GENERAL DESCRIPTION

ZENITH TELEVISION RECEIVERS

Zenith direct view television receivers have many outstanding features. These include gated automatic gain control, turret tuning with replaceable channel strips and main chassis break down into easily interchangeable sub-chassis. The primary differences between chassis is in the size, type and method of mounting the picture tube and the type of power supply. Table model receivers use a specially shielded power transformer to prevent magnetic interaction with the receiver sweep circuits-

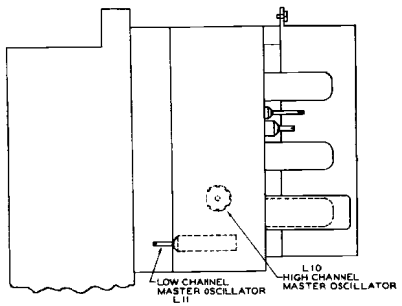
MODEL NO.	CHASSIS	SCREEN	TYPE OF SET	NAME
27T965R	27F20	"B"	Console - Mahogany	Broadmoor
28T925R	28F22	"A"	Table - Mahogany	Mayflower
28T925E	28F22	"A"	Table - Blonde	Biltmore
28T926R	28F25	"B"	Table - Mahogany	Claridge
28T926E	28F25	"B"	Table - Blonde	Saratoga
28T960E	28F20	"B"	Console - Blonde	Waldorf
28T960K	28F20	"B"	Console - Cordovan	Derby
28T961E	28F21	"A"	Console - Blond	Wilshire
28T962R	28F20	"B"	Console - Mahogany	Warwick
28T963R	28F21	"A"	Console - Mahogany	Newport
28T964R	28F23	"C"	Console - Mahogany	Stratosphere
G2951	29G20	"C"	Console - Walnut	Stratosphere
G2951R	29G20	"C"	Console - Mahogany	Stratosphere
G2952R	29G20	"C"	Console - Mahogany	St. Regis
37T998RLP	28F20	"B"	Radio-Phono-TV	Gotham
37T996RLP	28F23	"C"	Radio-Phono-TV	Sovereign
42T999RLP	28F23	"C"	Radio-Phono-TV	Marlborough

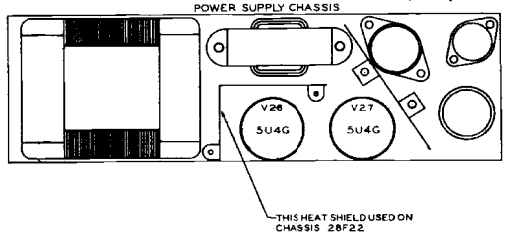
Power Consumption - 350 Watts

Power Supply - 110V 60 Cycles AC

Antenna Impedance
Balanced 300 ohms.

Audio Output - Undistorted 3.5 Watts
Maximum 6.5 Watts





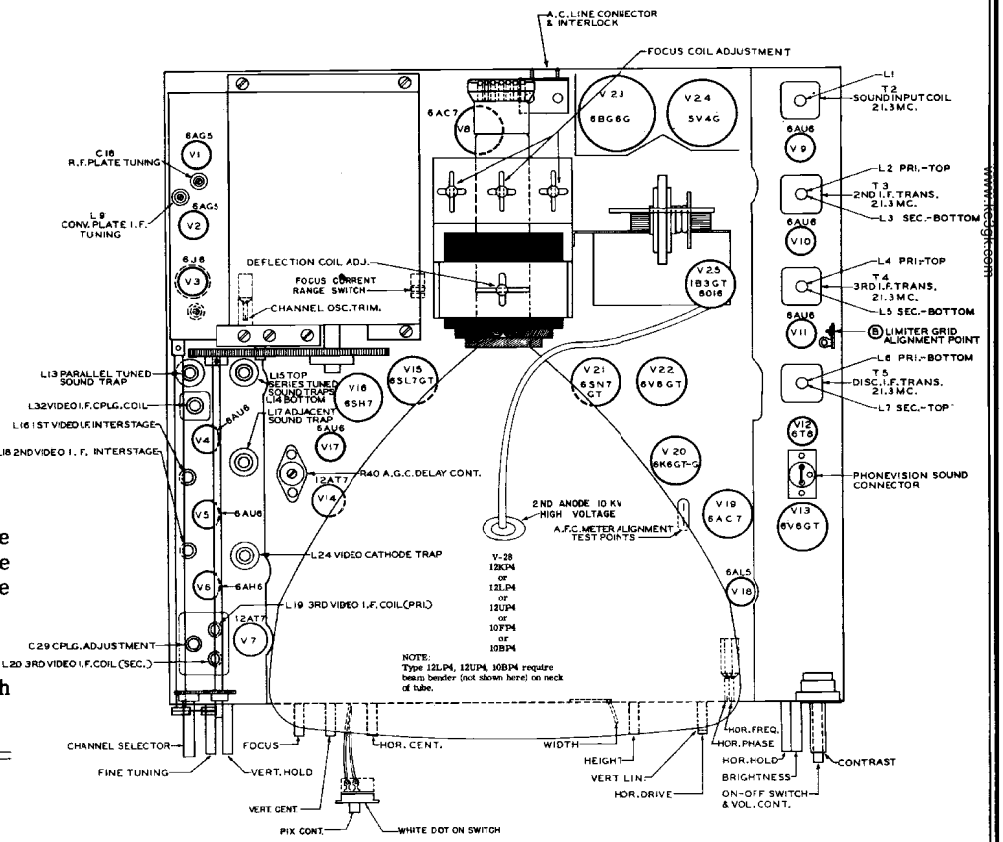


Fig. 31. Tube & Trimmer Layout for Chassis No. 28F20-20Z-21-22-23&25

NOTE: For additional data: See Chassis 28F20 etc. TV2 Page 2-1 through 2-27,28.

SUPPLEMENT

Most of the alignment and adjustment information presented in the first part of this manual applies to early production receivers. Later production receivers, identified by the fused and shielded high voltage power supply, incorporated revisions in the sweep, A.G.C., A.F.C., and I.F. circuits which necessitated changes in alignment and adjustment procedures.

The following section of the manual outlines the new procedures which are to be used with the revised 28F20, 28F21, 28F22 and the new 27F20, 27F20Z, 28F25 and 29G20 chassis.

Later model receivers with the new narrow band I.F.'s (identified by the green paint marks on the third picture I.F. can and at the rear of the sound chassis) must be aligned in the manner described under Narrow Band I.F. Alignment whereas the earlier model wide band receivers must be aligned as described on page 15 of this manual. Sound I.F. alignment procedure on all receivers to date, will be as described on page 17.

Zenith television receivers are now being manufactured with either the conventional clear glass picture tubes or the new Glare-Ban "Black" tubes. Those receivers with the Glare-Ban picture tubes are to be identified by the letters "OX" after the chassis and model numbers.

PICTURE CONTROL SWITCH

A picture control switch has been recently added to Zenith receivers. This switch controls the 6V6GT vertical output. By controlling the vertical output, either a giant circle or a smaller conventional picture may be selected.

27F20 CHASSIS

The 27F20 chassis is similar to the 28F20 except for revisions in the sync separator, AGC, and video amplifier circuits.

Instead of a 6AU6 sync amplifier and a 6SH7 sync clipper tube, as used in the basic 28F20 chassis, a dual triode 6SN7GT is used as a picture clipper and sync amplifier and a 12AT7 tube is used as sync clipper and sync separator.

In the AGC circuit, a 6SL7GT is used as the 1st and 2nd AGC amplifier. The AGC adjustment for this particular receiver may be found elsewhere in this manual.

A narrow band I.F. is used in the 27F20 chassis. When alignment is made, follow the procedure for a narrow band picture I.F. alignment.

With the exception of the AGC adjustment, the RF-IF alignment and all the other adjustments remain the same as for the 28F20 chassis.

27F20Z - 27G20 (OX)

With the exception of the picture tube, which is a metal glass 12UP4, this chassis is the same as the 27F20.

28F25 CHASSIS

This chassis is the same as the 28F20 with the exception of the power supply. A S-15747 table model power supply is used.

28F23 CHASSIS

This chassis, using a 16AP4 long-neck picture tube is similar to the basic 28F20 chassis, except for the focus coil and minor circuit changes. R51 in this chassis is 100,000 ohms and the 1st anode of the picture tube (Pin 10) is connected to the 490 volt tap (lug 4 on T11) instead of 397 volt connection as in the 28F20 chassis.

To prevent electrostatic charges from building up in the chassis, a 220,000 ohm resistor or two 100,000 ohm resistors in series, are connected between Pin 1 of the power socket and chassis to leak off these charges.

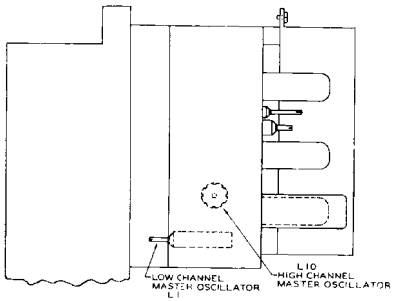
Some of the 28F23 chassis have the conventional wide band picture I.F. and must be aligned according to the method outlined on page 15 of this manual. Other models have the narrow band I.F. and must be aligned in the manner prescribed under narrow band I.F. alignment. The narrow band chassis have identifying green paint marks on the 3rd video I.F. transformer, and at the rear of the sound I.F. chassis.

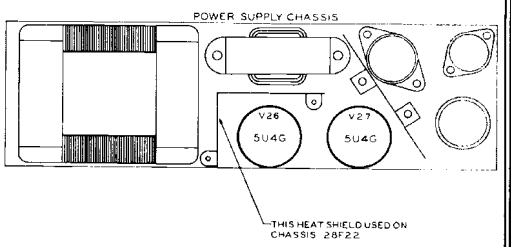
CAUTION: The outside metal cone of the 16AP4 picture tube used in this chassis is "hot", and it may be desirable to pull out the 6K6GT horizontal oscillator tube V20 in order to remove the high voltage during alignment and while adjustments are made which necessitate handling of the chassis, but do not require a picture.

29G20 CHASSIS

The 29G20 chassis is similar to the basic 28F20 chassis except for revisions in the sweep output circuits. The 16EP4 short-neck picture tube, which requires a greater beam deflection angle, necessitates the use of two 6BG6G tubes in parallel for increased horizontal output.

There are other minor circuit revisions, however, the R.F.-I.F. alignment and all the adjustments are the same as for the 28F20 chassis.





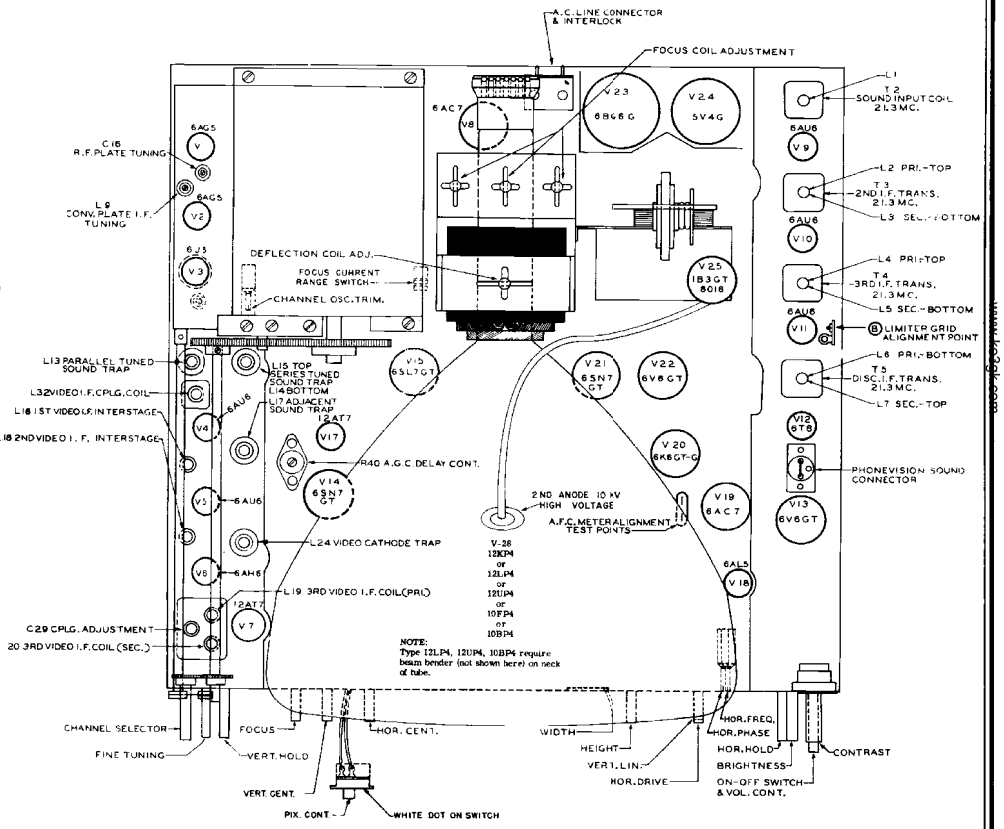


Fig. 50 Tube and Trimmer Layout 27F20 Chassis

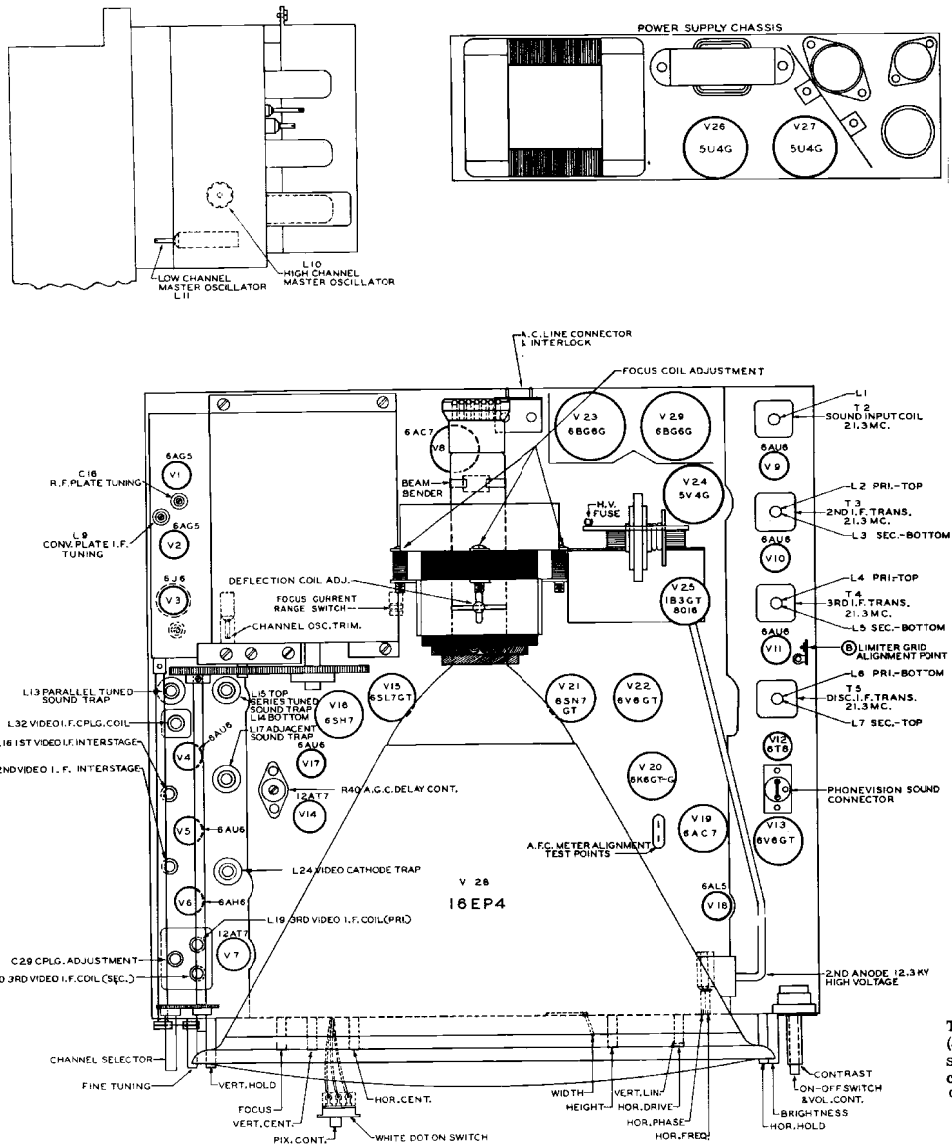


Fig. 51 Tube and Trimmer Layout 29G20 Chassis

The 29G20 chassis requires the narrow band I.F. alignment procedure.

The metal cone of the 16EP4 picture tube used in this chassis is "hot". Use the same precautionary measures as outlined under 28F23 chassis.

ADJUSTMENTS

ZENITH S15370 BIAS TEST FIXTURE

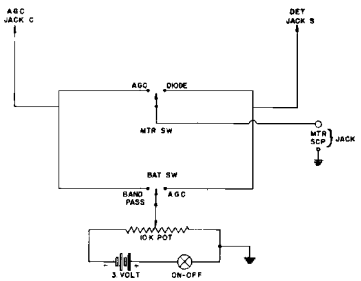


Fig. 52 Schematic Diagram S-15370 Bias Test Fixture

The S-15370 Bias Test Fixture is designed to plug into jacks "C" and "S" at the rear of the television chassis to supply an adjustable bias voltage for use during RF-IF alignment and for AGC adjustments.

The VTVM or scope connections are to be made between the SCP-MTR. jack and fixture chassis. IN ORDER TO CONSERVE BATTERY LIFE, ALWAYS TURN THE BIAS CONTROL KNOB TO THE OFF POSITION AFTER USE.

IF-RF ALIGNMENT

1. Plug the Bias Fixture into jacks "C" and "S" at the rear of the chassis and set the BAT. Switch to BAND PASS.

2. Set the MTR. Switch to AGC and adjust the Fixture Bias Control for -1.5V VTVM indication at the SCP-MTR jack.

3. Set MTR. Switch to DIODE and connect the scope to the SCP-MTR. jack.

After the Bias Fixture adjustments have been made, proceed with the alignment as outlined in the Service Manual.

REVISED AGC ADJUSTMENT PROCEDURE

The procedure outlined below applies to all Zenith TV receivers (except 27F20-27F20Z) in which a fused high voltage power supply is used. All receivers manufactured prior to the inclusion of the fused unit must be adjusted in the manner outlined on page 12 of this manual.

After the receiver has been properly identified, disconnect the antenna, short out the antenna terminals, remove V14 (12AT7) and V17 (6AU6) tubes, turn the HORIZONTAL HOLD control fully clockwise, and set the channel selector switch to Channel 10.

1. Plug the S-15370 Bias Fixture into jacks "C" and "S" at the rear of the television chassis. Set both the BAT and MTR switches to AGC. The VTVM indication at the SCP-MTR jack should be -8 volts or higher.

2. Insert V14 into its socket. Leave the BAT switch at AGC and set the MTR switch to DIODE. Adjust the Bias Fixture control for -2 volt indication at the SCP-MTR jack.

3. Set the MTR switch to AGC and adjust the AGC Delay Control (on receiver) for -6 volts indication at the SCP-MTR jack.

4. Leave the BAT switch at AGC, and set the MTR switch to DIODE. Adjust the Bias Fixture control for -1V indication at the SCP-MTR jack. Set the MTR switch to AGC and observe the VTVM indication at the SCP-MTR jack. This voltage should not exceed -1.5 volts.

5. Insert V17 into its socket, remove the Bias Fixture, and check operation of receiver.

AGC ADJUSTMENT PROCEDURE
CHASSIS 27F20 & 27F20Z

Before the AGC adjustment is made disconnect the antenna, short out the antenna terminals, turn the HORIZONTAL HOLD control fully clockwise and set the channel selector switch to channel 10.

1. Plug the S-15370 Bias Fixture into jacks "C" and "S" at the rear of the television chassis. Set both the BAT and MTR switches to AGC. With a screwdriver turn the AGC Delay Control (R40 on receiver) fully counter-clockwise. The VTVM indication at the SCP-MTR jack should be -8 volts or higher.

2. Leave the BAT switch at AGC and set the MTR switch to DIODE. Adjust the Bias Fixture control for -2 volt indication at the SCP-MTR jack.

3. Set the MTR switch to AGC and adjust the AGC Delay Control (on receiver) for -6 volts indication at the SCP-MTR jack.

4. Leave the BAT switch at AGC, and set the MTR switch to DIODE. Adjust the Bias Fixture control for -1V indication at the SCP-MTR jack. Set the MTR switch to AGC and observe the VTVM indication at the SCP-MTR jack. This voltage should not exceed -1.5 volts.

HORIZONTAL FREQUENCY AND PHASE ADJUSTMENTS

The purpose of the HORIZONTAL FREQUENCY and PHASE adjustments is to align the horizontal oscillator in order to keep it in the proper frequency and phase relationship with the transmitted synchronizing pulses.

Correct FREQUENCY adjustment is indicated by the ability of the receiver to stay in horizontal synchronization through most, if not the entire range, of the HORIZONTAL HOLD CONTROL, even if the signal is temporarily removed by switching to another channel and back.

The PHASE adjustment is used to position the picture on the raster. In order to check this adjustment the horizontal size of the picture must be reduced to view the sides (See Fig. 53). Proper adjustment is indicated when the HORIZONTAL HOLD CONTROL is in its electrical center position (See Step 4) and equal blanking exists on both sides of the picture.

It must be remembered that there is some interaction between the HORIZONTAL FREQUENCY and PHASE adjustments, and that the adjustment of one may necessitate the readjustment of the other.

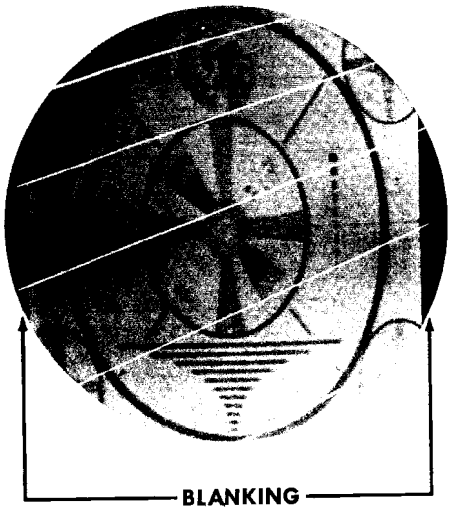


Fig. 53 Horizontal Size of Picture Reduced to Show Relative Position of Picture and Raster.

After the above checks have been made and cause has been determined for readjustment, proceed as follows:

1. Tune in a TV station and turn the HORIZONTAL FREQUENCY adjustment screw until the picture remains synchronized through most, if not the entire range of the HORIZONTAL HOLD CONTROL.

2. Connect the common lead of a VTVM to pin 1 of the 6AL5 phase detector and the other lead to the junction of R69 and R38 (470K and 560 ohm resistors in the grid circuit of the 6AC7 reactance tube. Later production receivers include a terminal strip for the meter connections. This strip is mounted on top of the chassis adjacent to the 6AC7 reactance tube socket. The VTVM common lead must always be connected to the terminal with the white lead).

3. Set the HORIZONTAL FREQUENCY adjustment so that maximum clockwise or counter-clockwise rotation of the HORIZONTAL HOLD control produces equal voltage swings of opposite polarity on the VTVM.

4. Set the HORIZONTAL HOLD control to the zero position midway between the equal positive and negative swings of the VTVM. Reduce the size of the picture with the WIDTH control until the sides are plainly visible. (On some receivers it may be impossible to reduce the width sufficiently to view both sides at once. If this is the case, the raster size should be further reduced with the HORIZONTAL DRIVE control, however, do not change the position of the HORIZONTAL DRIVE when the picture is restored to normal size after adjustment. Use the WIDTH control only. A remote case may arise where the raster size cannot be reduced sufficiently and it may be necessary to shift the raster with the HORIZONTAL CENTERING control in order to view a side at a time.) Turn the CONTRAST and BRIGHTNESS controls counter-clockwise. Advance the BRIGHTNESS control until the left and right sides of the picture are clearly distinguishable from the raster (See Fig. 53). The HORIZONTAL PHASE control should now be adjusted until the picture is centered on the raster, with approximately 3/8" blanking on either side. Whenever a change in the HORIZONTAL PHASE adjustment is made, a corresponding check and possible readjustment of the HORIZONTAL FREQUENCY adjustment must also be made (Step 3).

PICTURE IF ALIGNMENT
(Narrow Band)

The alignment procedure outlined below applies to those receivers which have an identifying GREEN PAINT mark on top of the 3rd video IF can and at the rear of the sound IF chassis. Receivers which do not have an identifying paint mark must be aligned in the manner outlined on page 15.

See Figures 29 and 37 for test equipment, bias and oscilloscope connections. A battery bias must be applied to the receiver during alignment. This bias may be obtained from the Zenith S-15370 Bias Test Fixture (See page25) or from a 1 1/2 V. battery, connecting the negative lead to jack "C" and the positive lead to chassis.

Connect output #1 between point "F" (picture IF strip) and chassis. Adjust the Mega-Sweep for maximum output and turn the coarse frequency adjustment control until the pattern is centered on the oscilloscope screen. It is possible to obtain two modes of operation from the Mega-Sweep. Select the mode which sweeps from low to high frequency. When the proper mode is selected, the low frequency peak of the IF response curve will appear on the left side of the oscilloscope screen (22.6 Mc., Fig. 54). With the Mega-Marker attenuator off, adjust the Mega-Sweep Attenuator for approximately -1.5 volts output at the Video Detector (Jack "S"). Do not exceed this voltage during alignment. The vertical gain on the oscilloscope and the Mega-Sweep Amplitude Controls should now be adjusted for a sizeable pattern on the oscilloscope screen. The oscilloscope Horizontal Gain Control must be adjusted so that both ends of the sweep are visible. After these initial adjustments have been made, proceed as follows:

1. Set the Mega-Marker to 22.6 Mc. and adjust L19 and L20 until the two over-coupled response curves are equal in amplitude with the low frequency peak corresponding to the 22.6 Mc. marker. To avoid distortion, always use minimum marker amplitude. Set the Mega-Marker to 25.9 Mc. and adjust C29 until the high frequency peak corresponds to 25.9 Mc. Check the 22.6 Mc. peak and repeat adjustment if necessary.

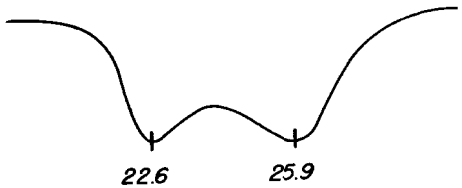


Fig. 54 3rd Picture I.F. Response

2. Connect output #1 between point "G" and chassis. Adjust the Mega-Sweep attenuator for approximately -1.5 V detector output at jack "S". Do not exceed this voltage during alignment. Set the Mega-Marker to 25.3 Mc. and adjust L18 until the I.F. peak corresponds to the 25.3 Mc. marker.

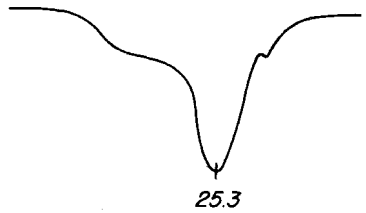


Fig. 55 2nd Picture I.F. Response

3. Connect output #1 between point "H" and chassis. Adjust the Mega-Sweep attenuator for -1.5 V output at jack "S". Set the Mega-Marker to 23.2 Mc. and adjust L16 until the low frequency

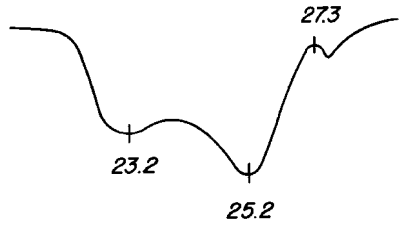


Fig. 56 1st Picture I.F. Response

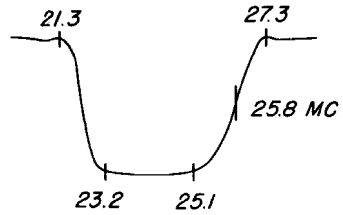


Fig. 57 Over-all Picture I.F. Response

4. Connect output #1 to the converter coupling ring (Zenith Part No. S-15371) and fit the ring over the 6AG5 converter tube. Because of the low coupling capacity of the ring, it will be necessary to increase the Mega-Sweep output to maximum in order to obtain approximately -1.5V indication at jack "S". Set the Mega-Marker to 21.3 Mc. and adjust trap L13 for minimum indication on the scope. Set Mega-Marker to 27.3 Mc. With a 68-7 alignment wrench adjust trap L14 (Lower slug) for minimum indication on the scope. (Because of the high attenuation of the combined 27.3 Mc. traps L14 and L17, it may be necessary to use maximum trap injection and vertical gain of the scope in order to see the "pip". In some cases, it may be necessary to temporarily detune L17 by inserting a 68-14 tuning wand into its field, however, never detune L17 by turning its adjustment screw.) Move the oscilloscope connection to the limiter grid (Point "B" Fig. 43). Reduce the sweep amplitude on the Mega-Sweep and observe the sound I.F. response curve (See Fig. 42). Adjust L15 (Upper slug) for maximum response. Return the scope connections to the video detector (jack "S") and adjust L32 and L9 (L9 is on the RF shelf) alternately until the response curve has a reasonably

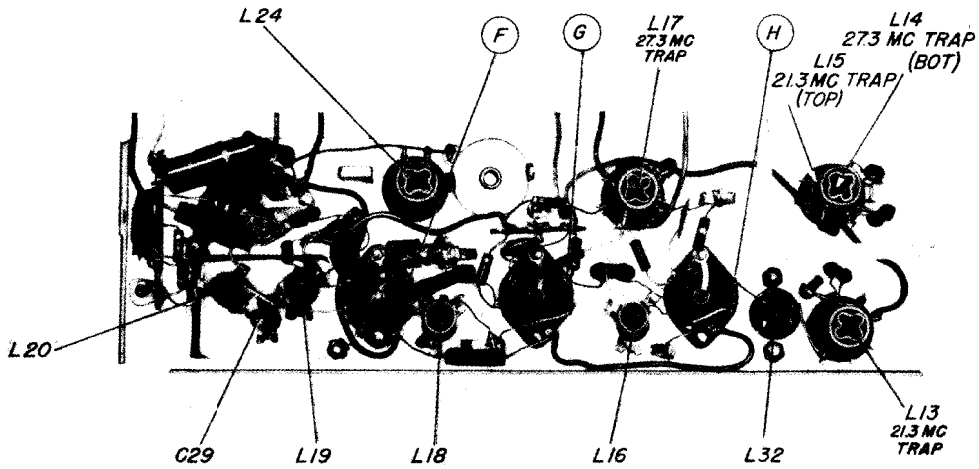


Fig. 58 Narrow Band Picture I.F. Sub-Chassis

flat top (See Fig. 57). Set Mega-Marker to 27.3 Mc. and recheck traps L14 and L17. A slight readjustment may be necessary. Set Mega-Marker to 25.8 Mc. and check the 50% point and the over-all response.

4.5 MC. TRAP ADJUSTMENT

The high shunt capacity C30 in the 4.5 Mc resonant circuit insures high frequency stability. Adjustment in most cases is unnecessary unless the unit is tampered with or replaced.

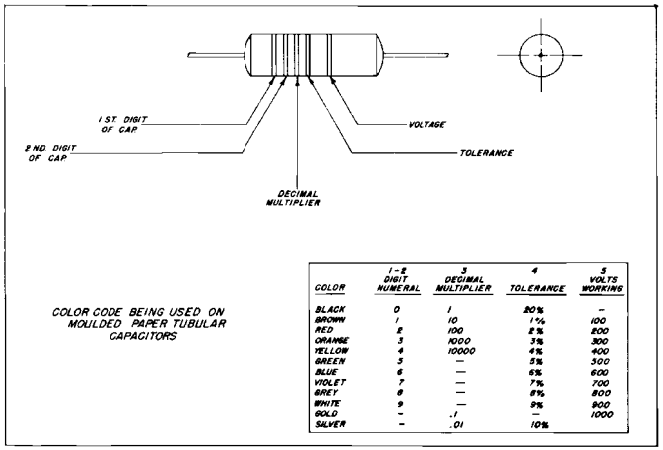
If adjustment becomes necessary, an accurate signal generator, crystal calibrated at 4.5 Mc. such as the Zenith version of the Mega-Marker and a RF VTVM capable of indicating voltages at frequencies up to 5 Mc. is required. The procedure is as follows:

1. Connect the 4.5 Mc. signal to the grid (Pin 7) of the 12AT7 1st video amplifier V7B.

2. Connect the probe of the VTVM to the grid of the picture tube.

3. Advance the Mega-Marker output and the receiver contrast control for approximately 1-volt indication on the meter. It may be necessary to temporarily disconnect the Mega-Marker from the Mega-Sweep in order to get an increased 4.5 Mc. output for this adjustment.

4. Adjust slug L24 for minimum indication on the meter. A pronounced dip will be noted at resonance.



COLOR CODE BEING USED ON MOULDED PAPER TUBULAR CAPACITORS

COLOR	1-2 DIGIT NUMERAL	3 DECIMAL MULTIPLIER	4 TOLERANCE	5 VOLTS WORKING
BLACK	0	1	20%	–
BROWN	1	10	1%	100
RED	2	100	2%	200
ORANGE	3	1000	3%	300
YELLOW	4	10000	4%	400
GREEN	5	–	5%	500
BLUE	6	–	6%	600
VIOLET	7	–	7%	700
GREY	8	–	8%	800
WHITE	9	–	9%	900
GOLD	–	.1	–	1000
SILVER	–	.01	10%	

Fig. 60 Moulded Paper Tubular Capacitors Identification Chart

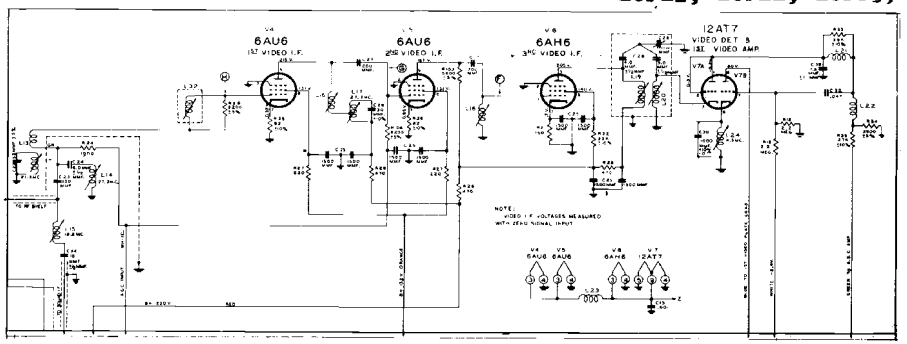


Fig. 59 Schematic Diagram. Narrow Band I.F.

CIRCUIT LEGEND

The following is a composite listing of electrical parts used in Zenith TV chassis listed below:

"X" Indicates Models 28F20, 21, 22, 23, & 25.
"7" Indicates Model 27F20
"9" Indicates Model 29G20
R-9 Used on 28F22 & 25 only.
T-17 Used with 12UP4 Picture Tube Only

DIAG. NO.	PART NO.	DESCRIPTION	POWER SUPPLY	CHANNEL STRIPS	SOUND CHASSIS	R.F. SHELF	MAIN CHASSIS	VIDEO I.F. CHASSIS
C-1	22-1826	15 MFD. ELECTRO 250 V.	X					
C-2	22-1827	40 MFD. ELECTRO 400 V.	X					
C-3	22-1828	20 MFD. ELECTRO 475 V.	X					
C-4		100 MFD. ELECTRO 300 V.	X					
C-5	22-1880	.0012 MFD. 600 V.			X			
C-6	22-1847	.0047 MFD. 200 V.					7-X-9	
C-7	22-1887	25 MMF. CER. 500 V.			X			
C-8	22-1706	.005 MFD. (DISC) 450 V.			X			
C-9	22-1703	500 MMF. CER. 500 V.			X			
C-10	22-							
C-11	22-1886	1000 MMF. CER. 500 V.			X			
C-12	22-1813	.022 MFD. 600 V.					7-X-9	
C-13	22-1782	.0047 MFD. 600 V.			X			
C-14	22-1693	3.0 MMF. CER. 500 V.			X			
C-15	22-1888	.001 MFD. 500 V.				X		X
C-16	S-15211	TRIMMER CAP. ASS'Y.				X		
C-17	22-1765	1.2 MMF 500 V.		X		X		
C-18	22-1867	SPECIAL CER. (DISC TYPE)				X		
C-19	22-1762	1.0 MMF. CER. 500 V.	X					
C-20	22-1876	47 MMF. CER. 500 V.				X		
C-21	22-2065	68 MMF. CER. 500 V.				X		
C-22	22-1870	52 MMF. CER. 500 V.					X	
C-23	22-1869	100 MMF. CER. 500 V.					X	
C-24	22-1869	6 MMF. CER. 500 V.					X	
C-25	105-17	DUAL CER. (2 X 1500 MMF.)					X	
C-26	22-1871	39 MMF. CER. 500 V.					X	
C-27	22-1668	200 MMF. CER. 500 V.					X	
C-28	105-20	DUAL CER. (5 MMF.-4 MMF)					X	
C-29	22-1882	1-8 MMF. TRIMMER					X	
C-30	27-108	500 MMF. SILVER MICA DISC (7PD)					X	
C-31	22-2054	200 MMF. CER. 500 V.				X		
C-32	22-1775	.047 MFD. 400 V.					X	
C-33	22-1829	9-60 MMF. TRIMMER		X				
C-34	22-1764	1.5 MMF. 500 V.		X				
C-35	22-1952	13 MMF. CER. 500 V.		X				
C-36	22-1879	1-8 MMF. SLUG TUNED TRIM		X				
C-37	22-1951	4.5 MMF. CER. 500 V.		X				
C-38	22-1852	7.5 MMF. CER. 500 V.		X				X
C-39	22-1854	9 MMF. CER. 500 V.		X				
C-40	22-1859	22 MMF. CER. 500 V.		X				
C-41	22-1900	7.5 MMF. CER. 500 V.		X				
C-42	22-1862	19 MMF. CER. 500 V.		X				
C-43	22-1891	2.5 MMF. CER. 500 V.		X				
C-44	22-1865	14 MMF. CER. 500 V.		X				
C-45	22-1857	15 MMF. CER. 500 V.		X				
C-46	22-1850	12 MMF. CER. 500 V.		X				
C-47	22-1863	10 MMF. CER. 500 V.		X				
C-48	22-2037	40 MFD. ELECTRO 350 V.					7-X-9	
C-49		10 MFD. ELECTRO 200 V.					7-X-9	
C-50	22-1766	.68 MMF. 500 V.	X					
C-51	22-1839	.001 MFD. 700 V.					7-X-9	
C-52	22-1138	470 MMF. MICA 500 V.					7-X-9	

DIAG. NO.	PART NO.	DESCRIPTION	POWER SUPPLY	CHANNEL STRIPS	SOUND CHASSIS	R.F. SHELF	MAIN CHASSIS	VIDEO I.F. CHASSIS
R-1	63-1580	10 OHM 2 W.	X					
R-2	63-1737	68 OHM 1/2 W.			X			
R-3	63-1573	6800 OHM 2 W.			X			
R-4	63-1870	100K OHM 1/2 W.			X		7-X-9	
R-5	63-1194	47K OHM 1 W.			X			
R-6	63-1876	150K OHM 1/2 W.			X	X	7-X-9	
R-7	63-1828	10K OHM 1/2 W.			X			
R-8	63-1869	100K OHM 1/2 W.			X		9	
R-9	63-1961	15 MEGOHM 1/2 W.			X			
R-10	63-1842	22K OHM 1/2 W.			X			
R-11	63-1883	220K OHM 1/2 W.			X		7-X-9	
R-12	63-1890	330K OHM 1/2 W.			X			
R-13	63-1227	220 OHM W.W. 1 W.			X			
R-14	63-1910	1.0 MEGOHM 1/2 W.					7-X-9	
R-15	63-1729	47 OHM 1/2 W.				X		
R-16	63-1841	22K OHM 1/2 W.				X		
R-17	63-1785	1000 OHM 1/2 W.				X	7	
R-18	63-1926	2.2 MEGOHM 1/2 W.				X	7-X-9	X
R-19	63-1782	820 OHM 1/2 W.				X	X-9	
R-20	63-1859	56K OHM 1/2 W.					7-X-9	
R-21	63-943	4700 OHM 1 W.				X		
R-22	63-1855	47K OHM 1/2 W.				X	X-9	
R-23	63-1701	10 OHM 1/2 W.				X	7-X-9	
R-24	63-1786	1000 OHM 1/2 W.						X
R-25	63-1806	3300 OHM 1/2 W.		X			7-X-9	
R-26	63-1740	82 OHM 1/2 W.					X	
R-27	63-1758	220 OHM 1/2 W.					X	
R-28	63-1772	470 OHM 1/2 W.					X	
R-29	63-1818	6200 OHM 1/2 W.					X	
R-30	63-1789	1200 OHM 1/2 W.					X-9	
R-31	63-1751	150 OHM 1/2 W.					7-X-9	X
R-32	63-1848	33K OHM 1/2 W.					X-9	X
R-33	63-1852	39K OHM 1/2 W.					7-X-9	X
R-34	63-1809	3900 OHM 1/2 W.					X	X
R-35	63-1845	27K OHM 1/2 W.					7-X-9	X
R-36	63-2022	10K OHM 5 W.					9	
R-37	63-1863	2700 OHM 1/2 W.		X				
R-38	63-1775	560 OHM 1/2 W.					7-X-9	
R-39	63-1975	12K OHM 1 W.					7-X	
R-40	63-1690	4000 OHM DELAY CONTROL					7-X-9	
R-41	63-1919	1.5 MEGOHM 1/2 W.					7-X-9	
R-42	63-1866	82K OHM 1/2 W.					7-X-9	
R-43	63-1856	47K OHM 1/2 W.					7-X-9	
R-44	63-1781	820 OHM 1/2 W.					X-9	
R-45	63-1849	33K OHM 1/2 W.					7-X-9	
R-46	63-1667	(DUAL) CONTRAST CONTROL			X		7-X-9	
R-47	63-1824	8200 OHM 1/2 W.					7-X-9	
R-48	63-1838	18K OHMS 1/2 W.					7-X-9	
R-49	63-1579	6200 OHM 2 W.					7-X-9	
R-50	63-2061	BRIGHTNESS CONTROL					7-X-9	
R-51	63-1873	120K OHM 1/2 W.					7-X	
R-52	63-1584	10K OHM 7 W.					7-X-9	

DIAG. NO.	PART NO.	DESCRIPTION	POWER SUPPLY	CHANNEL STRIPS	SOUND CHASSIS	R.F. SHELF	MAIN CHASSIS	VIDEO I.F. CHASS
L-1	ON T2	SOUND INPUT COIL			X			
L-2	ON T3	2ND IF TRANS.			X			
L-3	ON T3	2ND IF TRANS.			X			
L-4	ON T4	3RD IF TRANS.			X			
L-5	ON T4	3RD IF TRANS.			X			
L-6	ON T5	DISC. IF TRANS.			X			
L-7	ON T5	DISC. IF TRANS.			X			
L-8	S-15062	ANT. COIL ASS'Y				X		
L-9	S-15064	CONV. PLATE COIL ASS'Y					X	
L-10	S-15043	HIGH FREQ. OSC. COIL ASS'Y			X			
L-11	S-15066	LOW FREQ. OSC. COIL ASS'Y					X	
L-12	S-15065	FILAMENT CHOKE COIL ASS'Y			X			
L-13	S-15048	PARALLEL SOUND TRAP COIL ASS'Y						X
L-14	S-15727	SERIES TUNED ADJACENT SOUND TRAP						X
L-15		SERIES SOUND TRAP COIL						X
L-16	S-15051	1ST VIDEO INTERSTAGE COIL ASS'Y						X
L-17	S-15053	ADJACENT SOUND TRAP COIL ASS'Y						X
L-18	S-15052	2ND VIDEO INTERSTAGE COIL ASS'Y						X
L-19	S-15055	3RD IF COIL ASS'Y						X
L-20	S-15242	VIDEO IF COIL ASSEMBLY						X
L-21	S-15058	VIDEO DET. SERIES COIL ASS'Y						X
L-22	S-15059	VIDEO DET. SHUNT COIL ASS'Y						X
L-23	S-15060	FILAMENT CHOKE COIL ASS'Y						X
L-24	S-15057	VIDEO LATH. TRAP COIL ASS'Y						X
L-25	S-15082	R.F. PLATE COIL ASS'Y	X					
L-26	S-15094	CONV. GRID COIL ASS'Y	X					
L-27	S-15071	R.F. INPUT COIL ASS'Y	X					
L-28	S-15083	R.F. PLATE COIL ASS'Y	X					
L-29	S-15095	CONV. GRID COIL ASS'Y	X					
L-30	S-15072	R.F. INPUT COIL ASS'Y	X					
L-31	S-15084	R.F. PLATE COIL ASS'Y	X					
L-32	S-15049	VIDEO IF COUPLING COIL						X
L-33	S-15073	R.F. INPUT COIL ASS'Y	X					
L-34	S-15085	R.F. PLATE COIL ASS'Y	X					
L-35	S-15097	CONV. GRID COIL ASS'Y	X					
L-36	S-15106	OSC. COIL ASS'Y	X					
L-37	S-15096	CONV. GRID COIL ASS'Y	X					
L-38	S-15086	R.F. PLATE COIL ASS'Y	X					
L-39	S-15074	R.F. INPUT COIL ASS'Y	X					
L-40	S-15107	OSC. COIL ASS'Y	X					
L-41	20-252	ANT. PRI. COIL	X					
L-42	S-15075	R.F. INPUT COIL ASS'Y	X					
L-43	S-15087	R.F. PLATE COIL ASS'Y	X					
L-44	S-15117	R.F. COUPLING COIL ASS'Y	X					
L-45	S-15076	R.F. INPUT COIL ASS'Y	X					
L-46	S-15088	R.F. PLATE COIL ASS'Y	X					
L-47	S-15118	R.F. COUPLING COIL ASS'Y	X					
L-48	S-15077	R.F. INPUT COIL ASS'Y	X					
L-49								
L-50								
L-51	S-15078	R.F. INPUT COIL ASS'Y	X					
L-52	S-15090	R.F. PLATE COIL ASS'Y	X					

C-53	22-							
C-54	22-1773	0.1 MFD. 200 V.					7-X-9	
C-55	22-2053	100 MFD. ELECTRO 200 V.					7-X-9	
C-56		10 MFD. ELECTRO 475 V.					7-X-9	
C-57		40 MFD. ELECTRO 50 V.					7-X-9	
C-58	22-1841	0.1 MFD. 600 V.					7-X-9	
C-59	22-1901	.033 MFD. 600 V.					7-X-9	
C-60	22-1844	.047 MFD. 600 V.					7-X-9	
C-61	22-162	100 MMF MICA 500 V.					7	
C-62	22-182	220 MMF. MICA 500 V.					7-X-9	
C-63	22-1845	.0022 MFD. 600 V.					7-X-9	
C-64	22-1779	.01 MFD. 600 V.					7-X-9	
C-65	22-1842	.0047 MFD. 200 V.					7-X-9	
C-66	22-1843	.01 MFD. 600 V.					7-X-9	
C-67	22-1836	20 MFD. ELECTRO 475 V.					7-X-9	
C-68		20 MFD. ELECTRO 300 V.					7-X-9	
C-69		40 MFD. ELECTRO 25 V.					7-X-9	
C-70	22-1903	20 MFD. ELECTRO 25 V.					7-X-9	
C-71	22-1904	20 MFD. ELECTRO 25 V.					7-X-9	
C-72		500 MFD. ELECTRO 3 V.					7-X-9	
C-73	22-2078	.047 MFD. 600 V.					7-X-9	
C-74	22-1778	.047 MFD. 200 V.					7-X-9	
C-75	22-1850	.015 MFD. 200 V.					7-X-9	
C-76	22-1849	.0047 MFD. 600 V.					7-X-9	
C-77	22-1137	150 MMF. MICA 500 V.					7-X-9	
C-78	22-3	.01 MFD. 500 V.			X		7X-9	
C-79	22-2034	680 MMF. MICA 500 V.					7-X-9	
C-80	22-1851	.001 MFD. 1000 V.					7-X-9	
C-81	22-1832	500 MMF. SPECIAL 15,000 V.					7-X-9	
C-82	22-1831	56 MMF. MICA 500 V.					7-X-9	
C-83	22-1846	.01 MFD. 400 V.					7-X-9	
C-84	22-1895	10 MMF. CER. 500 V.				X		X
C-85	22-1947	100 MMF. CER. 500 V.				X		
C-86	22-1899	24 MMF. CER. 500 V.		X				
C-87	22-1866	200 MMF. CER. 500 V.				X		
C-88	22-1873	18 MMF. CER. 500 V.		X				
C-89	22-2033	40 MFD. ELECTRO 450 V.					7-X-9	
C-90		20 MFD. ELECTRO 25 V.					7-X-9	
C-91	22-2061	0.1 MFD. 400 V.					7	
C-92	22-1532	47 MMF. 500 V.					7-X	
C-93	22-2083	.015 MFD. 200 V.					7-9-X	
T1	95-1124	POWER TRANSFORMER(S-15747)	X					
T1	95-1115	POWER TRANSFORMER(S-15007)	X					
T2	95-1955	SOUND INPUT COIL ASS'Y			X			
T3	95-1119	I.F. TRANSFORMER			X			
T4	95-1119	I.F. TRANSFORMER			X			
T5	95-1120	DISC I.F. TRANSFORMER			X			
T6	95-1114	OUTPUT TRANSFORMER			X			
T7	95-1113	VERTICAL BLOCK OSC. TRANS.					7-X-9	
T8	95-1112	VERTICAL OUTPUT TRANS.					7-X	
T9	95-1110	DEFLECTION YOKE					7-X	
T10	S-15041	HOR. OSC. & A.F.C. TRANS.					7-X-9	
	S-15709	HOR. SWEEP TRANS. PART OF T11 & T17					7-X	
T11	S-15710	HOR. SWEEP TRANS.& SOCKET					7-X	
T13	95-1116	FILAMENT TRANSFORMER					7-X-9	
T14	95-1165	DEFLECTION YOKE					9	
T15	95-1166	VERTICAL OUTPUT TRANS.					9	
T16	S-15912	HOR. SWEEP TRANS.& SOCKET					9	
	S-15911	HOR. SWEEP TRANS.PART OF T16					9	
T17	S-16191	HOR. SWEEP TRANS. & SOCKET					7-X	

R-53	63-1827	10K OHM 1/2 W.					7-X-9	
R-54	63-1974	3300 OHM 1 W.					7	
R-55	63-1912	1.0 MEGOHM 1/2 W.			X		7-X-9	
R-56	63-1901	560K OHM 1/2 W.					7-X-9	
R-57	63-1896	470K OHM 1/2 W.					7-X-9	
R-58	63-1799	2.2K OHM 1/2 W.					X	
R-59	63-1065	15 K OHM 1 W					7	
R-60	63-2025	VERTICAL HOLD CONTROL					7-X-9	
R-61	63-[illegible]	12K OHM 1/2 W.					X-9	
R-62	63-2036	VERTICAL SIZE CONTROL					7-X-9	
R-63	63-1169	2700 OHM W.W. 2 W.					7-X-	
R-64	63-1222	470 OHM W.W. 1 W.					7-X-9	
R-65	63-1918	1.5 MEGOHM 1/2 W.					-9	
R-66	63-1967	1500 OHM 1 W.					7-X-9	
R-67	63-1674	VERTICAL LINEARITY CONTROL					7-X-9	
R-68	63-1670	VERTICAL CENTER CONTROL					7-X-9	
R-69	63-1898	470K OHM 1/2 W.					7-X-9	
R-70	63-947	27K OHM 2 W.					X-9	
R-71	63-2017	4000 OHM 5 W.					7-X-9	
R-72	63-1566	22K OHM 2 W.					7-X-9	
R-73	63-1672	HOR. HOLD CONTROL					7-X-9	
R-74	63-1071	10K OHM 1 W.					7-X-9	
R-75	63-1533	5K OHM 3 W.					7-X-9	
R-76	63-1485	33 K OHM 2 W.					7-X-9	
R-77	63-1675	HOR. DRIVE CONTROL					7-X-9	
R-78	63-1578	150 OHM 2 W.					7-X	
R-79	63-1679	15K OHM W.W. 20 W.					7-X-9	
R-80	63-2011	3000 OHM W.W. 10 W.					7-X-9	
R-81	63-1669	HOR. CENTER CONTROL					7-X-9	
R-82	63-2009	FOCUS CONTROL 4 W.					7-X-9	
R-83	63-1685	620 OHM 10 W.					7-X-9	
R-84	63-1198	10K OHM 2 W.					7-X	
R-85	63-1581	4.7 OHM 1/2 W.					7-X	
R-86	63-1792	1500 OHM 1/2 W.				X		
R-87	63-1813	4700 OHM 1/2 W.		X			7	
R-88	63-1884	220K OHM 1/2 W.					7-X-9	
R-89	63-1891	330K OHM 1/2 W.					7-X-9	
R-90	63-1820	6800 OHM 1/2 W.		X			7-X-9	
R-91	63-1754	180 OHM 1/2 W.					X-9	
R-92	63-1880	180K OHM 1/2 W.					X-9	
R-93	63-2015	33 OHM 2 W.	X					
R-94								
R-95	63-1067	6800 OHM 1 W.					X-9	
R-96	63-1784	1000 OHM 1/2 W.					7	
R-97	63-1101	8200 OHM 2 W.					7	
R-98	63-1897	470K OHM 1/2 W.					7	
R-99								
R-100	63-1771	.470 OHM 1/2 W.					7	
R-101	63-1744	100 OHM 1/2 W.					9	
R-102	63-1973	100 OHM 2 W.					9	
ST-2	S-15029	CHANNEL #2		X				
ST-3	S-15030	CHANNEL #3		X				
ST-4	S-15031	CHANNEL #4		X				
ST-5	S-15032	CHANNEL #5		X				
ST-6	S-15033	CHANNEL #6		X				
ST-7	S-15034	CHANNEL #7		X				
ST-8	S-15035	CHANNEL #8		X				
ST-9	S-15036	CHANNEL #9		X				
ST-10	S-15037	CHANNEL #10		X				
ST-11	S-15038	CHANNEL #11		X				
ST-12	S-15039	CHANNEL #12		X				
ST-13	S-15040	CHANNEL #13		X				
R-103	63-1816	5600 OHM 1/2 W						X
R-104	63-1823	8200 OHM 1/2 W						X
R-105	63-1620	1000 OHM [illegible]					-7-X	
R-106	63-1101	5600 OHM 2 W.					-7-X	
R-107	63-1017	5600 OHM 1/2 W.					9	
R-108	63-965	1000 OHM 1 W.					9	

L-53	S-15120	R.F. COUPLING COIL ASS'Y		X				
L-54	S-15119	R.F. COUPLING COIL ASS'Y		X				
L-55	S-15079	R.F. INPUT COIL ASS'Y		X				
L-56	S-15091	R.F. PLATE COIL ASS'Y		X				
L-57	S-15121	R.F. COUPLING COIL ASS'Y		X				
L-58	S-15109	OSC. COIL ASS'Y		X				
L-59								
L-60								
L-61								
L-62	S-15406	OSC. COIL ASS'Y		X				
L-63	S-15081	R.F. INPUT COIL ASS'Y		X				
L-64	S-15093	R.F. PLATE COIL ASS'Y		X				
L-65								
L-66	S-15405	OSC. COIL ASS'Y		X				
L-67	S-15128	B + CHOKE COIL ASS'Y					7-X-9	
L-68	S-15125	1ST VIDEO PEAKING COIL ASS'Y					X-9	
L-69	S-15127	2ND VIDEO SERIES PEAKING COIL ASS'Y					7-X-9	
L-70	S-15126	2ND VIDEO SHUNT PEAKING COIL ASS'Y					7-X-9	
L-71	S-15711	WIDTH CONTROL ASS'Y					7-X	
L-72	20-255	FILTER CHOKE					7-X-9	
L-73	ON T10	HOR. PHASE COIL					7-X-9	
L-74	ON T10	HOR. FREQ. COIL					7-X-9	
L-75	ON T9	1/2 VERT. DEFLECTION COIL					7-X	
L-76	ON T9	1/2 VERT. DEFLECTION COIL					7-X	
L-77	ON T9	1/2 HOR. DEFLECTION COIL					7-X	
L-78	95-1109	3 HY FILTER CHOKE	X					
L-79	ON T9	1/2 HOR. DEFLECTION COIL					7-X	
L-80	95-1111	FOCUS COIL					7-X	
L-81	S-15070	R.F. INPUT COIL ASS'Y		X				
L-82	95-1154	3 HY FILTER CHOKE	X					
L-83	S-15947	1ST VIDEO PEAKING COIL ASS'Y					7	
L-84	IN T-14	1/2 VERT. DEFLECTION COIL					9	
L-85	IN T-14	1/2 VERT. DEFLECTION COIL					9	
L-86	IN T-14	1/2 HOR. DEFLECTION COIL					9	
L-87	IN T-14	1/2 HOR. DEFLECTION COIL					9	
L-88	95-1147	FOCUS COIL					9	
L-89	S-16048	WIDTH CONTROL ASS'Y					9	
PL-1	100-36	PILOT LIGHT(6.3 V. .25 A.)					7-X-9	
S1	85-448	DIAL LIGHT SWITCH					7-X-9	
S2	85-238	FOCUS CURRENT RANGE SWITCH					7-X-9	
S3	85-460	PICTURE CONTROL SWITCH					-7-X	
SP1	49-649	10" P.M. SPEAKER (28T960)			X			
SP1	49-654	5X" P.M. SPEAKER (28T925)			X			
W1	S-15009	CABLE ASSEMBLY	X					
P1	58-169	POWER PLUG	X					
F1	136-16	1/4 AMP FUSE					X	
S 4	85-492	PICTURE CONTROL SWITCH					9	

NUMERICAL PARTS LIST

FOR FURTHER INFORMATION REFER TO CIRCUIT LEGEND

Diag. No.	Part No.	Description
		MAIN CHASSIS ASSY.
	12-1521	Horizontal Size Control Mtg. Brkt.
	12-1537	Horizontal Size Control Support Brkt
	12-1545	C.R.T. Support Brkt (2 used)
	15-84	Tube Socket Cap (Used with 78-806)
	19-175	Coil Mtg. Clip (Used on S-15042)
	19-176	Coil Mtg. Clip (2 used on S-15041)
	19-177	Anode Clip for C.R.T. (Used on S-15392)
	19-178	Capacitor Mtg. Clip (5 used)
	20-255	Filament Choke Coil
C-79	22-3	.01 Mfd. Ceramic Disc. 500V
C-62	22-182	220 Mmfd. (or 22-1666) 500V
C-77	22-1137	150 Mmfd. Mica. 500V
C-52	22-1138	470 Mmfd. Mica. 500V
	22-1442	100 Mmfd. Mica. 500V
	22-1674	50 Mmfd Ceramic(or 22-1532) 500V
C-32	22-1775	.047 Mfd. 400V
C-54	22-1777	.1 Mfd. 200V
C-74	22-1778	.047 Mfd. 200 V
C-64	22-1779	.01 Mfd. 600V
C-53	22-1809	.01 Mfd. 200V
C-12	22-1813	.022 Mfd. 600V
C-82	22-1831	56 Mmfd. Mica. 1000V (Part of 95-1110)
C-81	22-1832	500 Mmfd. Special Molded 20KV
C-67, C-68, C-69	22-1836	Dry Electrolytic 20 Mfd.-300Vx20Mfd. -475V.x40 Mfd.-25V
C-51	22-1839	.001 Mfd. (or 22-1343) 200V
C-58	22-1841	.1 Mfd. (or 22-1844) 600V
C-65	22-1842	.0047 Mfd. 200V
C-65	22-1843	.01 Mfd. 600V
C-60	22-1844	.047 Mfd. 600V
C-63	22-1845	.0022 Mfd. 600V
C-83	22-1846	.01 Mfd. 400V
C-6	22-1847	.0047 Mfd.(Use 22-3) 200V.
C-76	22-1849	.0047 Mfd. 600V
C-75	22-1850	.015 Mfd. 200V
C-80	22-1851	.001 Mfd. 1000V
C-59	22-1901	.033 Mfd. 600V
C-70	22-1903	Dry Electrolytic 20 Mfd. -25V
C-71, C-72	22-1904	Dry Electrolytic 500 Mfd. 3 V. x 20 Mfd. -25V.
	22-1948	Dry Electrolytic 50 Mfd. 50V
C-89, C-90	22-2033	Dry Electrolytic 40 Mfd. 450 V x 20 Mfd. 25 V
C-79	22-2034	680 Mmfd. Mica. 5% 500V

CHASSIS 27F20, 27F22, 28F20, 28F21, 28F22, 28F23, 28F25, 29G20

Diag. No.	Part No.	Description
C-48, C-49	22-2037	Dry Electrolytic 40 Mfd. 350V x 10 Mfd. 200V
	22-2052	Dry Electrolytic 10 Mfd. 475 V. (pigtail type)
C-55, C-56, C-57	22-2053	Dry Electrolytic 100 Mfd. 200V x 10 Mfd. 475V x 40 Mfd. 50V
	22-2078	.047 Mfd. 600V.
	27-112	Channel Indicator Disc. (Used on S-15346)
	27-113	Contrast Indicator Disc. (Used on S-15343)
	34-183	Turret Drive Gear (Used on S-15025)
	34-184	Indicator Drive Gear (Used on S-15134)
	34-185	Indicator Gear (Used on S-15346)
	34-186	Drive Gear (Used on S-15347)
	34-191	Drive Gear (2 used)
	44-27	Test Jack
	52-518	Low Capacity Shielded Lead
	54-139	#3/8-32 x 9/16 Hex Palnut (8 used) (or 54-108)
	54-189	#8-32 Wing Nut
	54-267	#6-32x5/16 Hex Palnut (2 used)
	57-1461	Indicator Mtg. Plate (Used on S-15367)
	57-1462	Front Bearing Plate (Used on S-15345)
	58-128	Two Contact A.C.Plug
	58-173	Eleven Prong Plug (Used on S-15208)
	58-178	Eleven Prong Adaptor Plug
	61-129	Osc. Cam Drive Pulley (Used on S-15205)
	61-130	Osc. Cam Control Pulley (Used on S-15204)
	61-131	Contrast Indicator Pulley (Used on S-15343 & 44)
R-70	63-947	27K Ohm (Insulated) 10% 2W
R-74	63-1071	10K Ohm (Insulated) 10% 1W
	63-1067	6800 Ohm (Insulated) 10% 1W
R-63	63-1169	2700 Ohm W.W. (Insulated) 10% 2W
R-63	63-1169	2700 ohm W.W.(Insulated) 10% 2W
R-84	63-1198	10K ohm (Insulated) 10% 2W
R-64	63-1222	470K ohm W.W.(insulated) 10% 1W
R-76	63-1485	33K ohm (Insulated) 10% 2W
R-75	63-1533	5K ohm (Insulated) 20% 3W Zipohm
R-72	63-1566	22K ohm (Insulated) 10% 2W
	63-1573	2700 ohm (Insulated) 10% 1W
R-78	63-1578	150 ohm (Insulated) 20% 2W
R-49	63-1579	6200ohm (Insulated) 5% 2W
R-85	63-1581	4.7 ohm W.W.(Insulated) 10% 1/2 W.
	63-1668	Focus Control (Used with one 63-1573 as temp.sub for 63-2009)
R-81	63-1669	Horizontal Center Control
R-68	63-1670	Vertical Center Control
	63-1671	Vertical Hold Control (or 63-2025)
R-73	63-1672	Horizontal Hold Control
	63-1673	Vertical Size Gontrol (or 63-2036)
R-67	63-1674	Vertical Linearity Control
R-77	63-1675	Horizontal Drive Control
R-79	63-1679	15K ohm W.W. (Insulated) 20% 20W.
R-50	63-1682	Intensity Control
R-52	63-1684	10K ohm (Insulated) 10% 7W. Zipohm
R-83	63-1685	620 ohm (Insulated) 10% 10W.Zipohm
	63-1689	4500 ohm (Insulated) 10% 10W.Zipohm
R-40	63-1690	Delay Control (4K ohm)
R-23	63-1701	10 ohm (Insulated) 10% 1/2 W.
R-31	63-1751	150 ohm (Insulated) 20% 1/2 W.

Diag. No.	Part No.	Description
R-91	63-1754	180 ohm (Insulated) 10% 1/2 W.
R-38	63-1775	560 ohm (Insulated) 10% 1/2 W.
	63-1779	1200 ohm (Insulated) 10% 1/2 W.
R-44	63-1781	820 ohm (Insulated) 5% 1/2 W.
R-19	63-1782	820 ohm (Insulated) 10% 1/2 W.
R-25	63-1806	3300 ohm (Insulated) 10% 1/2 W.
R-90	63-1820	6800 ohm (Insulated) 10% 1/2 W.
R-47	63-1824	8200 ohm (Insulated) 10% 1/2 W.
R-53	63-1827	10K ohm (Insulated) 10% 1/2 W.
R-61	63-1831	12K ohm (Insulated) 10% 1/2 W.
R-48	63-1838	18K ohm (Insulated) 10% 1/2 W.
R-35	63-1845	27K ohm (Insulated) 10% 1/2 W.
R-32	63-1848	33K ohm (Insulated) 10% 1/2 W.
R-45	63-1849	33K ohm (Insulated) 20% 1/2 W.
R-33	63-1852	39K ohm (Insulated) 10% 1/2 W.
R-22	63-1855	47K ohm (Insulated) 10% 1/2W.
R-43	63-1856	47K ohm (Insulated) 20% 1/2 W.
R-20	63-1859	56K ohm (Insulated) 10% 1/2 W.
R-42	63-1866	82K ohm (Insulated) 10% 1/2 W.
R-4	63-1870	100K ohm (Insulated) 10% 1/2W.
R-51	63-1873	120K ohm (Insulated) 10% 1/2W.
R-6	63-1876	150K ohm (Insulated) 10% 1/2W.
R-92	63-1880	180K ohm (Insulated) 10% 1/2W.
R-11	63-1883	220K ohm (Insulated) 10% 1/2W.
R-88	63-1884	220K ohm (Insulated) 20% 1/2W.
R-89	63-1891	330K ohm (Insulated) 20% 1/2 W.
R-57	63-1896	470K ohm (Insulated) 5% 1/2 W.
R-85	63-1898	470K ohm (Insulated) 20% 1/2W.
R-56	63-1901	560K ohm (Insulated) 10% 1/2W.
R-14	63-1910	1 Megohm (Insulated) 5% 1/2W.
R-55	63-1912	1 Megohm (Insulated) 20% 1/2W.
	63-1914	1.2 Megohm (Insulated) 5% 1/2W.
	63-1917	1.5 Megohm (Insulated) 5% 1/2W.
R-65	63-1918	1.5 Megohm (Insulated) 10% 1/2W.
R-41	63-1919	1.5 Megohm (Insulated) 20% 1/2W.
R-18	63-1926	2.2 Megohm (Insulated) 20% 1/2W.
R-65	63-1940	4.7 Megohm (Insulated) 20% 1/2W. (Use 63-1919)
	63-1965	150 ohm W.W.(Insulated) 20% 2W. (Alt. for 63-1578)
R-86	63-1967	1500 ohm (Insulated) 10% 1W.
	63-1995*	150 ohm (Insulated) 20% 3W.Zipohm (Alt. for 63-1578)
R-82	63-2009	Focus Control (Use one each 63-1573 & 63-1668 as temp. sub. on 1300 chassis)
R-80	63-2011	3K ohm W.W.(Insulated) 10% 10W. (one 63-1689 may be in parallel with one 63-1684 as a sub. for 63-2011)
R-71	63-2017	4K ohm Zipohm(Insulated) 10% 5W
	69-154	#6-32x2 1/4" R.H.M.S. Steel N.P.
	69-265	#8-32x2 1/2" R.H.M.S. Steel N.P.
	73-21	#8-32x3/16" Headless Set.Screw Cuppoint (8 used)
	73-24	#8-32x 1/4" Hex. Hd.Set Screw Cuppoint (2 used)
	73-30	#6-32x1/4" Hex. Hd. Set Screw Cuppoint (2 used)
	76-536	Idler Shaft
	76-537	Tuning Shaft
	78-708	Socket - Octal Tube
	78-755	Socket - Octal Tube (8 used)
	78-788	Socket - Miniature Tube (9 contact)
	78-791	Socket Seven Contact
	78-807	Socket - Miniature Tube (2 used)
	78-826	Socket - Eleven Contact
	78-829	Socket - C.R.T. (Used on S-15207)
	78-834	Socket - Octal Tube (Low Loss)
	78-835	Dial Light Socket & Wire
	80-402	Spring Drive Cord Tension (3 used)
	80-686	Spring - Grounding

Diag. No.	Part No.	Description
	80-690	Spring - Indicator Detent
	80-731	Spring - Width Control Tension
	83-1567	A.F.C. - Terminal Board
	83-1569	C.R.T.-Mtg. Rubber Strip (or 83-1605)
	83-1573	Insulator Strip (C.R.T.Socket Wire)
	83-1585	Insulator Strip
S-2	85-238	Focus Current Range Switch
	93-946	Cup Washer
	93-947	Cup Washer
	93-952	1/16"x.144x3/8" Bakelite Washer (3 used)
	93-953	Indicator Drive Gear Washer
	93-955	1/16"x11/64"x1/2" Bakelite Washer (2 used)
	94-645	Coupling Bushing
	94-653	Focusing Coil Bushing
T-9	95-1110	Deflection Yoke
L-80	95-1111	Focus Coil
T-8	95-1112	Vertical Output Transformer
T-7	95-1113	Vertical Blocking Osc. Transformer
T-13	95-1116	Filament Transformer
	97-328	Channel Indicator Stud
P1-1	100-36	Dial Light Bulb (2 used)
	112-88	#8-32 Thumb Screw (3 used)
	113-9	#8-32 x 1/4" Hex. Hd. Slotted M.S. (Lockwasher attached - 7 used)
	114-39	#8x1/4" Hex. Hd. S.T.Screw (18 used) (Or 114-326)
	114-307	#8-32x1 1/4" Hex. Hd. Slotted M.S.
	114-316	#6-32x1 1/4" Hex. Hd. Slotted M.S. (2 used)
	125-72	Rubber Grommet (C.R.T.Mtg.-2 used)
	126-613	Fire Shield
P-1	136-16	Fuse 1/4 amp.
	149-71	Iron Core (Used on S-15126 & 27)
	149-77	Iron Core & Insert (Used on S-15042)
	149-78	Iron Core & Screw(2 used on S-15041)
	166-50	C.R.T. Support Bumper
	188-27	Retaining Ring (2 used)
	188-32	Retaining Ring
	188-34	Retaining Ring
	188-75	Retaining Ring (2 used)
	214-7	Indicator Drive Chain
	S-15015	Horizontal Sweep Trans. Assy. (Used on S-15202)
	S-15020	R.F.Shelf & Turret Tuner Assy. (Complete)
	S-15025	Turret Drive Gear & Bushing Assy.
T-10	S-15041	Horizontal Osc. & A.F.C. Trans. Assembly
L-20	S-15042	Horizontal Size Control Assembly (Use S-15711)
	S-15045	Sound Chassis Assem. (Complete)
	S-15046	Video I.F. Strip Assem. (Complete)
	S-15067	C.R.T. Tie Down Strip & Brkt. Assy. (83-1566)
	S-15114	Osc. Coil Assem. (Used on S-15041)
	S-15124	A.F.C. Coil Assem. (Used on S-15041)
L-68	S-15125	1st Video Peaking Coil Assem.
L-70	S-15126	2nd Video Peaking Coil Assem.
L-69	S-15127	2nd Video Series Peaking Coil Assem.
L-67	S-15128	B+ Choke Coil Assem.
	S-15132	A.C. Plug & Brkt.
	S-15134	Chain Gear & Washer Assem.
	S-15202	Horizontal Sweep Trans. & Socket Assem.(or S-15710 & S-15711)

Diag. No.	Part No.	Description
	S-15203	Anode Clip & Wire Assem. (Used on S-15202)
	S-15204	Osc. Cam Drive Shaft & Pulley Assy.
	S-15205	Osc. Cam Control Ext. Shaft & Pulley Assem.
	S-15206	Osc. Cam Drive Cord & Eyelet Assy.
	S-15207	C.R.T. Socket & Wire Assem.
	S-15208	Phone Vision Dummy Plug & Wire Assem. (or use 58-178)
	S-15209	Electrostatic & Heat Shield Assem.
	S-15330	Beam Bender Unit (Used only with 12LP4)
	S-15343	Contrast Indicator Pulley, Bushing, and Disc. Assem.
	S-15344	Contrast Indicator Pulley & Bushing Assem.
	S-15345	Tuning Shaft Brkt & Plate Assem.
	S-15346	Channel Indicator Disc. & Gear Assy.
	S-15366	Contrast Indicator Cord & Eyelet
	S-15392	Anode Clip, Terminal & Washer
	S-15611*	Deflection Yoke Mtg. Assem.
	S-15614*	Indicator Plate & Stud Assem.
	S-15711*	Horizontal Size Control Assem.
	S-15919*	C.R.T. Retaining Brkt & Grommet Assem. (R.H)

TUBES

1	1B3GT	1	6K6GT
1	5V4G	1	6SH7
2	6AC7	1	6SL7GT
1	6AL5	1	6SN7GT
1	6AU6	1	6V6GT
1	6BG6G	1	12AT7

1 12KP4 or 12LP4

R. F. SHELF ASSEMBLY

	19-166	Coil Mtg. Clip
C-17	22-1765	1.2 Mmfd. Ceramic 500 V.
C-82	22-1866	200 Mmfd. Ceramic 500 V.
C-18	22-1867	Special Ceramic (Disc. Type) (Use S-15043)
C-27	22-1868	47 Mmfd. Ceramic 500 V.
	22-1872	46 Mmfd. Ceramic 500 V.
C-20	22-1876	47 Mmfd. Ceramic 500 V.
C-15	22-1878	.001 Mfd. Ceramic 500 V.
C-84	22-1879	10 Mmfd. Ceramic 500 V.
C-85	22-1880	100 Mmfd. Ceramic 500 V.
	52-532	Shielded Lead
	52-536	Shielded Lead
R-21	63-943	4700 ohm (Insulated) 10% 1 W.
R-23	63-1701	10 ohm (Insulated) 10% 1/2 W.
R-15	63-1729	47 ohm (Insulated) 10% 1/2 W.
R-19	63-1782	820 ohm (Insulated) 10% 1/2 W.
R-17	63-1785	1K ohm (Insulated) 10% 1/2 W.
R-86	63-1792	1500 ohm (Insulated) 10% 1/2 W.
R-16	63-1841	22K ohm (Insulated) 10% 1/2 W.
R-22	63-1845	47K ohm (Insulated) 10% 1/2 W.
R-6	63-1875	150K ohm (Insulated) 10% 1/2 W.
R-55	63-1912	1 Megohm (Insulated) 20% 1/2 W.
R-18	63-1926	2.2 Megohm (Insulated) 20% 1/2 W.
	76-533	Shaft
	78-807	Socket - Miniature Tube (2 used)
	78-857	Socket - Miniature (Alt. for 78-828) (Ceramic with Shield Base)
	80-141	Spring - Osc. Tuning Shaft (or 80-736)

Diag. No.	Part No.	Description
	80-679	Spring - Shaft Tension (or 80-701)
	83-1560	Master Terminal Strip
	83-1570	Antenna Terminal Strip
	93-216	.015 x .255 x 7/16" Steel Washer
	93-952	Bakelite Washer
	93-959	Fibre Washer (Use 93-973 Bakelite Washer on later Prod)
	94-647	Osc. Coil Mtg. Bushing
	112-732	Calibrating Screw
	112-742	Trimmer Adjusting Screw (Used on S-15211)
	126-622	Miniature Tube Shield (Alt. for 126-515)
	126-597	Internal Shield
	128-53	Osc. Coil Tuning Cam (3 used)
	149-62	Iron Core & Screw (Used on S-15066)
	149-74	Iron Core (Used on S-15082)
	149-75	Iron Core & Screw (Used on S-15066)
	188-34	Retaining Ring (Used on 76-533)
	S-15027	R.F. Shelf Assem. (Complete)
	S-15028	Tuning Washer Assem.
L-10	S-15043	High Frequency Osc. Coil & Capacitor Assem.
L-8	S-15062	Antenna Coil Assem.
L-9	S-15064	Converter Plate Coil Assem.
L-12	S-15065	Filament Choke Coil Assem.
L-11	S-15066	Low Frequency Osc. Coil Assem.
C-16	S-15211	Trimmer Capacitor Assem.

TUBES

2	6AG5
1	6J6

TURRET TUNER ASSEM.

	19-163	Coil Mtg. Clip (36 used)
C-19	22-1762	1.0 Mmfd. Ceramic 500 V. (1 ea. used S-15030 & 31)
C-34	22-1764	1.5 Mmfd. Ceramic 500 V. (1 ea. used S-15029-30-31-32-33)
C-17	22-1765	1.2 Mmfd. Ceramic 500 V. (1 ea. used S-15027 & 29)
C-50	22-1766	.68 Mmfd. Ceramic 500 V. (1 ea. used S-15032 & 33)
C-38	22-1852	7.5 Mmfd. Ceramic 500 V. (1 ea. used S-15034-35 & 36)
C-39	22-1854	9 Mmfd. Ceramic 500 V. (Used on S-15040)
C-45	22-1857	15 Mmfd. Ceramic 500 V. (Used on S-15036)
C-40	22-1859	22 Mmfd. Ceramic 500 V. (Used on S-15034)
C-46	22-1860	12 Mmfd. Ceramic 500 V. (Used on S-15038)
C-42	22-1862	19 Mmfd. Ceramic 500 V. (Used on S-15035)
C-47	22-1863	10 Mmfd. Ceramic 500 V. (Used on S-15039)
C-44	22-1865	16 Mmfd. Ceramic 500 V. (Used on S-15037)
C-88	22-1873	18 Mmfd. Ceramic 500 V. (Used on S-15031)
C-36	22-1879	Slug Tuned Trimmer Cond. (1 ea. used on S-15029-30-31-34-35-36)
C-43	22-1891	2.5 Mmfd. Ceramic 500 V. (Used on S-15036)
C-86	22-1899	24 Mmfd. Ceramic 500 V. (Used on S-15034)

Diag. No.	Part No.	Description
C-41	22-1900	7.5 Mmfd. Ceramic 500 V.(Used on S-15035)
C-37	22-1951	4.5 Mmfd. Ceramic 500 V. (Used on S-15030
C-35	22-1952	13 Mmfd. Ceramic 500 V (Used on S-15029)
	22-2094	7.5 Mmfd. Ceramic 500 V. (1 ea. used on S-15037 - 38 - 39- 40)
	46-779	Adjusting Wrench Knob & Set Screw
	56-263	Groove Pin Type 1 1/8" Dia. x 1/4" Lg. (Replaces 56-253)
	57-1428	Bearing Plate
	57-1497	Adjusting Plate (Rear Bearing)
R-25	63-1806	3300 Ohm 1/2 W. 10% Ins. Res. (1 ea. used S-15029-30-31)
R-87	63-1813	4700 Ohm 1/2 W. 10% Ins. Res. (1 ea. used S-15032 & 33)
R-90	63-1820	6800 Ohm 1/2 W. 10% Ins. Res. (1 used on S-15029)
	68-12	Adjusting Wrench
	73-24	#8-32 x 1/4" Hex. Hd. Slotted Set Screw Cuppoint (2 used on S-15024)
	73-119	Special Set Screw 10-32 x 1/2
	73-122	Special Set Screw 1/4-28x3/4
	80-697	Adj. Wrench Return Spring
	80-743	Index Spring (Used on S-16016)
	83-1071	Threaded Insert (36 used)
	94-677	Index Spring Bushing
	113-7	#4-40 x 1/4" B.H.M.S. Steel N.P. (Ext. Shakeproof Lockwasher)
	113-8	#6-32 x 1/4" Hex. Hd. Slotted M.S. (Int. Shakeproof Lockwasher)
	113-9	#6-32x 1/4" Hex. Hd. Slotted M.S. (Int. Shakeproof Lockwasher)
	126-596	R.F. Shelf Shield (or S-15497)
	149-76	Iron Core & Screw (Alt. for 139-83)
	149-86	Iron Core (Sub for 149-40) (36 used)
	184-14	Steel Ball 1/8" Dia.
	184-15	Steel Ball 5/32" Dia..
	184-16	Steel Ball 1/2" Dia.
	S-15019	Turret Tuner Housing Assem.
	S-15020	R.F. Shelf & Turret Tuner Assy. (Complete)
	S-15021	Turret Tuner Assem. (Mechanical)
	S-15022	Turret Tuner Cover Assem.
	S-15023	Idler Gear & Brkt. Assem.
	S-15024	Tuning Shaft Gear & Bushing Assem.
	S-15029	Channel Strip Assem. #2
	S-15030	Channel Strip Assem. #3
	S-15031	Channel St rip Assem. #4
	S-15032	Channel Strip Assem. #5
	S-15033	Channel Strip Assem. #6
	S-15034	Channel Strip Assem. #7
	S-15035	Channel Strip Assem. #8
	S-15036	Channel Strip Assem. #9
	S-15037	Channel Strip Assem. #10
	S-15038	Channel Strip Assem. #11
	S-15039	Channel Strip Assem. #12
	S-15040	Channel Strip Assem. #13
	S-16016	Index Sprirg & Bushing Assem.

VIDEO I.F. STRIP ASSEMBLY

	19-166	Coil Mtg. Clip (Used on S-15051 & 52) (or 19-181)
	19-179	Coil Mtg. Clip (Used on S-15049 & 54)
C-27	22-1668	200 Mmfd. Ceramic 500 V.
C-23	22-1669	100 Mmfd. Ceramic 500 V. (or 22-162)
C-32	22-1775	.047 Mfd. 400 V.
C-38	22-1852	7.5 Mmfd. Ceramic 500 V.
C-24	22-1869	6 Mmfd. Ceramic 500 V.(2 used)
C-22	22-1870	52 Mmfd. Ceramic 500 V.
C-26	22-1871	30 Mmfd. Ceramic 500 V.
C-29	22-1882	Trimmer (Used on S-15054)
C-15	22-1888	.001 Mfd. Ceramic 500 V.
C-84	22-1895	10 Mmfd. Ceramic 500 V.
	22-2050	5 Mmfd. Ceramic 500 V.
	22-2059	4 Mmfd. Ceramic 500 V.
C-25	105-17	Dual Ceramic (2X1500 Mmfd.)
	105-18	Dual Ceramic (5 mmfd.-6 mmfd.) (Use 1 ea. 22-2050 &2059 as alt.)
C-28	105-20	4-5 Mmf Dual Capacitor (use 22-2050 and 22-2059 as alt.)
C-30	27-108	Silver Mica Disc. (2 used) 500 Mmfd.
	54-271	#6-32 x 1/4" Hex. Palnut (Inverted) (4 used)
R-26	63-1740	32 ohm (Insulated) 10% 1/2 W.
R-31	63-1751	150 ohm (Insulated) 20% 1/2 W.
R-27	63-1758	220 ohm (Insulated) 20% 1/2 W.
R-28	63-1772	470 ohm (Insulated) 20% 1/2 W.
R-24	63-1786	1K ohm (Insulated) 20% 1/2 W.
R-25	63-1806	3300 ohm (Insulated) 10% 1/2 W.
R-34	63-1809	3900 ohm (Insulated) 5% 1/2 W.
	63-1812	4700 ohm (Insulated) 5% 1/2 W. (or 63-1818)
R103	63-1816	5600 ohm (Insulated) 5% 1/2 W.
R-29	63-1818	6200 ohm (Insulated) 5% 1/2 W.
R-35	63-1845	27K ohm (Insulated) 10% 1/2 W.
R-32	63-1848	33K ohm (Insulated) 10% 1/2 W.
R-33	63-1852	39K ohm (Insulated) 10% 1/2 W.
R-18	63-1926	2.2 Megohm (Insulated) 20% 1/2 W.
	64-451	Brass Eyelet (Used on 57-1054)
	78-788	Socket - Noval Tube
	78-807	Socket- Miniature Tube (3 used)
	86-182	Capacitor Lug
	94-538	Tuning Slug Insert (Used on S-15048-50-53-and 57)
	125-69	Rubber Grommet (4 used as shock mounts for coils)
	149-39	Iron Core (Used on S-15050)
	149-62	Iron Core & Screw (Used on S-15049-51-52 and 54)
	149-71	Iron Core (Used on S-15059-60)
	149-85	Iron Core (Used on S-15048-53-57)
	S-15046	Video I.F.Strip Assy.(Complete) (or S-15808)
L-13	S-15048	Parallel Tuned Sound Trap Coil Assem.
L-32	S-15049	Video I.F. Coupling Coil Assem.
	S-15050	Series Tuned Sound Trap Coil Assem. (or S-15727)
L-16	S-15051	1st Video I.F. Coil Assem.
L-18	S-15052	2nd Video I.F. Coil Assem.
L-17	S-15053	Adjacent Sound Channel Trap Coil Assem.
	S-15054	3rd I.F. Transformer Assem.
L-19	S-15055	3rd I.F. Coil Assy.(Use S-15054)
L-24	S-15057	Video Cathode Trap Coil Assem.
L-21	S-15058	Video Detector Series Coil Assem. (Peaking)
L-22	S-15059	Video Detector Shunt Coil Assem. (Peaking)
L-23	S-15060	Filament Choke Assem.
L-20	S-15242	Video I.F. Coil Assem. (3rd Secondary) (Use S-15054)

Diag. No.	Part No.	Description
		TUBES
		1 6AH6
		1 12AT7
		2 6AU6
		SOUND CHASSIS
	12-1540	Vol. Cont. Mtg. Brkt.
C-14	22-1693	3 Mmfd. Ceramic 500 V. (or 22-1896)
C-9	22-1703	.0005 Mfd. 500 V
C-8	22-1706	.005 Mfd.(Disc. type) 450 V.
C-13	22-1782	.0047 Mfd. 600 V.
C-10	22-1811	.0047 Mfd. 400 V.
C-12	22-1813	.022 Mfd. 600 V.
C-6	22-1847	.0047 Mfd. 200 V.
C-5	22-1880	.0012 Mfd. 600 V.
C-11	22-1886	.001 Mfd. Ceramic 500 V.
C-7	22-1887	25 Mmfd. Ceramic 500 V.
SP-1	49-649	10" P.M. Speaker 208-649 Cone & Voice Coil
	54-139	#3/8-32x9/16" Hex. Palnut
	54-267	#6-32x5/16" Hex. Palnut (Inverted) (4 used) (or 54-271)
	58-88	Three Prong Plug
	58-177	Three Prong Adaptor Plug
R-5	63-1194	47K ohm (Insulated) 10% 1 W.
R-13	63-1227	220 ohm W.W. (Insulated) 10% 1W.
R-3	63-1571	6800 ohm (Insulated) 10% 2W.
R-46	63-1667	Dual Con. & A.C.Switch (Volume and Contrast)
R-2	63-1737	68 ohm (Insulated) 20% 1/2 W.
R-7	63-1828	10K ohm (Insulated) 20% 1/2 W.
R-10	63-1842	22K ohm (Insulated) 20% 1/2 W.
R-8	63-1869	100K ohm (Insulated) 10% 1/2 W.
R-4	63-1870	100K ohm (Insulated) 20% 1/2 W.
R-6	63-1876	150K ohm (Insulated) 10% 1/2 W.
R-11	63-1883	220K ohm (Insulated) 10% 1/2 W.
R-12	63-1890	330K ohm (Insulated) 10% 1/2 W.
R-55	63-1912	1 Megohm (Insulated) 20% 1/2 W.
R-9	63-1961	15 Megohm (Insulated) 10% 1/2 W.
	63-1968	6800 Ohm (Insulated) W.W. 10% 2W. (Alt. for 63-1571)
	63-1997	6800 ohm (Insulated) 10% 2 W. (Alt. for 63-1571) Zipohm
	78-363	Socket - Three Contact
	78-755	Socket - Octal Tube
	78-788	Socket - Noval Tube
	78-807	Socket - Miniature Tube (3 used)
T-6	95-1114	Output Transformer
	95-1118	2nd I.F. Transformer
T-3, T-4	95-1119	3rd I.F. Transformer
T-5	95-1120	Discriminator Transformer
	95-1121	Sound Input Coil (or 95-1155)
	114-201	#8x5/16" Hex. Hd. Slotted S.T.scr.
	S-15045	Sound Chassis Assy. (Complete)

TUBES

3 6AU6
1 6V6GT
1 6T8

Diag. No.	Part No.	Description
		POWER SUPPLY
C-1	22-1826	Dry Electrolytic - 15 Mfd. 250V
C-2	22-1827	Dry Electrolytic - 40 Mfd. 400V
C-3, C-4	22-1828	Dry Electrolytic - 20 Mfd. 475V x100 Mfd. - 350V
	54-42	#10-32x5/16" Hex. Nut (4 used to mount 95-1115)
P-1	58-169	Seven Prong Plug (Used on S-15009)
R-1	63-1580	10 ohm W.W.(Insulated) 5% 2W. (or 63-1996)
	78-229	Socket - Electrolytic
	78-274	Socket - Electrolytic
	78-755	Socket - Tube (2 used)
L-78	95-1109	Filter Choke (2 used)
T-1	95-1115	Power Transformer
	114-43	#10-32x3/8" Hex. Slotted Washer Hd. M.S. (4 used to Mount) (95-1115)
	126-604	Heat Shield
	S-15007	Power Supply Assem. (Complete)
W-1	S-15009	Power Supply Cable Assem.

TUBES

2 5U4G

POWER SUPPLY FOR 28T925EU AND 28T925RU

	19-9	Cable Retaining Clip
C-1	22-1826	Electrolytic Condenser 15 Mfd.250V.
C-2	22-1827	Electrolytic Condenser 40 Mfd.400V.
C-3	22-1828	Electrolytic Condenser 100 Mfd. 350V-20 Mfd.- 475V
	54-34	#6-32x1/4"x3/32" Hex. Nut Steel N.P. (Used on 19-9)
	54-42	#10-32x5/16"x3/32" Hex. Nut Steel N.P. (4 used to Mt. 95-1124)
	57-1465	Cover Plate
R-1	63-1580	10 ohm W.W.(Insulated) 5% 2W. (or 63-1996)
R-93	63-2015	33 ohm W.W. (Insulated) 20% 2 W (or 63-2016)
	71-24	1/4-20x1/2" Flat H.M.S. Steel Plain (Used on 57-1465)
	78-229	Electrolytic Condenser Socket
	78-274	Electrolytic Condenser Socket
	78-755	Octal Tube Socket (2 used)
	93-125	#6 Internal Shakeprf. Lockwasher #1206 (1 used on 19-9)
	93-127	#10 Internal Shakeprf. Lockwasher #1210 (4 used to Mt. 95-1124)
	95-1109	Filter Choke
T-1	95-1124	Power Transformer
L-82	95-1154	Filter Choke
	114-43	10-32X3/8 Hex. Slotted Washer H.M.S. Steel N.P. (4 used to Mt. 95-1124)
	114-255	6-32x 5/16 Hex. Acorn H.M.S. Steel N.P. (1 used on 19-9)
	114-297	#6x1/4" Hex. Hd. Slotted S.T.Screw N.P. Stan. Tap (4 used to mt heat shields)
	126-604	Heat Shield
	S-15009	Cable Assem.
	S-15376	Heat Shield & Brkt Assem.
	S-15747	Power Supply Assy. (Complete)

Diag. No.	Part No.	Description
		TUBES
		2 5U4G
		28T960E (Chassis 28F20)
		CABINET PARTS
	7-11	Bezel (12" tube)
	11-106	Line Cord & Plug (9 ft. long)
	17-105	Bezel Clamp (4 used on 7-11)
	19-180	Control Cover Retaining Clip (3 ea. used on S-15341-42)
	24-446	A.C.Line Cord Plug Cover
	24-477	Outer Control Cover (R.H.)
	24-478	Outer Control Cover (L.H.)
	46-752	Vertical Horizontal Hold Control Knob (4 used)
	46-761	Channel Selector Knob
	46-762	Contrast Control Knob
	46-763	Volume Control & "On-Off" Sw.Knob
	46-782	Dial Light Switch Knob
SP-1	49-649	10" P.M.Speaker 208-649 Cone & Voice Coil
	54-30	#8-32x5/16"x7/64" Hex.Nut (4 used)
	56-261	#18 Ga. x 3/8" lg. Brass Esc. Pin (2 used)
	57-1463	Name Plate
	57-1481	Bezel Clamping Plate (4 used)
	58-75	Switch Plug
	70-86	#6x5/8" Washer Hd. Wood Screw Statuary Bronze (4 used)
	70-149	#4x1/2" Phillips B.H.W.S.(10 used)
	74-55	Ventilating Screen
	74-56	Ventilating Screen
	74-57	Ventilating Screen
	78-787	Two Contact A.C.Socket
	83-1630	Strip (2 used on C.R.T. in shipment)
S-1	85-448	Dial Light Switch (used on S-15424)
	93-263	1/32 x 3/16" x 1/2" Steel Washer (4 used)
	112-289	#8-32 x 1 3/8" Swedge Hd. M.S. (4 used)
	112-744	Latch Acjusting Screw (2 used)
	112-745	#4-40X 1/4" Flat Hd. S.T. Screw (8 used on 17-105)
	114-80	#1/4-20X1 3/8" Washer Hd. M.S. (7 used)
	114-313	#8x1/2" Hex. Hd. Slotted S.T.Screw (4 used)
	138-32	Speaker Grille
	171-9	Indicator Prism (2 used)
	184-14	Steel Ball-1/8" Dia. (To be inserted in shaft of V.C. Knob)
	188-102	Clamping Ring
	192-122	Protective Glass
	196-116	Bezel Gasket (used on 7-11)
	196-118	Protective Glass Gasket
	202-672	Instruction Book (Operating Guide)
	202-673	Unpacking & Installation Inst. Sheet
	S-15424	Dial Light Switch & Wire Assy.
	S-15471	Cabinet Back & A.C. Cord Assem.
	S-15341	Control Cover & Clip Assem.(R.H.)
	S-15342	Control Cover & Clip Assem.(L.H.)
	S-15521	Line Cord & Connector (Less back cover screen)

Diag. No.	Part No.	Description
		28T962R & 28T960K (Chassis 28F20)
	7-13	Bezel (12" tube)
	11-106	Line Cord & Plug (9 ft. long)
	17-105	Bezel Clamp (4 used)
	19-180	Cover Retaining Clip (3 ea. used on S-15363-64)
	24-479	Control Cover -Outer (R.H.)
	24-480	Control Cover -Outer (L.H.)
	46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
	46-773	Channel Selector Knob
	46-774	Contrast Control Knob
	46-775	Volume Control & "On-Off" Sw.Knob
	46-783	Dial Light Switch Knob
SP-1	49-649	10" P.M. Speaker 208-649 Cone & Voice Coil
	54-30	#8-32x5/16" x 7/64" Hex. Nut - Steel N.P.
	56-261	18 Ga. x 3/8" lg. Brass Esc. Pin
	57-1464	Name Plate
	57-1481	Bezel Clamping Plate (4 used)
	58-75	Switch Plug
	70-86	#6x5/8" Washer Hd. Wood Screw Steel St atuary Bronze(4 used)
	70-149	#4x1/2" Phillips R.H. Wood Screw Steel Cad. Plate (10 used)
	74-55	Ventilating Screen
	78-787	Two Contact A.C. Socket
	83-1630	Strip (2 used on C.R.T. in shipment)
S-1	85-448	Dial Light Switch (Used on S-15424)
	93-968	.046x.171 x 1/2" Steel Washer - Cad. Pl. (4 used)
	112-289	#8-32x1 3/8" Swedge Hd. M. Screw (4 used)
	112-744	Latch Adjusting Screw (2 used)
	112-745	#4-40x1/4" Flat Hd. S.T.Screw (8 used)
	114-80	#1/4-20 x 1 3/8" Hex. Washer Hd. M.S. (7 used)
	114-313	#8x1/2" Hex. Hd. Slotted S.T.Screw (4 used)
	138-33	Speaker Grille
	171-9	Indicator Prism (2 used)
	184-14	Steel Ball - 1/8" Dia. (To be inserted in shaft of V. C. knob)
	188-102	Clamping Ring
	192-122	Protective Glass
	196-116	Gasket (Bezel)
	196-118	Protective Glass Gasket
	202-672	Instruction Book (Operating Guide)
	202-673	Unpacking & Installation Instruction Sheet
	S-15363	Control Cover & Clip Assem. (R.H.)
	S-15364	Control Cover & Clip Assem. (L.H.)
	S-15424	Dial Light Switch & Wire Assem.
	S-15471	Cabinet Back Assem.
	T.V. 28F21	Main Chassis
28F21 Main Chassis same as 28F20 Main Chassis except:		
OMIT		
	S-15067	Tie Down Strip & Bracket Assem.
	S-15919	C.R.T. Retaining Brkt & Grommet Assem.
	34-186	Drive Gear (2 used)
	34-192	Drive Gear
	73-21	#8-32X3/16" Hdless Set Screw Cuppoint (4 used)
	76-536	Idler Shaft
	76-537	Tuning Shaft
	188-27	Retaining Ring
		TUBE
		1 12KP4
ADD		
	S-15319	Tie-Down Strip & Brkt Assem.
	S-15917	C.R.T. Brkt & Adaptor Brkt Assem.
	S-15320	Beam Bender Unit (Used only when using 10BP4)
	12-1533	Tube Adaptor Bracket (2 used)
	75-532	Tuning Shaft
	93-767	.020 x .385 x 5/8 Steel Washer (used on 76-532)
	113-9	#8-32X1/4" Hex. Hd. Slotted M.S. Steel N.P.(#8 Int. Lockwasher #1208 Attached)
		TUBE
		1 10FP4 (use 10BP4 as alt. if required)

MODEL 28T961E (Chassis 28F21)

Model 28T961E is the same as Model 28T960E except for the following:

OMIT

	7-11	Bezel (12" Tube)
	192-122	Protective Glass 12"
	196-116	Rubber Gasket (Bezel)
	196-118	Rubber Gasket (Protective Glass)

ADD

	7-12	Bezel (10" Tube)
	192-123	Protective Glass - 10"
	196-117	Rubber Gasket (Bezel)
	196-119	Rubber Gasket (Protective Glass)

MODEL 28T963R (Chassis 28F21)

Model 28T963R is the same as Model 28T962R except for the following:

OMIT

	192-122	Protective Glass 12"
	196-116	Rubber Gasket (Bezel)
	196-118	Rubber Gasket (Protective Glass)

ADD

	192-123	Protective Glass 10"
	196-117	Rubber Gasket (Bezel)
	196-119	Rubber Gasket (Protective Glass)

MODEL 28T925E (Chassis 28F22)

Model 28T925E is the same as Model 28T960E except for the following:

OMIT

	7-11	Bezel (12" Tube)
	49-649	10" P.M. Speaker 208-649 Cone & Voice Coil
	112-289	#8-32x1 3/8" Swedge Hd. M.S.(4 used)
	138-32	Speaker Grill
	192-122	Protective Glass
	196-116	Bezel Gasket
	196-118	Protective Glass Gasket
	202-672	Instruction Book
	S-15007	Power Supply Assem.

ADD

	7-12	Bezel (10" Tube)
	49-654	5 1/4" P.M. Speaker 208-654 Cone & Voice Coil
	74-56	Ventillating Screen
	74-57	Ventillating Screen
	112-142	Speaker Mounting Screws (2 used)
	192-123	Protective Glass
	196-117	Bezel Gasket
	196-119	Protective Glass Gasket
	202-681	Instruction Book
	202-682	Unpacking & Installation Inst.Sheet
	S-15375	Power Supply Assem. or S-15747
	S-15471	Cabinet Back & A.C.Cord Assem.

MODEL 28T925R (Chassis 28F22)

Model 28T925R is the same as Model 28T925E except for the following:

OMIT

	7-12	Bezel (10" tube)
	24-477	Control Cover - Outer (R.H.)
	24-478	Control Cover - Outer (L.H.)
	46-752	Vertical Hold & Horizontal Hold Control Knob (4 used)
	46-761	Channel Selector Knob
	46-762	Contrast Control
	46-763	Volume Control & "On-Off" Switch Knob
	46-782	Switch Knob
	57-1463	Nameplate
	S-15341	Control Cover & Clip Assem. (R.H.)
	S-15342	Control Cover & Clip Assem.(L.H.)

ADD

	7-14	Bezel (10" Tube)
	24-479	Control Cover - Outer (R.H.)
	24-480	Control Cover - Outer (L.H.)
	46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
	46-773	Channel Selector Knob
	46-774	Contrast Control Knob

Diag. No.	Part No.	Description
	46-775	Volume Control & "On-Off" Switch Knob
	46-783	Switch Knob
	57-1464	Nameplate
	S-15365	Control Cover & Clip Assem. (R.H.)
	S-15364	Control Cover & Clip Assem. (L.H.)

28F22 Power Supply Same As 28F20 Power Supply Except:

OMIT

	S-15007	Power Supply Final Assem. (Complete)
	95-1115	Power Transformer

ADD

	S-15375	Power Supply Final Assem. (Complete) or S-15747
	95-1124	Power Transformer

SPECIAL TEST EQUIPMENT FOR T.V.

	68-13	Alignment Tool
	68-14	Tuning Wand
	78-851	Adaptor Socket (To improve vertical synchronization in fringe areas)
	S-15369	Generator Test Unit
	S-15370	Bias Test Fixture
	S-15371	Coupling Ring
	S-15521	A.C.Test Cord for T.V.Chassis
	S-15627	Balance Transformer(Antenna)
	S-15729	Balance Transformer(Receiver)

MODEL 27T965R (Chassis 27F20)

Diag. No.	Part No.	Description
C61	22-162	100 Mmfd (Molded) 500V
	22-1532	47 Mmfd (Molded) 500V
	22-2061	.1 Mfd. (Molded) 400V
	22-2083	.015 Mfd. (Molded) 600V
	24-509	Cover (Used on S-15041)
	24-517	Switch Cover (85-469)
	34-192	Drive Gear
	44-25	Pilot Light Jack
	57-1512	Indicator Mtg. Plate
	63-1065	15K Ohm 1 W. 10% Ins. Res.
	63-1101	8200 Ohm 2 W. 10% Ins. Res.
	63-1193	5600 Ohm 2 W. 10% Ins. Res.
	63-1620	1800 Ohm 2 W. 10% Ins. Res.
	63-1771	470 Ohm 1/2 W. 10% Ins. Res.
	63-1784	1000 Ohm 1/2 W. 5% Ins. Res.
	63-1785	1000 Ohm 1/2 W. 10% Ins. Res.
R58	63-1799	2200 Ohm 1/2 W. 10% Ins. Res.
R87	63-1813	4700 Ohm 1/2 W. 10% Ins. Res.
R-98	63-1897	470K Ohm 1/2 W. 10% Ins. Res.
	63-1901	560K Ohm 1/2 W. 10% Ins. Res.
	63-1974	3300 Megohm 1 W. 10% Ins. Res.
	63-1975	12K Megohm 1 W. 10% Ins. Res.
R60	63-2025	Vertical Hold Control
R62	63-2036	Vertical Size Control
	63-2049	1000 Ohm 1/2 W. 10% Ins. Res.
	63-2061	Intensity Control
	63-1605	Rubber Strip (C.R.T. Mtg.)
	85-469	Picture Control Switch
	93-216	.015 x .255 x 7/16" Steel Washer (Used on S-15343)
	93-767	.020 x .385 x 5/8" Steel Washer (Used on 76-537)
	93-965	Rubber Washer (Used on S-15203)
	114-295	#8x 5/16 Hex Hd. Sl. S.T. Screw (Used on 12-1545)
	199-81	Steel Sleeve (Used on S-15344)
	S-15617	Gear & Bushing Assem.
	S-15710	Horizontal Sweep Trans. & Socket Assem.
	S-15769	Horizontal Osc. & A.F.C. Coil & Terminal Board Assem.
	S-15808	Video I.F. Strip Assem.
	S-15897	Deflection Yoke, Focus Coil & Brkt. Assem.
	S-15898	A.C. Plug, Brkt. & Wire Assem.
	S-15947	1st Video Peaking Coil Assem.
	S-16049	Horizontal Size Control Assem.

CABINET PARTS

	7-13	Bezel
	17-105	Bezel Clamp (4 used)
	24-479	Control Cover (Outer R.H.)
	24-480	Control Cover (Outer L.H.)
	46-771	Vertical & Horizontal Hold Control Knob
	46-773	Channel Selector Knob
	46-774	Contrast Control Knob
	46-775	Vol. Control & On-Off Switch Knob
	46-783	Switch Knob
	49-670	7 1/2" P.M. Speaker 208-670 Cone & Voice Coil
	56-261	#18 Ga. x 3/8 Lg. Brass Esc. Pin (2 used on 57-1559)
	57-1559	Nameplate
	57-1481	Bezel Clamping Plate
	70-86	#6 x 5/8" Washer Hd. Wood Screw Steel St at. Br. (6 used on S-15471)
	70-149	#4x1/2" Phill. R.H. Wood Screw Steel (2 used on 85-448-2 used on 171-9)
	70-151	#4x1/2" Phill. R.H. Wood Screw Steel (3 ea. used 24-479 & 24-480)
	74-55	Ventilating Screen
	78-787	Two Contact A.C.Socket
	85-448	Dial Light Switch
	112-745	#40-40x1/4" F.H.S.T.Screw (8 used on 17-105)
	112-767	Latch Adj. Screw
	114-80	1/4-20 x 1 3/8 Hex. Washer (3 used on S-15007)
	114-313	#8x 1/2" Hex. Hd. Sl. S.T.Screw (4 used on 7-13)
	171-9	Indicator Prism (2 used)
	188-102	Clamping Ring (46-774)
	192-122	Protective Glass
	196-116	Gasket (Bezel)
	196-118	Gasket (Glass)
	202-745	Instruction Book
	S-15007	Power Supply Assem. (Complete)
	S-15363	Cover & Clip Assem. (R.H.)
	S-15471	Cabinet Back Assem. (Complete)
	S-16052	Cover & Clip Assem. (L.H.)

The following parts are used on 27F20Z Only

	S-16023	Anode Clip & Wire Assem.
	S-16025	Beam Bender Unit
	S-16190	Indicator Disc. Assem.
	S-16191	Horizontal Sweep Transformer Assem.
	12-1643	Gasket Reinforcing Brkt.
	12-1644	C.R.T. Mtg. Brkt.
	80-745	C.R.T. Mtg. Brkt.
	114-45	#8x3/8 Hex. Hd. S.T.Screw (2 used)
	114-332	#10-32 x 1" Hex. Hd. S.T.Screw
	196-129	Plastic Gasket

MODEL 42T999RLP (Chassis 28F23)

	24-509	Cover (used on S-15041)
	44-25	Pilot Light Jack
	54-108	#3/8-32 x 9/16" Hex. Palnut Cad. Pl. (Inverted) (8 used)
	54-271	#6-32 x 1/4 Hex. Palnut (3 used to mount S-15579)
	57-1511	Front Bearing Plate
	57-1512	Indicator Mounting Plate
	63-1789	1200 Ohm 1/2 W. 10% Ins. Res.
R-58	63-1799	2200 Ohm 1/2 W. 10% Ins. Res.
R-8	63-1869	100 K Ohm 1/2 W. 10% Ins. Res.
R-60	63-2025	Vertical Hold Control
R-62	63-2036	Vertical Size Control
	80-717	Focusing Coil Mtg. Spring
	95-1147	Focus Coil
	114-295	#8x5/16" Hex. Hd. Sl. S.T. Screw Shakeproof (2 used on 12-1545)
	114-299	1/4-20 x 1/2" Hex.Hd. M.S. Ext. Lockwasher Attached (4 used on S-15995)
	114-324	#10-32 x 1 1/4 Hex. Hd. Sl. M.S. Steel (3 used on S-15996)
	114-326	#8 x 1/4" Hex. Hd. S.T. Screw (16 used)
	125-17	Rubber Grommet (2 used on S-15710)
	126-620	Fire Shield
	149-88	Iron Core & Insert (used on S-15711 only)
	199-81	Steel Sleeve (used on S-15344)
	S-15598	C.R.T. Tube Socket & Wire Assem.
	S-15614	Indicator Plate & Stud Assem.
	S-15615	Tuning Shaft Brkt & Plate Assem.
	S-15709	Horizontal Sweep Trans. Assem.
	S-15710	Horizontal Sweep Trans. & Socket Assem.
	S-15728	Beam Bender Unit
	S-15769	Horiz. Osc. & A.F.C.Coil & Terminal Board Assem.
	S-15857	Yoke & Focusing Coil Mtg. Brkt. Assy.
	S-15898	A.C. Plug, Brkt. & Insulator Assy.
	S-15995	C.R.T. Hook Brkt & Ins. Assy.
	22-2065	45 Mmfd. Ceramic 500 V.
	80-736	Spring, Shaft Tension
	93-952	Bakelite Washer 1/16" x .144 x 3/8"
	S-15985	Tuning Washer Assy (Replaces S-15028)
	S-15727	Series Tuned Sound Trap Coil
	S-15808	Video I.F. Strip Assem. (Complete)
	12-1589	Volume Control Brkt
	22-3	.01 Mfd. Ceramic (Disc.) 500 V.
	49-661	12" P.M. Speaker 208-661 Cone & Voice Coil
	54-271	#6-32x 1/4" Hex. Palnut Cad. Pl. (Inverted Type -4 used)
	95-1155	Sound Input Coil
	S-15618	Sound Chassis Assem. (Complete)

Cabinet Parts

	7-16	Bezel
	15-65	Cap & Insulator (S-15554)
	15-67	Cap & Insulator (S-15554)
	15-79	Cap & Insulator (S-15554)
	17-80	Cable Retaining Clamp
	17-106	Glass Retaining Clamp
	19-9	Cable Clamp
	19-123	Phono Unit Mtg. Clip
	24-388	Record Changer Compt. Cover
	24-485	Control Cover (Outer) (R.H.)
	24-486	Control Cover (Outer) (L.H.)
	46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
	46-773	Channel Selector Knob
	46-774	Contrast Control Knob
	46-775	Volume Control & On-Off Switch Knob
	46-783	Dial Light Switch Knob
	49-661	12" P.M. Speaker 208-661 Cone & Voice Coil Assem.
	56-261	#18 Ga. x 3/8" Lg. Brass. Esc. Pin. (2 used on 57-1464)
	57-1066	Dial Esc.
	57-1284	Strike Plate
	57-1289	Ornamental Plate (Zenith) (Used on S-3484)
	57-1454	Name Plate
	57-1465	Power Supply Cover Plate
	57-1481	Bezel Clamping Plate
	58-133	9 Prong Plug (Used on S-15554)
	68-1	Automatic Tuning Adj. Wrench
	70-3	#5x 1/2" R.H.W.S. Steel N.P. (2 used on 17-80)
	70-86	#6x 5/8" Washer H.W.S. Steel Stat. Bronze (8 used to Mt. T.V. Back)
	70-149	#4 x 1/2" Phill. R.H. Wood Screw Steel Cad. (6 used)
	70-151	#4 x 1/2" Phill R.H. Wood Screw Steel Stat. Bronze (3 ea. used on 24-485 & 486)
	71-24	1/4-20X 1/2 Flat Head M.S. Steel (3 used on 57-1465)
	71-32	#6-32 x 1" Flat H.M.S. Steel N.P. (4 used on 24-388)
	74-55	Ventilating Screen
	78-582	9 Prong Socket (2 used on S-15554)
	78-703	Pilot Light Socket & Wire
	78-761	Pilot Light Socket & Wire
	78-787	Two Contact Socket (Used on S-15559)
	78-840	A.C. Socket (Used on S-15559)
	80-423	Chassis Lift Spring (2 used)
	80-463	Phono Unit Mtg. Spring (4 used)
	83-1246	Record Changer Trim Strip
	83-1260	Cover Retaining Strip (2 used 24-388)
	83-1262	Cover Retaining Strip (1 used 24-388)
	85-448	Dial Light Switch
	93-392	3/32 x 33/64 x 1" Brown Felt Washer (3 used)
	100-36	Dial Light Bulb -Mazda #44
	112-558	#10-32 x 7/8" Phill. Flat H.M.S. Steel Stat. Bronze (4 used on chassis mtg.)
	112-670	Record Changer Mounting Screw
	112-671	Record Changer Mounting Screw (3 used)
	112-767	Latch Adj. Screw
	112-758	#4-40 x 1/4" R.H.S.T. Screw Cad Shakeproof (8 used)
	114-80	1/4-20 x 1 3/8 Hex Washer Hd. M.S. (4 used)
	114-248	6-20 x 5-16 Hex. Hd. Slotted S.T. Shakeproof (2 used on 24-388)
	114-313	#8x1/2" Hex. Hd. Sl. S.T. Screw Shakeprf (4 used on 7-16)
	138-34	Metal Cabinet Grill
	156-35	Bullet Catch (4 used)
	165-9	Metal Glide (2 used)
	165-14	Metal Glide (4 used)
	171-7	Pilot Light Lens (2 used)
	171-9	Indicator Prism (2 used)
	188-102	Clamping Ring
	192-96	Dial Glass
	192-125	Protective Glass
	196-121	Glass Gasket
	196-124	Glass Gasket
	202-517	Station Identification Tabs
	202-691	Inst. Book (T.V.)
	202-693	Instruction Book (Radio Phono)

Diag. No.	Part No.	Description
	202-697	F.M. Instruction Book
	S-11640	Pre-Amp Unit Assem.
	S-11918	Chassis Compt. Hinge Assem.(R.H.)
	S-11919	Chassis Compt. Hinge Assem. (L.H.)
	S-12319	Chassis Mtg. Strip & St ud Assem.
	S-12545	Phono Lift Spring & Bushing Assy.
	S-13058	F.M. Dipole & Short Wave Antenna Assy.
	S-13484	Record Changer Mtg. Frame Assy.
	S-13672	Tuning Knob & Ring Assem. (3 used)
	S-13673	Wavemagnet Assem.
	S-14011	Dual Speed Intermixer Record Changer
	S-15363	Cover & Clip Assem. (R.H.)(TV)(Inner)
	S-15364	Cover & Clip Assem. (L.H.)(TV)(Inner)
	S-15552	Phono Comp. Hinge Assem. (R.H.)
	S-15553	Phono Comp. Hinge Assem.(L.H.)
	S-15554	Interconnecting Cable Assem.
	S-15559	Cabinet Back Assem.(Complete)TV

C. R. T. Mounting

For sets not using web straps:

93-982	Armite Washer - Large (2 used)
93-983	Armite Washer - Small (6 used)
113-24	#8-32x3/8" Hex. Hd. M.S.'Ext. Shakeproof Lockwasher (5 used)
114-299	1/4-20 x 1/2" Hex. Hd. M.S. Ext. Shakeproof Lockwasher (2 used)
194-11	Stand-Off Insulator (3 used)
194-12	Stand-Off Insulator (2 used)
194-13	Stand-Off Insulator
S-15611	Deflection & Focus Coil Mtg. Brkt Assem.
S-15612	C.R.T. Mtg. Brkt. Assem. (3 used)
S-15613	C.R.T. Clamp Assem.
S-15616	Yoke Ring & Brkt. Assem.

For sets using web straps:

12-1545	C.R.T. Support Brkt
12-1637	C.R.T. Support Brkt (R.H.)
12-1638	C.R.T. Support Brkt (L.H.)
57-1536	Strap Clamp Plate
82-22	Cloth Strap
113-9	#8-32 x 1/4" Hex.Hd. Slotted M.S. Steel N.P. (4 used)
114-201	#8x5/16" Hex. Hd. Sl. S.T. Screw (4 used)
166-50	C.R.T. Support Bumper
194-15	Stand-Off Insulator (2 used)

MODEL 28T964R (Chassis 28F23)

Cabinet Parts

7-17	Bezel
17-106	Bezel Clamp
24-479	Control Cover - Outer (R.H.)
24-480	Control Cover - Outer (L.H.)
46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
46-773	Channel Selector Knob
46-774	Contrast Control Knob
46-775	Volume Control & On-Off Switch Knob
46-783	Switch Knob
49-649	10" P.M. Speaker 208-649 Cone & Voice Coil
56-261	#18 Ga. x 3/8 Lg. Brass Esc. Pin (2 used on 57-1559)
57-1481	Bezel Clamping Plate (4 used)
57-1559	Nameplate

Diag. No.	Part No.	Description
	58-75	Switch Plug
	70-149	#4 x 1/2" Phillips B.H. Wood Screw Steel Cad. Pl.(2 ea. used on 85-448 and 171-9)
	70-151	#4x 1/2" Phillips B.H. Wood Screw Steel Stat. Bronze (3 ea. used on 24-479 and 24-480)
	72-84	#8 x 1/2" Phillips Flat Hd. W.S. Steel (2 used on 152-170)
	74-55	Ventilating Screen
	78-787	Two Contact A.C.Socket (Used on S-15777)
	85-448	Dial Light Switch
	112-767	Latch Adjusting Screw
	114-80	1/4-20 x 1 3/8" Hex Washer Hd. M.S. (3 used to mt. S-15007 and 4 used to mt. chassis)
	114-200	#6x5/16" Hex. Hd. Slotted S.T.Screw Stan. Tap Steel (2 used on S-15777)
	114-313	#8x1/2" Hex Hd. St. S.T. Screw (4 used on 7-17)
	152-170	Chassis Retaining Block
	165-9	Metal Glides (4 used)
	171-9	Indicator Prism (2 used)
	188-102	Clamping ring (46-774)
	192-125	Protective Glass
	196-121	Gasket, Glass
	196-127	Gasket, Plastic
	202-691	Instruction Book
	S-15007	Power Supply Assem. (Complete)
	S-15363	Cover & Clip Assem. (R.H.)
	S-15777	Cabinet Back Assem. (Complete)
	S-16052	Cover & Clip Assem. (L.H.)

Chassis 29G20 is the same as Chassis 28F23 except:

Omit

22-1775	.047 Mfd. Molded 400 V.
22-1809	.01 Mfd. Molded 200 V.
63-1169	2700 Ohm W.W. 10% 2 W. Ins.
63-1198	10K Ohm 10% 2W. Ins.
63-1578	150 Ohm 20% 2W. Ins.
63-1581	4.7 Ohm W.W. 10% 1/2 W. Ins.
63-1682	Intensity Control
95-1110	Deflection Yoke
95-1112	Vertical Output Trans.
126-620	Fire Shield
149-77	Iron Core & Insert
S-15209	Electrostatic & Heat Shield Assem.
S-15392	Anode Clip, Terminal & Washer Assem.
S-15612	C.R.T. Mtg. Brkt. Assem.
S-15615	Tuning Shaft Brkt. & Plate Assem.
S-15618	Sound Chassis Assem. (Complete)
S-15709	Horizontal Sweep Trans. Assem.
S-15710	Horizontal Sweep Trans & Socket Assem.
S-15711	Horizontal Size Con. Assem. (or S-15775)
S-15857	Yoke & Focusing Coil Mtg. Brkt. Assem.
S-15995	C.R.T. Hook Brkt. & Insulator Assem.
16AP4	Picture Tube

Add:

22-3	.01 Mfd. 500 V.
22-2083	.015 Mfd. Molded 600 V.
22-2112	850 Mmfd. Ceramic 500 V.
34-192	Drive Gear (2 used)
63-965	1K Ohm 10% 1 W. Ins.
63-1744	100 Ohm 20% 1/2 W. Ins.
63-1817	5600 Ohm 10% 1/2 W. Ins.
63-1918	1.5 Megohm 10% 1/2 W. Ins.
63-1973	100 Ohm 10% 2W. Ins.
63-2022	10K Ohm 10% 5W. Zipohm
63-2061	Intensity Control
85-472	Picture Control Sw.
95-1165	Deflection Yoke

Diag. No.	Part No.	Description
	95-1166	Vertical Output Trans.
	126-621	Fire Shield
	194-12	Stand-Off Insulator (2 used)
	6BG6G	Tube (one added)
	16EP4	Picture Tube
	S-15045	Sound Chassis Assem. (Complete) (See 28F20 for breakdown)
	S-15345	Tuning Shaft Brkt. & Plate Assy.
	S-15859	Deflection & Focus Coil Mtg. Brkt. Assem.
	S-15860	C. R. T. Mtg. Brkt. Assem.
	S-15911	Horizontal Sweep Trans. Assem.
	S-15912	Horizontal Sweep Trans. & Socke: Assem.
	S-16043	C.R.T. Mtg. Brkt. & Insulator Assem.
	S-16048	Horizontal Size Con. Assem.
	S-16100	Picture Control Switch & Wire Assem.
	S-16101	Anode Clip & Wire Assem.
	S-16192	C.R.T. Mtg. Brkt.,Insulator, Plate and Strap Assem.

MODELS G2951-G2951R-G2952R (Chassis 29G20)

CABINET PARTS

7-18	Bezel
17-106	Bezel Clamp (4 used)
24-479	Control Cover -Outer (R.H.)
24-480	Control Cover - Outer (L.H.)
46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
46-773	Channel Selector Knob
46-774	Contrast Control Knob
46-775	Volume Control & "On-Off" Switch Knob
46-783	Switch Knob
49-649	10" P.M. Speaker 208-649 Cone & Voice Coil
56-261	#18 Ga. x 3/8 Lg. Brass Esc. Pin (2 used on 57-1464)
57-1559	Nameplate
57-1481	Bezel Clamping Plate (4used)
58-75	Switch Plug (Used on 85-448)
70-86	#6 x 5/8" Washer Hd. Wood Screw Steel-Stat. Bronze (8 used to mt. S-15921)
70-149	#4x 1/2" Phill. B.H.Wood Screw Steel Cad. Pl. (2 ea. used on 85-448 and 171-9)
70-151	#4x 1/2" Phill. B.H. Wood Screw Steel St at. Bronze (3 ea. used on 24-479 & 24-480)
72-84	#8 x 1 1/2" Phill.F.H.W.S.Steel (used on 152-170)
74-55	Ventillating Screen
78-787	Two Contact A.C.Socket
80-771	Bezel Grounding Spring
80-776	Shaft Tension Spring
85-448	Dial Light Switch
112-767	Latch Adjusting Screw
114-80	1/4-20 x 1 3/8 Hex. Washer Hd. M.S. (Chassis Mtg.)
114-313	#8x 1/2" Hex. Hd. Slotted S.T. Screw (4 used 7-18)
152-170	Chassis Retaining Block (2 used)
171-9	Indicator Prism (2 used)
188-102	Clamping Ring (46-774)
192-127	Protective Glass
196-128	Gasket (Glass)
196-134	Gasket (Bezel)
202-746	Instruction Book
S-15007	Power Supply Assem. (Complete)
S-15363	Cover & Clip Assem. (R.H.)
S-15921	Cabinet Back Assem.(Complete)
S-16052	Cover & Clip Assem. (L.H.)

MODEL 37T998RLP (Chassis 28F20 & 9E21Z)

CABINET PARTS

S-14012	Non-Intermixer L.P. Changer
S-14195	Loading Coil Assem.
S-15363	Cover & Clip Assem. (R.H.)
S-15364	Cover & Clip Assem. (L.H.)
S-15528	Low Impedance Loop Assem.
S-15529	Interconnecting Cable Assem.
S-15536	Record Changer Compartment Hinge Brkt. & Link Assem. (2 used)
S-15538	Record Changer Mtg. Frame & Arm Assem.
S-15542	Cabinet Back Assem. Complete (Television Section)
2-146	Cabinet Back (Radio-Phono Section)
7-13	Bezel
12-1547	Tone Arm Rest Bracket
15-82	Plug Cap & Insulator (Used on S-15529)
17-105	Bezel Clamp (4 used)
19-169	Record Changer Mounting Clip (4 used)
19-171	Loop Connector Clip (2 used)
46-697	Tuning Control Knob (2 used)
46-718	Band Switch Knob
46-726	Phono Switch Knob (2 used)
46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
46-773	Channel Selector Knob
46-774	Contrast Control Knob
46-775	Volume Control Knob
46-783	Switch Knob
49-660	12" P.M. Speaker 208-660 Cone & Voice Coil
56-261	#18 Ga. X 3/8" Lg. Brass Esc. Pin
57-1353	Diffusing Plate
57-1464	Nameplate
57-1471	Dial Escutcheon
57-1481	Bezel Clamping Plate (4 used)
58-169	Seven Prong Plug (used on S-15529)
70-86	#6 X 5/8 Washer Head Wood Screw-Stat. Bronze (4 used on S-15542 & 7 used on 2-146)
72-58	#2 X 3/8" Phillips Flat Hd. Wood Screw Steel-Brass (6 used on 57-1471)
74-55	Ventilating Screen
78-703	Pilot Li ght Socket & Wire
78-750	Six Contact Socket (used with S-15529)
78-761	Pilot Light Socket & Wire
80-678	Record Changer Mounting Spring (4 used)
83-1220	Pilot Light Socket Mtg. Strip
83-1245	Record Changer Trim Strip
85-448	Dial Light Switch
93-392	Brown Felt Washer 3/32" X 33/64" X 1" (3 used)
100-36	Pilot Light Bulb (2 used)
112-712	Record Changer Mtg. Screw (4 used)
112-745	4-40 X 1/4" Flat Hd. S.T. Screw Cad. Shakeprf. Type 23 (8 used on 17-105)
112-767	Latch Adj. Screw (2 used)
113-17	#6-32 X 1/4 R.H.M.S.Steel N.P. Internal Shakeprf. Lockwasher (2 used on 12-1547)
114-80	#1/4-20 X 1-3/8" Hex Washer Hd. M.S. (3 used on S-15007 & 4 used on S-15047)
114-128	#10 X 1-1/16" Hex Washer Hd. S. T. Type Z-Cad. (Radio Chassis Mtg. 4 used)
114-313	#8 X 1/2" Hex. Hd. Slotted S.T. Screw Cad. Shakeprf. Type #23 (4 used on 7-13)

Diag. No.	Part No.	Description
	114-321	#6 X 1/4" Hex Hd. Slotted S.T. Screw Cad. Shakeprf. Type #1 (2 used on S-14310 & 2 used on S-14311)
	165-9	Glider
	165-14	Glider
	171-7	Pilot Light Lens
	171-9	Indicator Prism
	184-14	Steel Ball 1/8" Dia. (Use on 46-775)
	188-102	Clamping Ring (used on 46-774)
	192-115	Dial Glass (Radio)
	192-122	Protective Glass (Television)
	196-109	Dial Dust Gasket (Radio)
	196-116	Rubber Gasket (Bezel)
	196-118	Rubber Gasket (Television)
	202-690	Instruction Book (Radio & Phono)
	202-691	Instruction Book (Television)
	202-697	F.M. Instruction Book

RADIORGAN ESC. PARTS

Diag. No.	Part No.	Description
	S-14255	Radiorgan Mtg. Brkt. Assem. (2 used)
	S-14273	Radiorgan Knob & Eyelet Assem. (Lo-Bass)
	S-14274	Radiorgan Knob & Eyelet Assem. (Bass)
	S-14275	Radiorgan Knob & Eyelet Assem. (Voice)
	S-14276	Radiorgan Knob & Eyelet Assem. (Treble)
	S-14277	Radiorgan Knob & Eyelet Assem. (Alto)
	S-14278	Radiorgan Knob & Eyelet Assem. (Normal)
	S-14310	Radiorgan Escutcheon Knob Assem. (L.H.)
	S-14311	Radiorgan Escutcheon Knob Assem. (R.H.)
	76-444	Radiorgan Knob Retaining Shaft (2 used)
	80-595	Radiorgan Mounting Spring (2 used)
	112-533	#6 X 1/4 Phillips Round Hd. S.T. Screw Shakeprf. Type 25-Cad. Pl. (2 used on S-14310 & 2 used on S-14311)

MODEL 37T998RLP (Z1) (Chassis 28F20)

37T998RLP (Z1) is the same as 37T998RLP except the following:

OMIT:

S-14012	Non-Intermixer Record Changer
12-1547	Tone Arm Rest Bracket
113-17	6-32 X 1/4" R.H.M.S. Steel (2 used)
202-690	Instruction Book

ADD:

S-14021	Single Arm Dual Speed Record Changer
202-740	Instruction Book (Radio & Phono)

MODEL 28T926E (Chassis 28F20)

CABINET PARTS

Diag. No.	Part No.	Description
	S-15341	Cover & Clip Assem. (R.H.)
	S-15471	Cabinet Back Assem.
	S-15747	Power Supply Assem. (Complete)
	S-16051	Cover & Clip Assem. (L.H.)
	7-11	Bezel
	17-105	Bezel Clamp
	24-477	Control Cover - Outer (R.H.)
	24-478	Control Cover - Outer (L.H.)
	46-752	Vertical & Horizontal Hold Control Knob (4 used)
	46-761	Channel Selector Knob
	46-762	Contrast Control Knob
	46-763	Volume Control & On Off Switch Knob
	46-782	Dial Light Switch Knob
	49-654	5 1/4" P.M. Speaker 208-654 Cone & Voice Coil
	56-261	#18 Ga. x 3/8" Lg. Brass Esc. Pin (2 used)
	57-1463	Nameplate
	57-1481	Bezel Clamping Plate
	58-75	Switch Plug
	70-86	#6 x 5/8" Washer Hd. Wood Screw Stat. Bronze (6 used to mt back)
	70-149	#4 x 1/2" Phillips R.H. Wood Screw (3 ea. used on 24-477 & 24-478 & 2 used on 171-9 & 85-448)
	74-55	Ventilating Screen
	78-787	Two Contact A.C.Socket
	80-776	Shaft Tension Spring
	85-448	Dial Light Switch
	112-744	Latch Adjusting Screw
	112-745	#4-40 x 1/4" Flat Hd. S.T. Shakeprf (2 ea. used to mt. 17-105)
	114-80	1/4-20 x 1 3/8" Hex Washer Hd. M.S. (4 used on chassis mtg.)
	114-313	#8x 1/2" Hex. Hd. Slotted S.T. Screw (4 used on 7-11)
	171-9	Indicator Prism (2 used)
	188-102	Clamping Ring (46-762)
	192-122	Protective Glass
	196-116	Gasket (Bezel)
	196-118	Gasket (Glass)
	202-691	Instruction Book

MODEL 28T926R (Chassis 28F20)

CABINET PARTS

Diag. No.	Part No.	Description
	S-15363	Cover & Clip Assem. (R.H.)
	S-15471	Cabinet Back Assem.
	S-15747	Power Supply Assem. (Complete)
	S-16052	Cover & Clip Assem. (L.H.)
	7-13	Bezel
	17-105	Bezel Clamp (4 used)
	24-479	Control Cover - Outer (R.H.)
	24-480	Control Cover - Outer (L.H.)
	46-771	Vertical Hold & Horizontal Hold Control Knob (4 used)
	46-773	Channel Selector Knob
	46-774	Contrast Control Knob
	46-775	Volume Control & On-Off Switch Knob
	46-783	Dial Light Switch Knob
	49-654	5 1/4" P.M. Speaker 208-654 Cone & Voice Coil Assem.
	56-261	#18 Ga. x 3/8" Lg. Brass Esc. Pin (2 used on 57-1559)
	57-1481	BezelClamping Plate(4 used)
	57-1559	Nameplate
	58-75	Switch Plug
	70-86	#6 x 5/8" Washer Hd. Wood Screw Stat. Bronze (6 used to mt. Back)
	70-149	#4 x 1/2" Phillips R.H. Wood Screw Steel Cad. Plate (2 used to mt 171-9)
	70-151	#4 X 1/2" Phillips R.H. Wood Screw Steel Stat. Bronze (3 ea. used to mt. 24-479 & 24-480)
	74-55	Ventilating Screen
	78-787	Two Contact A.C.Socket
	80-776	Shaft Tension Spring
	85-448	Dial Light Switch
	112-745	#4-40 x 1/4" Flat Hd. S.T. Screw Shakeprf. (2 ea. used on 17-105)
	112-767	Latch Adjusting Screw (2 used)
	114-80	1/4-20X 1 3/8" Hex. Washer Hd. M.S. Steel (4 used chassis mtg.)
	114-313	#8x1/2" Hex. Hd. Sl. S.T.Screw Shakeprf (4 used to mt. 7-13)
	171-9	Indicator Prism
	188-102	Clamping Ring (46-774)
	192-122	Protective Glass
	196-116	Gasket (Bezel)
	196-118	Gasket (Glass)
	202-691	Instruction Book

PARTS LIST SUPPLEMENT

Diag. No.	Part No.	Description
C16	S-15211	Trimmer Cap. Assy.
C31	22-2054	200 Mmf. Cer. 500 V.
C33	22-1829	9-60 Mmf. Trimmer
T10	S-15041	Hor. Osc. & A.F.C. Trans.
	S-15709	Hor. Sweep Trans.
T11	S-15710	Hor. Sweep Trans. & Socket
T14	95-1165	Deflection Yoke
T15	95-1166	Vertical Output Trans.
T16	S-15912	Hor. Sweep Trans. & Socket
	S-15911	Hor. Sweep Trans.
T17	S-16191	Hor. Sweep Trans. & Socket
R36	63-2022	10K Ohm 5W.
R37	63-1803	2700 Ohm 1/2 W.
R39	63-1975	12K Ohm 1 W.
R54	63-1974	3300 Ohm 1 W.
R59	63-1065	15K Ohm 1 W.
R108	63-965	1000 Ohm 1 W.
L72	20-255	Filter Choke
R96	63-1784	1000 Ohm 1/2 W.
R97	63-1101	8200 Ohm 2 W.
R100	63-1771	470 Ohm 1/2 W.
R101	63-1744	100 Ohm 1/2 W.
R102	63-1973	100 Ohm 2W.
R104	63-1823	8200 Ohm 1/2 W.
R105	63-1620	1800 Ohm 2 W.
R106	63-1193	5600 Ohm 2 W.
R107	63-1817	5600 Ohm 1/2 W.
L76	95-1109	3 Hy Filter Choke
L99	S-16048	Width Control Assy.
PL-1	100-36	Pilot Light (6.3 V. .25A)
S1	85-448	Dial Light Switch
S2	85-238	Focus Current Range Switch
S3	85-469	Picture Control Switch
SP1	49-649	10" P.M. Speaker
SP1	49-654	5 1/4" P.M. Speaker
P1	58-169	Power Plug
F1	136-16	1/4 Amp. Fuse.
S4	85-472	Picture Control Switch

GLARE-BAN "BLACK" PICTURE TUBES

Zenith television receivers are now being manufactured with either the conventional clear glass picture tubes or the new Glare-Ban "Black" tubes. Receivers using the Glare-Ban tubes can be identified by the suffix letters "OX" in accordance with the following:

CONVENTIONAL MODELS	GLARE-BAN MODELS
G2951 (29G20 chassis)	G2951 OX (29G20 (OX) chassis)
G2951R (29G20 chassis)	G2951ROX (29G20 (OX) chassis)
G2952R (29G20 chassis)	G2952ROX (29G20 (OX) chassis)
27T965R (27F20 chassis)	G2745ROX (27G20 (OX) chassis)
37T998RLPZ (28F20 chassis)	37T998RLPOX (28F20 (OX) chassis)
42T999RLPZ (28F23 chassis)	42T999RLPOX (28F23 (OX) chassis)

CHASSIS 27F20, 27F22, 28F20, 28F21, 28F22, 28F23, 28F25, 29G20

PICTURE TUBE	GASKET	PICTURE TUBE	GASKET
100-126 (12UP4)	196-129	100-123 (12UP4)	196-136
100-119 (16AP4)	196-127	100-124 (16AP4)	196-127
100-122 (16EP4)	196-127	100-125 (16EP4)	196-134

CHASSIS 28F20 (OX)

This chassis, using a 12UP4 Luxide Glare-Ban picture tube, is the same as 28F20 except for the following:

OMIT

S-15044	Main Chassis Wiring Assembly
S-15047	Television Chassis Final Assembly
S-15067	C.R.T. Tie-Down Strip & Bracket Assem.
S-15203	Anode Clip & Wire Assembly
S-15346	Channel Indicator Disc & Gear Assem.
S-15392	Anode Clip Terminal & Washer Assem.
S-15710	Horizontal Sweep Transformer & Socket Assembly
S-15918	C.R.T. Retaining Bracket & Grommet Assembly (L.H.)
S-15919	C.R.T. Retaining Bracket & Grommet Assembly (R.H.)
12-1512	C.R.T. Retaining Bracket (L.H.)
12-1513	C.R.T. Retaining Bracket (R.H.)
12-1520	C.R.T. Tie-Down Bracket
19-177	Anode Clip (C.R.T.)
27-112	Channel Indicator Disc.
64-6	1/8 x 3/16" Tubular Rivet Steel N.P. #1352
64-460	Brass Eyelet - Cad.
80-686	Grounding Spring
83-1566	C.R.T. Tie Down Strip
83-1605	Rubber Strip (C.R.T. Mounting)
86-208	Terminal
93-958	Bakelite Washer
93-965	Rubber Washer
100-102	Cathode Ray Tube - Type 12KP4
114-307	#8-32 x 1 1/4" Hex. Hd. Slotted M.S. Steel N.P.
114-310	#8 x 5/16" Hex. Slotted Washer Hd. Self-Tapping Screw-Stan-Tap - Cad. Plate
125-72	Rubber Grommet (C.R.T. Mounting)
79-55	#7 Transflex Vinylite Tubing 1"

ADD

S-16023	Anode Clip & Wire Assembly
S-16025	Beam Bender Unit
S-16190	Channel Indicator Disc & Gear Assem.
S-16191	Horizontal Sweep Transformer & Socket Assembly
S-16245	Main Chassis Wiring Assembly
S-16246	Television Chassis Final Assembly
12-1643	Gasket Reinforcing Bracket
12-1644	C.R.T. Mounting Bracket
19-192	Anode Connector Clip
27-142	Channel Indicator Disc.
80-745	C.R.T. Tie Down Spring
100-123	Cathode Ray Tube - Type 12UP4
114-45	#8 x 3/8" Hex. Hd. Self Tapping Screw Type "C" Steel N.P.
114-332	#10-32 x 1" Hex. Hd. Self Tapping Screw Shakeproof Type #1 - Cad. Plate
196-129	Plastic Gasket
79-73	7/16" I.D. Transflex Tubing 14"
91-1230	#22 Stranded-Tuned Copper Wire Polyethylene Insulation

CHASSIS 28F20, 28F20Z, 28F21, 28F22; Wide Band IF, Revised

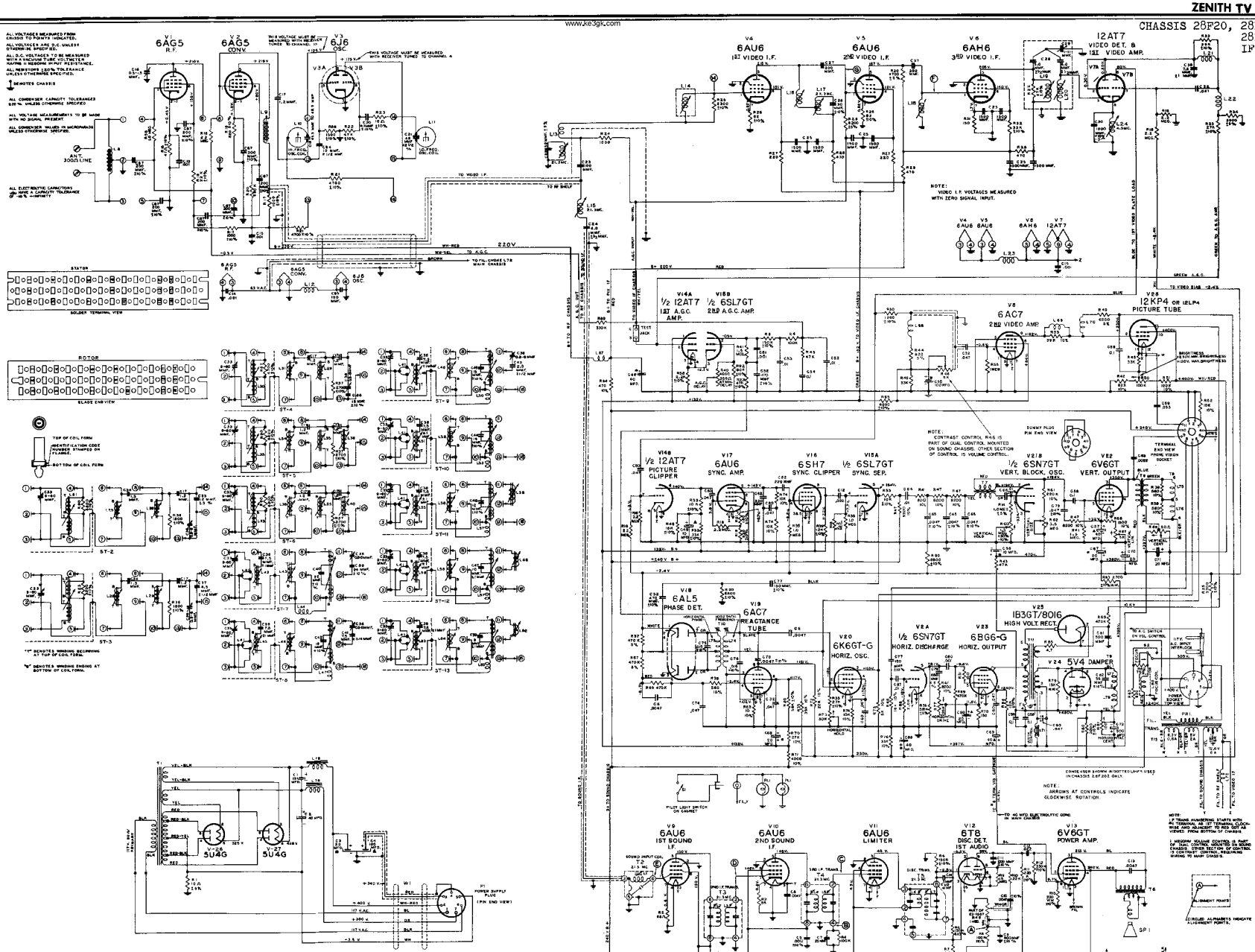
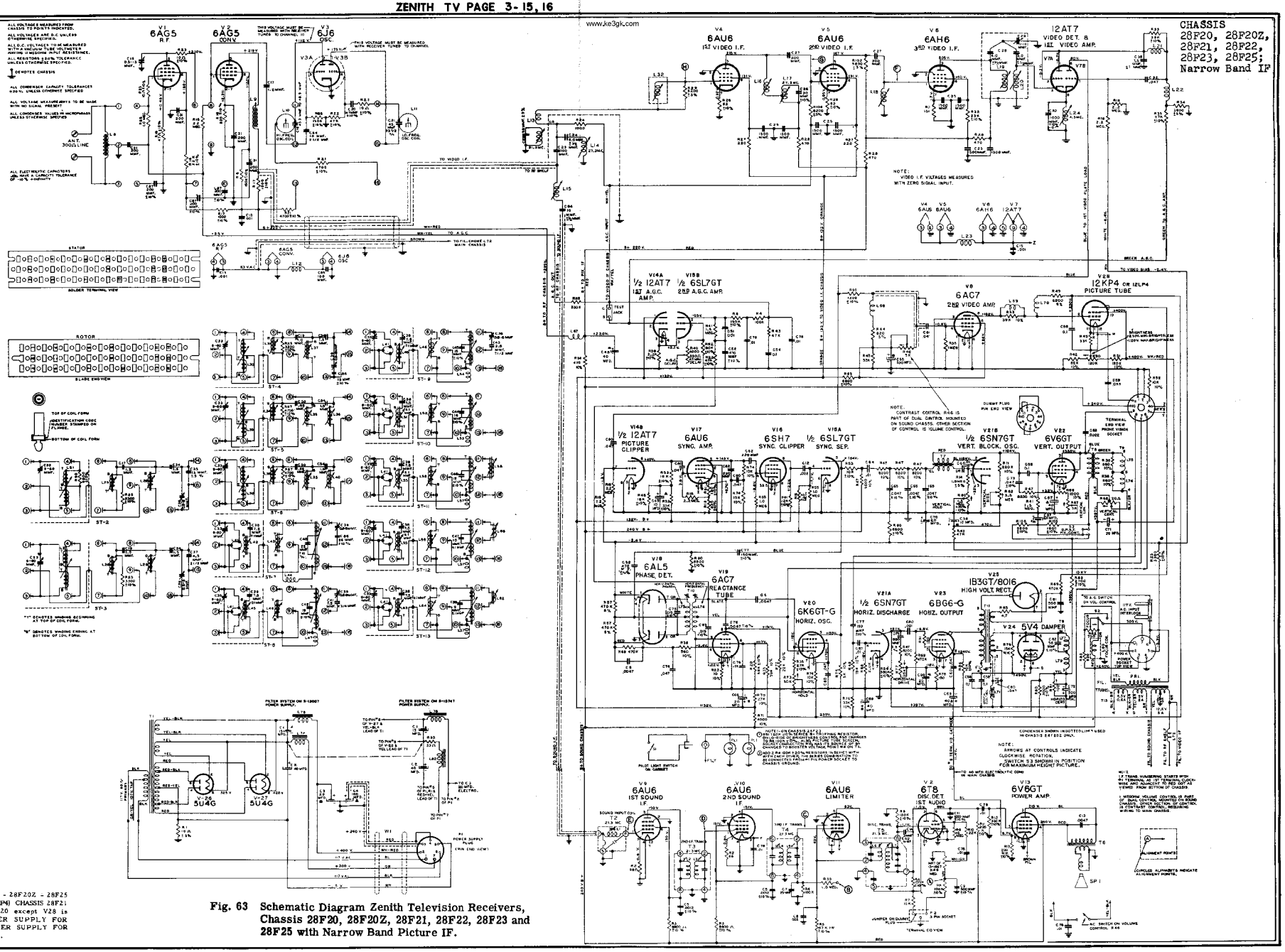


Fig. 62 Schematic Diagram Zenith Television Receivers, Chassis 28F20, 28F20Z, 28F21 and 28F22 with Wide Band Picture IF.

REVISED SCHEMATIC DIAGRAM CHASSIS 28F20 and 28F20 Z

(Chassis 28F21 and 28F22 same as 28F20 except V28 is 10FP4 or 10BP4)

CHASSIS
28F20, 28F20Z,
28F21, 28F22,
28F23, 28F25;
Narrow Band IF



ZENITH CHASSIS 28F20 - 28F20Z - 28F25 (CHASSIS 28F23, V28 is 16AP4) CHASSIS 28F21 and 28F22 same as 28F20 except V28 is 10FP4 or 10BP4. POWER SUPPLY FOR CONSOLES - S15007. POWER SUPPLY FOR TABLE MODELS - S15747.

Fig. 63 Schematic Diagram Zenith Television Receivers, Chassis 28F20, 28F20Z, 28F21, 28F22, 28F23 and 28F25 with Narrow Band Picture IF.

CHASSIS 27F20

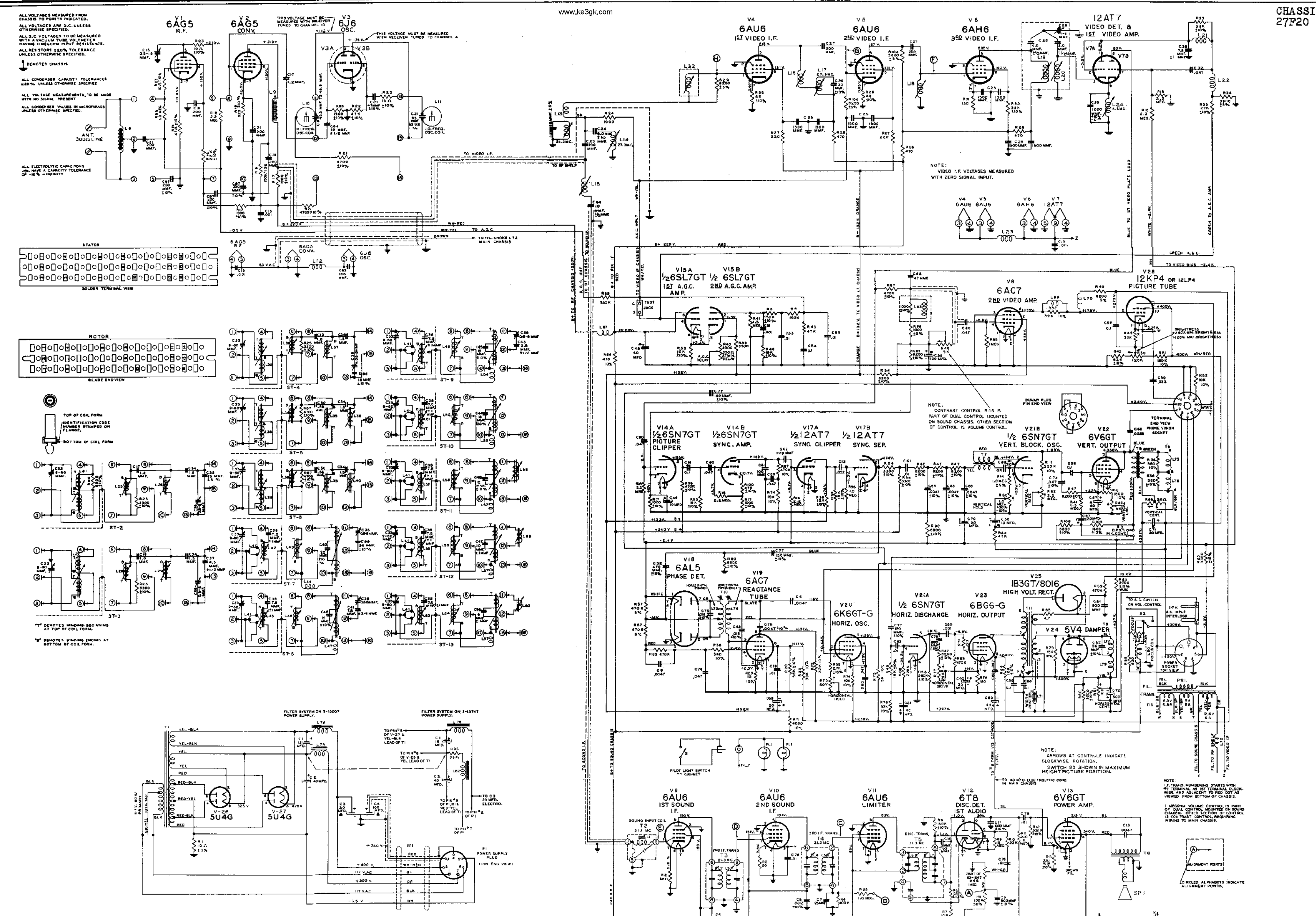


Fig. 64 Schematic Diagram Zenith Television Receiver
Chassis 27F20

REVISED SCHEMATIC DIAGRAM
CHASSIS 27F20 MODEL 27T965R

CHASSIS 29G20

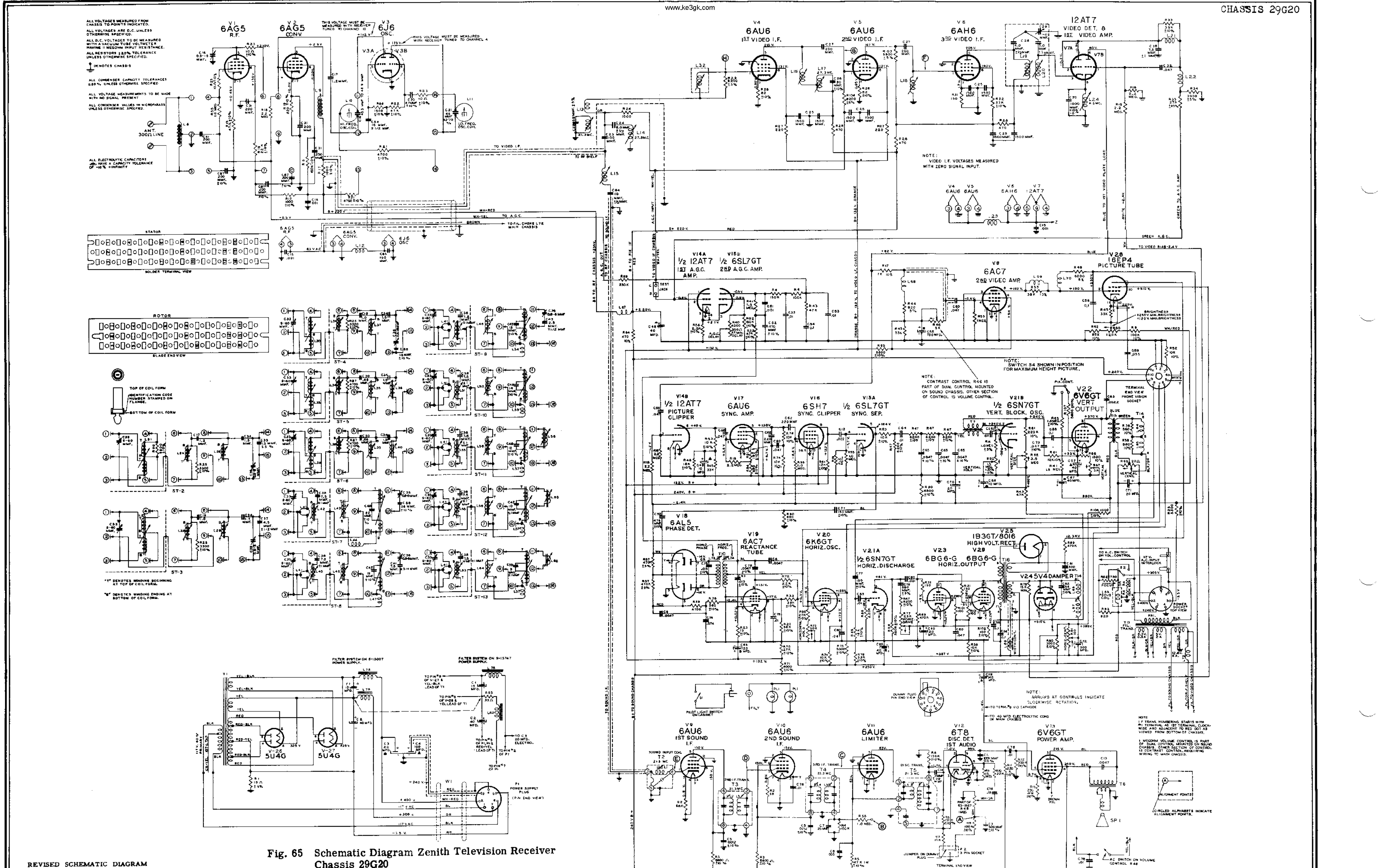


Fig. 65 Schematic Diagram Zenith Television Receiver Chassis 29G20

REVISED SCHEMATIC DIAGRAM
CHASSIS 29G20 MODEL G2952R