

SAFETY PRECAUTIONS

SERVICE WARNING

Only qualified service technicians who are familiar with safety checks and guidelines should perform service work. Before replacing parts, disconnect power source to protect electrostatically sensitive parts. Do not attempt to modify any circuit unless so recommended by the manufacturer. When servicing the receiver, use an isolation transformer between the line cord and power receptacle.

SERVICING THE HIGH VOLTAGE AND CRT

Use EXTREME CAUTION when servicing the high voltage circuits. To discharge static high voltage, connect a 10K ohms resistor in series with a test lead between the receiver and CRT anode lead. DO NOT lift the CRT by the neck. Always wear shatterproof goggles when handling the CRT to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering X-ray radiation. In solid-state receivers and monitors, the CRT is the only potential source of X-rays. Keep an accurate high voltage meter available at all times. Check meter calibration periodically. Whenever servicing a receiver, check the high voltage at various brightness levels to be sure it is regulating properly. Keep high voltage at rated value, NO HIGHER. Excessive high voltage may cause X-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value. When troubleshooting a receiver with excessive high voltage, avoid close contact with the CRT. DO NOT operate the receiver longer than necessary. To locate the cause of excessive high voltage, use a variable AC transformer to regulate voltage. In present receivers, many electrical and mechanical components have safety related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning receiver to customer. Check repaired area for poorly soldered connections, and check entire circuit board for solder splashes. Check inner board wiring for pinched wires or wires contacting any high wattage resistors. Check that all control knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

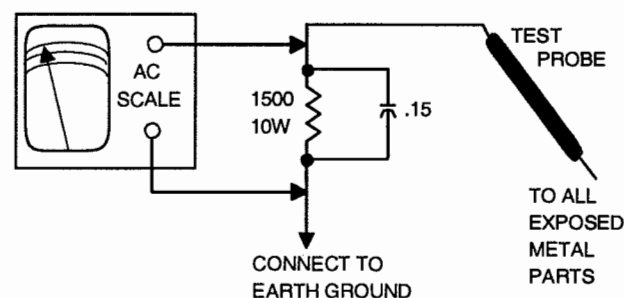
SAFETY CHECKS -- FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 1M ohms and 5.2M ohms. Parts without a return path must measure infinity.

Hot Leakage Current Check

Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15µF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point. Voltage measurements should not exceed .75VAC, 500µA. Any value exceeding this limit constitutes a potential shock hazard and must be corrected. If the AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.



TEST JIG HOOKUP

Function	Chek-A-Color Adapter No.	PC Board Plug No.	Pin	Color
CRT	B239	CN401	H1	Red
Yoke	D482		H2	Blue
Yoke Setting	YP1		V1	Yellow
Comments	Focus Tap		V2	Green

HIGH VOLTAGE SHUTDOWN TEST

Apply AC power and turn on the receiver. Momentarily short test point TP-R to test point TP-X. The receiver should lose sound and raster. If the receiver does not lose sound and raster, the shutdown circuit should be repaired. To return to normal operation, press the power button.

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by Howard W. Sams & Company as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to Howard W. Sams & Company by the manufacturers of the specific type of replacement part listed.

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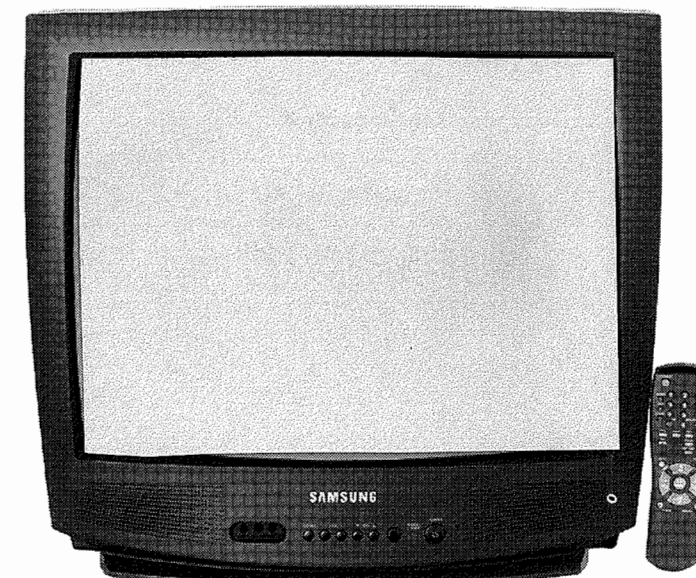
MODEL TXH2555 (CHASSIS KCT57A)

SAMSUNG

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SAMSUNG Model TXH2555 (Chassis KCT57A)



Complete coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list
- Troubleshooting guide

Coverage includes these additional models and chassis:

MODELS	CHASSIS
TXH2545	KCT57A
TXH2556	KCT57A
TXH2756	KCT57A



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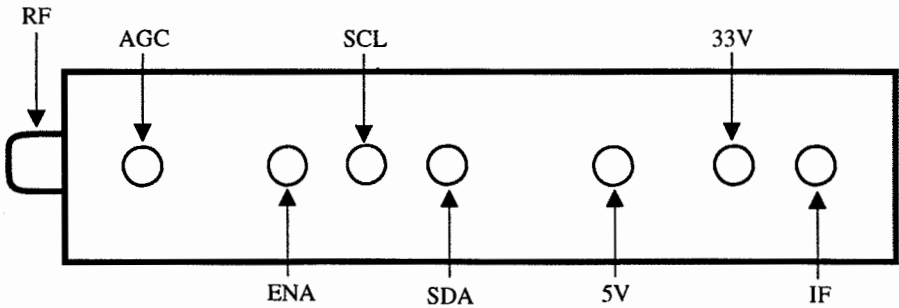
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TUNER INFORMATION

TUNER VOLTAGE CHART			
Pin	VHF Low Band	VHF High Band	UHF Band
AGC	5.7V	5.4V	6.1V
ENA	0V	0V	0V
SCL	5.0V	5.0V	5.0V
SDA	5.0V	5.0V	5.0V
5V	5.0V	5.0V	5.0V
33V	33.4V	33.4V	33.4V
IF	0V	0V	0V

NOTE: VHF Low Band voltages taken on channel 2.
VHF High Band voltages taken on channel 7.
UHF Band voltages taken on channel 14.

TUNER TERMINAL GUIDE



TROUBLESHOOTING

POWER SUPPLY

Check F801. If F801 is open, check DZ801, DZ802, D801, C801, C802, C803, C814, CB01, T801, and IC801. Apply 120VAC and check for 130V at the cathode of D811. If the 130V is missing, check D811, T801, and IC801. If the 130V is present, check for 33.5V at the cathode of DZ101. If the 33.5V is missing, check R806, R807, C108, and DZ101. Check for 12.0V at the cathode of D810. If the 12.0V is missing, check D810 and T801. Check for 14.0V at the cathode of D803. If the 14.0V is missing, check D803, IC853, IC802, and T801. If the 14.0V is present, check for 12.0V at pin 12V (2) of IC853. If the 12.0V is missing, check IC853. If the 12.0V is present, check for 9.0V at the cathode of DZ805. If the 9.0V is missing, check DZ805 and R819. Press the power button and check for 12.0V at pin 2 of IC501 on the CRT board. If the 12.0V is missing, check D504, R522, and check for 18.0V at the cathode of D401. If 18.0V is missing, refer to the "Horizontal" section of this Troubleshooting guide.

HIGH VOLTAGE SHUTDOWN

NOTE: Care should be taken in defeating the high voltage shutdown circuit as this may cause excessive X-ray radiation and damage to the CRT and T444. Monitor the high voltage and troubleshoot.

The high voltage from T444 is monitored and rectified by DX01. DX01 applies the rectified voltage to QX01. Should the high voltage increase, QX01 will conduct and shut down the horizontal drive signal at pin 40 of IC201. To troubleshoot, remove DX01 from the circuit. Use a variable AC variable transformer for power and start at 70VAC. Increase voltage as necessary to isolate and repair the malfunction. Re-connect DX01.

Voltages Taken in Shutdown

IC201		QX01	
Pin 50	.2V	Emitter	0V
		Base	0V
		Collector	0V

HORIZONTAL

To determine if the receiver is in shutdown, refer to "High Voltage Shutdown" section of this Troubleshooting guide. Check for a horizontal output signal at the base of Q401. If horizontal signal is missing, check T401, Q403, and pins 40, 41, and 50 of IC201. If horizontal signal is present, check Q401, T444, D401, D404, and D405. The high voltage rectifier is part of T444 and if defective will affect the operation of the horizontal circuits. Width or foldover problems may be caused by C402, C419, C403, C404, and L401 being defective.

VERTICAL

Inject a vertical signal at pin 1 of IC301. If vertical deflection is present, check pins 45, 46, and 47 of IC201. If vertical deflection is still missing, check IC301.

AUDIO

Select an active TV channel that is transmitting a stereo signal and check for an MTS waveform at pin 11 of ICD01. If the MTS waveform is missing, check Q601, IC202, and pins 1, 2, 55, and 56 of IC201. If the MTS waveform is present, check for audio waveforms at pins 4 and 15 of IC701. If the audio waveforms are missing, check IC701 and ICD01. If the audio waveforms are present, check IC602, IC603, Q603, Q604, Q605, and pins 6 and 12 of IC901.

IF AGC

Inject a video IF signal at the IF input and check for video on the CRT. If video is present, check the tuner and system control circuits. Check for a video waveform at pin 6 of IC201. If video is present, refer to the "Video" section of this Troubleshooting guide. Apply AGC bias to pin 53 of IC201. If video appears on the CRT, check pins 53 and 54 of IC201. If video is still missing, check IC201 and Q101.

VIDEO

Inject a video signal at pin 6 of IC201. If video is present on the CRT, refer to the "IF AGC" section of this Troubleshooting guide. Check for a video waveform at pin 11 of IC201. If waveform is missing, check Q201, Q702, IC701, and CF01. If the waveform is present, check IC201. If the brightness is inadequate or cannot be controlled, check pin 22 of IC201, Q204, and pin 7 of the CRT.

CHROMA

Check for a chroma waveform at pin 10 of IC201. If the waveform is missing, refer to the "Video" section of this Troubleshooting guide. Check for the proper waveforms at pins 19, 20, and 21 of IC201. If these waveforms are missing, check pins 12, 19, 20, 21, 34, 37, and 39 of IC201. If the proper waveforms are present at pins 19, 20, and 21 of IC201, refer to the "Raster" section of this Troubleshooting guide.

RASTER

Check the CRT and CRT voltages. If red is missing, check pin 21 of IC201 and IC503. If green is missing, check pin 20 of IC201 and IC502. If blue is missing, check pin 19 of IC201 and IC501. If the raster has a keystone shape, check the deflection yoke. If the raster has height or width problems, refer to the "Vertical", "Horizontal", or "Power Supply" section of this Troubleshooting guide.

MISCELLANEOUS ADJUSTMENTS

HIGH VOLTAGE CHECK

Tune in a picture. Set brightness, color, picture, and screen control to minimum. Connect a high voltage probe to CRT anode. High voltage should measure 17.5kV to 22kV.

CONVERGENCE

NOTE: Rotate the two tabs of each set of magnets equally and opposite to converge vertically and rotate both tabs in the same direction to converge horizontally. The four and six pole magnets interact, repeat adjustment until center convergence is correct.

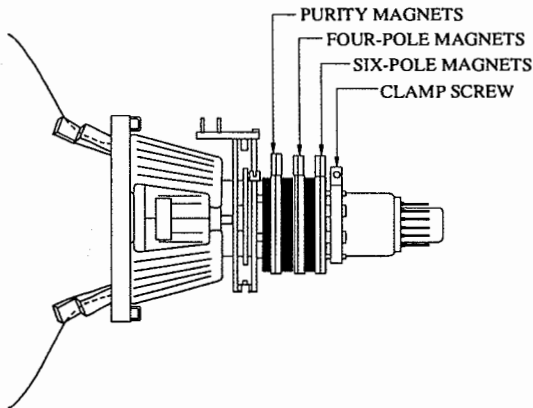
Connect a color bar generator to the antenna input and tune in a dot pattern. Adjust the four pole magnets to converge the red and blue dots at the center of the screen. Adjust the six pole magnets to converge the red/blue dots over the green dots at the center of the screen. Tune in a crosshatch pattern. Remove the rubber wedges between deflection yoke and the CRT. Tilt the deflection yoke up or down to converge the vertical lines at the top and bottom of the screen and the horizontal lines at the right and left sides of the screen. Tilt the deflection yoke to the right or left to converge the horizontal lines at the top and bottom of the screen and the vertical lines at the right and left sides of the screen. Replace the rubber wedges.

PURITY

NOTE: Operate the receiver for 15 minutes to allow warm-up of CRT. Use a degaussing coil to demagnetize the CRT.

Set contrast and brightness to maximum, and color to minimum. See the "Test Pattern" section of the Miscellaneous Adjustments and select a green raster. Slide the deflection yoke back. Adjust purity tabs to center the vertical green band. Slide the deflection yoke forward to produce a uniform green screen.

CRT NECK ASSEMBLY



FACTORY MODE

The adjustments for this receiver are all accomplished using the factory mode.

Entering the Factory Mode

To enter the factory mode, turn off the receiver. Without pausing between buttons, press mute, 1, 8, 2, and power. The receiver should come on with the following displayed on the CRT. To select between menus, use the channel up or down buttons. To enter the selected menu, use the volume + or - buttons. After adjusting, press the menu button to return to the menu. To exit the factory mode, press the power button.

Factory Mode

- Adjustment
- MPX Adjust
- Test Pattern
- Set Option Byte
- Factory Reset

ADJUSTMENT MENU

Item	Function	Data Range	Factory Value	On-Set Value
AGC	Auto Gain Control	0 - 63	15	24
VCO	Voltage Control Oscillator	0 - 127	62	51
SBT	Sub Brightness	0 - 13	7	10
SCT	Sub Contrast	0 - 13	7	0
SCR	Sub Color	0 - 13	8	5
STT	Sub Tint	0 - 13	8	2
RG	Red Gain	0 - 63	32	33
GG	Green Gain	0 - 63	32	32
BG	Blue Gain	0 - 63	32	31
SCO	S-Correction	0 - 63	20	14
VSL	Vertical Slope	0 - 63	38 (26*)	21
VS	Vertical Shift	0 - 63	32	40
VA	Vertical Amplitude	0 - 63	45 (27*)	45
HS	Horizontal Shift	0 - 63	46	55
EWA	East West Amplitude	0 - 63	52	32
EWP	East West Pin	0 - 63	31	8
EWC	East West Corner	0 - 63	32	0
EWT	East West Tilt	0 - 63	31	26
VZM	Vertical Zoom	0 - 63	25	25
MAT	Matrix	On - Off	Off	Off
VOL	Volume	0	0	0
PLA		0-10	0	0

* Used in model TXH2756.

RF AGC

Tune in a medium strength station. Select AGC. Decrease the on-set value to a point where snow appears. Then increase the on-set value to a point where snow disappears.

PIF VCO

Tune in a color bar pattern. Select VCO. Press the mute button to auto-tune.

White Balance

NOTE: Sub color and sub tint must be set before the white balance adjustment is performed.

Tune in a 10 bar staircase pattern. Select RG, BG, and GG. Set the on-set values to 32. Exit the factory mode and check the white balance at high and low brightness. If the white balance is not proper, select RG, BG, and GG. Adjust the on-set values for best white balance. Exit the factory mode and check the white balance at high and low brightness. Repeat as necessary.

Sub Brightness

Tune in a 10 bar staircase pattern. Select SBT. Adjust the on-set value so that the fifth bar from the right is brighter than the bars on the left.

S-Correction / Vertical Slope / Vertical Shift / Vertical Amplitude

Tune in a crosshatch pattern. Enter the factory mode and select VA. Adjust the on-set value for a slightly underscanned picture. Select VSL and adjust the on-set value for equal linearity at the top and bottom of the picture. Select SCO and adjust the on-set value for equal overall linearity. Select VS and adjust the on-set value to center the picture. Select VA and adjust the on-set value for a slightly overscanned picture.

MPX ADJUST MENU

Item	Function	Data Range	Factory Value	On-Set Value
ST	Stereo Threshold Level	0 - 15	7	7
SP	SAP Threshold Level	0 - 15	7	7
L	Level	0 - 15	9	9
A1	Alignment 1	0 - 31	20	19
A2	Alignment 2	0 - 31	10	9
A3	Alignment 3	0 - 7	0	0
ADJ	Adjustment	On - Off	Off	Off
SP (1)	-	-	Off	Off
ST (1)	-	-	Off	Off
A1 (1)	-	-	20	19
A2 (1)	-	-	10	9

(1) This adjustment can not be selected or adjusted.

After entering the MPX adjust menu, use the channel buttons to select the item and the volume buttons to adjust the on-set value of that item to the above value. Further adjustment not recommended.

TEST PATTERN

The adjustment menu allows red, green, and blue raster to be displayed on the CRT. Use the channel buttons to select the color and the volume buttons to turn on the raster. Press the menu button to exit.

FACTORY RESET

This menu will reset the custom video menu to factory specifications. Use the volume buttons to reset.

SET OPTION BYTE

This menu is used to set the options whenever IC902 is replaced. Use the channel buttons to select a bit and the volume buttons to alter its data. The following is displayed on the CRT when in the set option byte menu. Set byte 0 to 84 and set byte 1 to 50.

Byte 0: 84 (HEX)

Byte 1: 50 (HEX)

Byte 0 and 1 can be set up in hexadecimal to match the total binary values of the functions of this receiver using the following table.

In order to determine the hexadecimal value for Byte 0, decide what are the settings for D0 thru D7. For model TXH2555 it is 1000 0100, this is the binary value of Byte 0, then convert this value to the equal hexadecimal value, in this case it is 84.

Option Byte For Different Models.

Model	Byte 0	Byte 1
TXH2555	84	50
TXH2545	84	40
TXH2556	84	51
TXH2756	84	51

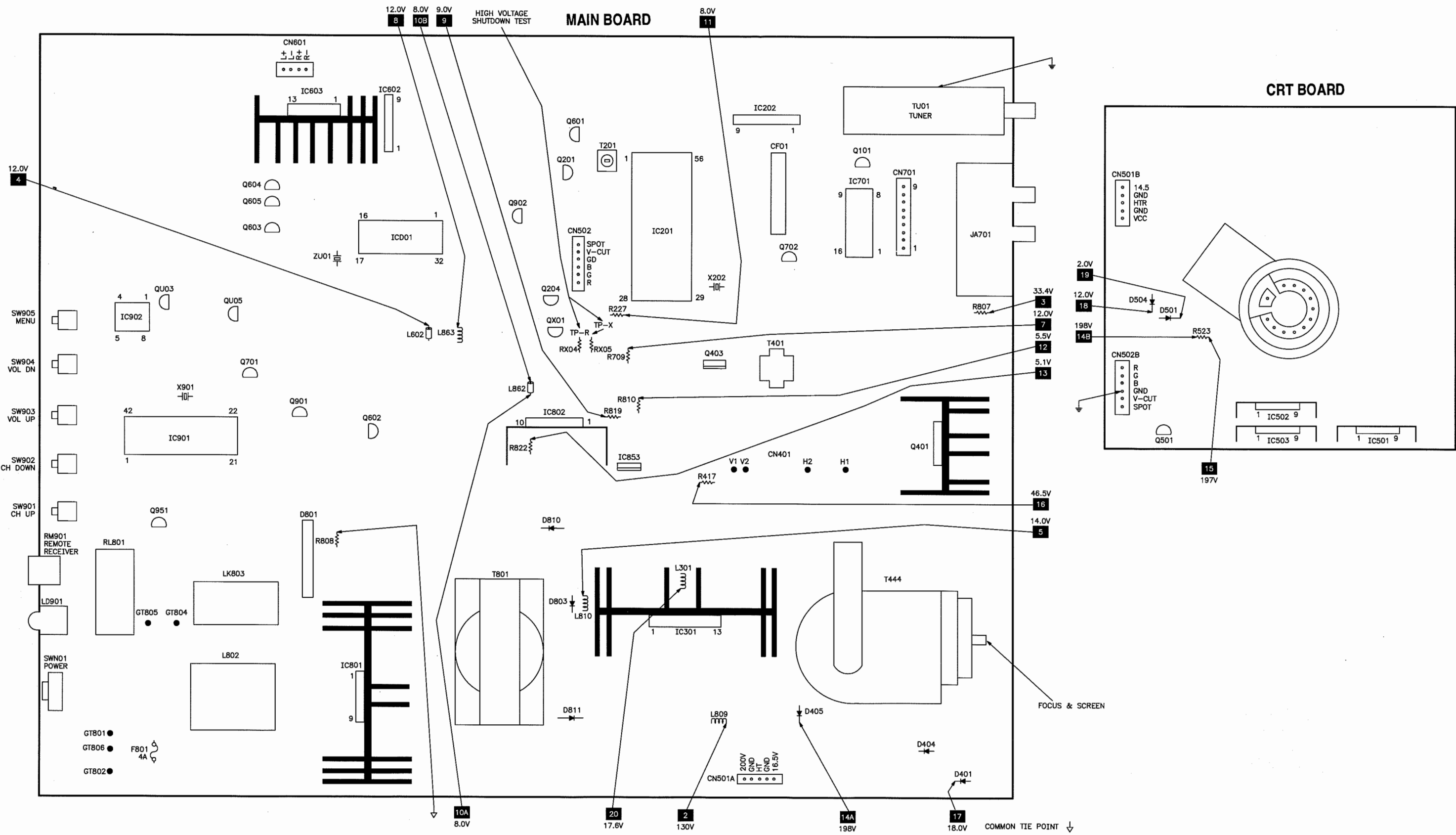
OPTION BYTE CHART

Hex Value	Byte	Data	Options	Remark
Byte 0 (hex) first digit 4	0	D0	0: AIR/STD/HRC/TRC. 1: AIR/STD/HRC/AFN.	Option
	0	D1	0: No auto power off. 1: Auto power off after 20 minutes.	Fix= 0
	1	D2	0: Auto mute in no signal. 1: No auto mute.	Fix= 1
	0	D3	0: Help message. 1: No help message.	Fix= 0
Byte 0 (hex) second digit 8	0	D4	0: No auto power on. 1: Auto power on.	Fix= 0
	0	D5	0: MPX. 1: Mono.	Option
	0	D6	0: Sharpness level in 4 steps. 1: Sharpness level in 8 steps.	Fix= 0
	1	D7	0: Noise reduction. 1: No noise reduction.	Fix= 1
Byte 1 (hex) first digit 0	0	D0	00: TV/video. 01: TV/video/S-video. 11: Not used.	Option
	0	D1		Option
	0	D2	0: VID : 0. 1: VID : 1.	Fix= 0
	0	D3	0: Picture level in 10 steps. 1: Picture level in 5 steps.	Fix= 0
Byte 1 (hex) second digit 5	1	D4	0: No comb filter. 1: Comb filter.	Option
	0	D5	0: 4:3 CRT 1: 12.8:9 CRT (Q model)	Option
	1	D6	0: Internal A/V switch (mono = 0) 1: External A/V switch (stereo = 1)	Option
	0	D7	No influence.	

SERVICE TIP

IC902 must be reprogrammed after replacement. Operate the receiver for 10 minutes. Perform purity, convergence, white balance, sub brightness, S-correction/vertical slope/vertical shift/vertical amplitude, and horizontal shift adjustments

PLACEMENT CHART

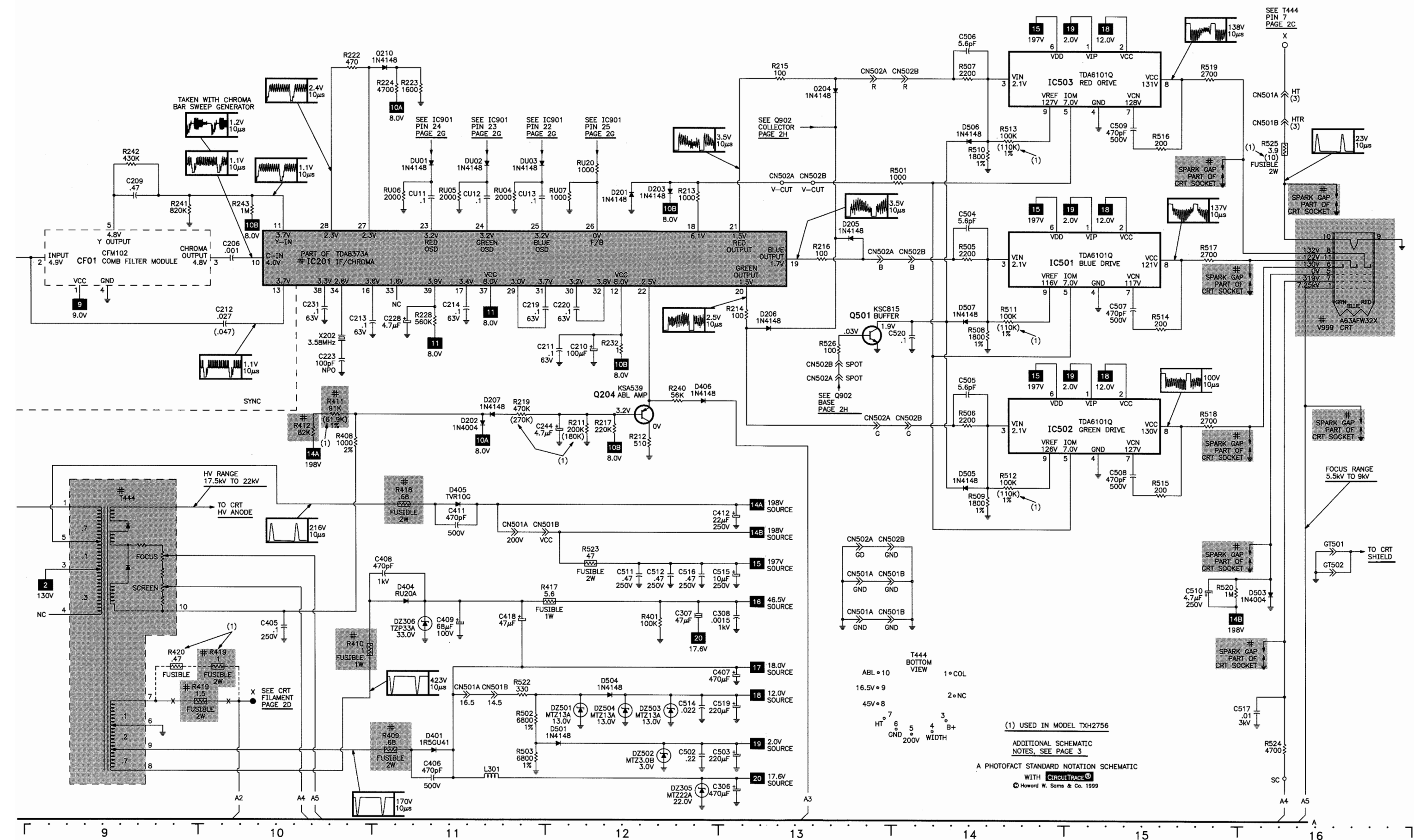


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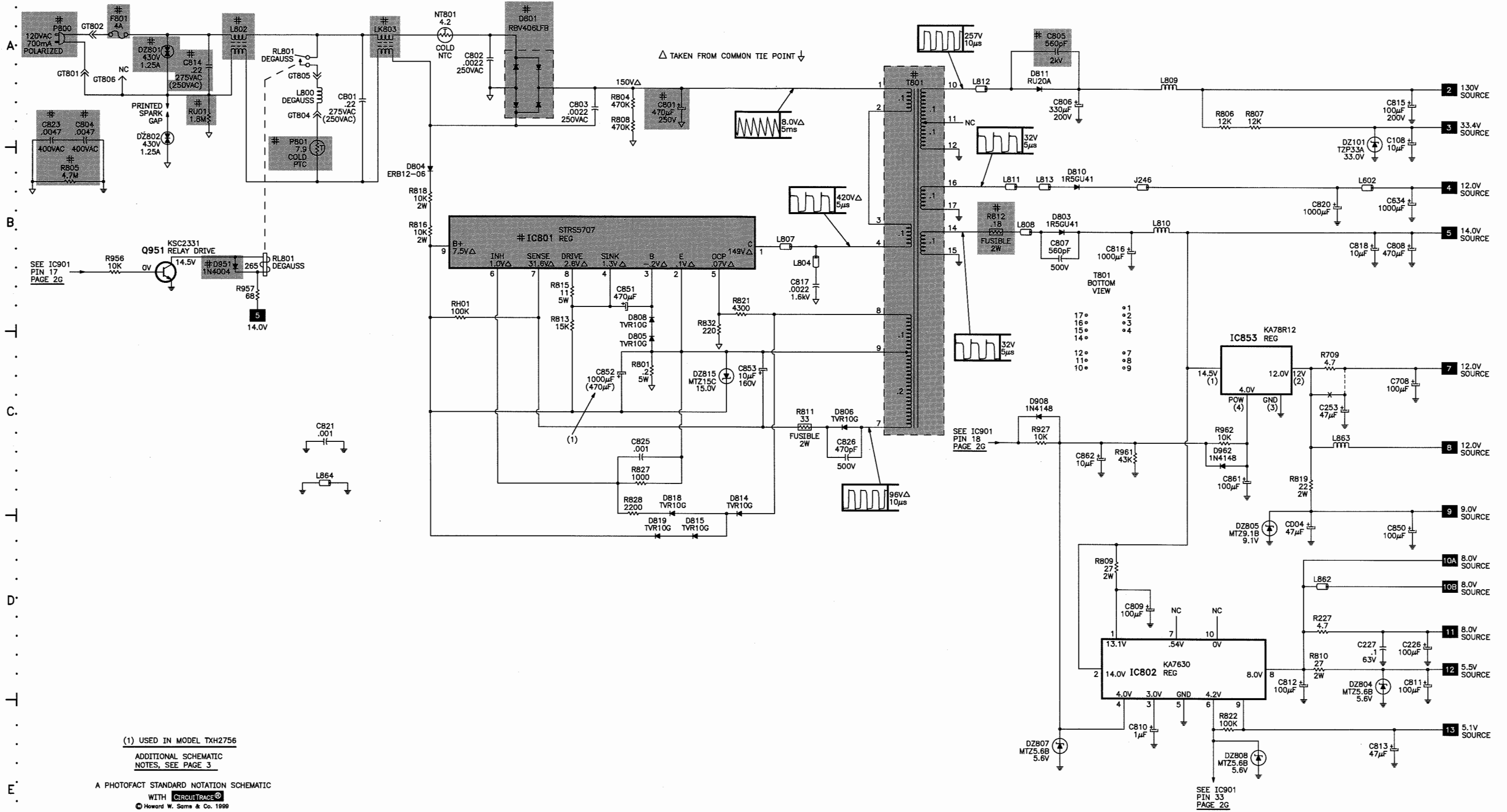
MODEL TXH2555 (CHASSIS KC157A)

FIG. 1 Schematic diagram of the receiver section of the TXH2756 model, showing the IF/CHROMA section (A), the A/V SWITCHING section (B), the SYNC section (C), and the VERT. OUTPUT section (D).

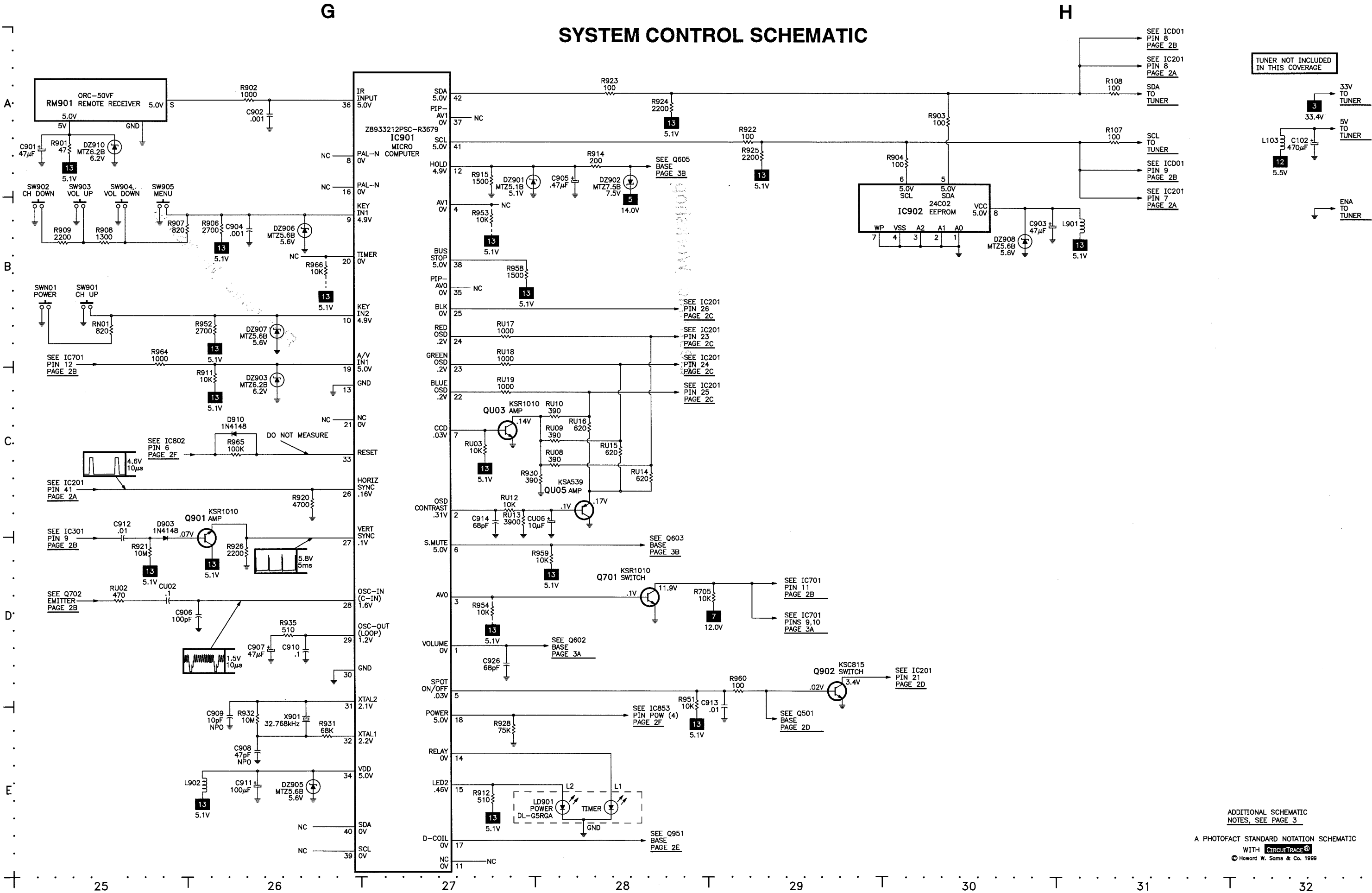
A. IF/CHROMA SECTION: This section includes the IC202 IF/CHROMA IC, which is part of the TDA8373A. It receives input from the tuner and outputs to the A/V SWITCHING section. Key components include the SF102 SAW filter, C104, C105, C107, C111, C110, L104, R120, R111, R113, R114, R112, R110, R109, R104, R103, R102, C240, C202, R202, R209, R210, C205, C204, C203, R204, L201, L202, L203, R207, R208, R205, R206, R607, R608, R606, C635, ZB01, Q601, Q201, Q202, Q203, Q204, Q205, Q206, Q207, Q208, Q209, Q210, Q211, Q212, Q213, Q214, Q215, Q216, Q217, Q218, Q219, Q220, Q221, Q222, Q223, Q224, Q225, Q226, Q227, Q228, Q229, Q230, Q231, Q232, Q233, Q234, Q235, Q236, Q237, Q238, Q239, Q240, Q241, Q242, Q243, Q244, Q245, Q246, Q247, Q248, Q249, Q250, Q251, Q252, Q253, Q254, Q255, Q256, Q257, Q258, Q259, Q260, Q261, Q262, Q263, Q264, Q265, Q266, Q267, Q268, Q269, Q270, Q271, Q272, Q273, Q274, Q275, Q276, Q277, Q278, Q279, Q280, Q281, Q282, Q283, Q284, Q285, Q286, Q287, Q288, Q289, Q290, Q291, Q292, Q293, Q294, Q295, Q296, Q297, Q298, Q299, Q300, Q301, Q302, Q303, Q304, Q305, Q306, Q307, Q308, Q309, Q310, Q311, Q312, Q313, Q314, Q315, Q316, Q317, Q318, Q319, Q320, Q321, Q322, Q323, Q324, Q325, Q326, Q327, Q328, Q329, Q330, Q331, Q332, Q333, Q334, Q335, Q336, Q337, Q338, Q339, Q340, Q341, Q342, Q343, Q344, Q345, Q346, Q347, Q348, Q349, Q350, Q351, Q352, Q353, Q354, Q355, Q356, Q357, Q358, Q359, Q360, Q361, Q362, Q363, Q364, Q365, Q366, Q367, Q368, Q369, Q370, Q371, Q372, Q373, Q374, Q375, Q376, Q377, Q378, Q379, Q380, Q381, Q382, Q383, Q384, Q385, Q386, Q387, Q388, Q389, Q390, Q391, Q392, Q393, Q394, Q395, Q396, Q397, Q398, Q399, Q400, Q401, Q402, Q403, Q404, Q405, Q406, Q407, Q408, Q409, Q410, Q411, Q412, Q413, Q414, Q415, Q416, Q417, Q418, Q419, Q420, Q421, Q422, Q423, Q424, Q425, Q426, Q427, Q428, Q429, Q430, Q431, Q432, Q433, Q434, Q435, Q436, Q437, Q438, Q439, Q440, Q441, Q442, Q443, Q444, Q445, Q446, Q447, Q448, Q449, Q450, Q451, Q452, Q453, Q454, Q455, Q456, Q457, Q458, Q459, Q460, Q461, Q462, Q463, Q464, Q465, Q466, Q467, Q468, Q469, Q470, Q471, Q472, Q473, Q474, Q475, Q476, Q477, Q478, Q479, Q480, Q481, Q482, Q483, Q484, Q485, Q486, Q487, Q488, Q489, Q490, Q491, Q492, Q493, Q494, Q495, Q496, Q497, Q498, Q499, Q500, Q501, Q502, Q503, Q504, Q505, Q506, Q507, Q508, Q509, Q510, Q511, Q512, Q513, Q514, Q515, Q516, Q517, Q518, Q519, Q520, Q521, Q522, Q523, Q524, Q525, Q526, Q527, Q528, Q529, Q530, Q531, Q532, Q533, Q534, Q535, Q536, Q537, Q538, Q539, Q540, Q541, Q542, Q543, Q544, Q545, Q546, Q547, Q548, Q549, Q550, Q551, Q552, Q553, Q554, Q555, Q556, Q557, Q558, Q559, Q560, Q561, Q562, Q563, Q564, Q565, Q566, Q567, Q568, Q569, Q570, Q571, Q572, Q573, Q574, Q575, Q576, Q577, Q578, Q579, Q580, Q581, Q582, Q583, Q584, Q585, Q586, Q587, Q588, Q589, Q590, Q591, Q592, Q593, Q594, Q595, Q596, Q597, Q598, Q599, Q600, Q601, Q602, Q603, Q604, Q605, Q606, Q607, Q608, Q609, Q610, Q611, Q612, Q613, Q614, Q615, Q616, Q617, Q618, Q619, Q620, Q621, Q622, Q623, Q624, Q625, Q626, Q627, Q628, Q629, Q630, Q631, Q632, Q633, Q634, Q635, Q636, Q637, Q638, Q639, Q640, Q641, Q642, Q643, Q644, Q645, Q646, Q647, Q648, Q649, Q650, Q651, Q652, Q653, Q654, Q655, Q656, Q657, Q658, Q659, Q660, Q661, Q662, Q663, Q664, Q665, Q666, Q667, Q668, Q669, Q670, Q671, Q672, Q673, Q674, Q675, Q676, Q677, Q678, Q679, Q680, Q681, Q682, Q683, Q684, Q685, Q686, Q687, Q688, Q689, Q690, Q691, Q692, Q693, Q694, Q695, Q696, Q697, Q698, Q699, Q700, Q701, Q702, Q703, Q704, Q705, Q706, Q707, Q708, Q709, Q710, Q711, Q712, Q713, Q714, Q715, Q716, Q717, Q718, Q719, Q720, Q721, Q722, Q723, Q724, Q725, Q726, Q727, Q728, Q729, Q730, Q731, Q732, Q733, Q734, Q735, Q736, Q737, Q738, Q739, Q740, Q741, Q742, Q743, Q744, Q745, Q746, Q747, Q748, Q749, Q750, Q751, Q752, Q753, Q754, Q755, Q756, Q757, Q758, Q759, Q760, Q761, Q762, Q763, Q764, Q765, Q766, Q767, Q768, Q769, Q770, Q771, Q772, Q773, Q774, Q775, Q776, Q777, Q778, Q779, Q780, Q781, Q782, Q783, Q784, Q785, Q786, Q787, Q788, Q789, Q790, Q791, Q792, Q793, Q794, Q795, Q796, Q797, Q798, Q799, Q800, Q801, Q802, Q803, Q804, Q805, Q806, Q807, Q808, Q809, Q810, Q811, Q812, Q813, Q814, Q815, Q816, Q817, Q818, Q819, Q820, Q821, Q822, Q823, Q824, Q825, Q826, Q827, Q828, Q829, Q830, Q831, Q832, Q833, Q834, Q835, Q836, Q837, Q838, Q839, Q840, Q841, Q842, Q843, Q844, Q845, Q846, Q847, Q848, Q849, Q850, Q851, Q852, Q853, Q854, Q855, Q856, Q857, Q858, Q859, Q860, Q861, Q862, Q863, Q864, Q865, Q866, Q867, Q868, Q869, Q870, Q871, Q872, Q873, Q874, Q875, Q876, Q877, Q878, Q879, Q880, Q881, Q882, Q883, Q884, Q885, Q886, Q887, Q888, Q889, Q890, Q891, Q892, Q893, Q894, Q895, Q896, Q897, Q898, Q899, Q900, Q901, Q902, Q903, Q904, Q905, Q906, Q907, Q908, Q909, Q910, Q911, Q912, Q913, Q914, Q915, Q916, Q917, Q918, Q919, Q920, Q921, Q922, Q923, Q924, Q925, Q926, Q927, Q928, Q929, Q930, Q931, Q932, Q933, Q934, Q935, Q936, Q937, Q938, Q939, Q940, Q941, Q942, Q943, Q944, Q945, Q946, Q947, Q948, Q949, Q950, Q951, Q952, Q953, Q954, Q



POWER SUPPLY SCHEMATIC

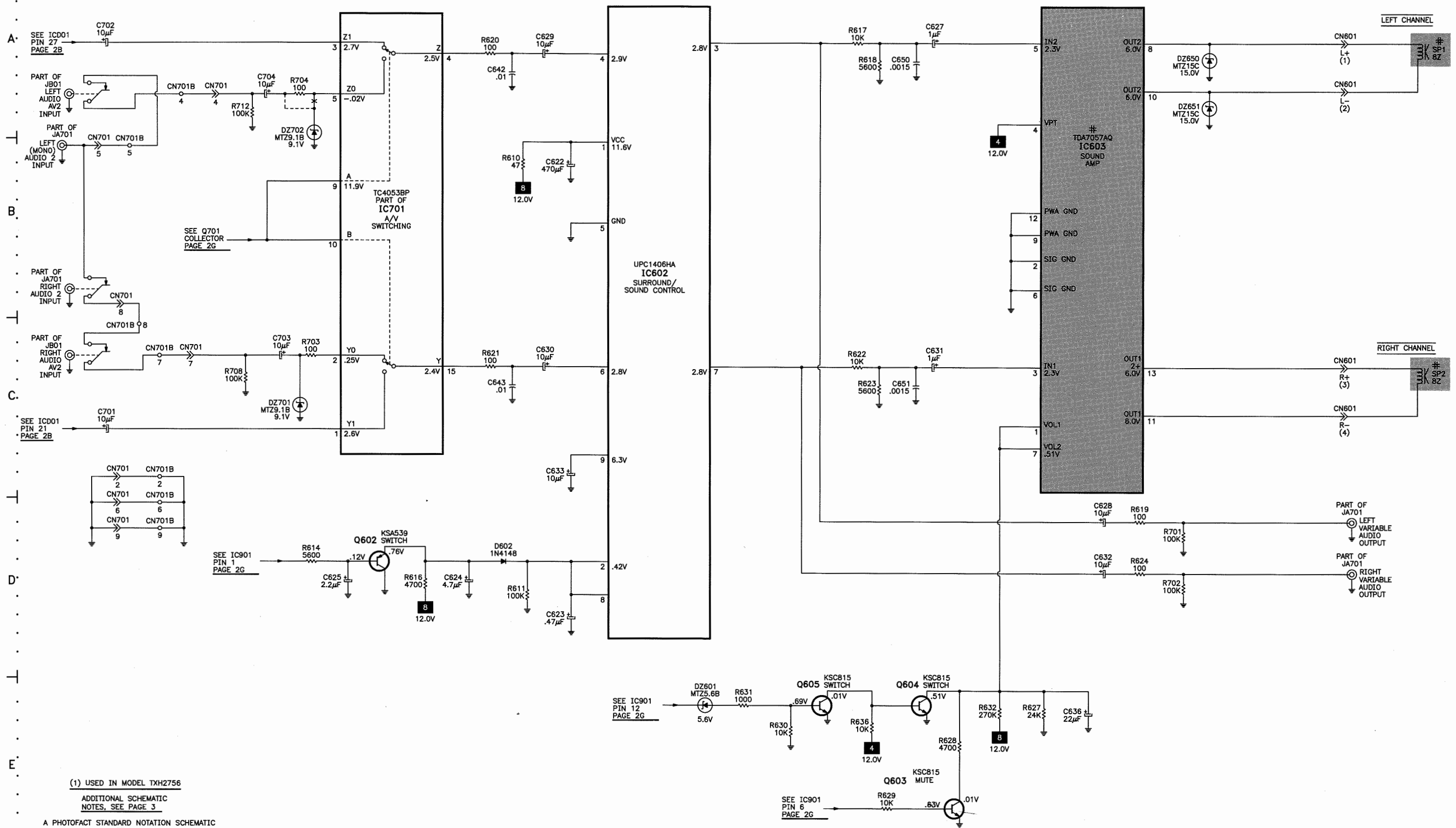


SYSTEM CONTROL SCHEMATIC



ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 3
A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH **CIRCUITTRACE**
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AUDIO SCHEMATIC



(1) USED IN MODEL TXH2756

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 3

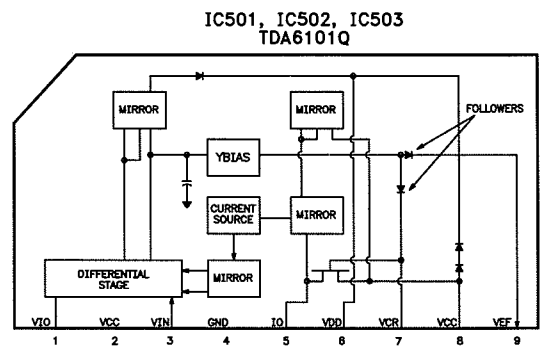
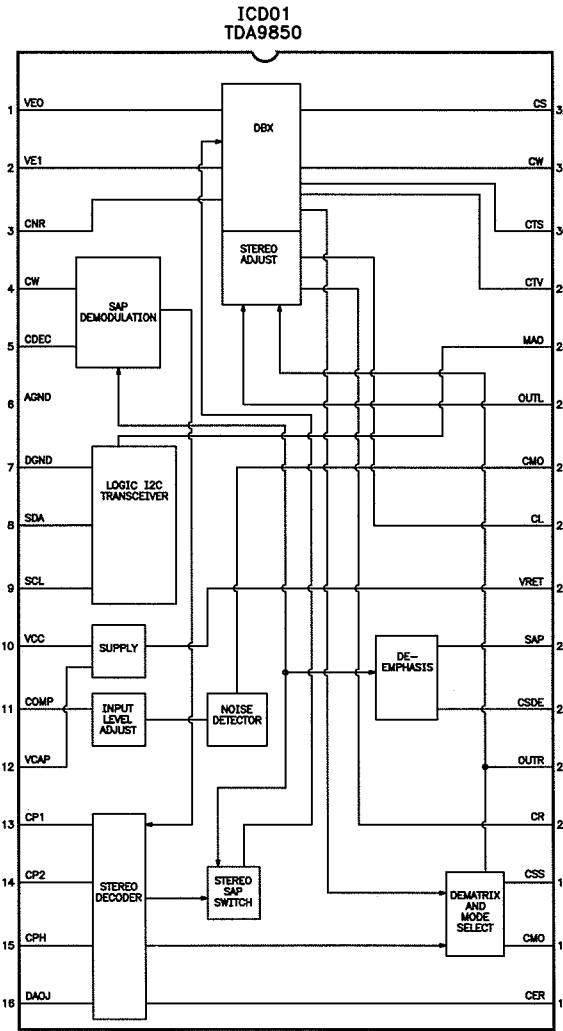
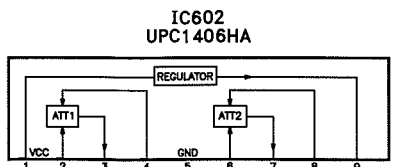
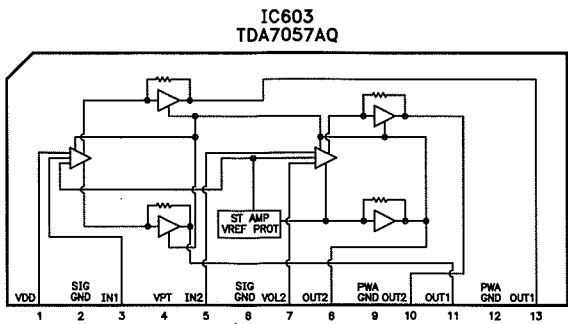
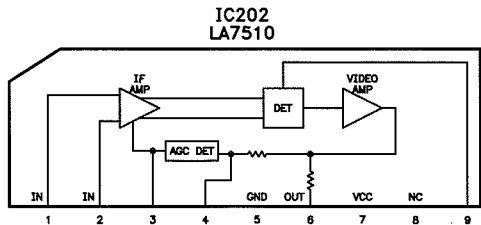
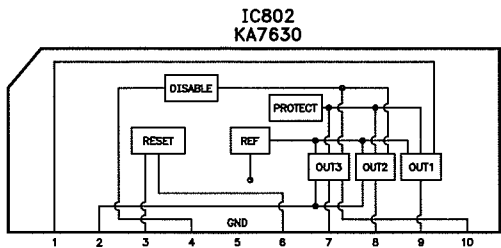
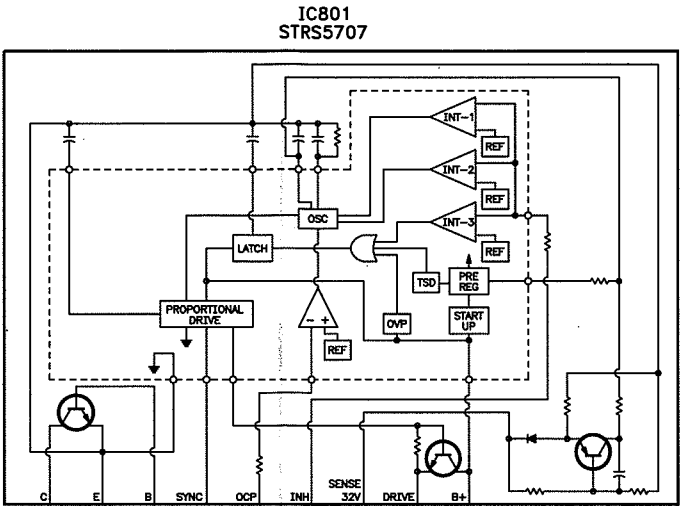
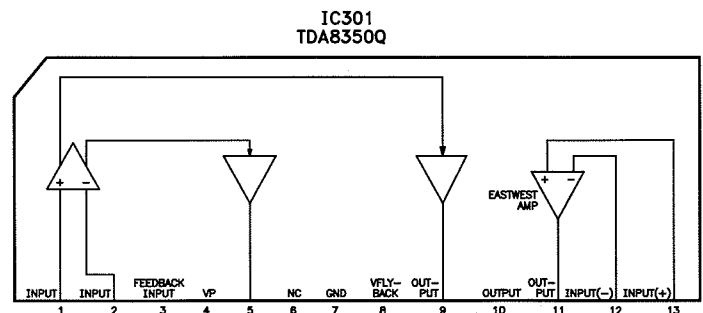
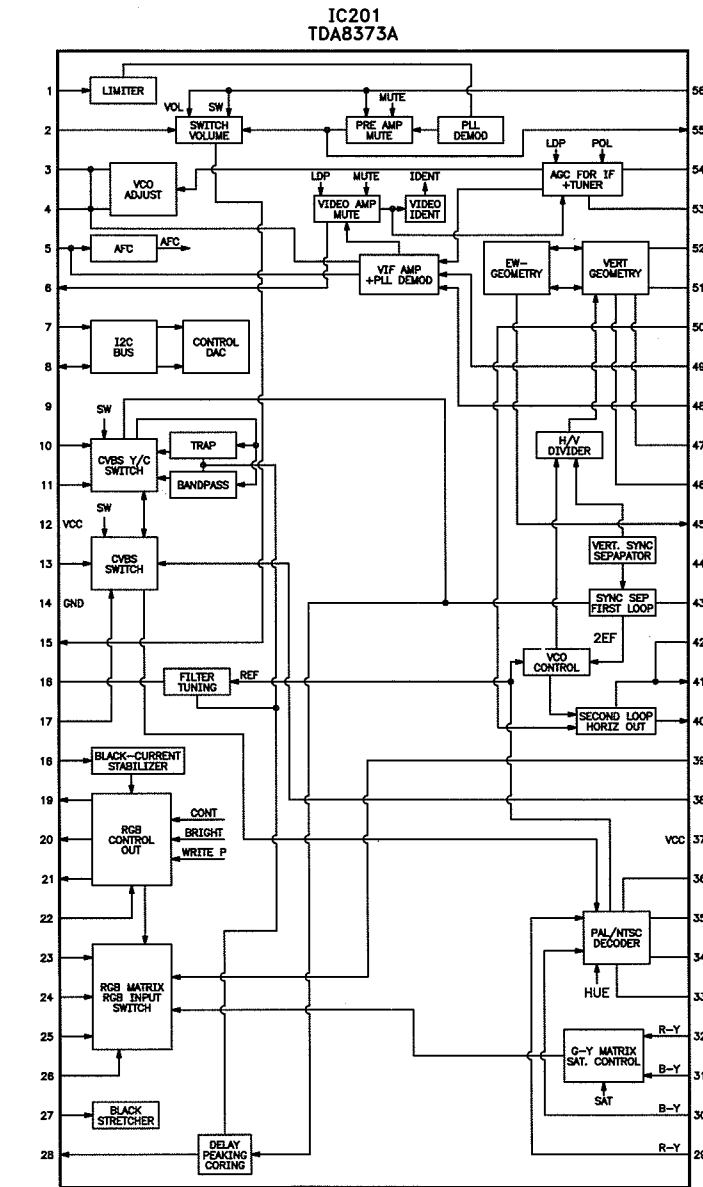
A PHOTOFACIT STANDARD NOTATION SCHEMATIC

WITH CIRCUIT TRACE
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SCHEMATIC COMPONENT LOCATION GUIDE

C101	C-2	C403	E-6	C709	B-6	CF01	B-9	D903	D-25	IC801	B-19	Q501	C-13	R241	B-9	R611	D-35	R907	B-25	RU15	C-28
C102	A-32	C404	E-8	C801	A-20	CU02	D-25	D908	C-22	IC802	D-23	Q601	A-4	R242	B-9	R614	D-34	R908	B-25	RU16	C-28
C104	A-1	C405	D-10	C802	A-19	CU06	C-28	D910	C-26	IC853	C-23	Q602	D-34	R243	B-10	R616	D-35	R909	B-25	RU17	B-27
C105	A-1	C406	E-11	C803	A-20	CU11	B-11	D951	B-18	IC901	A-27	Q603	E-37	R301	D-4	R617	A-37	R911	C-26	RU18	C-27
C106	B-2	C407	E-13	C804	B-17	CU12	B-11	D962	C-23	IC902	B-30	Q604	E-37	R304	D-4	R618	A-37	R912	E-27	RU19	C-27
C107	A-1	C408	D-11	C805	A-22	CU13	B-11	DU01	B-11	ICD01	A-5	Q605	E-37	R305	D-4	R619	D-39	R914	A-28	RU20	B-12
C108	B-24	C409	D-11	C806	A-22	CUD01	B-7	DU02	B-11	J246	B-22	Q701	D-28	R306	D-7	R620	A-35	R915	B-27	RU21	A-8
C110	B-1	C411	D-11	C807	B-22	CUD02	A-5	DU03	B-11	JA701	B-33	Q702	B-7	R307	D-6	R621	C-35	R920	C-26	RU22	A-8
C111	A-2	C412	D-13	C808	B-24	CUD03	A-5	DX01	E-2	JA701	B-33	Q901	D-26	R308	D-6	R622	C-37	R921	D-25	RUD01	A-7
C112	C-1	C413	E-4	C809	D-22	CUD04	A-6	DZ101	B-24	JA701	C-5	Q902	D-29	R309	D-7	R623	C-37	R922	A-29	RUD02	B-7
C113	B-1	C414	E-2	C810	E-22	CUD05	B-7	DZ302	D-7	JA701	D-40	Q951	B-17	R310	D-7	R624	D-39	R923	A-28	RUD03	B-8
C116	B-1	C415	E-2	C811	D-24	CUD06	B-6	DZ303	D-6	JA701	D-40	QU03	C-27	R401	D-12	R627	E-38	R924	A-28	RUD04	A-8
C117	B-1	C417	E-3	C812	D-23	CUD07	B-7	DZ305	E-12	JB01	A-33	QU05	C-28	R403	E-3	R628	E-38	R925	A-29	RX01	E-2
C201	A-3	C418	D-11	C813	E-24	CUD08	A-6	DZ306	D-11	JB01	C-33	QX01	E-2	R404	E-4	R629	E-37	R926	D-26	RX02	E-2
C202	B-2	C419	E-5	C814	A-18	CUD09	A-7	DZ401	E-1	JB01	C-5	R102	C-2	R405	D-8	R630	E-37	R927	C-22	RX03	E-2
C203	B-4	C502	E-12	C815	A-24	CUD10	B-6	DZ402	E-1	L102	B-2	R103	C-2	R407	E-4	R631	E-36	R928	E-27	RX04	D-2
C204	B-3	C503	E-13	C816	B-22	CUD11	A-6	DZ501	E-12	L103	A-32	R104	C-2	R408	C-10	R632	E-38	R930	C-27	RX05	E-2
C205	B-3	C504	B-14	C817	B-21	CUD12	B-6	DZ502	E-12	L104	B-1	R107	A-31	R409	E-11	R636	E-37	R931	E-26	RX06	E-2
C206	B-10	C505	C-14	C818	B-24	CUD13	A-6	DZ503	E-12	L201	B-5	R108	A-31	R410	D-11	R701	D-39	R932	E-26	SF101	B-2
C209	B-9	C506	A-14	C820	B-23	CUD14	B-6	DZ504	E-12	L202	C-4	R109	C-2	R411	C-10	R702	D-39	R935	D-26	SF102	A-1
C210	C-12	C507	C-15	C821	C-18	CX01	E-2	DZ601	E-36	L203	C-4	R111	B-1	R412	C-10	R703	C-34	R951	E-28	SP1	A-40
C211	C-12	C508	C-15	C823	B-17	D201	B-12	DZ650	A-39	L204	D-3	R112	B-2	R413	E-5	R704	A-34	R952	B-26	SP2	C-40
C212	C-10	C509	A-15	C825	C-20	D202	C-11	DZ651	A-39	L205	D-3	R113	B-1	R415	E-2	R705	D-28	R953	B-27	SW901	B-25
C213	C-11	C510	D-15	C826	C-21	D203	B-12	DZ701	C-34	L206	D-3	R114	B-1	R416	E-1	R706	C-6	R954	D-27	SW902	B-25
C214	C-11	C511	D-12	C850	D-24	D204	A-13	DZ702	B-34	L301	E-11	R120	B-1	R417	D-11	R707	B-8	R956	B-17	SW903	B-25
C219	C-12	C512	D-12	C851	B-20	D205	B-13	DZ704	C-6	L400	D-8	R202	B-2	R418	D-11	R708	C-34	R957	B-18	SW904	B-25
C220	C-12	C514	E-12	C852	C-20	D206	C-13	DZ801	A-17	L401	D-8	R203	B-4	R419	E-10	R709	C-23	R958	B-27	SW905	B-25
C223	C-10	C515	D-13	C853	C-20	D207	C-11	DZ802	B-17	L402	E-5	R204	B-4	R420	E-9	R710	C-8	R959	D-28	SWN01	B-25
C224	D-1	C516	D-12	C861	C-23	D208	E-3	DZ804	D-24	L405	E-3	R205	B-4	R501	B-13	R712	A-34	R960	D-29	T201	C-3
C225	D-1	C517	E-16	C862	C-22	D210	A-11	DZ805	D-23	L602	B-24	R206	B-4	R502	E-11	R715	C-5	R961	C-22	T401	E-4
C226	D-24	C519	E-13	C901	A-25	D301	D-7	DZ807	E-22	L800	A-18	R207	B-4	R503	E-11	R716	B-7	R962	C-23	T444	D-9
C227	D-24	C520	C-14	C902	A-26	D302	D-6	DZ808	E-23	L802	A-18	R209	B-3	R505	B-14	R717	B-7	R964	C-25	T801	A-21
C228	C-11	C622	B-35	C903	B-30	D401	E-11	DZ815	C-20	L804	B-21	R210	B-3	R506	C-14	R801	C-20	R965	C-26	V999	C-16
C229	D-2	C623	D-35	C904	B-26	D402	E-4	DZ901	B-27	L807	B-21	R211	C-12	R507	A-14	R804	A-20	R966	B-26	X202	C-10
C230	D-1	C624	D-35	C905	B-28	D403	E-4	DZ902	B-28	L808	B-22	R212	C-12	R508	C-14	R805	B-17	RD01	B-7	X901	E-26
C231	C-10	C625	D-34	C906	D-26	D404	D-11	DZ903	C-26	L809	A-23	R213	B-12	R509	D-14	R806	B-23	RD21	A-5	Z201	B-5
C232	D-1	C627	A-37	C907	D-26	D405	D-11	DZ905	E-26	L810	B-22	R214	C-13	R510	B-14	R807	B-23	RD22	A-5	Z601	A-2
C233	D-1	C628	D-38	C908	E-26	D406	C-12	DZ906	B-26	L811	B-22	R215	A-13	R511	C-14	R808	A-20	RE01	D-3	ZU01	A-7
C234	D-2	C629	A-35	C909	E-26	D501	E-12	DZ907	B-26	L812	A-22	R216	B-13	R512	D-14	R809	D-22	RE03	D-5		
C237	D-2	C630	C-35	C910	D-26	D503	D-16	DZ908	B-30	L813	B-22	R217	C-12	R513	B-14	R810	D-23	RH01	C-19		
C239	C-3	C631	C-37	C911	E-26	D504	E-12	DZ910	A-25	L862	D-23	R219	C-11	R514	B-14	R811	C-21	RL801	A-18		
C240	C-2	C632	D-38	C912	D-25	D505	D-14	DZE01	D-5	L863	C-23	R222	A-10	R515	D-15	R812	B-22	RL801	B-18		
C242	A-3	C633	C-35	C913	E-29	D506	B-14	DZX01	E-2	L864	C-18	R223	A-11	R516	B-15	R813	C-19	RM901	A-25		
C243	A-4	C634	B-24	C914	C-27	D507	C-14	F801	A-17	L901	B-31	R224	A-11	R517	B-15	R815	B-19	RN01	B-25		
C244	C-12	C635	A-2	C926	D-27	D602	D-35	IC201	A-3	L902	E-26	R226	D-1	R518	C-15	R816	B-19	RU01	A-18		
C253	C-23	C636	E-38	CA02	B-7	D801	A-19	IC201	B-10	LD901	E-28	R227	D-23	R519	A-15	R818	B-19	RU02	D-25		
C301	D-4	C642	A-35	CB01	A-18	D803	B-22	IC201	B-3	LE304	D-7	R228	C-11	R520	D-16	R819	C-23	RU03	C-27		
C302	D-6	C643	C-35	CD01	B-5	D804	B-19	IC201	D-1	LE305	D-6	R229	D-3	R522	E-11	R821	C-20	RU04	B-11		
C303	D-7	C650	A-37	CD02	A-7	D805	C-20	IC202	A-1	LK803	A-18	R230	E-3	R523	D-12	R822	E-23	RU05	B-11		
C304	D-6	C651	C-37	CD03	A-6	D806	C-21	IC301	D-5	NT801	A-19	R231	D-2	R524	E-16	R827	C-20	RU06	B-11		
C305	D-4	C701	C-33	CD04	D-23	D808	C-20	IC501	B-15	P800	A-17	R232	C-12	R525	B-16	R828	D-20	RU07	B-12		
C306	E-13	C702	A-33	CD05	A-7	D810	B-22	IC502	C-15	P801	B-18	R233	D-2	R526	C-13	R832	C-20	RU08	C-28		
C307	D-12	C703	C-34	CD06	A-4	D811	A-22	IC503	A-15	Q101	B-1	R234	D-1	R606	A-4	R901	A-25	RU09	C-28		
C308	D-13	C704	A-34	CD13	B-5	D814	D-20	IC602	B-36	Q201	B-4	R235	D-2	R607	A-4	R902	A-26	RU10	C-28		
C309	D-4	C705	C-5	CD27	A-7	D815	D-20	IC603	B-38	Q204	C-12	R237	D-2	R608	A-4	R903	A-30	RU12	C-27		
C401	E-4	C706	B-5	CE01	E-3	D818	D-20	IC701	B-35	Q401	E-5	R239	E-2	R610	B-35	R904	A-30	RU13	C-27		
C402	E-5	C708	C-24	CE03	D-4	D819	D-20	IC701	B-6	Q403	E-3	R240	C-12			R906	B-26	RU14	C-28		

IC FUNCTIONS



Schematic Notes

For SAFETY use only equivalent replacement part, see parts list.

* Circuitry not used in some versions.

--- Circuitry used in some versions.

⏏ Ground

⏏ Chassis ground

▽ Common tie point

△ Taken from common tie point

3 Schematic CIRCUITRACE® Voltage source tie point.

A Cabling: Heavy lines reduce use of multiple lines.

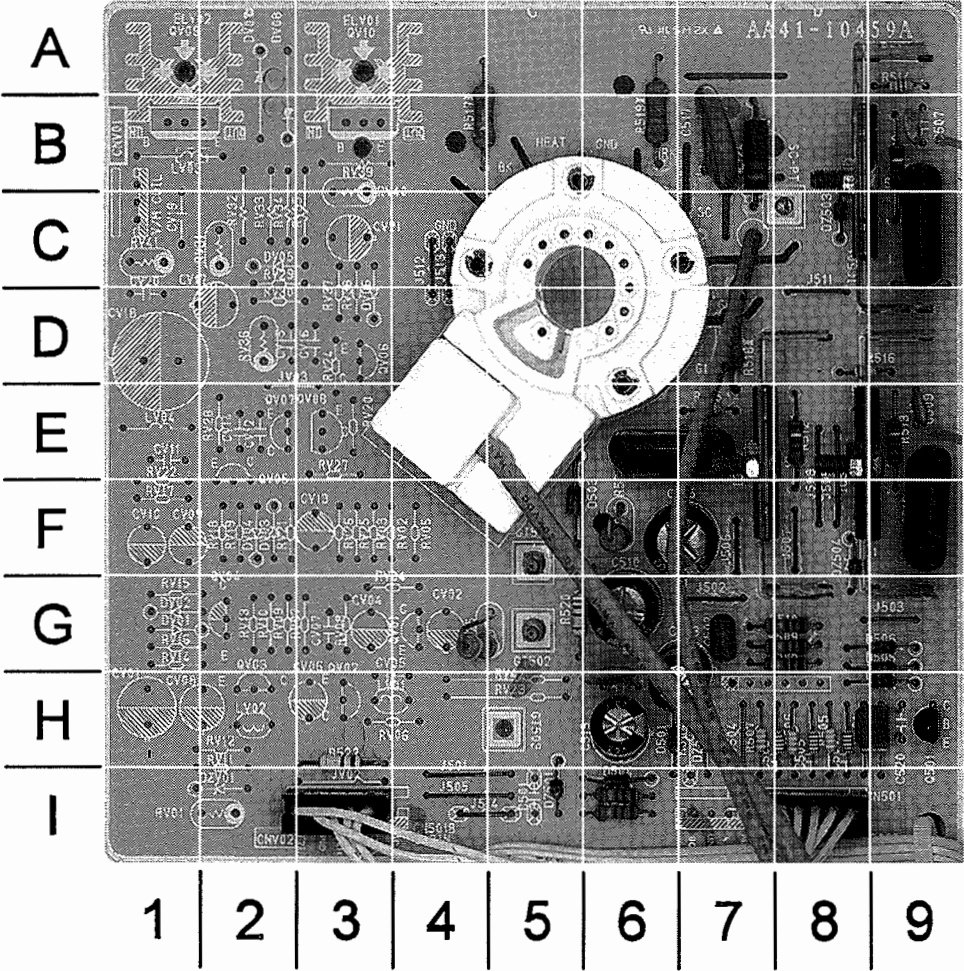
Waveforms and voltages are taken from ground, unless noted otherwise.
Waveforms taken with triggered scope and colorbar signal. Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.
Supply voltages maintained as seen at input.
Voltages measured with digital meter and a 1000µV RF signal, with colorbar pattern, applied to antenna terminal.
Controls adjusted for normal operation.
Capacitors are 50 volts or less, 5% or greater unless noted.
Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.
Resistors are 1/2W or less, 5% or greater unless noted.
Value in () used in some versions.
Measurements with switching as shown, unless noted.
Rated voltage shown on zener diodes.

Test Equipment

Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

Equipment	Sencore No.	Equipment	Sencore No.
Oscilloscope	SC3100	Isolation Transformer	PR570
Generators		Capacitance Analyzer	LC102
RGB	CM2125	CRT Analyzer	CR7000
Multiburst Signal	VG91	AC Leakage Tester	PR570
Color Bar	VG91	Inductance Analyzer	LC102
TV Stereo	VG91	Flyback Yoke Tester	TVA92
Digital VOM	SC3100	Field Strength Meter	SL753
Frequency Meter	SC3100	Transistor Tester	TF46
Hi-Voltage Probe	HP200	Horizontal Analyzer	HA-2500
Accessory Probes	TP212	Video Analyzer	VG91, TVA92

CRT Board

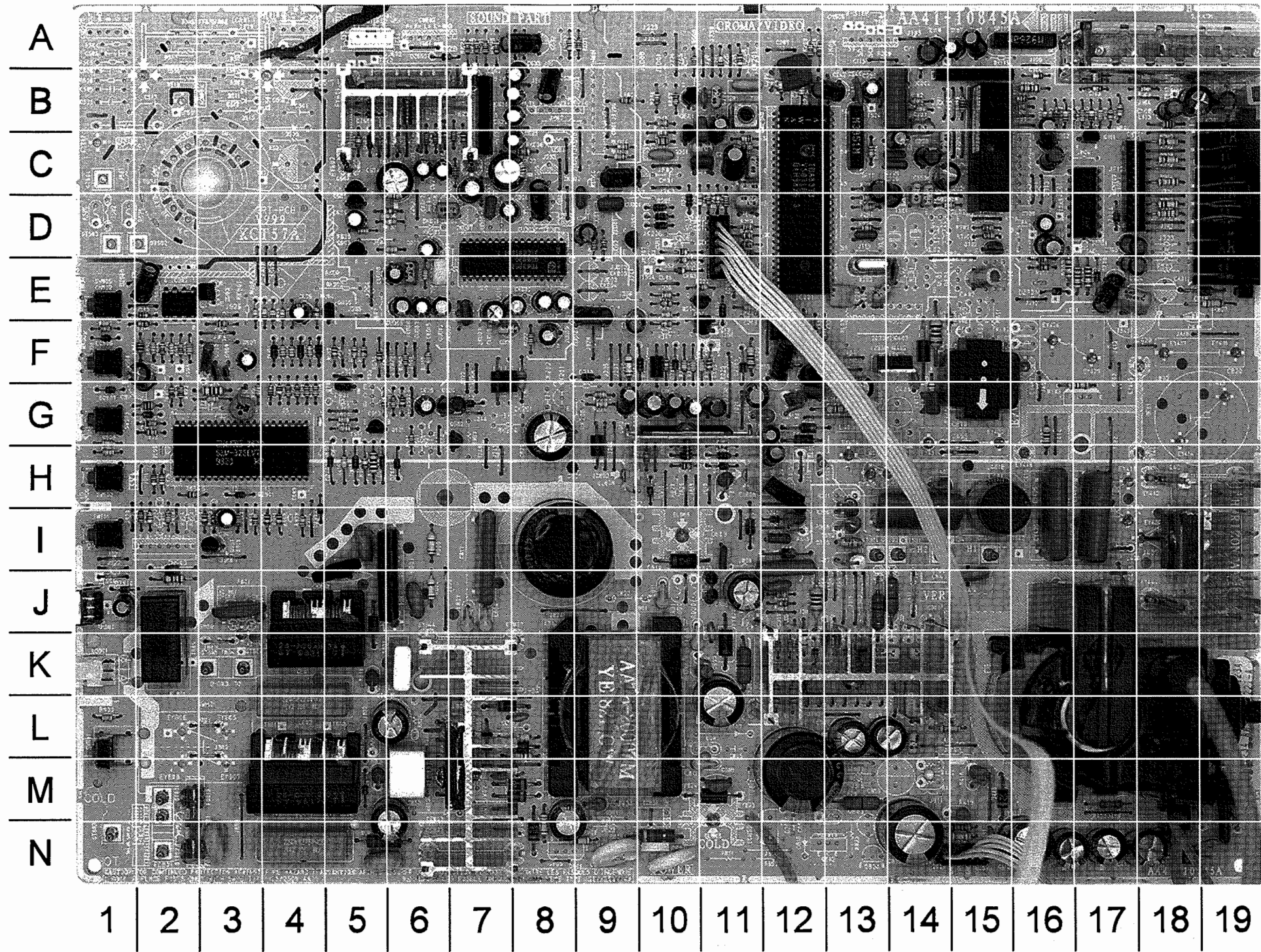


A HOWARD W. SAMS GRIDTRACE™ PHOTO

CRT Board, GridTrace Location Guide

C502	G-7	C515	F-7	D507	H-9	R502	I-6	R515	E-7
C503	H-7	C516	F-9	DZ501	I-5	R503	I-6	R516	D-8
C504	H-8	C517	B-7	DZ502	H-7	R505	H-8	R517	B-4
C505	H-8	C519	H-6	DZ503	C-8	R506	H-8	R518	D-7
C506	H-8	C520	H-9	DZ504	F-8	R507	H-7	R519	B-6
C507	B-9	CN501B	I-3	GT501	F-5	R508	G-8	R520	G-5
C508	E-7	CN502B	I-8	GT502	G-5	R509	G-8	R522	H-3
C509	E-9	D501	H-6	IC501	B-9	R510	G-8	R523	F-6
C510	G-6	D503	F-5	IC502	E-7	R511	B-9	R524	B-7
C511	E-6	D504	I-6	IC503	E-8	R512	E-8	R525	G-4
C512	C-9	D505	G-9	Q501	H-9	R513	E-9	R526	H-9
C514	H-6	D506	G-9	R501	H-8	R514	A-9		

MAIN BOARD



A HOWARD W. SAMS GridTRACE™ PHOTO

MAIN BOARD, GRIDTRACE LOCATION GUIDE

C101	B-19	C403	J-17	C817	I-7	CUD08	E-6
C102	B-19	C404	I-14	C818	G-11	CUD09	E-7
C104	B-16	C405	M-19	C820	G-8	CUD10	E-7
C105	A-15	C406	N-18	C821	I-11	CUD11	E-8
C106	B-16	C407	N-16	C823	N-9	CUD12	E-8
C107	A-15	C408	N-18	C825	M-7	CUD13	F-8
C108	B-18	C409	N-17	C826	L-8	CUD14	E-9
C110	A-14	C411	N-15	C850	C-15	CX01	G-12
C111	A-14	C412	N-16	C851	L-6	D201	D-10
C112	B-16	C413	G-13	C852	N-6	D202	G-12
C113	B-17	C414	J-15	C853	M-8	D203	E-11
C116	B-17	C415	I-12	C861	H-12	D204	D-10
C117	B-16	C417	G-14	C862	G-10	D205	D-10
C201	A-11	C418	N-18	C901	J-1	D206	D-10
C202	B-11	C419	I-16	C902	G-2	D207	F-10
C203	C-11	C622	C-7	C903	E-2	D208	E-11
C204	B-11	C623	C-8	C904	E-2	D210	F-9
C205	B-11	C624	G-7	C905	I-3	D301	K-13
C206	C-11	C625	G-6	C906	G-4	D302	K-13
C209	B-12	C627	C-6	C907	F-3	D401	N-18
C210	C-11	C628	B-8	C908	F-3	D402	I-11
C211	C-11	C629	B-8	C909	F-3	D403	I-12
C212	B-12	C630	B-8	C910	G-3	D404	M-18
C213	C-11	C631	C-6	C911	F-2	D405	M-15
C214	D-11	C632	A-8	C912	I-12	D406	E-11
C219	E-13	C633	B-8	C913	G-5	D602	C-5
C220	E-13	C634	C-6	C914	H-2	D801	J-6
C223	E-14	C635	A-11	C926	H-2	D803	K-11
C224	D-13	C636	D-5	CA02	E-15	D804	J-5
C225	D-14	C642	A-8	CB01	L-4	D805	L-7
C226	C-13	C643	A-8	CD01	D-9	D806	L-7
C227	D-14	C650	C-7	CD02	D-9	D808	L-7
C228	C-14	C651	C-6	CD03	D-6	D810	I-10
C229	C-14	C701	C-16	CD04	D-7	D811	M-11
C230	F-12	C702	C-16	CD05	E-8	D814	L-8
C231	C-14	C703	E-18	CD06	D-7	D815	M-8
C232	C-14	C704	E-17	CD13	C-7	D818	M-8
C233	C-14	C705	D-18	CD27	F-7	D819	N-8
C234	B-14	C706	C-9	CE01	G-12	D903	H-5
C237	B-14	C708	D-16	CE03	E-17	D908	H-10
C239	B-13	C709	D-16	CF01	C-15	D910	H-5
C240	B-13	C801	I-8	CN501A	N-15	D951	I-2
C242	B-13	C802	I-5	CN502A	C-11	D962	H-11
C243	B-11	C803	J-6	CN601	A-5	DU01	F-4
C244	F-10	C804	N-10	CN701	C-17	DU02	F-4
C253	F-12	C805	M-11	CU02	G-4	DU03	F-4
C301	J-12	C806	M-12	CU06	E-4	DX01	G-12
C302	K-14	C807	J-11	CU11	D-10	DZ101	E-19
C303	I-13	C808	J-11	CU12	E-10	DZ302	K-14
C304	L-14	C809	G-11	CU13	E-10	DZ303	L-13
C305	K-12	C810	G-10	CUD01	D-9	DZ305	K-12
C306	L-13	C811	F-12	CUD02	E-6	DZ306	K-13
C307	L-14	C812	G-10	CUD03	C-8	DZ401	I-12
C308	J-12	C813	G-9	CUD04	C-7	DZ402	H-5
C309	K-12	C814	N-4	CUD05	E-6	DZ601	H-6
C401	F-14	C815	N-14	CUD06	E-6	DZ650	A-7
C402	I-17	C816	L-11	CUD07	E-6	DZ651	B-5

PARTS LIST

MAIN BOARD, GRIDTRACE LOCATION GUIDE continued

DZ701	E-16	L808	K-10	R214	D-11	R619	A-7	R914	I-3	RUD03	C-9
DZ702	E-17	L809	M-13	R215	D-11	R620	A-7	R915	I-3	RUD04	C-9
DZ704	D-17	L810	K-11	R216	D-11	R621	A-7	R920	G-5	RX01	F-10
DZ801	N-3	L811	J-10	R217	E-10	R622	C-6	R921	H-5	RX02	F-10
DZ802	N-5	L812	M-11	R219	F-9	R623	C-6	R922	G-2	RX03	F-10
DZ804	F-12	L813	J-11	R222	E-11	R624	A-7	R923	G-2	RX04	F-11
DZ805	F-11	L862	F-10	R223	G-9	R627	C-5	R924	F-2	RX05	F-11
DZ807	H-11	L863	F-8	R224	G-9	R628	D-5	R925	F-2	RX06	H-13
DZ808	H-10	L864	F-8	R226	D-13	R629	G-6	R926	G-5	SF101	C-13
DZ815	M-5	L901	F-2	R227	E-11	R630	F-5	R927	H-10	SF102	A-16
DZ901	H-3	L902	G-2	R228	D-13	R631	G-6	R928	I-4	SW901	I-1
DZ902	I-4	LD901	K-1	R229	D-13	R632	D-6	R930	E-4	SW902	H-1
DZ903	G-7	LE304	J-14	R230	D-15	R636	D-6	R931	G-3	SW903	G-1
DZ905	G-2	LE305	J-13	R231	C-13	R701	B-19	R932	G-3	SW904	F-1
DZ906	F-1	LK803	J-4	R232	D-11	R702	C-18	R935	G-3	SW905	E-1
DZ907	G-1	NT801	I-5	R233	F-13	R703	E-16	R951	I-3	SWN01	L-1
DZ908	E-2	P801	J-3	R234	C-13	R704	E-17	R952	I-2	T201	B-11
DZ910	J-1	Q101	C-17	R235	B-14	R705	E-15	R956	I-4	T401	F-15
DZE01	K-15	Q201	C-10	R237	B-13	R706	E-17	R957	J-7	T444	L-17
DZX01	F-10	Q204	E-11	R239	F-10	R707	D-15	R958	F-2	T801	L-9
F801	M-2	Q401	I-18	R240	E-11	R708	C-18	R959	H-2	TP-R	F-11
GT801	M-2	Q403	F-14	R241	D-11	R709	F-11	R960	F-6	TP-X	F-11
GT802	N-2	Q601	B-10	R242	B-12	R710	D-15	R961	H-10	X202	E-13
GT804	K-3	Q602	G-7	R243	D-11	R712	D-18	R962	H-11	X901	F-3
GT805	K-3	Q603	D-5	R301	J-12	R715	D-18	R964	C-18	Z201	C-10
GT806	M-2	Q604	C-5	R304	K-12	R716	E-16	R965	H-5	Z601	B-11
IC201	C-12	Q605	D-5	R305	K-12	R717	E-16	RD01	E-6	ZU01	E-6
IC202	B-15	Q701	G-5	R306	H-13	R801	K-6	RD21	A-9		
IC301	K-13	Q702	D-15	R307	K-12	R804	J-6	RD22	A-8		
IC602	B-7	Q901	G-5	R308	K-12	R805	N-10	RE03	G-17		
IC603	B-6	Q902	D-9	R309	I-13	R806	L-15	RH01	N-9		
IC701	D-17	Q951	I-3	R310	K-15	R807	E-19	RL801	J-2		
IC801	M-7	QU03	E-3	R401	K-13	R808	I-6	RM901	J-1		
IC802	G-10	QU05	E-5	R403	G-14	R809	H-11	RN01	L-1		
IC853	H-12	QX01	F-11	R404	G-13	R810	G-12	RU01	N-5		
IC901	H-3	R102	B-14	R405	H-14	R811	M-9	RU02	F-6		
IC902	E-2	R103	B-18	R407	G-16	R812	K-11	RU03	I-3		
ICD01	E-8	R104	B-16	R408	M-17	R813	M-6	RU04	E-4		
J246	H-9	R107	A-18	R409	M-19	R815	M-6	RU05	F-5		
JA701	D-19	R108	A-18	R410	M-19	R816	M-5	RU06	F-5		
L102	B-16	R109	B-16	R411	N-15	R818	K-5	RU07	F-3		
L103	B-18	R111	B-17	R412	N-15	R819	G-12	RU08	E-3		
L104	B-15	R112	B-17	R413	I-19	R821	L-8	RU09	E-4		
L201	C-10	R113	B-17	R415	I-12	R822	H-10	RU10	E-4		
L202	F-14	R114	B-17	R416	H-5	R827	L-8	RU12	F-5		
L203	F-12	R120	B-17	R417	I-13	R828	N-8	RU13	E-4		
L204	F-12	R202	C-11	R418	M-15	R832	N-7	RU14	F-4		
L205	F-12	R203	C-11	R419	M-15	R901	I-2	RU15	F-4		
L206	F-12	R204	D-11	R606	B-9	R902	G-2	RU16	F-4		
L301	J-12	R205	B-10	R607	B-10	R903	F-2	RU17	G-4		
L401	H-15	R206	B-10	R608	A-10	R904	F-2	RU18	G-4		
L402	J-19	R207	C-10	R610	C-8	R906	F-2	RU19	G-4		
L405	F-14	R209	A-12	R611	C-5	R907	F-1	RU20	G-4		
L602	F-7	R210	A-12	R614	G-6	R908	G-1	RU21	E-7		
L802	M-4	R211	E-10	R616	D-6	R909	H-1	RU22	F-8		
L804	J-7	R212	E-10	R617	C-7	R911	I-4	RUD01	D-9		
L807	J-7	R213	D-11	R618	C-7	R912	I-2	RUD02	D-9		

Important Parts Information

- The parts listed here are those not usually available from a well-stocked supply cabinet or bin.
- Where items may be replaced with equivalent parts, several alternates are shown from participating vendors.
- On the parts lists, safety items are marked with a # to remind you that only exact replacements are recommended for these items.
- When ordering parts, state the model number, part number, and description.

Obtaining Parts

Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

800-428-7267

Or consult the Sams *Annual Index* for the address of the original equipment manufacturer.

Participating Vendors

Information on test equipment and replacement parts is listed in these pages for the following participating vendors. Consult the Sams *Annual Index* for their current address.

- Custom Components Corporation (Chek-A-Color)
- Sencore, Inc.
- NTE Electronics, Inc. (NTE)
- Thomson Consumer Electronics, Inc. (SK, TCE)
- Terrell & Nobis (TNI Electronics)

CABINET PARTS

Item	Mfr. Part No.	Item	Mfr. Part No.
Models TXH2545, TXH2555, and TXH2556		Model TXH2756	
Badge, SAMSUNG (1)	AA64-70117B	Badge, SAMSUNG (1)	AA64-70010A
Button Assembly (1)	AA64-10732A	Button Assembly (1)	AA64-10732A
Button Power (1)	AA64-10733A	Button Power (1)	AA64-10733A
Cabinet Front (1)	AA64-31137A	Cabinet Front (1)	AA64-31148A
Cabinet Front Assembly	AA91-10341A	Cabinet Front Assembly	AA91-10351A
Cabinet Rear (2)	AA64-31138A	Cabinet Rear (2)	AA64-31138A
Cabinet Rear Assembly	AA90-70111A	Cabinet Rear Assembly	AA90-70122A
IR Window (1)	AA64-40472A	IR Window (1)	AA64-40472A
Spring, Button Power (1)	AA61-60003T	Spring, Button Power (1)	AA61-60003T

- (1) Part of cabinet front assembly.
(2) Part of cabinet rear assembly.

PARTS LIST continued

SEMICONDUCTORS

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	TCE Part No.
D201	1N4148	0401-000005	NTE519	SK3100
D202	1N4004	0402-000132	NTE116	SK3312
D203 Thru				
D208	1N4148	0401-000005	NTE519	SK3100
D210	1N4148	0401-000005	NTE519	SK3100
D301, 02	1N4004	0402-000132	NTE116	SK3312
D401	1R5GU41	0402-000493	NTE576	-
D402, 03	1N4004	0402-000132	NTE116	SK3312
D404	RU20A	0402-000540	-	-
D405	ERB43-04SV1	0402-001105	-	-
	TVR10G	-	NTE552	SK9000
D406	1N4148	0401-000005	NTE519	SK3100
D501	1N4148	0401-000005	NTE519	SK3100
D503	1N4004	0402-000132	NTE116	SK3312
D504 Thru				
D507	1N4148	0401-000005	NTE519	SK3100
D602	1N4148	0401-000005	NTE519	SK3100
# D801	RBV406LFB	0402-001082	-	-
D803	1R5GU41	0402-000493	NTE576	-
D804	ERB12-06	0402-000213	NTE125	SK3081
D805, 06, 08	ERB43-04SV1	0402-001105	-	-
	TVR10G	-	NTE552	SK9000
D810	1R5GU41	0402-000493	NTE576	-
D811	RU20A	0402-000540	-	-
D814, 15	ERB43-04SV1	0402-001105	-	-
	TVR10G	-	NTE552	SK9000
D818, 19	ERB43-04SV1	0402-001105	-	-
	TVR10G	-	NTE552	SK9000
D903, 08, 10	1N4148	0401-000005	NTE519	SK3100
# D951	1N4004	0402-000132	NTE116	SK3312
D962	1N4148	0401-000005	NTE519	SK3100
DU01, 02, 03	1N4148	0401-000005	NTE519	SK3100
# DX01	ERB43-04SV1	0402-001105	-	-
	TVR10G	-	NTE552	SK9000
DZ101	TZP33A	0403-000700	-	-
DZ302	MA2560	0403-001039	NTE5090A	SK56V
DZ303	MTZ15C	0403-000656	-	-
DZ305	MTZ22A	0403-000660	-	-
DZ306	TZP33A	0403-000700	-	-
DZ401, 02	MTZ5.1B	0403-000295	NTE5010A	SK5A1
DZ501	MTZ13A	0403-000655	NTE5022A	SK13A
DZ502	MTZ3.0B	0403-000662	-	-
DZ503, 04	MTZ13A	0403-000655	NTE5022A	SK13A
DZ601	EQA02-06A	0403-000296	NTE5011A	SK5A6
	MTZ5.6B	0403-000296	NTE5011A	SK5A6
DZ650, 51	MTZ15C	0403-000656	-	-
DZ701, 02, 04	MTZ9.1B	0403-000563	NTE5018A	SK9A1
DZ804	EQA02-06A	0403-000296	NTE5011A	SK5A6
	MTZ5.6B	0403-000296	NTE5011A	SK5A6
DZ805	MTZ9.1B	0403-000563	NTE5018A	SK9A1
DZ807, 08	EQA02-06A	0403-000296	NTE5011A	SK5A6
	MTZ5.6B	0403-000296	NTE5011A	SK5A6

For SAFETY use only equivalent replacement part.

SEMICONDUCTORS continued

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	TCE Part No.
DZ815	MTZ15C	0403-000656	-	-
DZ901	MTZ5.1B	0403-000295	NTE5010A	SK5A1
DZ902	MTZ7.5B	0403-000562	NTE5015A	SK7A5
DZ903	EQA02-06D	0403-000297	NTE5013A	SK6A2
	MTZ6.2B	0403-000297	NTE5013A	SK6A2
DZ905 Thru				
DZ908	EQA02-06A	0403-000296	NTE5011A	SK5A6
	MTZ5.6B	0403-000296	NTE5011A	SK5A6
DZ910	EQA02-06D	0403-000297	NTE5013A	SK6A2
	MTZ6.2B	0403-000297	NTE5013A	SK6A2
DZE01	MA2560	0403-001039	NTE5090A	SK56V
# DZX01	MTZ6.8A	0403-000667	-	-
# IC201	TDA8373A	1204-001174	-	-
IC202	LA7510	1204-000506	NTE7067	-
# IC301	TDA8350Q/N4	1204-000426	-	-
	TDA8350Q	-	-	-
IC501, 02, 03	TDA6101Q	1201-000539	-	-
IC602	UPC1406HA	1204-000395	NTE1792	SK9877
# IC603	TDA7057AQ	1201-000537	-	-
IC701	HCF4053BE	0801-000961	NTE4053B	SK4053B
	TC4053BP	0801-000961	NTE4053B	SK4053B
# IC801	STRS5707	AA13-20004V	-	-
IC802	KA7630	1203-000644	-	-
IC853	KA78R12	1203-000165	-	-
IC901	Z8933212PSC-R3679	AA13-30019D	-	-
IC902	24C02	1103-000128	-	-
ICD01	TDA9850	1204-001204	-	-
LD901	DL-G5RGA	AA96-30001B	-	-
Q101	KTC3197	0501-000436	NTE107	SK3293
	KTC3197-AT	-	NTE107	SK3293
Q201	KSC815-Y	0501-000389	NTE123AP	SK3854
Q204	KSA539-Y	0501-000283	NTE159	SK3466
# Q401 (1)	2SD1880	0502-000209	NTE2353	-
# Q401 (2)	2SD1887YD	0502-000450	NTE2354%	-
Q403	KSC2073-H2	0502-001007	NTE375	SK3929
Q501	KSC815-Y	0501-000389	NTE123AP	SK3854
Q601	KSC815-Y	0501-000389	NTE123AP	SK3854
Q602	KSA539-Y	0501-000283	NTE159	SK3466
Q603, 04, 05	KSC815-Y	0501-000389	NTE123AP	SK3854
Q701	KSR1010	0504-000123	-	-
Q702	KSC815-Y	0501-000389	NTE123AP	SK3854
Q901	KSR1010	0504-000123	-	-
Q902	KSC815-Y	0501-000389	NTE123AP	SK3854
Q951	KSC2331-Y	0501-000369	NTE24	SK3849
QU03	KSR1010	0504-000123	-	-
QU05	KSA539-Y	0501-000283	NTE159	SK3466
# QX01	KSA539-Y	0501-000283	NTE159	SK3466

For SAFETY use only equivalent replacement part.

% Use insulating hardware supplied with replacement.

(1) Used in models TXH2545, TXH2555, and TXH2556.

(2) Used in model TXH2756.

CAPACITORS & ELECTROLYTICS

Item No.	Rating	Mfr. Part No.
C223	100pF 5% 50V NPO	2201-000144
C307	47µF 20% 50V	2401-001569
C308	.0015 10% 1kV	2201-000108
# C402 (1)	.0074 5% 1.6kV	2306-000355
# C402 (2)	.0063 5% 1.6kV	2306-000237
C403 (1)	330pF 10% 2kV	2201-000467
C403 (2)	470pF 2kV	2201-002028
C408	470pF 10% 1kV	2201-000551
C414	680pF 10% 2KV	2201-000984
# C419 (1)	.0047 5% 1.6kV	2306-000326
# C419 (2)	.0063 1.6kV	2306-000237
C517	.01 +80% -20% 3kV	2201-000158
C709	10µF 20% 50V NP	2401-000471
# C801	470µF 20% 250V	2401-001386
C802, 03	.0022 20% 250VAC	2201-000332
# C804	.0047 20% 400VAC	2201-000954
# C805	560pF 10% 2kV	2201-000991
# C814	.22 20% 275VAC	-
	.22 20% 250VAC	2306-000159
C817	.0022 5% 1.6kV	2303-000159
# C823	.0047 20% 400VAC	2201-000954
C908	47pF 5% 50V NPO	2201-000573
C909	10pF ±.25pF 50V NPO	2201-000193
CB01	.22 20% 275VAC	-
	.22 20% 250VAC	2306-000159
# CX01	10µF 20% 50V	2401-000480

For SAFETY use only equivalent replacement part.

(1) Used in models TXH2545, TXH2555, and TXH2556.

(2) Used in model TXH2756.

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of Howard W. Sams & Company.

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T. Clensy, G. Farrell, B. Fink,
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B. Medaris, R. Raus, B. Skinner*

PARTS LIST continued

CONTROLS & RESISTORS

Item No.	Function/Rating	Mfr. Part No.	NTE Part No.
# DZ801	Varistor	1405-000188	-
DZ802	Varistor	1405-000188	-
NT801	4.2 Cold NTC	1404-000181	-
# P801	7.9 Cold PTC	1404-000208	-
R237	39K 2% 1/8W	2004-001914	EW339
R310	.68 5% 2W Fusible	2008-000254	-
R408	1000 2% 1/2W	2004-001390	HW210
# R409	.68 5% 2W Fusible	2008-000254	-
# R410	1 5% 1W Fusible	2008-000264	F1W1D0
# R411 (1)	91K 1% 1/2W	2004-001408	-
# R411 (2)	61.9K 1% 1/2W	2004-001899	-
# R412	82K 5% 1/2W	2001-001194	HW382
R417	5.6 5% 1W Fusible	2008-001003	F1W5D6
# R418	.68 5% 2W Fusible	2008-000254	-
# R419 (1)	1.5 5% 2W Fusible	2008-000257	F2W1D5
# R419 (2)	1 5% 2W Fusible	2008-000266	F2W1D0
R420 (2)	.47 10% 1/2W Fusible	2008-000221	-
R502, 03	6800 1% 1/2W	2004-001402	-
R508, 09, 10	1800 1% 1/2W	2004-001970	-
R511, 12, 13 (1)	100K 1% 1/2W	2004-001373	-
R511, 12, 13 (2)	110K 1% 1/2W	2004-002011	-
R523	47 5% 2W Fusible	2008-000299	F2W047
R525 (1)	3.9 5% 2W Fusible	2008-001049	F2W3D9
R525 (2)	10 5% 2W Fusible	2008-000266	F2W010
R801	.2 10% 5W	2009-001010	5WD20
# R805 (1)	4.7M 5% 1/2W	2002-001002	HW547
# R805 (2)	4.7M 5% 1/2W	2002-000331	HW547
R811	33 5% 2W Fusible	2008-000294	F2W033
# R812	.18 10% 2W Fusible	2008-001011	-
R815	11 5% 5W Wirewound	2006-000295	-
# RU01	1.8M 10% 1/2W	2002-000326	HW518
RUD01	8200 2% 1/8W	2004-001256	EW282
# RX01	180K 5% 1/8W	2001-000397	EW418
# RX02	62K 5% 1/8W	2004-001990	EW362
# RX03	22K 5% 1/8W	2001-000522	EW322
# RX04	43K 5% 1/8W	2001-000766	EW343
# RX05	10K 5% 1/8W	2001-000290	EW310
# RX06	1 5% 1/2W Fusible	2008-000206	-

For SAFETY use only equivalent replacement part.

(1) Used in models TXH2545, TXH2555, and TXH2556.

(2) Used in model TXH2756.

COILS & TRANSFORMERS

Item No.	Function/Rating	Mfr. Part No.
J246	Ferrite Bead	3301-000287
L102	.56μH	2701-000326
L103	56μH	2701-000207
L104	10μH	2701-000114
L201	13μH	2701-000299
L202, 03	Ferrite Bead	3301-000287
L204, 05, 06	10μH	2701-000114
L301	10μH	2701-000116
# L400 (1)(2)	Yoke Horiz 1.3mH Vert 16.5mH	L7000-0001
# L400 (3)(4)	Yoke	-
# L401	Horizontal Linearity	AA27-30001N
# L401B (3)	Horizontal Linearity	AA27-30001N
L402	Ferrite Bead	2901-000296
L405	10μH	2701-000116
L602	Ferrite Bead	3301-000287
L800 (1)	Degaussing	AA27-20001W
L800 (3)	Degaussing	L2479-029-440
# L802	Line Filter	AA29-30002F
L804, 07, 08	Ferrite Bead	2901-000296
L809, 10	100μH	AA27-10002Y
L811, 12	Ferrite Bead	2901-000296
L813	Ferrite Bead	2901-000299
L862	Ferrite Bead	2901-000287
L863	330μH	2701-000176
L864	Ferrite Bead	2901-000287
L901, 02	10μH	2701-000114
LE304, 05	1μH	AA27-10001E
# LK803	Line Filter	AA29-30002H
T201	VCO	AA26-10005E
# T401	Horizontal Driver	AA26-50001R
# T444 (1)(5)	Horizontal Output	L7000-0030
# T444 (3)(5)	Horizontal Output	AA26-30005D
# T801	Switch Mode	AA26-20007M

For SAFETY use only equivalent replacement part.

(1) Used in models TXH2545, TXH2555, and TXH2556.

(2) Part of CRT Assembly Part No. AA94-50018E, see Miscellaneous.

(3) Used in model TXH2756.

(4) Bonded part of CRT.

(5) Focus and screen controls are part of T444.

MISCELLANEOUS

Item No.	Description	Mfr. Part No.	Notes
CF01	Module	AA29-10002A	Comb Filter
# F801	Fuse	3601-001012	4Amp, 250VAC, Slow Blow
JA701	Jack	3722-001261	Assembly
JB01	Jack	3722-001031	Assembly
# P800	Line Cord	AA96-20113A	AC, Polarized
RL801	Relay	3501-001040	Degaussing
RM901	Receiver	AA59-60001U	Remote, ORC-50VF
SF101	Filter	2904-000287	SAW
SF102	Filter	2904-000289	SAW
# SP1, 2 (1)	Speaker	3001-000191	4" X 1 1/2", 8 Ohms, 3W
SW901	Switch	3404-000244	Channel Up
SW902	Switch	3404-000244	Channel Down
SW903	Switch	3404-000244	Volume Up
SW904	Switch	3404-000244	Volume Down
SW905	Switch	3404-000244	Menu
SWN01	Switch	3404-000291	Power
# TU01 (2)	Tuner	AA40-10005T	UHF/VHF, TECC1070PG26A
# V999 (3)(4)	CRT	L1000-0027	A63AFW32X
# V999 (5)	CRT	AA03-10026A	A68ADT25X01
X202	Crystal	2801-000229	3.58MHz
X901	Crystal	2801-003224	32.768kHz
Z201	Trap	2903-000129	4.5MHz
Z601	Filter	2903-000135	4.5MHz, Bandpass
ZU01	Filter	2802-001054	514.5kHz
	CRT Assembly (3)	AA94-50018E	-
	CRT Assembly (5)	AA94-50018F	-
	Fuse Holder	3602-000114	For F801 (2 Used)
	Magnet (3)(4)	AA27-60001M	Purity/Convergence
	PC Board	AA95-90026X	A/V
	PC Board (3)(4)	AA95-20009Y	CRT
	PC Board (5)(6)	AA95-20009X	CRT
	PC Board (7)	AA94-10022I	Main
	PC Board (8)	AA94-10022L	Main
	PC Board (9)	AA94-10122J	Main
	PC Board (10)	AA94-10122K	Main
	PC Board (11)	AA94-10122N	Main
#	Socket	33359-063-650	CRT
	Transmitter	AA59-10100B	Remote, RM322
	Wedge (3)(4)	AA63-60032B	Yoke Positioning (3 Used)

For SAFETY use only equivalent replacement part.

(1) Part of cabinet front assembly, see Cabinet Parts.

(2) Contact TNI Electronics for replacement; order by part number on tuner.

(3) Used in models TXH2545, TXH2555, and TXH2556.

(4) Part of CRT Assembly Part No. AA94-50018E.

(5) Used in model TXH2756.

(6) Part of CRT Assembly Part No. AA94-50018F

(7) Used in model TXH2555.

(8) Used in model TXH2545.

(9) Used in model TXH2556.

(10) Used in model TXH2756 with Comb Filter.

(11) Used in model TXH2756 without Comb Filter.