

TOSHIBA

COLOR TELEVISION

CZ2084

(TAC8332)



For service information not described in this manual, see the original service data for CZ2010: CX2010C
(FILE NO. 020-554)

SPECIFICATIONS

INPUT POWER RATING:	85 watts (average), 120 volts AC, 60Hz
ANTENNA INPUT IMPEDANCES:	300 ohm balanced type for VHF and UHF 75 ohm unbalanced type for VHF
RECEIVING CHANNELS:	Any of 12 VHF channels channels 2 to 13 Any of 70 UHF channels channels 14 to 83 CATV channels Mid-band, A2, A1, A to I Super-band J-W Hyper-band AA-ZZ
INTERMEDIATE FREQUENCIES:	Picture I-F carrier frequency 45.75 MHz Sound I-F carrier frequency 41.25 MHz Color sub-carrier frequency 42.17 MHz
CHASSIS CONSTRUCTION:	IC-Solid State Chassis
PICTURE TUBE:	20 inches, A51JAR60X(MW), 192 sq. inches of viewable area, Full Square Face
SOUND OUTPUT:	5 watts \times 2 (Undistorted, Maximum)
SPEAKER:	2.0" \times 3.5" oval \times 2
CABINET:	Plastic, Table Type
DIMENSION:	Height 18-5/16 inches Width 19-11/16 inches Depth 18-43/64 inches
WEIGHT (NET):	66.2 lbs.
ANTENNAS:	VHF telescopic and UHF bow-tie
AUX. TERMINAL:	Headphone Jack, AV IN/OUT terminals (on front and back), RGB-IN terminal (8P)
FEATURES:	Frequency synthesized tuning system, CATV reception (Mid-, Super- and Hyper-band), Detachable Remote control, Comb Filter, Multi Channel TV Sound reception, ABC

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is 28.5 kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed 30.5 kV.
Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in the service data for CZ2010: CX2010. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This receiver is equipped with a Fail Safe (FS) circuit which

prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure on page 3 of this manual.

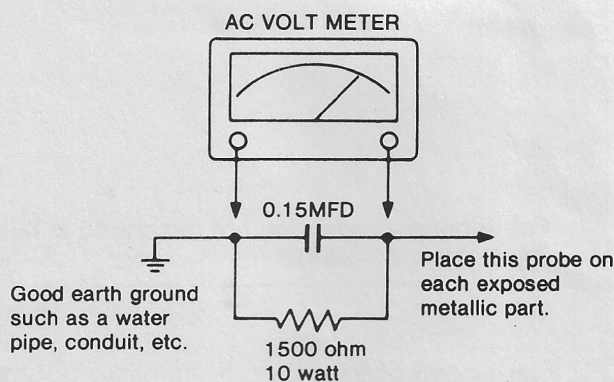
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some parts in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING: Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. **Since the power circuit of this receiver has hazardous potential to ground whenever the receiver is plugged in (floating chassis), an isolation transformer should be used during any dynamic service to avoid possible shock hazard.**
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 mfd, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 mfd capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by shading on the schematic diagram and the parts list.

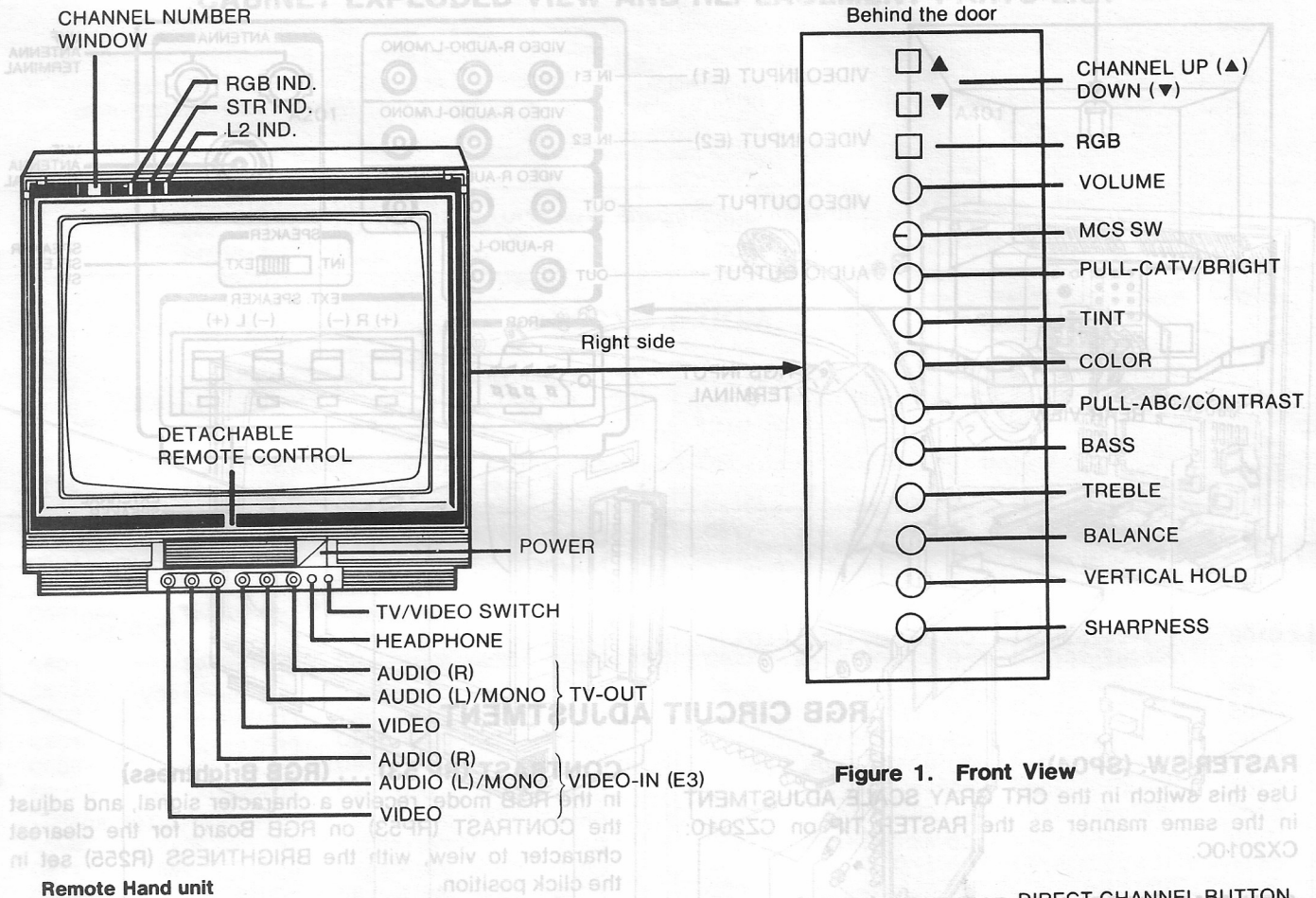
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

SERVICE NOTES

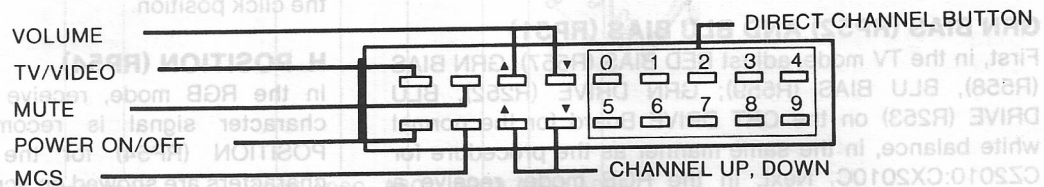
1. When replacing parts or circuit boards, clamp the lead wires to terminals before soldering.
2. When replacing a high wattage resistor (oxide metal film resistor) on circuit board, keep the resistor 10mm (1/2 in.) away from circuit board.
3. Keep wires away from high voltage or high temperature components.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

FRONT CONTROL VIEW



Remote Hand unit

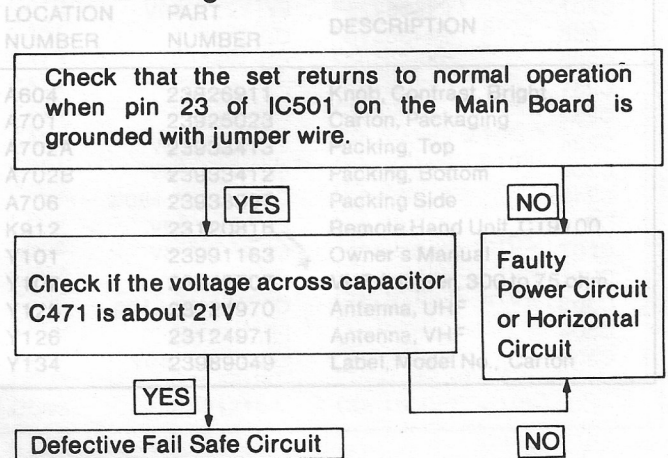


FS CIRCUIT CHECK

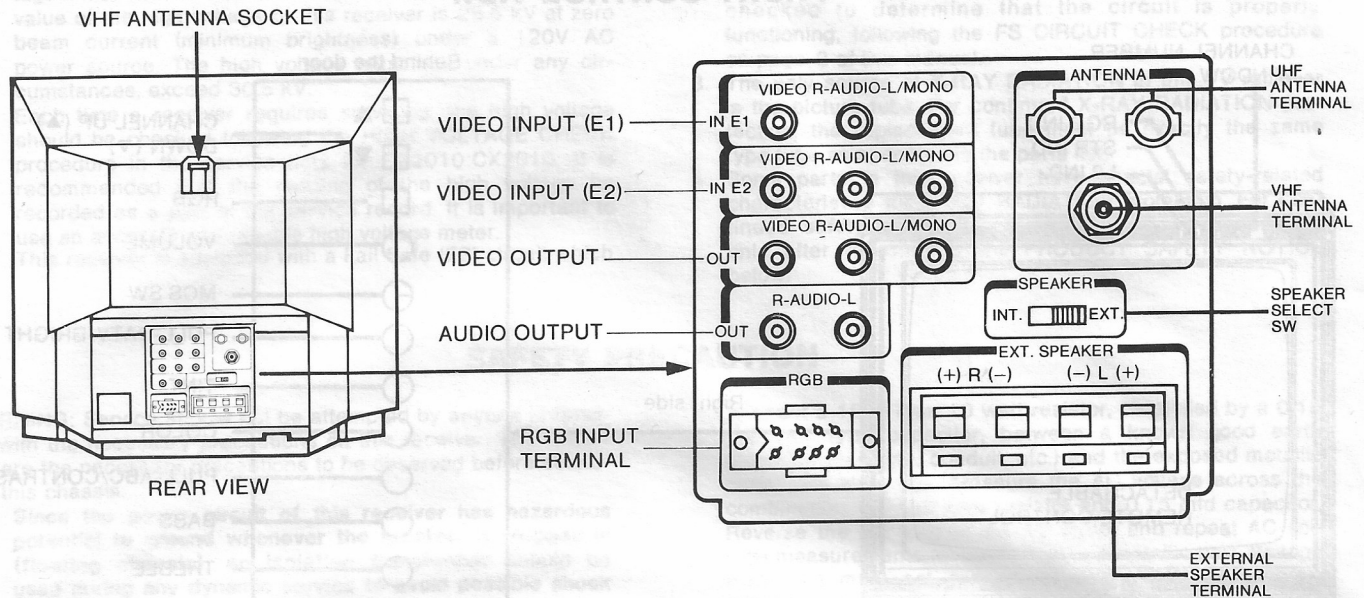
The Fail Safe (FS) circuit check is indispensable for the final check in the servicing. Checking should be done following the steps below.

1. Turn the power switch on and adjust customer controls for normal operation.
2. Temporarily short TP-R and TP-X on the Power Board with a jumper wire. Raster and sound will disappear.
3. The receiver must remain in this state even after removing the jumper wire. This is the evidence that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the receiver off and allow the FS circuit more than 30 seconds to reset. Then turn the power switch on to produce a normal picture.

Troubleshooting Guide for Fail Safe Circuit



BACK TERMINAL VIEW



RGB CIRCUIT ADJUSTMENT

RASTER SW. (SP04)

Use this switch in the CRT GRAY SCALE ADJUSTMENT in the same manner as the RASTER TIP on CZ2010: CX2010C.

GRN BIAS (RP52) AND BLU BIAS (RP51)

First, in the TV mode, adjust RED BIAS (R557), GRN BIAS (R558), BLU BIAS (R559); GRN DRIVE (R252), BLU DRIVE (R253) on the CRT DRIVE Board for the normal white balance, in the same manner as the procedure for CZ2010: CX2010C. Next, in the RGB mode, receive a character signal (EX. a personal computer) or get a white plane pattern on screen, and adjust GRN BIAS (RP52) and BLU BIAS (RP51) on RGB Board for the white balanced character or plane screen.

CONTRAST (RP 53) ... (RGB Brightness)

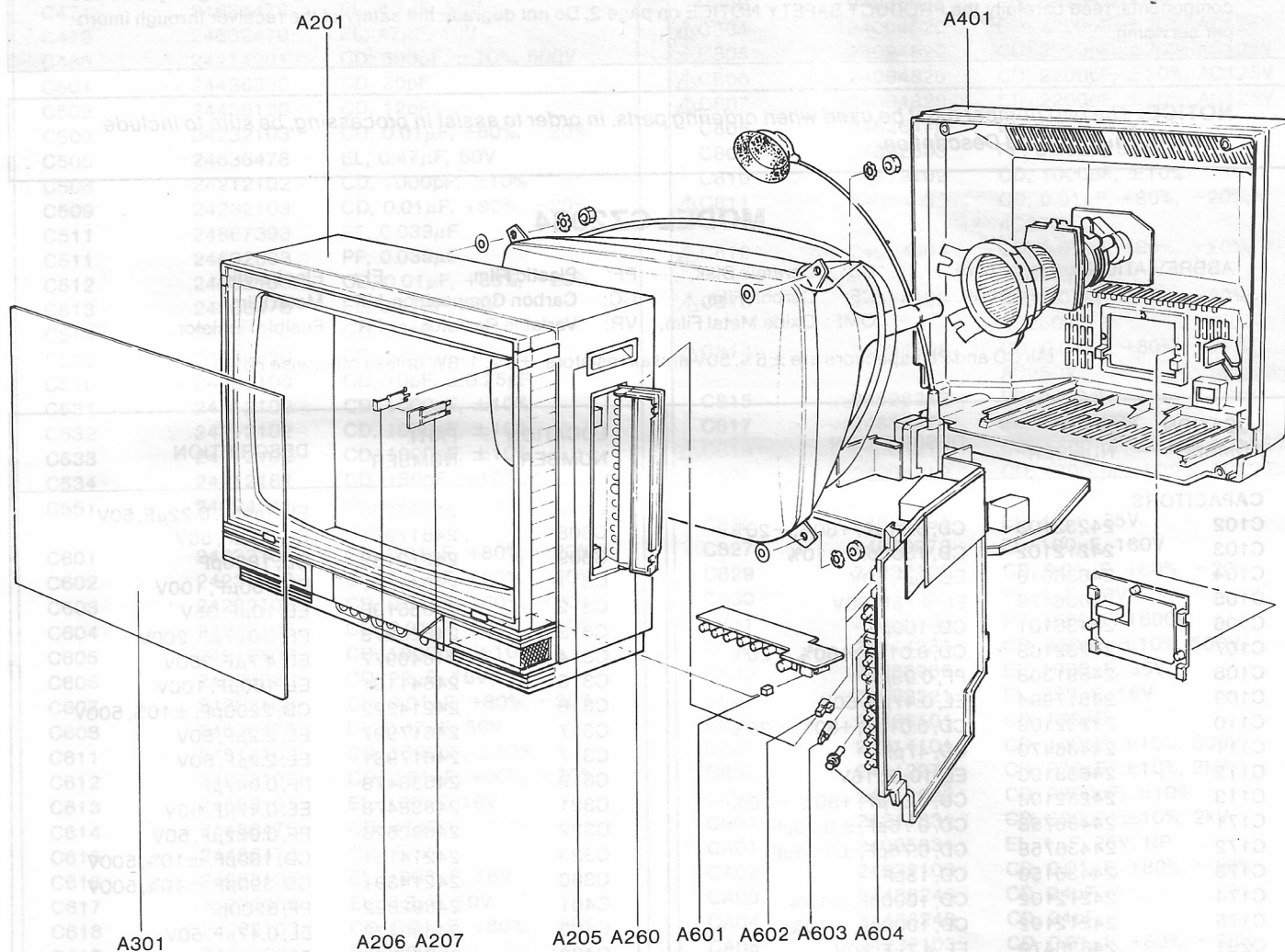
In the RGB mode, receive a character signal, and adjust the CONTRAST (RP53) on RGB Board for the clearest character to view, with the BRIGHTNESS (R255) set in the click position.

H. POSITION (RP54)

In the RGB mode, receive a character pattern (2000 character signal is recommended.), and adjust H. POSITION (RP54) for the picture position that all characters are showed on screen.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

CABINET EXPLODED VIEW AND REPLACEMENT PARTS LIST



LOCATION NUMBER	PART NUMBER	DESCRIPTION
CABINET PARTS		
A201	23807802	Front Cover
A205	23805760	Hand Hold
A206	23878530	Bracket, Glass Holding
A207	23846790	Cover, Glass Holding
A260	23990962	Door
A301	23827756	Filter Glass
A401	23830132	Back Cover
A601	23874822	Knob, TV/VIDEO SW.
A602	23874758	Knob, CH UP, DOWN, RGB
A603	23874798	Knob, MCS SW.

LOCATION NUMBER	PART NUMBER	DESCRIPTION
A604	23826911	Knob, Contrast, Bright
A701	23925023	Carton, Packaging
A702A	23933413	Packing, Top
A702B	23933412	Packing, Bottom
A706	23933397	Packing Side
K912	23120816	Remote Hand Unit, CT9100
Y101	23991163	Owner's Manual
Y107	23142707	VHF Adapter, 300 to 75 ohm
Y125	23124970	Antenna, UHF
Y126	23124971	Antenna, VHF
Y134	23989049	Label, Model No., Carton

CHASSIS REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

CAUTION: The shaded areas and Δ marks in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacement is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2. Do not degrade the safety of the receiver through improper servicing.

NOTICE: The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.

MODEL CZ2084

ABBREVIATIONS: Capacitors CD: Ceramic Disk, PF: Plastic Film, EL: Electrolytic,
Resistors CF: Carbon Film, CC: Carbon Composition, MF: Metal Film,
OMF: Oxide Metal Film, VR: Variable Resistor, FR: Fusible Resistor.

(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/8W unless otherwise noted.)

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION
CAPACITORS			C307	24587228	EL, Tantal, 0.22 μ F, 50V
C102	24232103	CD, 0.01 μ F, +80%, -20%	C308	24617981	EL, 2.2 μ F, 50V
C103	24212102	CD, 1000pF, $\pm 10\%$	C309	24212182	CD, 1800pF
C104	24636010	EL, 1 μ F, 50V	C311	24641101	EL, 100 μ F, 100V
C105	24636479	EL, 4.7 μ F, 50V	C312	24635100	EL, 10 μ F, 35V
C106	24436101	CD, 100pF	C313	24828273	PF, 0.027 μ F, 200V
C107	24232103	CD, 0.01 μ F, +80%, -20%	C314	24640977	EL, 4.7 μ F, 250V
C108	24591303	PF, 0.03 μ F	C315	24641101	EL, 100 μ F, 100V
C109	24617994	EL, 0.47 μ F, 50V	C316	24214222	CD, 2200pF, $\pm 10\%$, 500V
C110	24232103	CD, 0.01 μ F, +80%, -20%	C317	24617997	EL, 2.2 μ F, 50V
C111	24436470	CD, 47pF	C317	24617981	EL, 2.2 μ F, 50V
C112	24633100	EL, 10 μ F, 16V	C319	24538473	PF, 0.047 μ F
C113	24232103	CD, 0.01 μ F, +80%, -20%	C321	24636478	EL, 0.47 μ F, 50V
C171	24436758	CD, 0.75pF, ± 0.25 pF	C322	24692623	PF, 0.062 μ F, 50V
C172	24436758	CD, 0.75pF, ± 0.25 pF	C323	24214181	CD, 180pF, $\pm 10\%$, 500V
C173	24436150	CD, 15pF	C360	24214391	CD, 390pF, $\pm 10\%$, 500V
C174	24212102	CD, 1000pF, $\pm 10\%$	C401	24692822	PF, 8200pF
C175	24212102	CD, 1000pF, $\pm 10\%$	C402	24636478	EL, 0.47 μ F, 50V
C201	24636479	EL, 4.7 μ F, 50V	C403	24867562	PF, 5600pF
C202	24232103	CD, 0.01 μ F, +80%, -20%	C403	24692562	PF, 5600pF
C203	24436560	CD, 56pF	C404	24212681	CD, 680pF, $\pm 10\%$
C204	24636478	EL, 0.47 μ F, 50V	C405	24617993	EL, 1 μ F, 50V
C205	24632101	EL, 100 μ F, 10V	C406	24617993	EL, 1 μ F, 50V
C207	24636479	EL, 4.7 μ F, 50V	C407	24598242	PF, 2400pF
C208	24436510	CD, 51pF	C409	24635330	EL, 33 μ F, 35V
C209	24436220	CD, 22pF	C413	24436181	CD, 180pF
C231	24436101	CD, 100pF	C424	24214391	CD, 390pF, $\pm 10\%$, 500V
C232	24436220	CD, 22pF	C425	24212222	CD, 2200pF, $\pm 10\%$
C234	24633100	EL, 10 μ F, 16V	C426	24442181	CD, 180pF, $\pm 10\%$, 2kV
C235	24633470	EL, 47 μ F, 16V	C442	24633102	EL, 1000 μ F, 16V
C243	24232103	CD, 0.01 μ F, +80%, -20%	Δ C443	24828114	PF, 0.11 μ F, 200V
C244	24636100	EL, 10 μ F, 50V	Δ C444	24828104	PF, 0.1 μ F, 200V
C287	24633470	EL, 47 μ F, 16V	C445	24640992	EL, 33 μ F, 160V
C301	24636010	EL, 1 μ F, 50V	Δ C446	24095969	PF, 3000pF, 1600V
C303	24212471	CD, 470pF, $\pm 10\%$	Δ C447	24095970	PF, 2700pF, 1600V
C304	24692102	PF, 1000pF	C448	24833473	PF, 0.047 μ F, $\pm 10\%$, 200V
C305	24636478	EL, 0.47 μ F, 50V	C449	24642220	EL, 22 μ F, 160V

LOCATION NUMBER	PART NUMBER	DESCRIPTION
C451	24214222	CD, 2200pF, $\pm 10\%$, 500V
C452	24833473	PF, 0.047 μ F, $\pm 10\%$, 200V
C453	24212222	CD, 2200pF, $\pm 10\%$
C461	24633471	EL, 470 μ F, 16V
C462	24636100	EL, 10 μ F, 50V
C463	24633101	EL, 100 μ F, 16V
C471	24636479	EL, 4.7 μ F, 50V
C473	24632470	EL, 47 μ F, 10V
C480	24214391	CD, 390pF, $\pm 10\%$, 500V
C501	24436300	CD, 30pF
C502	24436120	CD, 12pF
C503	24232103	CD, 0.01 μ F, +80%, -20%
C505	24636478	EL, 0.47 μ F, 50V
C508	24212102	CD, 1000pF, $\pm 10\%$
C509	24232103	CD, 0.01 μ F, +80%, -20%
C511	24867393	PF, 0.039 μ F
C511	24692393	PF, 0.039 μ F
C512	24232103	CD, 0.01 μ F, +80%, -20%
C513	24636478	EL, 0.47 μ F, 50V
C514	24436330	CD, 33pF
C515	24436820	CD, 82pF
C516	24436100	CD, 10pF, ± 0.25 pF
C531	24212102	CD, 1000pF, $\pm 10\%$
C532	24212102	CD, 1000pF, $\pm 10\%$
C533	24212102	CD, 1000pF, $\pm 10\%$
C534	24212181	CD, 180pF, $\pm 10\%$
C551	24094541	Variable Capacitor, 2.5-23pF, 250V
C601	24232103	CD, 0.01 μ F, +80%, -20%
C602	24232103	CD, 0.01 μ F, +80%, -20%
C603	24232103	CD, 0.01 μ F, +80%, -20%
C604	24232103	CD, 0.01 μ F, +80%, -20%
C605	24212102	CD, 1000pF, $\pm 10\%$
C606	24633220	CD, 22 μ F, 16V
C607	24232103	CD, 0.01 μ F, +80%, -20%
C608	24636478	EL, 0.47 μ F, 50V
C611	24212102	CD, 1000pF, $\pm 10\%$
C612	24232103	CD, 0.01 μ F, +80%, -20%
C613	24633101	EL, 100 μ F, 16V
C614	24436470	CD, 47pF
C615	24436470	CD, 47pF
C616	24633102	EL, 1000 μ F, 16V
C617	24636339	EL, 3.3 μ F, 50V
C618	24232103	CD, 0.01 μ F, +80%, -20%
C619	24538224	PF, 0.22 μ F
C620	24636339	EL, 3.3 μ F, 50V
C621	24538224	PF, 0.22 μ F
C622	24436470	CD, 47pF
C623	24636229	EL, 2.2 μ F, 50V
C624	24634222	EL, 2200 μ F, 25V
C625	24754471	EL, 470 μ F, 25V
C626	24538104	PF, 0.1 μ F
C627	24436101	CD, 100pF
C628	24692223	PF, 0.022 μ F
C629	24633101	EL, 100 μ F, 16V
C630	24754470	EL, 47 μ F, 25V
C631	24754470	EL, 47 μ F, 25V
C632	24633101	EL, 100 μ F, 16V
C633	24692223	PF, 0.022 μ F
C634	24436101	CD, 100pF
C635	24538104	PF, 0.1 μ F
C636	24212222	CD, 2200pF, $\pm 10\%$
C637	24212222	CD, 2200pF, $\pm 10\%$
C638	24634101	EL, 100 μ F, 25V
C639	24754471	EL, 470 μ F, 25V

LOCATION NUMBER	PART NUMBER	DESCRIPTION
C640	24436330	CD, 33pF
C643	24636478	EL, 0.47 μ F, 50V
△C801	24095966	PF, 0.1 μ F, AC125V
△C801	24095991	PF, 0.1 μ F, AC125V
△C802	24095966	PF, 0.1 μ F, AC125V
△C802	24095991	PF, 0.1 μ F, AC125V
C803	24086975	EL, 220 μ F, 200V
△C804	24094820	CD, 2200pF, $\pm 20\%$, AC125V
△C805	24094820	CD, 2200pF, $\pm 20\%$, AC125V
△C806	24094820	CD, 2200pF, $\pm 20\%$, AC125V
△C807	24094820	CD, 2200pF, $\pm 20\%$, AC125V
C808	24636479	EL, 4.7 μ F, 50V
C809	24692303	PF, 0.03 μ F, 50V
C810	24212102	CD, 1000pF, $\pm 10\%$
△C811	24094905	CD, 0.01 μ F, +80%, -20%, AC250V
△C812	24094905	CD, 0.01 μ F, +80%, -20%, AC250V
△C813	24094905	CD, 0.01 μ F, +80%, -20%, AC250V
△C814	24094905	CD, 0.01 μ F, +80%, -20%, AC250V
C815	24598242	PF, 2400pF
C817	24636470	EL, 47 μ F, 50V
△C819	24094819	CD, 4700 pF, $\pm 20\%$, AC125V
△C820	24094819	CD, 4700 pF, $\pm 20\%$, AC125V
C821	24538474	PF, 0.47 μ F
C822	24630991	EL, 47 μ F, 25V
C827	24640973	EL, 100 μ F, 160V
C829	24232103	CD, 0.01 μ F, +80%, -20%
C830	24636010	EL, 1 μ F, 50V
C831	24095509	PF, 3600pF, 1600V
C832	24214331	CD, 330pF, $\pm 10\%$, 500V
C833	24086966	EL, 1000 μ F, 35V
C834	24633221	EL, 2203 μ F, 16V
C835	24436101	CD, 100pF
C836	24214101	CD, 100pF, $\pm 10\%$, 500V
C890	24442271	CD, 270pF, $\pm 10\%$, 2kV
C891	24212222	CD, 2200pF, $\pm 10\%$
C901	24211331	CD, 330pF, $\pm 10\%$, 2kV
CA01	24085031	EL, 1 μ F, 25V, NP
CA02	24232103	CD, 0.01 μ F, +80%, -20%
CA03	24436240	CD, 24pF
CA04	24436240	CD, 24pF
CA05	24232103	CD, 0.01 μ F, +80%, -20%
CA06	24633470	EL, 47 μ F, 16V
CA07	24636100	EL, 10 μ F, 50V
CA08	24692222	PF, 2200pF
CA09	24340561	CD, 560pF
CA10	24636010	EL, 1 μ F, 50V
CA11	24232103	CD, 0.01 μ F, +80%, -20%
CA13	24436121	CD, 120pF
CA14	24212391	CD, 390pF, $\pm 10\%$
CA15	24212391	CD, 390pF, $\pm 10\%$
CA16	24212391	CD, 390pF, $\pm 10\%$
CB01	24212102	CD, 1000pF, $\pm 10\%$
CB02	24436240	CD, 24pF
CB03	24436240	CD, 24pF
CB06	24094930	CD, 1000pF, $\pm 10\%$
CB07	24094930	CD, 1000pF, $\pm 10\%$
CB08	24094930	CD, 1000pF, $\pm 10\%$
CB09	24692104	PF, 0.1 μ F
CB10	24538103	PF, 0.01 μ F
CC01	24633100	EL, 10 μ F, 16V
CD03	24212102	CD, 1000pF, $\pm 10\%$

LOCATION NUMBER	PART NUMBER	DESCRIPTION
CD05	24232103	CD, 0.01 μ F, +80%, -20%
CD06	24232103	CD, 0.01 μ F, +80%, -20%
CE01	24634102	EL, 1000 μ F, 25V
CE02	24633470	EL, 47 μ F, 16V
CE05	24636221	EL, 220 μ F, 50V
CG01	24753100	EL, 10 μ F, 16V
CG02	24598102	PF, 1000pF
CG03	24598471	CD, 470pF
CG04	24598471	CD, 470pF
CG05	24598241	EL, 1 μ F, 50V
CG06	24753100	EL, 10 μ F, 16V
CG07	24756010	PF, 0.1 μ F
CG09	24753100	EL, 10 μ F, 16V
CG18	24756010	EL, 1 μ F, 50V
CG21	24753221	EL, 220 μ F, 16V
CG22	24753100	EL, 10 μ F, 16V
CG23	24756478	EL, 0.47 μ F, 50V
CG24	24756010	EL, 1 μ F, 50V
CG25	24598122	PF, 0.012 μ F, 50V
CG26	24756479	EL, 4.7 μ F, 50V
CG27	24436221	CD, 220 pF
CG28	24436221	CD, 220 pF
CG33	24753220	EL, 22 μ F, 16V
CG34	24753100	EL, 10 μ F, 16V
CG35	24753220	EL, 22 μ F, 16V
CG36	24591332	PF, 3300pF
CG37	24591220	PF, 2200pF
CG38	24753100	EL, 10 μ F, 16V
CG39	24753471	EL, 470 μ F, 16V
CG40	24598102	PF, 1000pF
CG41	24753100	EL, 10 μ F, 16V
CG42	24753100	EL, 10 μ F, 16V
CG43	24591272	PF, 2700pF
CG44	24591102	PF, 1000pF
CG45	24756478	EL, 0.47 μ F, 50V
CG46	24756010	EL, 1 μ F, 50V
CG47	24436680	CD, 68pF
CG48	24756478	EL, 0.47 μ F, 50V
CG49	24756478	EL, 0.47 μ F, 50V
CG51	24617982	EL, 10 μ F, 16V
CG52	24756010	EL, 1 μ F, 50V
CG53	24617996	EL, 3.3 μ F
CG54	24591332	PF, 3300pF
CG55	24591222	PF, 2200pF
CG56	24591224	PF, 0.22 μ F
CG57	24591224	PF, 0.22 μ F
CG58	24756010	EL, 1 μ F, 50V
CG59	24591222	PF, 2200pF, 50V
CG60	24753100	EL, 10 μ F, 16V
CG61	24591472	PF, 4700pF
CG66	24232103	CD, 0.01 μ F, +80%, -20%
CG67	24232103	CD, 0.01 μ F, +80%, -20%
CG68	24756010	EL, 1 μ F, 50V
CG69	24756339	EL, 3.3 μ F, 50V
CG70	24617988	EL, 47 μ F, 16V
CG71	24591333	PF, 0.033 μ F
CG72	24591472	PF, 4700pF
CG73	24538474	PF, 0.47 μ F
CG74	24756010	EL, 1 μ F, 50V
CG75	24753101	EL, 100 μ F, 16V
CG76	24756100	EL, 10 μ F, 50V
CG77	24085023	EL, 10 μ F, 16V
CG78	24591332	PF, 3300pF
CG79	24591472	PF, 4700pF
CG80	24753100	EL, 10 μ F, 16V

LOCATION NUMBER	PART NUMBER	DESCRIPTION
CG81	24591332	PF, 3300pF
CG82	24591103	PF, 0.01 μ F
CG83	24617988	EL, 47 μ F, 16V
CG84	24753221	EL, 220 μ F, 16V
CH01	24232103	CD, 0.01 μ F, +80%, -20%
CH02	24633470	EL, 47 μ F, 16V
CH03	24636339	EL, 3.3 μ F, 50V
CM06	24633100	EL, 10 μ F, 16V
CP01	24232103	CD, 0.01 μ F, +80%, -20%
CP02	24232103	CD, 0.01 μ F, +80%, -20%
CP03	24753221	EL, 220 μ F, 16V
CP04	24756100	EL, 10 μ F, 50V
CP05	24756010	EL, 1 μ F, 50V
CP06	24756010	EL, 1 μ F, 50V
CP07	24756010	EL, 1 μ F, 50V
CP08	24753220	EL, 22 μ F, 16V
CP09	24232103	CD, 0.01 μ F, +80%, -20%
CP10	24753221	EL, 220 μ F, 16V
CP11	24756479	EL, 4.7 μ F, 50V
CP12	24756100	EL, 10 μ F, 50V
CP13	24756100	EL, 10 μ F, 50V
CP14	24232103	CD, 0.01 μ F, +80%, -20%
CP15	24753220	EL, 22 μ F, 16V
CP16	24756229	EL, 2.2 μ F, 50V
CP20	24591222	PF, 2200pF, 50V
CP90	24212101	CD, 100pF, \pm 10%
CP151	24756339	EL, 3.3 μ F, 50V
CP152	24756339	EL, 3.3 μ F, 50V
CP153	24753100	EL, 10 μ F, 16V
CR01	24755479	EL, 4.7 μ F, 35V
CR02	24212471	CD, 470pF, \pm 10%
CR03	24538563	PF, 0.056 μ F
CR04	24754100	EL, 10 μ F, 25V
CR05	24692222	PF, 2200pF
CR06	24692222	PF, 2200pF
CR08	24212102	CD, 1000pF, \pm 10%
CR09	24756010	EL, 1 μ F, 50V
CR10	24538473	PF, 0.047 μ F
CR11	24599102	PF, 1000pF, 100V
CR36	24634101	EL, 100 μ F, 25V
CR37	24636339	EL, 3.3 μ F, 50V
CS01	24636229	EL, 2.2 μ F, 50V
CS02	24636229	EL, 2.2 μ F, 50V
CS03	24633100	EL, 10 μ F, 16V
CS04	24633100	EL, 10 μ F, 16V
CS07	24756478	EL, 0.47 μ F, 50V
CS08	24756478	EL, 0.47 μ F, 50V
CS09	24756478	EL, 0.47 μ F, 50V
CS10	24756478	EL, 0.47 μ F, 50V
CS11	24756478	EL, 0.47 μ F, 50V
CS12	24756478	EL, 0.47 μ F, 50V
CS13	24636010	EL, 1 μ F, 50V
CS14	24636010	EL, 1 μ F, 50V
CS15	24636010	EL, 1 μ F, 50V
CS16	24636010	EL, 1 μ F, 50V
CS17	24636010	EL, 1 μ F, 50V
CS18	24636010	EL, 1 μ F, 50V
CV01	24633471	EL, 470 μ F, 16V
CV02	24633100	EL, 10 μ F, 16V
CV03	24633100	EL, 10 μ F, 16V
CV04	24636339	EL, 3.3 μ F, 50V
CV05	24633100	EL, 10 μ F, 16V
CV07	24633100	EL, 10 μ F, 16V
CV08	24633471	EL, 470 μ F, 16V
CV09	24232103	CD, 0.01 μ F, +80%, -20%

LOCATION NUMBER	PART NUMBER	DESCRIPTION
CV10	24756100	EL, 10 μ F, 50V
CV11	24756100	EL, 10 μ F, 50V
CV12	24436430	CD, 43pF
CV18	24636479	EL, 4.7 μ F, 50V
CV19	24633471	EL, 470 μ F, 16V
CV25	24633471	EL, 470 μ F, 16V
CV26	24633100	EL, 10 μ F, 16V
CV28	24232103	CD, 0.01 μ F, +80%, -20%
CZ01	24636100	EL, 10 μ F, 50V
CZ02	24436121	CD, 120pF
CZ03	24633470	EL, 47 μ F, 16V
CZ04	24232103	CD, 0.01 μ F, +80%, -20%
CZ05	24436221	CD, 220 pF
RESISTORS		
R101	24360222	CF, 2200 ohm
R102	24366201	CF, 200 ohm, 1/6W
R103	24366104	CF, 100k ohm, 1/6W
R104	24366511	CF, 510 ohm, 1/6W
R105	24366683	CF, 68k ohm, 1/6W
R106	24366221	CF, 220 ohm, 1/6W
R107	24360392	CF, 3900 ohm
R152	24061668	VR, 10k ohm, 1/8W
R158	24061663	VR, 500k ohm, 1/8W
R161	24366471	CF, 470 ohm, 1/6W
R162	24366629	CF, 6.2 ohm, 1/6W
R171	24366102	CF, 1k ohm, 1/6W
R172	24366102	CF, 1k ohm, 1/6W
R201	24366183	CF, 18k ohm, 1/6W
R202	24360124	CF, 120k ohm
R203	24366242	CF, 2400 ohm, 1/6W
R204	24366132	CF, 1300 ohm, 1/6W
R205	24366102	CF, 1k ohm, 1/6W
R206	24366470	CF, 47 ohm, 1/6W
R207	24366363	CF, 36k ohm, 1/6W
R208	24360103	CF, 10k ohm
R209	24366392	CF, 3900 ohm, 1/6W
R210	24360331	CF, 330 ohm
R211	24366162	CF, 1600 ohm, 1/6W
R212	24366162	CF, 1600 ohm, 1/6W
R213	24366471	CF, 470 ohm, 1/6W
R214	24366103	CF, 10k ohm, 1/6W
R215	24360103	CF, 10k ohm
R216	24360753	CF, 75k ohm
R217	24366563	CF, 56k ohm, 1/6W
R218	24366272	CF, 2700 ohm, 1/6W
R220	24366101	CF, 100 ohm, 1/6W
R221	24962241	OMF, 240 ohm, 1/2W
R222	24366330	CF, 33 ohm, 1/6W
R223	24962392	OMF, 3900 ohm, 1/2W
R224	24380820	CF, 82 ohm, 1/8W
R225	24366302	CF, 3k ohm, 1/6W
R226	24366752	CF, 7500 ohm, 1/6W
R227	24366392	CF, 3900 ohm, 1/6W
R228	24366103	CF, 10k ohm, 1/6W
R229	24366103	CF, 10k ohm, 1/6W
R230	24366681	CF, 680 ohm, 1/6W
R231	24366112	CF, 1100 ohm, 1/6W
R232	24366123	CF, 12k ohm, 1/6W
R233	24366682	CF, 6800 ohm, 1/6W
R234	24366751	CF, 750 ohm, 1/6W
R235	24366102	CF, 1k ohm, 1/6W
R236	24366751	CF, 750 ohm, 1/6W
R237	24366391	CF, 390 ohm, 1/6W
R238	24366751	CF, 750 ohm, 1/6W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
R239	24360122	CF, 1200 ohm
R240	24366102	CF, 1k ohm, 1/6W
R241	24366153	CF, 15k ohm, 1/6W
R242	24366273	CF, 27k ohm, 1/6W
R243	24366273	CF, 27k ohm, 1/6W
R244	24380820	CF, 82 ohm, 1/8W
R245	24366243	CF, 24k ohm, 1/6W
R246	24366182	CF, 1800 ohm, 1/6W
R247	24366152	CF, 1500 ohm, 1/6W
R248	24360243	CF, 24k ohm
R249	24360473	CF, 47k ohm
R252	24061800	VR, 200 ohm, 1/8W
R253	24061800	VR, 200 ohm, 1/8W
R254	24060319	VR, 10k ohm, 1/5W, with Switch
R255	24060320	VR, 10k ohm, 1/10W, with Switch
R256	24060233	VR, 5k ohm, 1/10W
R257	24061658	VR, 2k ohm, 1/8W
R259	24061657	VR, 5k ohm, 1/8W
R281	24366123	CF, 12k ohm, 1/6W
R282	24366123	CF, 12k ohm, 1/6W
R284	24366303	CF, 30k ohm, 1/6W
R285	24366433	CF, 43k ohm, 1/6W
R290	24366682	CF, 6800 ohm, 1/6W
R291	24360102	CF, 1k ohm
R292	24366183	CF, 18k ohm, 1/6W
R301	24360751	CF, 750 ohm
R303	24366112	CF, 1100 ohm, 1/6W
R305	24366912	CF, 9100 ohm, 1/6W
R306	24366912	CF, 9100 ohm, 1/6W
R308	24366302	CF, 3k ohm, 1/6W
R309	24360224	CF, 220k ohm
R310	24366203	CF, 20k ohm, 1/6W
R311	24366331	CF, 330 ohm, 1/6W
R312	24366102	CF, 1k ohm, 1/6W
R313	24360434	CF, 430k ohm
R315	24366392	CF, 3900 ohm, 1/6W
R316	24963821	OMF, 820 ohm, 1W
R317	24962821	OMF, 820 ohm, 1/2W
R318	24962110	OMF, 11 ohm, 1/2W
R319	24941335	CC, 3.3M ohm, 1/4W
R320	24983829	MF, 8.2 ohm, 1W
R321	24366623	CF, 62k ohm, 1/6W
R322	24366513	CF, 51k ohm, 1/6W
R323	24366183	CF, 18k ohm, 1/6W
R324	24366393	CF, 39k ohm, 1/6W
R325	24983159	MF, 1.5 ohm, 1/2W
R328	24366244	CF, 240k ohm, 1/6W
R351	24063918	VR, 200k ohm, 0.15W
R352	24061656	VR, 10k ohm, 1/8W
R402	24552682	OMF, 6800 ohm, 1/2W
R403	24380362	CF, 3600 ohm
R404	24366363	CF, 36k ohm, 1/6W
R405	24366362	CF, 3600 ohm, 1/6W
R406	24003990	OMF, 15k ohm, $\pm 2\%$, 1/4W
R407	24367154	CF, 150k ohm, $\pm 2\%$
Δ R409	24964113	OMF, 11k ohm, 2W
R410	24962181	OMF, 180 ohm, 1/2W
R411	24003989	OMF, 3900 ohm, $\pm 2\%$, 1/4W
R412	24366181	CF, 180 ohm, 1/6W
R419	24946151	CC, 150 ohm, 1/2W
R424	24360111	CF, 110 ohm
R425	24963273	OMF, 27k ohm, 1W
Δ R426	24965392	OMF, 3900 ohm, 3W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
R430	24946272	CC, 2.7k ohm, $\pm 10\%$, 1/2W
R441	24982689	MF, 6.8 ohm, 1/2W
△R442	24547279	FR, 2.7 ohm, 1W
△R443	24964163	OMF, 16k ohm, 2W
R444	24982228	MF, 0.22 ohm, 1/2W
R445	24366102	CF, 1k ohm, 1/6W
R447	24962102	OMF, 1k ohm, 1/2W
R449	24962330	OMF, 33 ohm, 1/2W
R451	24061668	VR, 10k ohm, 1/8W
R460	24000946	Voltage Depending Resistor, 56V
R471	24360163	CF, 16k ohm
R472	24962270	OMF, 27 ohm, 1/2W
△R475	24360561	CF, 560 ohm
R476	24360823	CF, 82k ohm
R477	24360243	CF, 24k ohm
△R478	24327153	MF, 15k ohm, $\pm 1\%$, 1/4W
R480	24360103	CF, 10k ohm
R481	24360333	CF, 33k ohm
△R482	24327562	MF, 5600 ohm, $\pm 1\%$, 1/4W
R483	24983109	MF, 1 ohm, 1W
R501	24360102	CF, 1k ohm
R502	24366563	CF, 56k ohm, 1/6W
R503	24366563	CF, 56k ohm
R504	24366102	CF, 1k ohm
R505	24941565	CC, 5.6M ohm, 1/4W
R509	24366183	CF, 18k ohm, 1/6W
R514	24366392	CF, 3900 ohm, 1/6W
R515	24366102	CF, 1k ohm, 1/6W
R516	24366681	CF, 680 ohm, 1/6W
R517	24366471	CF, 470 ohm, 1/6W
R521	24360680	CF, 68 ohm
R522	24360751	CF, 750 ohm
R531	24360161	CF, 160 ohm
R532	24360161	CF, 160 ohm
R533	24360910	CF, 91 ohm
R534	24360332	CF, 3300 ohm
R535	24360332	CF, 3300 ohm
R536	24360332	CF, 3300 ohm
R537	24360242	CF, 2400 ohm
R538	24360242	CF, 2400 ohm
R539	24380242	CF, 2400 ohm
R540	24553752	OMF, 7500 ohm, 1W
R542	24553752	OMF, 7500 ohm, 1W
R543	24360181	CF, 180 ohm
R544	24360181	CF, 180 ohm
R545	24360181	CF, 180 ohm
R546	24553752	OMF, 7500 ohm, 1W
△R547	24554153	OMF, 15k ohm, 2W
R548	24553752	OMF, 7500 ohm, 1W
R554	24063922	VR, 10k ohm, 0.15W
R555	24063922	VR, 10k ohm, 0.15W
R557	24061795	VR, 10k ohm, 1/8W
R558	24061795	VR, 10k ohm, 1/8W
R559	24061795	VR, 10k ohm, 1/8W
R561	24366124	CF, 120k ohm, 1/6W
R562	24366303	CF, 30k ohm, 1/6W
R563	24366473	CF, 47k ohm, 1/6W
R564	24366753	CF, 75k ohm, 1/6W
R565	24366182	CF, 1800 ohm, 1/6W
R566	24366822	CF, 8200 ohm, 1/6W
R567	24360512	CF, 5100 ohm, 1/6W
R568	24366512	CF, 5100 ohm, 1/6W
R601	24366101	CF, 100 ohm, 1/6W
R602	24366152	CF, 1500 ohm, 1/6W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
R603	24366562	CF, 5600 ohm, 1/6W
R604	24366511	CF, 510 ohm, 1/6W
R605	24366330	CF, 33 ohm, 1/6W
R606	24360331	CF, 330 ohm
R607	24360301	CF, 300 ohm
R608	24366274	CF, 270k ohm, 1/6W
R609	24366242	CF, 2400 ohm, 1/6W
R610	24360392	CF, 3900 ohm
R611	24366102	CF, 1k ohm, 1/6W
R613	24366151	CF, 150 ohm, 1/6W
R616	24366102	CF, 1k ohm, 1/6W
R617	24360151	CF, 150 ohm
R618	24366562	CF, 5600 ohm, 1/6W
R619	24366151	CF, 150 ohm, 1/6W
R620	24366562	CF, 5600 ohm, 1/6W
R621	24366133	CF, 13k ohm, 1/6W
R622	24366152	CF, 1500 ohm, 1/6W
R623	24982479	MF, 4.7 ohm, 1/2W
R624	24366331	CF, 330 ohm, 1/6W
R626	24366333	CF, 33k ohm, 1/6W
R628	24366333	CF, 33k ohm, 1/6W
R629	24366331	CF, 330 ohm, 1/6W
R630	24982479	MF, 4.7 ohm, 1/2W
R631	24366153	CF, 15k ohm, 1/6W
R632	24366153	CF, 15k ohm, 1/6W
R633	24360222	CF, 2200 ohm
R634	24360222	CF, 2200 ohm
R635	24360512	CF, 5100 ohm
R636	24366101	CF, 100 ohm, 1/6W
R637	24366102	CF, 1k ohm, 1/6W
R640	24380103	CF, 10k ohm
R642	24380330	CF, 33 ohm
R643	24552390	OMF, 39 ohm, 1/2W
R645	24366273	CF, 27k ohm, 1/6W
R646	24366273	CF, 27k ohm, 1/6W
R651	24060370	VR, 10k ohm, 0.15W
R652	24060370	VR, 10k ohm, 0.15W
R653	24060370	VR, 10k ohm, 0.15W
R654	24060370	VR, 10k ohm, 0.15W
R665	24942331	CC, 330 ohm, 1/2W
R666	24942331	CC, 330 ohm, 1/2W
R667	24360103	CF, 10k ohm
R668	24360103	CF, 10k ohm
△R801	24007951	Cement, 1.5 ohm, $\pm 10\%$, 7W
△R802	24007942	Cement, 180 ohm, 5W
R803	24552361	OMF, 360 ohm, 1/2W
R804	24962100	OMF, 10 ohm, 1/2W
R805	24360100	CF, 10 ohm
R807	24963273	OMF, 27k ohm, 1W
R808	24963273	OMF, 27k ohm, 1W
R809	24327154	CF, 150k ohm, $\pm 1\%$, 1/4W
R810	24378274	CF, 270k ohm, $\pm 2\%$, 1/8W
R811	24360361	CF, 360 ohm
△R812	24514120	Cement, 12 ohm, 5W
R813	24360102	CF, 1k ohm
△R814	24360121	CF, 120 ohm
△R815	24327162	CF, 1600 ohm, $\pm 1\%$, 1/4W
R816	24360362	CF, 3600 ohm
△R817	24003989	OMF, 3900 ohm, $\pm 2\%$, 1/4W
△R818	24360302	CF, 3k ohm
R819	24360112	CF, 1100 ohm
R820	24962390	OMF, 39 ohm, 1/2W
R821	24327471	MF, 470 ohm, $\pm 2\%$, 1/4W
R822	24962182	OMF, 1800 ohm, 1/2W
R823	24360472	CF 4700 ohm

LOCATION NUMBER	PART NUMBER	DESCRIPTION
△R824	24942105	CC, 1M ohm, 1/2W
R825	24963473	OMF, 47k ohm, 1W
R830	24360393	CF, 39k ohm
R831	24982308	MF, 0.3 ohm, 1/2W
R832	24982758	MF, 0.75 ohm, 1/2W
R834	24962821	OMF, 820 ohm, 1/2W
R835	24983519	MF, 5.1 ohm, 1W
△R851	24061672	VR, 500 ohm, 1/8W
R901	24946472	CC, 4700 ohm, ±10%, 1/2W
R902	24946472	CC, 4700 ohm, ±10%, 1/2W
R903	24946472	CC, 4700 ohm, ±10%, 1/2W
△R910	24000862	PTC Thermister, 140V, 7mW
△R920	24000935	FR, 3.9 ohm, 2W
RA01	24366333	CF, 33k ohm, 1/6W
RA02	24366333	CF, 33k ohm, 1/6W
RA03	24366683	CF, 68k ohm, 1/6W
RA04	24366683	CF, 68k ohm, 1/6W
RA06	24360432	CF, 4300 ohm
RA07	24366432	CF, 4300 ohm, 1/6W
RA08	24366432	CF, 4300 ohm, 1/6W
RA09	24366472	CF, 4700 ohm, 1/6W
RA10	24366103	CF, 10k ohm, 1/6W
RA11	24366103	CF, 10k ohm, 1/6W
RA12	24366911	CF, 910 ohm, 1/6W
RA13	24366822	CF, 8200 ohm, 1/6W
RA14	24366183	CF, 18k ohm, 1/6W
RA15	24366183	CF, 18k ohm, 1/6W
RA16	24366183	CF, 18k ohm, 1/6W
RA17	24366183	CF, 18k ohm, 1/6W
RA23	24366103	CF, 10k ohm, 1/6W
RA26	24366103	CF, 10k ohm, 1/6W
RA29	24366362	CF, 3600 ohm, 1/6W
RA30	24366103	CF, 10k ohm, 1/6W
RA31	24366473	CF, 47k ohm, 1/6W
RA32	24366152	CF, 1500 ohm, 1/6W
RA33	24366103	CF, 10k ohm, 1/6W
RA34	24360472	CF 4700 ohm
RA35	24360472	CF 4700 ohm
RA37	24366472	CF, 4700 ohm, 1/6W
RA38	24366472	CF, 4700 ohm, 1/6W
RA39	24366472	CF, 4700 ohm, 1/6W
RA40	24366472	CF, 4700 ohm, 1/6W
RA41	24366472	CF, 4700 ohm, 1/6W
RA42	24360683	CF, 68k ohm
RA43	24360683	CF, 68k ohm
RA44	24366683	CF, 68k ohm, 1/6W
RA45	24366683	CF, 68k ohm, 1/6W
RA46	24366102	CF, 1k ohm, 1/6W
RA48	24366102	CF, 1k ohm, 1/6W
RA49	24366102	CF, 1k ohm, 1/6W
RA51	24366103	CF, 10k ohm, 1/6W
RA52	24366103	CF, 10k ohm, 1/6W
RA53	24366472	CF, 4700 ohm, 1/6W
RA54	24366472	CF, 4700 ohm, 1/6W
RA55	24366153	CF, 15k ohm, 1/6W
RA56	24366472	CF, 4700 ohm, 1/6W
RB01	24366562	CF, 5600 ohm, 1/6W
RB02	24366273	CF, 27k ohm, 1/6W
RB03	24367103	CF, 10k ohm, ±2%
RB04	24366561	CF, 560 ohm, 1/6W
RB05	24360222	CF, 2200 ohm
RB06	24367124	CF, 120k ohm, ±2%
RB07	24367181	CF, 180 ohm, ±2%
RB08	24366152	CF, 1500 ohm, 1/6W
RB09	24366754	CF, 750k ohm, 1/6W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
RB11	24366820	CF, 82 ohm, 1/6W
RC01	24366473	CF, 47k ohm, 1/6W
RC02	24366164	CF, 160k ohm, 1/6W
RC03	24366164	CF, 160k ohm, 1/6W
RC04	24366203	CF, 20k ohm, 1/6W
RC05	24366203	CF, 20k ohm, 1/6W
RC07	24366102	CF, 1k ohm, 1/6W
RC08	24366102	CF, 1k ohm, 1/6W
RC09	24360223	CF, 22k ohm
RC10	24366333	CF, 33k ohm, 1/6W
RC11	24366164	CF, 160k ohm, 1/6W
RC12	24366203	CF, 20k ohm, 1/6W
RC13	24366162	CF, 1600 ohm, 1/6W
RD01	24366302	CF, 3k ohm, 1/6W
RD02	24366302	CF, 3k ohm, 1/6W
RD03	24366202	CF, 2k ohm, 1/6W
RD04	24366202	CF, 2k ohm
RD05	24360331	CF, 330 ohm
RD06	24360331	CF, 330 ohm
RD07	24360331	CF, 330 ohm
RD08	24366331	CF, 330 ohm, 1/6W
RD09	24366331	CF, 330 ohm, 1/6W
RD10	24360331	CF, 330 ohm
RD11	24360331	CF, 330 ohm
△RD12	24964111	OMF, 110 ohm, 2W
RD13	24366241	CF, 240 ohm, 1/6W
RD14	24366223	CF, 22k ohm, 1/6W
RD15	24366223	CF, 22k ohm, 1/6W
△RE01	24007952	Cement, 6.8 ohm, 5W
RE03	24962821	OMF, 820 ohm, 1/2W
RE06	24360102	CF, 1k ohm
RE07	24360101	CF, 100 ohm
RG01	24380101	CF, 100 ohm
RG02	24380272	CF, 2700 ohm
RG03	24380123	CF, 12k ohm
RG04	24360432	CF, 4300 ohm
RG05	24380562	CF, 5600 ohm
RG06	24380432	CF, 4300 ohm
RG07	24360391	CF, 390 ohm
RG08	24380182	CF, 1800 ohm
RG09	24380202	CF, 2k ohm
RG10	24380563	CF, 56k ohm
RG11	24380563	CF, 56k ohm
RG12	24380472	CF 4700 ohm
RG13	24380823	CF, 82k ohm
RG14	24380101	CF, 100 ohm
RG15	24380823	CF, 82k ohm
RG16	24380562	CF, 5600 ohm
RG22	24366101	CF, 100 ohm, 1/6W
RG23	24366102	CF, 1k ohm, 1/6W
RG24	24366912	CF, 9100 ohm, 1/6W
RG25	24366823	CF, 82k ohm, 1/6W
RG26	24380222	CF, 2200 ohm
RG27	24366332	CF, 3300 ohm, 1/6W
RG28	24366362	CF, 3600 ohm, 1/6W
RG29	24366102	CF, 1k ohm, 1/6W
RG30	24366104	CF, 100k ohm, 1/6W
RG32	24366102	CF, 1k ohm, 1/6W
RG33	24366432	CF, 4300 ohm, 1/6W
RG34	24366562	CF, 5600 ohm, 1/6W
RG35	24366103	CF, 10k ohm, 1/6W
RG36	24366223	CF, 22k ohm, 1/6W
RG37	24366223	CF, 22k ohm, 1/6W
RG38	24366563	CF, 56k ohm, 1/6W
RG39	24366104	CF, 100k ohm, 1/6W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
RG40	24366562	CF, 5600 ohm, 1/6W
RG41	24366563	CF, 56k ohm, 1/6W
RG42	24380103	CF, 10k ohm
RG43	24366332	CF, 3300 ohm, 1/6W
RG44	24366184	CF, 180k ohm, 1/6W
RG45	24366184	CF, 180k ohm, 1/6W
RG46	24380184	CF, 180k ohm, 1/8W
RG47	24380362	CF, 3600 ohm
RG48	24366332	CF, 3300 ohm, 1/6W
RG49	24366102	CF, 1k ohm, 1/6W
RG51	24066915	VR, 2k ohm, 0.1W
RG52	24066927	VR, 5k ohm, 0.1W
RG53	24066928	VR, 2k ohm, 0.1W
RG54	24066928	VR, 2k ohm, 0.1W
RG55	24066928	VR, 2k ohm, 0.1W
RG56	24066927	VR, 5k ohm, 0.1W
RG57	24066927	VR, 5k ohm, 0.1W
RG58	24066925	VR, 50k ohm, 0.1W
RG60	24380333	CF, 33k ohm
RG61	24366102	CF, 1k ohm, 1/6W
RG62	24366271	CF, 270 ohm, 1/6W
RG63	24366332	CF, 3300 ohm, 1/6W
RG64	24366102	CF, 1k ohm, 1/6W
RG65	24366562	CF, 5600 ohm, 1/6W
RG66	24380302	CF, 3k ohm
RG67	24366103	CF, 10k ohm, 1/6W
RG68	24380561	CF, 560 ohm
RG69	24380561	CF, 560 ohm
RG70	24380103	CF, 10k ohm
RG71	24366332	CF, 3300 ohm, 1/6W
RG72	24366562	CF, 5600 ohm, 1/6W
RG73	24380102	CF, 1k ohm
RG74	24366562	CF, 5600 ohm, 1/6W
RG75	24366103	CF, 10k ohm, 1/6W
RG76	24380103	CF, 10k ohm
RG77	24380333	CF, 33k ohm
RG78	24366221	CF, 220 ohm, 1/6W
RG79	24366104	CF, 100k ohm, 1/6W
RG80	24366103	CF, 10k ohm, 1/6W
RG81	24366103	CF, 10k ohm, 1/6W
RG82	24380683	CF, 68k ohm
RG83	24366103	CF, 10k ohm, 1/6W
RG84	24380223	CF, 22k ohm
RG85	24366123	CF, 12k ohm, 1/6W
RG86	24380103	CF, 10k ohm
RG87	24366153	CF, 15k ohm, 1/6W
RG88	24366103	CF, 10k ohm, 1/6W
RG89	24376180	CF, 18 ohm, 1/2W
RG90	24366362	CF, 3600 ohm, 1/6W
RG91	24380184	CF, 180k ohm
RG92	24366122	CF, 1200 ohm, 1/6W
RG93	24366122	CF, 1200 ohm, 1/6W
RG94	24366682	CF, 6800 ohm, 1/6W
RG95	24366333	CF, 33k ohm, 1/6W
RG96	24366393	CF, 39k ohm, 1/6W
RG97	24366153	CF, 15k ohm, 1/6W
RG98	24380103	CF, 10k ohm
RG99	24366122	CF, 1200 ohm, 1/6W
RG100	24366103	CF, 10k ohm, 1/6W
RG101	24366393	CF, 39k ohm, 1/6W
RG102	24366122	CF, 1200 ohm, 1/6W
RG103	24366682	CF, 6800 ohm, 1/6W
RG104	24366103	CF, 10k ohm, 1/6W
RG105	24366823	CF, 82k ohm, 1/6W
RG106	24366474	CF, 470k ohm, 1/6W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
RG107	24366163	CF, 16k ohm, 1/6W
RG108	24366202	CF, 2k ohm, 1/6W
RG109	24366103	CF, 10k ohm, 1/6W
RG110	24366103	CF, 10k ohm, 1/6W
RG111	24366103	CF, 10k ohm, 1/6W
RG112	24366103	CF, 10k ohm, 1/6W
RG113	24366103	CF, 10k ohm, 1/6W
RG114	24366103	CF, 10k ohm, 1/6W
RG115	24366103	CF, 10k ohm, 1/6W
RG116	24366153	CF, 15k ohm, 1/6W
RG117	24380182	CF, 1800 ohm
RG118	24366332	CF, 3300 ohm, 1/6W
RG119	24380562	CF, 5600 ohm
RG121	24360561	CF, 560 ohm
RG122	24380102	CF, 1k ohm
RG123	24380102	CF, 1k ohm
RG124	24366561	CF, 560 ohm, 1/6W
RG125	24366332	CF, 3300 ohm, 1/6W
RG126	24366102	CF, 1k ohm, 1/6W
RG127	24366104	CF, 100k ohm, 1/6W
RG128	24366104	CF, 100k ohm, 1/6W
RG130	24366472	CF, 4700 ohm, 1/6W
RG131	24380223	CF, 22k ohm
RG132	24366472	CF, 4700 ohm, 1/6W
RG133	24366151	CF, 150 ohm, 1/6W
RG134	24366332	CF, 3300 ohm, 1/6W
RG135	24366393	CF, 39k ohm, 1/6W
RG136	24366272	CF, 2700 ohm, 1/6W
RG137	24327102	CF, 1k ohm, $\pm 1\%$, 1/4W
RG138	24376221	CF, 220 ohm, 1/2W
RG139	24366222	CF, 2200 ohm, 1/6W
RG140	24366182	CF, 1800 ohm, 1/6W
RG141	24366103	CF, 10k ohm, 1/6W
RG142	24366242	CF, 2400 ohm, 1/6W
RG144	24380512	CF, 5100 ohm
RG145	24366472	CF, 4700 ohm
RG146	24366472	CF, 4700 ohm
RG147	24380151	CF, 150 ohm
RG151	24380273	CF, 27k ohm
RG152	24380332	CF, 3300 ohm
RG153	24366331	CF, 330 ohm, 1/6W
RG154	24366911	CF, 910 ohm, 1/6W
RG155	24366683	CF, 68k ohm, 1/6W
RG156	24380103	CF, 10k ohm
RH01	24366513	CF, 51k ohm, 1/6W
RH02	24366473	CF, 47k ohm, 1/6W
RH03	24366473	CF, 47k ohm, 1/6W
RH04	24366622	CF, 6200 ohm, 1/6W
RH05	24366473	CF, 47k ohm, 1/6W
RH06	24366473	CF, 47k ohm, 1/6W
RH07	24360622	CF, 6200 ohm
RH08	24366472	CF, 4700 ohm, 1/6W
RH09	24366103	CF, 10k ohm, 1/6W
RH10	24366472	CF, 4700 ohm, 1/6W
RH11	24366103	CF, 10k ohm, 1/6W
RH12	24366333	CF, 33k ohm, 1/6W
RH13	24366333	CF, 33k ohm, 1/6W
RH14	24366124	CF, 120k ohm, 1/6W
RH15	24366124	CF, 120k ohm, 1/6W
RH16	24366363	CF, 36k ohm, 1/6W
RH17	24366363	CF, 36k ohm, 1/6W
RP01	24360103	CF, 10k ohm
RP02	24366103	CF, 10k ohm, 1/6W
RP03	24366392	CF, 3900 ohm, 1/6W
RP05	24360391	CF, 390 ohm

LOCATION NUMBER	PART NUMBER	DESCRIPTION
RP06	24360391	CF, 390 ohm
RP07	24360122	CF, 1200 ohm
RP08	24360122	CF, 1200 ohm
RP09	24360122	CF, 1200 ohm
RP10	24360301	CF, 300 ohm
RP11	24360431	CF, 430 ohm
RP12	24360301	CF, 300 ohm
RP13	24360431	CF, 430 ohm
RP14	24360391	CF, 390 ohm
RP15	24360301	CF, 300 ohm
RP16	24360471	CF, 470 ohm
RP17	24360332	CF, 3300 ohm
RP19	24360102	CF, 1k ohm
RP20	24360221	CF, 220 ohm
RP21	24360473	CF, 47k ohm
RP22	24360103	CF, 10k ohm
RP23	24360223	CF, 22k ohm
RP24	24552560	OMF, 56 ohm, 1/2W
RP25	24360122	CF, 1200 ohm
RP26	24360101	CF, 100 ohm
RP27	24360560	CF, 56 ohm
RP28	24360101	CF, 100 ohm
RP29	24360560	CF, 56 ohm
RP30	24360101	CF, 100 ohm
RP31	24360560	CF, 56 ohm
RP32	24360330	CF, 33 ohm
RP33	24360622	CF, 6200 ohm
RP34	24360622	CF, 6200 ohm
RP35	24360182	CF, 1800 ohm
RP36	24360222	CF, 2200 ohm
RP37	24360222	CF, 2200 ohm
RP38	24360432	CF, 4300 ohm
RP39	24360332	CF, 3300 ohm
RP40	24360822	CF, 8200 ohm
RP41	24360684	CF, 680k ohm
RP42	24360682	CF, 6800 ohm
RP43	24360103	CF, 10k ohm
RP47	24360222	CF, 2200 ohm
RP48	24360101	CF, 100 ohm
RP49	24360683	CF, 68k ohm
RP51	24061668	VR, 10k ohm, 1/8W
RP52	24061668	VR, 10k ohm, 1/8W
RP53	24061668	VR, 10k ohm, 1/8W
RP54	24061669	VR, 5k ohm, 1/8W
RP60	24360681	CF, 680 ohm
RP61	24360222	CF, 2200 ohm
RP62	24360473	CF, 47k ohm
RP63	24360683	CF, 68k ohm
RP64	24360102	CF, 1k ohm
RP65	24360104	CF, 100k ohm
RP66	24360473	CF, 47k ohm
RP67	24360472	CF 4700 ohm
RP68	24360103	CF, 10k ohm
RP69	24360223	CF, 22k ohm
RP70	24360103	CF, 10k ohm
RP71	24360563	CF, 56k ohm
RP72	24360223	CF, 22k ohm
RP73	24360102	CF, 1k ohm
RP74	24360122	CF, 1200 ohm
RP75	24360112	CF, 1100 ohm
RP76	24552241	OMF, 240 ohm, 1/2W
RP77	24360122	CF, 1200 ohm
RP78	24360431	CF, 430 ohm
RP79	24360472	CF 4700 ohm
RP80	24360123	CF, 12k ohm

LOCATION NUMBER	PART NUMBER	DESCRIPTION
RP81	24360103	CF, 10k ohm
RP82	24360102	CF, 1k ohm
RP83	24360102	CF, 1k ohm
RP84	24360122	CF, 1200 ohm
RP90	24360151	CF, 150 ohm
RP90	24552472	OMF, 4700 ohm, 1/2W
RP91	24360151	CF, 150 ohm
RP91	24360202	CF, 2k ohm
RP92	24360151	CF, 150 ohm
RP151	24360222	CF, 2200 ohm
RP152	24360222	CF, 2200 ohm
RP153	24360123	CF, 12k ohm
RP154	24360123	CF, 12k ohm
RP155	24360472	CF, 4700 ohm
RP156	24360472	CF, 4700 ohm
RP157	24360123	CF, 12k ohm
RP158	24360132	CF, 1300 ohm
RR01	24380563	CF, 56k ohm
RR02	24380104	CF, 100k ohm
RR03	24380104	CF, 100k ohm
RR04	24380103	CF, 10k ohm
RR05	24380101	CF, 100 ohm
RR06	24380102	CF, 1k ohm, 1/8W
RR07	24380223	CF, 22k ohm
RR08	24380152	CF, 1500 ohm
RR09	24380181	CF, 180 ohm
RR14	24380823	CF, 82k ohm
RR15	24360183	CF, 18k ohm
RR16	24360391	CF, 390 ohm
RR17	24380151	CF, 150 ohm, 1/8W
RR18	24380122	CF, 1200 ohm
RR19	24360822	CF, 8200 ohm
RR20	24380682	CF, 6800 ohm, 1/8W
RR21	24360562	CF, 5600 ohm
RR22	24360682	CF, 6800 ohm
RR23	24380822	CF, 8200 ohm
ARR47	24964471	OMF, 470 ohm, 2W
ARR48	24964181	OMF, 180 ohm, 2W
RR49	24360562	CF, 5600 ohm
RR63	24360103	CF, 10k ohm
RR64	24360102	CF, 1k ohm
RR65	24360152	CF, 1500 ohm
RR66	24360103	CF, 10k ohm
RS01	24360102	CF, 1k ohm
RS02	24360102	CF, 1k ohm
RS03	24360102	CF, 1k ohm
RS04	24360102	CF, 1k ohm
RS05	24360332	CF, 3300 ohm
RS06	24360332	CF, 3300 ohm
RS07	24366243	CF, 24k ohm, 1/6W
RS08	24366243	CF, 24k ohm, 1/6W
RS09	24366243	CF, 24k ohm, 1/6W
RS10	24366243	CF, 24k ohm, 1/6W
RS11	24366243	CF, 24k ohm, 1/6W
RS12	24366243	CF, 24k ohm, 1/6W
RS16	24360332	CF, 3300 ohm
RS17	24360332	CF, 3300 ohm
RS24	24360332	CF, 3300 ohm
RS25	24360332	CF, 3300 ohm
RS30	24360243	CF, 24k ohm
RS31	24360243	CF, 24k ohm
RS49	24360333	CF, 33k ohm
RS60	24360333	CF, 33k ohm
RS65	24360333	CF, 33k ohm
RS66	24360333	CF, 33k ohm

LOCATION NUMBER	PART NUMBER	DESCRIPTION
RV01	24360750	CF, 75 ohm
RV02	24360750	CF, 75 ohm
RV03	24360750	CF, 75 ohm
RV06	24366112	CF, 1100 ohm, 1/6W
RV07	24366123	CF, 12k ohm, 1/6W
RV08	24366682	CF, 6800 ohm, 1/6W
RV09	24366272	CF, 2700 ohm, 1/6W
RV14	24360102	CF, 1k ohm
RV15	24360102	CF, 1k ohm
RV16	24366152	CF, 1500 ohm, 1/6W
RV17	24360750	CF, 75 ohm
RV22	24366224	CF, 220k ohm, 1/6W
RV24	24366101	CF, 100 ohm, 1/6W
RV25	24366202	CF, 2k ohm, 1/6W
RV26	24366202	CF, 2k ohm, 1/6W
RV27	24366220	CF, 22 ohm, 1/6W
RV28	24366561	CF, 560 ohm, 1/6W
RV29	24366332	CF, 3300 ohm, 1/6W
RV30	24366271	CF, 270 ohm, 1/6W
RV31	24366391	CF, 390 ohm, 1/6W
RV32	24962511	OMF, 510 ohm, 1/2W
RV33	24366750	CF, 75 ohm, 1/6W
RV34	24962621	OMF, 620 ohm, 1/2W
RZ01	24376361	CF, 360 ohm, 1/2W
RZ02	24360561	CF, 560 ohm
RZ03	24360821	CF, 820 ohm
RZ04	24360102	CF, 1k ohm
RZ05	24360512	CF, 5100 ohm
RZ06	24360102	CF, 1k ohm
RZ07	24360361	CF, 360 ohm
RZ08	24360392	CF, 3900 ohm
RZ09	24380123	CF, 12k ohm
RZ10	24360271	CF, 270 ohm
RZ11	24360271	CF, 270 ohm
RZ12	24380272	CF, 2700 ohm
RZ13	24360682	CF, 6800 ohm
RZ14	24360392	CF, 3900 ohm
RZ51	24061670	VR, 2k ohm, 1/8W
COILS AND TRANSFORMERS		
L101	23261970	Coil, RF Choke, TRF9235
L101	23221977	Coil, RF Choke, TRF9232
L101	23262951	Coil, TRF1019
L102	23262983	Coil, IF-3, TRF1902B
L103	23262882	Coil, AFT, TRF1223
L104	23261052	Coil, RF Choke, AZ9246F
L106	23261052	Coil, RF Choke, AZ9246F
L171	23262882	Coil, AFT, TRF1223
L201	23283150	Coil, Peaking, TRF4150J
L204	23237984	Coil, Peaking, TRF4180AC
L401	23284109	Coil, Peaking, TRF4109K
L441	23261974	Coil (Ferrite Bead), HC5-035
L442	23222672	Coil, Linearity, TLN2057
L443	23221026	Coil, RF Choke, AZ9004Y
L445	23221998	Coil, RF Choke, TRF9200A
△L462	23227566	Deflection Yoke, TDY6215A
L501	23285300	Coil, Peaking, TRF4300J
L501	23287300	Coil, Peaking, TRF4300J
L501	23283300	Coil, Peaking, TRF4300J
L521	23238906	Coil, Peaking, TRF4221AC
L522	23238906	Coil, Peaking, TRF4221AC
L523	23238906	Coil, Peaking, TRF4221AC
L601	23284398	Coil, Peaking, TRF4398
L602	23261976	Coil, RF Choke, TRF9228
L603	23262983	Coil, IF-3, TRF1902B

LOCATION NUMBER	PART NUMBER	DESCRIPTION
L604	23261052	Coil, RF Choke, AZ9246F
L605	23261052	Coil, RF Choke, AZ9246F
L606	23262882	Coil, AFT, TRF1223
L607	23283240	Coil, Peaking, TRF4240J
L608	23252961	Coil, SIF, TRF6003
L801	23221996	Coil, Choke, TLN1015W
L802	23261975	Coil, Choke, TRF9229
L803	23261975	Coil, Choke, TRF9229
L804	23221026	Coil, RF Choke, AZ9004Y
L804	23222694	Coil, Width, TLN2026
L806	23261974	Coil (Ferrite Bead), HC5-035
L808	23261975	Coil, Choke, TRF9229
L840	23221026	Coil, Choke, AZ9004Y
△L901	23200861	Coil, Degaussing, TSB2153
LA01	23238929	Coil, Peaking, TRF4279AC
LG04	23232987	Coil, Tuning, TRF3025
LH01	23221026	Coil, RF Choke, AZ9004Y
LP01	23283330	Coil, Peaking, TRF4330
LP02	23283330	Coil, Peaking, TRF4330
LP03	23283330	Coil, Peaking, TRF4330
LP151	23103966	Coil (Ferrite Core), BF30
LR02	23232988	Coil, Tuning, TRF3018
LZ01	23232975	Coil, TRF3042
LZ02	23283829	Coil, Peaking, TRF4829J
T401	23224988	Transformer, Horiz Drive, TLN1032
△T461	23226452	Transformer, Flyback, TFB4016AD
△T801	23211980	Line Filter, TRF3104H
△T802	23213852	Transformer, Remote, TPW1253
△T803	23213851	Transformer, Converter, TPW3039
△T811	23211980	Line Filter, TRF3104H
SEMICONDUCTORS		
IC101	B0356602	IC, TA7660P
IC501	B0356446	IC, TA7644BP
IC602	B0354710	IC, TA7607AP
IC603	23119710	IC, AN5836
IC604	23119763	IC, AN7158N
IC605	B0325290	IC, TA7337P
ICA01	B0406236	IC, TMP47405702
ICB01	B0272120	IC, TD6312P
ICC01	B0474370	IC, TC40174BP
ICG06	B0325355	IC, TA7343AP
ICG08	B0350500	IC, TA75558P
ICG09	B0470662	IC, TC4066BP
ICG15	B0312100	IC, TA7133P
ICG33	B0470522	IC, TC4052BP
ICG35	23119489	IC, AN6291
ICG37	B0350500	IC, TA75558P
ICG38	B0350500	IC, TA75558P
ICG39	B0350500	IC, TA75558P
ICP02	23119723	IC, AN5352
ICP03	B0470662	IC, TC4066BP
ICP04	23119742	IC, HD74LS26P
ICR01	B0350602	IC, TA75559P FA-1
ICV01	B0357640	IC, TA7717P
ICV01	or B0357650	IC, TA7717AP
Q202	A6509121	Transistor, 2SA562TM-O
Q203	A6534045	Transistor, 2SA1015-Y
Q204	A6534045	Transistor, 2SA1015-Y
Q205	A6317547	Transistor, 2SC1815-Y
Q206	A6534045	Transistor, 2SA1015-Y

LOCATION NUMBER	PART NUMBER	DESCRIPTION
Q207	A6534045	Transistor, 2SA1015-Y
Q241	A6317547	Transistor, 2SC1815-Y
Q242	A6317547	Transistor, 2SC1815-Y
Q243	A6317547	Transistor, 2SC1815-Y
Q290	A6534045	Transistor, 2SA1015-Y
Q291	A6317547	Transistor, 2SC1815-Y
Q303	A6324922	Transistor, 2SC2229-0
Q306	A6319576	Transistor, 2SC2073 FA-4
Q307	A6532320	Transistor, 2SA940
Q402	A6330004	Transistor, 2SC2482 FA-1
△Q404	A6848004	Transistor, 2SD870
Q471	A6534021	Transistor, 2SA1015-0
Q505	A6319400	Transistor, 2SC2068
Q507	A6319400	Transistor, 2SC2068
Q509	A6319400	Transistor, 2SC2068
Q510	A6317547	Transistor, 2SC1815-Y
Q601	A6708871	Transistor, 2SC388ATM
Q606	A6317547	Transistor, 2SC1815-Y
△Q801	A6846806	Transistor, 2SD820 FA-1
Q802	A6319302	Transistor, 2SC1959-Y
Q803	A6533730	Transistor, 2SA1012-Y
Q804	A6534045	Transistor, 2SA1015-Y
Q806	A6848908	Transistor, 2SD1052A
QA02	A6534045	Transistor, 2SA1015-Y
QA03	A6534045	Transistor, 2SA1015-Y
QA04	A6534045	Transistor, 2SA1015-Y
QA05	A6317547	Transistor, 2SC1815-Y
QB02	A6317526	Transistor, 2SC1815-0
QB03	A6317547	Transistor, 2SC1815-Y
QB04	A6317526	Transistor, 2SC1815-0
QC02	A6534045	Transistor, 2SA1015-Y
QC03	A6317547	Transistor, 2SC1815-Y
QC04	A6317547	Transistor, 2SC1815-Y
QD01	A6531140	Transistor, 2SA817-Y
QD02	A6531140	Transistor, 2SA817-Y
QD03	A671656A	Transistor, 2SC495-Y
QE01	A6848908	Transistor, 2SD1052A
QE04	A6534045	Transistor, 2SA1015-Y
QG01	A6317547	Transistor, 2SC1815-Y
QG02	A6317547	Transistor, 2SC1815-Y
QG03	A6317547	Transistor, 2SC1815-Y
QG04	A6317547	Transistor, 2SC1815-Y
QG05	A6534045	Transistor, 2SA1015-Y
QG07	A6534063	Transistor, 2SA1015-GR
QG10	A6317547	Transistor, 2SC1815-Y
QG11	A6317547	Transistor, 2SC1815-Y
QG12	A6534045	Transistor, 2SA1015-Y
QG13	A6317547	Transistor, 2SC1815-Y
QG14	A6317547	Transistor, 2SC1815-Y
QG16	A6534045	Transistor, 2SA1015-Y
QG17	A6317547	Transistor, 2SC1815-Y
QG18	A6534045	Transistor, 2SA1015-Y
QG19	A6317547	Transistor, 2SC1815-Y
QG20	A6534045	Transistor, 2SA1015-Y
QG21	A6534045	Transistor, 2SA1015-Y
QG22	A6317547	Transistor, 2SC1815-Y
QG23	A6317547	Transistor, 2SC1815-Y
QG24	A6534045	Transistor, 2SA1015-Y
QG25	A6317547	Transistor, 2SC1815-Y
QG26	A6534045	Transistor, 2SA1015-Y
QG27	A6317547	Transistor, 2SC1815-Y
QG28	A6317547	Transistor, 2SC1815-Y
QG29	A6317547	Transistor, 2SC1815-Y
QG34	A6317547	Transistor, 2SC1815-Y
QG36	A6317547	Transistor, 2SC1815-Y

LOCATION NUMBER	PART NUMBER	DESCRIPTION
QG39	A6317547	Transistor, 2SC1815-Y
QH01	A6534045	Transistor, 2SA1015-Y
QH02	A6534045	Transistor, 2SA1015-Y
QH03	A6534045	Transistor, 2SA1015-Y
QH04	A6317567	Transistor, 2SC1815-GR
QH05	A6317567	Transistor, 2SC1815-GR
QP01	A6317547	Transistor, 2SC1815-Y
QP06	A6317547	Transistor, 2SC1815-Y
QP07	A6319302	Transistor, 2SC1959-Y
QP08	A6708871	Transistor, 2SC388ATM
QP09	A6708871	Transistor, 2SC388ATM
QP10	A6708871	Transistor, 2SC388ATM
QP11	A6509121	Transistor, 2SA562TM-O
QP12	A6534045	Transistor, 2SA1015-Y
QP13	A6317547	Transistor, 2SC1815-Y
QP14	A6534045	Transistor, 2SA1015-Y
QP15	A6317547	Transistor, 2SC1815-Y
QP16	A6317547	Transistor, 2SC1815-Y
QP17	A6534045	Transistor, 2SA1015-Y
QP18	A6534045	Transistor, 2SA1015-Y
QP20	A6534045	Transistor, 2SA1015-Y
QP151	23114544	Transistor, 2SA1206
QP152	A6734592	Transistor, 2SC752GTM-Y
QP153	A6734592	Transistor, 2SC752GTM-Y
QR02	A6317547	Transistor, 2SC1815-Y
QR03	A6534045	Transistor, 2SA1015-Y
QR04	A6534045	Transistor, 2SA1015-Y
QR36	A6534045	Transistor, 2SA1015-Y
QR37	A6314446	Transistor, 2SC1627-Y
QR38	A6509141	Transistor, 2SA562TM-Y
QV02	A6534045	Transistor, 2SA1015-Y
QV03	A6317547	Transistor, 2SC1815-Y
QV04	A6534045	Transistor, 2SA1015-Y
QV05	A6534045	Transistor, 2SA1015-Y
QV08	A6534045	Transistor, 2SA1015-Y
QV09	A6317547	Transistor, 2SC1815-Y
QV10	A6534045	Transistor, 2SA1015-Y
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QZ02	A6317547	Transistor, 2SC1815-Y
QZ03	A6317547	Transistor, 2SC1815-Y
QZ04	A6317547	Transistor, 2SC1815-Y
QZ05	A6317547	Transistor, 2SC1815-Y
D201	A7246711	Diode, 1S1555 (TV)
D202	A7246602	Diode, 1S1553 (TV)
D204	A7246711	Diode, 1S1555 (TV)
D205	A7246653	Diode, 1S1554 (TV)
D206	A7246711	Diode, 1S1555 (TV)
D231	23115535	Diode, 0A91
D251	A7246711	Diode, 1S1555 (TV)
D252	A7246711	Diode, 1S1555 (TV)
D253	A7246602	Diode, 1S1553 (TV)
D254	A7246711	Diode, 1S1555 (TV)
D302	A7246711	Diode, 1S1555 (TV)
D303	A7246711	Diode, 1S1555 (TV)
D304	A7246711	Diode, 1S1555 (TV)
D305	A7568475	Diode, TVR-2D
D305	or 23115621	Diode, EM1Z
D306	A7568475	Diode, TVR-2D
D306	or 23115621	Diode, EM1Z
D307	A7246711	Diode, 1S1555 (TV)
D308	23115690	Diode, GU-3C
D310	A7246711	Diode, 1S1555
D401	A7246711	Diode, 1S1555 (TV)
D441	A7978850	Diode, S5295G
D442	A7978850	Diode, S5295G

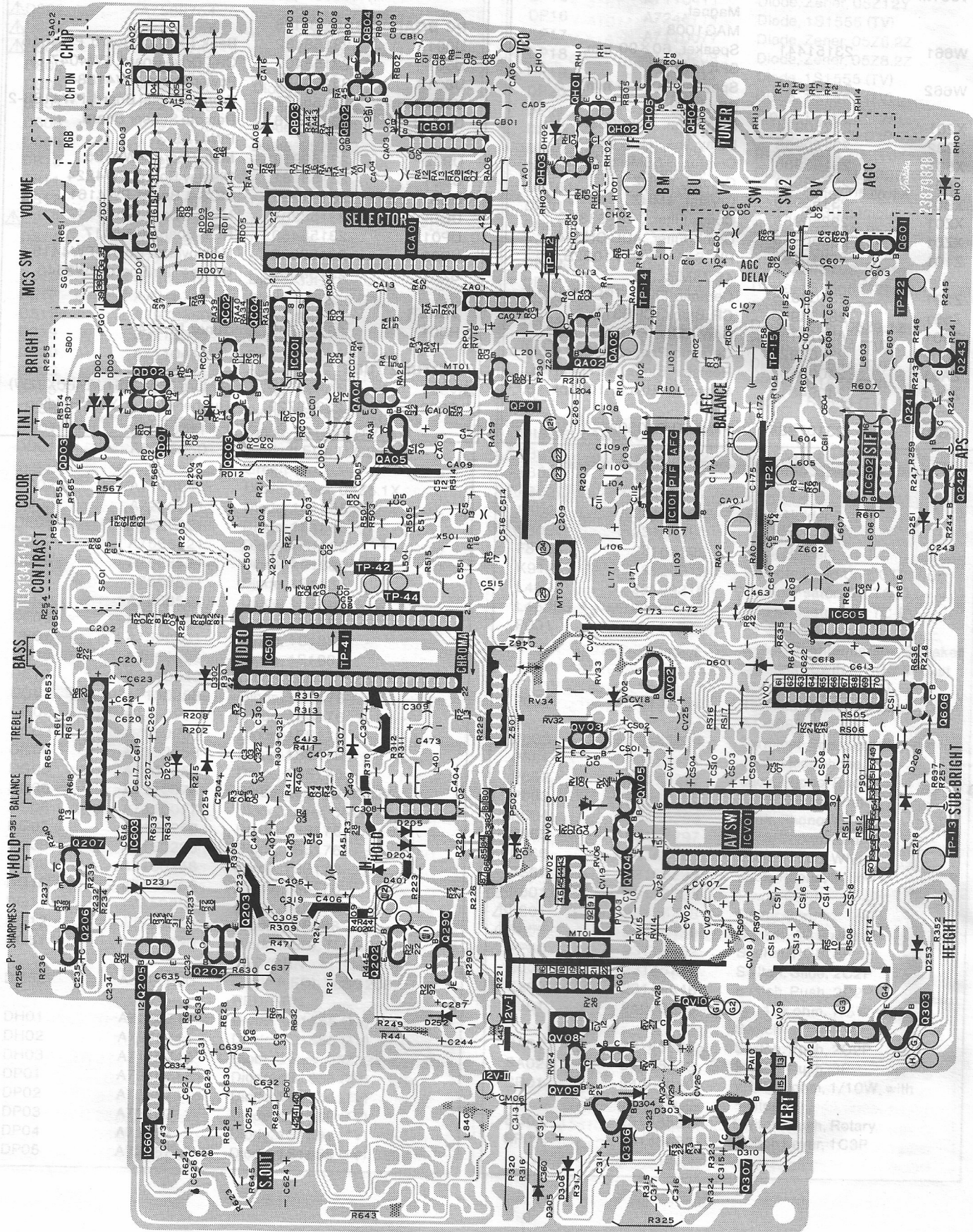
LOCATION NUMBER	PART NUMBER	DESCRIPTION
D471	A7568460	Diode, TVR-1B
△D472	23115774	Diode, Zener, RD6.2E FA-1
D601	A7246711	Diode, 1S1555 (TV)
△D801	A7568754	Diode, 1S1887A FA-1
△D802	A7568754	Diode, 1S1887A FA-1
△D803	A7568754	Diode, 1S1887A FA-1
△D804	A7568754	Diode, 1S1887A FA-1
D805	A7978850	Diode, S5295G
D806	A7978850	Diode, S5295G
D807	A7978850	Diode, S5295G
D808	A7978850	Diode, S5295G
D809	A7978850	Diode, S5295G
D810	A7246602	Diode, 1S1553 (TV)
D811	A7801021	Diode (SCR), SF0RIB42IG1
D812	A7110017	Diode, Zener, 05Z5.6Y
△D813	23115774	Diode, Zener, RD6.2E FA-1
D814	A7978850	Diode, S5295G
D815	A7246711	Diode, 1S1555 (TV)
D816	A7580660	Diode, 3JH61
D817	A7246711	Diode, 1S1555 (TV)
D818	A7978850	Diode, S5295G
D819	23115585	Diode, GU3SZ
D820	A7110412	Diode, Zener, 05Z12Z
DA03	A7246711	Diode, 1S1555 (TV)
DA05	A7246711	Diode, 1S1555 (TV)
DA06	A7246711	Diode, 1S1555 (TV)
DC01	A7246711	Diode, 1S1555 (TV)
DD01	A8626050	Diode (LED), TLG321, Green
DD02	A7110040	Diode, Zener, 05Z5.1X
DD03	A7246711	Diode, 1S1555 (TV)
DE01	A7568521	Diode, 1S1885
DE02	A7568521	Diode, 1S1885
DE03	A7568521	Diode, 1S1885
DE04	A7568521	Diode, 1S1885
DE05	A7568521	Diode, 1S1885
DE06	A7568521	Diode, 1S1885
DE07	A7568521	Diode, 1S1885
DE08	A7568521	Diode, 1S1885
DE10	A7110040	Diode, Zener, 05Z5.1X
DG01	A7150258	Diode, 1SS176
DG02	A7150258	Diode, 1SS176
DG03	A7150258	Diode, 1SS176
DG04	A7150258	Diode, 1SS176
DG05	A7150258	Diode, 1SS176
DG06	A7110076	Diode, Zener, 05Z6.2Y
DG06	or A7110077	Diode, Zener, 05Z6.2Z
DG07	A7150258	Diode, 1SS176
DG08	A7150258	Diode, 1SS176
DG09	A7150258	Diode, 1SS176
DG10	A7150258	Diode, 1SS176
DG11	A7150258	Diode, 1SS176
DG12	A7150258	Diode, 1SS176
DG51	A8636690	Diode (LED), TLG208, RED/GRN
DG52	A8636690	Diode (LED), TLG208, RED/GRN
DH01	A7246711	Diode, 1S1555 (TV)
DH02	A7246711	Diode, 1S1555 (TV)
DH03	A7110743	Diode, Zener, 05Z33Y
DP01	A7246711	Diode, 1S1555 (TV)
DP02	A7246711	Diode, 1S1555 (TV)
DP03	A7246711	Diode, 1S1555 (TV)
DP04	A7246711	Diode, 1S1555 (TV)
DP05	A7246711	Diode, 1S1555 (TV)

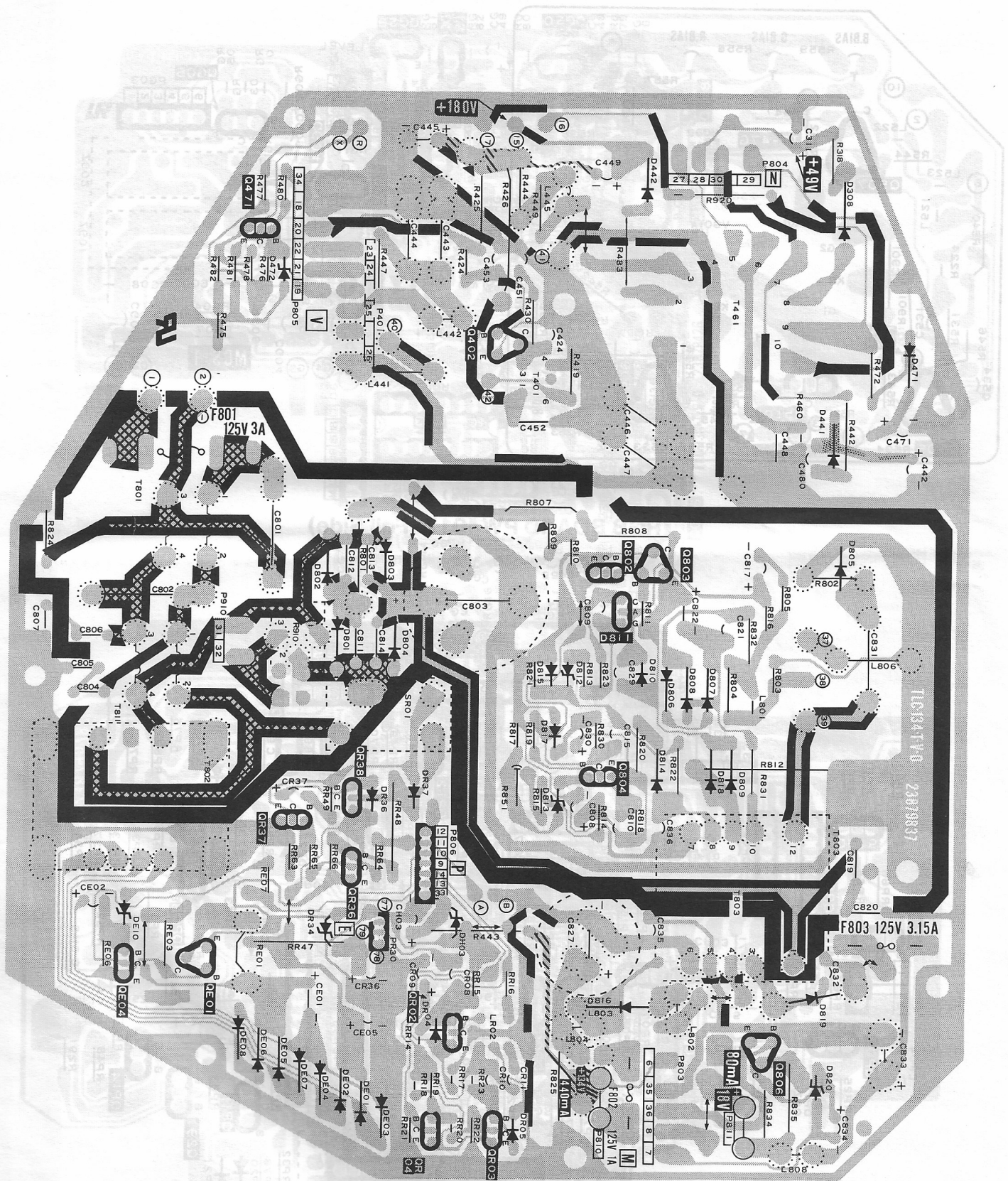
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DP11	A7246711	Diode, 1S1555 (TV)
DP13	A7110411	Diode, Zener, 05Z12Y
DP14	A7110411	Diode, Zener, 05Z12Y
DP15	A7110411	Diode, Zener, 05Z12Y
DP16	A7246711	Diode, 1S1555 (TV)
DP17	A7110077	Diode, Zener, 05Z6.2Z
DP18	A7110209	Diode, Zener, 05Z8.2Z
DP19	A7246711	Diode, 1S1555 (TV)
DP20	A7246602	Diode, 1S1553 (TV)
DP21	A7246602	Diode, 1S1553 (TV)
DP22	A7246711	Diode, 1S1555 (TV)
DP30	A7110563	Diode, Zener, 05Z16X
DP50	A8606660	Diode (LED), TLG208, Green
DP151	A7110040	Diode, Zener, 05Z5.1X
DR01	23115800	Diode, PH302, Photo
DR01	or A8652035	Diode, TPS703, Photo
DR02	23115800	Diode, PH302, Photo
DR02	A8652035	Diode, TPS703, Photo
DR04	A7246711	Diode, 1S1555 (TV)
DR05	A7246711	Diode, 1S1555 (TV)
DR34	A7110263	Diode, Zener, 05Z9.1Z
DR36	A7246653	Diode, 1S1554 (TV)
DR37	A7246653	Diode, 1S1554 (TV)
DV01	A7246711	Diode, 1S1555 (TV)
DV02	A7246711	Diode, 1S1555 (TV)
MISCELLANEOUS		
△F801	23144942	Fuse, 3A
F801A	23165081	Fuse Holder
△F802	23144907	Fuse, 1A
F802A	23165102	Fuse Holder
△F803	23144893	Fuse, 3.15A
F803A	23165102	Fuse Holder
K912	23120816	Remote Hand Unit, CT9100
L462A	23199318	Compensator, DY, TC-C
L462B	23199314	Compensator, DY, TC-E
P001	23161770	AV Terminal, AV202H less VHF Antenna Box, Speaker Terminal, Switch, RGB Socket and PC Board (U001)
P002	23142634	Terminal Board, Antenna, AT-506S
P003	23161808	Terminal, Speaker, 4P
P661	23166180	Jack, Headphone
P662	23166297	Jack, Phono, Red
P663	23166300	Jack, Phono, White
P664	23166299	Jack, Phono, Yellow
P665	23166297	Jack, Phono, Red
P666	23166300	Jack, Phono, White
P667	23166299	Jack, Phono, Yellow
△P801	23176795	Power Cord
△P801	or 23176798	Power Cord
△P850	23164439	Socket, AC Power
PP50	23116332	Socket, RGB, 8P
S001	23145747	Switch, Slide, 2C2P
S202	23145646	Switch, Push, 2C2P
S501	24060319	VR, 10k ohm, 1/5W, with Switch
SA01	23145685	Switch, Push, 2C2P
SA02	23145578	Switch, Push, 3P
SB01	24060320	VR, 10k ohm, 1/10W, with Switch
SG01	23145555	Switch, Push, Rotary
SP01	23145682	Switch Lever, 1C3P

LOCATION NUMBER	PART NUMBER	DESCRIPTION
△SR01	23146969	Relay, TSB4020
△V901A	23116543	Socket, CRT
V901M	23102983	Purity and Convergence Magnet, MAG1008
W661	23151441	Speaker, 60×90 mm, SPK1109
W662	23151441	Speaker, 60×90 mm, SPK1109
X201	23250974	Delay line, TRF2035
X232	23250958	Delay line, TRF2045
X501	23153988	Crystal, 3.58MHz, APC
XA01	23153969	Crystal, 4MHZ
XB01	23153969	Crystal, 4MHZ
XZ01	23250955	Comb Filter, PDL-633KC
XZ01 or	23250954	Comb Filter, ADL-CN334
Z101	A5610690	PIF SAW Filter, F1032B, 45.75MHz
Z201	23107976	Ceramic Filter, TPS4.5MC2
Z501	23134990	CR Block, CRS316
Z601	A5613160	SAW Filter, F1322
Z602	23107920	Ceramic Phase Shifter, 4.5MHz
ZA01	24000905	Resistor Block, 4.7kohm×5
ZD01	24094814	Capacitor Block, 1000pF×6, 50V
ZG01	23107884	Filter, TLC1030A

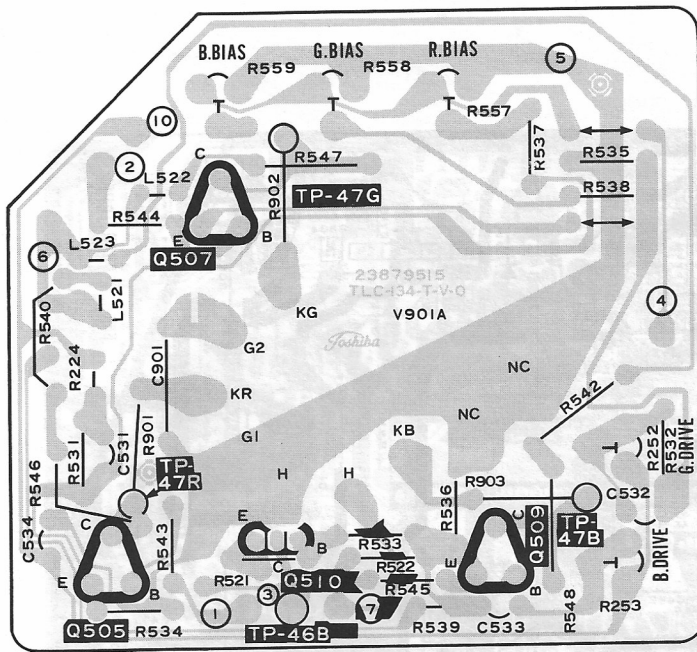
LOCATION NUMBER	PART NUMBER	DESCRIPTION
ZG02	23107883	Filter, TLC1030B
ZG03	23107851	Filter, TLC1051
ZG04	23107851	Filter, TLC1051
PC BOARD ASSEMBLIES		
U001	23158452	Back Terminal Board, PW4015
U501	23158407	CRT Drive Board, PW4047
U801A	23169987	Power Board, PW4188-1
U801B	23158127	Front terminal Board, PW4188-2
U801C	23158126	Remote Sensor Board, PW4188-3
U902	23169919	Main Board, PW4185
UB01	23158181	Display Board, PW4224
UG01	23158285	MCS-1 Board, PW4161
UG02	23158284	MCS-2 Board, PW4147
UP01	23158450	RGB Board, PW4017
UP02	23169878	H/V Inverter Board, PW4415
UZ01	23138082	Comb Filter Board, PW3543
TUNER		
H001	23121796	Tuner, EL524F
PICTURE TUBE		
△V901	A5493039	Picture Tube, A51JAR60X(MW)
E502	23848729	Rubber Wedge, Yoke Holding

MAIN BOARD PW4185 (Foil Side)

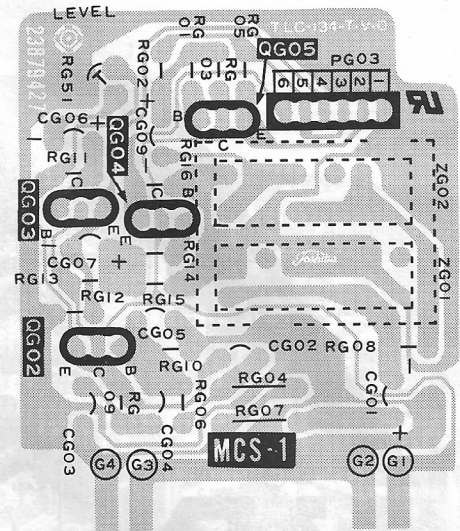




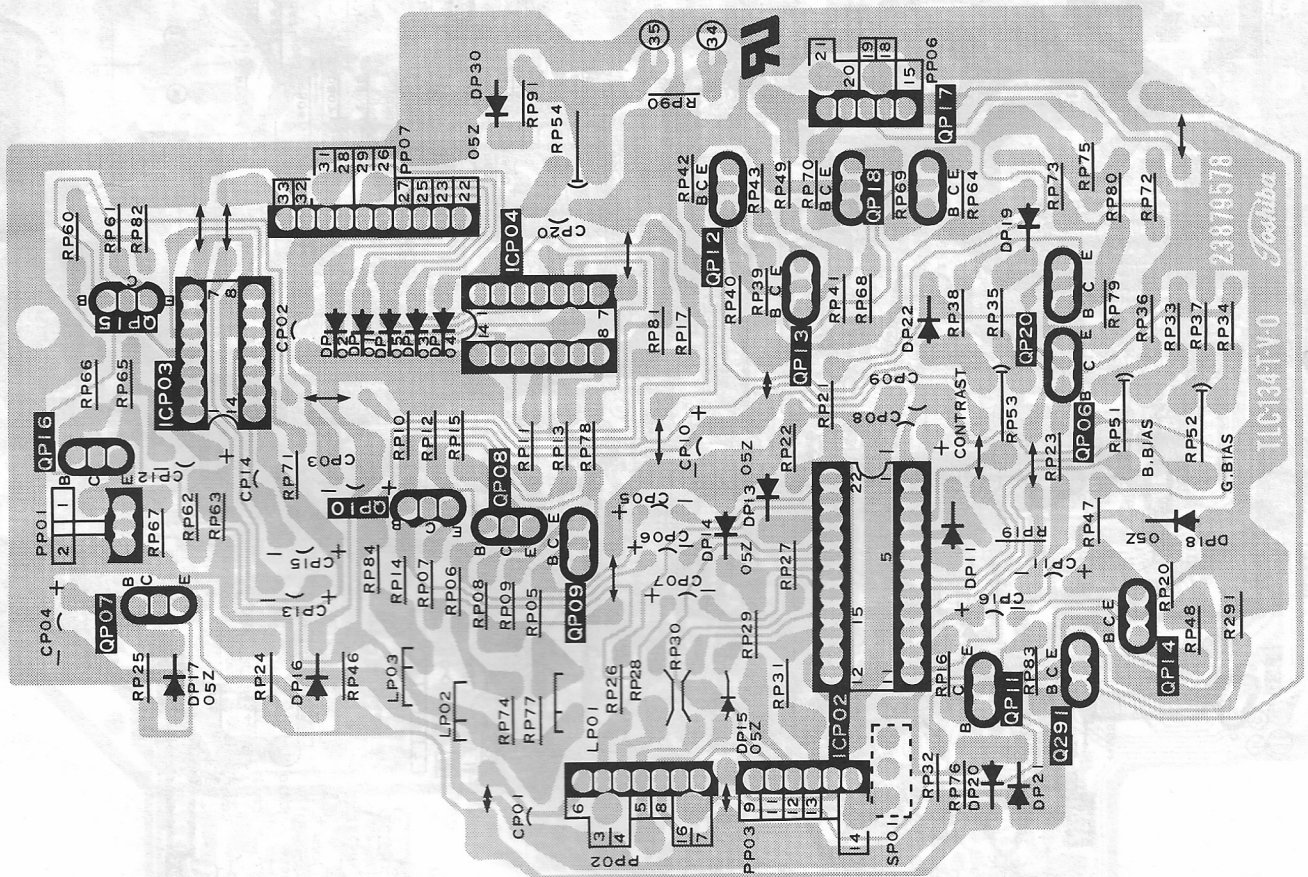
CRT DRIVE BOARD PW4047 (Foil Side)



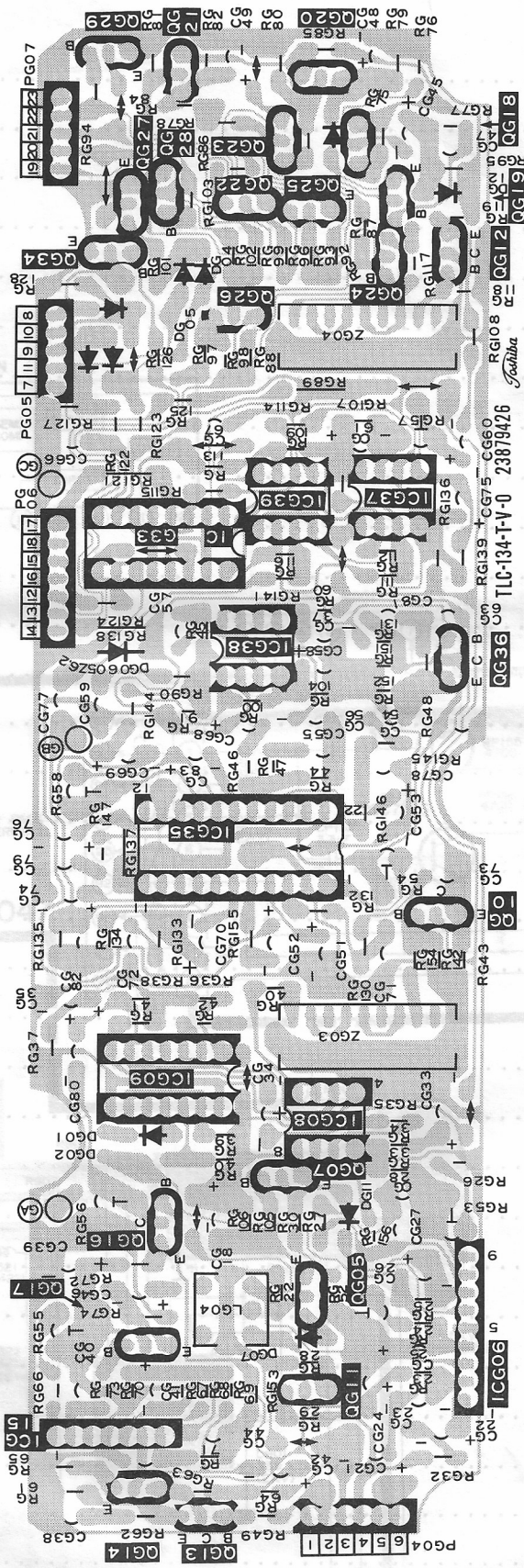
MCS-1 BOARD PW4161 (Foil Side)



RGB BOARD PW4017 (Foil Side)



MCS-2 BOARD PW4147 (Foil Side)



This manual is the latest at the time of printing, and does not include the modifications which may be made after the printing, by the constant improvement of product.

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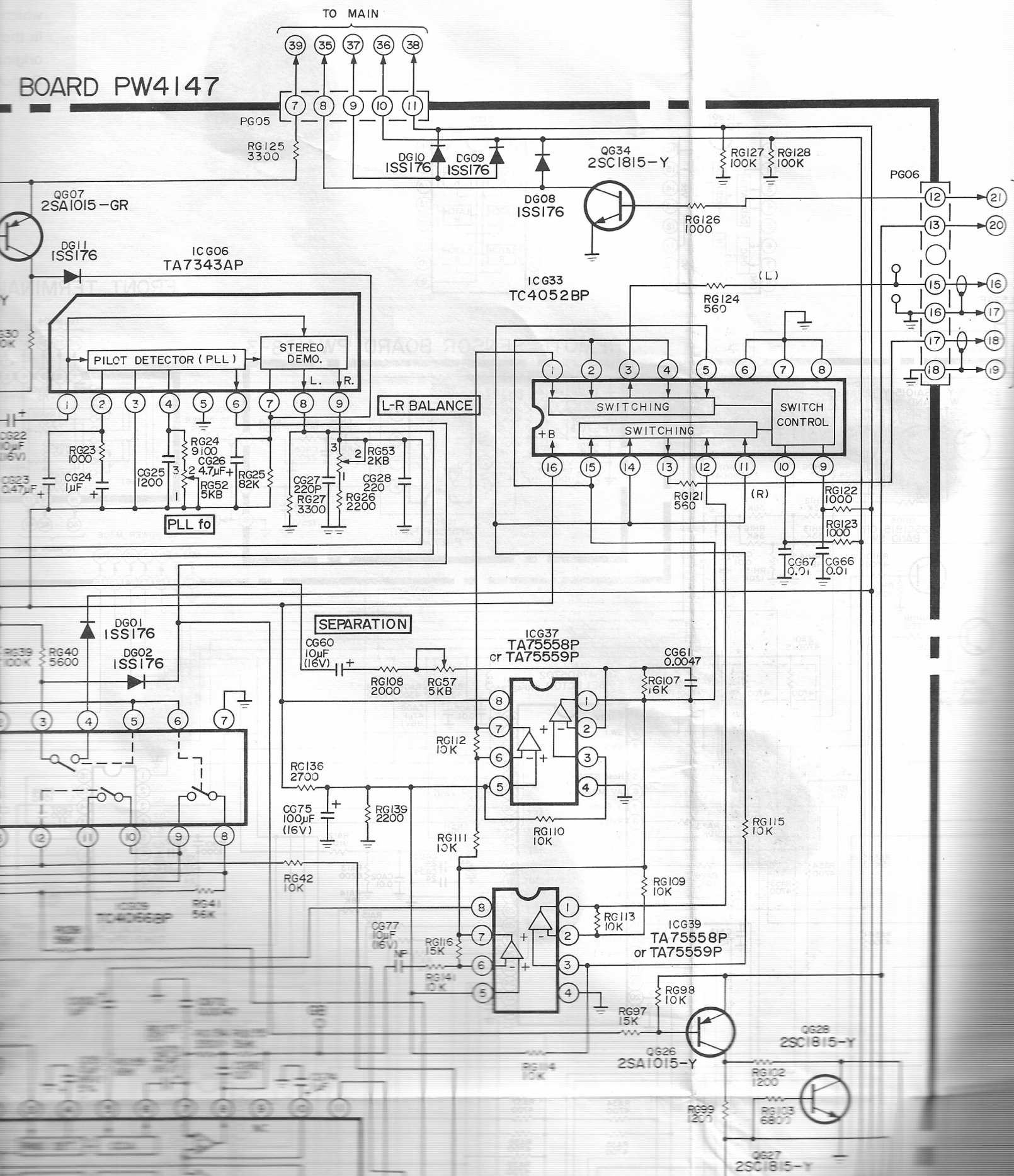
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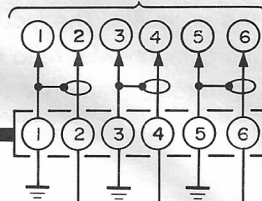
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BOARD PW4147

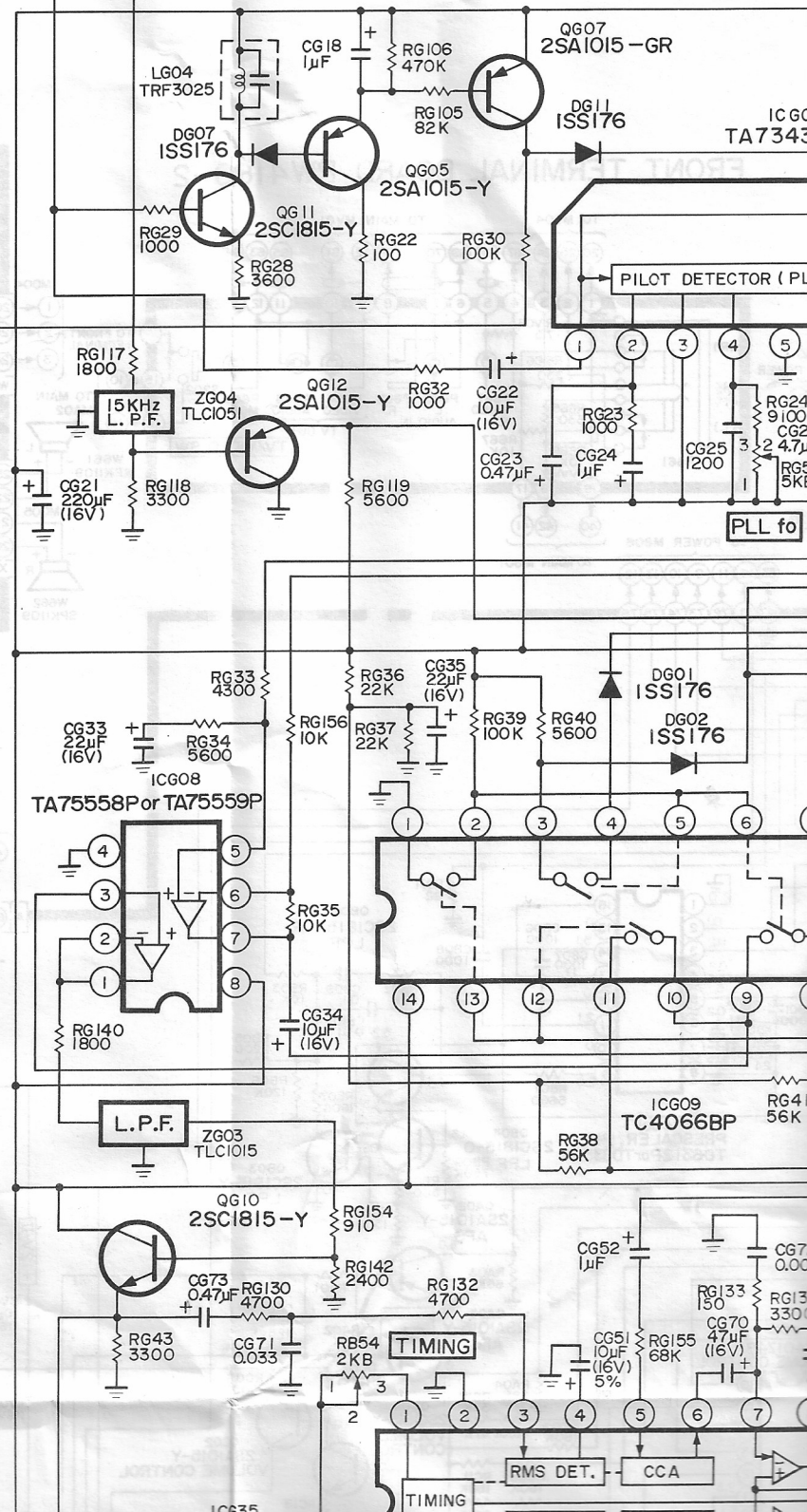


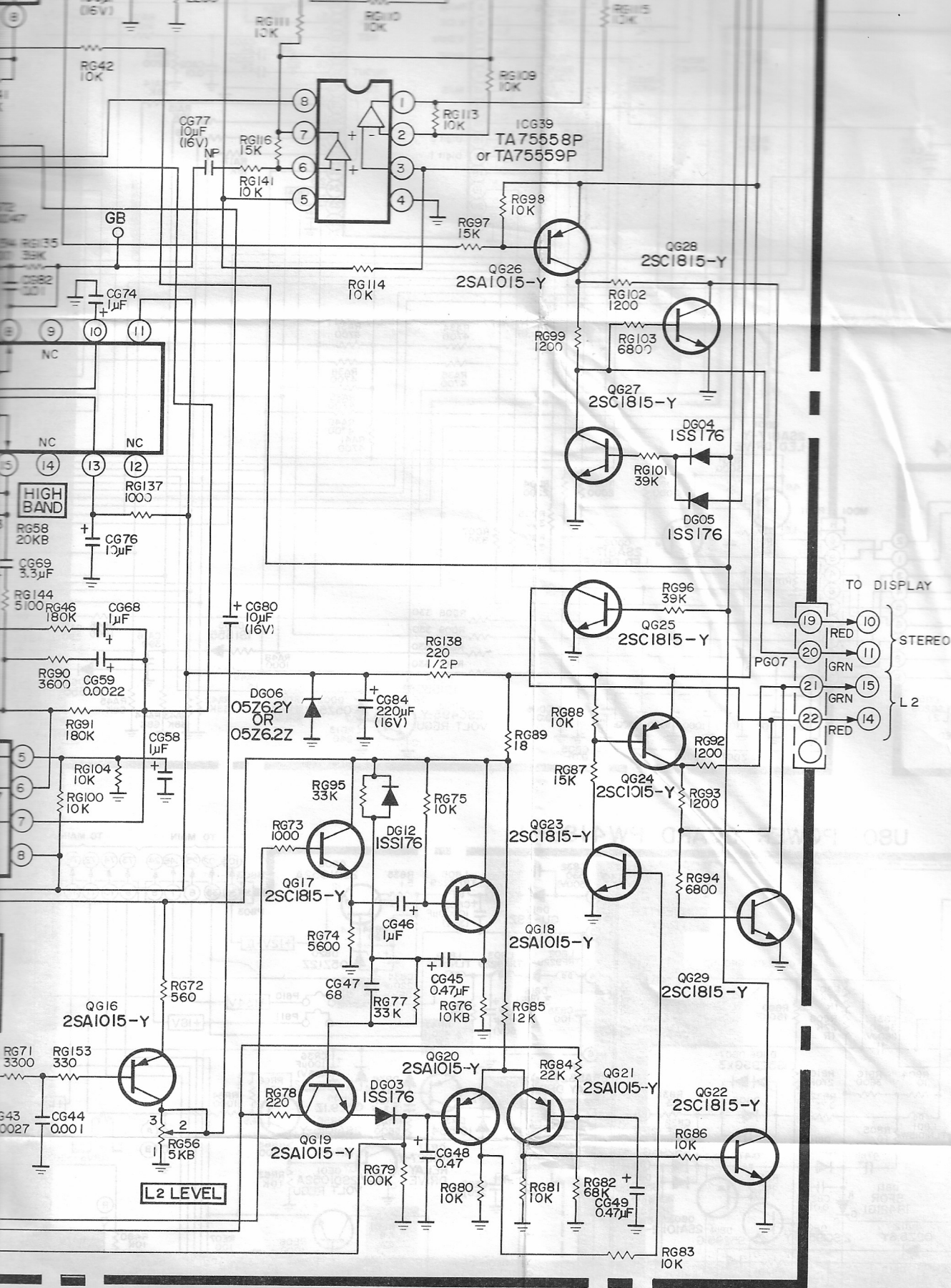
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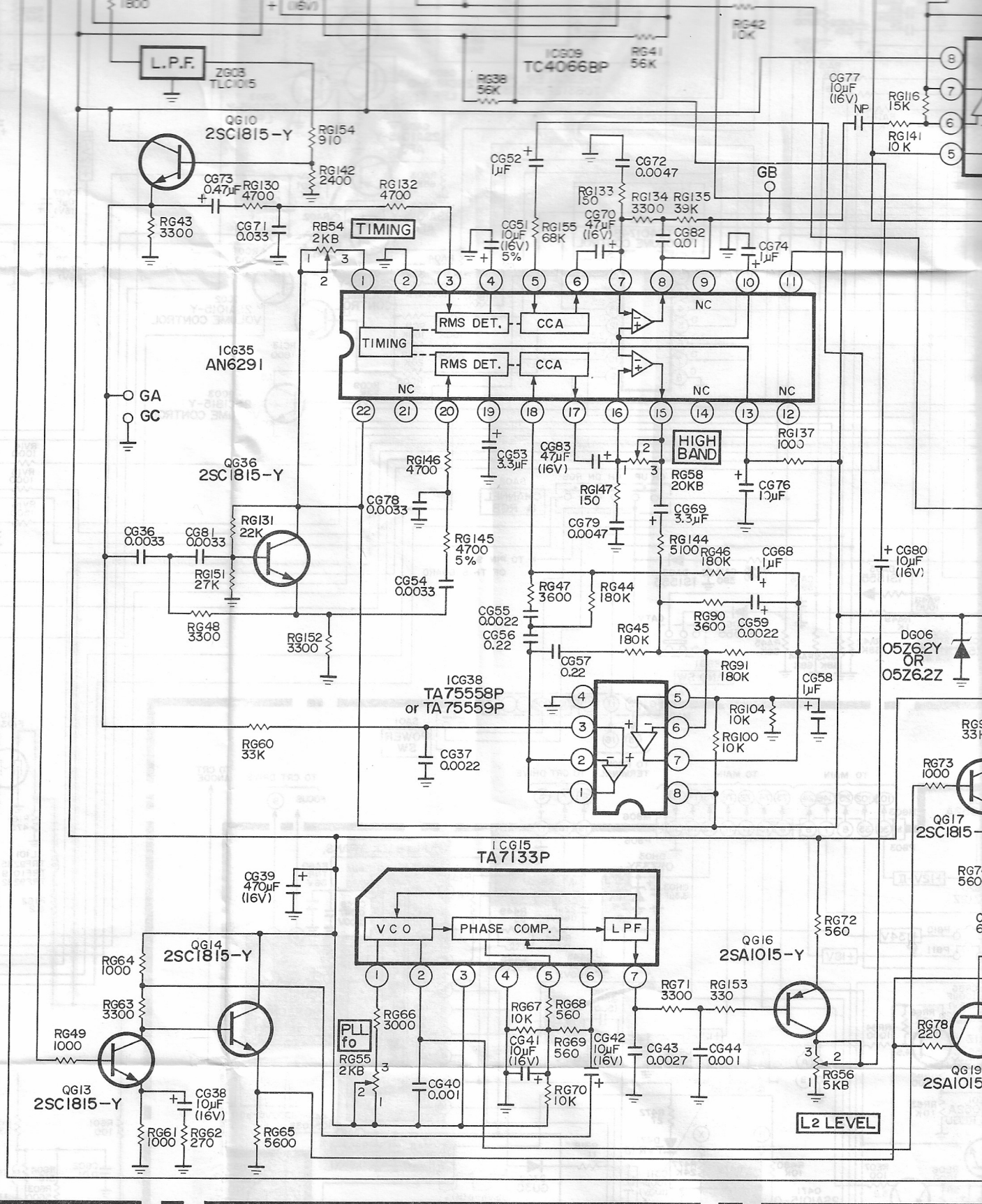
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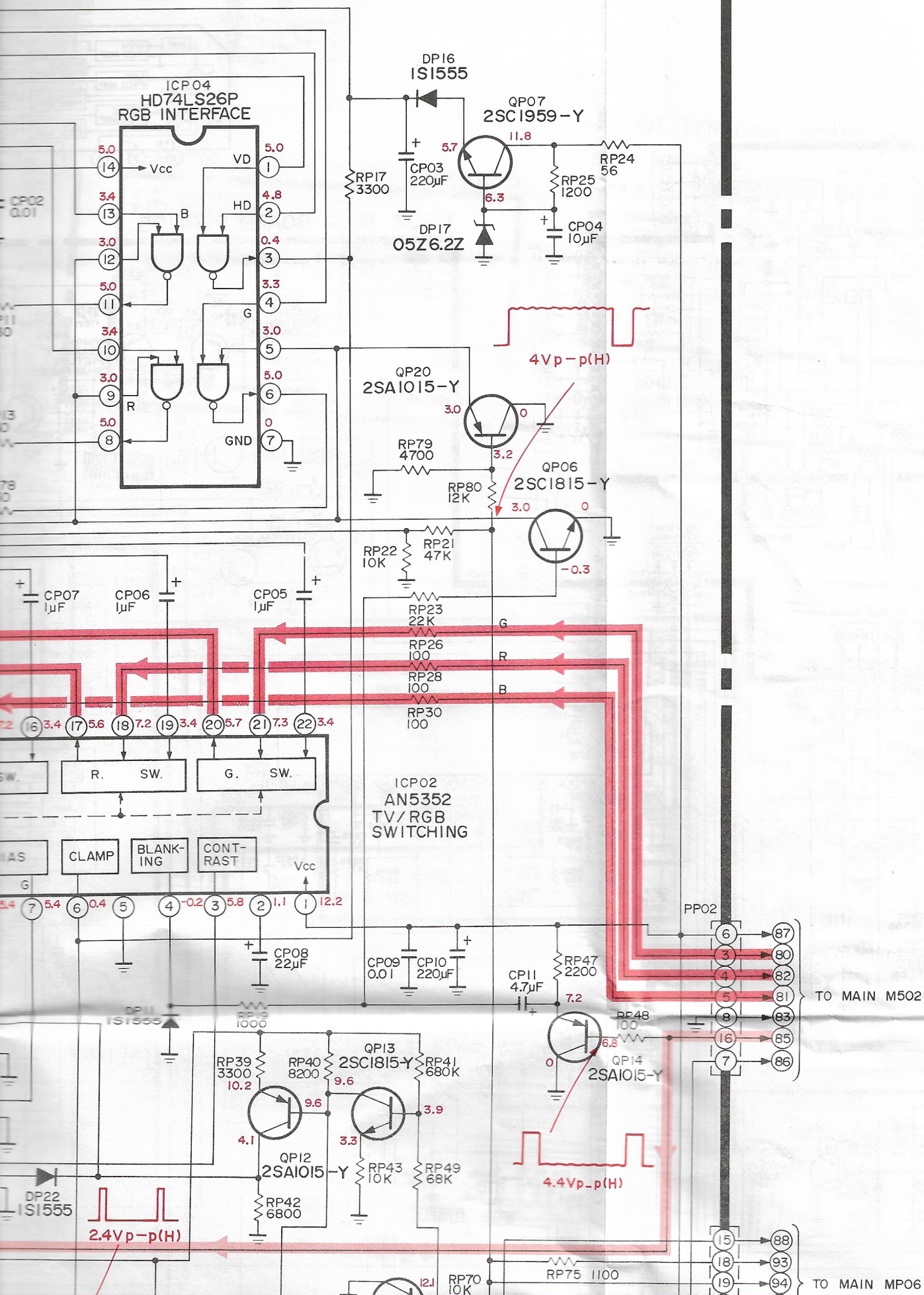


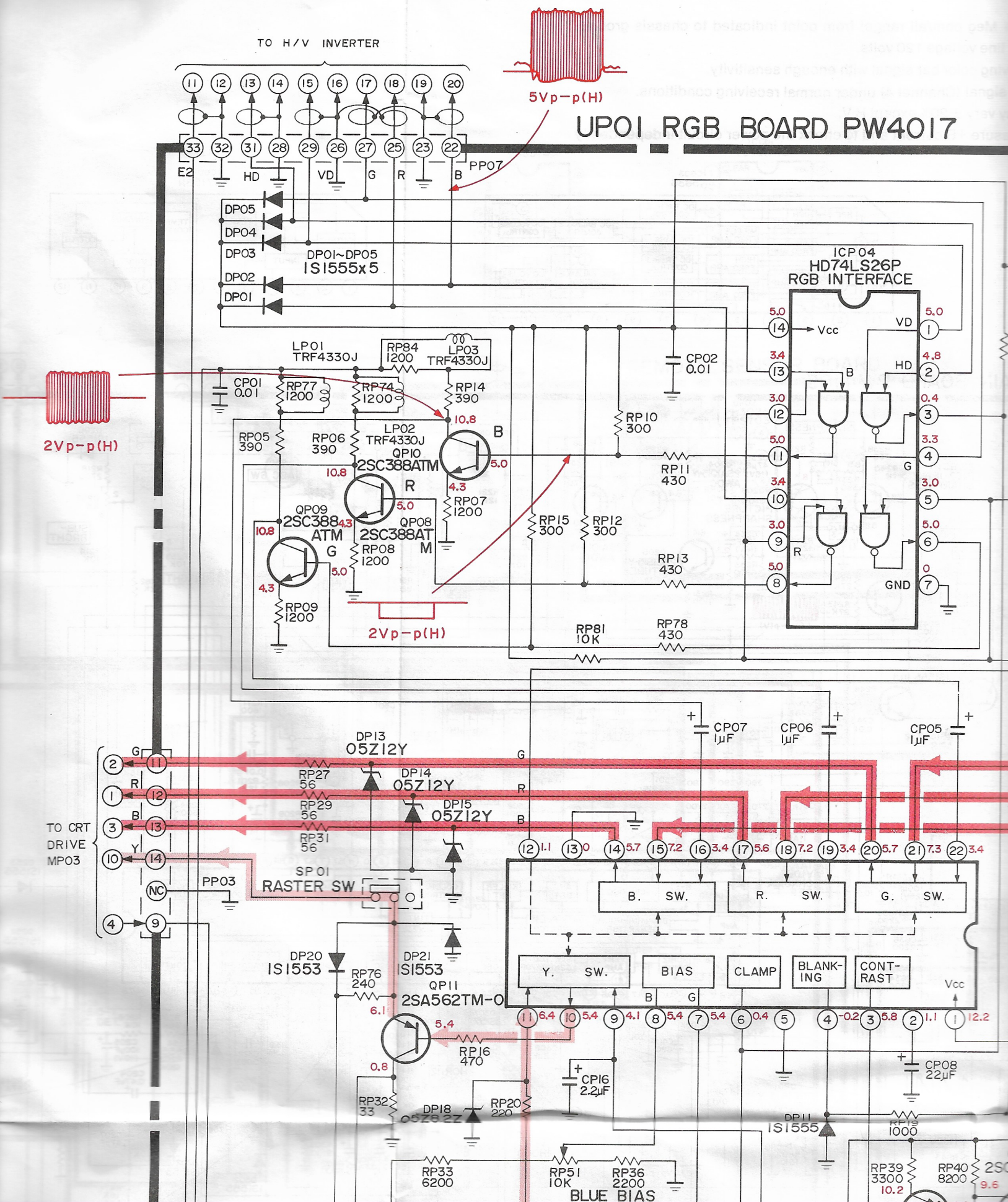
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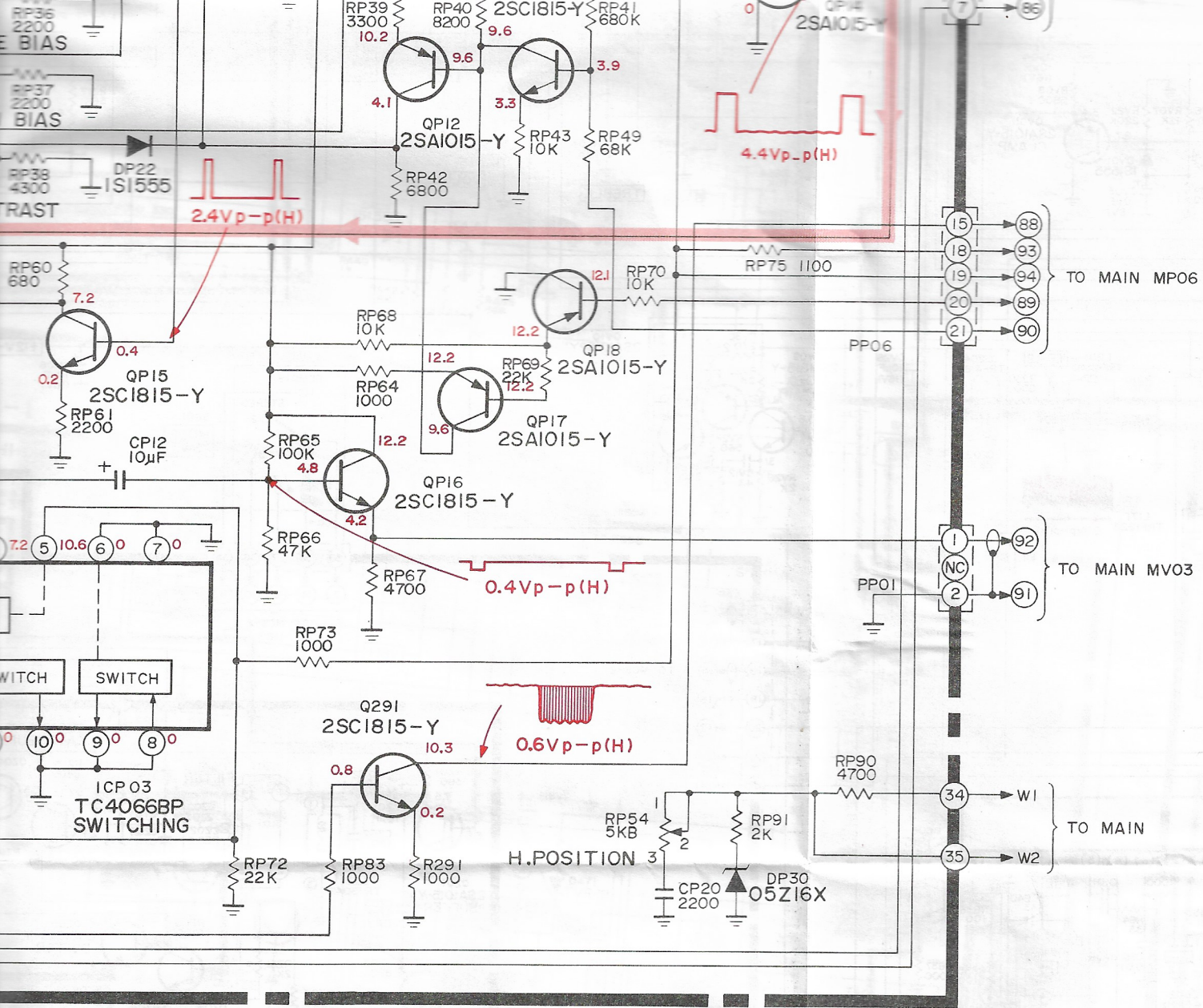




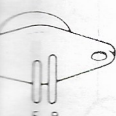




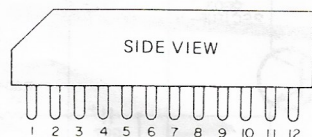




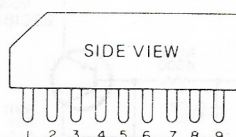
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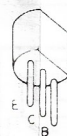
Q404
Q801



IC603
IC604



IC605



Q202	Q471	QB03	QH04	QP01	QV08
Q203	Q510	QB04	QH05	QR02	QV09
Q204	Q601	QC02	QM01	QR03	QV10
Q205	Q606	QC03	QM02	QR04	QZ01
Q206	Q802	QC04	QM03	QR36	QZ02
Q207	Q804	QD01	QM04	QR37	QZ03
Q241	QA02	QD02	QM05	QR38	QZ04
Q242	QA03	QE04	QM06	QV02	QZ05
Q243	QA04	QH01	QM07	QV03	
Q290	QA05	QH02	QM08	QV04	
Q291	QB02	QH03	QM09	QV05	



Q505
Q507
Q509



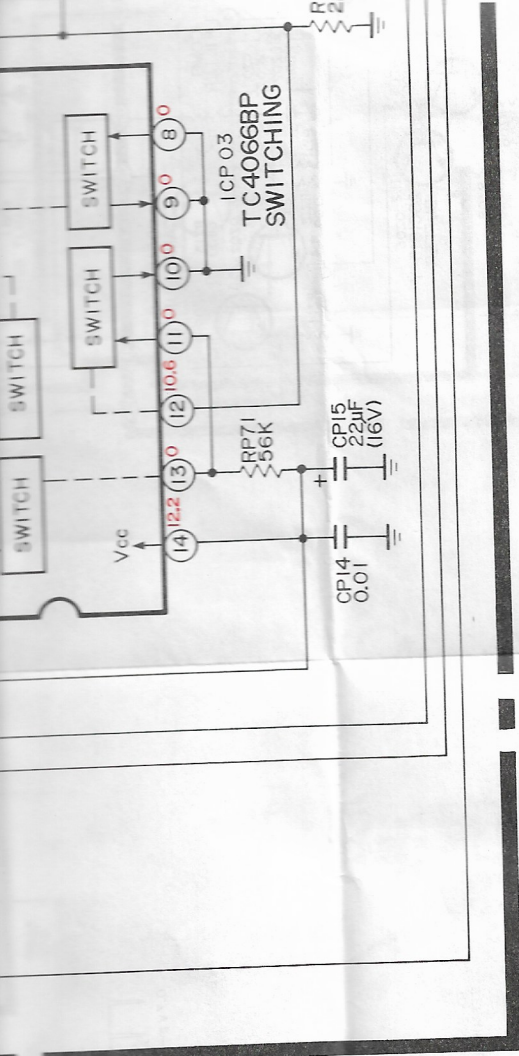
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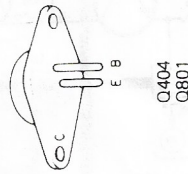
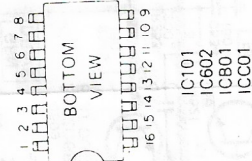
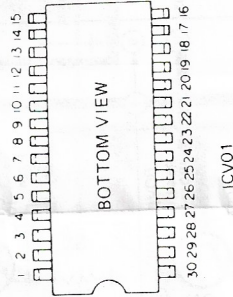
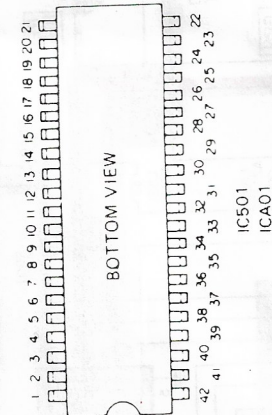
Q303
Q402



Q306 Q803
Q307 Q806
QE01

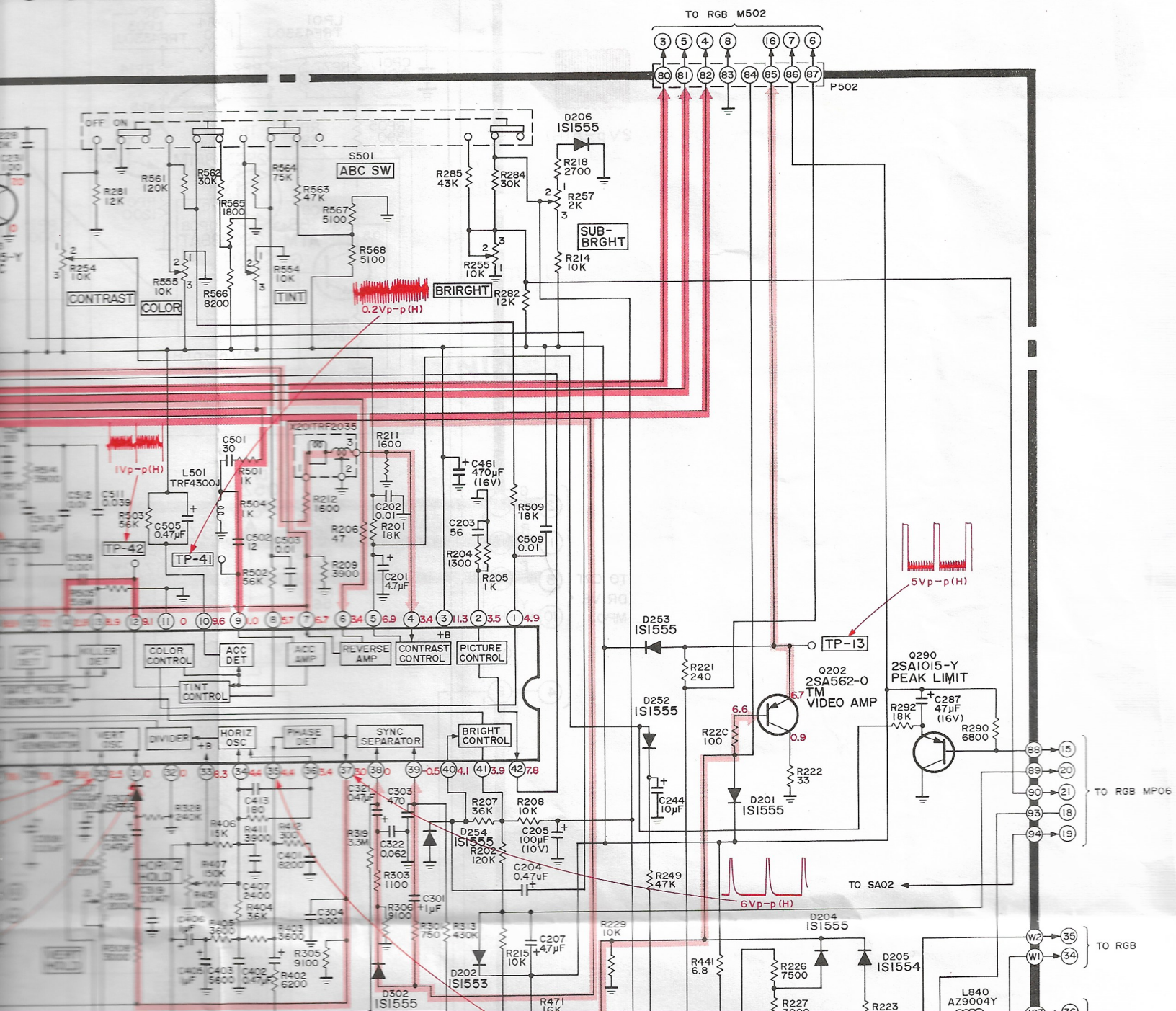
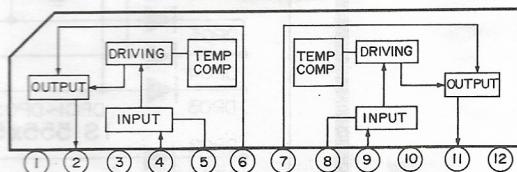


TERMINAL VIEWS OF IC'S AND TRANSISTORS



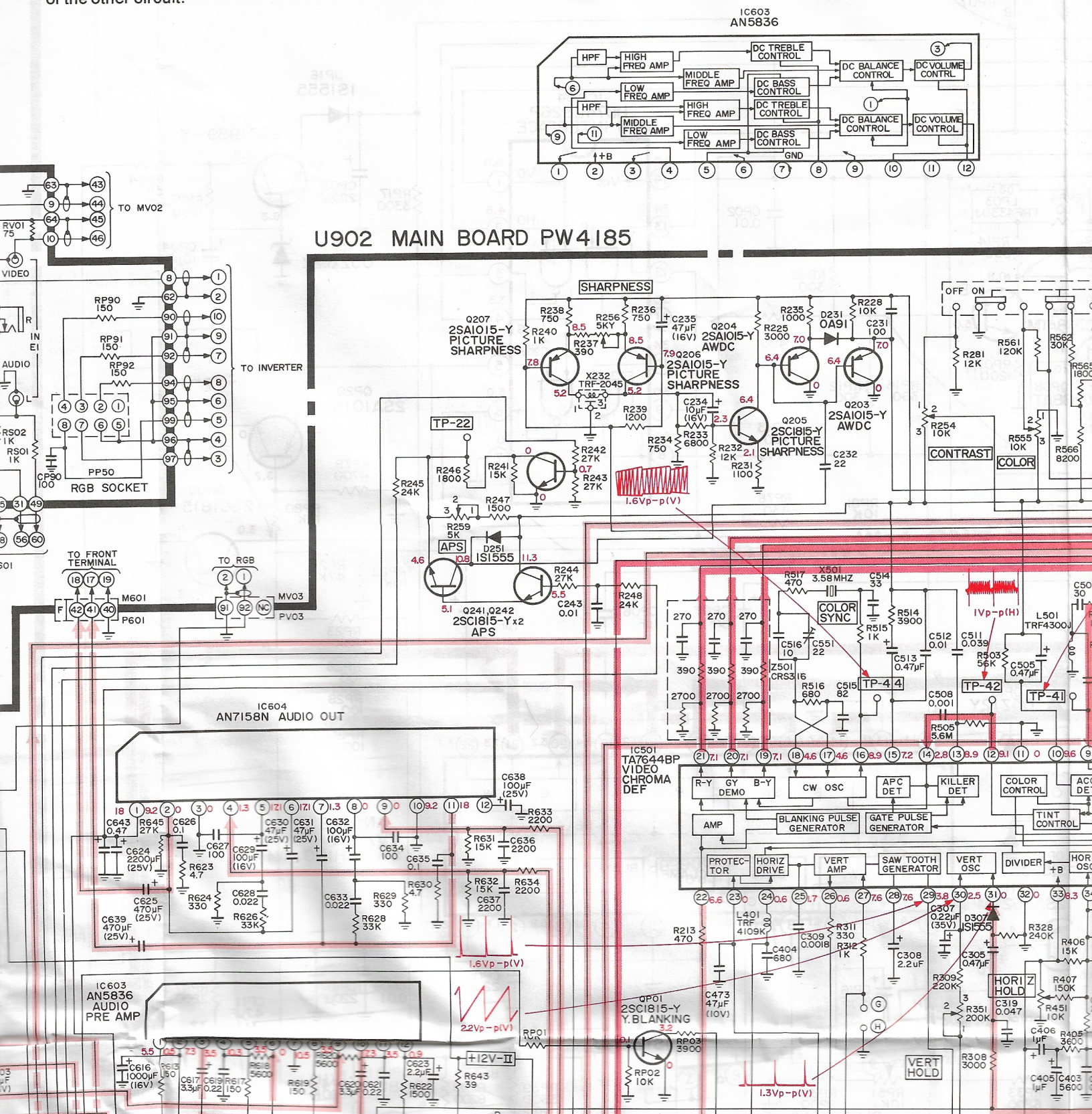
114

IC604
AN7158N



NOTE:

1. Resistance is shown in ohm, k=1,000, M=1,000,000.
2. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF , and the values more than 1 in pF.
3. Voltages read with "VTVM" (input impedance: 21 Meg ohm/all range) from point indicated to chassis ground, using a color bar signal with all controls at normal line voltage 120 volts.
4. Waveforms in chrominance circuit are taken receiving color bar signal with enough sensitivity.
5. Waveforms in other circuits are taken using an air signal (Channel 4) under normal receiving conditions.
6. Voltage reading shown are nominal values and may vary $\pm 20\%$ except H.V.
7. Jumper wires P810 and P811 can be used to measure +B current and to check the power circuit independently of the other circuit.



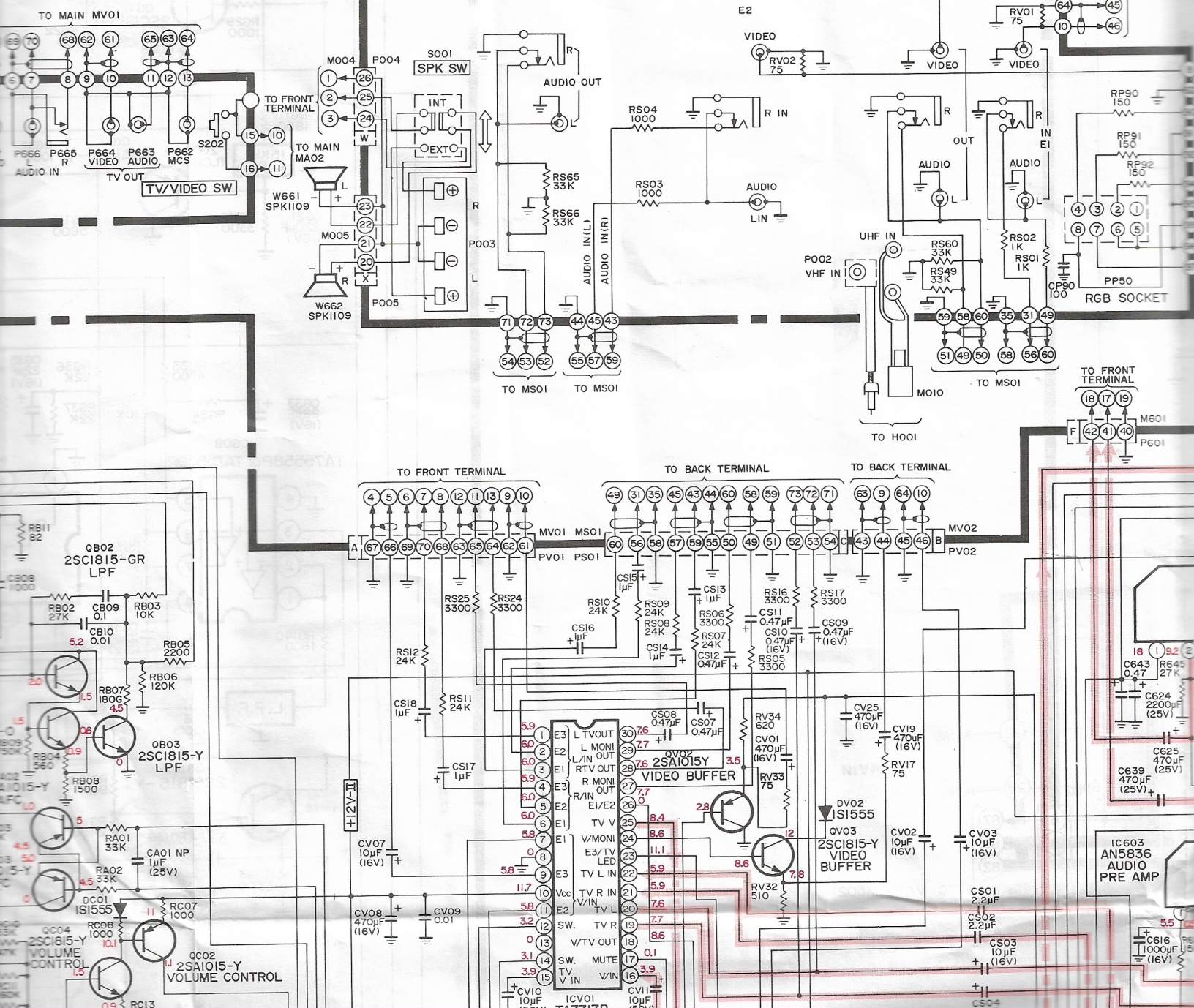
WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

NOTE: The shaded areas and Δ marks in the schematic diagram and the parts list designate components that have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacement is to be identical with the original. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2. Improper servicing may degrade the safety of the receiver through improper servicing.

NOTE:

1. Resistance is shown in ohms, kilohms, or megohms.
2. Unless otherwise specified, all capacitors are in pF.
3. Voltages read with respect to common using a color bar.
4. Waveforms in chart.
5. Waveforms in chart.
6. Voltage reading.
7. Jumper wires.

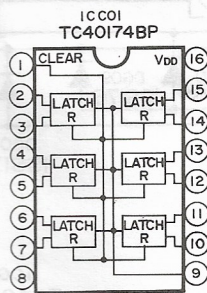
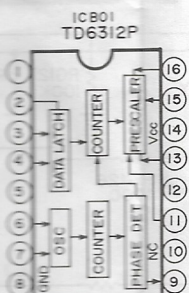
BOARD PW4188-2



SCHEMATIC DIAGRAM (1/2): MODEL CZ2084 Chassis No. TAC8332

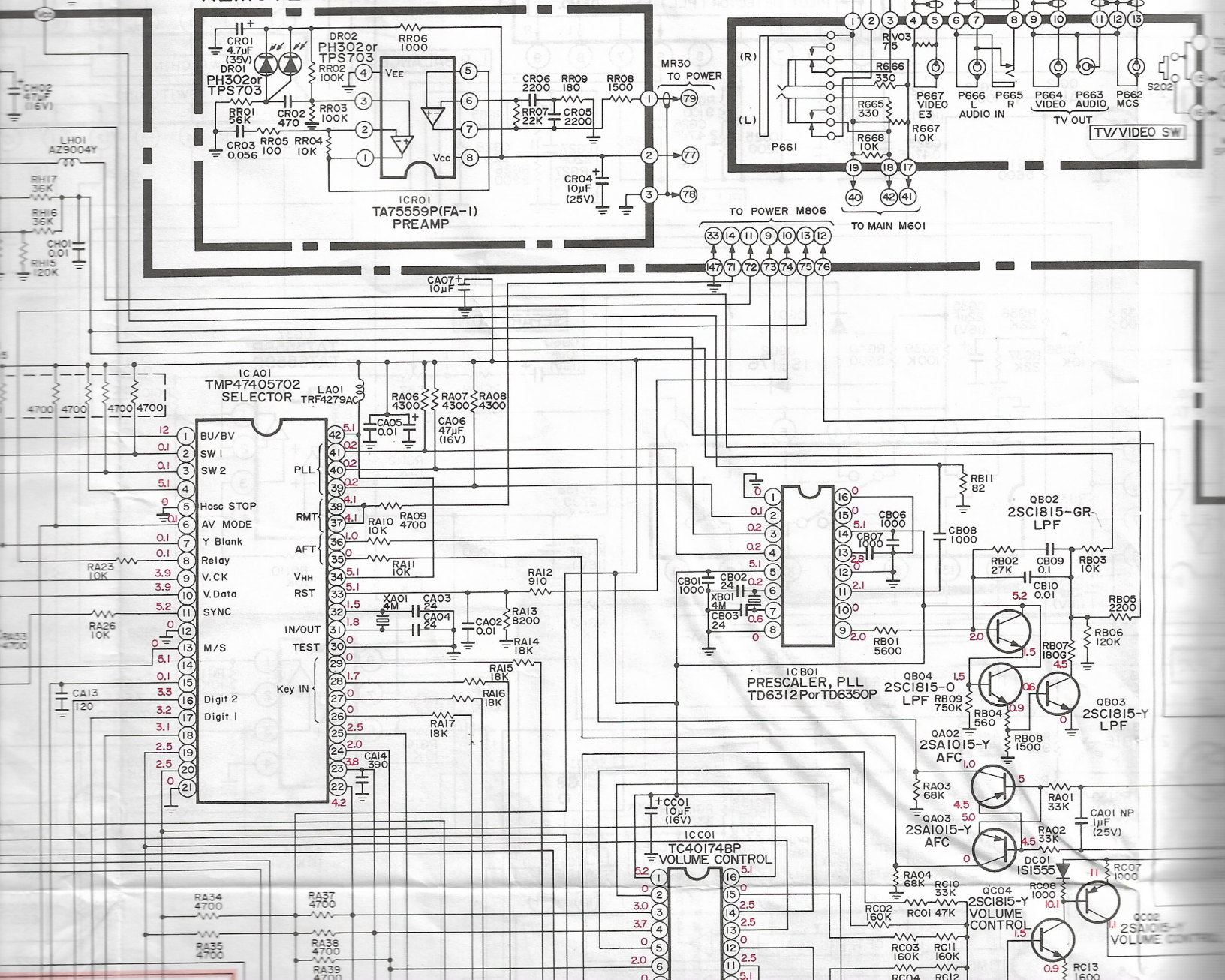
WARNING: BEFORE SERVICING THIS
CAUTION" AND "PRODUCT SAFETY NO

CAUTION: The shaded areas and Δ which have special characteristics im-
in the original circuit or specified in the
originals. Before replacing any of these
Do not degrade the safety of the rece



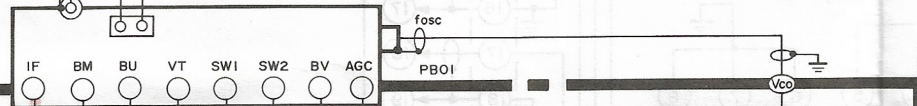
FRONT TERMINAL BOARD PW4188-2

REMOTE SENSOR BOARD PW4188-3

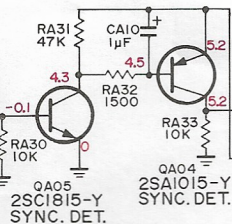


SCHEMATIC DIAG MODEL CZ2084 Cha

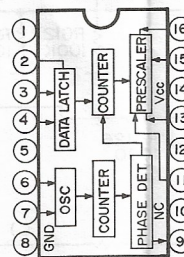
TO BACK TERMINAL(ANT)
H001 U/V TUNER EL524F



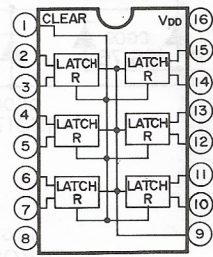
(Voltages are measured
with CH.4 selected.)



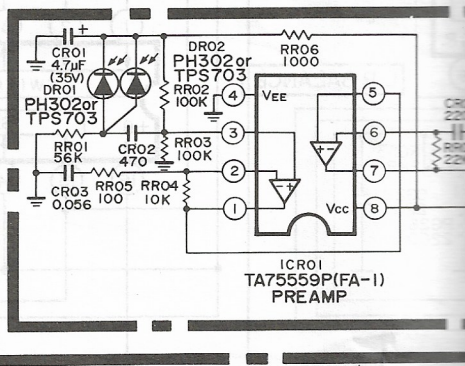
ICB01
TD6312P



ICC01
TC40174BP



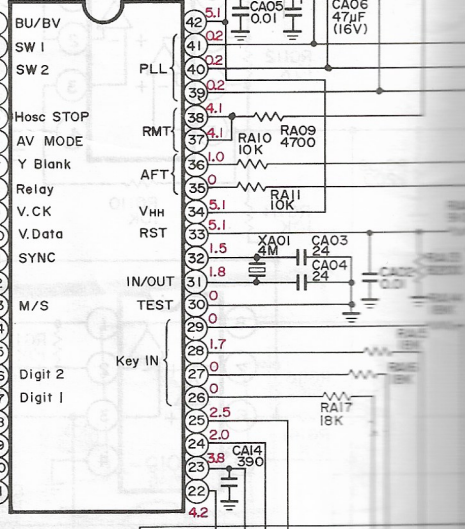
REMOTE SENSOR BOARD P



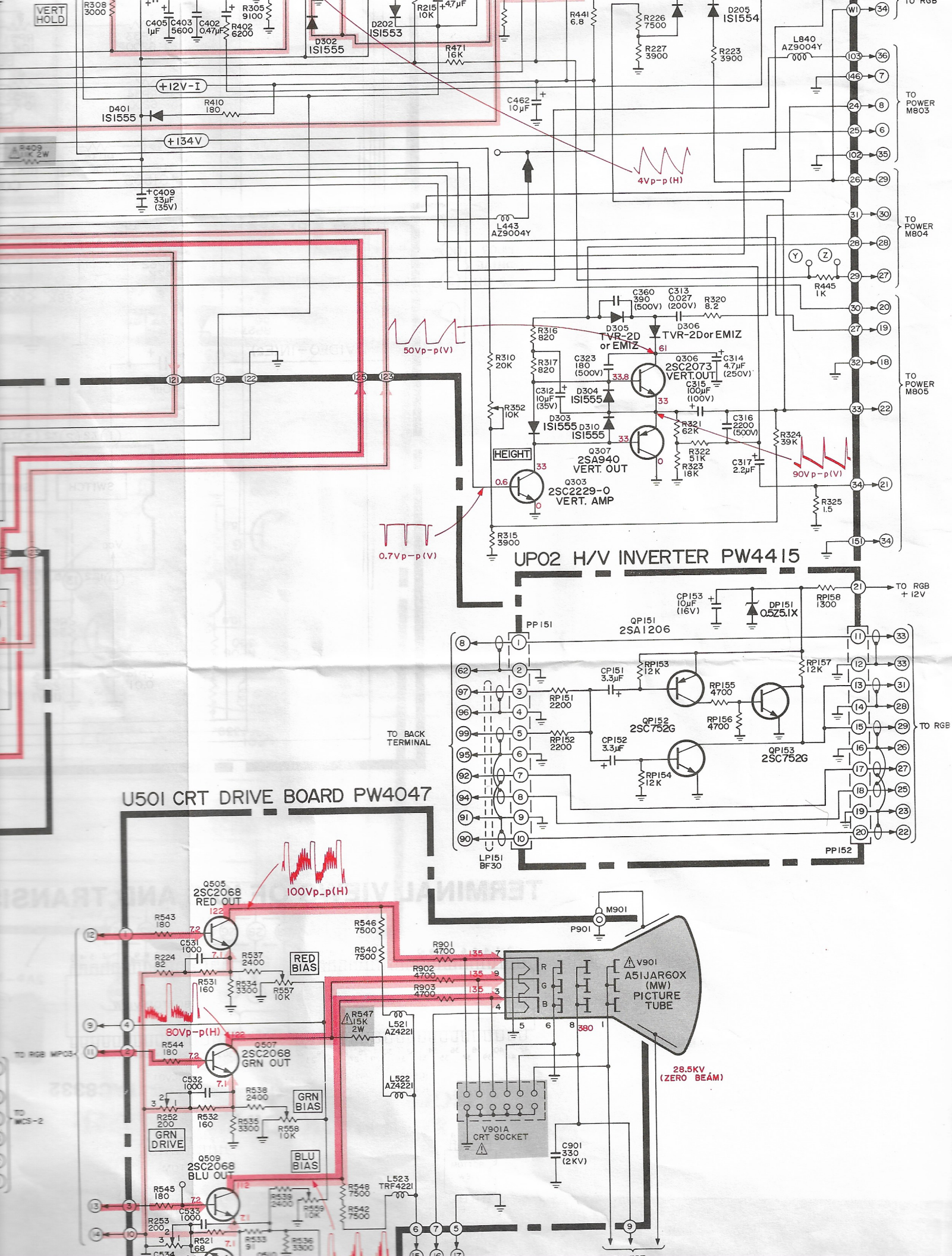
ICR01
TA75559P(FA-I)
PREAMP

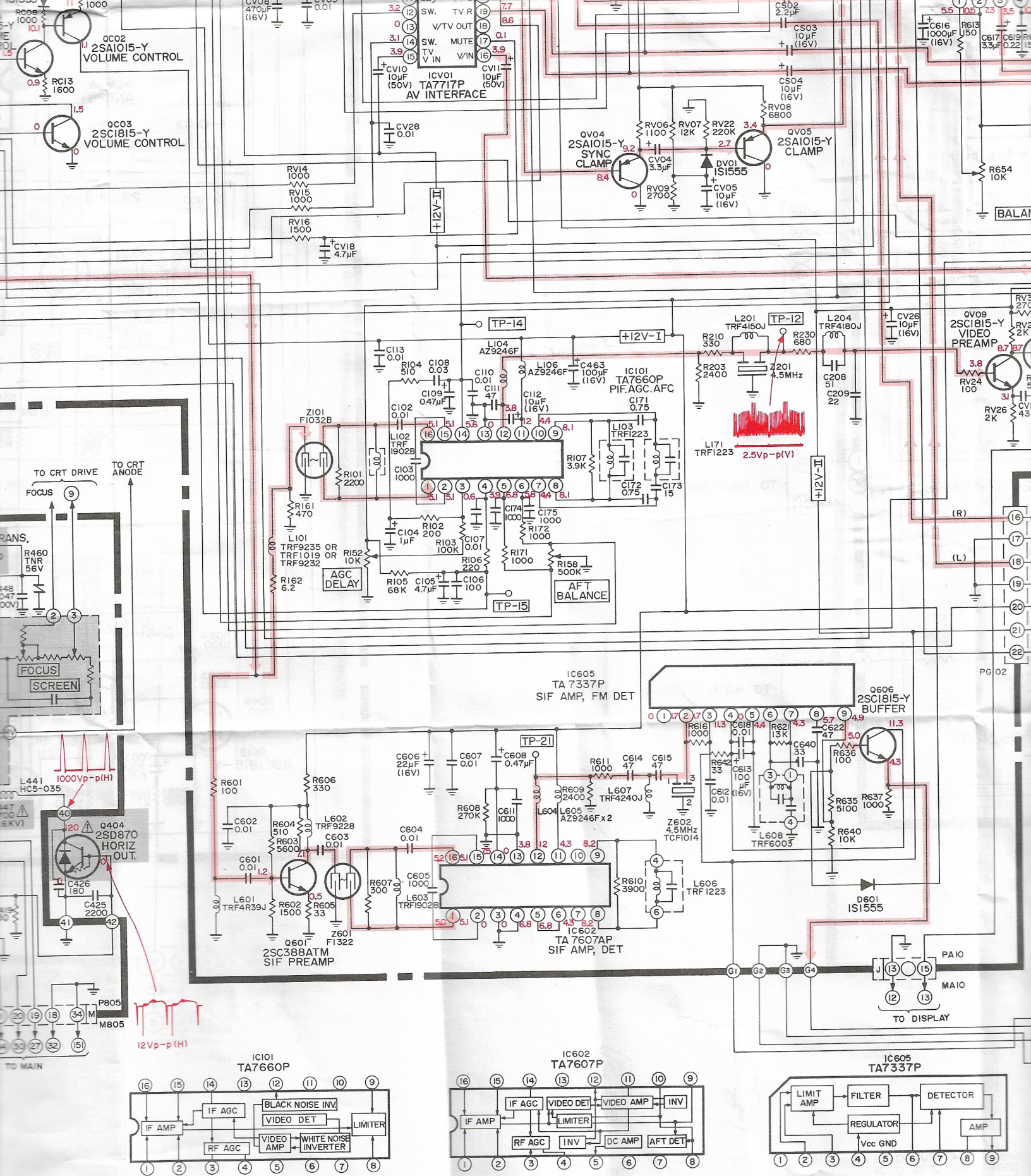
CA07 10μF

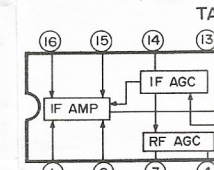
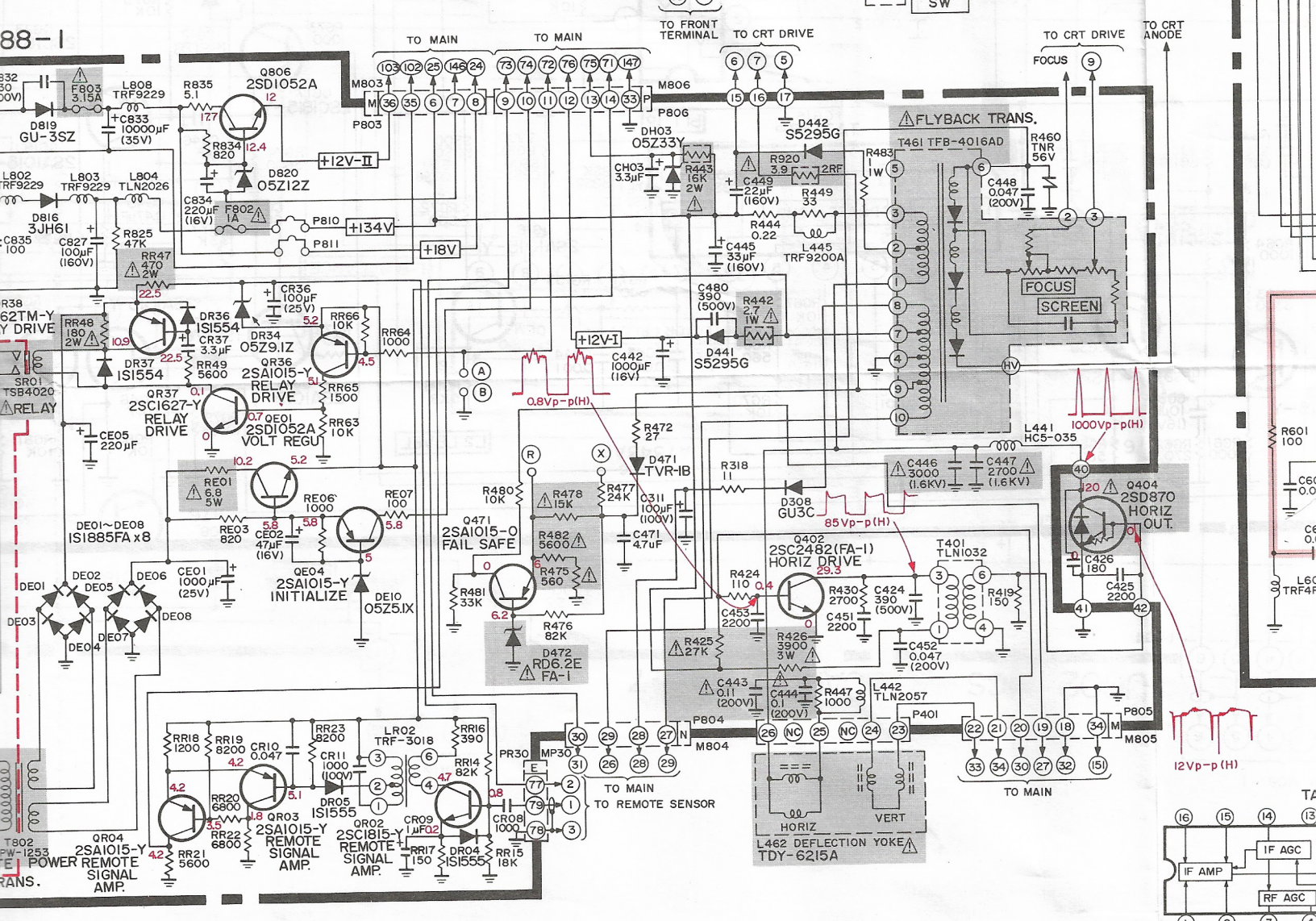
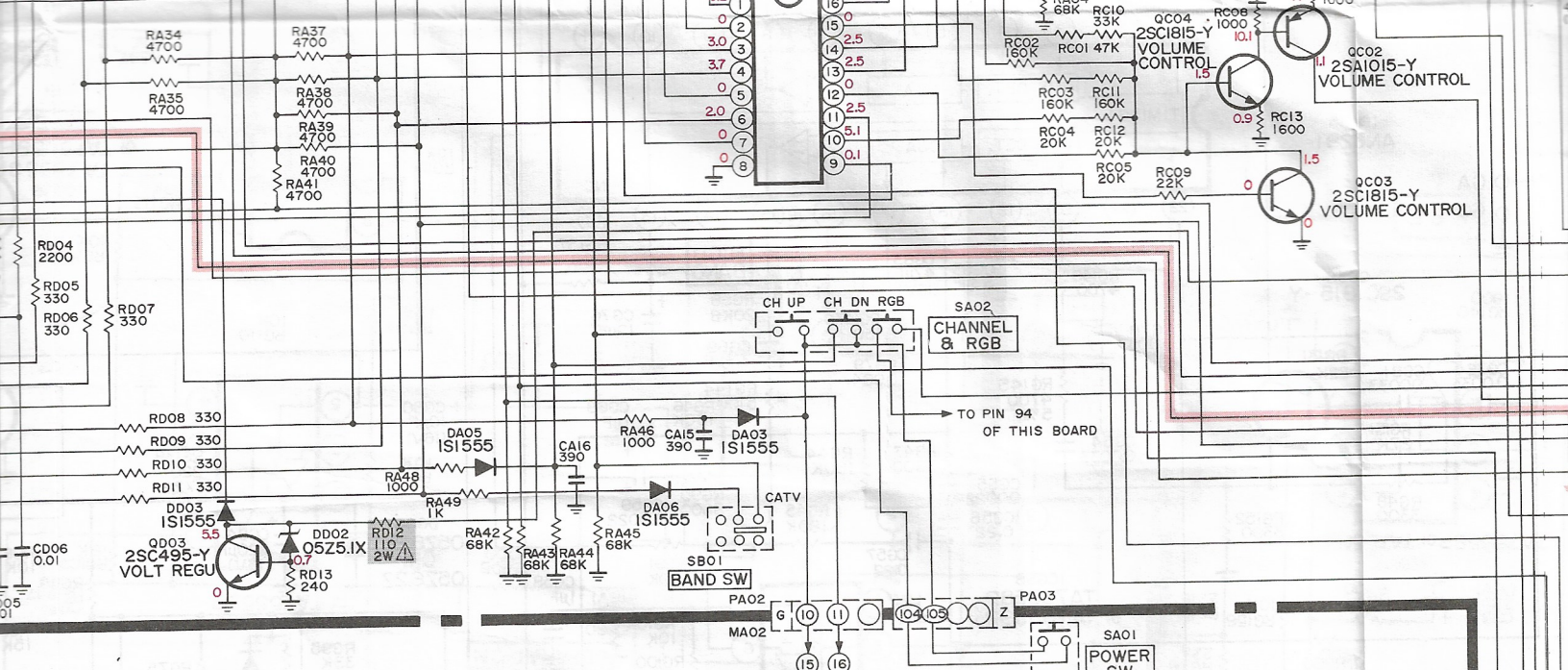
ICAO1
TMP47405702
SELECTOR



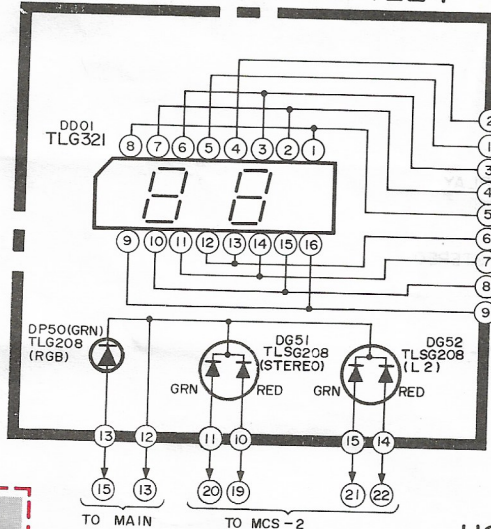
RA34 4700 RA37 4700 RA38 4700 RA39 4700



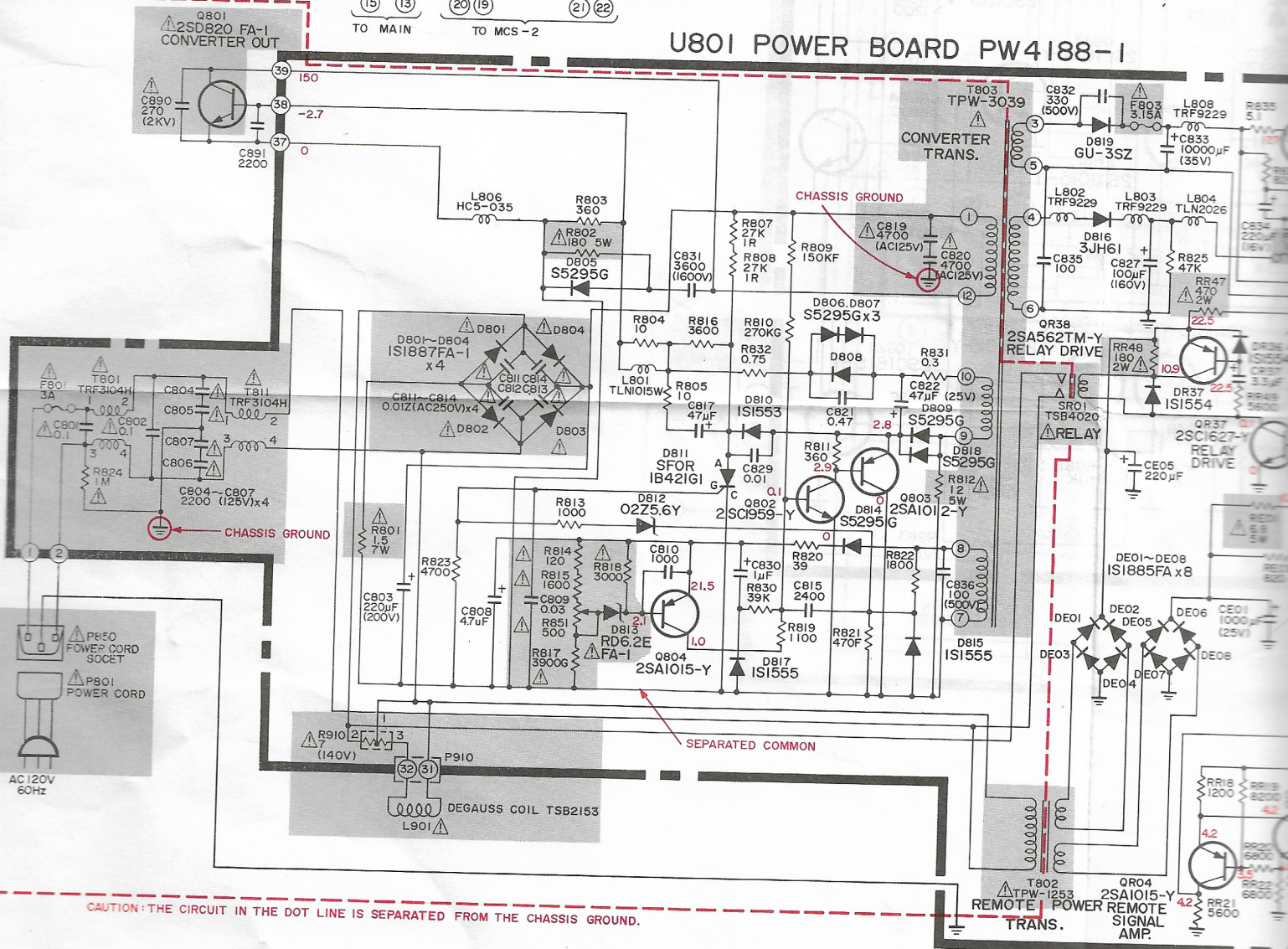




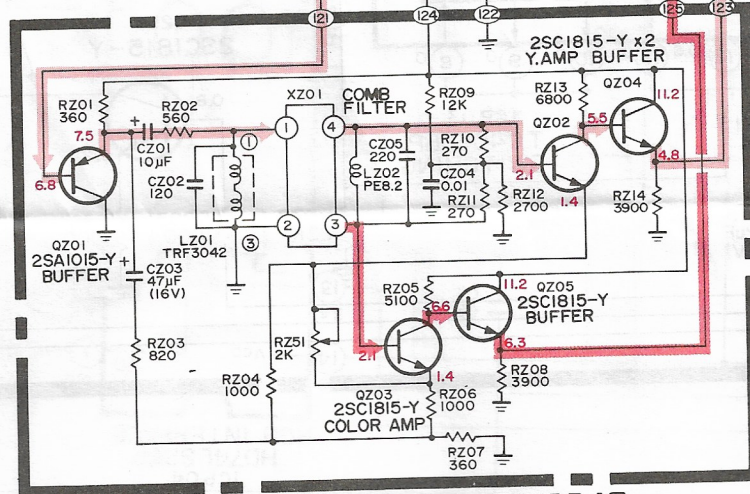
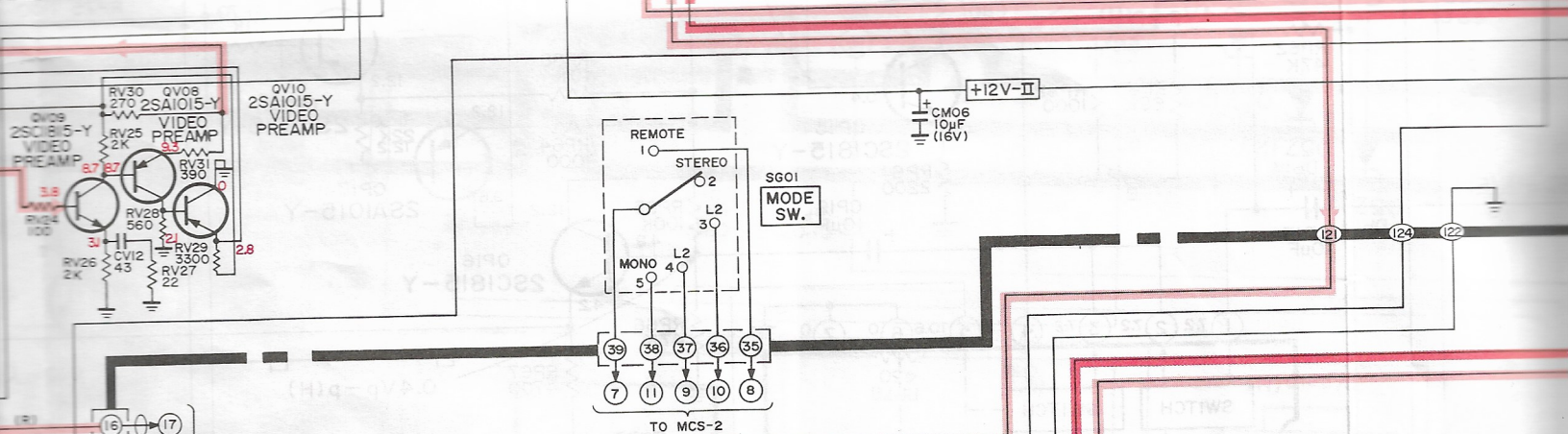
DISPLAY BOARD PW4224



U801 POWER BOARD PW4188-1

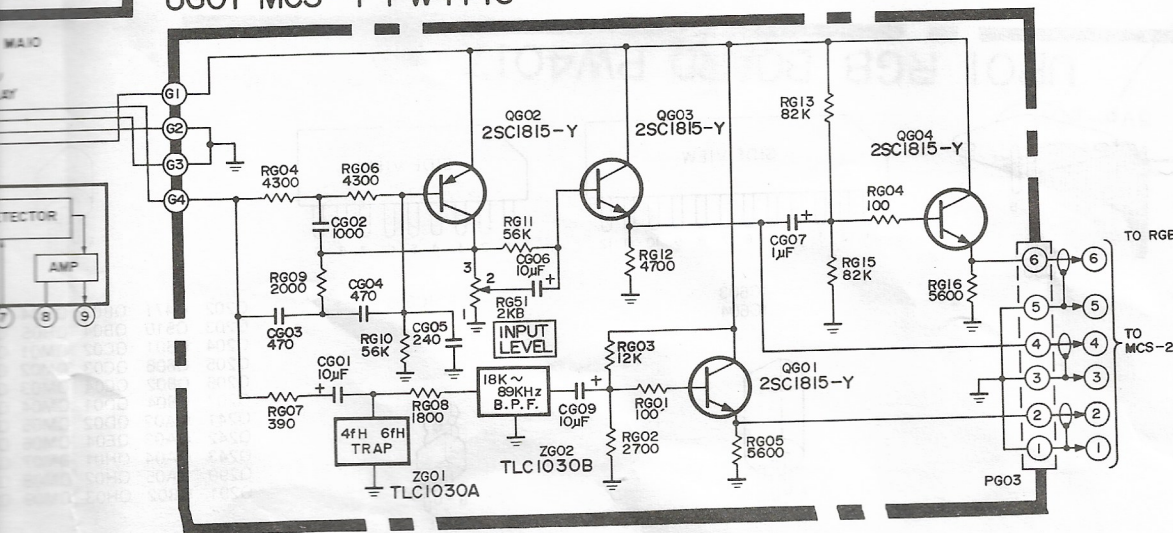


CAUTION: THE CIRCUIT IN THE DOT LINE IS SEPARATED FROM THE CHASSIS GROUND.

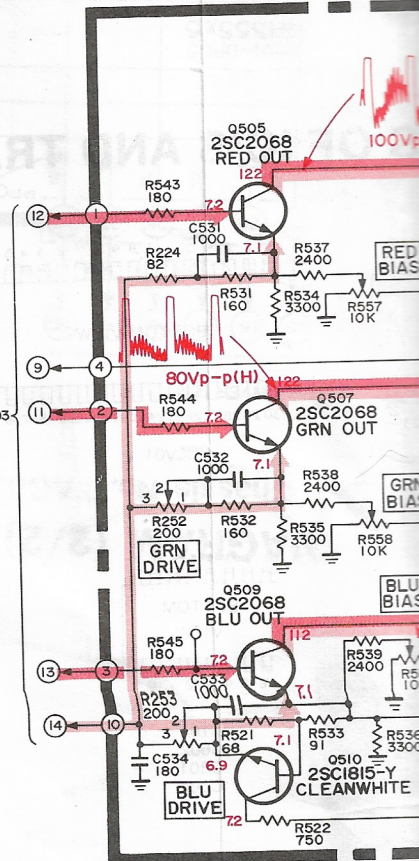


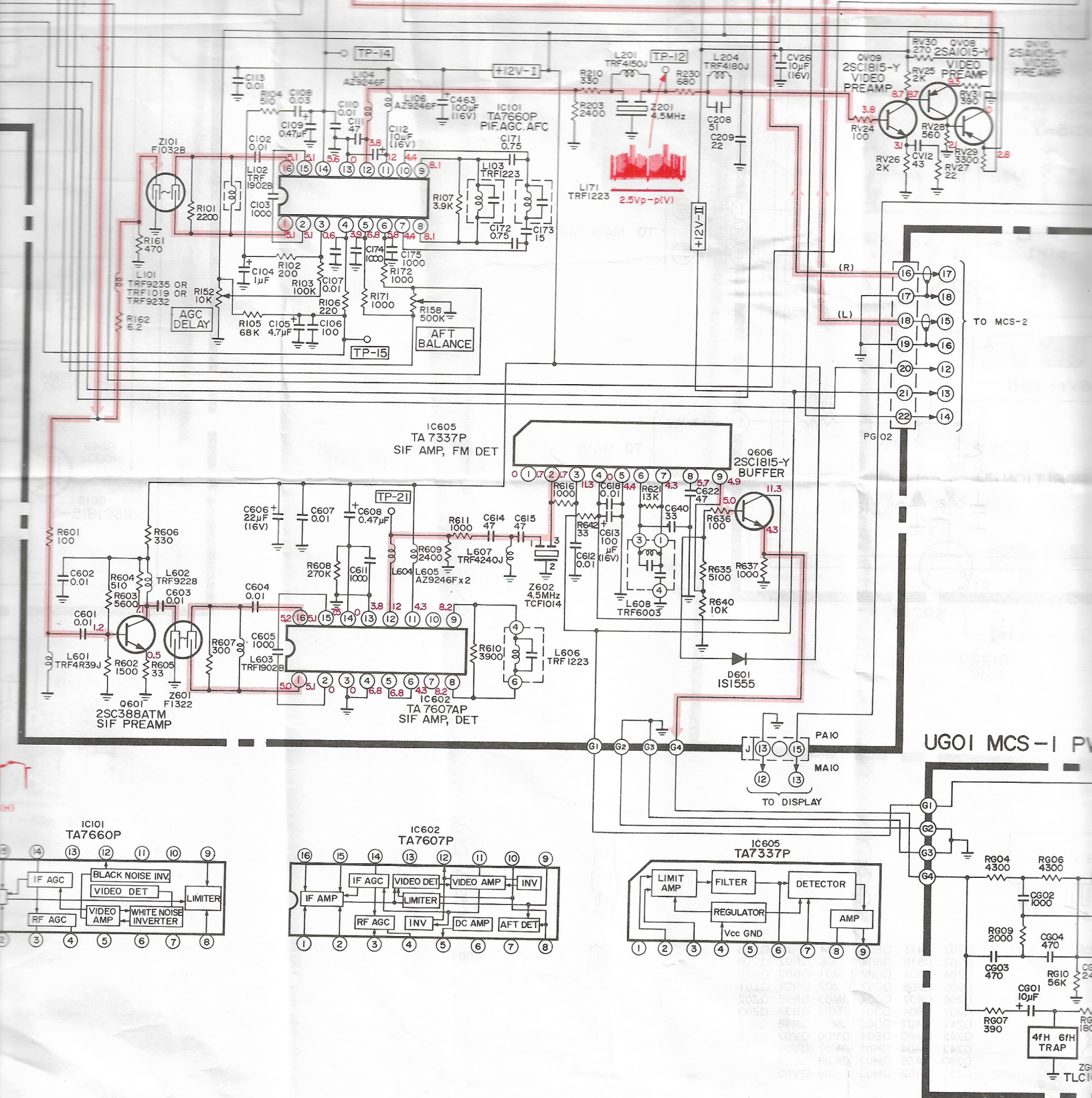
UZ01 COMB FILTER BOARD PW3543

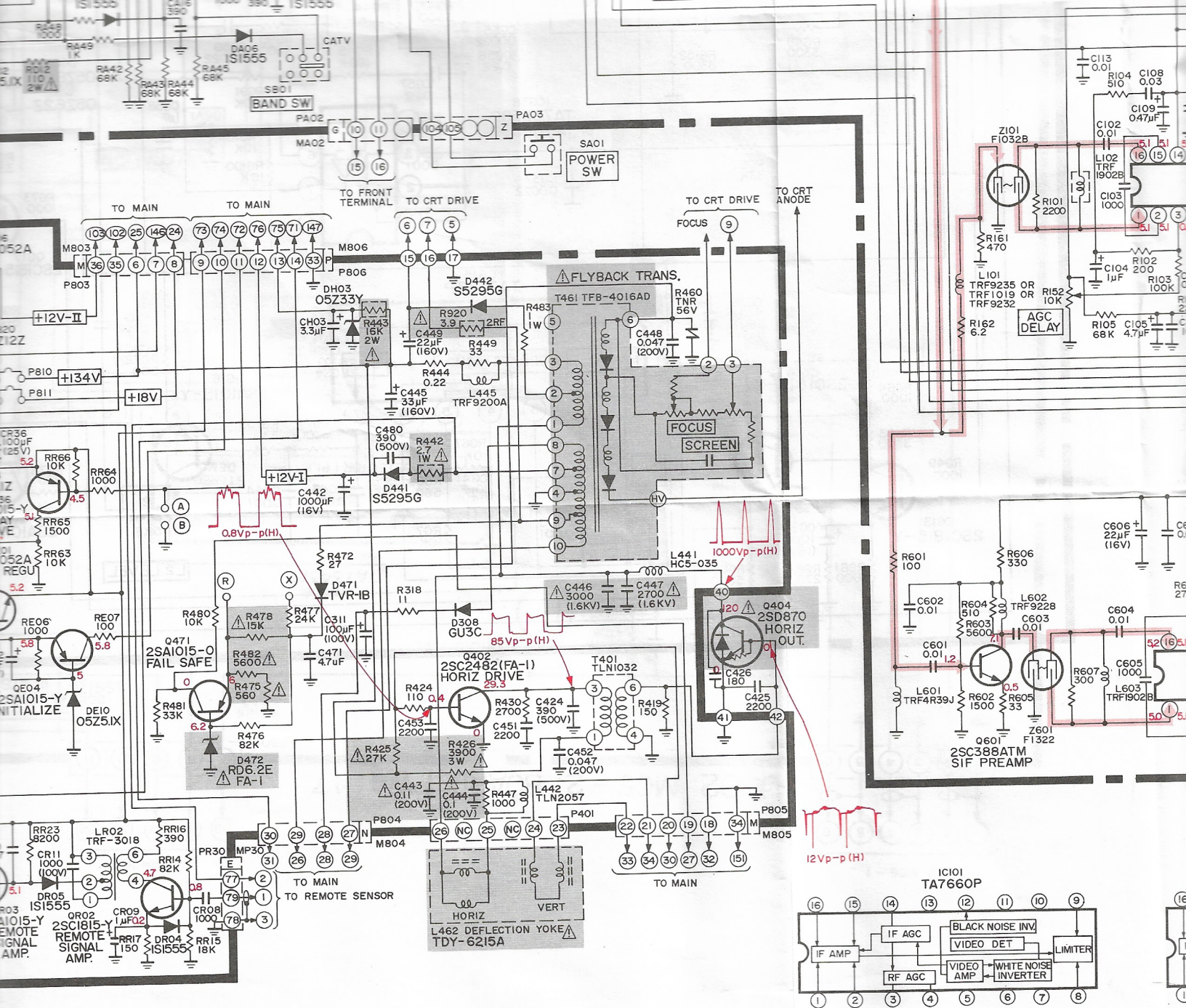
UG01 MCS-1 PW4146

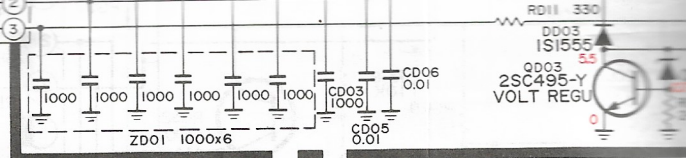
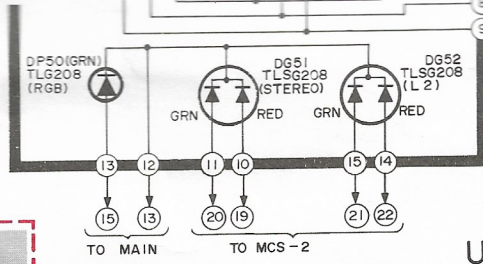


U501 CRT DRIVE BOARD

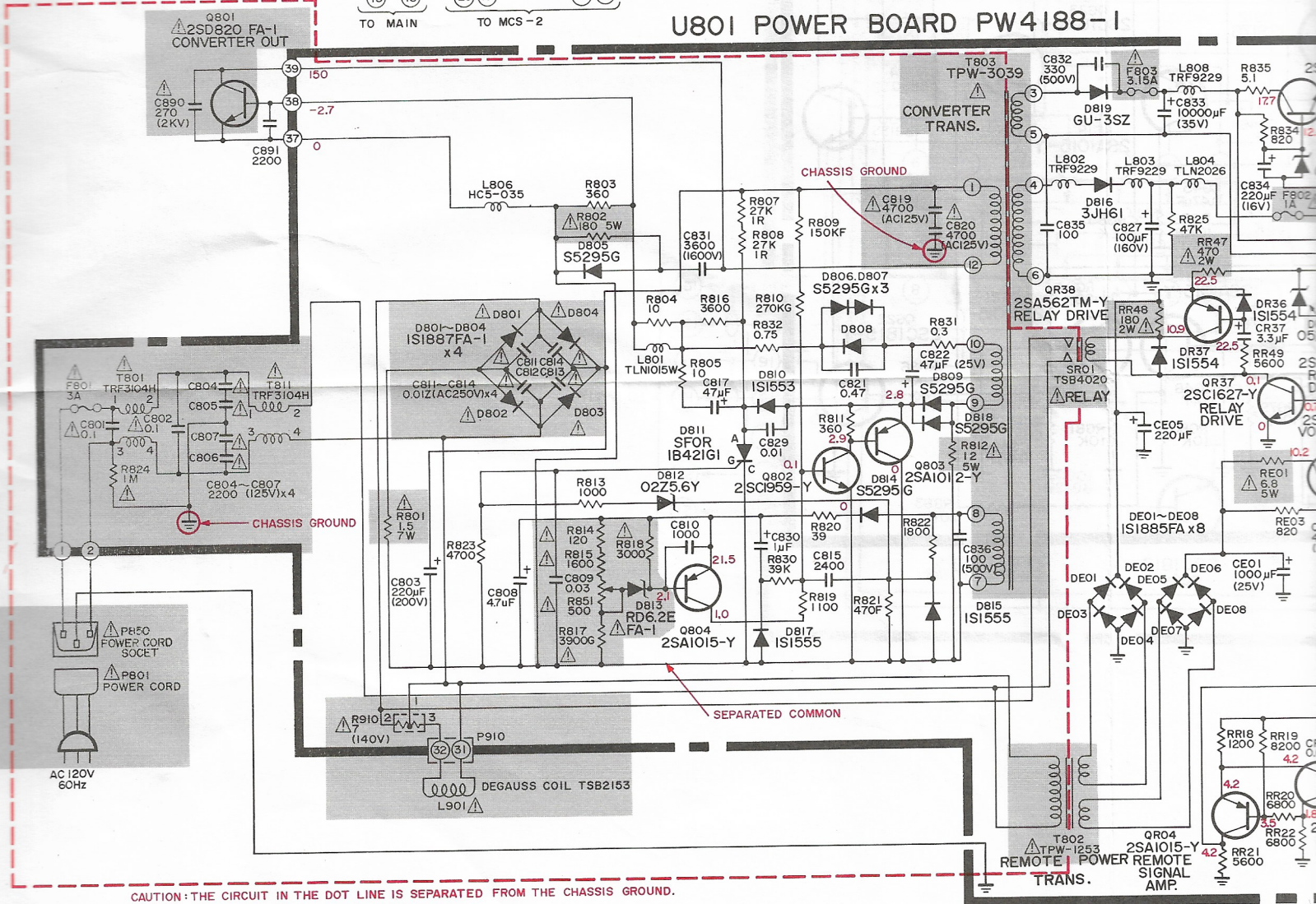








U801 POWER BOARD PW4188-1



CAUTION: THE CIRCUIT IN THE DOT LINE IS SEPARATED FROM THE CHASSIS GROUND.

