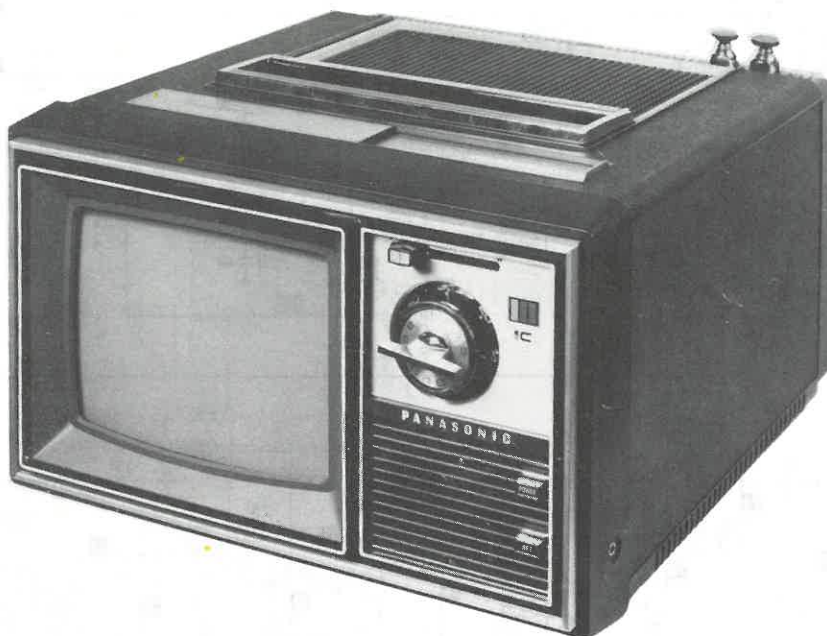


For Supplier Address See PHOTOFACT Index



SAFETY PRECAUTIONS

Make sure line voltage does not exceed rating of set.
Check high-voltage regulation and adjust to correct value.

Be sure shields and rear cover are in place and secure.

Beware of shock from high voltage or AC line.
Discharge high voltage to HV cage only.

Use extreme care when handling picture tube. Do not bump, scratch, or exert undue strain.

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REMEMBER TO ASK— "What else needs fixing?"

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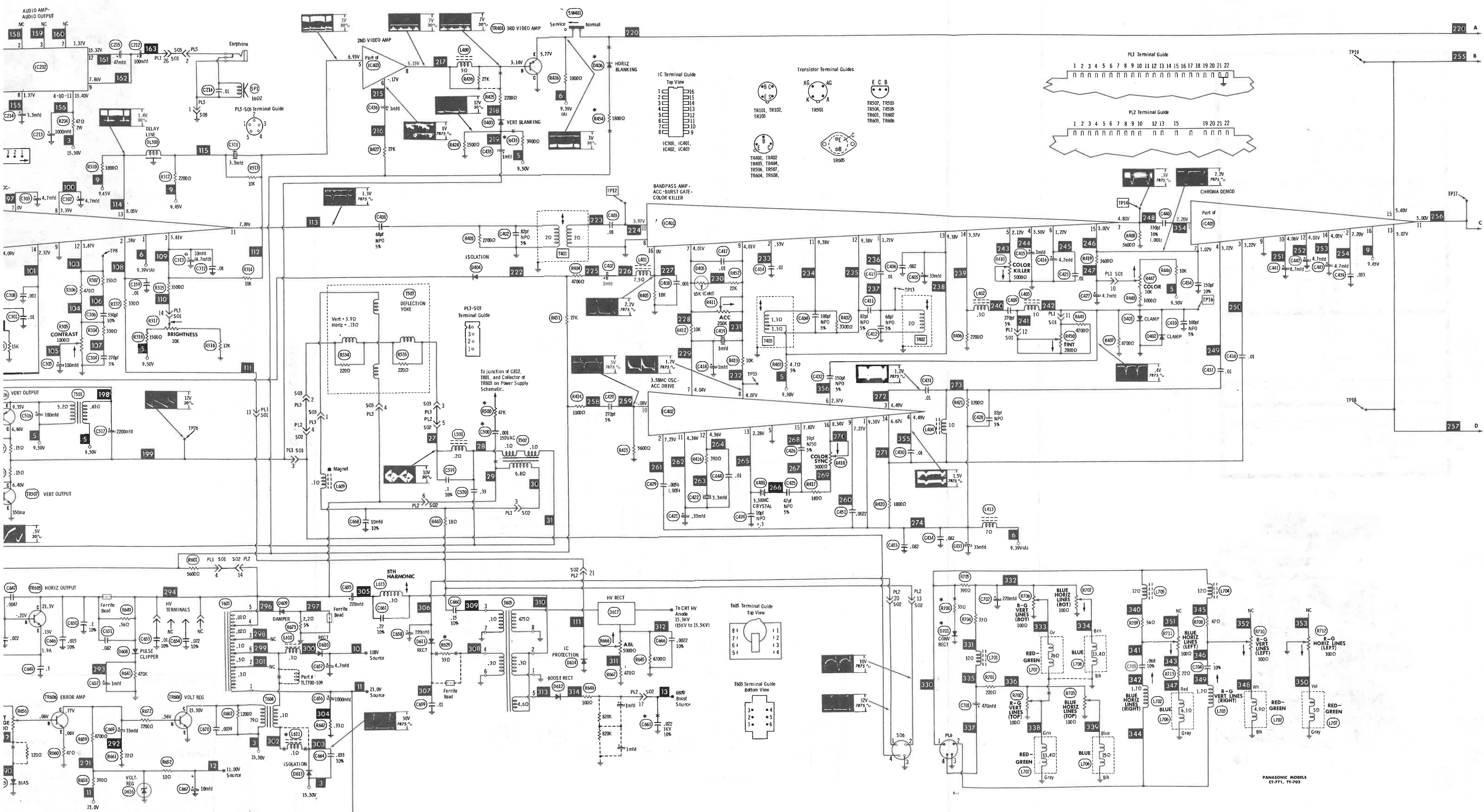
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. 2PD562

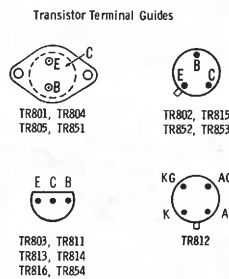
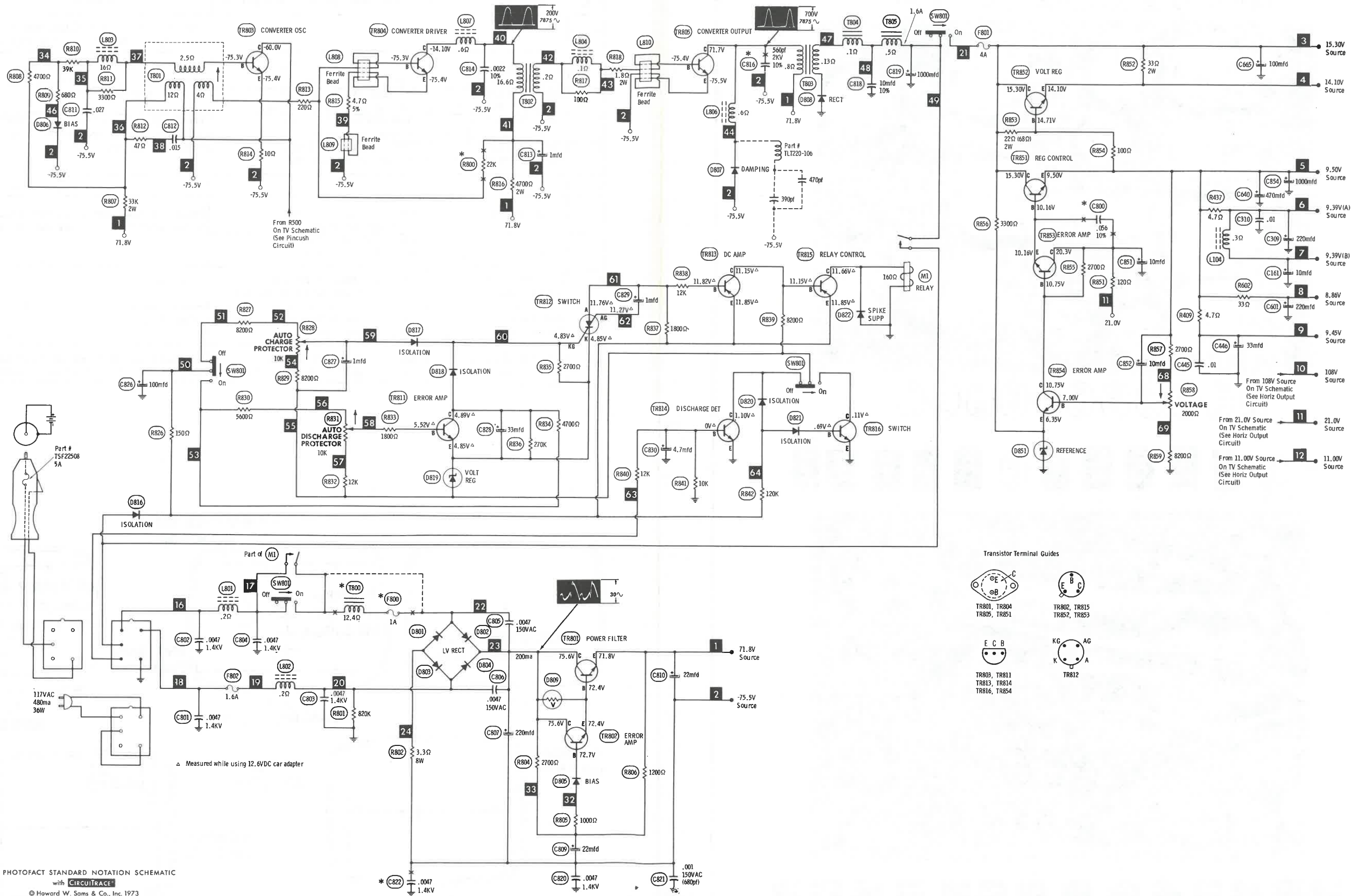
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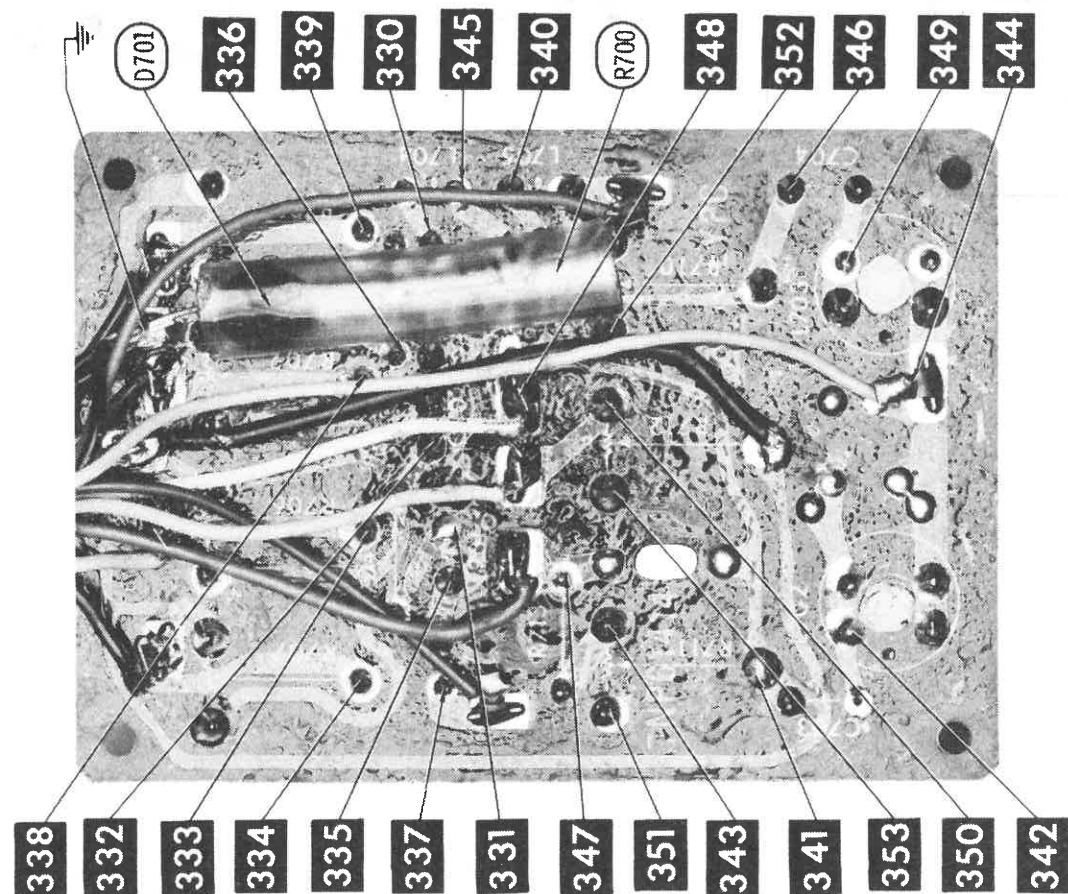
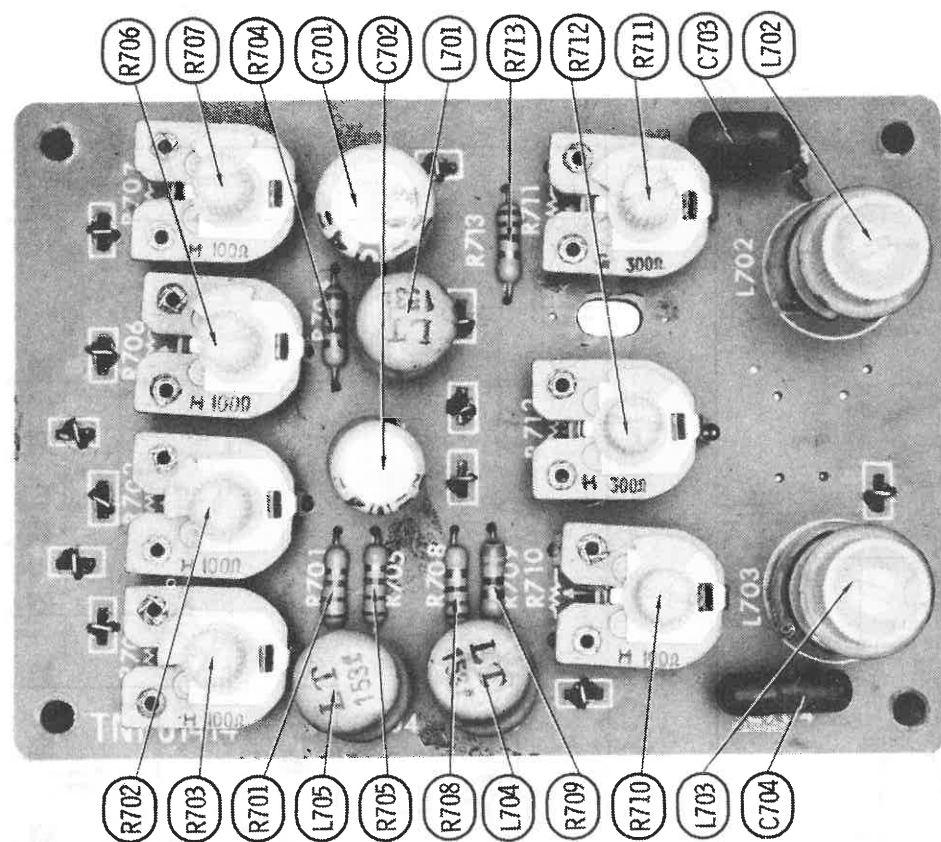
SET 1294 FOLDER 1





A PHOTOFAC STANDARD NOTATION SCHEMATIC
with CIRCUITRACE
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POWER SUPPLY-CONVERTER

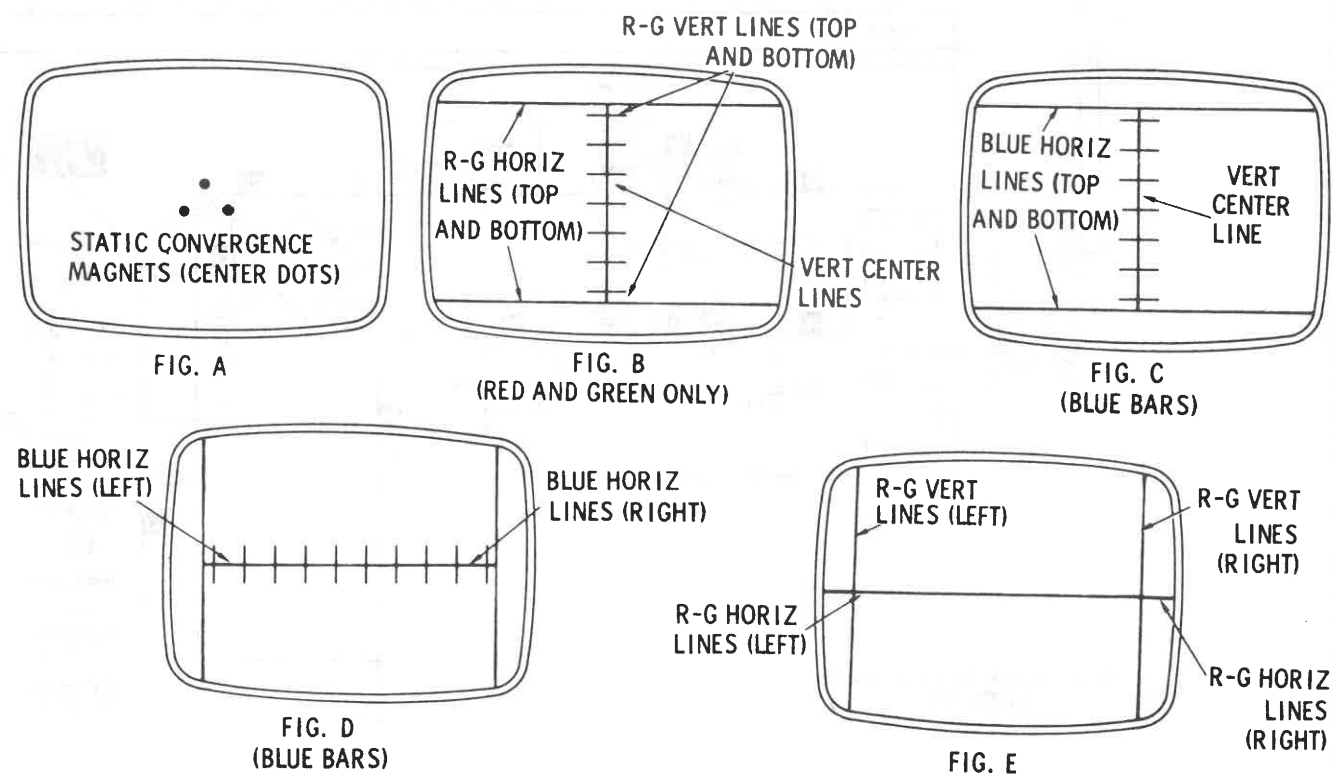


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CONVERGENCE BOARD

CONVERGENCE ADJUSTMENTS

Step	Control	Use to Converge (or Straighten)	Remarks
1.			Perform Center Dot Convergence using convergence magnets. See Fig. A.
2.	R-G Vertical Lines, Top R702	Red and Green Vertical bars at top of screen.	Touch up both controls for best convergence from top to bottom along vertical center line (Fig. B).
3.	R-G Vertical Lines, Bottom R706	Red and Green Vertical bars at bottom of screen.	
4.	Blue Horizontal Lines, Top R703	Blue Horizontal bars at top of screen.	Touch up both controls for best convergence of horizontal bars along vertical center line (Fig. C).
5.	Blue Horizontal Lines, Bottom R707	Blue Horizontal bars at bottom of screen.	
6.			Perform Center Dot Static Convergence(Fig.A) .
7.	Blue Horizontal Lines, Right L702	Blue Horizontal bars at right side of screen.	Touch up both controls for best convergence along horizontal center line (Fig. D).
8.	Blue Horizontal Lines, Left R711	Blue Horizontal bars at left side of screen.	
9.	R-G Vertical Lines, Right L703	Red and Green Vertical bars at right side of screen.	(Fig. E)
10.	R-G Vertical Lines, Left R710	Red and Green Vertical bars at left side of screen.	(Fig. E)
11.	R-G Horizontal Lines, Left R712	Red and Green Horizontal bars at left side of screen.	Use control to converge blue bar with red and green bars at left side of screen (Fig. E).



SERVICING IN THE FIELD

CRT - IMPLOSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

FUSE/FUSE DEVICE

A 4 amp fuse is used for low-voltage power supply protection. (See Photo Cabinet Rear View for location.)

1.6A and 1A fuses are used for AC line protection. (See Photo Cabinet Rear View for location.)

VHF TUNER

The fine tuning mechanically engages oscillator slug for adjustment (one slug for each channel.)

UHF TUNER

No provision is made to alter the continuous UHF tuning on this receiver.

HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the horiz. hold control (See Photo Cabinet Rear View for location.)

WIDTH

See Miscellaneous adjustments (Horiz. 5th harmonic)

FOCUS

The focus may be varied by means of a focus control (See Photo Cabinet Rear View for location.)

AGC

The AGC may be varied by means of a RF AGC control. (See Transistor Placement Chart for location.)

TROUBLESHOOTING CHECK CHART

The following chart lists component failures most likely to produce the indicated symptoms.

PICTURE or SOUND

No pic, no sound, no raster: Fuses, LV Rects, Converter Osc/Driver/Output, Rect

No pic, no sound, has raster: Video IFs, Tuner Mixer

No pic, no sound, has snow: Tuner RF/Mixer/Osc

No pic, has sound, no raster: CRT

No pic, has sound, has raster: Video Amps

Has pic, no sound: Sound IF Det/IF, Audio Det/Amp/Output

Overloaded picture: AGC, Video Det

SYNC

No vert sync: Vert Osc

No horiz sync: Horiz Sync Phase Inv/Det/Amp/Osc

No vert/horiz sync: Sync Amp/Separator

RASTER

Yellow (no blue): Blue Video Output, CRT

Cyan (no red): Red Video Output, CRT

Magenta (no green): Green Video Output, CRT

COLOR (B/W operating normally)

No color: Color Killer, Burst Gate, Bandpass Amp

Weak color: Bandpass Amp

No color sync: Burst Gate, 3.58MC Osc

No blue: Chroma Demod, Blue Video Out.

No red: Chroma Demod, Red Video Out.

No green: Chroma Demod, Green Video Out

Incorrect hue (tint) Burst Gate, 3.58MC Osc, Chroma Demod

SWEEP

No raster, has sound: Horiz Osc/Driver/Output, Error Amp, Volt Reg. Damper, HV Rect, CRT

No vert deflection: Vert Osc/Amps/Outputs

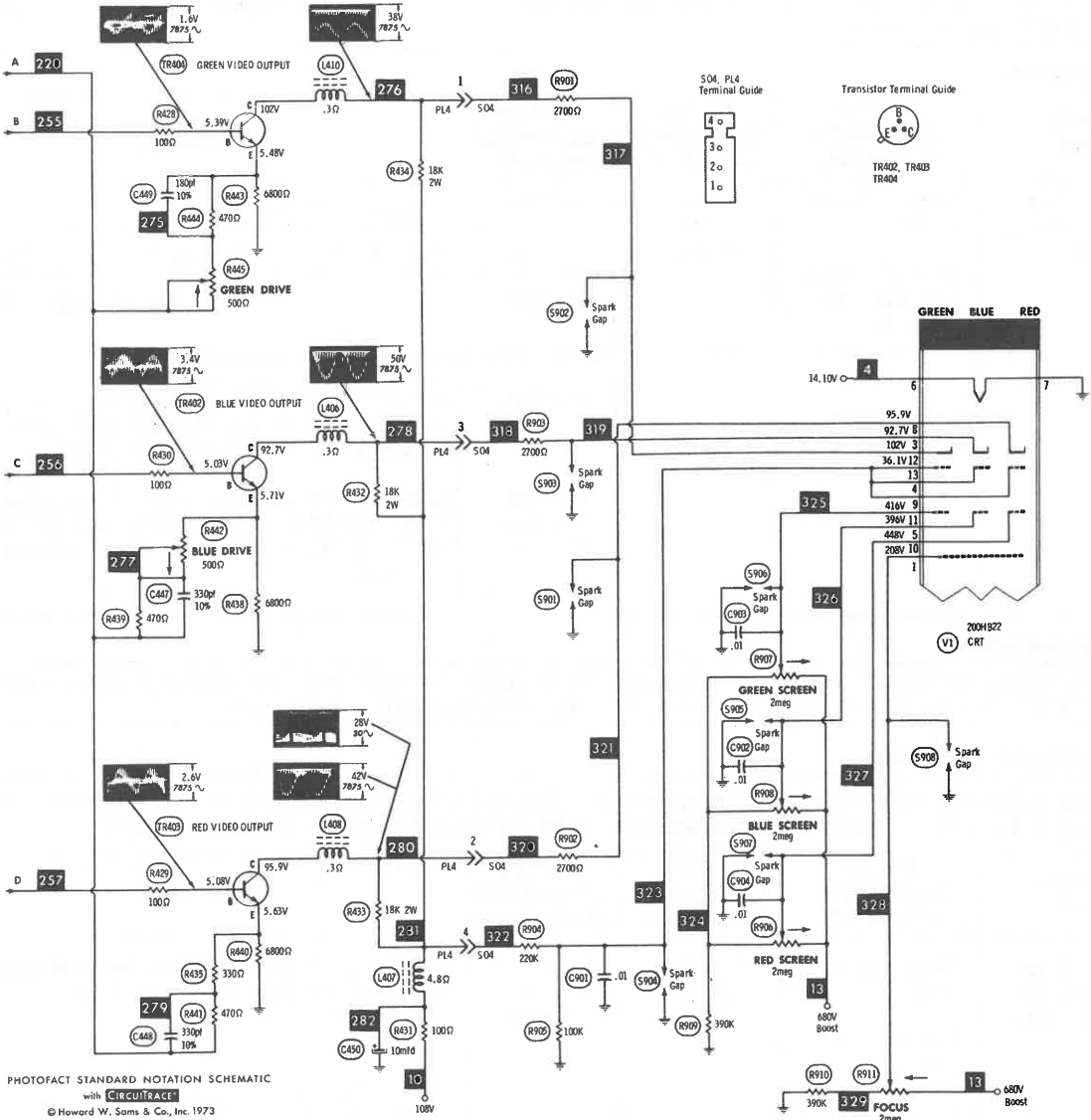
Poor vert lin or foldover: Vert Osc/Amps/Output

Poor horiz lin or foldover: Horiz Output, Damper

Narrow picture: LV Rects, Conv Circuit, Horiz Osc/Driver/Output, Damper

Vert off frequency: Vert Osc.

Horiz off frequency: Horiz Sync Phase Inv/Det/Amp/Osc



PANASONIC MODELS
CT-771, TY-702

FOLDER 1

TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain line voltage at 117VAC.
Allow a 20-minute warm-up period for receiver and test equipment.
Suggested Alignment Tools: GC ELECTRONICS
T101 thru T113, L7, T201, T202, T401, T402, T403#9296, 9300, 9302

PRELIMINARY INSTRUCTIONS

Set the channel selector to the highest unused channel. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication.
Note: Response may vary slightly from that shown.
Connect a +5 volt bias supply to TP6 low side to ground. Connect a Jumper from AGC Terminal T on VHF Tuner to Ground.

VIDEO IF ALIGNMENT

CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input to TP7, low side to ground.	Thru .001mfd to TP2 on VHF tuner, low side to ground.	44MC (10MC Sweep)	39.75MC	Adjust T105 for MINIMUM.
			41.25MC	Adjust T103, T108, and R115 for MINIMUM.
			47.25MC	Adjust T102 and R102 for MINIMUM. Fig. 1
"	"	"	39.75MC	Adjust T101, C104, T104, T106, T107, T109 and L7 (VHF Tuner) for maximum gain and symmetry of response at 44.00MC. C104 and L7 effects overall response. T106 and T107 effects tilt and 45.75MC. T101, T104, and T109 effects gain at 44.25MC. Fig. 2
			42.17MC	
			44.25MC	
			45.75MC	

4.5MC TRAP ALIGNMENT

Tune in a strong TV signal and set the contrast at maximum. Adjust the fine tuning until a beat pattern is visible on the screen. Adjust T110 for MINIMUM beat interference.

CHROMA BANDPASS ALIGNMENT

Connect as explained in preliminary instructions. Set color control to maximum, tint control to mid-range, and color killer fully counterclockwise. Push Service Switch to Service position.

CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input thru detector probe to TP14, low side to ground.	Thru .1mfd to TP12, low side to ground.	3.58MC (3-5MC Sweep)	3.08MC 3.58MC 4.08MC	Adjust T402 and T403 for maximum gain and symmetry of response. Fig. 3
"	Thru .001mfd to TP2 on VHF tuner, low side to ground.	44MC (10MC Sweep)	3.08MC 3.58MC 4.08MC (4.5MC Trap)	Adjust T401 for response as shown in Fig. 4 If necessary retouch T402 and T403. Inability to obtain proper bandpass alignment may be due to misadjustment of the 4.5MC trap. Adjust T110 for MINIMUM at 4.5MC.

After completing Chroma Bandpass Alignment, reset color killer. (Refer to Miscellaneous Adjustments.)

SOUND IF ALIGNMENT

Tune in a station and adjust T201 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce the signal while aligning for undistorted output by adjusting T202.

TV ALIGNMENT INSTRUCTIONS (Continued)

AFT ALIGNMENT

Connect as in preliminary instructions. Push AFT to On position.

CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input to AFT Terminal on VHF Tuner. Low side to ground.	Thru .001mfd to TP5, on VHF tuner, low side to ground.	44MC (10MC Sweep)	45.75MC	Adjust T111, R129 and T113 for maximum amplitude of response as shown in Fig. 5.
"	"	"	"	Adjust T112 to place marker as shown in Fig. 5.

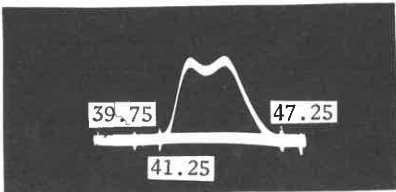


FIG. 1

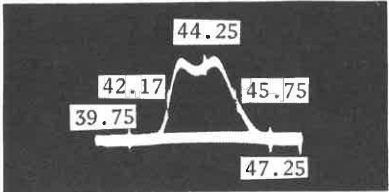


FIG. 2

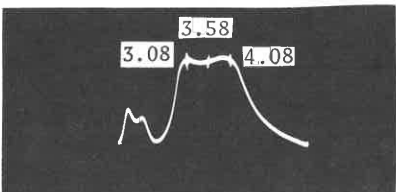


FIG. 3

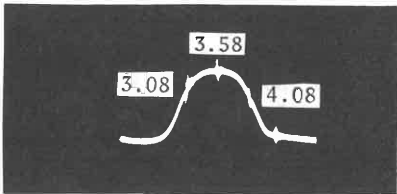


FIG. 4

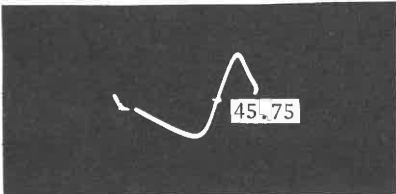


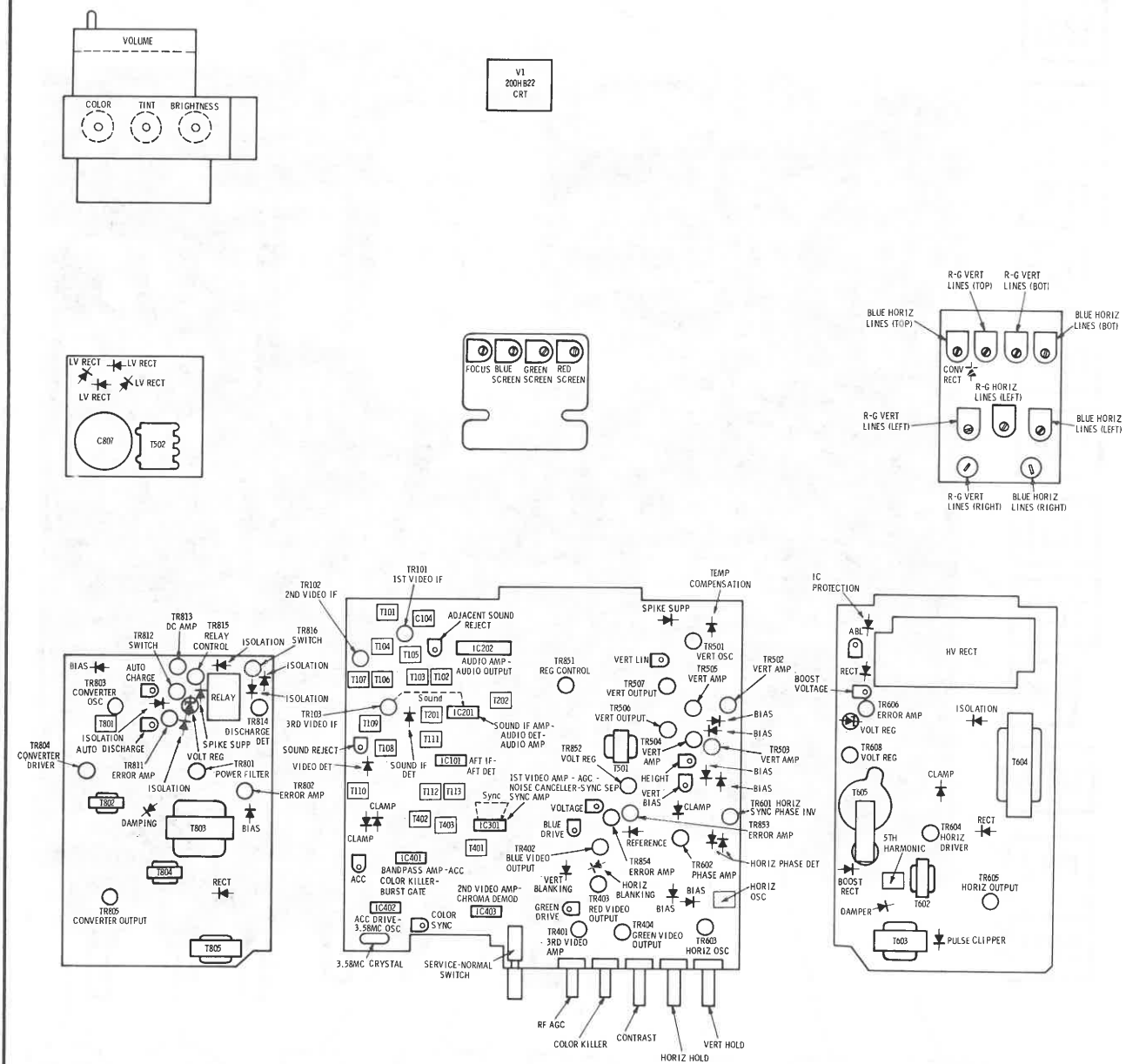
FIG. 5

RESISTANCE MEASUREMENTS

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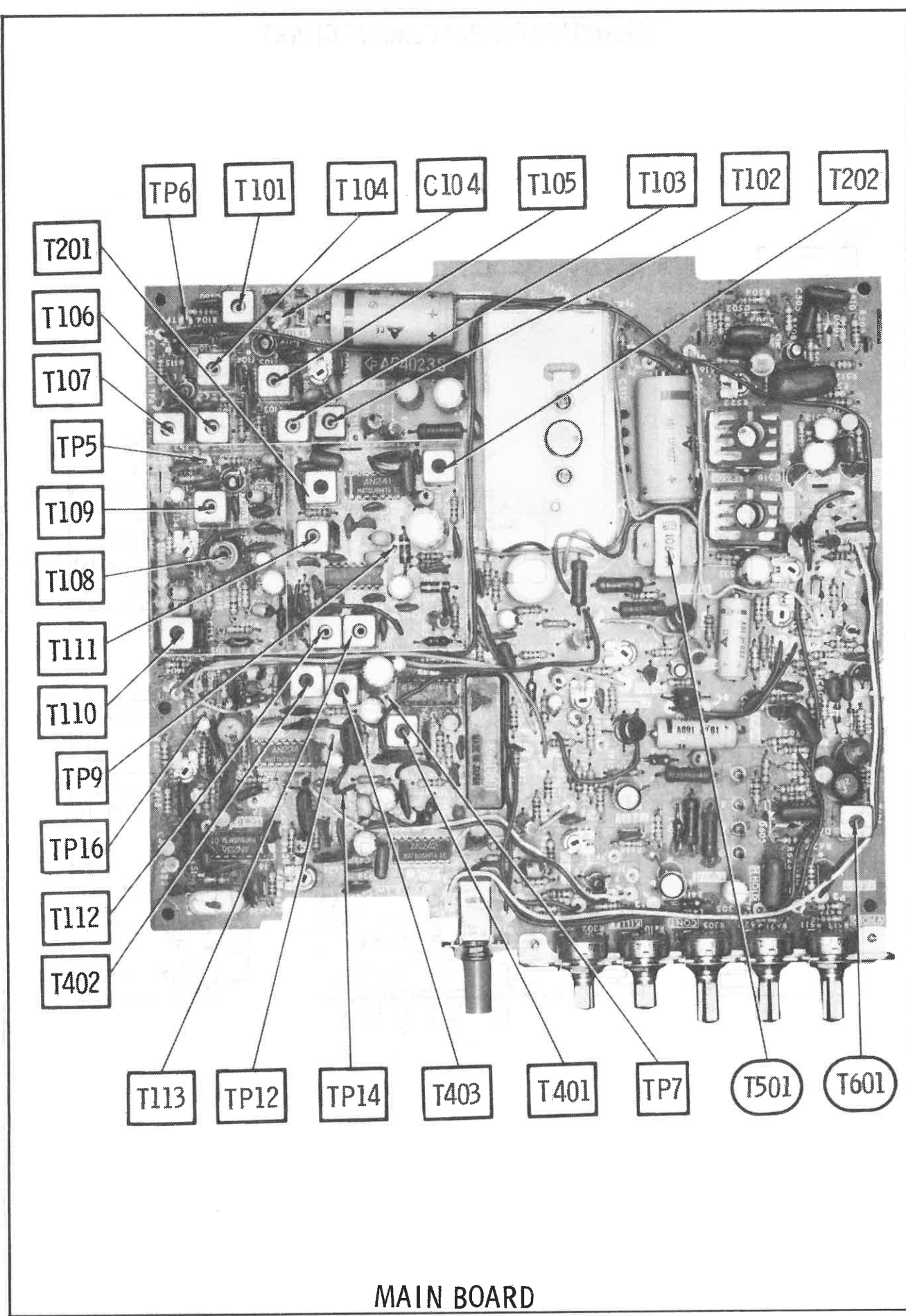
THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
● READING DEPENDS UPON POLARITY OF METER CONNECTIONS.

TRANSISTOR PLACEMENT CHART



PANASONIC MODELS
CT-771, TY-702

FOLDER 1



MAIN BOARD

MISCELLANEOUS ADJUSTMENTS

Suggested Alignment Tools:

T601, T801GC ELECTRONICS #9293
L613GC ELECTRONICS #9296, 9300, 9302

HORIZONTAL OSCILLATOR ADJUSTMENT

Tune in a TV station and set all controls for normal operation. Set the Horizontal Hold Control (R621) to the center of its range. Adjust Horizontal Oscillator Transformer (T601) to a point where it is virtually impossible to lose Horizontal Sync while switching from Channel to Channel.

HORIZONTAL 5TH HARMONIC ADJUSTMENT

Tune in a TV station and adjust all controls for normal operation. Turn Brightness to a point where picture just appears on the screen. Adjust L613 for maximum width.

WIDTH

If Horizontal Width is insufficient, remove the lead from Terminal 4 of T603 and solder to Terminal 5.

If too much width is obtained, remove the lead from Terminal 4 and solder to Terminal 3. Adjust L613 as explained above and check high voltage.

CONVERTER FREQUENCY ADJUSTMENT

Connect vertical input of an Oscilloscope to the Collector of TR805 and External Sync Input of Oscilloscope to the Collector of TR605. Adjust T801 until waveform syncs on the Oscilloscope, as shown in Figure 6. This waveform is taken at Horizontal rate and is 700VPP.

PURITY ADJUSTMENTS

Allow set to warm up approximately one hour. Perform Step 1 of "Convergence Adjustments". If the picture tube appears to be magnetized, use a degaussing coil to demagnetize tube and mounting brackets.

Turn the blue and green screen controls fully counterclockwise (red raster). Loosen the deflection yoke and move it forward as far as possible. Adjust the tabs on the purity magnet and rotate the assembly until a red spot appears at the center of the picture tube. Slide deflection yoke rearward to obtain a uniform red over entire picture-tube face. A low-power microscope is useful to observe the beam landings. Tighten deflection yoke clamp screw.

GRAY SCALE ADJUSTMENTS

Tune in a black and white picture or a color picture with the Color control set to MINIMUM. Turn the red, blue and green screen controls and the red and blue drive controls fully counterclockwise. Move the Normal-Service switch to Service position. Advance the screen controls, one at a time, until each produces a barely visible line on the screen. Sometimes this setting can be improved by just extinguishing the line. Adjust the blue and green drive controls to eliminate coloring in the dark and bright areas of the picture.

3.58 OSCILLATOR AND ACC ADJUSTMENT

Connect a Color Bar Generator to VHF Antenna Terminals. Adjust Receiver for normal Color Reception. Connect a .1mfd Capacitor from TP-16 to ground. Adjust R418 until color bars stop or float slowly across screen.

Disconnect .1mfd. Capacitor from TP-16. Connect Vertical Input of Oscilloscope to TP-16. Adjust ACC Control R411 to obtain .5VPP Burst Signal. Waveform is shown on schematic.

AGC ADJUSTMENT

Tune in a strong TV station. Adjust RF AGC Control (R302) for maximum contrast and MINIMUM snow.

HIGH VOLTAGE ADJUSTMENT

Tune in a TV station and set all controls for normal operation. Turn Brightness Control to MINIMUM. Connect High Voltage probe to Picture Tube Anode. High voltage should be 16KV. If High Voltage is too high, disconnect C654 and connect C653.

If Voltage is less than 15KV, connect both C653 and C654. Terminals are provided on PC Board to connect and disconnect C653 and C654.

B+ AND AUTOMATIC BRIGHTNESS LIMITER (ABL)

Tune in a TV station and set all controls for normal operation. Turn Brightness Control to center range. Connect DC probe of VTVM to Emitter of TR-851. Adjust R858 for +9.5 Volts. Connect DC probe of VTVM to TP-27 and adjust R656 for +21 Volts.

Automatic Brightness Limiter Control (R666) is Factory Preset and normally needs no adjustment.

If adjustment is necessary, connect Meter in series with Red Cathode on Picture Tube. Set Contrast and Brightness to maximum and adjust ABL Control (R666) for 400 Microamps.

COLOR KILLER ADJUSTMENT

Tune in a weak signal or reduce the signal at the antenna terminals to obtain a snowy picture. Set Color Control and Tint Control to Mid-Range. Adjust Killer Control (R410) to the point where Color just disappears. Check by tuning in a TV station which has a color signal to see if Killer is killing the Color Signal. If Color is lost, slightly reduce Killer Level.

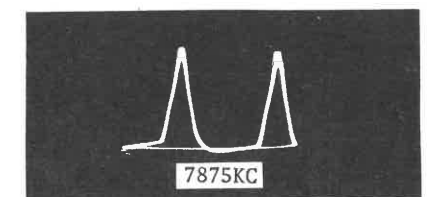
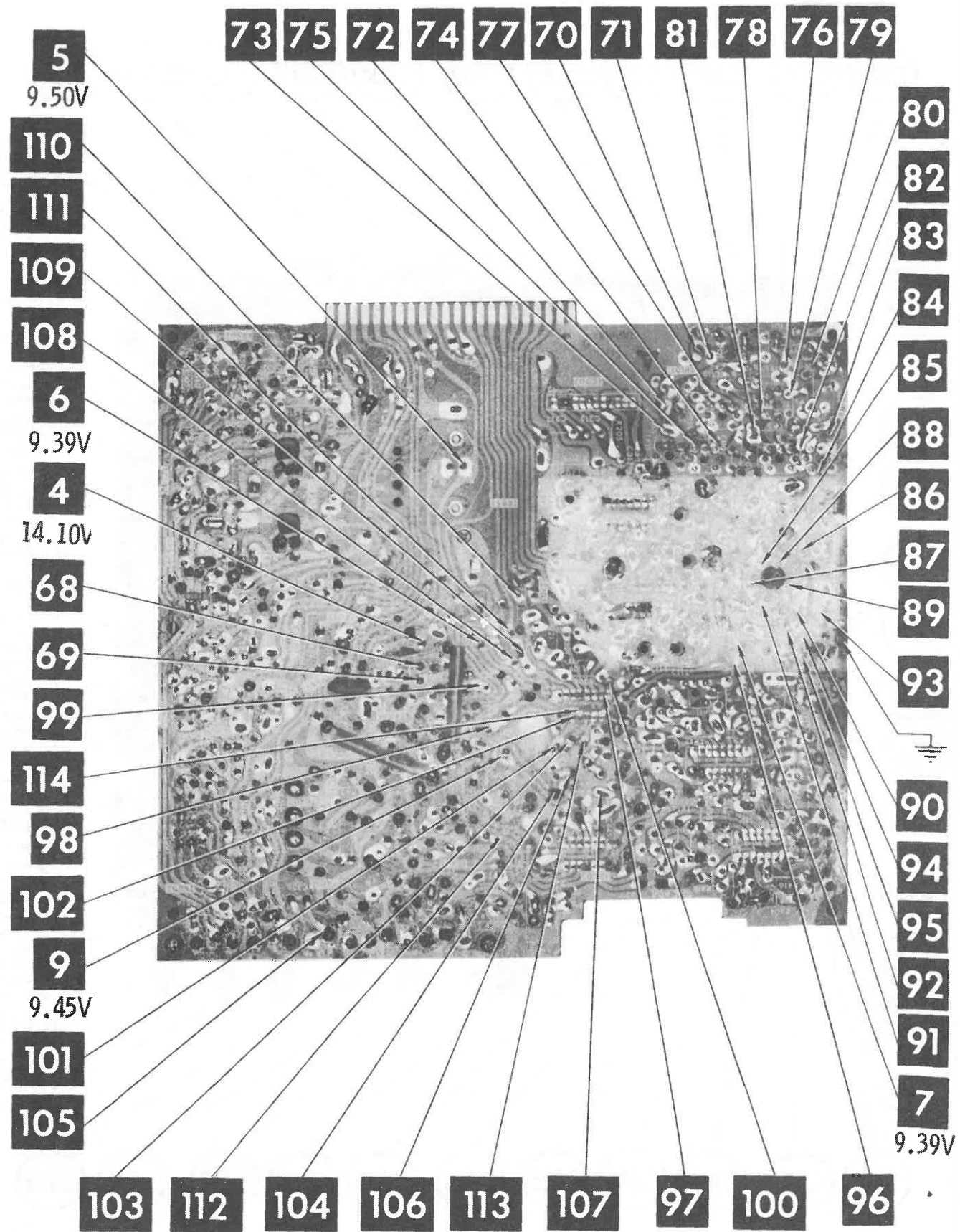
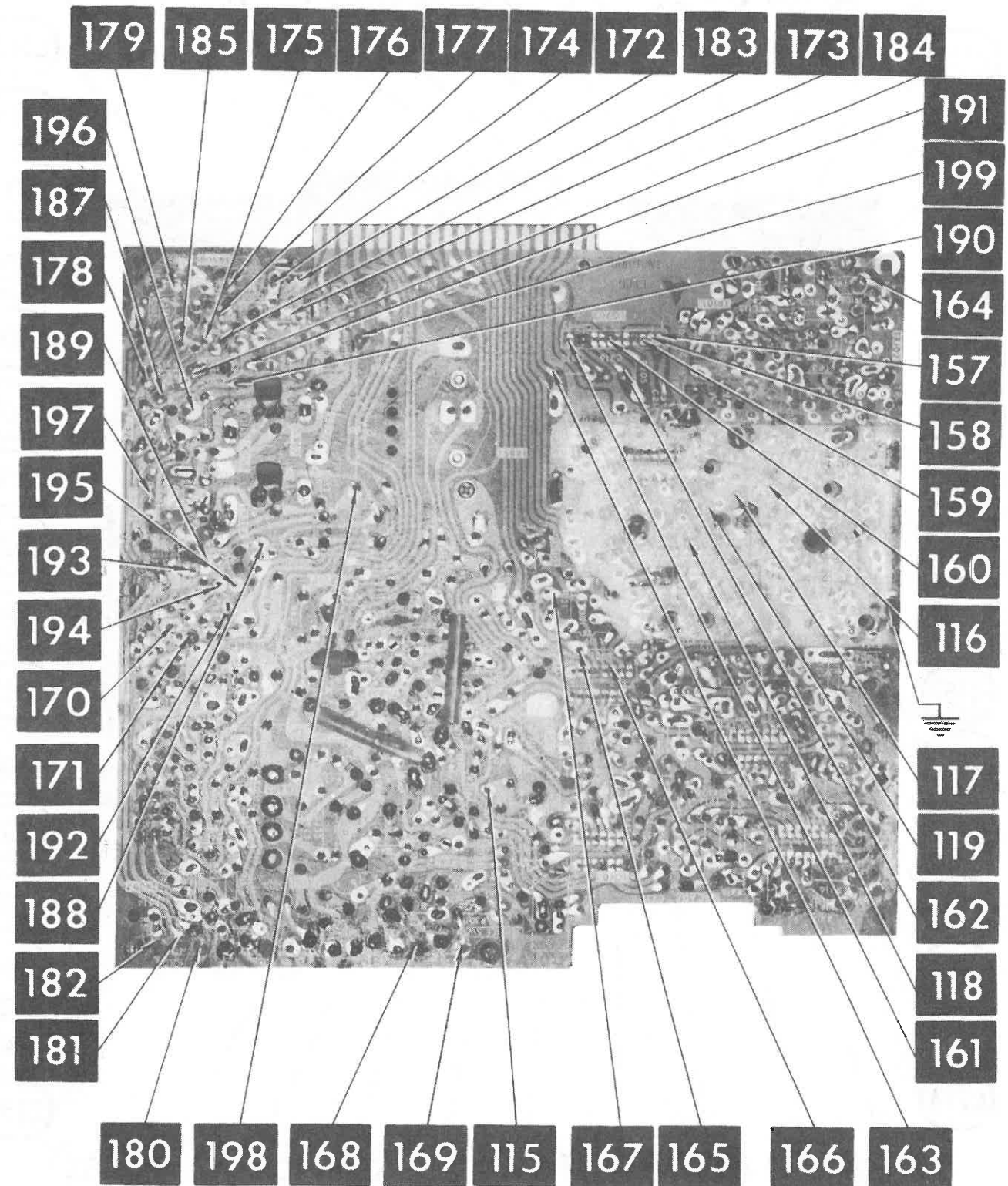


FIG. 6

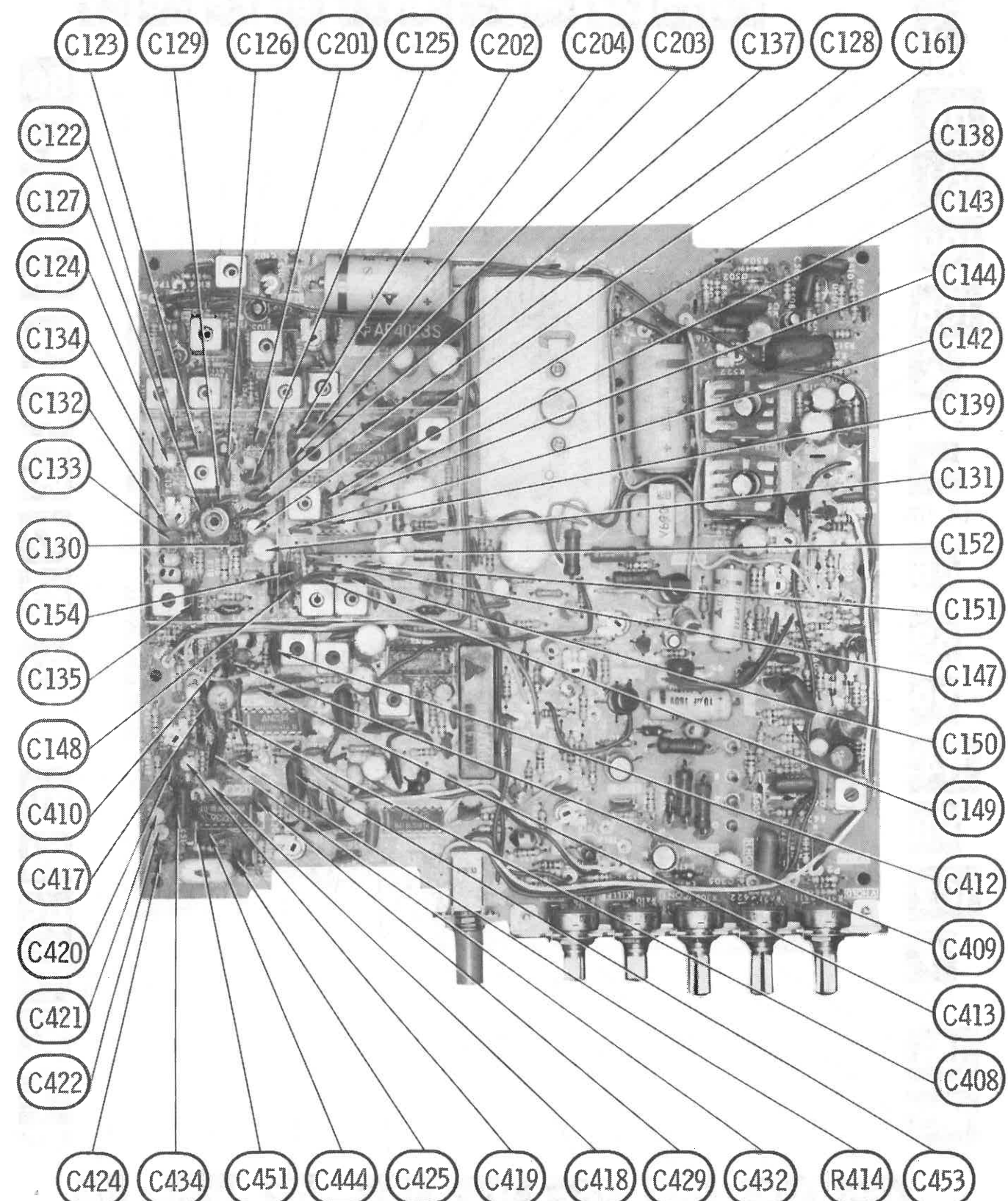
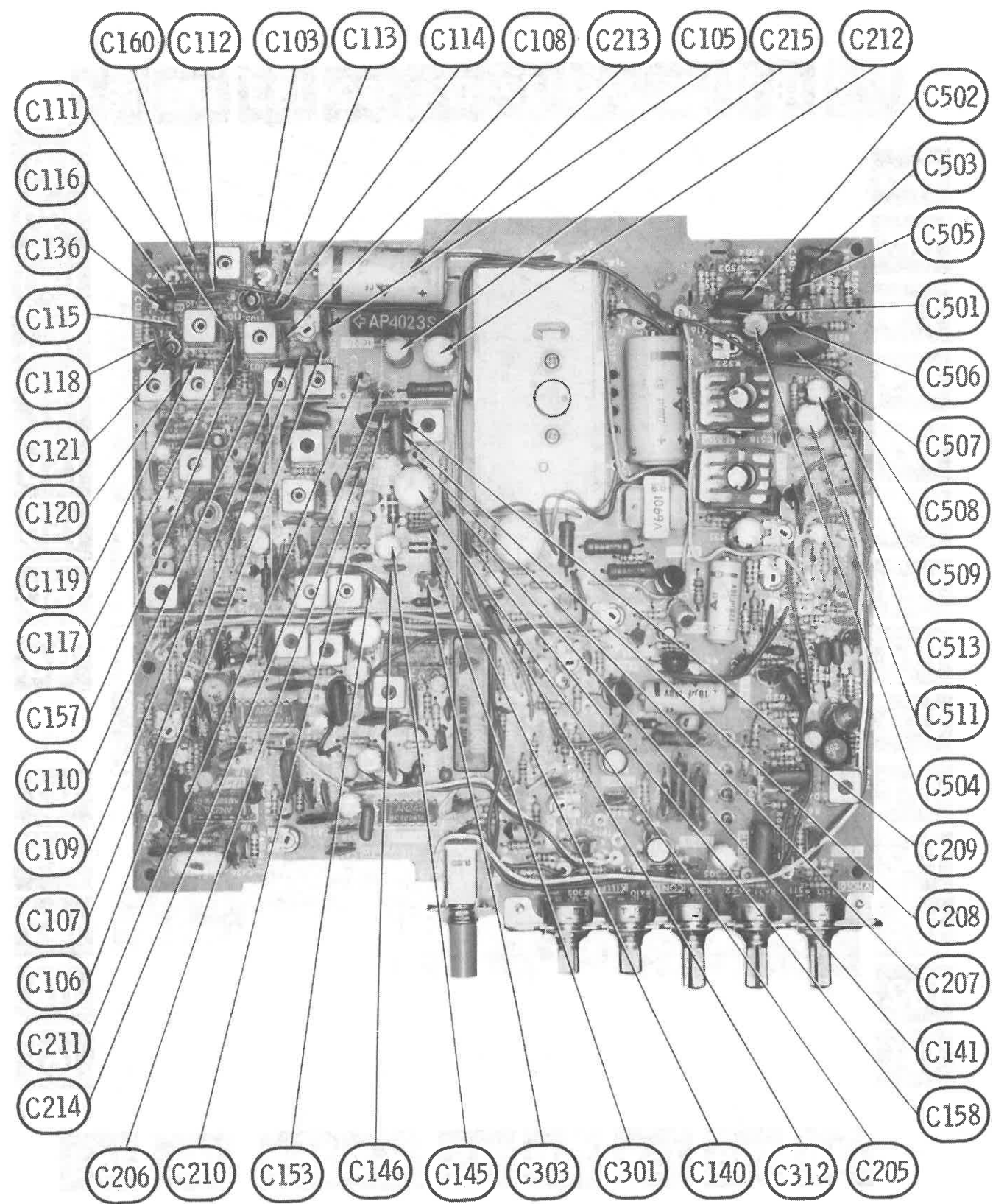


MAIN BOARD

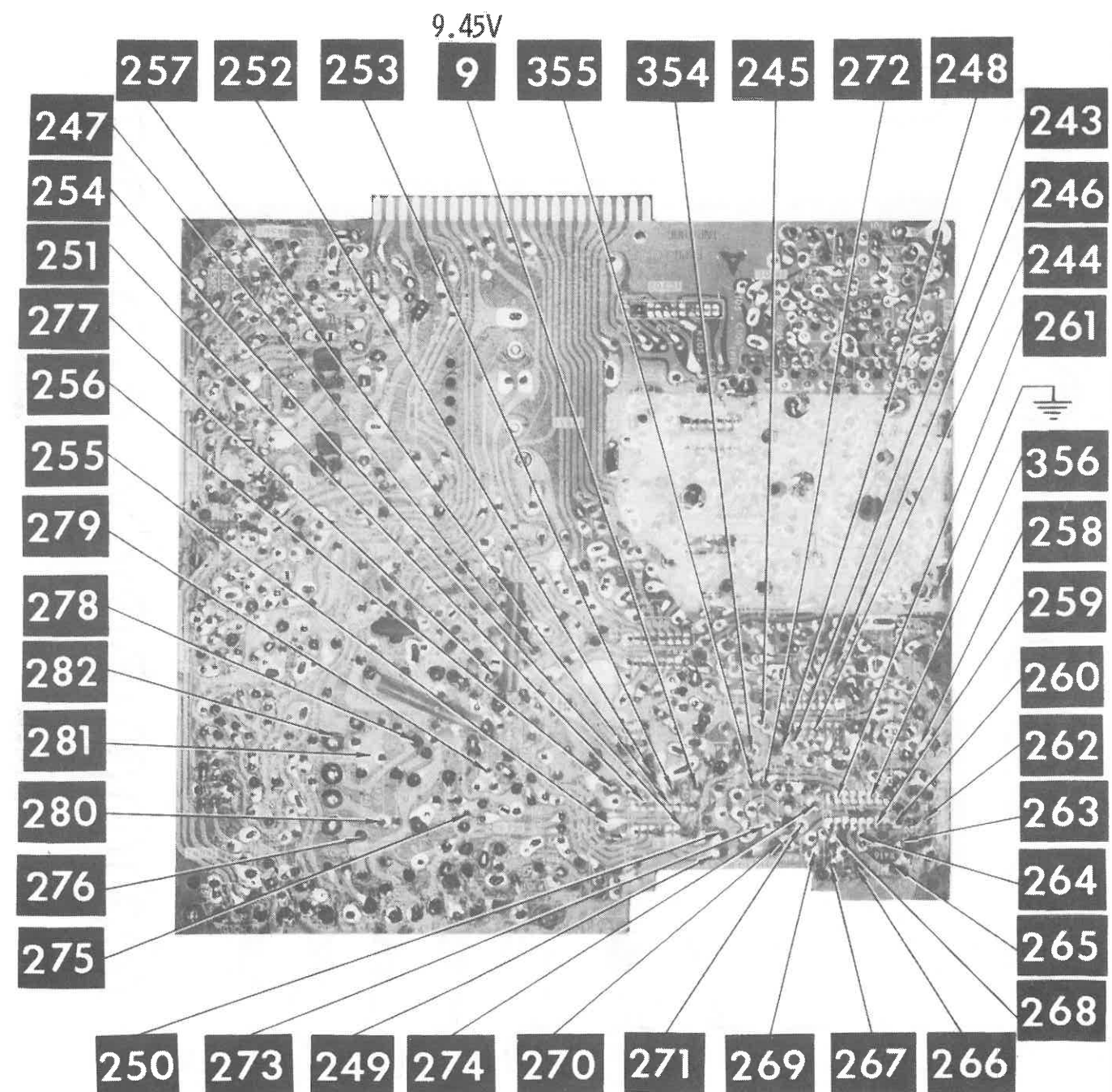


PANASONIC MODELS
CI-771, TY-702

FOLDER 1

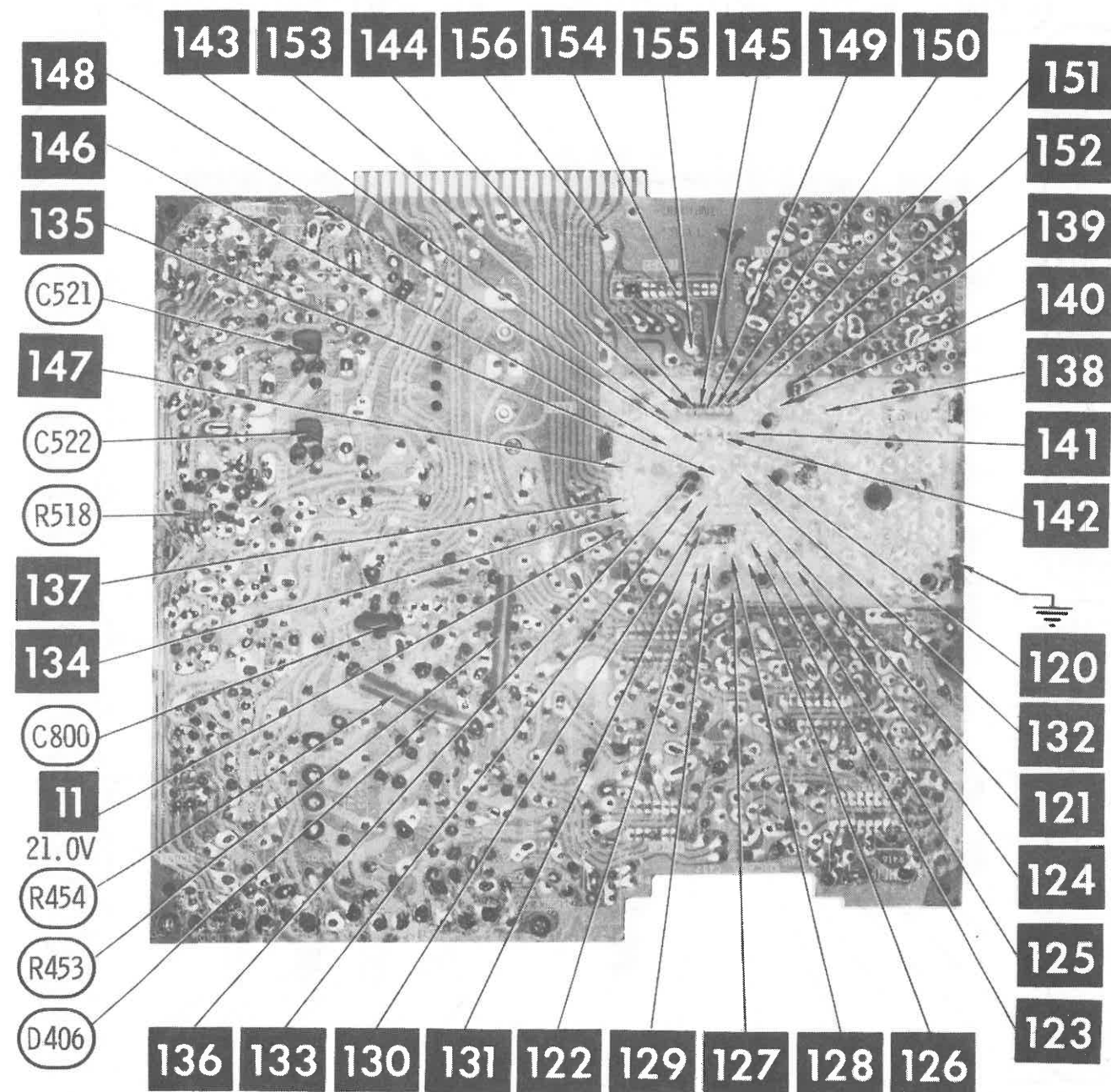


MAIN BOARD



MAIN BOARD*

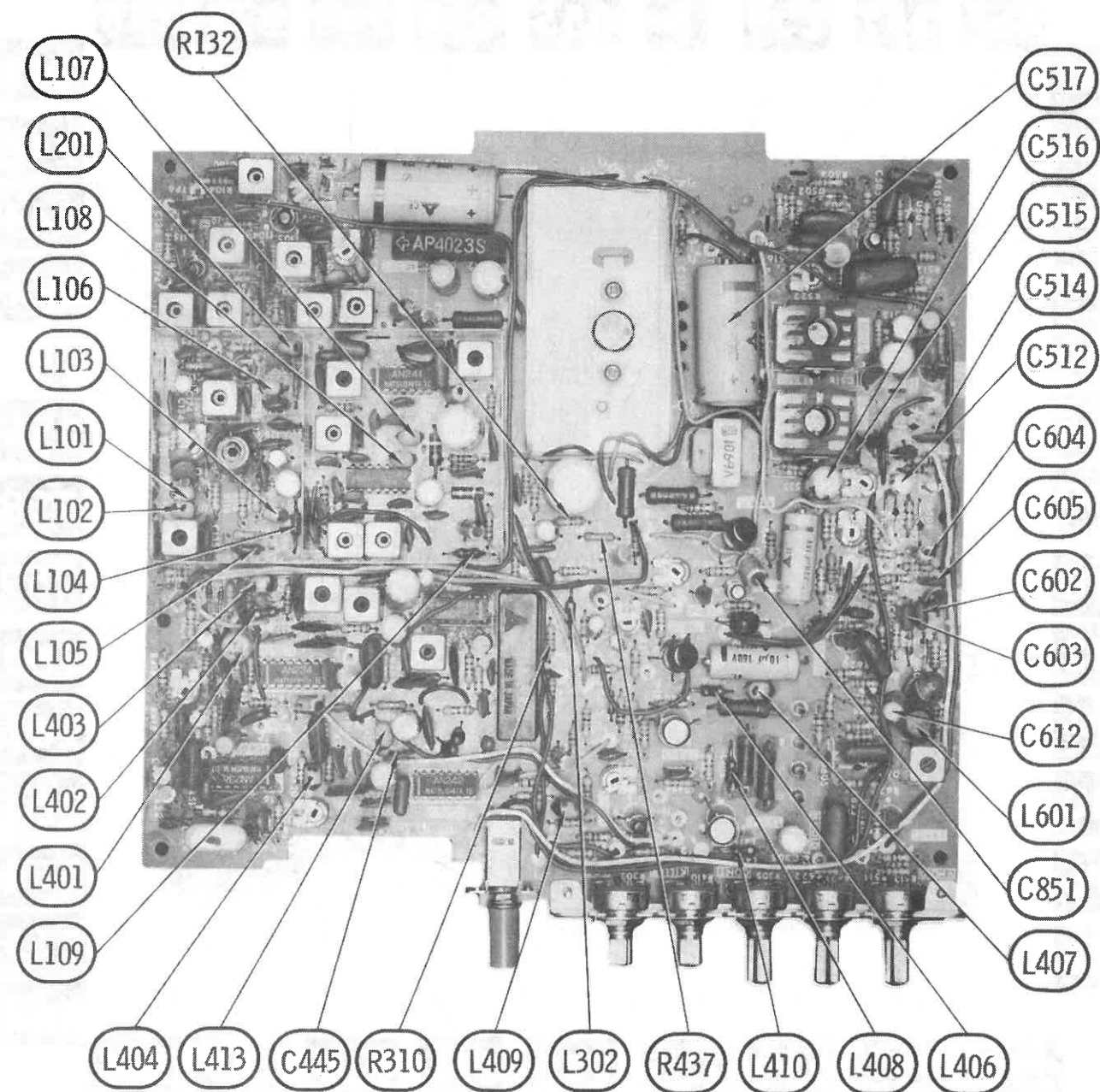
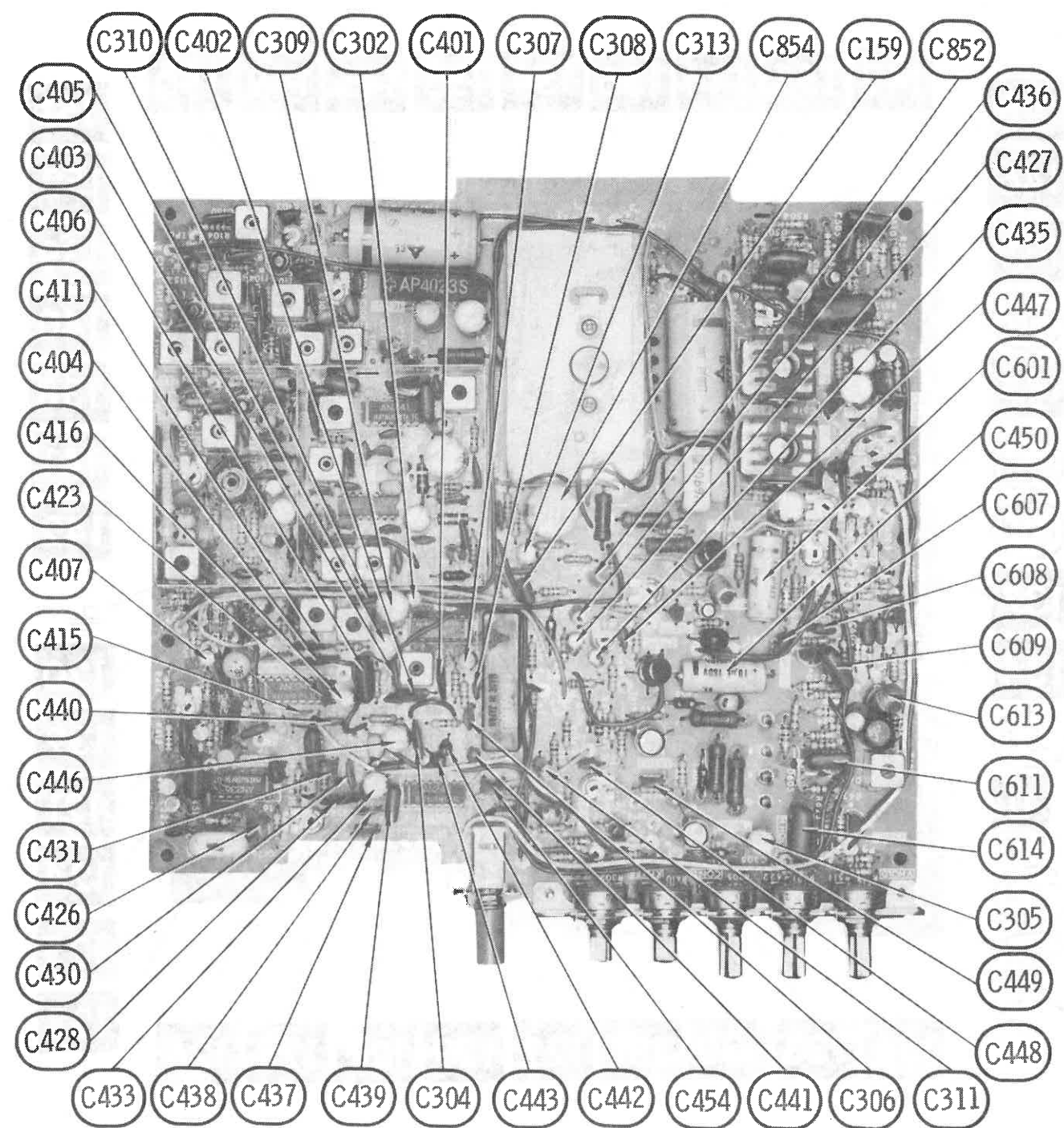
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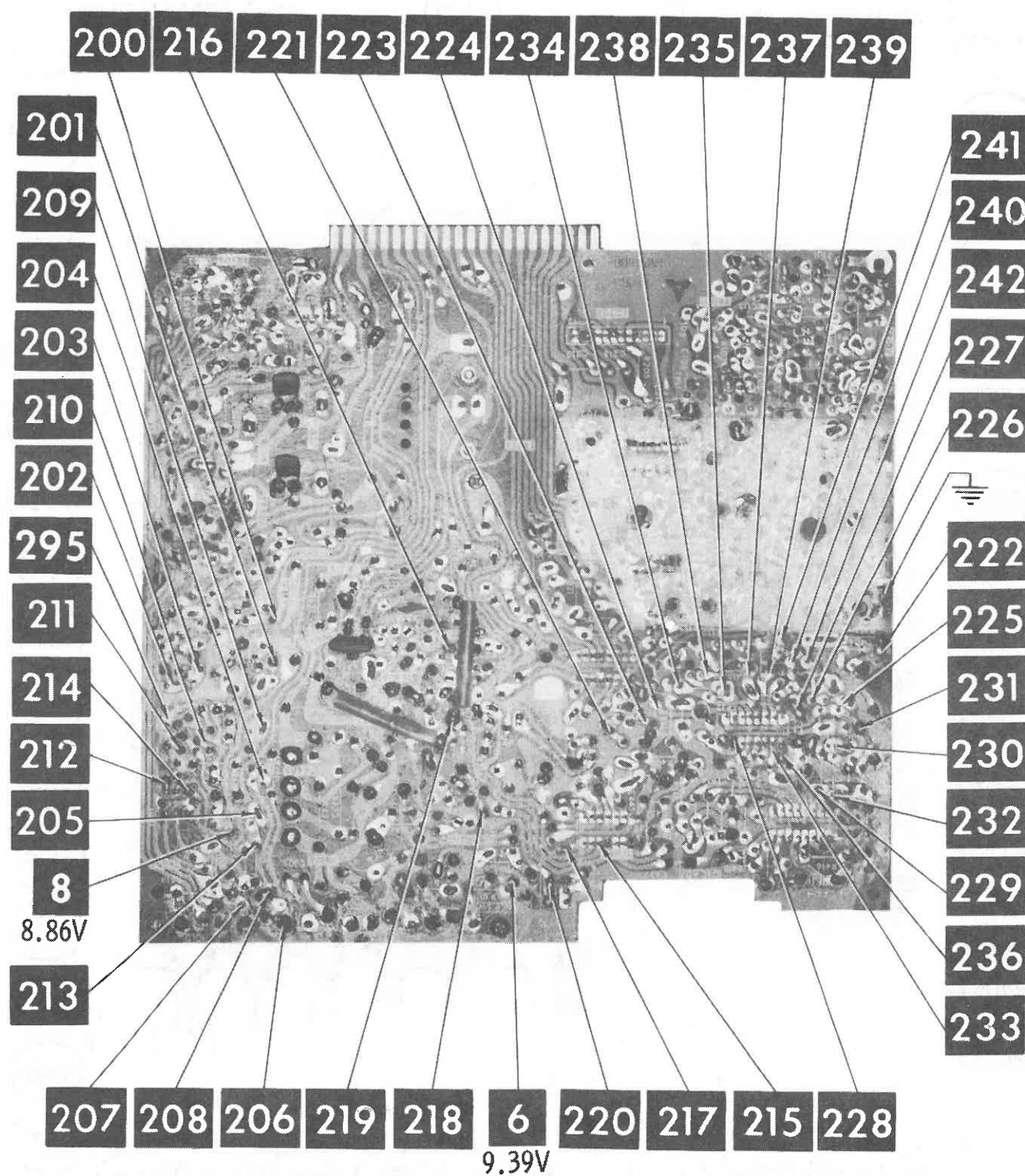
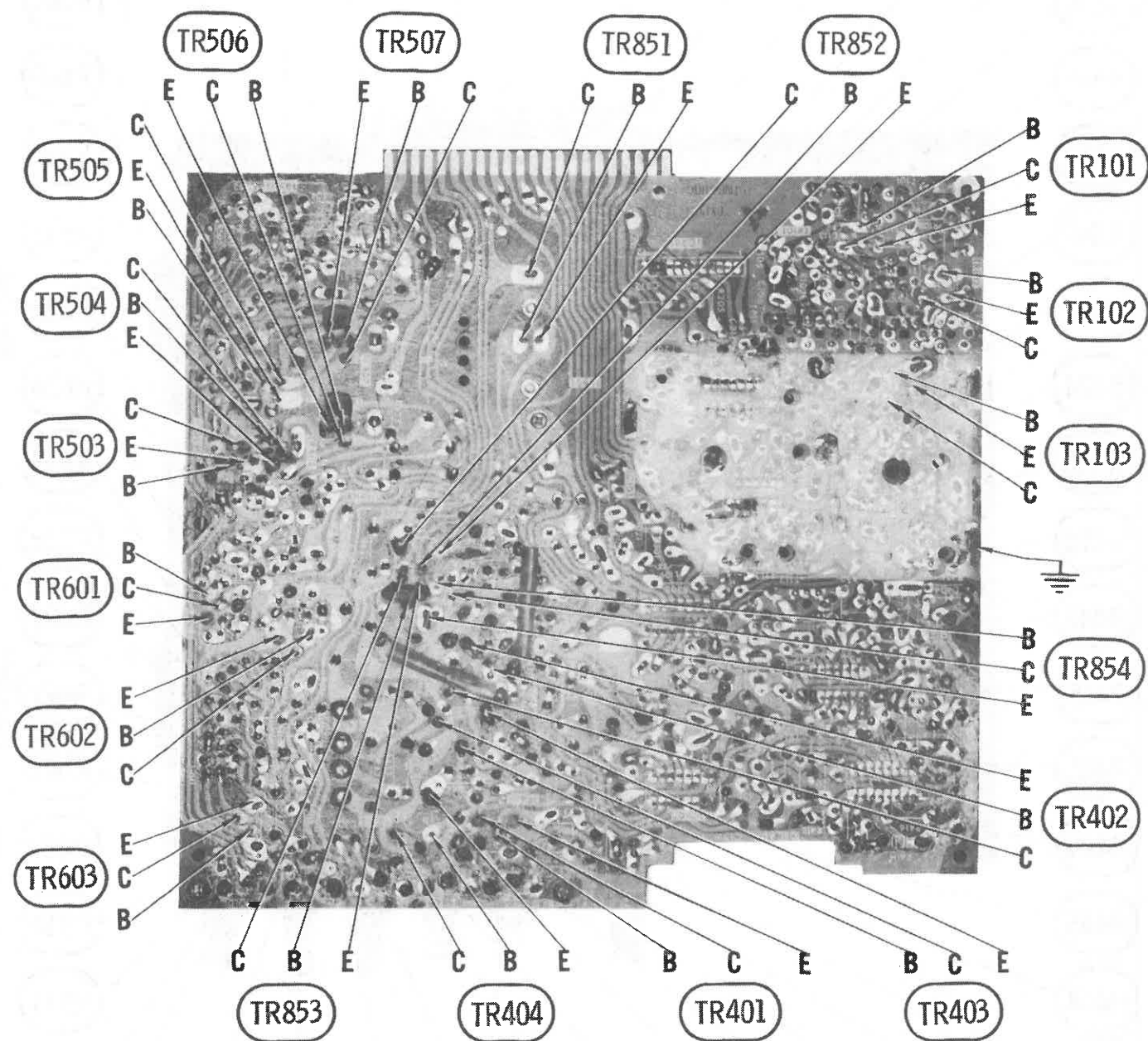
PANASONIC MODELS
CT-771, TV-702

FOLDER 1

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MAIN BOARD

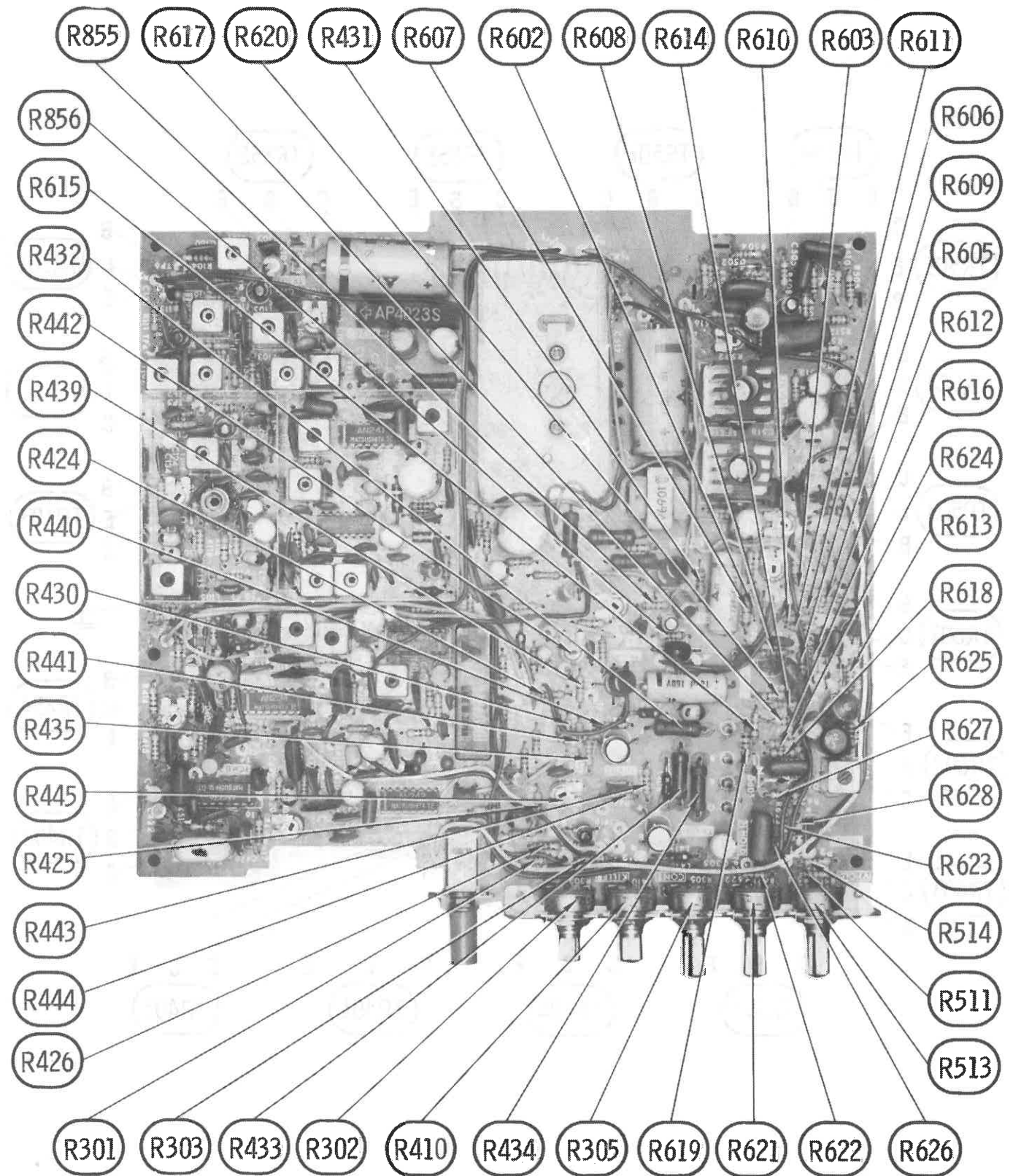
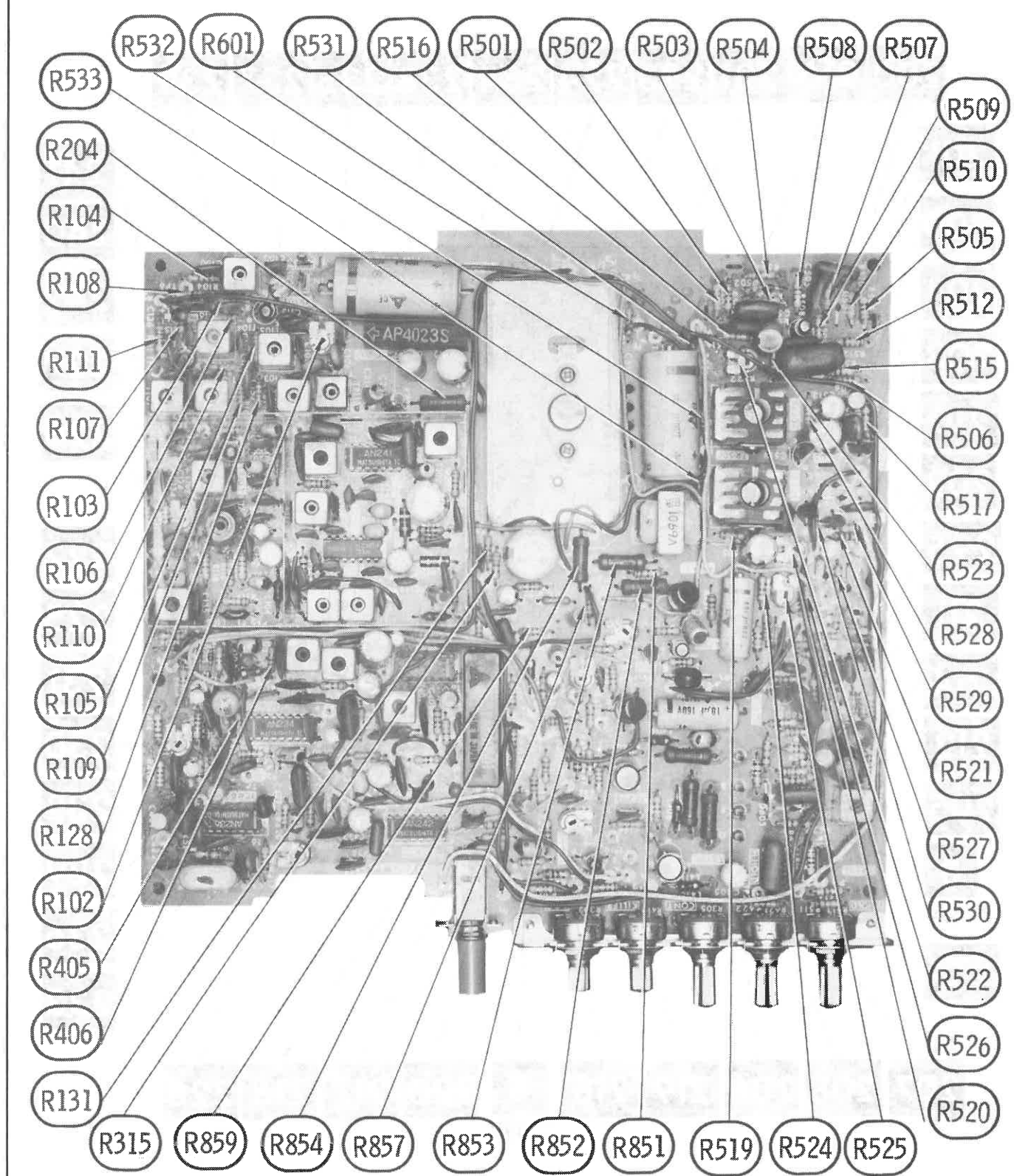


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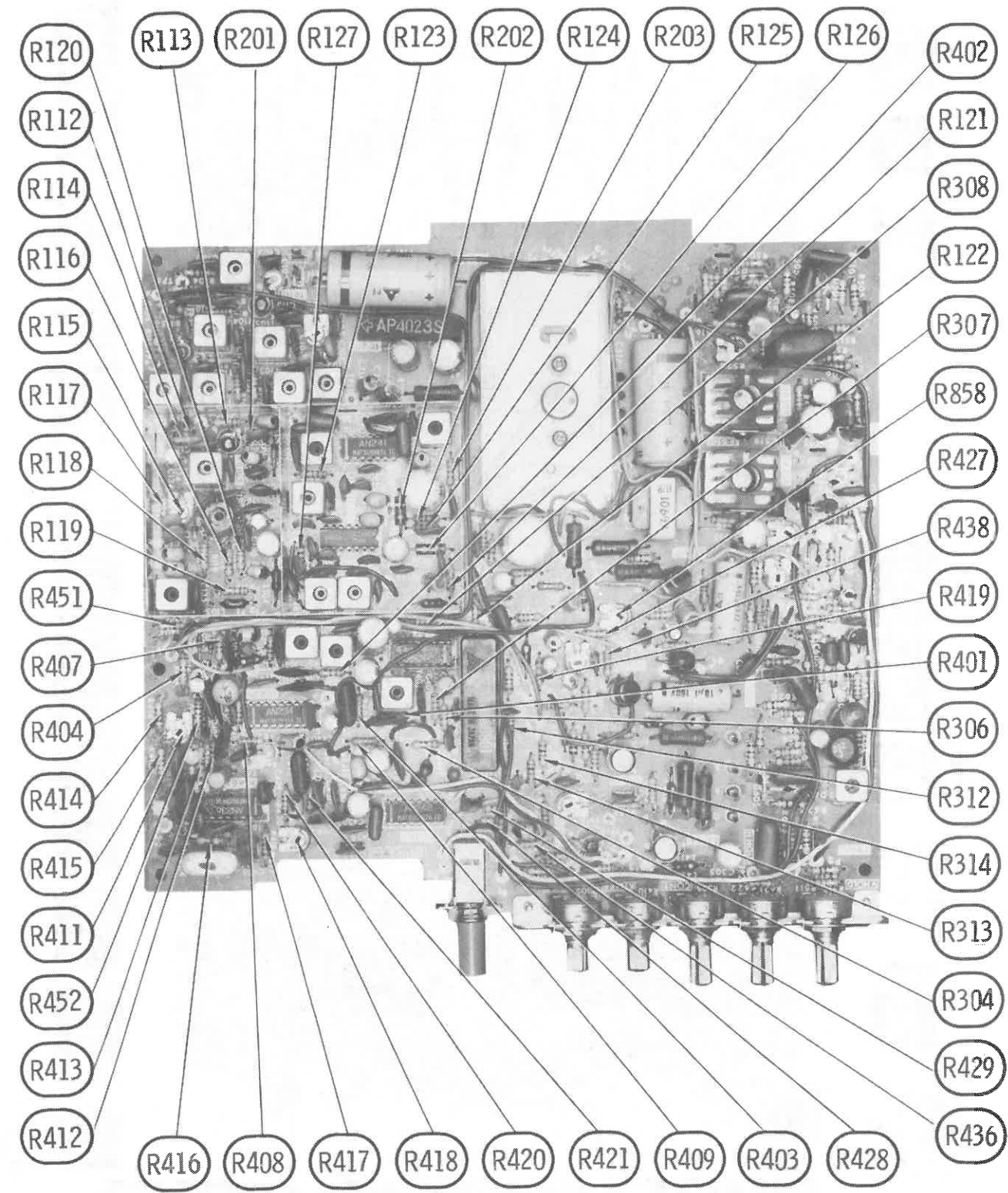
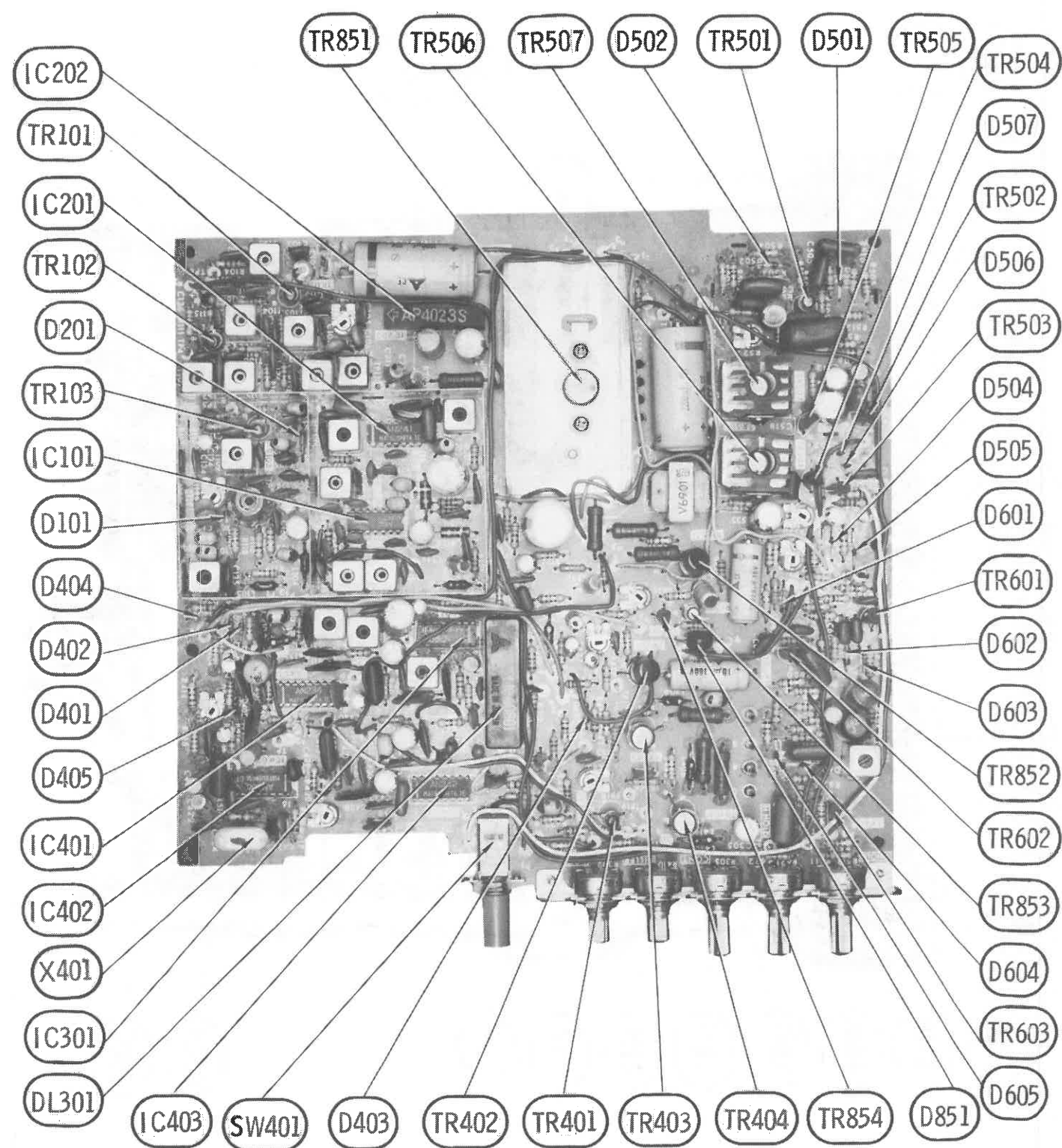
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FOLDER 1



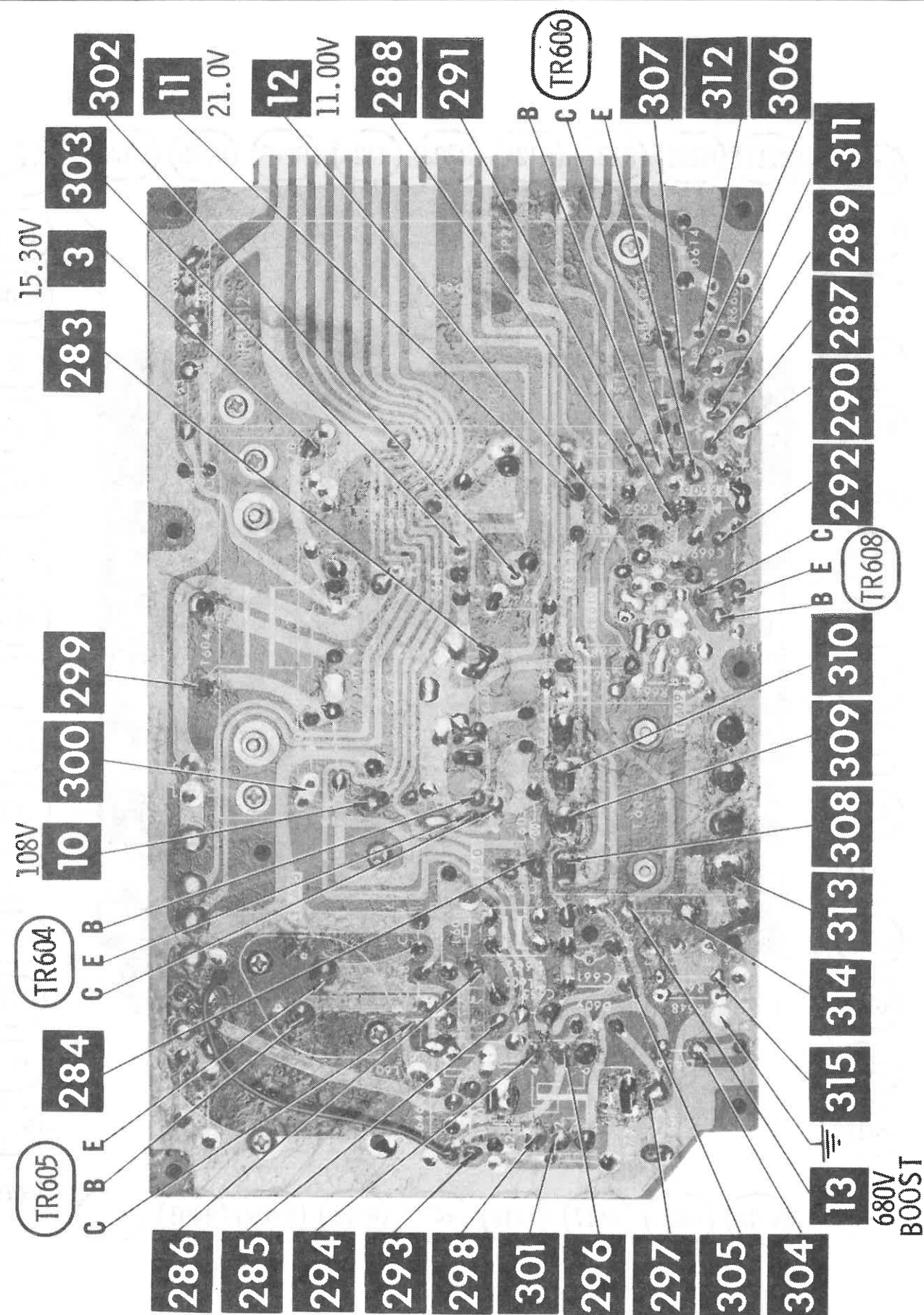
MAIN BOARD



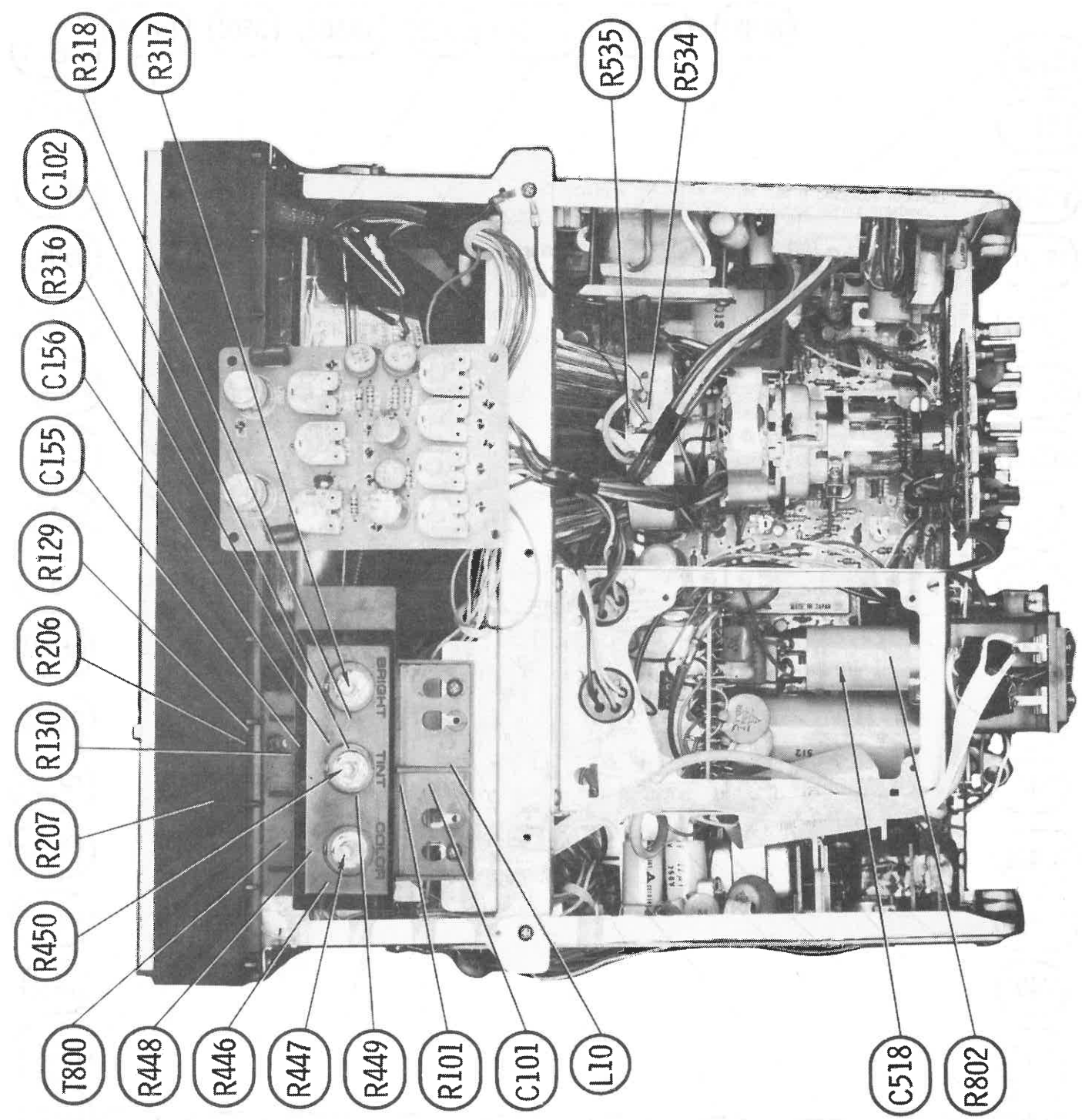
MAIN BOARD

PANASONIC MODELS
CT-771, TY-702

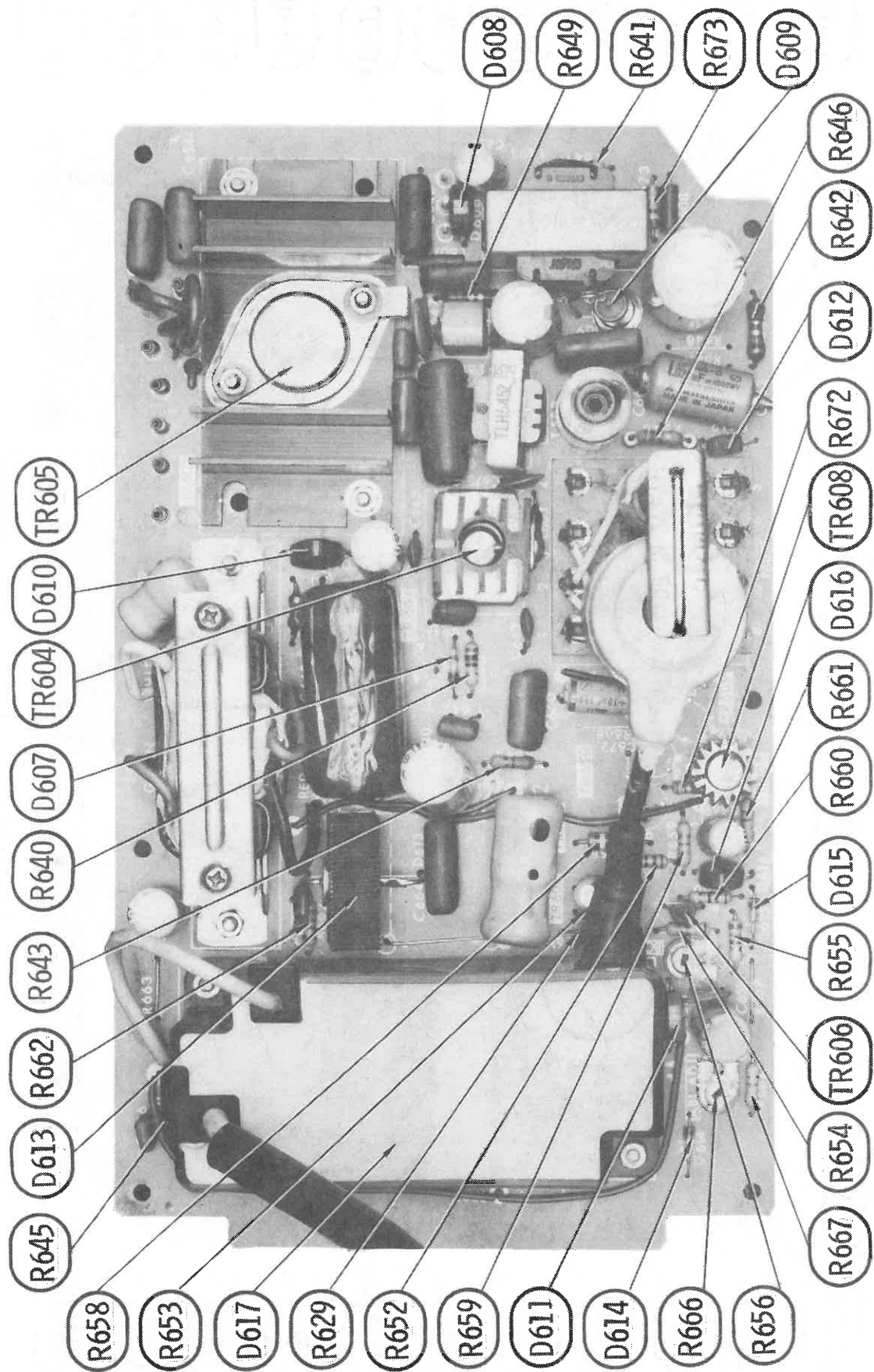
FOLDER 1



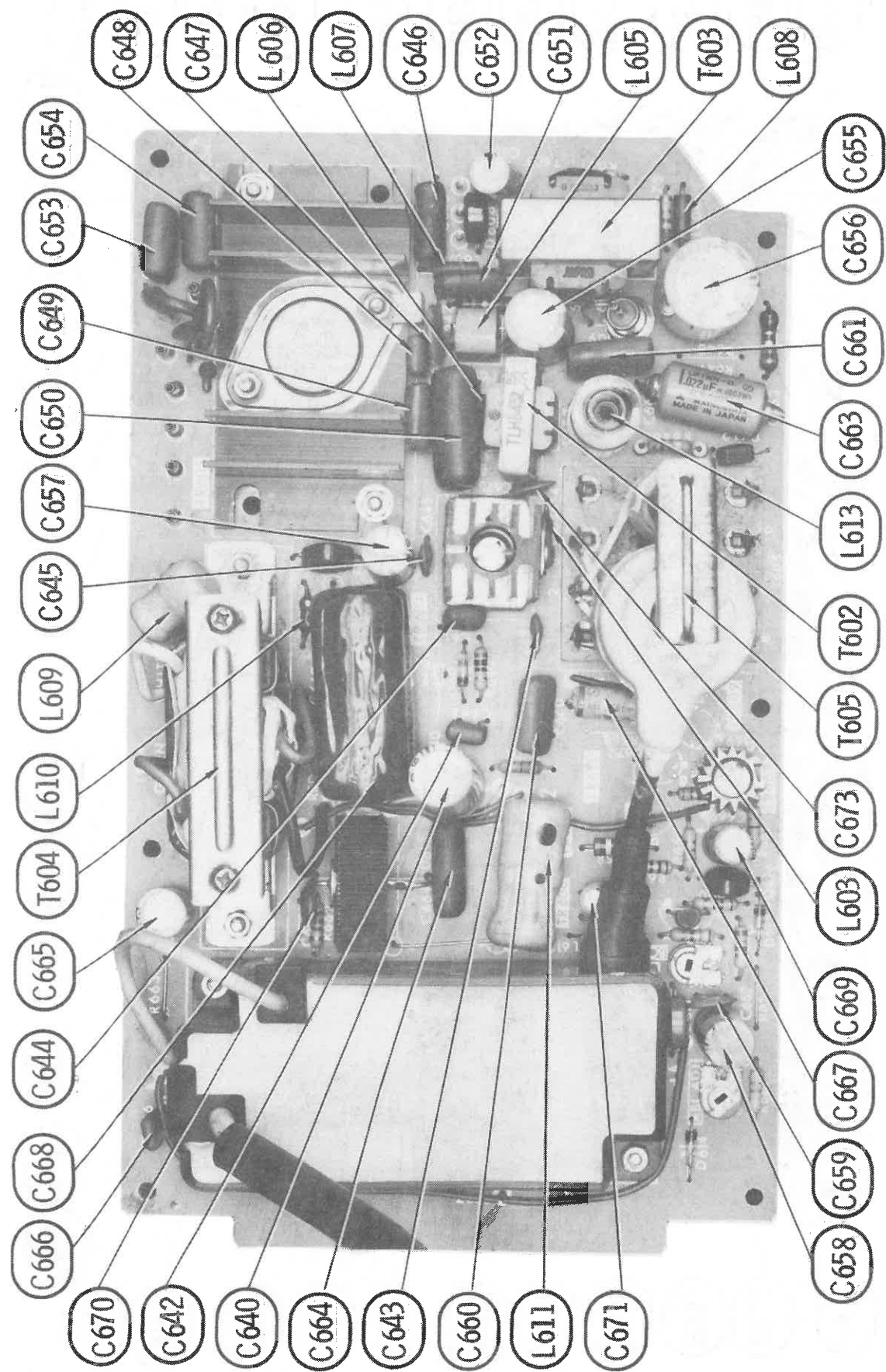
HORIZ OUTPUT BOARD



CHASSIS-TOP VIEW

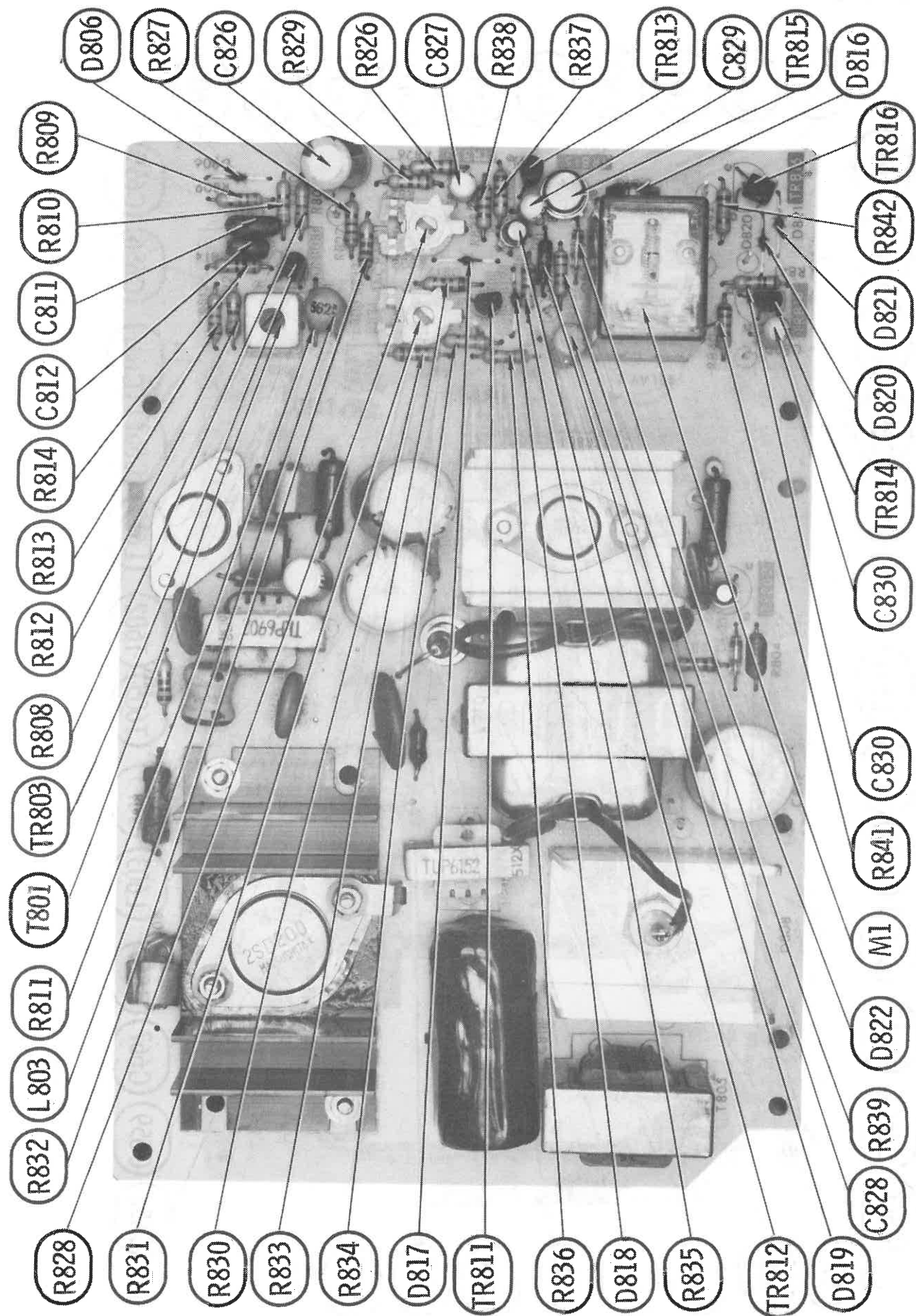


HORIZ OUTPUT BOARD

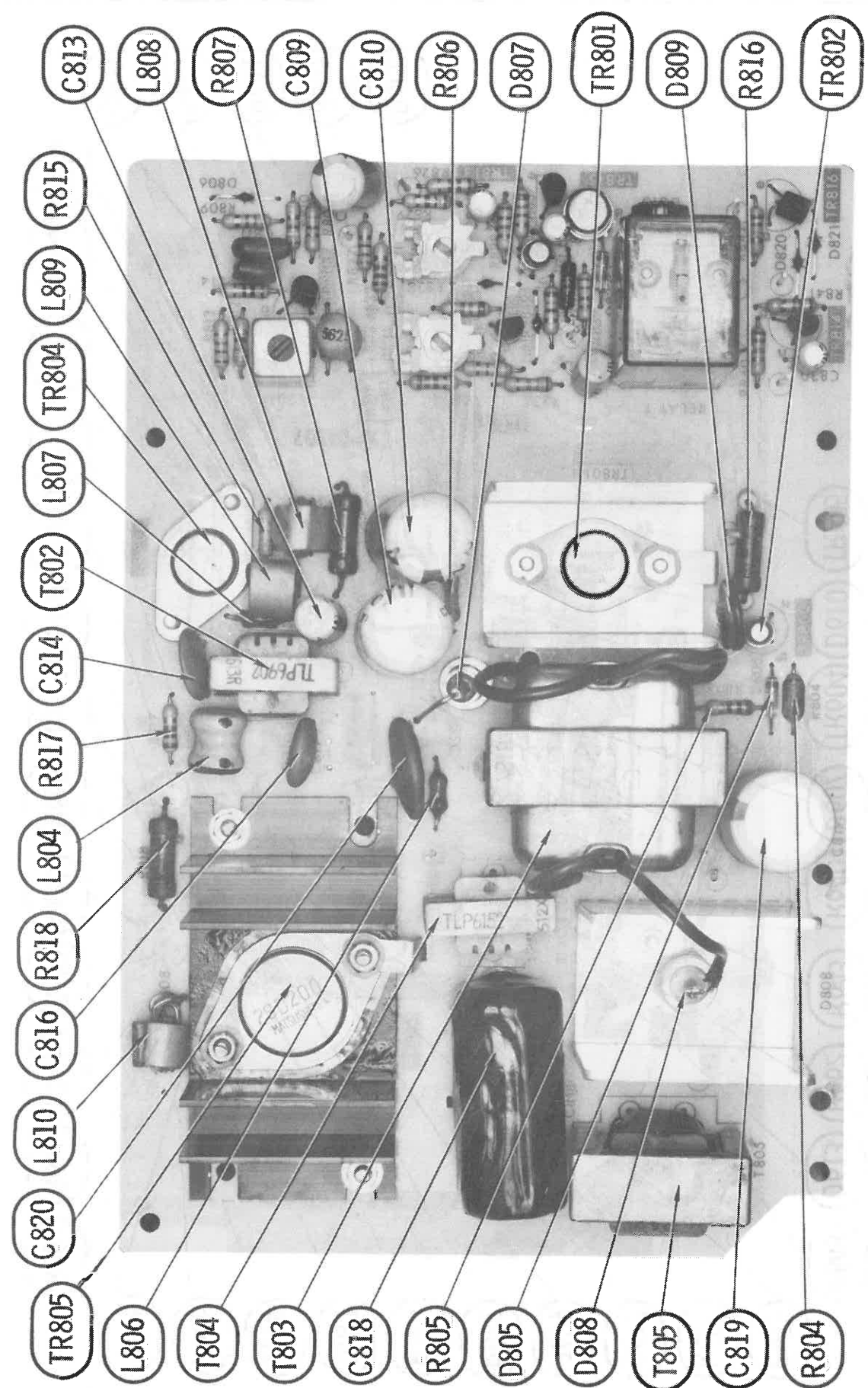


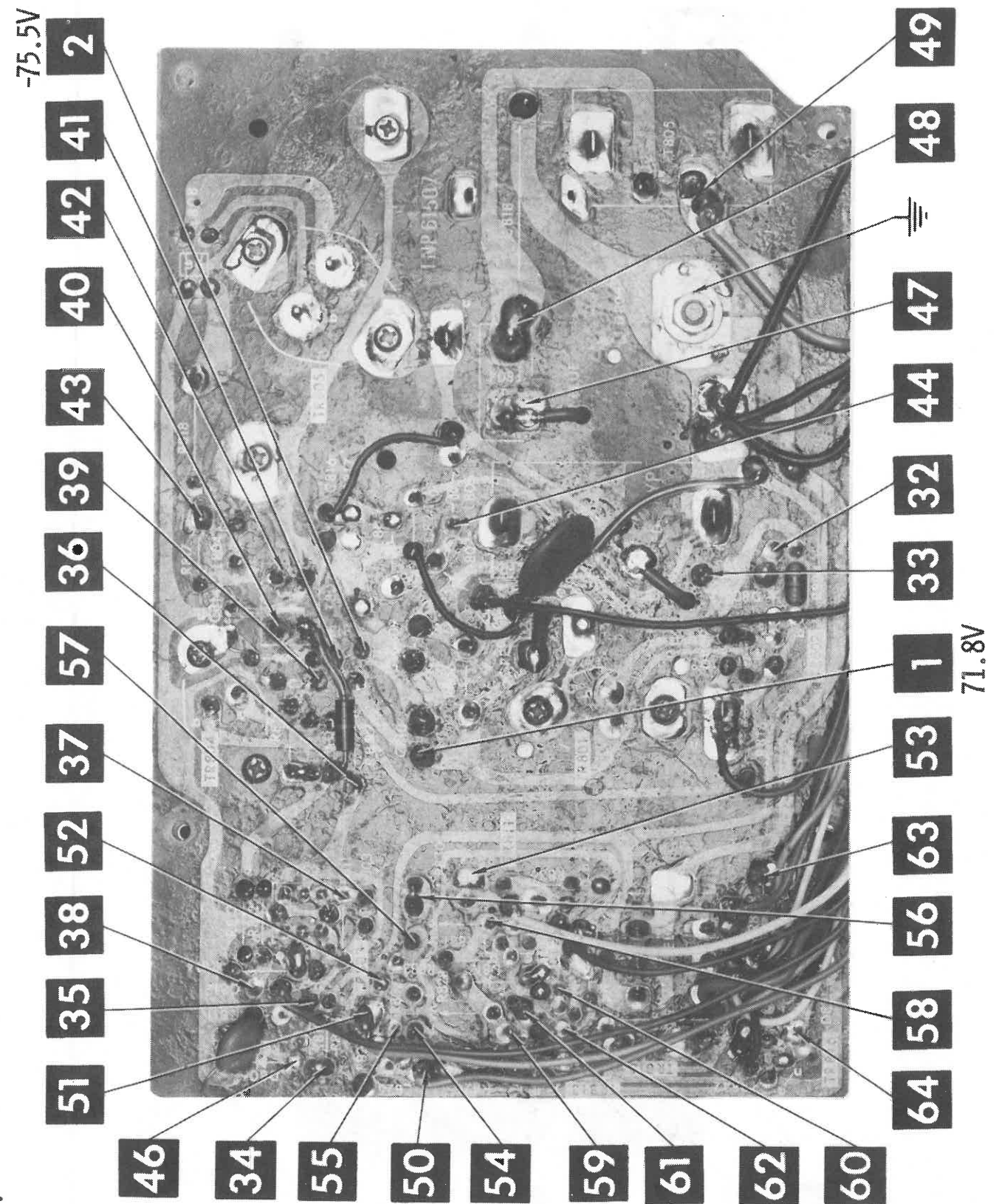
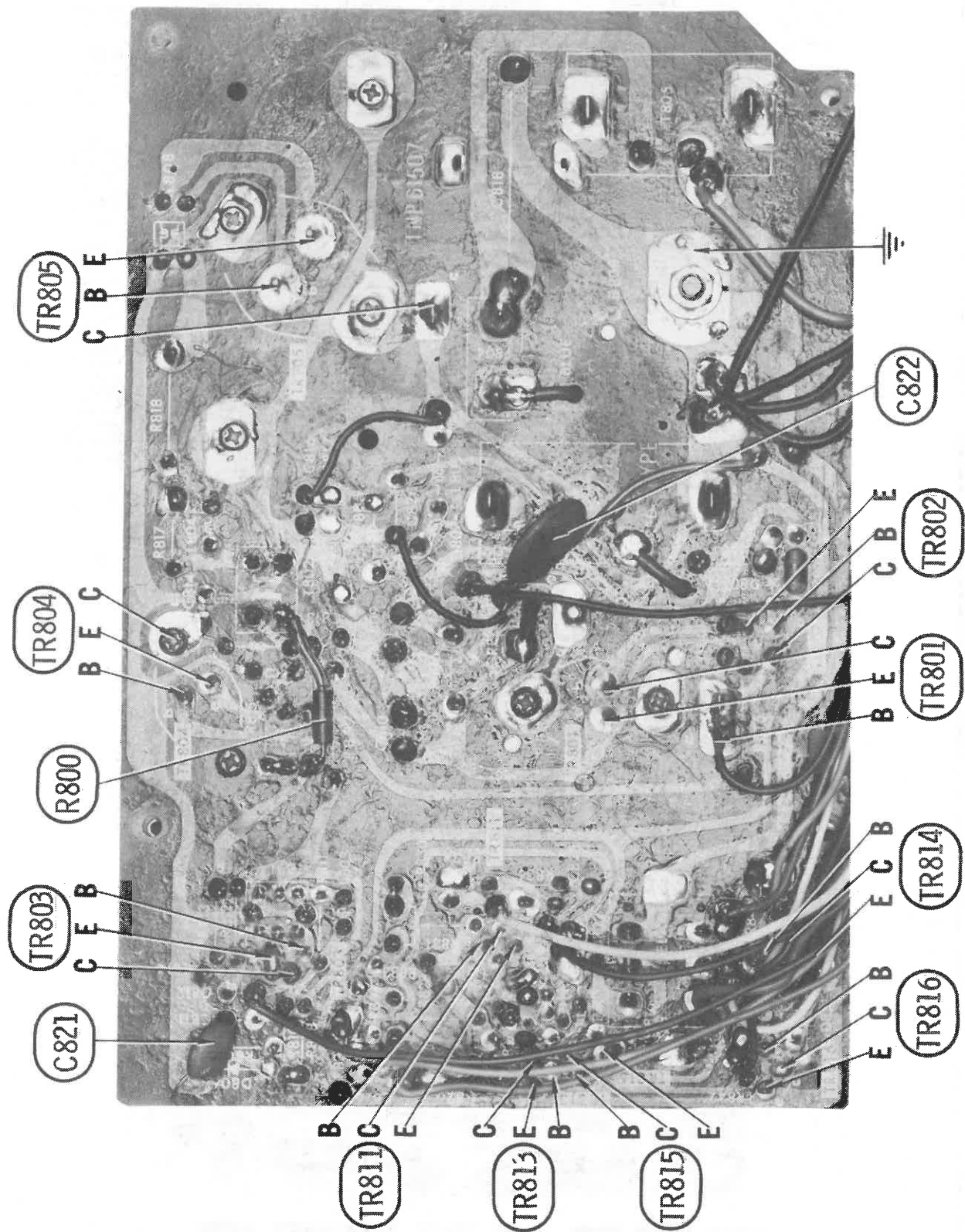
PANASONIC MODELS
CT-771, TY-702

FOLDER 1



POWER SUPPLY (CONVERTER-CHARGE BOARD)



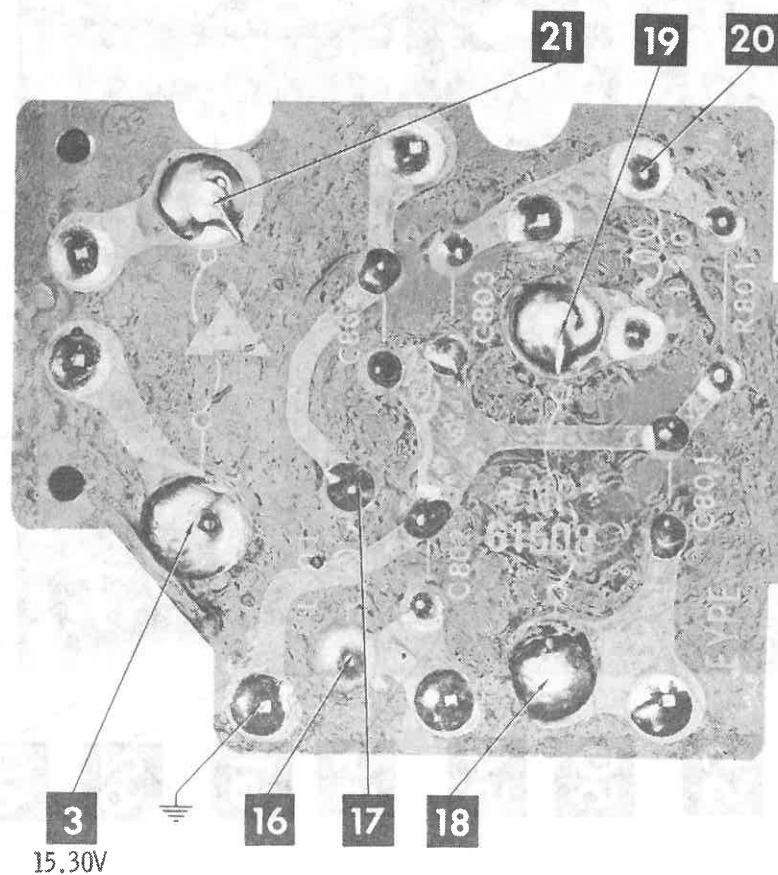


POWER SUPPLY (CONVERTER-CHARGE BOARD)

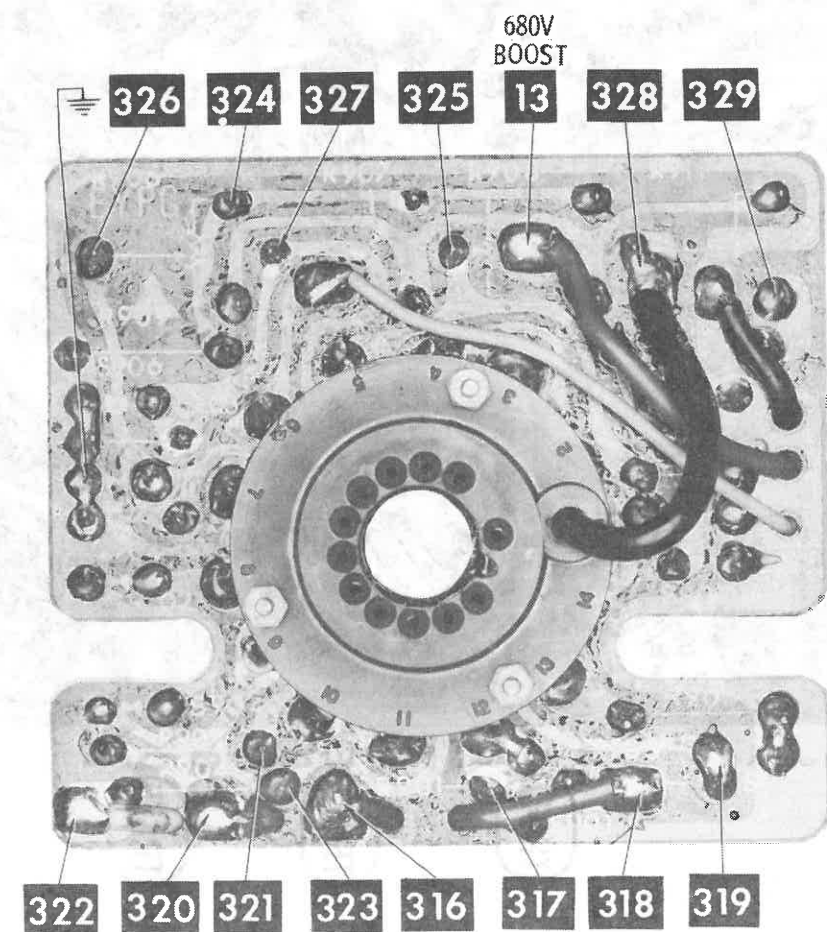
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PANASONIC MODELS
CT-771, TY-702

FOLDER 1



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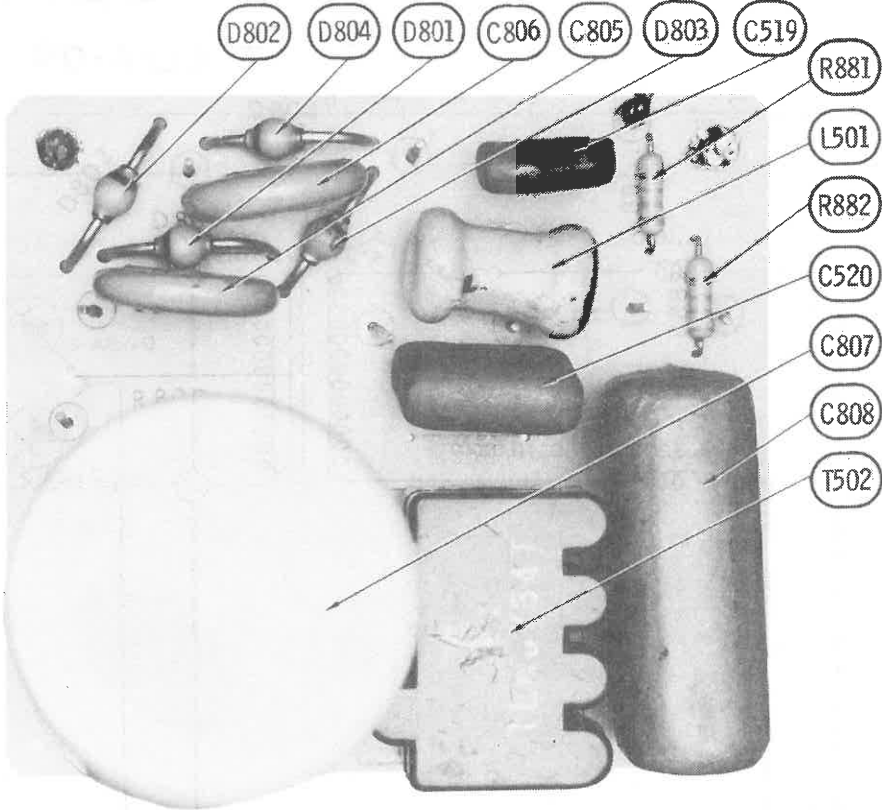
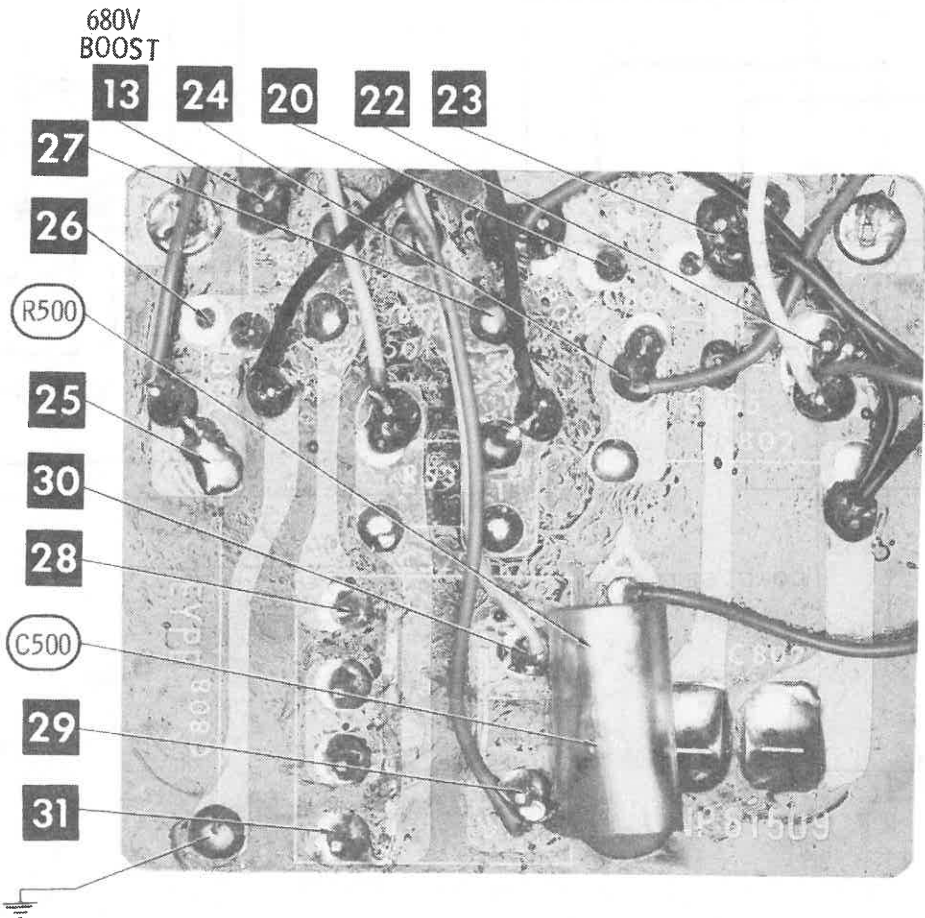


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SYM	PART No.	DESCRIPTION	ZONE No.	GUIDE No.
RESISTORS				
R41	ERD12TJ391	Carbon, 390 Ohm±5%	S-1D	A-1B
R42	ERD14TJ103	Carbon, 10K Ohm±5%	S-2C	A-1B
R43	ERD14TJ621	Carbon, 620 Ohm±5%	S-2D	A-1B
R44	ERD14TJ562	Carbon, 5.6K Ohm±5%	S-2D	A-1B
R45	ERD14TJ392	Carbon, 3.9K Ohm±5%	S-2D	A-1B
R46	ERD12TJ102	Carbon, 1K Ohm±5%	S-2D	A-1B
R47	ERD12TJ331	Carbon, 330 Ohm±5%	S-1D	A-1B
R48	ERX2PSK470	Metal, 47 Ohm±5%	S-1D	A-1C
R49	ERD14TG182	Carbon, 1.8K Ohm±2%	S-2E	A-1C
R50	ERD14TG562	Carbon, 5.6K Ohm±2%	S-2E	A-1C
R51	ERD14TJ122	Carbon, 1.2K Ohm±5%	S-2E	A-1B
R52	ERD14TJ562	Carbon, 5.6K Ohm±5%	S-2E	A-1C
R53	ERD12TJ151	Carbon, 150 Ohm±5%	S-2F	A-1C
R54	ERW4PR33	Wire Wound, 0.33 Ohm±20%	S-3B	A-1A
R56	ERD14TJ104	Carbon, 100K Ohm±5%	S-3C	A-1B
R57	ERD14TJ104	Carbon, 100K Ohm±5%	S-2C	A-1B
R58	ERD14TJ271	Carbon, 270 Ohm±5%	S-3C	A-1B
VARIABLE RESISTOR				
R55	EVTS0AA00852	Control, Current 500 Ohm Type B	S-3C	A-1A
CAPACITORS				
C41	ECKDAL472PE	Ceramic, 0.0047Mfd	S-1A	—
C42	ECKDAL472PE	Ceramic, 0.0047Mfd	S-1A	A-1B
C43	ECEA50V33N	Electrolytic, 33Mfd	S-1D	A-1B
C44	ECEA25V220U	Electrolytic, 220Mfd	S-1D	A-1B
C45	ECEA50V1MH	Electrolytic, 1Mfd	S-2D	A-1B
C46	ECEA25V100U	Electrolytic, 100Mfd	S-2F	A-1C
C47	ECEA16V10U	Electrolytic, 10Mfd	S-3C	A-1B
COILS				
L41	TLP8508	Line Filter	S-1A	—
L42	TLP8508	Line Filter	S-1A	—
TRANSFORMER				
T41	TLP6235S	AC Power Transformer	S-1B	—
DIODES				
D41	TVSSA-2	Power Rectifier	S-1C	A-1A
D42	TVSSA-2	Power Rectifier	S-1C	A-1A
D43	TVSSA-2	Power Rectifier	S-1C	A-1A
D44	TVSSA-2	Power Rectifier	S-1C	A-1A
D45	TVSSD-1Y	Rectifier	S-1C	A-1B
D46	0A95	Pulse Gate	S-1C	A-1B
D47	0A95	Reverse Voltage Protector	S-2C	A-1C
D48	TVSZB1-6	+6V Regulator	S-2D	A-1B
D49	0A95	Reverse Voltage Protector	S-2E	A-1C
SYM	PART No.	DESCRIPTION	ZONE No.	GUIDE No.
TRANSISTORS				
TR41	2SA564A	Saw Tooth Generator	S-2C	A-1B
TR42	2SC696	Gate Pulse Generator	S-2D	A-1B
TR43	2SF1060	Current Control, Thyristor	S-1D	A-1C
TR44	2SA546	Automatic Charge Protector Control	S-2E	A-1C
TR45	2SC828	Current Detector	S-3C	A-1B
TR46	2SC828	Current Detector Amp.	S-3D	A-1B
TR47	2SC828A	Switching, Lamp ON-OFF	S-2F	A-1C
MISCELLANEOUS				
F41	TVL335	Pilot Lamp	S-1B	—
F42	XBA2M05NU100	Fuse, 0.5A	S-3F	—
	TSF35502	Fuse, 5A		
	TJB5304	4P Lug Board		
	TJS69940	6P Connector		
	TJS69810	2P Socket		
	TJE3102	1P Lug Terminal		
	TUX6310	Mounting Metal, Socket		
	TUW6726	Holding Metal, Pilot Lamp		
	TUC6653	Radiator		
	TY-360	PANASONIC Lead Acid Battery		
	TSX160	AC Power Cord, Battery Pack		
	TUX6263	Stopper, AC Power Cord		
ASSEMBLY PARTS				
	TYB61510-011	Charger PWB Assembly		
	TNP61514	ACP PWB		
	TXAJS11702	3P Socket Assembly		
Courtesy of the Manufacturer				

REPLACEMENT PARTS LIST

POWER SUPPLY (LOW VOTAGE RECT & PINCUSHION) Howard W. Sams CIRCUITRACE® Photo

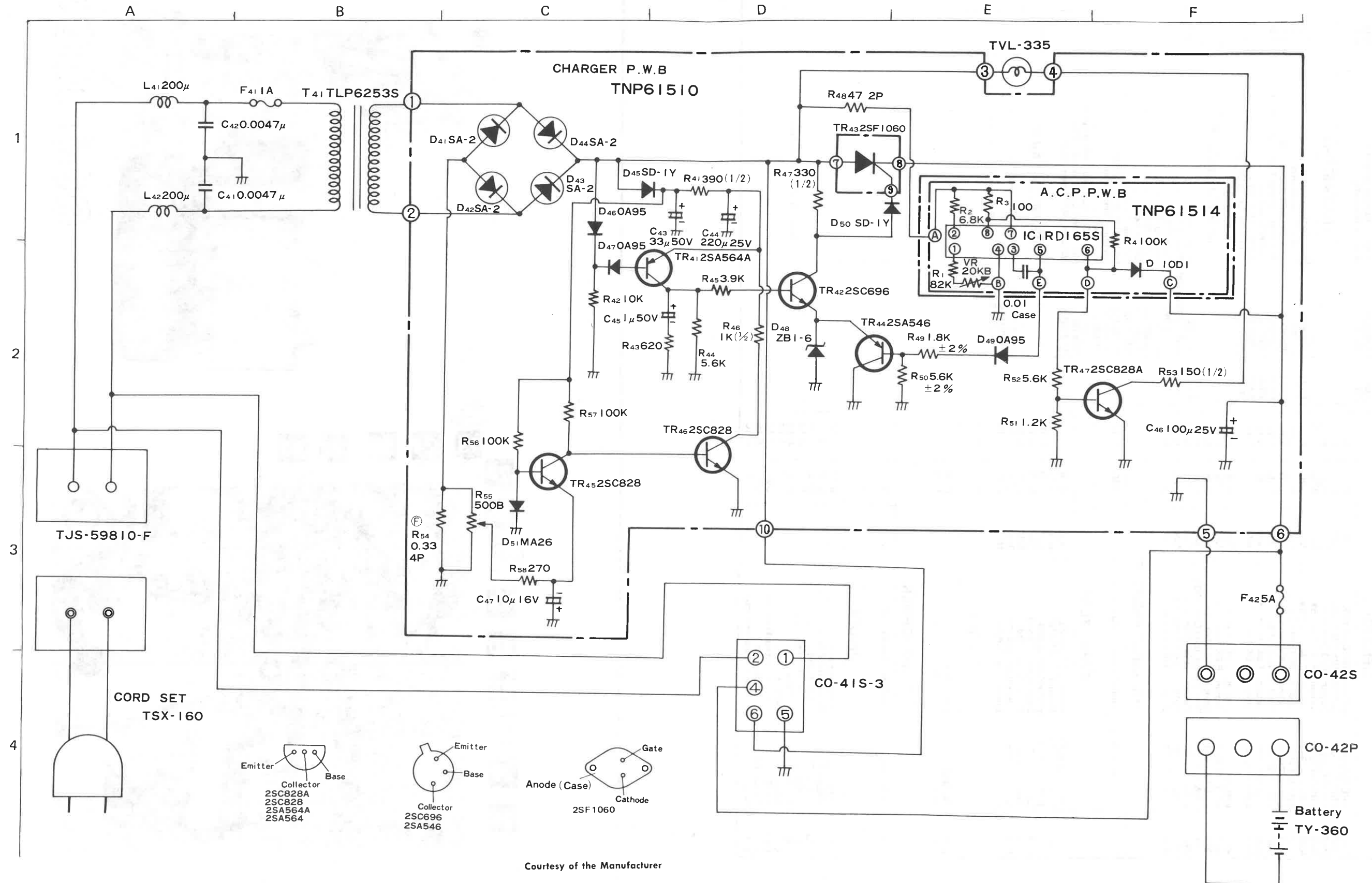


PANASONIC MODELS
CT-771, TY-702

FOLDER 1

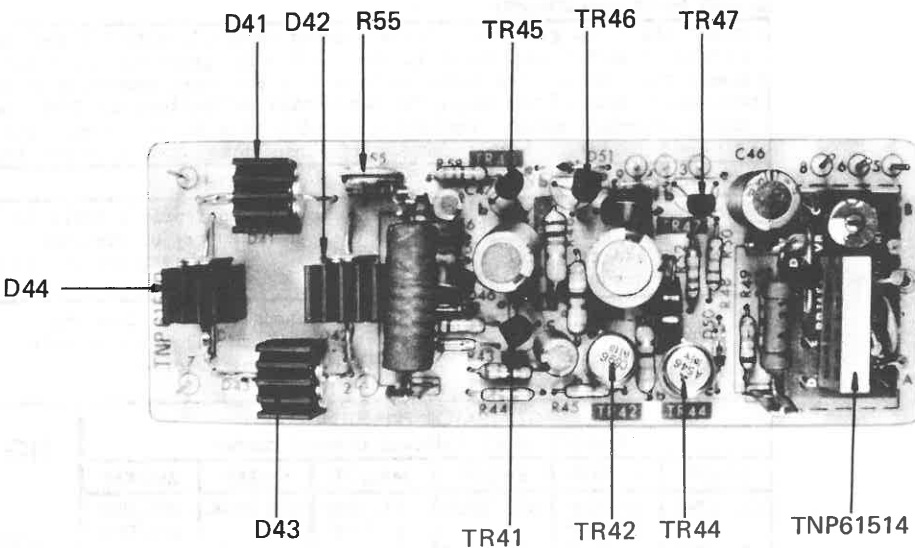
SCHEMATIC DIAGRAM

CLIP-ON RECHARGEABLE BATTERY PACK TY-702

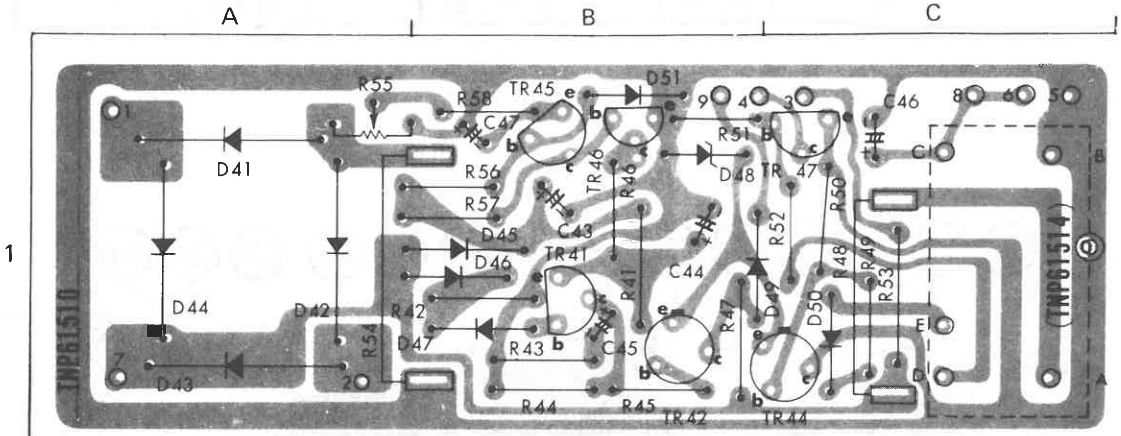


Courtesy of the Manufacturer

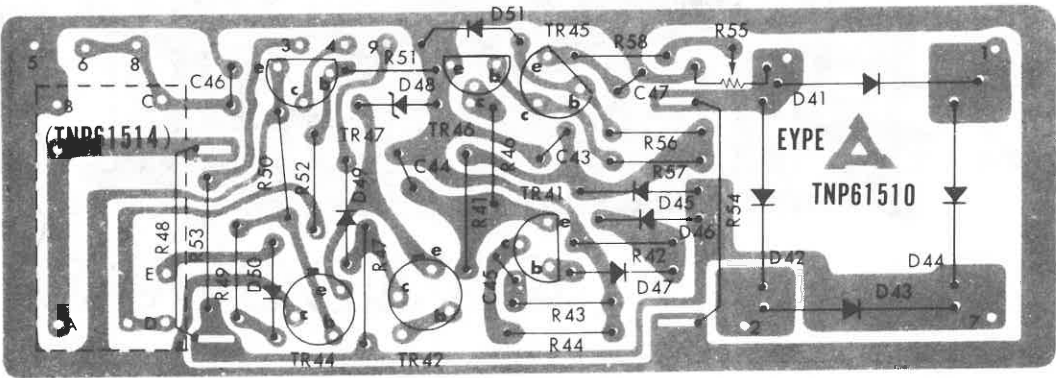
PARTS LOCATION TYB61510-011



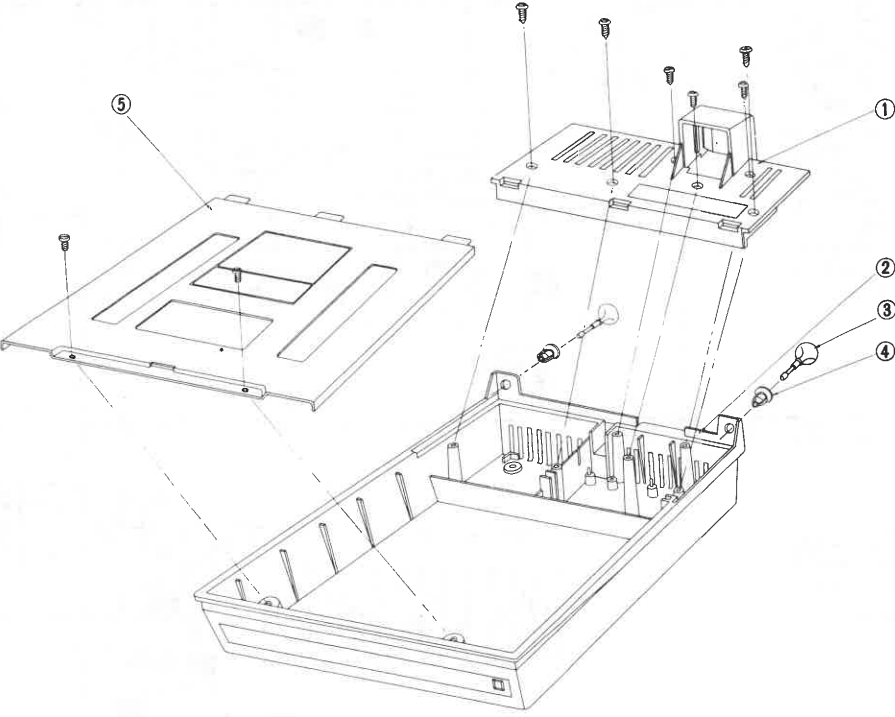
COMPONENT VIEW (A)



CONDUCTOR VIEW



CABINET PARTS



1. TXFEG12702 Battery Case Cover (Small)
2. TXFEG11702 Cabinet Assembly
3. TTK60533 Nylatch (Plunger)
4. TTK60534 Nylatch (Grommet)
5. TXFEG13702 Battery Case Cover (Large)

BATTERY CHARGE

FULL CHARGE

The battery in the battery pack is fully charged under the connection of AC OPERATION and the power switch of the receiver in "OFF" position. Keep this condition for about 15 hours.

SUPPLEMENTARY CHARGE WITH THE RECEIVER

The battery is supplementally charged during AC operation.

SUPPLEMENTARY CHARGE WITHOUT THE RECEIVER

The battery can be charged supplementally by only connecting the AC power cord to an AC 120 volt outlet without engaging to the receiver.

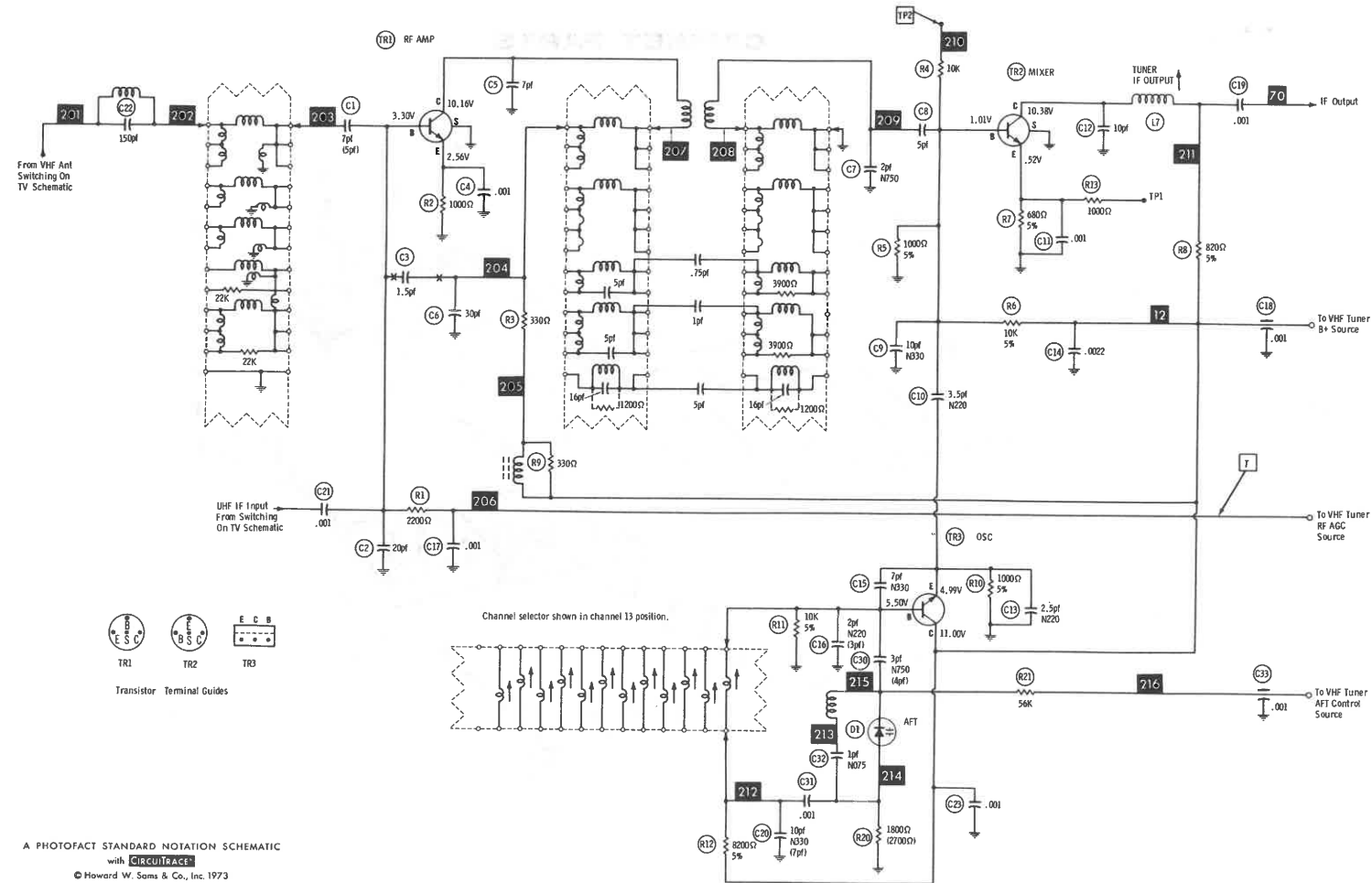
NOTE

Always recharge the battery immediately after use to assure full strength for next use.

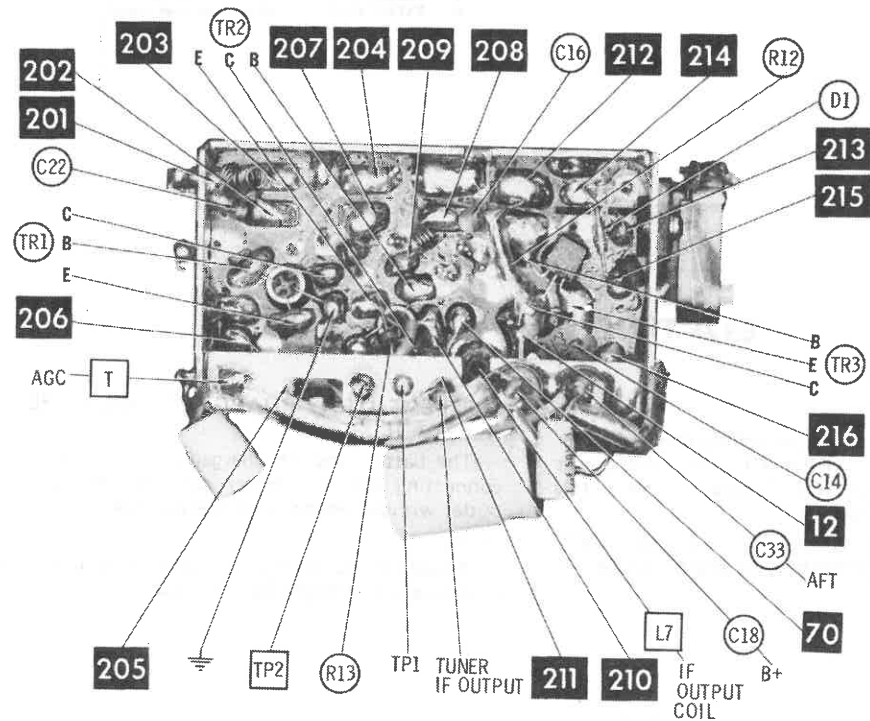
Courtesy of the Manufacturer

PANASONIC MODELS
CT-771, TY-702

FOLDER 1



A Howard W. Sams CIRCUITRACE® Photo



VHF TUNER

VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ADJUSTMENTS

The oscillator slug for each channel is preset with the fine tuning control. Adjust the fine tuning for best picture and sound.

RF AND MIXER ADJUSTMENTS

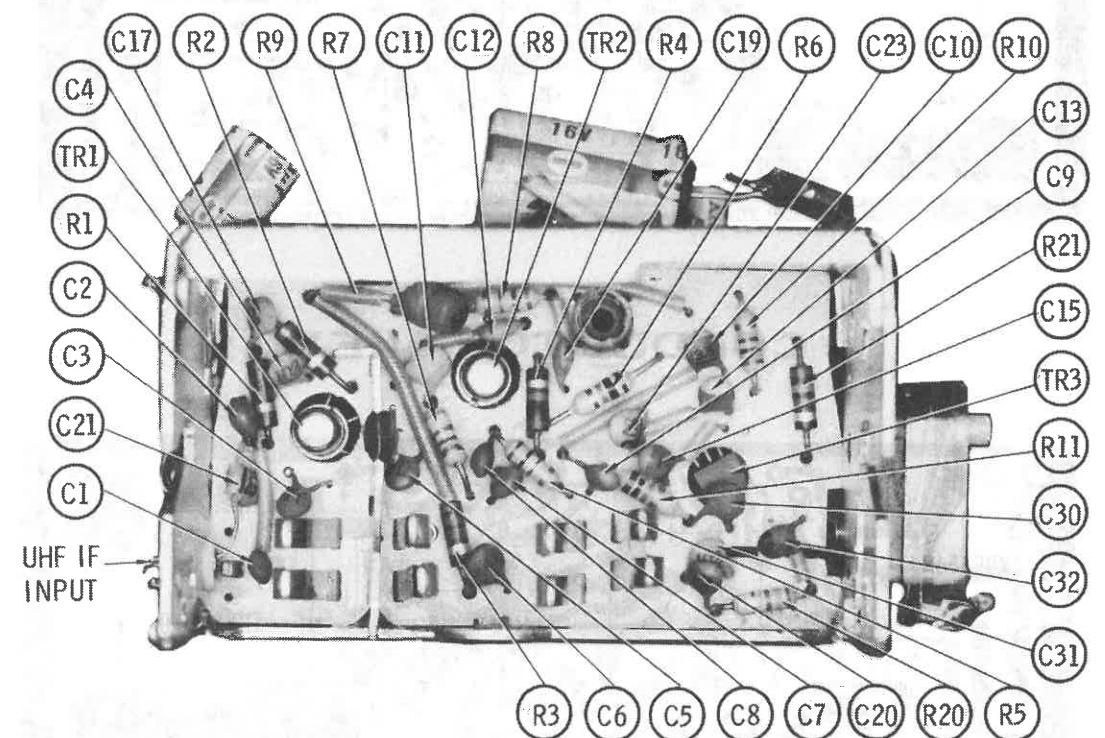
Connect the sweep generator across antenna terminals with 120-ohm carbon resistor in each lead. Refer to chart below for generator frequencies. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the scope for horizontal deflection. Use 10MC sweep unless otherwise noted. Connect a variable bias to the RF AGC line at Point T. Adjust bias to obtain response curve showing no overload.

CHANNEL	CONNECT SCOPE	REMARKS
13	Vertical input to Point TP1, low side to ground.	Expand or compress appropriate coils for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
12 thru 2	Vertical input to Point TP1, low side to ground.	Check all channels and make compromise adjustments by expanding or compressing appropriate coils if necessary.

GENERATOR FREQUENCY Numbers in () indicate channel number					
SWEEP	MARKER	SWEEP	MARKER	SWEEP	MARKER
(2) 57MC	55.25MC	(6) 85MC	83.25MC	(10) 195MC	193.25MC
(3) 63MC	59.75MC	(7) 177MC	87.75MC	(11) 201MC	197.75MC
(4) 69MC	61.25MC	(8) 183MC	175.25MC	(12) 207MC	199.25MC
(5) 79MC	65.75MC	(9) 189MC	179.75MC	(13) 213MC	203.75MC
	67.25MC		181.25MC		205.25MC
	71.75MC		185.75MC		209.75MC
	77.25MC		187.25MC		211.25MC
	81.75MC		191.75MC		215.75MC

FIG. 201

SOUND VIDEO



ALIGNMENT INSTRUCTION

- AUTOMATIC CONSTANT CURRENT CONTROL ALIGNMENT
1. Remove both top cover "A" and "B".
 2. Disconnect 3-Pin connector from the battery TY-360 in the battery pack.
 3. Connect the following test equipments as shown

in Figure 7.
DC power Source variable type
DC ampere meter 0 to 3 A range
DC volt meter 0 to 30 V range

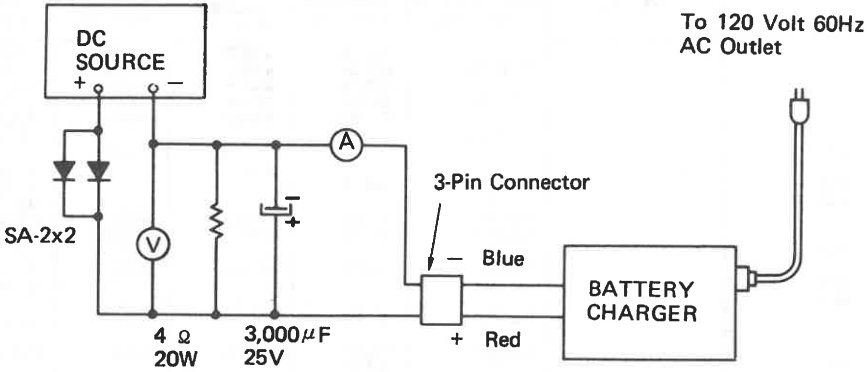
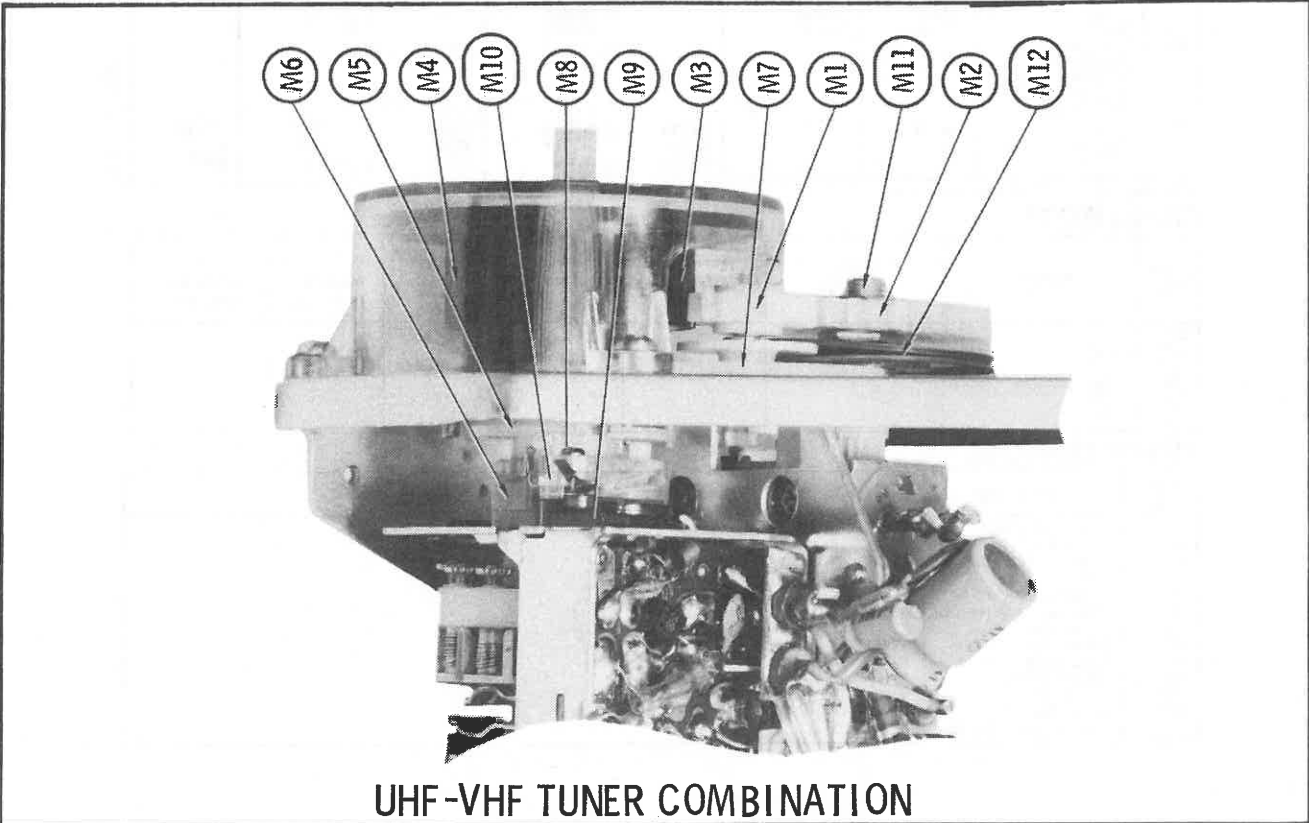


Figure 7.

4. After finishing the connection, set the DC Power Source voltage to +12.0 volts with the connected volt meter.
5. Then connect the AC power cord plug of the battery pack to a 120 volt 60Hz AC outlet.
6. Observing the ampere meter, turn and adjust current control (R55) on charger PWB (TYB61510-011) for 0.8 A.
7. Disconnect all the connections.

NOTE:
Automatic Over Charge Protector Alignment is pre-set in the Automatic Over Charge Protector Unit (TNP-61514), and requires no readjustment even if the unit is replaced by new one.

Courtesy of the Manufacturer



UHF-VHF TUNER COMBINATION

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

WIRING DATA

High Voltage Lead	Use BELDEN No. 8868 (25KV)
Shielded Hook-up Wire	Use BELDEN No. 8885 (Single Conductor)
	8738 (Two Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
300-Ohm Tuner Input Lead	Use BELDEN No. 8225
300-Ohm Antenna Lead-in	Use BELDEN No. 8275 (Foam Core) or 8285 (Foam Jacketed)
Antenna Rotor Cable	Use BELDEN No. 8464 (Flat) or 8484 (Round) - 4 Conductor
	8485 (Round) - 5 Conductor
	8488 (Round) - 8 Conductor

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MFR. PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V1	200HB22				

SEMICONDUCTORS

ITEM No.	TYPE / MFR. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	MOTOROLA PART No.
D101	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D201	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D401	TVSBAX13	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D402	TVSBAX13	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D403	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D404	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D406	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D501	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D502	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D504	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D505	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D506	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D507	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D601	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D602	0A90G	1N34AS (7)	1N34A (7)	PTC207 (7)	SK3087 (7)		ECG 110 (6)	
D603	0A90G							
D604	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D605	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D607	0A90G	1N34AS	1N34A	PTC207	SK3087	RT218	ECG 109	
D608	TVSUFSD-1		D172	PTC216	SK3130		ECG 506	
D609	TVSSB-2		D172	PTC216	SK3130		ECG 506	
D610	TVSUFSD-1		D172	PTC216	SK3130		ECG 506	
D611	TVSHFSD-1		D172	PTC216	SK3130		ECG 506	
D612	TVSSF-1		D172	PTC216	SK3130		ECG 506	
D613	TVSSB-2T				SK3033		ECG 117	
D614	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D615	0A90G	1N34AS	1N34A	PTC207	SK3087		ECG 109	
D616	TVSZB1-11 (10)		Z1212	ZB11	SK3092		ECG 5074	
D617	ECXB0061							
D701	TVSUFSD-1		D172	PTC216	SK3130		ECG 506	
D801	TVSS3G4	GE-510	R210	PTC205	SK3081		ECG 125	
D802	TVSS3G4	GE-510	R210	PTC205	SK3081		ECG 125	
D803	TVSS3G4	GE-510	R210	PTC205	SK3081		ECG 125	
D804	TVSS3G4	GE-510	R210	PTC205	SK3081		ECG 125	
D805	0A95	1N34AS	1N34A	PTC207	SK3090		ECG 109	
D806	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D807	TVSSB2-C		D172	PTC216	SK3130		ECG 506	
D808	TVS15SB20R		12FR10		SK3517			
D816	TVSSD-1Y	GE-504A	8D6 or 5A6D	PTC202	SK3017A or SK3032	RT210 or RT215	ECG 116 or ECG 117	
D817	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D818	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D819	TVSRD6A(10)	GEZD-3.6	Z1200	PTC501	SK3055	RT218	ECG 134	
D820	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D821	MA26	GE-300	D200	PTC214	SK3100	RT218	ECG 177	
D822	0A95	1N34AS	1N34A	PTC207	SK3090		ECG 109	
D851	TVSZB1-6 (10)	GEZD-6.2	Z1204	PTC503	SK3058		ECG 5070	

PANASONIC MODELS
CT-771, TY-702

FOLDER 1

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

SEMICONDUCTORS (cont)

ITEM No.	TYPE / MFR. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	MOTOROLA PART No.
IC101	UPC23C				SK3072			HEPC6063P
IC201	AN241							
IC202	EHD-AP4023S							
IC301	AN229							
IC401	AN234							
IC402	AN236							
IC403	AN242							
TR101	2SC562	GE-22	IRTR-70		SK3018	RT113	ECG 161	HEP709
TR102	2SC562		IRTR-70		SK3018	RT113	ECG 161	HEP709
TR103	2SC563		IRTR-70		SK3018	RT113	ECG 161	HEP709
TR401	2SA550(R)		TR-19	PTC103	SK3025	RT126	ECG 129	HEP715
TR402	2SC1012A		IRTR-78	PTC117	SK3044	RT110	ECG 154	HEP706
TR403	2SC1012A		IRTR-78	PTC117	SK3044	RT110	ECG 154	HEP706
TR404	2SC1012A		IRTR-78	PTC117	SK3044	RT110	ECG 154	HEP706
TR501	3SF11(Q)							
TR502	2SC828A(Q)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR503	2SC828A(Q)(R)(S)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR504	2SC828A(P)(Q)(R)(S)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR505	2SA564A(P)(Q)(R)(S)	GE-22	TR-19	PTC103	SK3114	RT126	ECG 159	HEP57
TR506	2SA546(A)(B)(D)(E)(F)		TR-28		SK3025	RT115	ECG 129	HEP242
TR507	2SC696(A)(B)(D)(E)(F)		TR-25		SK3024	RT114	ECG 128	HEP243
TR601	2SC828(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR602	2SC828(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR603	2SC828A(P)(Q)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR604	2SC696A(B)(E)(F)	GE-18	TR-25	PTC125	SK3024	RT114	ECG 128	HEP243
TR605	2SD321	GE-38	IRTR-67	PTC129	SK3115		ECG 165	HEP740
TR606	2SC828(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR608	2SC696A(B)(D)	GE-18	TR-25	PTC125	SK3024	RT114	ECG 128	HEP243
TR801	2SC840A(P)(Q)	GE-12	TR-23	PTC104	SK3021		ECG 175	HEP240
TR802	2SC538A(Q)(R)	GE-20	TR-21	PTC123	SK3020	RT107	ECG 123A	HEP738
TR803	2SC828A(Q)(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR804	2SC582(E)	GE-12	TR-23	PTC104	SK3021		ECG 124	HEP240
TR805	2SD200	GE-38	IRTR-67	PTC129	SK3115		ECG 165	HEP740
TR811	2SC828(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR812	3SF11(Q)							
TR813	2SA564A(Q)(P)	GE-22	TR-19	PTC103	SK3114	RT126	ECG 159	HEP57
TR814	2SC828(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR815	2SA546(A)(B)(D)(E)(H)		TR-28		SK3025	RT115	ECG 129	HEP242
TR816	2SC828(R)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728
TR851	2SC840(P)(Q)	GE-12	TR-23	PTC104	SK3021		ECG 175	HEP241
TR852	2SC696(D)(A)(E)	GE-18	TR-25	PTC125	SK3024	RT114	ECG 128	HEP243
TR853	2SC538A(R)(Q)	GE-20	TR-21	PTC123	SK3020	RT107	ECG 123A	HEP738
TR854	2SC828(R)(Q)	GE-20	TR-21	PTC123	SK3122	RT107	ECG 123A	HEP728

(6) Matched Pair.
(10) Zener.

(7) Two required - select matched pair.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C101	33 16V	ECEA16V33N	ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325
C102	330 16V	ECEA16V330N	ME-8-E-250	EA15-250	WBR300-35	QT1-30A	MTA300G50	EV-1245
C124	10 16V	ECEA16V10N	RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C131	100 6.3V	ECEA6V100N	RME-E-B-100	EP6-100	WBR100-16	MT1-21	MTV100CB6	EV-1030
C136	10 16V	ECSZ16EF10M					TD106M025FL	SD20-109
C145	33 16V	ECEA16V33N	ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325
C156	1 50V	ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
C161	10 16V	ECEA16V10N	RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C205	470 16V	ECEA16V470N	RME-L-E-500	EA15-500	WBR500-16	QT1-30A	MTV500DN15	EV-1250
C207	1 50V	ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
C211	1 50V	ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
C212	100 16V	ECEA16V100N	RME-E-E-100	EP15-100	WBR100-16	MT1-19	MTV100CD15	EV-1230
C213	1000 25V	ECEB25V1000N	ME-G1000	EA30-1000	WBR1000-25		MTA1000G25	TVA-1211
C214	3.3 25V	ECEA25V3R3N	RME-A-G-003	EP30-5	WBR5-50	MT1-3	MTV4CB50	EV-1318
C215	47 16V	ECEA16V47N	RME-E-E-050	EP15-50	WBR50-25	MT1-16	MTV50CB15	EV-1226
C302	4.7 25V	ECEA25V4R7N	RME-A-G-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319
C303	4.7 25V	ECEA25V4R7N	RME-A-G-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319
C305	100 6.3V	ECEA6V100N	RME-E-B-100	EP6-100	WBR100-16	MT1-21	MTV100CB6	EV-1030
C307	.33 25V	ECAG25ER33					TDC334M050EL	SD35-R339
C309	220 16V	ECEA16V220L	RME-J-250	EA15-250	WBR250-16	QT1-28	MTV250DE15	EV-1240
C311	3.3 NP 16V	ECEA16N3R3			BRNP4-25	NPQT-1	TCN503	TVAN-1150
C313	10 16V	ECEA16V10N	RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C405	4.7 50V	ECEA50V4R7MH						
	33 16V	ECEA16V33N	ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325

VHF TUNER PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

SEMICONDUCTORS

ITEM No.	TYPE / MFR. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	MOTOROLA PART No.
D1	TVS1S2085 (8)							
TR2	2SC761 (Y)	GE-11	TR-22	PTC115	SK3018	RT107	ECG 108	HEP56
TR3	2SC563	GE-11	TR-22	PTC115	SK3018	RT107	ECG 108	HEP56
	2SC1215*	GE-11	TR-22	PTC115	SK3018	RT107	ECG 108	HEP56
				PTC115	SK3019	RT108	ECG 108	HEP720

(8) Varactor

* Alternate Type

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	7						
C2	20						
C3	1.5		CCT0-200	DTZ-6R8	NP06P8	CN0568	10TCC-V68
C4	.001			DTZ-20	NP020	CN0420	10TCC-Q20
C5	7		CCD-102	DTZ-1R5	NP01P5	CN0515	10TCC-V15
C6	30			DM-102	GP1000	SM210	2SS-D10
C7	2 N750		CCT0-300	DTZ-6R8	NP06P8	CN0568	10TCC-V68
C8	5						10TCC-Q30
C9	10 N330						
C10	3.5 N220		*	TCA-10	NP05	CN7522	10TCC-V50
C11	.001		*			*	10TCC-Q10
C12	10		CCD-102	DM-102	GP1000	SM210	10TCC-V33
C13	2.5 N220		CCT0-100	DTZ-10	NP010	CN0410	2SS-D10
C14	.0022		*			*	10TCC-Q10
C15	7 N330		CCD-222	DD-222	GP2200	GP222	10TS-D22
C16	2 N220		*			*	10TCC-V68
C17	.001		CCD-102	DM-102	GP1000	SM210	2SS-D10
C18	.001						
C19	.001		CCD-102	DM-102	GP1000	SM210	2SS-D10
C20	10 N330		*	TCA-10	GP1000	SM210	10TCC-Q10
C21	.001		CCD-102	DM-102	GP1000	SM210	2SS-D10
C22	150		CCD-151	DD-151	GP150	GP315	10TS-T15
C23	.001		CCD-102	DM-102	GP1000	SM210	2SS-D10
C30	3 N750						
C31	.001		CCD-102	DM-102	GP1000	SM210	2SS-D10
C32	1 N075						
C33	.001						

UHF TUNER PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

SEMICONDUCTORS

ITEM No.	TYPE / MFR. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	MOTOROLA PART No.
D71	TVS1S750							
	1N826*	1N82A	1N82AG		SK3089		ECG 112	
	SD82*	1N82A	1N82AG		SK3089		ECG 112	
D72	TVS1S2268 (8)							
	1S2D87* (8)							
	1S2339* (8)							
	1S1922* (8)							
	1S2147* (8)							
TR71	2SC684	GE-11		PTC115	SK3019	RT108	ECG 108	HEP720
	2SC1215*	GE-11		PTC115	SK3019	RT108	ECG 108	HEP720
	2SC1158*	GE-11		PTC115	SK3019	RT108	ECG 108	HEP720

(8) Varactor

* Alternate Type.

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C71	2.7						
C76	1.5						
C77	.001						
C81	.001						
C82	.001						
C83	85						

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M1	Indicator Middle Gear	TEK6306	
M2	Indicator Main Gear	TEK6307	
M3	Channel Indicator, UHF Tuner	TKK60333	
M4	Indicator Cover	TKK60334	
M5	Fine Tuning Drive Gear	N8-466-01	
M6	Slide Gear	N8-471R1	
M7	Idler Gear	N8-433-02	
M8	Compression Spring	N8-214-04	
M9	Return Spring	N8-461R1	
M10	Crutch Gear	N8-442-02	
M11	Drive Shaft	N8-613-16	
M12	Flexion Board Ass'y	N8-451-03	

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER
F800	1A @ 250V Quick Acting Pigtail			GJV1		318001	
F801	4A @ 125V Quick Acting Pigtail	TSF35402		GJV4		318004	
F802	1.6A @ 125V Quick Acting Pigtail	XBA2M16NV100		GJV1-6/10		31801.6	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
DL301	VHF Antenna	TXFSA11771	JFD Replacement: PAN-10
L880	UHF Antenna	TSA325B	JFD Replacement: TA-545
M1	UHF Tuner	TNT4674E	
S901	UHF Tuner	TNT86513E	
S902	Combination Tuner	TNT4674CE	
S903	Delay Line	TLK60801	
S904	Degaussing Coil	TLK9174	
S905	Relay	AP39046	Battery Charge - Discharge
S906	Spark Gap	TGPS152B-L	
S907	Spark Gap	TGPS152B-L	
S908	Spark Gap	TGPS152B-L	
SW1	Spark Gap	TGPS152B-L	
SW2	Switch	N23-105	AFT Defeat (Micro Switch)
SW101	Switch	N27-454-A01	UHF B+/UHF IF Switch
SW401	Switch	ESB397	AFT Defeat
SW801	Switch	ESB3910	Normal-Service
SW802	Switch	ESB1151D	Power Off-On
X401	Crystal	ESB1134NS	Degaussing
	Magnet	TSS616-1	3.5MC
	Printed Circuit Board	TYB61106-011	Blue Lateral & Purity Ring Assembly (Part of TNS979, Convergence Yoke & Board Assembly)
	Printed Circuit Board	TYB61107-011	Main Assembly
	Printed Circuit Board	TYB61312-011	CRT Socket Assembly
	Printed Circuit Board	TYB61506-011	Horizontal Output Assembly
	Printed Circuit Board	TYB61507-011	AFT-Switch Assembly
	Printed Circuit Board	TYB61508-011	Power Supply Assembly (Converter & Charger)
	Printed Circuit Board	TYB61509-011	Power Supply Assembly (AC)
	Printed Circuit Board	TYB61509-011	Power Supply Assembly (LV Rect & Pincush)
	Printed Circuit Board	TNS979	Convergence Yoke Assembly

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Escutcheon Assembly	TXFKE11771	Knob - Brightness	TBX6519-1
Cabinet - Complete	TXFKY12771	Knob - Color	TBX6519-2
Handle	TKK70204	Knob - Tint	TBX6519-3
Front Cover	TXFKG11771	Knob - Degaussing	TBX6517
Knob - VHF Channel Selector	TBX7763-1	Knob - Power	TBX6517-1
Knob - VHF Fine Tuning	TBX7764	Knob - AFT	TBX6517-2
Knob - Volume	TBX6518	Knob - Rear Controls (5 required)	TBX6519

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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ELECTROLYTIC CAPACITORS (cont)

ITEM No.	RATING	REPLACEMENT DATA							
		MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.	
C407	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C415	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C416	4.7	25V ECEA25V4R7N	RME-A-G-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319	
C418	1	10V ECAG10E1	ME-1-D-001	EP15-2	WBR1-50	MT1-1	MTV1CB50	EV-1315	
C419	1 NP	50V ECEA50N1			BRNP1-50		TCN501	TVAN-1301.1	
C421	.33	10V ECAG10ER33					TDC334M050EL	SD35-R339	
C422	3.3 NP	16V ECEA16N3R3			BRNP4-25	NPQT-1	TCN503	TVAN-1150	
C427	4.7	25V ECEA25V4R7N	RME-A-G-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319	
C433	33	16V ECEA16V33N	ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325	
C435	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C436	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C441	4.7	16V ECSZ16EF4R7					TDC475M035FL	SD35-4R79	
C442	4.7	16V ECSZ16EF4R7					TDC475M035FL	SD35-4R79	
C443	4.7	16V ECSZ16EF4R7					TDC475M035FL	SD35-4R79	
C446	33	16V ECEA16V33N	ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325	
C450	10	160V ECEB160V10	CTA-1310	EP15-50	WBR12-250	QT1-6	TC52A	TVA-1441	
C504	47	16V ECEA16V47N	RME-E-E-050	EP15-50	WBR50-25	MT1-16	MTV50CB15	EV-1226	
C508	.33	25V ECAG25ER33					TDC334M050EL	SD35-R339	
C511	10	50V ECEA50B101	RME-D-J-010	EP50-10	WBR10-50	MT1-6	MTV10CB50	EV-1622	
C512	10 NP	16V ECEA16N10			BRNP10-400	NPQT-3	TCN5010	TVAN-1155	
C513	47	16V ECEA16V47MH	RME-E-E-050	EP15-50	WBR50-25	MT1-16	MTV50CB15	EV-1226	
C516	100	16V ECEA16V100MH	RME-E-E-100	EP15-100	WBR100-16	MT1-19	MTV100CD15	EV-1230	
C517	2200	16V ECEB16V2200N	ME-G2000	EA15-2000	WBR2000-16	QT1-33	TC1520A	TVA-1175.3	
C518	3300	16V ECCEM16R3300E	AFH1-04-01(1) (2)		CC0014A		TC1540 (1)	TVL-1173.1 (1)	
C601	220	16V ECEB16V220N	ME-8-E-250	EA15-250	WBR250-16	QT1-28	MTA250F15	TVA-1161	
C604	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C612	4.7	50V ECEA50V4R7MH	RME-B-J-005	EP50-5	WBR5-50	MT1-3	MTV5CB50	EV-1519	
C640	470	16V ECEA16V470L	RME-L-E-500	EA15-500	WBR500-16	QT1-30A	MTV500DN15	EV-1250	
C652	1	250V ECEA250V1	ME-3-R-001		WBR1-450	QT1-1	TC595	TVA-1500	
C655	220	25V ECEA25V220U	RME-K-G-250	EA30-250	WBR250-25	QT1-28	MTV250DJ25	EV-1340	
C656	1000	25V ECEA25V1000N	RME-P-G-1000	EA30-1000	WBR1000-25		MTA1000G25	EV-1360	
C657	4.7	160V ECEA160V4R7	ME-6-R-005		WBR8-250	QT1-3.5	TC50XA	TVA-1438	
C658	220	10V ECEA10V220N	RME-G-D-250	EA15-250	WBR250-16	MT1-25	MTV250DB10	EV-1140	
C665	100	25V ECEA25V100U	RME-G-G-100	EA30-100	WBR100-25	MT1-20	MTV100DB25	EV-1330	
C667	10	16V ECEB16V10N	ME-1-E-010	EA15-10	WBR10-25	MT1-5	MTA10D35	TVA-1145	
C669	33	16V ECEA16V33MH	ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325	
C671	3.3	50V ECEA50V3R3MH	RME-B-J-003	EP50-5	WBR5-50	MT1-3	MTV4CB50	EV-1618	
C701	470	10V ECEA10V470N	RME-K-D-500	EA15-500	WBR500-16	QT1-30A	MTV500DN15	EV-1150	
C702	220	10V ECEA10V220N	RME-G-D-250	EA15-250	WBR250-16	MT1-25	MTV250DB10	EV-1140	
C807	220	250V ECEM250H220Y							
C809	22	250V ECEA250V22	CTA-1325		WBR30-250	QT1-12	TC55A	TVA-1509	
C810	22	250V ECEA250V22	CTA-1325		WBR30-250	QT1-12	TC55A	TVA-1509	
C813	1	160V ECEA160V1	ME-3-R-001		WBR1-450	QT1-1	TC595	TVA-1434	
C819	1000	25V ECEA25V1000N	RME-P-G-1000	EA30-1000	WBR1000-25		MTA1000G25	EV-1360	
C826	100	25V ECEA25V100U	RME-G-G-100	EA30-100	WBR100-25	MT1-20	MTV100DB25	EV-1330	
C827	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C828	33	6.3V ECEA6V33N	ME-2-B-035	EP6-25	WBR35-50	MT1-13	MTV30CB25	EV-1125	
C829	1	50V ECEA50V1N	RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615	
C830	4.7	25V ECEA25V4R7N	RME-A-G-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319	
C851	10	25V ECEA25V10N	RME-B-G-010	EP30-10	WBR10-25	MT1-5	MTV10CB50	EV-1322	
C852	10	16V ECEA16V10N	RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222	
C854	1000	16V ECEA16V1000U	RME-N-E-1000	EA15-1000	WBR1000-16	QT1-32	TC1501B	EV-1260	

(1) Use insulating sleeve. (2) Indicates AEROVOX part supplied by ARCO.

PANASONIC MODELS
CT-771, TY-702

FOLDER 1

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

CAPACITORS

ITEM No.	RATING			MFR. PART No.	REPLACEMENT DATA				
					ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C103	56	50V	5%	ECV1ZW20P32	CCT0-100	DTZ-10	NP010	CN0456	10TCC-Q56
C104	20	50V							
C105	10	50V	+ .5	ECCD05020CU				CN0410	10TCC-Q10
C106	2 N750	50V	+ .25	ECCD05020CU				CN7522	
C107	2 N750	50V	+ .25	ECCD05020CU				CN7522	
C108	15 N075	50V	5%	ECCD05150JL				*	
C109	18 N075	50V	5%	ECCD05180JL				*	
C110	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C111	18	50V	5%		CCT0-180		NP018	CN0418	10TCC-Q18
C112	.01	50V			CCD-103		MGP01	TA110	TG-S10
C113	3 N150	50V	+ .25	ECCD05030CP	*			*	10TCP-V30
C114	47 N150	50V	5%	ECCD05470JP	*			*	10TCP-Q47
C115	56	50V	5%					CN0456	10TCC-Q56
C116	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C117	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C118	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C119	22	50V	5%		CCT0-220		NP022	CN0422	10TCC-Q22
C120	180	50V	5%		CCD-181	DD-181	GP180	GP318	10TS-T18
C121	22	50V	5%		CCT0-220	DTZ-22	NP022	CN0422	10TCC-Q22
C122	22	50V	5%		CCT0-220	DTZ-22	NP022	CN0422	10TCC-Q22
C123	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C125	4	50V	+ .25	ECCD05040C			NP04		10TCC-V39
C126	22	50V	5%		CCT0-220	DTZ-22	NP022	CN0422	10TCC-Q22
C127	82 N150	50V	5%	ECCD05820JP	*			*	10TCP-Q82
C128	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C129	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C130	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C132	10	50V	+ .5		CCT0-100	DTZ-10	NP010	CN0410	10TCC-Q10
C133	5	50V	+ .25	ECCD05050C			NP05		10TCC-V50
C134	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C135	82 N150	50V	5%	ECCD05820JP	*			CN0510	10TCP-Q82
C137	1	50V	+ .25	ECCD05010C				*	10TCC-V10
C138	27 N150	50V	5%	ECCD05270JP	*			*	10TCP-Q27
C139	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C140	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C141	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C142	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C143	.001	50V			CCD-102	DM-102	GP1000	SM210	2SS-D10
C144	.001	50V			CCD-102	DM-102	GP1000	SM210	2SS-D10
C146	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C147	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C148	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C149	27 N150	50V	5%	ECCD05222JP	*			*	10TCP-Q27
C150	27 N150	50V	5%	ECCD05222JP	*			*	10TCP-Q27
C151	2.7 N150	50V		ECCD052R7CP	*			*	10TCP-V27
C152	.001	50V			CCD-102	DM-102	GP1000	SM210	2SS-D10
C153	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C154	.001	50V			CCD-102	DM-102	GP1000	SM210	2SS-D10
C155	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C157	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C158	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C159	.01	50V			1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C160	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C201	10	50V	+ .5p		CCT0-100	DTZ-10	NP010	CN0410	10TCC-Q10
C202	5	50V	+ .25p	ECCD05050C			NP05		10TCC-V50
C203	82 N075	50V	5%	ECCD05820JL				*	
C204	.047	50V			1DP-2-473		DPMS6S47	PVC1147	225P47391WD3
C206	.0022	50V			CCD-222	DD-222	GP2200	GP222	10TS-D22
C208	.033	50V			1DP-1-333		DPMS-6S33	PVC1133	1PB-S33
C209	12 N075	50V	5%	ECCD05120JL				*	
C210	82 N075	50V	5%	ECCD05820JL				*	
C216	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C301	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C304	270	50V	5%		CCD-270	DD-271	GP270	GP327	10TS-T27
C306	330	50V	10%		CCD-331	DD-331	GP330	GP333	10TS-T33
C308	.001	50V			CCD-102	DM-102	GP1000	SM210	2SS-D10
C310	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C312	.01	50V			CCD-103	CK-103	MGP01	TA110	TG-S10
C401	68 NPO	50V	5%		CCT0-820	DTZ-68	NP082	CN0468	10TCC-Q68
C402	82 NPO	50V	5%		CCD-103	CK-103	MGP01	CN0482	10TCC-Q82
C403	.01	50V			CCT0-101	DTZ-100	NP0100	TA110	TG-S10
C404	100 NPO	50V	5%					CN0310	10TCC-T10

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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COILS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA					
		MFR. PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.
L613	Fifth Harmonic	TLH6952					
L702	Right Blue Horiz. Lines	TLC1210					
L703	Right R/G Vert Lines	TLC1210					
	Conv. Yoke Ass'y.	TNS979 (1)					
	Conv. Yoke	TLC-2056S					
L706	Blue Section						
L707	R/G Section						
T601	Horiz. Oscillator	TLH6351					

(1) Includes Convergence Board

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T800	.48AAC	12.4	132MH	TLP6154				
T804	1.6A	.1	7uh	TLP6152				
T805	1.6A	.5	365uh	TLP6153				

TRANSFORMERS (Sweep Circuits)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		MFR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T501	Vert. Pulse	TLV6901				
T502	Pincushion Correction	TLH6754T				
T503	Yoke (Horiz. 134uh) 90° (Vert 4.3MH)	TLV5202S				
T602	Horiz Driver	TLH6452				
T603	Horiz. Out.	TLF6901				
T604	Boost Reg.	TLH6753S				
T605	Flyback	TLF6801S				
T802	Converter Driver	TLP6902				
T803	Converter Out.	TLP6903				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFR. PART No.	QUAM PART No.	
SP1	3" PM 16 ohms	EASBP755A		

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L10	RF Choke (15 turns)	TLT070-107		74F686AP	T821
L101	RF Choke (7uh)	TLT010-107		74F106AP	T806
L102	RF Choke (1uh)	TLT070-107	19-2009	74F686AP	T821
L103	RF Choke (7uh)	TLT082-106		74F826AP	T822
L104	RF Choke (8.2uh)	TLT082-106	19-2015	74F826AP	T822
L105	RF Choke (8.2uh)	TLT082-106	19-2015	74F826AP	T822
L106	RF Choke (4uh)	TLT040-107	19-1003	74F396AP	T858
L107	RF Choke (4.7uh)	TLT147-107		74F476AP	T819
L108	RF Choke (4.7uh)	TLT147-107		74F476AP	T819
L109	RF Choke (8.2uh)	TLT082-106		74F826AP	T822
L201	RF Choke (7uh)	TLT070-107	19-2015	74F686AP	T821
L302	RF Choke (8.2uh)	TLT082-106		74F826AP	T822
L401	Peaking (6.8mh)	TLT682-109	19-2015		
L402	RF Choke (8.2uh)	TLT082-106	19-5102	74F826AP	T822
L403	RF Choke (22uh)	TLT220-999	19-2015	74F225AI	TA311
L404	RF Choke (22uh)	TLT220-999	19-6022	74225AI	TA311
L406	RF Choke (8.2uh)	TLT082-106	19-6022	74F826AP	T822
L407	Peaking (270uh)	TLT271-999	19-2015	72F274AP	
L408	RF Choke (8.2uh)	TLT082-106		74F826AP	T822
L409	Peaking (330uh)	TLT331-999	19-2015	72F334AP	T319
L410	RF Choke (8.2uh)	TLT082-106	19-3330	74F826AP	T822
L413	Peaking (470uh)	TLT471-999	19-2015	74F474AP	T323
L501	Peaking (300uh)	TLH6651		6155	T318
L601	Peaking (3.9mh)	TLT392-109	19-3300	4668	T877
L603	RF Choke (22uh)	TLT220-106		74F225AI	TA311
L605	RF Choke (4 turns)	TLR69402	19-6022		
L609	RF Choke (7.6uh)	TLH6652		74F826AP	T822
L610	RF Choke (8.2uh)	TLT082-106	19-2015	74F826AP	T822
L611	Peaking (70uh)	TLT700-109	19-7068	74F685AI	T303
L701	Peaking (15mh)	TLT153-109			
L704	Peaking (15mh)	TLT153-109			
L705	Peaking (15mh)	TLT153-109			
L801	Line Choke (200uh)	TLP8508		5250	
L802	Line Choke (200uh)	TLP8508		5250	
L803	Peaking (5.6mh)	TLT562-109		4669	
L804	RF Choke (10uh)	TLT100-109	19-1005	4622	T823
L806	RF Choke (22uh)	TLT220-106	19-6022	74F225AI	TA311
L807	RF Choke (18uh)	TLT180-106		72F185AP	
L808	RF Choke (4 turns)	TLR69402			
L809	RF Choke (3 turns)	TLR69401			
L810	RF Choke (4 turns)	TLR69402			
T101	Video Input IF	TLI61373			
T102	47.25MC Trap	TLI63353			
T103	41.25MC Trap	TLI63354			
T104	1st Video IF	TLI61374			
T105	39.75MC Trap	TLI63352			
T106	2nd Video IF (Pri)	TLI61375			
T107	2nd Video IF (Sec)	TLI61376			
T108	41.25MC Trap	TLI61378			
T109	3rd Video IF	TLI61377			
T110	4.5MC Trap	TLI63355			
T111	AFT Input IF	TLI67364			
T112	AFT Discriminator (Pri)	TLI67365			
T113	AFT Discriminator (Sec)	TLI67366			
T201	Sound Input IF	TLI62353			
T202	Sound Discriminator	TLI63353			
T401	Chroma Take Off	TLK61053			
T402	2nd Chroma Bandpass	TLK63160			
T403	1st Chroma Bandpass	TLK63159			
T801	Converter Oscillator	TLH6351			

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C406	.082 50V		6DP-4-823		DPMS6S82		1PB-S82
C408	.001 50V		CCD-102	DM-102	GP1000	SM210	2SS-D10
C409	270 125 5%		DM-19-271J	CPR-270J	CD15FD271J03	SX327	424ME2700J501
C410	100 NPO 50V 5%		CCCT0-101	DTZ-100	NP0100	CNO310	10TCC-T10
C411	82 NPO 50V 5%		CCCT0-820	DTZ-82	NP082	CNO482	10TCC-Q82
C412	68 NPO 50V 5%			DTZ-68		CNO468	10TCC-Q68
C413	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C414	.01 50V		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C417	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C420	270 50V 5%		CCD-270	DD-271	GP270	GP327	10TS-T27
C423	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C424	10 NPO 50V +.5		CCCT0-100	DTZ-10	NP010	CNO410	10TCC-Q10
C425	47 NPO 50V 5%		CCCT0-470	DTZ-47	NP047	CNO447	10TCC-Q47
C426	39 N750 50V 5%		CCTN-390			CN7439	10TCU-Q39
C428	82 NPO 50V 5%		CCCT0-820	DTZ-82	NP082	CNO482	10TCC-Q82
C429	.0056 50V		6DP-1-562	CPR-5600J	DPMS6D56	PVC6256	1PB-D56
C430	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C431	.01 50V		CCD-103	CK-103	MGPO1	CNO315	10TCC-T15
C432	150 NPO 50V 5%		CCCT0-151	DTZ-150			
C434	.082 50V		6DP-4-823		DPMS6S82		1PB-S82
C437	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C438	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C439	.033 50V		1DP-1-333		DPMS-6S33	PVC1133	1PB-S33
C440	330 10%		CCD-331	DD-331	GP330	GP333	10TS-T33
C444	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C445	.01 50V		CCD-103	CK-103	MGPO1	TA110	TG-S10
C447	330 10%		CCD-331	DD-331	GP330	GP333	10TS-T33
C448	330 10%		CCD-331	DD-331	GP330	GP333	10TS-T33
C449	180 10%		CCD-181	DD-181	GP180	GP318	10TS-T18
C451	.0022 50V		6DP-1-222	CPR-2200J	DPMS-6D22	PVC6222	1PB-D22
C453	.082 50V		6DP-4-823		DPMS6S82		1PB-S82
C454	150 10%		CCD-151	DD-151	GP150	GP315	10TS-T15
C500	.001 150VAC			CI-102	AC-1000	UAC210	12SL-D10
C501	.022 50V 10%		1DP-1-223		DPMS6S22	PVC1122	225P22391WD3
C502	.1 50V 10%		1DP-2-104		DPMS2P1	PVC101	225P10491WD3
C503	.056 50V 10%		1DP-2-563		DPMS6S56	PVC1156	225P56391WD3
C505	.027 50V 10%		6DP-3-273		DPMS6S27	PVC6127	1PB-S27
C506	.027 50V 10%		6DP-3-273		DPMS6S27	PVC6127	1PB-S27
C507	.47 50V 10%		1DP-4-474		DPMS2P47	PVC1047	1PB-P47
C509	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C514	.0082 50V 10%		6DP-2-822	CPR-8200J	DPMS6D82	PVC6282	1PB-D82
C515	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C519	.1 50V 10%		1DP-2-104		DPMS2P1	PVC101	225P10491WD3
C520	.33 50V		1DP-4-334		DPMS2P33	PVC1033	1PB-P33
C521	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C522	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C602	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C603	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C605	220 10%		CCD-221	DD-221	GP220	GP322	10TS-T22
C607	.012 50V 10%						1PB-S12
C608	.0056 50V 10%		6DP-1-562	CPR-5600J	DPMS6D56	PVC6256	1PB-D56
C609	.1 50V 10%		1DP-2-104		DPMS2P1	PVC101	225P10491WD3
C611	.068 50V 10%		1DP-2-683		DPMS-6S68	PVC1168	1PB-S68
C613	.0082 125V 5%		DM-30-822J	CPR-8200J		SX282	MS-28
C614	.022 400V		4DP-2-223		DPMS6S22	PVC6122	4PS-S22
C642	.01 50V 10%		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C643	.001 50V		CCD-102	DM-102	GP1000	SM210	2SS-D10
C644	.01 50V		1DP-1-103	CPR-10000J	DPMS6S1	PVC211	225P10391WD3
C645	.001 50V		CCD-102	DM-102	GP1000	SM210	2SS-D10
C646	.015 400V 10%		4DP-1-153		DPMS6S15	PVC6115	4PS-S15
C647	.0047 50V		CCD-472	DD-472G	GP4700	JF247	10TS-D47
C648	.022 50V		1DP-1-223		DPMS6S22	PVC1122	225P22391WD3
C649	.1 50V		1DP-2-104		DPMS2P1	PVC101	225P10491WD3
C650	.1 400V 10%		4DP-3-104		DPMS4P1	PVC401	4PS-P10
C651	.082 50V		6DP-4-823		DPMS6S82		1PB-S
C653	.01 400V 10%		4DP-1-103	CPR-10000J	DPMS6S1	PVC411	4PS-S10
C654	.022 400V 10%		4DP-2-223		DPMS6S22	PVC6122	4PS-S22
C659	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C660	.15 50V 10%		1DP-3-154		DPMS-2P15	PVC1015	1PB-P15
C661	.22 50V 10%		1DP-3-224		DPMS2P22	PVC1022	1PB-P22
C663	.022 1000V		16DP-5-223		DPMS-20S22	PVC16122	10TM-S22

PANASONIC MODELS
CT-771, TY-702

FOLDER 1

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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CAPACITORS (cont)

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA					
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C664	.033 400V 10%	ECQH2106KZ	4DP-2-333	CPR-2200J	DPMS6S33	PVC6133	4PS-S33	
C666	.0022 50V 10%		6DP-1-222		DPMS-6D22	PVC6222	1PB-D22	
C668	10mfd 250V 10%							
C670	.0039 50V		6DP-1-392		CPR-3900J	DPMS6D39	PVC6239	1PB-D39
C673	.01 50V		CCD-103		CK-103	MGPO1	TA110	TG-S10
C703	.068 50V 10%		1DP-2-683			DPMS-6S68	PVC1168	1PB-S68
C704	.047 50V 10%		1DP-2-473			DPMS6S47	PVC1147	225P47391WD3
C800	.056 50V 10%		1DP-2-563			DPMS6S56	PVC1156	225P56391WD3
C801	.0047 150VAC 1.4VDC			CI-502	AC-5000	UAC250	125L-D50	
C802	.0047 150VAC 1.4VDC			CI-502	AC-5000	UAC250	125L-D50	
C803	.0047 150VAC 1.4KVDC	ECQH6155KZ	CI-502	AC-5000	UAC250	125L-D50		
C804	.0047 150VAC 1.4KVDC		CI-502	AC-5000	UAC250	125L-D50		
C805	.0047 150VAC		CI-502	AC-5000	UAC250	125L-D50		
C806	.0047 150VAC		CI-502	AC-5000	UAC250	125L-D50		
C808	1.5mfd 600V 10%		WMF-6W1P5	DPMS-6S27	PVC6127	1PB-S27		
C811	.027 50V		6DP-3-273	DD-153	DPMS6S15	PVC2115	225P15391WD3	
C812	.015 50V		1DP-1-153	DD-222	GP2200	GP222	10TS-D22	
C814	.0022 10KV 10%		CCD-222	DD30-561	HV3-560	3HV356	30GA-T56	
C816	560 2KV 10%		3CCD-561					
C818	10mfd 250V 10%		ECQH2106KZ	CI-502	AC-5000	UAC250	125L-D50	
C820	.0047 150VAC 1.4KVDC	CI-102		AC-1000	UAC210	125L-D10		
C821	.001 150VAC	CI-502		AC-5000	UAC250	125L-D50		
C822	.0047 150VAC 1.4KVDC	CCD-103		DD-103	GP10000	JF110	10TS-S10	
C901	.01	CCD-103		DD-103	GP10000	JF110	10TS-S10	
C902	.01	CCD-103		DD-103	GP10000	JF110	10TS-S10	
C903	.01	CCD-103		DD-103	GP10000	JF110	10TS-S10	
C904	.01	CCD-103		DD-103	GP10000	JF110	10TS-S10	

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFG. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS—IRC PART No.	MALLORY PART No.
R102	Adjacent Sound Reject	500	EVN K4AA00B52				
R115	Sound Reject	500	EVN K4AA00B52				
R129	AFT	50K	EVN K4AA00B54				
R207	Volume (Slider Type)	50K	EVA 85A01A54L				
R302	RF AGC	10K	EVH 33AL15B14				
R305	Contrast	1000	EVH 34AL20E13				
R317	Brightness	10K	EVH BOAL15B14				
R410	Color Killer	5000	EVH 33AL15B53				
R411	ACC	200K	EVN K4AA00B25				
R418	Color Sync (CW)	3000	EVN K4AA00B33				
R442	Blue Drive	500	EVN K4AA00B52				
R445	Green Drive	500	EVN K4AA00B52				
R447	Color	10K	EVH BOAL15B14				
R450	Tint	2000	EVH BOAL15A23				
R513	Vert Hold	10K	EVH 33AL20B14				
R520	Height	20K	EVN K4AA00B24				

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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CONTROLS (All wattages 1/2 watt, or less, unless listed) (cont)

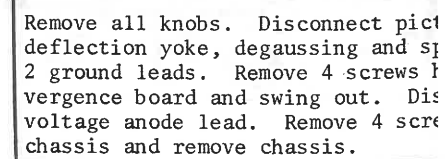
ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFG. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS—IRC PART No.	MALLORY PART No.
R522	Vert Linearity	500	EVN K4AA00B52				
R525	Vert Bias	5000	EVN K4AA00B53				
R621	Horiz Hold	5000	EVH 33AL20B53				
R656	"B" Boost	500	EVN K4AA00B52				
R666	ABL (Auto Brightness Level)	5000	EVN K4AA00B53				
R702	R-G Vertical Lines (Top)	100	EVT J4AS15B12	TSV-100 (1) or T-100 (1)		X201R101B (1)	MTC12L1 (1)
R703	Blue Horiz. Lines(Top)	100	EVT J4AS15B12	TSV-100 (1) or T-100 (1)		X201R101B (1)	MTC12L1 (1)
R706	R-G Vert. Lines (Bottom)	100	EVT J4AS15B12	TSV-100 (1) or T-100 (1)		X201R101B (1)	MTC12L1 (1)
R707	Blue Horiz Lines (Bottom)	100	EVT J4AS15B12	TSV-100 (1) or T-100 (1)		X201R101B (1)	MTC12L1 (1)
R710	R-G Vert Lines (Left)	300	EVT J4AS15B32	TSV-250 (1) or T-300 (1) or T-100 (1)		X201R351B (1)	MTC32L1 (1)
R711	Blue Horiz Lines(Left)	100	EVT J4AS15B12	TSV-100 (1) or T-300 (1) or T-250 (1)		X201R101B (1)	MTC12L1 (1)
R712	R-G Horiz Lines(Left)	300	EVT J4AS15B32	TSV-250 (1) or T-300 (1) or T-10K (1)		X201R351B (1)	MTC32L1 (1)
R828	Auto Charge Protector	10K	EVT S3AA00B14	TSV-10K (1) or T-10K (1)		X201R103B (1)	MTC14L1 (1)
R831	Auto Discharge Protector	10K	EVT S3AA00B14	TSV-10K (1) or T-10K (1)		X201R103B (1)	MTC14L1 (1)
R858	DC Voltage Adjuster	2000	EVN K4AA00B23				
R906	Red Screen	2meg	EVT MAA15RB26	T-2meg (1) or TSV-2.2meg (1)		X201R205B (1)	MTC26L1 (1)
R907	Green Screen	2meg	EVT MAA15GB26	T-2meg (1) or TSV-2.2meg (1)		X201R205B (1)	MTC26L1 (1)
R908	Blue Screen	2meg	EVT MAA15BB26	T-2meg (1) or TSV-2.2meg (1)		X201R205B (1)	MTC26L1 (1)
R911	Focus	2meg	EVT MAA15OB26	T-2meg (1) or TSV-2.2meg (1)		X201R205B (1)	MTC26L1 (1)

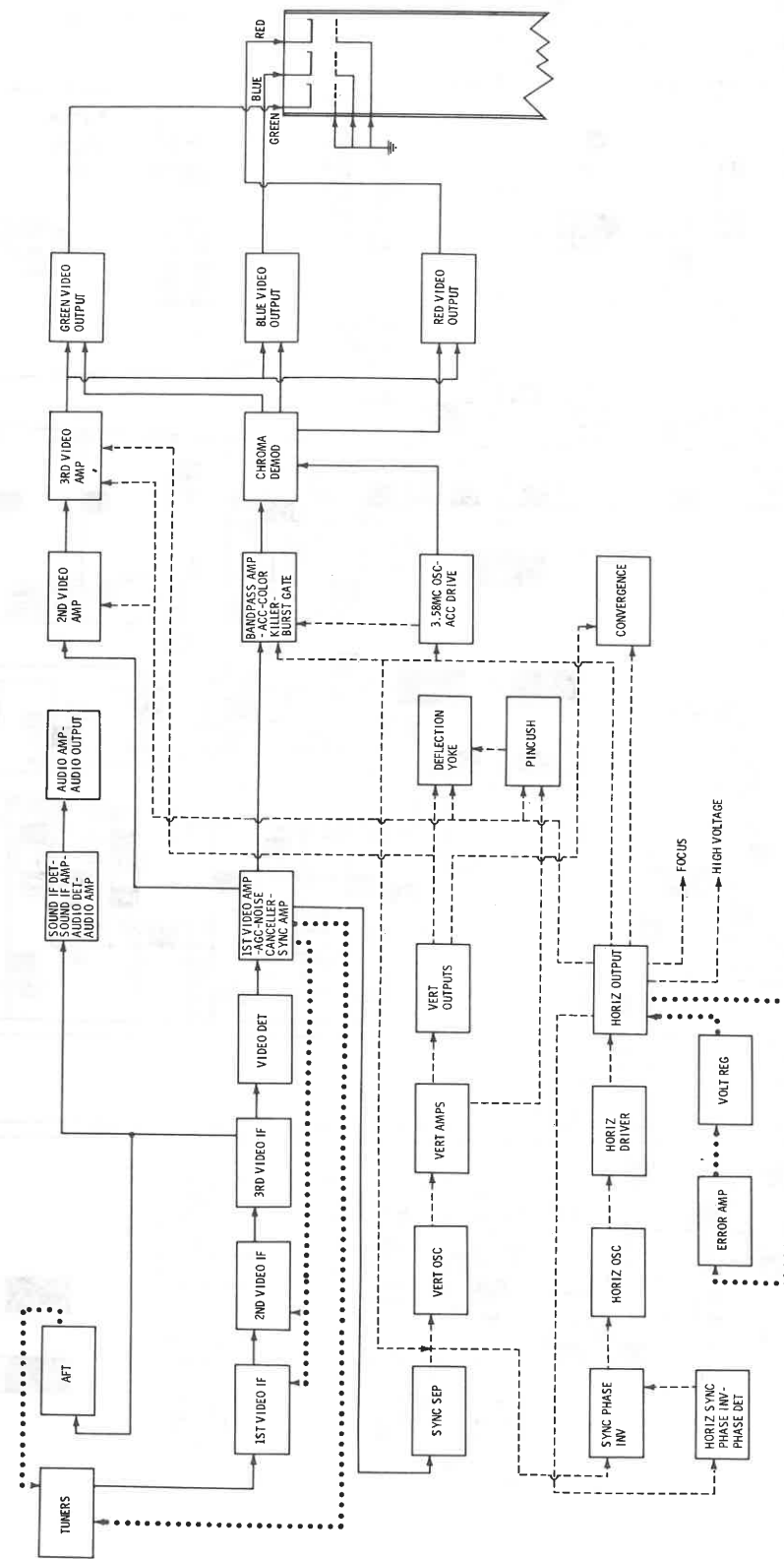
(1) For horizontal mounting, bend the two outside terminals to fit PC board. Use jumper wire to connect center terminal to PC board.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFG. PART No.			WORKMAN PART No.	MFG. PART No.
D405	Posistor 65K (Cold)		TVM410	R649	.56 1/2W WW		ERM12PR56
D809	VDR*		ERV-08E2150K-2	R673	2.2 5% 1/4W Carbon		ERD14TJ2R2
R204	4.7 2W Film	CA-4.7	ERX2PSK470	R802	3.3 8W WW		ERW-10HC3R3
R403	4.7 5% 1/4W Carbon		ERD14FJ4R7	R807	33K 2W Film	3G-33K	ERG2PSK333
R409	4.7 5% 1/4W Carbon		ERD14FJ4R7	R815	4.7 5% 1/4W Carbon	CA-4.7	ERD14TJ4R7
R432	18K 2W Film	3G-18K	ERG2PSK183	R816	4700 2W Film	3G-4.7K	ERG2PSK472
R433	18K 2W Film	3G-18K	ERG2PSK183	R818	1.8 2W Film		ERX2PSK1R8
R434	18K 2W Film	3G-18K	ERG2PSK183	R852	33 2W Film		ERX2PSK330
R437	4.7 5% 1/4W Carbon	CA-4.7	ERD14FJ4R7	R853	22 2W Film		ERX2PS220
R531	.27 1/2W WW		ERM12PR27	R854	100 2W Film	3G-100	
R532	.15 1/2W WW		ERM12PR15				
R533	.15 1/2W WW		ERM12PR15				
R642	.33 1/2W WW		ERM12PR33				

* Voltage Dependent Resistor



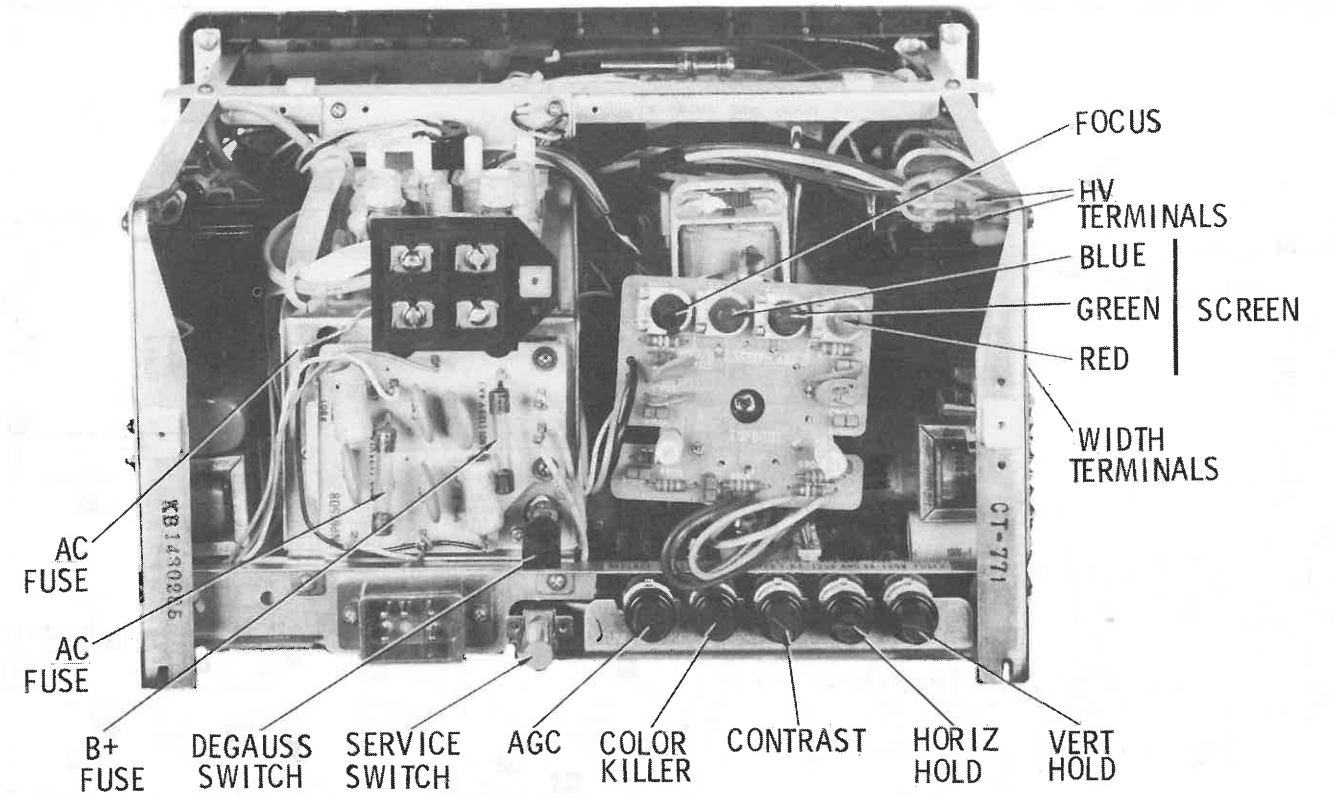


BLOCK DIAGRAM

— Indicates primary signal path
 - - - Indicates control signal path
 Indicates control voltage path

PANASONIC MODELS
 CT-771, TY-702

FOLDER 1



DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

Disconnect antenna leads. Remove 5 screws holding cabinet back. Remove cabinet back.

NOTE: Most components may now be serviced. Most boards may be swung out for servicing.

Remove all knobs. Disconnect picture tube socket, deflection yoke, degaussing and speaker plug, and 2 ground leads. Remove 4 screws holding convergence board and swing out. Disconnect high voltage anode lead. Remove 4 screws holding chassis and remove chassis.

PICTURE TUBE REMOVAL

Follow chassis removal procedure and lay set face down on a soft protective surface.

Remove convergence yoke and deflection yoke. Remove 1 screw holding picture tube retaining wire. Remove 8 screws holding picture tube mounting brackets. Remove retaining wire and brackets. Lift picture tube out. Do NOT lift picture tube by neck.