

# TX-28/25XD90P/A/B Service Manual

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## Service Support

Service and repair of this product is supported by Panasonic's LUCI interface.

This interface provides a link between the TV and a standard PC to allow a number of diagnostic and control functions to be performed.

For more details contact your local Panasonic company.

  
BACK

EXIT

Audio

Control

Power supply

Video

  
BACK

D - PCB

E - PCB

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H - PCB

M - PCB

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BACK

D - Schematic

E - Schematic

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BACK

# Service Manual



## Colour Television

### TX-28XD90P /A /B TX-25XD90P /A /B

### EURO - 5 Chassis

#### SPECIFICATIONS

(Information in brackets { } refer to TX-25XD90P /A /B)

<b>Power Source:</b>	220-240V AC, 50Hz
<b>Power Consumption:</b>	184W {174W}
<b>Aerial Impedance:</b>	75Ω unbalanced, Coaxial Type
<b>Stand-by Power Consumption:</b>	1,9W
<b>Receiving System:</b>	PAL B/G, H, D/K, PAL-525/60 SECAM B/G, D/K M.NTSC NTSC (AV only)
<b>Receiving Channels:</b>	VHF H1-H2 (ITALY) VHF A-H (ITALY) VHF R3-R5 UHF E21-E69 CATV S1-S10 (M1-M10) CATV S21-S41 (HYPERBAND)
<b>Intermediate Frequency:</b>	Video 38,9MHz Audio 33,4MHz, 33,16MHz 32,4MHz, 33,05MHz 32,66MHz
<b>Colour</b>	34,47MHz (PAL) 34,5MHz, 34,65MHz (SECAM)
<b>Video/Audio Terminals:</b>	AUDIO MONITOR OUT AV1 IN
	Audio (RCAX2) 500mV rms 1kΩ Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10kΩ RGB (21 pin)
<b>AV1 OUT</b>	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ

<b>AV2 IN</b>	Video (21 pin) Audio (21 pin) S-Video IN (21 pin)	1V p-p 75Ω 500mV rms 10kΩ Y: 1V p-p 75Ω C: 0.3V p-p 75Ω
<b>AV2 OUT</b>	Video (21 pin) Audio (21 pin) Selectable Output (21 pin)	1V p-p 75Ω 500mV rms 1kΩ
<b>AV3 IN</b>	S-Video IN (4-pin) Audio(RCAX2) Video (RCAX1)	Y: 1V p-p 75Ω C: 0,3V p-p 75Ω 500mV rms 10kΩ 1V p-p 75Ω
<b>High Voltage:</b>	28,5kV ±1kV	
<b>Picture Tube:</b>	A66ECF61X81	{A59ECF50X81}
<b>Audio Output:</b> (Music Power)	2 x 20W 8Ω Impedance	Left/Right
<b>Headphones:</b>	8Ω Impedance 3,5 mm	
<b>Accessories Supplied:</b>	Remote Control 2 x R6 (UM3) Batteries	
<b>Dimensions:</b>	Height: 596,5mm Width: 778mm Depth: 481,5mm	{550,5mm} {730mm} {479mm}
<b>Net weight:</b>	36kg	{31kg}

Specifications are subject to change without notice.  
Weights and dimensions shown are approximate.

**NOTE:** This Service Manual should be used in conjunction with the EURO - 5 Technical Guide.

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## SAFETY PRECAUTIONS

### GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the a.c. supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts that have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the a.c. outlet.
5. Potentials as high as 29,5kV are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazard.

### LEAKAGE CURRENT COLD CHECK

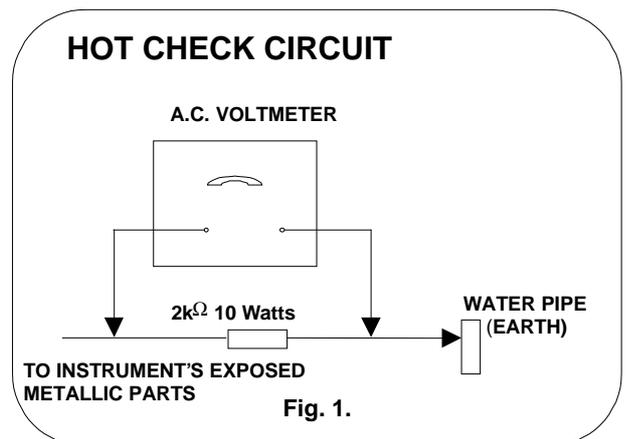
1. Unplug the a.c. cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered a.c. plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis, the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis, the reading must be infinite.

### LEAKAGE CURRENT HOT CHECK

1. Plug the a.c. cord directly into the a.c. outlet. Do not use an isolation transformer for this check.
2. Connect a 2kΩ 10W resistor in series with an exposed metallic part on the receiver and an earth, such as a water pipe.
3. Use an a.c. voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed metallic part and check the voltage at each point.
5. Reverse the a.c. plug at the outlet and repeat each of the above measurements.

6. The potential at any point should not exceed 1,4 Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

### X-RADIATION WARNING



1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that the jig is capable of handling 29,5kV without causing X-Radiation.

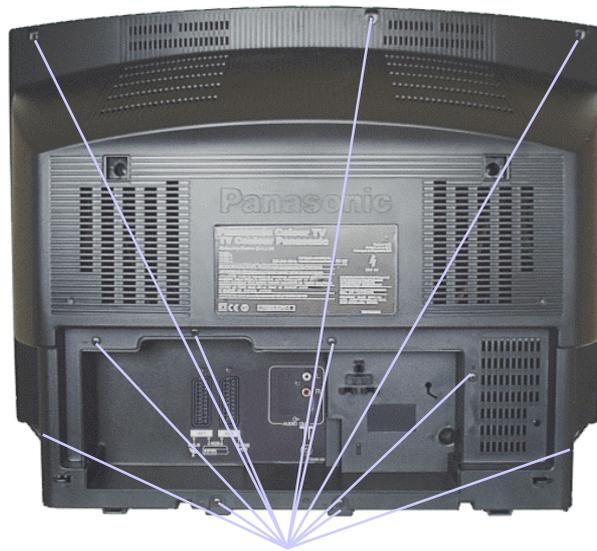
**NOTE:** It is important to use an accurate periodically calibrated high voltage meter.

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate :- 28,5kV ± 1kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X-Radiation possibility, it is essential to use the specified tube.

## SERVICE HINTS

### How to remove the rear cover

1. Remove the 11 screws as shown in Fig.2.



Screws  
Fig.2.

## LOCATION OF CONTROLS

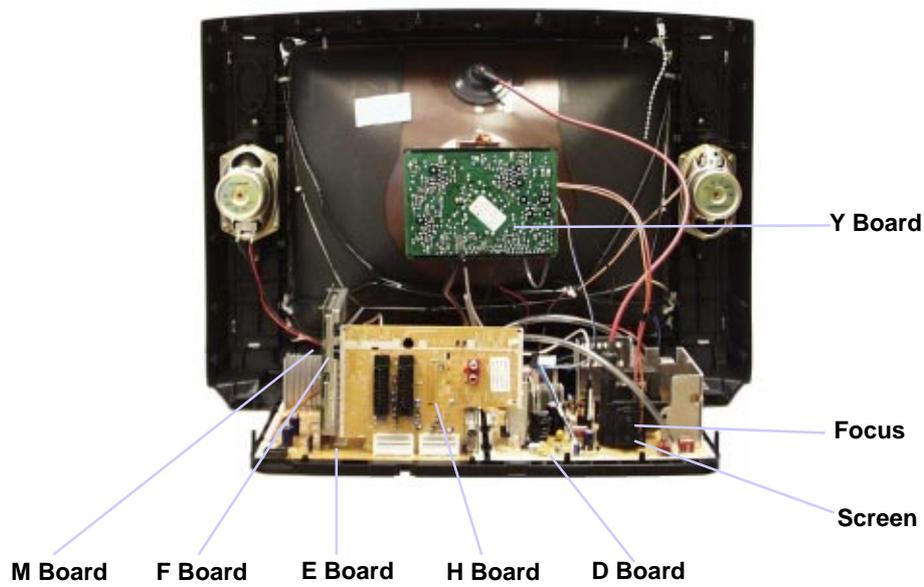


Fig.3.

## HOW TO MOVE THE CHASSIS INTO SERVICE POSITION

1. Hold and lift the rear of the chassis and gently pull the chassis toward you, as shown in **Fig.4**.
2. Release the respective wiring clips and rotate the chassis vertically through 90°, clockwise.
3. Locate the base of the chassis frame into the hole **(B)**, shown in **Fig.6**.
4. Clip the chassis frame onto the bead clamber **(A)**, as shown in **Fig.5**.
5. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer.

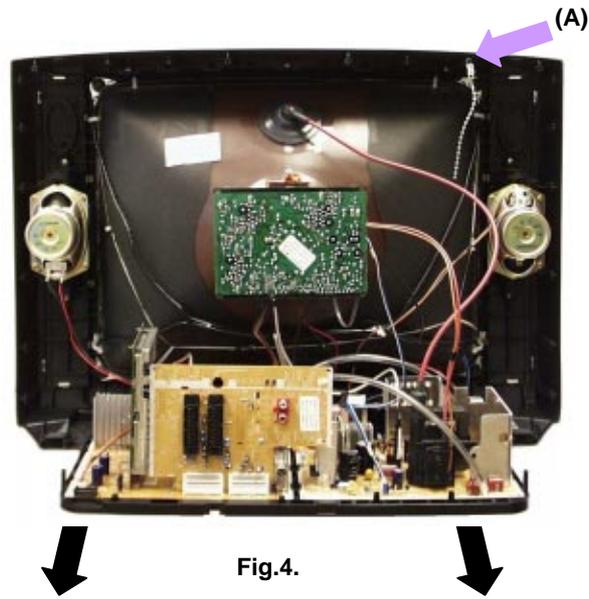


Fig.5.

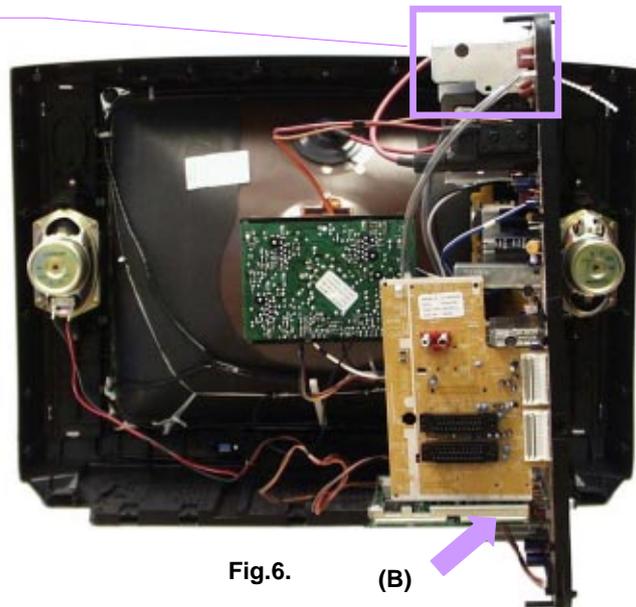


Fig.6.

**(B)**

## ADJUSTMENT PROCEDURE

Item / Preparation	Adjustments
<b>+B SET-UP</b> 1. Receive a Greyscale signal. 2. Set the controls :- Brightness      Minimum Contrast         Minimum Volume           Minimum	1. Confirm the following voltages. <b>D-Board</b> D3   PIN5   147V ± 3V D12   PIN5   5V ± 0,3V D13   PIN1   40V ± 4V D3   PIN4   230V ± 10V D3   PIN4   205V ± 10V D3   PIN4   190V ± 10V D3   PIN4   190V ± 10V D14   PIN5   5V ± 0,5V D12   PIN7   15V ± 2V D12   PIN9   15V ± 2V D11   PIN8   12V ± 2V D11   PIN10 33V ± 3V <b>E-Board</b> U8A   E19-PIN8   8V ± 0,5V U9    IC3801-PIN3 9V ± 0,5V U12   E22-PIN8   12V ± 0,5V STD5VE26-PIN4   5V ± 0,5V U15   E23-PIN8   15V ± 1V U15   E23-PIN9   -15V ± 1V U33   E22-PIN10 33V ± 4V U40   E24-PIN1   40V ± 3V U5B   E19-PIN5   5V ± 0,5V
<b>Cut Off</b> 1. Receive a Greyscale signal. 2. Degauss the tube externally. 3. Set the TV into Service Mode 1. 4. Select Cut off mode.	Adjust the screen VR until the display shows "O.K."

## SELF CHECK

Self-check is used to automatically check the bus lines and hexadecimal code of the TV set. To get into the Self-Check mode press the down (-v) button on the customer controls at the front of the set, at the same time pressing the **STATUS**  button on the remote control, and the screen will show :-

VPC	O.K.	PCB	O.K.
TUN	O.K.		
E2	O.K.	Cab	O.K.
DPL	--		
CIP1	O.K.	Sum	Factory use only
CIP2	O.K.		
VP	O.K.		
DFU	O.K.		
COL	--		
PIP	--		
DIS	O.K.		
OPTION 1	BD		
OPTION 2	1C		
OPTION 3	1F		
OPTION 4	00		
OPTION 5	FF		
OPTION 6	23		

Self Check is also used to automatically check the bus lines and hexadecimal code of the TV set. If the CCU ports have been checked and found to be incorrect or not located then "--" will appear in place of "O.K.". For more in-depth TV diagnostics use the **LUCI** interface as listed below.

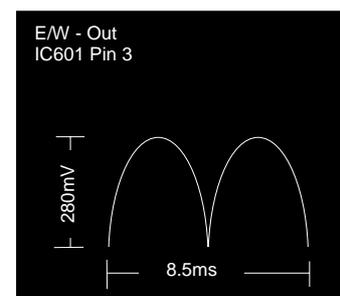
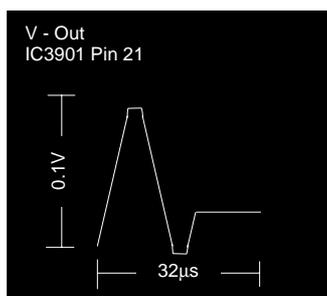
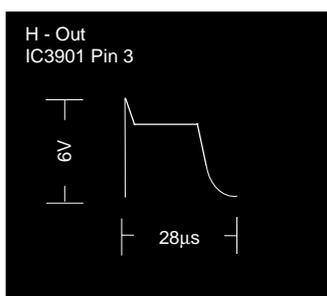
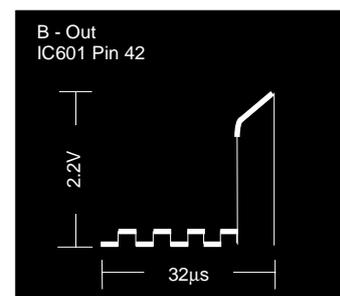
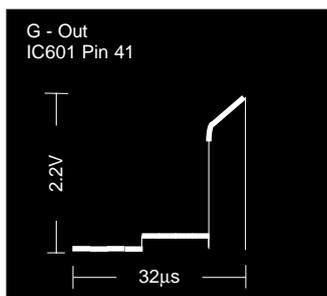
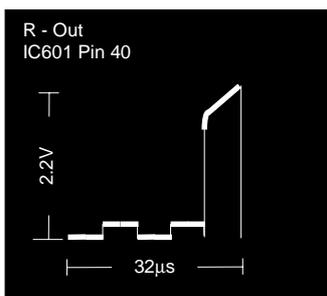
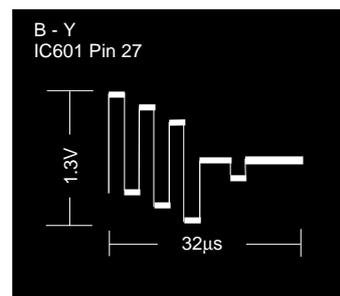
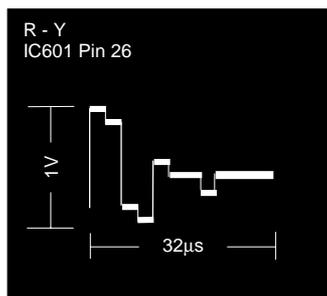
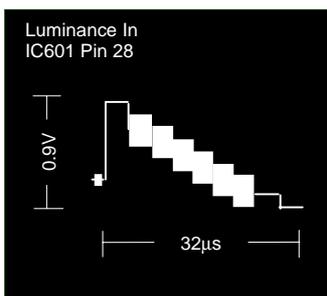
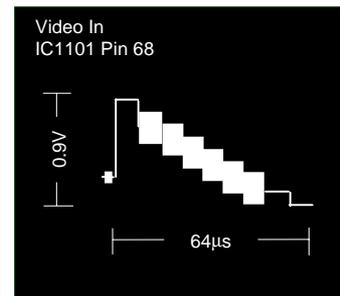
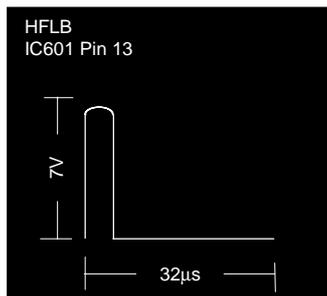
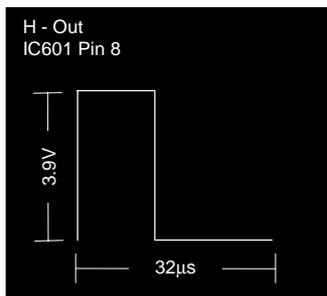
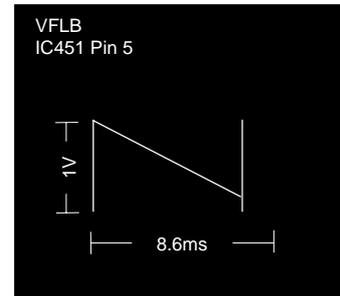
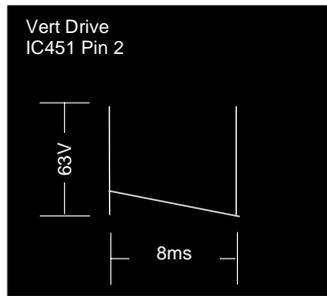
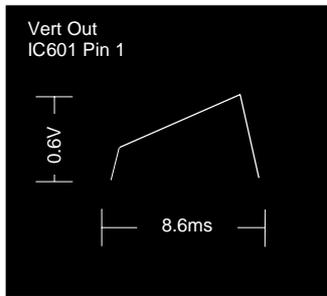
### Service Aids

To aid in the service of our current chassis there are a number of Service Aids which have been made available.

- LUCI** interface kit (Linked Utility Computer Interface)  
 Part number: TZS6EZ002  
 This contains interface and cables for connecting TV service connector and a PC as well as diagnostic software. As new models are introduced upgrade software will become available.
- VICI** (Visual Interactive Computer Information)  
 These C.D.'s contain multimedia documentation providing quick access to service information.  
 Part No. TZS7EZ006 & TZS7EZ005
  - Service Manuals
  - Instruction Books
  - Technical Information
- TASMIN** (Technically Advanced System for Multimedia Interactive Notes)  
 As well as providing a first step towards more interactive training this product also achieves quick access to Technical Information.

## WAVEFORM PATTERN TABLE

**NOTE:** All waveforms have been taken using a standard colour bar pattern.



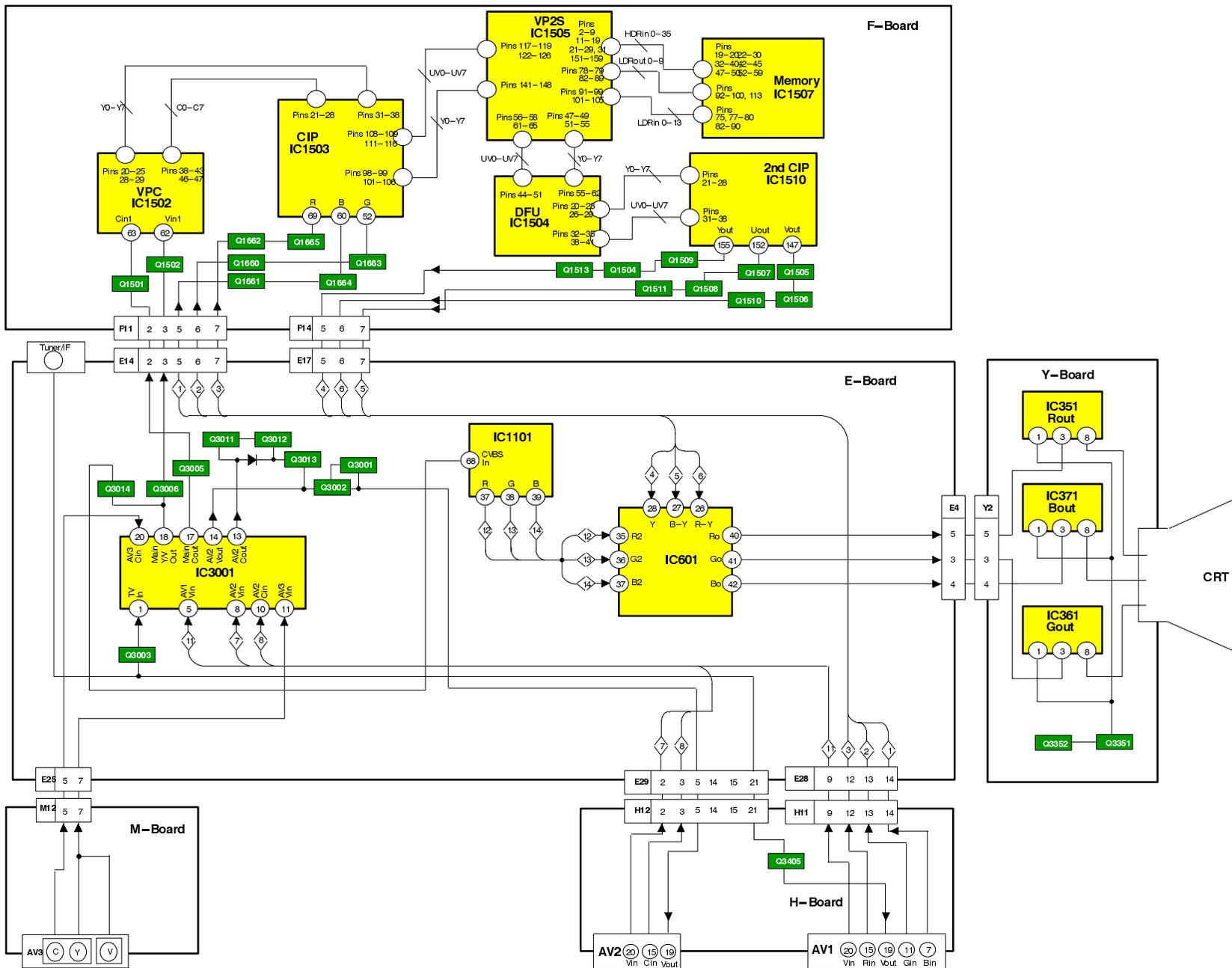
## ALIGNMENT SETTINGS:

(The figures below are nominal and used for representative purposes only.)

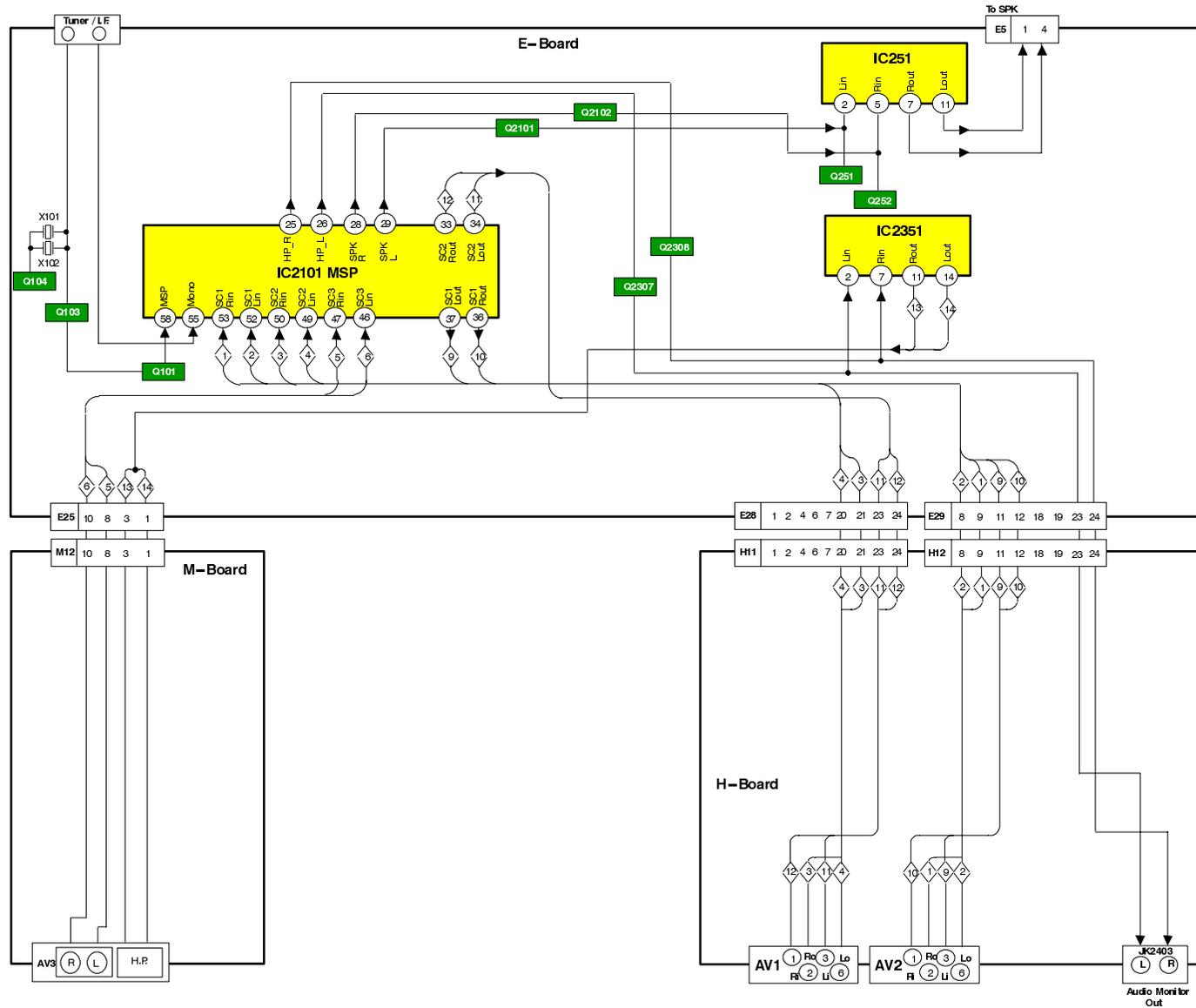
1. Set the Bass to maximum position, set the Treble to minimum position, press the down button (- / v) on the customer controls at the front of the TV and at the same time press the **INDEX** button on the remote control, this will place the TV into the Service Mode.
2. Press the **RED / GREEN** buttons to step up / down through the functions.
3. Press the **YELLOW / BLUE** buttons to alter the function values.
4. Press the **STR** button after each adjustment has been made to store the required values.
5. To exit the Service Mode, press the "**N**" button.

Alignment Function		Settings / Special features
Horizontal Position	H-Pos +020	Optimum setting.
Vertical Position	V-Pos +024	Optimum setting.
Horizontal Amplitude	H-Amp +049	Optimum setting.
Vert. Amplitude	V-Amp +029	Optimum setting.
EW-amplitude	E/W-Amp1 +022	Optimum setting.
EW-amplitude	E/W-Amp2 +000	Optimum setting.
Trapezium-comp	Trapez-1 +033	Optimum setting.
Horizontal-Parallel	H-Parallel +032	Optimum setting.
Vertical Linearity	V-Lin +004	Optimum setting.
DVCO	DVCO 000	Receive a PAL Colour Bar Pattern. For DVCO alignment press " <b>Blue</b> " button, wait until the colours are stable and press " <b>STR</b> ".
Cut-off DC	Cut-off O.K.	To adjust Cutoff adjust the screen VR until the display shows "O.K."
Highlight	High 0031 0031 0031	Contrast Maximum A.I. Off Adjust for optimum setting.
Sub-Brightness	Sub-Brightness 000	Optimum setting.

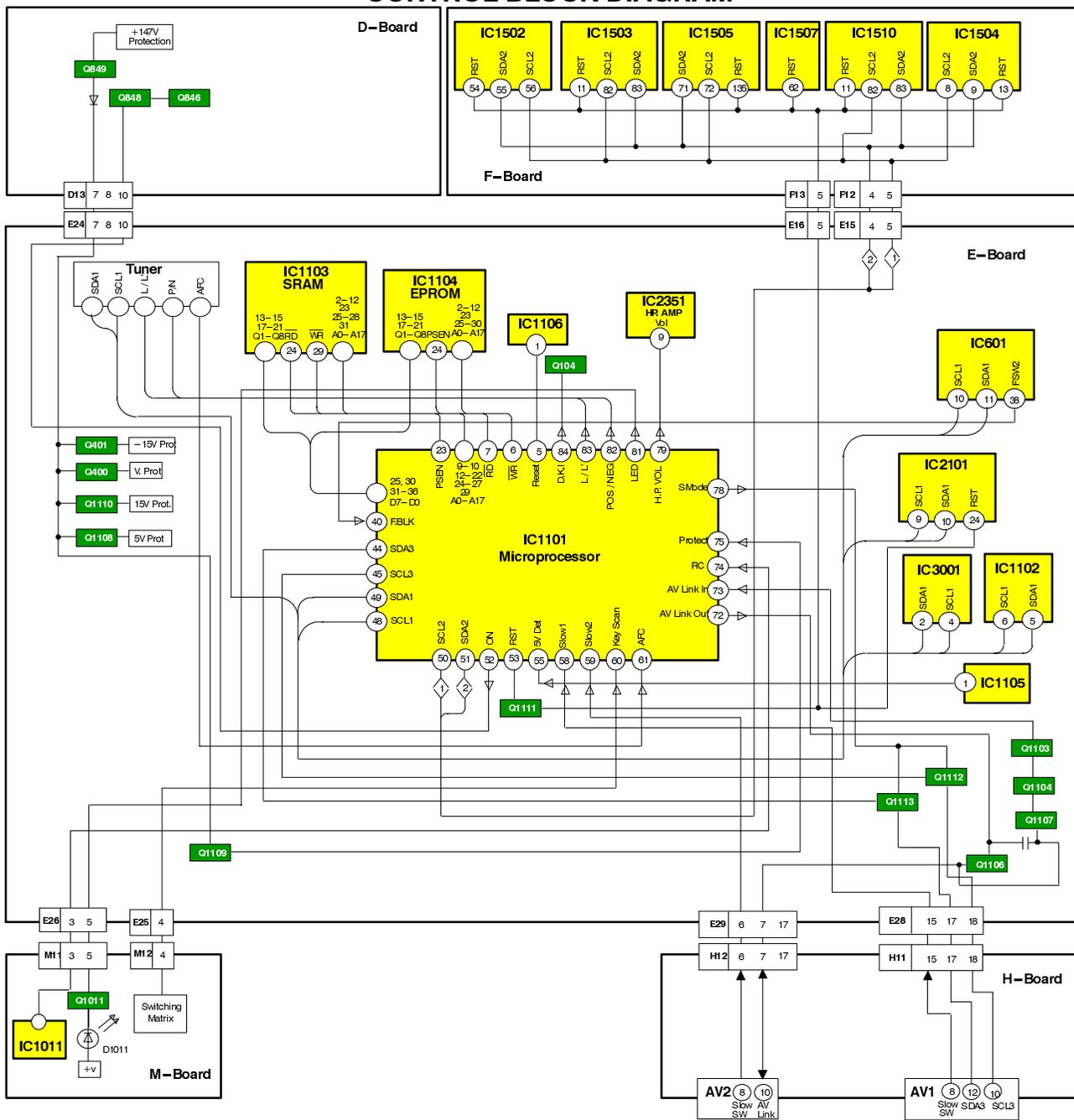
# VIDEO BLOCK DIAGRAM



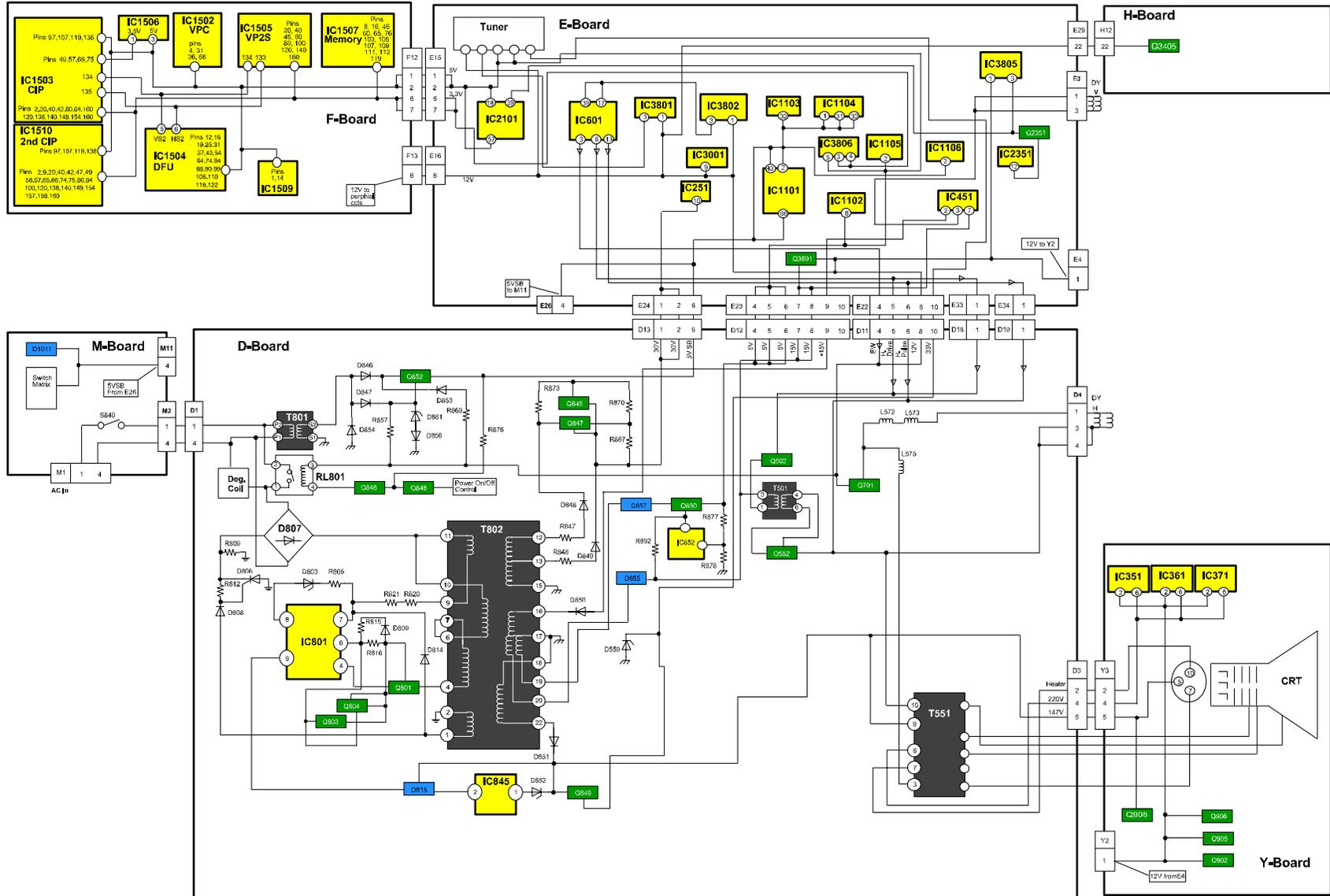
# AUDIO BLOCK DIAGRAM



# CONTROL BLOCK DIAGRAM

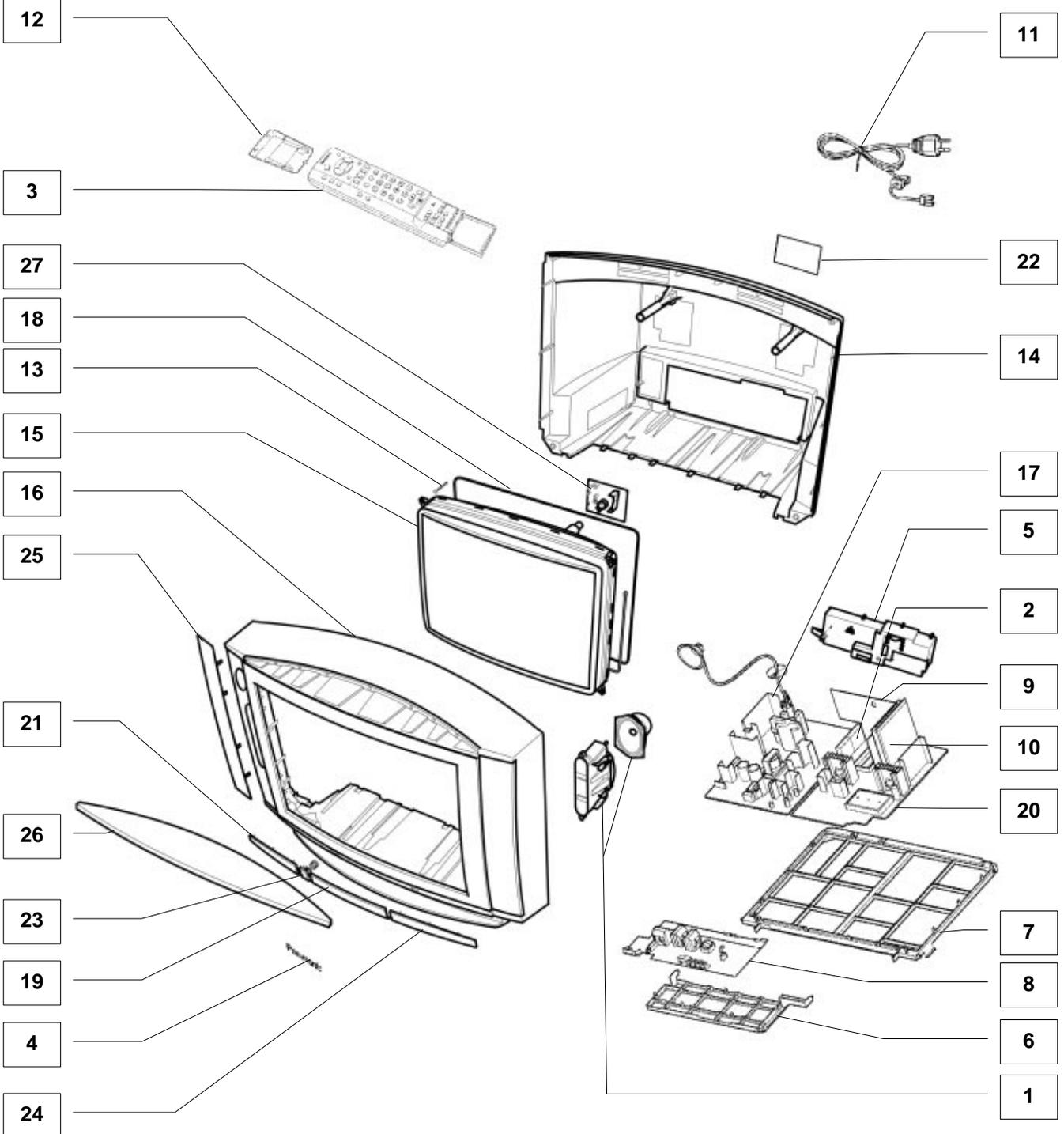


# POWER SUPPLY & DEFLECTION BLOCK DIAGRAM



# PARTS LOCATION

**NOTE:**  
The numbers on the exploded view below refer to the mechanical section of the Replacement Parts List.



## REPLACEMENT PARTS LIST

### Important Safety Notice

Components identified by  $\Delta$  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

### COMMON PARTS FOR MODELS TX-28XD90P, TX-28XD90P/A, TX-28XD90P/B, TX-25XD90P, TX-25XD90P/A AND TX-25XD90P/B

Ref No.	Part No.	Description
<b>MECHANICAL PARTS</b>		
1	EAGG1216C2A	SPEAKER
2	ENG29505G	TUNER $\Delta$
3	EUR511211	REMOTE CONTROL
4	TBM8E1728	PANASONIC BADGE
5	TKP8E1261	REAR AV COVER
6	TMW8E025	CONTROL BRACKET
7	TMX8E028	CHASSIS FRAME
8	TNP8EM015AA	M P.C.B. $\Delta$
9	TNPA1047AD	H P.C.B. $\Delta$
10	TNPA1068AC	F P.C.B. $\Delta$
11	TSX8E0027	POWER CORD $\Delta$
12	UR51EC904A	BATTERY COVER (REMOTE)
13	VP17005-32	C.R.T. FIXING SCREW
<b>MISCELLANEOUS COMPONENTS</b>		
	ERC12GK825	SOLID 0.5W 10% 8M2 $\Omega$
	ERD25TC0T	CARBON 0.25W 5% 0 $\Omega$
	TBM8E1616	PRE-SET LABEL
	TBM8E1903	REAR AV LABEL
	TEK6940	LID CATCHER
	TES8E015	POWER BUTTON SPRING
	TMW8E020-1	LED HOLDER
	TMX8E025	PCB HOLDER
	UM-3DJ-2P	BATTERY-SET
	ZTUZAE550A	ANODE CABLE $\Delta$
	PLCC-84-T	84 PIN I.C. SOCKET
	832AG11D-ESL	I.C. SOCKET
SOD1	31221212478	FIX CLIP
SOD9	31221212478	FIX CLIP
<b>INSTRUCTION BOOKS</b>		
	TQB8E2684MN2	BULGARIAN/ROMANIAN $\Delta$
	TQB8E2684PQ2	POLISH/HUNGARIAN $\Delta$
	TQB8E2684RU2	CZECH/ENGLISH $\Delta$
<b>INTEGRATED CIRCUITS</b>		
IC251	LA4282	AUDIO OUTPUT
IC351	TDA6111Q-N4	RGB OUTPUT
IC361	TDA6111Q-N4	RGB OUTPUT
IC371	TDA6111Q-N4	RGB OUTPUT
IC381	TL431ACLPM	REGULATOR
IC451	LA7876	VERTICAL OUTPUT
IC601	TDA9330HN1G	VIDEO PROCESSOR
IC801	AN8029	POWER SUPPLY
IC845	SE140N	ERROR AMPLIFIER
IC852	TL431ACLPM	REGULATOR
IC1011	RPM-637CBRL	LED RECEIVER
IC1101	SDA5450C47-1	MICRO PROCESSOR
IC1103	M5M51008BP	SRAM
IC1104	27C2001-K03	EPROM *
IC1105	MN1381-T(TA)	RESET
IC1106	MN1381-R(TA)	RESET
IC1502	VPC3215CB4TP	VPC
IC1503	MB87F1720	CIP
IC1504	FJB007S	DFU
IC1505	MB87F2131	VP2S
IC1506	AN77L035M-E1	3.5V REGULATOR
IC1507	MB87H2010	MEMORY
IC1509	TLC2932IPWL	CLOCK CONVERTOR
IC1510	MB87F1720	CIP

Ref No.	Part No.	Description
IC2101	MSP3410DPPB4	AUDIO PROCESSOR
IC2351	AN7108	H.P. AMPLIFIER
IC3001	TEA6415C	VIDEO SWITCH
IC3801	AN7809FLB	9V REGULATOR
IC3802	AN7708FLB	8V REGULATOR
IC3805	AN7808LB	8V REGULATOR
IC3806	SI-3033C	3.5V REGULATOR
<b>FUSES</b>		
F840	XBA2C50TH15	FUSE $\Delta$
F845	TR5-T3150	FUSE $\Delta$
F846	TR5-T1250	FUSE $\Delta$
F8401	EYF52BC	FUSE HOLDER
F8402	EYF52BC	FUSE HOLDER
<b>DIODES</b>		
D001	MA4020	DIODE
D002	MA4020	DIODE
D252	MA165TA5	DIODE
D253	MA700TA5	DIODE
D254	MA700TA5	DIODE
D255	MA165TA5	DIODE
D351	ERA15-04V3	DIODE
D352	ERA15-04V3	DIODE
D361	ERA15-04V3	DIODE
D362	ERA15-04V3	DIODE
D371	ERA15-04V3	DIODE
D372	ERA15-04V3	DIODE
D387	MA2160LFS	DIODE
D400	MA4104	DIODE
D401	MA165TA5	DIODE
D402	MA165TA5	DIODE
D403	EU02AV0	DIODE
D404	EU02AV1	DIODE
D405	MA165TA5	DIODE
D408	MA165TA5	DIODE
D502	1SS254T-77	DIODE
D503	EU02	DIODE
D504	EU02	DIODE
D505	ERA81004V3	DIODE
D556	AU02V0	DIODE
D559	MTZJT-7736A	DIODE
D560	1SS252T-77	DIODE
D561	1SS254T-77	DIODE
D563	RH3GLF102	DIODE
D565	MTZJT-7736A	DIODE
D566	MA165TA5	DIODE
D571	FMV-3GULF730	DIODE
D575	1SS252T-77	DIODE
D601	MA29TA5	DIODE
D603	MA4075	DIODE
D605	MA4062	DIODE
D607	MA165TA5	DIODE
D610	MA4043	DIODE
D611	MA165TA5	DIODE
D612	MA165TA5	DIODE
D615	MA165TA5	DIODE
D616	MA178TA5	DIODE
D617	MTZJT-779.1C	DIODE
D618	MTZJT-779.1C	DIODE
D620	MA165TA5	DIODE
D651	MA165TA5	DIODE
D701	AU02V0	DIODE
D803	MTZJT-7712C	DIODE
D806	TF361MALF3	DIODE
D807	RBV-608LF-B	DIODE
D808	MA165TA5	DIODE
D809	ERA22-02V3	DIODE

Ref No.	Part No.	Description
D810	MA2180BLFS	DIODE
D812	MTZJT-775.6B	DIODE
D813	MA700TA5	DIODE
D814	AU01ZV0	DIODE
D815	PC123FY2	DIODE
D817	D5L60F4015	DIODE
D818	TMPG10G3	DIODE
D819	ERA81004V3	DIODE
D820	MA4100	DIODE
D821	EU02AV0	DIODE
D845	MA165TA5	DIODE
D846	EK04V0	DIODE
D847	ERA15-01V3	DIODE
D848	EU02	DIODE
D849	FMGG26S	DIODE
D850	ERB32-02E	DIODE
D851	FMGG2CSLF116	DIODE
D852	MA4062	DIODE
D853	1N4150T-77	DIODE
D854	ERA15-01V3	DIODE
D855	D10SC6MRL	DIODE
D856	MA165TA5	DIODE
D857	FML22SLF610	DIODE
D860	1SS254T-77	DIODE
D861	MTZJT-775.1C	DIODE
D901	1SS254T-77	DIODE
D902	1SS254T-77	DIODE
D903	1SS254T-77	DIODE
D910	R2KNV	DIODE
D1011	SLR56UR3FLF	LED
D1102	MA4051	DIODE
D1103	MA4051	DIODE
D1104	MA165TA5	DIODE
D1105	MA165TA5	DIODE
D1107	MA165TA5	DIODE
D1109	MA165TA5	DIODE
D1110	MA165TA5	DIODE
D1112	MA165TA5	DIODE
D1501	MA151ATX	DIODE
D2101	MTZJT-7712C	DIODE
D2102	MTZJT-7712C	DIODE
D2351	MTZJT-775.6B	DIODE
D3006	MA4100	DIODE
D3008	MA723TA5	DIODE
D3009	MA170	DIODE
D3011	MA858TA5	DIODE
D3351	1SS254T-77	DIODE
D3352	MA165TA5	DIODE
D3353	MA165TA5	DIODE
D3354	MA165TA5	DIODE
D3401	MTZJT-7712C	DIODE
D3803	MA4043	DIODE
D3804	MTZJT-778.2A	DIODE
D3805	ERA81004V3	DIODE
D3990	MTZJT-7724D	DIODE

## TRANSISTORS

Q101	BC847B	TRANSISTOR
Q103	BC847B	TRANSISTOR
Q104	BC847B	TRANSISTOR
Q251	2SD1328STX	TRANSISTOR
Q252	2SD1328STX	TRANSISTOR
Q253	BC847B	TRANSISTOR
Q254	BC857B	TRANSISTOR
Q400	BC847B	TRANSISTOR
Q401	BC847B	TRANSISTOR
Q502	2SC2925STA	TRANSISTOR
Q552	2SC5144LB230	TRANSISTOR
Q553	2SC1473-RN	TRANSISTOR
Q554	2SC1473-RN	TRANSISTOR
Q601	BC857B	TRANSISTOR
Q602	BC857B	TRANSISTOR
Q603	BC857B	TRANSISTOR
Q604	BC857B	TRANSISTOR
Q607	BC857B	TRANSISTOR
Q608	BC857B	TRANSISTOR
Q701	2SK2538000LB	TRANSISTOR
Q801	2SK1365LB106	TRANSISTOR
Q803	2SD965-R	TRANSISTOR
Q804	2SA719-TA	TRANSISTOR

Ref No.	Part No.	Description
Q845	2SA684R	TRANSISTOR
Q846	BC547B/126	TRANSISTOR
Q847	BC557B/126	TRANSISTOR
Q848	BC547B/126	TRANSISTOR
Q849	2SA1018QTA	TRANSISTOR
Q850	2SD1474PLB	TRANSISTOR
Q852	2SC1318-S	TRANSISTOR
Q853	BC557C/126	TRANSISTOR
Q854	BC557C/126	TRANSISTOR
Q902	BC847B	TRANSISTOR
Q903	BC847B	TRANSISTOR
Q904	BC857B	TRANSISTOR
Q905	BC847B	TRANSISTOR
Q906	BC847B	TRANSISTOR
Q907	BC857B	TRANSISTOR
Q908	2SA1535ARLB	TRANSISTOR
Q909	2SC3944ARLB	TRANSISTOR
Q1011	BC557B/126	TRANSISTOR
Q1103	BC847B	TRANSISTOR
Q1104	BC847B	TRANSISTOR
Q1105	BC847B	TRANSISTOR
Q1106	BC847B	TRANSISTOR
Q1107	BC847B	TRANSISTOR
Q1108	BC847B	TRANSISTOR
Q1109	BC847B	TRANSISTOR
Q1110	BC847B	TRANSISTOR
Q1111	BC847B	TRANSISTOR
Q1112	BC847B	TRANSISTOR
Q1113	BC847B	TRANSISTOR
Q1118	BC857B	TRANSISTOR
Q1501	BC857B	TRANSISTOR
Q1502	BC857B	TRANSISTOR
Q1503	BC847B	TRANSISTOR
Q1504	BC847B	TRANSISTOR
Q1505	BC847B	TRANSISTOR
Q1506	BC847B	TRANSISTOR
Q1507	BC847B	TRANSISTOR
Q1508	BC847B	TRANSISTOR
Q1509	BC847B	TRANSISTOR
Q1510	BC847B	TRANSISTOR
Q1511	BC847B	TRANSISTOR
Q1513	BC857B	TRANSISTOR
Q1660	BC847B	TRANSISTOR
Q1661	BC847B	TRANSISTOR
Q1662	BC847B	TRANSISTOR
Q1663	BC847B	TRANSISTOR
Q1664	BC847B	TRANSISTOR
Q1665	BC847B	TRANSISTOR
Q1666	BC847B	TRANSISTOR
Q1667	BC847B	TRANSISTOR
Q2101	BC860B	TRANSISTOR
Q2102	BC860B	TRANSISTOR
Q2301	BC847B	TRANSISTOR
Q2302	BC847B	TRANSISTOR
Q2305	BC857B	TRANSISTOR
Q2307	BC860B	TRANSISTOR
Q2308	BC860B	TRANSISTOR
Q2351	BC847B	TRANSISTOR
Q2352	BC847B	TRANSISTOR
Q3001	BC857B	TRANSISTOR
Q3002	BC847B	TRANSISTOR
Q3003	BC847B	TRANSISTOR
Q3005	BC847B	TRANSISTOR
Q3006	BC847B	TRANSISTOR
Q3010	BC857B	TRANSISTOR
Q3011	BC857B	TRANSISTOR
Q3012	BC847B	TRANSISTOR
Q3013	BC847B	TRANSISTOR
Q3014	BC847B	TRANSISTOR
Q3351	BC847B	TRANSISTOR
Q3352	BC857B	TRANSISTOR
Q3401	BC847B	TRANSISTOR
Q3402	BC847B	TRANSISTOR
Q3403	BC847B	TRANSISTOR
Q3404	BC847B	TRANSISTOR
Q3405	BC847B	TRANSISTOR
Q3801	2SD1474PLB	TRANSISTOR
Q3990	BC847B	TRANSISTOR

Ref No.	Part No.	Description	
<b>TRANSFORMERS</b>			
T501	ETH19Y187AY	TRANSFORMER	△
T551	ZTFM05004A	F.B.T.	△
T801	ETP35KAN619U	TRANSFORMER	△
T802	ETS49AH1W7AD	TRANSFORMER	△
T803	ETQ24K37AY	TRANSFORMER	△
<b>COILS</b>			
L002	EXCELD35V	COIL	
L003	EXCELD35V	COIL	
L004	EXCELSA35T	COIL	
L005	TLT100K991R	COIL	
L007	EXCELD35V	COIL	
L008	ELJFC2R2KF	COIL	
L009	ELJFC2R2KF	COIL	
L251	EXCELSA35T	COIL	
L252	EXCELSA35T	COIL	
L253	EXCELSA35T	COIL	
L254	EXCELSA35T	COIL	
L351	SDL5000	DELAY LINE	
L361	SDL5000	DELAY LINE	
L363	TLT100K991R	COIL	
L371	SDL5000	DELAY LINE	
L381	TLT220K991R	COIL	
L501	ELELN101KA	COIL	
L554	EXCELD35V	COIL	
L556	EXCELD35C	COIL	
L572	ELHKLBO25B	COIL	
L573	ELHKLBO26B	COIL	
L575	ELC18B271E	COIL	
L601	EXCELD25V	COIL	
L602	EXCELD35V	COIL	
L603	TLT033K991R	COIL	
L604	ELEXT2R7KA	COIL	
L605	ELEXT2R7KA	COIL	
L606	ELEXT2R7KA	COIL	
L607	ELEXT2R7KA	COIL	
L701	ELC18B221L	COIL	
L806	EXCELSA39V	COIL	
L807	ELF18D850C	LINE FILTER	
L808	EXCELSA39V	COIL	
L809	EXCELD35C	COIL	
L810	EXCELSA39V	COIL	
L811	EXCELSA39V	COIL	
L812	EXCELD35V	COIL	
L813	EXCELD35V	COIL	
L817	EXCELD35V	COIL	
L819	EXCELSA39V	COIL	
L842	ELF18D486D	COIL	
L843	ELF18D486D	COIL	
L845	EXCELSA35T	COIL	
L847	EXCELSA35B	COIL	
L849	EXCELSA35T	COIL	
L854	ELEIE150KA	COIL	
L859	EXCELSA35T	COIL	
L860	EXCELSA35T	COIL	
L861	EXCELSA35T	COIL	
L910	EXCELSA35T	COIL	
L911	EXCELSA35T	COIL	
L912	EXCELSA35T	COIL	
L1101	EXCELD35V	COIL	
L1103	TLT047K991R	COIL	
L1104	EXCELD35V	COIL	
L1105	EXCELD35V	COIL	
L1106	TLT047K991R	COIL	
L1507	TLT018K991R	COIL	
L1508	TLT033K991R	COIL	
L1509	EXCELD35V	COIL	
L1510	EXCELD35V	COIL	
L1511	TLT018K991R	COIL	
L1516	EXCELD35V	COIL	
L1519	EXCEMT103DTM	COIL	
L1523	EXCEMT103DTM	COIL	
L1525	EXCEMT103DTM	COIL	
L1527	EXCEMT103DTM	COIL	
L1528	EXCELD35V	COIL	
L1529	EXCELD35V	COIL	
L1532	EXCELD35V	COIL	
L1533	EXCELD35V	COIL	

Ref No.	Part No.	Description	
L1534	EXCELD35V	COIL	
L1535	EXCELD35V	COIL	
L1536	EXCELD35V	COIL	
L1537	TLT100K991R	COIL	
L1538	TLT018K991R	COIL	
L1539	TLT033K991R	COIL	
L1540	TLT018K991R	COIL	
L1541	TLT033K991R	COIL	
L1542	TLT018K991R	COIL	
L1543	TLT033K991R	COIL	
L2101	TLT100K991R	COIL	
L2102	TLT039K991R	COIL	
L2103	TLT100K991R	COIL	
L2104	EXCELD35V	COIL	
L2106	TLT068K991R	COIL	
L2381	EXCELSA35T	COIL	
L2382	EXCELSA35T	COIL	
L2412	EXCELSA35T	COIL	
L2413	EXCELSA35T	COIL	
L3001	TLT100K991R	COIL	
L3205	EXCELD35V	COIL	
L3281	EXCELSA35T	COIL	
L3282	EXCELSA35T	COIL	
L3401	TLT015K991R	COIL	
L3402	TLT015K991R	COIL	
L3403	TLT015K991R	COIL	
L3404	TLT015K991R	COIL	
L3405	TLT015K991R	COIL	
L3406	TLT015K991R	COIL	
L3407	TLT015K991R	COIL	
L3408	TLT015K991R	COIL	
L3409	TLT100K991R	COIL	
L3801	EXCELD35V	COIL	
<b>FILTERS</b>			
X101	EFCT6504BF	FILTER	
X102	EFCT7004BF	CERAMIC FILTER	
X601	TSSA010	CRYSTAL	
X1101	TSSA121	CRYSTAL	
X1501	TSS2169-B	CRYSTAL	
X2101	4730007158	CRYSTAL	
<b>RESISTOR</b>			
RL801	TSE1885-1	RELAY	△
R001	ERJ6GEYJ223	S.M.CARB	0.1W 5% 22KΩ
R002	ERJ6GEYJ101	S.M.CARB	0.1W 5% 100Ω
R003	ERJ6GEYJ393	S.M.CARB	0.1W 5% 39KΩ
R101	ERJ6GEYJ561	S.M.CARB	0.1W 5% 560Ω
R102	ERJ6GEYJ101	S.M.CARB	0.1W 5% 100Ω
R103	ERJ6GEYJ563	S.M.CARB	0.1W 5% 56KΩ
R104	ERJ6GEYJ471	S.M.CARB	0.1W 5% 470Ω
R105	ERJ6GEYJ332	S.M.CARB	0.1W 5% 3K3Ω
R106	ERJ6GEYJ821	S.M.CARB	0.1W 5% 820Ω
R107	ERJ6GEYJ102	S.M.CARB	0.1W 5% 1KΩ
R109	ERJ6GEYJ103	S.M.CARB	0.1W 5% 10KΩ
R110	ERJ6GEYJ222	S.M.CARB	0.1W 5% 2K2Ω
R111	ERJ6GEYJ331	S.M.CARB	0.1W 5% 330Ω
R251	ERJ6GEYJ391	S.M.CARB	0.1W 5% 390Ω
R252	ERJ6GEYJ682	S.M.CARB	0.1W 5% 6K8Ω
R253	ERJ6GEYJ103	S.M.CARB	0.1W 5% 10KΩ
R254	ERJ6GEYJ391	S.M.CARB	0.1W 5% 390Ω
R255	ERJ6GEYJ103	S.M.CARB	0.1W 5% 10KΩ
R256	ERJ6GEYJ681	S.M.CARB	0.1W 5% 680Ω
R257	ERJ6GEYOR00	S.M.CARB	0.1W 5% 0Ω
R258	ERJ6GEYJ682	S.M.CARB	0.1W 5% 6K8Ω
R259	ERJ6GEYOR00	S.M.CARB	0.1W 5% 0Ω
R260	ERJ6GEYJ103	S.M.CARB	0.1W 5% 10KΩ
R261	ERJ6GEYJ681	S.M.CARB	0.1W 5% 680Ω
R262	ERJ6GEYJ103	S.M.CARB	0.1W 5% 10KΩ
R263	ERJ6GEYJ104	S.M.CARB	0.1W 5% 100KΩ
R264	ERJ6GEYJ473	S.M.CARB	0.1W 5% 47KΩ
R265	ERDS1TJ2R2	CARBON	0.5W 5% 2R2Ω
R266	ERDS1TJ2R2	CARBON	0.5W 5% 2R2Ω
R269	ERJ6GEYJ273	S.M.CARB	0.1W 5% 27KΩ
R270	ERJ6GEYJ273	S.M.CARB	0.1W 5% 27KΩ
R271	ERJ6GEYJ272	S.M.CARB	0.1W 5% 2K7Ω
R272	ERJ6GEYJ103	S.M.CARB	0.1W 5% 10KΩ
R273	ERJ6GEYJ331	S.M.CARB	0.1W 5% 330Ω
R274	ERJ6GEYJ201	S.M.CARB	0.1W 5% 200Ω

Ref No.	Part No.	Description					
R275	ERJ6GEYJ201	S.M.CARB	0.1W	5%	200Ω		
R276	ERDS1TJ2R2	CARBON	0.5W	5%	2R2Ω		
R350	ERQ12AJ151P	FUSIBLE	12W	5%	150Ω	Δ	
R351	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R352	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R354	ERO25CKF4122	METAL	25W	1%	41KΩ	Δ	
R355	ERG2FG823H	METAL	2W	2%	82KΩ	Δ	
R356	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω		
R357	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω		
R358	ERDS1TJ821	CARBON	0.5W	5%	820Ω		
R360	ERO50PKF8251	METAL	50W	1%	8K2Ω	Δ	
R361	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R362	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R364	ERO25CKF4122	METAL	25W	1%	41KΩ	Δ	
R365	ERG2FG823H	METAL	2W	2%	82KΩ	Δ	
R366	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω		
R367	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω		
R368	ERDS1TJ821	CARBON	0.5W	5%	820Ω		
R369	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω		
R371	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R372	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R374	ERO25CKF4122	METAL	25W	1%	41KΩ	Δ	
R375	ERG2FG823H	METAL	2W	2%	82KΩ	Δ	
R376	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω		
R377	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω		
R378	ERDS1TJ821	CARBON	0.5W	5%	820Ω		
R379	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω		
R383	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω		
R385	ERQ12HKR39	METAL	0.5W	5%	R39Ω	Δ	
R394	ERJ6ENF7500	SM.CARB0.125W		5%	50Ω		
R395	ERJ6ENF5900	SM.CARB0.125W		5%	90Ω		
R396	ERJ6ENF7500	SM.CARB0.125W		5%	50Ω		
R397	ERJ6ENF5900	SM.CARB0.125W		5%	90Ω		
R398	ERJ6ENF7500	SM.CARB0.125W		5%	50Ω		
R399	ERJ6ENF5900	SM.CARB0.125W		5%	90Ω		
R401	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω		
R402	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω		
R403	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R404	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R416	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω		
R418	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω		
R420	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ		
R421	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220KΩ		
R441	ERJ6ENF3902	SM.CARB0.125W		5%	9KΩ		
R442	ERJ6ENF1202	S.M.CARB	0.1W	1%	1K2Ω		
R443	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω		
R451	ERDS1TJ2R7	CARBON	0.5W	5%	2R7Ω		
R452	ERDS1TJ2R7	CARBON	0.5W	5%	2R7Ω		
R453	ERJ6ENF3902	SM.CARB0.125W		5%	9KΩ		
R454	ERJ6ENF1302	SM.CARB0.125W		5%	3KΩ		
R457	ERJ6ENF6801	SM.CARB0.125W		5%	800Ω		
R458	ERJ6ENF3001	SM.CARB0.125W		5%	0Ω		
R470	ERJ6ENF1802	SM.CARB0.125W		5%	8KΩ		
R471	ERDS1FJ1R0	CARBON	0.5W	5%	1Ω	Δ	
R504	ERD25TJ271	CARBON	0.25W	5%	270Ω		
R505	ERQ12HJ4R7	METAL	0.5W	5%	4R7Ω	Δ	
R506	ERDS1TJ681	CARBON	0.5W	5%	680Ω		
R507	ERDS1TJ681	CARBON	0.5W	5%	680Ω		
R554	ERX3SJSR27H	RESISTOR	3W	5%	R27Ω		
R556	ERDS1TJ273	CARBON	0.5W	5%	27KΩ		
R557	ERDS1TJ683	CARBON	0.5W	5%	68KΩ		
R558	ERDS1TJ273	CARBON	0.5W	5%	27KΩ		
R560	ERD25TJ123	CARBON	0.25W	5%	12KΩ		
R561	ERD25TJ333	CARBON	0.25W	5%	33KΩ		
R562	ERD25TJ393	CARBON	0.25W	5%	39KΩ		
R563	ERD25TJ223	CARBON	0.25W	5%	22KΩ		
R564	ERDS1TJ394	CARBON	0.5W	5%	390KΩ		
R567	ERG3FJ223	METAL	3W	5%	22KΩ	Δ	
R569	ERDS1TJ120	CARBON	0.5W	5%	12Ω		
R570	ERD25TJ103	CARBON	0.25W	5%	10KΩ		
R572	ERG3FJ821	METAL	3W	5%	820Ω	Δ	
R574	ERG3FJ151	METAL	3W	5%	150Ω	Δ	
R579	ERD25TJ274	CARBON	0.25W	5%	270KΩ		
R580	ERD25TJ563	CARBON	0.25W	5%	56KΩ		
R581	ERD25TJ104	CARBON	0.25W	5%	100KΩ		
R582	ERD25TJ225	CARBON	0.25W	5%	2M2Ω		
R583	ERD25TJ225	CARBON	0.25W	5%	2M2Ω		
R588	ERD25TJ332	CARBON	0.25W	5%	3K3Ω		
R601	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ		
R613	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		

Ref No.	Part No.	Description					
R614	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R615	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R616	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω		
R617	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R619	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R620	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R622	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ		
R623	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ		
R626	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω		
R627	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R628	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω		
R630	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R631	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1MΩ		
R632	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ		
R634	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R635	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R636	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R637	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R646	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω		
R647	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R648	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R649	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R650	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R651	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R652	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R653	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R657	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω		
R658	ERJ6ENF2212	SM.CARB0.125W		5%	2K1Ω		
R663	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330KΩ		
R664	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω		
R665	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω		
R666	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω		
R667	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ		
R674	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ		
R675	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω		
R676	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R677	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ		
R678	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω		
R679	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R681	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R682	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R683	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R684	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R685	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R686	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R688	ERJ6ENF3162	SM.CARB0.125W		5%	1K6Ω		
R701	ERX3FJ2R7H	RESISTOR	3W	5%	2R7Ω		
R702	ERDS1TJ683	CARBON	0.5W	5%	68KΩ		
R703	ERD25TJ393	CARBON	0.25W	5%	39KΩ		
R704	ERDS1TJ330	CARBON	0.5W	5%	33Ω		
R805	232266296706	THERMISTOR					
R806	ERD25TJ101	CARBON	0.25W	5%	100Ω		
R807	ERD25TJ104	CARBON	0.25W	5%	100KΩ		
R809	ERF10ZK4R7	WOUND	10W	5%	4R7Ω	Δ	
R810	ERD25TJ223	CARBON	0.25W	5%	22KΩ		
R811	ERD25TJ391	CARBON	0.25W	5%	390Ω		
R812	ERD25TJ681	CARBON	0.25W	5%	680Ω		
R814	ERD25TJ392	CARBON	0.25W	5%	3K9Ω		
R815	ERD25TJ100	CARBON	0.25W	5%	10Ω		
R816	ERDS1TJ330	CARBON	0.5W	5%	33Ω		
R818	ERD25TJ511	CARBON	0.25W	5%	510Ω		
R820	ERG3FJ223	METAL	3W	5%	22KΩ	Δ	
R821	ERG3FJ223	METAL	3W	5%	22KΩ	Δ	
R822	ERD25TJ391	CARBON	0.25W	5%	390Ω		
R823	ERX12SJR22	METAL	0.5W	5%	R22Ω		
R824	ERX12SJR22	METAL	0.5W	5%	R22Ω		
R825	ERX12SJR22	METAL	0.5W	5%	R22Ω		
R827	ERDS1FJ121	CARBON	0.5W	5%	120Ω	Δ	
R828	ERD25TJ103	CARBON	0.25W	5%	10KΩ		
R829	ERD25TJ221	CARBON	0.25W	5%	220Ω		
R830	ERX12SJR22	METAL	0.5W	5%	R22Ω		
R831	ERD75TAJ825	CARBON	0.75W	5%	8M2Ω	Δ	
R832	ERG3FJ331	METAL	3W	5%	330Ω	Δ	
R835	ERD25TJ220	CARBON	0.25W	5%	22Ω		
R836	ERD25TJ100	CARBON	0.25W	5%	10Ω		
R837	ERD25TJ183	CARBON	0.25W	5%	18KΩ		
R838	ERD25TJ821	CARBON	0.25W	5%	820Ω		
R841	ERC12ZGK105D	SOLID	0.5W	10%	1MΩ		
R847	TSF19252	FS LINK					Δ
R848	TSF19402	FS LINK					Δ

Ref No.	Part No.	Description				
R857	ERD25TJ221	CARBON 0.25W	5%	220Ω		
R862	ERD25TJ272	CARBON 0.25W	5%	2K7Ω		
R863	ERG3FJ680H	METAL 3W	5%	68Ω	Δ	
R864	ERDS1TJ682	CARBON 0.5W	5%	6K8Ω		
R867	ERD25TJ102	CARBON 0.25W	5%	1KΩ		
R868	ERD25TJ151	CARBON 0.25W	5%	150Ω		
R869	ERD25TJ560	CARBON 0.25W	5%	56Ω		
R870	ERD25TJ101	CARBON 0.25W	5%	100Ω		
R873	ERQ2CJP2R4	FUSIBLE 2W	5%	2R4Ω	Δ	
R876	ERD25TJ562	CARBON 0.25W	5%	5K6Ω		
R877	ERO25CKF1022	METAL 25W	1%	10KΩ	Δ	
R878	ERO25CKF1002	METAL 0.25W	1%	10KΩ	Δ	
R883	ERD25TJ103	CARBON 0.25W	5%	10KΩ		
R885	ERD25TJ103	CARBON 0.25W	5%	10KΩ		
R886	ERX3SJR56	RESISTOR 3W	5%	R56Ω		
R888	ERDS1TJ393	CARBON 0.5W	5%	39KΩ		
R889	ERD25TJ392	CARBON 0.25W	5%	3K9Ω		
R891	ERD25TJ103	CARBON 0.25W	5%	10KΩ		
R892	ERD25TJ222	CARBON 0.25W	5%	2K2Ω		
R897	ERD25TJ183	CARBON 0.25W	5%	18KΩ		
R901	ERJ6GEYJ562	S.M.CARB 0.1W	5%	5K6Ω		
R902	ERJ6GEYJ562	S.M.CARB 0.1W	5%	5K6Ω		
R903	ERJ6GEYJ562	S.M.CARB 0.1W	5%	5K6Ω		
R904	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ		
R906	ERJ6GEYJ563	S.M.CARB 0.1W	5%	56KΩ		
R907	ERJ6GEYJ822	S.M.CARB 0.1W	5%	8K2Ω		
R908	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω		
R909	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ		
R910	ERJ6GEYJ221	S.M.CARB 0.1W	5%	220Ω		
R911	ERD25TJ561	CARBON 0.25W	5%	560Ω		
R913	ERJ6GEYJ183	S.M.CARB 0.1W	5%	18KΩ		
R914	ERJ6GEYJ222	S.M.CARB 0.1W	5%	2K2Ω		
R915	ERJ6GEYJ182	S.M.CARB 0.1W	5%	1K8Ω		
R916	ERJ6GEYJ221	S.M.CARB 0.1W	5%	220Ω		
R917	ERJ6GEYJ121	S.M.CARB 0.1W	5%	120Ω		
R919	ERQ14AJW390	FUSIBLE 14W	5%	39Ω	Δ	
R920	ERQ14AJW390	FUSIBLE 14W	5%	39Ω	Δ	
R922	ERD25TJ683	CARBON 0.25W	5%	68KΩ		
R923	ERD25TJ683	CARBON 0.25W	5%	68KΩ		
R924	ERDS1FYJ390	CARBON 0.5W	5%	39Ω	Δ	
R925	ERJ6GEYOR00	S.M.CARB 0.1W	5%	0Ω		
R926	ERJ6GEYOR00	S.M.CARB 0.1W	5%	0Ω		
R927	ERD25TJ122	CARBON 0.25W	5%	1K2Ω		
R928	ERD25TJ5R6	CARBON 0.25W	5%	5R6Ω		
R929	ERDS1FYJ471	CARBON 0.5W	5%	470Ω	Δ	
R931	ERDS1FYJ390	CARBON 0.5W	5%	39Ω	Δ	
R935	ERQ14AJW3R9	FUSIBLE 14W	5%	3R9Ω	Δ	
R936	ERQ1CJP102	METAL 1W	5%	1KΩ	Δ	
R937	ERQ14AJW100	METAL 0.25W	5%	10Ω	Δ	
R938	ERD25TJ122	CARBON 0.25W	5%	1K2Ω		
R941	ERD25TJ5R6	CARBON 0.25W	5%	5R6Ω		
R1011	ERD25TJ101	CARBON 0.25W	5%	100Ω		
R1012	ERD25TJ101	CARBON 0.25W	5%	100Ω		
R1013	ERD25TJ471	CARBON 0.25W	5%	470Ω		
R1015	ERD25TJ103	CARBON 0.25W	5%	10KΩ		
R1071	ERD25TJ103	CARBON 0.25W	5%	10KΩ		
R1072	ERD25TJ222	CARBON 0.25W	5%	2K2Ω		
R1073	ERD25TJ222	CARBON 0.25W	5%	2K2Ω		
R1074	ERD25TJ332	CARBON 0.25W	5%	3K3Ω		
R1075	ERD25TJ512	CARBON 0.25W	5%	5K1Ω		
R1076	ERD25TJ912	CARBON 0.25W	5%	9K1Ω		
R1101	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1103	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1104	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1105	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1106	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1107	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1108	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1109	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1110	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1111	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1113	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1114	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1116	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1117	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω		
R1118	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω		
R1119	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω		
R1120	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω		
R1121	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1122	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1123	ERJ6GEYJ823	S.M.CARB 0.1W	5%	82KΩ		

Ref No.	Part No.	Description				
R1124	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1125	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1126	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1127	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1128	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1129	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1130	ERJ6GEYJ104	S.M.CARB 0.1W	5%	100KΩ		
R1131	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1132	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1133	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1134	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1135	ERJ6GEYJ225	S.M.CARB 0.125W	5%	2M2Ω		
R1138	ERJ6GEYJ273	S.M.CARB 0.1W	5%	27KΩ		
R1139	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1141	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1142	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1143	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1144	ERJ6GEYJ473	S.M.CARB 0.1W	5%	47KΩ		
R1145	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1146	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1147	ERJ6GEYJ223	S.M.CARB 0.1W	5%	22KΩ		
R1148	ERJ6GEYJ104	S.M.CARB 0.1W	5%	100KΩ		
R1149	ERJ6GEYJ104	S.M.CARB 0.1W	5%	100KΩ		
R1150	ERJ6GEYJ104	S.M.CARB 0.1W	5%	100KΩ		
R1151	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1152	ERJ6GEYJ224	S.M.CARB 0.1W	5%	220KΩ		
R1153	ERJ6GEYJ273	S.M.CARB 0.1W	5%	27KΩ		
R1154	ERJ6GEYJ221	S.M.CARB 0.1W	5%	220Ω		
R1155	ERJ6GEYJ474	S.M.CARB 0.1W	5%	470KΩ		
R1156	ERJ6GEYOR00	S.M.CARB 0.1W	5%	0Ω		
R1157	ERJ6GEYJ100	S.M.CARB 0.1W	5%	10Ω		
R1158	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1160	ERJ6GEYOR00	S.M.CARB 0.1W	5%	0Ω		
R1161	ERJ6GEYJ392	S.M.CARB 0.1W	5%	3K9Ω		
R1162	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ		
R1163	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1164	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1165	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1166	ERJ6GEYJ683	S.M.CARB 0.1W	5%	68KΩ		
R1167	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1168	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1169	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1170	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1171	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1172	ERJ6GEYJ821	S.M.CARB 0.1W	5%	820Ω		
R1173	ERJ6GEYJ681	S.M.CARB 0.1W	5%	680Ω		
R1174	ERJ6GEYJ681	S.M.CARB 0.1W	5%	680Ω		
R1175	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1176	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1177	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1178	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1179	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1180	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1181	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1182	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1183	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1184	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1186	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1187	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1188	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1189	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1190	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1194	ERJ6GEYJ681	S.M.CARB 0.1W	5%	680Ω		
R1195	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ		
R1200	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω		
R1237	ERJ6GEYOR00	S.M.CARB 0.1W	5%	0Ω		
R1238	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ		
R1239	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω		
R1501	ERJ6GEYOR00	S.M.CARB 0.1W	5%	0Ω		
R1502	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω		
R1503	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω		
R1504	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω		
R1505	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω		
R1506	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω		
R1507	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ		
R1508	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω		
R1509	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω		
R1510	ERJ6GEYJ8R2	S.M.CARB 0.125W	5%	8R2Ω		
R1511	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1513	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		
R1514	ERJ6GEYJ180	S.M.CARB 0.1W	5%	18Ω		
R1515	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω		

Ref No.	Part No.	Description
R1517	ERJ6GEYJ180	S.M.CARB 0.1W 5% 18Ω
R1518	ERJ6GEYJ180	S.M.CARB 0.1W 5% 18Ω
R1519	ERJ6GEYJ561	S.M.CARB 0.1W 5% 560Ω
R1520	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1521	ERJ6GEYJ820	S.M.CARB 0.1W 5% 82Ω
R1522	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1523	ERJ6GEYJ390	S.M.CARB 0.1W 5% 39Ω
R1524	ERJ6GEYJ560	S.M.CARB 0.1W 5% 56Ω
R1525	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1526	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1527	ERJ6GEYJ100	S.M.CARB 0.1W 5% 10Ω
R1528	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1530	ERJ6GEYJ560	S.M.CARB 0.1W 5% 56Ω
R1531	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1532	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1533	ERJ6GEYJ181	S.M.CARB 0.1W 5% 180Ω
R1534	ERJ6GEYJ272	S.M.CARB 0.1W 5% 2K7Ω
R1535	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1536	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R1537	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1538	ERJ6GEYJ181	S.M.CARB 0.1W 5% 180Ω
R1540	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1541	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1542	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1543	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1544	ERJ6GEYJ561	S.M.CARB 0.1W 5% 560Ω
R1545	ERJ6ENF3600	SM.CARB0.125W 5% 60Ω
R1546	ERJ6GEYJ561	S.M.CARB 0.1W 5% 560Ω
R1547	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1548	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R1550	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1551	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1552	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1553	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1554	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1555	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1556	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1559	ERJ6ENF2200	SM.CARB0.125W 5% 20Ω
R1560	ERJ6GEYJ560	S.M.CARB 0.1W 5% 56Ω
R1561	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1562	ERJ6ENF4750	SM.CARB0.125W 5% 75Ω
R1563	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1564	ERJ6ENF2200	SM.CARB0.125W 5% 20Ω
R1565	ERJ6GEYJ820	S.M.CARB 0.1W 5% 82Ω
R1566	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1567	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1568	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1569	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1570	ERJ6ENF2701	SM.CARB0.125W 5% 700Ω
R1571	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1572	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1573	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1574	ERJ6GEYJ560	S.M.CARB 0.1W 5% 56Ω
R1575	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1576	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1577	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1578	ERJ6GEYJ301	SM.CARB0.125W 5% 300Ω
R1579	ERJ6GEYJ431	S.M.CARB 0.1W 5% 430Ω
R1580	ERJ6GEYJ511	S.M.CARB 0.1W 5% 510Ω
R1581	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1582	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1583	ERJ6GEYJ561	S.M.CARB 0.1W 5% 560Ω
R1584	ERJ6GEYJ561	S.M.CARB 0.1W 5% 560Ω
R1585	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1586	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1587	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1588	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R1589	ERJ6GEYJ152	S.M.CARB 0.1W 5% 1K5Ω
R1590	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1591	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1592	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1593	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1594	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1595	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1598	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1599	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1600	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1603	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1604	ERJ6GEYJ820	S.M.CARB 0.1W 5% 82Ω
R1605	ERJ6GEYJ183	S.M.CARB 0.1W 5% 18KΩ
R1606	ERJ6GEYJ273	S.M.CARB 0.1W 5% 27KΩ
R1607	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω

Ref No.	Part No.	Description
R1609	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1610	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1611	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1613	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1614	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1615	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1616	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1617	ERJ6ENF1100	SM.CARB0.125W 5% 10Ω
R1618	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1619	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1620	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1621	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1622	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1623	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1624	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R1625	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R1626	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R1627	ERJ6GEYJ100	S.M.CARB 0.1W 5% 10Ω
R1628	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1629	ERJ6GEYJ121	S.M.CARB 0.1W 5% 120Ω
R1630	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1631	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1632	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1633	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1634	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1635	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1636	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1637	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1639	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1640	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1641	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1642	ERJ6GEYJ183	S.M.CARB 0.1W 5% 18KΩ
R1643	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1644	ERJ6GEYJ183	S.M.CARB 0.1W 5% 18KΩ
R1645	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1646	ERJ6GEYJ183	S.M.CARB 0.1W 5% 18KΩ
R1660	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1661	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1662	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22KΩ
R1663	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1664	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1665	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1666	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22KΩ
R1667	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1668	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1669	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1670	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22KΩ
R1671	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1672	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1673	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1674	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1675	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R1676	ERJ6GEYJ560	S.M.CARB 0.1W 5% 56Ω
R1677	ERJ6ENF6800	SM.CARB0.125W 5% 80Ω
R1678	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1679	ERJ6ENF1500	SM.CARB0.125W 5% 50Ω
R1680	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1681	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1682	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1683	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1684	ERJ6GEYJ271	S.M.CARB 0.1W 5% 270Ω
R1685	ERQ14AJ100	METAL 0.25W 5% 10Ω ▲
R1686	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1687	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1688	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1690	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1691	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1692	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R2101	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2102	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2103	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R2104	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R2105	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R2106	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2107	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2108	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2109	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R2110	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2111	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2112	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R2114	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω

Ref No.	Part No.	Description
R2117	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R2118	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2120	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2121	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R2125	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2301	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R2302	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2303	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R2304	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2307	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2308	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2312	ERJ6GEYJ272	S.M.CARB 0.1W 5% 2K7Ω
R2314	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2315	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R2316	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R2318	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R2319	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R2320	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2321	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2351	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R2352	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R2353	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2354	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2355	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2356	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2357	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R2358	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R2359	ERJ6GEYJ393	S.M.CARB 0.1W 5% 39KΩ
R2361	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22KΩ
R2362	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2363	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2364	ERD25TJ101	CARBON 0.25W 5% 100Ω
R2365	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R2368	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R2369	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R2370	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2371	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2372	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R2373	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R2376	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2377	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R2459	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R2460	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R2474	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R2475	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3005	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3006	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R3007	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R3008	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R3009	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R3010	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3012	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3013	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3014	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3015	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R3016	ERJ6GEYJ121	S.M.CARB 0.1W 5% 120Ω
R3017	ERJ6GEYJ390	S.M.CARB 0.1W 5% 39Ω
R3018	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3019	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3020	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3021	ERJ6GEYJ681	S.M.CARB 0.1W 5% 680Ω
R3022	ERJ6GEYJ680	S.M.CARB 0.1W 5% 68Ω
R3023	ERQ14AJ390	FUSIBLE 0.25W 5% 39Ω Δ
R3024	ERJ6GEYJ683	S.M.CARB 0.1W 5% 68KΩ
R3025	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15KΩ
R3026	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R3027	ERJ6GEYJ100	S.M.CARB 0.1W 5% 10Ω
R3028	ERJ6GEYJ681	S.M.CARB 0.1W 5% 680Ω
R3029	ERJ6GEYJ100	S.M.CARB 0.1W 5% 10Ω
R3030	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15KΩ
R3031	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R3033	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R3034	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R3035	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R3036	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3037	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R3038	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R3039	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R3040	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3043	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R3045	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω

Ref No.	Part No.	Description
R3046	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3047	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R3048	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3053	ERJ6GEYJ220	S.M.CARB 0.1W 5% 22Ω
R3057	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R3058	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3059	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3060	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R3061	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R3062	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R3063	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R3064	ERJ6GEYJ272	S.M.CARB 0.1W 5% 2K7Ω
R3065	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R3066	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R3067	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3068	ERJ6GEYJ563	S.M.CARB 0.1W 5% 56KΩ
R3069	ERJ6GEYJ183	S.M.CARB 0.1W 5% 18KΩ
R3070	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3071	ERJ6GEYJ621	S.M.CARB 0.125W 5% 620Ω
R3072	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R3073	ERJ6GEYJ393	S.M.CARB 0.1W 5% 39KΩ
R3075	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R3076	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R3077	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3078	ERJ6GEYOR00	S.M.CARB 0.1W 5% 0Ω
R3079	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3080	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3081	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3082	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3087	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R3113	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3114	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3125	ERJ6GEYJ681	S.M.CARB 0.1W 5% 680Ω
R3126	ERJ6GEYJ681	S.M.CARB 0.1W 5% 680Ω
R3281	ERD25TJ750	CARBON 0.25W 5% 75Ω
R3282	ERD25TJ750	CARBON 0.25W 5% 75Ω
R3284	ERD25TJ102	CARBON 0.25W 5% 1KΩ
R3285	ERD25TJ102	CARBON 0.25W 5% 1KΩ
R3351	ERJ6GEYJ220	S.M.CARB 0.1W 5% 22Ω
R3352	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R3353	ERJ6GEYJ474	S.M.CARB 0.1W 5% 470KΩ
R3354	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3355	ERJ6GEYJ391	S.M.CARB 0.1W 5% 390Ω
R3356	ERJ6GEYJ682	S.M.CARB 0.1W 5% 6K8Ω
R3357	ERJ6GEYJ682	S.M.CARB 0.1W 5% 6K8Ω
R3358	ERJ6GEYJ682	S.M.CARB 0.1W 5% 6K8Ω
R3360	ERDS1TJ471	CARBON 0.5W 5% 470Ω
R3361	ERO50PKF1133	METAL 50W 1% 113KΩ Δ
R3401	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3402	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3403	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R3404	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R3405	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3406	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3407	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15KΩ
R3408	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3409	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3410	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3412	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3413	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3414	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R3415	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3416	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R3417	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3418	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R3419	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R3420	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R3421	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R3422	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15KΩ
R3423	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R3424	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3425	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R3426	ERJ6GEYJ680	S.M.CARB 0.1W 5% 68Ω
R3427	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3428	ERJ6GEYJ680	S.M.CARB 0.1W 5% 68Ω
R3430	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R3433	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R3446	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3447	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R3452	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3453	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω

Ref No.	Part No.	Description			
R3454	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3455	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3801	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3802	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R3803	ERG3FJ100	METAL	3W	5%	10Ω
R3990	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R3991	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3992	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3993	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3994	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ

## CAPACITORS

C002	ECA1HMR33GB	ELECT	50V	0.33μF	
C003	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C004	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C005	ECA1CM221GB	ELECT	16V	220pF	
C006	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C007	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C008	ECUV1H561JCX	S.M.CAP	50V	560pF	
C009	ECA1CM221GB	ELECT	16V	220pF	
C010	ECA1HM4R7GB	ELECT	50V	4.7μF	
C011	ECUV1H100DCX	S.M.CAP	50V	10pF	
C012	ECUV1H100DCX	S.M.CAP	50V	10pF	
C013	ECA1CM470GB	ELECT	16V	47μF	
C014	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C015	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C017	ECUV1H100DCX	S.M.CAP	50V	10pF	
C018	ECJ2VF1H104Z	ELECT	350V	0.10μF	
C019	ECJ2VF1H104Z	ELECT	350V	0.10μF	
C103	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C104	ECJ2VF1H103Z	ELECT	350V	10nF	
C107	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C108	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C109	ECUV1C184KBX	S.M.CAP	16V	0.18μF	
C110	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C111	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C251	ECA1CM100GB	ELECT	16V	10pF	
C252	ECUV1H103KBX	S.M.CAP	50V	10nF	
C253	ECA1HM4R7GB	ELECT	50V	4.7μF	
C254	ECQM1H104J	FILM	50V	100nF	
C255	ECA1EHG101B	ELECT	25V	100pF	
C256	ECUV1H103KBX	S.M.CAP	50V	10nF	
C257	ECA1HM4R7GB	ELECT	50V	4.7μF	
C258	ECA1CM100GB	ELECT	16V	10pF	
C259	ECQM1H104J	FILM	50V	100nF	
C260	ECA1VM102GB	ELECT	35V	1nF	
C261	ECA1VM102GB	ELECT	35V	1nF	
C262	ECA1HM220GB	ELECT	50V	22pF	
C263	ECA1HM100GB	ELECT	50V	10pF	
C264	ECA1HM222E	ELECT	50V	2.2nF	
C265	ECA1HM220GB	ELECT	50V	22pF	
C266	ECA1HM100GB	ELECT	50V	10pF	
C267	ECQM1H224J	FILM	50V	220nF	
C268	ECQM1H224J	FILM	50V	220nF	
C269	ECA1HM470GB	ELECT	50V	47μF	
C270	ECQM1H224J	FILM	50V	220nF	
C271	ECQM1H224J	FILM	50V	220nF	
C277	ECUV1H102JCX	S.M.CAP	50V	1nF	
C278	ECUV1H102JCX	S.M.CAP	50V	1nF	
C352	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C353	ECUV1H104KBX	S.M.CAP	50V	100nF	
C354	ECQM2104KZ	FILM	250V	100nF	
C355	ECKC2H102J	CERAMIC	500V	1nF	△
C362	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C363	ECUV1H104KBX	S.M.CAP	50V	100nF	
C364	ECQM2104KZ	FILM	250V	100nF	
C365	ECKC2H102J	CERAMIC	500V	1nF	△
C372	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C373	ECUV1H104KBX	S.M.CAP	50V	100nF	
C374	ECQM2104KZ	FILM	250V	100nF	
C375	ECKC2H102J	CERAMIC	500V	1nF	△
C381	ECA1HM101GB	ELECT	50V	100pF	
C382	ECA1CM471GB	ELECT	16V	470pF	
C383	ECUV1H103KBX	S.M.CAP	50V	10nF	
C384	ECQM2104KZ	FILM	250V	100nF	
C385	ECA2EM220B	ELECT	250V	22pF	
C386	ECKC3D152J	CERAMIC	2KV	1.5nF	△
C387	ECUV1H681JCX	S.M.CAP	50V	680pF	
C395	ECQM1H104J	FILM	50V	100nF	

Ref No.	Part No.	Description			
C396	ECJ2VF1H104Z	ELECT	350V	0.10μF	
C400	ECA1VM102GB	ELECT	35V	1nF	
C401	ECA1VM102GB	ELECT	35V	1nF	
C402	ECA1HM010GB	ELECT	50V	1pF	
C403	MA165TA5	DIODE			
C404	ECEA1HU471	ELECT	50V	470μF	
C405	ECA1EM102GB	ELECT	25V	1nF	
C407	ECQB1224KFW	FILM	100V	0.22μF	
C411	ECUV1H102KBX	S.M.CAP	50V	1nF	
C501	ECQM1H224J	FILM	50V	220nF	
C502	ECQM2104KZ	FILM	250V	100nF	
C503	ECKC2H102J	CERAMIC	500V	1nF	△
C504	ECQB1H223K	FILM	50V	22nF	
C505	ECA1EM222GB	ELECT	25V	2.2nF	
C506	ECKC2H102J	CERAMIC	500V	1nF	△
C507	ECA1EM332E	ELECT	25V	3.3nF	
C552	ECWH20392JVY	FILM	200V	3.9nF	
C553	ECQP1104JZW	FILM	100V	0.10μF	
C554	ECQB1H152K	FILM	50V	1.5nF	
C555	ECWH20472JVB	FILM	200V	4.7nF	
C556	ECEA2CNR47SB	ELECT	160V	R47μF	
C557	ECKC2H331J	CERAMIC	500V	330pF	△
C558	ECA2EM330B	ELECT	250V	33pF	
C559	ECKC2H103J	CERAMIC	50V	10nF	△
C563	ECWF2564JBB	FILM	200V	0.56μF	
C564	ECKC1H103JB	CERAMIC	50V	10nF	
C565	ECQP1823JZW	FILM	100V	82nF	
C572	ECWH20472JVB	FILM	200V	4.7nF	
C573	ECQF4153JZH	FILM	400V	15nF	
C574	ECWF4684JBB	FILM	400V	0.68μF	
C575	ECWF4684JBB	FILM	400V	0.68μF	
C581	ECQF4123JZH	FILM	400V	12nF	
C584	ECKC3D391J	CERAMIC	2KV	390pF	△
C602	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C603	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C604	ECUV1H470JCX	S.M.CAP	50V	47pF	
C605	ECA1CM221GB	ELECT	16V	220pF	
C606	ECA1AM332E	ELECT	10V	3.3nF	
C607	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C608	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C609	ECA1HM3R3GB	ELECT	50V	3.3μF	
C610	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C611	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C612	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C613	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C614	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C615	ECJ2VB1C104K	ELECT	350V	0.10μF	
C616	ECQM1H104J	FILM	50V	100nF	
C617	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C618	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C620	ECUV1H100DCX	S.M.CAP	50V	10pF	
C622	ECUV1H470JCX	S.M.CAP	50V	47pF	
C623	ECUV1H470JCX	S.M.CAP	50V	47pF	
C624	ECUV1H820JCX	S.M.CAP	50V	82pF	
C625	ECUV1H470JCX	S.M.CAP	50V	47pF	
C626	ECUV1H470JCX	S.M.CAP	50V	47pF	
C627	ECUV1H470JCX	S.M.CAP	50V	47pF	
C628	ECUV1H470JCX	S.M.CAP	50V	47pF	
C632	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C633	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C634	ECUV1H222KBX	S.M.CAP	50V	2.2nF	
C635	ECA1EM101GB	ELECT	25V	1μF	
C637	ECUV1H470JCX	S.M.CAP	50V	47pF	
C638	ECUV1H270JCX	S.M.CAP	50V	27pF	
C639	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C641	ECUV1H101JCX	S.M.CAP	50V	100pF	
C643	ECUV1H102KBX	S.M.CAP	50V	1nF	
C644	ECQM1H104J	FILM	50V	100nF	
C645	ECQM1H104J	FILM	50V	100nF	
C646	ECUV1H103KBX	S.M.CAP	50V	10nF	
C651	ECUV1C224KBX	S.M.CAP	16V	220nF	
C701	ECQV1H105JZ	FILM	50V	1μF	
C702	ECKC2H102J	CERAMIC	500V	1nF	△
C806	ECQE6104K	FILM	600V	100nF	△
C807	ECQB1H473K	FILM	50V	47nF	
C808	ECQM1H334J	FILM	50V	330nF	
C809	ECQE2A474MWB	FILM	100V	0.47μF	
C811	ECQB1H104J	FILM	50V	100nF	
C812	ECQB1H562K	FILM	50V	5.6nF	
C813	ECKC2H472J	CERAMIC	500V	4.7nF	△
C814	ECKC2H472J	CERAMIC	500V	4.7nF	△

Ref No.	Part No.	Description			
C815	ECA1CM331B	ELECT	16V	330pF	
C816	ECQB1H122J	FILM	50V	1.2nF	
C817	ECKC2H472J	CERAMIC	500V	4.7nF	Δ
C818	ECKC2H472J	CERAMIC	500V	4.7nF	Δ
C819	ECOS2WB221DB	ELECT	0V	220pF	
C820	ECOS2WB221DB	ELECT	0V	220pF	
C821	ECQB1H222J	FILM	50V	2200pF	
C822	ECKC3D471JB	CERAMIC	2KV	470pF	Δ
C823	EEUFA1V2221B	CERAMIC	35V	220μF	
C824	ECQB1H221KF3	FILM	50V	0pF	
C826	ECQB1H473K	FILM	50V	47nF	
C827	ECKCNS332J	CERAMIC	1.2KV	3.3nF	Δ
C830	ECQE6105JFW	FILM	600V	1μF	
C831	ECKC3D471JB	CERAMIC	2KV	470pF	Δ
C833	ECQB1H682K	FILM	50V	6.8nF	
C835	ECQB1H332K	FILM	50V	3.3nF	
C842	222233510154	ELECT	50V	0.15μF	
C843	ECQE2A474MWB	FILM	100V	0.47μF	
C847	ECEA1EN101UB	ELECT	25V	100μF	
C848	ECKC2H331J	CERAMIC	500V	330pF	Δ
C849	ECKC2H391J	CERAMIC	500V	390pF	
C853	ECEA1CU332	ELECT	16V	3300μF	
C854	ECA1EM221GB	ELECT	25V	220pF	
C855	ECEA1HU102	ELECT	50V	1000μF	
C856	ECA1EM332E	ELECT	25V	3.3nF	
C857	ECA1EM471GB	ELECT	25V	470pF	
C858	ECOS2EA271BB	ELECT	250V	270pF	
C859	ECKC2H471J	CERAMIC	500V	470pF	Δ
C861	ECOS2EA221AB	ELECT	250V	220μF	
C863	ECA1EM332E	ELECT	25V	3.3nF	
C864	ECA0JM102GB	ELECT	6.3V	1nF	
C866	ECA1HM101GB	ELECT	50V	100pF	
C867	ECA1CM222E	ELECT	16V	2.2nF	
C868	ECA1CM100GB	ELECT	16V	10pF	
C869	ECA1HM101GB	ELECT	50V	100pF	
C871	ECA0JM102GB	ELECT	6.3V	1nF	
C872	ECA1CM222E	ELECT	16V	2.2nF	
C901	ECUV1H030CCX	S.M.CAP	50V	30pF	
C902	ECA1VM101GB	ELECT	35V	100pF	
C904	ECJ2VF1H103Z	ELECT	350V	10nF	
C906	ECUV1H680JCX	S.M.CAP	50V	68pF	
C907	ECUV1H121JCX	S.M.CAP	50V	120pF	
C908	ECUV1H151JCX	S.M.CAP	50V	150pF	
C909	ECKC2H472J	CERAMIC	500V	4.7nF	Δ
C910	ECKC2H472J	CERAMIC	500V	4.7nF	Δ
C911	ECUV1H151JCX	S.M.CAP	50V	150pF	
C912	ECA2EM220B	ELECT	250V	22pF	
C913	ECA1HM101GB	ELECT	50V	100pF	
C914	ECA1HM101GB	ELECT	50V	100pF	
C916	ECA2EM220B	ELECT	250V	22pF	
C917	ECA1HM100GB	ELECT	50V	100pF	
C918	ECJ2VF1H103Z	ELECT	350V	10nF	
C919	ECCR2H270J	CERAMIC	500V	27pF	
C1011	ECKC1H101J	CERAMIC	50V	100pF	
C1012	ECA1VM470B	ELECT	35V	47pF	
C1013	ECKC1H103JB	CERAMIC	50V	10nF	
C1014	ECA1HM101GB	ELECT	50V	100pF	
C1101	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1102	ECUV1H101JCX	S.M.CAP	50V	100pF	
C1103	ECUV1H220JCX	S.M.CAP	50V	22pF	
C1104	ECUV1H220JCX	S.M.CAP	50V	22pF	
C1107	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1109	ECUV1C104KBX	S.M.CAP	16V	0.10μF	
C1113	ECUV1C104KBX	S.M.CAP	16V	0.10μF	
C1114	ECA1HM101GB	ELECT	50V	100pF	
C1116	ECUV1H560JCX	S.M.CAP	50V	56pF	
C1117	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1118	ECJ3VB1C474K	ELECT	350V	0.47μF	
C1120	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1121	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C1122	ECA1HM010GB	ELECT	50V	1pF	
C1123	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1124	ECUV1H101JCX	S.M.CAP	50V	100pF	
C1125	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1126	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1127	ECA1HM101GB	ELECT	50V	100pF	
C1128	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1129	ECA1HM101GB	ELECT	50V	100pF	
C1130	ECUV1H103KBX	S.M.CAP	50V	10nF	
C1131	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1138	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	

Ref No.	Part No.	Description			
C1145	ECJ2VB1H333K	ELECT	350V	33nF	
C1147	ECA1CM331B	ELECT	16V	330pF	
C1148	ECUV1C224KBX	S.M.CAP	16V	220nF	
C1501	ECUV1H330JCX	S.M.CAP	50V	33pF	
C1502	ECUV1H471JCX	S.M.CAP	50V	470pF	
C1503	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1504	ECUV1H680JCX	S.M.CAP	50V	68pF	
C1505	ECUV1H820JCX	S.M.CAP	50V	82pF	
C1506	ECUV1H331JCX	S.M.CAP	50V	330pF	
C1507	ECUV1H102KBX	S.M.CAP	50V	1nF	
C1508	ECEA1HN010UB	ELECT	50V	1μF	
C1509	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1510	ECA1HM101GB	ELECT	50V	100pF	
C1511	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1512	ECUV1H030CCX	S.M.CAP	50V	30pF	
C1513	ECA1HM100GB	ELECT	50V	10pF	
C1514	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1515	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1516	ECUV1H030CCX	S.M.CAP	50V	30pF	
C1517	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1518	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1519	ECA1HM101GB	ELECT	50V	100pF	
C1521	ECA1HM101GB	ELECT	50V	100pF	
C1522	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1523	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1524	ECA1VM470B	ELECT	35V	47pF	
C1525	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1527	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1528	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1529	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1530	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1532	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1533	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1534	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1535	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1536	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1537	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1538	EEUNA1E220B	S.M.CAP	35V	22pF	
C1539	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1540	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1541	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1542	ECA1CM471GB	ELECT	16V	470pF	
C1543	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1544	EEUNA1E220B	S.M.CAP	35V	22pF	
C1545	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1546	ECA1HM101GB	ELECT	50V	100pF	
C1547	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1548	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1549	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1550	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1551	EEUNA1E220B	S.M.CAP	35V	22pF	
C1552	ECA1HM101GB	ELECT	50V	100pF	
C1553	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1554	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1555	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1556	ECA1HM101GB	ELECT	50V	100pF	
C1557	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1558	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1559	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1560	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1561	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1562	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1563	ECA1HM101GB	ELECT	50V	100pF	
C1564	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1565	ECUV1H270JCX	S.M.CAP	50V	27pF	
C1567	ECA1HM101GB	ELECT	50V	100pF	
C1568	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1569	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1570	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1571	ECA1CM471GB	ELECT	16V	470pF	
C1572	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1573	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1574	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1575	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1576	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1577	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1578	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1579	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1580	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1581	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1582	ECUV1H104ZFX	S.M.CAP	50V	100nF	

Ref No.	Part No.	Description
C1583	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1584	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1585	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1586	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1587	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1588	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1589	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1590	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1591	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1592	ECA1CM221GB	ELECT 16V 220pF
C1593	ECA1CM221GB	ELECT 16V 220pF
C1594	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1595	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1596	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1597	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1598	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1599	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1600	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1601	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1602	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1603	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1604	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1605	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1606	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1607	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1608	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1609	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1610	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1611	ECA1CM471GB	ELECT 16V 470pF
C1612	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1614	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1615	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1616	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1617	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1618	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1619	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1620	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1621	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1622	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1623	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1624	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1625	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1626	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1627	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1628	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1629	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1630	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1631	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1632	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1633	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1636	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1637	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1638	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1639	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1642	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1643	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1644	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1645	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1647	ECUV1H470JCX	S.M.CAP 50V 47pF
C1648	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1649	ECA1HM101GB	ELECT 50V 100pF
C1650	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1651	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1652	ECA1HM101GB	ELECT 50V 100pF
C1653	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1654	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1655	ECA1VM470B	ELECT 35V 47pF
C1656	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1658	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1659	ECA1VM470B	ELECT 35V 47pF
C1660	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1661	ECA1HM101GB	ELECT 50V 100pF
C1662	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1663	ECUV1H560JCX	S.M.CAP 50V 56pF
C1664	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1666	ECUV1H390JCX	S.M.CAP 50V 39pF
C1667	ECUV1H820JCX	S.M.CAP 50V 82pF
C1668	ECUV1H680JCX	S.M.CAP 50V 68pF
C1669	ECUV1H271JCX	S.M.CAP 50V 270pF
C1670	ECUV1H391JCX	S.M.CAP 50V 390pF
C1671	ECUV1H390JCX	S.M.CAP 50V 39pF
C1672	ECUV1H820JCX	S.M.CAP 50V 82pF

Ref No.	Part No.	Description
C1673	ECUV1H680JCX	S.M.CAP 50V 68pF
C1674	ECUV1H271JCX	S.M.CAP 50V 270pF
C1675	ECUV1H391JCX	S.M.CAP 50V 390pF
C1676	ECUV1H390JCX	S.M.CAP 50V 39pF
C1677	ECUV1H820JCX	S.M.CAP 50V 82pF
C1678	ECUV1H680JCX	S.M.CAP 50V 68pF
C1679	ECUV1H271JCX	S.M.CAP 50V 270pF
C1680	ECUV1H391JCX	S.M.CAP 50V 390pF
C1681	ECUV1H820JCX	S.M.CAP 50V 82pF
C1682	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1683	ECUV1H101JCX	S.M.CAP 50V 100pF
C1685	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1686	ECUV1H101JCX	S.M.CAP 50V 100pF
C1688	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1689	ECUV1H104ZFX	S.M.CAP 50V 100nF
C1690	ECJ2VF1C105Z	ELECT 350V 1.0µF
C1691	ECJ2VF1C105Z	ELECT 350V 1.0µF
C1692	EEUNA1E220B	S.M.CAP 35V 22pF
C1693	ECA1HM101GB	ELECT 50V 100pF
C1695	ECUV1H221JCX	S.M.CAP 50V 220pF
C1696	EEUNA1E220B	S.M.CAP 35V 22pF
C1697	EEUNA1E220B	S.M.CAP 35V 22pF
C1698	EEUNA1E220B	S.M.CAP 35V 22pF
C2103	ECUV1H391KBX	S.M.CAP 50V 390pF
C2104	ECUV1H102KBX	S.M.CAP 50V 1nF
C2105	ECUV1H102KBX	S.M.CAP 50V 1nF
C2106	ECUV1H102KBX	S.M.CAP 50V 1nF
C2107	ECUV1H102KBX	S.M.CAP 50V 1nF
C2108	ECUV1H102KBX	S.M.CAP 50V 1nF
C2109	ECUV1H102KBX	S.M.CAP 50V 1nF
C2110	ECUV1H102KBX	S.M.CAP 50V 1nF
C2111	ECA1CM100GB	ELECT 16V 10pF
C2112	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2113	ECA1CM100GB	ELECT 16V 10pF
C2114	ECA1HM101GB	ELECT 50V 100pF
C2115	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2116	ECUV1H102KBX	S.M.CAP 50V 1nF
C2117	ECUV1H471KBX	S.M.CAP 50V 470pF
C2118	ECA1HM3R3GB	ELECT 50V 3.3µF
C2119	ECUV1H471KBX	S.M.CAP 50V 470pF
C2120	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2121	ECUV1H221JCX	S.M.CAP 50V 220pF
C2122	ECUV1H221JCX	S.M.CAP 50V 220pF
C2123	ECUV1H221JCX	S.M.CAP 50V 220pF
C2124	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2125	ECA1CM100GB	ELECT 16V 10pF
C2126	ECUV1H221JCX	S.M.CAP 50V 220pF
C2127	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2128	ECUV1H221JCX	S.M.CAP 50V 220pF
C2129	ECA1CM100GB	ELECT 16V 10pF
C2130	ECUV1H221JCX	S.M.CAP 50V 220pF
C2131	ECQM1H334J	FILM 50V 330nF
C2132	ECA1CM100GB	ELECT 16V 10pF
C2133	ECUV1H470JCX	S.M.CAP 50V 47pF
C2134	ECUV1H470JCX	S.M.CAP 50V 47pF
C2135	ECUV1H070DCX	S.M.CAP 50V 7pF
C2137	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2138	ECUV1H010CCX	S.M.CAP 50V 1pF
C2139	ECUV1H010CCX	S.M.CAP 50V 1pF
C2141	ECUV1H560JCX	S.M.CAP 50V 56pF
C2142	ECA1CM100GB	ELECT 16V 10pF
C2144	ECUV1H560JCX	S.M.CAP 50V 56pF
C2146	ECA1CM100GB	ELECT 16V 10pF
C2147	ECUV1H103KBX	S.M.CAP 50V 10nF
C2148	ECUV1H103KBX	S.M.CAP 50V 10nF
C2301	ECA1CM470GB	ELECT 16V 47µF
C2302	ECA1CM470GB	ELECT 16V 47µF
C2307	ECUV1H103KBX	S.M.CAP 50V 10nF
C2308	ECUV1H103KBX	S.M.CAP 50V 10nF
C2353	ECA1CM471GB	ELECT 16V 470pF
C2356	ECA1HM4R7GB	ELECT 50V 4.7µF
C2357	ECUV1H151JCX	S.M.CAP 50V 150pF
C2358	ECUV1H151JCX	S.M.CAP 50V 150pF
C2359	ECA1HM4R7GB	ELECT 50V 4.7µF
C2361	ECA1CM470GB	ELECT 16V 47µF
C2362	ECA1HM101GB	ELECT 50V 100pF
C2363	ECEA1HU221	ELECT 50V 220µF
C2364	ECEA1HU221	ELECT 50V 220µF
C2365	ECA1HM101GB	ELECT 50V 100pF
C2366	ECAQM222GB	ELECT 6.3V 2.2nF
C2367	ECUV1H104ZFX	S.M.CAP 50V 100nF
C2370	ECA1HM100GB	ELECT 50V 10pF

Ref No.	Part No.	Description			
C2371	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C2372	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C2375	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2377	ECKC1H102J	CERAMIC	50V	1000pF	
C2378	ECKC1H102J	CERAMIC	50V	1000pF	
C2381	ECKC1H103JB	CERAMIC	50V	10nF	
C2382	ECKC1H103JB	CERAMIC	50V	10nF	
C2430	ECUV1H561JCX	S.M.CAP	50V	560pF	
C2431	ECUV1H561JCX	S.M.CAP	50V	560pF	
C2437	ECUV1H561JCX	S.M.CAP	50V	560pF	
C2438	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3002	ECA1CM470GB	ELECT	16V	47µF	
C3003	ECUV1H102ZFX	S.M.CAP	50V	1nF	
C3004	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3005	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3006	ECA1HM4R7GB	ELECT	50V	4.7µF	
C3007	ECA1HM4R7GB	ELECT	50V	4.7µF	
C3008	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3009	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C3010	ECUV1H680JCX	S.M.CAP	50V	68pF	
C3011	ECA1CM221GB	ELECT	16V	220pF	
C3012	ECA1CM470GB	ELECT	16V	47µF	
C3013	ECA1CM470GB	ELECT	16V	47µF	
C3014	EEUNA1A470B	S.M.CAP	10V	47pF	
C3015	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3016	ECA1CM470GB	ELECT	16V	47µF	
C3017	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3018	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3021	ECA1CM331B	ELECT	16V	330pF	
C3022	ECA1CM102B	ELECT	16V	1.0nF	
C3023	ECA1HM100GB	ELECT	50V	10pF	
C3024	ECA1HM2R2GB	ELECT	50V	2.2µF	
C3025	ECA1CM470GB	ELECT	16V	47µF	
C3026	ECUV1H224ZFX	S.M.CAP	50V	0.22µF	
C3027	ECJ2VF1H104Z	ELECT	350V	0.10µF	
C3028	ECUV1H470JRX	S.M.CAP	50V	47pF	
C3120	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3122	ECUV1H102KBX	S.M.CAP	50V	1nF	
C3123	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3124	ECUV1H102KBX	S.M.CAP	50V	1nF	
C3255	ECA1HM4R7GB	ELECT	50V	4.7µF	
C3256	ECA1HM4R7GB	ELECT	50V	4.7µF	
C3282	ECKC1H561J	CERAMIC	50V	560pF	
C3284	ECKC1H561J	CERAMIC	50V	560pF	
C3351	ECA1CM221GB	ELECT	16V	220pF	
C3401	ECEA1HKA100	ELECT	50V	10pF	
C3402	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3403	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3404	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3405	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3406	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3407	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3408	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3409	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3410	ECEA1HKA100	ELECT	50V	10pF	
C3411	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3412	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3413	ECUV1H102JCX	S.M.CAP	50V	1nF	
C3414	ECEA1HKA100	ELECT	50V	10pF	
C3415	ECEA1HKA100	ELECT	50V	10pF	
C3416	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3417	ECEA1HKA100	ELECT	50V	10pF	
C3418	ECEA1HKA100	ELECT	50V	10pF	
C3419	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3420	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3421	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3422	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3423	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3424	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3425	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3426	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3427	ECUV1H102JCX	S.M.CAP	50V	1nF	
C3428	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3429	ECEA1CKA220	ELECT	16V	22µF	
C3430	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3431	ECEA1CN470	ELECT	16V	47µF	
C3432	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3433	ECA1CM221GB	ELECT	16V	220pF	
C3460	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3461	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3496	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3497	ECUV1H561JCX	S.M.CAP	50V	560pF	

Ref No.	Part No.	Description			
C3498	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3802	ECA1CM100GB	ELECT	16V	10pF	
C3803	ECA1EM100GB	ELECT	25V	0.1µF	
C3804	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3805	ECUV1H224ZFX	S.M.CAP	50V	0.22µF	
C3806	ECA1HM101GB	ELECT	50V	100pF	
C3807	ECA1HM100GB	ELECT	50V	10pF	
C3808	ECA1CM470GB	ELECT	16V	47µF	
C3814	ECA1HM010GB	ELECT	50V	1pF	
C3816	ECA1CM471GB	ELECT	16V	470pF	
C3817	ECA1CM221GB	ELECT	16V	220pF	
C3818	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3819	ECA1HM010GB	ELECT	50V	1pF	
C3821	ECA1HM010GB	ELECT	50V	1pF	
C3823	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3824	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3825	ECJ2VB1C224K	ELECT	350V	0.22µF	
C3826	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3827	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω

## TERMINALS AND LINKS

JA1	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA1	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA11	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA12	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA13	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA14	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA15	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA16	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA18	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA19	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA2	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA2	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA20	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA21	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA23	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA24	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA26	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA27	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA29	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA3	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA3	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA30	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA31	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA33	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA35	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA36	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA37	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA4	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JA4	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA5	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA6	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA7	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA8	ERJ8GEY0R00	S.M.CARB	.125W	5%	Ω
JA9	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JK2403	TJB8E014	RCA TERMINAL (2P)			
JK3281	TJBA039	A/V TERMINAL			
JK3401	1364-21-21	SCART SOCKET			
JK3402	1364-21-21	SCART SOCKET			
JSE004	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSE009	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSE011	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSE025	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSE026	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSE044	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF001	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF005	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF006	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF007	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF009	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF010	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF013	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF015	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF017	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF018	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF019	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF020	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF021	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω
JSF022	ERJ6GEY0R00	S.M.CARB	0.1W	5%	Ω

Ref No.	Part No.	Description
JSF023	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF024	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF025	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF026	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF027	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF028	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF029	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF032	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF034	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF037	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF039	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF041	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF042	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSF043	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω

Ref No.	Part No.	Description
JSH002	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSH010	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSY03	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
JSY04	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0Ω
<b>SWITCHES</b>		
S840	ESB92S11B	SWITCH
S1071	EVQ23405R	SWITCH
S1072	EVQ23405R	SWITCH
S1073	EVQ23405R	SWITCH
S1074	EVQ23405R	SWITCH
S1075	EVQ23405R	SWITCH

▲

**NOTE:**

For models with the dark walnut finish please refer to the TX-28XD90P/A and TX-25XD90P/A Difference Lists and for Models with the light mahogany please refer to the TX-28XD90P/B AND TX-25XD90P/B

Ref No.	Part No.	Description	
<b>DIFFERENCES FOR MODEL TX-28XD90P</b>			
<b>MECHANICAL PARTS</b>			
14	TKU8E00320	BACK COVER	△
15	A66ECF61X81	C. R.T.	△
16	TKY8E161	CABINET	△
17	TNPA1014AF	D P.C.B.	△
18	TLK8E05140	DEGAUSS COIL	△
19	TKP8E1170	DOOR LID	
20	TNPH0176AN	E P.C.B.	△
21	TKP8E1175	LEFT PANEL	
22	TQF8E2769	MODEL LABEL	△
23	TBX8E040	POWER BUTTON	
24	TKP8E1200	RIGHT PANEL	
25	TKP8E1169	SPEAKER NET	
26	TKP8E1172	TOP PANEL	
27	TNPA1353AD	Y P.C.B.	△
<b>MISCELLANEOUS COMPONENTS</b>			
	TPC8E4659	OUTER CARTON	
	TPD8E633	CUSHION TOP	
	TPD8E634	CUSHION BOTTOM	
<b>CAPACITORS</b>			
C636	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C852	ECKC3D222JB	CERAMIC 2KV 2200pF	△
<b>INTEGRATED CIRCUITS</b>			
IC1102	X24CWH0501GP	EAROM *	
<b>COILS</b>			
L353	TLT150K991R	COIL	
L373	TLT150K991R	COIL	
<b>RESISTOR</b>			
R419	ERG3FJ151	METAL 3W 5% 150Ω	△
R655	ERJ6GEYJ224	S.M.CARB 0.1W 5% 220KΩ	
R680	ERJ6GEYJ303	S.M.CARB0.125W 5% 30KΩ	
<b>DIFFERENCES FOR MODEL TX-28XD90P/A</b>			
<b>MECHANICAL PARTS</b>			
14	TKU8E00320	BACK COVER	△
15	A66ECF61X81	CRT	△
16	TKY8E161	CABINET	△
17	TNPA1014AF	D P.C.B.	△
18	TLK8E05140	DEGAUSS COIL	△
19	TKP8E1180	DOOR LID	
20	TNPH0176AN	E P.C.B.	△
21	TKP8E1184	TOP PANEL	
22	TQF8E2770	MODEL LABEL	△
23	TBX8E045	POWER BUTTON	
24	TKP8E1204	RIGHT PANEL	
25	TKP8E1169	SPEAKER NET	
26	TKP8E1182	LEFT PANEL	
27	TNPA1353AD	Y P.C.B.	△
<b>MISCELLANEOUS COMPONENTS</b>			
	TPC8E4659	OUTER CARTON	
	TPD8E633	CUSHION TOP	

Ref No.	Part No.	Description	
	TPD8E634	CUSHION BOTTOM	
<b>CAPACITORS</b>			
C636	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C852	ECKC3D222JB	CERAMIC 2KV 2200pF	△
<b>INTEGRATED CIRCUITS</b>			
IC1102	X24CWH0501GP	EAROM *	
<b>COILS</b>			
L353	TLT150K991R	COIL	
L373	TLT150K991R	COIL	
<b>RESISTOR</b>			
R419	ERG3FJ151	METAL 3W 5% 150Ω	△
R655	ERJ6GEYJ224	S.M.CARB 0.1W 5% 220KΩ	
R680	ERJ6GEYJ303	S.M.CARB0.125W 5% 30KΩ	
<b>DIFFERENCES FOR MODEL TX-28XD90P/B</b>			
<b>MECHANICAL PARTS</b>			
14	TKU8E00320	BACK COVER	△
15	A66ECF61X81	C. R.T.	△
16	TKY8E161	CABINET	△
17	TNPA1014AF	D P.C.B.	△
18	TLK8E05140	DEGAUSS COIL	△
19	TKP8E1181	DOOR LID	
20	TNPH0176AN	E P.C.B.	△
21	TKP8E1185	LEFT PANEL	
22	TQF8E2771	MODEL LABEL	△
23	TBX8E046	POWER BUTTON	
24	TKP8E1189	RIGHT PANEL	
25	TKP8E1169	SPEAKER NET	
26	TKP8E1183	TOP PANEL	
27	TNPA1353AD	Y P.C.B.	△
<b>MISCELLANEOUS COMPONENTS</b>			
	TPC8E4659	OUTER CARTON	
	TPD8E633	CUSHION TOP	
	TPD8E634	CUSHION BOTTOM	
<b>CAPACITORS</b>			
C636	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C852	ECKC3D222JB	CERAMIC 2KV 2200pF	△
<b>INTEGRATED CIRCUITS</b>			
IC1102	X24CWH0501GP	EAROM *	
<b>COILS</b>			
L353	TLT150K991R	COIL	
L373	TLT150K991R	COIL	
<b>RESISTOR</b>			
R419	ERG3FJ151	METAL 3W 5% 150Ω	△
R655	ERJ6GEYJ224	S.M.CARB 0.1W 5% 220KΩ	
R680	ERJ6GEYJ303	S.M.CARB0.125W 5% 30KΩ	

Ref No.	Part No.	Description	
<b>DIFFERENCES FOR MODEL TX-25XD90P</b>			
<b>MECHANICAL PARTS</b>			
14	TKU8E00310	BACK COVER	△
15	A59ECF50X81	C.R.T.	
16	TKY8E151-2	CABINET	△
17	TNPA1014AE	D.P.C.B.	△
18	TLK8E05138	DEGAUSS COIL	△
19	TKP8E1170	DOOR LID	
20	TNPH0176AM	E.P.C.B.	△
21	TKP8E1173	LEFT PANEL	
22	TQF8E2766	MODEL LABEL	△
23	TBX8E040	POWER BUTTON	
24	TKP8E1263	RIGHT PANEL	
25	TKP8E1168	SPEAKER NET	
26	TKP8E1171	TOP PANEL	
27	TNPA1353AC	Y.P.C.B.	△
<b>MISCELLANEOUS COMPONENTS</b>			
	TPC8E4660-1	OUTER CARTON	
	TPD8E631	CUSHION TOP	
	TPD8E632	CUSHION BOTTOM	
<b>CAPACITORS</b>			
C636	ECJ2VF1H103Z	ELECT 350V	10nF
C852	ECKC3D102J	CERAMIC 2KV	1nF
<b>INTEGRATED CIRCUITS</b>			
IC1102	X24CWH0502FP	EAROM *	
<b>COILS</b>			
L353	TLT120K991R	COIL	
L373	TLT120K991R	COIL	
<b>RESISTOR</b>			
R419	ERG3FJ471	METAL 3W	5% 470Ω
R655	ERJ6GEYJ244	S.M.CARB 0.125W	5% 240KΩ
R680	ERJ6GEYJ273	S.M.CARB 0.1W	5% 27KΩ
<b>DIFFERENCES FOR MODEL TX-25XD90P/A</b>			
<b>MECHANICAL PARTS</b>			
14	TKU8E00310	BACK COVER	△
15	A59ECF50X81	C.R.T.	
16	TKY8E151-2	CABINET	△
17	TNPA1014AE	D.P.C.B.	△
18	TLK8E05138	DEGAUSS COIL	△
19	TKP8E1180	DOOR LID	
20	TNPH0176AM	E.P.C.B.	△
21	TKP8E1192	LEFT PANEL	
22	TQF8E2767	MODEL LABEL	△
23	TBX8E045	POWER BUTTON	
24	TKP8E1264	RIGHT PANEL	
25	TKP8E1168	SPEAKER NET	
26	TKP8E1190	TOP PANEL	
27	TNPA1353AC	Y.P.C.B.	△
<b>MISCELLANEOUS COMPONENTS</b>			
	TPC8E4660-1	OUTER CARTON	
	TPD8E631	CUSHION TOP	

Ref No.	Part No.	Description	
	TPD8E632	CUSHION BOTTOM	
<b>CAPACITORS</b>			
C636	ECJ2VF1H103Z	ELECT 350V	10nF
C852	ECKC3D102J	CERAMIC 2KV	1nF
<b>INTEGRATED CIRCUITS</b>			
IC1102	X24CWH0502FP	EAROM *	
<b>COILS</b>			
L353	TLT120K991R	COIL	
L373	TLT120K991R	COIL	
<b>RESISTOR</b>			
R419	ERG3FJ471	METAL 3W	5% 470Ω
R655	ERJ6GEYJ244	S.M.CARB 0.125W	5% 240KΩ
R680	ERJ6GEYJ273	S.M.CARB 0.1W	5% 27KΩ
<b>DIFFERENCES FOR MODEL TX-25XD90P/B</b>			
<b>MECHANICAL PARTS</b>			
14	TKU8E00310	BACK COVER	△
15	A59ECF50X81	C.R.T.	
16	TKY8E151-2	CABINET	△
17	TNPA1014AE	D.P.C.B.	△
18	TLK8E05138	DEGAUSS COIL	△
19	TKP8E1181	DOOR LID	
20	TNPH0176AM	E.P.C.B.	△
21	TKP8E1193	LEFT PANEL	
22	TQF8E2768	MODEL LABEL	△
23	TBX8E046	POWER BUTTON	
24	TKP8E1265	RIGHT PANEL	
25	TKP8E1168	SPEAKER NET	
26	TKP8E1191	TOP PANEL	
27	TNPA1353AC	Y.P.C.B.	△
<b>MISCELLANEOUS COMPONENTS</b>			
	TPC8E4660-1	OUTER CARTON	
	TPD8E631	CUSHION TOP	
	TPD8E632	CUSHION BOTTOM	
<b>CAPACITORS</b>			
C636	ECJ2VF1H103Z	ELECT 350V	10nF
C852	ECKC3D102J	CERAMIC 2KV	1nF
<b>INTEGRATED CIRCUITS</b>			
IC1102	X24CWH0502FP	EAROM *	
<b>COILS</b>			
L353	TLT120K991R	COIL	
L373	TLT120K991R	COIL	
<b>RESISTOR</b>			
R419	ERG3FJ471	METAL 3W	5% 470Ω
R655	ERJ6GEYJ244	S.M.CARB 0.125W	5% 240KΩ
R680	ERJ6GEYJ273	S.M.CARB 0.1W	5% 27KΩ



# SCHEMATIC DIAGRAMS FOR MODELS

**TX-28XD90P /A /B**

**TX-25XD90P /A /B**

**(EURO - 5 CHASSIS)**

## IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

## NOTE

### 1. RESISTOR

All resistors are carbon  $\frac{1}{4}W$  resistor, unless marked otherwise.  
Unit of resistance is OHM ( $\Omega$ ) (k=1,000, M=1,000,000)

### 2. CAPACITORS

All capacitors are ceramic 50V unless marked otherwise.  
Unit of capacitance is  $\mu F$  unless otherwise stated.

### 3. COIL

Unit of inductance is  $\mu H$ , unless otherwise stated.

### 4. TEST POINT

 Test Point Position

### 5. EARTH SYMBOL

 Chassis Earth (Cold)

 Line Earth (Hot)

### 6. VOLTAGE MEASUREMENT

Voltage is measured by a d.c. voltmeter.

Measurement conditions are as follows:

Power source                    a.c. 220V-240V, 50Hz

Receiving Signal              Colour Bar signal (RF)

All customer controls        Maximum position

### 7.

 Indicates the Video signal path

 Indicates the Audio signal path

These schematic diagrams are the latest at time of printing and are subject to change without notice.

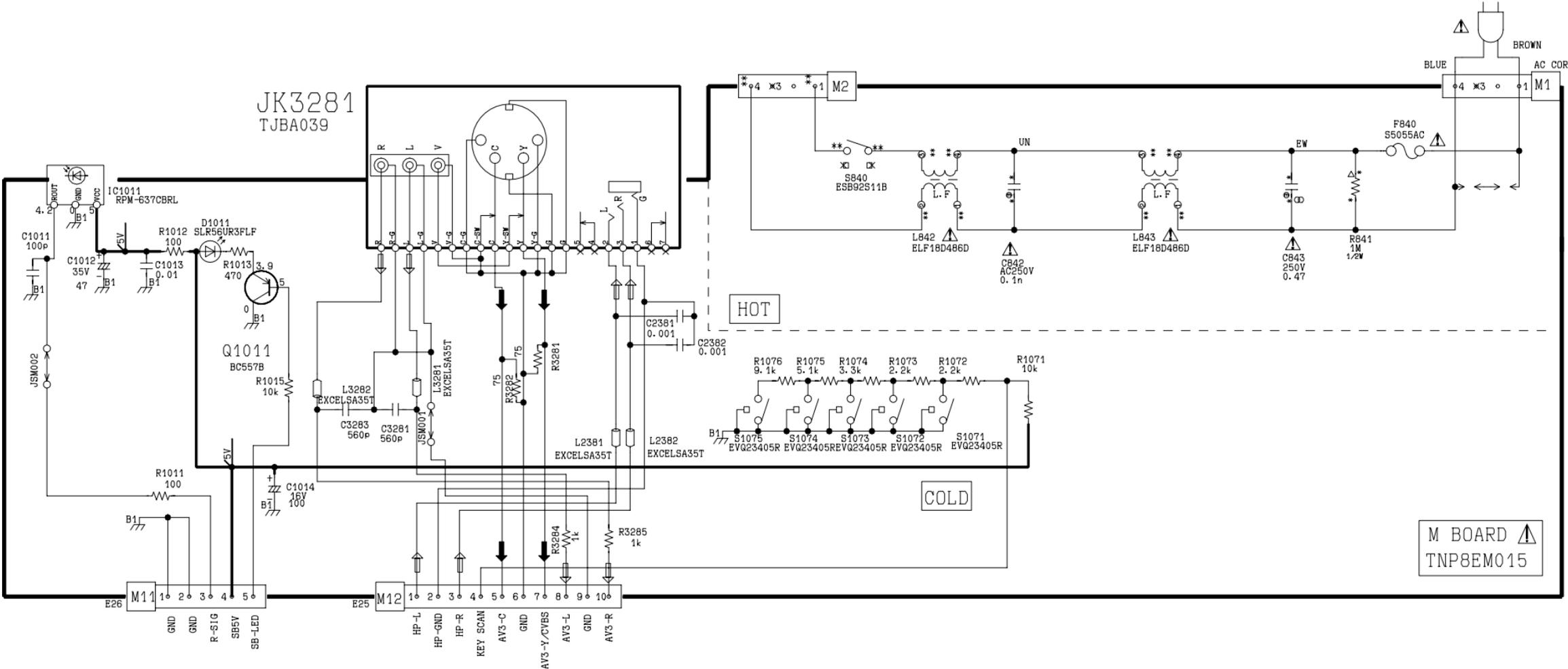
## REMARKS

- Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- Do not short circuit the hot and cold circuits as electrical components may be damaged.
- Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
- Make sure to disconnect the power plug before removing the chassis.

## NOTE

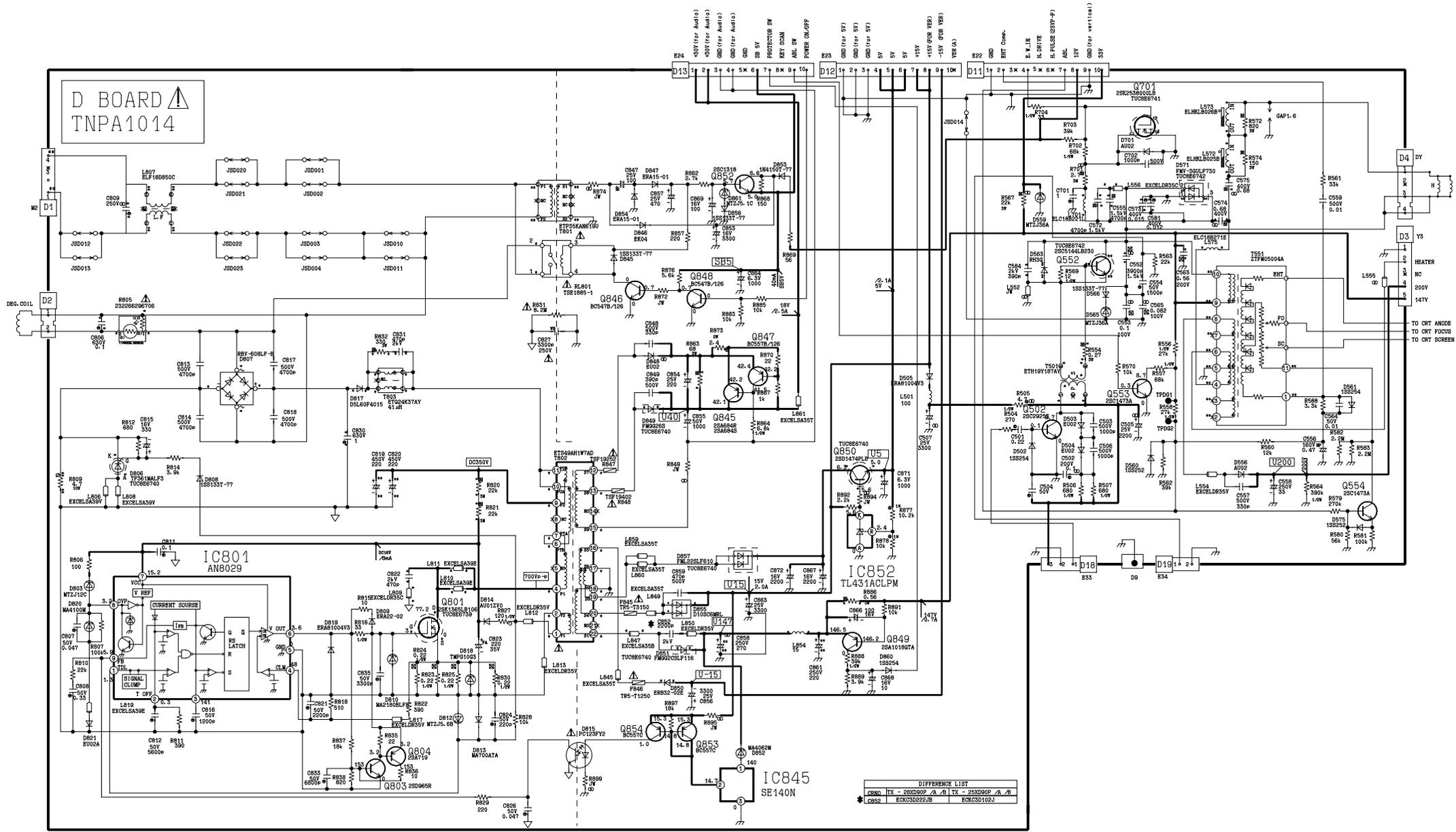
- The Power Supply Circuit contains a circuit area, which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.

JK3281  
TJBA039



M BOARD  
TNP8EM015

D BOARD  
TNPA1014



DIFFERENCE LIST

ORIG.	TX - 28X3001	A/B	TR - 28X300P	A/B
	IC852	EXC31222-B	EXC31022-J	

HEATER  
TO CRT ANODE  
TO CRT FOCUS  
TO CRT SCREEN

H BOARD  
TNPA1047

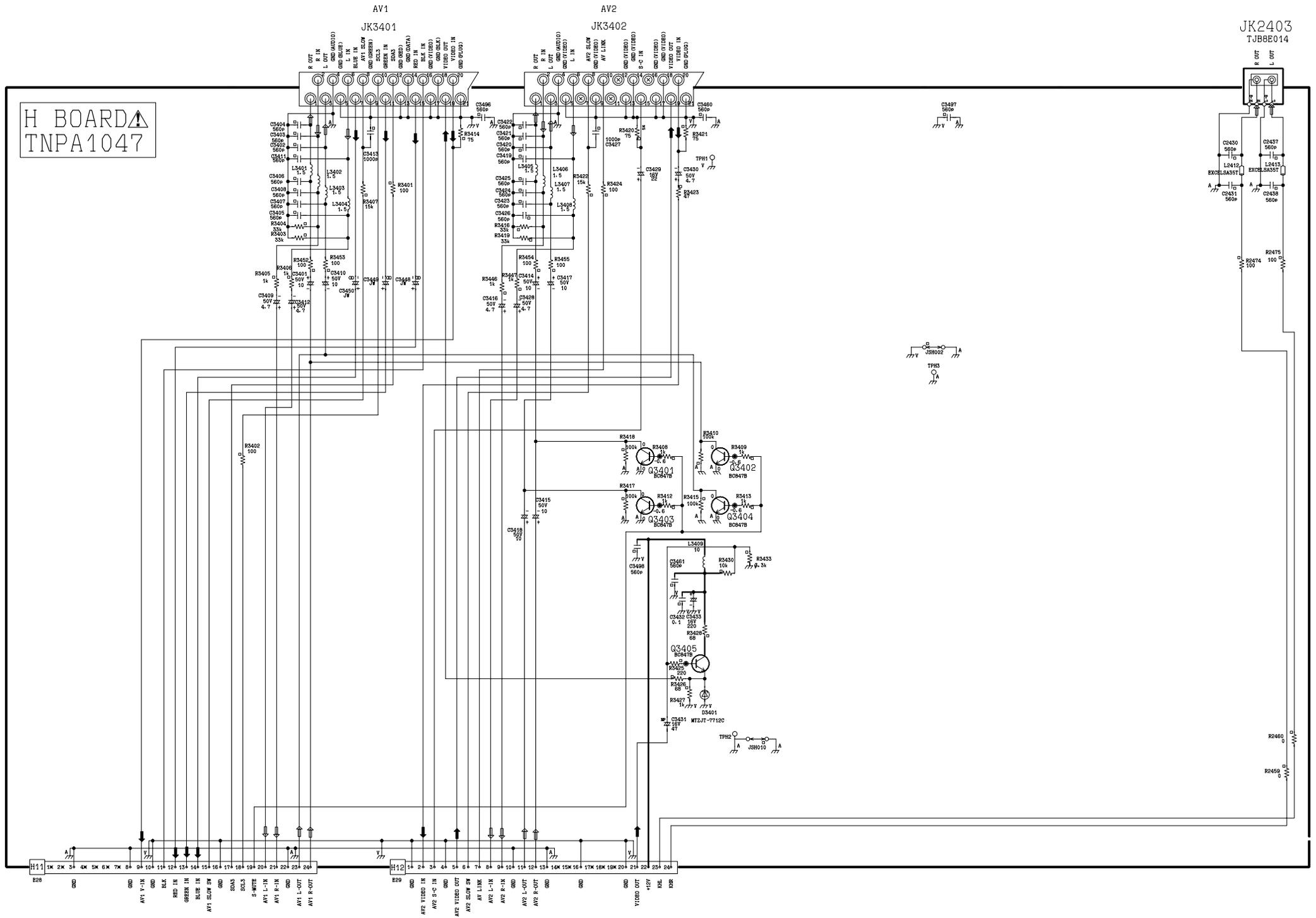
AV1

AV2

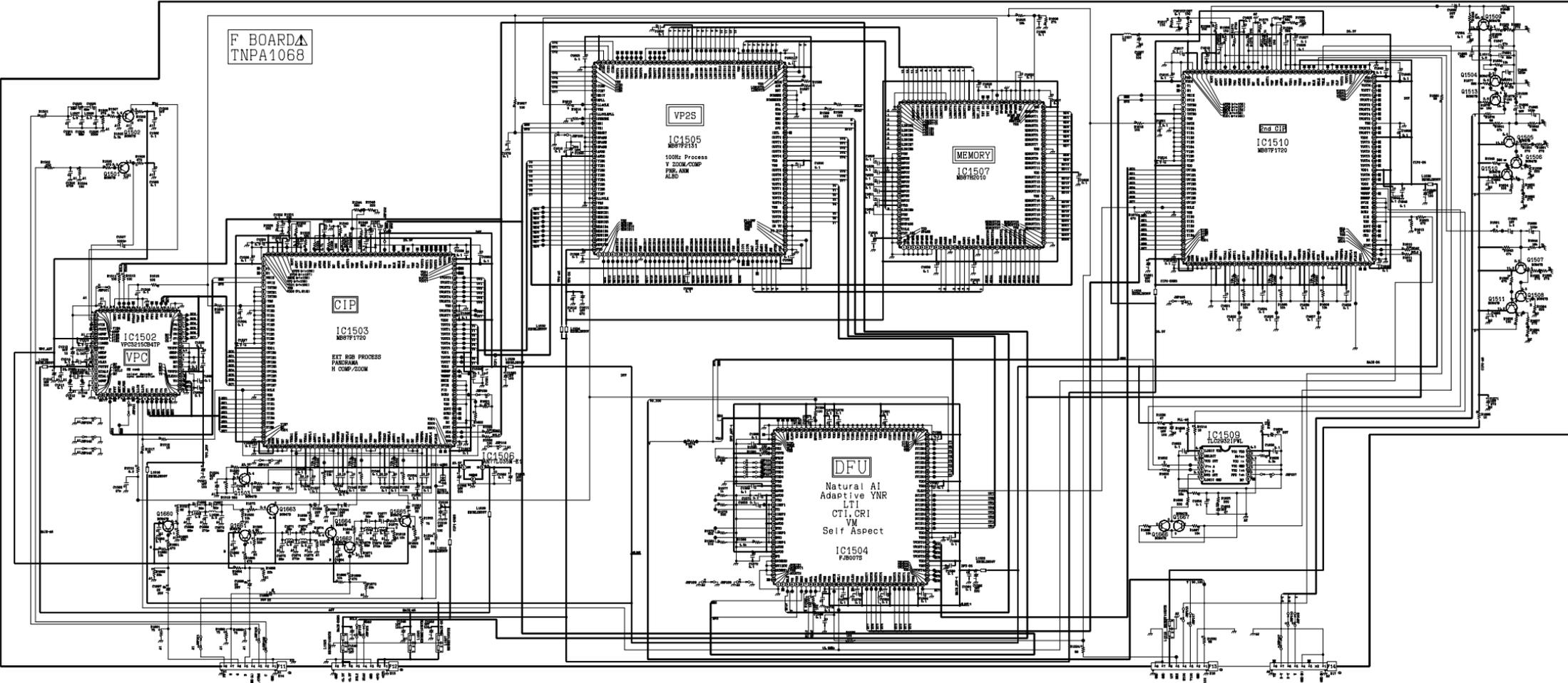
JK3401

JK3402

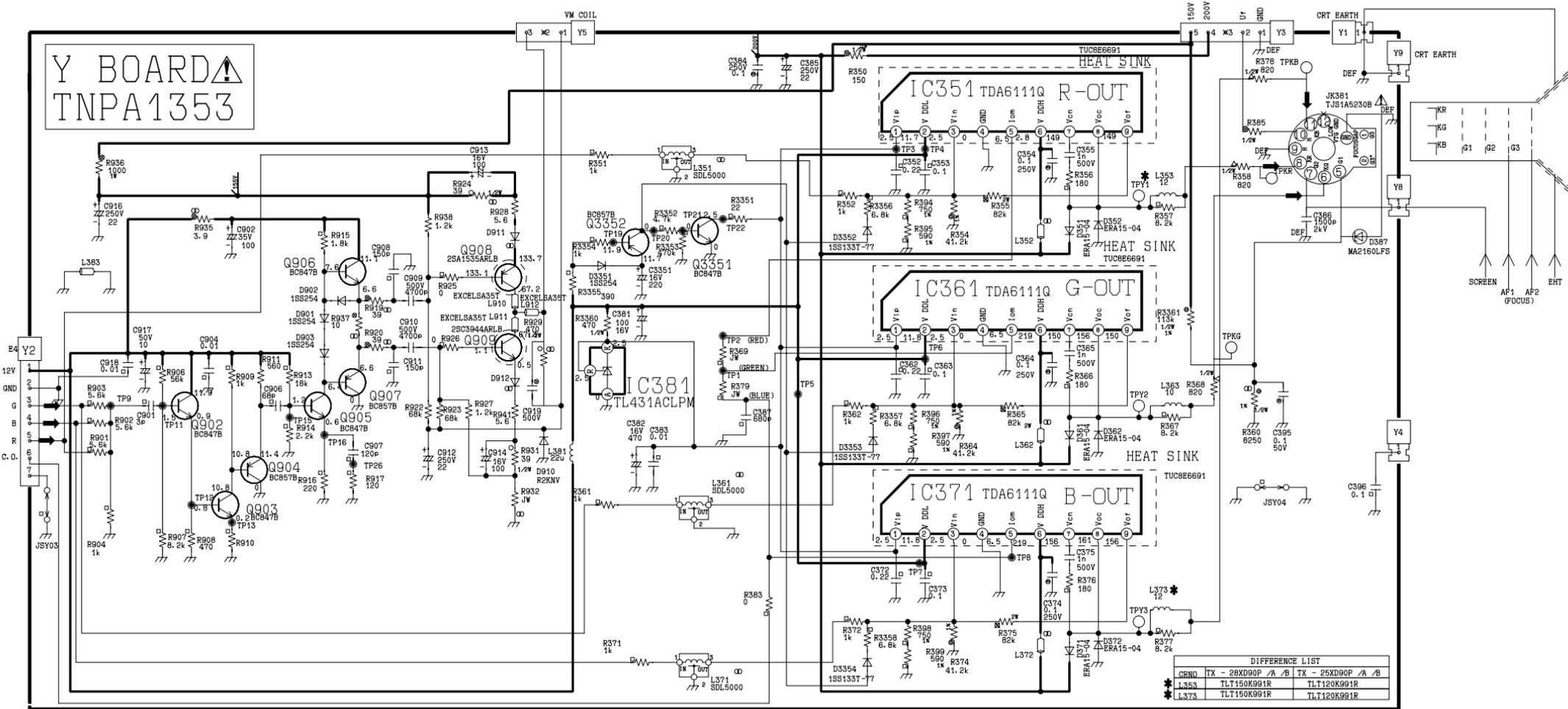
JK2403  
TJB8E014



F BOARD  
TNPA1068



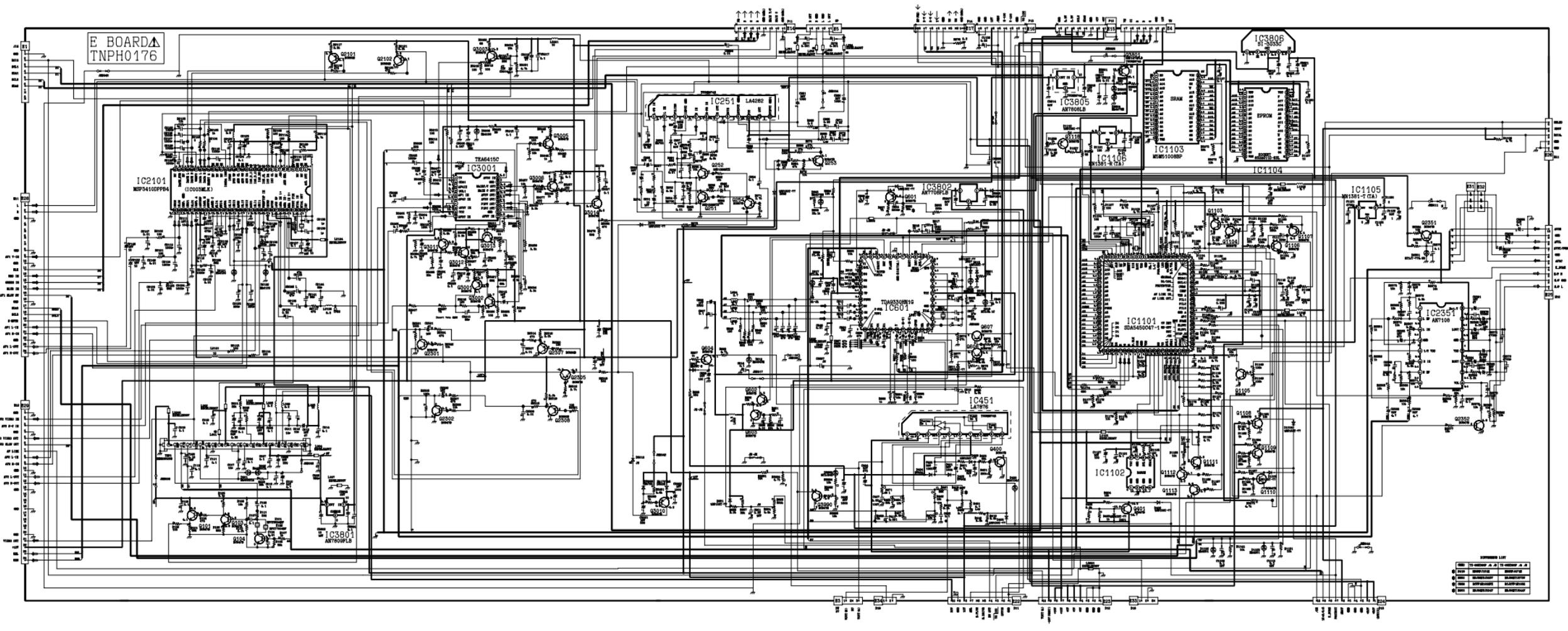
# Y BOARD TNPA1353



DIFFERENCE LIST

ORNO	TX - 28XD90P / A	B / TX - 25XD90P / A	B
* L353	TL150K991R	TL120K991R	
* L373	TL150K991R	TL120K991R	

E BOARD  
TNPH0176



SYMBOL LIST

□	IC	IC	IC	IC	IC
○	RES	RES	RES	RES	RES
△	DIODE	DIODE	DIODE	DIODE	DIODE
◇	INDUCTOR	INDUCTOR	INDUCTOR	INDUCTOR	INDUCTOR
▽	CAPACITOR	CAPACITOR	CAPACITOR	CAPACITOR	CAPACITOR

# CONDUCTOR VIEWS

## E - BOARD TNPH0176

TRAN'S		DIODE'S			
Q101	A3	D001	A1	D2364	A6
Q103	A3	D002	A1	D3005	B1
Q104	A3	D252	E5	D3006	B2
Q251	D4	D253	E5	D3008	B4
Q252	D4	D254	E5	D3009	A3
Q253	E4	D255	E4	D3010	A3
Q254	E4	D256	E4	D3011	B1
Q281	E3	D281	E4	D3803	A5
Q282	D3	D282	E4	D3804	A5
Q400	B5	D283	E4	D3805	C5
Q401	A4	D284	E2	D3990	A4
Q601	B5	D285	E3		
Q602	B4	D286	E2		
Q603	C4	D400	B5	IC251	E4
Q604	C4	D401	A4	IC281	E2
Q607	C4	D402	A4	IC451	A4
Q608	D4	D403	B4	IC601	C4
Q1001	C7	D404	A4	IC1001	C7
Q1105	C6	D405	A6	IC1101	D5
Q1106	C6	D408	B5	IC1102	E5
Q1107	C6	D411	A4	IC1103	E5
Q1108	A5	D601	B4	IC1104	D5
Q1109	A5	D603	D5	IC1105	B6
Q1110	A5	D605	B5	IC1106	D6
Q1111	C5	D607	B5	IC1901	C6
Q1112	E5	D609	B5	IC2101	B3
Q1113	E5	D610	C4	IC2351	A6
Q1114	C6	D611	C4	IC3001	B1
Q1116	C6	D612	C4	IC3801	A2
Q1118	D6	D615	B5	IC3802	C5
Q1901	C6	D616	B5	IC3805	B5
Q2101	B2	D617	D5	IC3806	D1
Q2102	C2	D618	C4		
Q2103	B2	D620	B5		
Q2301	B2	D651	C4	TPE1	A2
Q2302	A2	D652	C4	TPE2	B3
Q2305	A2	D653	B4	TPE23	D6
Q2307	A3	D1001	C7		
Q2308	A3	D1101	C1		
Q2351	A6	D1102	C1		
Q2352	A6	D1103	C1		
Q3001	C1	D1104	A6		
Q3002	B1	D1105	A6		
Q3003	B2	D1106	B6		
Q3005	D1	D1107	C5		
Q3006	D1	D1108	C6		
Q3007	D1	D1109	D6		
Q3008	D1	D1110	D6		
Q3010	A3	D1111	D6		
Q3011	B2	D1112	D6		
Q3012	B2	D2101	B2		
Q3013	B2	D2102	B2		
Q3014	D1	D2301	A2		
Q3801	A5	D2302	A2		
Q3990	A4	D2351	A6		

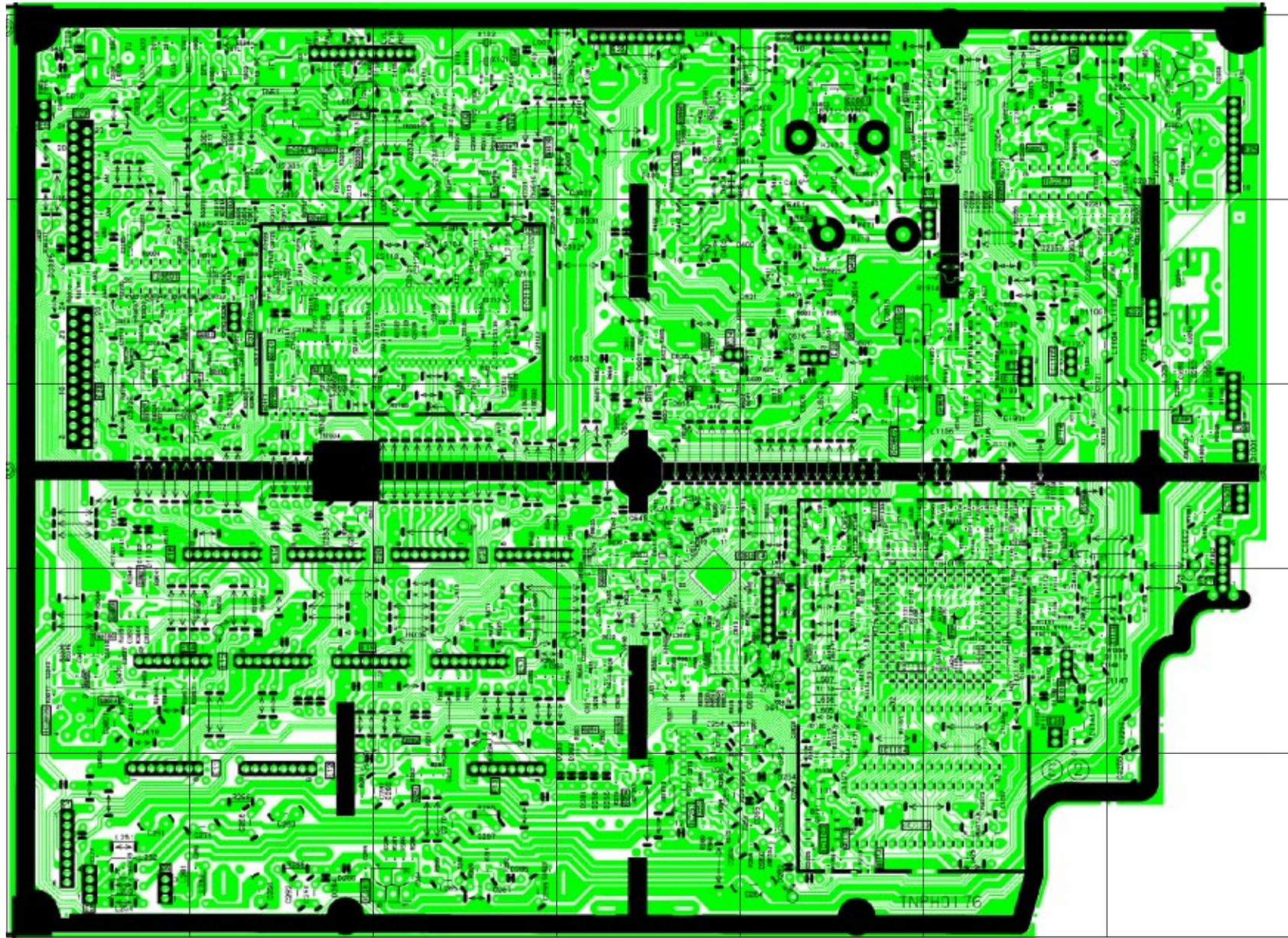
**A**

**B**

**C**

**D**

**E**



1

2

3

4

5

6

7

# Y - BOARD TNPA1353

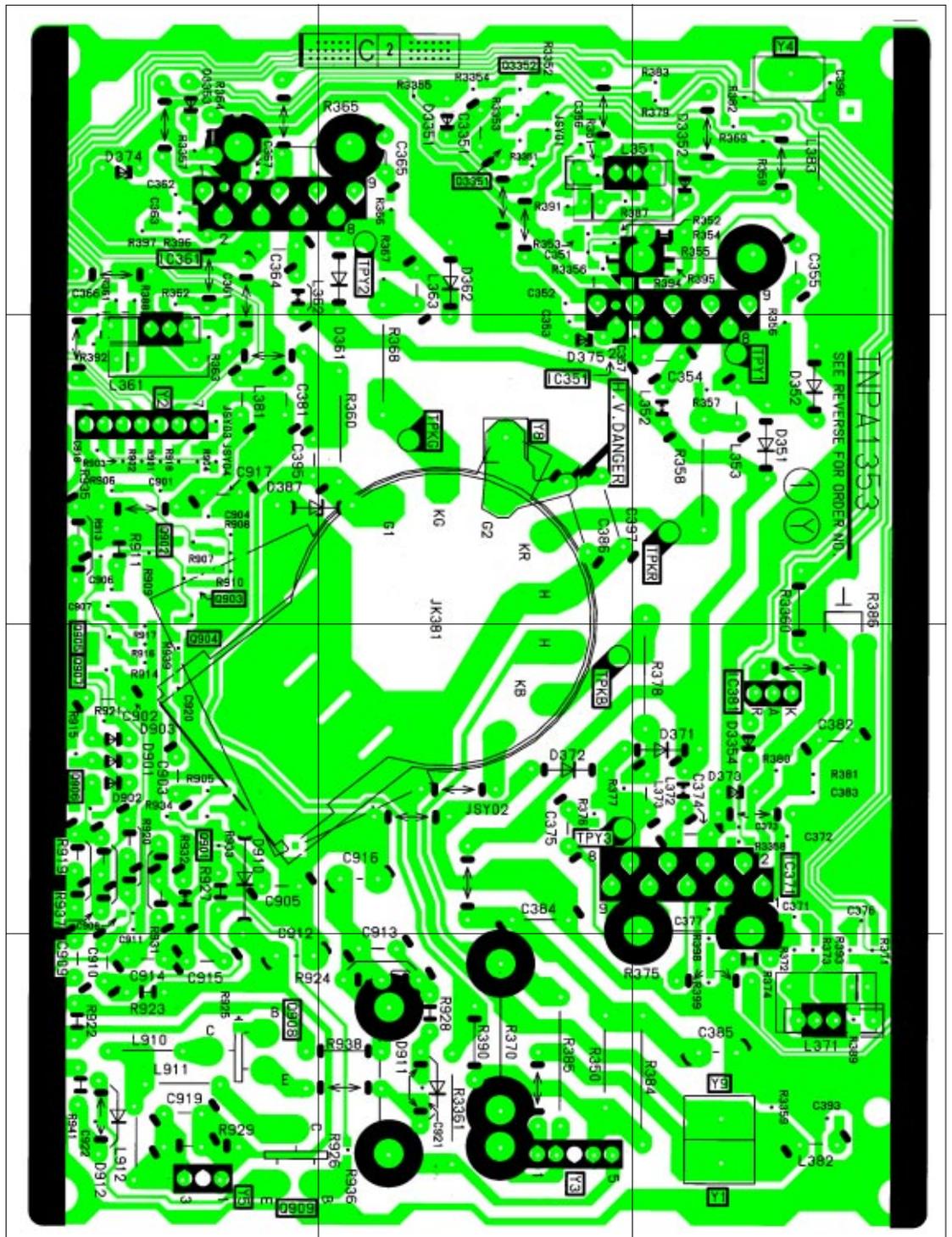
TRAN'S	
Q901	C1
Q902	B1
Q903	B1
Q904	C1
Q906	C1
Q908	D1
Q909	D1
Q3351	A2
Q3352	A2
DIODE'S	
D351	B3
D352	B3
D361	A2
D362	A2
D371	C3
D372	C2
D373	C3
D374	A1
D375	B2
D387	B1
D901	C1
D902	C1
D903	C1
D910	C1
D911	D2
D3351 A2	
D3352 A3	
D3353 A1	
D3354 C3	
T.P.'S	
TPY1	B3
TPY2	A2
TPY3	C2
TPKR	B3
TPKG	B2
TPKB	C2
I.C.'S	
IC351	B2
IC361	A1
IC371	C3
IC381	C3

**A**

**B**

**C**

**D**



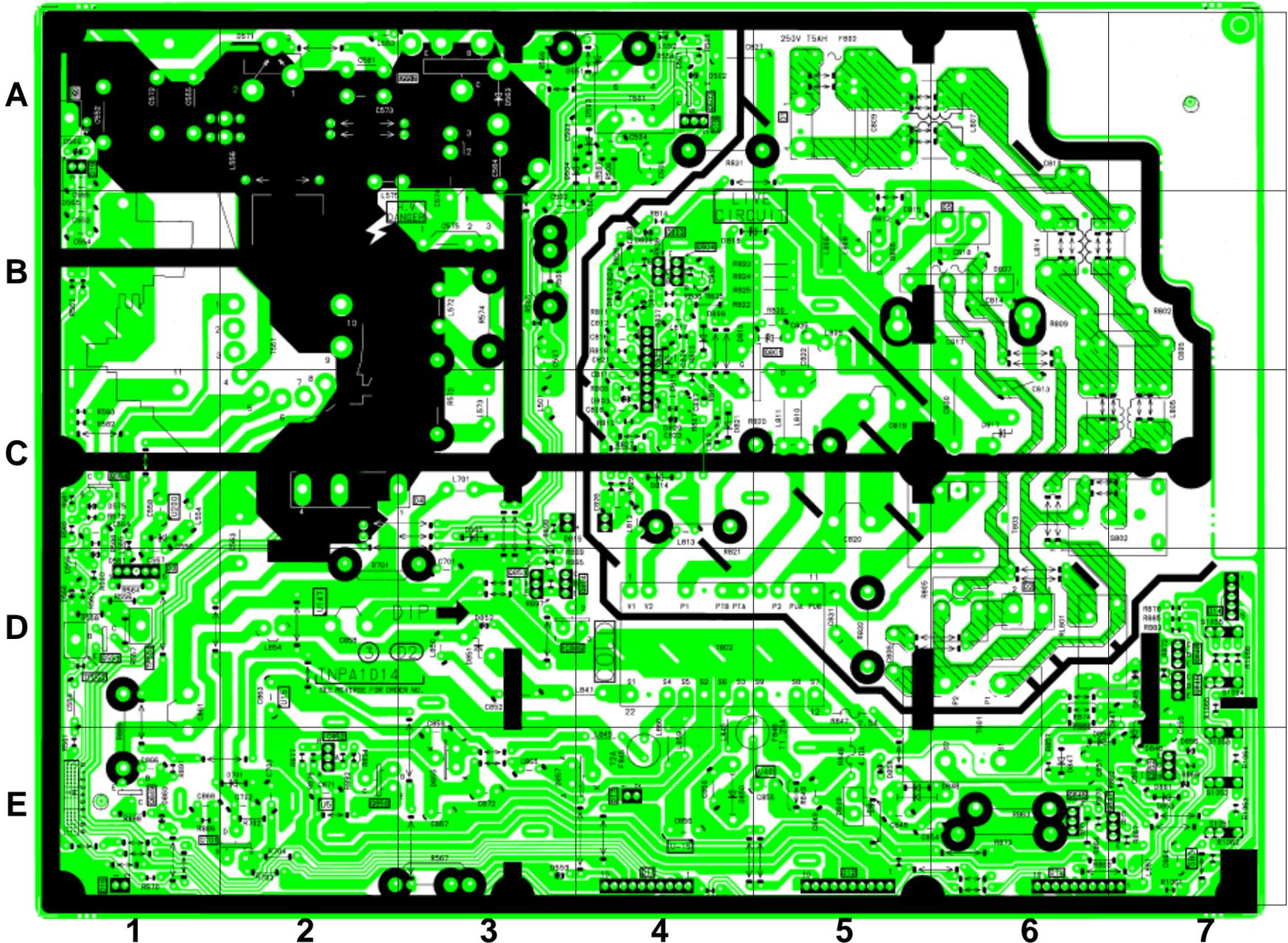
**1**

**2**

**3**

D - BOARD TNPA1014

DIODE'S		TRAN'S	
D503	A4	Q502	A4
D504	A3	Q552	A3
D505	C3	Q553	D1
D551	A4	Q554	C1
D556	C1	Q701	E1
D559	E3	Q801	B5
D560	D1	Q803	B4
D561	D1	Q804	B4
D563	A3	Q845	E6
D565	A1	Q846	D7
D566	A1	Q847	E6
D571	A2	Q848	D7
D575	C1	Q849	E1
D701	E2	Q850	E2
D803	C4	Q852	E7
D807	B6	Q853	D3
D808	B4	Q854	D3
D809	B4		
D810	B4	I.C.'S	
D812	B4	IC801	B4
D813	B4	IC845	D3
D814	C4	IC852	E2
D815	C3		
D817	C6	T.P.'S	
D818	B4	TPDG1	D1
D819	B4	TPDG2	D1
D820	C4		
D821	C4		
D845	D7		
D846	D7		
D847	E6		
D848	E5		
D849	E5		
D850	E4		
D851	D3		
D852	D3		
D853	E7		
D854	E6		
D855	E3		
D856	E7		
D857	E3		
D858	E5		
D860	E1		
D861	E7		



# H - BOARD TNPA1047

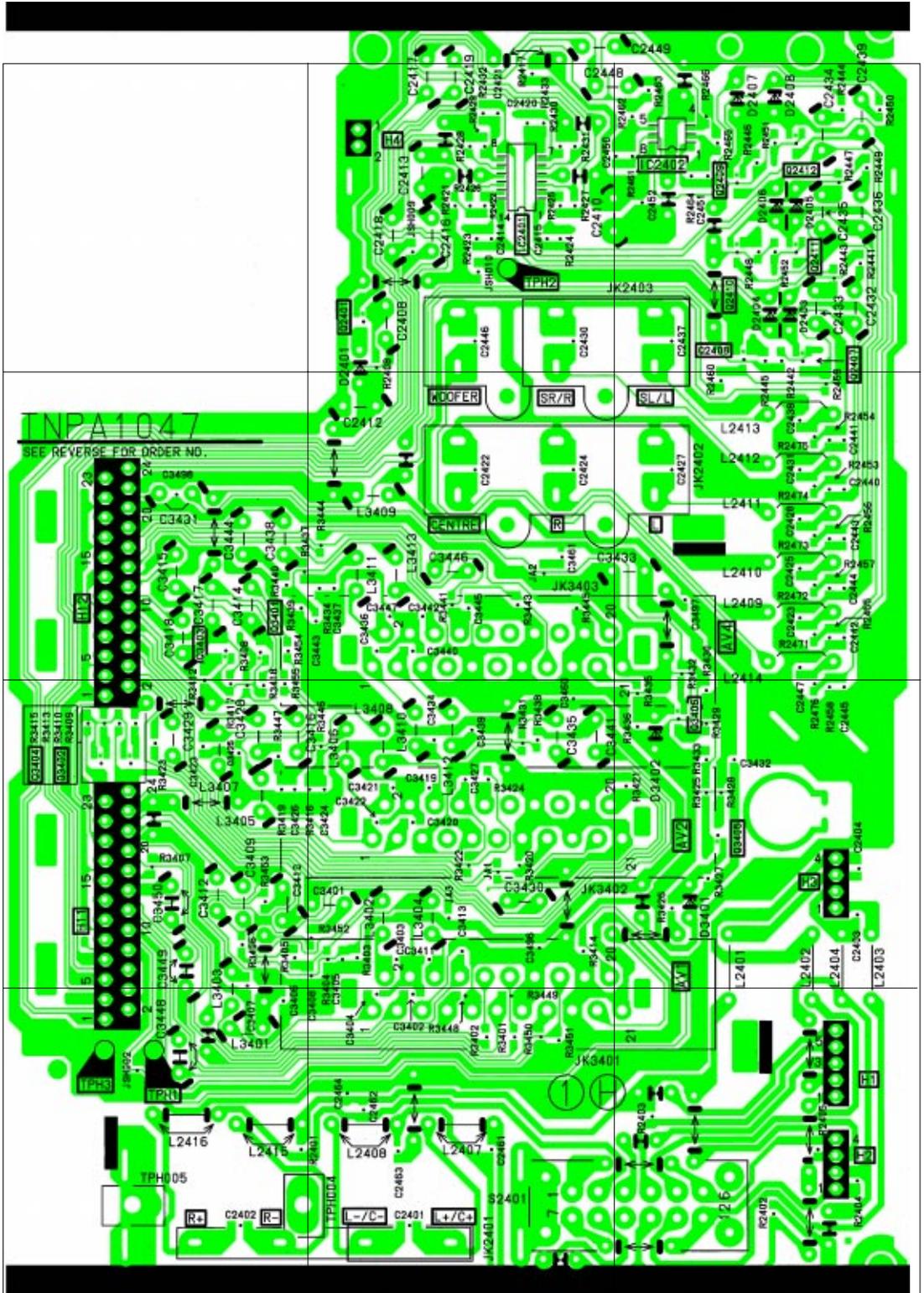
TRAN'S	
Q2401	A2
Q2407	A3
Q2408	A3
Q2409	A3
Q2410	A3
Q2411	A3
Q2412	A3
Q3401	B1
Q3402	C1
Q3403	B1
Q3404	C1
Q3405	C3
Q3406	C3
DIODE'S	
D2401	A2
D2403	A3
D2404	A3
D2405	A3
D2406	A3
D2407	A3
D2408	A3
D3401	C3
D3402	C3
T.P.'S	
TPH1	D1
TPH2	A2
TPH3	D1
TPH004	D1
TPH005	D1
I.C.'S	
IC2401	A2
IC2402	A3

**A**

**B**

**C**

**D**



# F - BOARD TNPA1068

TRAN'S	
Q1663	B2
Q1664	B2
Q1665	B2
Q1666	C1
Q1667	C1

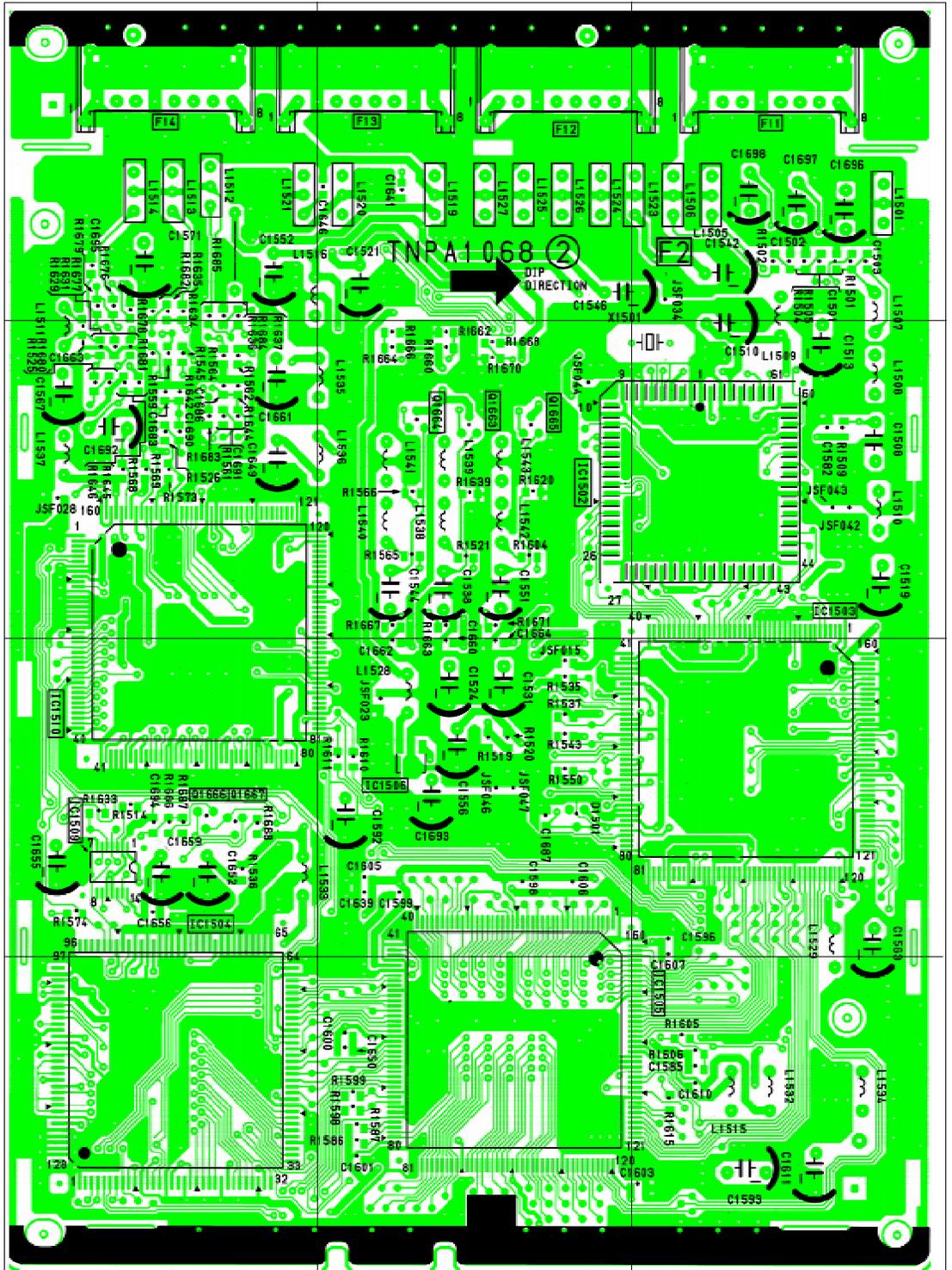
I.C.'S	
IC1502	B3
IC1503	C3
IC1504	D1
IC1505	D2
IC1506	C2
IC1509	C1
IC1510	C1

**A**

**B**

**C**

**D**



**1**

**2**

**3**

# F - BOARD TNPA1068

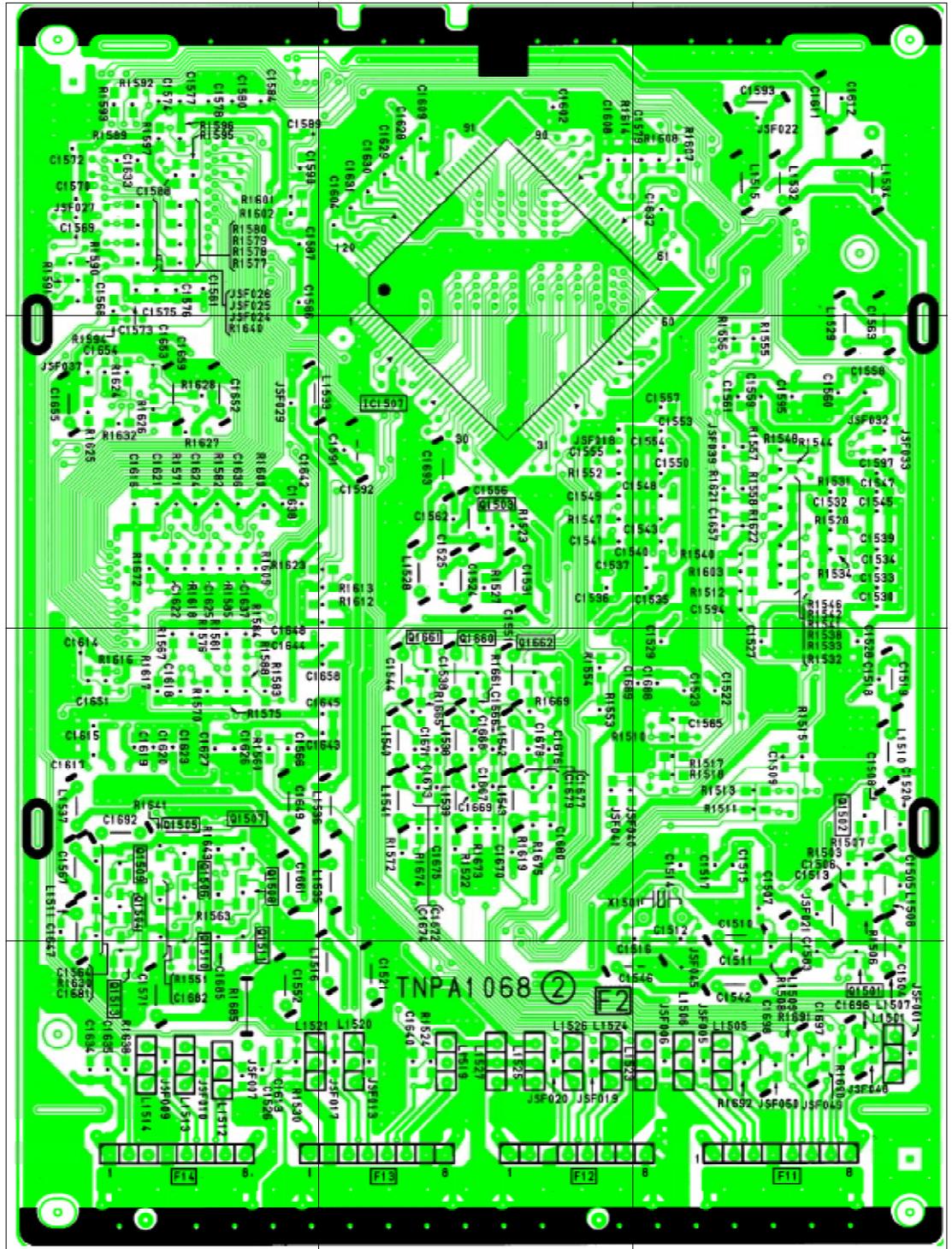
TRAN'S	
Q1501	D3
Q1502	C3
Q1503	B2
Q1504	C1
Q1505	C1
Q1506	C1
Q1507	C1
Q1508	C1
Q1509	C1
Q1510	D1
Q1511	D1
Q1519	D1
Q1660	C2
Q1661	C2
Q1662	C2
I.C.'S	
IC1507	B2

**A**

**B**

**C**

**D**



**1**

**2**

**3**

# M - BOARD TNP8EM015

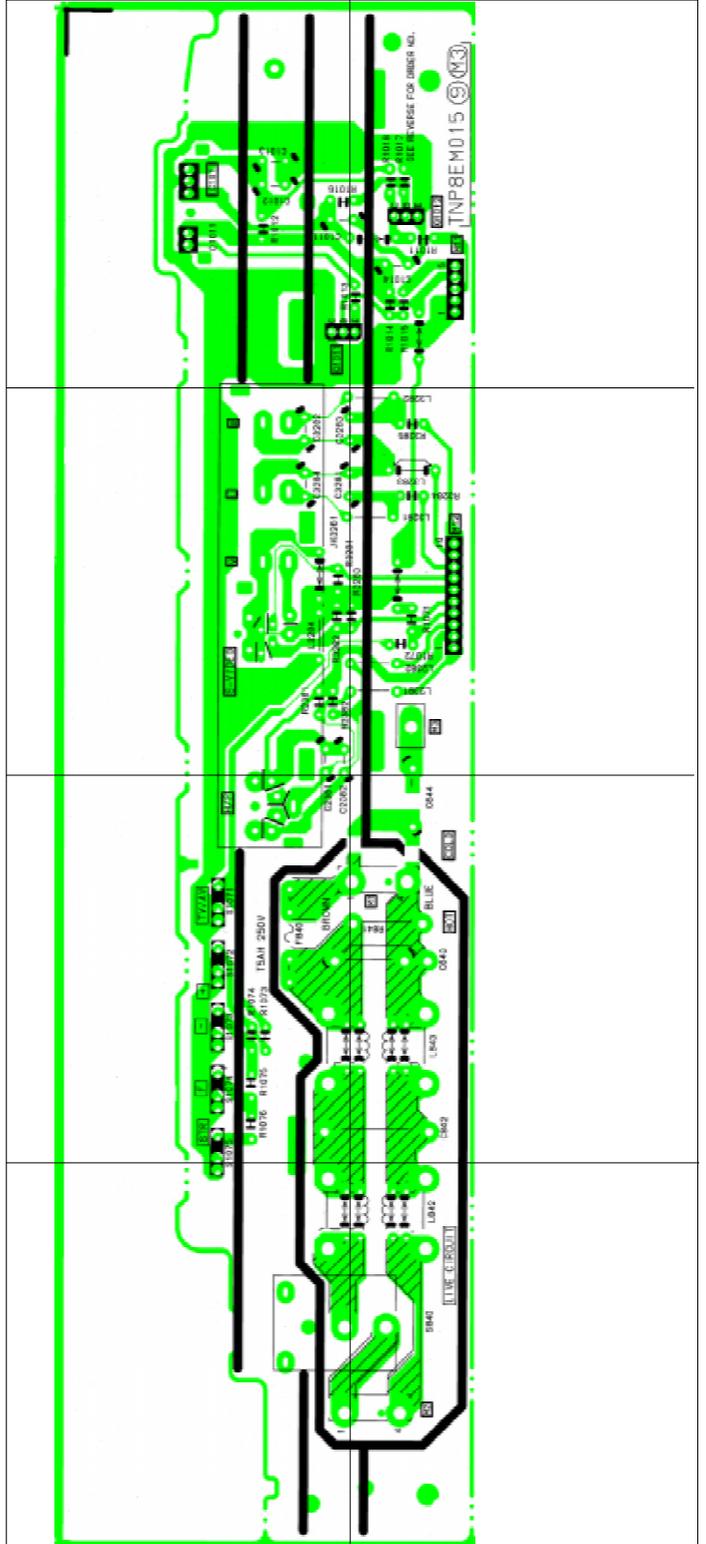
TRAN'S	
Q1011	A1
Q1012	A2
DIODE'S	
D1011	A1
I.C.'S	
IC1011	A1

**A**

**B**

**C**

**D**



**1**

**2**