

Service Manual



Colour Television

TX-28EX4F

TX-25EX4F

EURO4 Chassis

SPECIFICATIONS

(Information in brackets { } refers to model TX-25EX4F)

Power Source: 220-240V AC, 50Hz

Power Consumption: 85W

Aerial Impedance: 75Ω unbalanced, Coaxial Type

Stand-by Power Consumption: 1,8W

Receiving System: PAL I,B/G, H, D/K, PAL 525/60
SECAM L/L', B/G, D/K
M.NTSC
NTSC (AV only)

Receiving Channels:
VHF E2-E12 VHF H1-H2 (ITALY)
VHF A-H (ITALY) VHF R1-R2
VHF R3-R5 VHF R6-R12
UHF E21-E69 CATV (S01-S05)
CATV S1-S10 (M1-M10) CATV S11-S20 (U1-U10)
CATV S21-S41 (HYPERBAND)

Intermediate Frequency:
Video 38,9MHz 34MHz
Audio 32,9MHz, 33,4MHz, 33,16MHz
32,4MHz, 40,4MHz, 33,05MHz
32,66MHz
Colour 34,47MHz (PAL)
34,5MHz, 34,65MHz (SECAM)

Video/Audio

Terminals:

AUDIO MONITOR OUT	Audio (RCAX2)	500mV rms1kΩ
AV1 IN	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 10kΩ
	RGB (21 pin)	
AV1 OUT	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
AV2 IN	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 10kΩ
	S-Video IN	Y: 1V p-p 75Ω
	(21 pin)	C: 0.3V p-p 75Ω

AV2 OUT	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
	Selectable Output (21 pin)	
AV3 IN	Audio (RCAX2)	500mV rms10kΩ
	Video (RCAX1)	1V p-p 75Ω
High Voltage:	28,5kV ±1kV	{28,2kV ±1kV}
Picture Tube:	A66ECF50X41	66cm
	{A59ECF50X41	59cm}
Audio Output:	2 x 15W (Music Power)	
	8Ω Impedance	
Headphones:	8Ω Impedance	
	3,5 mm	
Accessories supplied :	Remote Control	
	2 x R6 (UM3) Batteries	

Dimensions:

Height:	596,5 mm	{550,5 mm}
Width:	778 mm	{730 mm}
Depth:	479 mm	{478,5 mm}

Net weight: 32kg {27kg}

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

NOTE: This Service Manual should be used in conjunction with the EURO4 Technical Guide.


Panasonic

SCHEMATIC DIAGRAMS FOR MODELS

TX-28EX4F / TX-25EX4F


(EURO-4 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 1/4W resistor, unless marked otherwise.
Unit of resistance is OHM (Ω) (k=1,000, M=1,000,000)
2. CAPACITORS
All capacitors are ceramic 50V unless marked otherwise.
Unit of capacitance is μ F unless otherwise stated.
3. COIL
Unit of inductance is μ 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 DC voltmeter.
Measurement conditions are as follows:
Power source AC 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

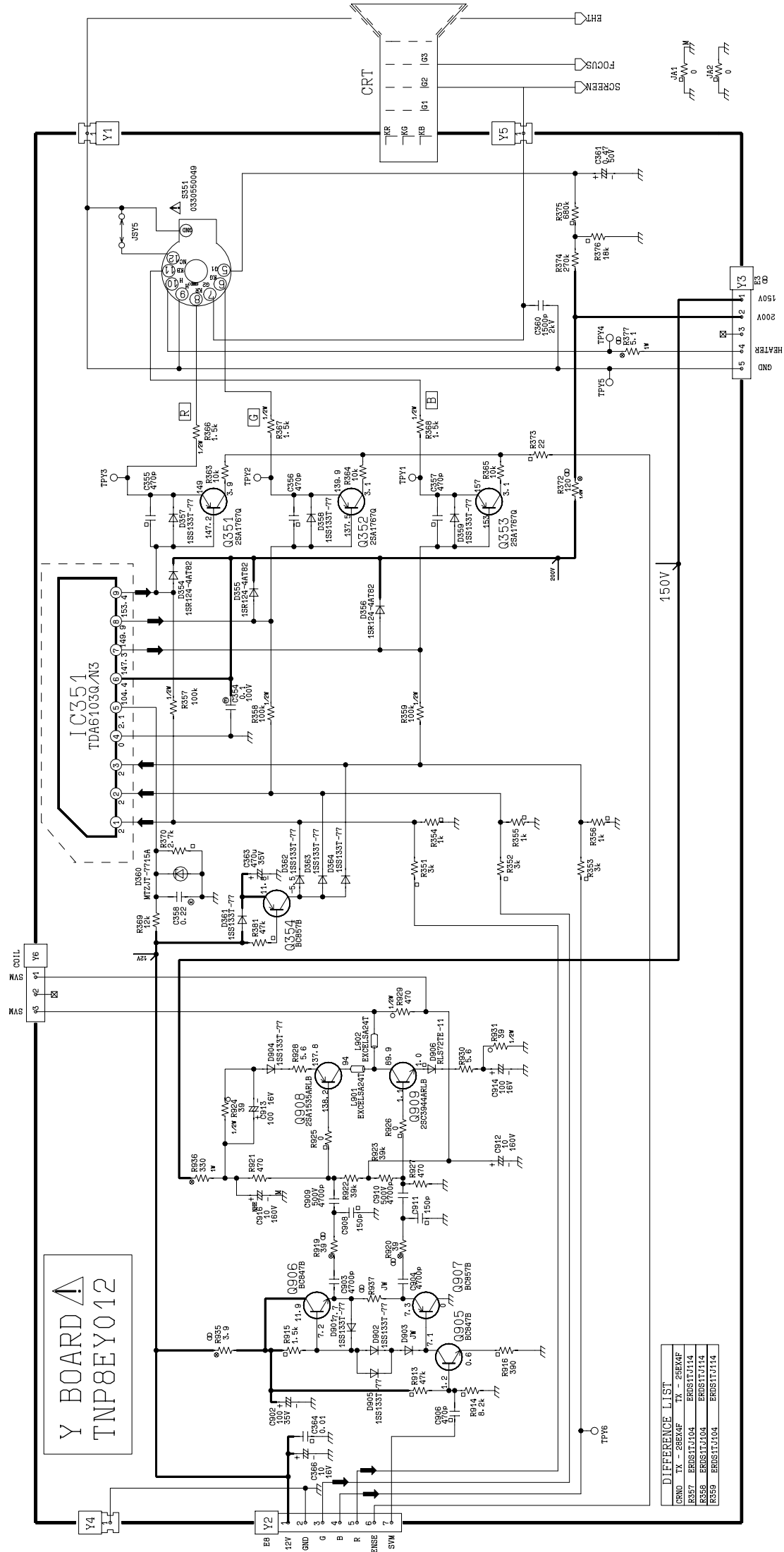
These schematic diagrams are the latest at time of printing and are subject to change without notice.

REMARKS

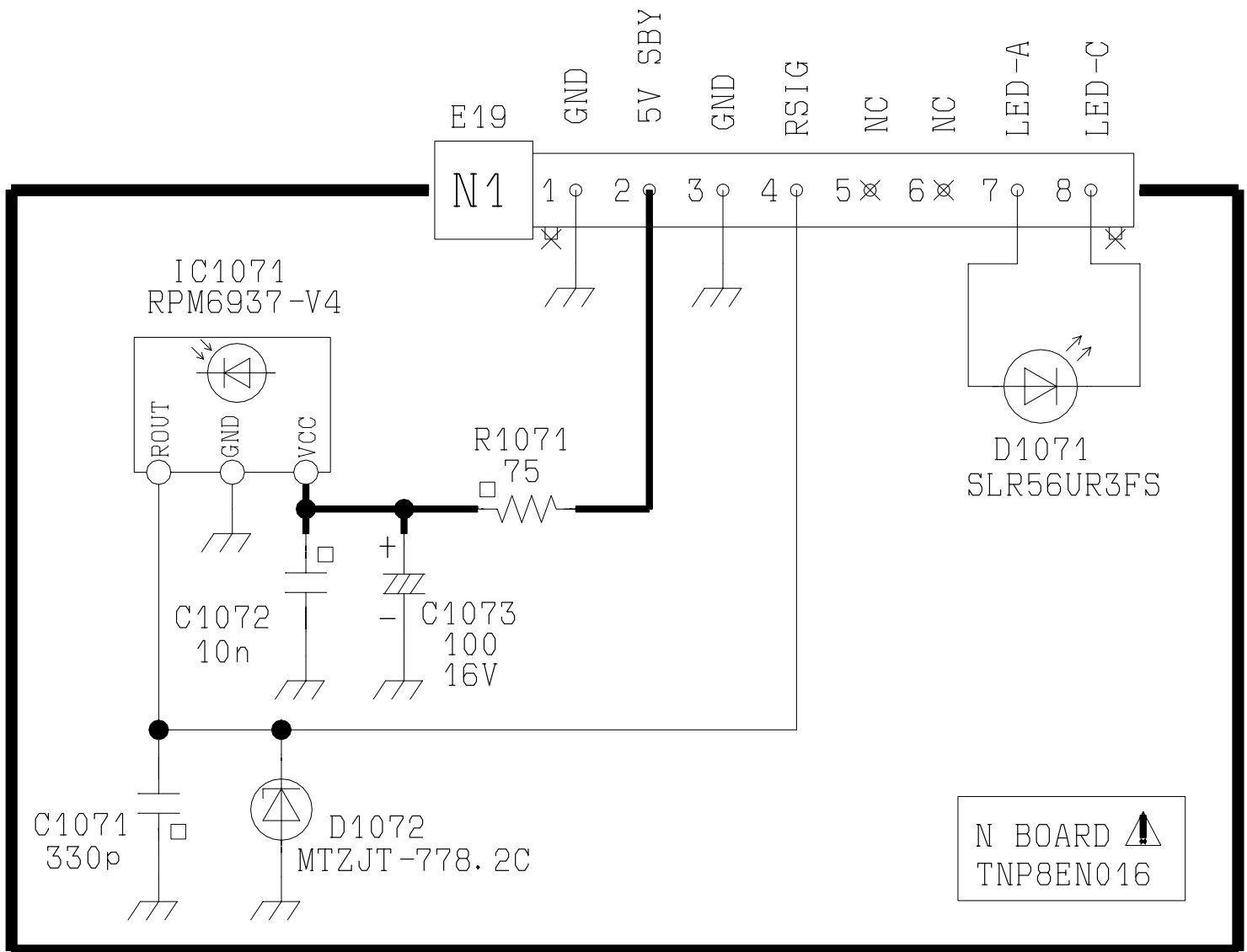
- a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- b. Do not short circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously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

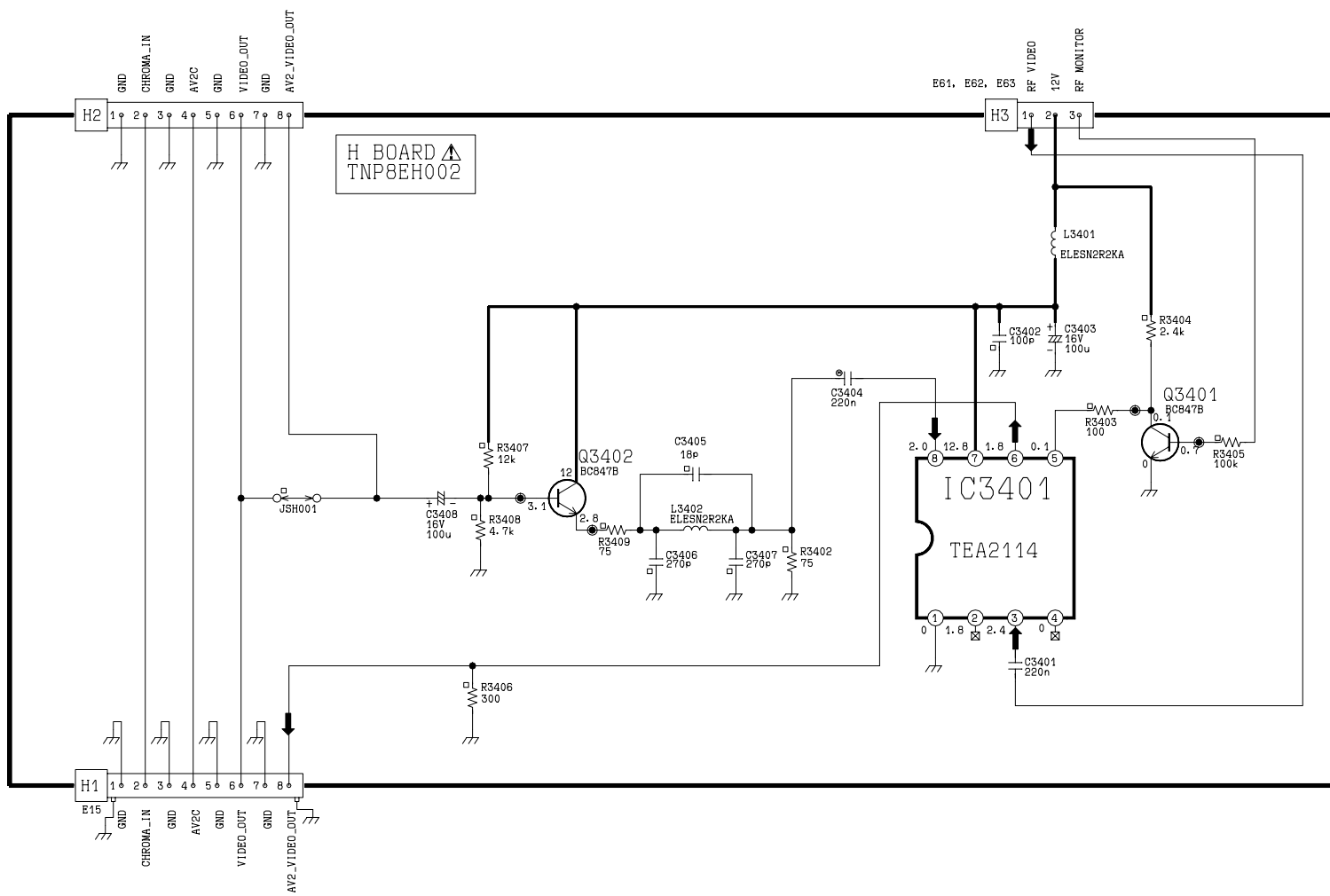
NOTE

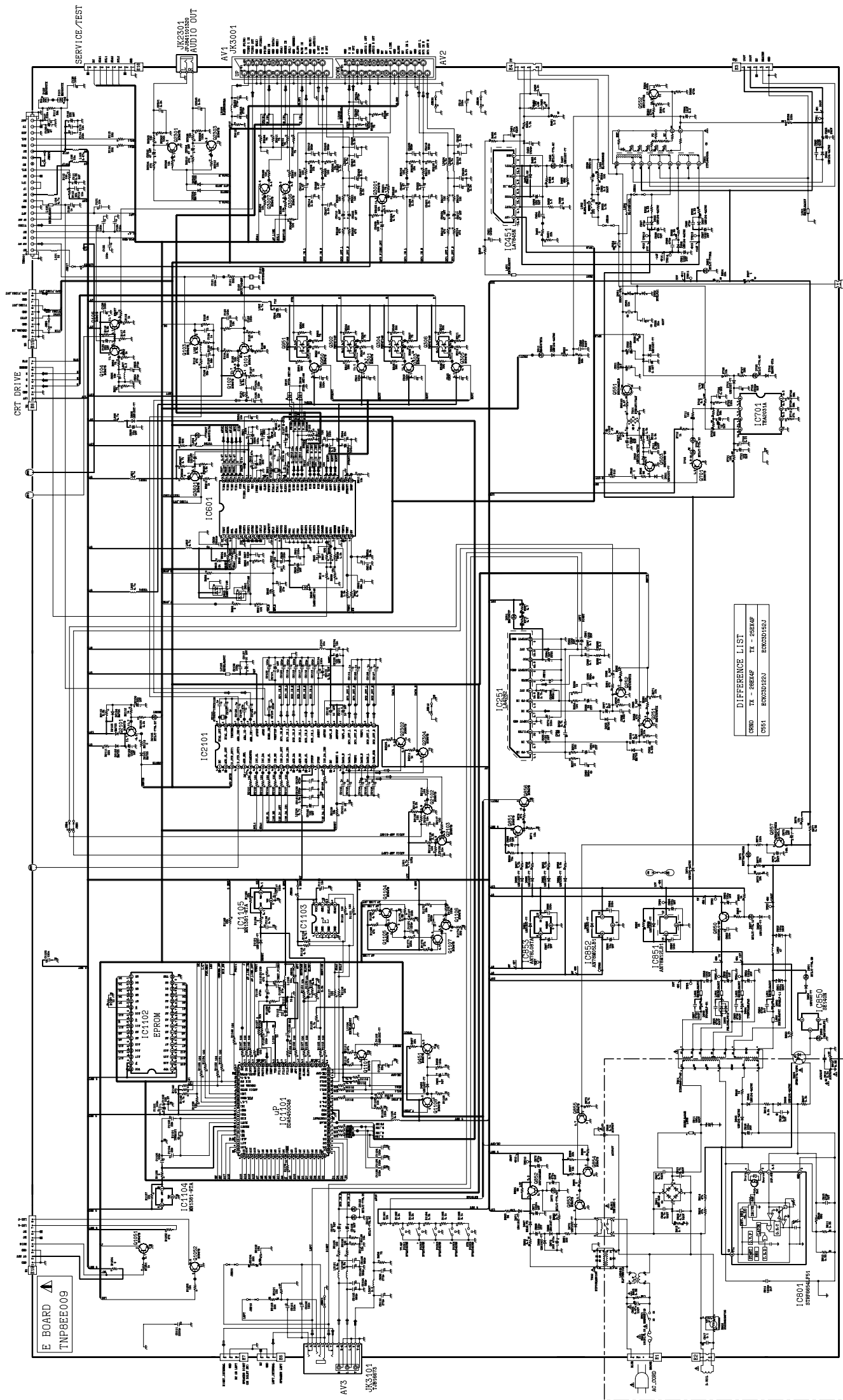
1. The Power Supply Circuit contains a circuit area, which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.



DIFFERENCE LIST	
CRNO	TX - 28EX4F
R357	ER051TJ104
R358	ER051TJ104
R359	ER051TJ104







DIFFERENCE LIST		
IC101	TY - 8004F	TY - 8004F
IC102	800001200	800001200