

JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

BASIC CHASSIS

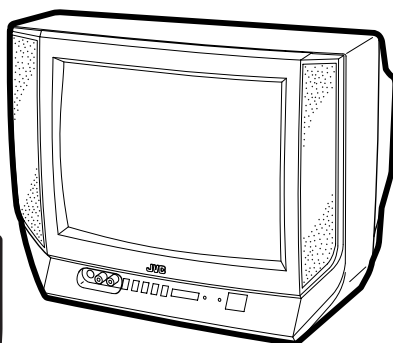
CG

AV-21D43/BK
AV-20N43/BK
AV-14F43/BK

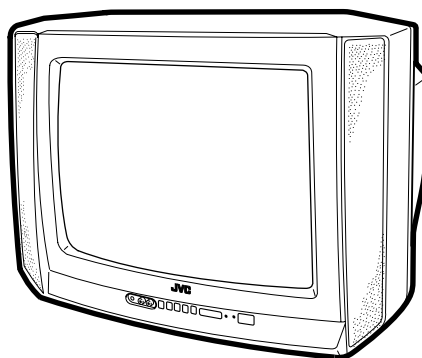
CD-ROM No.SML200209



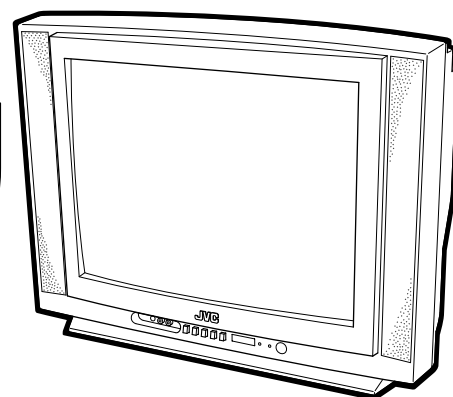
[RM-C368GY]



[AV-14F43/BK]



[AV-20N43/BK]



[AV-21D43/BK]

CONTENTS


■ NOTE ON USING CIRCUIT DIAGRAMS	2-1
■ SEMICONDUCTOR SHAPES	2-2
■ BLOCK DIAGRAM	2-3
■ CIRCUIT DIAGRAMS	2-5
■ PATTERN DIAGRAMS	2-13

AV-21D43/BK AV-20N43/BK AV-14F43/BK

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the  symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	:DC 20k Ω /V
(4)Oscilloscope sweeping time	:H \Rightarrow 20 μ S/div :V \Rightarrow 5mS/div :Others \Rightarrow Sweeping time is specified
(5)Voltage values	:All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board :R1209 \rightarrow R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

- Resistance value

No unit	{ Ω }
K	{K Ω }
M	{M Ω }

- Rated allowable power

No indication	:1/ 16 [W]
Others	:As specified

- Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

- Capacitance value

1 or higher	:[pF]
less than 1	:[μ F]

- Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]:Capacitance value [μ F]/withstand voltage[V]

- Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μ H]
Others	:As specified

(4)Power Supply




	:B1		:B2 (12V)
	:9V		:5V

* Respective voltage values are indicated





(5)Test point

	:Test point		:Only test point display
---	-------------	---	--------------------------



(6)Connecting method

	:Connector		:Wrapping or soldering
	:Receptacle		

(7)Ground symbol

	:LIVE side ground
	:ISOLATED(NEUTRAL) side ground
	:EARTH ground
	:DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : () side GND and the ISOLATED(NEUTRAL) : () side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused.

Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time.
If the above precaution is not respected , a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

◇ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

CONTENTS

SEMICONDUCTOR SHAPES	2-2
BLOCK DIAGRAM	2-3
CIRCUIT DIAGRAMS	
MAIN PWB CIRCUIT DIAGRAM	2-5
PATTERN DIAGRAMS	
MAIN PWB PATTERN	2-13
CRT SOCKET PWB PATTERN	2-15

SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

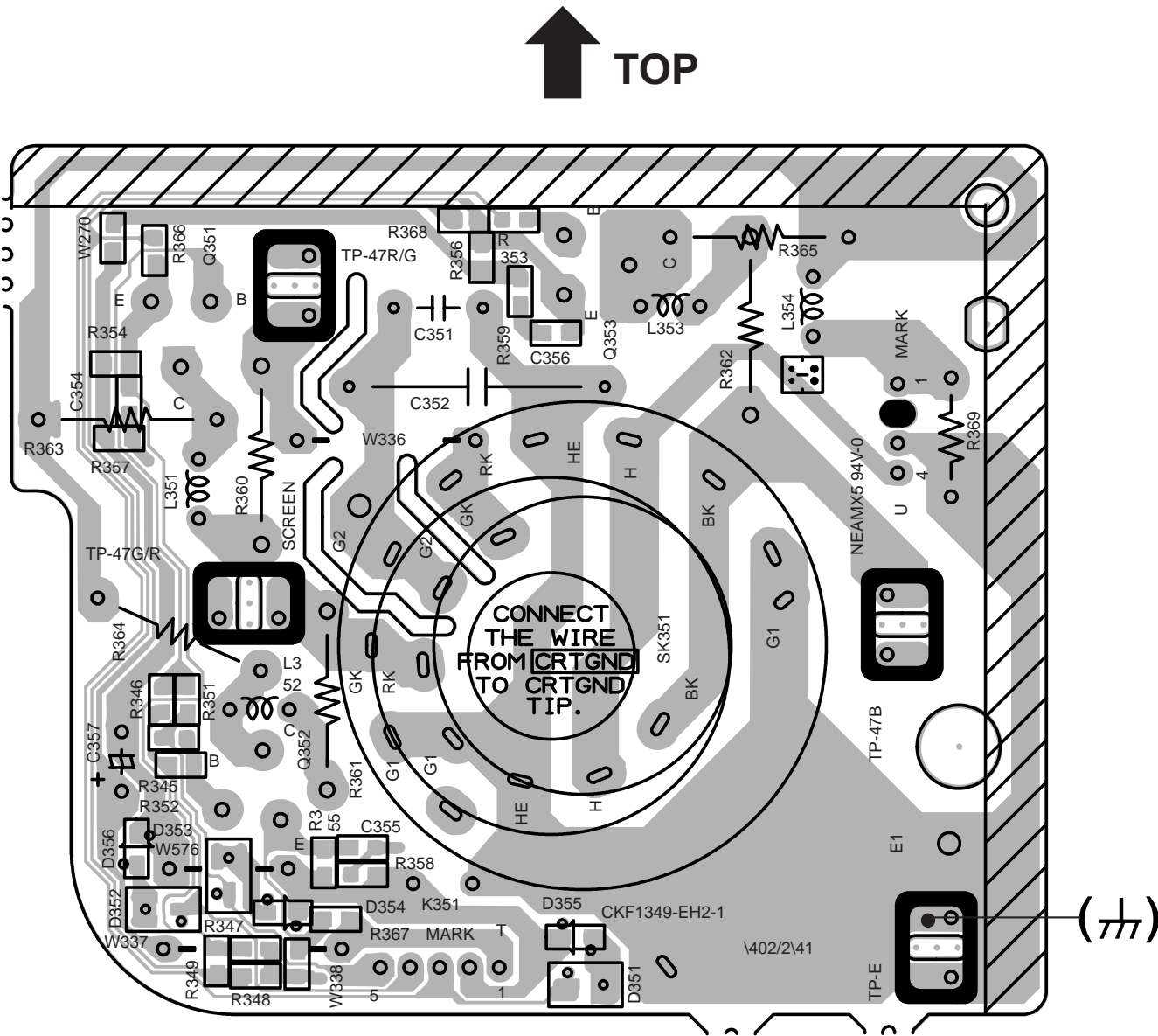
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

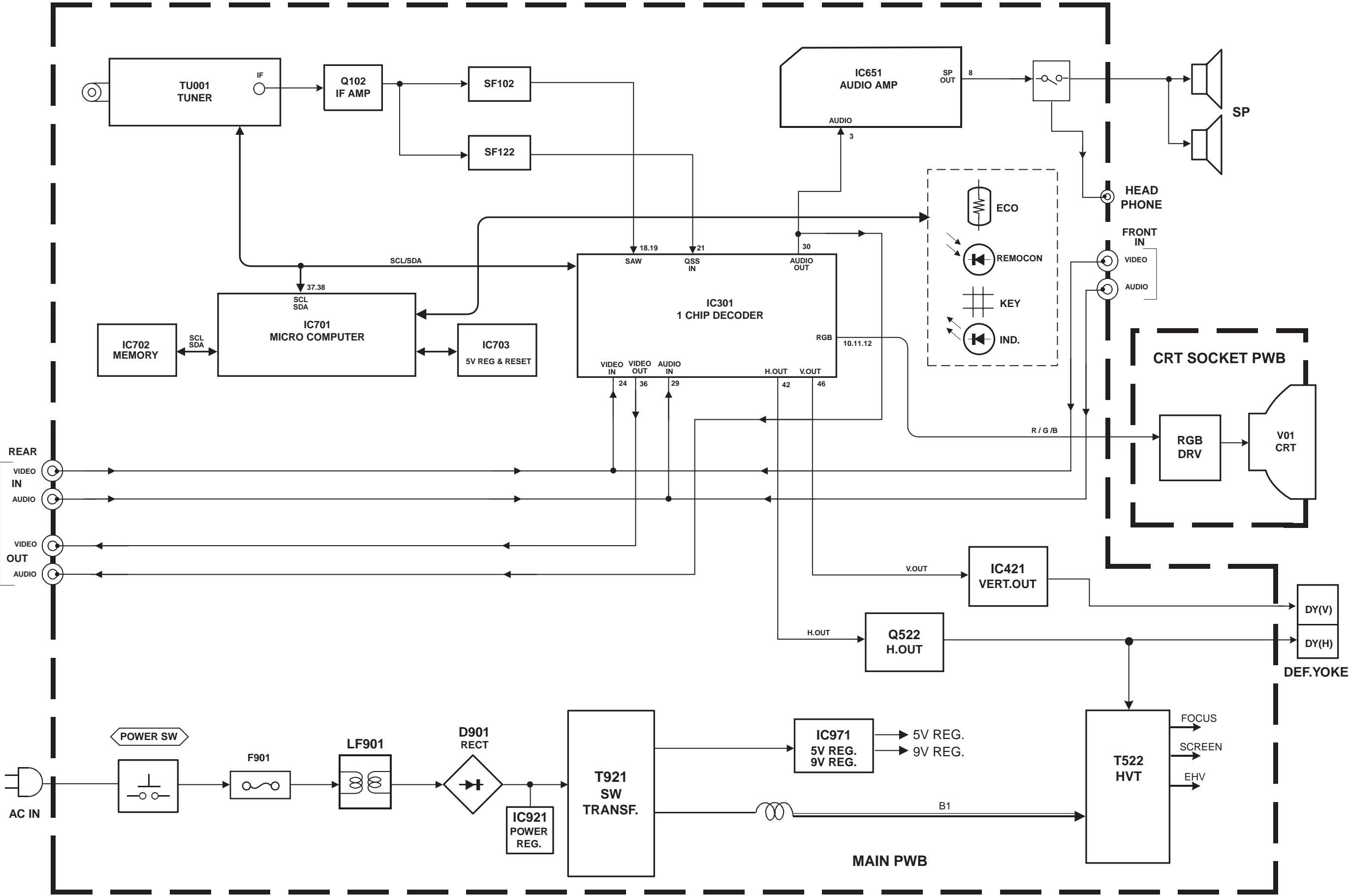
CHIP IC

TOP VIEW	

CRT SOCKET PWB PATTERN



BLOCK DIAGRAM

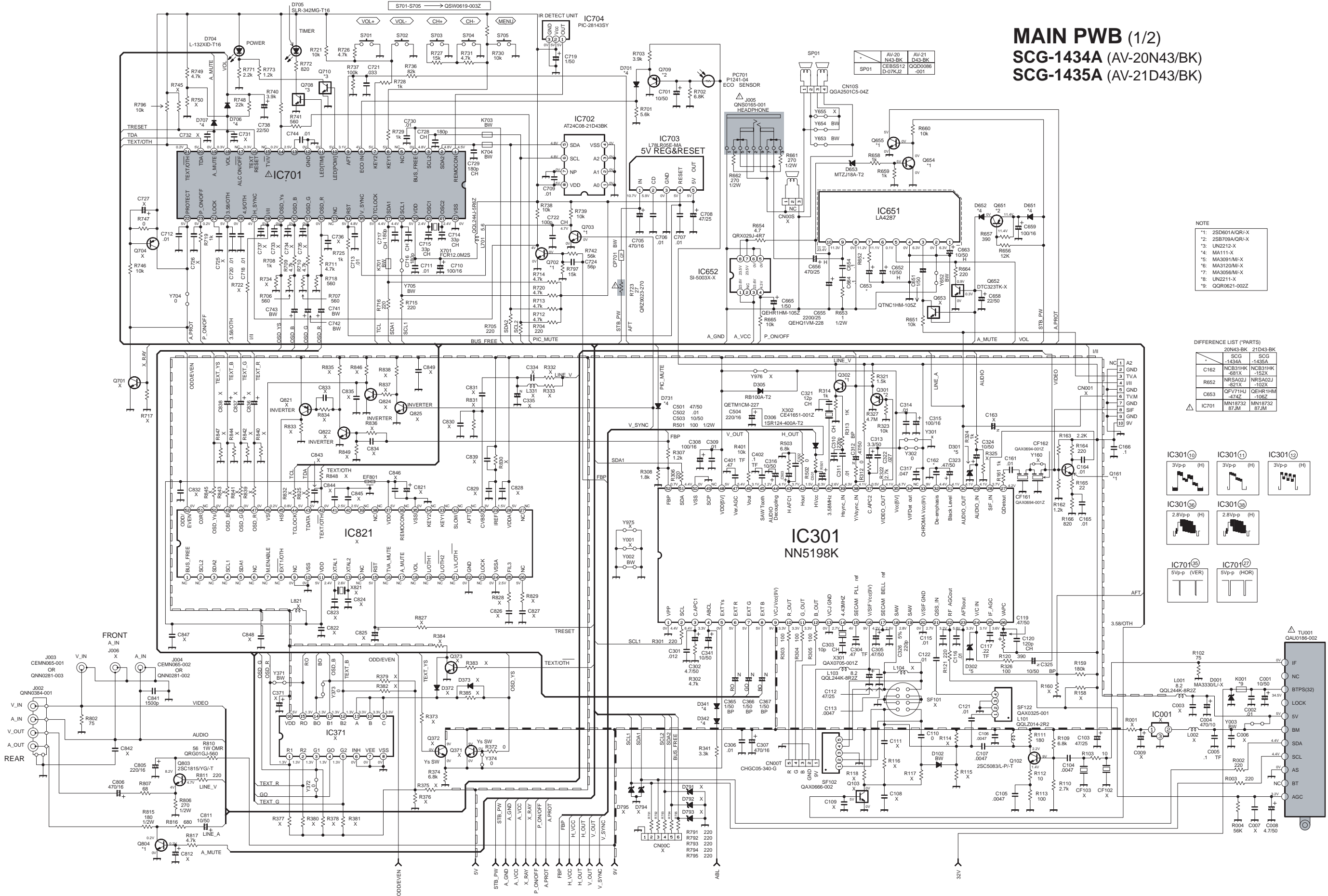


CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAMS (1/2) [AV-21D43/BK, AV-20N43/BK]

AV-21D43
AV-20N43

AV-21D43
AV-20N43

MAIN PWB (1/2)
SCG-1434A (AV-20N43/BK)
SCG-1435A (AV-21D43/BK)

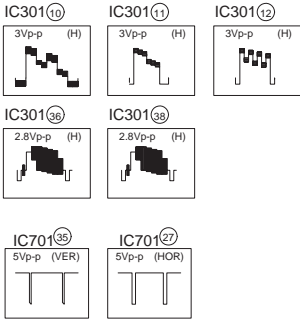


NOTE

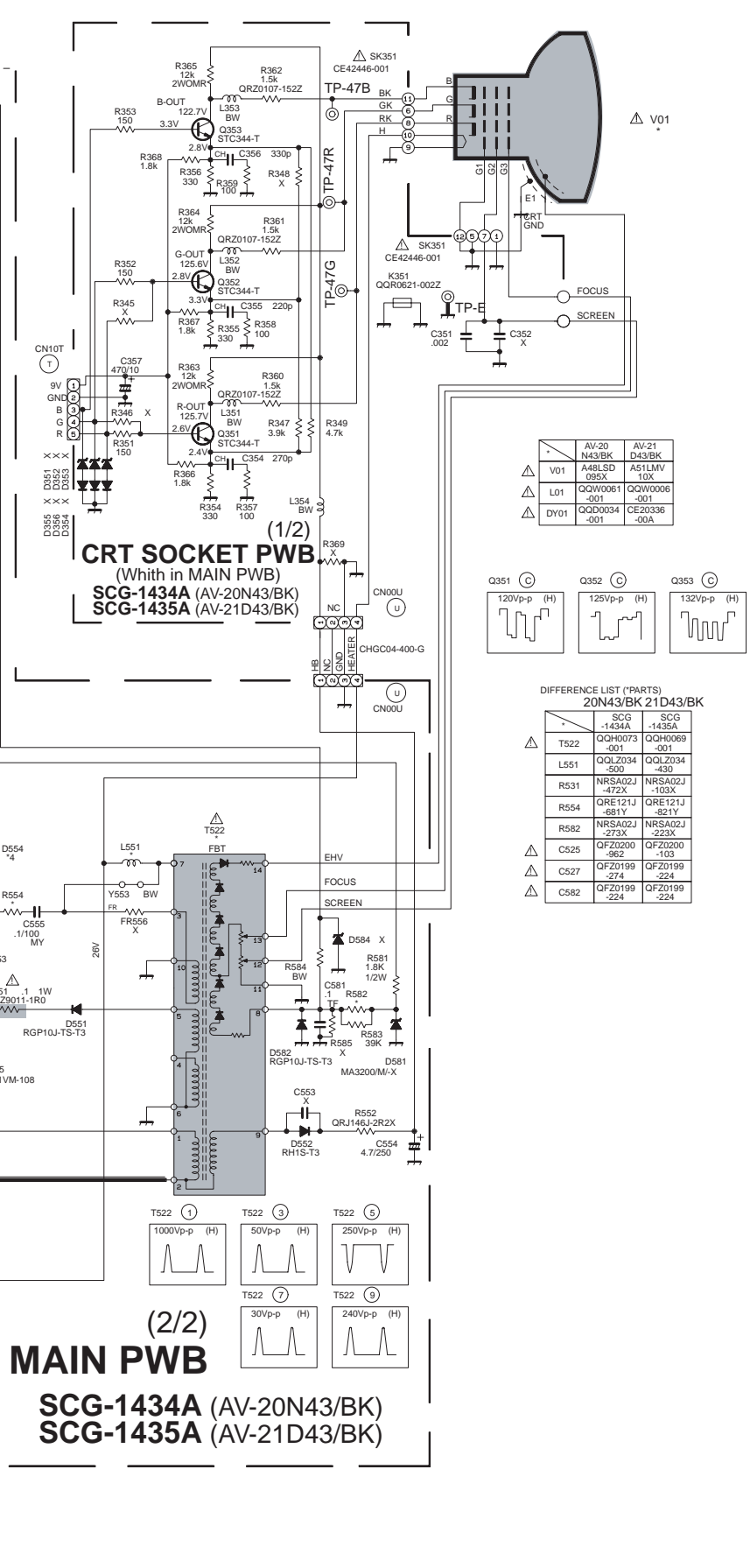
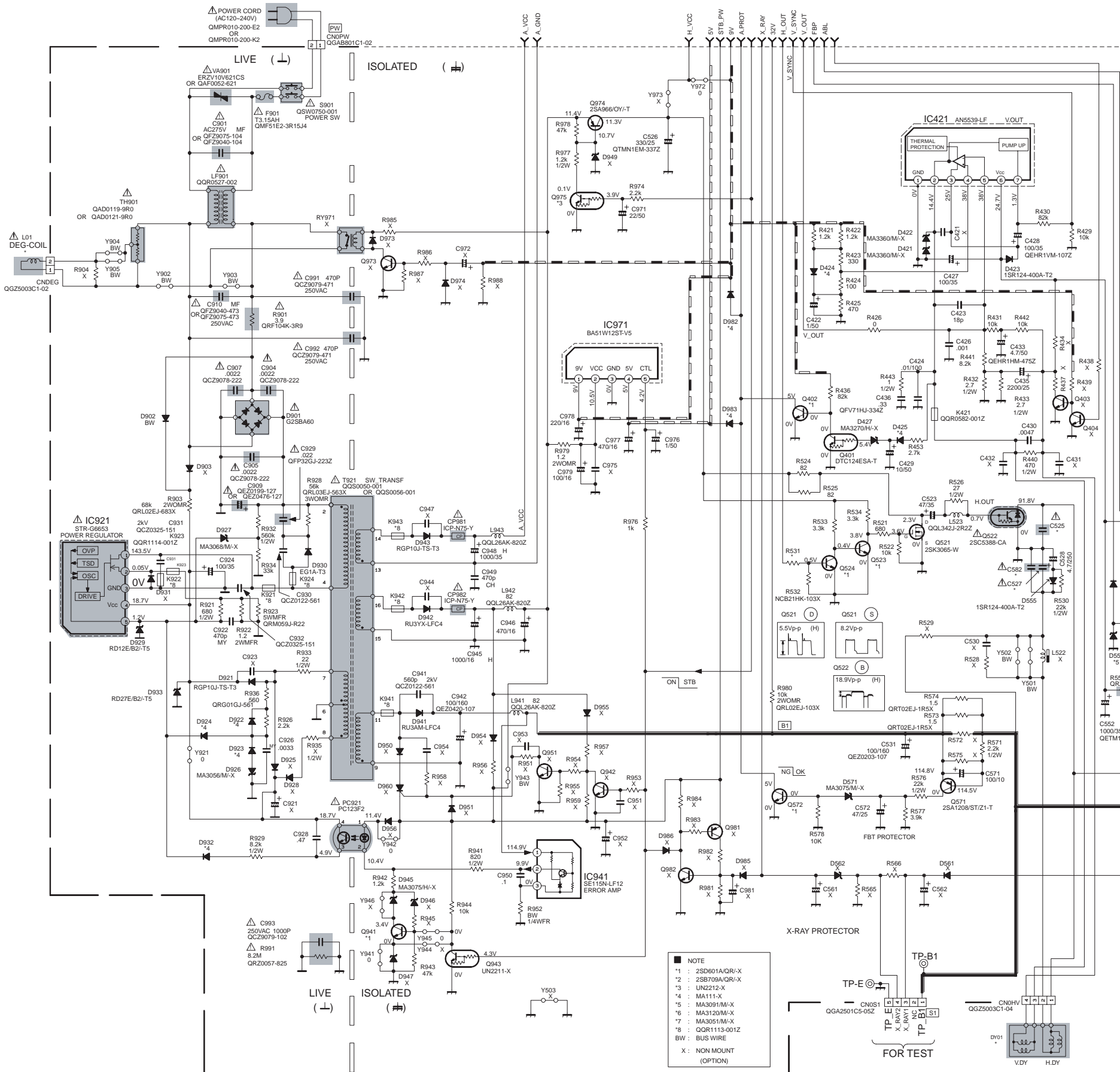
- 1: 2SD601A/QR-X
- 2: 2SB709A/QR-X
- 3: UN2212-X
- 4: MA1111-X
- 5: MA3091/M-X
- 6: MA3120/M-X
- 7: MA3056/M-X
- 8: UN2211-X
- 9: QOR0621-002Z

DIFFERENCE LIST (PARTS)

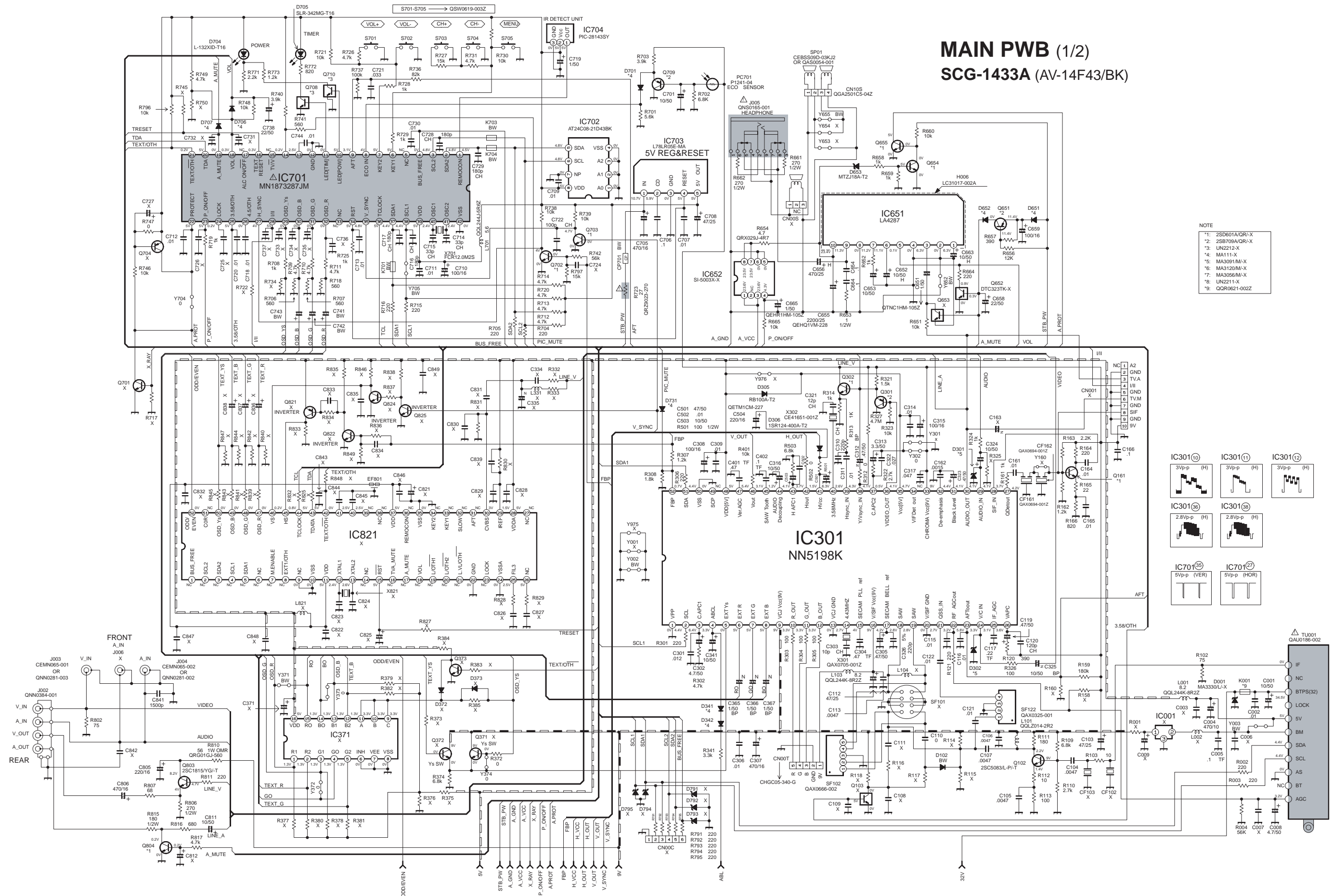
	20N43-BK	21D43-BK
SCG	1434A	1435A
C162	NCB31HK-681X	NCB31HK-152X
R652	NRS402J-821X	NRS402J-102X
C653	QFV71HJ-474Z	QFV71HJ-106Z
IC701	MN18732-87JM	MN18732-87JM



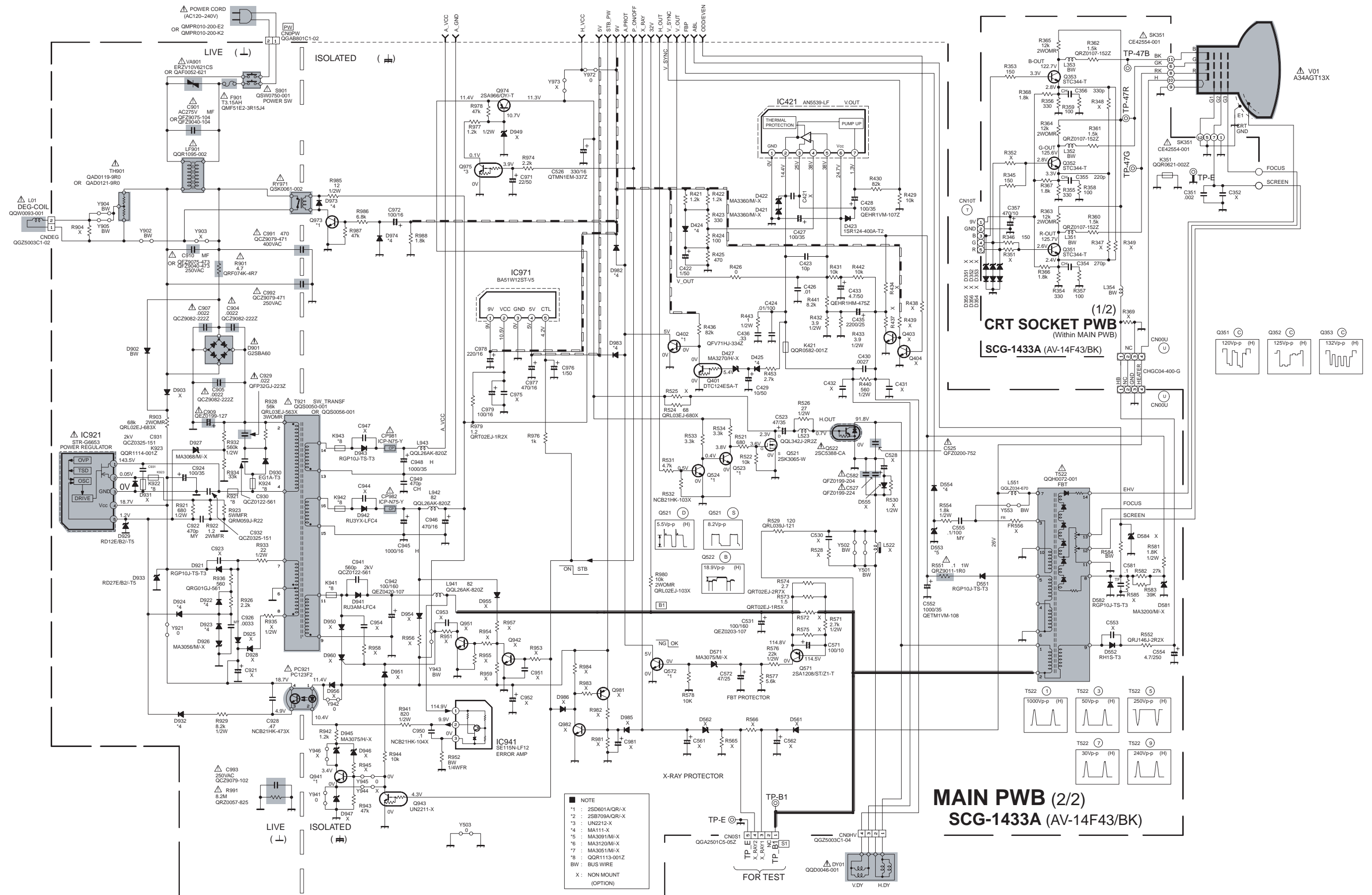
MAIN PWB CIRCUIT DIAGRAM (2/2) [AV-21D43/BK, AV-20N43/BK]



MAIN PWB CIRCUIT DIAGRAMS (1/2) [AV-14F43/BK]

MAIN PWB (1/2)
SCG-1433A (AV-14F43/BK)

MAIN PWB CIRCUIT DIAGRAM (2/2) [AV-14F43/BK]



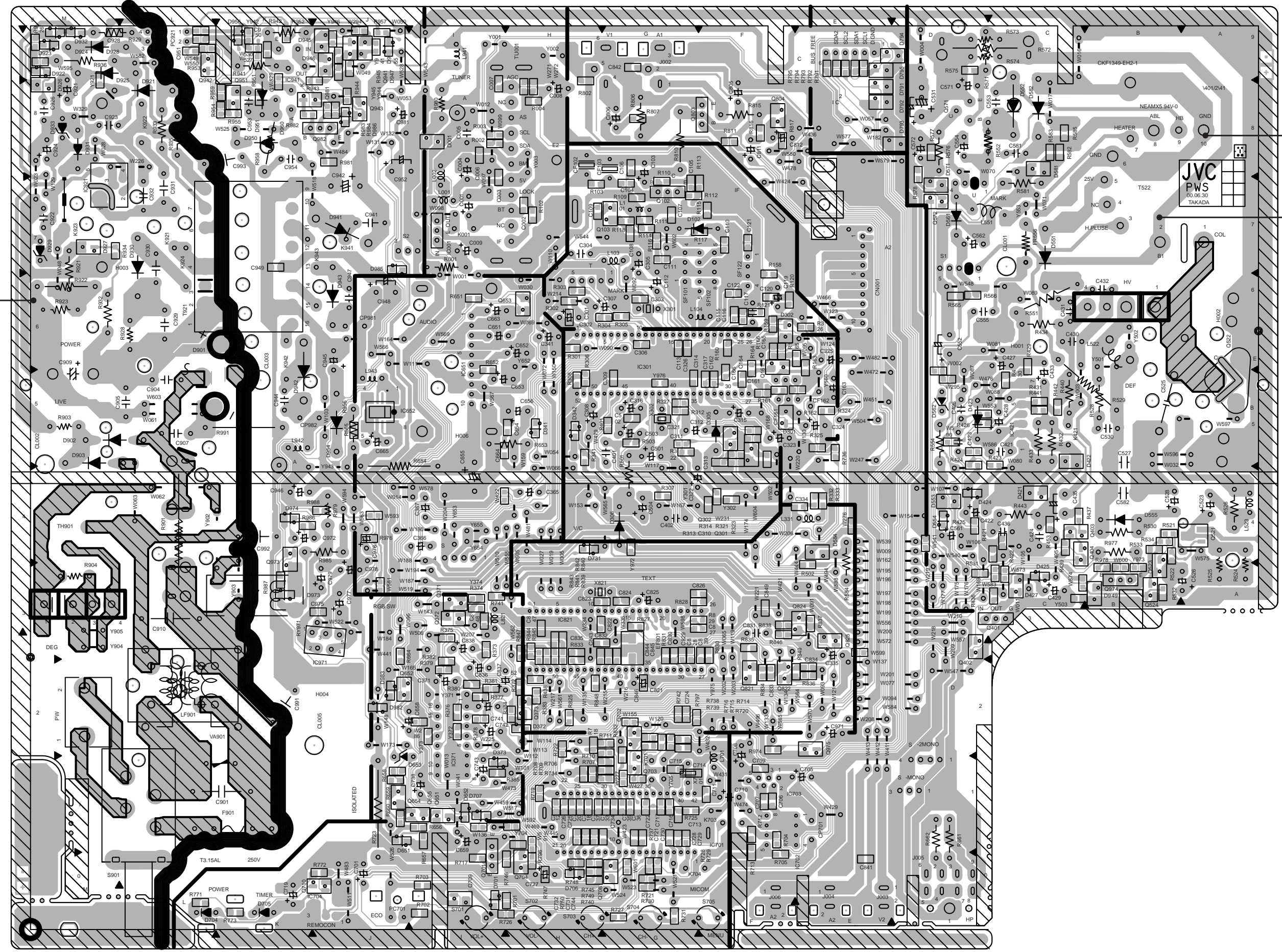
PATTERN DIAGRAMS MAIN PWB PATTERN

FRONT

(1)

TP-E
(11)

TP-91
(B1)





VICTOR COMPANY OF JAPAN, LIMITED

HOME AV NETWORK BUSINESS UNIT. 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan



Printed in Japan
0208 WPC