

SCHEMATIC DIAGRAM



MODEL : 19A20

Chassis No. TAC0001

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

CAUTION: The international hazard symbols " \triangle " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

NOTE:

- 1. RESISTOR** Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon composition of 1/2 watt
1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
K = $\pm 10\%$ G = $\pm 2\%$ F = $\pm 1\%$
- 2. CAPACITOR** Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF , and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
 Electrolytic capacitor  Mylar capacitor
- 3.** The parts indicated with " \triangle " have special characteristics, and should be replaced with identical parts only.
- 4.** Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage 120 volts.
- 5.** Waveforms are taken receiving color bar signal with enough sensitivity.
- 6.** Voltage reading shown are nominal values and may vary $\pm 20\%$ except H.V.

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

CAUTION: The international hazard symbols "△" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

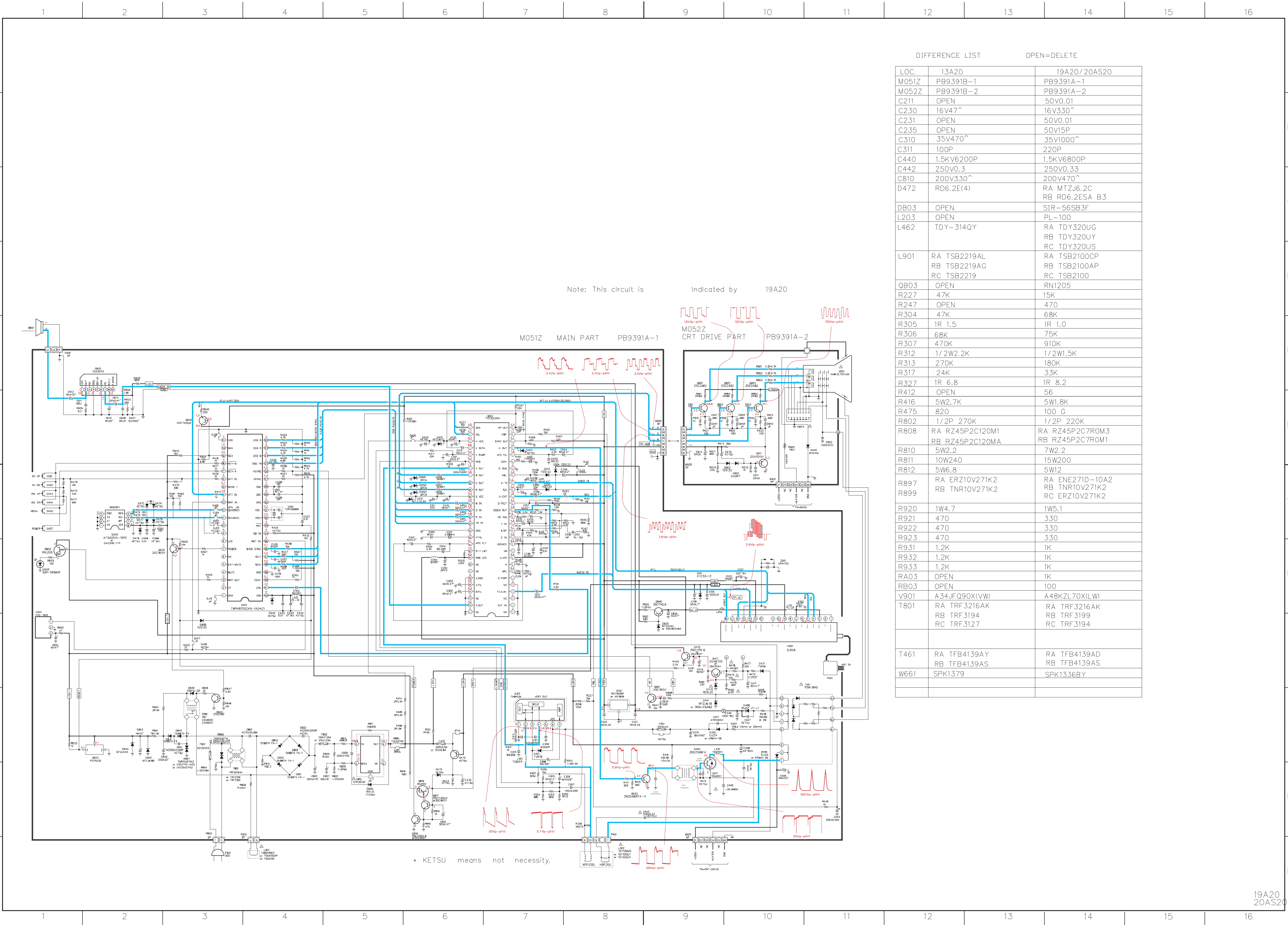
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1,000, M = 1,000,000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon composition of 1/2 watt
1RF = Fuse resistor of 1 watt K = ±10% G = ±2% F = ±1%

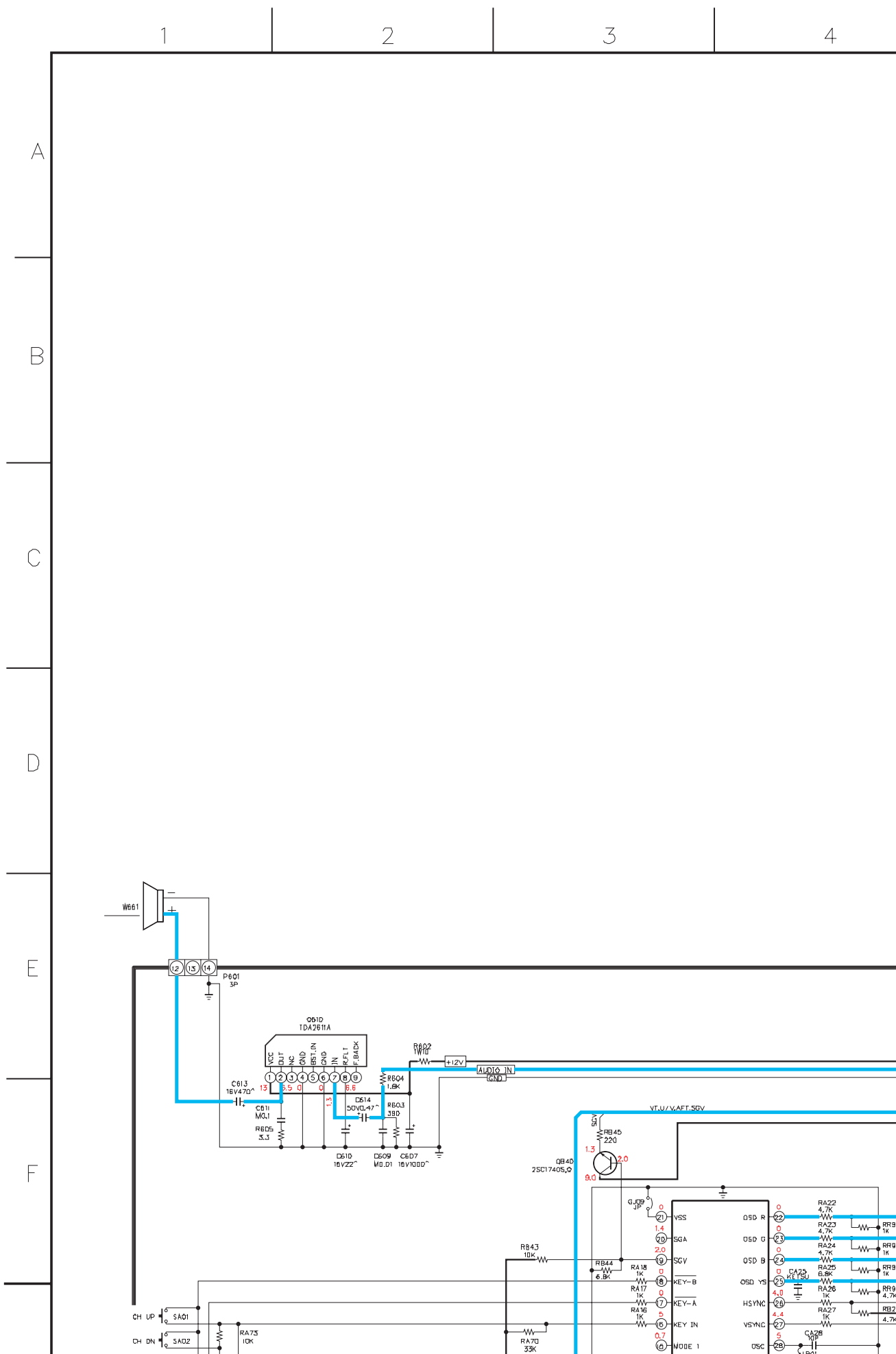
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in µF, and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
—|— Electrolytic capacitor —|— Mylar capacitor

3. The parts indicated with "△" have special characteristics, and should be replaced with identical parts only.

4. Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.



DIFFERENCE LIST		OPEN=DELETE
LOC.	13A20	19A20/20AS20
M051Z	PB9391B-1	PB9391A-1
M052Z	PB9391B-2	PB9391A-2
C211	OPEN	50V0.01
C230	16V47△	16V330△
C231	OPEN	50V0.01
C235	OPEN	50V15P
C310	35V470△	35V1000△
C311	100P	220P
C440	1.5KV6200P	1.5KV6800P
C442	250V0.3	250V0.33
C810	200V330△	200V470△
D472	RD6.2E(4)	RA MTZJ6.2C RB RD6.2ESA B3
DB03	OPEN	SIR-56SB3F
L203	OPEN	PL-100
L462	TDY-314QY	RA TDY320UG RB TDY320UY RC TDY320US
L901	RA TSB2219AL RB TSB2219AG RC TSB2219	RA TSB2100CP RB TSB2100AP RC TSB2100
QB03	OPEN	RN1205
R227	47K	15K
R247	OPEN	470
R304	47K	68K
R305	1R 1.5	1R 1.0
R306	68K	75K
R307	470K	910K
R312	1/2W1.2K	1/2W1.5K
R313	270K	180K
R317	24K	33K
R327	1R 6.8	1R 8.2
R412	OPEN	56
R416	5W2.7K	5W1.8K
R475	820	100 G
R802	1/2P 270K	1/2P 220K
R808	RA RZ45P2C120M1 RB RZ45P2C120MA	RA RZ45P2C7R0M3 RB RZ45P2C7R0M1
R810	5W2.2	7W2.2
R811	10W240	15W200
R812	5W6.8	5W12
R897	RA ERZ10V271K2 RB TNR10V271K2	RA ENE271D-10A2 RB TNR10V271K2 RC ERZ10V271K2
R920	1W4.7	1W5.1
R921	470	330
R922	470	330
R923	470	330
R931	1.2K	1K
R932	1.2K	1K
R933	1.2K	1K
RA03	OPEN	1K
RB03	OPEN	100
V901	A34JF90X(VW)	A48KZL70X(LW)
T801	RA TRF3216AK RB TRF3194 RC TRF3127	RA TRF3216AK RB TRF3199 RC TRF3194
T461	RA TFB4139AY RB TFB4139AS	RA TFB4139AD RB TFB4139AS
W661	SPK1379	SPK1336BY



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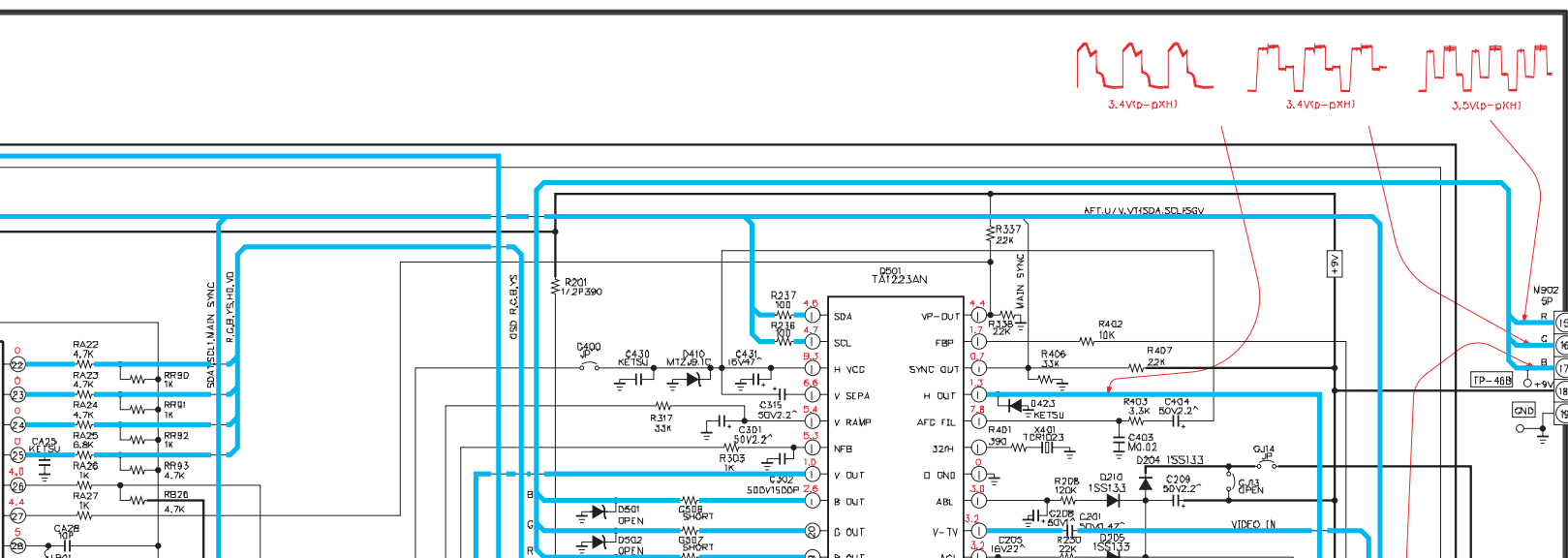
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Note: This circuit is

M051Z MAIN PART PB9391A-1

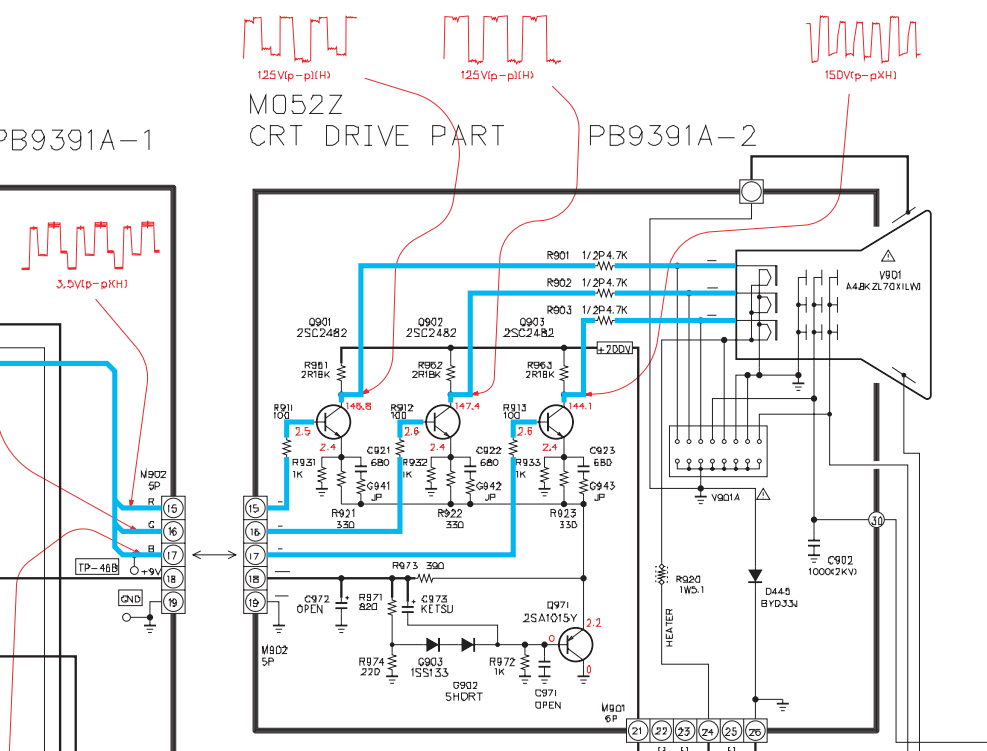


DIFFERENCE LIST

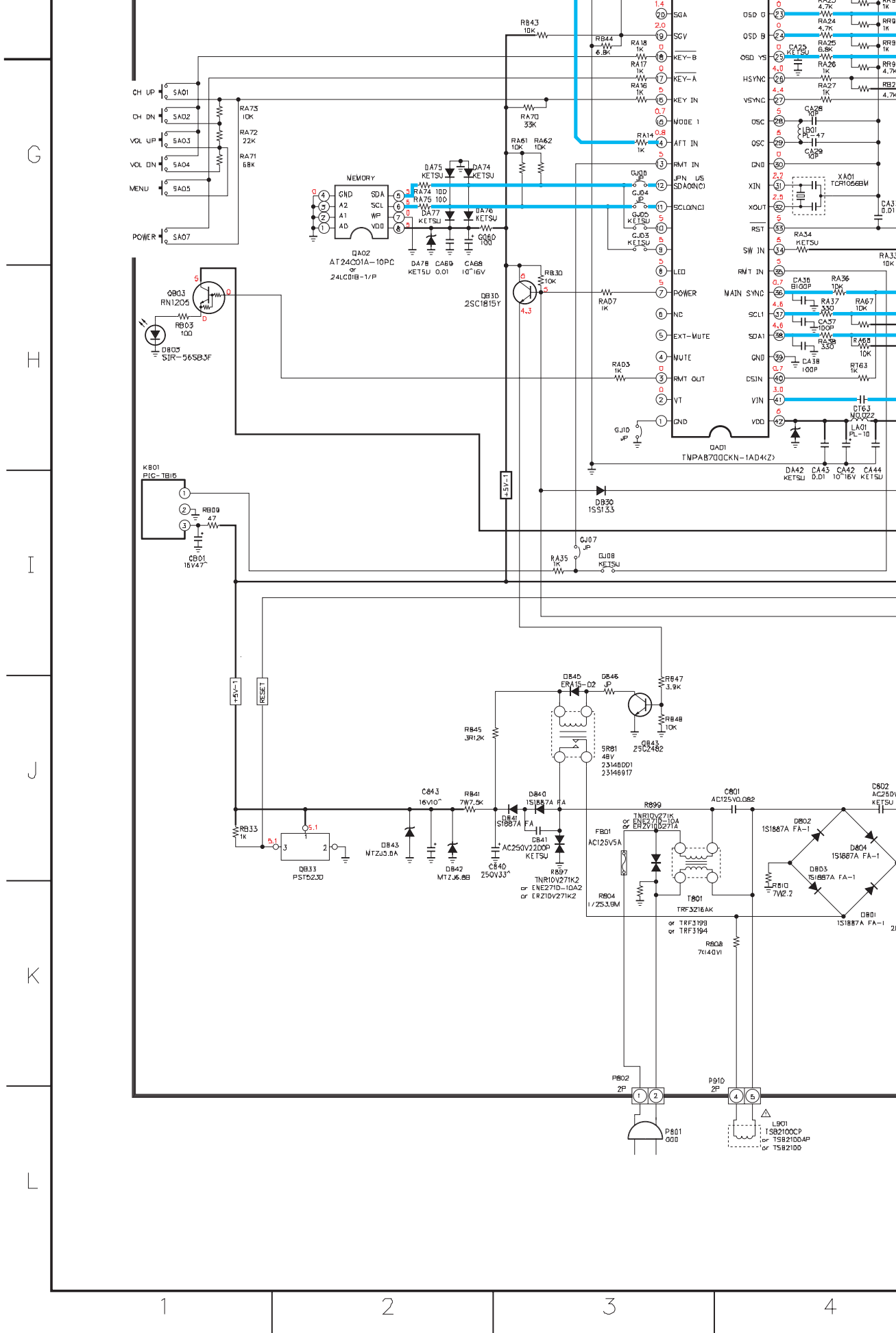
LOC.	13A20
M051Z	PB9391B-1
M052Z	PB9391B-2
C211	OPEN
C230	16V47^
C231	OPEN
C235	OPEN
C310	35V470^
C311	100P
C440	1.5KV6200P
C442	250V0.3
C810	200V330^
D472	RD6.2E(4)
DB03	OPEN
L203	OPEN
L462	TDY-314QY
L901	RA TSB2219AL RB TSB2219AG RC TSB2219
QB03	OPEN
R227	47K
R247	OPEN
R304	47K
R305	1R 1.5
R306	68K
R307	470K
R312	1/2W2.2K
R313	270K
R317	24K
R327	1R 6.8
R412	OPEN
R416	5W2.7K
R475	820
R802	1/2P 270K
R808	RA RZ45P2C120M1 RB RZ45P2C120MA
R810	5W2.2
R811	10W240
R812	5W6.8
R897	RA ERZ10V271K2 RB INR10V271K2

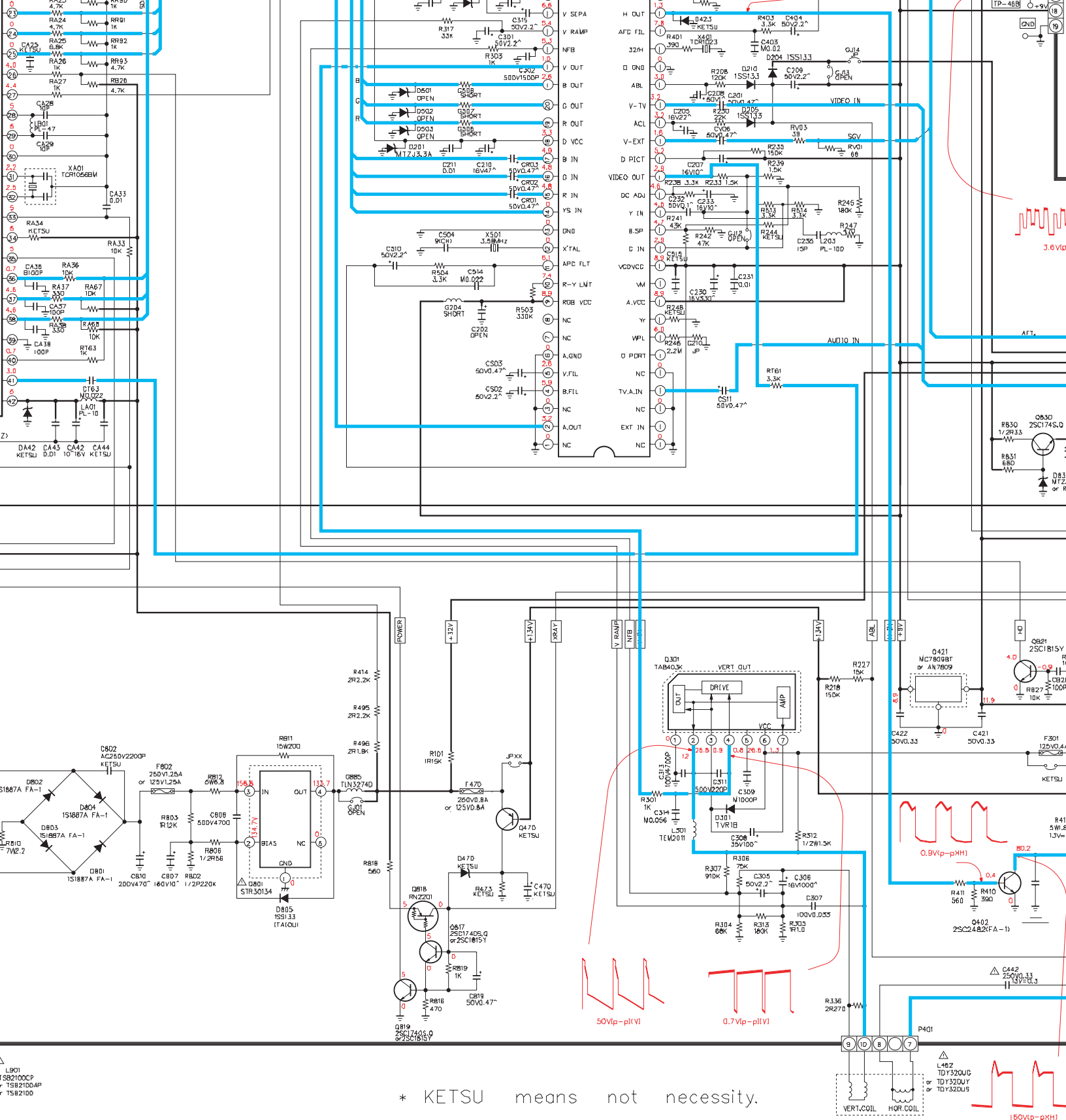
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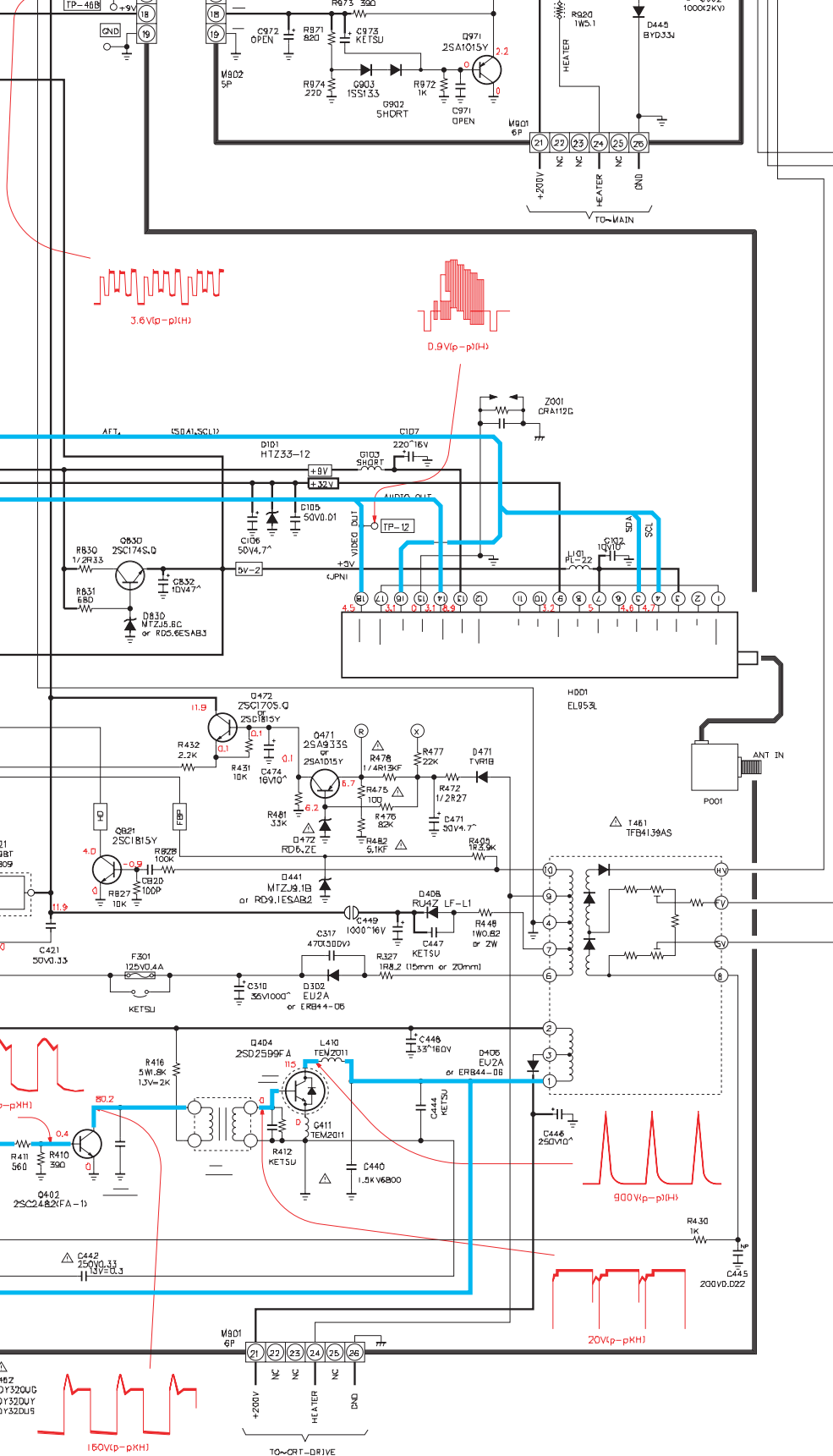
Indicated by 19A20



13	14	15	16
OPEN=DELETE			A
	19A20/20AS20		B
	PB9391A-1		
	PB9391A-2		
	50V0.01		
	16V330^		B
	50V0.01		
	50V15P		
	35V1000^		
	220P		C
	1.5KV6800P		
	250V0.33		
	200V470^		
	RA MTZJ6.2C RB RD6.2ESA B3		D
	SIR-56SB3F		
	PL-100		
	RA TDY320UG RB TDY320UY RC TDY320US		
AL AG	RA TSB2100CP RB TSB2100AP RC TSB2100		E
	RN1205		
	15K		
	470		
	68K		E
	1R 1.0		
	75K		
	910K		
	1/2W1.5K		F
	180K		
	33K		
	1R 8.2		
	56		F
	5W1.8K		
	100 G		
	1/2P 220K		
120M1 120MA	RA RZ45P2C7R0M3 RB RZ45P2C7R0M1		F
	7W2.2		
	15W200		
	5W12		
271K2 271K2	RA ENE271D-10A2 RB TNR10V271K2		







R810	5W2.2
R811	10W240
R812	5W6.8
R897	RA ERZ10V271K2
R899	RB TNR10V271K2
R920	1W4.7
R921	470
R922	470
R923	470
R931	1.2K
R932	1.2K
R933	1.2K
RA03	OPEN
RB03	OPEN
V901	A34JFQ90X(VW)
T801	RA TRF3216AK
	RB TRF3194
	RC TRF3127
T461	RA TFB4139AY
	RB TFB4139AS
W661	SPK1379

20W7A	7W2.2
	15W200
	5W12
271K2	RA ENE271D-10A2
271K2	RB TNR10V271K2
	RC ERZ10V271K2
	1W5.1
	330
	330
	330
	1K
	1K
	1K
	1K
	100
VW)	A48KZL70X(LW)
AK	RA TRF3216AK
	RB TRF3199
	RC TRF3194
AY	RA TFB4139AD
AS	RB TFB4139AS
	SPK1336BY

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19A20
20AS20

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