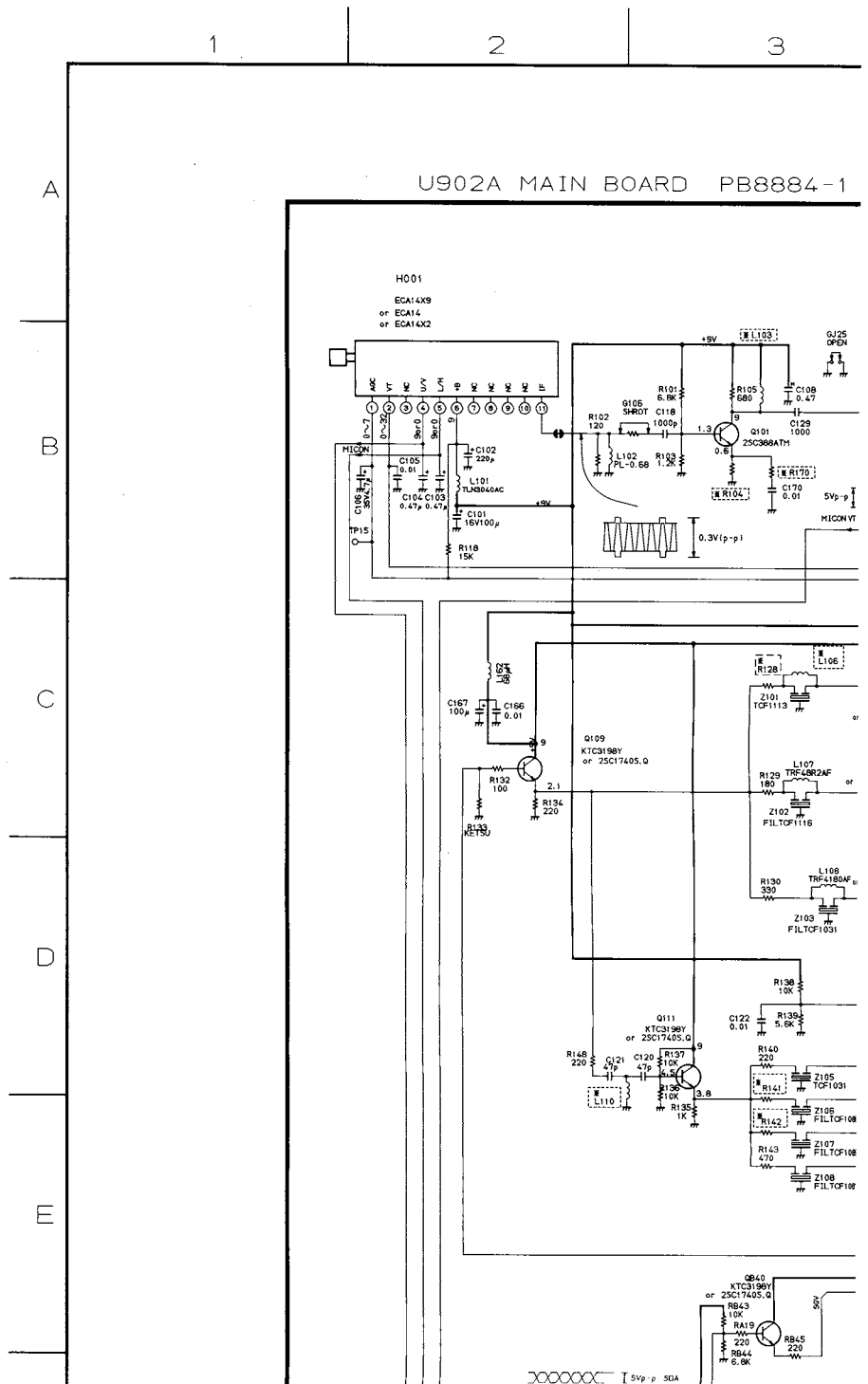


SCHEMATIC DIAGRAM

MODEL : 14N5XM / 14N5XMJ

14N5XE / 14N5XMS

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 page 3. Do not degrade the safety of the receiver through improper servicing.



OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

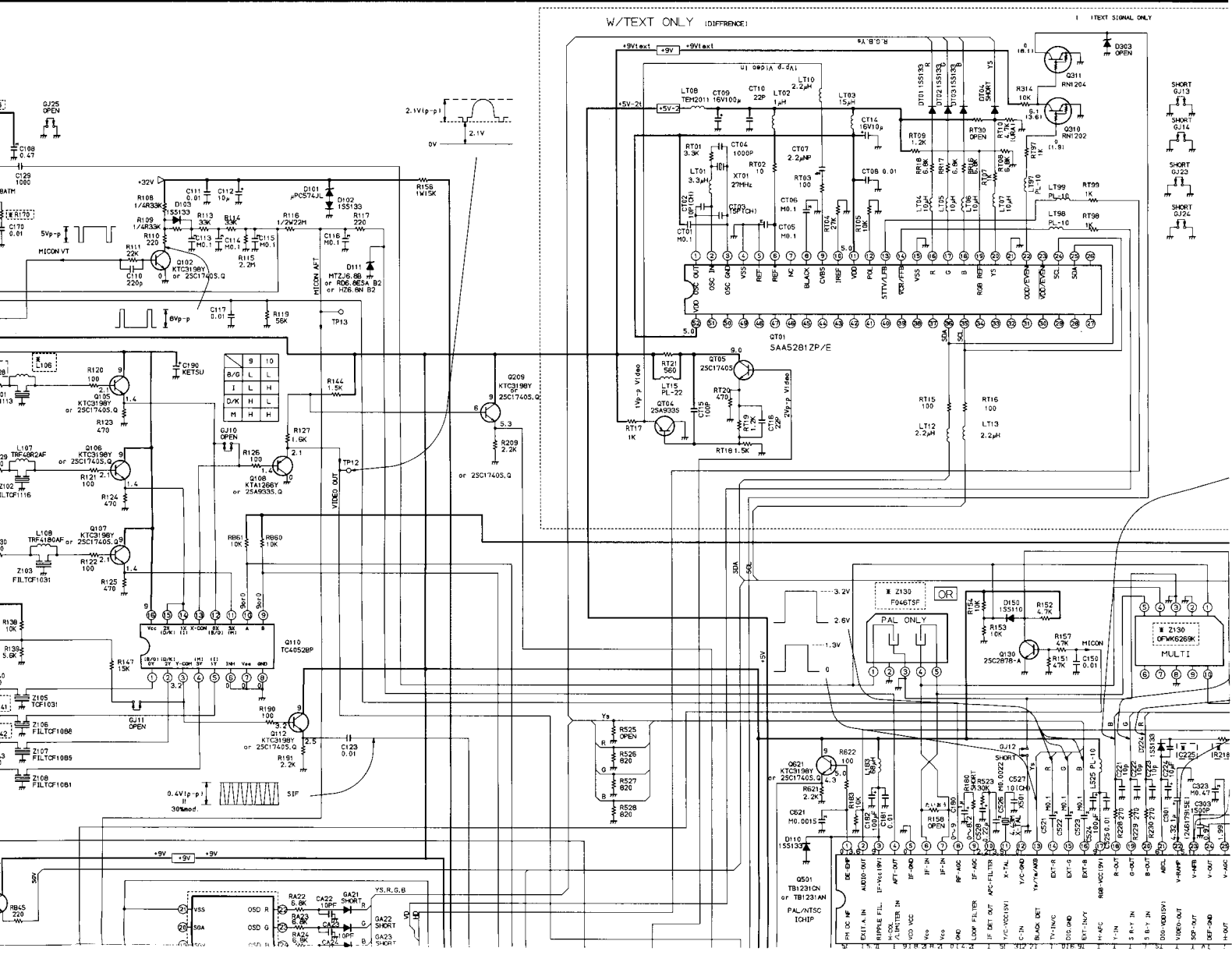
NOTES:

1. D.C. resistance value. These are measured.
2. The circuits are sub-circuits.
3. \bullet : Solder links.

Technical
on page



884-1 (BASE=PB7330)



EXPRESSION

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values are in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values are in μH , and the values less than 1 in H.

...nce value of a principal transformer is shown in this schematic dia-
 ...e are measured for separated from the circuit.
 ...are subject to change without notice.
 ...er links.

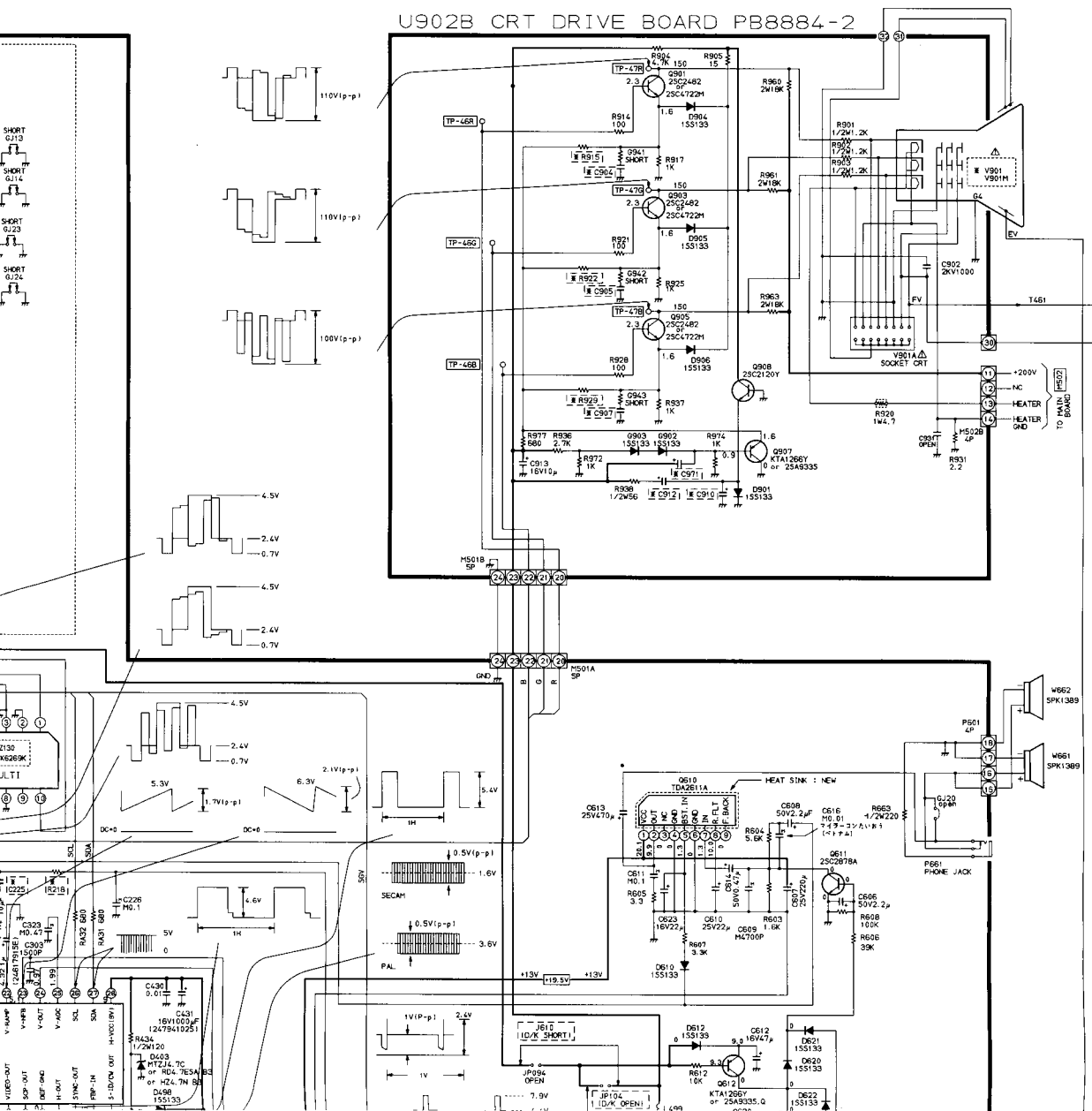
9

10

11

12

13



MODEL (JOB)	MAIN UNIT
L106	TRF-2
L110	TRF-2
R103	1/5W
R104	1/5W
R170	1/5W
L106	TRF-2
L110	TRF-2
R128	1/5W
R141	SHOR
R142	SHOR
GA01 (RA)	TMP8
GA01 (RB)	TMP8
RA14	1/5W
RA15	1/5W
RA64	OPEN
RA65	OPEN
GJ10	
GJ11	
L107	
L108	
Q106	
Q107	
Q110	
R121	
R122	
R124	
R125	
R129	
R130	
R134	
R143	
RA75	
Z102	
Z103	
Z106	
Z107	
Z108	
QB60	
QB61	
RB60	
RB61	
RS26	
RS27	
RS28	
C904	50V
C905	50V
C907	50V
C971	15V
R915	1/5W
R922	1/5W
R929	1/5W
C910	50V
C912	15V
L901 (RA)	T5B
L901 (RB)	T5B
L901 (RC)	T5B
V901 (RA)	A3A
V901 (RB)	NON
V901M (RA)	MAG
V901M (RB)	NON
D433	SS
D830	MTZ
T801 (RA)	TRF
T801 (RB)	TRF
T802 (RA)	TRF
T802 (RB)	TRF
GJ03-GJ06	OPEN
R470	500
R470	1W
C801	
C886	
C889	
D886	

DUCTOR

0,000

Capacitor values less than 1 are expres-

Capacitor values more than 1 are expres-

14

15

16

REL (JOB) N UNIT	14N5XM (LJ139) PB8897	20N3XM (LJ142) PB8899	21N3XM (LJ143) PB8885
	14N5XMJ (LJ140) PB8897		
NO.	14N5XE (LJ141) PB8884	14N5XMS (L8420) PB8898	20N3XMS (L8421) PB8900
	TRF4R47AF	TRF4R47AF	TRF4R56AF
	1/6W33	1/6W33	1/6W33
	1/6W220	1/6W220	1/6W150
	TRF4100AF	TRF4100AF	TRF46R2AF
	TRF4150AF	TRF4150AF	TRF4150AF
	1/6W220	1/6W220	1/6W180
	SHORT	SHORT	1/6W470
	SHORT	SHORT	SHORT
(RA)	MPB7CK38N-3560	MPB7CK38N-3639	MPB7CK38N-3639
(RB)	MPB7CK38N-3505	NONE	NONE
	1/6W10K	1/6W10K	1/6W10K
	1/6W10K	1/6W7.5K	1/6W7.5K
	OPEN	OPEN	OPEN
	OPEN	1/6W33K	1/6W33K
	50V390	50V390	50V470
	50V330	50V330	50V390
	50V470	50V470	50V560
	16V47µ	16V47µ	16V22µ
	1/6W680	1/6W680	1/6W560
	1/6W680	1/6W680	1/6W560
	1/6W680	1/6W680	1/6W560
	50V0.47µ	50V0.47µ	50V0.47µ
	16V470µ	16V470µ	16V10µ
(RA)	TSB2360AL	TSB2360AL	TSB2359AT
(RB)	TSB2360AT	TSB2360AT	TSB2359AG
(RC)	TSB2360AG	TSB2360AG	TSB2359AG
(RA)	A34JFQ90X(VW)	A34JFQ90X(VW)	A48JAN46X(W)
(RB)	NONE	NONE	A48JLL90X(K)
(RA)	MAG1070	MAG1070	MAG1070
(RB)	NONE	NONE	MAG1054
	1S5133	1S5133	1S5133
(RA)	MTZJ5.1B	MTZJ5.1B	MTZJ5.6B
(RB)	TRF3227AC	TRF3227AC	TRF3227AC
(RC)	TRF3216AK	TRF3216AK	TRF3216AK
(RA)	TRF3227AC	TRF3227AC	TRF3227AC
(RB)	TRF3216AK	TRF3216AK	TRF3216AK
-GJ06	OPEN	OPEN	OPEN
	500mA	500mA	500mA
	1W0.75	1W0.75	1W0.68

A

B

C

D

E

F

G

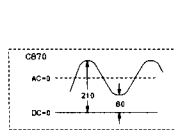
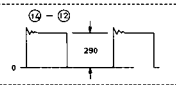
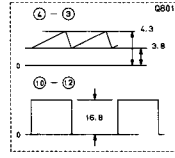
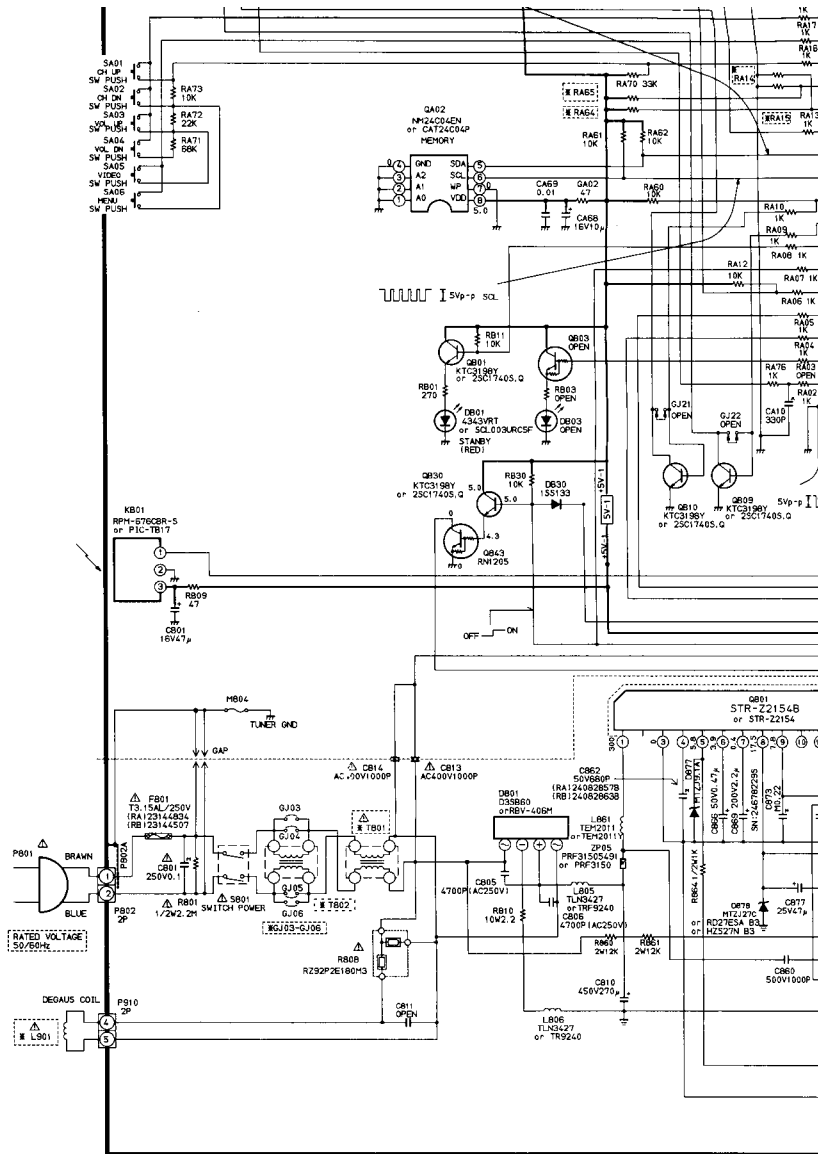
H

I

J

K

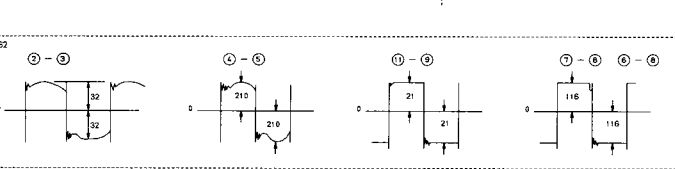
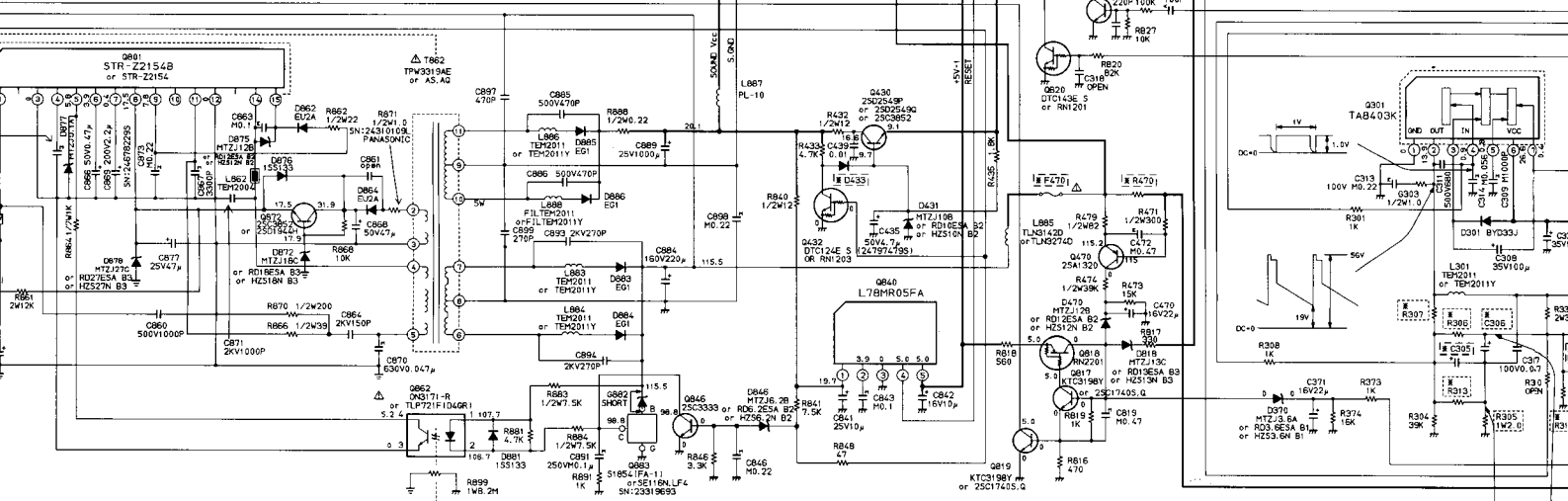
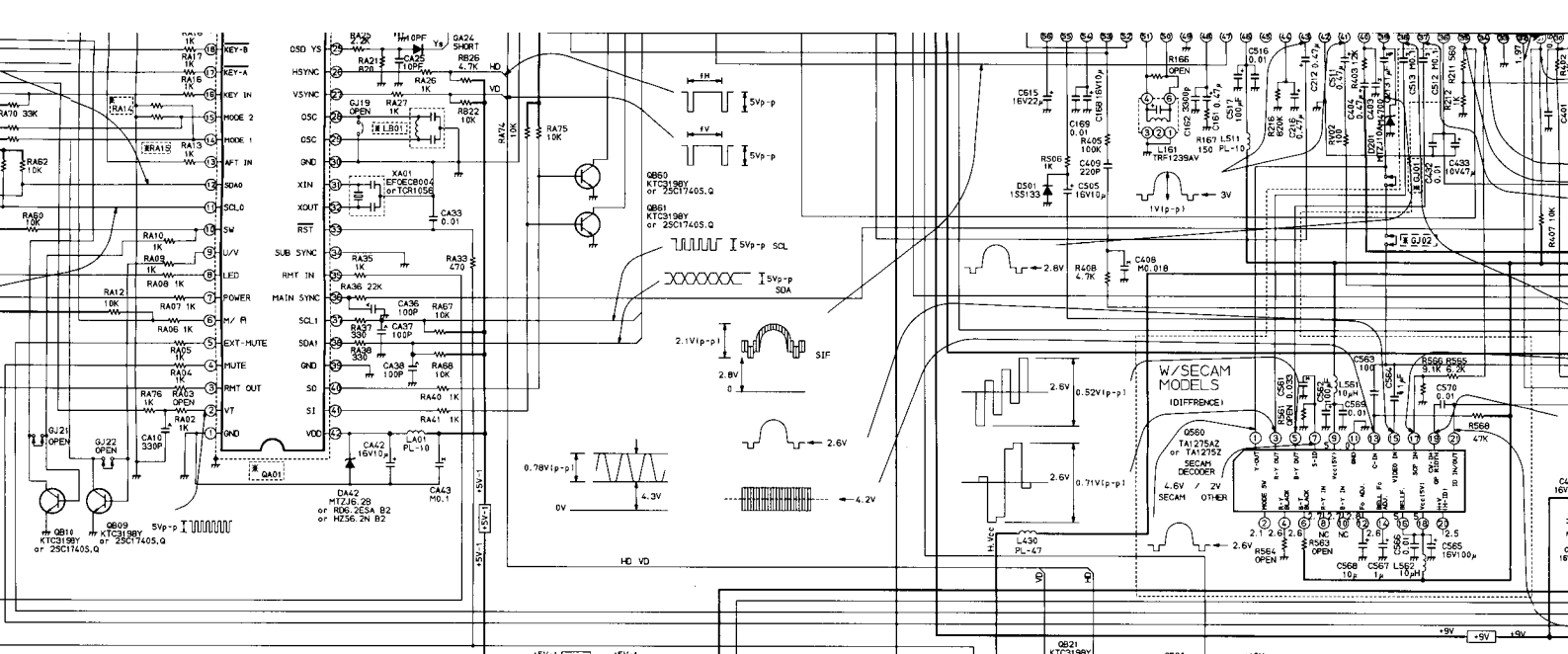
L



1

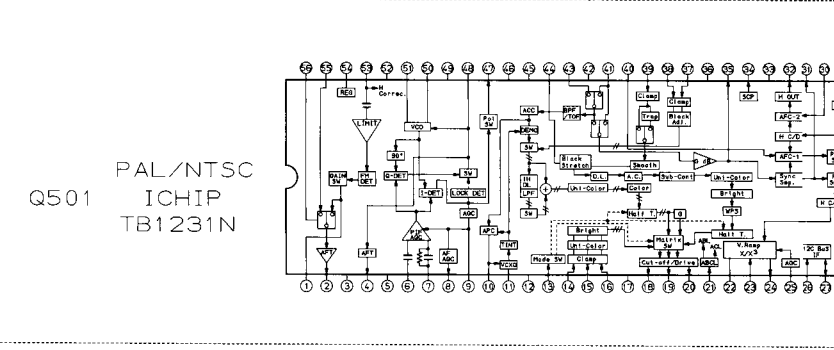
2

3



PAIR USE

OB83	OB82
518541FA-41	HTZJ 2.7B
518541FA-11	SHORT
SE116N.LF4	SHORT



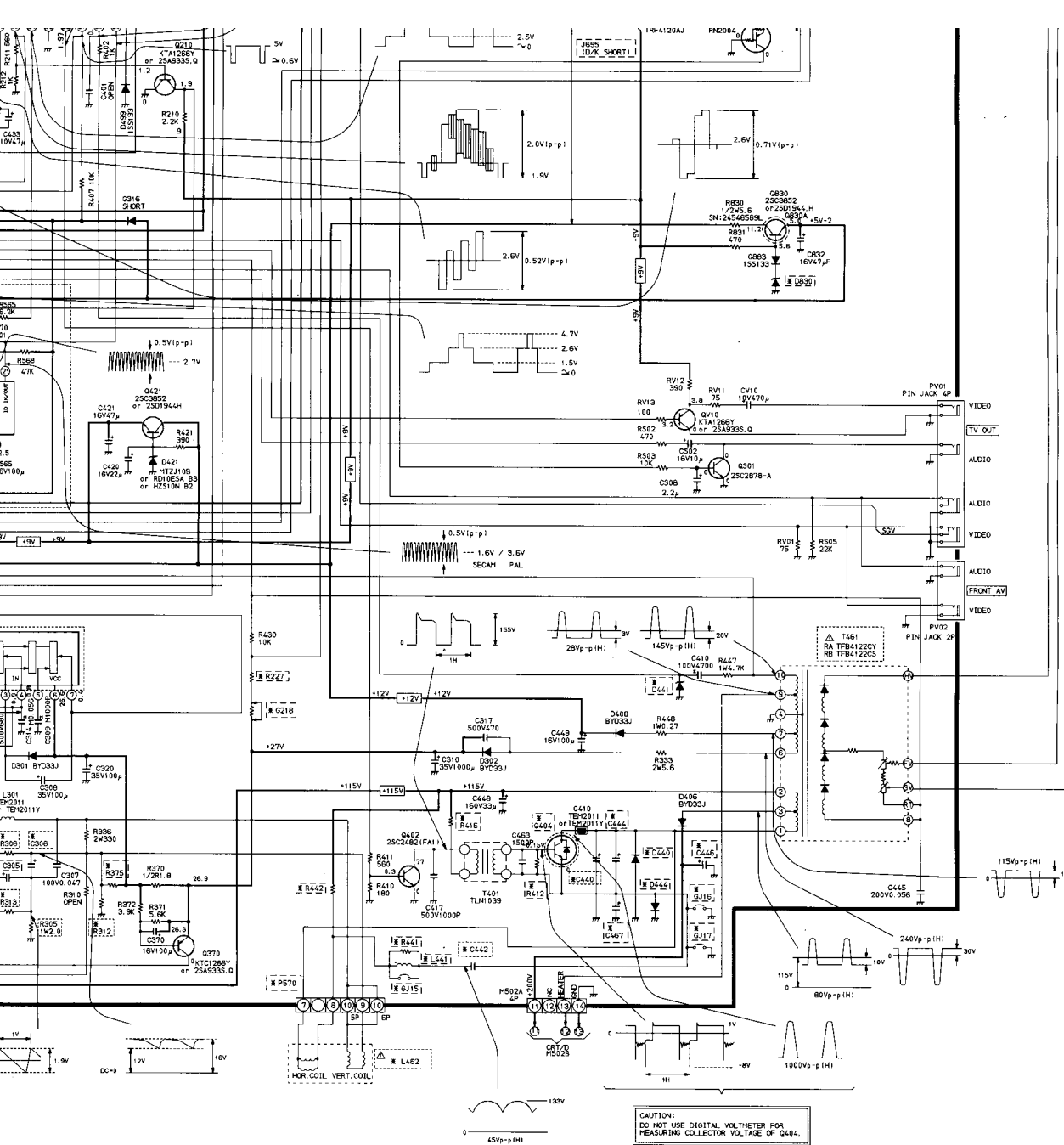
4

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7

8



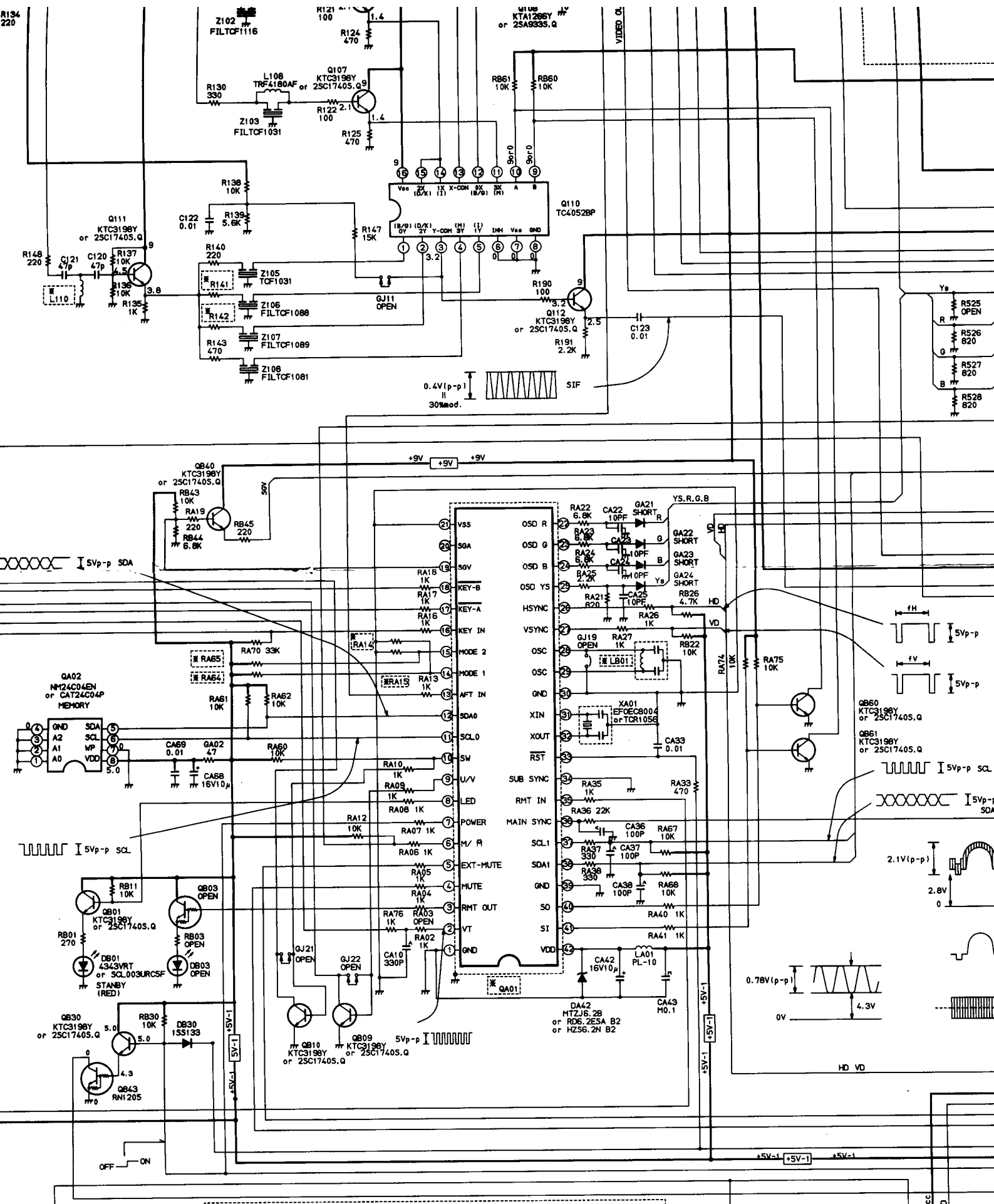
DIFFERENCE BETWEEN 14" 20" 21"

DEFLECTION	CRT	POWER	
C225	Q404	C904	F470
C305	R218	C905	GJ03
C306	R227	C907	GJ04
C440	R305	C910	GJ05
C442	R306	C912	GJ06
C444	R307	C971	R470
C446	R312	L901	T801
C467	R313	R915	T802
D440	R375	R922	D830
D444	R412	R929	D433
G218	R416	V901	
GJ15	R441	V901M	
GJ16	R442		
GJ17	T461		
L441			
L462			

1470 SERIES (S8ER)

14N5XE	21N3XM
14N5XM	21N3XMS
14N5XMJ	
14N5XMS	
20N3XM/J	
20N3XMS	

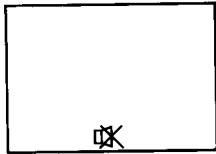
LB88	
Q852 (RA)	
Q852 (RB)	
C318	
R227	1/6
R218	1/6
C225	OP
G218	SH
R305	1W2
R306	1/6
R307	1/6
R312	1/2
R313	1/6
R375	OP
Q404 (R1)	2SD
Q404 (R2)	2SD
R416 (R1)	5W
R416 (R2)	5W
R472	OP
C305	5M
C306	5M
C150	16V
D150	
R151	
R152	
R153	
R154	
R157	
Z130	
Q130	
C440	1.2
C442	25
C444	OP
C446	25
C467	OP
D444	OP
D440	OP
D441	MT
GJ15	SH
L441	OP
R441	OP
R442	2W
P570	5
L462 (RA)	TL
L462 (RB)	TL
T461 (RA)	TH
T461 (RB)	TH
GJ16	SH
GJ17	SH
LB01	TR
RA12	
RA74	
RA05	
GA21	
GA22	
GA23	
GA24	
RA21	
RA25	
TEXT BLK	OP
SECAM BLK	US
GJ01	OP
GJ02	OP
GJ03	OP
J610	
J695	
JP104	
W661	
W662	
C616	
RATED VOLTAGE	110



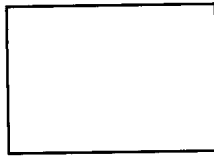
SERVICE MODE

1. ENTERING TO SERVICE MODE

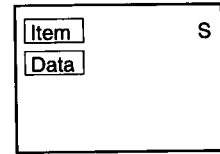
1) Press **OK** button once on Remote Control.



2) Press **OK** button again to keep pressing.



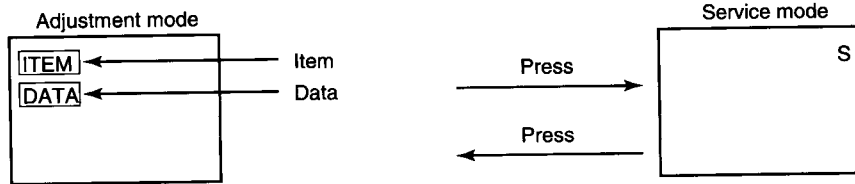
3) While pressing the **OK** button, press **MENU** button on TV set.



(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press **MENU** button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF:

Test signal selection :

Selection of the adjustment items :

Change of the data value :

Adjustment menu mode ON/OFF :

Initialization of the memory (QA02) :

Reset the count of operating protect circuit to "00":

"RCUT" selection :

"GCUT" selection :

"BCUT" selection :

"CNTX" (or "SCNT") selection :

"COLC" selection :

"TNTC" selection :

Test audio signal ON/OFF (1kHz) :

Self diagnostic display ON/OFF :

- / - - button (on Remote) or **⊖** button (on TV)

⊖ button (on Remote)

CHANNEL **▲/▼** (on TV & Remote)

VOLUME **▲/▼** (on TV & Remote)

MENU button on TV

CALL + CHANNEL button on TV (**▲**)

CALL + CHANNEL button on TV (**▼**)

1 button

2 button

3 button

4 button

5 button

6 button

8 button

9 button

- - - Color thickness correction

note: Displayed differently as shown below, depending on the setting of the receiving color system.

COLP (PAL)

COLC (NTSC)

COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.