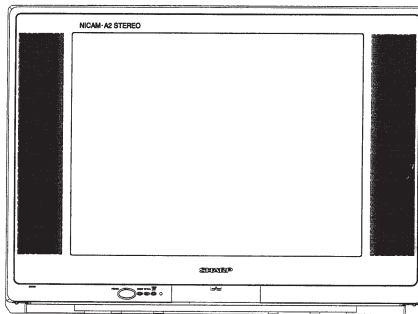


29WF200



29WF500

COLOUR TELEVISION *Chassis No. GB-1*

MODELS 29WF200 29WF500

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

FEATURES

- PAL-B/G, NTSC (AV only) (29WF200)
- World Multi 28 System (29WF500)
- 100-CH Program Memory
- AV Mode (Standard / Dynamic / Soft)
- CATV Hyper Band Ready
- PAL/NTSC 3 Line Comb Filter
- On/Off Velocity Modulation
- Black Stretch Circuit
- Picture Noise Reduction
- White Temp. Select
- Aperture Control
- S-BOOSTER
- OSD-Language (English ONLY)
- On/Off Reminder Timer
- Power Save Mode
- Rear AV-IN 1 & 2, S-Video In, AV Output (Monitor Out), Headphone and Front AV-IN 3
- 3.5L Speaker Box
- AFT
- Component Input Terminal
- AV Stereo (29WF200)
- NICAM/A2 (29WF500)

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WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis. To prevent electric shock, do not remove cover. No user – serviceable parts inside. Refer servicing to qualified service personnel.

SPECIFICATIONS

Convergence	Self Convergence System
Focus	Bi-Potential, Uni-Potential Electrostatic
Sweep Deflection	Magnetic
Intermediate Frequencies	
Picture IF Carrier	38.9MHz
Sound IF Carrier Frequency	
5.5MHz	33.4MHz(29WF200)
6.5MHz	32.4MHz(29WF500)
6.0MHz	32.9MHz(29WF500)
5.5MHz	33.4MHz(29WF500)
4.5MHz	34.4MHz(29WF500)
Colour Sub-Carrier Frequency	
PAL	34.47MHz
NTSC	35.32MHz
Power Input	110 ~ 240V AC 50/60 Hz
Power Consumption	158W(29WF200) 165W(29WF500)
Audio Power Output Rating	10W X 2 (at Max.)
Speaker	
Size	8 x 12 cm + 5cm round (2pcs.)
Aerial Input Impedance	
VHF/UHF	75 ohms Unbalanced
Receiving Channel	
PAL-B/G	
VHF-Channels	E2 thru E12
UHF-Channels	E21 thru E69
CATV	X thru Z +2, S1 thru S41
PAL-B/G, SECAM-B/G	
VHF-Channels	E2 thru E12(29WF500)
UHF-Channels	E21 thru E69(29WF500)
CATV	X thru Z +2, S1 thru S41 (29WF500)
PAL-D/K, SECAM-D/K	
VHF-Channels	R1 thru R12, C1 thru C12(29WF500)
UHF-Channels	21 thru 69, C21 thru C57(29WF500)
PAL-I, SECAM-I	
VHF-Channels	(IRELAND) B thru J(29WF500)
UHF-Channels	(U.K. & H.K.) 21 thru 69(29WF500)
NTSC-M	
VHF-Channels	2 thru 13(US)(29WF500) 1 thru 12 (Japan)(29WF500)
UHF-Channels	14 thru 69(US)(29WF500) 13 thru 62 (Japan)(29WF500)
CATV	A-6 thru A-1, A thru W+23(US)(29WF500) C13 thru C63 (Japan)(29WF500)
Receiving Frequency	
VHF	44.25 MHz thru 423.25 MHz
UHF	431.25 MHz thru 863.25 MHz
Dimensions	Width: 800mm Height: 583mm Depth: 506mm Weight(approx): 47 kg

Specifications are subject to change without prior notice.

IMPORTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service personnel only.

SERVICE OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10K ohm Resistor in series with an insulated wire(such as a test probe) between picture tube dag and 2nd anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.

X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute Minimum. Since certain malfunctions or servicing may produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

1. When repairing the circuit, be sure not to increase the high voltage to more than 33.0kV (at beam 0 μA) for the set.
2. To keep the set in a normal operation, be sure to make it function on 30.0kV ±1.5kV (at beam 1,700 μA) in the case of the set. The set has been factory - Adjusted to the above-mentioned high voltage.
∴ If there is a possibility that the high voltage fluctuates as a result of the repairs, never forget to check for such high voltage after the work.
3. Do not substitute a picture tube with unauthorized types and/or brands which may cause excess X-ray radiation.

BEFORE RETURNING THE RECEIVER

Before returning the receiver to the user, perform the following safety Checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators etc.

ADJUSTMENT PRECAUTIONS

This model's setting are adjusted in two different ways: through the I²C bus control and in the conventional analog manner. The adjustments via the I²C bus control include preset-only items and variable data.

1. Setting the service mode by the microprocessor.

- ① When the JA366 and JA367 are short-circuited, enter into the service mode. (Adjustment through the I²C bus control). (Use JWS Key to set as well).
- ② Press the CH DOWN / UP key on the remote controller to get ready to select the mode one by one.
- ③ Press the CH DOWN / UP key on the remote controller to select the modes reversibly one by one.
- ④ Using the VOLUME UP / DOWN key on the remote controller, the data can be modified.
- ⑤ When the short circuit between the JA366 and JA367 is cut off, it will be released from the service mode.

2. Factory Presetting.

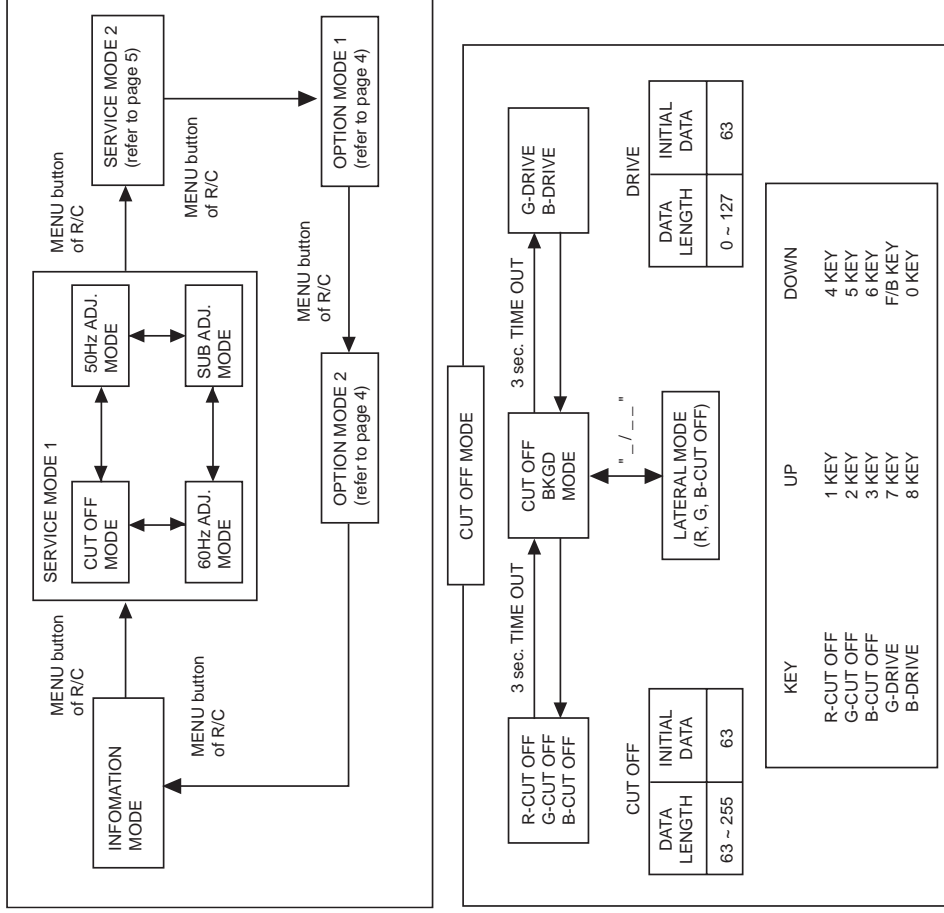
- ① Short JA366 & JA367 and turn on the main power switch. Initial values are automatically preset, only when a new EEPROM is used (Judge with the first 4 bytes).
- ② The initial data are preset as listed in page 5 to 8.
- ③ Make sure whether the data need to modification or not (Initial data).

Note: Once the chassis has been assembly together and ready to be POWER ON for the FIRST TIME, make sure to short JA366 & JA367 to switch to the service mode position first and then turn on the main power switch. (See 2-① above).

Precaution: If haven't done this initialization, it may possibly generate excessive Beam current.

SERVICE MODE

- (1) In the Service Mode, Key is used to select the mode in the following order.



USER DATA IN SERVICE MODE OPTION

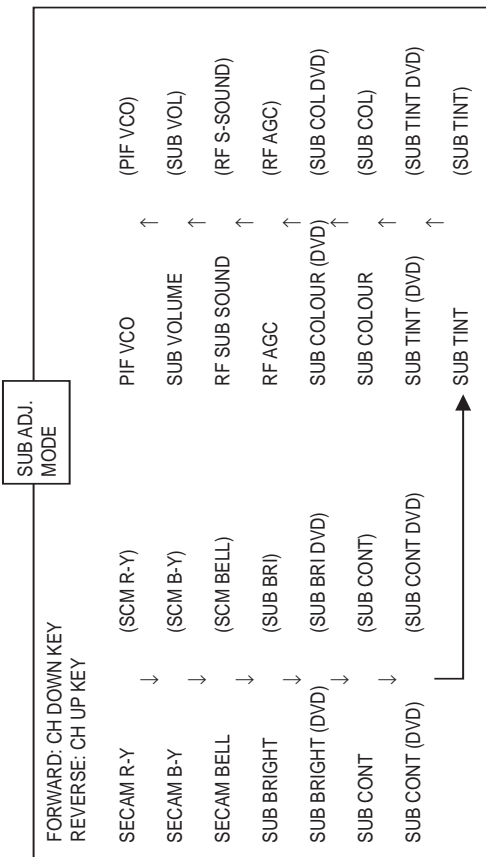
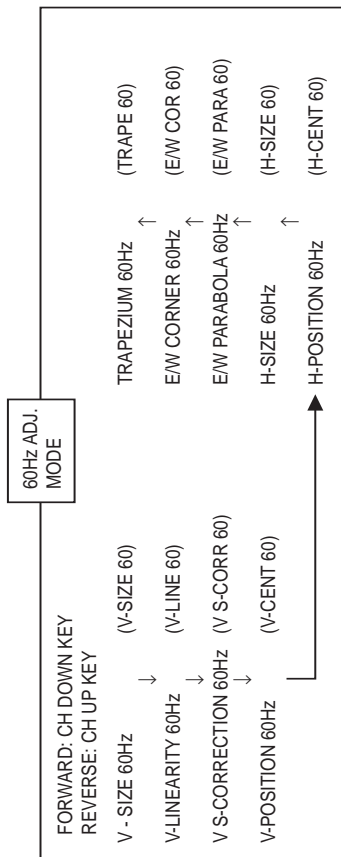
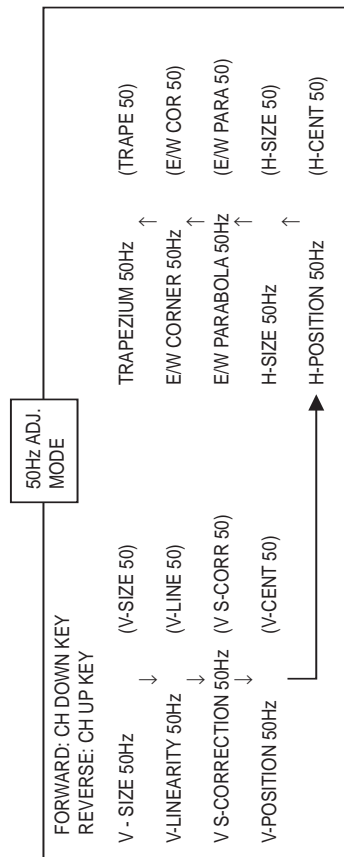
- While SERVICE MODE 1 on, EEPROM DATA will switch to the service data.
- Also, once press the menu button at the remote controller, EEPROM will switch to SERVICE MODE OPTION.
- Once press the menu button again at the remote controller, EEPROM will switch back to SERVICE MODE 1.
- In the service option the user data establish as below.

Service Mode Option MENU

No.	SERVICE MODE	EEPROM ITEM	OSD	DATA	INITIAL DATA
1	OPTION MODE 1	WHITE TEMP SETTING	WT	LOW/HIGH	HIGH
2		S-BOOST OPTION	S-BOOST	OFF/ON	ON
3		PIF FREQ. SETTING	PIF	33.50MHz ~ 58.75MHz	38.9MHz
4		SPRIT/INTER CARRIER	S/I	SPRIT/INTER	SPRIT
5		FORCED COLOUR KILLER	F-ID	OFF/ON	OFF
6		TEXT OPTION	TEXT	OFF/ON	OFF
7		NICAM OPTION	NICAM	OFF/ON	OFF
8		A2 STEREO OPTION	A2	OFF/ON	OFF
9		MONO BILINGUAL OPTION	MONO-BIL	OFF/ON	OFF
10	OPTION MODE 1	SECAM OPTION	SECAM	OFF/ON	ON
11		RF-NTSC OPTION	RF-NTSC	OFF/ON	ON
12		SOUND SYSTEM SETTING	S-SYS	BG / I / DK / M	BG I DK M
13		ROTATION OPTION	ROTATION	OFF/ON	OFF
14		SERCH SPEED SETTING	S SPD	350kHz / 450kHz / 550kHz	450kHz
15		HOTEL MODE OPTION	H MODE	OFF/ON	OFF
16		HOTEL MODE POSITION	H POSITION	0 ~ 99 / —	0
17		HOTEL MODE VOLUME	H VOLUME	0 ~ 60	0
18		OSD LANGUAGE	LANGUAGE	E / C / F / R / M / A	E C F R M A
19		COMB	COMB	OFF/ON	ON
20		AI	AI	OFF/ON	ON

Option setting data

No.	OSD	SETTING DATA	
		29WF200	29WF500
1	WT	HIGH	HIGH
2	S-BOOST	ON	ON
3	PIF	38.9MHz	38.9MHz
4	S/I	SPRIT	SPRIT
5	F-ID	OFF	OFF
6	TEXT	OFF	OFF
7	NICAM	OFF	ON
8	A2	OFF	ON
9	MONO-BIL	OFF	ON
10	SECAM	OFF	ON
11	RF-NTSC	OFF	ON
12	S-SYS	BG	BG I DK M
13	ROTATION	OFF	OFF
14	S SPD	550kHz	550kHz
15	H MODE	OFF	OFF
16	H POSITION	0	0
17	H VOLUME	0	0
18	LANGUAGE	E	E
19	COMB	ON	ON
20	AI	ON	ON



AFTER SHORT JA 366 & JA 367, AND TURN ON THE MAIN POWER SWITCH, READ DATA FROM EEPROM ADDRESS 00H ~ 03H, AND COMPARE TO THE LIST BELOW, IF DIFFERENT, INITIALIZE THE EEPROM.

ADDRESS	DATA
00H	3AH
01H	76H
02H	3BH
03H	76H

1. SERVICE MODE 1.

No.	EEPROM SETTING	DATA LENGTH	OSD	IC	DATA SETTING	INITIAL DATA	SETTING DATA
1	CUT OFF	#1	CUTOFF BKGD	1 CHIP	CUTOFF/DRIVE	#2	—
2	CUT OFF (DVD)	#1	CUTOFF DVD BKGD	1 CHIP	CUTOFF/DRIVE	#2	—
3	V-SIZE (50Hz)	0 ~ 63	V-SIZE 50	1 CHIP	V-SIZE	7	22
4	V-LINEARITY (50Hz)	0 ~ 15	V-LINEARITY	1 CHIP	V-LINEARITY	3	3
5	VS-CORRECTION (50Hz)	0 ~ 15	V-S-CORR 50	1 CHIP	V-S-CORRECTION	5	4
6	V-POSITION (50Hz)	0 ~ 7	V-CENT 50	1 CHIP	V-POSITION	3	4
7	H-POSITION (50Hz)	0 ~ 31	H-CENT 50	1 CHIP	H-POSITION	11	8
8	H-SIZE (50Hz)	0 ~ 63	H-SIZE 50	1 CHIP	H-SIZE	31	50
9	E/W-PARABOLA (50Hz)	0 ~ 63	E/W PAR 50	1 CHIP	E/W PARABOLA	31	35
10	E/W-CORNER (50Hz)	0 ~ 15	E/W COR 50	1 CHIP	E/W CORNER	8	7
11	E/W-TRAPEZIUM (50Hz)	0 ~ 31	E/W TRAPEZIUM	1 CHIP	E/W TRAPEZIUM	5	17
12	SECAM R-Y #3	0 ~ 15	SCM R-Y	1 CHIP	SECAM R-Y	8	8
13	SECAM B-Y #3	0 ~ 15	SCM B-Y	1 CHIP	SECAM B-Y	8	8
14	SECAM BELL	0 ~ 1	SCM BELL	1 CHIP	BELL F0	0	0
15	SUB BRIGHT	0 ~ 127	SUB BRI	1 CHIP	BRIGHTNESS	80	80
16	SUB BRIGHT (DVD)	0 ~ 127	SUB BRI DVD	1 CHIP	BRIGHTNESS	80	80
17	SUB CONT	0 ~ 15	SUB CONT	1 CHIP	SUB CONTRAST	8	4
18	SUB CONT (DVD)	0 ~ 15	SUB CONT DVD	1 CHIP	SUB CONTRAST	8	4
19	SUB TINT #3	0 ~ 127	SUB TINT	1 CHIP	TINT	64	64
20	SUB TINT (DVD) #3	0 ~ 31	SUB TINT DVD	1 CHIP	BB-TINT	16	16
21	SUB COLOUR	0 ~ 127	SUB COL	1 CHIP	COLOUR	45	45
22	SUB COLOUR (DVD)	0 ~ 127	SUB COL DVD	1 CHIP	COLOUR	45	70
23	RF AGC	0 ~ 63	RF AGC	1 CHIP	RF AGC	46	34
24	RF SUB SOUND	0 ~ 127	RF S-SOUND	1 CHIP	IF AUDIO ATT	96	95
25	SUB VOLUME	0 ~ 255	SUB VOL	SOUND	VOLUME	60	255
26	PIF VCO	#4	PIFVCO	1 CHIP	#4	-	-
27	V-SIZE (60Hz)#5	0 ~ 63	V-SIZE 60	1 CHIP	V-SIZE	7	26
28	V-LINEARITY (60Hz)#5	0 ~ 15	V-LINEARITY	1 CHIP	V-LINEARITY	3	3
29	VS-CORRECTION (60Hz)#5	0 ~ 15	V-S-CORR 60	1 CHIP	V-S-CORRECTION	5	6
30	V-POSITION (60Hz)#5	0 ~ 7	V-CENT 60	1 CHIP	V-POSITION	3	2
31	H-POSITION (60Hz)#5	0 ~ 31	H-CENT 60	1 CHIP	H-POSITION	11	10
32	H-SIZE (60Hz)#5	0 ~ 63	H-SIZE 60	1 CHIP	H-SIZE	31	50
33	E/W-PARABOLA (60Hz)#5	0 ~ 63	E/W PAR 60	1 CHIP	E/W PARABOLA	31	32
34	E/W-CORNER (60Hz)#5	0 ~ 15	E/W COR 60	1 CHIP	E/W CORNER	8	5
35	TRAPEZIUM (60Hz)#5	0 ~ 31	TRAPE 60	1 CHIP	E/W TRAPEZIUM	5	17
36	V-ENT	0 ~ 7	V-ENT	1 CHIP	V-ENT	6	6
37	H-ENT	0 ~ 7	H-ENT	1 CHIP	H-ENT	5	5

#1 R CUT (63 ~ 255), G CUT (63 ~ 255), B CUT (63 ~ 255), G DRV (0 ~ 127), B DRV (0 ~ 127)

#2 R CUT (63), G CUT (63), B CUT (63), G DRV (63), B DRV (63)

#3 WHILE ADJUSTING SECAM R-Y, SECAM B-Y AND SUB-TINT, Y-MUTE OF 1 CHIP IS SET TO ON.

#4 WHILE CHOOSING PIFVCO MODE, RF AGC SET TO "0" AND PIFVCO IS SET TO "1".

#5 ADJUSTMENT FOR 60Hz. IS CHANGE AUTOMATICALLY BY 50Hz. ADJUSTMENT AS BELOW.

60Hz. ADJ.	OFFSET VALUE FROM 50Hz ADJ.
V-SIZE (60Hz)	+3
V-LINEARITY (60Hz)	+1
VS-CORRECTION (60Hz)	+1
V-POSITION (60Hz)	-1
H-POSITION (60Hz)	+3
H-SIZE (60Hz)	0
E/W-PARABOLA (60Hz)	+1
E/W-CORNER (60Hz)	0
TRAPEZIUM (60Hz)	0

HOTEL MODE

When hotel mode is ON:

- Maximum volume data is determined by option setting H VOLUME.
- Channel position after POWER ON is determined by option setting H POSITION (if option setting HOTEL-POS is not set, processing is according to last position data).
- PRESET mode is disabled.
- CH SETTING menu is not available.

2. SERVICE MODE 2.

No.	EEPROM SETTING	DATA LENGTH	OSD	IC	DATA SETTING	INITIAL DATA	SETTING DATA
1	WHITE PEEK CONTROL	0 ~ 1	WPS	1 CHIP	WPS	1	1
2	SUB CONTRAST	0 ~ 127	S CONT	1 CHIP	CONTRAST	127	127
3	NTSC PHASE	0 ~ 3	N-P NT	1 CHIP	N PHASE	0	0
4	SUB SHARPNESS (TV)	0 ~ 63	S SHARP T	1 CHIP	SHARPNESS	10	10
5	SUB SHARPNESS (AV)	0 ~ 63	S SHARP A	1 CHIP	SHARPNESS	10	10
6	SUB SHARPNESS (DVD)	0 ~ 63	S SHARP D	1 CHIP	SHARPNESS	10	10
7	RGB CONTRAST	0 ~ 63	RGB CONT	1 CHIP	RGB CONTRAST	32	42
8	Y-DL (B/G B/W)	0 ~ 3	Y B B	1 CHIP	Y-DL	0	0
9	Y-DL (B/G PAL)	0 ~ 3	Y B P	1 CHIP	Y-DL	1	0
10	Y-DL (B/G SECAM)	0 ~ 3	Y B S	1 CHIP	Y-DL	0	0
11	Y-DL (B/G N443)	0 ~ 3	Y B N4	1 CHIP	Y-DL	0	0
12	Y-DL (B/G N358)	0 ~ 3	Y B N3	1 CHIP	Y-DL	0	0
13	Y-DL (LBW)	0 ~ 3	Y B	1 CHIP	Y-DL	0	0
14	Y-DL (L PAL)	0 ~ 3	Y L P	1 CHIP	Y-DL	3	3
15	Y-DL (L SECAM)	0 ~ 3	Y L S	1 CHIP	Y-DL	0	0
16	Y-DL (LN443)	0 ~ 3	Y LN4	1 CHIP	Y-DL	0	0
17	Y-DL (LN358)	0 ~ 3	Y LN3	1 CHIP	Y-DL	0	0
18	Y-DL (DK B/W)	0 ~ 3	Y DK B	1 CHIP	Y-DL	0	0
19	Y-DL (DK PAL)	0 ~ 3	Y DK P	1 CHIP	Y-DL	3	0
20	Y-DL (DK SECAM)	0 ~ 3	Y DK S	1 CHIP	Y-DL	3	0
21	Y-DL (DK N443)	0 ~ 3	Y DK N4	1 CHIP	Y-DL	0	0
22	Y-DL (DK N358)	0 ~ 3	Y DK N3	1 CHIP	Y-DL	0	0
23	Y-DL (M B/W)	0 ~ 3	Y M B	1 CHIP	Y-DL	0	0
24	Y-DL (M PAL)	0 ~ 3	Y M P	1 CHIP	Y-DL	0	0
25	Y-DL (M SECAM)	0 ~ 3	Y M S	1 CHIP	Y-DL	0	0
26	Y-DL (MN443)	0 ~ 3	Y MN4	1 CHIP	Y-DL	1	1
27	Y-DL (MN358)	0 ~ 3	Y MN3	1 CHIP	Y-DL	1	0
28	Y-DL (AV B/W)	0 ~ 3	Y A B	1 CHIP	Y-DL	0	0
29	Y-DL (AV PAL)	0 ~ 3	Y A P	1 CHIP	Y-DL	0	0
30	Y-DL (AV SECAM)	0 ~ 3	Y A S	1 CHIP	Y-DL	0	0
31	Y-DL (AV N443)	0 ~ 3	Y AN4	1 CHIP	Y-DL	0	0
32	Y-DL (AV N358)	0 ~ 3	Y AN3	1 CHIP	Y-DL	0	0
33	SECAM GP-PHASE	0 ~ 3	S G-PHASE	1 CHIP	S GP-PHASE	1	1
34	SECAM ID-SENS	0 ~ 1	S ID-SENS	1 CHIP	S ID-SENS	0	0
35	SECAM ID-MODE	0 ~ 1	S ID-MODE	1 CHIP	S ID-MODE	0	0
36	P/N-ID	0 ~ 1	P N ID	1 CHIP	P/N-ID	0	0
37	6.5M SIF FIX	0 ~ 1	6.5M	1 CHIP	6.5M S-FIX	0	0
38	DC RESTORATION	0 ~ 3	DC REST	1 CHIP	DC RESTORATION	3	3
39	BLACK STRETCH	0 ~ 3	S ST	1 CHIP	BLACK STRETCH	1	2
40	ABL START POINT	0 ~ 3	ABL ST	1 CHIP	ABL START POINT	3	2
41	ABL GAIN	0 ~ 3	ABL GA	1 CHIP	ABL GAIN	2	2
42	COLOUR GAMMA	0 ~ 1	COL G	1 CHIP	COLOUR GAMMA	1	1
43	V RAMP REF. VOLTAGE	0 ~ 1	V RAMP	1 CHIP	V RAMP	1	1
44	VSM PHASE	0 ~ 1	VSM PHASE	1 CHIP	VSM PHASE	0	0
45	AUDIO ATT	0 ~ 127	ATT	1 CHIP	IF AUDIO ATT	0	0
46	DETAILS CORING	0 ~ 63	WECOR	COMB/AV	WECOR	32	5
47	DETAILS DIFF FREQ.	0 ~ 1	DCNG	COMB/AV	DCNG	1	1
48	DETAILS GAIN	0 ~ 7	SPAL	COMB/AV	SPAL	6	2

No.	EEPROM SETTING	DATA LENGTH	OSD	IC	DATA SETTING	INITIAL DATA	SETTING DATA
105	VSM GAIN(AVM3)	0 ~ 7	VG1SP3	1 CHIP	VSM GAIN	7	7
106	GAMMA POINT(AVM3)	0 ~ 3	G-POINT3	1 CHIP	GAMMA POINT	1	2
107	TREBLE(AVM3)	0 ~ 60	TRESSP1	SOUND	TREBLE	35	32
108	BASS(AVM3)	0 ~ 60	BASS3SP1	SOUND	BASS	35	30
109	SURR EFFECT(AVM3)	0 ~ 15	EF3SP1	SOUND	SURR LEVEL	15	10
110	SURR LOOP(AVM3)	0 ~ 1	LO3SP1	SOUND	LOOP	0	0
111	S-BOOST MER	0 ~ 255	MER	-	-	127	80
112	S-BOOST MEL1	0 ~ 255	MEL1	-	-	180	150
113	S-BOOST MEL2	0 ~ 255	MEL2	-	-	195	156
114	S-BOOST MEL3	0 ~ 255	MEL3	-	-	210	163
115	S-BOOST MEL4	0 ~ 255	MEL4	-	-	225	165
116	S-BOOST MEL5	0 ~ 255	MEL5	-	-	240	170
117	S-BOOST MEL6	0 ~ 255	MEL6	-	-	255	180
118	S-BOOST START POINT	0 ~ 255	SSTP	-	-	25	21
119	S-BOOST STOP POINT	0 ~ 255	SSPP	-	-	45	60
120	SIBOOST STEP POINT	0 ~ 255	SSSTEP	-	-	5	7
121	AUDIO AGC	0 ~ 1	SUR AGC	SOUND	AGC	1	1
122	NICAM FM	0 ~ 255	NICAM FM	SOUND	NICAM	80	80

No.	EEPROM SETTING	DATA LENGTH	OSD	IC	DATA SETTING	INITIAL DATA	SETTING DATA
49	DETAILS LIMIT	0 ~ 15	PKLM	COMB/AI	PKLM	8	4
50	OUTLINE DFF FREQ.	0 ~ 1	YDO	COMB/AI	YDO	0	1
51	OUTLINE CORING	0 ~ 7	RCOR	COMB/AI	RCOR	5	4
52	OUTLINE CORRECTION	0 ~ 15	RMV	COMB/AI	RMV	14	14
53	DETAILS OUTLINE	0 ~ 255	GAINA	COMB/AI	GAINA	64	90
54	YNR CORING	0 ~ 7	BLC	COMB/AI	BLC	4	0
55	CHROMA BPF TV	0 ~ 3	BPS T	COMB/AI	BPS T	0	3
56	CHROMA BPF AV	0 ~ 3	BPS A	COMB/AI	BPS A	0	0
57	Y-DELAY TV	0 ~ 7	YDL T	COMB/AI	YDL T	4	4
58	Y-DELAY AV	0 ~ 7	YDL A	COMB/AI	YDL A	3	3
59	V OUTLINE LIMIT	0 ~ 15	VPL	COMB/AI	VPL	8	8
60	V OUTLINE CORING	0 ~ 15	KOA	COMB/AI	KOA	2	7
61	V OUTLINE DETECT	0 ~ 1	YHO	COMB/AI	YHO	1	1
62	YNR DETECT GAIN	0 ~ 3	YNG	COMB/AI	YNG	2	0
63	YNR CORING	0 ~ 15	COR	COMB/AI	COR	8	1
64	B-STRETCH REFLECT	0 ~ 3	APSL	COMB/AI	APSL	1	1
65	B-STRETCH THRE	0 ~ 63	APMN	COMB/AI	APMN	20	20
66	PEDESTAL CORRECTION	0 ~ 7	PHD	COMB/AI	PHD	6	6
67	B-STRETCH INITIAL	0 ~ 31	APA	COMB/AI	APA	6	4
68	AION/OFF	0 ~ 1	AION	COMB/AI	AION	0	1
69	HISTGRAM LIMIT	0 ~ 63	LMT	COMB/AI	LMT	12	15
70	Y-MIN DETECT GAIN	0 ~ 3	MNSL	COMB/AI	MNSL	2	1
71	Y-MIN LIMIT	0 ~ 63	MINLT	COMB/AI	MINLT	32	32
72	BASE AMOUNT	0 ~ 15	BSE	COMB/AI	BSE	15	15
73	Y-MIN DETECT OFFSET	0 ~ 15	MNOFT	COMB/AI	MNOFT	6	9
74	APL LAST GAIN	0 ~ 1	APGA	COMB/AI	APGA	1	1
75	APL LIMIT LAST GAIN	0 ~ 63	APLT	COMB/AI	APLT	10	32
76	APL SWITCH LAST GAIN	0 ~ 127	APDT	COMB/AI	APDT	37	10
77	LOW APL COL LEVEL	0 ~ 63	APC	COMB/AI	APC	28	10
78	LOW APL COL GAIN	0 ~ 3	CAS	COMB/AI	CAS	0	2
79	HIGH APL COL LEVEL	0 ~ 63	APU	COMB/AI	APU	54	5
80	HIGH APL COL GAIN	0 ~ 3	CUS	COMB/AI	CUS	2	2
81	PRESALE SCART	0 ~ 127	PRE S	NICAM	PRESALE	24	24
82	PRESALE FM/AM	0 ~ 127	PRE F	NICAM	PRESALE	10	10
83	PRESALE NICAM	0 ~ 127	PRE N	NICAM	PRESALE	63	24
84	AUTO VOLUME CORR	0 ~ 3	AVC	NICAM	PRESALE	0	0
85	VOLUME NICAM BG	0 ~ 127	BG L	NICAM	VOLUME	127	113
86	VOLUME NICAM I	0 ~ 127	IL	NICAM	VOLUME	127	103
87	VOLUME NICAM DK	0 ~ 127	DK L	NICAM	VOLUME	127	95
88	VOLUME IGR BG	0 ~ 127	IGR L	NICAM	VOLUME	127	125
89	VOLUME FM	0 ~ 127	FML	NICAM	VOLUME	127	125
90	OSD H-POSITION	0 ~ 127	OSD-H	-	-	26	25
91	TEXT H-POSITION	0 ~ 127	TEXT-H	-	-	34	10
92	TEXT V-POSITION	0 ~ 63	TEXT-L	-	-	35	37
93	VSM GAIN(AVM1)	0 ~ 7	VG1SP1	1 CHIP	VSM GAIN	3	7
94	GAMMA POINT(AVM1)	0 ~ 3	G-POINT1	1 CHIP	GAMMA POINT	3	2
95	TREBLE(AVM1)	0 ~ 60	TRE1SP1	SOUND	TREBLE	25	31
96	BASS(AVM1)	0 ~ 60	BASS1SP1	SOUND	BASS	25	28
97	SURR EFFECT(AVM1)	0 ~ 15	EF1SP1	SOUND	SURR LEVEL	15	10
98	SURR LOOP(AVM1)	0 ~ 1	LO1SP1	SOUND	LOOP	0	0
99	VSM GAIN(AVM2)	0 ~ 7	VG1SP2	1 CHIP	VSM GAIN	5	4
100	GAMMA POINT(AVM2)	0 ~ 3	G-POINT2	1 CHIP	GAMMA POINT	2	2
101	TREBLE(AVM2)	0 ~ 60	TRE2SP1	SOUND	TREBLE	30	30
102	BASS(AVM2)	0 ~ 60	BASS2SP1	SOUND	BASS	32	30
103	SURR EFFECT(AVM2)	0 ~ 15	EF2SP1	SOUND	SURR LEVEL	15	10
104	SURR LOOP(AVM2)	0 ~ 1	LO2SP1	SOUND	LOOP	0	0

INITIAL SETTING

(1) Execute MCL 1/2 key to set the following data in EEPROM.

R/C CODE TV-CH.	SREC/SRAC/SY1			SREC-SCA		
	CH-No.	MCL 1 (R/C CODE 117h) Fv (MHz)	S-SYSTEM	CH-No.	MCL 2 (R/C CODE 169h) Fv (MHz)	S-SYSTEM
0	SKIP OFF FREE					
1	E-2	48.25	5.5 B/G	AU-0	590.25	5.5 B/G
2	E-4/B-3	62.25	5.5 B/G	AU-2	46.25	5.5 B/G
3	OIR-3	77.25	6.5 D/K	AU-3	64.25	5.5 B/G
4	E-5	175.25	5.5 B/G	AU-4	86.25	5.5 B/G
5	E-6/B-5	182.25	5.5 B/G	AU-5A	95.25	5.5 B/G
6	OIR-7	183.25	6.5 D/K	AU-6	138.25	5.5 B/G
7	OIR-8	191.25	6.5 D/K	AU-7	175.25	5.5 B/G
8	E-8/B-7	196.25	5.5 B/G	AU-8	182.25	5.5 B/G
9	J-9	199.25	4.5 M	AU-9	189.25	5.5 B/G
10	E-10/B-9	210.25	5.5 B/G	AU-10	196.25	5.5 B/G
11	E-12/B-11	224.25	5.5 B/G	AU-11	209.25	5.5 B/G
12	E-21	471.25	5.5 B/G		216.25	5.5 B/G
13	I-23	487.25	6.0 I		SKIP OFF FREE	
14	E-25	503.25	5.5 B/G		SKIP OFF FREE	
15	E-34	575.25	5.5 B/G		SKIP OFF FREE	
16	E-35	583.25	5.5 B/G		SKIP OFF FREE	
17	E-37	599.25	5.5 B/G		SKIP OFF FREE	
18	J-38	621.25	4.5 M		SKIP OFF FREE	
19	OIR-42	639.25	6.5 D/K		SKIP OFF FREE	
20	B-50	703.25	5.5 B/G		SKIP OFF FREE	
21	I-54	735.25	6.0 I		SKIP OFF FREE	
22	E-58	767.25	5.5 B/G		SKIP OFF FREE	
23	E-64	815.25	5.5 B/G		SKIP OFF FREE	
24	I-69	855.25	6.0 I		SKIP OFF FREE	
25	E-69	855.25	5.5 B/G		SKIP OFF FREE	
26	US-2	55.25	4.5 M		SKIP OFF FREE	
27	A-6	83.25	4.5 M		SKIP OFF FREE	
28	JA-6	183.25	4.5 M	WE-28	527.25	5.5 B/G
29	JA-8	193.25	4.5 M		SKIP OFF FREE	
30	JA-12	217.25	4.5 M		SKIP OFF FREE	
31	US-14	471.25	4.5 M		SKIP OFF FREE	
32	JA-14	477.25	4.5 M		SKIP OFF FREE	
33	JA-50	693.25	4.5 M		SKIP OFF FREE	
34	US-83	885.25	4.5 M		SKIP OFF FREE	
35	S-2	112.25	5.5 B/G		SKIP OFF FREE	
36	S-10	168.25	5.5 B/G	AU-37	590.25	5.5 B/G
37		SKIP OFF FREE			SKIP OFF FREE	
38	S-20	294.25	5.5 B/G		SKIP OFF FREE	
39	S-41	463.25	5.5 B/G		SKIP OFF FREE	
40		SKIP OFF FREE			SKIP OFF FREE	
41	B-43	647.25	5.5 B/G	E-2	48.25	5.5 B/G
42	B-45	663.25	5.5 B/G	WE-4	62.25	5.5 B/G
43	B-47	679.25	5.5 B/G	OI-3	77.25	6.5 D/K
44	E-5	174.95	5.5 B/G	E-5	175.25	5.5 B/G
45	E-5	175.55	5.5 B/G	OIR-7	183.25	6.5 D/K
46		SKIP OFF FREE		OIR-8	191.25	6.5 D/K
47		SKIP OFF FREE		E-10	210.25	5.5 B/G
48		SKIP OFF FREE		E-12	224.25	5.5 B/G
49		SKIP OFF FREE		I-23	487.25	6.0 I
50		SKIP OFF FREE		WE-25	503.25	5.5 B/G
51		SKIP OFF FREE		E-34	575.25	5.5 B/G

R/C CODE TV-CH.	SREC/SRAC/SY1			SREC-SCA		
	CH-No.	MCL 1 (R/C CODE 117h) Fv (MHz)	S-SYSTEM	CH-No.	MCL 2 (R/C CODE 169h) Fv (MHz)	S-SYSTEM
52		SKIP OFF FREE		E-37	599.25	5.5 B/G
53		SKIP OFF FREE		JPN-38	621.25	4.5 M
54		SKIP OFF FREE		OI-42	639.25	6.5 D/K
55		SKIP OFF FREE		I-54	735.25	6.0 I
56		SKIP OFF FREE		E-58	767.25	5.5 B/G
57		SKIP OFF FREE		WE-64	815.25	5.5 B/G
58		SKIP OFF FREE		I-69	855.25	6.0 I
59		SKIP OFF FREE		JA-1	91.25	4.5 M
60		SKIP OFF FREE		JA-6	183.25	4.5 M
61		SKIP OFF FREE		JA-8	193.25	4.5 M
62		SKIP OFF FREE		JA-12	217.25	4.5 M
63		SKIP OFF FREE		US-14	471.25	4.5 M
64		SKIP OFF FREE		JA-50	693.25	4.5 M
65		SKIP OFF FREE		S-2	112.25	5.5 B/G
66		SKIP OFF FREE		S-10	168.25	5.5 B/G
67		SKIP OFF FREE		S-20	294.25	5.5 B/G
68		SKIP OFF FREE		S-41	463.25	5.5 B/G
69		SKIP OFF FREE		E-5	174.95	5.5 B/G
70		SKIP OFF FREE		E-5	175.55	5.5 B/G
71		SKIP OFF FREE				
99		SKIP OFF FREE				

SHIPPING SETTING & CHECKING

(1) The following default data has been factory-setting for the EEPROM.

R/C	238 (Eeh)
S-SYSTEM	B/G
LANGUAGE SELECT	ENGLISH

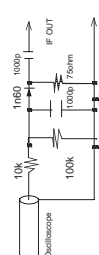
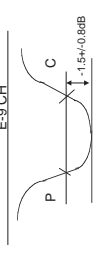
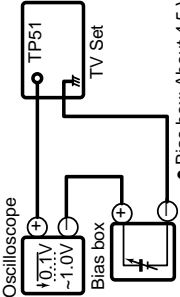
ITEM	DATA SETTING	ITEM	DATA SETTING
LAST POWER	ON	VM	ON
LAST TV/AV MODE	TV	TEXT	1
LAST CH	CH1	ON TIMER	IN ACTIVE
FLASH BACK	CH1	ON TIMER CH	IN ACTIVE
FAVORITE CH1	CH10	ON TIMER VOLUME	IN ACTIVE
FAVORITE CH2	CH20	REMINDER	IN ACTIVE
FAVORITE CH3	CH30	AFT	ALL CH ON
FAVORITE CH4	CH40	COLOUR SYSTEM	ALL CH AUTO
1 DIGIT/2 DIGIT	2 DIGIT	SKIP	ALL CH OFF
VOLUME	0	NICAM ON/OFF	ALL CH ON
ROTATION	0	NICAM STEREO MODE	ALL CH STEREO
SAVE	OFF	NICAM BILINGUAL MODE	ALL CH M1
AV MODE	2	A2 ON/OFF	ALL CH ON
BALANCE	0	A2 STEREO MODE	ALL CH STEREO
BLUE BACK	OFF	A2 BILINGUAL MODE	ALL CH MAIN

(2) Normal setting for AV MODE.

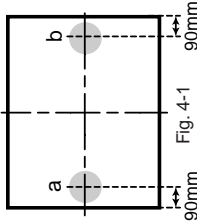
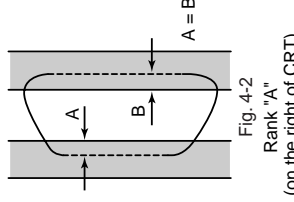
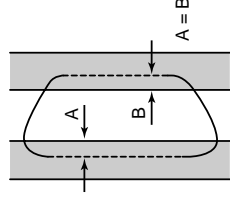
MODE	1	2	3
SOFT	SOFT	STANDARD	DYNAMIC
CONTRAST	50	60	60
COLOUR	-5	0	10
BRIGHT	0	0	0
TINT	0	0	0
SHARPNESS	-5	0	5
PEICTURE NR	ON	OFF	OFF
WHITE TEMP	0	0	0
SURROUND	OFF	OFF	ON
TREBLE	#	#	#
BASS	#	#	#
S-BOOSTER	OFF	ON	ON

SERVICE MODE DATA

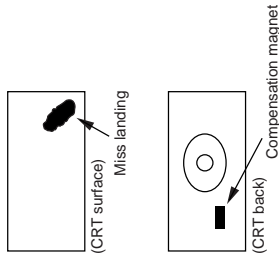
PIF ADJUSTMENT

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	TUNER IFT (PRESET) TU200	<ol style="list-style-type: none"> Get the tuner ready to receive the CH. E -9 signal, but with no signal input. Adjust the PLL data. Connect the sweep generator's output cable to the tuner antenna. (RF SWEEP) Adjust the sweep generator's to 80dBµV. Connect the response lead (use LOW IMPEDANCE probe with wave detector; see Fig.1) to the tuner's IF output terminal. (This terminal must have the probe alone connected). Set the RF AGC to 0 - 6 V with no saturation with the waveform. Adjust the tuner IF coil to obtain the waveform as shown in Fig. 2. <p>Note: Be sure to keep the tuner cover in position during this adjustment.</p>	 <p style="text-align: center;">Fig. 1</p>  <p style="text-align: center;">Fig. 2</p>
2	RF-AGC TAKE OVER POINT ADJUSTMENT (IC BUS CONTROL)	<ol style="list-style-type: none"> Receive "PAL COLOUR BAR" signal. <ul style="list-style-type: none"> Signal Strength: 54 ± 1 dBµV (75 ohm open) Connect the oscilloscope to TP51 (Tuner's AGC Terminal) as shown in Fig. 3. <div style="text-align: center;">  <p style="text-align: center;">● Bias box: About 4.5 V</p> <p style="text-align: center;">Fig. 3</p> </div> Call "RF-AGC" mode in service mode. Adjust the "RF-AGC" bus data to obtain the Tuner output pin drop $0.1V \sim 1.0V$ below maximum voltage. Change the antenna input signal to 63-67dBµV, and make sure there is no noise. Turn up the input signal to 90-95 dBµV to be sure that there is no cross modulation beat. 	<p>Note: For the 50 W signal strength gauge, when not using 50/75 impedance adapter, signal strength is 52±1dBµV(75 W open), instead of 54±1dBµV (75 W open).</p> <p>Precaution: The loss of using impedance adapter.</p>

PURITY ADJUSTMENT

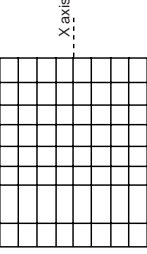
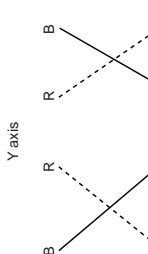
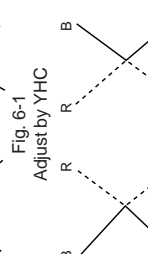
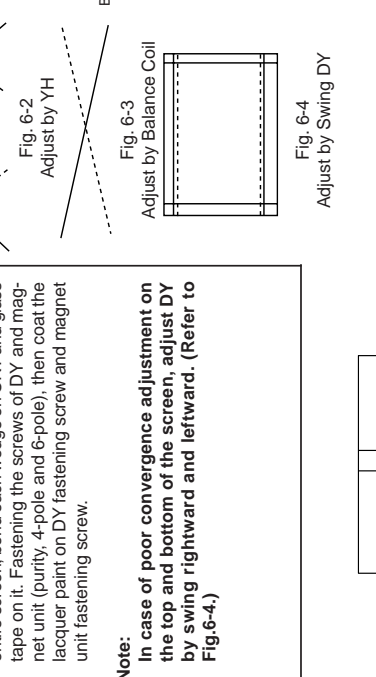
No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	PURITY ADJ.	<p>1. Select the green monocolour screen with remote controller, and set the beam current of 1.7mA with the contrast control.</p> <p>2. Degauss the CRT enough with the degaussing coil. NOTE: Horizontal = 0 Vertical = 0.1</p> <p>Adjustable magnetic field is shown in P8-1.</p> <p>3. The purity magnet must be previously set at the zero magnetic field, and the convergence must be adjusted to be rough.</p> <p>4. Observe the points a, b as shown in Fig. 4-1 through the microscope. With P-MG, adjust it to the center - rank A. Move DY fore and aft to set the landing at the point. (rank A)</p> <p>5. If the a/b balance is poor, compensate it to the center "Rank AB".</p> <p>6. Align it to zero, keeping the raster rotation in the east direction.</p> <p>7. Tighten the deflection coil fastening screws. ● Tightening torque: 108 ± 20 N (11 ± 2 kgf)</p> <p>8. Checking the CRT corner area, bond the magnetic sheet to set the landing at Rank A for compensation.</p> <p>Note: Apply the adjustment after aging with the beam current 1700 ± 50 μA or more for 30 minutes or more.</p> <p>Note: Select the service mode, and press the monocolour key of R/C for process, and the monocolour screen (green) will be selected.</p>	 <p>Fig. 4-1</p>  <p>Fig. 4-2 Rank "A" (on the right of CRT)</p>  <p>Fig. 4-3 Rank "A" (on the left of CRT)</p>
		<p>* Every push of the monocolour key, changes the screen as follows.</p> <pre> graph TD A[Monocolour GREEN screen] --> B[Monocolour BLUE screen] B --> C[Monocolour RED screen] C --> D[Monocolour screen release] D --> A </pre>	<p>* Continuously press the monocolour key 1 second or more, and the monocolour mode will be selected without the service mode.</p> <p>* Even with TEXT key or "R/G/Cy" key, it can be directly switched to each monocolour screen.</p>
		<p>* Adjustment for uniformity is mentioned in another content. Please refer to the following page.</p>	

PURITY ADJUSTMENT (Continued)


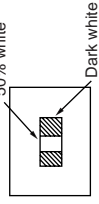
No.	Adjusting point	Adjusting condition/procedure	Waveform or others
2	Uniformity (To perform after the purity and convergence adjustment.)	<p>Before adjustment begin, Horizontal magnetic field = 0G Vertical magnetic field = Each destination's adjustment magnetic field. Make sure degauss it.</p> <p>(North direction Red uniformity)</p> <ol style="list-style-type: none"> 1. Horizontal mf = Set to monocolour screen Red and adjust to + 0.25G. 2. Pay attention to the edge of CRT, if the landing is poor, adjust by attaching the compensation magnet at the back of the CRT. (Refer to Fig.5) <p>(South direction Red uniformity)</p> <ol style="list-style-type: none"> 1. Horizontal mf = Set to monocolour screen Red and adjust to - 0.25G. 2. Pay attention to the edge of CRT, if the landing is poor, adjust by attaching the compensation magnet at the back of the CRT. <p>(The same method is applied for adjustment of monocolour screen Blue for blue uniformity, and changing both the magnetic field for North and South direction.)</p> <p>* During the pasting of compensation magnet, use the crosshatch pattern. Make sure there is no blur or bend lines occur. If the blur or bend are serious, adjust the location of compensation magnet to make it better.</p>	 <p>Fig. 5</p>

CONVERGENCE ADJUSTMENT

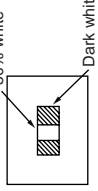
FOCUS ADJUSTMENT

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	CONVERGENCE ADJ. (To be done after the purity adjustment.)	<p>1. Receive the "Crosshatch Pattern" signal.</p> <p>2. Using the remote controller, call NORMAL mode.</p> <p>Static convergence</p> <ol style="list-style-type: none"> 1. Overlap blue and red with the open-/closing angle and rotation of the 4 pole magnet. 2. Overlap green on blue and red with the open-/closing angle and rotation of the 6 pole magnet. <p>Dynamic convergence</p> <ol style="list-style-type: none"> 1. Fix the wedges in a position so that the deflection yolk neck is at the center of top bottom and left right. (Straight line and without any blur horizontal / vertical line.) 2. Adjust the Red, Blue, upper and lower of the center Y axis on the screen by using the Volume(YH, YHC) at the deflection yolk. (Refer to Fig.6-1 and 6-2.) 3. If the Horizontal Red, Blue (XV) on the screen center X axis is shifted, correct the Red, Blue (XV) by adjusting the balance coil on the deflection yolk. (Refer to Fig.6-3.) 4. After confirm that there is no problems on the entire screen, bond each wedge on CRT and glass tape on it. Fastening the screws of DY and magnet unit (purity, 4-pole and 6-pole), then coat the lacquer paint on DY fastening screw and magnet unit fastening screw. <p>Note: In case of poor convergence adjustment on the top and bottom of the screen, adjust DY by swing rightward and leftward. (Refer to Fig.6-4.)</p>	 <p>Fig. 6-1 Adjust by YHC</p>  <p>Fig. 6-2 Adjust by YH</p>  <p>Fig. 6-3 Adjust by Balance Coil</p>  <p>Fig. 6-4 Adjust by Swing DY</p>

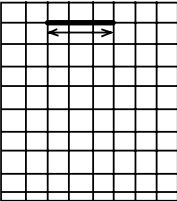
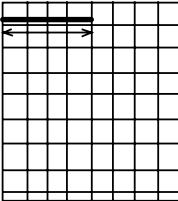
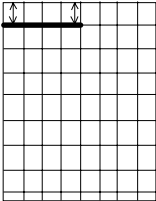
CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT (Continued)

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
4	SUB-BRIGHT-ADJUSTMENT (I ² C BUS CONTROL) (AV-IN SIGNAL)	<ol style="list-style-type: none"> 1. Receive the window pattern with AV input. 2. Make the image normal with the remote controller. 3. Select the SUB-BRIGHT adjustment mode with the remote controller, and adjust the right dark white area of the window pattern to 5.5 ± 0.5 cd. 	<p>Reference: * When E-2 CH (Crosshatch pattern) or equivalent signal is received.</p> <ol style="list-style-type: none"> 1. Make the image normal with the remote controller. 2. Adjust the 4rd (1 thru 5 from the left) black of the window pattern to sink. 
5	SUB-BRIGHT-ADJUSTMENT (I ² C BUS CONTROL) (DVD SIGNAL)	<ol style="list-style-type: none"> 1. Select DVD mode. 2. Receive the signal of the DVD signal generator. (Component signal) (Window pattern) 3. Make the image normal with the remote controller. 4. Select the SUB-BRIGHT adjustment mode (DVD), and adjust the right dark white area of the window pattern to 2.8 ± 0.5 cd of the window pattern. 	<p>Note 3: Use "Y" of Minolta colour analyzer CA-100 in adjustment.</p> <p>Note 4: Use the window pattern of the signal generator SX-1006 for adjustment.</p> 
6	SUB-CONTRAST ADJUSTMENT (AV-IN SIGNAL)	<ol style="list-style-type: none"> 1. Receive the window pattern with AV input. 2. Make the image normal with the remote controller. 3. Select the SUB-CONTRAST adjustment mode with the remote controller, and adjust 50% white to 165 ± 10cd. 	
7	SUB-CONTRAST ADJUSTMENT (DVD SIGNAL)	<ol style="list-style-type: none"> 1. Select the DVD mode. 2. Receive the signal of the DVD signal generator. (Component signal) (Window pattern) 3. Select the SUB-CONTRAST adjustment mode (DVD) with the remote controller, and adjust 50% white to 165 ± 10 cd. 	

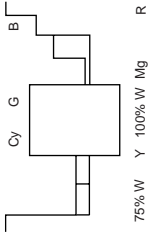
CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

No.	Adjusting point	Adjusting condition/procedure	Waveform or others																														
1	CRT CUTOFF ADJUSTMENT (I ² C BUS CONTROL)	<ol style="list-style-type: none"> 1. Receive "WHITE" Pattern with Colour Burst signal. 2. Select P-NORM with the remote controller. 3. Select the CUT OFF BKGD mode at the service mode. 4. Select the screen VR 0/10. 5. Press "j,-" key of the remote controller to select the lateral in-line mode. 6. Turn the screen VR clockwise, and adjust the first lighting lateral in-line raster to slightly light. 7. Adjust the CUT OFF data of two other colours, and coarsely adjust the lateral in-line to become white. (Note 1) 8. Turn the screen VR in the opposite direction to the point where the lateral in-line raster goes out. <p>Note 1: Apply the adjustment after aging with the beam current 1,700±50µA or more for 30 min or more.</p> <ol style="list-style-type: none"> 9. Press "j,-" key of the remote controller to select the normal mode. 	<p>* Before doing adjustment, make sure the R/G/B-cut and the B/G-Drive is at initial value.</p> <p>On the monocolour screen of white or green.</p>																														
2	WHITE BALANCE BACKGROUND BUS ADJUSTMENT (AV-IN SIGNAL)	<ol style="list-style-type: none"> 1. Receive "WHITE" Pattern with COLOUR BURST signal. 2. Select P-NORM with the remote controller. 3. Connect the beam ammeter between TP1601 and TP1602. 4. Coarsely confirm the beam current to approx. 1.7mA. 5. Receive the window pattern with AV input. (PAL burst is generated with the signal generator.) 6. With the data of G-drive and B-drive, adjust the colour temperature 12,300°K of the 50% white. 7. Adjust the right dark area of the window to 17,000°K with R-cut off, G-cut off and B-cut off. 8. Read just the colour temperature at the 50% white. 9. Check 12,300°K at the dark white. <p>Note 1 : Apply this adjustment after aging with the beam current 1,700±50µA or more for 30 min or more. (On the white or green minocolour screen)</p> <p>* The colour temperature is based on the shipment initial setting table.</p>	<p>Note 1: Data up/down is possible with the below comparison.</p> <table border="0"> <tr><td>R CUT OFF</td><td>UP</td><td>"1"KEY</td></tr> <tr><td></td><td>DOWN</td><td>"4"KEY</td></tr> <tr><td>G CUT OFF</td><td>UP</td><td>"2"KEY</td></tr> <tr><td></td><td>DOWN</td><td>"5"KEY</td></tr> <tr><td>B CUT OFF</td><td>UP</td><td>"3"KEY</td></tr> <tr><td></td><td>DOWN</td><td>"6"KEY</td></tr> <tr><td>G-DRIVE</td><td>UP</td><td>"7"KEY</td></tr> <tr><td></td><td>DOWN</td><td>"8"KEY</td></tr> <tr><td>B-DRIVE</td><td>UP</td><td>"9"KEY</td></tr> <tr><td></td><td>DOWN</td><td>"0"KEY</td></tr> </table> <p>*18,000°K X : 0.255 Y : 0.255 *17,000°K X : 0.261 Y : 0.261 *12,300°K X : 0.272 Y : 0.275 (With Minolta colour thermometer CA-100)</p> <p>Note 2: Use the window pattern of the signal generator SX-1006 for adjustment. (PAL and colour burst are present.)</p> 	R CUT OFF	UP	"1"KEY		DOWN	"4"KEY	G CUT OFF	UP	"2"KEY		DOWN	"5"KEY	B CUT OFF	UP	"3"KEY		DOWN	"6"KEY	G-DRIVE	UP	"7"KEY		DOWN	"8"KEY	B-DRIVE	UP	"9"KEY		DOWN	"0"KEY
R CUT OFF	UP	"1"KEY																															
	DOWN	"4"KEY																															
G CUT OFF	UP	"2"KEY																															
	DOWN	"5"KEY																															
B CUT OFF	UP	"3"KEY																															
	DOWN	"6"KEY																															
G-DRIVE	UP	"7"KEY																															
	DOWN	"8"KEY																															
B-DRIVE	UP	"9"KEY																															
	DOWN	"0"KEY																															
3	WHITE BALANCE BACKGROUND BUS ADJUSTMENT (DVD SIGNAL)	<ol style="list-style-type: none"> 1. The window pattern is received with DVD signal (component signal). 2. Apply the adjustment in the same manners as 2 (AV-IN SIGNAL) and subsequence above. (G-DRIVE, B-DRIVE, R-CUT OFF, G-CUT OFF, B-CUT OFF) <p>Apply the adjustment after the end of 2 (AV-IN SIGNAL).</p>																															

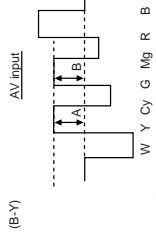
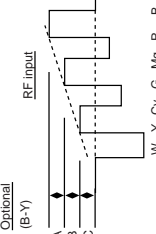
HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	MAIN SCREEN ADJUSTMENT V-AMP 50 V-LINE 50 V S-CORR 50 V-CENT 50 H-CENT 50 H-SIZE 50 E/W-PAR 50 E/W-COR 50 TRAPE 50 V-EHT H-EHT OTHER	<p>Adjust the overscan to 8.5%. (monoscope)</p> <p>Adjust the linearity to the best. (monoscope)</p> <p>Already preset. (Adjust this unless the linearity is achieved.) (monoscope)</p> <p>Align the center of the screen to the geometric center of CRT. (monoscope)</p> <p>Align the center of the screen to the geometric center of CRT. (monoscope)</p> <p>Adjust the overscan to 8.5%. (monoscope)</p> <p>Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the middle 4 blocks are straight. (Refer to Fig.7-1)(crosshatch)</p> <p>Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the top are straight. (Refer to Fig.7-2)(crosshatch)</p> <p>Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the center area of the second vertical line-edge of screen) and D2 (top area of the second vertical line-edge of screen) are same. (Refer to Fig.7-3)</p> <p>Already preset.</p> <p>Already preset.</p> <p>On the items of V-AMP 60, V-LINE 60, V S-CORR 60, V-CENT 60, H-CENT 60, H-SIZE 60, E/W-PAR 60, E/W-COR 60 and TRAPE 60, the data is automatically input if the 50Hz mode adjustment is done.</p> <p>however, if it is largely deviated when it is check in the 60Hz. Mode Readjust in the 60Hz. Mode.</p> <p>Attention: Don't change 50Hz mode data after adjust 60Hz mode data. Because 60Hz mode data follow the 50Hz mode data automatically.</p>	 <p>Fig. 7-1</p>  <p>Fig. 7-2</p>  <p>Fig. 7-3</p>

PAL CHROMA ADJUSTMENT

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	SUB COLOUR (FC BUS CONTROL)	<ol style="list-style-type: none"> Receive "PAL Colour Bar" signal. Make the image normal with the remote controller. Connect the oscilloscope to IC850#9pin. (Using 10:1 Probe) Range : 2 V/Div Sweep Time : 20 μ sec/Div Set the sub-colour adjustment mode with the remote controller, and vary the sub colour data to make 75% W of the colour bar and RED at the same level for adjustment shown in Fig.8-1. 	 <p>Fig. 8-1</p>

NTSC CHROMA ADJUSTMENT

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	SUB-TINT (FC BUS CONTROL)	<ol style="list-style-type: none"> Select the sub-tint adjustment mode (automatic Y cut) to receive the "NTSC Colour Bar" (AV input). Connect the oscilloscope to TP47B <ul style="list-style-type: none"> Range : 20mV/Div. (AC)(Use Probe 10:1) Sweep time : 20 μsec/Div. Vary the sub tint data to adjust the waveform to be gained as shown in Fig.9-1. TP47B.....(KY) 6pin <p>NOTE: (Optional) if using RF input, please refer to the Fig. 9-2 waveform.</p>	 <p>Fig. 9-1</p>  <p>Fig. 9-2</p>

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO)

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	CONTRAST key	<ol style="list-style-type: none"> 1. Receive "Monoscope Pattern" signal. 2. Press to MENU mode, then Select Picture Mode and set to select CONTRAST. 3. Press Volume Up/Down key to check whether the CONTRAST effect is OK or not. 	
2	COLOUR key	<ol style="list-style-type: none"> 1. Receive "Colour Bar" signal. 2. Press to MENU mode, then Select Picture Mode and set to select COLOUR. 3. Press Volume Up/Down key to check whether the COLOUR effect is OK or not. 	
3	BRIGHTNESS key	<ol style="list-style-type: none"> 1. Receive "Monoscope Pattern" signal. 2. Press to MENU mode, then Select Picture Mode and set to select BRIGHTNESS. 3. Press Volume Up/Down key to check whether the BRIGHTNESS effect is OK or not. 	
4	TINT key	<ol style="list-style-type: none"> 1. Receive the "NTSC Colour Bar" signal thru AV in. 2. Press to MENU mode, then Select Picture Mode and set to select TINT. 3. Press Volume Up/Down key to check TINT. UP for GREEN direction and DOWN for RED direction whether is OK or not. 	
5	SHARPNESS Key	<ol style="list-style-type: none"> 1. Receive "Monoscope Pattern" signal. 2. Press to MENU mode, then Select Picture Mode and set to select SHARPNESS. 3. Press Volume Up/Down key to check whether the SHARPNESS effect is OK or not. 	
6	CH DISPLAY COLOUR	<ol style="list-style-type: none"> 1. All Ch (1-99) will have an OSD display of the channel number in green colour under AFT ON condition. 	
7	NORMAL Key	<ol style="list-style-type: none"> 1. Once in PICTURE Mode, and the NORMAL key is pressed, all the settings will be present to normal setting. (Normal setting value for every mode, refer table on page8-1.) 	Notes: if nothing is display mean contrast, colour, bright, tint, sharpness are all in normal setting.
8	WHITE TEMP	<ol style="list-style-type: none"> 1. Receive "Monoscope Pattern" signal. 2. Set FUNCTION to select WHITE TEMP. 3. Press Volume Up/Down key to check WHITE TEMP Option. STANDARD: NORMAL SETTING, WARM for more REDDISH direction changing, COOL for more BLUISH direction changing. 	

SECAM CHROMA ADJUSTMENT(29WF500 only)

No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	SECAM BLACK LEVEL R-Y/B-Y I²C BUS ADJUSTMENT	<ol style="list-style-type: none"> 1. Receive (SECAM colour bar). 2. Select SECAM black level adjustment R-Y mode. 3. Connect the oscilloscope to pin(20) of IC201(R out). <ul style="list-style-type: none"> ● Range : 10mV/Div. ● Sweep time : 20 μsec/Div.(Probe 10:1 is used) 4. Vary R-Y data to minimize the offset between the non-signal line and signal line as shown in Fig.10-1(b) 5. Select SECAM black level adjustment B-Y mode. 6. Reconnect the oscilloscope to 22pin of IC800 (B Out) 7. Vary B-Y data to minimize the offset between the non-signal line and signal (TP47RB) line as shown in Fig.10-2(b) 	

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO) (Continued)

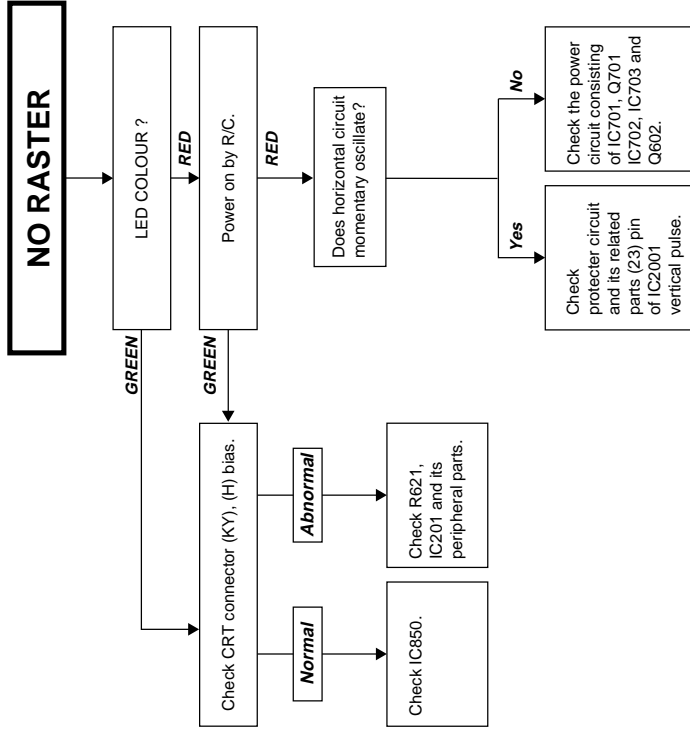
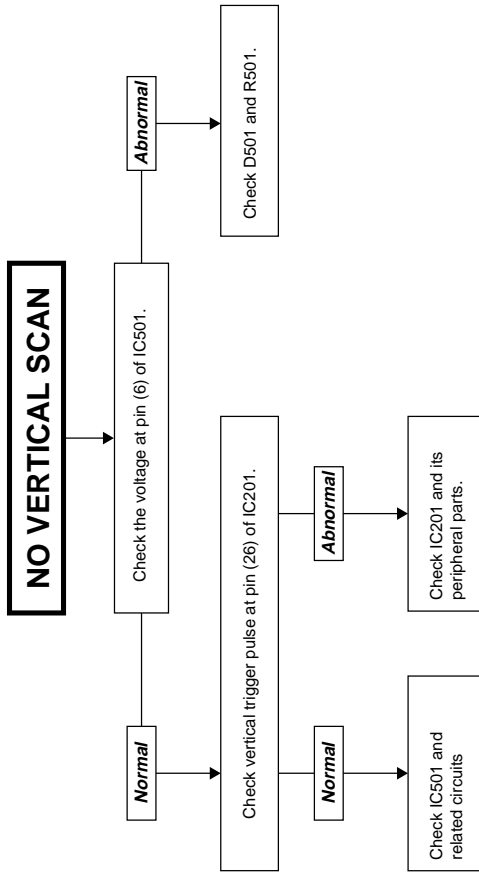
No.	Adjusting point	Adjusting condition/procedure	Waveform or others
9	COLOUR SYSTEM (29WF500 only)	<ol style="list-style-type: none"> 1. Receive the "PAL COLOUR BAR" signal, press the COLOUR SYSTEM key to select modes except PAL, check the COLOUR is not working properly. Then, select the "PAL" mode. Check again its colour so that it is working properly. 2. Receive "SECAM COLOUR BAR" signal, press COLOUR SYSTEM key to select modes except SECAM, check the COLOUR is not working properly. Then, select the "SECAM" mode. Check again its colour so that it is working properly. 3. Receive "NTSC 4.43" signal, press COLOUR SYSTEM key to select modes except NTSC4.43, check the COLOUR is not working properly. Then, select the "NTSC 4.43" mode. Check again its colour so that it is working properly. 4. Receive "NTSC 4.43/3.58 COLOUR BAR" signal thru AV, press COLOUR SYSTEM key to select modes except N4.43/3.58, check the COLOUR is not working properly. Then, select the "NTSC 4.43/3.58" mode. Check again its colour so that it is working properly. 	
10	SOUND SYSTEM (29WF500 only)	<ol style="list-style-type: none"> 1. Receive "PAL-D/K" signal, press the "SOUND SYSTEM" to select B/G. I. Check the sound output is not working properly. Select D/K and check the sound output to make sure it is working properly. 2. Receive "PAL-I" signal, press the "SOUND SYSTEM" to select B/G, D/K. Check the sound output is not working properly. Select I and check the sound output to make sure it is working properly. 3. Receive "PAL-B/G" signal, press the "SOUND SYSTEM" to select I, D/K. Check the sound output is not working properly. Select B/G and check the sound output to make sure it is working properly. 	
11	HEADPHONE OUTPUT CHECKING	<ol style="list-style-type: none"> 1. Receive PAL COLOUR BAR with SOUND 400Hz, 100% MODULATION (±50kHz Dev). 2. Maximum volume, and check the headphone output with 400Hz sound and no sound out from speaker. (Ref: Output level of Headphone is as following Apx. 500mV/p-p) 	
12	NOISE MUTE CHECKING	<ol style="list-style-type: none"> 1. Receive "PAL COLOUR BAR" signal. 2. Turn up the volume control to maximum, make sure the sound is heard from the speakers. Then put the unit in no signal state. 3. Check the sound mute is effective. 4. Finally turn sound level of CTV to minimum. 	

PROTECTOR OPERATION CHECKING

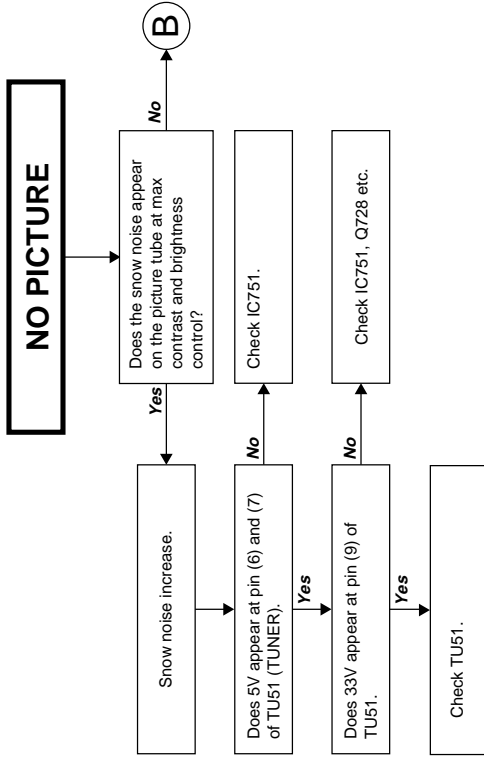
No.	Adjusting point	Adjusting condition/procedure	Waveform or others
1	HV PROTECTOR	<ol style="list-style-type: none"> 1. Receive E-5CH (Monoscope Pattern). 2. Connect the Bias Box to the cathode side (R653) of D652. 3. Set the voltage of the Bias Box at 10V, and verify that the protector does not operate. 4. Set the voltage of the Bias Box at 18V, and verify that the protector operate. 	Reference Approx. 12.2V as ordinary.
2	OTHER PROTECTORS OUTPUT CHECKING	* Correspondence for short circuit of smoothing electrolysis of +B line and so on. To check the operation of protector and so on, take care for the breakage, deterioration and so on of each element.	

TROUBLE SHOOTING FLOWCHART

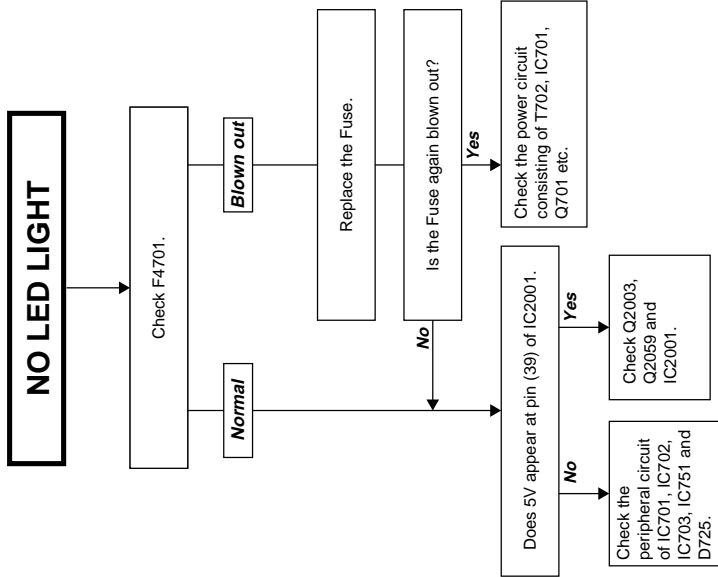
TROUBLE SHOOTING FLOWCHART (Continued)



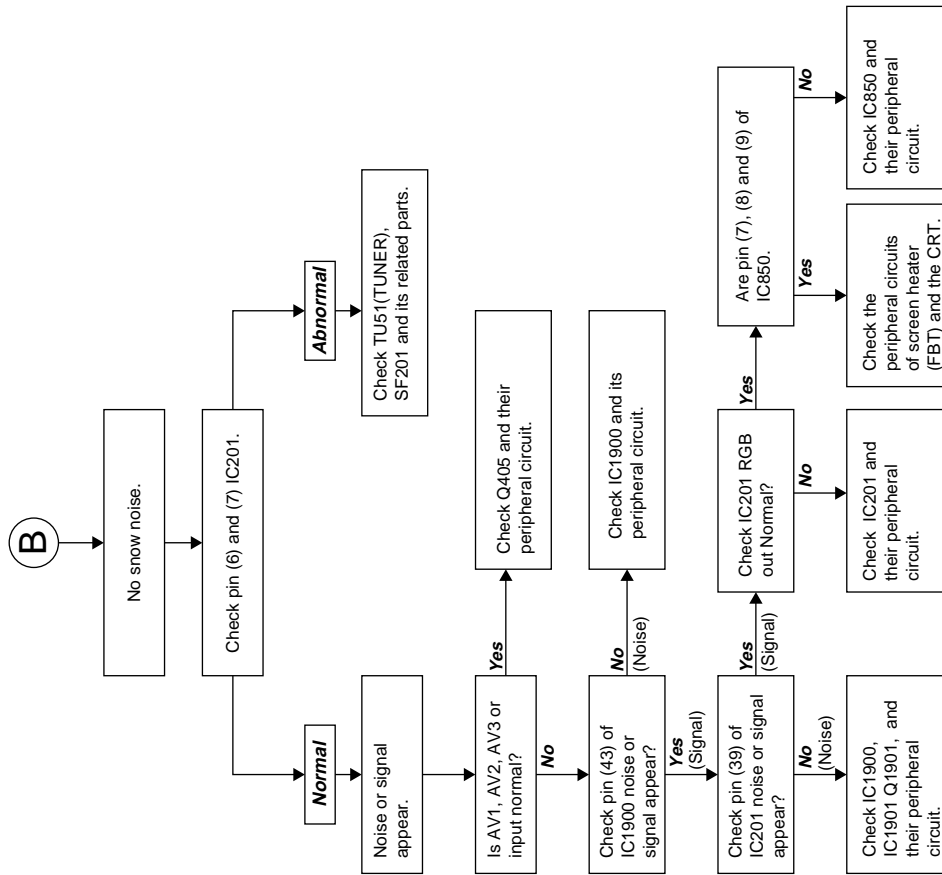
TRUBLE SHOOTING FLOWCHART (Continued)



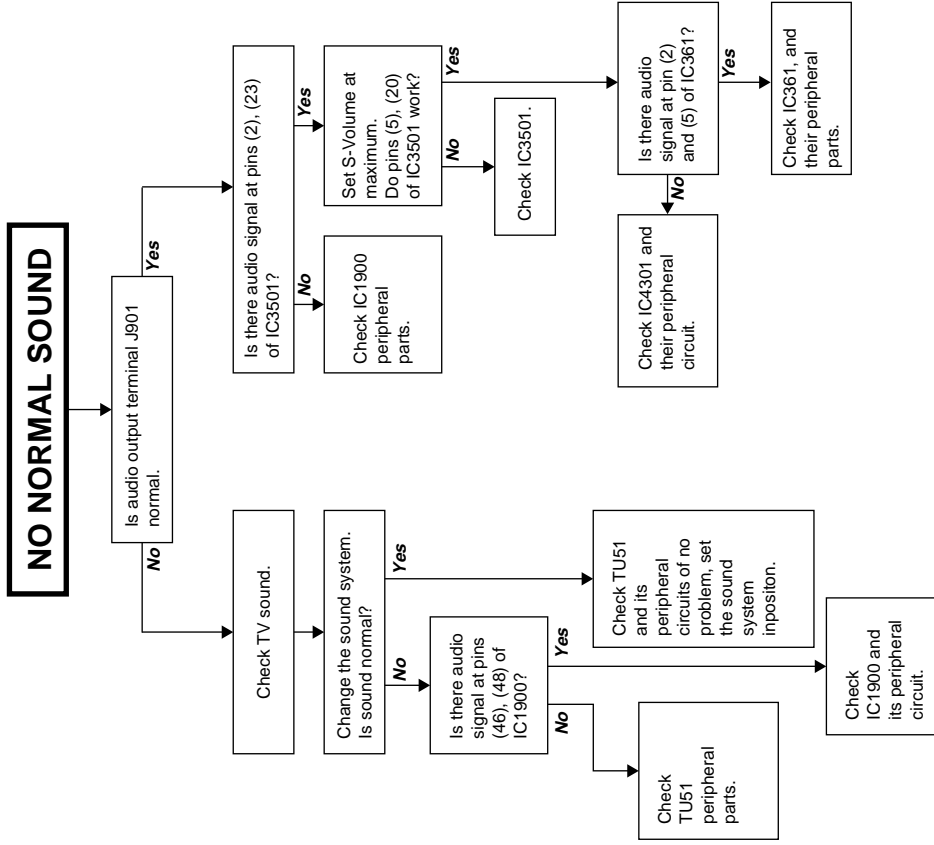
TRUBLE SHOOTING FLOWCHART (Continued)



TROUBLE SHOOTING FLOWCHART (Continued)

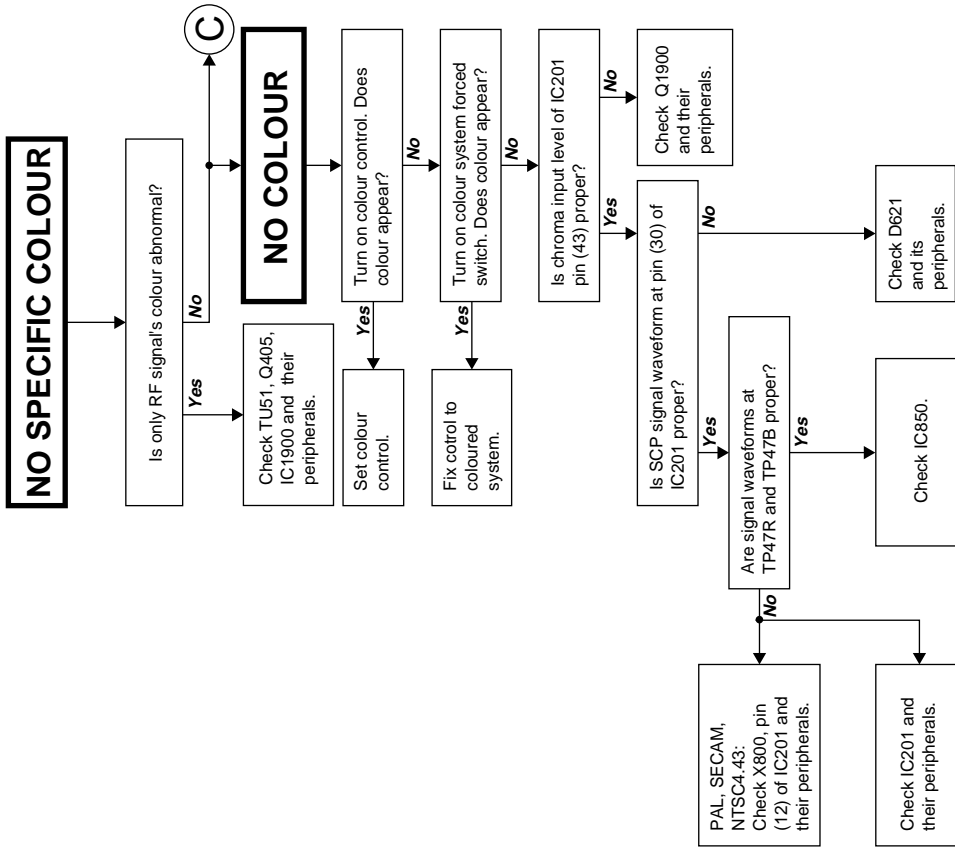


TROUBLE SHOOTING FLOWCHART (Continued)

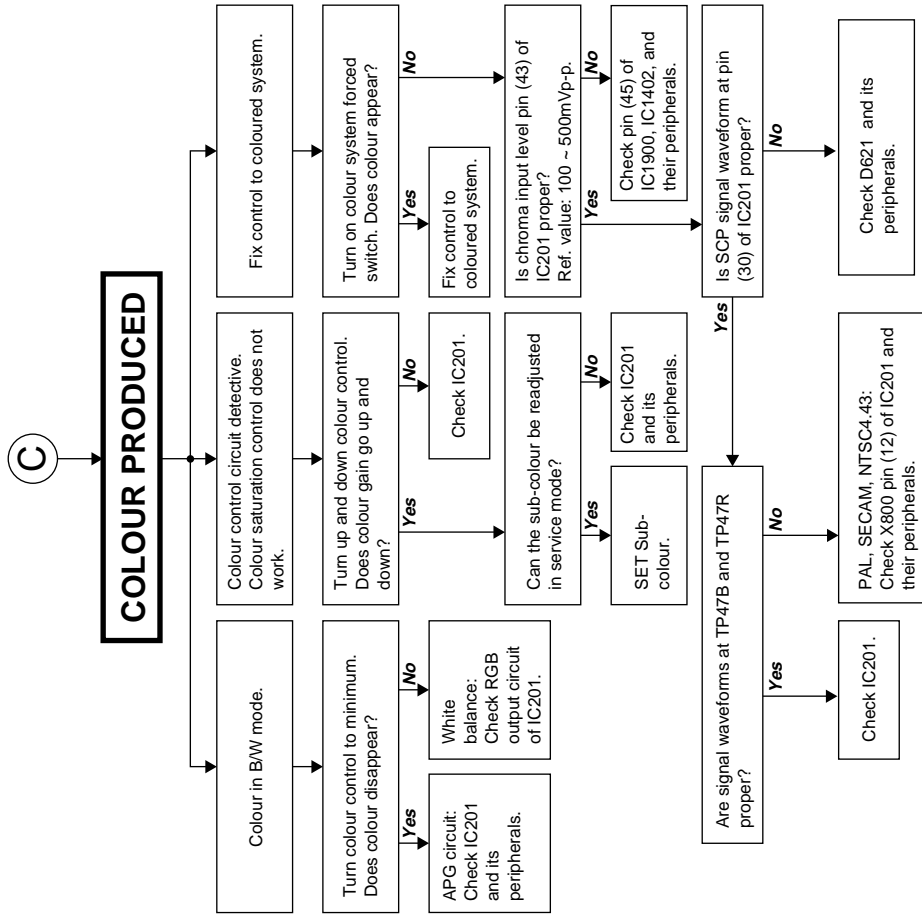


TROUBLE SHOOTING FLOWCHART (Continued)

TROUBLE SHOOTING FLOWCHART (Continued)



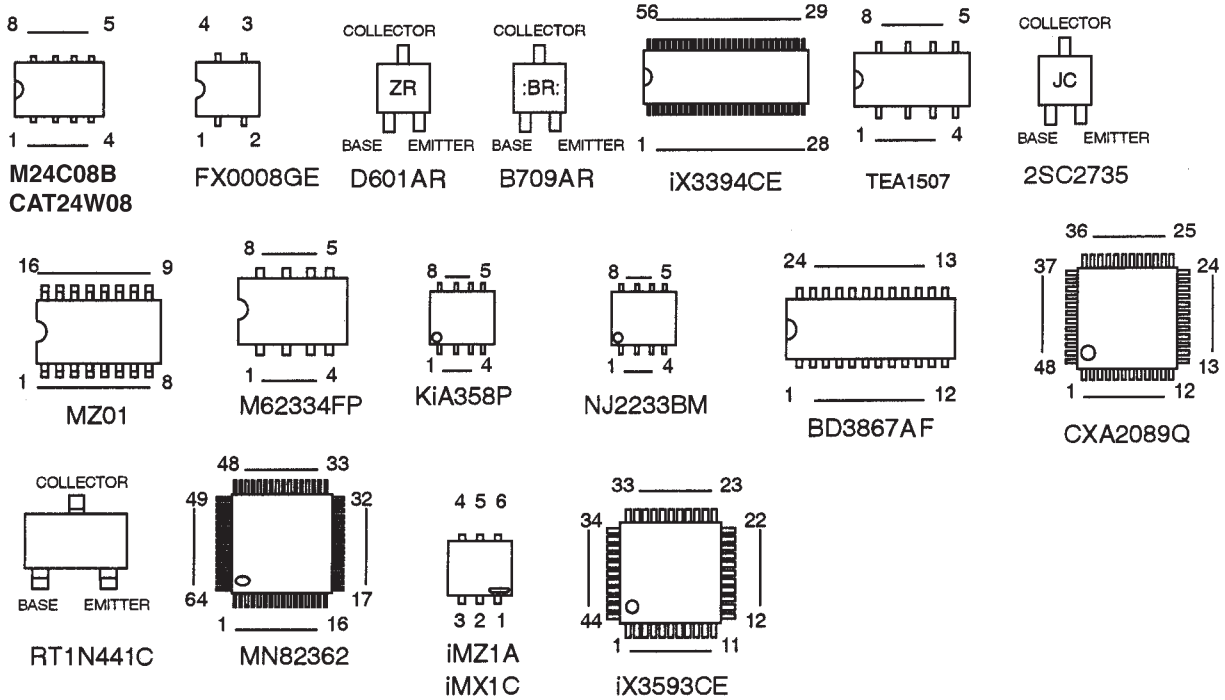
18-1



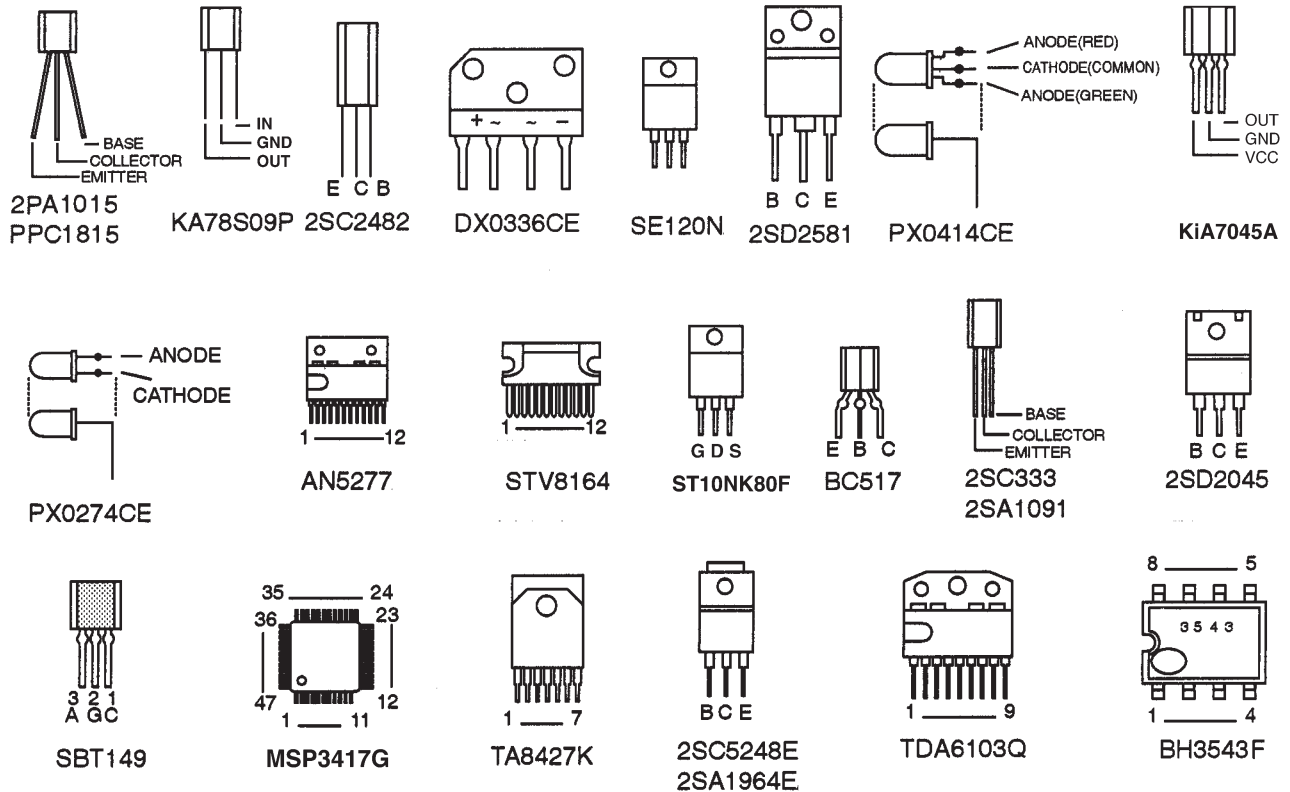
18-2

SOLID STATE DEVICE BASE DIAGRAM

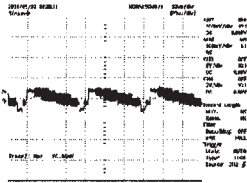
TOP VIEW



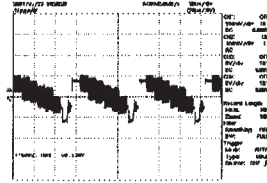
SIDE VIEW



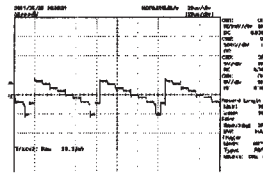
WAVEFORMS



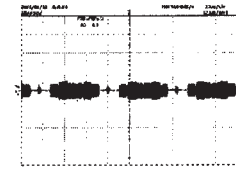
① Horizontal Rate
Pin 1 Vp-p=1.2v



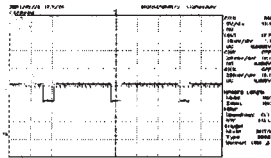
② Horizontal Rate
Pin 2 Vp-p=2.3v



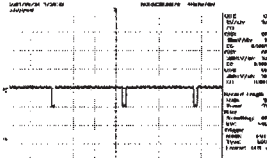
③ Horizontal Rate
Pin 3 Vp-p=1.0v



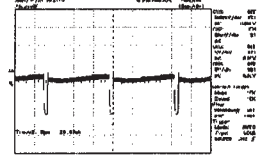
④ Horizontal Rate
Pin 4 Vp-p=0.5v



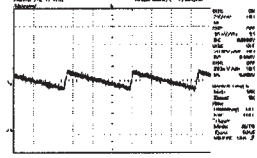
⑤ Horizontal Rate
Pin 5 Vp-p=5.0v



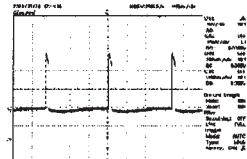
⑥ Vertical Rate
Pin 6 Vp-p=5.0v



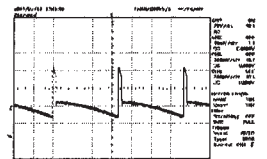
⑦ Vertical Rate
Pin 7 Vp-p=1.1v



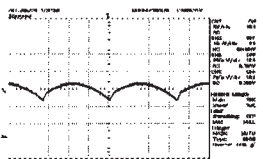
⑧ Vertical Rate
Pin 8 Vp-p=2.4v



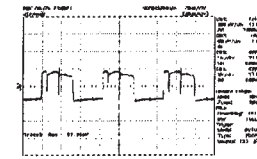
⑨ Vertical Rate
Pin 9 Vp-p=30.0v



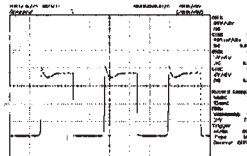
⑩ Vertical Rate
Pin 10 Vp-p=53.0v



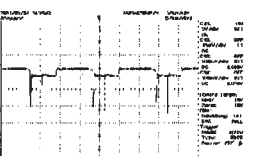
⑪ Vertical Rate
Pin 11 Vp-p=5.4v



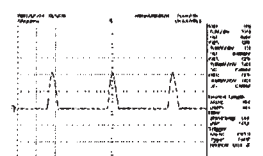
⑫ Horizontal Rate
Pin 12 Vp-p=5.4v



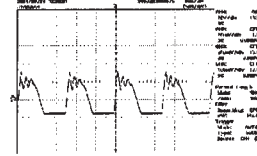
⑬ Horizontal Rate
Pin 13 Vp-p= 225.0v



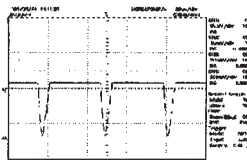
⑭ Horizontal Rate
Pin 14 Vp-p=15.0v



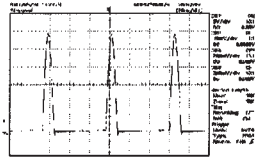
⑮ Horizontal Rate
Pin 15 Vp-p=1130.0v



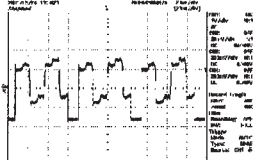
⑯ Horizontal Rate
Pin 16 Vp-p=440.0v



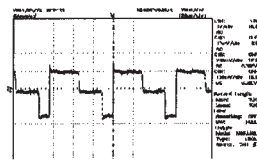
⑰ Horizontal Rate
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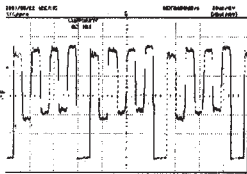
⑱ Horizontal Rate
Pin 18 Vp-p= 28.5v



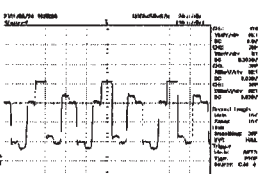
⑲ Horizontal Rate
Pin 19 Vp-p=3.0v



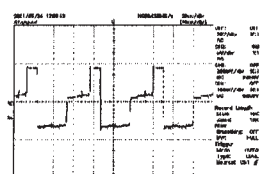
⑳ Horizontal Rate
Pin 20 Vp-p=3.0v



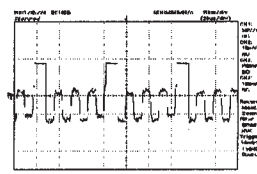
㉑ Horizontal Rate
Pin 21 Vp-p=3.0v



㉒ Horizontal Rate
Pin 22 Vp-p= 160.0v



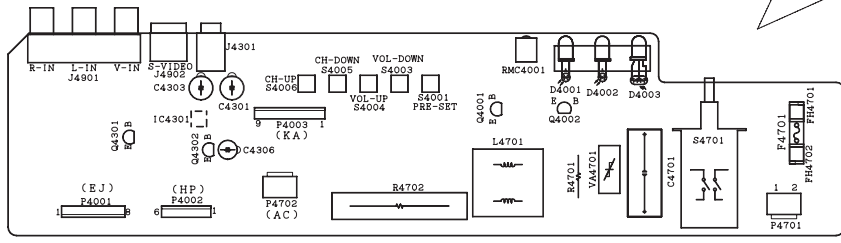
㉓ Horizontal Rate
Pin 23 Vp-p=150.0v



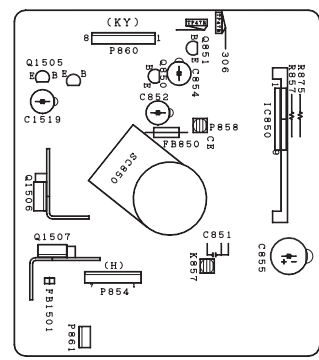
㉔ Horizontal Rate
Pin 24 Vp-p= 150.0v

MODEL 29WF500 CHASSIS LAYOUT

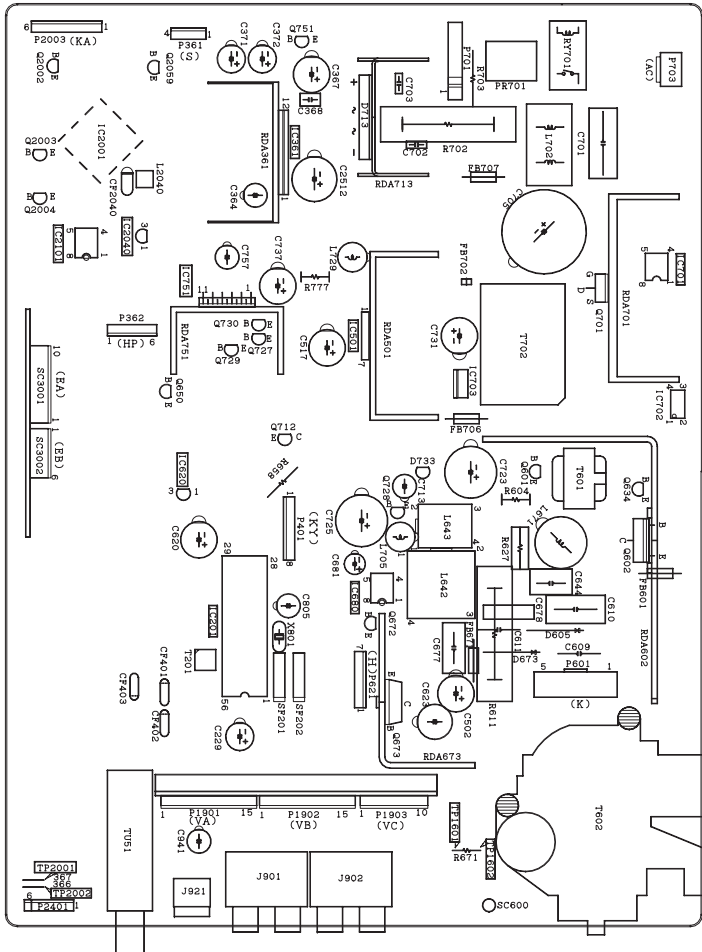
PWB F
DUNITK8028ME
FRONT



PWB B
DUNITK4527ME
CRT

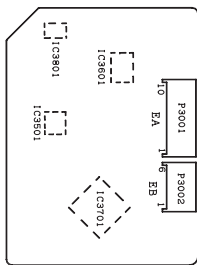
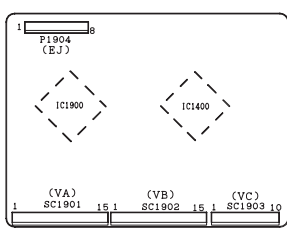


PWB D
DUNITK8027ME
S-CONTROL

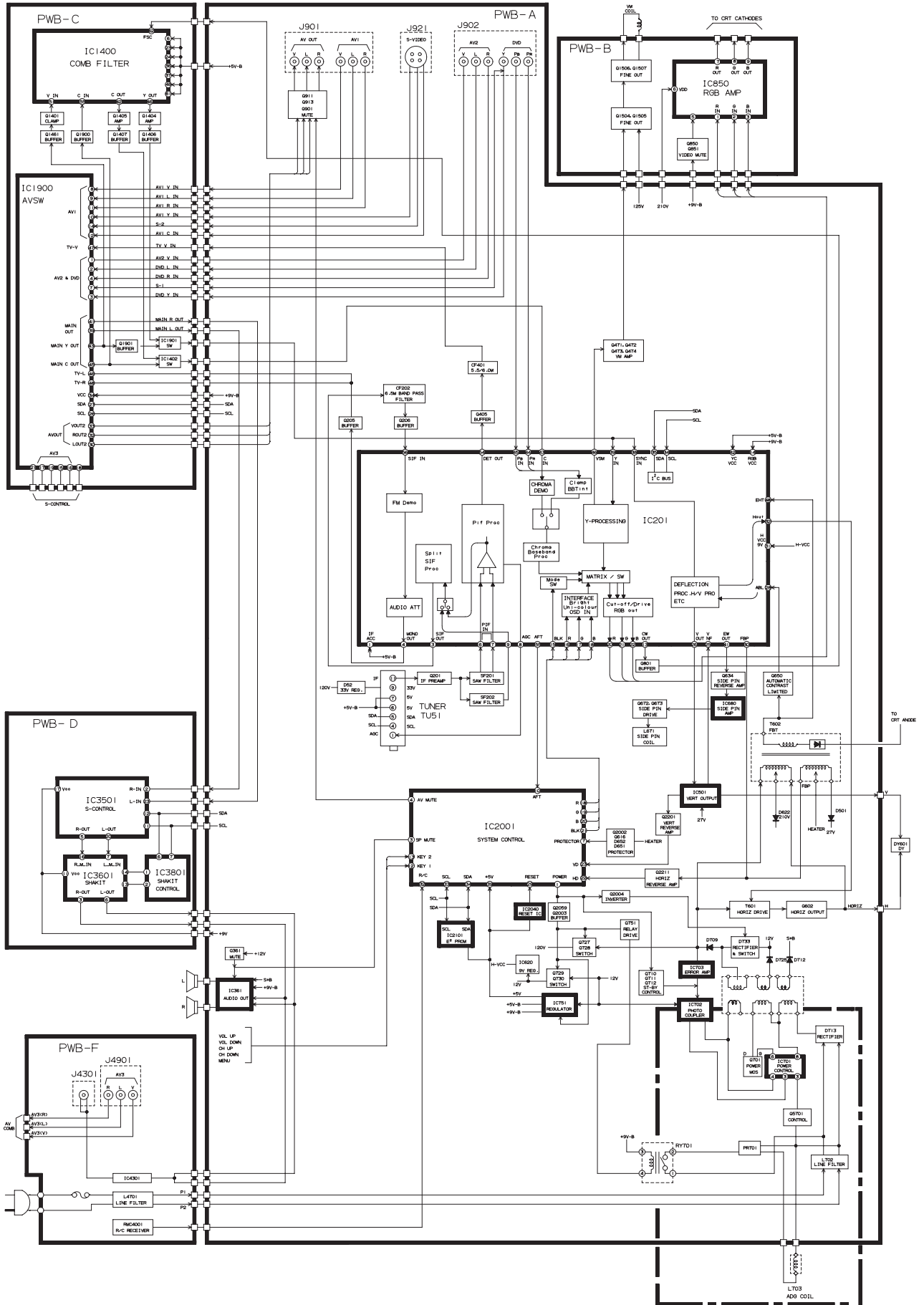


PWB A
DUNITK8024ME
MAIN

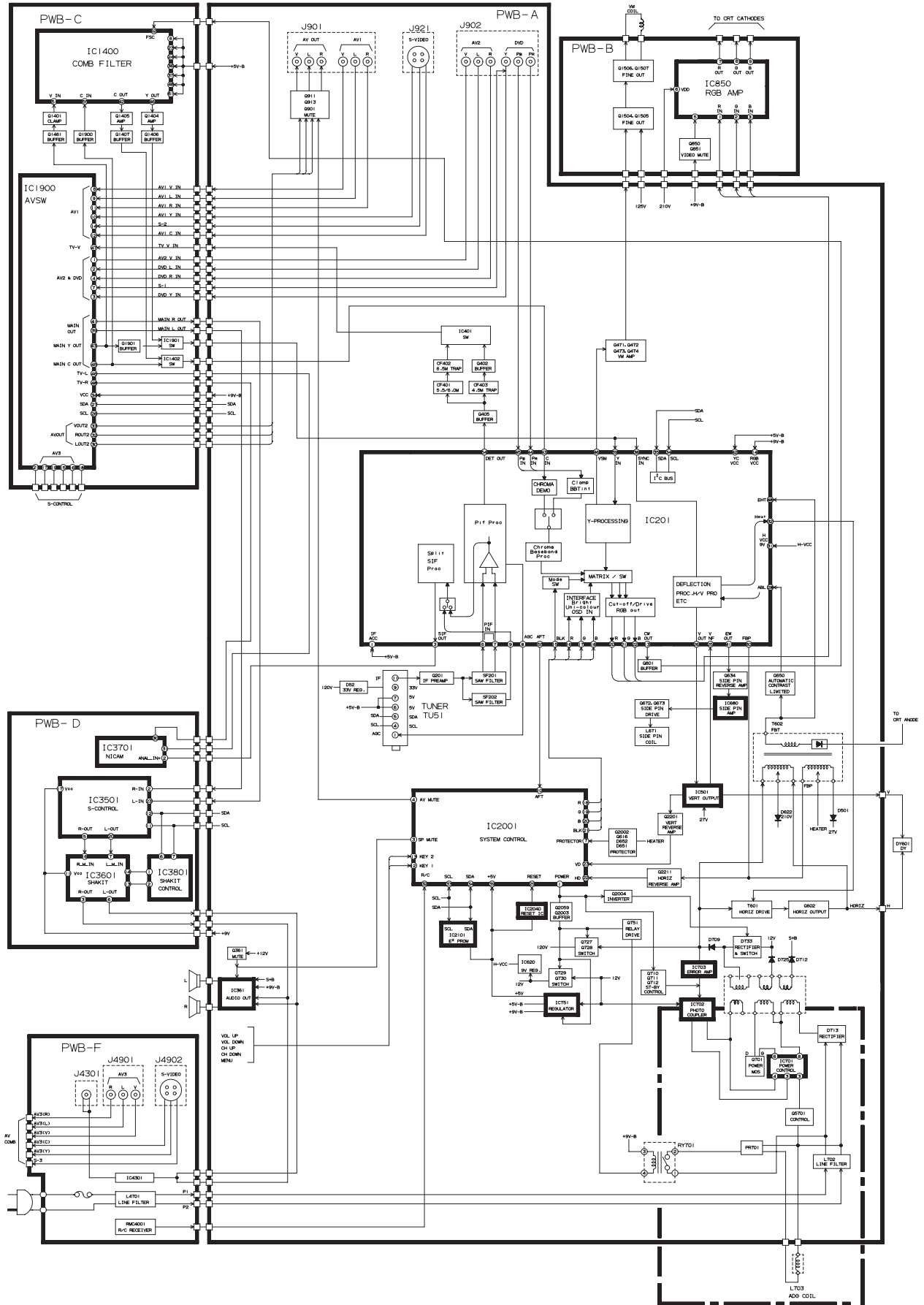
PWB C
DUNITK8025ME
AV COMB



BLOCK DIAGRAM (29WF200)



BLOCK DIAGRAM (29WF500)



DESCRIPTION OF SCHEMATIC DIAGRAM

SAFETY NOTES:

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "△" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE (— — —) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

NOTES:

1. The unit of resistance "ohm" is omitted.
(K = 1000 ohms, M = Meg ohm).
2. All resistors are 1/16 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted. ($P = \mu\mu F$).

VOLTAGE MEASUREMENT CONDITIONS:

1. Voltage in parenthesis measured with no Signal.
2. Voltages without parenthesis measured with PAL Colour-Signal.
3. All the voltages in each point are measured high impedance volt-meter.

WAVEFORM MEASUREMENT CONDITIONS:

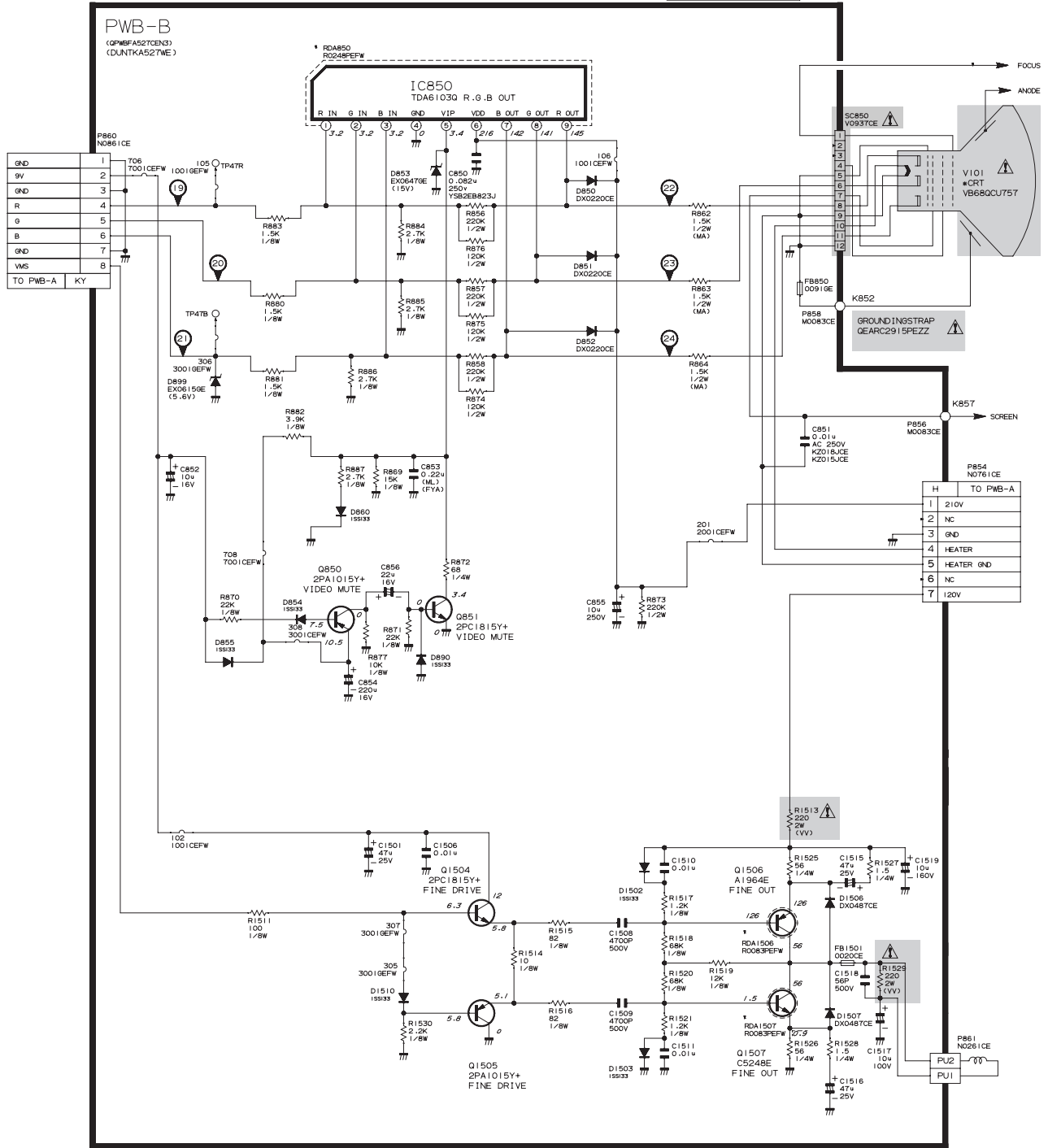
1. Colour bar generator signal of 1.8V peak to peak applied at Base of Video Buffer Amp. Q405.
2. Approximately 4.0 V AGC bias.

SCHEMATIC DIAGRAM CRT UNIT

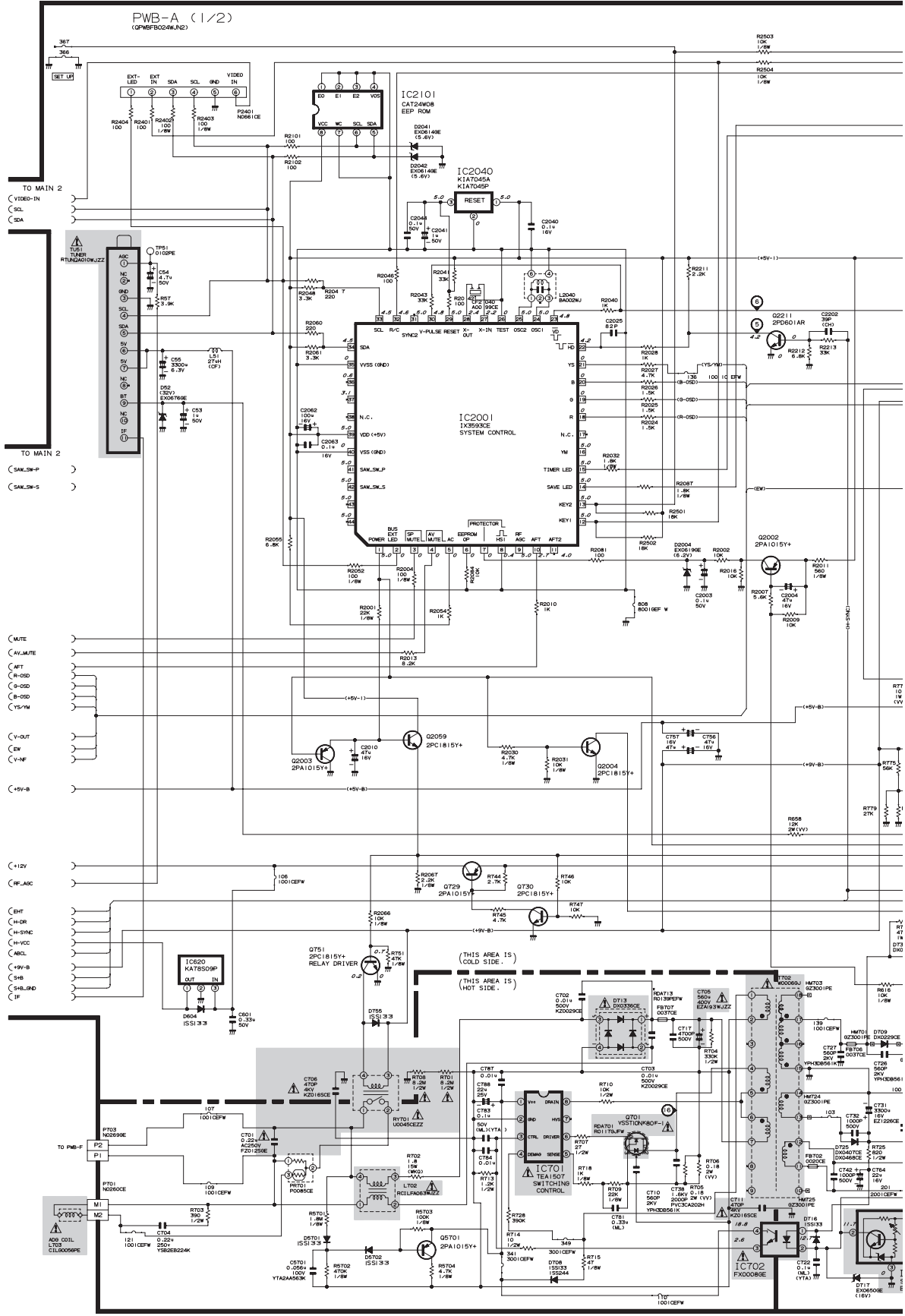
▲ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

NOTE: 1. THE UNIT OF RESISTANCE *OHM* IS OMITTED
(K=1000 OHMS, M=MEG OHM).
2. THE UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(U, P, ETC).

REPLACE WITH A PICTURE
TUBE OF THE SAME TYPE
NUMBER FOR CONTINUED
SAFETY.



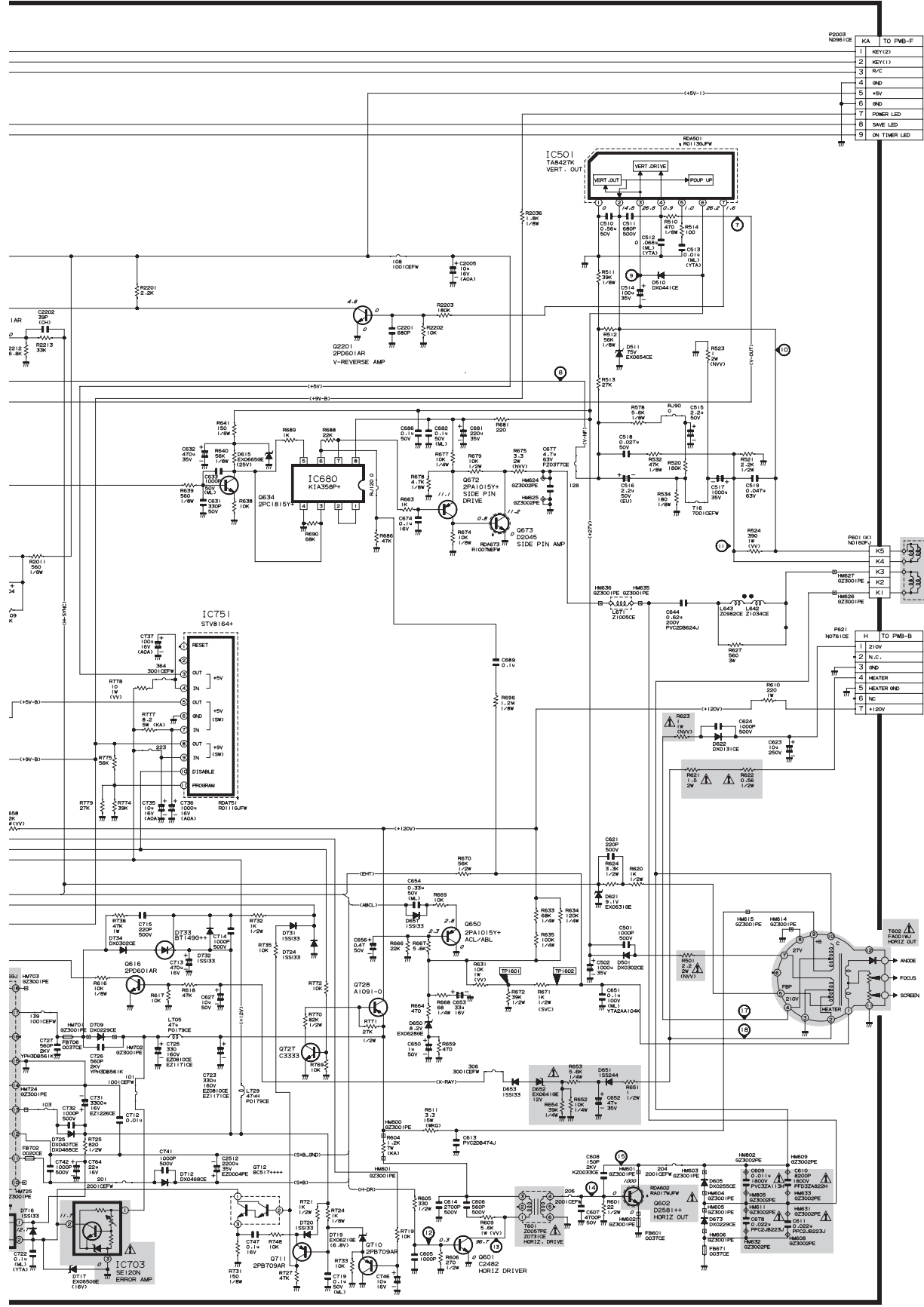
MAIN-1 UNIT (29WF200)



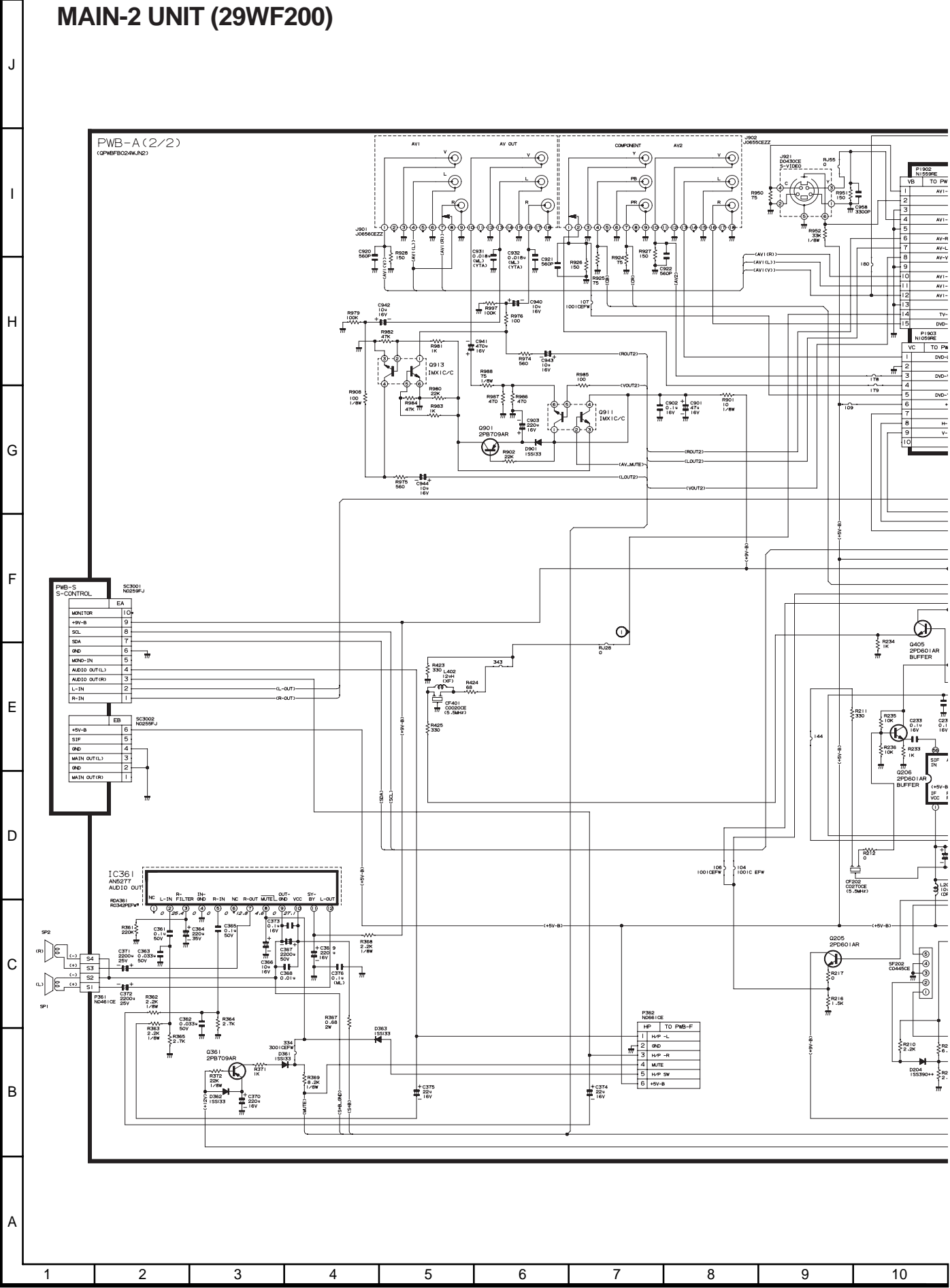
NOTE 1: THE UNIT OF RESISTANCE "OHM" IS OMITTED.
(K=1000 OHMS, M=MEG OHM)
2: ALL RESISTORS ARE 1/16 WATT UNLESS OTHERWISE NOTED.
3: UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL.
(u, P, ETC.).

▲ AND SHADED () COMPONENTS = SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

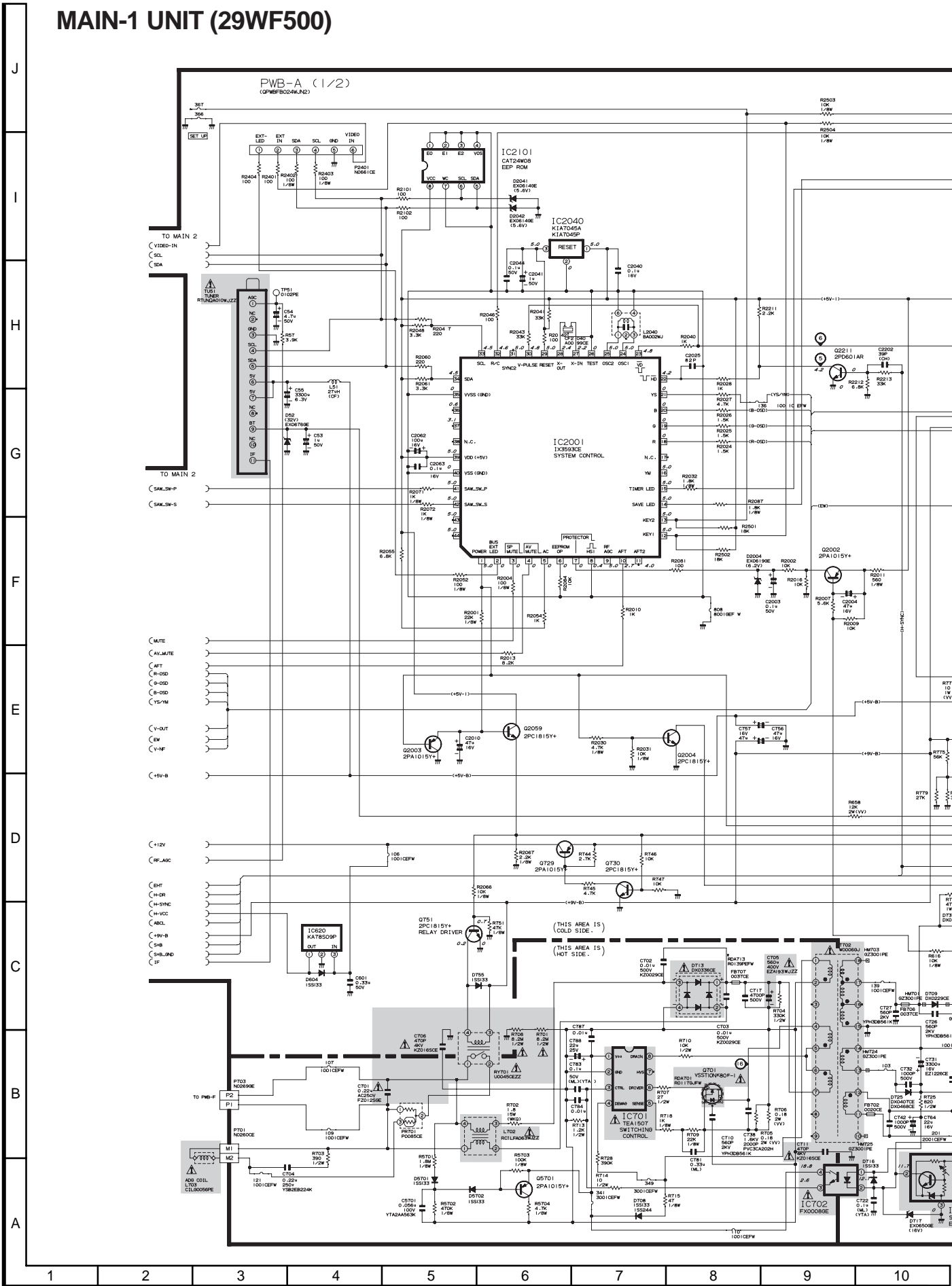
PNOS	NOTICE	KA	TO PWB-F
1	KEY(2)		
2	KEY(1)		
3	R/C		
4	IND		
5	HY		
6	IND		
7	POWER LED		
8	SAVE LED		
9	ON TIMER LED		



MAIN-2 UNIT (29WF200)

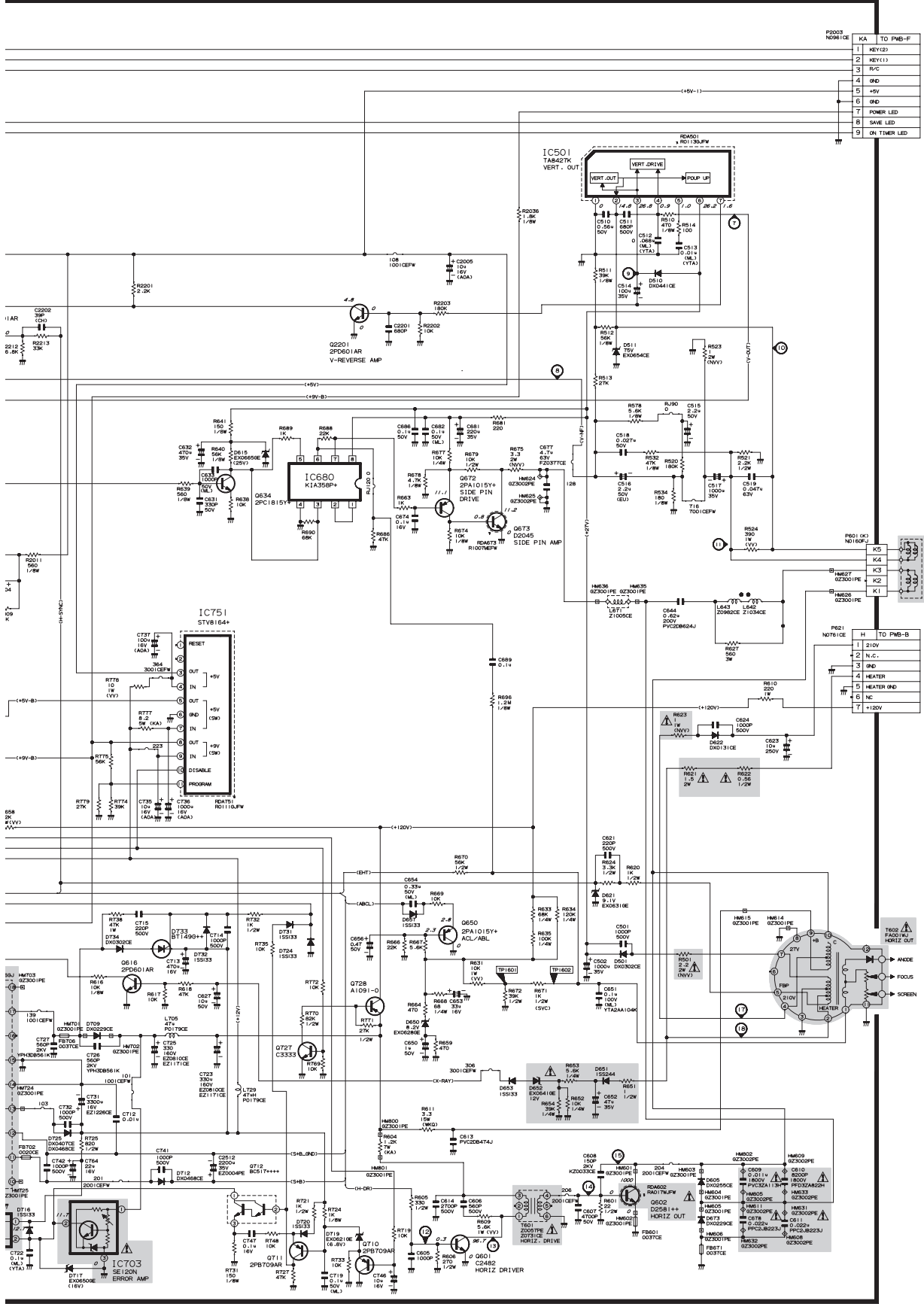


MAIN-1 UNIT (29WF500)



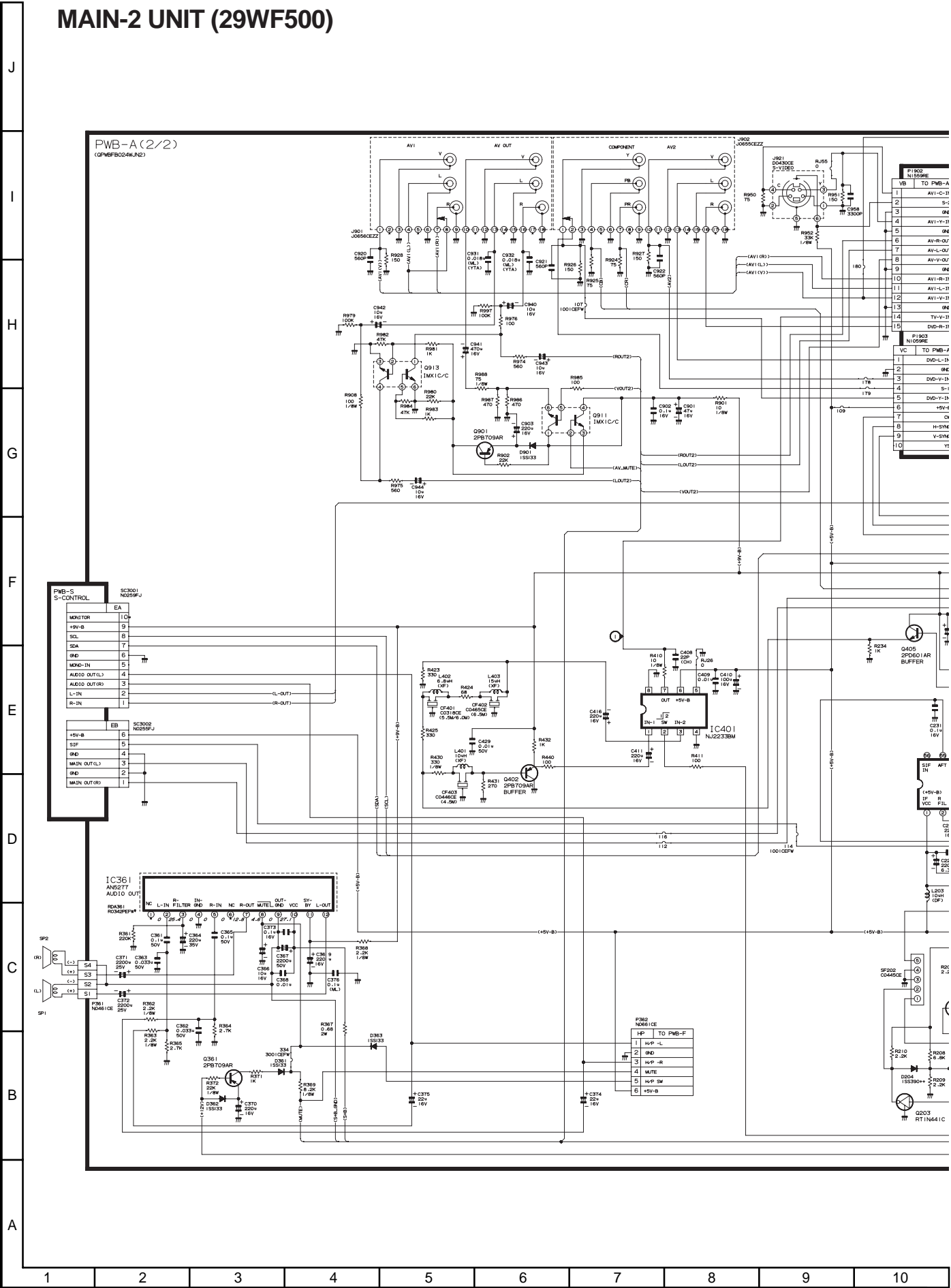
NOTE: 1. THE UNIT OF RESISTANCE *OHM* IS OMITTED.
(K=1000 OHMS, M=MEG OHM).
2. ALL RESISTORS ARE 1/8 WATT, UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL.
(u. P. ETC.).

▲ AND SHADED () COMPONENTS = SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.



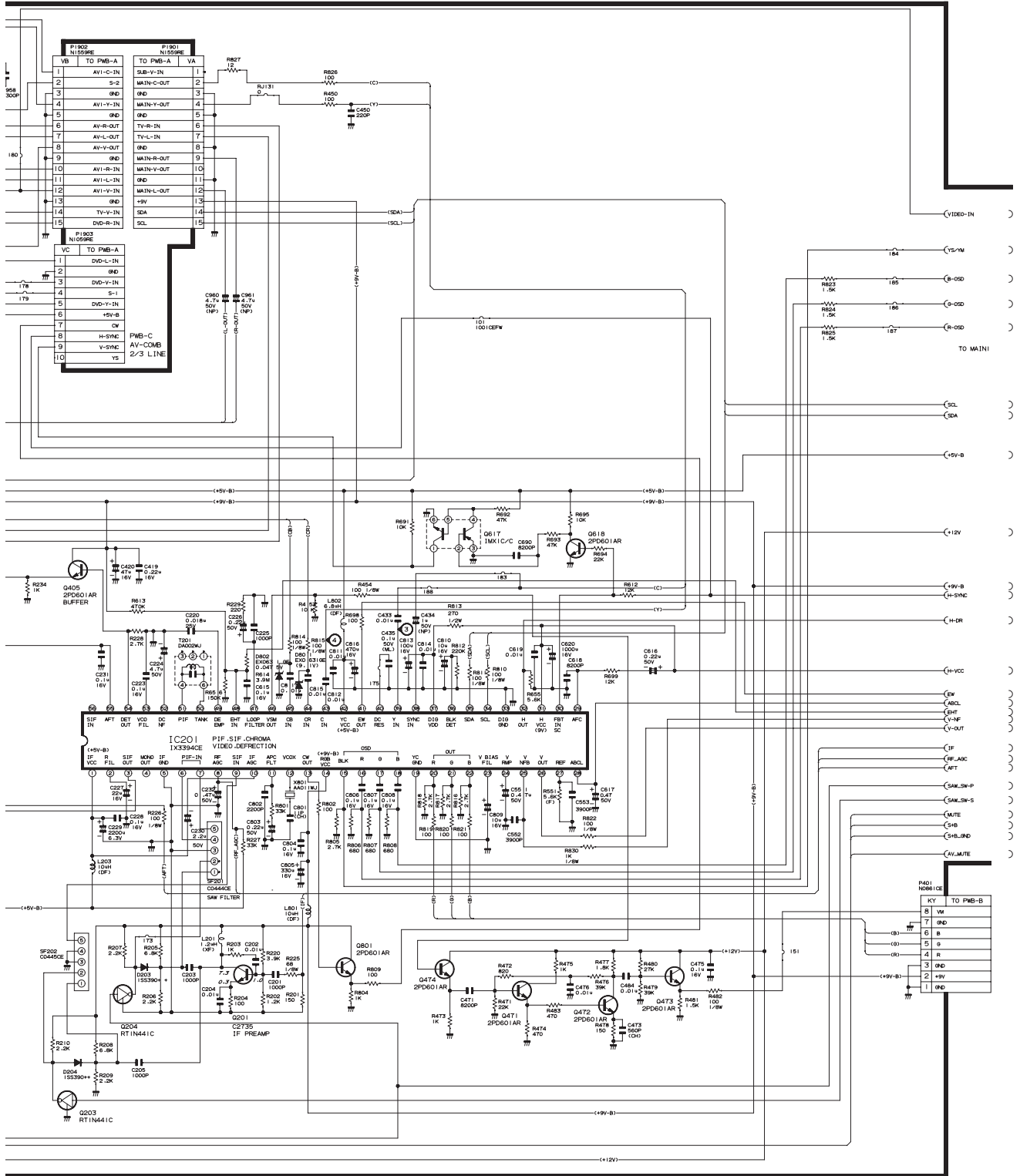
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MAIN-2 UNIT (29WF500)



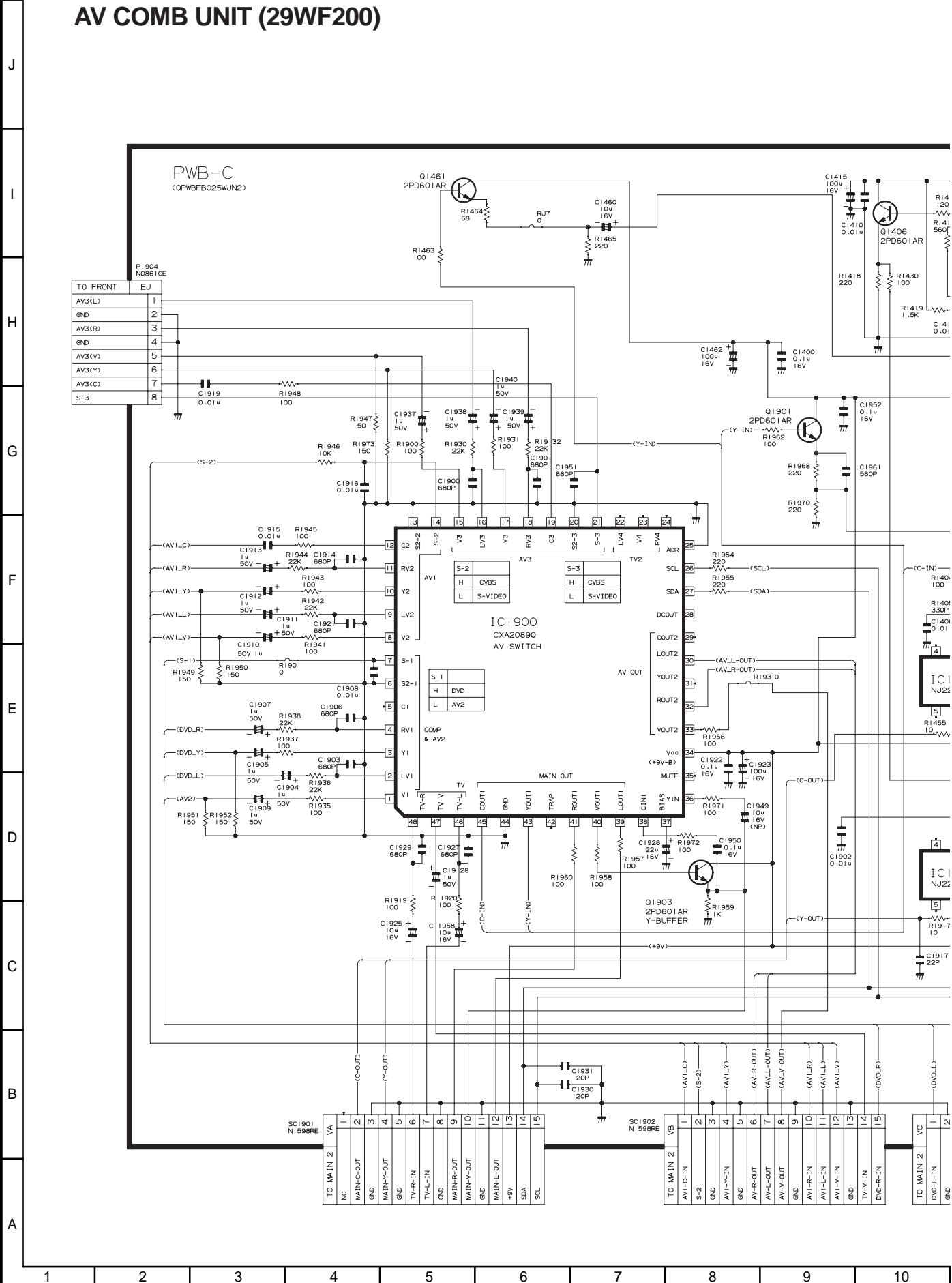
NOTE 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=1000000 OHMS)
2. ALL RESISTORS ARE 1/8 WATT, UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u= P, ETC.)

▲ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.



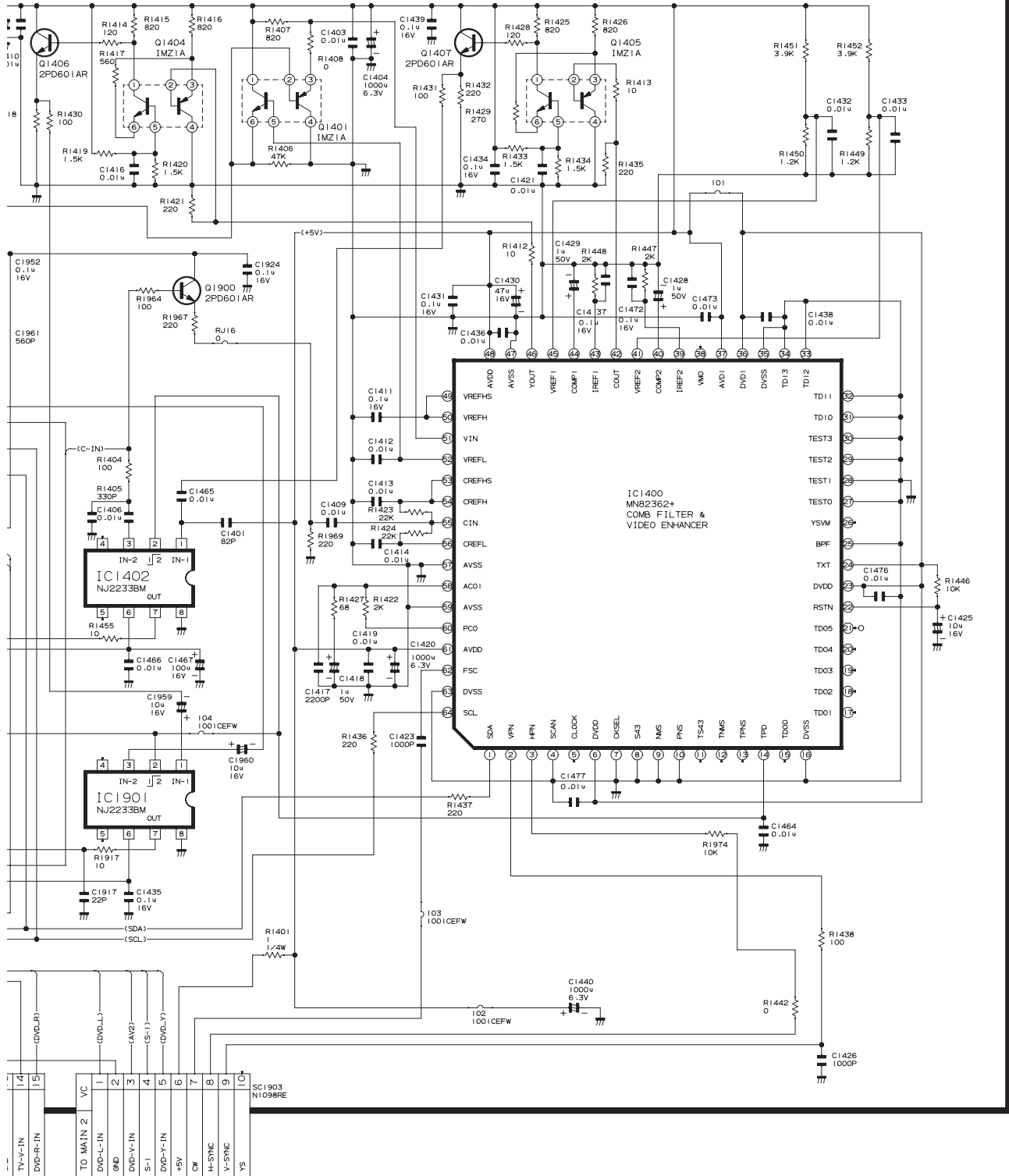
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AV COMB UNIT (29WF200)



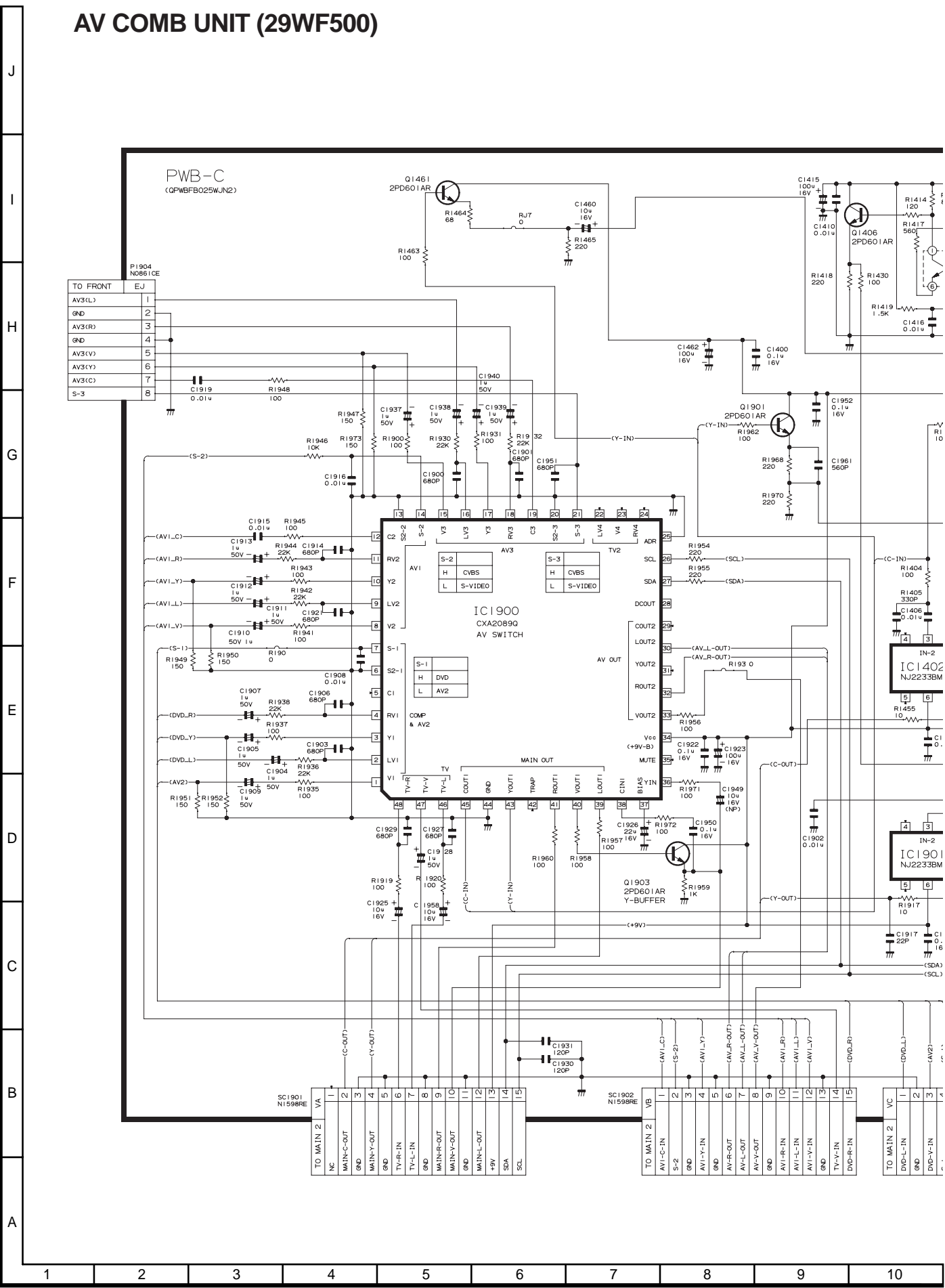
▲ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGACHM).
2. ALL RESISTORS ARE 1/16 WATT, UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC).



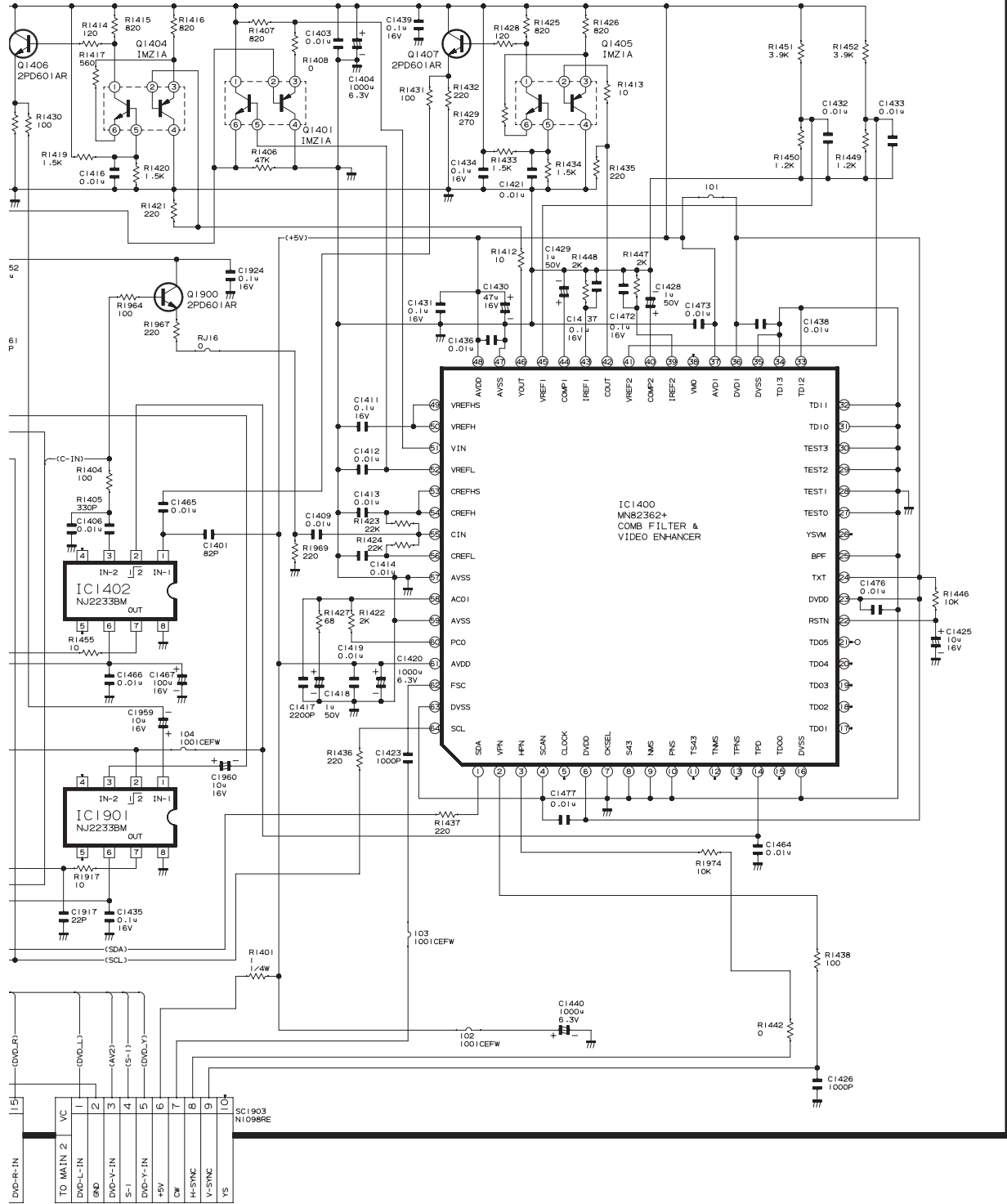
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AV COMB UNIT (29WF500)



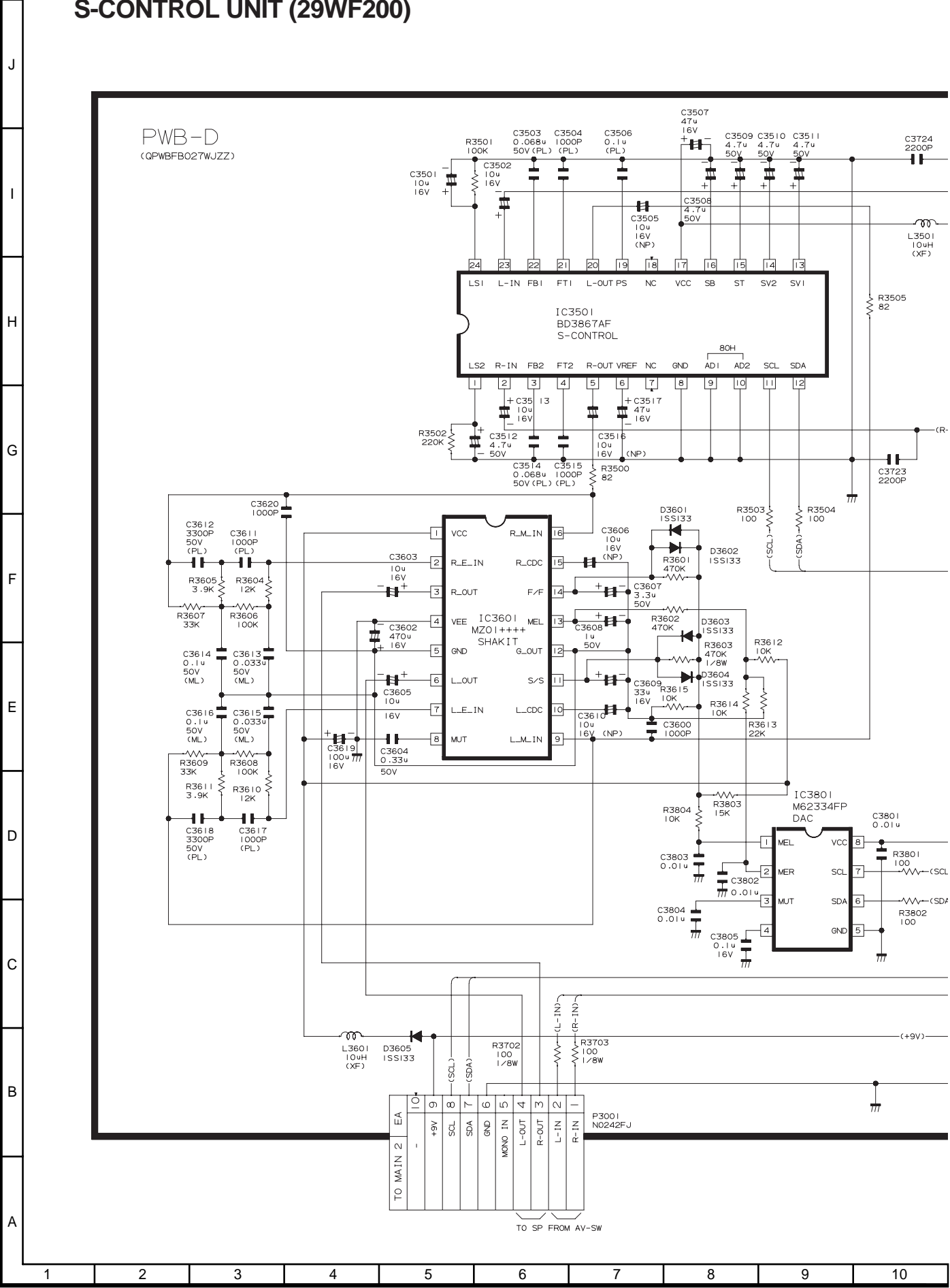
▲ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/16 WATT UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC.).

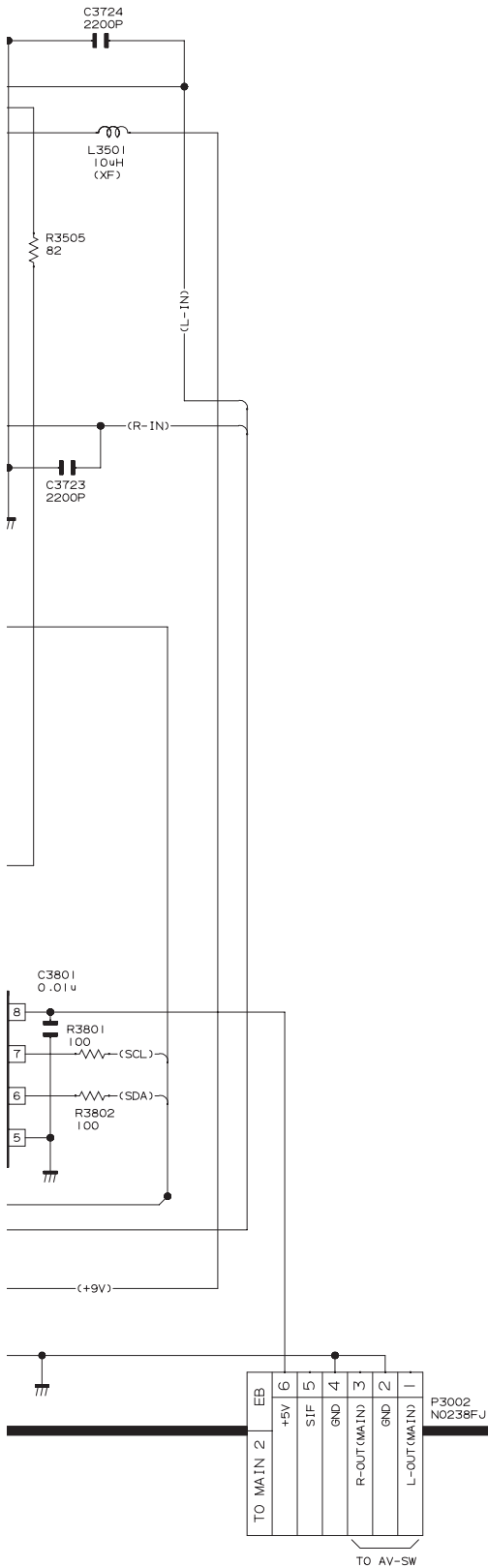


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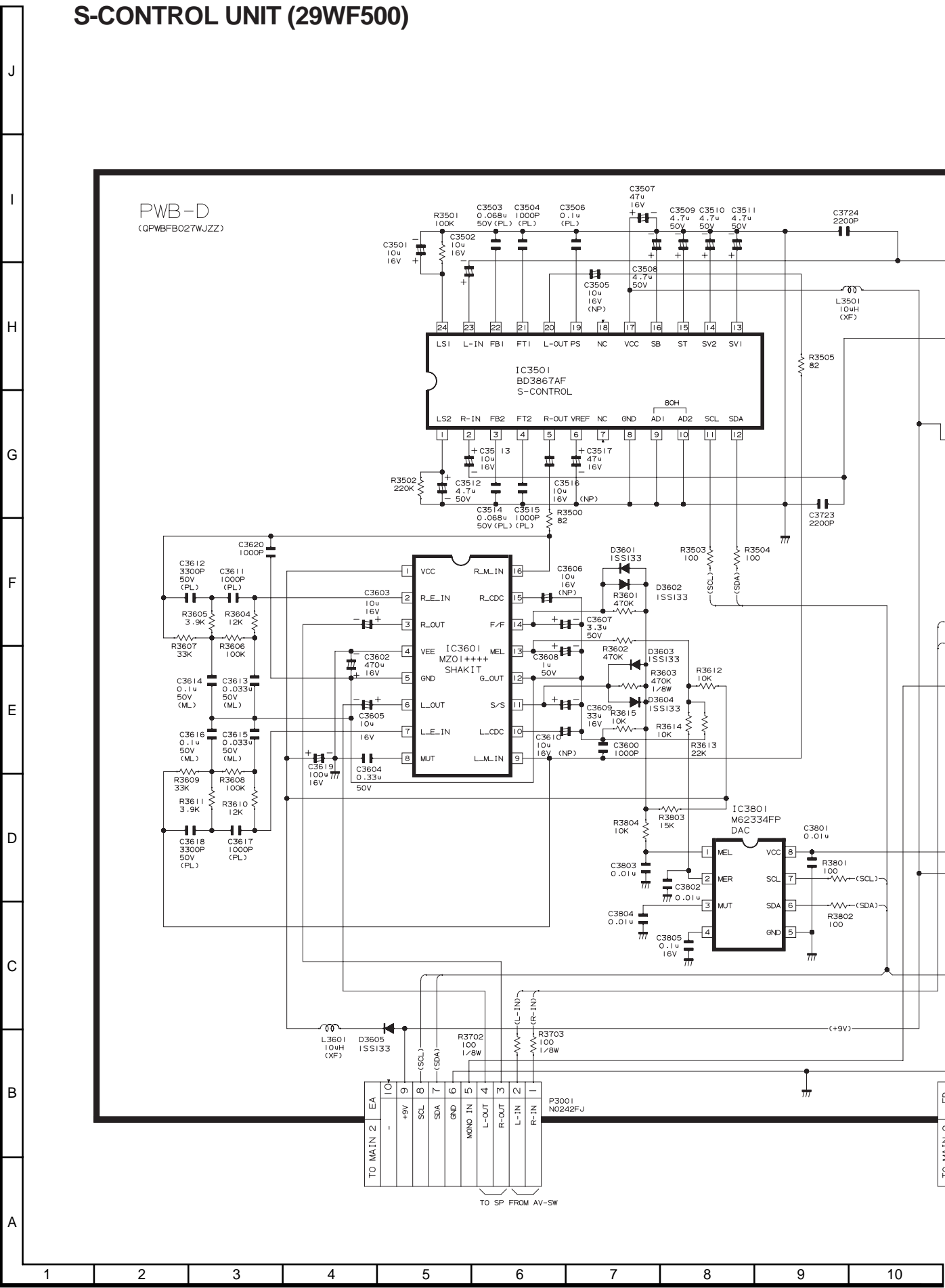
S-CONTROL UNIT (29WF200)



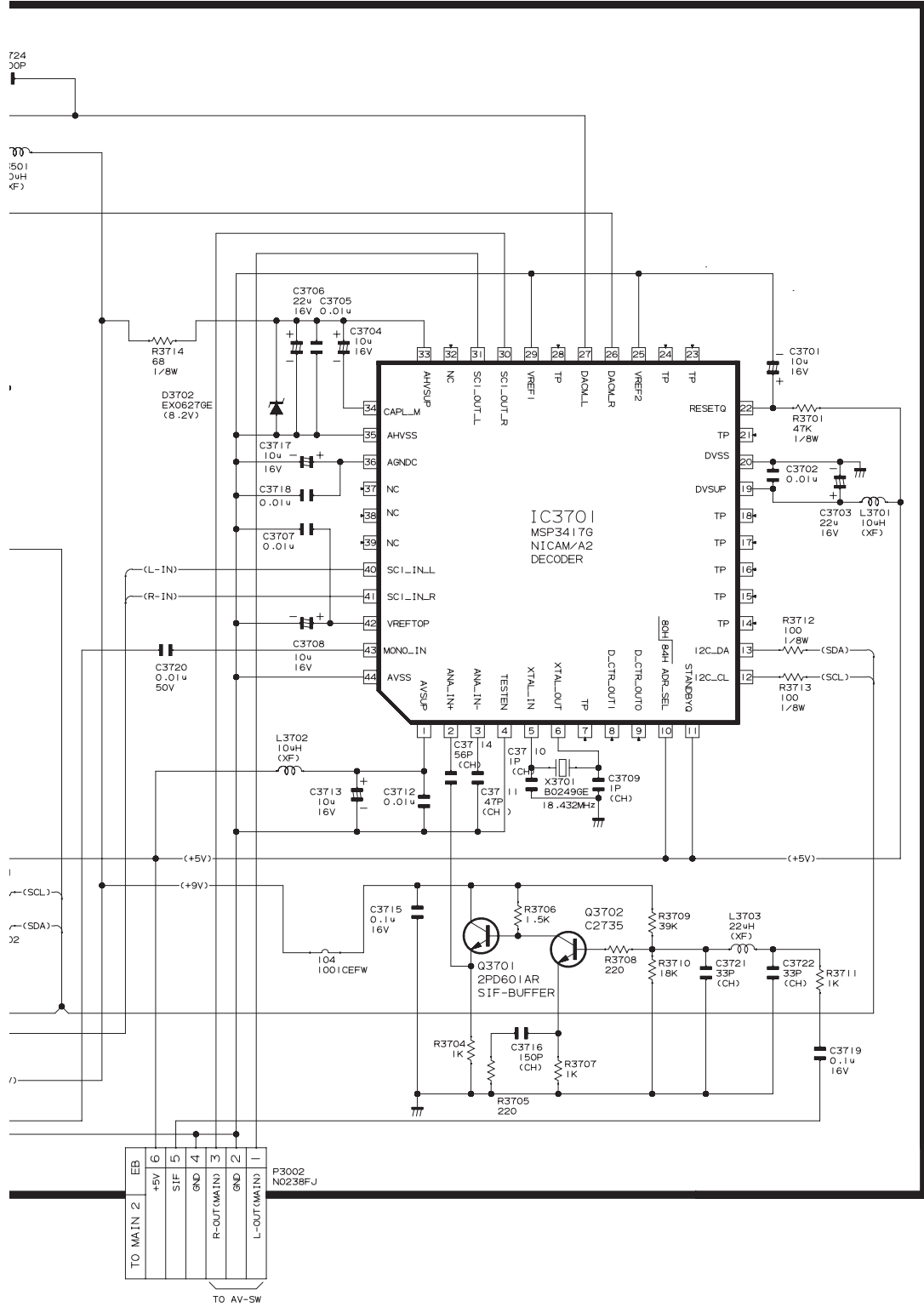
NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM) .
2. ALL RESISTORS ARE 1/16 WATT .UNLESS OTHERWISE NOTED .
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC) .



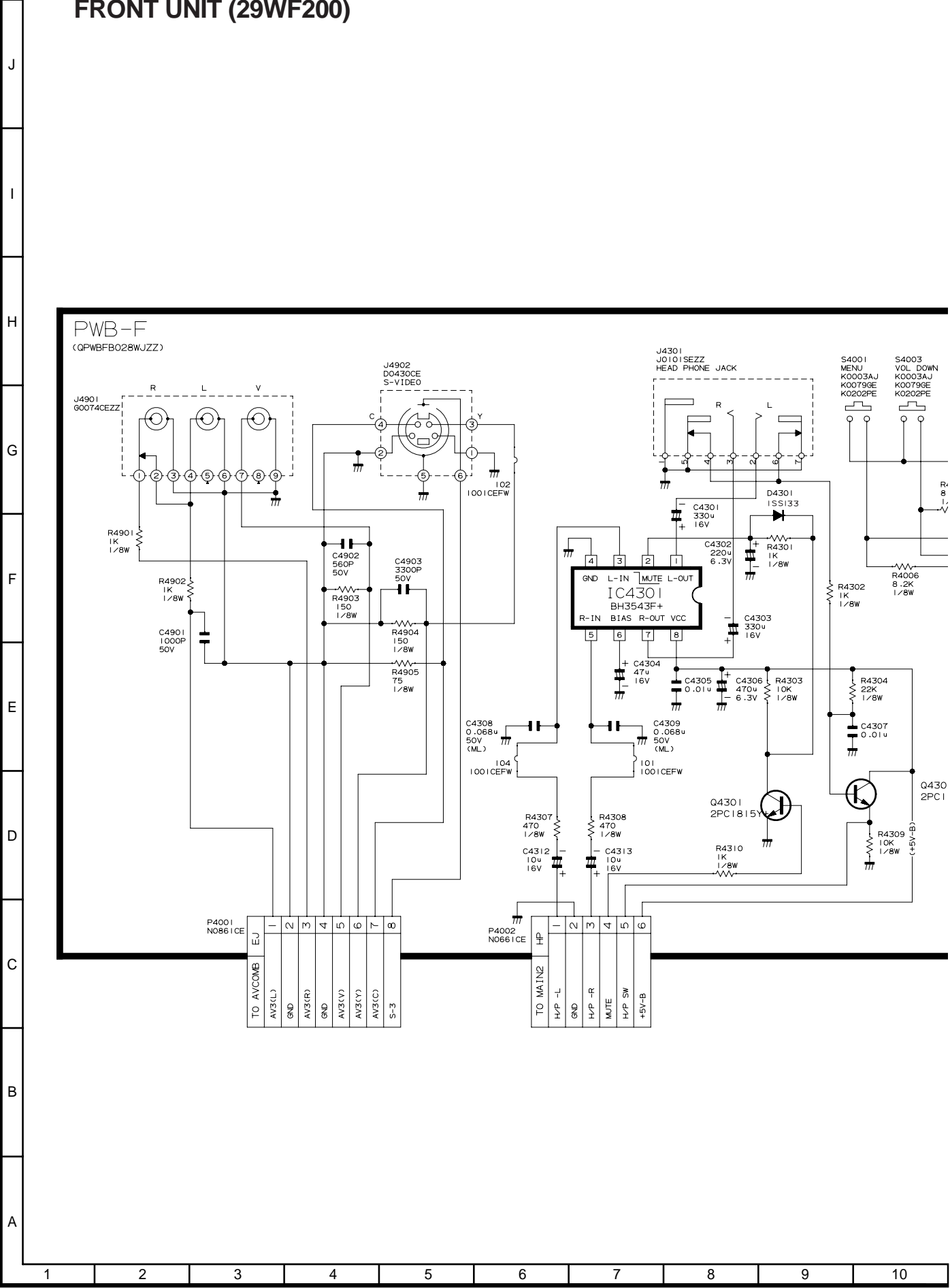
S-CONTROL UNIT (29WF500)

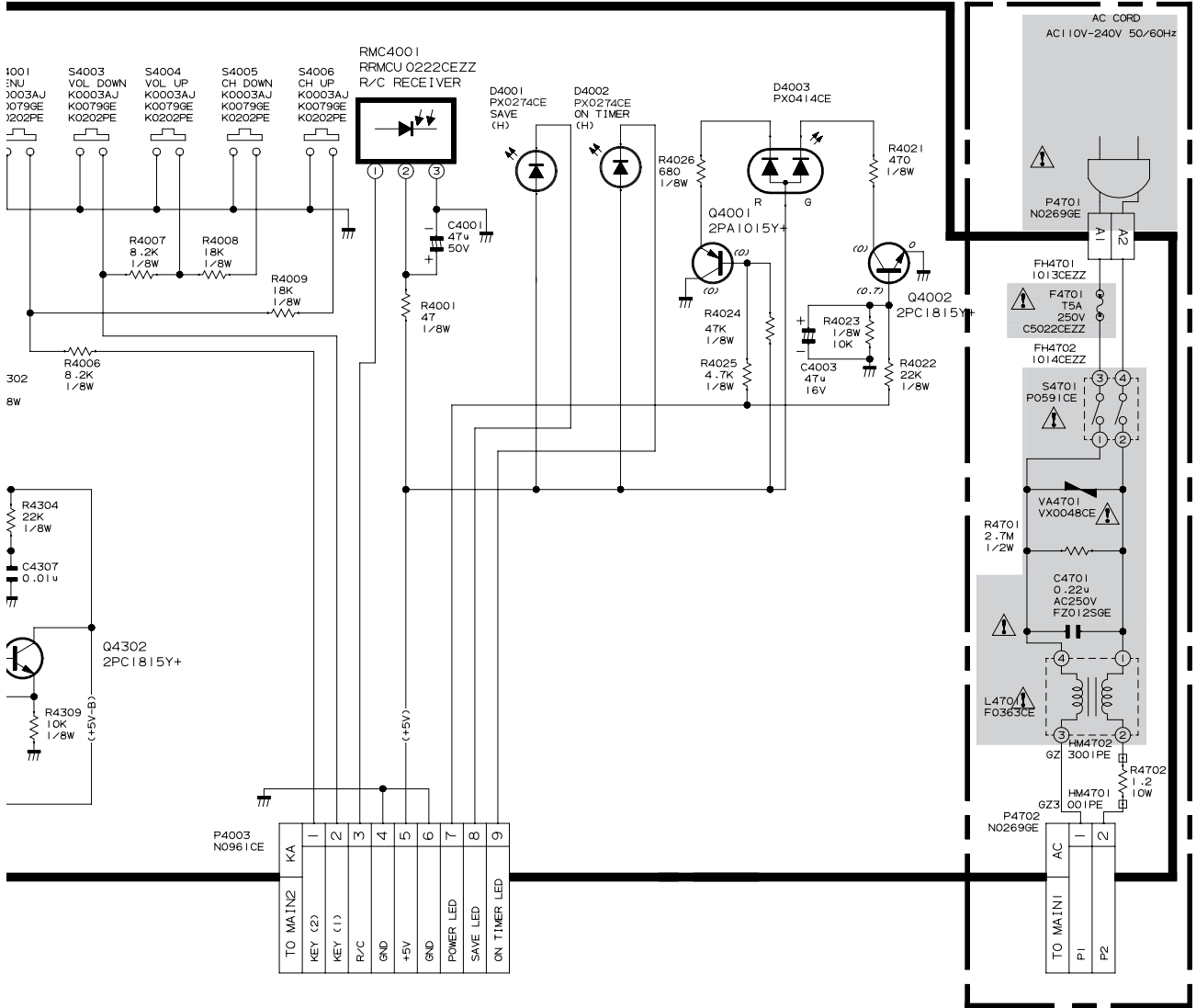


NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/16 WATT UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC).



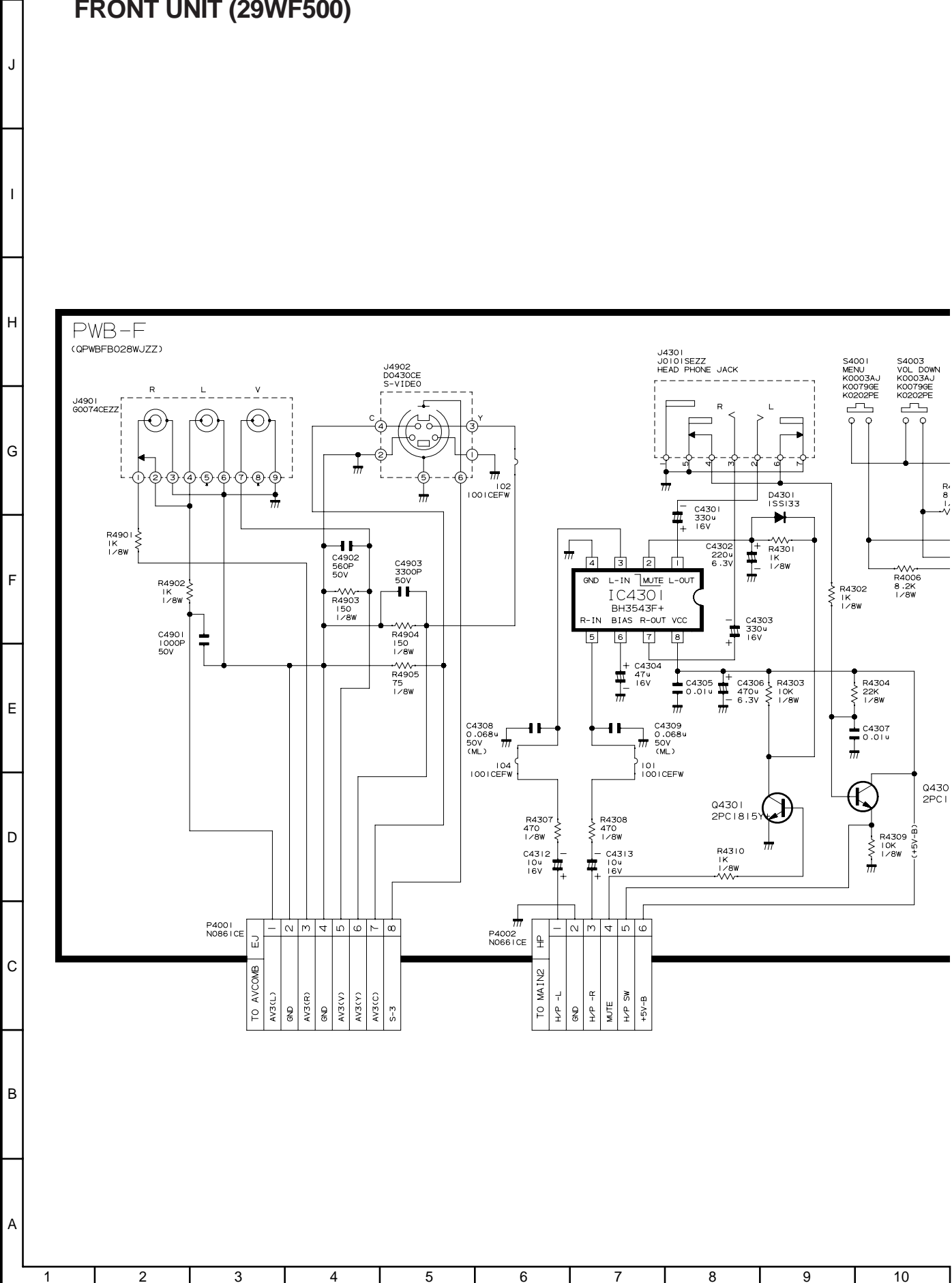
FRONT UNIT (29WF200)

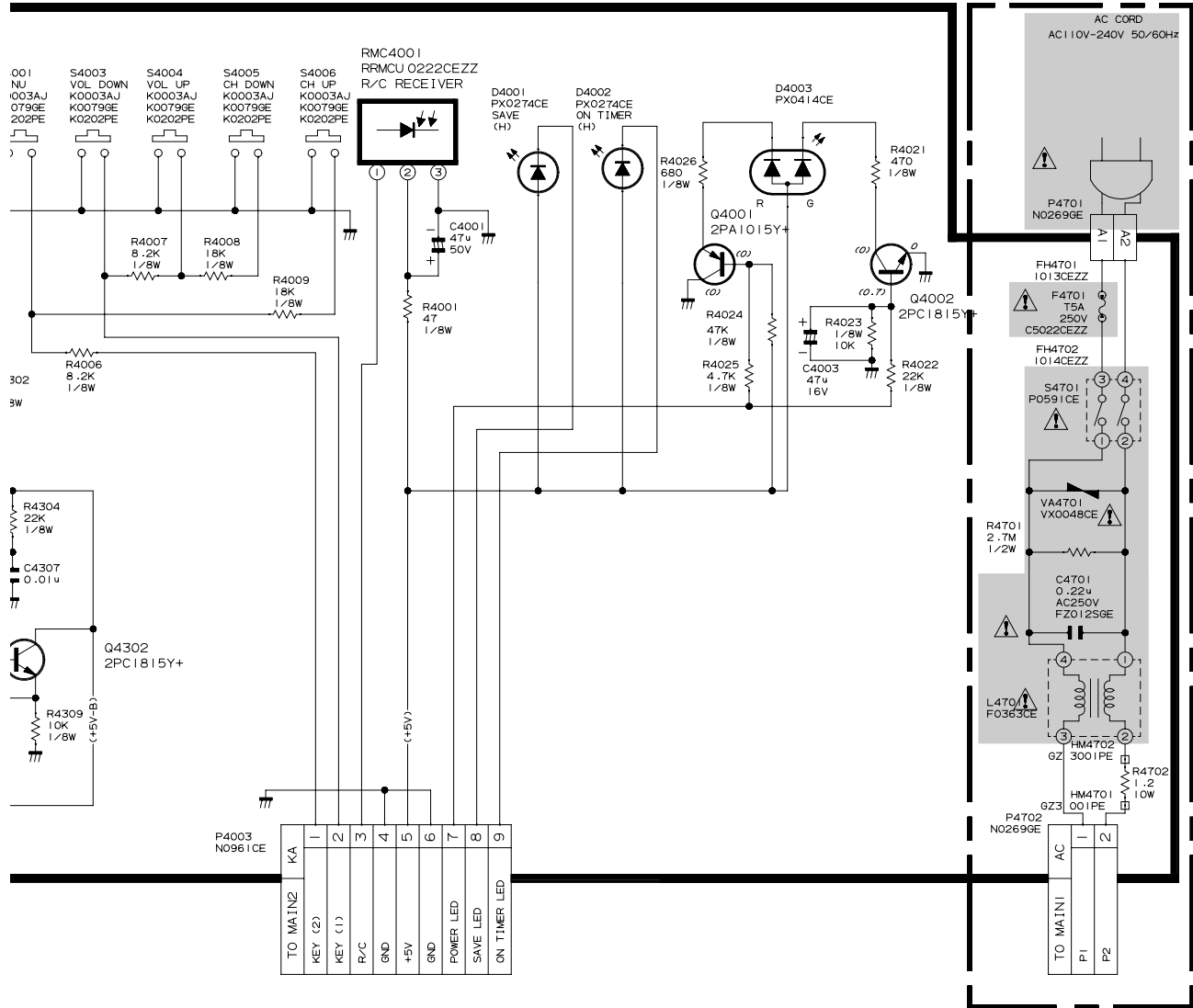




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FRONT UNIT (29WF500)

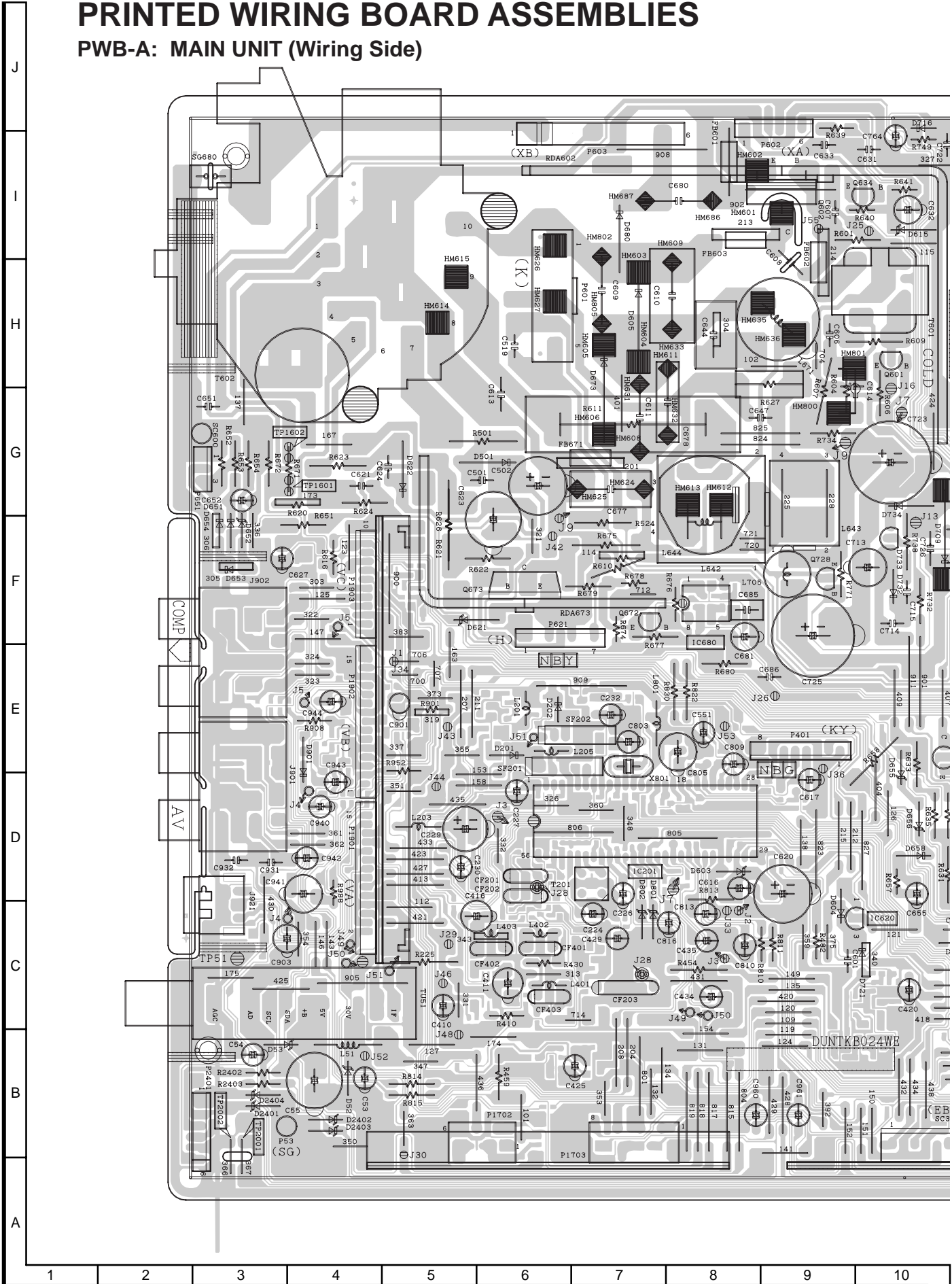


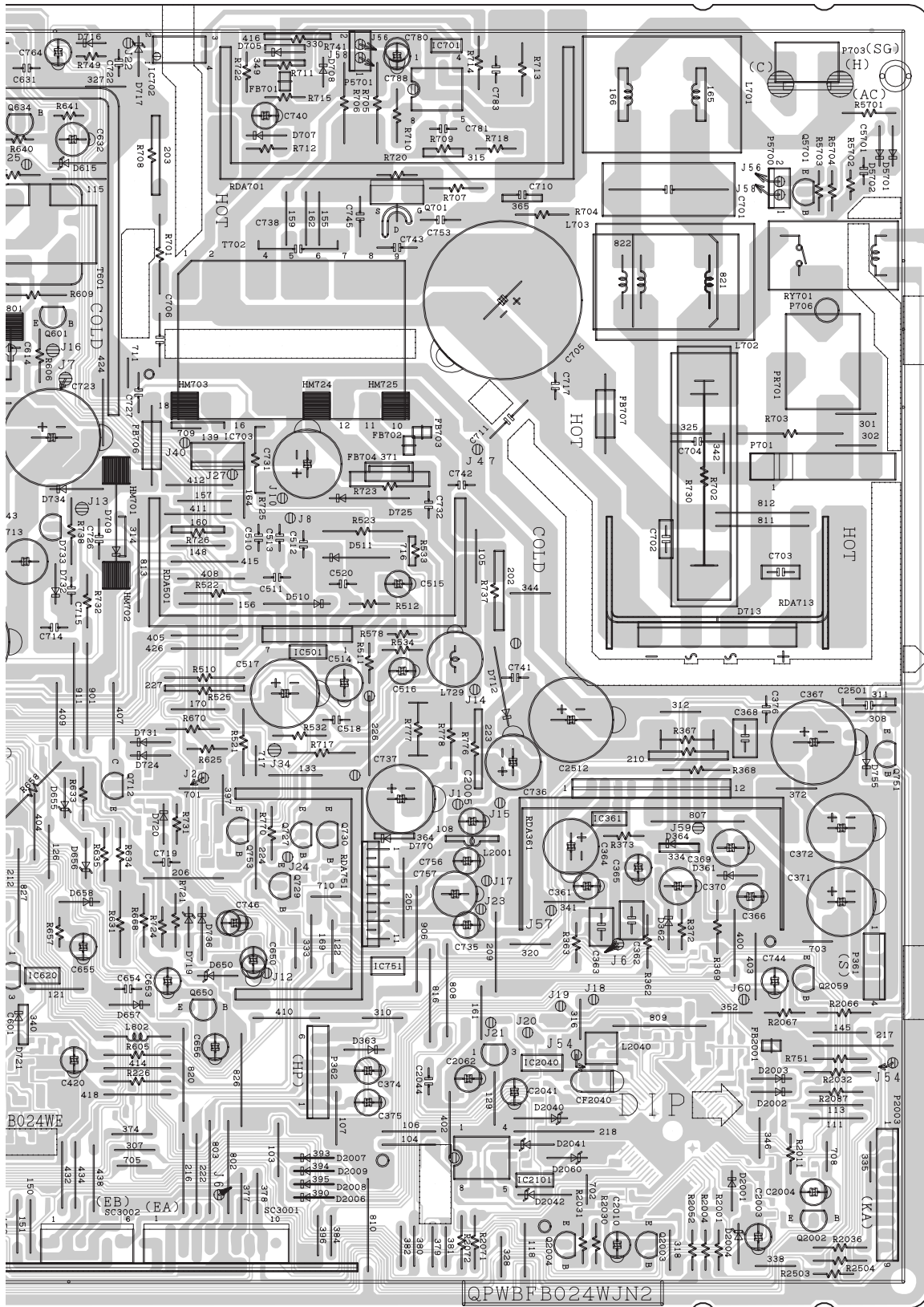


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PRINTED WIRING BOARD ASSEMBLIES

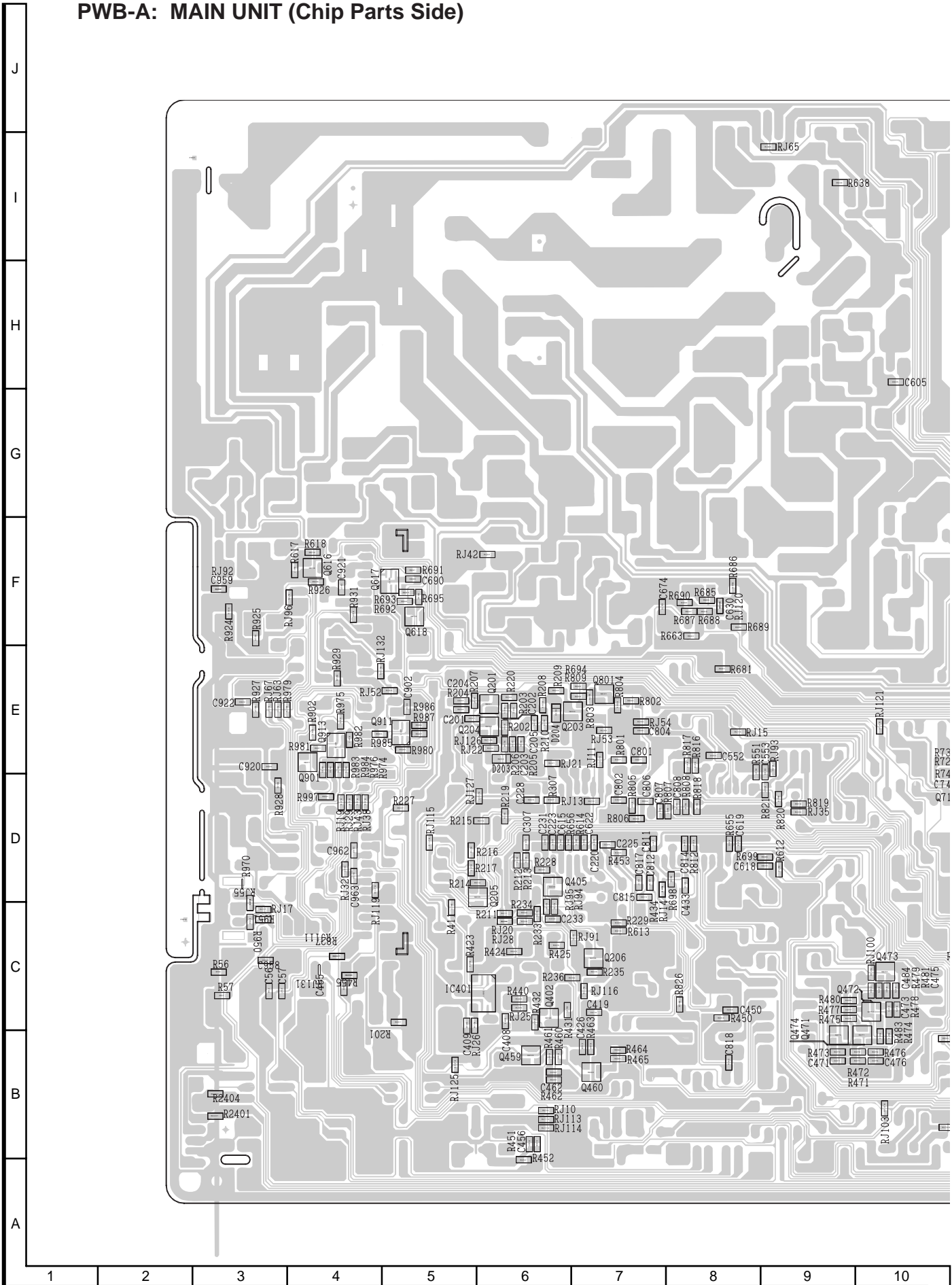
PWB-A: MAIN UNIT (Wiring Side)

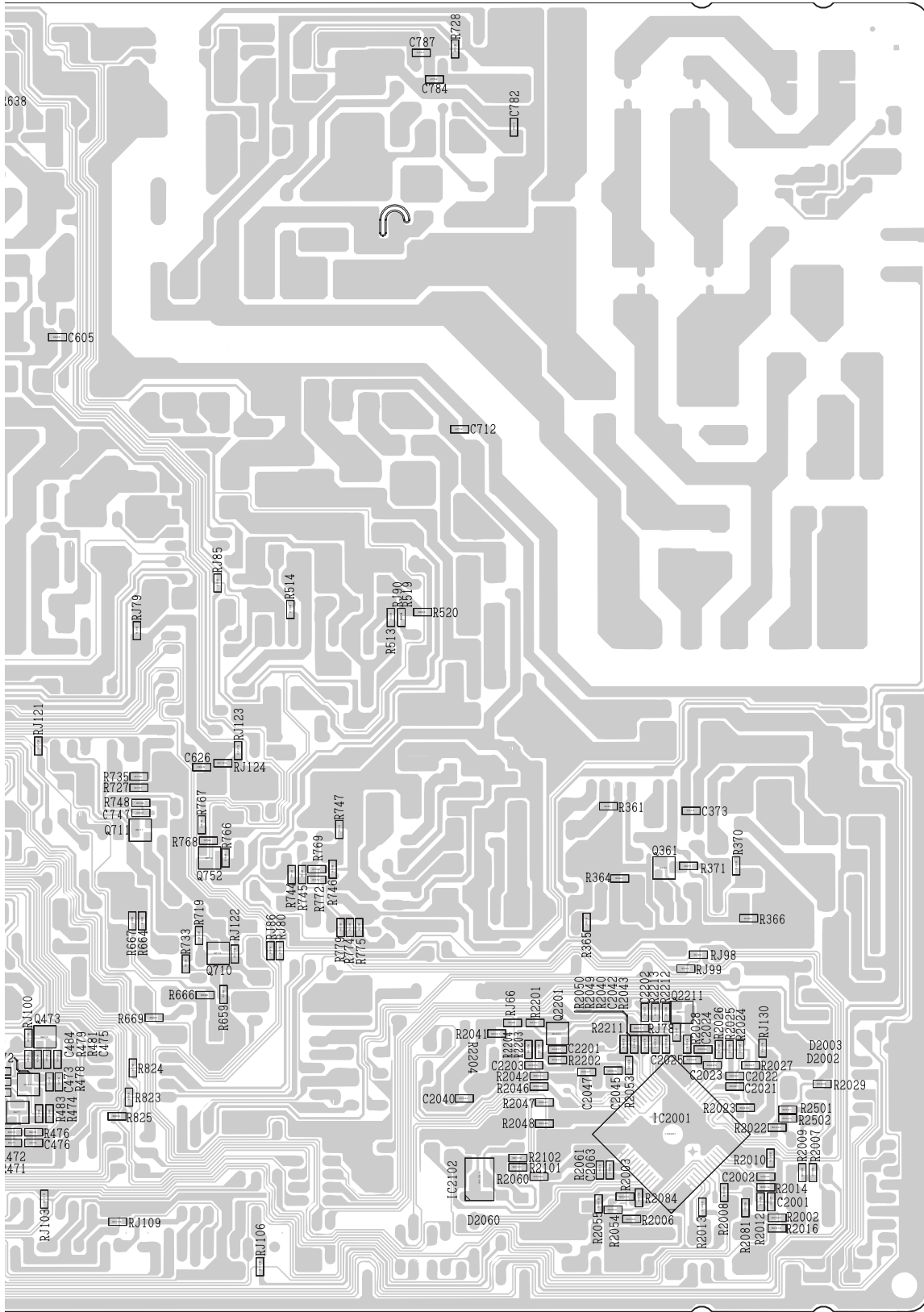




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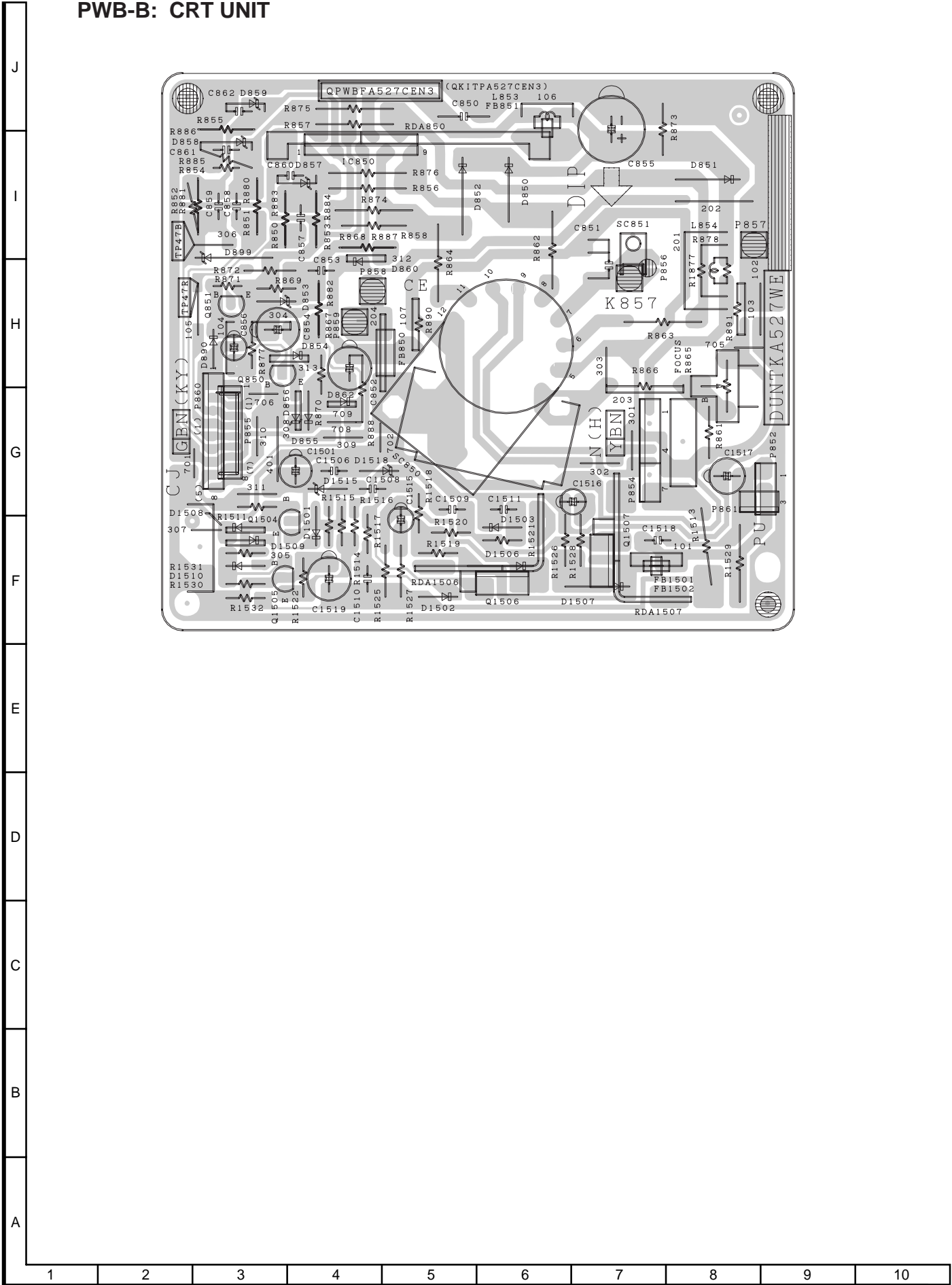
PWB-A: MAIN UNIT (Chip Parts Side)

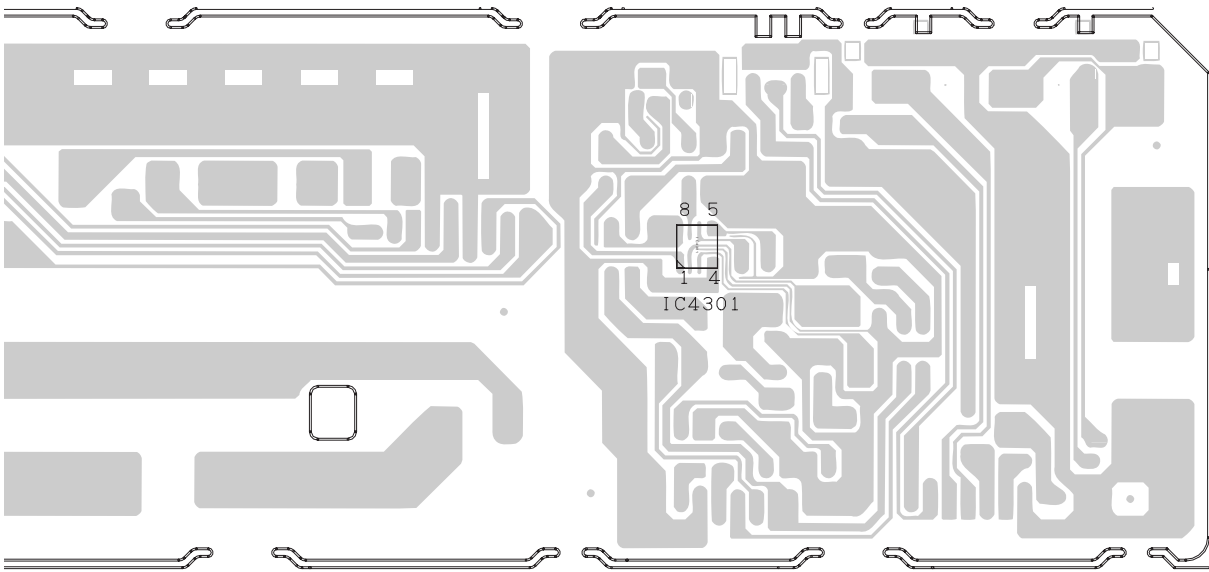
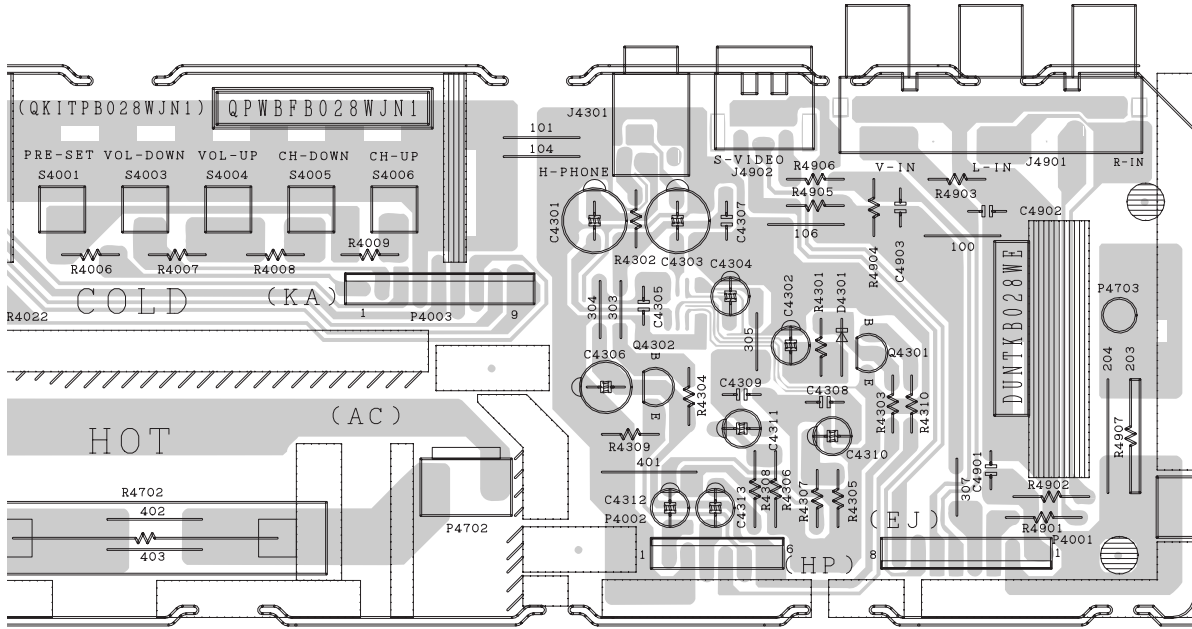




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PWB-B: CRT UNIT





10	11	12	13	14	15	16	17	18	19
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REPLACEMENT PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "△" in the Replacement Parts Lists.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

MARK ★ : SPARE PARTS-DELIVERY SECTION.

Ref. No.	Part No.	★	Description	Code
PICTURE TUBE				
△ V101	VB68QCP899X3E	R	Picture Tube	CV
△ L703	RCiLG0056PEZZ	R	Degaussing Coil	AS
	QEARCA023WJZZ	R	Ground-Part	
	QEARP0023PEZZ	R	Ground-Part	AC
	PMAGF3087CEZZ	R	Magnet	AL
	PMAGG3002CEZZ	R	Magnet	AC

PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A	DUNTKB024WED2	-	Main Unit(29WF200)	—
PWB-A	DUNTKB024WED4	-	Main Unit(29WF500)	—
PWB-B	DUNTKA527WED1	-	CRT Unit	—
PWB-C	DUNTKB025WEA6	-	AV Comb Unit	—
PWB-D	DUNTKB027WEA9	-	S-Control Unit(29WF200)	—
PWB-D	DUNTKB027WEB1	-	S-Control Unit(29WF500)	—
PWB-F	DUNTKB028WEA8	-	Front Unit	—

Ref. No.	Part No.	★	Description	Code
DUNTKB024WED2(29WF200)				
DUNTKB024WED4(29WF500)				
PWB-A MAIN UNIT				

TUNER

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY NOT INDEPENDENTLY.

△ TU51	RTUNQA010WJZZ	R	Tuner	AW
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INTEGRATED CIRCUIT

IC201	RH-iX3394CEN2	R	TB1251CN	AY
IC361	VHiAN5277//-1	R	AN5277	AN
IC401	VHiNJ2233BM-1Y	R	NJM2233BM(29WF500)	AE
IC501	VHiTA8427K/-1	R	TA8427K	AL
IC620	VHiKA78S09P-1+	R	KIA78S09P	AD
IC680	VHiKiA358P+-1	R	KIA358P	AD
△ IC701	VHiTEA1507/-1	R	TEA1507P/N1	AL
△ IC702	RH-FX0008GEZZ	R	PC123FY8	AE
△ IC703	VHiSE120N//-1	R	SE120N	AG
IC751	VHiSTV8164+-1	R	I.C.	AL
IC2001	RH-iX3593CEN2Q	R	I.C.	AU
IC2040	VHiKiA7045A-1+	R	KIA7045AP	AD
IC2101	VHiCAT24W08-1	R	I.C.	

TRANSISTORS

Q201	VS2SC2735//1E*	R	2SC2735	AC
Q203	VSRT1N441C/-1*	R	RT1N441C(29WF500)	AB
Q204	VSRT1N441C/-1*	R	RT1N441C(29WF500)	AB
Q205	VS2PD601AR/-1*	R	2PD601AR(29WF200)	AB
Q206	VS2PD601AR/-1*	R	2PD601AR(29WF200)	AB
Q361	VS2PB709AR/-1*	R	2PB709AR	AB
Q402	VS2PB709AR/-1*	R	2PB709AR(29WF500)	AB
Q405	VS2PD601AR/-1*	R	2PD601AR	AB
Q471	VS2PD601AR/-1*	R	2PD601AR	AB
Q472	VS2PD601AR/-1*	R	2PD601AR	AB
Q473	VS2PD601AR/-1*	R	2PD601AR	AB
Q474	VS2PD601AR/-1*	R	2PD601AR	AB
Q601	VS2SC2482//-1+	R	2SC2482	AD
△ Q602	VS2SD2581++2E	R	2SD2581	AM
Q616	VS2PD601AR/-1*	R	2PD601AR	AB
Q617	VSiMX1C/C//-1Y	R	iMX1C	AC
Q618	VS2PD601AR/-1*	R	2PD601AR	AB
Q634	VS2PC1815Y+-1+	R	2PC1815Y	AC
Q650	VS2PA1015Y+-1+	R	2PA1015Y	AC
Q672	VS2PA1015Y+-1+	R	2PA1015Y	AC
Q673	VS2SD2045//-1	R	2SD2045	AL
△ Q701	VSST10NK80F-1	R	ST10NK80F	
Q710	VS2PB709AR/-1*	R	2PB709AR	AB
Q711	VS2PB709AR/-1*	R	2PB709AR	AB
Q712	VSBC517++++-1+	R	BC517	AD
Q727	VS2SC3333//-1+	R	2SC3333	AD
Q728	VS2SA1091-O1A+	R	2SA1091-O	AF
Q729	VS2PA1015Y+-1+	R	2PA1015Y	AC
Q730	VS2PC1815Y+-1+	R	2PC1815Y	AC
Q751	VS2PC1815Y+-1+	R	2PC1815Y	AC
Q801	VS2PD601AR/-1*	R	2PD601AR	AB
Q901	VS2PB709AR/-1*	R	2PB709AR	AB
Q911	VSiMX1C/C//-1Y	R	iMX1C	AC
Q913	VSiMX1C/C//-1Y	R	iMX1C	AC
Q2002	VS2PA1015Y+-1+	R	2PA1015Y	AC
Q2003	VS2PA1015Y+-1+	R	2PA1015Y	AC
Q2004	VS2PC1815Y+-1+	R	2PC1815Y	AC
Q2059	VS2PC1815Y+-1+	R	2PC1815Y	AC
Q2201	VS2PD601AR/-1*	R	2PD601AR	AB
Q2211	VS2PD601AR/-1*	R	2PD601AR	AB
Q5701	VS2PA1015Y+-1+	R	2PA1015Y	AC

DIODES

D52	RH-EX0676GEZZ*	R	Zener Diode, 32V	AA
D203	VHD1SS390+-1*	R	1SS390(29WF500)	AB
D204	VHD1SS390+-1*	R	1SS390	AB
D361	VHD1SS133+-1*	R	1SS133	
D362	VHD1SS133+-1*	R	1SS133	
D363	VHD1SS133+-1*	R	1SS133	
D501	RH-DX0302CEZZ*	R	DX0302CE	AC

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
D510	RH-DX0441CEZZ*	R	DX0441CE	AC	CAPACITORS				
D511	RH-EX0654CEZZ*	R	Zener Diode, 75V	AD	C53	VCEA0A1HW105M+	R 1	50V Electrolytic	AB
D604	VHD1SS133+-1*	R	1SS133		C54	VCEA0A1HW475M+	R 4.7	50V Electrolytic	AB
D605	RH-DX0255CEZZ	R	DX0255CE	AC	C55	VCEA0A0JW338M	R 3300	6.3V Electrolytic	AD
D615	RH-EX0665GEZZ*	R	Zener Diode, 25V	AA	C201	VCKYCY1HB102K*	R 1000p	50V Ceramic	AA
D621	RH-EX0631GEZZ*	R	Zener Diode, 9.1V	AA	C202	VCKYCY1HB103K*	R 0.01	50V Ceramic	AA
D622	RH-DX0131CEZZ*	R	DX0131CE	AC	C203	VCKYCY1HB102K*	R 1000p	50V Ceramic	AA
D650	RH-EX0628GEZZ*	R	Zener Diode, 8.2V	AC	C204	VCKYCY1HB103K*	R 0.01	50V Ceramic	AA
⚠ D651	VHD1SS244//-1*	R	1SS244	AB	C205	VCKYCY1HB102K*	R 1000p	50V Ceramic	AA
⚠ D652	RH-EX0641GEZZ*	R	Zener Diode, 12V	AA	C220	VCKYCY1EB183KY	R 0.018	25V Ceramic	AA
D653	VHD1SS133+-1*	R	1SS133		C223	VCKYCY1CF104Z*	R 0.1	16V Ceramic	AA
D657	VHD1SS133+-1*	R	1SS133		C224	VCEA0A1HW475M+	R 4.7	50V Electrolytic	AB
D673	RH-DX0229CEZZ	R	DX0229CE	AF	C225	VCKYCY1HB102K*	R 1000p	50V Ceramic	AA
D708	VHD1SS133+-1*	R	1SS133		C226	VCEA0A1HW224M+	R 0.22	50V Electrolytic	AB
D709	RH-DX0229CEZZ	R	DX0229CE	AF	C227	VCEA0A1CW226M+	R 22	16V Electrolytic	AB
D712	RH-DX0468CEZZ	R	DX0468CE	AE	C228	VCKYCY1CF104Z*	R 0.1	16V Ceramic	AA
⚠ D713	RH-DX0336CEZZ	R	DX0336CE	AH	C229	VCEA0A0JW228M	R 2200	6.3V Electrolytic	AD
D716	VHD1SS133+-1*	R	1SS133		C230	VCEA0A1HW225M+	R 2.2	50V Electrolytic	AB
D717	RH-EX0650GEZZ*	R	Zener Diode, 16V	AB	C231	VCKYCY1CF104Z*	R 0.1	16V Ceramic	AA
D719	RH-EX0621GEZZ*	R	Zener Diode, 6.8V	AB	C232	VCEA0A1HW474M+	R 0.47	50V Electrolytic	AB
D720	VHD1SS133+-1*	R	1SS133		C233	VCKYCY1CF104Z*	R 0.1	16V Ceramic	AA
D724	VHD1SS133+-1*	R	1SS133		(29WF200)				
D725	RH-DX0407CEZZ*	R	DX0407CE	AD	C361	VCQYTA1HM104J+	R 0.1	50V Mylar	AB
D731	VHD1SS133+-1*	R	1SS133		C362	VCQYTA1HM333K+	R 0.033	50V Mylar	AB
D732	VHD1SS133+-1*	R	1SS133		C363	VCQYTA1HM333K+	R 0.033	50V Mylar	AB
D733	VHSBT149G+-1+	R	Sl.Control Rectifier	AD	C364	VCEA0A1VW227M+	R 220	35V Electrolytic	AC
D734	RH-DX0302CEZZ*	R	DX0302CE	AC	C365	VCQYTA1HM104J+	R 0.1	50V Mylar	AB
D755	VHD1SS133+-1*	R	1SS133		C366	VCEA0A1CW106M+	R 10	16V Electrolytic	AB
D801	RH-EX0631GEZZ*	R	Zener Diode, 9.1V	AA	C367	VCEA0H1VW228M	R 2200	35V Electrolytic	AH
D802	RH-EX0631GEZZ*	R	Zener Diode, 0.0475V	AA	C368	VCKYPA1HF103Z+	R 0.01	50V Ceramic	AA
D901	VHD1SS133+-1*	R	1SS133		C369	VCEA0A1CW227M+	R 220	16V Electrolytic	AC
D2004	RH-EX0619GEZZ*	R	Zener Diode, 6.2V	AA	C370	VCEA0A1CW227M+	R 220	16V Electrolytic	AC
D2041	RH-EX0614GEZZY	R	Zener Diode, 5.6V	AB	C371	VCEA0A1EW228M	R 2200	25V Electrolytic	AF
D2042	RH-EX0614GEZZY	R	Zener Diode, 5.6V	AB	C372	VCEA0A1EW228M	R 2200	25V Electrolytic	AF
D5701	VHD1SS133+-1*	R	1SS133		C373	VCKYCY1CF104Z*	R 0.1	16V Ceramic	AA
D5702	VHD1SS133+-1*	R	1SS133		C374	VCEA0A1CW226M+	R 22	16V Electrolytic	AB
PACKAGED CIRCUITS					C375	VCEA0A1CW226M+	R 22	16V Electrolytic	AB
PR701	RMPTP0085CEZZ	R	Packaged Circuit	AL	C376	VCQYTA1HM104J+	R 0.1	50V Mylar	AB
X801	RCRCAA011WJZZ	R	Crystal	AE	C408	VCCCCY1HH220J*	R 22p	50V Ceramic	AA
COILS					(29WF500)				
L51	VP-CF270K0000*	R	Peaking, 27μH	AB	C409	VCKYCY1HF103Z*	R 0.01	50V Ceramic	AA
L201	VP-XF1R2K0000*	R	Peaking, 1.2μH	AB	(29WF500)				
L203	VP-DF100K0000*	R	Peaking, 10μH	AB	C410	VCEA0A1CW107M+	R 100	16V Electrolytic	AC
L401	VP-XF100K0000*	R	Peaking, 10μH(29WF500)	AB	(29WF500)				
L402	VP-XF6R8K0000Y	R	Peaking, 6.8μH(29WF500)	AB	C411	VCEA0A1CW227M+	R 220	16V Electrolytic	AC
L402	VP-XF120K0000Y	R	Peaking, 12μH(29WF200)	AB	(29WF500)				
L403	VP-XF150K0000*	R	Peaking, 15μH(29WF500)	AB	C416	VCEA0A1CW227M+	R 220	16V Electrolytic	AC
L642	RCiLZ1034CEZZ	R	Coil	AM	(29WF500)				
L643	RCiLZ0982CEZZ	R	Coil	AK	C419	VCKYCY1CF224Z*	R 0.22	16V Ceramic	AB
L671	RCiLZ1005CEZZ	R	Coil	AH	C420	VCEA0A1CW476M+	R 47	16V Electrolytic	AB
⚠ L702	RCiLFA063WJZZ	R	Coil		C429	VCQYTA1HM103J+	R 0.01	50V Mylar	AB
L705	RCiLP0179CEZZ+	R	Coil	AD	(29WF500)				
L729	RCiLP0179CEZZ+	R	Coil	AD	C433	VCKYCY1HB103K*	R 0.01	50V Ceramic	AA
L801	VP-DF100K0000*	R	Peaking, 10μH	AB	C434	VCE9GA1HW105M+	R 1	50V Electrolytic	AB
L802	VP-DF6R8K0000Y	R	Peaking, 6.8μH	AB	C435	VCQYTA1HM104J+	R 0.1	50V Mylar	AB
L2040	RCiLBA002WJZZ	R	Oscillation Coil	AQ	C450	VCKYCY1HB221K*	R 220p	50V Ceramic	AA
FILTERS					C471	VCKYCY1HB822K*	R 8200p	50V Ceramic	AB
CF202	RFiLC0270CEZZ	R	Filter(29WF200)	AD	C473	VCCCCY1HH561J*	R 560p	50V Ceramic	AB
CF401	RFiLC0020CEZZ	R	Filter(29WF200)	AE	C475	VCKYCY1CF104Z*	R 0.1	16V Ceramic	AA
CF401	RFiLC0318CEZZ	R	Filter(29WF500)	AG	C476	VCKYCY1HB103K*	R 0.01	50V Ceramic	AA
CF402	RFiLC0465CEZZ	R	Filter(29WF500)	AD	C484	VCKYCY1HB103K*	R 0.01	50V Ceramic	AA
CF403	RFiLC0446CEZZ	R	Filter(29WF500)	AD	C501	VCKYPA2HB102K+	R 1000p	500V Ceramic	AA
CF2040	RFiLA0099CEZZ	R	Filter	AE	C502	VCEA0A1VW108M	R 1000	35V Electrolytic	AD
SF201	RFiLC0444CEZZ	R	Filter	AN	C510	VCFYFA1HA564J+	R 0.56	50V Polyester Film	AB
SF202	RFiLC0445CEZZ	R	Filter	AM	C511	VCKYPA2HB681K+	R 680p	500V Ceramic	AB
TRANSFORMERS					C512	VCQYTA1HM683J+	R 0.068	50V Mylar	AB
T201	RCiLDA002WJZZ	R	Detection Coil	AF	C513	VCQYTA1HM103J+	R 0.01	50V Mylar	AB
⚠ T601	RTRNZ0057PEZZ	R	Transformer	AK	C514	VCEA0A1VW107M+	R 100	35V Electrolytic	AC
⚠ T602	RTRNFA001WJZZ	R	H-Volt Transformer	BA	C515	VCEACA1HC225J+	R 2.2	50V Electrolytic	AC
⚠ T702	RTRNW0006GJZZ	R	Transformer	AP	C516	VCEACA1HC225J+	R 2.2	50V Electrolytic	AC
					C517	VCEA0A1VW108M	R 1000	35V Electrolytic	AD
					C518	VCQYTA1HM273J+	R 0.027	50V Mylar	AB
					C519	VCFYSA1JB473J+	R 0.047	63V	AC
					C551	VCEACA1HC474K+	R 0.47	50V Electrolytic	AC
					C552	VCKYCY1HB392K*	R 3900p	50V Ceramic	AA
					C553	VCKYCY1HB392K*	R 3900p	50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
RJ53	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R236	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA
RJ54	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF200)	
RJ55	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R307	VRS-CY1JF333J*	R 33k	1/16W Metal Oxide	AA
RJ63	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF200)	
RJ65	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R361	VRS-CY1JF224J*	R 220k	1/16W Metal Oxide	AD
RJ66	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R362	VRD-RA2BE222J*	R 2.2k	1/8W Carbon	AA
RJ67	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R363	VRD-RA2BE222J*	R 2.2k	1/8W Carbon	AA
RJ78	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R364	VRS-CY1JF272J*	R 2.7k	1/16W Metal Oxide	AA
RJ79	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R365	VRS-CY1JF272J*	R 2.7k	1/16W Metal Oxide	AA
RJ80	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R367	VRN-VV3DBR68J	R 0.68	2W Metal Film	AA
RJ86	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R368	VRD-RA2BE222J*	R 2.2k	1/8W Carbon	AA
RJ90	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R369	VRD-RA2BE822J*	R 8.2k	1/8W Carbon	AA
RJ93	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R371	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA
RJ94	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R372	VRD-RA2BE223J*	R 22k	1/8W Carbon	AA
			(29WF200)		R410	VRD-RA2BE100J*	R 10	1/8W Carbon	AA
RJ95	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF500)	
RJ98	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R411	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ99	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF500)	
RJ100	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R423	VRS-CY1JF331J*	R 330	1/16W Metal Oxide	AA
RJ103	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R424	VRS-CY1JF680J*	R 68	1/16W Metal Oxide	AA
			(29WF500)		R425	VRS-CY1JF331J*	R 330	1/16W Metal Oxide	AA
RJ106	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R430	VRD-RA2BE331J*	R 330	1/8W Carbon	AA
RJ113	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF500)	
RJ114	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R431	VRS-CY1JF271J*	R 270	1/16W Metal Oxide	AA
RJ115	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF500)	
			(29WF200)		R432	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA
RJ116	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA				(29WF500)	
RJ119	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R440	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
			(29WF200)					(29WF500)	
RJ120	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R450	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ121	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R453	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA
RJ122	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R454	VRD-RA2BE101J*	R 100	1/8W Carbon	AA
RJ123	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R471	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA
RJ124	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R472	VRS-CY1JF821J*	R 820	1/16W Metal Oxide	AA
RJ125	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R473	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA
RJ126	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R474	VRS-CY1JF471J*	R 470	1/16W Metal Oxide	AA
RJ127	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R475	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA
RJ130	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R476	VRS-CY1JF393J*	R 39k	1/16W Metal Oxide	AA
RJ131	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R477	VRS-CY1JF182J*	R 1.8k	1/16W Metal Oxide	AA
RJ132	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R478	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
R57	VRS-CY1JF392J*	R 3.9k	1/16W Metal Oxide	AA	R479	VRS-CY1JF393J*	R 39k	1/16W Metal Oxide	AA
R201	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA	R480	VRS-CY1JF273J*	R 27k	1/16W Metal Oxide	AA
R202	VRS-CY1JF122J*	R 1.2k	1/16W Metal Oxide	AA	R481	VRS-CY1JF152J*	R 1.5k	1/16W Metal Oxide	AA
R203	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA	R482	VRD-RA2BE101J*	R 100	1/8W Carbon	AA
			(29WF500)		R483	VRS-CY1JF471J*	R 470	1/16W Metal Oxide	AA
R203	VRS-CY1JF331J*	R 330	1/16W Metal Oxide	AA	⚠ R501	VRN-VV3DB2R2J	R 2.2	2W Metal Film	AB
			(29WF200)		R510	VRD-RA2BE471J*	R 470	1/8W Carbon	AA
R204	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA	R511	VRD-RA2BE393J*	R 39k	1/8W Carbon	AA
R205	VRS-CY1JF682J*	R 6.8k	1/16W Metal Oxide	AA	R512	VRD-RA2BE563J*	R 56k	1/8W Carbon	AA
			(29WF500)		R513	VRS-CY1JF273J*	R 27k	1/16W Metal Oxide	AA
R206	VRS-CY1JF222J*	R 2.2k	1/16W Metal Oxide	AA	R514	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
			(29WF500)		R520	VRS-CY1JF184J*	R 180k	1/16W Metal Oxide	AA
R207	VRS-CY1JF222J*	R 2.2k	1/16W Metal Oxide	AA	R521	VRD-RM2HD222JY	R 2.2k	1/2W Carbon	AA
			(29WF500)		R523	VRN-VV3DB1R0J	R 1	2W Metal Film	AB
R208	VRS-CY1JF682J*	R 6.8k	1/16W Metal Oxide	AA	R524	VRS-VV3AB391J	R 390	1W Metal Oxide	AA
R209	VRS-CY1JF222J*	R 2.2k	1/16W Metal Oxide	AA	R532	VRD-RA2BE473J*	R 47k	1/8W Carbon	AA
R210	VRS-CY1JF222J*	R 2.2k	1/16W Metal Oxide	AA	R534	VRD-RA2BE181J*	R 180	1/8W Carbon	AA
R211	VRS-CY1JF331J*	R 330	1/16W Metal Oxide	AA	R551	VRS-CY1JF562F*	R 5.6k	1/16W Metal Oxide	AA
			(29WF200)		R578	VRD-RA2BE562J*	R 5.6k	1/8W Carbon	AA
R212	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R601	VRD-RM2HD220J*	R 22	1/2W Carbon	AA
			(29WF200)		R604	VRS-KA3NG122J	R 1.2k	7W Metal Oxide	AD
R216	VRS-CY1JF152J*	R 1.5k	1/16W Metal Oxide	AA	R605	VRD-RM2HD331J*	R 330	1/2W Carbon	AA
			(29WF200)		R606	VRD-RM2HD271J*	R 270	1/2W Carbon	AA
R217	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R609	VRS-VV3AB562J	R 5.6k	1W Metal Oxide	AA
			(29WF200)		R610	VRS-VV3AB221J	R 220	1W Metal Oxide	AA
R220	VRS-CY1JF392J*	R 3.9k	1/16W Metal Oxide	AA	R611	VRW-KQ41C3R3K	R 3.3	15W Cement	AG
R225	VRD-RA2BE680J*	R 68	1/8W Carbon	AA	R612	VRS-CY1JF123J*	R 12k	1/16W Metal Oxide	AA
R226	VRD-RA2BE101J*	R 100	1/8W Carbon	AA	R613	VRS-CY1JF474J*	R 470k	1/16W Metal Oxide	AA
R227	VRS-CY1JF333J*	R 33k	1/16W Metal Oxide	AA	R614	VRS-CY1JF395JY	R 3.9M	1/16W Metal Oxide	AA
R228	VRS-CY1JF272J*	R 2.7k	1/16W Metal Oxide	AA	R616	VRD-RA2BE103J*	R 10k	1/8W Carbon	AA
R229	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA	R617	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA
R233	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA	R618	VRS-CY1JF473J*	R 47k	1/16W Metal Oxide	AA
			(29WF200)		R620	VRD-RM2HD102J*	R 1k	1/2W Carbon	AA
R234	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA	⚠ R621	VRN-VV3DB1R5J	R 1.5	2W Metal Film	AB
R235	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA	⚠ R622	VRN-SV2HCR56J	R 0.56	1/2W Metal Film	AA
			(29WF200)		⚠ R623	VRN-VV3AB1R0J	R 1	1W Metal Film	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R624	VRD-RM2HD332J*	R	3.3k 1/2W Carbon	AA	R769	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA
R627	VRS-KT3LB561J	R	560 3W Metal Oxide	AE	R770	VRD-RM2HD823JY	R	82k 1/2W Carbon	AA
R631	VRS-VV3AB103J	R	10k 1W Metal Oxide	AA	R771	VRD-RM2HD273J*	R	27k 1/2W Carbon	AA
R633	VRD-RA2EE683JY	R	68k 1/4W Carbon	AA	R772	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA
R634	VRD-RA2EE124J*	R	120k 1/4W Carbon	AA	R774	VRS-CY1JF393J*	R	39k 1/16W Metal Oxide	AA
R635	VRD-RA2EE104J*	R	100k 1/4W Carbon	AA	R775	VRS-CY1JF563J*	R	56k 1/16W Metal Oxide	AA
R638	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R777	VRS-KA3HG8R2K	R	8.2 5W Metal Oxide	AD
R639	VRD-RA2BE561J*	R	560 1/8W Carbon	AA	R778	VRS-VV3AB100J	R	10 1W Metal Oxide	AA
R640	VRD-RA2BE563J*	R	56k 1/8W Carbon	AA	R779	VRS-CY1JF273J*	R	27k 1/16W Metal Oxide	AA
R641	VRD-RA2BE151J*	R	150 1/8W Carbon	AA	R801	VRS-CY1JF333J*	R	33k 1/16W Metal Oxide	AA
▲ R651	VRD-RM2HD1R0J*	R	1 1/2W Carbon	AA	R802	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
▲ R652	VRD-RA2EE103JY	R	10k 1/4W Carbon	AA	R804	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA
▲ R653	VRD-RA2EE562J*	R	5.6k 1/4W Carbon	AA	R805	VRS-CY1JF272J*	R	2.7k 1/16W Metal Oxide	AA
▲ R654	VRD-RA2EE393JY	R	39k 1/4W Carbon	AA	R806	VRS-CY1JF681J*	R	680 1/16W Metal Oxide	AA
R655	VRS-CY1JF562J*	R	5.6k 1/16W Metal Oxide	AA	R807	VRS-CY1JF681J*	R	680 1/16W Metal Oxide	AA
R656	VRS-CY1JF224J*	R	220k 1/16W Metal Oxide	AD	R808	VRS-CY1JF681J*	R	680 1/16W Metal Oxide	AA
R658	VRS-VV3DB123J	R	12k 2W Metal Oxide	AA	R809	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R659	VRS-CY1JF471J*	R	470 1/16W Metal Oxide	AA	R810	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R663	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA	R811	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R664	VRS-CY1JF471J*	R	470 1/16W Metal Oxide	AA	R812	VRS-CY1JF224J*	R	220k 1/16W Metal Oxide	AD
R666	VRS-CY1JF223J*	R	22k 1/16W Metal Oxide	AA	R813	VRD-RM2HD271J*	R	270 1/2W Carbon	AA
R667	VRS-CY1JF562J*	R	5.6k 1/16W Metal Oxide	AA	R814	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R668	VRD-RA2EE680J*	R	68 1/4W Carbon	AA	R815	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R669	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R816	VRS-CY1JF272J*	R	2.7k 1/16W Metal Oxide	AA
R670	VRD-RM2HD563JY	R	56k 1/2W Carbon	AA	R817	VRS-CY1JF272J*	R	2.7k 1/16W Metal Oxide	AA
R671	VRS-SV2HC102J	R	1k 1/2W Metal Oxide	AA	R818	VRS-CY1JF272J*	R	2.7k 1/16W Metal Oxide	AA
R672	VRD-RM2HD393J*	R	39k 1/2W Carbon	AA	R819	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R674	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA	R820	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R675	VRN-VV3DB3R3J	R	3.3 2W Metal Film	AB	R821	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R677	VRD-RA2EE103JY	R	10k 1/4W Carbon	AA	R822	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R678	VRD-RA2BE472J*	R	4.7k 1/8W Carbon	AA	R823	VRS-CY1JF152J*	R	1.5k 1/16W Metal Oxide	AA
R679	VRD-RM2HD103J*	R	10k 1/2W Carbon	AA	R824	VRS-CY1JF152J*	R	1.5k 1/16W Metal Oxide	AA
R681	VRS-CY1JF221J*	R	220 1/16W Metal Oxide	AA	R825	VRS-CY1JF152J*	R	1.5k 1/16W Metal Oxide	AA
R686	VRS-CY1JF473J*	R	47k 1/16W Metal Oxide	AA	R826	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R688	VRS-CY1JF223J*	R	22k 1/16W Metal Oxide	AA	R827	VRS-CY1JF100J*	R	10 1/16W Metal Oxide	AA
R689	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA				(29WF200)	
R690	VRS-CY1JF683J*	R	68k 1/16W Metal Oxide	AA	R827	VRS-CY1JF120J*	R	12 1/16W Metal Oxide	AA
R691	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA				(29WF500)	
R692	VRS-CY1JF473J*	R	47k 1/16W Metal Oxide	AA	R830	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA
R693	VRS-CY1JF473J*	R	47k 1/16W Metal Oxide	AA	R901	VRD-RA2BE100J*	R	10 1/8W Carbon	AA
R694	VRS-CY1JF223J*	R	22k 1/16W Metal Oxide	AA	R902	VRS-CY1JF223J*	R	22k 1/16W Metal Oxide	AA
R695	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R908	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R696	VRD-RA2BE125JY	R	1.2M 1/8W Carbon	AA	R924	VRS-CY1JF750J*	R	75 1/16W Metal Oxide	AA
R698	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA	R925	VRS-CY1JF750J*	R	75 1/16W Metal Oxide	AA
R699	VRS-CY1JF123J*	R	12k 1/16W Metal Oxide	AA	R926	VRS-CY1JF151J*	R	150 1/16W Metal Oxide	AA
▲ R701	VRC-UA2HG825K*	R	8.2M 1/2W Solid	AA	R927	VRS-CY1JF151J*	R	150 1/16W Metal Oxide	AA
R702	VRW-KQ41C1R8K	R	1.8 15W Cement	AG	R928	VRS-CY1JF151J*	R	150 1/16W Metal Oxide	AA
R703	VRD-RM2HD391J*	R	390 1/2W Carbon	AA	R950	VRS-CY1JF750J*	R	75 1/16W Metal Oxide	AA
R704	VRD-RM2HD334J*	R	330k 1/2W Carbon	AA	R951	VRS-CY1JF151J*	R	150 1/16W Metal Oxide	AA
R705	VRN-VV3DBR18J	R	0.18 2W Metal Film	AD	R952	VRD-RA2BE333J*	R	33k 1/8W Carbon	AA
R706	VRN-VV3DBR18J	R	0.18 2W Metal Film	AD	R974	VRS-CY1JF561J*	R	560 1/16W Metal Oxide	AA
R707	VRD-RM2HD270J*	R	27 1/2W Carbon	AA	R975	VRS-CY1JF561J*	R	560 1/16W Metal Oxide	AA
▲ R708	VRC-UA2HG825K*	R	8.2M 1/2W Solid	AA	R976	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R709	VRD-RA2BE223J*	R	22k 1/8W Carbon	AA	R979	VRS-CY1JF104J*	R	100k 1/16W Metal Oxide	AA
R710	VRD-RM2HD103J*	R	10k 1/2W Carbon	AA	R980	VRS-CY1JF223J*	R	22k 1/16W Metal Oxide	AA
R713	VRD-RM2HD122JY	R	1.2k 1/2W Carbon	AA	R981	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA
R714	VRD-RM2HD100JY	R	10 1/2W Carbon	AA	R982	VRS-CY1JF473J*	R	47k 1/16W Metal Oxide	AA
R715	VRD-RA2BE470J*	R	47 1/8W Carbon	AA	R983	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA
R718	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA	R984	VRS-CY1JF473J*	R	47k 1/16W Metal Oxide	AA
R719	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R985	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R721	VRD-RM2HD102J*	R	1k 1/2W Carbon	AA	R986	VRS-CY1JF471J*	R	470 1/16W Metal Oxide	AA
R724	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA	R987	VRS-CY1JF471J*	R	470 1/16W Metal Oxide	AA
R725	VRD-RM2HD821JY	R	820 1/2W Carbon	AA	R988	VRD-RA2BE750J*	R	75 1/8W Carbon	AA
R727	VRS-CY1JF473J*	R	47k 1/16W Metal Oxide	AA	R997	VRS-CY1JF104J*	R	100k 1/16W Metal Oxide	AA
R728	VRS-CY1JF394J*	R	390k 1/16W Metal Oxide	AA	R2001	VRD-RA2BE223J*	R	22k 1/8W Carbon	AA
R731	VRD-RA2BE151J*	R	150 1/8W Carbon	AA	R2002	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA
R732	VRD-RM2HD102J*	R	1k 1/2W Carbon	AA	R2004	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
R733	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R2007	VRS-CY1JF562J*	R	5.6k 1/16W Metal Oxide	AA
R735	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R2009	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA
R738	VRS-VV3AB473J	R	47k 1W Metal Oxide	AB	R2010	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA
R744	VRS-CY1JF272J*	R	2.7k 1/16W Metal Oxide	AA	R2011	VRD-RA2BE561J*	R	560 1/8W Carbon	AA
R745	VRS-CY1JF472J*	R	4.7k 1/16W Metal Oxide	AA	R2013	VRS-CY1JF822J*	R	8.2k 1/16W Metal Oxide	AA
R746	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R2016	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA
R747	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R2024	VRS-CY1JF152J*	R	1.5k 1/16W Metal Oxide	AA
R748	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA	R2025	VRS-CY1JF152J*	R	1.5k 1/16W Metal Oxide	AA
R751	VRD-RA2BE473J*	R	47k 1/8W Carbon	AA	R2026	VRS-CY1JF152J*	R	1.5k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R2027	VRS-CY1JF472J*	R	4.7k 1/16W Metal Oxide	AA	RDA713	PRDAR0139PEFW	R	Heat Sink for D713	AC
R2028	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA	RDA751	PRDAR0111GJFW	R	Heat Sink for IC751	AF
R2030	VRD-RA2BE472J*	R	4.7k 1/8W Carbon	AA	△ RY701	RRLYU0045CEZZ	R	Relay	AL
R2031	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA	SC3001	QSOCON0259FJ00	R	Socket, 10Pin(EA)	AE
R2032	VRD-RA2BE182J*	R	1.8k 1/8W Carbon	AA	SC3002	QSOCON0255FJ00	R	Socket, 6Pin(EB)	AD
R2036	VRD-RA2BE182J*	R	1.8k 1/8W Carbon	AA					
R2040	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA					
R2041	VRS-CY1JF333J*	R	33k 1/16W Metal Oxide	AA					
R2042	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2043	VRS-CY1JF333J*	R	33k 1/16W Metal Oxide	AA					
R2046	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2047	VRS-CY1JF221J*	R	220 1/16W Metal Oxide	AA					
R2048	VRS-CY1JF333J*	R	3.3k 1/16W Metal Oxide	AA					
R2052	VRD-RA2BE101J*	R	100 1/8W Carbon	AA					
R2054	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide	AA					
R2055	VRS-CY1JF682J*	R	6.8k 1/16W Metal Oxide	AA					
R2060	VRS-CY1JF221J*	R	220 1/16W Metal Oxide	AA					
R2061	VRS-CY1JF333J*	R	3.3k 1/16W Metal Oxide	AA					
R2066	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA					
R2067	VRD-RA2BE222J*	R	2.2k 1/8W Carbon	AA					
R2071	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA					
			(29WF500)						
R2072	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA					
			(29WF500)						
R2081	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2084	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA					
R2087	VRD-RA2BE182J*	R	1.8k 1/8W Carbon	AA					
R2101	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2102	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2201	VRS-CY1JF222J*	R	2.2k 1/16W Metal Oxide	AA					
R2202	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA					
R2203	VRS-CY1JF184J*	R	180k 1/16W Metal Oxide	AA					
R2211	VRS-CY1JF222J*	R	2.2k 1/16W Metal Oxide	AA					
R2212	VRS-CY1JF682J*	R	6.8k 1/16W Metal Oxide	AA					
R2213	VRS-CY1JF333J*	R	33k 1/16W Metal Oxide	AA					
R2401	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2402	VRD-RA2BE101J*	R	100 1/8W Carbon	AA					
R2403	VRD-RA2BE101J*	R	100 1/8W Carbon	AA					
R2404	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA					
R2501	VRS-CY1JF183J*	R	18k 1/16W Metal Oxide	AA					
R2502	VRS-CY1JF183J*	R	18k 1/16W Metal Oxide	AA					
R2503	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA					
R2504	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA					
R5701	VRD-RA2BE185JY	R	1.8M 1/8W Carbon	AA					
R5702	VRD-RA2BE474J*	R	470k 1/8W Carbon	AA					
R5703	VRD-RA2BE104J*	R	100k 1/8W Carbon	AA					
R5704	VRD-RA2BE472J*	R	4.7k 1/8W Carbon	AA					
BALUNES									
FB601	RBLN-0037CEZZ*	R	Balun	AB					
FB671	RBLN-0037CEZZ*	R	Balun	AB					
FB702	RBLN-0020CEZZ+	R	Balun	AB					
FB706	RBLN-0037CEZZ*	R	Balun	AB					
FB707	RBLN-0037CEZZ*	R	Balun	AB					
MISCELLANEOUS PARTS									
J901	QTANJ0656CEZZ	R	Terminal	AK					
J902	QTANJ0655CEZZ	R	Terminal	AK					
J921	QSOCD0430CEZZ	R	Socket, S-VIDEO	AE					
P361	QPLGN0461CEZZ	R	Plug, 4Pin(S1-4)	AB					
P362	QPLGN0661CEZZ	R	Plug, 6Pin(HP)	AD					
P401	QPLGN0861CEZZ	R	Plug, 8Pin(KY)	AC					
P601	QPLGN0160FJZZ	R	Plug, 5Pin(K1-5)	AD					
P621	QPLGN0761CEZZ	R	Plug, 7Pin(H)	AD					
P701	QPLGN0260CEZZ	R	Plug, 2Pin(M1-2)	AC					
P703	QPLGN0269GEZZ	R	Plug, 2Pin(P1-2)	AB					
P1901	QPLGN1559REZZ	R	Plug, 15Pin(VA)	AC					
P1902	QPLGN1559REZZ	R	Plug, 15Pin(VB)	AC					
P1903	QPLGN1059REZZ	R	Plug, 10Pin(VC)	AC					
P2003	QPLGN0961CEZZ	R	Plug, 9Pin(KA)	AD					
P2401	QPLGN0661CEZZ	R	Plug	AD					
RDA361	PRDAR0342PEFW	R	Heat Sink for IC361	AL					
RDA501	PRDAR0113GJFW	R	Heat Sink for IC501	AH					
RDA602	PRDAR017WJFW	R	Heat Sink for Q602	AG					
RDA673	PRDAR1007MEFW	R	Heat Sink for Q673	AH					
RDA701	PRDAR0117GJFW	R	Heat Sink for Q701	AL					

**DUNTKA527WED1
PWB-B CRT UNIT**

INTEGRATED CIRCUIT
IC850 VHiTDA6103Q-1 R TDA6103Q/N3 AL

TRANSISTORS

Q850 VS2PA1015Y+-1+ R 2PA1015Y AC
Q851 VS2PC1815Y+-1+ R 2PC1815Y AC
Q1504 VS2PC1815Y+-1+ R 2PC1815Y AC
Q1505 VS2PA1015Y+-1+ R 2PA1015Y AC
Q1506 VS2SA1964E/-1 R 2SA1964E AF
Q1507 VS2SC5248E/-1 R 2SC5248E AE

DIODES

D850 RH-DX0220CEZZ* R DX0220CE AB
D851 RH-DX0220CEZZ* R DX0220CE AB
D852 RH-DX0220CEZZ* R DX0220CE AB
D853 RH-EX0647GEZZ* R Zener Diode, 15V AA
D854 VHD1SS133+-1* R 1SS133
D855 VHD1SS133+-1* R 1SS133
D860 VHD1SS133+-1* R 1SS133
D890 VHD1SS133+-1* R 1SS133
D899 RH-EX0615GEZZ* R Zener Diode, 5.6V AA
D1502 VHD1SS133+-1* R 1SS133
D1503 VHD1SS133+-1* R 1SS133
D1506 RH-DX0487CEZZ* R DX0487CE AC
D1507 RH-DX0487CEZZ* R DX0487CE AC
D1510 VHD1SS133+-1* R 1SS133

CAPACITORS

C850 VCFYSB2EB823J R 0.082 250V AD
C851 RC-KZ018JCEZZ R 0.01 AC250V AC
C852 VCEAOA1CW106M+ R 10 16V Electrolytic AB
C853 VCFYFA1HA224J+ R 0.22 50V Mylar AB
C854 VCEAOA1CW227M+ R 220 16V Electrolytic AC
C855 VCEAOA2EW106M+ R 10 250V Electrolytic AD
C856 VCEAOA1CW226M+ R 22 16V Electrolytic AB
C1501 VCEAOA1EW476M+ R 47 25V Electrolytic AB
C1506 VCKYPA1HF103Z+ R 0.01 50V Ceramic AA
C1508 VCKYPA2HB472K+ R 4700p 500V Ceramic AB
C1509 VCKYPA2HB472K+ R 4700p 500V Ceramic AB
C1510 VCKYPA1HF103Z+ R 0.01 50V Ceramic AA
C1511 VCKYPA1HF103Z+ R 0.01 50V Ceramic AA
C1515 VCEAOA1EW476M+ R 47 25V Electrolytic AB
C1516 VCEAOA1EW476M+ R 47 25V Electrolytic AB
C1517 VCEAOA2AW106M+ R 10 100V Electrolytic AC
C1518 VCCSPA2HL560K+ R 56p 500V Ceramic AA
C1519 VCEAA42CN106M+ R 10 160V Electrolytic AC

RESISTORS

R856 VRD-RM2HD224J* R 220k 1/2W Carbon AA
R857 VRD-RM2HD224J* R 220k 1/2W Carbon AA
R858 VRD-RM2HD224J* R 220k 1/2W Carbon AA
R862 VRC-MA2HG152K* R 1.5k 1/2W Solid AA
R863 VRC-MA2HG152K* R 1.5k 1/2W Solid AA
R864 VRC-MA2HG152K* R 1.5k 1/2W Solid AA
R869 VRD-RA2BE153J* R 15k 1/8W Carbon AA
R870 VRD-RA2BE223J* R 22k 1/8W Carbon AA
R871 VRD-RA2BE223J* R 22k 1/8W Carbon AA
R872 VRD-RA2EE680J* R 68 1/4W Carbon AA
R873 VRD-RM2HD224J* R 220k 1/2W Carbon AA
R874 VRD-RM2HD124J* R 120k 1/2W Carbon AA
R875 VRD-RM2HD124J* R 120k 1/2W Carbon AA
R876 VRD-RM2HD124J* R 120k 1/2W Carbon AA
R877 VRD-RA2BE103J* R 10k 1/8W Carbon AA
R880 VRD-RA2BE152J* R 1.5k 1/8W Carbon AA

Ref. No.	Part No.	★	Description	Code
R881	VRD-RA2BE152J*	R	1.5k 1/8W Carbon	AA
R882	VRD-RA2BE392J*	R	3.9k 1/8W Carbon	AA
R883	VRD-RA2BE152J*	R	1.5k 1/8W Carbon	AA
R884	VRD-RA2BE272J*	R	2.7k 1/8W Carbon	AA
R885	VRD-RA2BE272J*	R	2.7k 1/8W Carbon	AA
R886	VRD-RA2BE272J*	R	2.7k 1/8W Carbon	AA
R887	VRD-RA2BE272J*	R	2.7k 1/8W Carbon	AA
R1511	VRD-RA2BE101J*	R	100 1/8W Carbon	AA
△ R1513	VRS-VV3DB221J	R	220 2W Metal Oxide	AA
R1514	VRD-RA2BE100J*	R	10 1/8W Carbon	AA
R1515	VRD-RA2BE820J*	R	82 1/8W Carbon	AA
R1516	VRD-RA2BE820J*	R	82 1/8W Carbon	AA
R1517	VRD-RA2BE122J*	R	1.2k 1/8W Carbon	AA
R1518	VRD-RA2BE683J*	R	68k 1/8W Carbon	AA
R1519	VRD-RA2BE123J*	R	12k 1/8W Carbon	AA
R1520	VRD-RA2BE683J*	R	68k 1/8W Carbon	AA
R1521	VRD-RA2BE122J*	R	1.2k 1/8W Carbon	AA
R1525	VRD-RA2EE560J*	R	56 1/4W Carbon	AA
R1526	VRD-RA2EE560J*	R	56 1/4W Carbon	AA
R1527	VRD-RA2EE1R5JY	R	1.5 1/4W Carbon	AA
R1528	VRD-RA2EE1R5JY	R	1.5 1/4W Carbon	AA
△ R1529	VRS-VV3DB221J	R	220 2W Metal Oxide	AA
R1530	VRD-RA2BE222J*	R	2.2k 1/8W Carbon	AA

BALUNES

FB850	RBLN-0091GEZZ*	R	Balun	AB
FB1501	RBLN-0020CEZZ+	R	Balun	AB

MISCELLANEOUS PART

P854	QPLGN0761CEZZ	R	Plug, 7Pin(H)	AD
P856	QTiPM0083CEZZ	R	Tip	AB
P858	QTiPM0083CEZZ	R	Tip	AB
P860	QPLGN0861CEZZ	R	Plug, 8Pin(KY)	AC
P861	QPLGN0261CEZZ	R	Plug, 2Pin(PU1-2)	AB
RDA850	PRDAR0248PEFW	R	Heat Sink for IC850	AF
RDA1506	PRDAR0083PEFW	R	Heat Sink for Q1506	AD
RDA1507	PRDAR0083PEFW	R	Heat Sink for Q1507	AD
△ SC850	QSOCV0937CEZZ	R	Socket, 12Pin	AL

**DUNTKB025WEA6
PWB-C AV COMB UNIT**

INTEGRATED CIRCUITS

IC1400	VHiMN82362+-1Q	R	I.C.	AW
IC1402	VHiNJ2233BM-1Y	R	NJM2233BM	AE
IC1900	VHiCXA2089Q-1S	R	CXA2089Q	AN
IC1901	VHiNJ2233BM-1Y	R	NJM2233BM	AE

TRANSISTORS

Q1401	VSIMZ1A///-1*	R	iMZ1A	AC
Q1404	VSIMZ1A///-1*	R	iMZ1A	AC
Q1405	VSIMZ1A///-1*	R	iMZ1A	AC
Q1406	VS2PD601AR/-1*	R	2PD601AR	AB
Q1407	VS2PD601AR/-1*	R	2PD601AR	AB
Q1461	VS2PD601AR/-1*	R	2PD601AR	AB
Q1900	VS2PD601AR/-1*	R	2PD601AR	AB
Q1901	VS2PD601AR/-1*	R	2PD601AR	AB
Q1903	VS2PD601AR/-1*	R	2PD601AR	AB

CAPACITORS

C1400	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1401	VCCCCY1HH820J*	R	82p 50V Ceramic	AA
C1403	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1404	VCEAOA0JW108M+	R	1000 6.3V Electrolytic	AC
C1406	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1409	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1410	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1411	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1412	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1413	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1414	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1415	VCEAOA1CW107M+	R	100 16V Electrolytic	AC
C1416	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
C1417	VCKYCY1HB222K*	R	2200p 50V Ceramic	AA
C1418	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1419	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1420	VCEAOA0JW108M+	R	1000 6.3V Electrolytic	AC
C1421	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1423	VCKYCY1HB102K*	R	1000p 50V Ceramic	AA
C1425	VCEAOA1CW106M+	R	10 16V Electrolytic	AB
C1426	VCKYCY1HB102K*	R	1000p 50V Ceramic	AA
C1428	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1429	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1430	VCEAOA1CW476M+	R	47 16V Electrolytic	AB
C1431	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1432	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1433	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1434	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1435	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1436	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1437	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1438	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1439	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1440	VCEAOA0JW108M+	R	1000 6.3V Electrolytic	AC
C1460	VCEAOA1CW106M+	R	10 16V Electrolytic	AB
C1462	VCEAOA1CW107M+	R	100 16V Electrolytic	AC
C1464	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1465	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1466	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1467	VCEAOA1CW107M+	R	100 16V Electrolytic	AC
C1472	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1473	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1476	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1477	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1900	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1901	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1902	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1903	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1904	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1905	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1906	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1907	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1908	VCKYCY1HB103K*	R	0.01 50V Ceramic	AA
C1909	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1910	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1911	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1912	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1913	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1914	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1915	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1916	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1917	VCCCCY1HH220J*	R	22p 50V Ceramic	AA
C1919	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA
C1921	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1922	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1923	VCEAOA1CW107M+	R	100 16V Electrolytic	AC
C1924	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1925	VCEAOA1CW106M+	R	10 16V Electrolytic	AB
C1926	VCEAOA1CW226M+	R	22 16V Electrolytic	AB
C1927	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1928	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1929	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1930	VCCCCY1HH121J*	R	120p 50V Ceramic	AA
C1931	VCCCCY1HH121J*	R	120p 50V Ceramic	AA
C1937	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1938	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1939	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1940	VCEAOA1HW105M+	R	1 50V Electrolytic	AB
C1949	VCE9GA1CW106M+	R	10 16V Electrolytic	AB
C1950	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1951	VCKYCY1HB681K*	R	680p 50V Ceramic	AA
C1952	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA
C1958	VCEAOA1CW106M+	R	10 16V Electrolytic	AB
C1959	VCEAOA1CW106M+	R	10 16V Electrolytic	AB
C1960	VCEAOA1CW106M+	R	10 16V Electrolytic	AB
C1961	VCKYCY1HB561K*	R	560p 50V Ceramic	AA

RESISTORS

RJ2	VRS-CY1JF000J*	R	0 1/16W Metal Oxide	AA
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Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
RJ3	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1943	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ6	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1944	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA
RJ7	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1945	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ9	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1946	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA
RJ10	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1947	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
RJ13	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1948	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ16	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1949	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
RJ17	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1950	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
RJ18	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1951	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
RJ19	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1952	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
RJ20	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1954	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA
RJ21	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1955	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA
RJ22	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1956	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ23	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1957	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ24	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1958	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
RJ25	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1959	VRS-CY1JF102J*	R 1k	1/16W Metal Oxide	AA
R190	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1960	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
R193	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1962	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
R1401	VRD-RA2EE1R0J*	R 1	1/4W Carbon	AA	R1964	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
R1404	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA	R1967	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA
R1405	VCKYCY1HB331K*	R 330PF	D50 MIC	AA	R1968	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA
R1406	VRS-CY1JF473J*	R 47k	1/16W Metal Oxide	AA	R1969	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA
R1407	VRS-CY1JF821J*	R 820	1/16W Metal Oxide	AA	R1970	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA
R1408	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA	R1971	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
R1412	VRS-CY1JF100J*	R 10	1/16W Metal Oxide	AA	R1972	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA
R1413	VRS-CY1JF100J*	R 10	1/16W Metal Oxide	AA	R1973	VRS-CY1JF151J*	R 150	1/16W Metal Oxide	AA
R1414	VRS-CY1JF121J*	R 120	1/16W Metal Oxide	AA	R1974	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA
R1415	VRS-CY1JF821J*	R 820	1/16W Metal Oxide	AA					
R1416	VRS-CY1JF821J*	R 820	1/16W Metal Oxide	AA					
R1417	VRS-CY1JF561J*	R 560	1/16W Metal Oxide	AA					
R1418	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1419	VRS-CY1JF152J*	R 1.5k	1/16W Metal Oxide	AA					
R1420	VRS-CY1JF152J*	R 1.5k	1/16W Metal Oxide	AA					
R1421	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1422	VRS-CY1JF202JY	R 2k	1/16W Metal Oxide	AA					
R1423	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					
R1424	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					
R1425	VRS-CY1JF821J*	R 820	1/16W Metal Oxide	AA					
R1426	VRS-CY1JF821J*	R 820	1/16W Metal Oxide	AA					
R1427	VRS-CY1JF680J*	R 68	1/16W Metal Oxide	AA					
R1428	VRS-CY1JF121J*	R 120	1/16W Metal Oxide	AA					
R1429	VRS-CY1JF271J*	R 270	1/16W Metal Oxide	AA					
R1430	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1431	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1432	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1433	VRS-CY1JF152J*	R 1.5k	1/16W Metal Oxide	AA					
R1434	VRS-CY1JF152J*	R 1.5k	1/16W Metal Oxide	AA					
R1435	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1436	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1437	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1438	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1442	VRS-CY1JF000J*	R 0	1/16W Metal Oxide	AA					
R1446	VRS-CY1JF103J*	R 10k	1/16W Metal Oxide	AA					
R1447	VRS-CY1JF202JY	R 2k	1/16W Metal Oxide	AA					
R1448	VRS-CY1JF202JY	R 2k	1/16W Metal Oxide	AA					
R1449	VRS-CY1JF122J*	R 1.2k	1/16W Metal Oxide	AA					
R1450	VRS-CY1JF122J*	R 1.2k	1/16W Metal Oxide	AA					
R1451	VRS-CY1JF392J*	R 3.9k	1/16W Metal Oxide	AA					
R1452	VRS-CY1JF392J*	R 3.9k	1/16W Metal Oxide	AA					
R1455	VRS-CY1JF100J*	R 10	1/16W Metal Oxide	AA					
R1463	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1464	VRS-CY1JF680J*	R 68	1/16W Metal Oxide	AA					
R1465	VRS-CY1JF221J*	R 220	1/16W Metal Oxide	AA					
R1900	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1917	VRS-CY1JF100J*	R 10	1/16W Metal Oxide	AA					
R1919	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1920	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1930	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					
R1931	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1932	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					
R1935	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1936	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					
R1937	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1938	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					
R1941	VRS-CY1JF101J*	R 100	1/16W Metal Oxide	AA					
R1942	VRS-CY1JF223J*	R 22k	1/16W Metal Oxide	AA					

MISCELLANEOUS PARTS									
	PSLDM0102GJFW	R	Shield		AD				
P1904	QLPGLN0861CEZZ	R	Plug, 8Pin(EJ)		AC				
SC1901	QSOCCN1598REZZ	R	Socket, 15Pin(VA)		AD				
SC1902	QSOCCN1598REZZ	R	Socket, 15Pin(VB)		AD				
SC1903	QSOCCN1098REZZ	R	Socket, 10Pin(VC)		AC				

DUNTKB027WEA9(29WF200)
DUNTKB027WEB1(29WF500)
PWB-D S-CONTROL UNIT

INTEGRATED CIRCUITS									
IC3501	VHiBD3867AF-1Y	R	I.C.		AQ				
IC3601	VHiMZ01++++-1Y	R	I.C.		AT				
IC3701	VHiMSP3417G-1Q	R	MSP3417G-QG-B8 (29WF500)		AY				
IC3801	VHiM62334FP-1*	R	M62334FP		AH				

TRANSISTORS									
Q3701	VS2PD601AR/-1*	R	2PD601AR(29WF500)		AB				
Q3702	VS2SC2735//1E*	R	2SC2735(29WF500)		AC				

DIODES									
D3601	VHD1SS133+++1*	R	1SS133						
D3602	VHD1SS133+++1*	R	1SS133						
D3603	VHD1SS133+++1*	R	1SS133						
D3604	VHD1SS133+++1*	R	1SS133						
D3605	VHD1SS133+++1*	R	1SS133						
D3702	RH-EX0627GEZZ*	R	Zener Diode, 8.2V (29WF500)		AA				

PACKAGED CIRCUIT									
X3701	RCRSB0249GEZZ+	R	Crystal(29WF500)		AF				

COILS									
L3501	VP-XF100K0000*	R	Peaking, 10μH		AB				
L3601	VP-XF100K0000*	R	Peaking, 10μH		AB				
L3701	VP-XF100K0000*	R	Peaking, 10μH(29WF500)		AB				
L3702	VP-XF100K0000*	R	Peaking, 10μH(29WF500)		AB				
L3703	VP-XF220K0000*	R	Peaking, 22μH(29WF500)		AB				

CAPACITORS									
C3501	VCEA0A1CW106M+	R	10 16V Electrolytic		AB				
C3502	VCEA0A1CW106M+	R	10 16V Electrolytic		AB				
C3503	VCQYTA1HM683J+	R	0.068 50V Mylar		AB				

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C3504	RC-QZA102TAYJ+	R	1000p 50V Polyester Film	AB	C3719	VCKYCY1CF104Z*	R 0.1 16V	Ceramic	AA
C3505	VCE9GA1CW106M+	R	10 16V Electrolytic	AB			(29WF500)		
C3506	RC-QZA104TAYJ+	R	0.1 50V Polyester Film	AB	C3720	VCQYTA1HM103J+	R 0.01 50V	Mylar	AB
C3507	VCEA0A1CW476M+	R	47 16V Electrolytic	AB			(29WF500)		
C3508	VCEA0A1HW475M+	R	4.7 50V Electrolytic	AB	C3721	VCCCCY1HH330J*	R 33p 50V	Ceramic	AA
C3509	VCEA0A1HW475M+	R	4.7 50V Electrolytic	AB			(29WF500)		
C3510	VCEA0A1HW475M+	R	4.7 50V Electrolytic	AB	C3722	VCCCCY1HH330J*	R 33p 50V	Ceramic	AA
C3511	VCEA0A1HW475M+	R	4.7 50V Electrolytic	AB			(29WF500)		
C3512	VCEA0A1HW475M+	R	4.7 50V Electrolytic	AB	C3723	VCKYCY1HB222K*	R 2200p 50V	Ceramic	AA
C3513	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	C3724	VCKYCY1HB222K*	R 2200p 50V	Ceramic	AA
C3514	VCQYTA1HM683J+	R	0.068 50V Mylar	AB	C3801	VCKYCY1HF103Z*	R 0.01 50V	Ceramic	AA
C3515	RC-QZA102TAYJ+	R	1000p 50V Polyester Film	AB	C3802	VCKYCY1HF103Z*	R 0.01 50V	Ceramic	AA
C3516	VCE9GA1CW106M+	R	10 16V Electrolytic	AB	C3803	VCKYCY1HB103K*	R 0.01 50V	Ceramic	AA
C3517	VCEA0A1CW476M+	R	47 16V Electrolytic	AB			(29WF500)		
C3600	VCKYCY1HB102K*	R	1000p 50V Ceramic	AA	C3803	VCKYCY1HF103Z*	R 0.01 50V	Ceramic	AA
C3602	VCEA0A1CW477M+	R	470 16V Electrolytic	AC			(29WF200)		
C3603	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	C3804	VCKYCY1HB103K*	R 0.01 50V	Ceramic	AA
C3604	VCFYFA1HA334J+	R	0.33 50V Polyester Film	AB			(29WF500)		
C3605	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	C3804	VCKYCY1HF103Z*	R 0.01 50V	Ceramic	AA
C3606	VCE9GA1CW106M+	R	10 16V Electrolytic	AB			(29WF200)		
C3607	VCEA0A1HW335M+	R	3.3 50V Electrolytic	AB	C3805	VCKYCY1CF104Z*	R 0.1 16V	Ceramic	AA
C3608	VCEA0A1HW105M+	R	1 50V Electrolytic	AB					
C3609	VCEA0A1CW336M+	R	33 16V Electrolytic	AB	RESISTORS				
C3610	VCE9GA1CW106M+	R	10 16V Electrolytic	AB	RJ2	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3611	RC-QZA102TAYJ+	R	1000p 50V Polyester Film	AB			(29WF500)		
C3612	RC-QZA332TAYJ+	R	3300p 50V Polyester Film	AB	RJ3	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
			(29WF200)		RJ4	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3612	VCQYTA1HM332J+	R	3300p 50V Mylar	AA			(29WF500)		
			(29WF500)		RJ6	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3613	VCQYTA1HM333J+	R	0.033 50V Mylar	AB	RJ7	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3614	VCQYTA1HM104J+	R	0.1 50V Mylar	AB	RJ8	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3615	VCQYTA1HM333J+	R	0.033 50V Mylar	AB			(29WF500)		
C3616	VCQYTA1HM104J+	R	0.1 50V Mylar	AB	RJ9	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3617	RC-QZA102TAYJ+	R	1000p Polyester Film	AB	RJ11	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3618	RC-QZA332TAYJ+	R	3300p 50V Polyester Film	AB	RJ13	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
			(29WF200)		RJ14	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
C3618	VCQYTA1HM332J+	R	3300p 50V Mylar	AA	RJ15	VRS-CY1JF000J*	R 0 1/16W	Metal Oxide	AA
			(29WF500)		R3500	VRS-CY1JF820J*	R 82 1/16W	Metal Oxide	AA
C3619	VCEA0A1CW107M+	R	100 16V Electrolytic	AC	R3501	VRS-CY1JF104J*	R 100k 1/16W	Metal Oxide	AA
C3620	VCKYCY1HB102K*	R	1000p 50V Ceramic	AA	R3502	VRS-CY1JF224J*	R 220k 1/16W	Metal Oxide	AD
C3701	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	R3503	VRS-CY1JF101J*	R 100 1/16W	Metal Oxide	AA
			(29WF500)		R3504	VRS-CY1JF101J*	R 100 1/16W	Metal Oxide	AA
C3702	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA	R3505	VRS-CY1JF820J*	R 82 1/16W	Metal Oxide	AA
			(29WF500)		R3601	VRS-CY1JF474J*	R 470k 1/16W	Metal Oxide	AA
C3703	VCEA0A1CW226M+	R	22 16V Electrolytic	AB	R3602	VRS-CY1JF474J*	R 470k 1/16W	Metal Oxide	AA
			(29WF500)		R3603	VRD-RA2BE474J*	R 470k 1/8W	Carbon	AA
C3704	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	R3604	VRS-CY1JF123J*	R 12k 1/16W	Metal Oxide	AA
			(29WF500)		R3605	VRS-CY1JF392J*	R 3.9k 1/16W	Metal Oxide	AA
C3705	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA	R3606	VRS-CY1JF104J*	R 100k 1/16W	Metal Oxide	AA
			(29WF500)		R3607	VRS-CY1JF333J*	R 33k 1/16W	Metal Oxide	AA
C3706	VCEA0A1CW226M+	R	22 16V Electrolytic	AB	R3608	VRS-CY1JF104J*	R 100k 1/16W	Metal Oxide	AA
			(29WF500)		R3609	VRS-CY1JF333J*	R 33k 1/16W	Metal Oxide	AA
C3707	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA	R3610	VRS-CY1JF123J*	R 12k 1/16W	Metal Oxide	AA
			(29WF500)		R3611	VRS-CY1JF392J*	R 3.9k 1/16W	Metal Oxide	AA
C3708	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	R3612	VRS-CY1JF103J*	R 10k 1/16W	Metal Oxide	AA
			(29WF500)		R3613	VRS-CY1JF223J*	R 22k 1/16W	Metal Oxide	AA
C3709	VCCCCY1HH1R0C*	R	1p 50V Ceramic	AA	R3614	VRS-CY1JF103J*	R 10k 1/16W	Metal Oxide	AA
			(29WF500)		R3615	VRS-CY1JF103J*	R 10k 1/16W	Metal Oxide	AA
C3710	VCCCCY1HH1R0C*	R	1p 50V Ceramic	AA	R3701	VRD-RA2BE473J*	R 47k 1/8W	Carbon	AA
			(29WF500)				(29WF500)		
C3711	VCCCCY1HH470J*	R	47p 50V Ceramic	AA	R3702	VRD-RA2BE101J*	R 100 1/8W	Carbon	AA
			(29WF500)		R3703	VRD-RA2BE101J*	R 100 1/8W	Carbon	AA
C3712	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA	R3704	VRS-CY1JF102J*	R 1k 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		
C3713	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	R3705	VRS-CY1JF221J*	R 220 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		
C3714	VCCCCY1HH560J*	R	56p 50V Ceramic	AB	R3706	VRS-CY1JF152J*	R 1.5k 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		
C3715	VCKYCY1CF104Z*	R	0.1 16V Ceramic	AA	R3707	VRS-CY1JF102J*	R 1k 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		
C3716	VCCCCY1HH151J*	R	150p 50V Ceramic	AA	R3708	VRS-CY1JF221J*	R 220 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		
C3717	VCEA0A1CW106M+	R	10 16V Electrolytic	AB	R3709	VRS-CY1JF393J*	R 39k 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		
C3718	VCKYCY1HF103Z*	R	0.01 50V Ceramic	AA	R3710	VRS-CY1JF183J*	R 18k 1/16W	Metal Oxide	AA
			(29WF500)				(29WF500)		

Ref. No.	Part No.	★	Description	Code
R3711	VRS-CY1JF102J*	R	1k 1/16W Metal Oxide (29WF500)	AA
R3712	VRD-RA2BE101J*	R	100 1/8W Carbon (29WF500)	AA
R3713	VRD-RA2BE101J*	R	100 1/8W Carbon (29WF500)	AA
R3714	VRD-RA2BE680J*	R	68 1/8W Carbon (29WF500)	AA
R3801	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R3802	VRS-CY1JF101J*	R	100 1/16W Metal Oxide	AA
R3803	VRS-CY1JF153J*	R	15k 1/16W Metal Oxide	AA
R3804	VRS-CY1JF103J*	R	10k 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

	PSLDM0345PEFW	R	Shield	AC
P3001	QPLGN0242FJ00	R	Plug, 10Pin(EA)	AE
P3002	QPLGN0238FJ00	R	Plug, 6Pin(EB)	AD

**DUNTKB028WEA8
PWB-F FRONT UNIT**

INTEGRATED CIRCUIT

IC4301	VHiBH3543F+-1*	R	BH3543F-E2	AE
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TRANSISTORS

Q4001	VS2PA1015Y+-1+	R	2PA1015Y, SAVE	AC
Q4002	VS2PC1815Y+-1+	R	2PC1815Y, ON TIMER	AC
Q4301	VS2PC1815Y+-1+	R	2PC1815Y	AC
Q4302	VS2PC1815Y+-1+	R	2PC1815Y	AC

DIODES

D4001	RH-PX0274CEZZ	R	PhotoDiode	AC
D4002	RH-PX0274CEZZ	R	PhotoDiode	AC
D4003	RH-PX0414CEZZ	R	PhotoDiode	AE
D4301	VHD1SS133+-1*	R	1SS133	AE
△	VA4701RH-VX0048CEZZ	R	Varistor	AE

COIL

△	L4701	RCiLF0363CEZZ	R Coil	AG
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CAPACITORS

C4001	VCEA0A1HW476M+	R	47 50V Electrolytic	AB
C4003	VCEA0A1CW476M+	R	47 16V Electrolytic	AB
C4301	VCEA0A1CW337M+	R	330 16V Electrolytic	AC
C4302	VCEA0A0JW227M+	R	220 6.3V Electrolytic	AB
C4303	VCEA0A1CW337M+	R	330 16V Electrolytic	AC
C4304	VCEA0A1CW476M+	R	47 16V Electrolytic	AB
C4305	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C4306	VCEA0A0JW477M+	R	470 6.3V Electrolytic	AC
C4307	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C4308	VCQYTA1HM683J+	R	0.068 50V Mylar	AB
C4309	VCQYTA1HM683J+	R	0.068 50V Mylar	AB
C4312	VCEA0A1CW106M+	R	10 16V Electrolytic	AB
C4313	VCEA0A1CW106M+	R	10 16V Electrolytic	AB
△	C4701	RC-FZ012SGEZZ	R 0.22 AC250V Metallized Polyester Film	AE
C4901	VCKYPA1HB102K+	R	1000p 50V Ceramic	AA
C4902	VCKYPA1HB561K+	R	560p 50V Ceramic	AA
C4903	VCQYTA1HM332J+	R	3300p 50V Mylar	AA

RESISTORS

R4001	VRD-RA2BE470J*	R	47 1/8W Carbon	AA
R4006	VRD-RA2BE822J*	R	8.2k 1/8W Carbon	AA
R4007	VRD-RA2BE822J*	R	8.2k 1/8W Carbon	AA
R4008	VRD-RA2BE183J*	R	18k 1/8W Carbon	AA
R4009	VRD-RA2BE183J*	R	18k 1/8W Carbon	AA
R4021	VRD-RA2BE471J*	R	470 1/8W Carbon	AA
R4022	VRD-RA2BE223J*	R	22k 1/8W Carbon	AA
R4023	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA
R4024	VRD-RA2BE473J*	R	47k 1/8W Carbon	AA
R4025	VRD-RA2BE472J*	R	4.7k 1/8W Carbon	AA
R4026	VRD-RA2BE681J*	R	680 1/8W Carbon	AA
R4301	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
R4302	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA
R4303	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA
R4304	VRD-RA2BE223J*	R	22k 1/8W Carbon	AA
R4307	VRD-RA2BE471J*	R	470 1/8W Carbon	AA
R4308	VRD-RA2BE471J*	R	470 1/8W Carbon	AA
R4309	VRD-RA2BE103J*	R	10k 1/8W Carbon	AA
R4310	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA
R4701	VRC-UA2HG275KY	R	2.7M 1/2W Solid	AC
R4702	VRW-KP4AC1R2K	R	1.2 10W Cement	AE
R4901	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA
R4902	VRD-RA2BE102J*	R	1k 1/8W Carbon	AA
R4903	VRD-RA2BE151J*	R	150 1/8W Carbon	AA
R4904	VRD-RA2BE151J*	R	150 1/8W Carbon	AA
R4905	VRD-RA2BE750J*	R	75 1/8W Carbon	AA

SWITCHES

S4001	QSW-K0003AJZZ+	R	Switch, MENU	AB
S4003	QSW-K0003AJZZ+	R	Switch, VOL. DOWN	AB
S4004	QSW-K0003AJZZ+	R	Switch, VOL. UP	AB
S4005	QSW-K0003AJZZ+	R	Switch, CH DOWN	AB
S4006	QSW-K0003AJZZ+	R	Switch, CH UP	AB
△	S4701	QSW-P0591CEZZ	R Switch, POWER	AQ

MISCELLANEOUS PARTS

△	F4701	QFS-C5022CEZZ	R Fuse, T5A/250V	AD
	FH4701	QFSDH1013CEZZ+	R Fuse Holder	AC
	FH4702	QFSDH1014CEZZ+	R Fuse Holder	AC
	J4301	QJAKJ0101SEZZ	R Jack, Headphone	AE
	J4901	QJAKG0074CEZZ	R Jack	AF
	J4902	QSOCD0430CEZZ	R Socket, S-Video	AE
	P4001	QPLGN0861CEZZ	R Plug, 8Pin(EJ)	AC
	P4002	QPLGN0661CEZZ	R Plug, 6Pin(HP)	AD
	P4003	QPLGN0961CEZZ	R Plug, 9Pin(KA)	AD
△	P4701	QPLGN0269GEZZ	R Plug, 2Pin(A1-2)	AB
	P4702	QPLGN0269GEZZ	R Plug, 2Pin(AC)	AB
	RMC4001	RRMCU0222CEZZ	R Remote Receiver	AL
		LHLDP1056PE00	R Holder	AC

Ref. No. Part No. ★ Description Code

MISCELLANEOUS PARTS

QACCJ9001CESB	R AC Cord	
RSP-ZA001WJZZ	R Speaker Box (SP1,SP2)	BB
QCNW-A027WJZZ	R Connecting Cord	AF
QCNW-A028WJZZ	R Connecting Cord	AF
QCNW-A029WJZZ	R Connecting Cord	AG
QCNW-A030WJZZ	R Connecting Cord	AF
QCNW-A031WJZZ	R Connecting Cord	AG
QCNW-A032WJZZ	R Connecting Cord	AL
QCNW-A106WJZZ	R Connecting Cord	AF
QPLGA0201SE0F	R Plug	AG
QSOCN0243GEZZ	R Socket	

SUPPLIED ACCESSORIES

ACCESSORIES

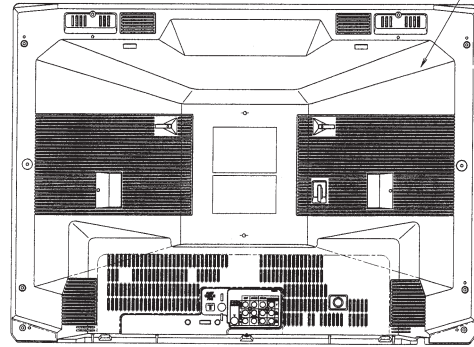
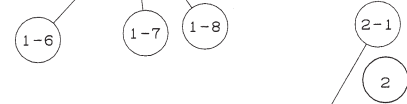
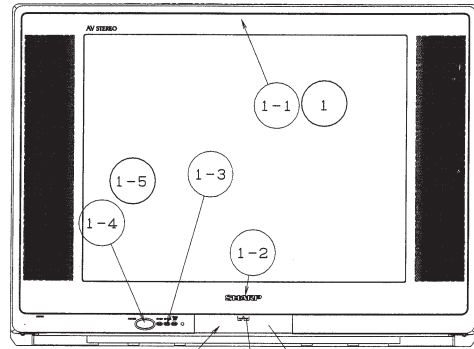
RRMCG1570PESA	R Infrared R-C	AP
TiNS-A444WJZZ	R Instruction Book(29WF200)	
TiNS-A445WJZZ	R Instruction Book(29WF500)	

**PACKING PARTS
(NOT REPLACEMENT ITEM)**

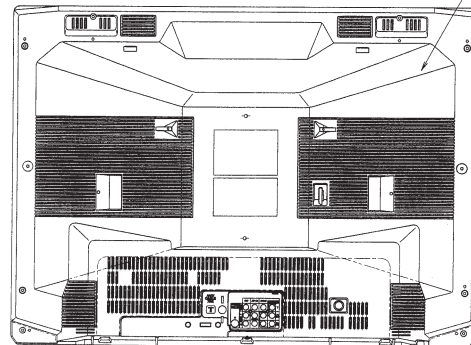
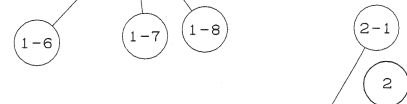
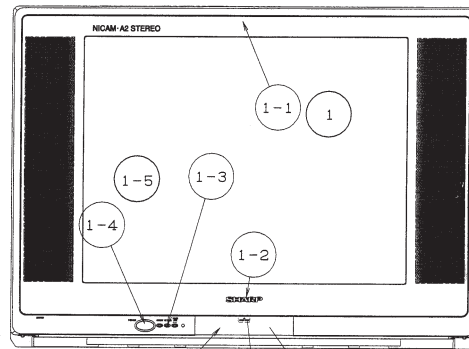
SPAKCA401WJZZ	- Packing Case(29WF200)	—
SPAKCA402WJZZ	- Packing Case(29WF500)	—
SPAKXA170WJZZ	- Packing Add.	—
SSAKA0037CEZZ	- Polyethylene Bag	—
SSAKH0018PEZZ	- Polyethylene Bag	—

CABINET PARTS

1	CCABAA192WEC0	R Front Cabinet Ass'y (29WF200)	
1	CCABAA193WEC0	R Front Cabinet Ass'y (29WF500)	
1-1	<i>Not Available</i>	- Front Cabinet	—
1-2	HBDGB3141CESA	R SHARP Badge	AG
1-3	GCOVA0142PESA	R LED & R/C Cover	AD
1-4	JBTN-0395PESA	R Power Button	AG
1-5	MSPRC0005PEFW	R Power Button Spring	AB
1-6	GDORF0196PESA	R Door	AN
1-7	PKAi-0007PE00	R Door Latch	AE
1-8	HiNDPA264WJSA	R Indication Plate	
2	CCABBA2459WEA0	Rear Cabinet Ass'y	
2-1	<i>Not Available</i>	- Rear Cabinet	—

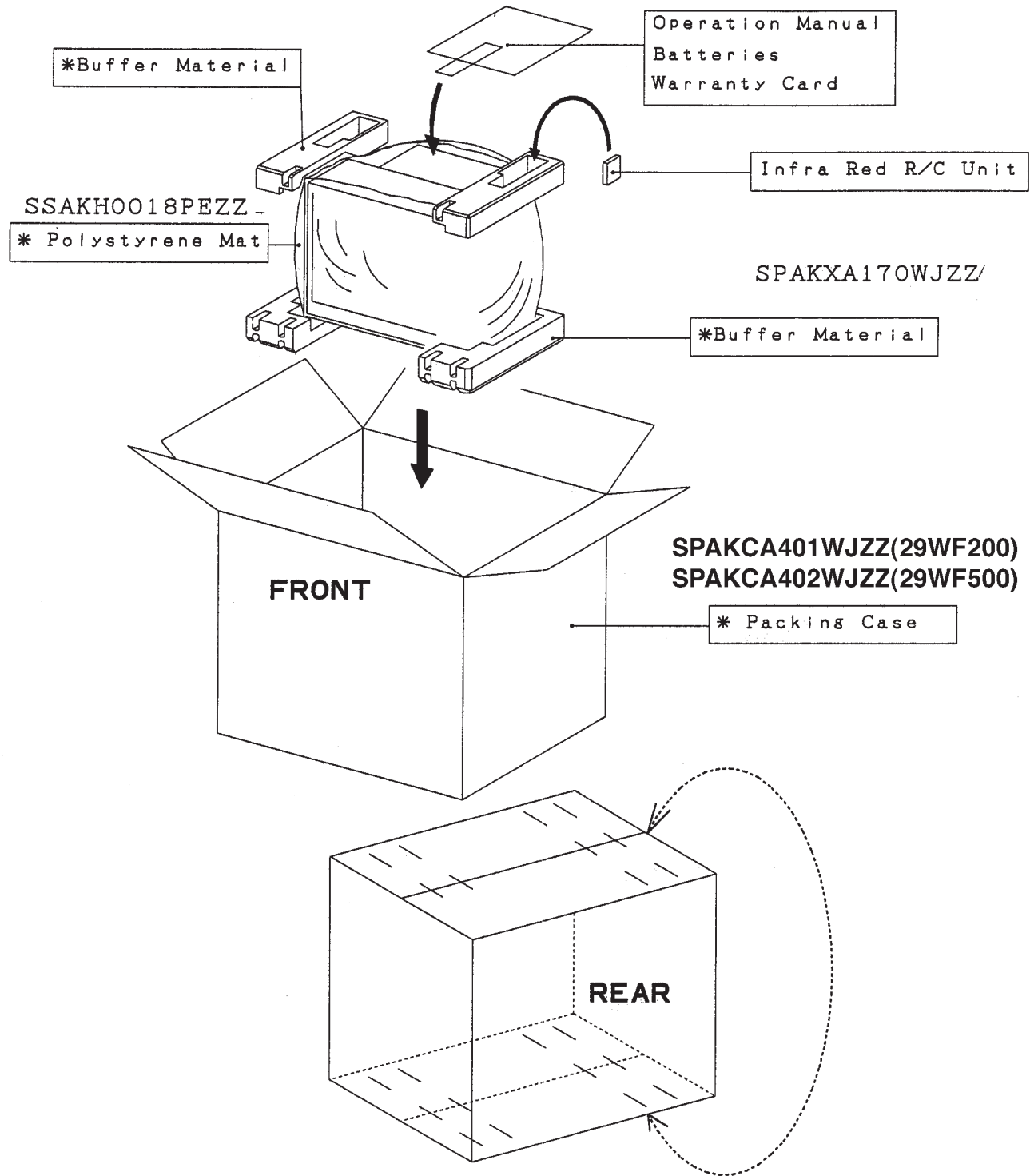


29WF200



29WF500

PACKING OF THE SET



MARK *: Not replacement items

USE 22 STAPLES
FIX THE PACKING CASE

SHARP

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TQ1677-S
Jan. 2004 Printed in Japan
In Japan gedruckt

Design and Production Information
Design : SEM
Production : SYI

MY. DS

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