

SONY.

TRINITRON® COLOR TV BASIC SCHEMATIC DIAGRAM

KV-2182GE/RM-656A

Chassis No. SCC-A93E

NOTE

**THIS SCHEMATIC DIAGRAM IS FOR USE BY YOUR SERVICE
TECHNICIAN.**

KEEP THIS DIAGRAM HANDY FOR FUTURE REFERENCE.






Sony Corporation


4-490-300-01

© 1987

Printed in Japan

Note:

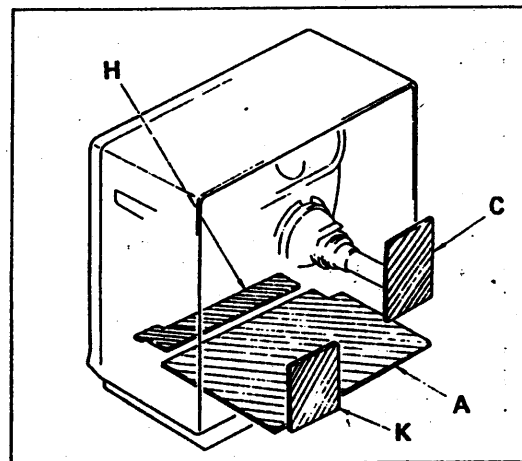
- All capacitors are in μF unless otherwise noted.
50WV or less are not indicated except for electrolytics.
 p : μF
- All resistors are in ohms $\frac{1}{4}$ W unless otherwise noted.
 $k\Omega$: 1000Ω , $M\Omega$: $1000k\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : fusible resistor.
- Δ : internal component.
-  : panel designation.
-  : adjustment for repair.
-  : B+ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 $M\Omega$ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar-signal input.
no mark : with PAL color-bar signal received.

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE WIREWOUND
COIL	: RB	NONFLAMMABLE CEMENT
	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: AIR	HIGH RIPPLE

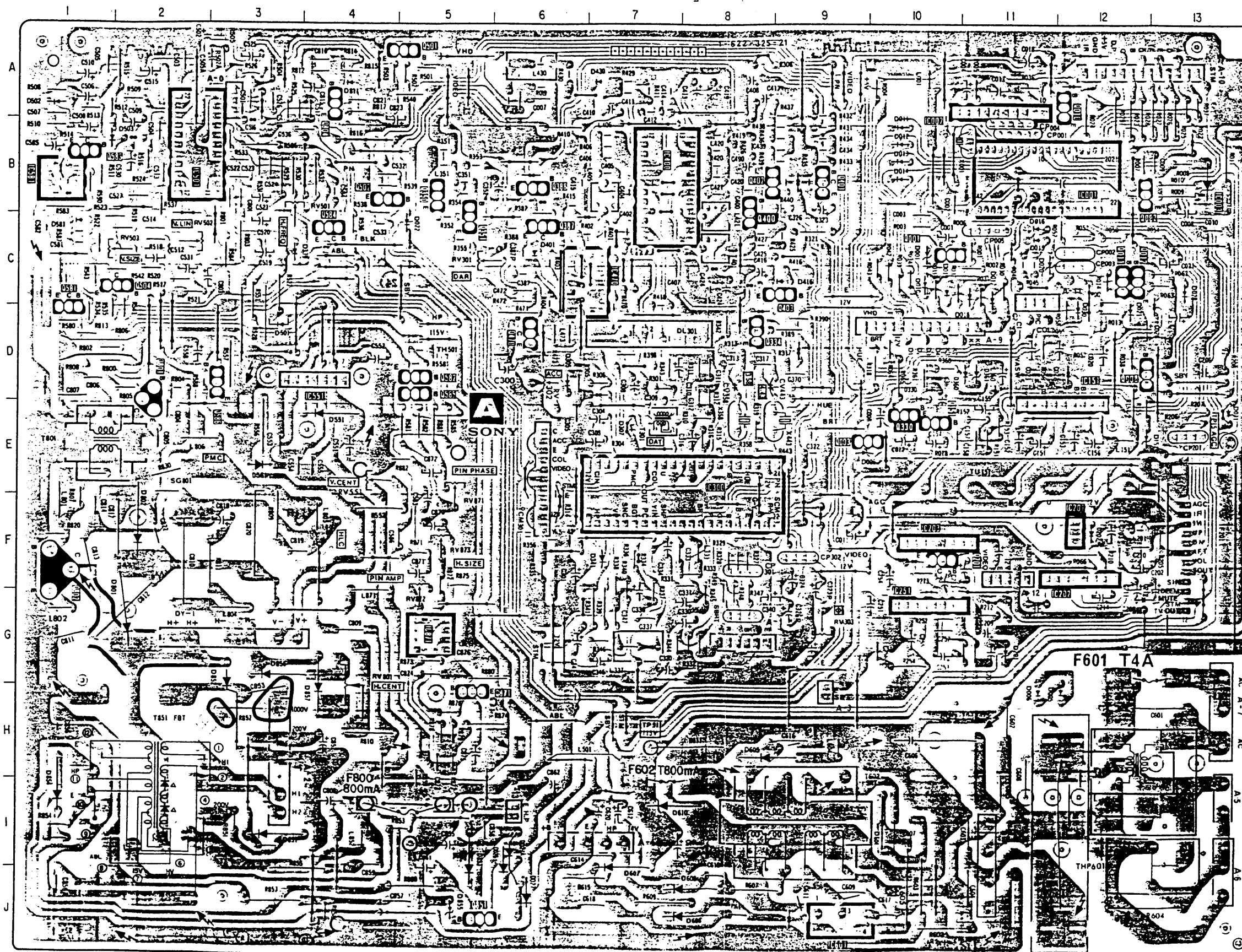
CIRCUIT BOARDS LOCATION



MOUNTING DIAGRAMS

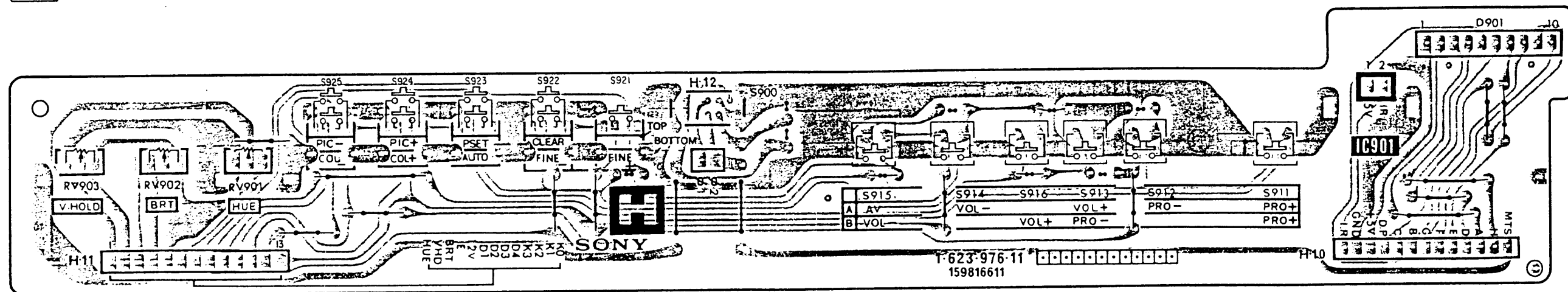
Note: All mounting diagrams are viewed from conductor side.

A [SYSTEM CONTROL, AUDIO AMP, AUDIO SW, VIDEO SW,
AUDIOOUT, MEMORY, Y/C PROCESS, Y/C JUNGLE, LINE RECT, PWM REG.]



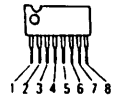
IC			
IC001	B-12	D201	G-11
IC002	A-11	D202	F-12
IC003	B-13	D305	D-6
IC151	D-12	D330	D-10
IC201	F-12	D339	C-3
IC202	F-12	D341	F-7
IC203	F-10	D360	D-11
IC251	G-10	D361	D-11
IC300	E-7	D501	D-3
IC501	B-2	D502	A-1
IC551	D-4	D503	B-1
IC601	J-9	D551	E-4
IC871	G-5	D561	E-3
TRANSISTOR			
Q001	C-10	D601	I-11
Q002	B-12	D604	I-10
Q003	E-9	D605	H-8
Q008	D-12	D606	J-8
Q010	A-12	D607	I-7
		D608	J-8
		D610	I-7
Q011	C-12	D801	G-2
Q012	C-12	D802	F-2
Q151	E-10	D851	I-3
Q201	F-10	D852	G-3
Q330	E-10	D853	I-5
Q470	D-6	D854	I-1
Q501	A-5	D855	J-5
Q504	D-2	D856	G-3
Q801	D-2	D857	H-4
Q802	F-1	D027A	I-6
Q804	A-4		
Q851	C-1		
Q871	H-5		
DIODE		VARIABLE RESISTOR	
D001	C-10	RV301	C-5
D006	E-9	RV302	D-6
D010	C-10	RV303	G-9
D011	B-10	RV501	B-3
D012	B-10	RV502	C-2
D013	B-10	RV503	C-2
D014	B-10	RV551	E-4
D017	C-11	RV801	G-4
D018	C-11	RV871	E-5
D020	C-11	RV872	F-5
D021	D-12	RV873	F-5
D022	C-5		
D028	C-13		
D030	D-12		
D151	E-12		

H CUSTOMER CONTROL,
INDICATOR, PROG DISP.

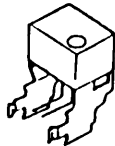


SEMICONDUCTOR

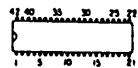
BA7001



BX1398

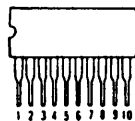


CXA1001AP
M50431-512P



(Top view)

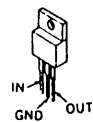
CXK1004L



LA7920



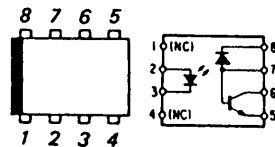
NJM78L09A



STR50115B



TLP651VIDEO



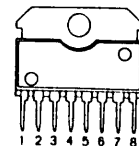
uPC78L12



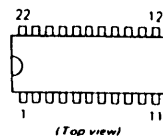
uPC574J



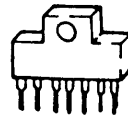
uPC1241H



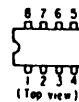
uPC1377C



uPC1488H



uPC4558C



2SA933



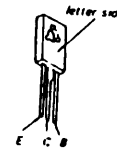
2SA1048
2SA1115
2SC403
2SC1740
2SC2458
2SC2603
DTA124ES



2SA1175
2SC2785



2SC2611
2SC2688



2SD773



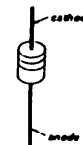
2DS1398



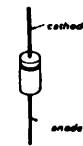
2SD1761



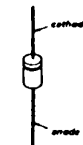
1SS119
1SS133
1SS148
RD2.0ES-B1
RD3.9ES-L1
RD5.6ES-B2
RD7.5ES-B3
RD13ES-B2



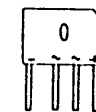
10E2-TA2B
ERD28-08S
ES1F
GP08DPKG23
RGP10GPKG23
RGP15JPKG23



ERC08-15S
ERC24-06S
R2M



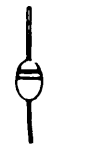
KBU4JL-6088



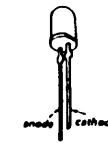
MC931



U05G V30N



SE303AY

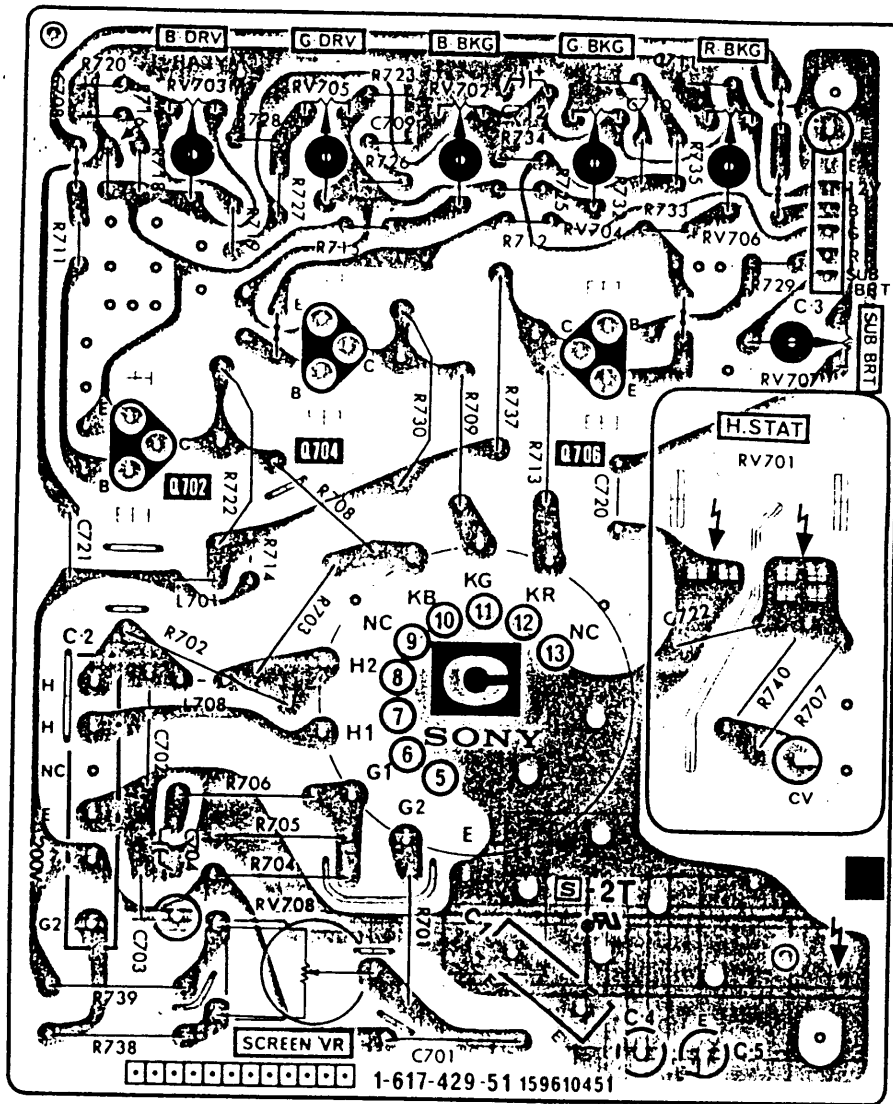


SLR-932A



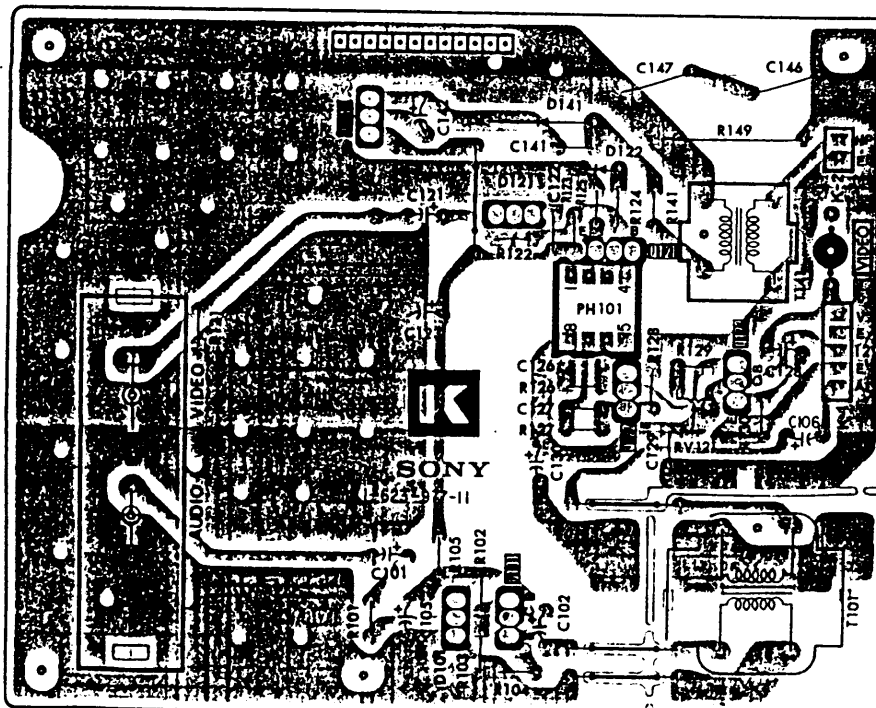
C

[R · G · B OUT]



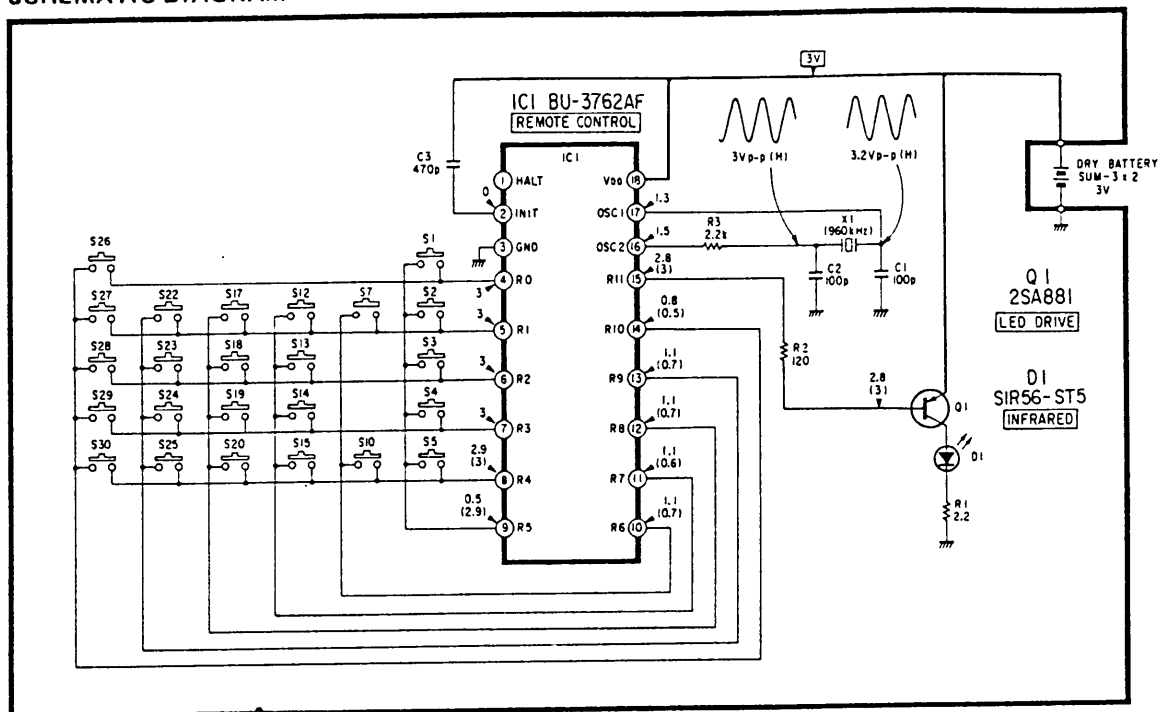
K
















[A, V/IN]



REMOTE COMMANDER RM-656A

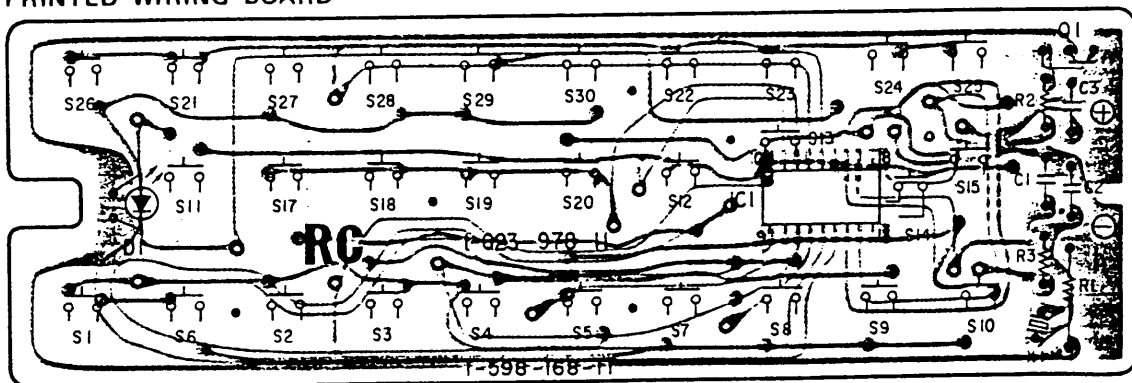
SCHEMATIC DIAGRAM



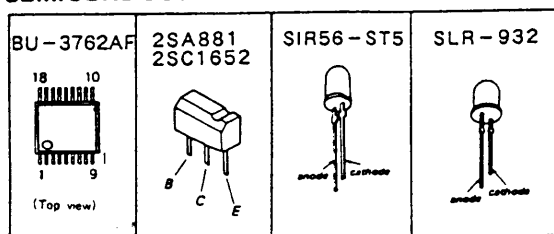
	R5	R6	R7	R8	R9	R10
R0	S1 MUTE 					S26 
R1	S2 1 	S7 	S12 + 	S17 2 	S22 + 	S27 3 
R2	S3 4		S13 - 	S18 5 	S23 - 	S28 6 
R3	S4 7		S14 + 	S19 8	S24 PROGR +	S29 9
R4	S5 10 	S10	S15 - 	S20 11	S25 PROGR -	S30 12

- All voltages are in V (volt).
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M Ω /V digital voltmeter. No marking: S1 is depressed.
- Voltage variations may be noted due to normal production tolerances.
- Voltages and waveform are for when 1 button is pressed
- Voltages in () are taken with button not pressed.
- — : B = bus.







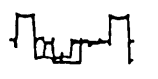


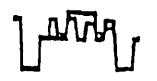



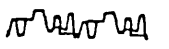


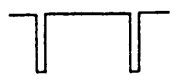


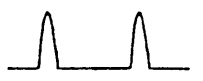
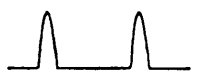

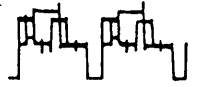




PRINTED WIRING BOARD



SEMICONDUCTOR



WAVE FORM

<div>①</div> <div></div> <div>2Vp-p (H)</div>	<div>⑤</div> <div></div> <div>0. 7Vp-p (H)</div>	<div>⑨</div> <div></div> <div>5Vp-p (H)</div>	<div>⑬</div> <div></div> <div>1. 8Vp-p (H)</div>	<div>⑰</div> <div></div> <div>1. 8Vp-p (H)</div>	<div>⑳</div> <div></div> <div>90Vp-p (H)</div>	<div>㉑</div> <div></div> <div>100Vp-p (H)</div>
<div>②</div> <div></div> <div>2Vp-p (H)</div>	<div>⑥</div> <div></div> <div>0. 4Vp-p (H)</div>	<div>⑩</div> <div></div> <div>5Vp-p (H)</div>	<div>⑭</div> <div></div> <div>2. 4Vp-p (H)</div>	<div>⑱</div> <div></div> <div>5. 6Vp-p (H)</div>	<div>㉒</div> <div></div> <div>13vp-p (H)</div>	<div>㉔</div> <div></div> <div>80Vp-p (H)</div>
<div>③</div> <div></div> <div>2Vp-p (H)</div>	<div>⑦</div> <div></div> <div>0. 5Vp-p (H)</div>	<div>⑪</div> <div></div> <div>2Vp-p (H)</div>	<div>⑮</div> <div></div> <div>4. 6Vp-p (H)</div>	<div>⑲</div> <div></div> <div>1. 8Vp-p (H)</div>	<div>㉓</div> <div></div> <div>900Vp-p (H)</div>	<div>㉕</div> <div></div> <div>28Vp-p (H)</div>
<div>④</div> <div></div> <div>1Vp-p (H)</div>	<div>⑧</div> <div></div> <div>5Vp-p (H)</div>	<div>⑫</div> <div></div> <div>7. 6Vp-p (H)</div>	<div>⑯</div> <div></div> <div>11Vp-p (H)</div>	<div>㉘</div> <div></div> <div>4. 8Vp-p (H)</div>	<div>㉖</div> <div></div> <div>110Vp-p (H)</div>	

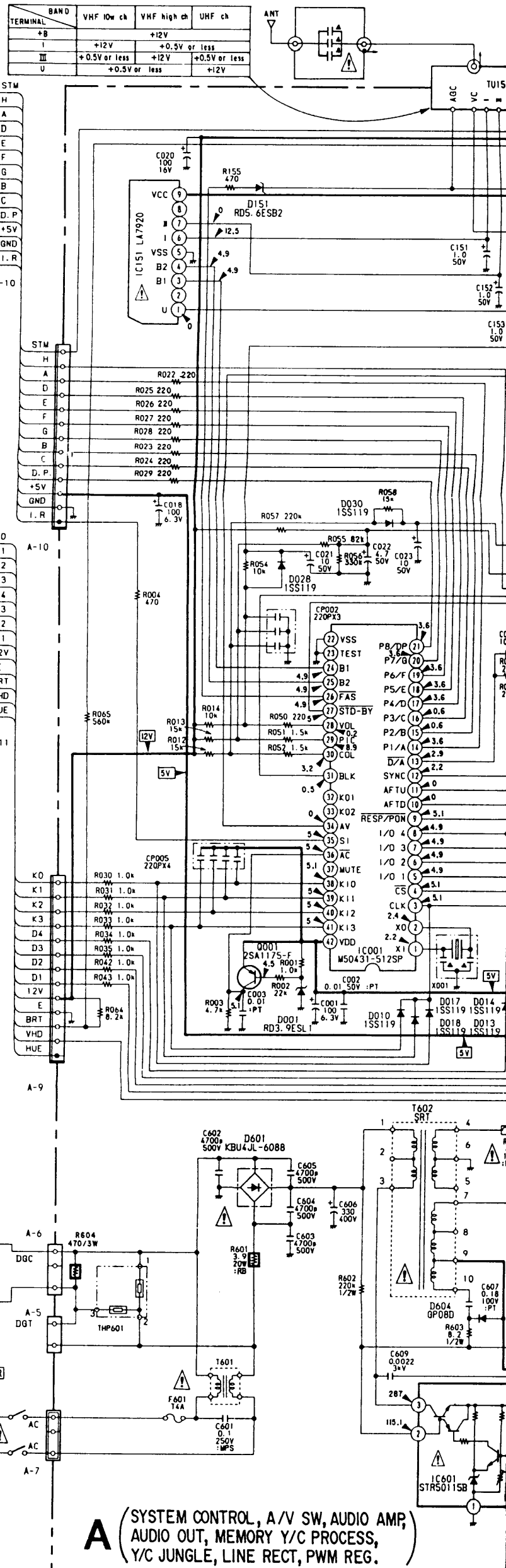
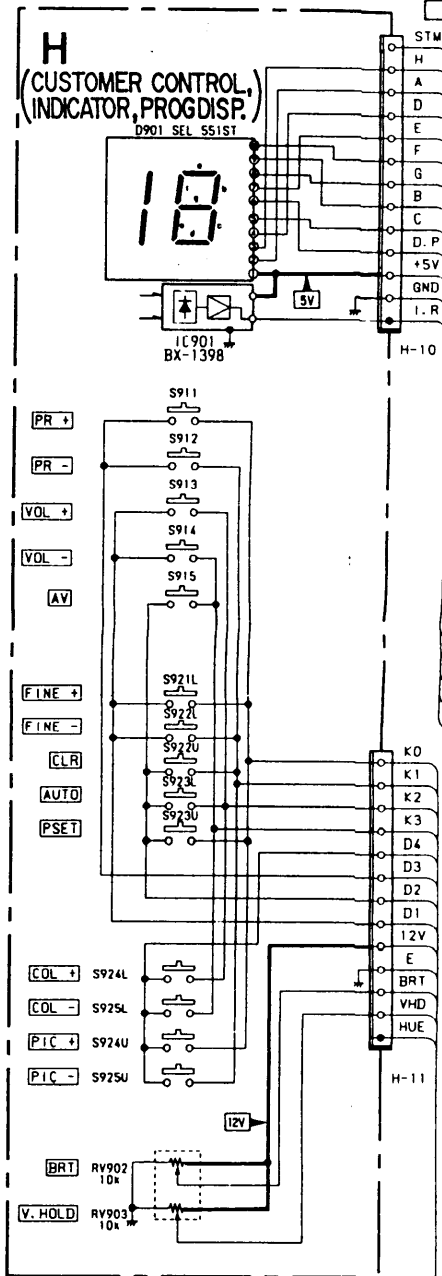
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

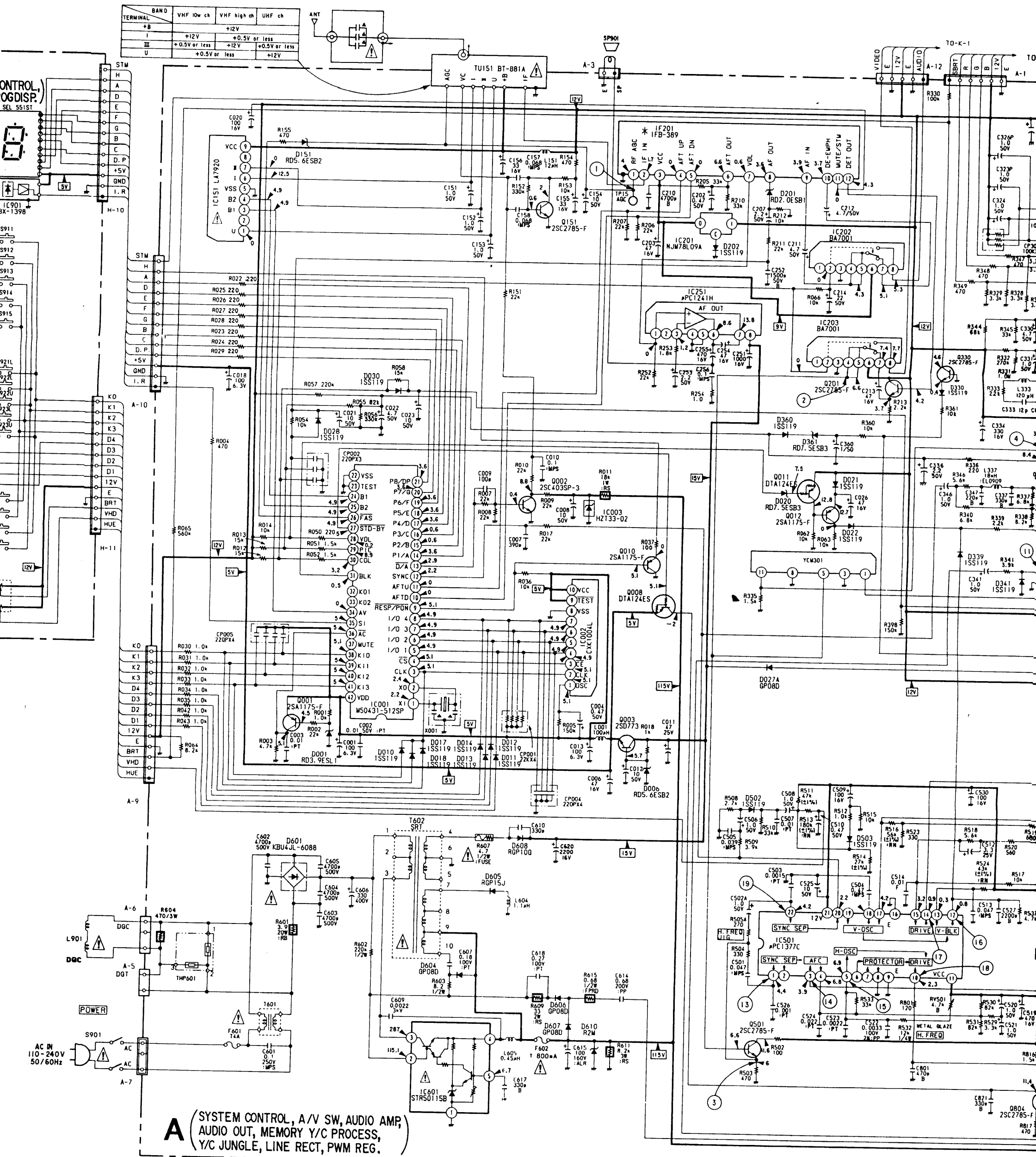
SAFETY-RELATED COMPONENT WARNING!!

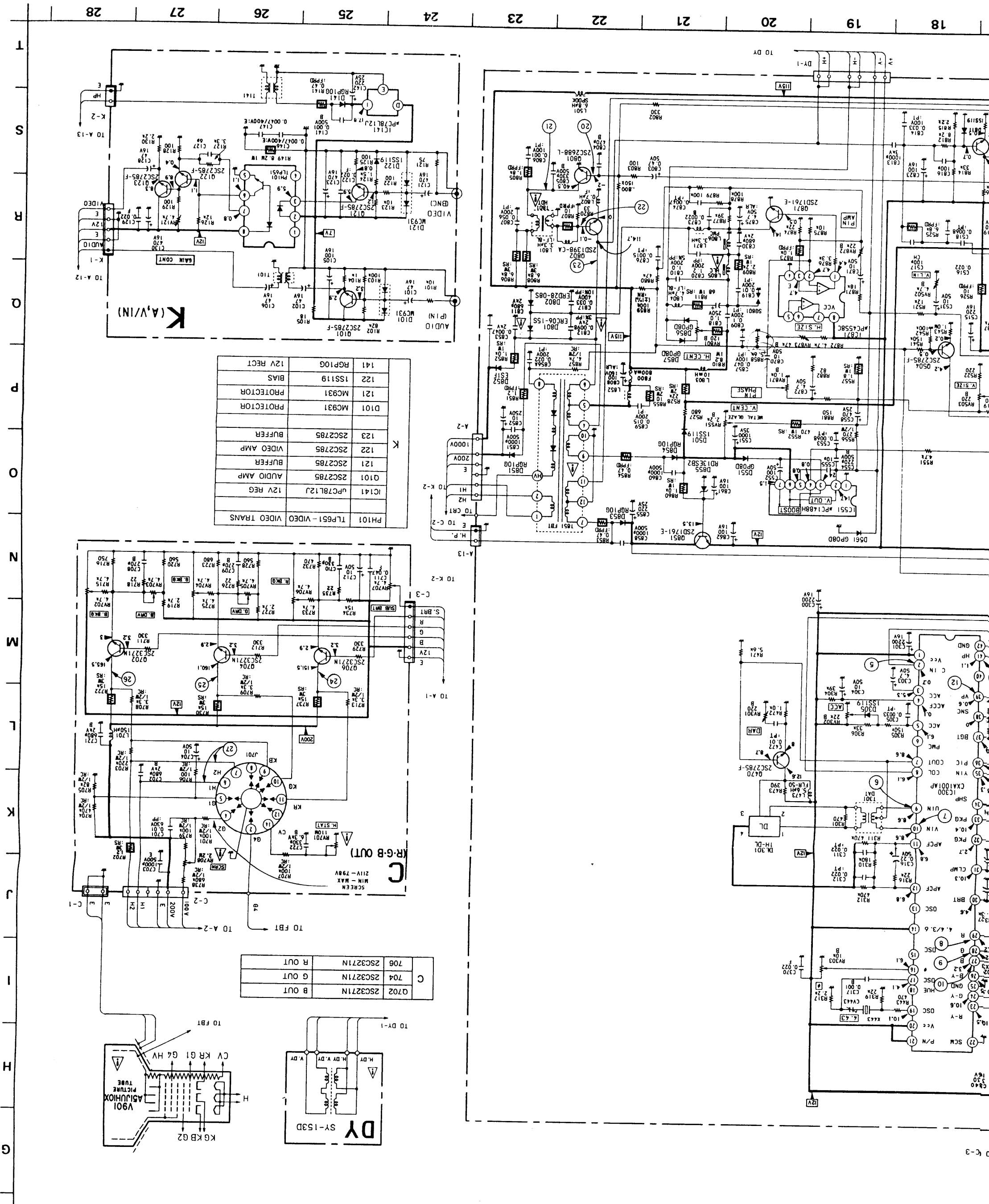
COMPONENTS IDENTIFIED BY SHADING AND  MARK ON THE SCHEMATIC DIAGRAMS ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THE SERVICE MANUAL.

H	IC901	BX-1398	RMT SENSOR
	D901	SEL551ST	PROG DISP

IC001	M50431-512SP	CONTROLLER
002	CXK1004L	MEMORY
003	HZT33-02	33V REG
151	LA7920	BAND SW
201	NUM78L09A	9V REG
202	BA7001	AUDIO SW
203	BA7001	VIDEO SW
251	uPC1241H	AUDIO OUT
300	CXA1001AP	Y CHROMA
501	uPC1377C	H.V OSC
551	uPC1488H	V OUT
601	STR50115B	PWM REG
871	uPC4558C	PIN AMP
Q001	2SA1175	RESET
002	2SC403SP	VC AMP
003	2SD773	5V REG
008	DTA124ES	ST-BY
010	2SA1175	LED DRIVE
011	DTA124ES	BLK-1
012	2SA1175	BLK-2
151	2SC2785	VC FILTER
201	2SC2785	BUFFER
330	2SC2785	ABL
470	2SC2785	DL DRIVE
501	2SC2785	SYNC AMP
504	2SC2785	V SIZE CORRECT
801	2SC2688	H DRIVE
802	2SD1398	H OUT
804	2SC2785	H PULSE
851	2SD1761	12V REG
871	2SD1761	PIN OUT
D001	RD3.9ES-L1	REST
006	RD5.6ES-B2	5V REG
010	1SS119	AV SW
011	1SS119	KEY SCAN D1
012	1SS119	KEY SCAN D2
013	1SS119	KEY SCAN D3
014	1SS119	KEY SCAN D4
017	1SS119	12 DISP
018	1SS119	12 PROG
020	RD7.5ES-B3	BLK
021	1SS119	BLK-1
022	1SS119	BLK-2
028	1SS119	VOL
030	1SS119	COL CONT
151	RD5.6ES-B2	AGC
201	RD2.0ES-B1	MUTE
202	1SS119	9V REG
305	1SS119	ACC
330	1SS119	ABL
339	1SS119	V PULSE
341	1SS119	CLIP
360	1SS119	ABL-1
361	RD7.5ES-B3	ABL-2
501	1SS119	12V SUPPLY
502	1SS119	V SYNC
503	1SS119	V HOLD
561	GP08D	V DRIVE
601	GP08D	PROTECT
601	KBU4JL-6088	LINE RECT
604	GP08D	CHARGE UP
605	RGF15J	115V DAMPER
606	RGF10G	CLMP
607	GP08D	CLMP
608	RGF10G	14V RECT
610	R2M	OVP
801	ERC06-15S	H DAMPER
802	ERD28-08S	PIN DAMPER
811	1SS119	PROTECT
851	RGF10G	200V RECT
852	ES1F	MV RECT
853	RGF10G	15V RECT
854	RGF10G	24V RECT
855	RD13ES-B2	12V REG
856	GP08D	H CENTER
857	GP08D	H CENTER
027A	GP08D	BACK UP-2







18 19 20 21 22 23 24 25 26 27 28