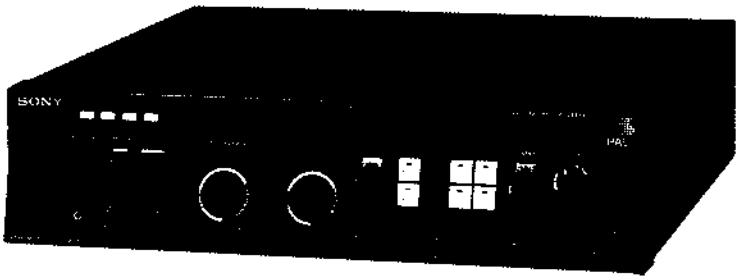
SERVICE MANUAL

AEP Model
UK Model
Australian Model



SPECIFICATIONS

Video color system PAL only

S-video input/output
S-VIDEO SOURCE IN (4-pin mini DIN)
S-VIDEO OUTPUT (4-pin mini DIN)
Y-signal: 1 Vp-p, 75 ohms, unbalanced, sync negative
C-signal: 0.3 Vp-p, 75 ohms, unbalanced

Video input/output V SOURCE IN 1 and 2 (phono jacks)
V OUTPUT (phono jacks)
1 Vp-p, 75 ohms, unbalanced, sync negative

Audio input R/L SOURCE IN 1 and 2 (phono jacks)
LINE IN (phono jacks)
Input level: –7.5 dBs (0 dBs = 0.775 Vrms)
Input impedance:More than 47 kilohms
MIC (minijack)
Input level: –66 dBs
Input impedance:More than 3 kilohms

Audio output R/L OUTPUT (phono jacks)
Output level: –7.5 dBs at 47 kilohms load
Output impedance:Less than 10 kilohms

Power supply European model: AC 220V, 50Hz
UK and Australian model: AC 240V, 50Hz

Power consumption
37W

Operating temperature
5°C to 40°C (41°F to 104°F)

Storage temperature
–20°C to 60°C (–4°F to 140°F)

Dimensions 430 x 115 x 425 mm (w/h/d)
(17 x 4 5/8 x 16 3/4 inches)

Weight 7.5 kg (16 lb 9 oz)

Design and specifications subject to change without notice.

MICROFILM

VIDEO MULTI COLOR CORRECTOR

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

SAFETY-RELATED COMPONENT WARNING!!

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

TABLE OF CONTENTS

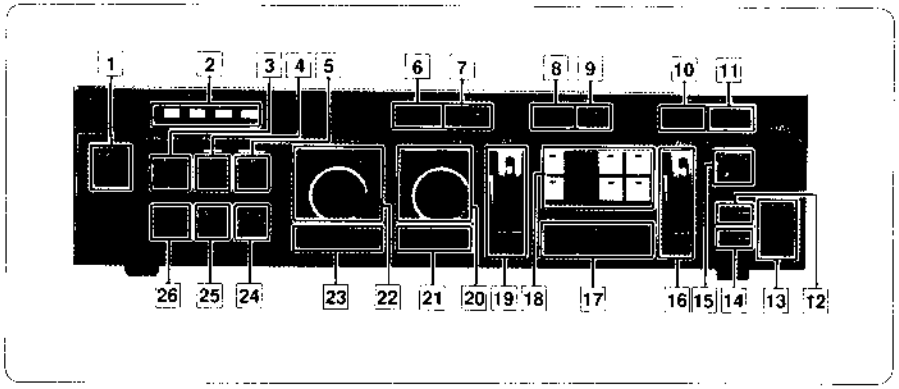
SECTION 1
GENERAL

This section is extracted from instraction manual.

1-1. LOCATION AND FUNCTION OF CONTROLS

Front panel

Each button or switch (except POWER) is equipped with an indicator which lights up when turned on. To turn the indicator off, simply press it again.



1 POWER switch

2 INPUT SELECT buttons
Select the desired input source. Two video and audio channels 1 and 2, are available. On each channel, S-VIDEO selects the VCR connected to the S VIDEO SOURCE IN, and VIDEO selects the VCR connected to the V SOURCE IN connector.

3 PHASE CORRECT control
Adjust the strength of the image outlines.

4 GAMMA control
Adjusts the luminous intensity and color signals to give the recorded object a suitable brightness.

5 COLOR control
Adjusts the color intensity.

6 BYPASS switch
Outputs unprocessed video signals.

7 SPLIT SCREEN switch
Divides the screen to display the processed video image on the left half and the unprocessed video image on the right.

8 VIDEO ART REVERSE switch
Selects where to start painting the image, from either high (off) or low (on) luminance portions of the image.

9 VIDEO ART control
Controls the painting of the video image with color selected by the COLOR SELECT knob. To use the video art function, set the WIPE lever all the way up and operate this control.
This control should normally be set to the rightmost (maximum) position otherwise the wipe will not function.

10 CHROMA NR (noise reduction) switch
Reduces color flickers in the image.

11 REVERSE (NEGA/POSI) switch
Inverts the output signal.

12 Fader VIDEO button
Enables video fade in/out using the FADER lever.

13 Video fader WHITE/BLACK/BACK COLOR buttons
Select either white, black or the back color designated by the COLOR SELECT knob as the fader color. (Default selection is white.)

14 Fader AUDIO button
Enables audio fade in/out using the FADER lever.

15 COLOR SELECT knob
Selects a color for wipe and video fader.

16 FADER lever
Controls the video and audio fade in/out. This lever should normally be kept at the lowermost position for both video and audio. Press the VIDEO button and move the lever up to fade out the screen in the fader color designated by the WHITE/BLACK/BACK COLOR buttons. Move it down to fade in. Press the AUDIO button and move the lever up to fade out the audio sound. Move it down to fade in.

17 AUTO WIPE/FADER buttons, SPEED control and START button
Allow automatic wipe and fade in/out. The speed can be adjusted using the SPEED control. Press the START button to begin.

18 WIPE PATTERN buttons
Select the wipe pattern.

19 WIPE lever
Wipes the screen with the color selected by the COLOR SELECT knob.

20 WHITE BALANCE ON/OFF and WIDE RANGE switches
Enable the white balance adjustment.
Press the WIDE RANGE switch to widen the range of white balance control.

21 WHITE CLIP switch and control
Compensate color with bright segments of the image to make white objects look normal. Set the compensation level using the control. Turning it clockwise increases the level.
The white clip function is disabled when the WHITE BALANCE switch is turned off.

22 BLACK BALANCE ON/OFF and WIDE RANGE switches
Enable black balance adjustment.
Press the WIDE RANGE switch to widen the range of black balance control.

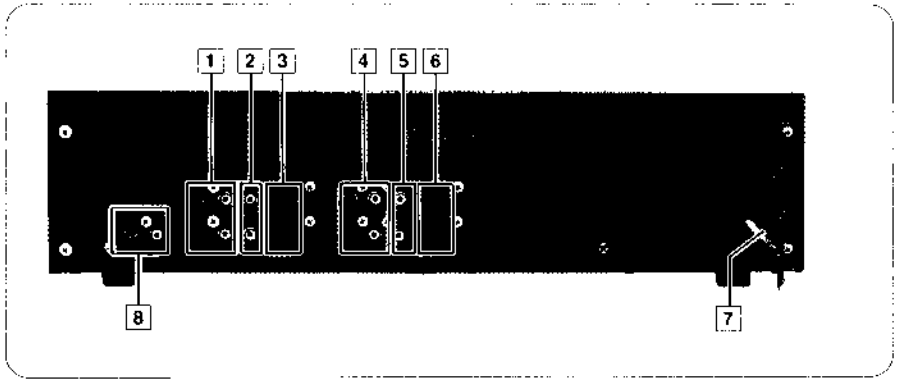
23 BLACK CLIP switch and control
Compensate color with dark segments of the image to make black objects look normal. Set the compensation level using the control. Turning it clockwise increases the level.
The black clip function is disabled when the BLACK BALANCE switch is turned off.

24 AUDIO MIX control
Controls the mixing level of audio signals input from SOURCE IN and LINE IN jacks.

25 MIC (microphone) LEVEL control
Controls the level of sound input from the MIC jack.

26 MIC jack (minijack)
Accepts a microphone.

Rear panel



1 Audio R/L SOURCE IN 1/2 jacks (phono)
Connect to the audio output jacks of a monitor, VCR, video camera recorder or other video equipment.

2 V(ideo) SOURCE IN 1/2 jacks (phono)
Connect to the video output jacks of a monitor, VCR, video camera recorder or other video equipment.

3 S-VIDEO SOURCE IN 1/2 connectors (4-pin mini DIN)
Connect to the S-video output connector of a monitor, VCR, video camera recorder or other video equipment

4 Audio R/L OUTPUT jacks (phono)
Connect to the audio input jacks of a VCR, video camera recorder or other video equipment. The same signal is output to both upper and lower row jacks.

5 V(ideo) OUTPUT jacks (phono)
Connect to the video input jacks of a VCR, video camera recorder or other video equipment. The same signal is output to both upper and lower jacks.

6 S-VIDEO OUTPUT connectors (4-pin mini DIN)
Connect to the S-video input connector of a VCR, video camera recorder or other video equipment. The same signal is output to both upper and lower connectors

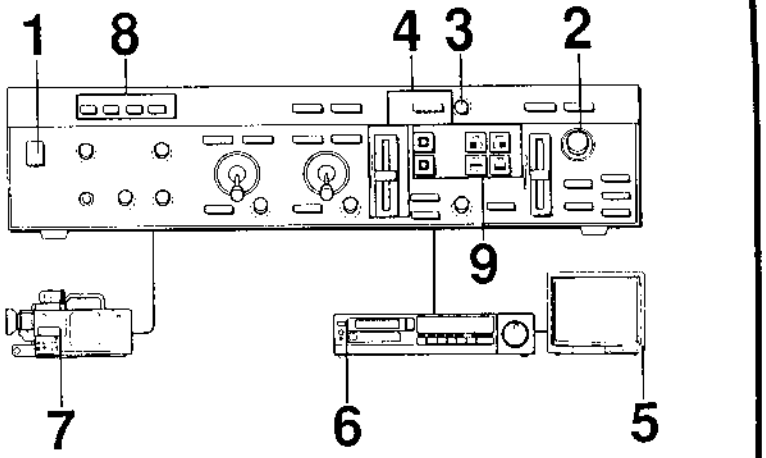
7 Power cord (mains lead)
Connect to an AC (mains) outlet.

8 LINE IN jacks (phono)
Connect to the line output jacks of a stereo amplifier when mixing sound

GB

1-2. MONITOR ADJUSTMENT AND PREPARATION

Before beginning color correction using XV-C900, adjust your monitor so that colors appearing on the monitor screen will not be deceptive.



1 Turn on the color corrector.

2 Set the COLOR SELECT knob to COLOR BAR

3 Turn the VIDEO ART control fully to MAX.

4 Press one of the WIPE PATTER buttons and move the WIPE lever to its uppermost position.

5 Turn on the TV/monitor and select the appropriate input so that the color bar appears on the screen.

6 Turn on the recording VCR. If desired, record the color bar at the beginning of a tape for monitor color adjustment during future playback.

7 Turn on the playback VCR.

8 Press the appropriate INPUT SELECT button.

9 Press the activated WIPE PATTERN button (with the lamp lit) to turn it off. The color bar disappears

Adjusting brightness
- Turn the monitor's color control to the minimum so that the color bar appears in black and white.
- Turn the monitor's brightness control until the eight bars are clearly distinguished.

Adjusting color intensity
Adjust the monitor's color until all eight colors appear normal. (Refer to the color bar photograph [G] on the reference sheet.)

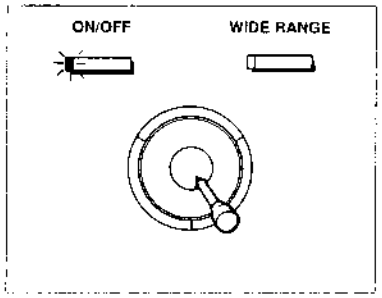
Caution
When recording the color bar or using it to adjust the color on the monitor, make sure that the power of the playback VCR is turned off. Signals being input from the SOURCE IN jacks may distort the color bar.

1-3. COLOR ADJUSTMENT AND CORRECTION DURING EDITING

Insert a prerecorded tape into the playback VCR, begin playback and adjust color using the functions listed below. Refer to the photographs provided on the attached color reference sheet.

White/Black Balance

To make "supposed-to-be white" objects look properly white [A]
Press the WHITE BALANCE ON/OFF switch and move the lever.



This allows color correction of the video image's bright portions.

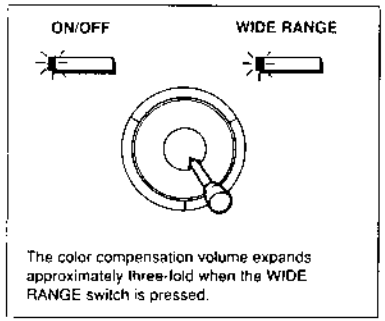
To make "supposed-to-be black" objects look properly black [B]
Press the BLACK BALANCE ON/OFF switch and move the lever.
This allows color correction of the video image's dark portions.

You can even create special color effects with this function. [C]
A color screen can be changed gradually to monochrome or a monochrome screen gradually to color. Setting the COLOR control to the leftmost position (minimum) may provide better results.

Note
The desired color may not be generated if a video source without burst signals is input (from a monochrome video camera, etc.)

Wide Range

For a greater range of corrections
Press the WIDE RANGE switch(es) and move the WHITE (BLACK) BALANCE lever(s).



The color compensation volume expands approximately three-fold when the WIDE RANGE switch is pressed.

Note
Certain TV sets have a muting function which may cause the screen to go blank when noise-ridden pictures, such as high-speed picture search images, are processed by this unit.

White/Black Clip

Compensating color with bright (dark) segments of the image
When the video image is adjusted referring to a color other than white or black, white and black objects may not appear natural. Even in that case, the WHITE (BLACK) CLIP function allows you to compensate color with the white (black) segments of an excessively bright (dark) screen.

Press the WHITE (BLACK) CLIP switch. Adjust the white (black) balance compensation level using the control. Turn the control fully to the right to maximize the compensation level. When it is set to the leftmost position (minimum), the level is the same as when the WHITE (BLACK) CLIP switch is turned off. Both the switch and control do not function when the WHITE (BLACK) BALANCE ON/OFF switch is turned off.

Note
In normal circumstances, use the unit with this switch turned off.

Color Control

Adjusting color intensity [D]
- Turn the control clockwise to obtain a deeper color.
- Turn the control counterclockwise to obtain a lighter color.
- In normal circumstances, set this control to the center click position.

Gamma Control

Correcting pictures that are either too bright or dark [E]
- To brighten a dark subject on a bright background, turn the GAMMA control towards HIGH.
- To make a bright subject on a dark background easier to see, turn the control towards LOW.
- In normal circumstances, set the control at the center click position.

Phase Correct

Correcting false outlines after repeated editing
- Turn the control towards [+] makes the overall contrast sharper.
- Turn the control towards [–] allows you to eliminate false outlines around the edges of the picture.
- In normal circumstances, set the control at the center click position.

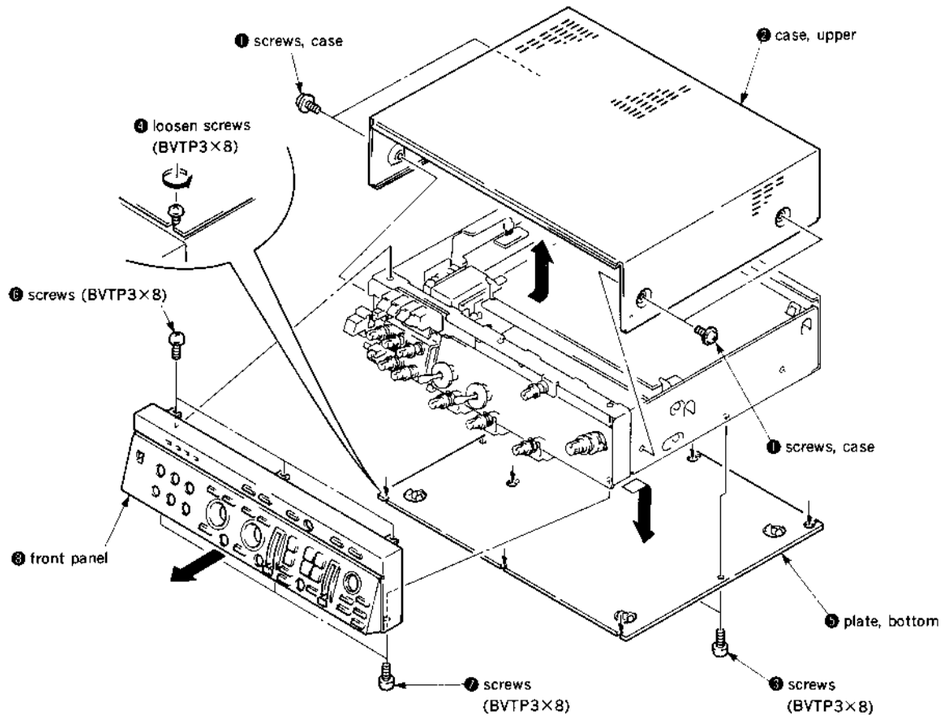
Chroma NR (noise reduction)

Reducing color flickers [F]
- Turn the CHROMA NR switch on to reduce color flickering caused by repeated editing.
- This function does not affect normal images.

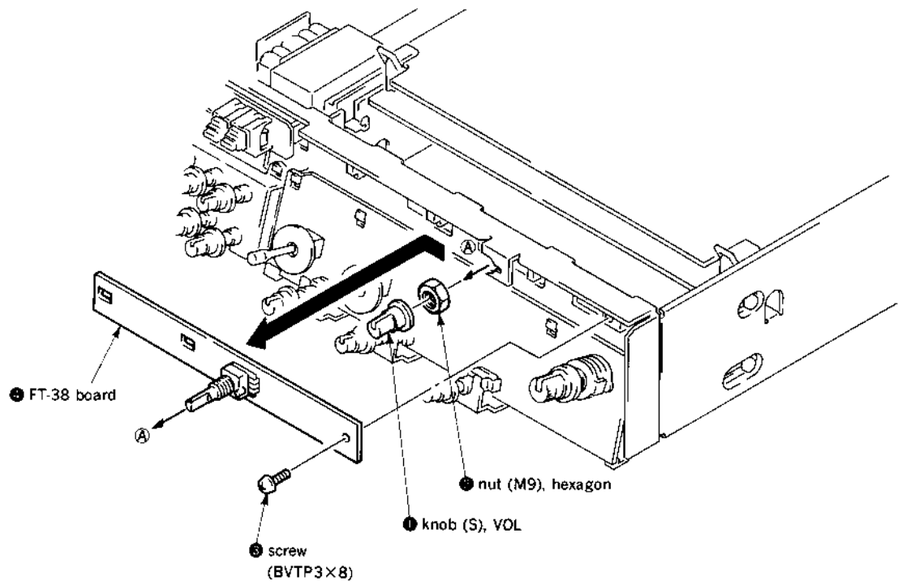
SECTION 2
DISASSEMBLY

Note : The number within "❶" means the seguential number for dismounting.

2-1. REMOVAL OF CABINET, FRONT PANEL

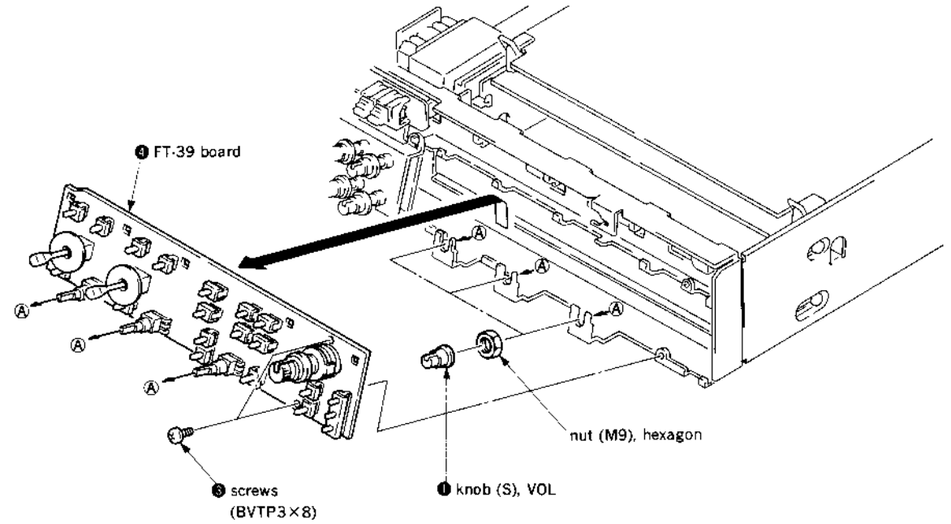


2-2. REMOVAL OF FT-38 BOARD

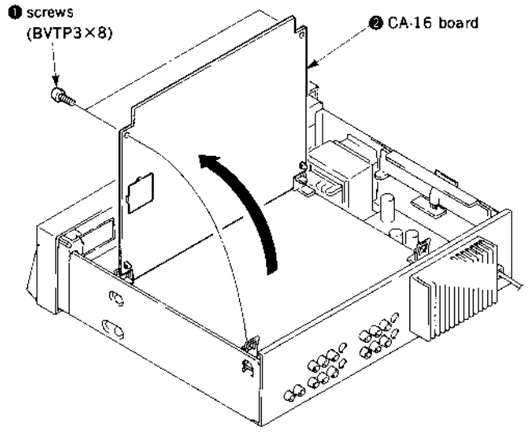


2-3. REMOVAL OF FT-39 BOARD

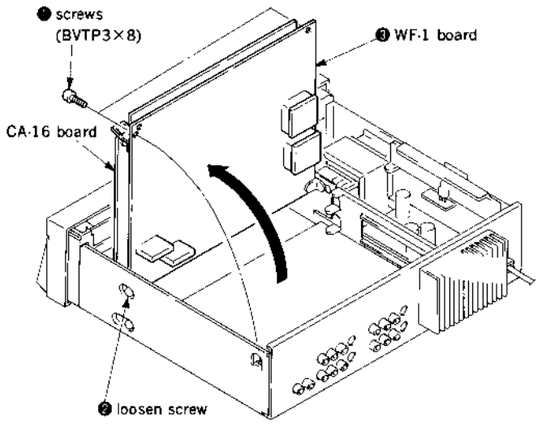
1) Refer to 2-2. and remove the FT-38 board.



2-4. OPENING OF CA-16 BOARD



2-5. OPENING OF WF-1 BOARD



3-1. CIRCUIT

AC-4
(POW

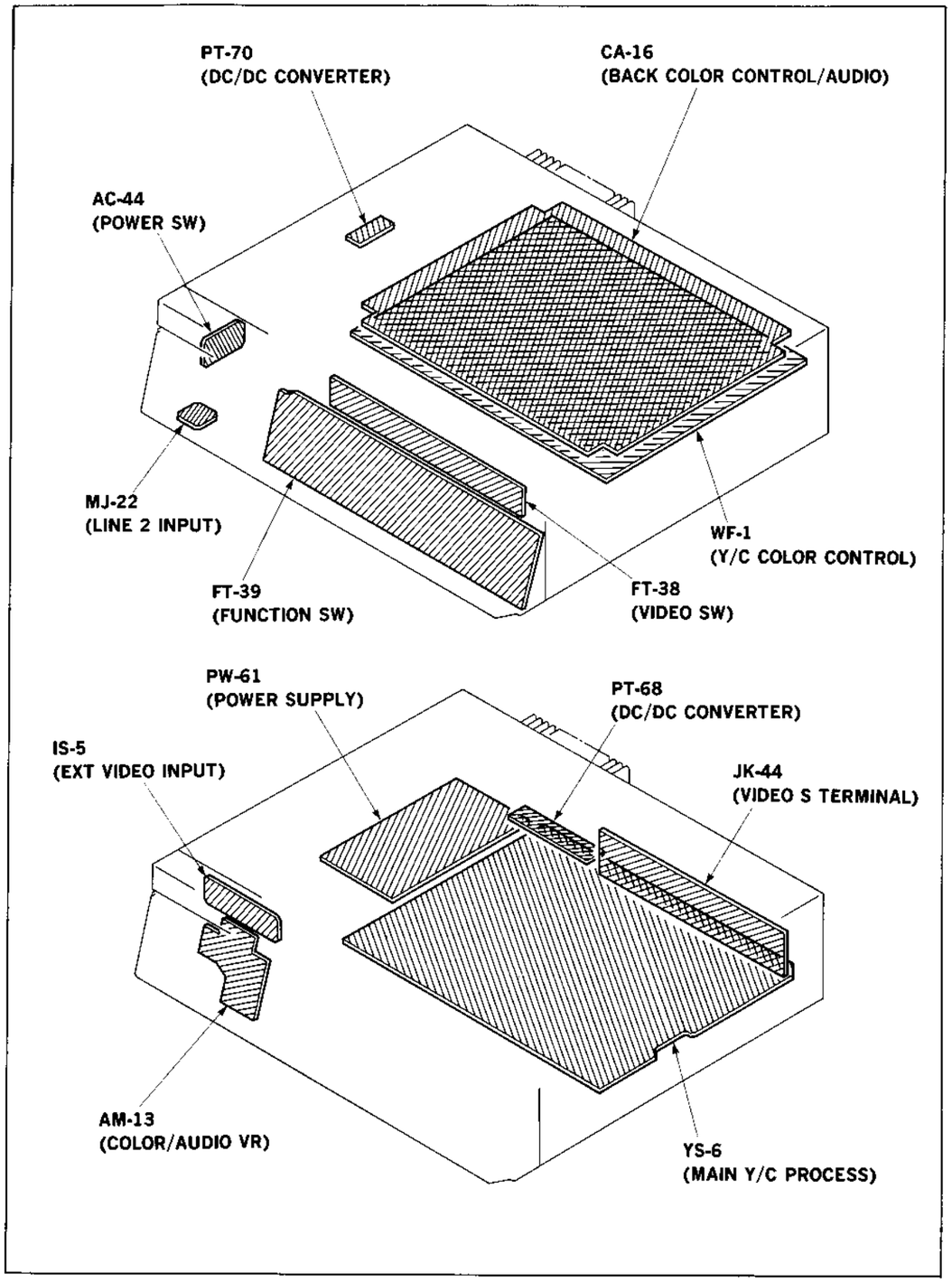
MJ-2
(LINE

IS-5
(EXT VID

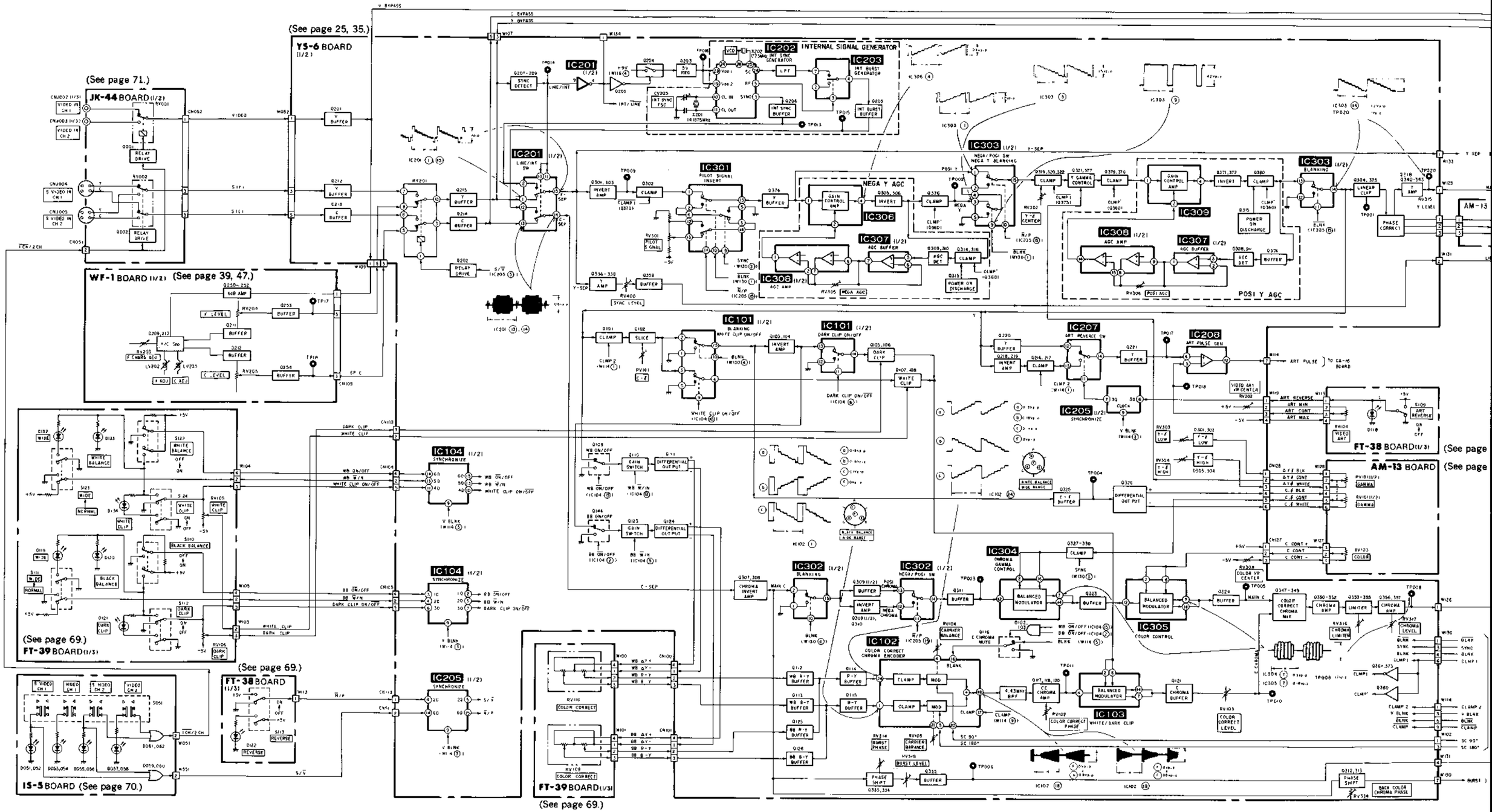
AM
(CO

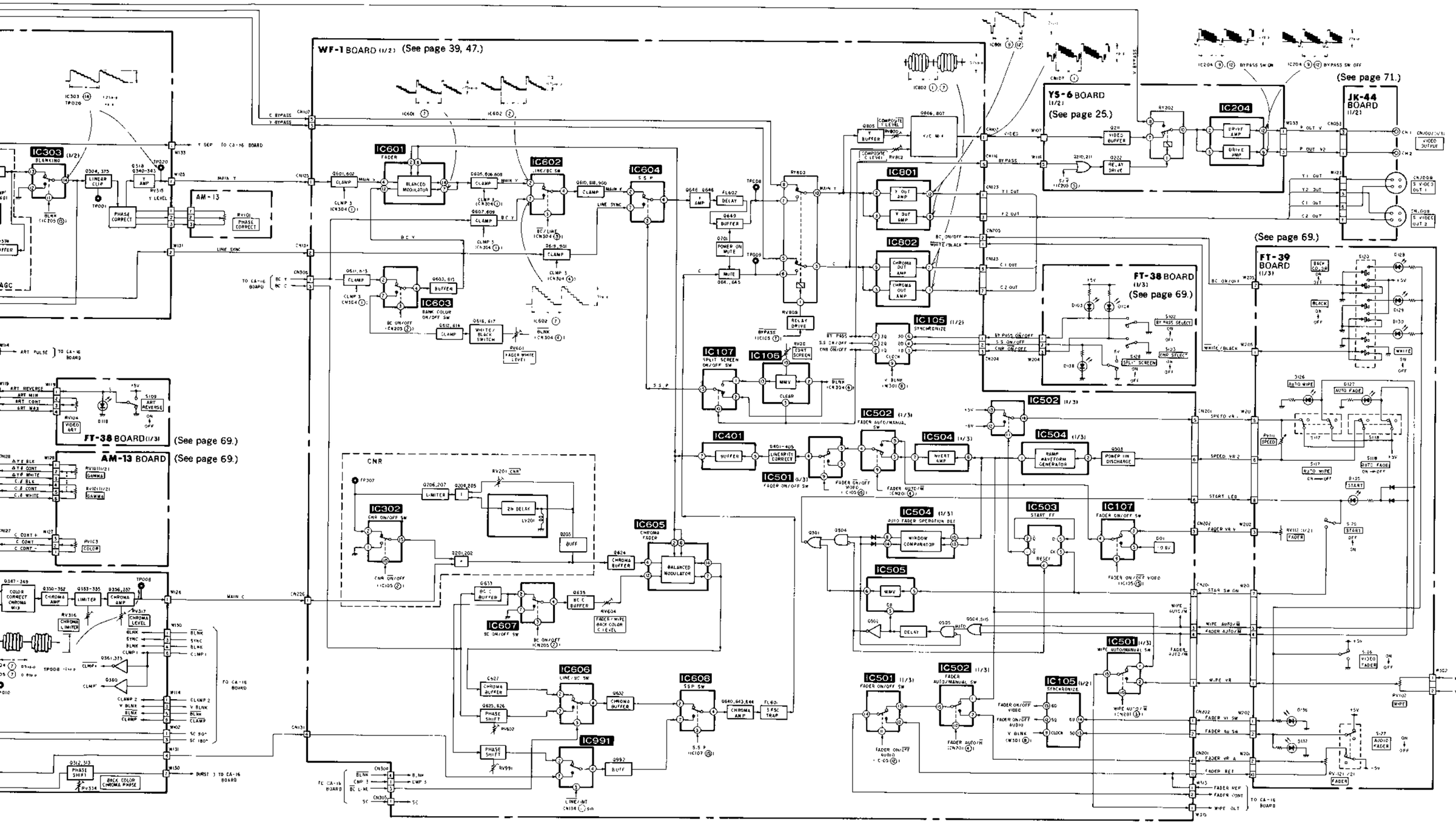
SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION

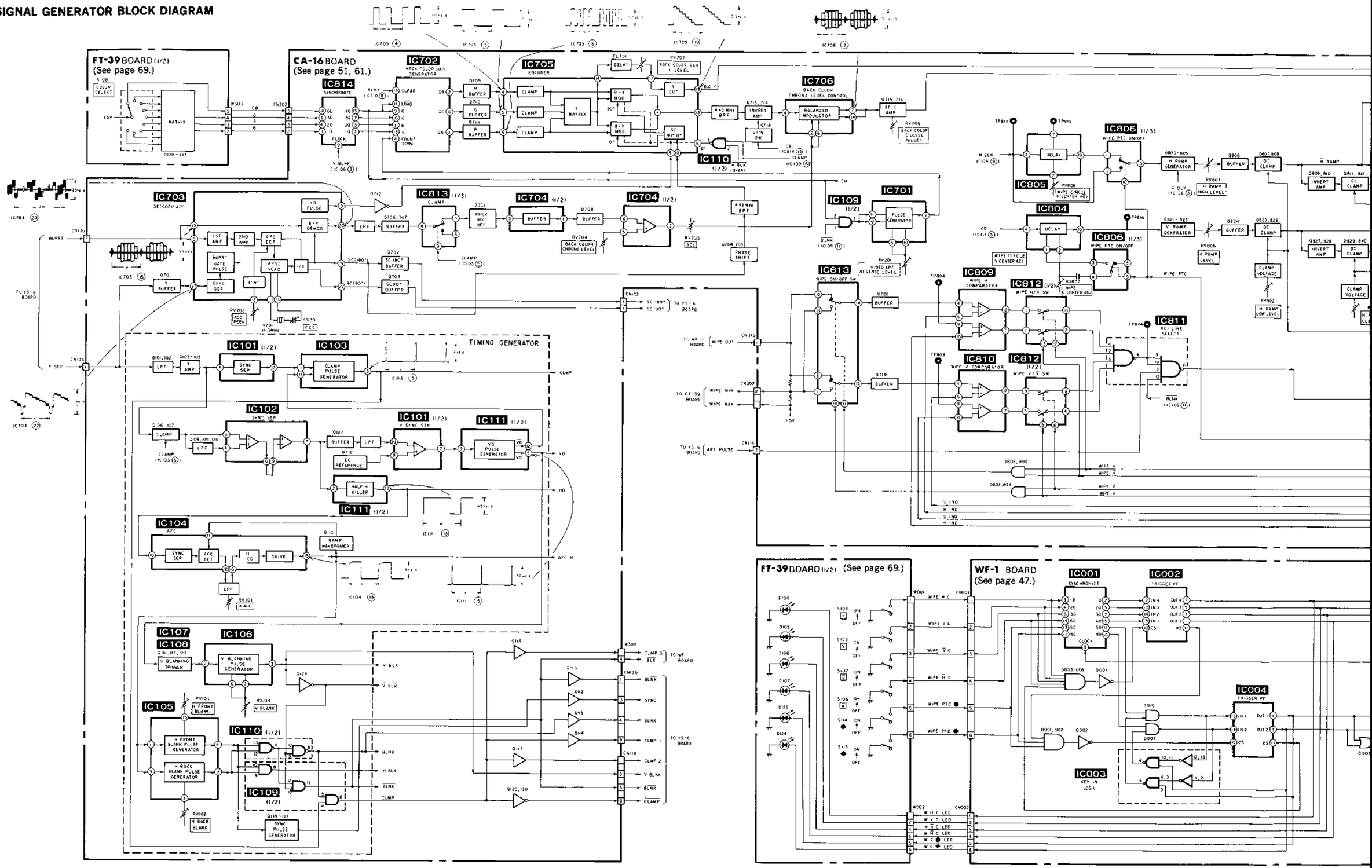


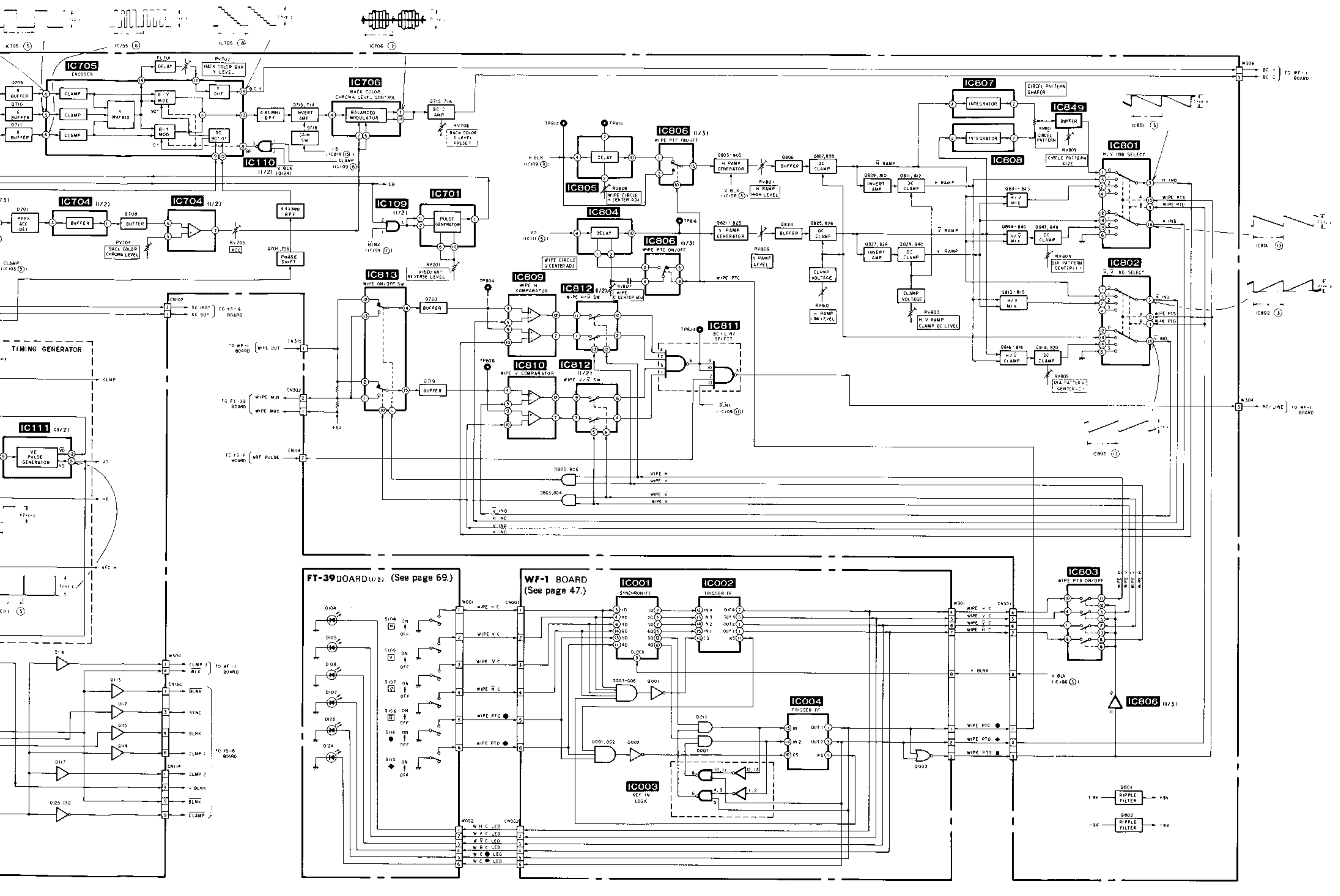
3-2. COLOR CORRECT BLOCK DIAGRAM



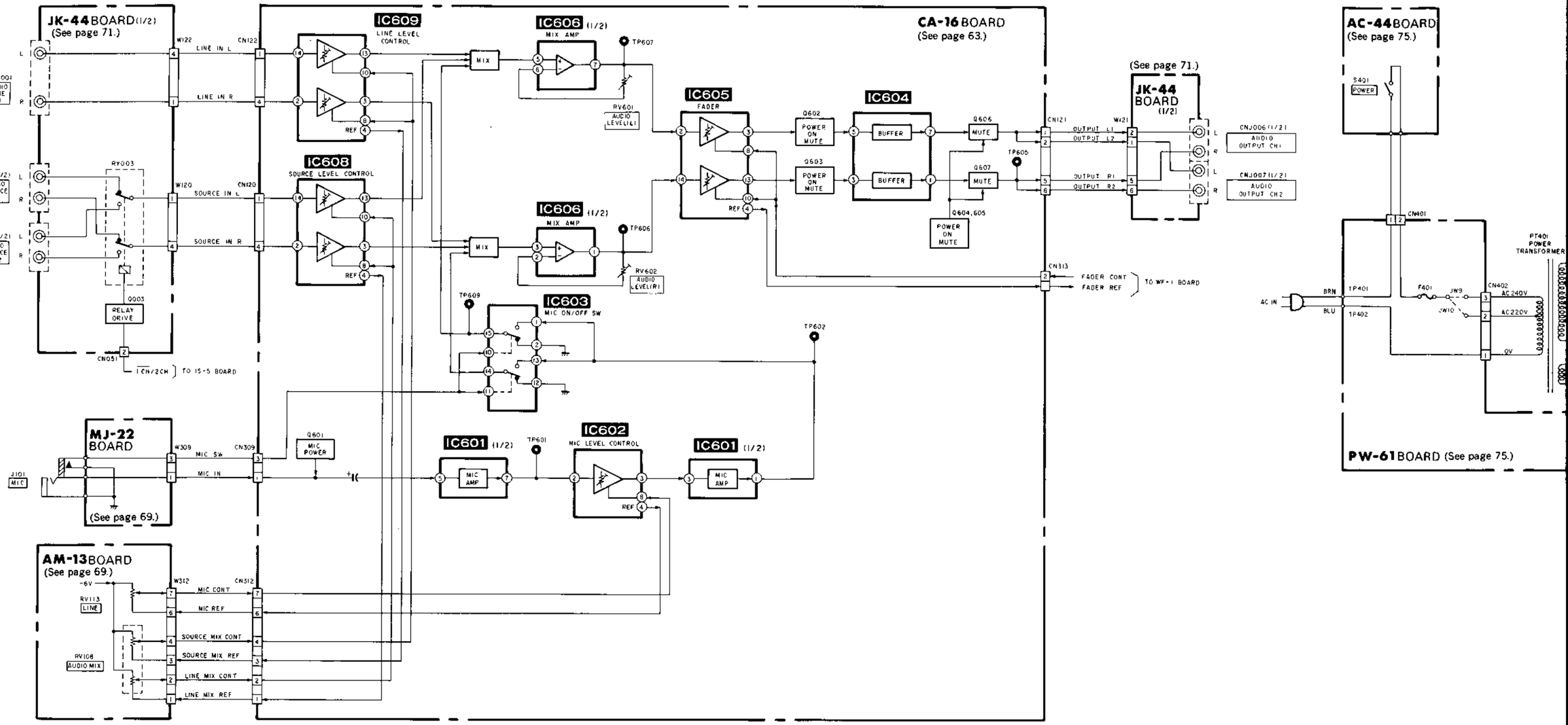

WF-1 BOARD (1/2) (See page 39, 47.)
IC303 BLANKING (1/2)
IC601 FADER
IC602 LINE/BC SW
IC603 BURST COLOR ON/OFF SW
IC604 S.S.P
IC605 CHROMA FADER
IC606 LINE/BC SW
IC607 BC ON/OFF SW
IC608 S.S.P SW
IC801
IC802
IC105 (1/2) SYNCHRONIZE
IC107 SPLIT SCREEN ON/OFF SW
IC106 SPLIT SCREEN
IC401 BUFFER
IC501 (1/3) FADER ON/OFF SW
IC502 (1/3) FADER AUTO/MANUAL SW
IC504 (1/3) INVERT AMP
IC503 START FF
IC991
YS-6 BOARD (1/2) (See page 25.)
IC204
JK-44 BOARD (1/2) (See page 71.)
FT-38 BOARD (1/3) (See page 69.)
FT-39 BOARD (1/3) (See page 69.)
FT-38 BOARD (1/3) (See page 69.)
AM-13 BOARD (See page 69.)
CNR
TO CA-16 BOARD
—13—
—14—

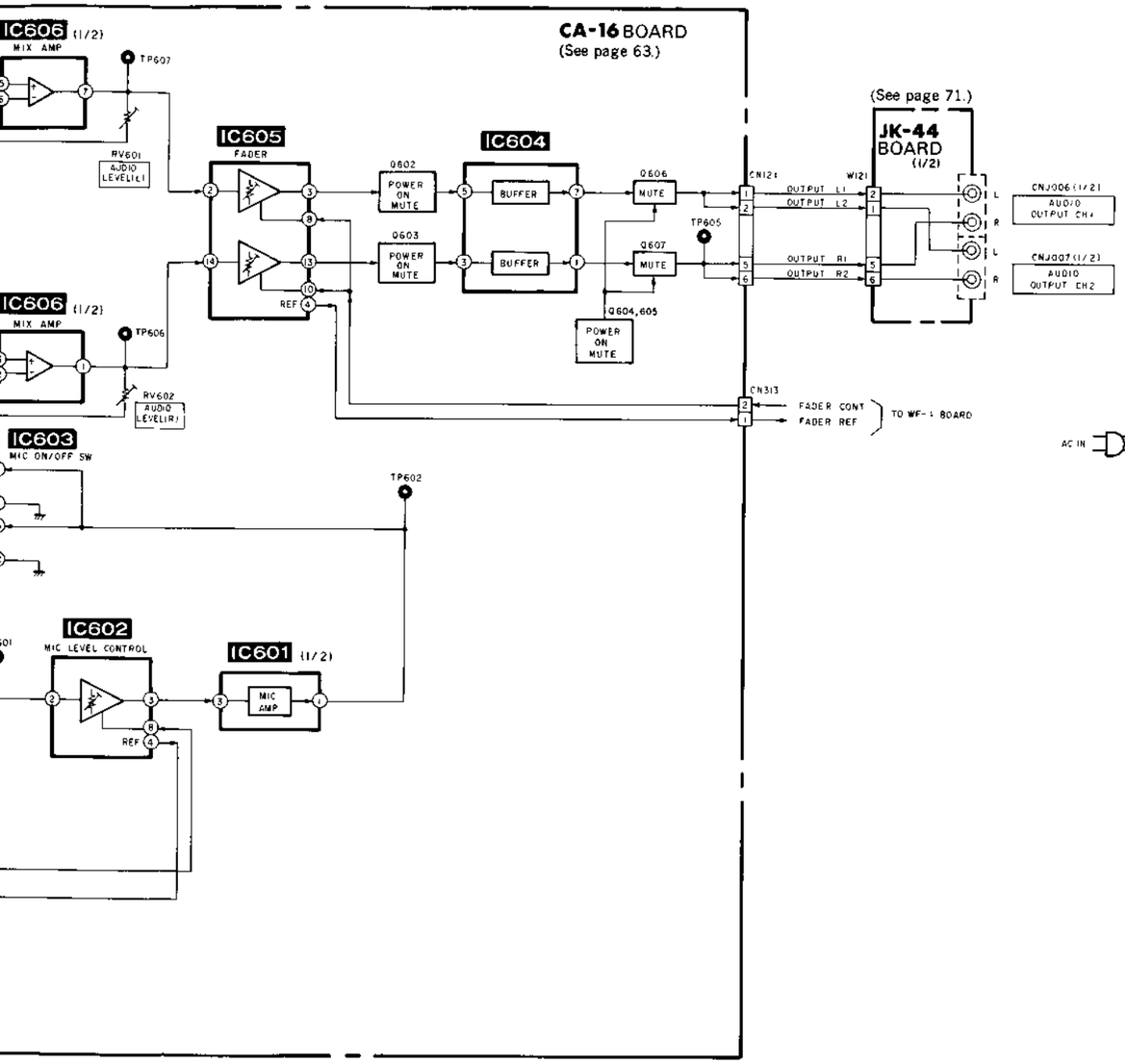
3-3. BACK COLOR SIGNAL GENERATOR BLOCK DIAGRAM

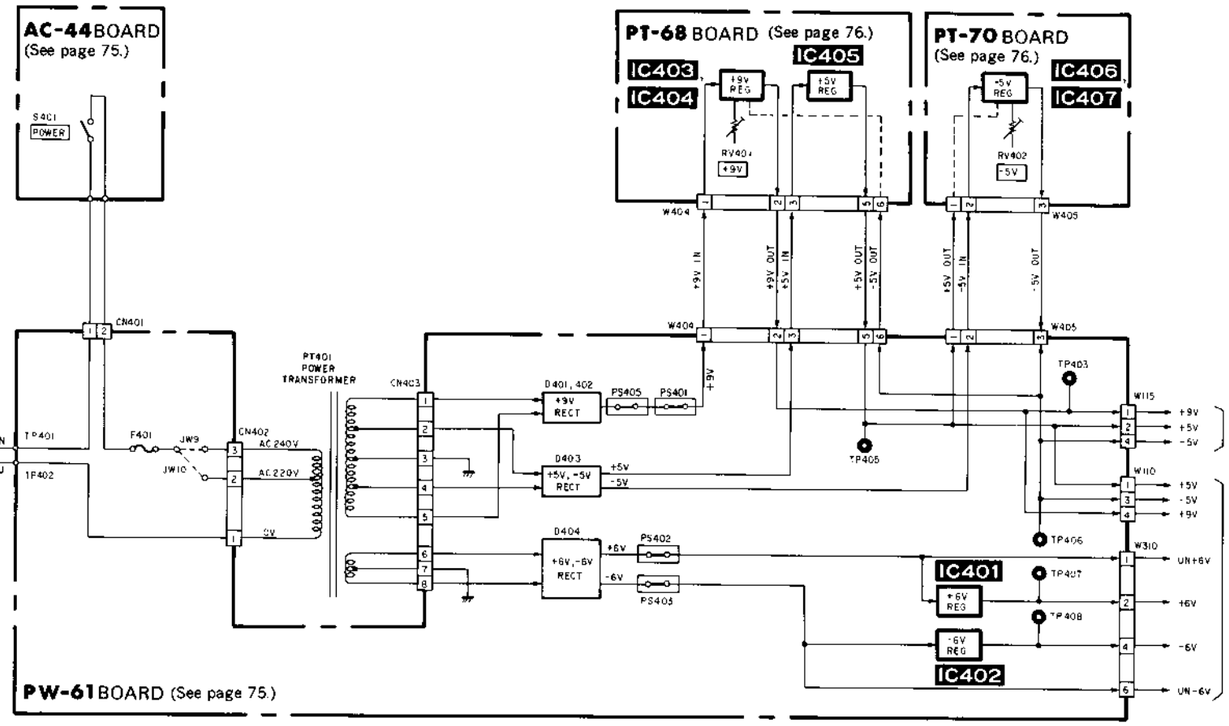



IC705
ENCODER
IC706
BACK COLOR CHROMA LEVEL CONTROL
BALANCED MODULATOR
IC110 (1/2)
IC704 (1/2)
BUFFER
IC109 (1/2)
IC701
PULSE GENERATOR
IC805
IC806 (1/3)
WIPE PTC ON/OFF
IC804
DELAY
IC806 (1/3)
WIPE PTC ON/OFF
IC813
WIPE ON/OFF SW
IC809
WIPE H COMPARATOR
IC812 (1/2)
IC810
WIPE V COMPARATOR
IC812 (1/2)
IC811
IC807
INTEGRATOR
IC849
BUFFER
IC808
INTEGRATOR
IC801
H, V IND SELECT
IC802
IC803
WIPE PTS ON/OFF
IC806 (1/3)
TIMING GENERATOR
IC111 (1/2)
VD PULSE GENERATOR
FT-39 BOARD (1/2) (See page 69.)
WF-1 BOARD (See page 47.)
IC001
SYNCHRONIZE
IC002
TRIGGER FF
IC004
TRIGGER FF
IC003
KEY IN LOGIC
H RAMP GENERATOR
V RAMP GENERATOR
INVERT AMP
DC CLAMP
RIPPLE FILTER

3-4. AUDIO/POWER BLOCK DIAGRAM

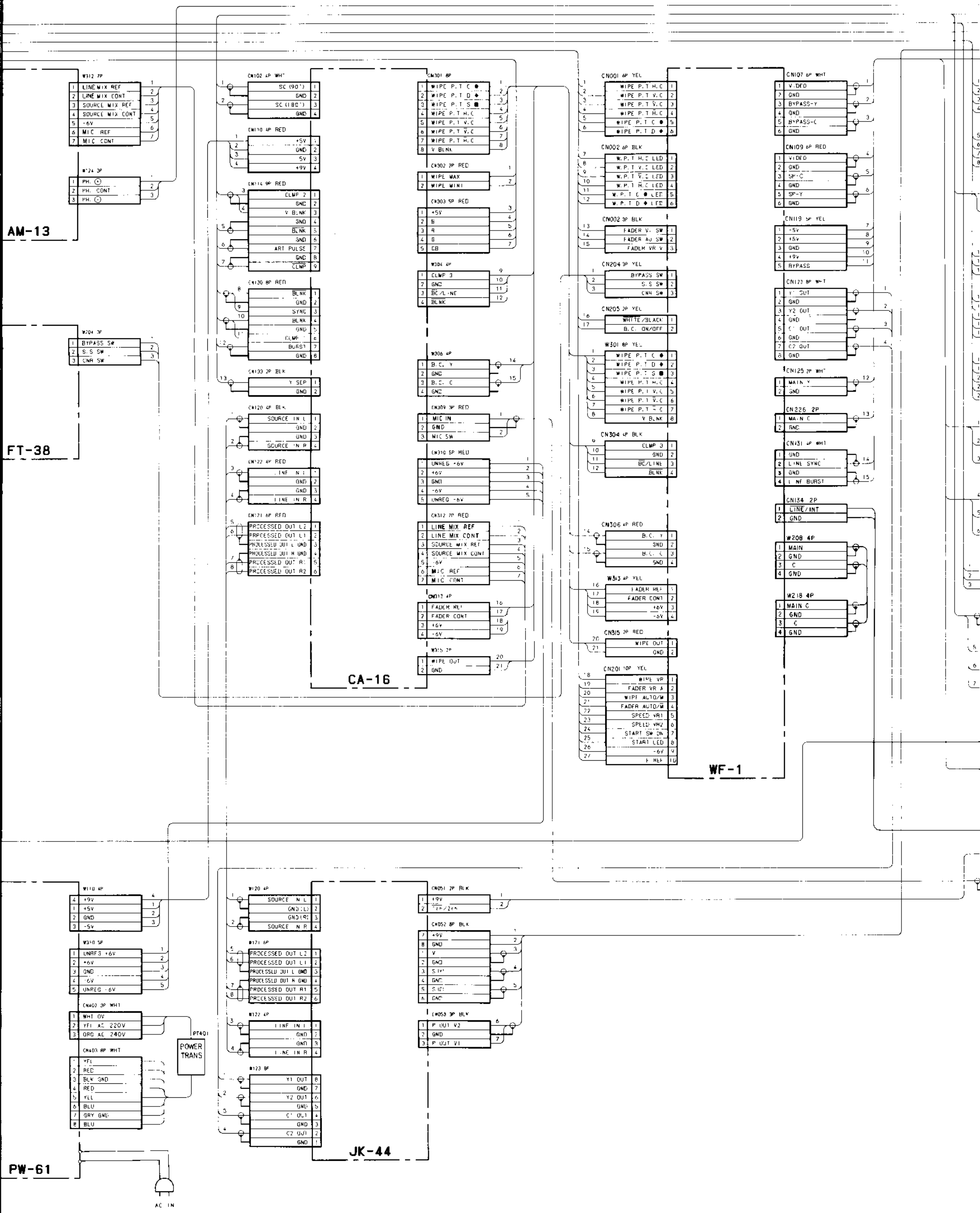


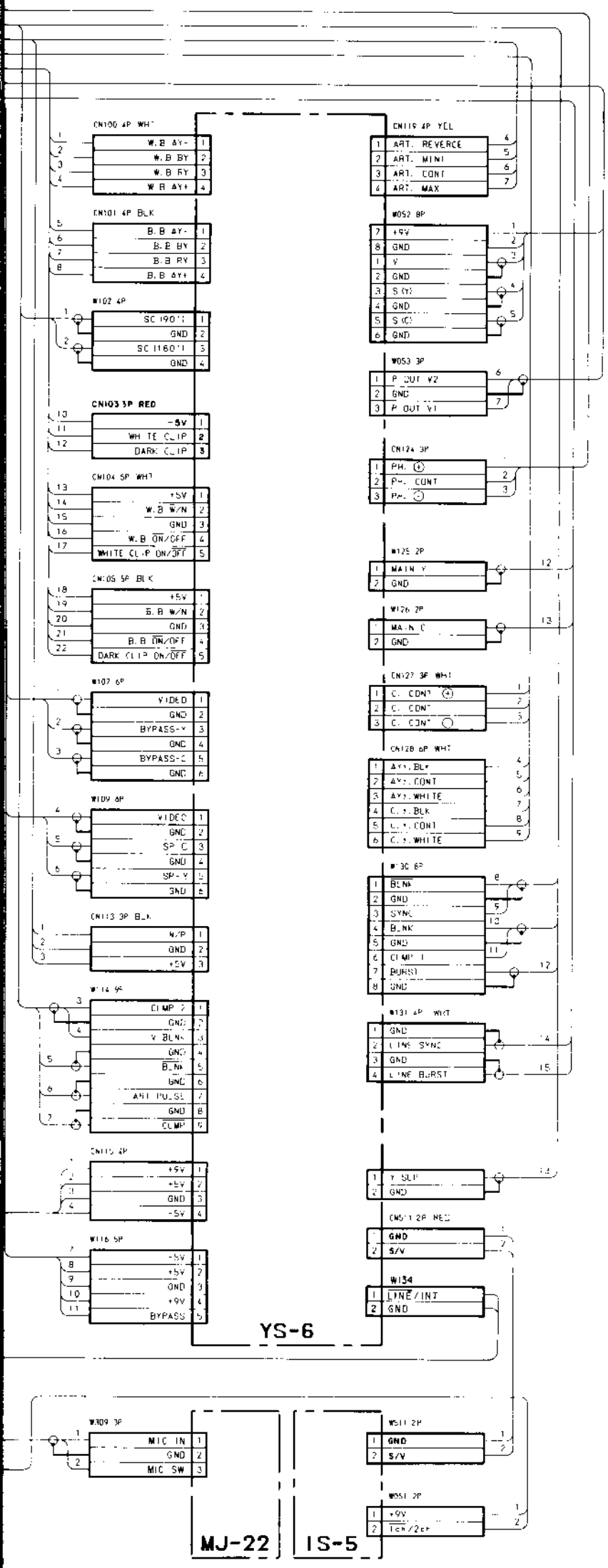

CA-16 BOARD
(See page 63.)
IC606 (1/2)
MIX AMP
TP607
RV601
AUDIO LEVEL(L)
IC605
FADER
IC604
Q602
POWER ON MUTE
Q603
POWER ON MUTE
BUFFER
BUFFER
Q606
MUTE
Q607
MUTE
TP605
Q604,605
POWER ON MUTE
REF
CN121
WI21
OUTPUT L1
OUTPUT L2
OUTPUT R1
OUTPUT R2
(See page 71.)
JK-44 BOARD (1/2)
CNJ006 (1/2)
AUDIO OUTPUT CH1
CNJ007 (1/2)
AUDIO OUTPUT CH2
IC606 (1/2)
MIX AMP
TP606
RV602
AUDIO LEVEL(R)
CN313
FADER CONT
FADER REF
TO WF-1 BOARD
IC603
MIC ON/OFF SW
TP602
IC602
MIC LEVEL CONTROL
IC601 (1/2)
MIC AMP
REF


AC-44 BOARD
(See page 75.)
S401
POWER
CN401
AC IN
BRN
BLU
TP401
1P402
F401
JW9
JW10
CN402
AC240V
AC220V
0V
PT401
POWER TRANSFORMER
CN403
D401, 402
+9V RECT
PS405
PS401
+9V
D403
+5V, -5V RECT
+5V
-5V
D404
+6V, -6V RECT
+6V
-6V
PS402
PS405
PT-68 BOARD (See page 76.)
IC403
IC404
IC405
+9V REG
+5V REG
RV404
+9V
W404
+9V IN
+9V OUT
+5V IN
+5V OUT
-5V OUT
W405
PT-70 BOARD
(See page 76.)
IC406
IC407
-5V REG
RV402
-5V
TP403
TP405
W115
+9V
+5V
-5V
TO YS-6 BOARD
W110
+5V
-5V
+9V
TP406
W310
UN+6V
TO CA-16 BOARD
IC401
+6V REG
TP407
TP408
+6V
-6V REG
-6V
IC402
UN-6V
PW-61 BOARD (See page 75.)

SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM


W312 7P
LINE MIX REF
LINE MIX CONT
SOURCE MIX REF
SOURCE MIX CONT
-6V
MIC REF
MIC CONT
W324 3P
PH. ⊕
PH. CONT
PH. ⊖
AM-13
W204 3P
BYPASS SW
S.S SW
CNR SW
FT-38
CN102 4P WHT
SC (90°)
GND
SC (180°)
GND
CN110 4P RED
+5V
GND
5V
+9V
CN114 9P RED
CLMP 2
GND
V BLNK
GND
BLNK
GND
ART PULSE
GND
CLMP
CN130 8P RED
BLNK
GND
SYNC
BLNK
GND
CLMP
BURST
GND
CN133 2P BLK
Y SEP
GND
CN120 4P BLK
SOURCE IN L
GND
GND
SOURCE IN R
CN122 4P RED
LINE IN L
GND
GND
LINE IN R
CN121 6P RED
PROCESSED OUT L2
PROCESSED OUT L1
PROCESSED OUT L GND
PROCESSED OUT R GND
PROCESSED OUT R1
PROCESSED OUT R2
CA-16
CN301 8P
WIPE P.T C ●
WIPE P.T D ◆
WIPE P.T S ■
WIPE P.T H.C
WIPE P.T V.C
WIPE P.T V̄.C
WIPE P.T H̄.C
V BLNK
CN302 2P RED
WIPE MAX
WIPE MINI
CN303 5P RED
+5V
B
R
G
CB
W304 4P
CLMP 3
GND
BC/LINE
BLNK
W306 4P
B.C. Y
GND
B.C. C
GND
CN309 3P RED
MIC IN
GND
MIC SW
CN310 5P RED
UNREG +6V
+6V
GND
-6V
UNREG -6V
CN312 7P RED
LINE MIX REF
LINE MIX CONT
SOURCE MIX REF
SOURCE MIX CONT
-6V
MIC REF
MIC CONT
CN313 4P
FADER REF
FADER CONT
+6V
-6V
W315 2P
WIPE OUT
GND
CN001 6P YEL
WIPE P.T H.C
WIPE P.T V.C
WIPE P.T V̄.C
WIPE P.T H̄.C
WIPE P.T C ●
WIPE P.T D ◆
CN002 6P BLK
W.P.T H.C LED
W.P.T V.C LED
W.P.T V̄.C LED
W.P.T H̄.C LED
W.P.T C ● LED
W.P.T D ◆ LED
CN002 3P BLK
FADER V. SW
FADER AU SW
FADER VR V
CN204 3P YEL
BYPASS SW
S.S SW
CNR SW
CN205 2P YEL
WHITE/BLACK
B.C. ON/OFF
W301 8P YEL
WIPE P.T C ●
WIPE P.T D ◆
WIPE P.T S ■
WIPE P.T H.C
WIPE P.T V.C
WIPE P.T V̄.C
WIPE P.T H̄.C
V BLNK
CN304 4P BLK
CLMP 3
GND
BC/LINE
BLNK
CN306 4P RED
B.C. Y
GND
B.C. C
GND
W313 4P YEL
FADER REF
FADER CONT
+6V
-6V
CN315 2P RED
WIPE OUT
GND
CN201 10P YEL
WIPE VR
FADER VR A
WIPE AUTO/M
FADER AUTO/M
SPEED VR1
SPEED VR2
START SW ON
START LED
-6V
F REF
WF-1
CN107 6P WHT
VIDEO
GND
BYPASS-Y
GND
BYPASS-C
GND
CN109 6P RED
VIDEO
GND
SP-C
GND
SP-Y
GND
CN119 5P YEL
-5V
+5V
GND
+9V
BYPASS
CN123 8P WHT
Y1 OUT
GND
Y2 OUT
GND
C1 OUT
GND
C2 OUT
GND
CN125 2P WHT
MAIN Y
GND
CN226 2P
MAIN C
GND
CN131 4P WHT
GND
LINE SYNC
GND
LINE BURST
CN134 2P
LINE/INT
GND
W208 4P
MAIN
GND
C
GND
W218 4P
MAIN C
GND
C
GND
W110 4P
+9V
+5V
GND
-5V
W340 5P
UNREG +6V
+6V
GND
-6V
UNREG -6V
CN402 3P WHT
WHT 0V
YEL AC 220V
ORG AC 240V
CN403 8P WHT
YEL
RED
BLK GND
RED
YEL
BLU
GRY GND
BLU
PT401
POWER TRANS
AC IN
PW-61
W120 4P
SOURCE IN L
GND(L)
GND(R)
SOURCE IN R
W121 6P
PROCESSED OUT L2
PROCESSED OUT L1
PROCESSED OUT L GND
PROCESSED OUT R GND
PROCESSED OUT R1
PROCESSED OUT R2
W122 4P
LINE IN L
GND
GND
LINE IN R
W123 8P
Y1 OUT
GND
Y2 OUT
GND
C1 OUT
GND
C2 OUT
GND
JK-44
CN051 2P BLK
+9V
GND
CN052 8P BLK
+9V
GND
V
GND
5.1V
GND
5.1C
GND
CN053 3P BLK
P OUT V2
GND
P OUT V1



4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.

(In addition to this, the necessary note is printed in each block.)

- **For Printed Wiring Board:**

Note:

- : Pattern from the side which enables seeing.
- Circled numbers refer to waveforms.

- **For Schematic Diagram:**

Note:

- All resistors are in ohms, 1/4W unless otherwise noted.
  Chip resistor are 1/10W unless otherwise noted.
  kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF : μμF.
  50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : panel designation.
- : adjustment for repair. *
- : B + Line. *
- : B − Line. *
- : IN/OUT direction of B(+, −) line. *

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

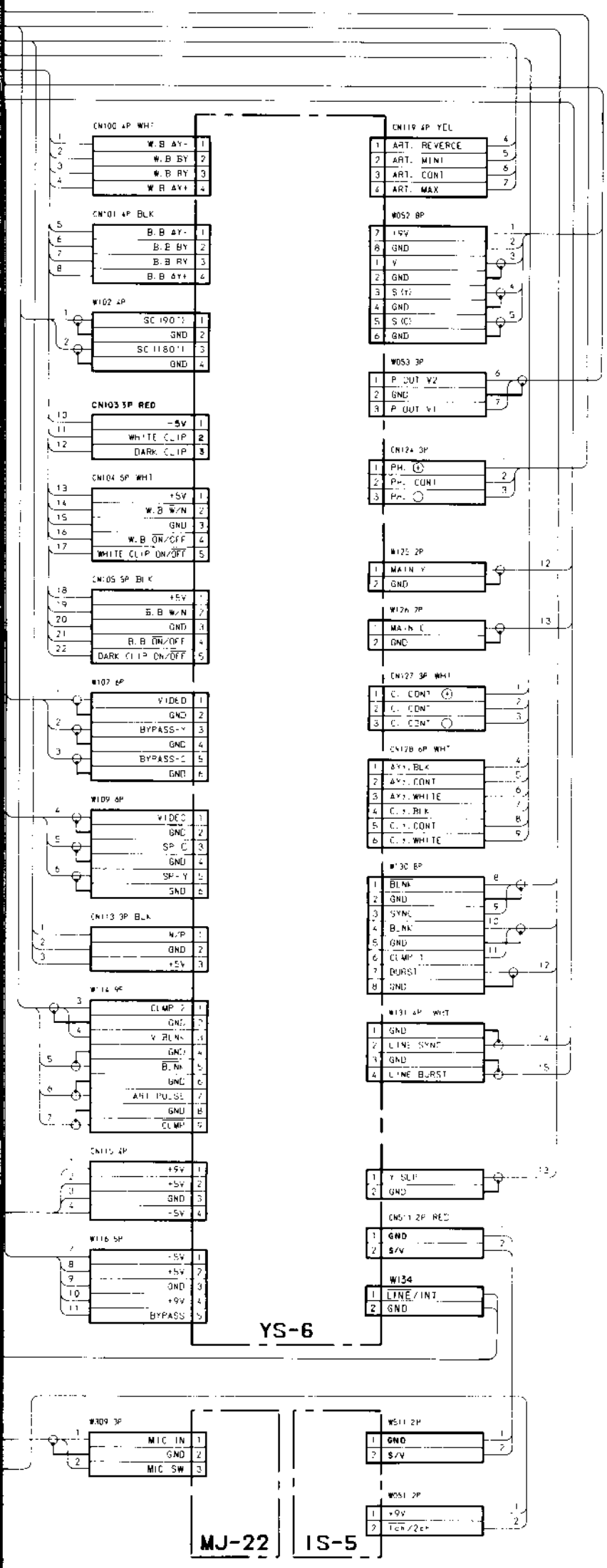
When indicating parts by reference number, please include the board name.

- For voltages and waveforms.
- Voltages are dc between ground and measurement points. *
- Readings are taken with a color-bar signal input. *
- Readings are taken with a digital multimeter (DC10MΩ). *
- Voltage variations may be noted due to normal production tolerances. *

VIDEO CH1	: ON
BYPASS	: OFF
SPLIT SCREEN	: OFF
CHROMA NR	: OFF
REVERSE	: POSI
COLOR CORRECT	: OFF
WIPE	: OFF
FADER VIDEO	: ON
FADER AUDIO	: OFF
COLOR SELECT	: COLOR BAR
FADER VR	: LOWER

Set the control knob to the mechanical center position unless otherwise noted.

* : indicated by the color red.



4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.

(In addition to this, the necessary note is printed in each block.)

- **For Printed Wiring Board:**

Note:

- : Pattern from the side which enables seeing.
- Circled numbers refer to waveforms.

- **For Schematic Diagram:**

Note:

- All resistors are in ohms, 1/4W unless otherwise noted.
  Chip resistor are 1/10W unless otherwise noted.
  kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF : μμF.
  50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : panel designation.
- : adjustment for repair. *
- : B + Line. *
- : B − Line. *
- : IN/OUT direction of B (+, −) line. *

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

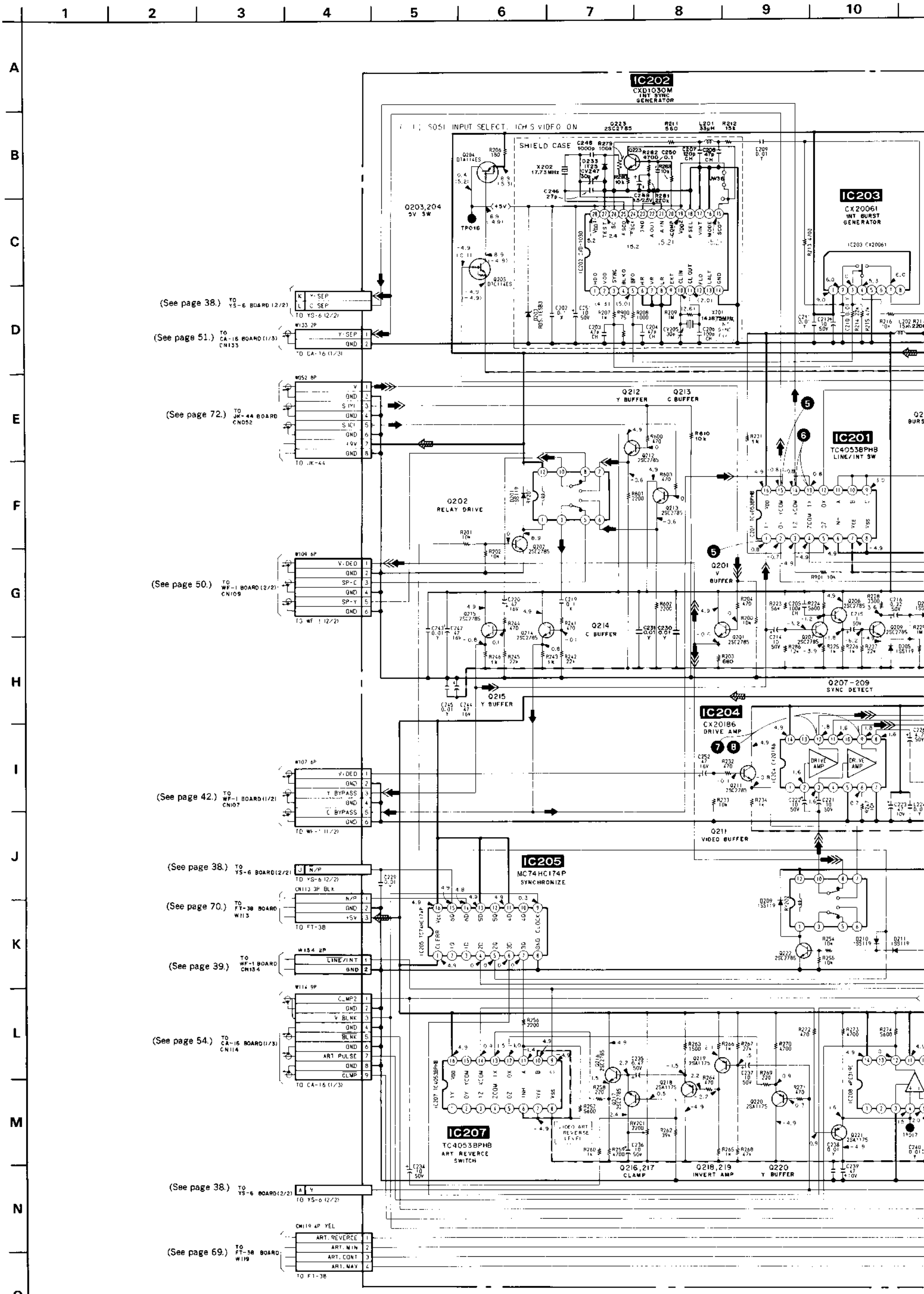
- For voltages and waveforms.
- Voltages are dc between ground and measurement points. *
- Readings are taken with a color-bar signal input. *
- Readings are taken with a digital multimeter (DC10MΩ). *
- Voltage variations may be noted due to normal production tolerances. *

VIDEO CH1	: ON
BYPASS	: OFF
SPLIT SCREEN	: OFF
CHROMA NR	: OFF
REVERSE	: POSI
COLOR CORRECT	: OFF
WIPE	: OFF
FADER VIDEO	: ON
FADER AUDIO	: OFF
COLOR SELECT	: COLOR BAR
FADER VR	: LOWER

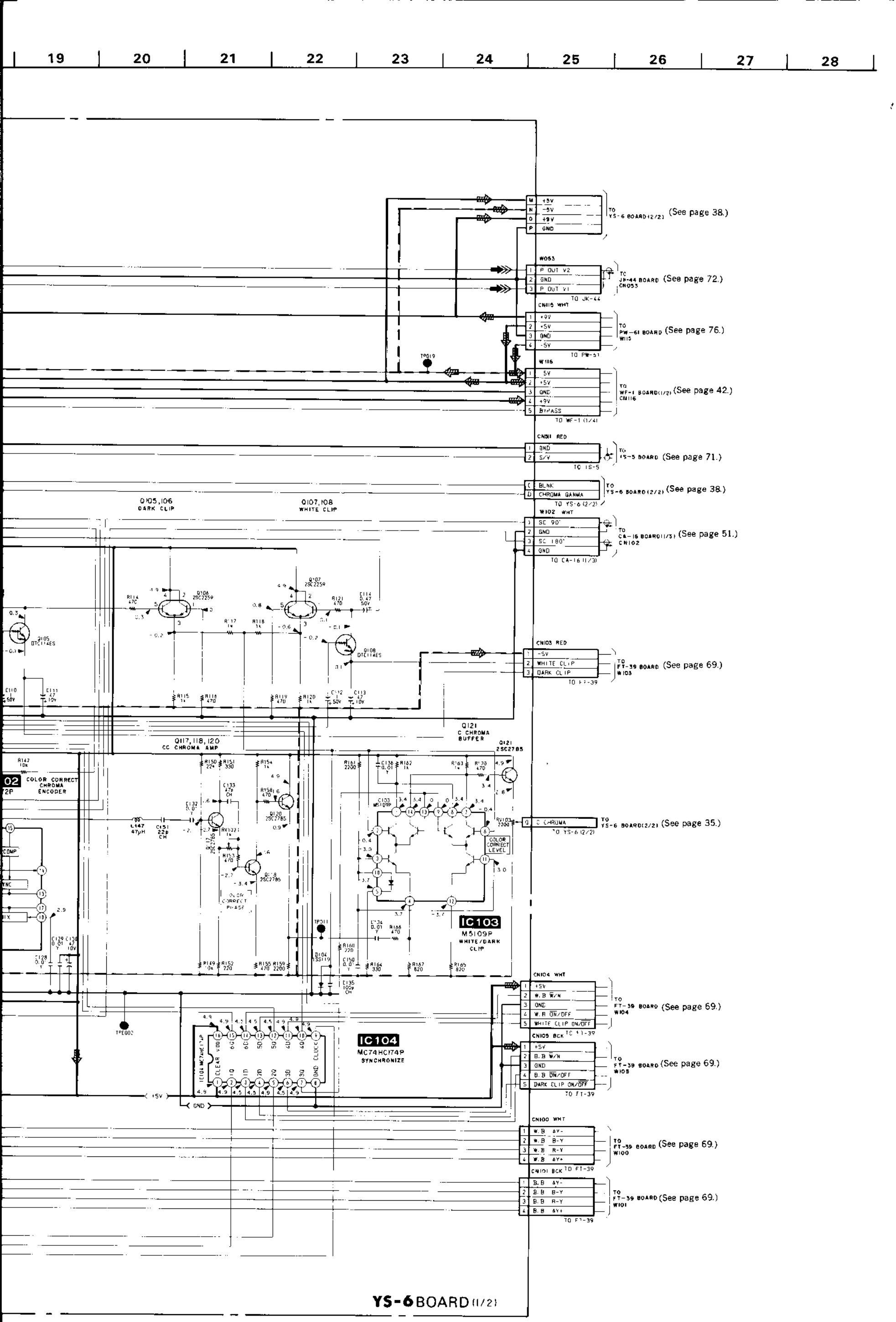
Set the control knob to the mechanical center position unless otherwise noted.

* : indicated by the color red.

YS-6 (MAIN Y/C PROCESS) SCHEMATIC DIAGRAM
—Ref. No. YS-6 BOARD : 1000 series—



VIDEO (1/4)



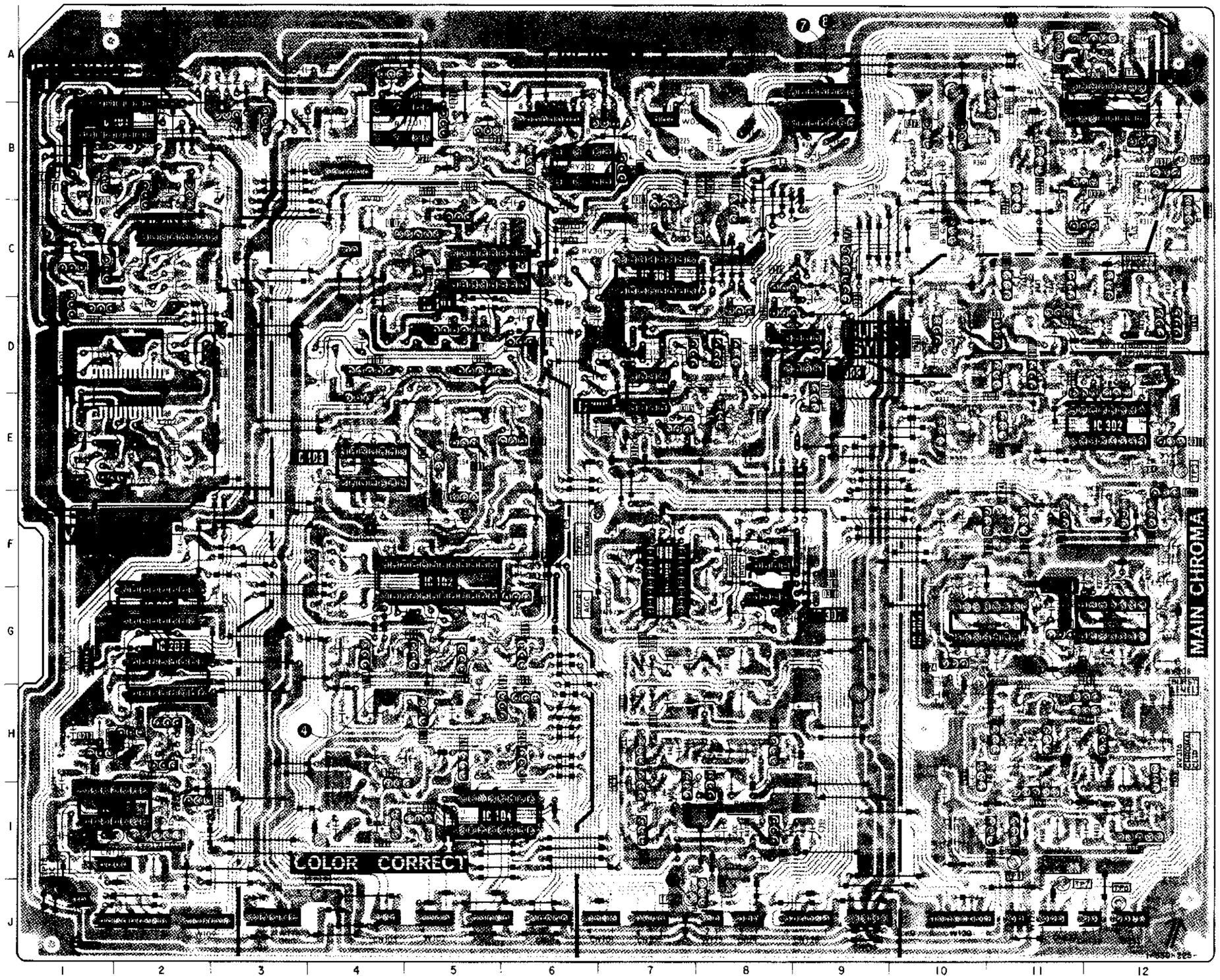
- **Signal path**
  - ➡ : REC Y Signal
  - ➡ : REC CHROMA Signal
  - ➡ : REC Y/CHROMA Signal

VIDEO (1/4) **VIDEO (1/4)**

YS-6 (MAIN Y/C PROCESS) PRINTED WIRING BOARD

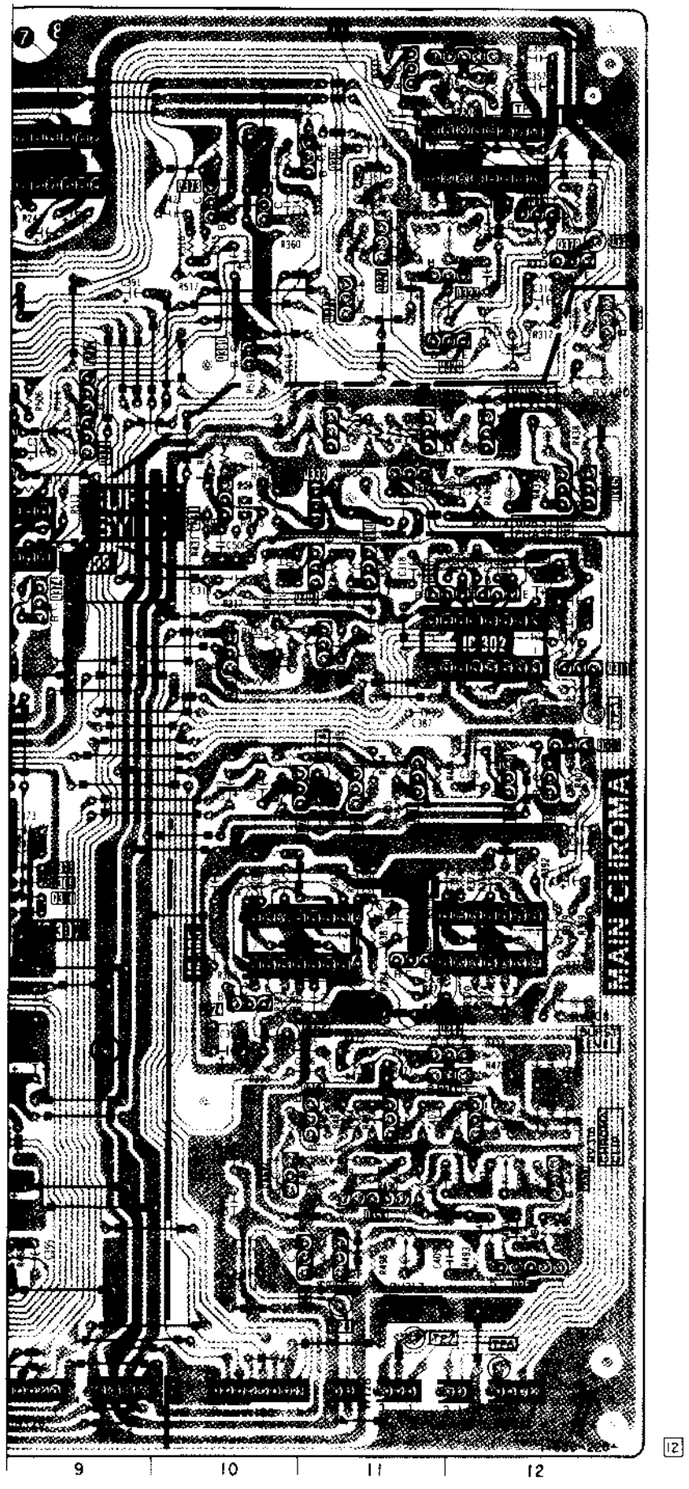
—Ref. No. YS-6 BOARD : 1000 series—

YS-6 BOARD



YS-6 BOARD

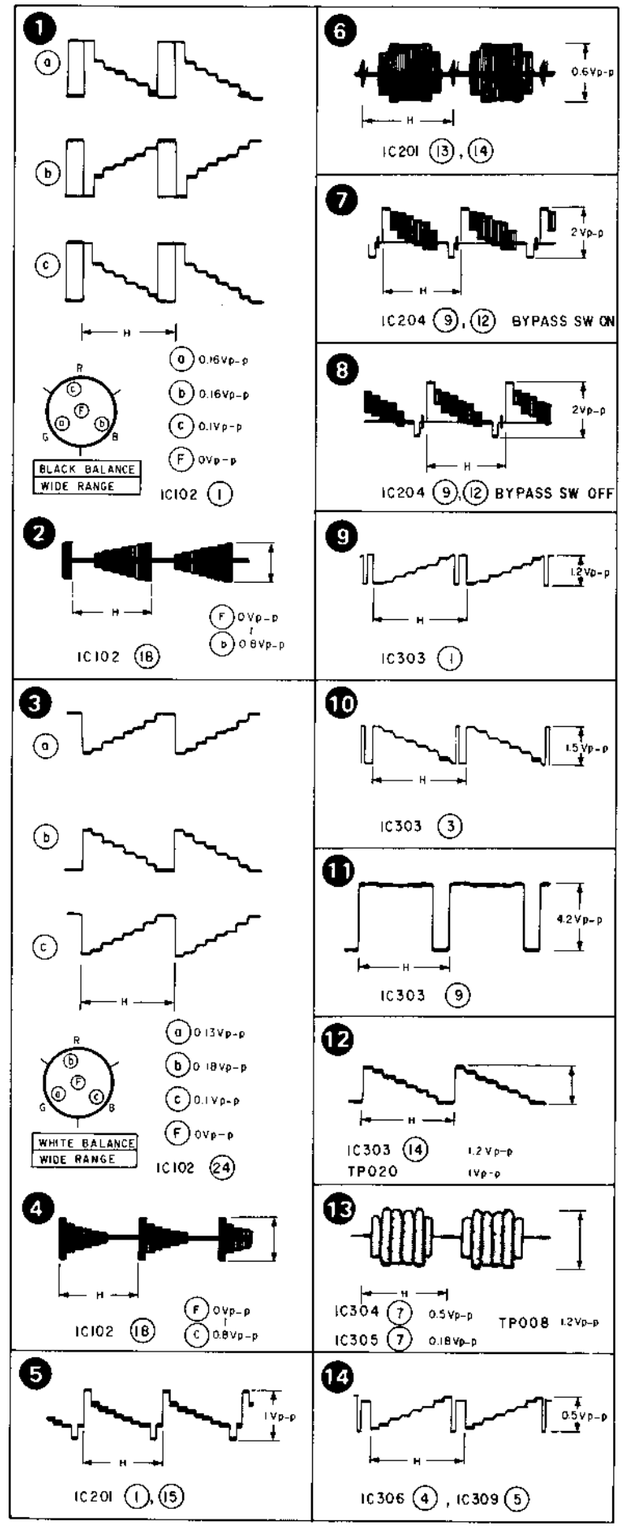
D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
		Q322	C-12
IC101	D-5	Q323	H-11
IC102	G-5	Q324	H-10
IC103	F-4	Q325	F-11
IC104	I-5	Q326	F-11
IC201	B-1	Q327	F-12
IC202	E-2	Q328	F-12
IC203	C-2	Q329	F-12
IC204	B-9	Q330	F-12
IC205	G-2	Q331	E-10
IC207	H-2	Q332	E-11
IC208	I-1	Q333	E-11
IC301	D-7	Q334	E-12
IC302	E-12	Q335	E-12
IC303	B-11	Q336	D-12
IC304	H-12	Q337	D-11
IC305	H-11	Q338	D-11
IC306	E-7	Q340	I-7
IC307	G-8	Q341	I-7
IC308	G-8	Q342	I-7
IC309	E-9	Q343	I-8
		Q344	H-7
Q101	C-5	Q345	H-8
Q102	C-5	Q346	I-8
Q103	D-5	Q347	H-11
Q104	D-5	Q348	H-11
Q105	D-6	Q349	I-12
Q106	E-5	Q350	I-11
Q107	E-4	Q351	I-11
Q108	E-4	Q352	I-11
Q109	H-6	Q353	I-11
Q110	H-6	Q354	J-12
Q111	H-5	Q355	I-12
Q112	H-5	Q356	J-11
Q113	H-6	Q357	J-11
Q114	H-4	Q359	C-12
Q115	H-5	Q360	B-10
Q116	G-6	Q361	B-10
Q117	F-5	Q370	D-8
Q118	F-5	Q371	D-9
Q120	F-5	Q372	D-9
Q121	F-5	Q373	B-10
Q122	I-4	Q374	E-9
Q123	I-5	Q375	A-11
Q124	I-4	Q376	D-8
Q125	I-6	Q377	C-11
Q126	I-5	Q378	C-12
Q127	D-5	Q379	D-8
Q201	B-7	Q380	C-10
Q202	B-4		
Q203	D-1		
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		



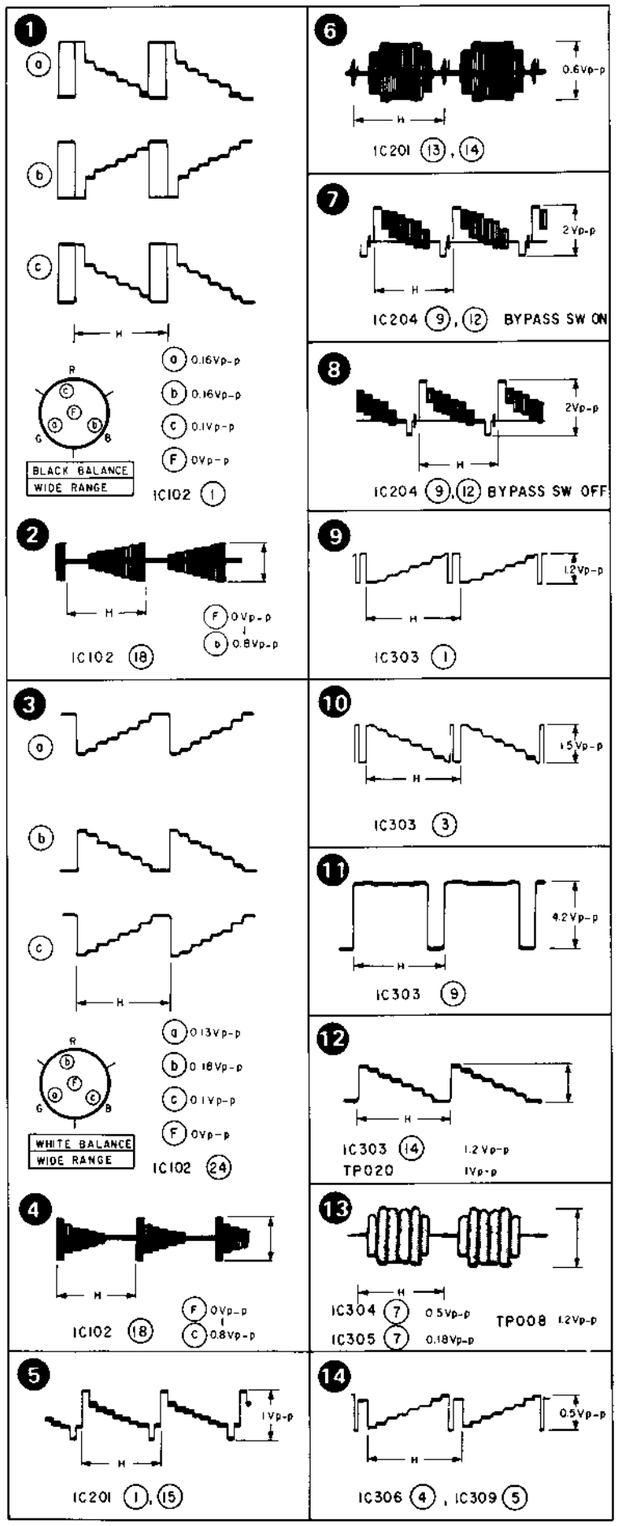
YS-6 BOARD

D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
		Q322	C-12
IC101	D-5	Q323	H-11
IC102	G-5	Q324	H-10
IC103	F-4	Q325	F-11
IC104	I-5	Q326	F-11
IC201	B-1	Q327	F-12
IC202	E-2	Q328	F-12
IC203	C-2	Q329	F-12
IC204	B-9	Q330	F-12
IC205	G-2	Q331	E-10
IC207	H-2	Q332	E-11
IC208	I-1	Q333	E-11
IC301	D-7	Q334	E-12
IC302	E-12	Q335	E-12
IC303	B-11	Q336	D-12
IC304	H-12	Q337	D-11
IC305	H-11	Q338	D-11
IC306	E-7	Q340	I-7
IC307	G-8	Q341	I-7
IC308	G-8	Q342	I-7
IC309	E-9	Q343	I-8
		Q344	H-7
Q101	C-5	Q345	H-8
Q102	C-5	Q346	I-8
Q103	D-5	Q347	H-11
Q104	D-5	Q348	H-11
Q105	D-6	Q349	I-12
Q106	E-5	Q350	I-11
Q107	E-4	Q351	I-11
Q108	E-4	Q352	I-11
Q109	H-6	Q353	I-11
Q110	H-6	Q354	J-12
Q111	H-5	Q355	I-12
Q112	H-5	Q356	J-11
Q113	H-6	Q357	J-11
Q114	H-4	Q359	C-12
Q115	H-5	Q360	B-10
Q116	G-6	Q361	B-10
Q117	F-5	Q370	D-8
Q118	F-5	Q371	D-9
Q120	F-5	Q372	D-9
Q121	F-5	Q373	B-10
Q122	I-4	Q374	E-9
Q123	I-5	Q375	A-11
Q124	I-4	Q376	D-8
Q125	I-6	Q377	C-11
Q126	I-5	Q378	C-12
Q127	D-5	Q379	D-8
Q201	B-7	Q380	C-10
Q202	B-4		
Q203	D-1		
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		

YS-6 BOARD



YS-6 BOARD



YS-6 (MAIN Y/C PROCESS) PRINTED WIRING BOARD

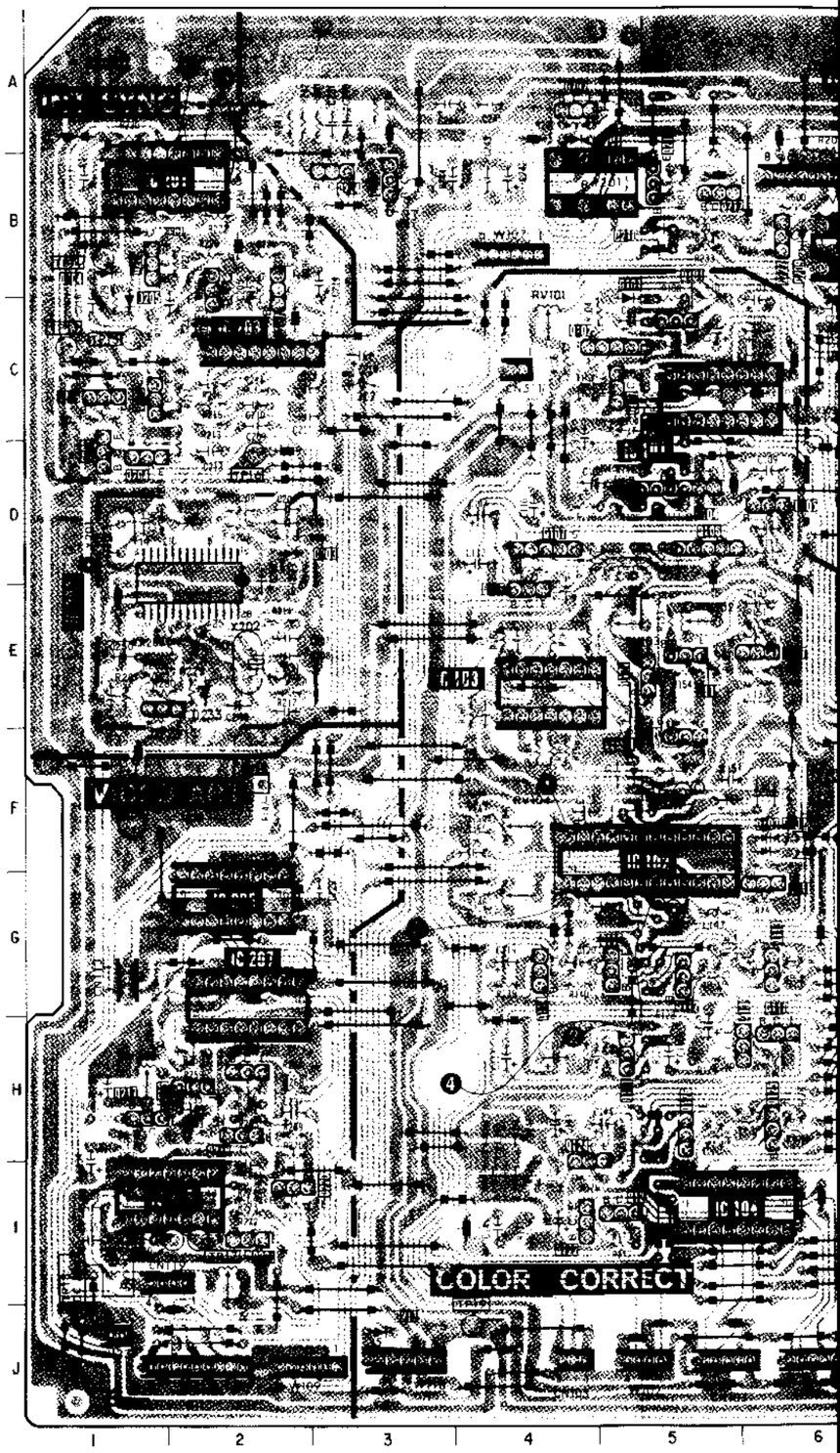
—Ref. No. YS-6 BOARD : 1000 series—

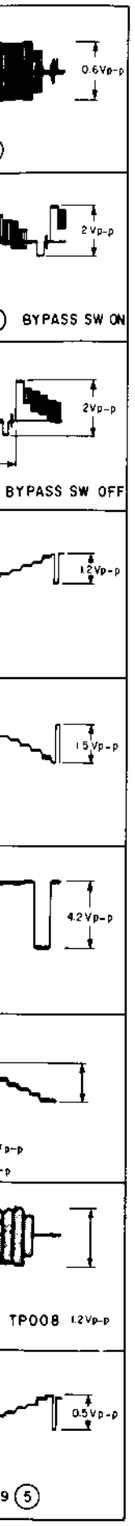
YS-6 BOARD

YS-6 BOARD

D101	C-5		Q222	C-6	
D102	G-6		Q233	E-1	
D103	G-6		Q301	C-7	
D104	F-5		Q302	C-8	
D201	B-4		Q303	C-8	
D203	D-2		Q304	A-11	
D204	B-1		Q305	D-8	
D205	C-1		Q306	D-8	
D209	B-6		Q307	E-11	
D210	B-5		Q308	E-11	
D211	J-3		Q309	E-12	
D233	E-2		Q310	E-12	
D301	H-7		Q311	F-12	
D302	H-7		Q312	F-11	
D303	H-7		Q313	F-10	
D304	H-7		Q314	E-8	
D305	E-7		Q315	E-8	
D307	E-8		Q316	D-8	
D309	G-9		Q318	J-8	
D310	G-9		Q319	B-12	
D311	G-9		Q320	C-12	
D312	F-7		Q321	C-11	
			Q322	C-12	
IC101	D-5		Q323	H-11	
IC102	G-5		Q324	H-10	
IC103	F-4		Q325	F-11	
IC104	I-5		Q326	F-11	
IC201	B-1		Q327	F-12	
IC202	E-2		Q328	F-12	
IC203	C-2		Q329	F-12	
IC204	B-9		Q330	F-12	
IC205	G-2		Q331	E-10	
IC207	H-2		Q332	E-11	
IC208	I-1		Q333	E-11	
IC301	D-7		Q334	E-12	
IC302	E-12		Q335	E-12	
IC303	B-11		Q336	D-12	
IC304	H-12		Q337	D-11	
IC305	H-11		Q338	D-11	
IC306	E-7		Q340	I-7	
IC307	G-8		Q341	I-7	
IC308	G-8		Q342	I-7	
IC309	E-9		Q343	I-8	
			Q344	H-7	
Q101	C-5		Q345	H-8	
Q102	C-5		Q346	I-8	
Q103	D-5		Q347	H-11	
Q104	D-5		Q348	H-11	
Q105	D-6		Q349	I-12	
Q106	E-5		Q350	J-11	
Q107	E-4		Q351	I-11	
Q108	E-4		Q352	I-11	
Q109	H-6		Q353	I-11	
Q110	H-6		Q354	J-12	
Q111	H-5		Q355	I-12	
Q112	H-5		Q356	J-11	
Q113	H-6		Q357	J-11	
Q114	H-4		Q359	C-12	
Q115	H-5		Q360	B-10	
Q116	G-6		Q361	B-10	
Q117	F-5		Q370	D-8	
Q118	F-5		Q371	D-9	
Q120	F-5		Q372	D-9	
Q121	F-5		Q373	B-10	
Q122	I-4		Q374	E-9	
Q123	I-5		Q375	A-11	
Q124	I-4		Q376	D-8	
Q125	I-6		Q377	C-11	
Q126	I-5		Q378	C-12	
Q127	D-5		Q379	D-8	
Q201	B-7		Q380	C-10	
Q202	B-4				
Q203	D-1				
Q204	D-1				
Q205	C-1				
Q206	C-1				
Q207	C-3				
Q208	C-2				
Q209	B-2				
Q211	B-7				
Q212	B-5				
Q213	B-5				
Q214	B-3				
Q215	B-3				
Q216	H-2				
Q217	H-2				
Q218	H-2				
Q219	H-2				
Q220	I-2				
Q221	I-2				

YS-6 BOARD





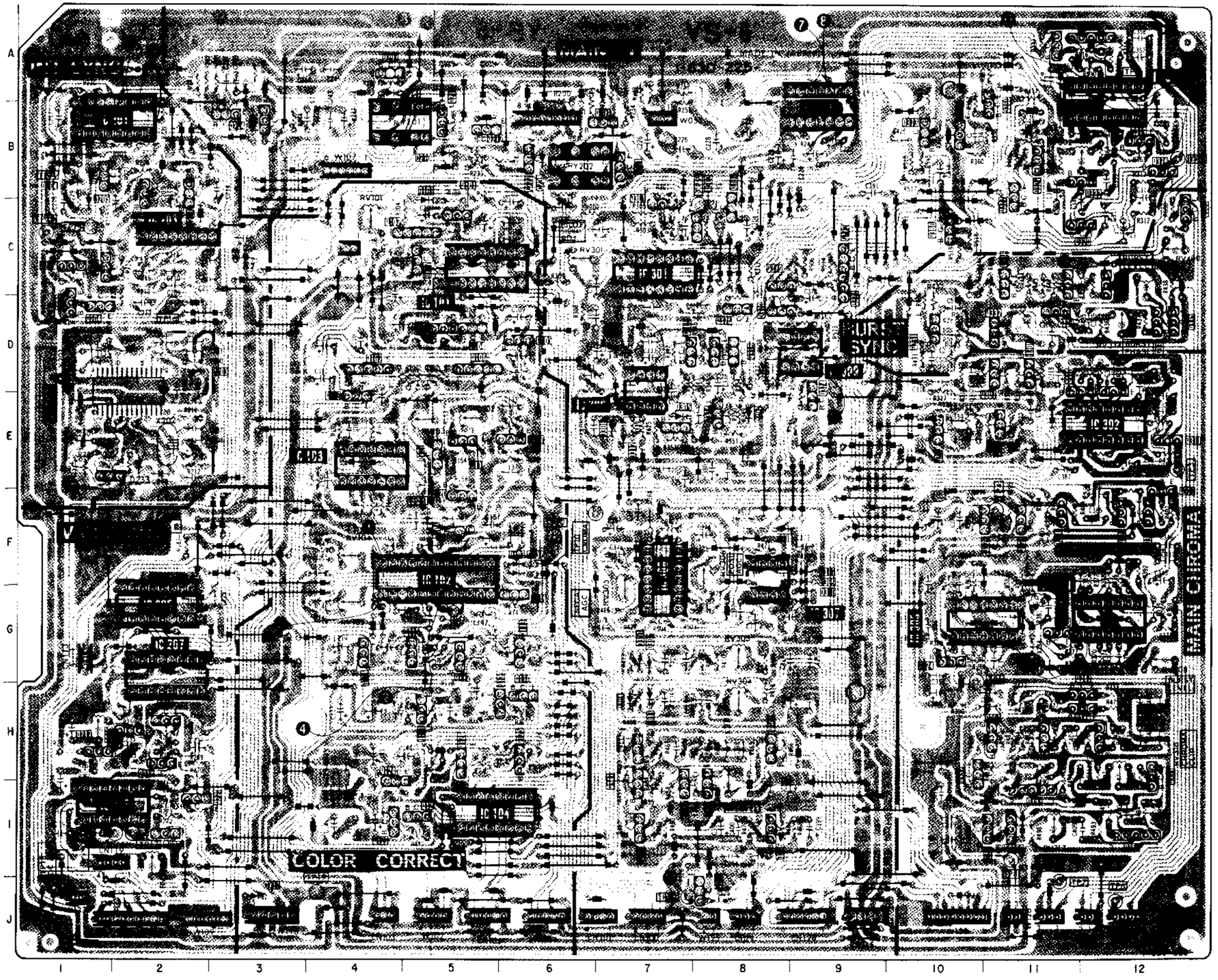
YS-6 (MAIN Y/C PROCESS) PRINTED WIRING BOARD

—Ref. No. YS-6 BOARD : 1000 series—

YS-6 BOARD

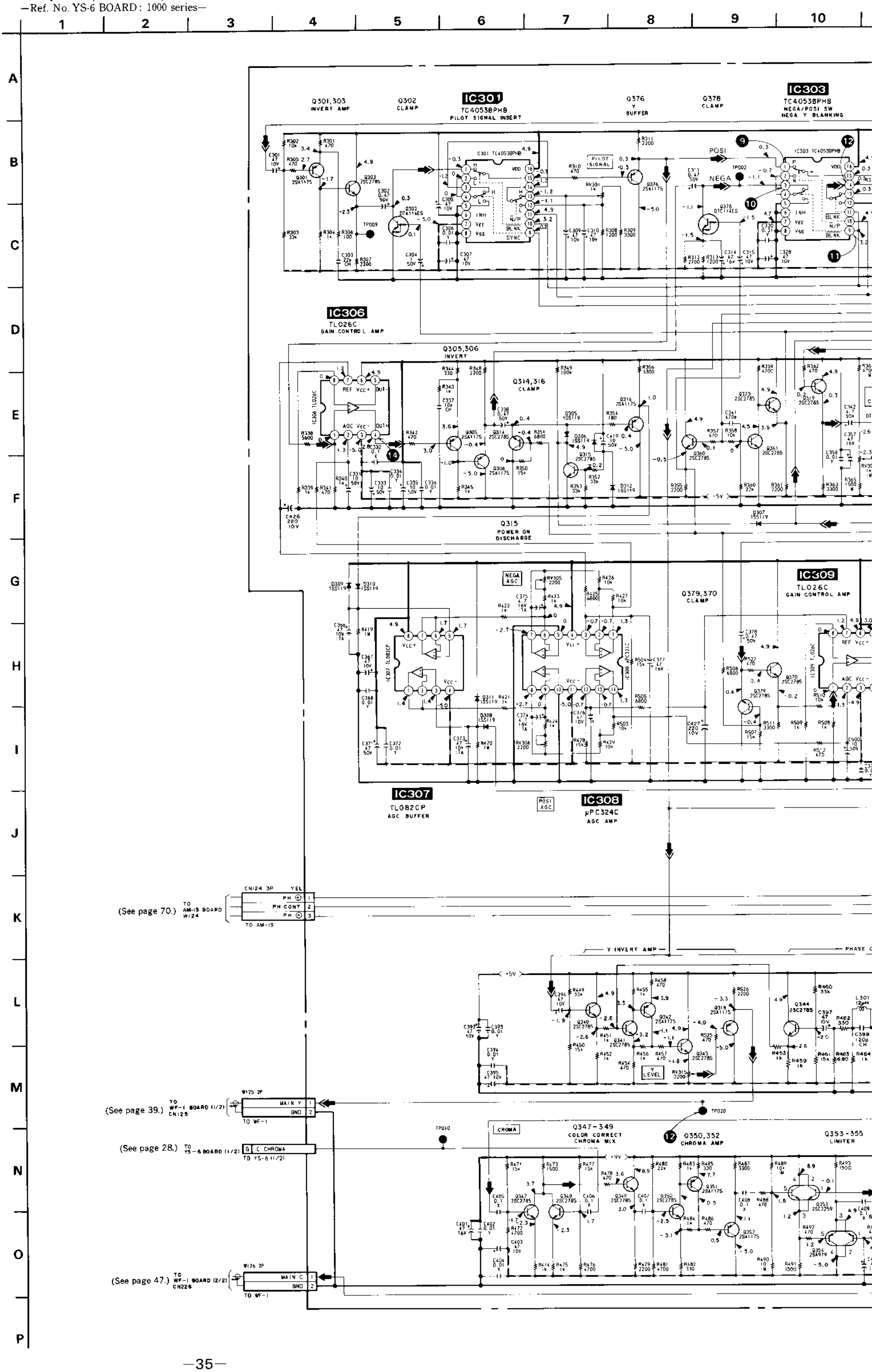
D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
		Q322	C-12
IC101	D-5	Q323	H-11
IC102	G-5	Q324	H-10
IC103	F-4	Q325	F-11
IC104	I-5	Q326	F-11
IC201	B-1	Q327	F-12
IC202	E-2	Q328	F-12
IC203	C-2	Q329	F-12
IC204	B-9	Q330	F-12
IC205	G-2	Q331	E-10
IC207	H-2	Q332	E-11
IC208	I-1	Q333	E-11
IC301	D-7	Q334	E-12
IC302	E-12	Q335	E-12
IC303	B-11	Q336	D-12
IC304	H-12	Q337	D-11
IC305	H-11	Q338	D-11
IC306	E-7	Q340	I-7
IC307	G-8	Q341	I-7
IC308	G-8	Q342	I-7
IC309	E-9	Q343	I-8
		Q344	H-7
Q101	C-5	Q345	H-8
Q102	C-5	Q346	I-8
Q103	D-5	Q347	H-11
Q104	D-5	Q348	H-11
Q105	D-6	Q349	I-12
Q106	E-5	Q350	I-11
Q107	E-4	Q351	I-11
Q108	E-4	Q352	I-11
Q109	H-6	Q353	I-11
Q110	H-6	Q354	J-12
Q111	H-5	Q355	I-12
Q112	H-5	Q356	J-11
Q113	H-6	Q357	J-11
Q114	H-4	Q359	C-12
Q115	H-5	Q360	B-10
Q116	G-6	Q361	B-10
Q117	F-5	Q370	D-8
Q118	F-5	Q371	D-9
Q120	F-5	Q372	D-9
Q121	F-5	Q373	B-10
Q122	I-4	Q374	E-9
Q123	I-5	Q375	A-11
Q124	I-4	Q376	D-8
Q125	I-6	Q377	C-11
Q126	I-5	Q378	C-12
Q127	D-5	Q379	D-8
Q201	B-7	Q380	C-10
Q202	B-4		
Q203	D-1		
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		

YS-6 BOARD



YS-6 (MAIN Y/C PROCESS) SCHEMATIC DIAGRAM

—Ref. No. YS-6 BOARD : 1000 series—



Q376 Y BUFFER

Q378 CLAMP

IC303 TC4053BPHB NEGA/POSI SW NEGA Y BLANKING

Q375,304 LINEAR CLIP

Q307,308 CHROMA INVERT AMP

IC302 TC4053BPHB BLANKING NEGA POSI SW

IC304 M5109P CHROMA GAMMA CONTROL

Q323 BUFFER

Q325 C-Y BUFFER

Q326 DIFERENTIAL OUTPUT

Q333,334 PHASE SHIFT

IC309 TL026C GAIN CONTROL AMP

Q379,370 CLAMP

Q371,372 INVERT

Q374 BUFFER

Q380 CLAMP

IC308 μPC324C AGC AMP

Y INVERT AMP

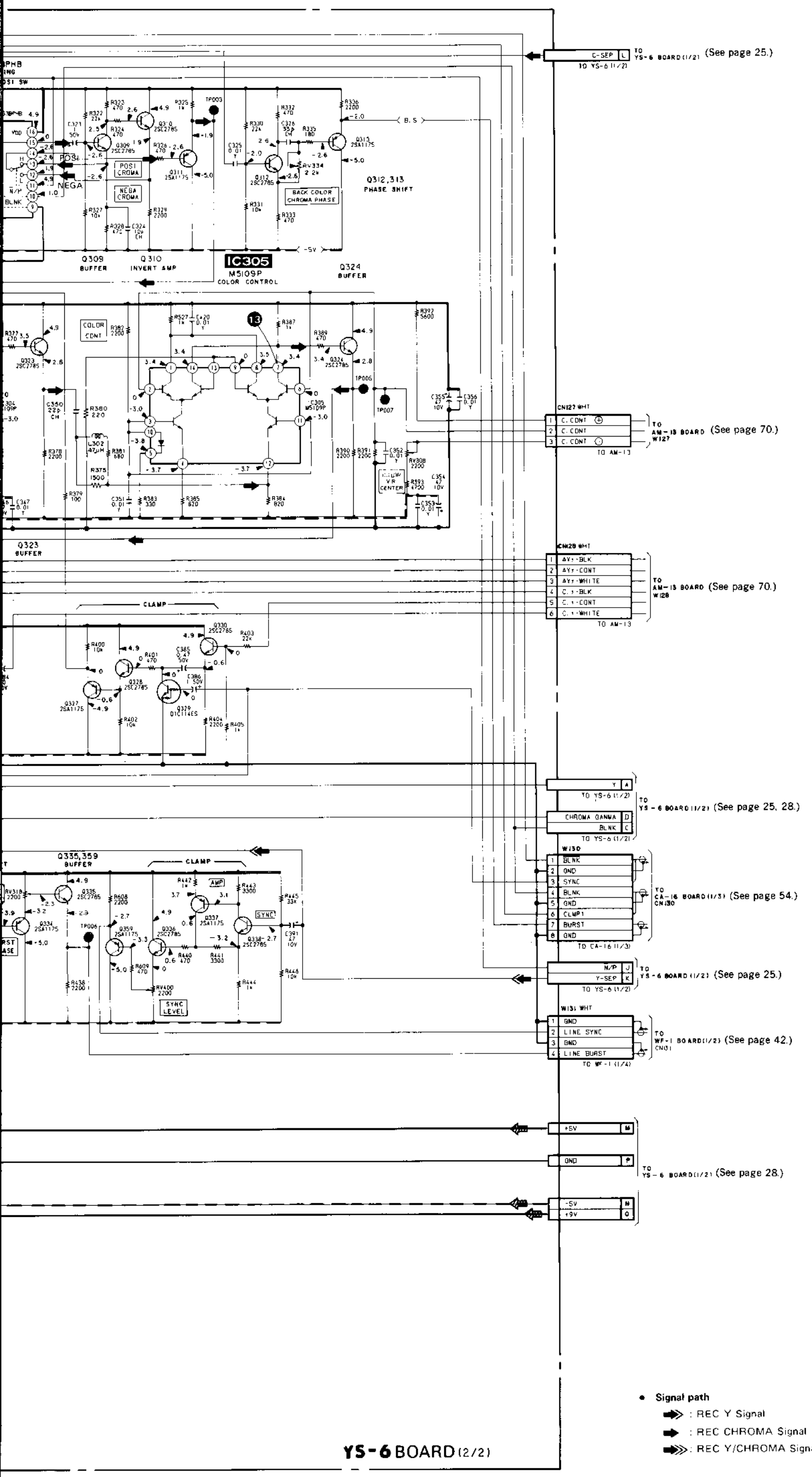
PHASE CONT

Q347-349 COLOR CORRECT CHROMA MIX

Q350,352 CHROMA AMP

Q353-355 LIMITER

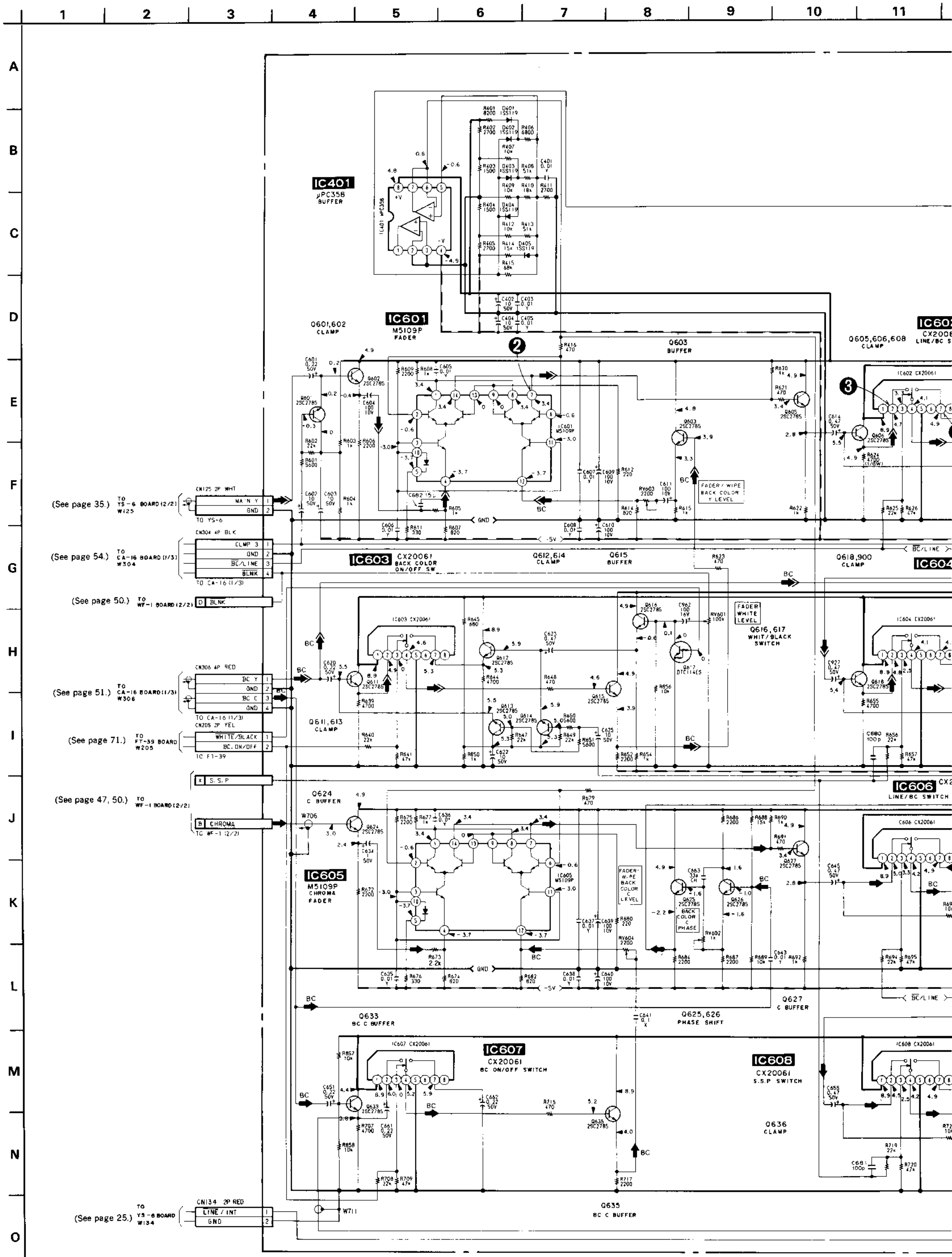
Q356,357 CHROMA AMP



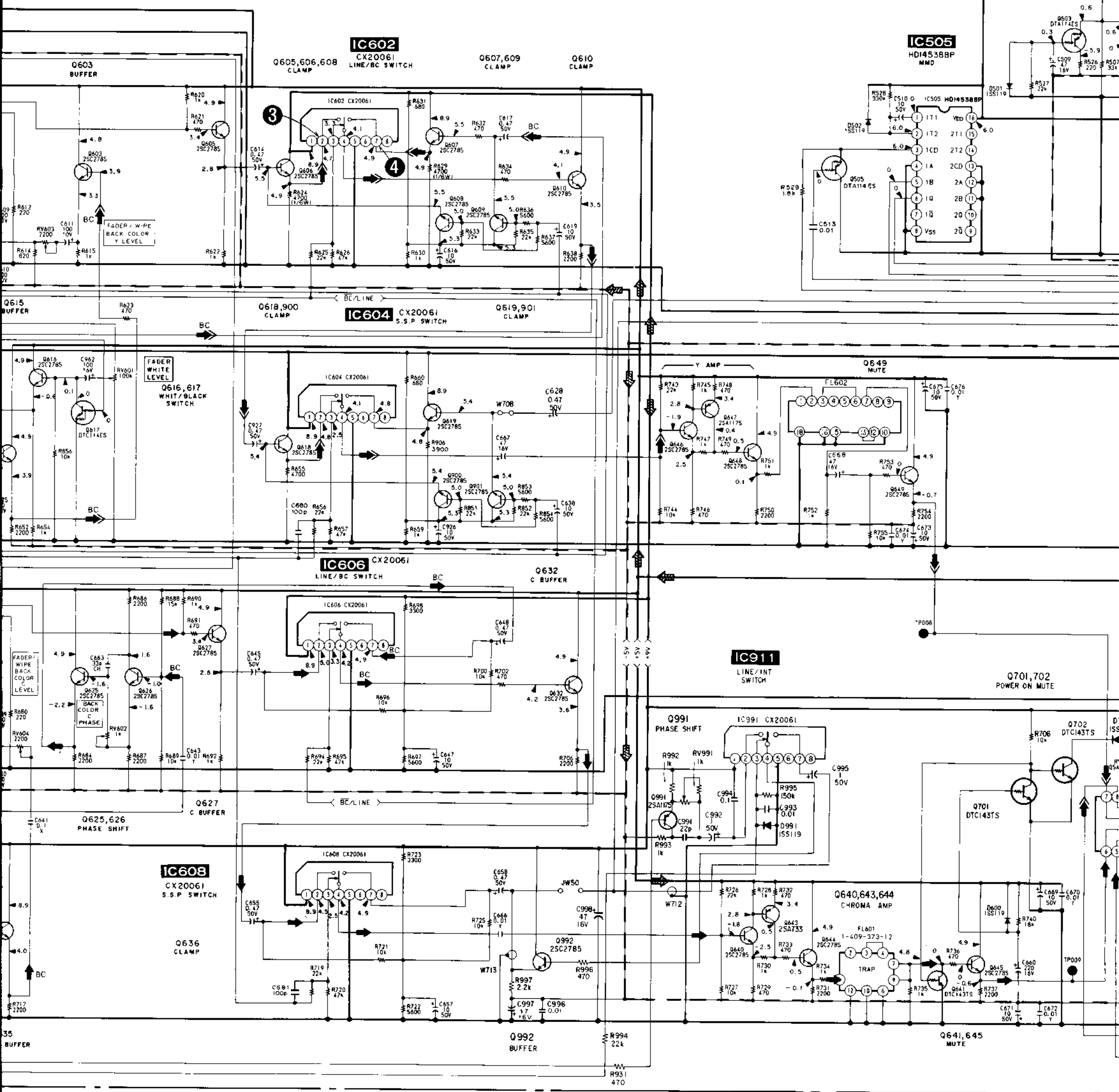
- **Signal path**
  - ➡ : REC Y Signal
  - ➡ : REC CHROMA Signal
  - ➡ : REC Y/CHROMA Signal

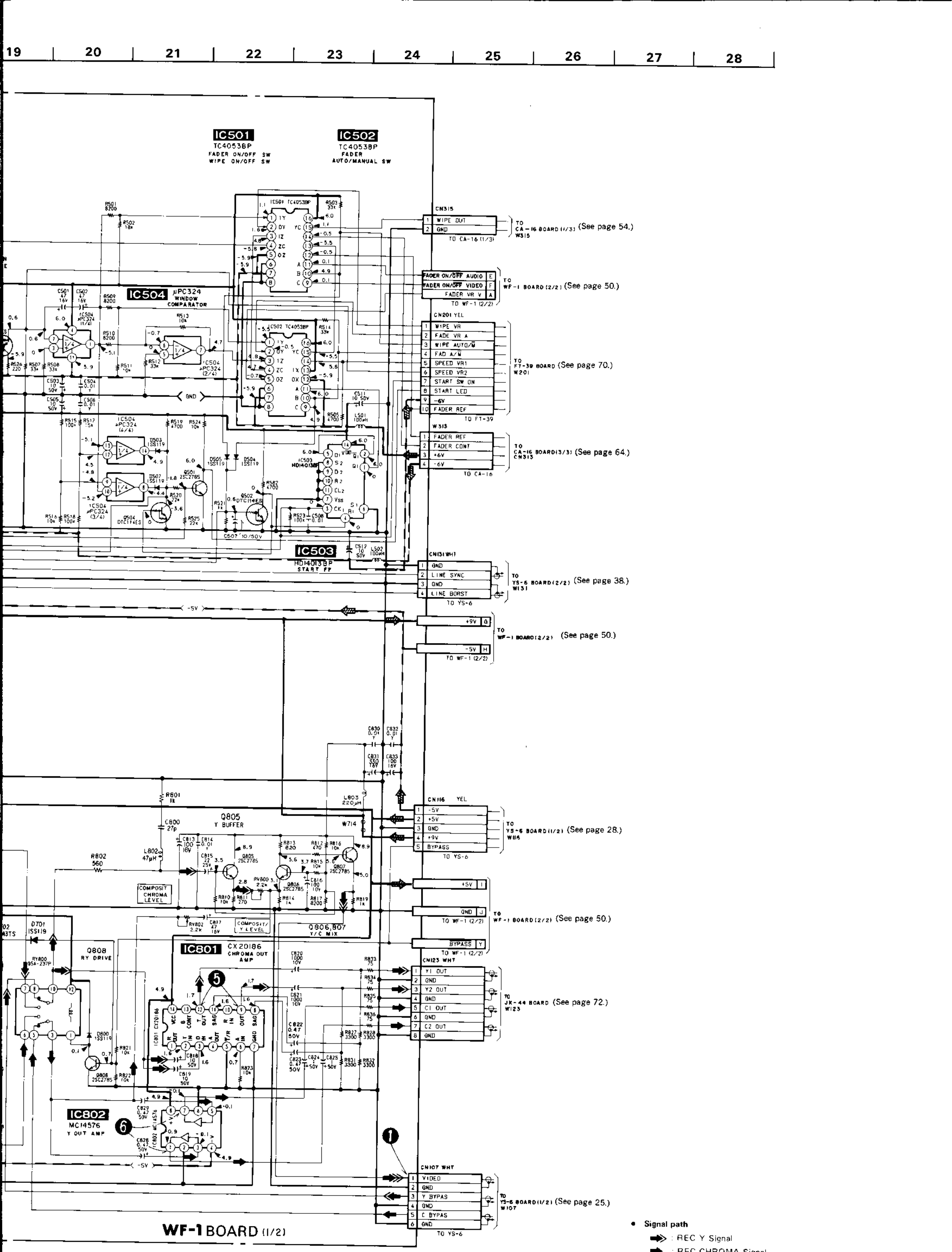
YS-6 BOARD (2/2)

WF-1 (Y/C COLOR CONTROL) SCHEMATIC DIAGRAM
—Ref. No. WF-1 BOARD : 2000 series—



8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19

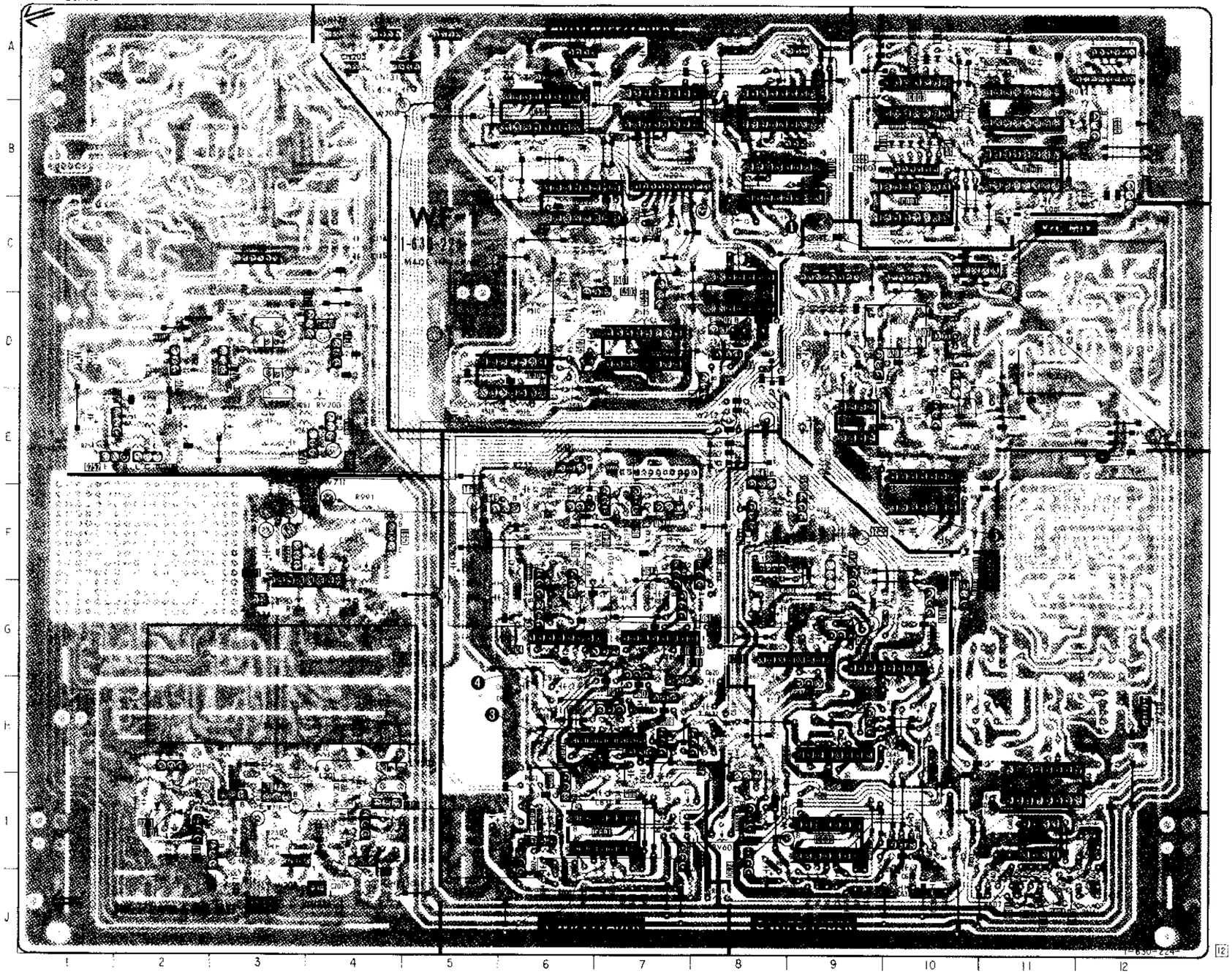




- **Signal path**
  - ➠ : REC Y Signal
  - ➡ : REC CHROMA Signal
  - ➠➠ : REC Y/CHROMA Signal

WF-1 (Y/C COLOR CONTROL) PRINTED WIRING BOARD

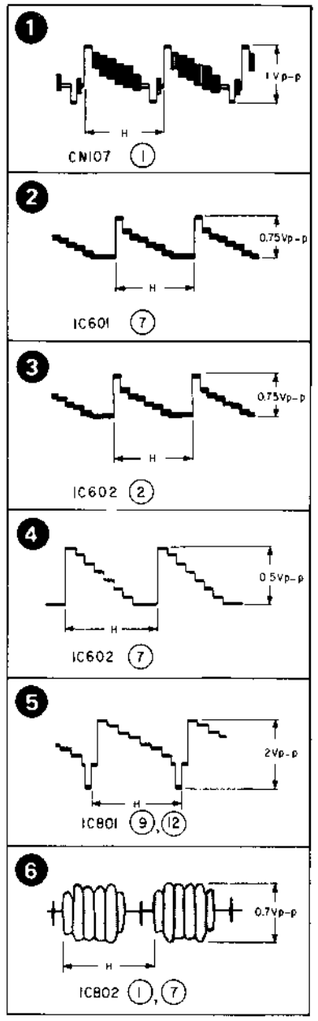
—Ref. No. WF-1 BOARD : 2000 series—

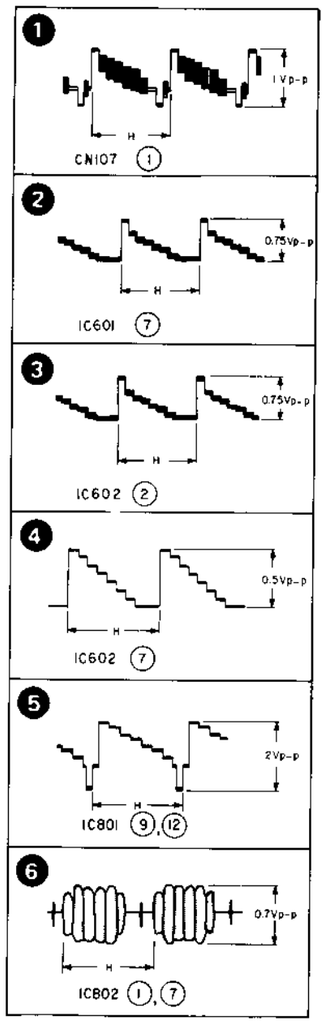


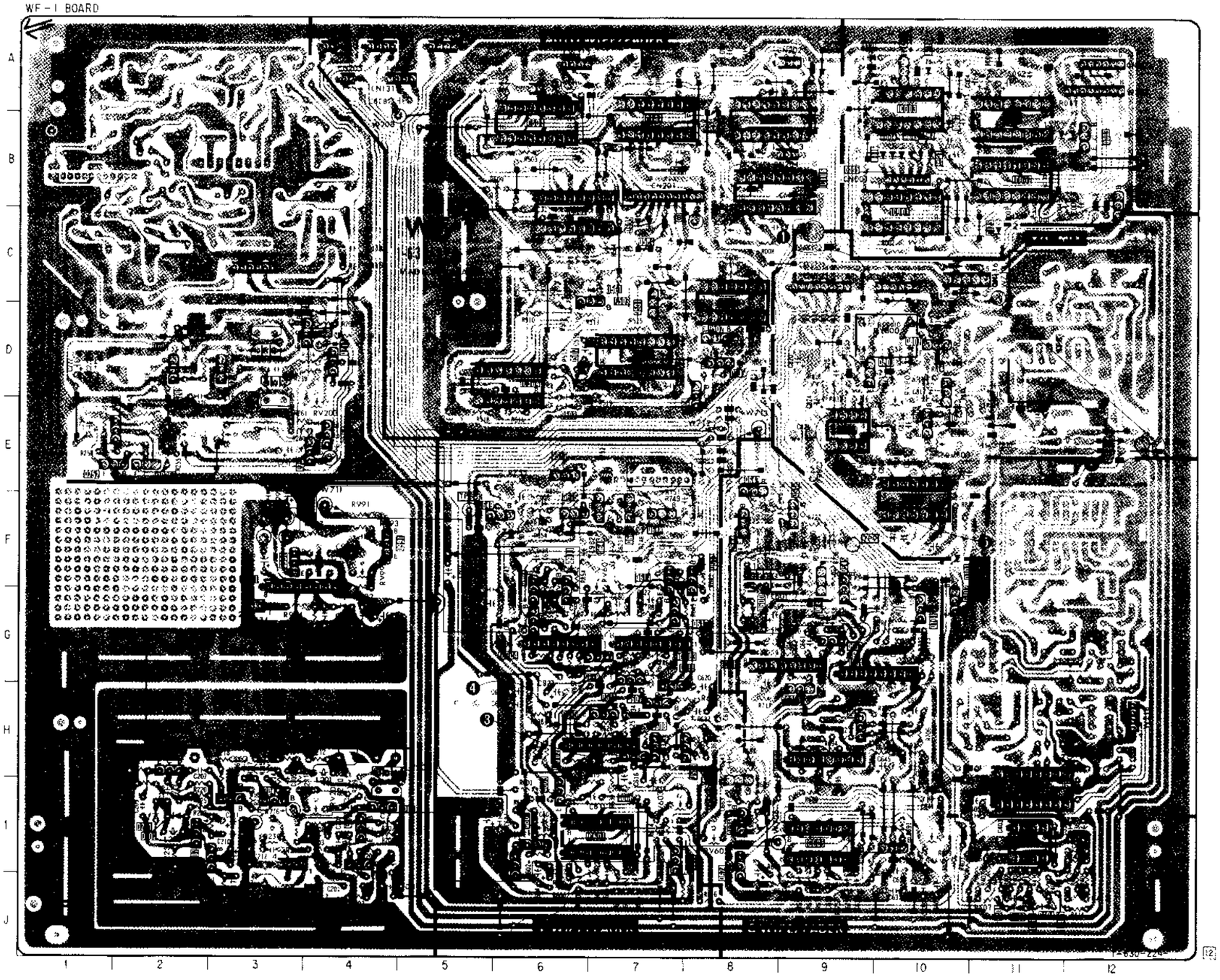
WF-1 BOARD

D001	B-10	Q609	H-7
D002	B-10	Q610	H-7
D003	B-10	Q611	G-7
D004	B-10	Q612	G-7
D005	B-10	Q613	F-7
D006	B-9	Q614	F-7
D007	A-10	Q615	G-7
D008	B-11	Q616	F-6
D009	B-11	Q617	E-6
D010	A-10	Q618	G-6
D011	B-7	Q619	G-6
D123	C-11	Q624	I-8
D130	A-9	Q625	I-8
D201	I-2	Q626	H-8
D202	I-2	Q627	I-10
D203	D-2	Q632	H-9
D401	J-11	Q633	G-9
D402	J-11	Q635	H-9
D403	J-11	Q640	F-19
D404	J-11	Q641	F-9
D405	J-11	Q643	E-8
D501	C-6	Q644	F-8
D502	D-6	Q645	F-9
D503	E-6	Q646	F-7
D504	C-7	Q647	F-7
D505	C-7	Q648	F-7
D507	E-6	Q649	F-5
D600	G-8	Q701	G-10
D701	F-10	Q702	G-10
D800	D-10	Q805	E-10
D991	G-4	Q806	D-10
		Q807	D-10
IC001	B-10	Q808	D-9
IC002	B-11	Q900	F-6
IC003	A-10	Q901	F-6
IC004	A-11	Q991	F-4
IC105	A-8	Q992	F-3
IC106	B-9		
IC107	A-7		
IC302	I-11		
IC401	I-11		
IC501	B-6		
IC502	B-6		
IC503	C-8		
IC504	D-6		
IC505	D-7		
IC601	I-7		
IC602	H-6		
IC603	G-7		
IC604	Q-6		
IC605	I-9		
IC606	H-9		
IC607	G-8		
IC608	G-9		
IC801	E-10		
IC802	E-9		
IC991	F-3		
Q001	B-12		
Q002	A-10		
Q003	B-12		
Q201	I-4		
Q202	I-4		
Q203	I-4		
Q204	I-3		
Q205	I-3		
Q206	H-2		
Q207	I-2		
Q208	I-2		
Q209	D-2		
Q210	D-3		
Q211	D-4		
Q212	D-4		
Q250	E-1		
Q251	E-2		
Q252	E-1		
Q253	E-4		
Q254	E-4		
Q501	C-7		
Q502	D-8		
Q503	C-6		
Q504	D-8		
Q505	D-8		
Q601	I-6		
Q602	I-6		
Q603	I-6		
Q605	I-7		
Q606	H-7		
Q607	H-7		
Q608	H-7		

WF-1 BOARD







WF-1 BOARD

CN107 ①

IC601 ⑦

IC602 ②

IC602 ⑦

IC801 ⑨,⑫

IC802 ①,⑦

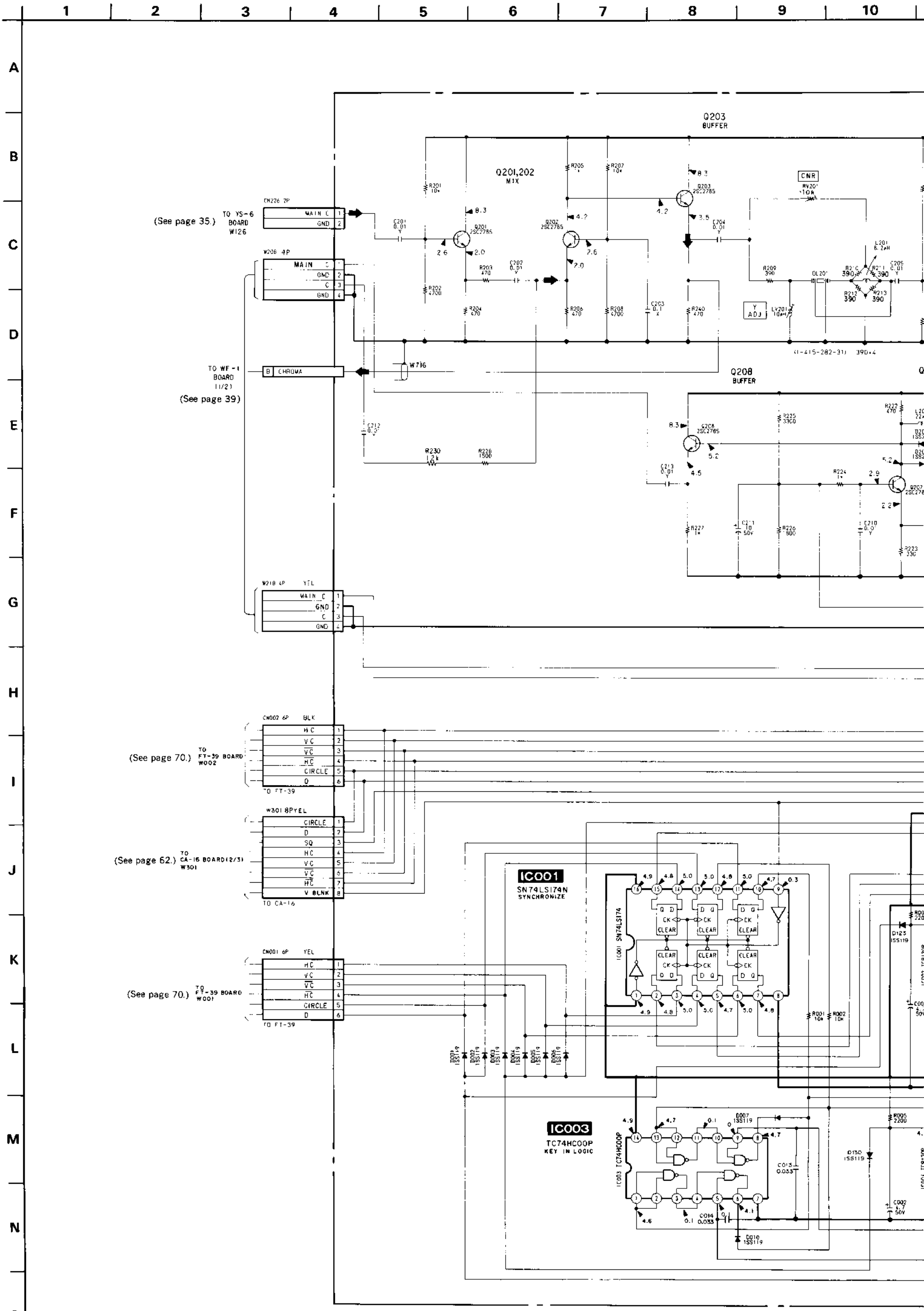
WF-1 BOARD

D001	B-10
D002	B-10
D003	B-10
D004	B-10
D005	B-10
D006	B-9
D007	A-10
D008	B-11
D009	B-11
D010	A-10
D011	B-7
D123	C-11
D130	A-9
D201	I-2
D202	I-2
D203	D-2
D401	J-11
D402	J-11
D403	J-11
D404	J-11
D405	J-11
D501	C-6
D502	D-6
D503	E-6
D504	C-7
D505	C-7
D507	E-6
D600	G-8
D701	F-10
D800	D-10
D991	G-4
IC001	B-10
IC002	B-11
IC003	A-10
IC004	A-11
IC105	A-8
IC106	B-9
IC107	A-7
IC302	I-11
IC401	I-11
IC501	B-6
IC502	B-6
IC503	C-8
IC504	D-6
IC505	D-7
IC601	I-7
IC602	H-6
IC603	G-7
IC604	Q-6
IC605	I-9
IC606	H-9
IC607	G-8
IC608	G-9
IC801	E-10
IC802	E-9
IC991	F-3
Q001	B-12
Q002	A-10
Q003	B-12
Q201	I-4
Q202	I-4
Q203	I-4
Q204	I-3
Q205	I-3
Q206	H-2
Q207	I-2
Q208	I-2
Q209	D-2
Q210	D-3
Q211	D-4
Q212	D-4
Q250	E-1
Q251	E-2
Q252	E-1
Q253	E-4
Q254	E-4
Q501	C-7
Q502	D-8
Q503	C-6
Q504	D-8
Q505	D-8
Q601	I-6
Q602	I-6
Q603	I-6
Q605	I-7
Q606	H-7
Q607	H-7
Q608	H-7
Q609	H-7
Q610	H-7
Q611	G-7
Q612	G-7
Q613	F-7
Q614	F-7
Q615	G-7
Q616	F-6
Q617	E-6
Q618	G-6
Q619	G-6
Q624	I-8
Q625	I-8
Q626	H-8
Q627	I-10
Q632	H-9
Q633	G-9
Q635	H-9
Q640	F-19
Q641	F-9
Q643	E-8
Q644	F-8
Q645	F-9
Q646	F-7
Q647	F-7
Q648	F-7
Q649	F-5
Q701	G-10
Q702	G-10
Q805	E-10
Q806	D-10
Q807	D-10
Q808	D-9
Q900	F-6
Q901	F-6
Q991	F-4
Q992	F-3

WF-1 (Y/C COLOR CONTROL) PRINTED WIRING BOARD

—Ref. No. WF-1 BOARD : 2000 series—

WF-1 (Y/C COLOR CONTROL) SCHEMATIC DIAGRAM
—Ref. No. WF-1 BOARD : 2000 series—



Q203
BUFFER

Q204,205
AMP

Q253,254
BUFFER

Q208
BUFFER

Q206,207
LIMITER

IC302
CNR ON/OFF
SWITCH

Q001
INVERTER

IC105
SN74LS174N
SYNCHRONIZE

IC001 SN74LS174

IC002
TC9130P
TRIGGER FF

Q002
INVERTER

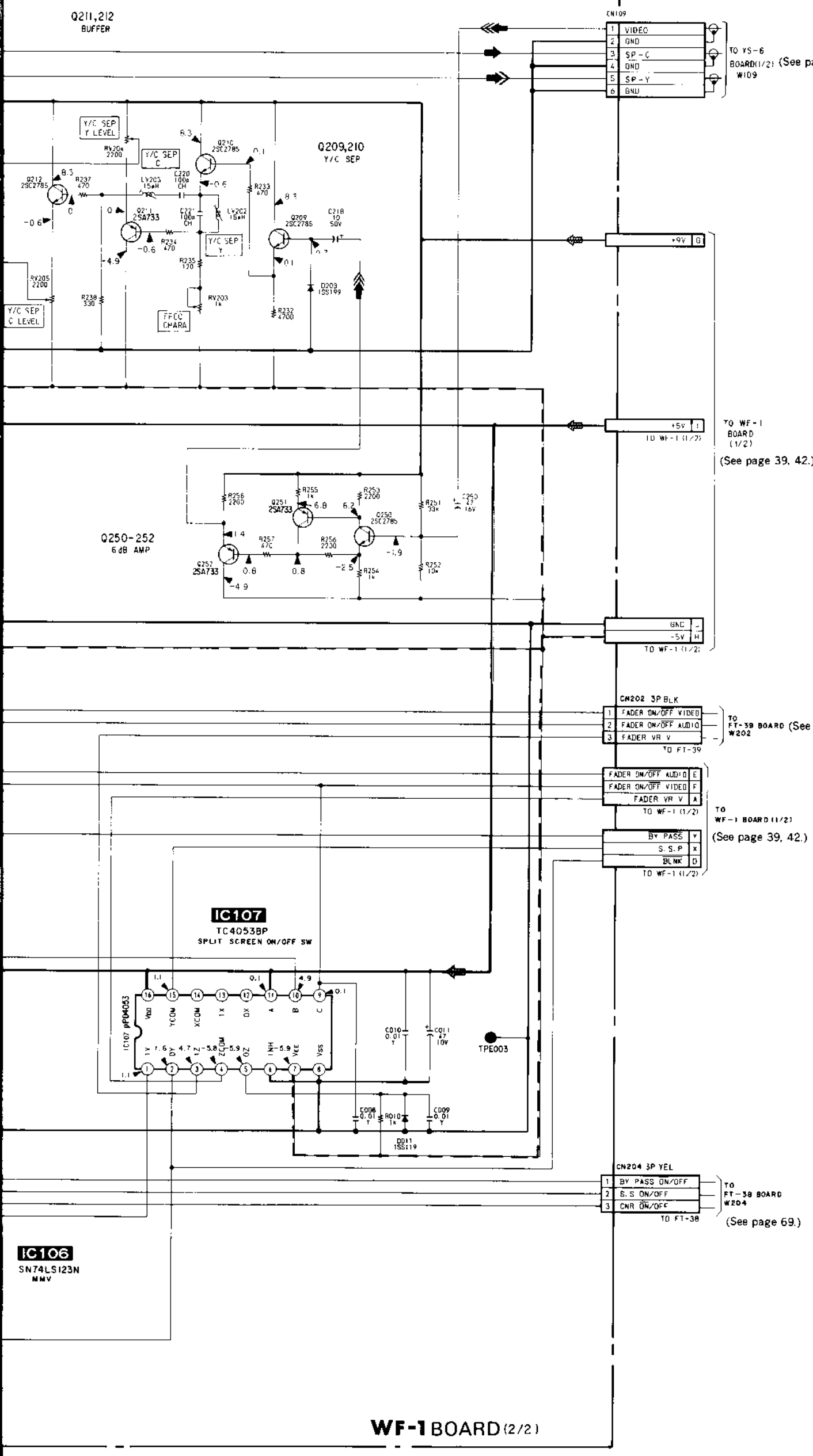
IC003 TC74HC00P

IC004
TC9130P
TRIGGER FF

Q003
SWITCH

SPLIT
SCREEN

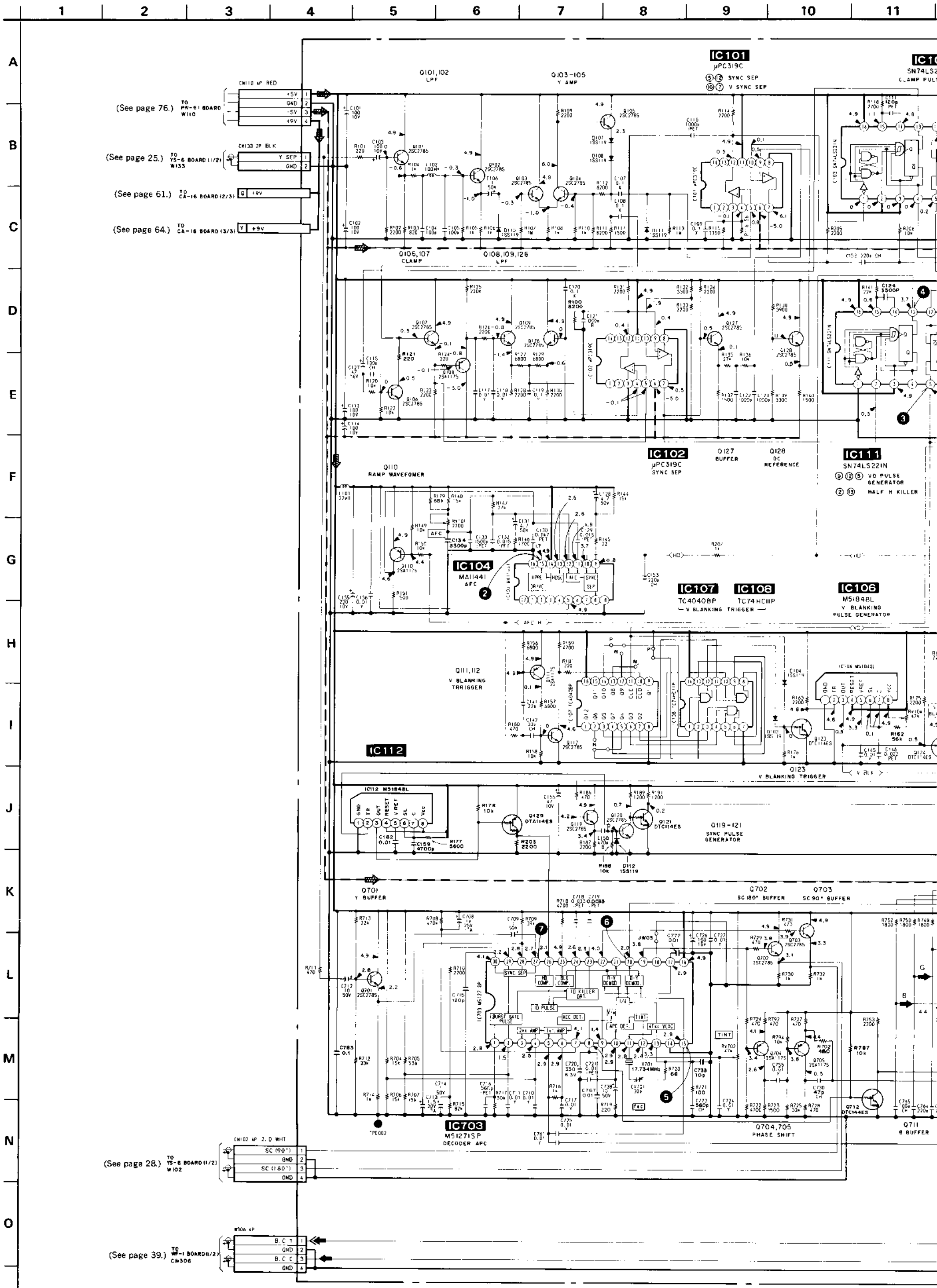
IC106 SN74LS123



- **Signal path**
  - ➡ : REC Y Signal
  - → : REC CHROMA Signal
  - ➡ : REC Y/CHROMA Signal

CA-16 (BACK COLOR/AUDIO) SCHEMATIC DIAGRAM

—Ref. No. CA-16 BOARD : 3000 series—



IC101 μPC319C
⑤⑫ SYNC SEP
⑩⑦ V SYNC SEP

IC103 SN74LS221N
CLAMP PULSE GENERATOR

IC809 μPC319
WIPE H COMPARATOR

IC812 TC40668PHB
①②⑩⑪ WIPE H/$\overline{H}$ SW
③④⑧⑨ WIPE V/$\overline{V}$ SW

IC810 μPC319C
WIPE V COMPARATOR

IC811 TC74HC20P
BC/LINE SELECT

IC105 SN74LS123N
①④ H FRONT BLANK PULSE GENERATOR
⑨⑤ H BACK BLANK PULSE GENERATOR

IC102 μPC319C
SYNC SEP

Q127 BUFFER
Q128 DC REFERENCE

IC111 SN74LS221N
⑨⑫⑤ VD PULSE GENERATOR
②⑬ HALF H KILLER

IC701 TC74HC02P PULSE GENERATOR
BACK COLOR BAR

IC702 TC74HC193P
BACK COLOR BAR GENERETOR

IC107 TC4040BP — V BLANKING TRIGGER —
IC108 TC74HC11P
IC106 M51848L
V BLANKING PULSE GENERATOR

IC813 TC4053BPHB
③④ CLAMP/WIPE ON/

Q123 V BLANKING TRIGGER
Q124 INVERTER

IC110 TC74HC00P

Q119~121 SYNC PULSE GENERATOR

IC109 TC74HC08P

Q706,707 PHASE SHIFT

Q708 BUFFER

Q702 SC180° BUFFER
Q703 SC90° BUFFER

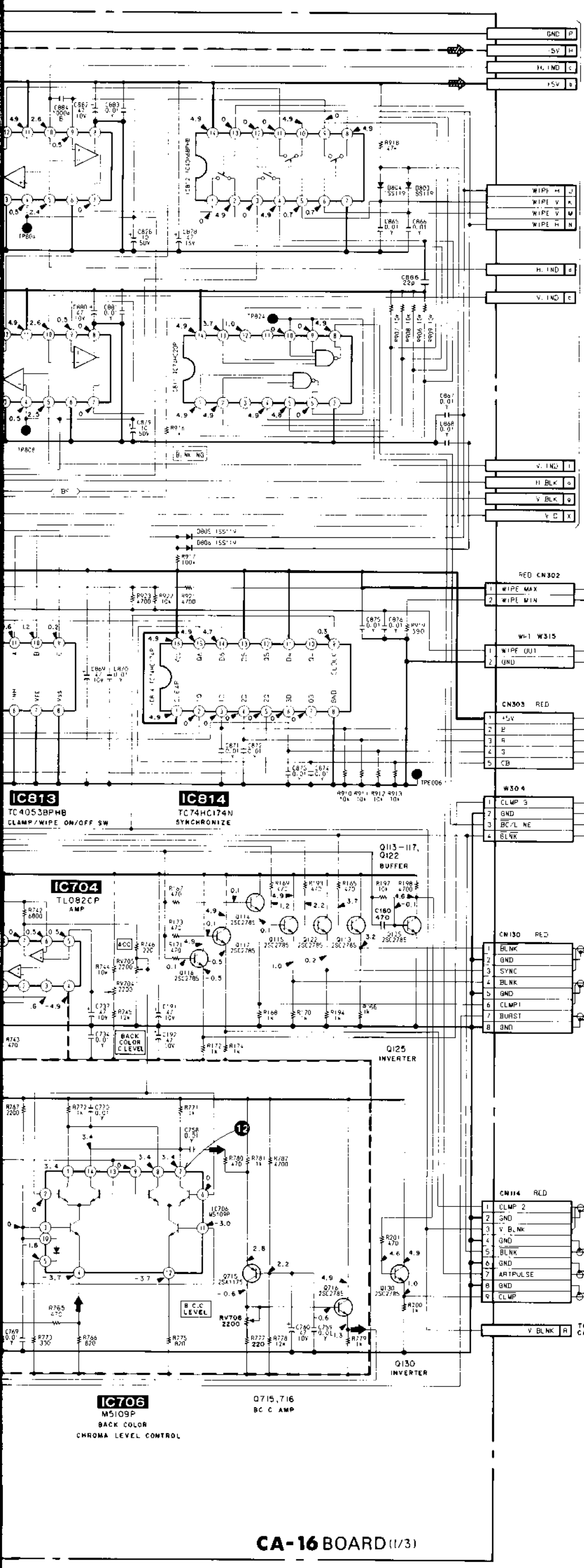
IC705 V7040 ENCODER

Q704,705 PHASE SHIFT
Q711 B BUFFER
Q710 G BUFFER
Q709 R BUFFER

Q713,714 INVERT AMP
Q718 GAIN SWITCH

BACK COLOR Y LEVEL

BACK COLOR/AUDIO (1/2)



TO CA-16 BOARD(2/3) (See page 61, 62.)

TO FT-39 BOARD W302 (See page 70.)

TO WF-1 BOARD(1/2) CN315 (See page 42.)

TO FT-39 BOARD W303 (See page 71.)

TO WF-1BOARD(2/2) CN304 (See page 39.)

TO YS-6 BOARD(2/2) W130 (See page 38.)

TO YS-6 BOARD(1/2) W114 (See page 25.)

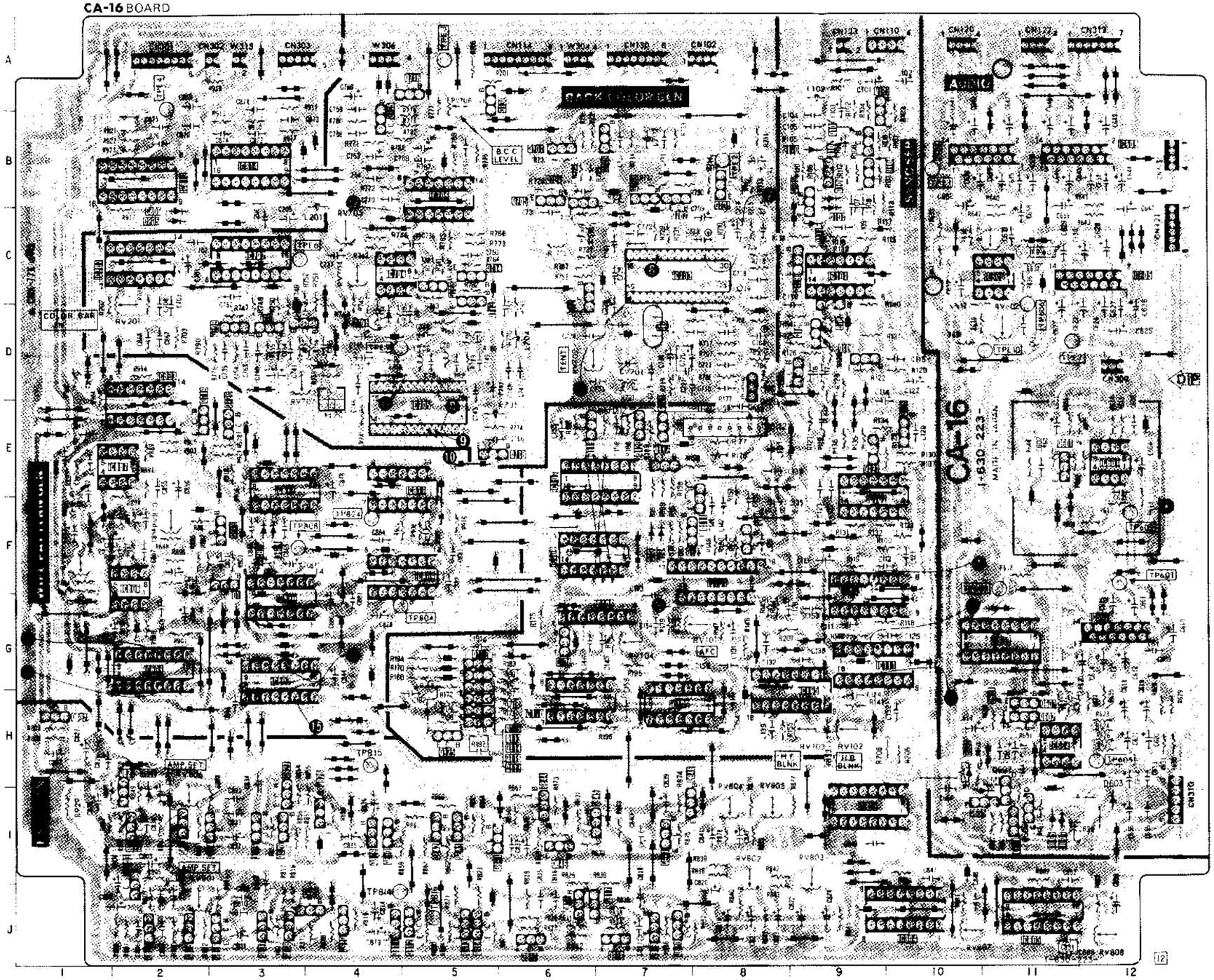
TO CA-16 BOARD(2/3) (See page 62.)

CA-16 BOARD(1/3)

- **Signal path**
  - ➠ : REC Y Signal
  - ➡ : REC CHROMA Signal

BACK COLOR/AUDIO (1/2)

BACK COLOR/AUDIO (1/2)



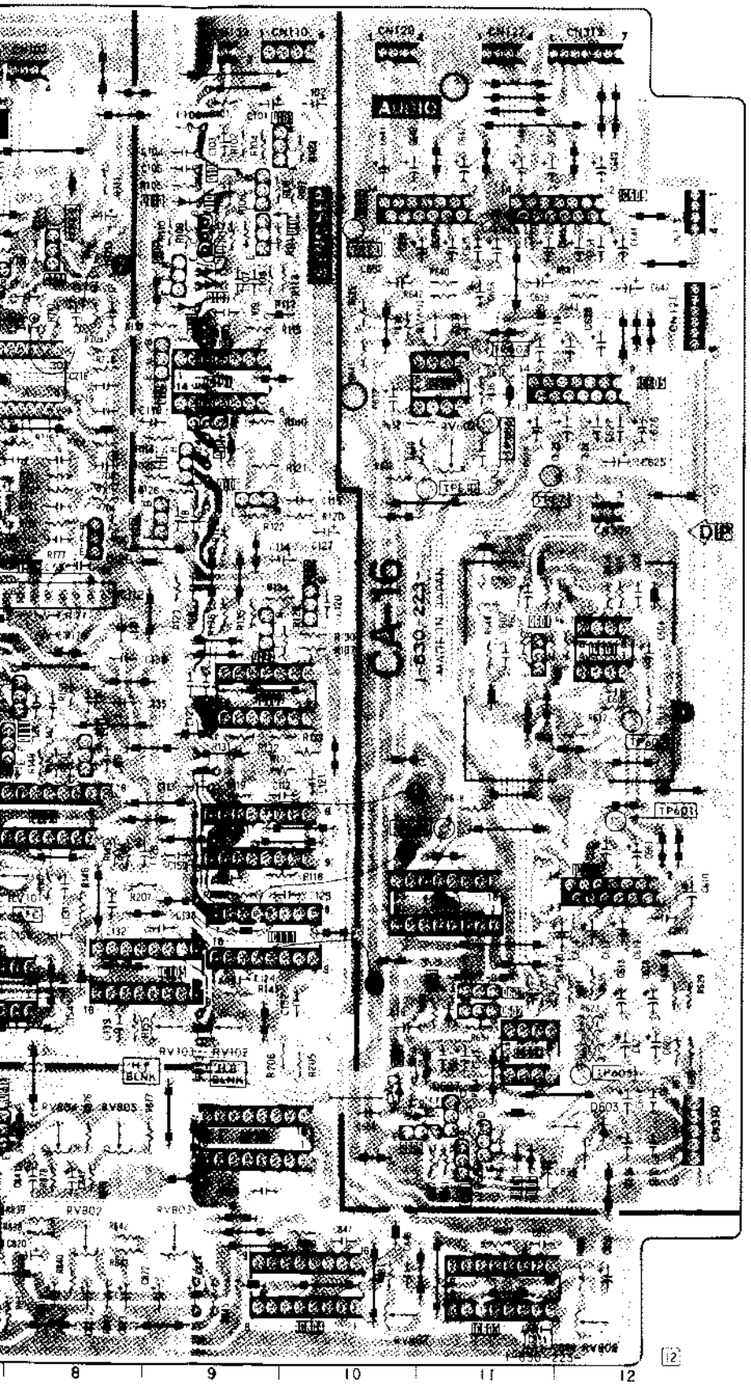
CA-16 (BACK COLOR/AUDIO) PRINTED WIRING BOARD

—Ref. No. CA-16 BOARD: 3000 series—

CA-16 BOARD

D103	F-7
D104	F-7
D107	C-9
D108	C-9
D110	B-9
D111	C-9
D112	E-7
D601	H-11
D603	I-12
D604	I-11
D605	I-11
D606	I-11
D607	H-10
D701	D-4
D801	J-2
D802	H-2
D803	F-3
D804	F-3
D805	C-2
D806	C-2
IC101	C-9
IC102	F-9
IC103	G-9
IC104	G-8
IC105	H-9
IC106	G-7
IC107	E-6
IC108	F-6
IC109	H-7
IC110	H-6
IC111	G-9
IC112	E-8
IC601	G-12
IC602	G-12
IC603	G-11
IC604	H-11
IC605	C-12
IC606	C-11
IC608	B-10
IC609	B-12
IC701	C-2
IC702	C-3
IC703	C-7
IC704	C-4
IC705	E-5
IC706	B-5
IC801	G-2
IC802	H-3
IC803	D-2
IC804	J-10
IC805	J-11
IC806	I-9
IC807	E-2
IC808	G-2
IC809	F-5
IC810	G-3
IC811	F-5
IC812	F-3
IC813	B-2
IC814	B-3
Q101	B-9
Q102	B-9
Q103	B-9
Q104	B-9
Q105	B-9
Q106	D-9
Q107	D-9
Q108	D-9
Q109	D-9
Q110	F-8
Q111	F-8
Q112	E-5
Q113	H-5
Q114	H-5
Q115	H-5
Q116	H-5
Q117	H-5
Q119	E-6
Q120	E-7
Q121	E-7
Q122	G-5
Q123	F-7
Q124	G-6
Q125	H-5
Q126	E-10
Q127	E-9
Q128	C-9
Q129	E-8
Q130	B-5
Q601	E-11
Q602	H-11
Q603	H-11
Q604	I-11
Q605	I-10
Q606	I-11
Q607	I-11
Q701	B-8
Q701	B-7
Q702	B-7
Q703	B-7
Q704	C-6
Q705	C-6
Q706	B-7
Q707	B-6
Q708	C-5
Q709	D-3
Q710	D-3
Q711	D-3
Q712	D-6
Q713	D-5
Q714	C-5
Q715	B-4
Q716	A-5
Q718	E-5
Q719	E-2
Q720	E-3
Q801	G-3
Q802	H-1
Q803	J-2
Q804	J-2
Q805	J-2
Q806	J-3
Q807	J-3
Q808	J-3
Q809	J-3
Q810	J-4
Q811	J-4
Q812	J-5
Q813	J-5
Q814	J-5
Q815	J-6
Q816	J-6
Q817	J-6
Q818	J-7
Q819	J-7
Q820	J-7
Q821	I-2
Q822	I-2
Q823	I-2
Q824	I-2
Q825	I-3
Q826	I-3
Q827	I-3
Q828	I-4
Q829	I-4
Q840	I-4
Q841	I-5
Q842	I-5
Q843	I-5
Q844	I-6
Q845	I-6
Q846	I-6
Q847	I-7
Q848	I-7
Q849	F-3

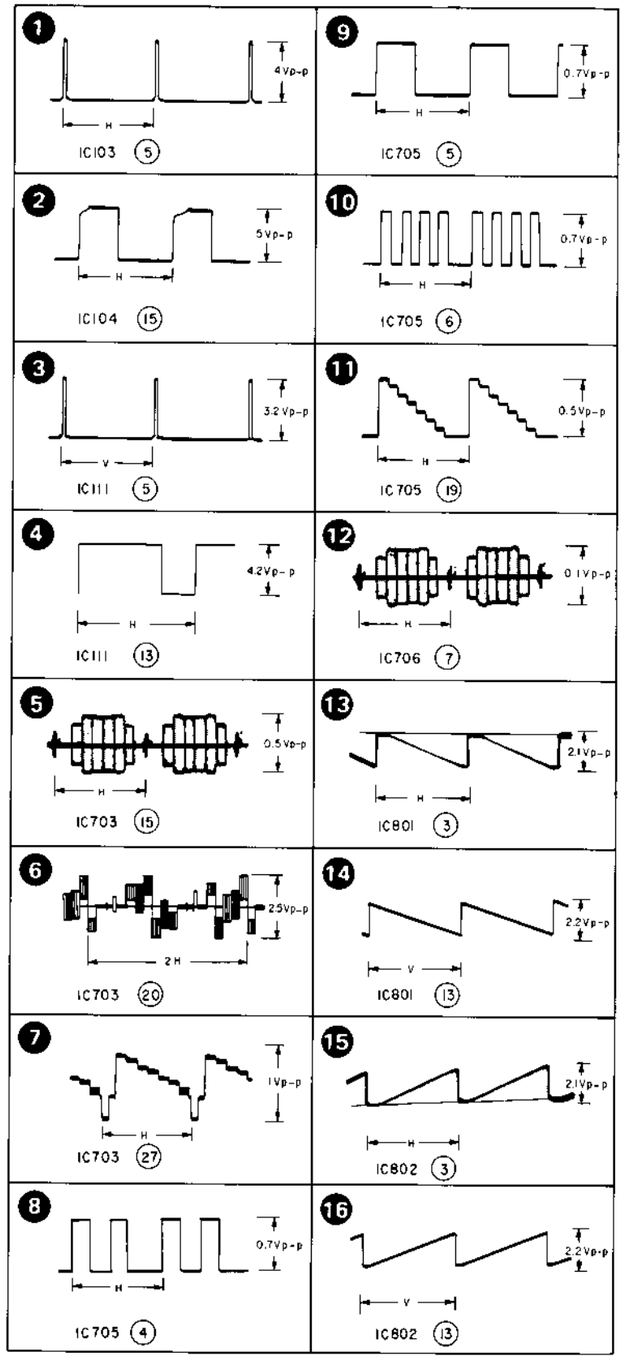
CA-16 BOAR



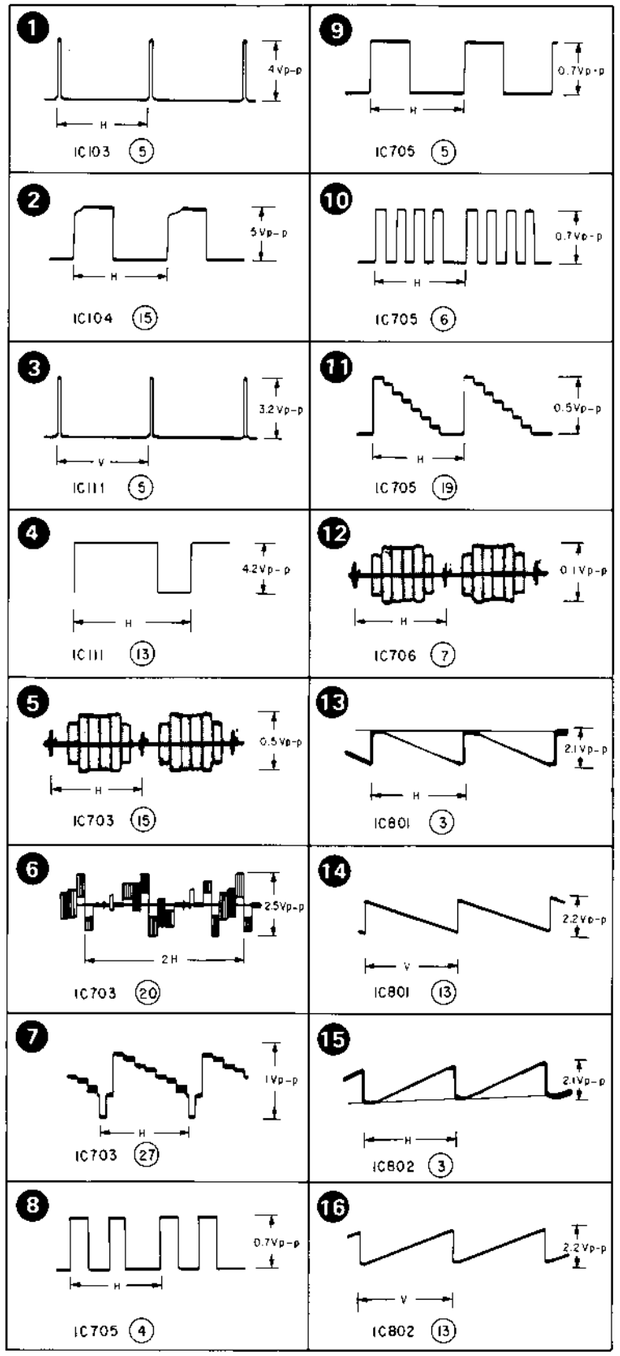
CA-16 BOARD

D103	F-7	Q130	B-5
D104	F-7	Q601	E-11
D107	C-9	Q602	H-11
D108	C-9	Q603	H-11
D110	B-9	Q604	I-11
D111	C-9	Q605	I-10
D112	E-7	Q606	I-11
D601	H-11	Q607	I-11
D603	I-12	Q701	B-8
D604	I-11	Q701	B-7
D605	I-11	Q702	B-7
D606	I-11	Q703	B-7
D607	H-10	Q704	C-6
D701	D-4	Q705	C-6
D801	J-2	Q706	B-7
D802	H-2	Q707	B-6
D803	F-3	Q708	C-5
D804	F-3	Q709	D-3
D805	C-2	Q710	D-3
D806	C-2	Q711	D-3
		Q712	D-6
IC101	C-9	Q713	D-5
IC102	F-9	Q714	C-5
IC103	G-9	Q715	B-4
IC104	G-8	Q716	A-5
IC105	H-9	Q718	E-5
IC106	G-7	Q719	E-2
IC107	E-6	Q720	E-3
IC108	F-6	Q801	G-3
IC109	H-7	Q802	H-1
IC110	H-6	Q803	J-2
IC111	G-9	Q804	J-2
IC112	E-8	Q805	J-2
IC601	G-12	Q806	J-3
IC602	G-12	Q807	J-3
IC603	G-11	Q808	J-3
IC604	H-11	Q809	J-3
IC605	C-12	Q810	J-4
IC606	C-11	Q811	J-4
IC608	B-10	Q812	J-5
IC609	B-12	Q813	J-5
IC701	C-2	Q814	J-5
IC702	C-3	Q815	J-6
IC703	C-7	Q816	J-6
IC704	C-4	Q817	J-6
IC705	E-5	Q818	J-7
IC706	B-5	Q819	J-7
IC801	G-2	Q820	J-7
IC802	H-3	Q821	I-2
IC803	D-2	Q822	I-2
IC804	J-10	Q823	I-2
IC805	J-11	Q824	I-2
IC806	I-9	Q825	I-3
IC807	E-2	Q826	I-3
IC808	G-2	Q827	I-3
IC809	F-5	Q828	I-4
IC810	G-3	Q829	I-4
IC811	F-5	Q840	I-4
IC812	F-3	Q841	I-5
IC813	B-2	Q842	I-5
IC814	B-3	Q843	I-5
		Q844	I-6
Q101	B-9	Q845	I-6
Q102	B-9	Q846	I-6
Q103	B-9	Q847	I-7
Q104	B-9	Q848	I-7
Q105	B-9	Q849	F-3
Q106	D-9		
Q107	D-9		
Q108	D-9		
Q109	D-9		
Q110	F-8		
Q111	F-8		
Q112	E-5		
Q113	H-5		
Q114	H-5		
Q115	H-5		
Q116	H-5		
Q117	H-5		
Q119	E-6		
Q120	E-7		
Q121	E-7		
Q122	G-5		
Q123	F-7		
Q124	G-6		
Q125	H-5		
Q126	E-10		
Q127	E-9		
Q128	C-9		
Q129	E-8		

CA-16 BOARD



CA-16 BOARD



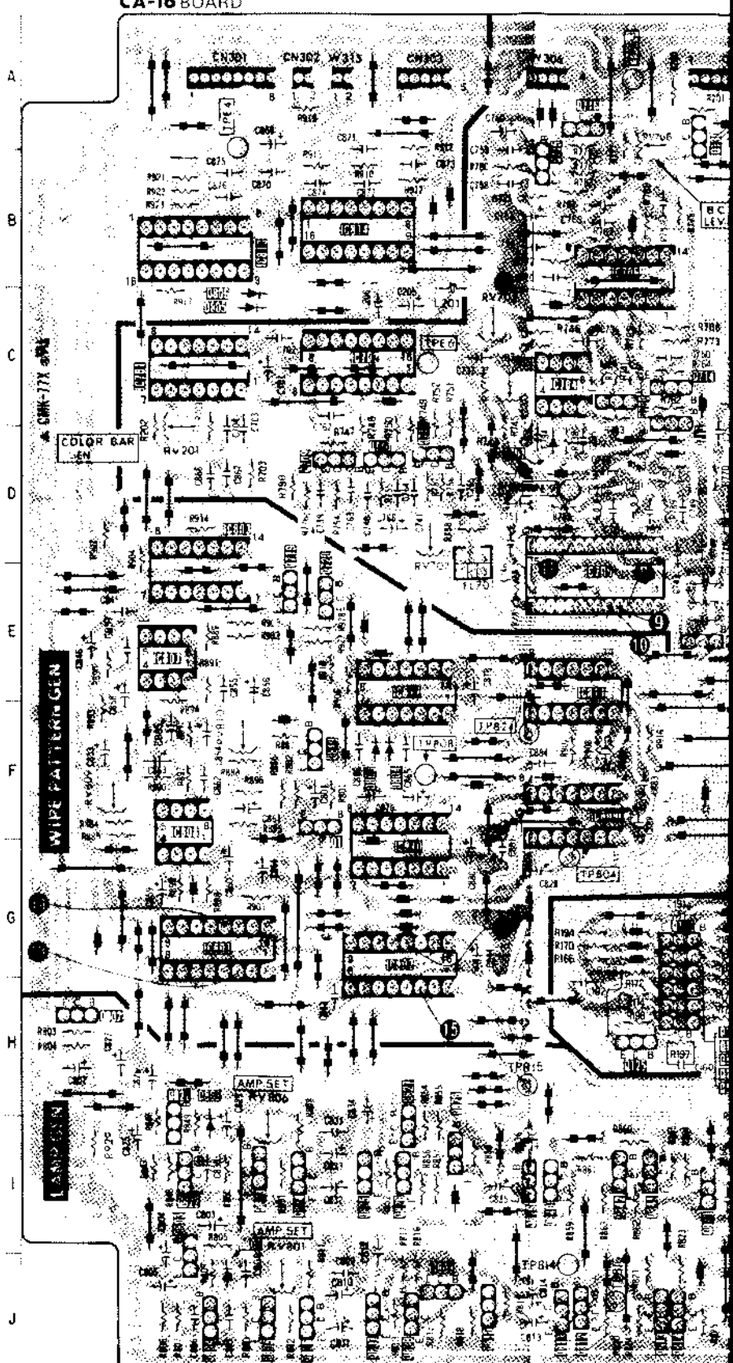
CA-16 (BACK COLOR/AUDIO) PRINTED WIRING BOARD

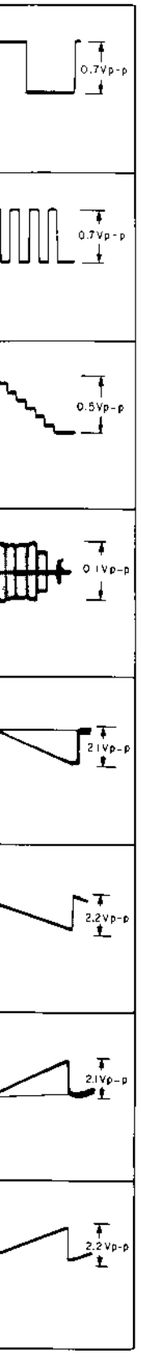
—Ref. No. CA-16 BOARD : 3000 series—

CA-16 BOARD

D103	F-7
D104	F-7
D107	C-9
D108	C-9
D110	B-9
D111	C-9
D112	E-7
D601	H-11
D603	I-12
D604	I-11
D605	I-11
D606	I-11
D607	H-10
D701	D-4
D801	J-2
D802	H-2
D803	F-3
D804	F-3
D805	C-2
D806	C-2
IC101	C-9
IC102	F-9
IC103	G-9
IC104	G-8
IC105	H-9
IC106	G-7
IC107	E-6
IC108	F-6
IC109	H-7
IC110	H-6
IC111	G-9
IC112	E-8
IC601	G-12
IC602	G-12
IC603	G-11
IC604	H-11
IC605	C-12
IC606	C-11
IC608	B-10
IC609	B-12
IC701	C-2
IC702	C-3
IC703	C-7
IC704	C-4
IC705	E-5
IC706	B-5
IC801	G-2
IC802	H-3
IC803	D-2
IC804	J-10
IC805	J-11
IC806	I-9
IC807	E-2
IC808	G-2
IC809	F-5
IC810	G-3
IC811	F-5
IC812	F-3
IC813	B-2
IC814	B-3
Q101	B-9
Q102	B-9
Q103	B-9
Q104	B-9
Q105	B-9
Q106	D-9
Q107	D-9
Q108	D-9
Q109	D-9
Q110	F-8
Q111	F-8
Q112	E-5
Q113	H-5
Q114	H-5
Q115	H-5
Q116	H-5
Q117	H-5
Q119	E-6
Q120	E-7
Q121	E-7
Q122	G-5
Q123	F-7
Q124	G-6
Q125	H-5
Q126	E-10
Q127	E-9
Q128	C-9
Q129	E-8
Q130	B-5
Q601	E-11
Q602	H-11
Q603	H-11
Q604	I-11
Q605	I-10
Q606	I-11
Q607	I-11
Q701	B-8
Q701	B-7
Q702	B-7
Q703	B-7
Q704	C-6
Q705	C-6
Q706	B-7
Q707	B-6
Q708	C-5
Q709	D-3
Q710	D-3
Q711	D-3
Q712	D-6
Q713	D-5
Q714	C-5
Q715	B-4
Q716	A-5
Q718	E-5
Q719	E-2
Q720	E-3
Q801	G-3
Q802	H-1
Q803	J-2
Q804	J-2
Q805	J-2
Q806	J-3
Q807	J-3
Q808	J-3
Q809	J-3
Q810	J-4
Q811	J-4
Q812	J-5
Q813	J-5
Q814	J-5
Q815	J-6
Q816	J-6
Q817	J-6
Q818	J-7
Q819	J-7
Q820	J-7
Q821	I-2
Q822	I-2
Q823	I-2
Q824	I-2
Q825	I-3
Q826	I-3
Q827	I-3
Q828	I-4
Q829	I-4
Q840	I-4
Q841	I-5
Q842	I-5
Q843	I-5
Q844	I-6
Q845	I-6
Q846	I-6
Q847	I-7
Q848	I-7
Q849	F-3

CA-16 BOARD



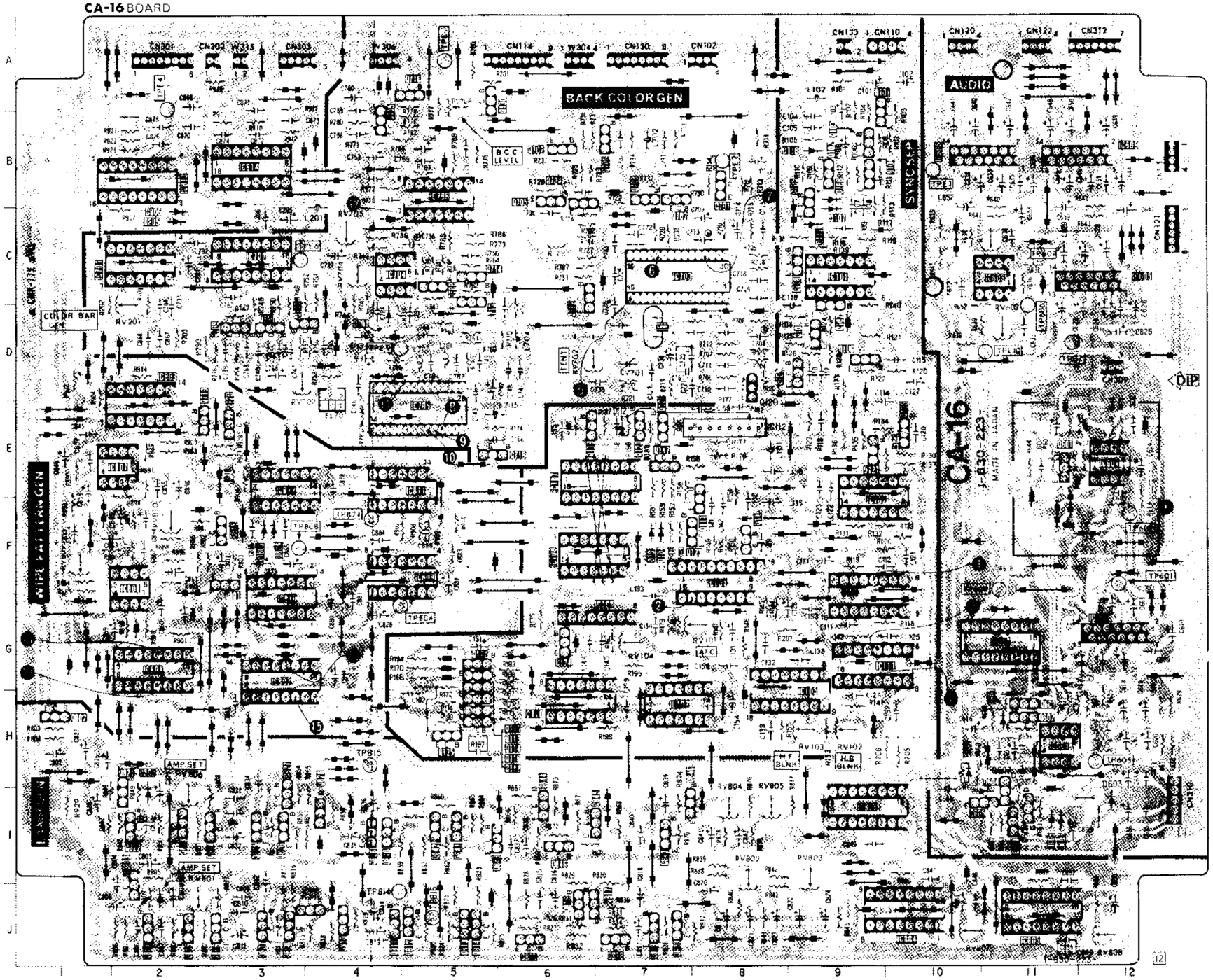


CA-16 BOARD

D103	F-7
D104	F-7
D107	C-9
D108	C-9
D110	B-9
D111	C-9
D112	E-7
D601	H-11
D603	I-12
D604	I-11
D605	I-11
D606	I-11
D607	H-10
D701	D-4
D801	J-2
D802	H-2
D803	F-3
D804	F-3
D805	C-2
D806	C-2
IC101	C-9
IC102	F-9
IC103	G-9
IC104	G-8
IC105	H-9
IC106	G-7
IC107	E-6
IC108	F-6
IC109	H-7
IC110	H-6
IC111	G-9
IC112	E-8
IC601	G-12
IC602	G-12
IC603	G-11
IC604	H-11
IC605	C-12
IC606	C-11
IC608	B-10
IC609	B-12
IC701	C-2
IC702	C-3
IC703	C-7
IC704	C-4
IC705	E-5
IC706	B-5
IC801	G-2
IC802	H-3
IC803	D-2
IC804	J-10
IC805	J-11
IC806	I-9
IC807	E-2
IC808	G-2
IC809	F-5
IC810	G-3
IC811	F-5
IC812	F-3
IC813	B-2
IC814	B-3
Q101	B-9
Q102	B-9
Q103	B-9
Q104	B-9
Q105	B-9
Q106	D-9
Q107	D-9
Q108	D-9
Q109	D-9
Q110	F-8
Q111	F-8
Q112	E-5
Q113	H-5
Q114	H-5
Q115	H-5
Q116	H-5
Q117	H-5
Q119	E-6
Q120	E-7
Q121	E-7
Q122	G-5
Q123	F-7
Q124	G-6
Q125	H-5
Q126	E-10
Q127	E-9
Q128	C-9
Q129	E-8
Q130	B-5
Q601	E-11
Q602	H-11
Q603	H-11
Q604	I-11
Q605	I-10
Q606	I-11
Q607	I-11
Q701	B-8
Q701	B-7
Q702	B-7
Q703	B-7
Q704	C-6
Q705	C-6
Q706	B-7
Q707	B-6
Q708	C-5
Q709	D-3
Q710	D-3
Q711	D-3
Q712	D-6
Q713	D-5
Q714	C-5
Q715	B-4
Q716	A-5
Q718	E-5
Q719	E-2
Q720	E-3
Q801	G-3
Q802	H-1
Q803	J-2
Q804	J-2
Q805	J-2
Q806	J-3
Q807	J-3
Q808	J-3
Q809	J-3
Q810	J-4
Q811	J-4
Q812	J-5
Q813	J-5
Q814	J-5
Q815	J-6
Q816	J-6
Q817	J-6
Q818	J-7
Q819	J-7
Q820	J-7
Q821	I-2
Q822	I-2
Q823	I-2
Q824	I-2
Q825	I-3
Q826	I-3
Q827	I-3
Q828	I-4
Q829	I-4
Q840	I-4
Q841	I-5
Q842	I-5
Q843	I-5
Q844	I-6
Q845	I-6
Q846	I-6
Q847	I-7
Q848	I-7
Q849	F-3

CA-16 (BACK COLOR/AUDIO) PRINTED WIRING BOARD

—Ref. No. CA-16 BOARD: 3000 series—

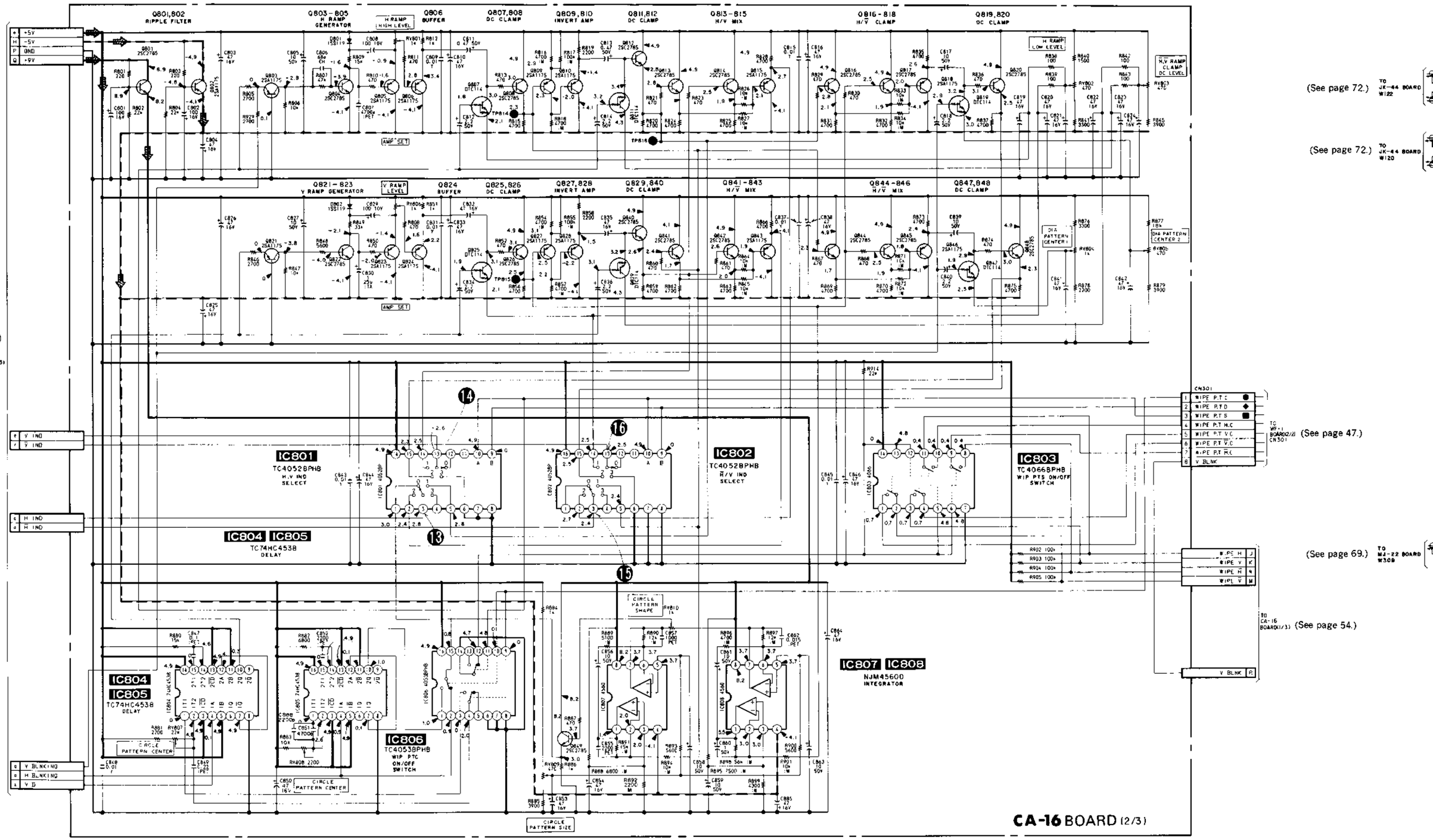


CA-16 (BACK COLOR/AUDIO) SCHEMATIC DIAGRAM

—Ref. No. CA-16 BOARD : 3000 series—

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

A B C D E F G H I J



(See page 51, 54.) TO CA-16 BOARD (1/3)

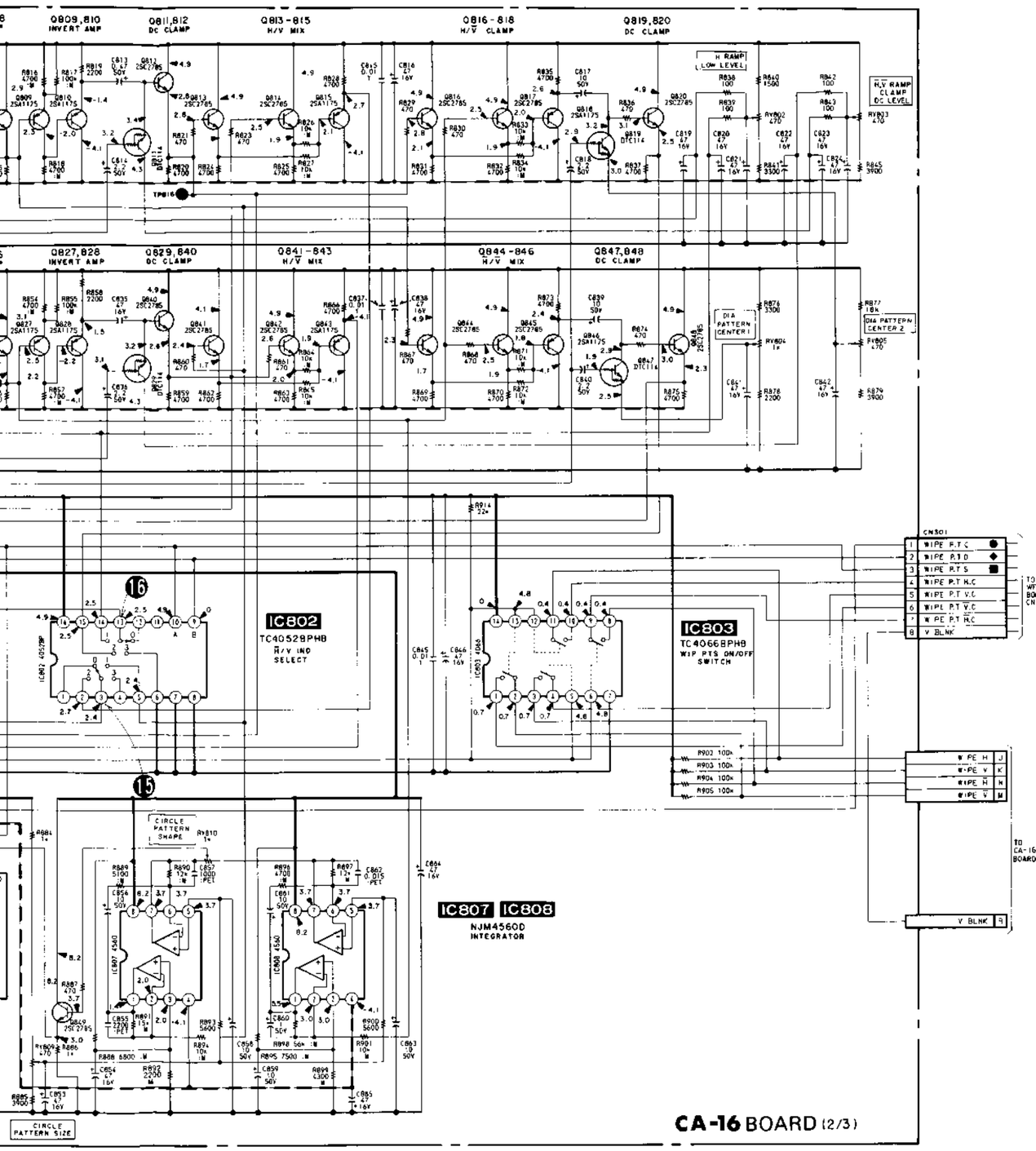
(See page 72.) TO JK-44 BOARD W122

(See page 72.) TO JK-44 BOARD W120

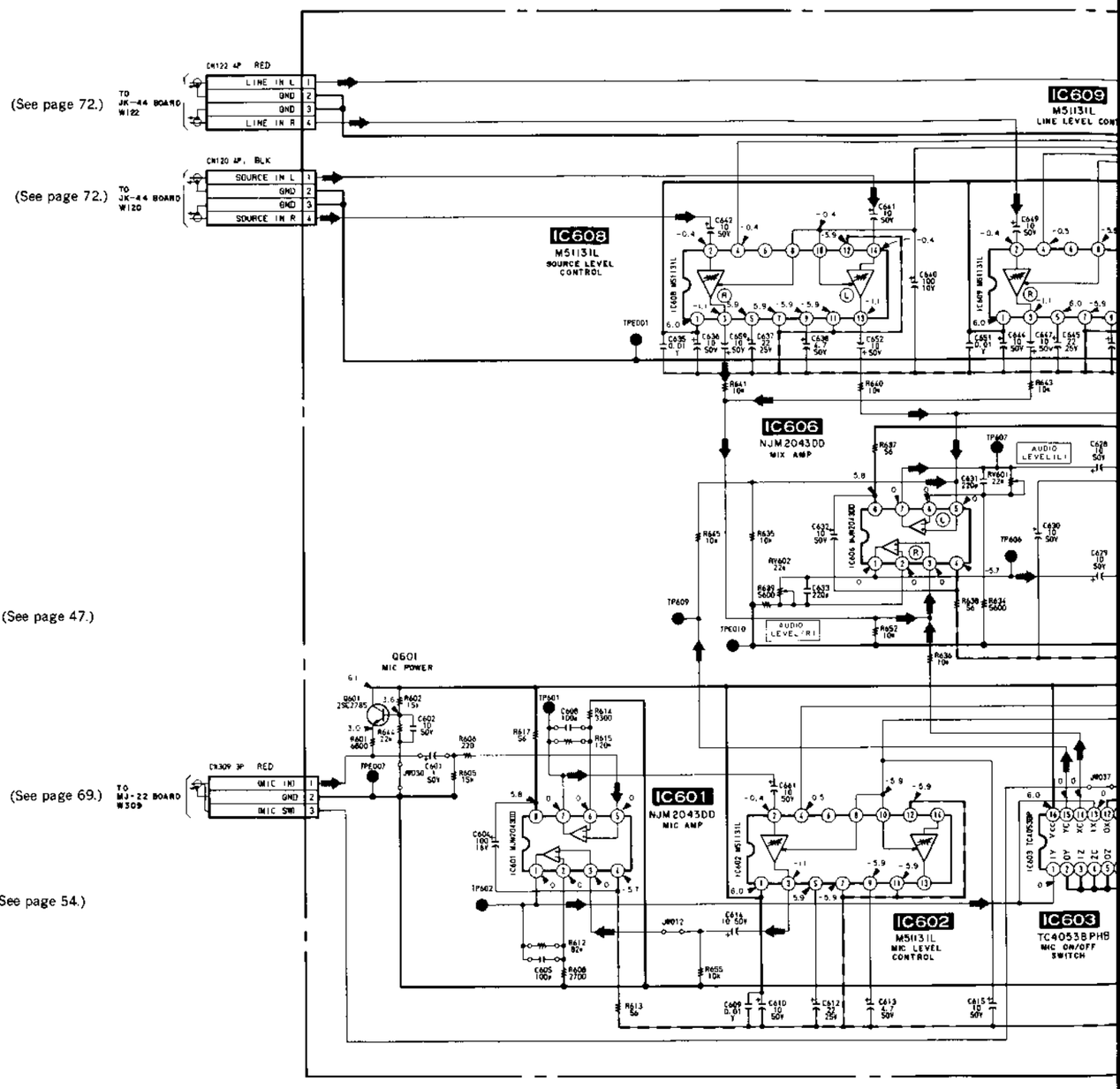
TO WP-1 BOARD(2/2) CN301 (See page 47.)

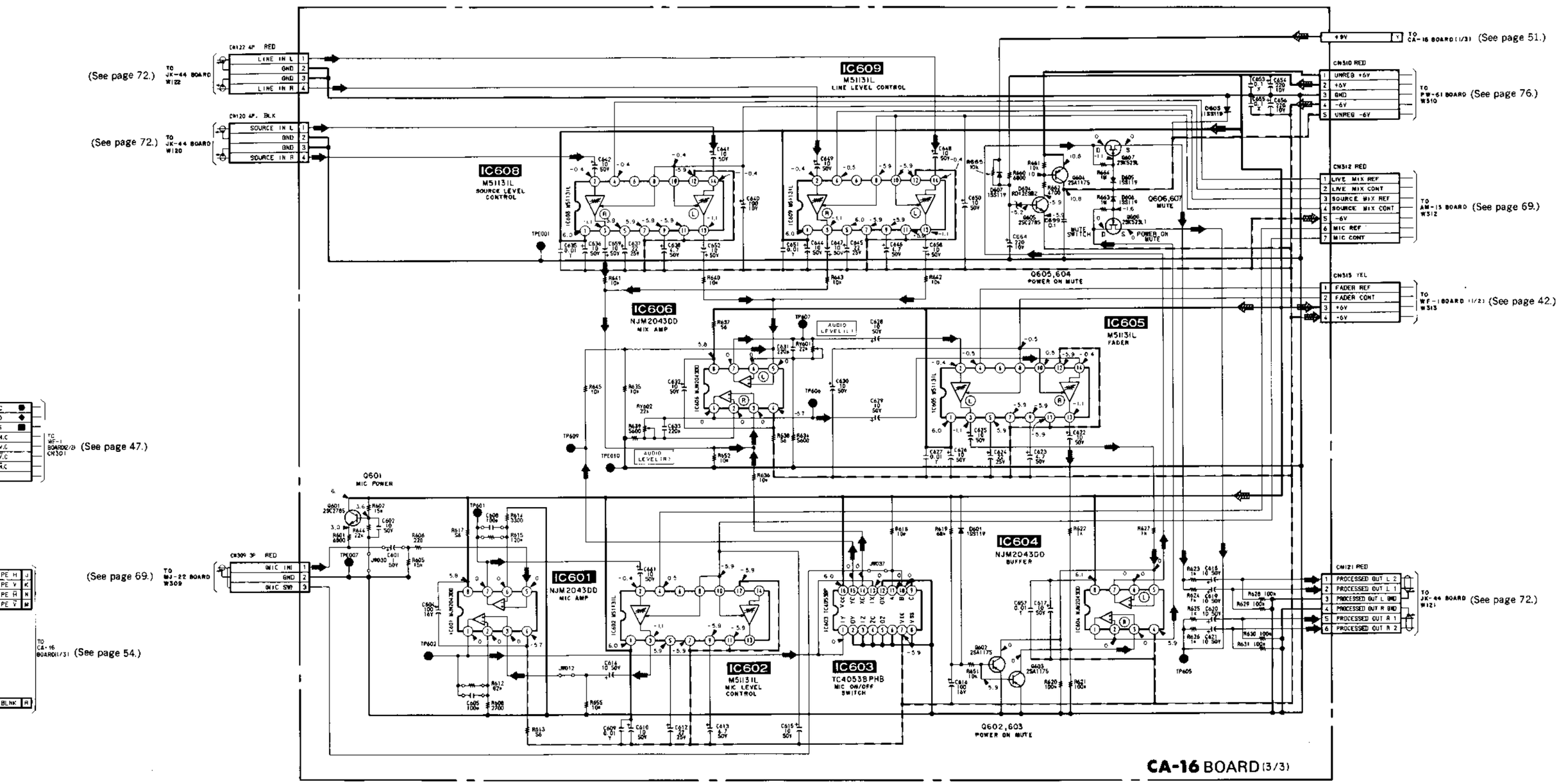
(See page 69.) TO MJ-22 BOARD W309

TO CA-16 BOARD(1/3) (See page 54.)



CA-16 BOARD (2/3)





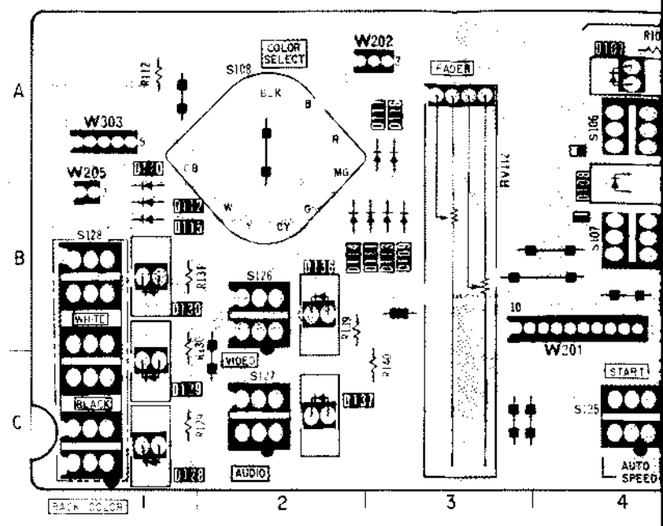
- Signal path
- ➡ : REC AUDIO Signal

FT-39 (FUNCTION SW), FT-38 (VIDEO SW), JK-44 (VIDEO S TERI

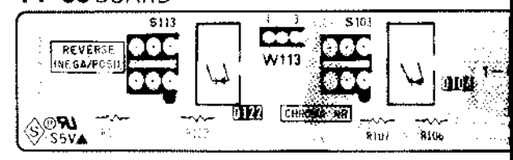
—Ref. No. FT-39 and JK-44 BOARDS : 4000 series, FT-38 and 1S-5 BOA

FT-39 BOARD

FT-39 BOARD	
D101	C-5
D102	C-5
D105	B-5
D106	A-5
D107	A-4
D108	B-5
D109	B-3
D110	B-1
D111	B-2
D112	B-1
D113	B-3
D114	B-2
D115	B-1
D116	A-3
D117	A-3
D119	A-11
D120	A-12
D121	C-12
D123	A-6
D124	B-6
D126	C-6
D127	C-6
D128	C-1
D129	C-1
D130	C-1
D132	A-9
D133	A-10
D134	C-10
D135	C-4
D136	B-2
D137	C-2

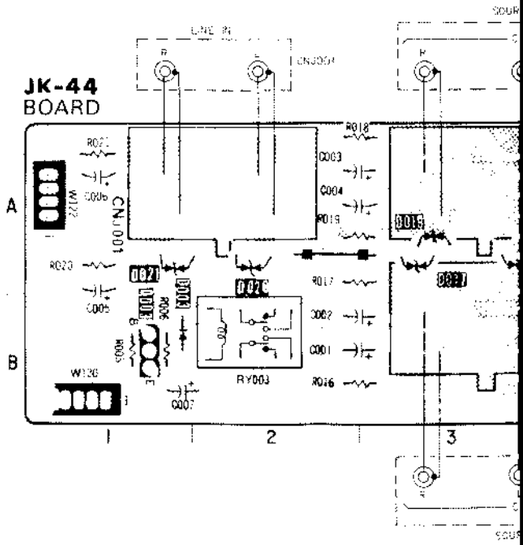


FT-38 BOARD



JK-44 BOARD

JK-44 BOARD	
D001	A-6
D102	B-6
D103	A-1
D116	A-3
D017	A-3
D018	A-4
D019	A-3
D020	A-2
D021	A-1
D024	A-8
D025	A-8
D026	A-8
D027	A-8
D801	B-8
D802	B-8
D803	A-8
D804	A-8
Q001	A-6
Q002	B-6



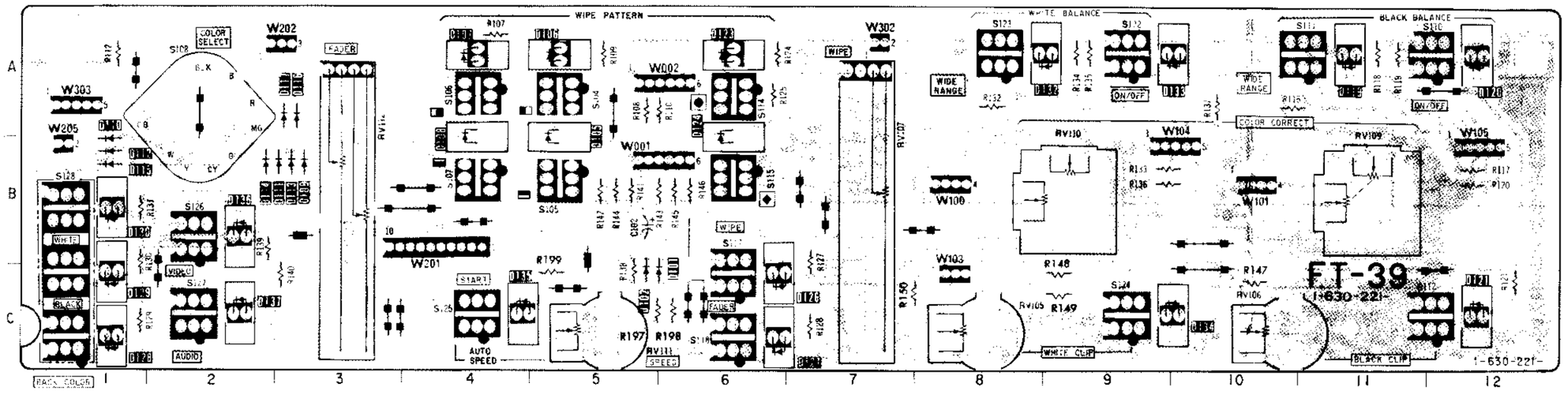
FT-39 (FUNCTION SW), FT-38 (VIDEO SW), JK-44 (VIDEO S TERMINAL), AM-13 (COLOR/AUDIO VR), IS-5 (EXT VIDEO INPUT), MJ-22 (LINE 2 INPUT)

—Ref. No. FT-39 and JK-44 BOARDS : 4000 series, FT-38 and IS-5 BOARDS : 5000 series, AM-13 BOARD : 6000 series, MJ-22 BOARD : 7000 series—

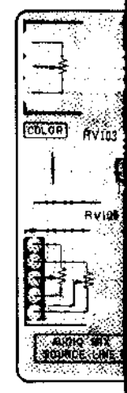
FT-39 BOARD

FT-39 BOARD	
D101	C-5
D102	C-5
D105	B-5
D106	A-5
D107	A-4
D108	B-5
D109	B-3
D110	B-1
D111	B-2
D112	B-1
D113	B-3
D114	B-2
D115	B-1
D116	A-3
D117	A-3
D119	A-11
D120	A-12
D121	C-12
D123	A-6
D124	B-6
D126	C-6
D127	C-6
D128	C-1
D129	C-1
D130	C-1
D132	A-9
D133	A-10
D134	C-10
D135	C-4
D136	B-2
D137	C-2

FT-39 BOARD



AM-13 BO



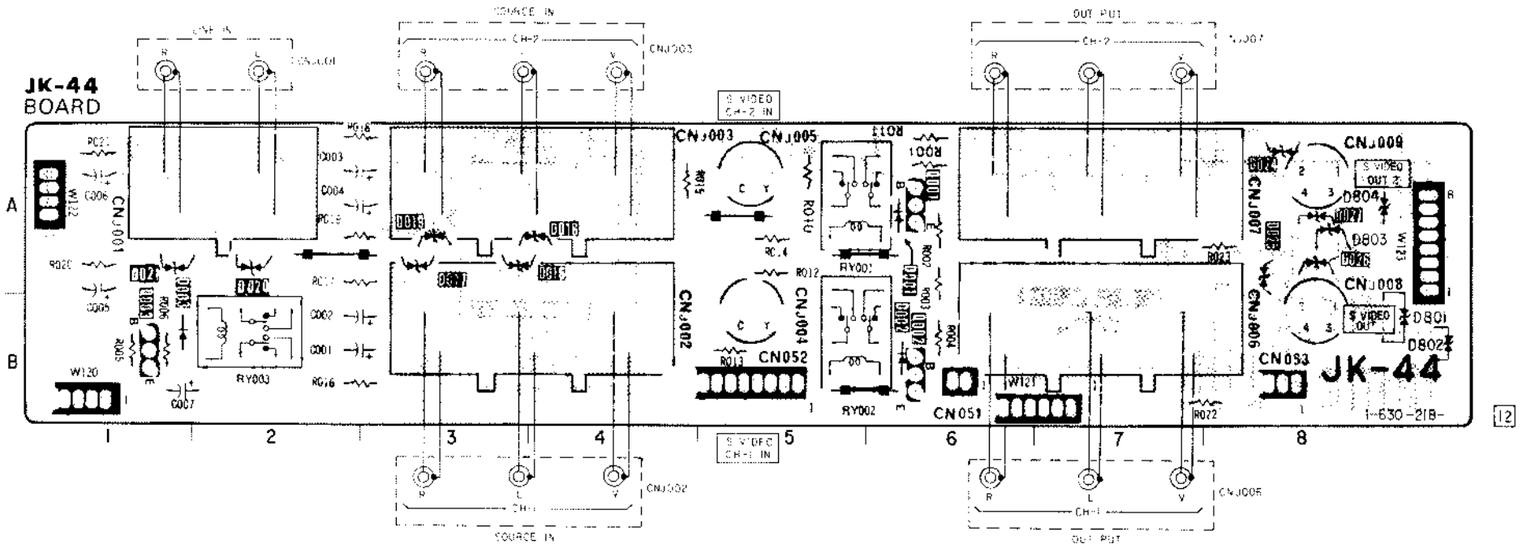
FT-38 BOARD

IS-5 BOARD

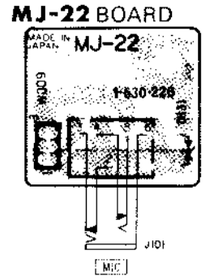
JK-44 BOARD

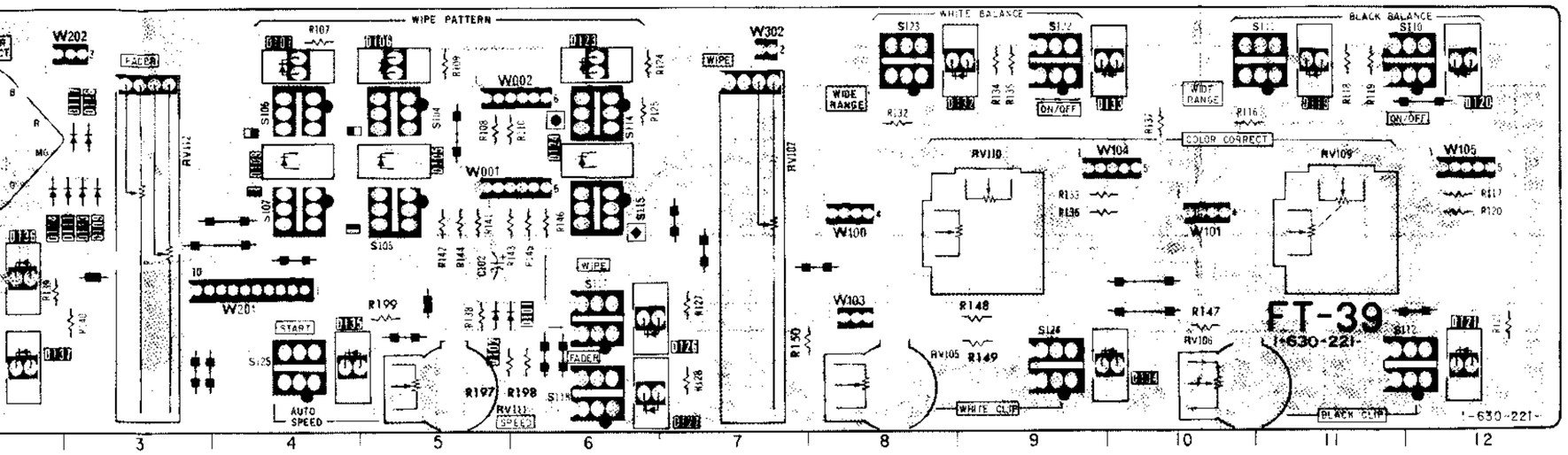
JK-44 BOARD	
D001	A-6
D102	B-6
D103	A-1
D116	A-3
D017	A-3
D018	A-4
D019	A-3
D020	A-2
D021	A-1
D024	A-8
D025	A-8
D026	A-8
D027	A-8
D801	B-8
D802	B-8
D803	A-8
D804	A-8
Q001	A-6
Q002	B-6

JK-44 BOARD

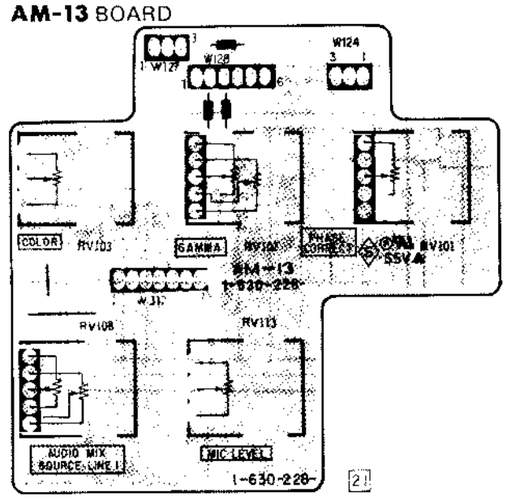


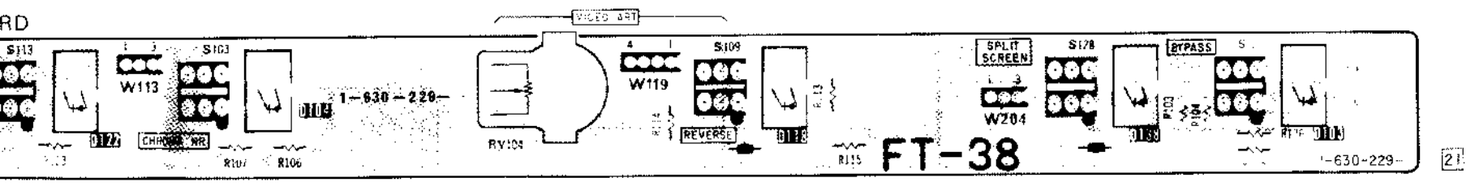
MJ-22 BOARD



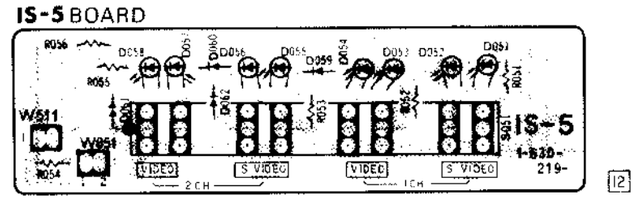


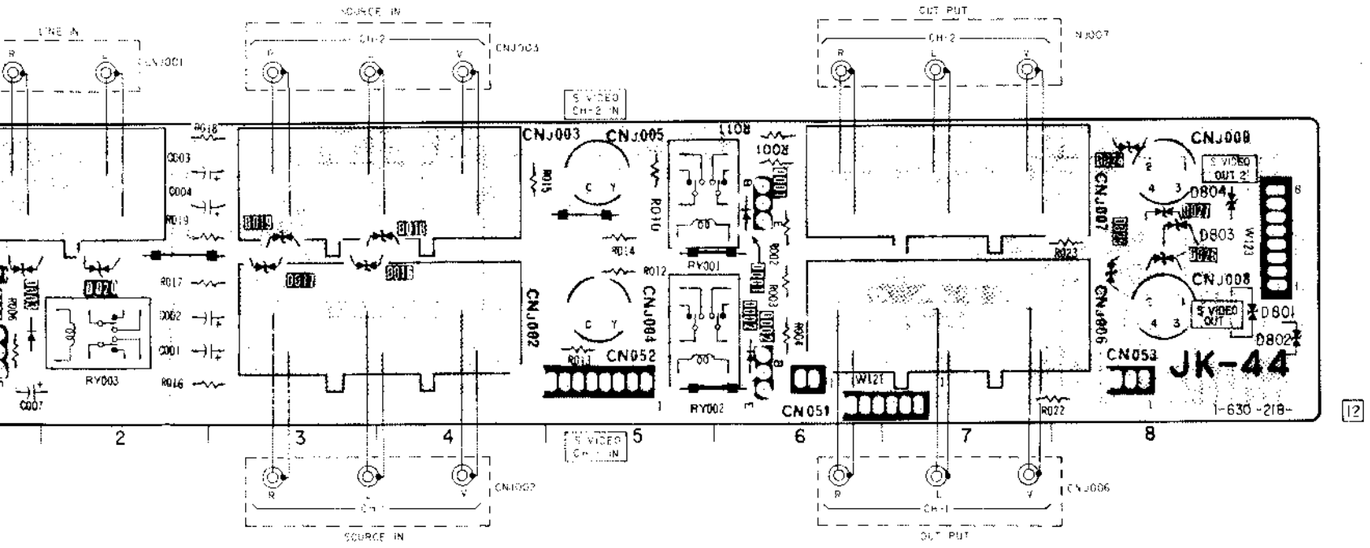
AM-13 BOARD



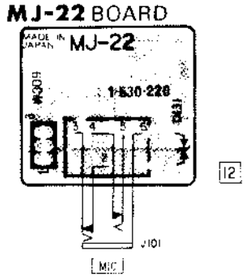


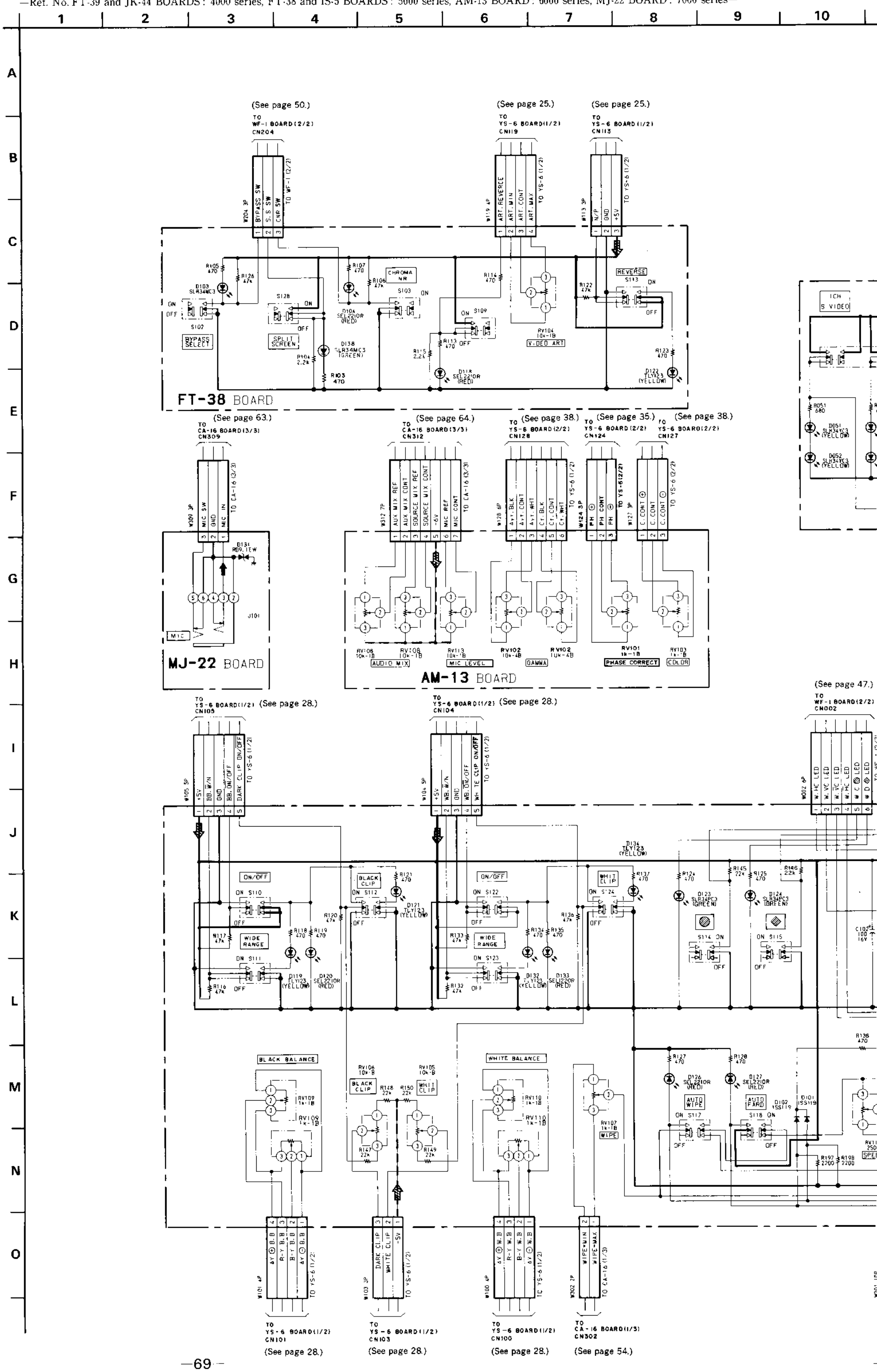
IS-5 BOARD





MJ-22 BOARD




(See page 50.)
TO WF-1 BOARD(2/2) CN204
W204 3P
BYPASS SW
S. S SW
CNR SW
TO WF-1 (2/2)
(See page 25.)
TO YS-6 BOARD(1/2) CN119
W119 4P
ART. REVERCE
ART. MIN
ART. CONT
ART. MAX
TO YS-6 (1/2)
(See page 25.)
TO YS-6 BOARD(1/2) CN113
W113 3P
N/P
GND
+5V
TO YS-6 (1/2)
R105 470
R126 47k
D103 SLR34MC3
S102
ON
OFF
BYPASS SELECT
S128
SPLIT SCREEN
R107 470
R106 47k
CHROMA NR
S103
D104 SEL2210R (RED)
R104 2.2k
R103 470
D138 SLR34MC3 (GREEN)
R114 470
S109
R113 470 OFF
R115 2.2k
D118 SEL2210R (RED)
RV104 10k-1B
VIDEO ART
R122 47k
REVERSE
S113
R123 470
D122 TLY133 (YELLOW)
FT-38 BOARD
(See page 63.)
TO CA-16 BOARD(3/3) CN309
W309 3P
MIC SW
GND
MIC IN
TO CA-16 (3/3)
D131 RD6.1EW
J101
MIC
MJ-22 BOARD
(See page 64.)
TO CA-16 BOARD(3/3) CN312
W312 7P
AUX MIX REF
AUX MIX CONT
SOURCE MIX REF
SOURCE MIX CONT
-6V
MIC REF
MIC CONT
TO CA-16 (3/3)
(See page 38.)
TO YS-6 BOARD(2/2) CN128
W128 6P
Ay. BLK
Ay. CONT
Ay. WHT
Cr. BLK
Cr. CONT
Cr. WHT
TO YS-6 (1/2)
(See page 35.)
TO YS-6 BOARD(2/2) CN124
W124 3P
PH ⊕
PH CONT
PH ⊖
TO YS-6(2/2)
(See page 38.)
TO YS-6 BOARD(2/2) CN127
W127 3P
C. CONT ⊕
C. CONT
C. CONT ⊖
TO YS-6 (2/2)
RV108 10k-1B
AUDIO MIX
RV109 10k-1B
MIC LEVEL
RV102 10k-4B
GAMMA
RV101 1k-1B
PHASE CORRECT
RV103 1k-1B
COLOR
AM-13 BOARD
1CH S VIDEO
R051 680
D051 SLH34YC3 (YELLOW)
D052 SLH34YC3 (YELLOW)
(See page 47.)
TO WF-1 BOARD(2/2) CN002
W002 6P
W. HC LED
W. VC LED
W. VC LED
W. HC LED
W C LED
W D LED
TO WF-1 (2/2)
TO YS-6 BOARD(1/2) CN105
(See page 28.)
W105 5P
+5V
BB. W/N
GND
BB. ON/OFF
DARK CLIP ON/OFF
TO YS-6 (1/2)
TO YS-6 BOARD(1/2) CN104
(See page 28.)
W104 5P
+5V
WB. W/N
GND
WB. ON/OFF
WH TE CLIP ON/OFF
TO YS-6 (1/2)
D136 TLY123 (YELLOW)
ON/OFF
ON S110
OFF
R117 47k
WIDE RANGE
ON S111
R116 47k
R118 470
R119 470
D119 TLY123 (YELLOW)
D120 SEL2210R (RED)
BLACK CLIP
ON S112
R121 470
R120 47k
D121 TLY123 (YELLOW)
ON/OFF
ON S122
R133 47k
WIDE RANGE
ON S123
R132 47k
R136 470
R135 470
D132 TLY123 (YELLOW)
D133 SEL2210R (RED)
WHIT CLIP
ON S124
R137 470
R124 470
D123 SLR34PC3 (GREEN)
S114 ON
R145 22k
R125 470
D124 SLR34PC3 (GREEN)
ON S115
R146 22k
C102 100 16V
R136 470
R127 470
D126 SEL2210R (RED)
AUTO WIPE
ON S117
R128 470
D127 SEL2210R (RED)
AUTO PARD
S118 ON
D101 1SS119
D102 1SS119
R197 2200
R198 2200
RV11 250
SPE
BLACK BALANCE
RV109 1k-1B
RV106 10k-B
BLACK CLIP
R148 22k
R147 22k
R150 22k
RV105 10k-B
WHIT CLIP
R149 22k
WHITE BALANCE
RV110 1k-1B
RV107 1k-1B
WIPE
W101 4P
ΔY ⊕ B-B
R-Y B-B
B-Y B-B
ΔY ⊖ B-B
TO YS-6 (1/2)
W103 3P
DARK CLIP
WHITE CLIP
-5V
TO YS-6 (1/2)
W100 4P
ΔY ⊕ W-B
R-Y W-B
B-Y W-B
ΔY ⊖ W-B
TO YS-6 (1/2)
W302 2P
WIPE-MIN
WIPE-MAX
TO CA-16 (1/3)
TO YS-6 BOARD(1/2) CN101
(See page 28.)
TO YS-6 BOARD(1/2) CN103
(See page 28.)
TO YS-6 BOARD(1/2) CN100
(See page 28.)
TO CA-16 BOARD(1/3) CN302
(See page 54.)

7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18

(See page 25.)

TO YS-6 BOARD (1/2) CN113

W113 3P: 1 N/P, 2 GND, 3 +5V — TO YS-6 (1/2)

REVERSE S113 ON / OFF

R122 47k

R123 470

D122 TLY123 (YELLOW)

(See page 38.)

(See page 35.)

TO YS-6 BOARD (2/2) CN124

W124 3P: PH ⊕, PH CONT, PH ⊖ — TO YS-6 (1/2)

(See page 38.)

TO YS-6 BOARD (2/2) CN127

W127 3P: C. CONT ⊕, C. CONT, C. CONT ⊖ — TO YS-6 (2/2)

Cr. CONT, Cr. WHT — TO YS-6 (1/2)

RV102 10k-4B

RV101 1k-1B PHASE CORRECT

RV103 1k-1B COLOR

1CH S VIDEO | 1CH VIDEO | 2CH S VIDEO | 2CH VIDEO

S051

D062 ISS119

D061 ISS119

R051 680 | R052 680 | R053 680

D051 SLH34YC3 (YELLOW)

D053 SLH34YC3 (YELLOW)

D055 SLH34YC3 (YELLOW)

D057 SLH34YC3 (YELLOW)

D052 SLH34YC3 (YELLOW)

D054 SLH34YC3 (YELLOW)

D056 SLH34YC3 (YELLOW)

D058 SLH34YC3 (YELLOW)

R054 680

D059 ISS119

D060 ISS119

R056 10k

R055 8200

W051 2P: 1 +9V, 2 1CH/2CH — TO JK-44

W511 2P: 1 GND, 2 S/V — TO YS-6 (1/2) CN511 — (See page 28.)

IS-5 BOARD

(See page 47.)

TO WF-1 BOARD (2/2) CN002

W002 6P: W. HC LED, W. VC LED, W. VC LED, W. HC LED, W C LED, W D LED — TO WF-1 (2/2)

(See page 47.)

TO WF-1 BOARD (2/2) CN001

W001 6P: WIPE. PT HC, WIPE. PT VC, WIPE. PT VC, WIPE. PT HC, WIP P. T C, WIP P. T D — TO WF-1 (2/2)

(See page 54.)

TO CA-16 BOARD (1/3) CN303

W303 5P: C, B, G, R, +5V — TO CA-16 (1/3)

(See page 39.)

TO WF-1 BOARD (1/2) CN205

W205 2P: B. C ON/OFF, WHITE/BLACK — TO WF-1 (1/2)

D134 TLY123 (YELLOW)

WHIT CLIP ON S124 OFF

R137 470 | R124 470 | R145 22k | R125 470 | R146 22k

D123 SLR34PC3 (GREEN) | D124 SLR34PC3 (GREEN)

S114 ON OFF | S115 ON OFF

R136 47k | R135 470

D133 SEL1220R (RED)

R109 470 | R141 22k | R107 470 | R143 22k | R144 22k

D106 SLR34PC3 (GREEN) | D107 SLR34PC3 (GREEN)

R108 470 | R110 470

C107 100 16V

S104 ON OFF H | S106 ON OFF H

S105 ON OFF V | S107 ON OFF V

D105 SLR34PC3 (GREEN) | D108 SLR34PC3 (GREEN)

R142 22k

D109 ISS119 | D110 ISS119 | D111 ISS119 | D112 ISS119 | D113 ISS119 | D117 ISS119 | D116 ISS119 | D115 ISS119 | D114 ISS119

R112 470

Y, CY, G, MG, R, W, B, C.B, BLK

S108 COLOR SELECT

R138 470

D135 SEL2210R

R127 470 | R128 470

D126 SEL2210R (RED) | D127 SEL2210R (RED)

AUTO WIPE ON S117 OFF | AUTO FARD S118 ON OFF

D101 ISS119 | D102 ISS119

RV107 1k-1B WIPE

RV111 250k SPEED

R197 2200 | R198 2200

S125 ON OFF START

R199 22k

FADER

RV112 20k-1B | RV113 20k-1B

S126 ON OFF VIDEO FADER ON/OFF

S127 ON OFF AUDIO FADER ON/OFF

R139 470 | R140 470

D136 SEL2210R (RED) | D137 SEL2210R (RED)

R129 470 | R130 470 | R131 470

D128 TLY123 (YELLOW) BACK COLOR | D129 TLY123 (YELLOW) BLACK | D130 TLY123 (YELLOW) WHITE

S128 ON OFF

FT-39 BOARD

W302 2P: WIPE-MIN, WIPE-MAX — TO CA-16 (1/3)

TO CA-16 BOARD (1/3) CN302

(See page 54.)

W201 10P: FADER REF, +6V, START LED, START, SPEED VR2, SPEED VR1, FADER AUTO/M, WIPE AUTO/M, FADER VR A, WIPE VR — TO WF-1 (1/2)

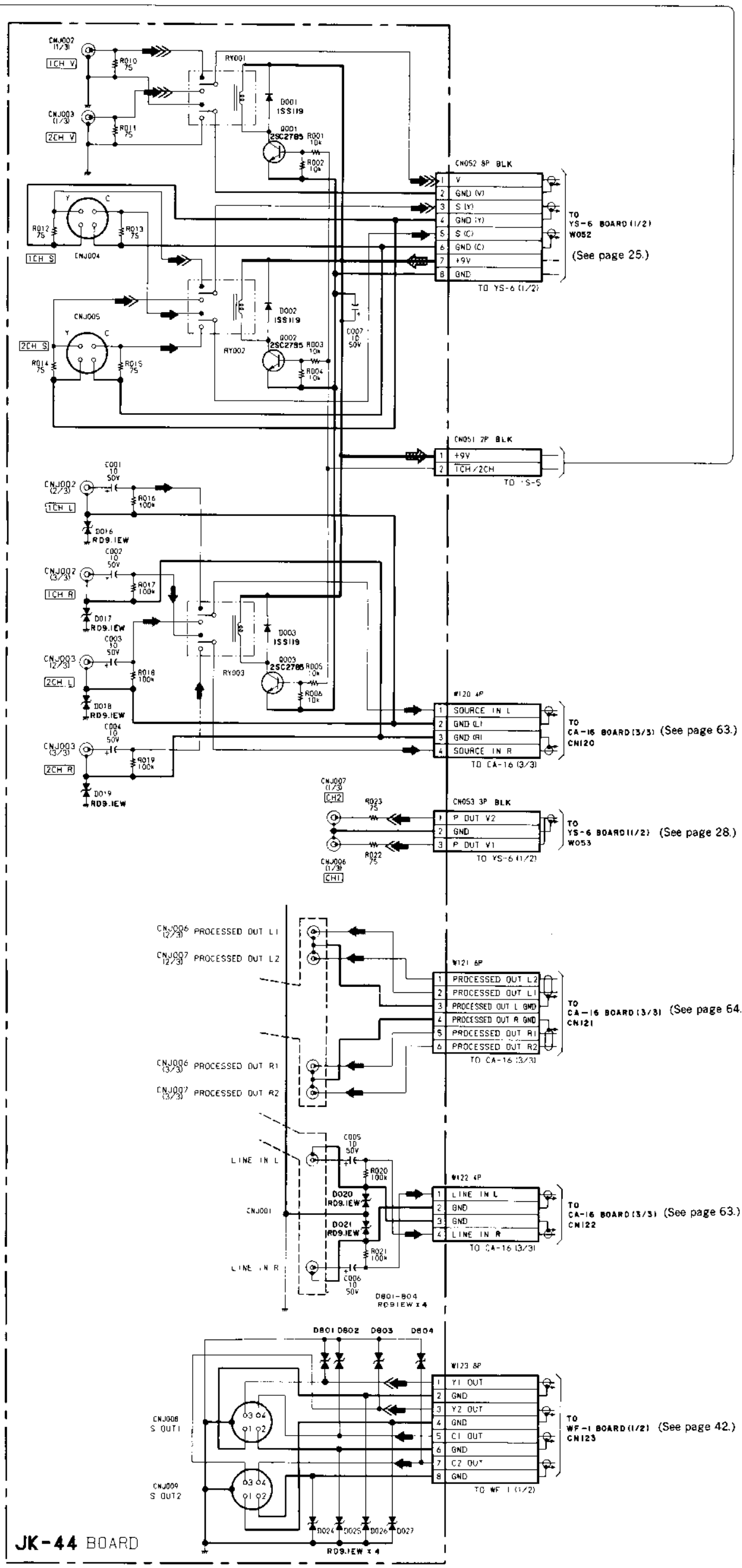
TO WF-1 BOARD (1/2) CN201

(See page 42.)

W202 3P: FADER VR V, FADER AU SW, FADER VI SW — TO WF-1 (2/2)

TO WF-1 BOARD (2/2) CN202

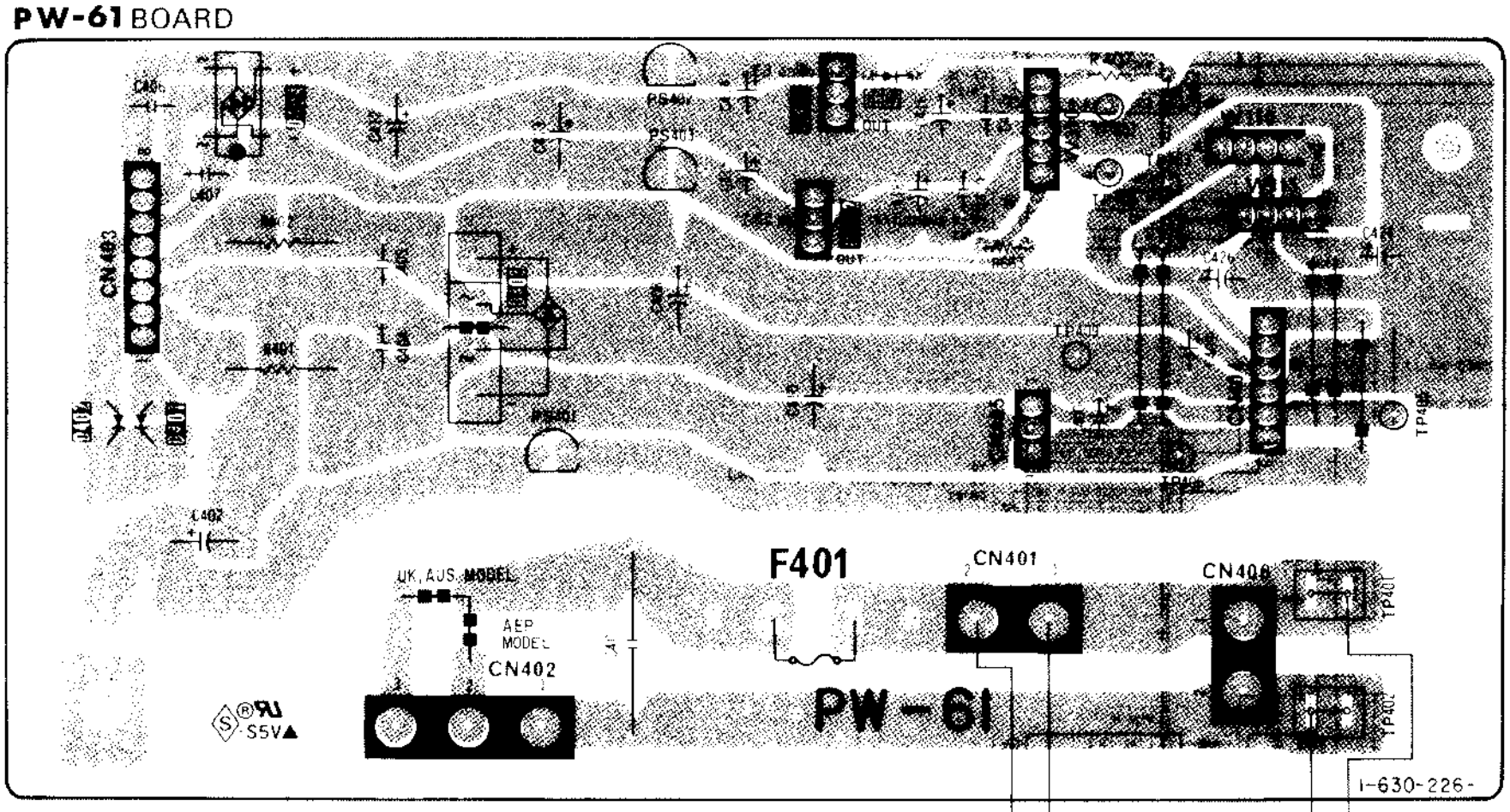
(See page 50.)



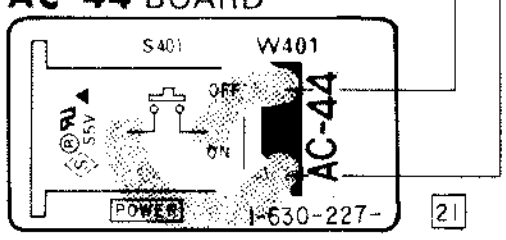
- **Signal path**
  - ➡➡ : REC Y Signal
  - ➡ : REC CHROMA Signal
  - ➡➡ : REC Y/CHROMA Signal
  - ➡ : REC AUDIO Signal

AC-44 (POWER SW), PT-68 (DC/DC CONVERTER), PT-70 (DC/DC CONVERTER), PW-61 (POWER SUPPLY) PRINTED WIRING BOARD
—Ref. No. PT-68BOARD : 4000 series, AC-44 BOARD : 5000 series, PW-61 BOARD : 6000 series, PT-70 BOARD : 7000 series—

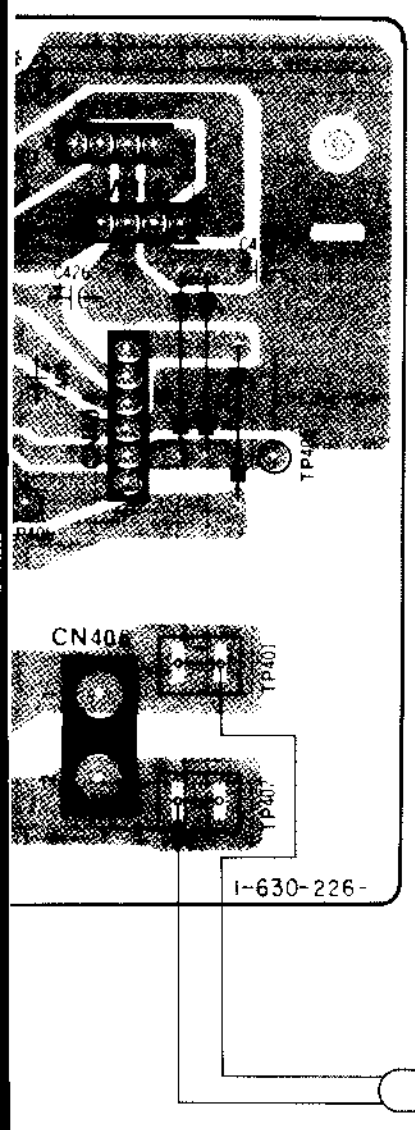
PW-61 BOARD



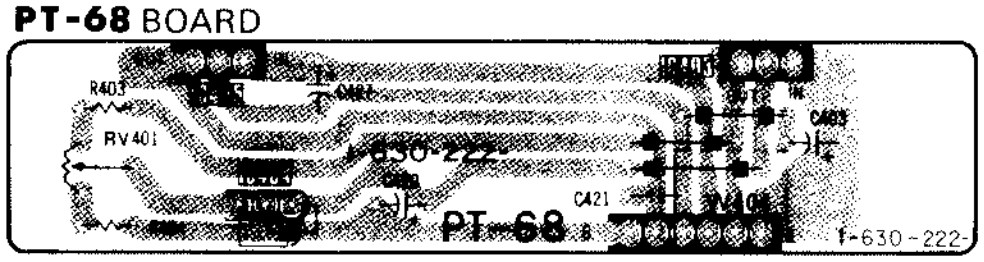
AC-44 BOARD



VIRING BOARD



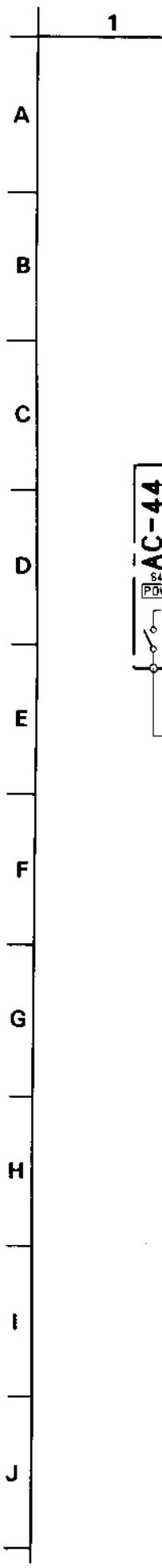
PT-68 BOARD



12

PT-70 BOARD

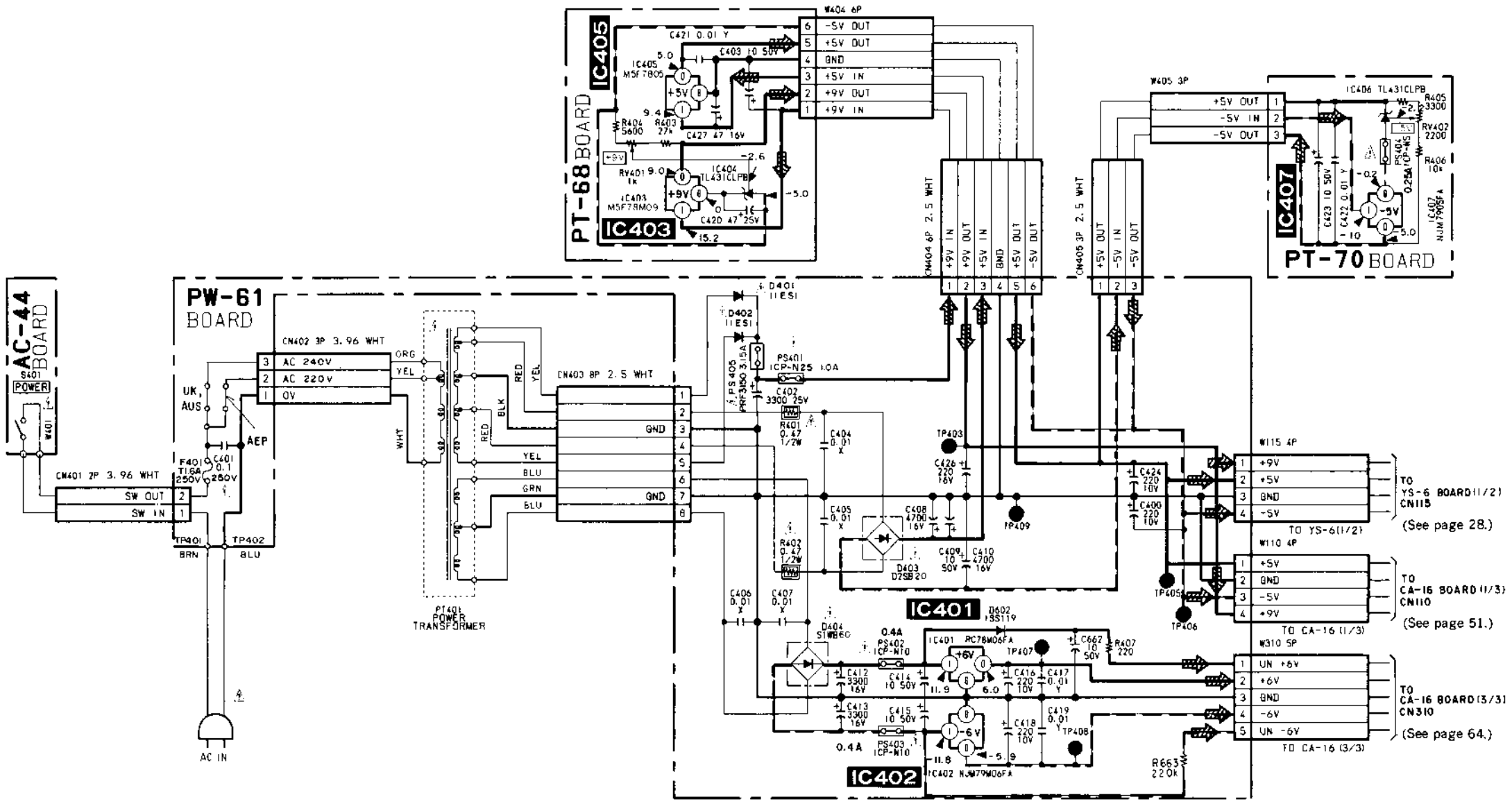
AC-44 (POWE
—Ref. No. PT-6



OWER SW), PT-68 (DC/DC CONVERTER), PT-70 (DC/DC CONVERTER), PW-61 (POWER SUPPLY) SCHEMATIC DIAGRAM

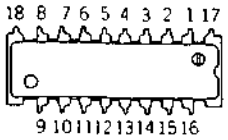
PT-68BOARD : 4000 series, AC-44 BOARD : 5000 series, PW-61 BOARD : 6000 series, PT-70 BOARD : 7000 series—

2 3 4 5 6 7 8 9 10 11 12



4-3. SEMICONDUCTORS

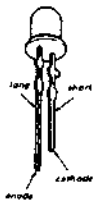
HA1141



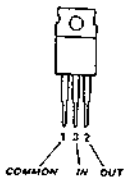
DTA114ES
DTC114ES
DTC143TS
2SA1048
2SC2458

2SK523

SLH-34YC3

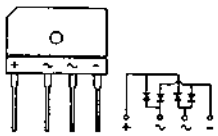


M5F78M09
M5F7805
NJM79M05FA
NJM79M06FA
NJM7905FA
RC78M06FA

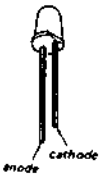


2SC2785-HFE

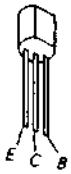
D2SB20



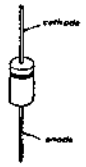
SLR-34MC3



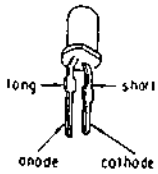
2SA733-K



RD3.9E-B2
RD9.1E-B2

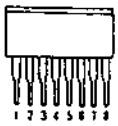


SLR-34PC3
SEL2210R
TLY123

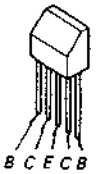


M51131L

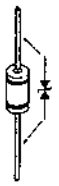
M51848L



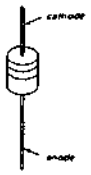
2SA979
2SC2259-F



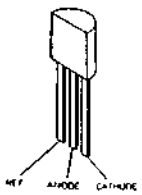
RD9.1EW



1SS119
1SS148
11ES2

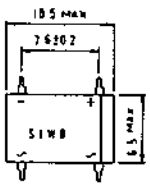


TL431CLPB

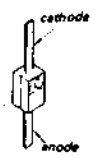


2SK105A-10

S1WB60



1T25



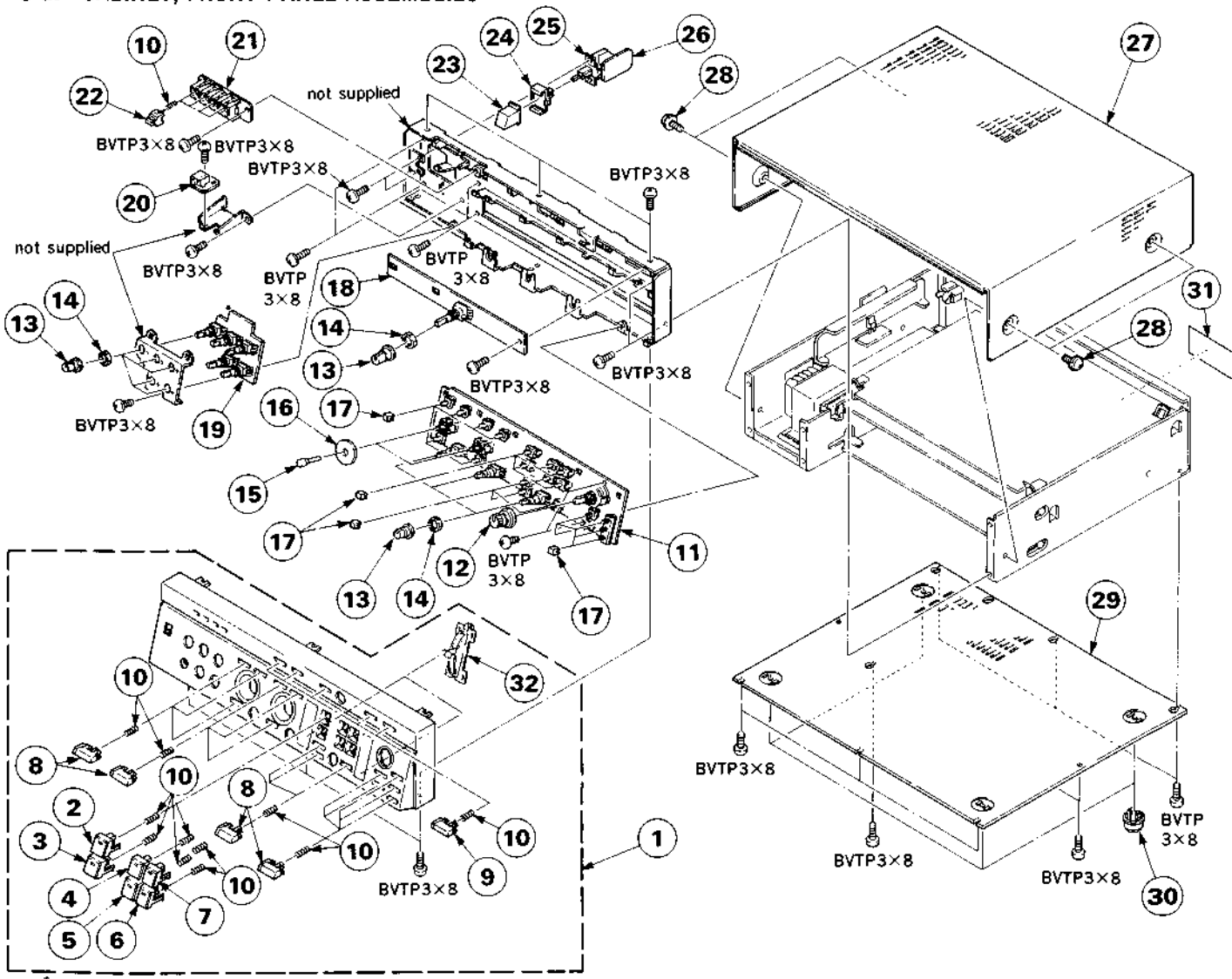
SECTION 5
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts' Color

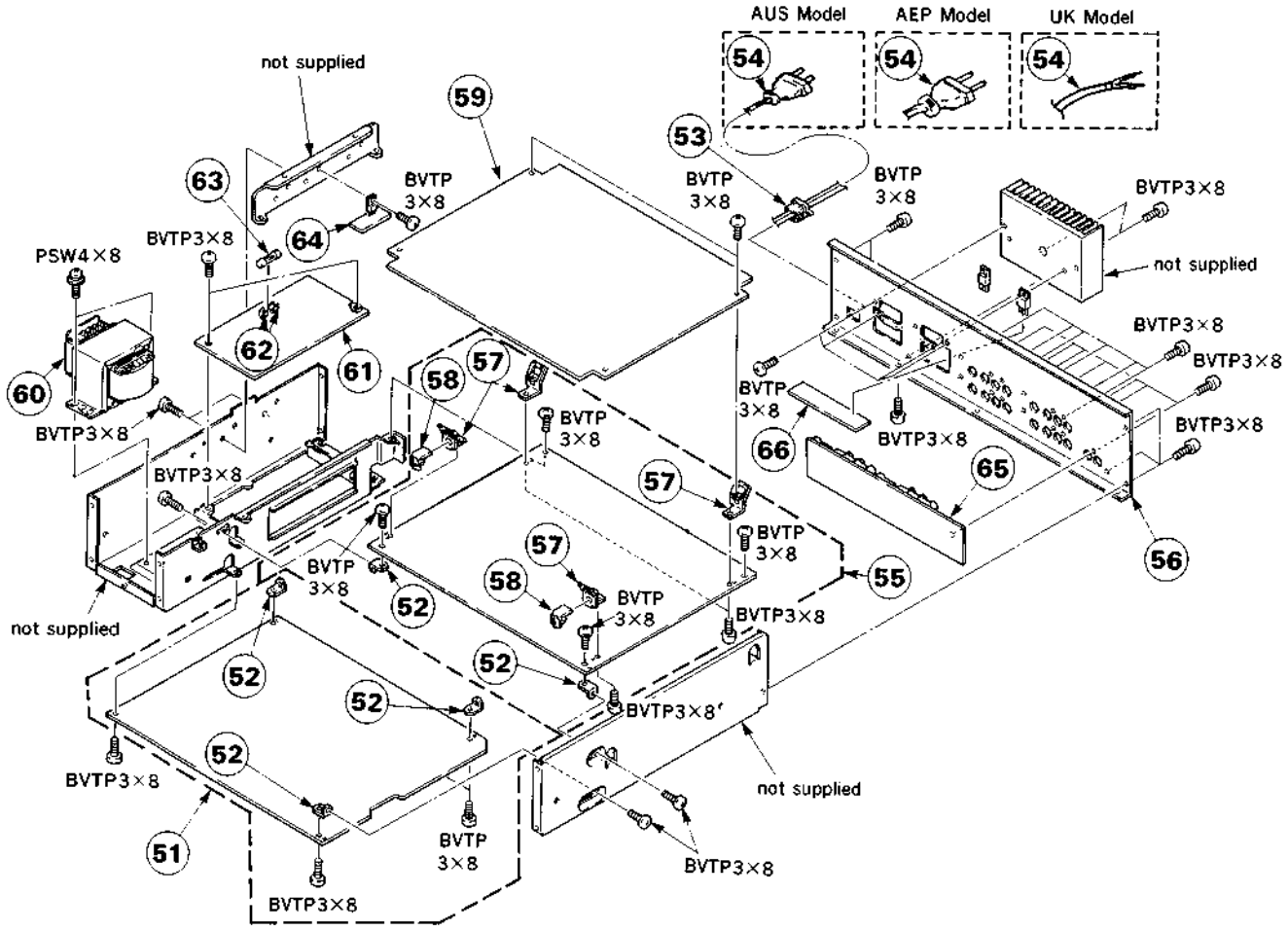
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

5-1. CABINET, FRONT PANEL ASSEMBLIES



No.	Part No.	Description	Remark
1	X-2118-237-1	PANEL ASSY, FRONT	2-10, 32
2	X-2118-230-1	PUSH BUTTON (C) ASSY	
3	X-2118-229-1	PUSH BUTTON (D) ASSY	
4	X-2118-208-1	PUSH BUTTON (S-0) ASSY	
5	X-2118-210-1	PUSH BUTTON (S-2) ASSY	
6	X-2118-211-1	PUSH BUTTON (S-3) ASSY	
7	X-2118-209-1	PUSH BUTTON (S-1) ASSY	
8	X-2118-205-1	PUSH BUTTON (SL) ASSY	
9	X-2118-204-1	PUSH BUTTON (FL) ASSY	
10	2-217-533-00	SPRING, COMPRESSION	
11	*A-7070-849-A	FT-39 BOARD, COMPLETE	
12	X-2118-214-1	KNOB (L) ASSY, VOL	
13	X-2118-215-1	KNOB (S) ASSY, VOL	
14	2-118-268-01	NUT (M9), HEXAGON	
15	2-128-426-01	GRIP	
16	2-118-243-11	SHEET, JOY STICK	
17	2-118-220-01	JOINT	
18	*1-630-229-21	FT-38 BOARD	
19	*1-630-228-21	AM-13 BOARD	
20	*1-630-220-12	MJ-22 BOARD	
21	*1-630-219-12	IS-5 BOARD	
22	X-2118-231-1	BUTTON (I-S) ASSY	
23	2-118-215-01	BUTTON (POWER)	
24	2-118-218-01	JOINTER	
25	⚠1-553-318-13	SWITCH, PUSH (AC POWER) (1 KEY) (S401)	
26	*1-630-227-21	AC-44 BOARD	
27	2-382-698-01	CASE, UPPER	
28	4-847-802-00	SCREW, CASE	
29	*2-382-694-01	PLATE, BOTTOM	
30	X-3701-069-0	FOOT ASSY, M.F	
31	*2-128-447-01	LABEL, MODEL NUMBER (UK/AUS MODEL)	
	*2-128-448-01	LABEL, MODEL NUMBER (AEP MODEL)	
32	X-2118-236-1	LEVER ASSY, FADER	

5-2. MAIN BOARD ASSEMBLY



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

No.	Part No.	Description	Remark
51	*A-7061-748-A	YS-6 BOARD, COMPLETE	52
52	*2-382-687-11	HOLDER (2), PC BOARD	
53	⚠3-703-244-02	BUSHING (2104), CORD	
54	⚠1-534-817-31	CORD, POWER (AEP MODEL)	
	⚠1-551-732-11	CORD, POWER (AUS MODEL)	
54	⚠1-551-884-32	CORD, POWER (UK MODEL)	
55	*A-7061-749-A	WF-1 BOARD, COMPLETE	52, 57, 58
56	2-128-439-21	PLATE, JACK	
57	*2-128-437-01	HOLDER (3), PC BOARD	
58	*3-710-565-01	HINGE, PC BOARD	

No.	Part No.	Description	Remark
59	*A-7061-750-A	CA-16 BOARD, COMPLETE	
60	⚠1-449-826-11	TRANSFORMER, POWER	
61	*A-7061-751-A	PW-61 BOARD, COMPLETE (AEP MODEL)	62
	*A-7061-835-A	PW-61 BOARD, COMPLETE (UK/AUS MODEL)	62
62	⚠1-533-189-11	HOLDER, FUSE	
63	⚠1-532-259-00	FUSE, TIME-LAG	
64	*1-630-217-12	PT-70 BOARD	
65	*A-7070-842-A	JK-44 BOARD, COMPLETE	
66	*1-630-222-12	PT-68 BOARD	

XV-C900

PT-70 IS-5 FT-39

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
	*1-630-217-12	PT-70 BOARD				
		**********				
	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3				
		CAPACITOR				
C422	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C423	1-123-875-11	ELECT	10MF	20%	50V	
		IC				
IC406	8-759-914-44	IC TL431CLPB				
IC407	8-759-701-84	IC NJM7905FA				
		IC LINK				
PS404⚠	1-532-727-11	LINK, IC (ICP-N5) 0.25A				
		RESISTOR				
R405	1-249-423-11	CARBON	3.3K	5%	1/4W	
R406	1-249-429-11	CARBON	10K	5%	1/4W	
		VARIABLE RESISTOR				
RV402	1-228-991-00	RES, ADJ, CARBON 2.2K				
**********						
	*1-630-219-12	IS-5 BOARD				
		**********				
	*2-128-430-01	HOLDER (I-S), LED				
		DIODE				
D051	8-719-945-57	DIODE SLH-34YC3 (1CH S VIDEO)				
D052	8-719-945-57	DIODE SLH-34YC3 (1CH S VIDEO)				
D053	8-719-945-57	DIODE SLH-34YC3 (1CH VIDEO)				
D054	8-719-945-57	DIODE SLH-34YC3 (1CH VIDEO)				
D055	8-719-945-57	DIODE SLH-34YC3 (2CH S VIDEO)				
D056	8-719-945-57	DIODE SLH-34YC3 (2CH S VIDEO)				
D057	8-719-945-57	DIODE SLH-34YC3 (2CH VIDEO)				
D058	8-719-945-57	DIODE SLH-34YC3 (2CH VIDEO)				
D059	8-719-911-19	DIODE 1SS119				
D060	8-719-911-19	DIODE 1SS119				
D061	8-719-911-19	DIODE 1SS119				
D062	8-719-911-19	DIODE 1SS119				
		RESISTOR				
R051	1-249-415-11	CARBON	680	5%	1/4W	
R052	1-249-415-11	CARBON	680	5%	1/4W	
R053	1-249-415-11	CARBON	680	5%	1/4W	
R054	1-249-415-11	CARBON	680	5%	1/4W	
R055	1-249-428-11	CARBON	8.2K	5%	1/4W	
R056	1-249-429-11	CARBON	10K	5%	1/4W	

Ref.No	Part No.	Description				Remark
		SWITCH				
S051	1-571-875-11	SWITCH, PYUSH (4 KEY) (INPUT SELECT)				
**********						
	*A-7070-849-A	FT-39 BOARD, COMPLETE				
		**********				
	*2-118-219-01	HOLDER (S), LED				
	*3-662-262-00	HOLDER (D), LED				
		CAPACITOR				
C102	1-126-101-11	ELECT	100MF	20%	16V	
		DIODE				
D101	8-719-921-20	DIODE 1SS119				
D102	8-719-921-20	DIODE 1SS119				
D105	8-719-940-80	DIODE SLR-34PC3 (▬)				
D106	8-719-940-80	DIODE SLR-34PC3 (■)				
D107	8-719-940-80	DIODE SLR-34PC3 (■)				
D108	8-719-940-80	DIODE SLR-34PC3 (▬)				
D109	8-719-911-19	DIODE 1SS119				
D110	8-719-911-19	DIODE 1SS119				
D111	8-719-911-19	DIODE 1SS119				
D112	8-719-911-19	DIODE 1SS119				
D113	8-719-911-19	DIODE 1SS119				
D114	8-719-911-19	DIODE 1SS119				
D115	8-719-911-19	DIODE 1SS119				
D116	8-719-911-19	DIODE 1SS119				
D117	8-719-911-19	DIODE 1SS119				
D119	8-719-812-32	DIODE TLY123 (BLACK BALANCE WIDE RANGE)				
D120	8-719-300-71	DIODE SEL2210R (BLACK BALANCE ON/OFF)				
D121	8-719-812-32	DIODE TLY123 (BLACK CLIP)				
D123	8-719-940-80	DIODE SLR-34PC3 (■)				
D124	8-719-940-80	DIODE SLR-34PC3 (■)				
D126	8-719-300-71	DIODE SEL2210R (AUTO SPEED WIPE)				
D127	8-719-300-71	DIODE SEL2210R (AUTO SPEED FADER)				
D128	8-719-812-32	DIODE TLY123 (BACK COLOR)				
D129	8-719-812-32	DIODE TLY123 (BLACK)				
D130	8-719-812-32	DIODE TLY123 (WHITE)				
D132	8-719-812-32	DIODE TLY123 (WHITE BALANCE WIDE RANGE)				
D133	8-719-300-71	DIODE SEL2210R (WHITE BALANCE ON/OFF)				
D134	8-719-812-32	DIODE TLY123 (WHITE CLIP)				
D135	8-719-300-71	DIODE SEL2210R (AUTO SPEED START)				
D136	8-719-300-71	DIODE SEL2210R (VIDEO)				
D137	8-719-300-71	DIODE SEL2210R (AUDIO)				
		RESISTOR				
R107	1-249-413-11	CARBON	470	5%	1/4W	
R108	1-249-413-11	CARBON	470	5%	1/4W	
R109	1-249-413-11	CARBON	470	5%	1/4W	
R110	1-249-413-11	CARBON	470	5%	1/4W	
R112	1-249-413-11	CARBON	470	5%	1/4W	

Ref.No	Part No.	Description				Remark
R116	1-249-437-11	CARBON	47K	5%	1/4W	
R117	1-249-437-11	CARBON	47K	5%	1/4W	
R118	1-249-413-11	CARBON	470	5%	1/4W	
R119	1-249-413-11	CARBON	470	5%	1/4W	
R120	1-249-437-11	CARBON	47K	5%	1/4W	
R121	1-249-413-11	CARBON	470	5%	1/4W	
R124	1-249-413-11	CARBON	470	5%	1/4W	
R125	1-249-413-11	CARBON	470	5%	1/4W	
R127	1-249-413-11	CARBON	470	5%	1/4W	
R128	1-249-413-11	CARBON	470	5%	1/4W	
R129	1-249-413-11	CARBON	470	5%	1/4W	
R130	1-249-413-11	CARBON	470	5%	1/4W	
R131	1-249-413-11	CARBON	470	5%	1/4W	
R132	1-249-437-11	CARBON	47K	5%	1/4W	
R133	1-249-437-11	CARBON	47K	5%	1/4W	
R134	1-249-413-11	CARBON	470	5%	1/4W	
R135	1-249-413-11	CARBON	470	5%	1/4W	
R136	1-249-437-11	CARBON	47K	5%	1/4W	
R137	1-249-413-11	CARBON	470	5%	1/4W	
R138	1-249-413-11	CARBON	470	5%	1/4W	
R139	1-249-413-11	CARBON	470	5%	1/4W	
R140	1-249-413-11	CARBON	470	5%	1/4W	
R141	1-249-433-11	CARBON	22K	5%	1/4W	
R142	1-249-433-11	CARBON	22K	5%	1/4W	
R143	1-249-433-11	CARBON	22K	5%	1/4W	
R144	1-249-433-11	CARBON	22K	5%	1/4W	
R145	1-249-433-11	CARBON	22K	5%	1/4W	
R146	1-249-433-11	CARBON	22K	5%	1/4W	
R147	1-249-433-11	CARBON	22K	5%	1/4W	
R148	1-249-433-11	CARBON	22K	5%	1/4W	
R149	1-249-433-11	CARBON	22K	5%	1/4W	
R150	1-249-433-11	CARBON	22K	5%	1/4W	
R197	1-249-421-11	CARBON	2.2K	5%	1/4W	
R198	1-249-421-11	CARBON	2.2K	5%	1/4W	
R199	1-249-433-11	CARBON	22K	5%	1/4W	

VARIABLE RESISTOR

RV105	1-237-400-11	RES, VAR, CARBON 10K (WHITE CLIP)
RV106	1-237-400-11	RES, VAR, CARBON 10K (BLACK CLIP)
RV107	1-238-564-11	RES, VAR, SLIDE 1K/1K (WIPE)
RV109	1-237-423-21	RES, VAR, CARBON 1K/1K (COLOR CORRECT)
RV110	1-237-423-21	RES, VAR, CARBON 1K/1K (COLIR CORRECT)
RV111	1-238-518-11	RES, VAR, CARBON 250K (AUTO SPEED)
RV112	1-238-563-11	RES, VAR, SLIDE 20K/20K (FADER)

SWITCH

S104	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN ■)
S105	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN ■)
S106	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN ■)
S107	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN ■)
S108	1-570-796-21	SWITCH, ROTARY (COLOR SELECT)
S110	1-570-797-11	SWITCH, PUSH (1 KEY) (BLACK BALANCE ON/OFF)
S111	1-570-797-11	SWITCH, PUSH (1 KEY) (BLACK BALANCE WIDE RANGE)
S112	1-570-797-11	SWITCH, PUSH (1 KEY) (BLACK CLIP)
S114	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN ■)
S115	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN ■)
S117	1-570-797-11	SWITCH, PUSH (1 KEY) (AUTO SPEED WIPE)
S118	1-570-797-11	SWITCH, PUSH (1 KEY) (AUTO SPEED FADER)
S122	1-570-797-11	SWITCH, PUSH (1 KEY) (WHITE BALANCE ON/OFF)
S123	1-570-797-11	SWITCH, PUSH (1 KEY) (WHITE BALANCE WIDE RANGE)
S124	1-570-797-11	SWITCH, PUSH (1 KEY) (WHITE CLIP)
S125	1-570-797-21	SWITCH, PUSH (1 KEY) (AUTO SPEED START)
S126	1-570-797-11	SWITCH, PUSH (1 KEY) (VIDEO)
S127	1-570-797-11	SWITCH, PUSH (1 KEY) (AUDIO)
S128	1-571-874-11	SWITCH, PYSH (3 KEY) (VIDEO WHITE/BLACK/BACK COLOR)

****

*A-7061-748-A	YS-6 BOARD, COMPLETE	
	**********	
*2-352-113-01	CASE, SHIELD	
*2-352-115-01	LID, SHIELD CASE	
*2-382-687-11	HOLDER (2), PC BOARD	
7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

CAPACITOR

C101	1-124-465-00	ELECT	0.47MF	20%	50V
C102	1-124-499-11	ELECT	1MF	20%	50V
C103	1-124-446-11	ELECT	47MF	20%	10V
C104	1-161-379-00	CERAMIC	0.01MF	30%	16V
C105	1-124-446-11	ELECT	47MF	20%	10V
C106	1-161-379-00	CERAMIC	0.01MF	30%	16V
C107	1-124-446-11	ELECT	47MF	20%	10V
C108	1-124-446-11	ELECT	47MF	20%	10V
C109	1-124-465-00	ELECT	0.47MF	20%	50V
C110	1-124-499-11	ELECT	1MF	20%	50V
C111	1-124-446-11	ELECT	47MF	20%	10V
C112	1-124-499-11	ELECT	1MF	20%	50V
C113	1-124-446-11	ELECT	47MF	20%	10V
C114	1-124-465-00	ELECT	0.47MF	20%	50V
C115	1-126-101-11	ELECT	100MF	20%	16V
C116	1-124-446-11	ELECT	47MF	20%	10V
C117	1-124-443-00	ELECT	100MF	20%	10V
C118	1-124-443-00	ELECT	100MF	20%	10V
C119	1-123-875-11	ELECT	10MF	20%	50V
C120	1-123-875-11	ELECT	10MF	20%	50V
C121	1-124-499-11	ELECT	1MF	20%	50V
C122	1-162-851-11	CERAMIC	0.1MF	10%	16V
C123	1-124-499-11	ELECT	1MF	20%	50V
C124	1-162-851-11	CERAMIC	0.1MF	10%	16V
C125	1-161-379-00	CERAMIC	0.01MF	30%	16V

When indicating parts by reference number, please include the board name.

YS-6

Ref.No	Part No.	Description				Remark
C126	1-124-446-11	ELECT	47MF	20%	10V	
C127	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C128	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C129	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C130	1-124-446-11	ELECT	47MF	20%	10V	
C131	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C132	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C133	1-101-880-00	CERAMIC	47PF	5%	50V	
C134	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C135	1-102-973-00	CERAMIC	100PF	5%	50V	
C136	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C141	1-126-101-11	ELECT	100MF	20%	16V	
C142	1-124-446-11	ELECT	47MF	20%	10V	
C143	1-124-443-00	ELECT	100MF	20%	10V	
C144	1-124-443-00	ELECT	100MF	20%	10V	
C145	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C146	1-124-446-11	ELECT	47MF	20%	10V	
C147	1-124-446-11	ELECT	47MF	20%	10V	
C148	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C150	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C151	1-102-959-00	CERAMIC	22PF	5%	50V	
C202	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C203	1-101-880-00	CERAMIC	47PF	5%	50V	
C204	1-101-880-00	CERAMIC	47PF	5%	50V	
C205	1-102-973-00	CERAMIC	100PF	5%	50V	
C206	1-102-973-00	CERAMIC	100PF	5%	50V	
C207	1-102-816-00	CERAMIC	120PF	5%	50V	
C208	1-101-880-00	CERAMIC	47PF	5%	50V	
C209	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C210	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C211	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C212	1-123-875-11	ELECT	10MF	20%	50V	
C213	1-124-446-11	ELECT	47MF	20%	10V	
C214	1-123-875-11	ELECT	10MF	20%	50V	
C215	1-124-499-11	ELECT	1MF	20%	50V	
C216	1-124-464-11	ELECT	0.22MF	20%	50V	
C217	1-124-499-11	ELECT	1MF	20%	50V	
C218	1-126-176-11	ELECT	220MF	20%	10V	
C219	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C220	1-124-477-11	ELECT	47MF	20%	16V	
C221	1-123-875-11	ELECT	10MF	20%	50V	
C222	1-123-875-11	ELECT	10MF	20%	50V	
C223	1-124-446-11	ELECT	47MF	20%	10V	
C224	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C225	1-124-473-11	ELECT	1000MF	20%	10V	
C226	1-124-927-11	ELECT	4.7MF	20%	50V	
C227	1-124-473-11	ELECT	1000MF	20%	10V	
C228	1-124-927-11	ELECT	4.7MF	20%	50V	
C229	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C230	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C231	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C234	1-123-875-11	ELECT	10MF	20%	50V	
C235	1-124-465-00	ELECT	0.47MF	20%	50V	
C236	1-123-875-11	ELECT	10MF	20%	50V	
C237	1-123-875-11	ELECT	10MF	20%	50V	
C238	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C239	1-124-446-11	ELECT	47MF	20%	10V	
C240	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C241	1-124-446-11	ELECT	47MF	20%	10V	
C242	1-124-477-11	ELECT	47MF	20%	16V	
C243	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C244	1-124-477-11	ELECT	47MF	20%	16V	
C245	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C246	1-102-961-00	CERAMIC	27PF	5%	50V	
C248	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C249	1-131-348-00	TANTALUM	1.5MF	20%	25V	
C250	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C251	1-123-875-11	ELECT	10MF	20%	50V	
C252	1-124-477-11	ELECT	47MF	20%	16V	
C301	1-124-446-11	ELECT	47MF	20%	10V	
C302	1-124-465-00	ELECT	0.47MF	20%	50V	
C303	1-102-959-00	CERAMIC	22PF	5%	50V	
C304	1-124-499-11	ELECT	1MF	20%	50V	
C305	1-124-446-11	ELECT	47MF	20%	10V	
C306	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C307	1-124-446-11	ELECT	47MF	20%	10V	
C309	1-124-446-11	ELECT	47MF	20%	10V	
C310	1-124-446-11	ELECT	47MF	20%	10V	
C311	1-124-465-00	ELECT	0.47MF	20%	50V	
C314	1-124-477-11	ELECT	47MF	20%	16V	
C315	1-124-446-11	ELECT	47MF	20%	10V	
C316	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C317	1-102-965-00	CERAMIC	39PF	5%	50V	
C318	1-124-499-11	ELECT	1MF	20%	50V	
C319	1-124-446-11	ELECT	47MF	20%	10V	
C320	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C321	1-124-446-11	ELECT	47MF	20%	10V	
C322	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C323	1-124-499-11	ELECT	1MF	20%	50V	
C324	1-102-947-00	CERAMIC	10PF	0.5PF	50V	
C325	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C326	1-102-963-00	CERAMIC	33PF	5%	50V	
C328	1-124-446-11	ELECT	47MF	20%	10V	
C329	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C330	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C331	1-123-875-11	ELECT	10MF	20%	50V	
C332	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C333	1-123-875-11	ELECT	10MF	20%	50V	
C334	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C335	1-123-875-11	ELECT	10MF	20%	50V	
C336	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C337	1-102-947-00	CERAMIC	10PF	0.5PF	50V	
C338	1-124-902-00	ELECT	0.47MF	20%	50V	
C341	1-102-824-00	CERAMIC	470PF	10%	50V	
C342	1-124-927-11	ELECT	4.7MF	20%	50V	
C343	1-124-499-11	ELECT	1MF	20%	50V	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
C344	1-161-379-00	CERAMIC	0.01MF	30%	16V
C345	1-161-379-00	CERAMIC	0.01MF	30%	16V
C346	1-124-446-11	ELECT	47MF	20%	10V
C347	1-161-379-00	CERAMIC	0.01MF	30%	16V
C350	1-102-959-00	CERAMIC	22PF	5%	50V
C351	1-161-379-00	CERAMIC	0.01MF	30%	16V
C352	1-161-379-00	CERAMIC	0.01MF	30%	16V
C353	1-161-379-00	CERAMIC	0.01MF	30%	16V
C354	1-124-446-11	ELECT	47MF	20%	10V
C355	1-124-446-11	ELECT	47MF	20%	10V
C356	1-161-379-00	CERAMIC	0.01MF	30%	16V
C357	1-124-477-11	ELECT	47MF	20%	16V
C358	1-161-379-00	CERAMIC	0.01MF	30%	16V
C359	1-124-446-11	ELECT	47MF	20%	10V
C360	1-124-499-11	ELECT	1MF	20%	50V
C361	1-101-880-00	CERAMIC	47PF	5%	50V
C362	1-124-446-11	ELECT	47MF	20%	10V
C363	1-124-446-11	ELECT	47MF	20%	10V
C364	1-124-446-11	ELECT	47MF	20%	10V
C365	1-124-446-11	ELECT	47MF	20%	10V
C366	1-131-381-00	TANTALUM	47MF	10%	10V
C367	1-124-446-11	ELECT	47MF	20%	10V
C368	1-161-379-00	CERAMIC	0.01MF	30%	16V
C371	1-124-910-11	ELECT	47MF	20%	50V
C372	1-161-379-00	CERAMIC	0.01MF	30%	16V
C373	1-131-381-00	TANTALUM	47MF	10%	10V
C374	1-131-363-00	TANTALUM	4.7MF	10%	16V
C375	1-131-363-00	TANTALUM	4.7MF	10%	16V
C376	1-124-446-11	ELECT	47MF	20%	10V
C377	1-124-477-11	ELECT	47MF	20%	16V
C378	1-124-465-00	ELECT	0.47MF	20%	50V
C379	1-161-379-00	CERAMIC	0.01MF	30%	16V
C380	1-124-446-11	ELECT	47MF	20%	10V
C383	1-123-875-11	ELECT	10MF	20%	50V
C384	1-123-875-11	ELECT	10MF	20%	50V
C385	1-124-465-00	ELECT	0.47MF	20%	50V
C386	1-124-499-11	ELECT	1MF	20%	50V
C387	1-101-880-00	CERAMIC	47PF	5%	50V
C388	1-102-951-00	CERAMIC	15PF	5%	50V
C389	1-102-959-00	CERAMIC	22PF	5%	50V
C391	1-124-446-11	ELECT	47MF	20%	10V
C392	1-124-446-11	ELECT	47MF	20%	10V
C393	1-161-379-00	CERAMIC	0.01MF	30%	16V
C394	1-161-379-00	CERAMIC	0.01MF	30%	16V
C395	1-124-446-11	ELECT	47MF	20%	10V
C396	1-124-446-11	ELECT	47MF	20%	10V
C397	1-124-446-11	ELECT	47MF	20%	10V
C398	1-102-816-00	CERAMIC	120PF	5%	50V
C399	1-124-446-11	ELECT	47MF	20%	10V
C400	1-102-965-00	CERAMIC	39PF	5%	50V
C401	1-124-477-11	ELECT	47MF	20%	16V
C402	1-161-379-00	CERAMIC	0.01MF	30%	16V
C403	1-124-446-11	ELECT	47MF	20%	10V

Ref.No	Part No.	Description			Remark
C404	1-161-379-00	CERAMIC	0.01MF	30%	16V
C405	1-162-851-11	CERAMIC	0.1MF	10%	16V
C406	1-162-851-11	CERAMIC	0.1MF	10%	16V
C407	1-162-851-11	CERAMIC	0.1MF	10%	16V
C408	1-162-851-11	CERAMIC	0.1MF	10%	16V
C409	1-162-851-11	CERAMIC	0.1MF	10%	16V
C410	1-124-477-11	ELECT	47MF	20%	16V
C411	1-124-477-11	ELECT	47MF	20%	16V
C412	1-124-477-11	ELECT	47MF	20%	16V
C413	1-161-379-00	CERAMIC	0.01MF	30%	16V
C414	1-124-446-11	ELECT	47MF	20%	10V
C415	1-161-379-00	CERAMIC	0.01MF	30%	16V
C416	1-124-477-11	ELECT	47MF	20%	25V
C417	1-161-379-00	CERAMIC	0.01MF	30%	16V
C418	1-124-902-00	ELECT	0.47MF	20%	50V
C419	1-123-875-11	ELECT	10MF	20%	50V
C420	1-161-379-00	CERAMIC	0.01MF	30%	16V
C421	1-101-888-00	CERAMIC	68PF	5%	50V
C422	1-161-379-00	CERAMIC	0.01MF	30%	16V
C423	1-124-446-11	ELECT	47MF	20%	10V
C424	1-124-446-11	ELECT	47MF	20%	10V
C425	1-161-379-00	CERAMIC	0.01MF	30%	16V
C426	1-126-176-11	ELECT	220MF	20%	10V
C427	1-126-176-11	ELECT	220MF	20%	10V
C500	1-123-875-11	ELECT	10MF	20%	50V
C503	1-102-947-00	CERAMIC	10PF	0.5PF	50V

CONNECTOR

CN100	1-506-469-11	PIN, CONNECTOR 4P	
CN101	1-506-469-11	PIN, CONNECTOR 4P	
CN103	1-506-468-11	PIN, CONNECTOR 3P	
CN104	1-506-470-11	PIN, CONNECTOR 5P	
CN105	*1-506-470-11	PIN, CONNECTOR 5P	
CN113	1-506-468-11	PIN, CONNECTOR 3P	
CN115	*1-560-892-00	PIN, CONNECTOR 4P	
CN119	1-506-469-11	PIN, CONNECTOR 4P	
CN124	1-506-468-11	PIN, CONNECTOR 3P	
CN127	1-506-468-11	PIN, CONNECTOR 3P	
CN128	1-506-471-11	PIN, CONNECTOR 6P	
CN511	1-506-467-11	PIN, CONNECTOR 2P	

TRIMMER

CV205	1-141-245-00	TRIMMER, CERAMIC
CV247	1-141-245-00	TRIMMER, CERAMIC

DIODE

D101	8-719-911-19	DIODE 1SS119
D102	8-719-911-19	DIODE 1SS119
D103	8-719-911-19	DIODE 1SS119
D104	8-719-911-19	DIODE 1SS119
D201	8-719-911-19	DIODE 1SS119
D203	8-719-109-86	DIODE RD5.1ESB3

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark
D204	8-719-911-19	DIODE 1SS119	
D205	8-719-911-19	DIODE 1SS119	
D209	8-719-911-19	DIODE 1SS119	
D210	8-719-911-19	DIODE 1SS119	
D211	8-719-911-19	DIODE 1SS119	
D233	8-719-920-95	DIODE 1T25-0	
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D304	8-719-911-19	DIODE 1SS119	
D305	8-719-911-19	DIODE 1SS119	
D306	8-719-911-19	DIODE 1SS119	
D307	8-719-911-19	DIODE 1SS119	
D308	8-719-911-19	DIODE 1SS119	
D309	8-719-911-19	DIODE 1SS119	
D310	8-719-911-19	DIODE 1SS119	
D311	8-719-911-19	DIODE 1SS119	
D312	8-719-911-19	DIODE 1SS119	
		IC	
IC101	8-759-140-53	IC UPD4053BC	
IC102	8-759-603-55	IC M51272P	
IC103	8-759-602-06	IC M5109P	
IC104	8-759-001-42	IC MC74HC174N	
IC201	8-759-140-53	IC UPD4053BC	
IC202	8-752-321-16	IC CXD1030M	
IC203	8-752-006-12	IC CX20061	
IC204	8-759-302-99	IC CX20186	
IC205	8-759-001-42	IC MC74HC174N	
IC207	8-759-140-53	IC UPD4053BC	
IC208	8-759-103-19	IC UPC319C	
IC301	8-759-140-53	IC UPD4053BC	
IC302	8-759-140-53	IC UPD4053BC	
IC303	8-759-140-53	IC UPD4053BC	
IC304	8-759-602-06	IC M5109P	
IC305	8-759-602-06	IC M5109P	
IC306	8-759-973-61	IC TL026CP	
IC307	8-759-990-82	IC TL082CP	
IC308	8-759-132-40	IC UPC324C	
IC309	8-759-973-61	IC TL026CP	
		COIL	
L147	1-410-478-11	INDUCTOR 47UH	
L201	1-410-476-11	INDUCTOR 33UH	
L202	1-408-411-00	INDUCTOR 15UH	
L301	1-410-471-11	INDUCTOR 12UH	
L302	1-410-478-11	INDUCTOR 47UH	
		TRANSISTOR	
Q101	8-729-900-80	TRANSISTOR DTC114ES	
Q102	8-729-625-91	TRANSISTOR 2SC2259-F	
Q103	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q104	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q105	8-729-900-80	TRANSISTOR DTC114ES	
Q106	8-729-625-91	TRANSISTOR 2SC2259-F	
Q107	8-729-625-91	TRANSISTOR 2SC2259-F	
Q108	8-729-900-80	TRANSISTOR DTC114ES	
Q109	8-729-900-80	TRANSISTOR DTC114ES	
Q110	8-729-900-80	TRANSISTOR DTC114ES	
Q111	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q112	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q113	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q114	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q115	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q116	8-729-900-80	TRANSISTOR DTC114ES	
Q117	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q118	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q120	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q121	8-729-139-96	TRANSISTOR 2SC2785-HFE	
Q122	8-729-900-80	TRANSISTOR DTC114ES	
Q123	8-729-900-80	TRANSISTOR DTC114ES	
Q124	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q125	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q126	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q127	8-729-173-38	TRANSISTOR 2SA733-K	
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q203	8-729-900-80	TRANSISTOR DTC114ES	
Q204	8-729-900-61	TRANSISTOR DTA114ES	
Q205	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q206	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q207	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q208	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q209	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q211	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q212	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q213	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q214	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q215	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q216	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q217	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q218	8-729-173-38	TRANSISTOR 2SA733-K	
Q219	8-729-173-38	TRANSISTOR 2SA733-K	
Q220	8-729-173-38	TRANSISTOR 2SA733-K	
Q221	8-729-173-38	TRANSISTOR 2SA733-K	
Q222	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q223	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q301	8-729-173-38	TRANSISTOR 2SA733-K	
Q302	8-729-900-61	TRANSISTOR DTA114ES	
Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q304	8-729-173-38	TRANSISTOR 2SA733-K	
Q305	8-729-173-38	TRANSISTOR 2SA733-K	
Q306	8-729-173-38	TRANSISTOR 2SA733-K	
Q307	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q309	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q310	8-729-119-78	TRANSISTOR 2SC2785-HFE	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
Q311	8-729-173-38	TRANSISTOR 2SA733-K	
Q312	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q313	8-729-173-38	TRANSISTOR 2SA733-K	
Q314	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q315	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q316	8-729-173-38	TRANSISTOR 2SA733-K	
Q318	8-729-173-38	TRANSISTOR 2SA733-K	
Q319	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q320	8-729-173-38	TRANSISTOR 2SA733-K	
Q321	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q322	8-729-900-61	TRANSISTOR DTA114ES	
Q323	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q324	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q325	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q326	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q327	8-729-173-38	TRANSISTOR 2SA733-K	
Q328	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q329	8-729-900-80	TRANSISTOR DTC114ES	
Q330	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q331	8-729-173-38	TRANSISTOR 2SA733-K	
Q332	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q333	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q334	8-729-173-38	TRANSISTOR 2SA733-K	
Q335	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q336	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q337	8-729-173-38	TRANSISTOR 2SA733-K	
Q338	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q340	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q341	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q342	8-729-173-38	TRANSISTOR 2SA733-K	
Q343	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q344	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q345	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q346	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q347	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q348	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q349	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q350	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q351	8-729-173-38	TRANSISTOR 2SA733-K	
Q352	8-729-173-38	TRANSISTOR 2SA733-K	
Q353	8-729-625-91	TRANSISTOR 2SC2259-F	
Q354	8-729-697-92	TRANSISTOR 2SA979	
Q355	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q356	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q357	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q359	8-729-173-38	TRANSISTOR 2SA733-K	
Q360	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q361	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q370	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q371	8-729-173-38	TRANSISTOR 2SA733-K	
Q372	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q373	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q374	8-729-173-38	TRANSISTOR 2SA733-K	
Q375	8-729-625-91	TRANSISTOR 2SC2259-F	
Q376	8-729-173-38	TRANSISTOR 2SA733-K	
Q377	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q378	8-729-900-80	TRANSISTOR DTC114ES	
Q379	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q380	8-729-119-78	TRANSISTOR 2SC2785-HFE	

RESISTOR

Ref.No	Part No.	Description				Remark
R101	1-249-413-11	CARBON	470	5%	1/4W	
R102	1-249-413-11	CARBON	470	5%	1/4W	
R103	1-249-417-11	CARBON	1K	5%	1/4W	
R104	1-249-413-11	CARBON	470	5%	1/4W	
R105	1-249-417-11	CARBON	1K	5%	1/4W	
R106	1-249-424-11	CARBON	3.9K	5%	1/4W	
R107	1-249-408-11	CARBON	180	5%	1/4W	
R108	1-249-421-11	CARBON	2.2K	5%	1/4W	
R109	1-249-433-11	CARBON	22K	5%	1/4W	
R110	1-249-429-11	CARBON	10K	5%	1/4W	
R111	1-249-417-11	CARBON	1K	5%	1/4W	
R112	1-249-417-11	CARBON	1K	5%	1/4W	
R113	1-249-421-11	CARBON	2.2K	5%	1/4W	
R114	1-249-413-11	CARBON	470	5%	1/4W	
R115	1-249-417-11	CARBON	1K	5%	1/4W	
R116	1-249-413-11	CARBON	470	5%	1/4W	
R117	1-249-417-11	CARBON	1K	5%	1/4W	
R118	1-249-417-11	CARBON	1K	5%	1/4W	
R119	1-249-413-11	CARBON	470	5%	1/4W	
R120	1-249-417-11	CARBON	1K	5%	1/4W	
R121	1-249-413-11	CARBON	470	5%	1/4W	
R124	1-249-421-11	CARBON	2.2K	5%	1/4W	
R125	1-249-410-11	CARBON	270	5%	1/4W	
R126	1-249-417-11	CARBON	1K	5%	1/4W	
R127	1-249-433-11	CARBON	22K	5%	1/4W	
R128	1-249-429-11	CARBON	10K	5%	1/4W	
R129	1-249-418-11	CARBON	1.2K	5%	1/4W	
R130	1-249-417-11	CARBON	1K	5%	1/4W	
R131	1-249-429-11	CARBON	10K	5%	1/4W	
R132	1-249-413-11	CARBON	470	5%	1/4W	
R133	1-249-421-11	CARBON	2.2K	5%	1/4W	
R134	1-249-413-11	CARBON	470	5%	1/4W	
R135	1-249-429-11	CARBON	10K	5%	1/4W	
R136	1-249-421-11	CARBON	2.2K	5%	1/4W	
R137	1-249-417-11	CARBON	1K	5%	1/4W	
R138	1-249-417-11	CARBON	1K	5%	1/4W	
R139	1-249-421-11	CARBON	2.2K	5%	1/4W	
R140	1-249-421-11	CARBON	2.2K	5%	1/4W	
R141	1-249-429-11	CARBON	10K	5%	1/4W	
R142	1-249-429-11	CARBON	10K	5%	1/4W	
R143	1-215-453-00	METAL	22K	1%	1/6W	
R144	1-215-449-00	METAL	15K	1%	1/6W	
R145	1-215-453-00	METAL	22K	1%	1/6W	
R146	1-215-449-00	METAL	15K	1%	1/6W	
R149	1-249-429-11	CARBON	10K	5%	1/4W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R150	1-249-433-11	CARBON	22K	5%	1/4W	
R151	1-249-411-11	CARBON	330	5%	1/4W	
R152	1-249-409-11	CARBON	220	5%	1/4W	
R153	1-249-413-11	CARBON	470	5%	1/4W	
R154	1-249-417-11	CARBON	1K	5%	1/4W	
R155	1-249-413-11	CARBON	470	5%	1/4W	
R158	1-249-413-11	CARBON	470	5%	1/4W	
R159	1-249-421-11	CARBON	2.2K	5%	1/4W	
R160	1-249-409-11	CARBON	220	5%	1/4W	
R161	1-249-421-11	CARBON	2.2K	5%	1/4W	
R162	1-249-417-11	CARBON	1K	5%	1/4W	
R163	1-249-417-11	CARBON	1K	5%	1/4W	
R164	1-249-411-11	CARBON	330	5%	1/4W	
R165	1-249-416-11	CARBON	820	5%	1/4W	
R166	1-249-413-11	CARBON	470	5%	1/4W	
R167	1-249-416-11	CARBON	820	5%	1/4W	
R170	1-249-413-11	CARBON	470	5%	1/4W	
R171	1-249-421-11	CARBON	2.2K	5%	1/4W	
R172	1-249-410-11	CARBON	270	5%	1/4W	
R173	1-249-417-11	CARBON	1K	5%	1/4W	
R174	1-249-433-11	CARBON	22K	5%	1/4W	
R175	1-249-429-11	CARBON	10K	5%	1/4W	
R176	1-249-418-11	CARBON	1.2K	5%	1/4W	
R177	1-249-417-11	CARBON	1K	5%	1/4W	
R178	1-249-429-11	CARBON	10K	5%	1/4W	
R179	1-249-413-11	CARBON	470	5%	1/4W	
R180	1-249-421-11	CARBON	2.2K	5%	1/4W	
R181	1-249-429-11	CARBON	10K	5%	1/4W	
R182	1-249-413-11	CARBON	470	5%	1/4W	
R183	1-249-421-11	CARBON	2.2K	5%	1/4W	
R184	1-249-417-11	CARBON	1K	5%	1/4W	
R185	1-249-417-11	CARBON	1K	5%	1/4W	
R186	1-249-429-11	CARBON	10K	5%	1/4W	
R200	1-249-429-11	CARBON	10K	5%	1/4W	
R201	1-249-429-11	CARBON	10K	5%	1/4W	
R202	1-249-429-11	CARBON	10K	5%	1/4W	
R203	1-249-415-11	CARBON	680	5%	1/4W	
R204	1-249-413-11	CARBON	470	5%	1/4W	
R206	1-249-408-11	CARBON	180	5%	1/4W	
R207	1-249-417-11	CARBON	1K	5%	1/4W	
R208	1-249-417-11	CARBON	1K	5%	1/4W	
R209	1-247-903-00	CARBON	1M	5%	1/4W	
R211	1-249-414-11	CARBON	560	5%	1/4W	
R212	1-249-431-11	CARBON	15K	5%	1/4W	
R213	1-249-425-11	CARBON	4.7K	5%	1/4W	
R214	1-249-433-11	CARBON	22K	5%	1/4W	
R215	1-249-437-11	CARBON	47K	5%	1/4W	
R216	1-249-429-11	CARBON	10K	5%	1/4W	
R217	1-249-421-11	CARBON	2.2K	5%	1/4W	
R219	1-249-415-11	CARBON	680	5%	1/4W	
R221	1-249-429-11	CARBON	10K	5%	1/4W	
R222	1-249-421-11	CARBON	2.2K	5%	1/4W	
R223	1-249-438-11	CARBON	56K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R224	1-249-426-11	CARBON	5.6K	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R227	1-249-433-11	CARBON	22K	5%	1/4W	
R228	1-249-423-11	CARBON	3.3K	5%	1/4W	
R229	1-247-903-00	CARBON	1M	5%	1/4W	
R230	1-247-893-11	CARBON	390K	5%	1/4W	
R231	1-249-417-11	CARBON	1K	5%	1/4W	
R232	1-249-413-11	CARBON	470	5%	1/4W	
R233	1-249-429-11	CARBON	10K	5%	1/4W	
R234	1-249-417-11	CARBON	1K	5%	1/4W	
R241	1-249-413-11	CARBON	470	5%	1/4W	
R242	1-249-433-11	CARBON	22K	5%	1/4W	
R243	1-249-417-11	CARBON	1K	5%	1/4W	
R244	1-249-413-11	CARBON	470	5%	1/4W	
R245	1-249-433-11	CARBON	22K	5%	1/4W	
R246	1-249-417-11	CARBON	1K	5%	1/4W	
R247	1-249-429-11	CARBON	10K	5%	1/4W	
R248	1-247-838-00	CARBON	2K	5%	1/4W	
R249	1-247-838-00	CARBON	2K	5%	1/4W	
R251	1-247-838-00	CARBON	2K	5%	1/4W	
R252	1-247-838-00	CARBON	2K	5%	1/4W	
R254	1-249-429-11	CARBON	10K	5%	1/4W	
R255	1-249-429-11	CARBON	10K	5%	1/4W	
R256	1-249-421-11	CARBON	2.2K	5%	1/4W	
R257	1-249-426-11	CARBON	5.6K	5%	1/4W	
R258	1-249-409-11	CARBON	220	5%	1/4W	
R259	1-249-425-11	CARBON	4.7K	5%	1/4W	
R260	1-249-417-11	CARBON	1K	5%	1/4W	
R262	1-249-436-11	CARBON	39K	5%	1/4W	
R263	1-249-419-11	CARBON	1.5K	5%	1/4W	
R264	1-249-413-11	CARBON	470	5%	1/4W	
R265	1-249-417-11	CARBON	1K	5%	1/4W	
R266	1-249-417-11	CARBON	1K	5%	1/4W	
R267	1-249-434-11	CARBON	27K	5%	1/4W	
R268	1-249-437-11	CARBON	47K	5%	1/4W	
R269	1-249-409-11	CARBON	220	5%	1/4W	
R270	1-249-425-11	CARBON	4.7K	5%	1/4W	
R271	1-249-413-11	CARBON	470	5%	1/4W	
R272	1-249-413-11	CARBON	470	5%	1/4W	
R273	1-249-425-11	CARBON	4.7K	5%	1/4W	
R274	1-249-426-11	CARBON	5.6K	5%	1/4W	
R279	1-249-441-11	CARBON	100K	5%	1/4W	
R280	1-249-429-11	CARBON	10K	5%	1/4W	
R281	1-247-887-00	CARBON	220K	5%	1/4W	
R282	1-249-425-11	CARBON	4.7K	5%	1/4W	
R283	1-249-429-11	CARBON	10K	5%	1/4W	
R286	1-249-430-11	CARBON	12K	5%	1/4W	
R288	1-249-433-11	CARBON	22K	5%	1/4W	
R301	1-249-413-11	CARBON	470	5%	1/4W	
R302	1-249-429-11	CARBON	10K	5%	1/4W	
R303	1-249-435-11	CARBON	33K	5%	1/4W	
R304	1-249-417-11	CARBON	1K	5%	1/4W	

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Ref.No	Part No.	Description				Remark
R305	1-249-413-11	CARBON	470	5%	1/4W	
R306	1-249-405-11	CARBON	100	5%	1/4W	
R307	1-249-421-11	CARBON	2.2K	5%	1/4W	
R308	1-249-418-11	CARBON	1.2K	5%	1/4W	
R309	1-249-423-11	CARBON	3.3K	5%	1/4W	
R310	1-249-413-11	CARBON	470	5%	1/4W	
R311	1-249-421-11	CARBON	2.2K	5%	1/4W	
R312	1-249-422-11	CARBON	2.7K	5%	1/4W	
R313	1-249-418-11	CARBON	1.2K	5%	1/4W	
R314	1-249-413-11	CARBON	470	5%	1/4W	
R315	1-249-423-11	CARBON	3.3K	5%	1/4W	
R316	1-249-413-11	CARBON	470	5%	1/4W	
R317	1-249-431-11	CARBON	15K	5%	1/4W	
R318	1-249-425-11	CARBON	4.7K	5%	1/4W	
R319	1-249-413-11	CARBON	470	5%	1/4W	
R320	1-249-421-11	CARBON	2.2K	5%	1/4W	
R321	1-249-421-11	CARBON	2.2K	5%	1/4W	
R322	1-249-433-11	CARBON	22K	5%	1/4W	
R323	1-249-413-11	CARBON	470	5%	1/4W	
R324	1-249-413-11	CARBON	470	5%	1/4W	
R325	1-249-417-11	CARBON	1K	5%	1/4W	
R326	1-249-413-11	CARBON	470	5%	1/4W	
R327	1-249-429-11	CARBON	10K	5%	1/4W	
R328	1-249-413-11	CARBON	470	5%	1/4W	
R329	1-249-421-11	CARBON	2.2K	5%	1/4W	
R330	1-249-433-11	CARBON	22K	5%	1/4W	
R331	1-249-429-11	CARBON	10K	5%	1/4W	
R332	1-249-413-11	CARBON	470	5%	1/4W	
R333	1-249-413-11	CARBON	470	5%	1/4W	
R335	1-249-408-11	CARBON	180	5%	1/4W	
R336	1-249-421-11	CARBON	2.2K	5%	1/4W	
R337	1-249-413-11	CARBON	470	5%	1/4W	
R338	1-249-426-11	CARBON	5.6K	5%	1/4W	
R339	1-249-417-11	CARBON	1K	5%	1/4W	
R340	1-249-417-11	CARBON	1K	5%	1/4W	
R341	1-249-413-11	CARBON	470	5%	1/4W	
R342	1-249-413-11	CARBON	470	5%	1/4W	
R343	1-249-417-11	CARBON	1K	5%	1/4W	
R344	1-249-411-11	CARBON	330	5%	1/4W	
R345	1-249-417-11	CARBON	1K	5%	1/4W	
R348	1-249-421-11	CARBON	2.2K	5%	1/4W	
R349	1-249-441-11	CARBON	100K	5%	1/4W	
R350	1-249-431-11	CARBON	15K	5%	1/4W	
R351	1-249-427-11	CARBON	6.8K	5%	1/4W	
R352	1-249-435-11	CARBON	33K	5%	1/4W	
R353	1-249-435-11	CARBON	33K	5%	1/4W	
R354	1-249-408-11	CARBON	180	5%	1/4W	
R355	1-249-421-11	CARBON	2.2K	5%	1/4W	
R356	1-249-423-11	CARBON	3.3K	5%	1/4W	
R357	1-249-413-11	CARBON	470	5%	1/4W	
R358	1-249-429-11	CARBON	10K	5%	1/4W	
R359	1-249-425-11	CARBON	4.7K	5%	1/4W	
R360	1-249-433-11	CARBON	22K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R361	1-249-421-11	CARBON	2.2K	5%	1/4W	
R362	1-249-413-11	CARBON	470	5%	1/4W	
R363	1-249-423-11	CARBON	3.3K	5%	1/4W	
R364	1-215-437-00	METAL	4.7K	1%	1/6W	
R365	1-215-425-00	METAL	1.5K	1%	1/6W	
R366	1-249-425-11	CARBON	4.7K	5%	1/4W	
R368	1-249-421-11	CARBON	2.2K	5%	1/4W	
R369	1-249-413-11	CARBON	470	5%	1/4W	
R370	1-249-411-11	CARBON	330	5%	1/4W	
R371	1-249-416-11	CARBON	820	5%	1/4W	
R372	1-249-417-11	CARBON	1K	5%	1/4W	
R373	1-249-417-11	CARBON	1K	5%	1/4W	
R374	1-249-416-11	CARBON	820	5%	1/4W	
R375	1-249-419-11	CARBON	1.5K	5%	1/4W	
R376	1-249-409-11	CARBON	220	5%	1/4W	
R377	1-249-413-11	CARBON	470	5%	1/4W	
R378	1-249-421-11	CARBON	2.2K	5%	1/4W	
R379	1-249-405-11	CARBON	100	5%	1/4W	
R380	1-249-409-11	CARBON	220	5%	1/4W	
R381	1-249-415-11	CARBON	680	5%	1/4W	
R382	1-249-421-11	CARBON	2.2K	5%	1/4W	
R383	1-249-411-11	CARBON	330	5%	1/4W	
R384	1-249-416-11	CARBON	820	5%	1/4W	
R385	1-249-416-11	CARBON	820	5%	1/4W	
R387	1-249-417-11	CARBON	1K	5%	1/4W	
R389	1-249-413-11	CARBON	470	5%	1/4W	
R390	1-249-421-11	CARBON	2.2K	5%	1/4W	
R391	1-249-421-11	CARBON	2.2K	5%	1/4W	
R392	1-249-426-11	CARBON	5.6K	5%	1/4W	
R393	1-249-425-11	CARBON	4.7K	5%	1/4W	
R394	1-249-413-11	CARBON	470	5%	1/4W	
R395	1-249-413-11	CARBON	470	5%	1/4W	
R396	1-249-421-11	CARBON	2.2K	5%	1/4W	
R397	1-249-417-11	CARBON	1K	5%	1/4W	
R398	1-215-421-00	METAL	1K	1%	1/6W	
R399	1-215-421-00	METAL	1K	1%	1/6W	
R400	1-249-429-11	CARBON	10K	5%	1/4W	
R401	1-249-413-11	CARBON	470	5%	1/4W	
R402	1-249-429-11	CARBON	10K	5%	1/4W	
R403	1-249-433-11	CARBON	22K	5%	1/4W	
R404	1-249-421-11	CARBON	2.2K	5%	1/4W	
R405	1-249-417-11	CARBON	1K	5%	1/4W	
R406	1-249-421-11	CARBON	2.2K	5%	1/4W	
R407	1-249-411-11	CARBON	330	5%	1/4W	
R408	1-249-417-11	CARBON	1K	5%	1/4W	
R409	1-249-415-11	CARBON	680	5%	1/4W	
R410	1-249-406-11	CARBON	120	5%	1/4W	
R411	1-249-421-11	CARBON	2.2K	5%	1/4W	
R413	1-249-421-11	CARBON	2.2K	5%	1/4W	
R414	1-249-416-11	CARBON	820	5%	1/4W	
R415	1-249-421-11	CARBON	2.2K	5%	1/4W	
R416	1-249-406-11	CARBON	120	5%	1/4W	
R417	1-249-421-11	CARBON	2.2K	5%	1/4W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R418	1-249-418-11	CARBON	1.2K	5%	1/4W	
R419	1-247-903-00	CARBON	1M	5%	1/4W	
R420	1-247-903-00	CARBON	1M	5%	1/4W	
R421	1-249-417-11	CARBON	1K	5%	1/4W	
R422	1-249-417-11	CARBON	1K	5%	1/4W	
R423	1-249-417-11	CARBON	1K	5%	1/4W	
R424	1-249-417-11	CARBON	1K	5%	1/4W	
R425	1-249-427-11	CARBON	6.8K	5%	1/4W	
R426	1-249-429-11	CARBON	10K	5%	1/4W	
R427	1-249-429-11	CARBON	10K	5%	1/4W	
R428	1-249-431-11	CARBON	15K	5%	1/4W	
R429	1-249-429-11	CARBON	10K	5%	1/4W	
R430	1-249-417-11	CARBON	1K	5%	1/4W	
R431	1-249-421-11	CARBON	2.2K	5%	1/4W	
R432	1-249-419-11	CARBON	1.5K	5%	1/4W	
R433	1-249-421-11	CARBON	2.2K	5%	1/4W	
R435	1-249-415-11	CARBON	680	5%	1/4W	
R436	1-249-413-11	CARBON	470	5%	1/4W	
R437	1-249-408-11	CARBON	180	5%	1/4W	
R438	1-249-421-11	CARBON	2.2K	5%	1/4W	
R439	1-249-411-11	CARBON	330	5%	1/4W	
R440	1-249-413-11	CARBON	470	5%	1/4W	
R441	1-249-423-11	CARBON	3.3K	5%	1/4W	
R442	1-249-417-11	CARBON	1K	5%	1/4W	
R443	1-249-423-11	CARBON	3.3K	5%	1/4W	
R444	1-249-417-11	CARBON	1K	5%	1/4W	
R445	1-249-435-11	CARBON	33K	5%	1/4W	
R446	1-249-429-11	CARBON	10K	5%	1/4W	
R449	1-249-435-11	CARBON	33K	5%	1/4W	
R450	1-249-431-11	CARBON	15K	5%	1/4W	
R451	1-249-417-11	CARBON	1K	5%	1/4W	
R452	1-249-417-11	CARBON	1K	5%	1/4W	
R453	1-249-417-11	CARBON	1K	5%	1/4W	
R454	1-249-413-11	CARBON	470	5%	1/4W	
R455	1-249-417-11	CARBON	1K	5%	1/4W	
R456	1-249-417-11	CARBON	1K	5%	1/4W	
R457	1-249-413-11	CARBON	470	5%	1/4W	
R458	1-249-413-11	CARBON	470	5%	1/4W	
R459	1-249-417-11	CARBON	1K	5%	1/4W	
R460	1-249-435-11	CARBON	33K	5%	1/4W	
R461	1-249-431-11	CARBON	15K	5%	1/4W	
R462	1-249-411-11	CARBON	330	5%	1/4W	
R463	1-249-415-11	CARBON	680	5%	1/4W	
R464	1-249-417-11	CARBON	1K	5%	1/4W	
R465	1-249-423-11	CARBON	3.3K	5%	1/4W	
R466	1-249-413-11	CARBON	470	5%	1/4W	
R467	1-249-421-11	CARBON	2.2K	5%	1/4W	
R468	1-249-421-11	CARBON	2.2K	5%	1/4W	
R469	1-249-431-11	CARBON	15K	5%	1/4W	
R470	1-249-429-11	CARBON	10K	5%	1/4W	
R471	1-249-431-11	CARBON	15K	5%	1/4W	
R472	1-249-425-11	CARBON	4.7K	5%	1/4W	
R473	1-249-419-11	CARBON	1.5K	5%	1/4W	
R474	1-249-417-11	CARBON	1K	5%	1/4W	
R475	1-249-417-11	CARBON	1K	5%	1/4W	
R476	1-249-425-11	CARBON	4.7K	5%	1/4W	
R477	1-249-431-11	CARBON	15K	5%	1/4W	
R478	1-249-413-11	CARBON	470	5%	1/4W	
R479	1-249-421-11	CARBON	2.2K	5%	1/4W	
R480	1-249-433-11	CARBON	22K	5%	1/4W	
R481	1-249-425-11	CARBON	4.7K	5%	1/4W	
R482	1-249-411-11	CARBON	330	5%	1/4W	
R483	1-249-417-11	CARBON	1K	5%	1/4W	
R484	1-249-417-11	CARBON	1K	5%	1/4W	
R485	1-249-411-11	CARBON	330	5%	1/4W	
R486	1-249-413-11	CARBON	470	5%	1/4W	
R487	1-249-423-11	CARBON	3.3K	5%	1/4W	
R488	1-249-413-11	CARBON	470	5%	1/4W	
R489	1-215-445-00	METAL	10K	1%	1/6W	
R490	1-215-445-00	METAL	10K	1%	1/6W	
R491	1-249-419-11	CARBON	1.5K	5%	1/4W	
R492	1-249-413-11	CARBON	470	5%	1/4W	
R493	1-249-419-11	CARBON	1.5K	5%	1/4W	
R494	1-249-413-11	CARBON	470	5%	1/4W	
R495	1-249-421-11	CARBON	2.2K	5%	1/4W	
R496	1-215-421-00	METAL	1K	1%	1/6W	
R497	1-215-421-00	METAL	1K	1%	1/6W	
R498	1-249-421-11	CARBON	2.2K	5%	1/4W	
R499	1-249-421-11	CARBON	2.2K	5%	1/4W	
R500	1-249-417-11	CARBON	1K	5%	1/4W	
R501	1-249-418-11	CARBON	1.2K	5%	1/4W	
R502	1-249-417-11	CARBON	1K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-249-431-11	CARBON	15K	5%	1/4W	
R505	1-249-427-11	CARBON	6.8K	5%	1/4W	
R506	1-249-427-11	CARBON	6.8K	5%	1/4W	
R507	1-249-431-11	CARBON	15K	5%	1/4W	
R508	1-249-417-11	CARBON	1K	5%	1/4W	
R509	1-249-417-11	CARBON	1K	5%	1/4W	
R510	1-249-429-11	CARBON	10K	5%	1/4W	
R511	1-249-423-11	CARBON	3.3K	5%	1/4W	
R512	1-249-413-11	CARBON	470	5%	1/4W	
R513	1-249-413-11	CARBON	470	5%	1/4W	
R514	1-249-417-11	CARBON	1K	5%	1/4W	
R515	1-249-411-11	CARBON	330	5%	1/4W	
R516	1-249-421-11	CARBON	2.2K	5%	1/4W	
R517	1-249-421-11	CARBON	2.2K	5%	1/4W	
R518	1-249-431-11	CARBON	15K	5%	1/4W	
R519	1-249-427-11	CARBON	6.8K	5%	1/4W	
R520	1-249-408-11	CARBON	180	5%	1/4W	
R521	1-249-423-11	CARBON	3.3K	5%	1/4W	
R522	1-249-413-11	CARBON	470	5%	1/4W	
R525	1-249-413-11	CARBON	470	5%	1/4W	
R526	1-249-421-11	CARBON	2.2K	5%	1/4W	
R527	1-249-417-11	CARBON	1K	5%	1/4W	
R530	1-249-413-11	CARBON	470	5%	1/4W	

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Ref.No	Part No.	Description				Remark
R531	1-249-441-11	CARBON	100K	5%	1/4W	
R553	1-249-409-11	CARBON	220	5%	1/4W	
R554	1-249-413-11	CARBON	470	5%	1/4W	
R555	1-249-411-11	CARBON	330	5%	1/4W	
R600	1-249-413-11	CARBON	470	5%	1/4W	
R601	1-249-421-11	CARBON	2.2K	5%	1/4W	
R602	1-249-421-11	CARBON	2.2K	5%	1/4W	
R603	1-249-413-11	CARBON	470	5%	1/4W	
R608	1-249-421-11	CARBON	2.2K	5%	1/4W	
R609	1-249-413-11	CARBON	470	5%	1/4W	
R610	1-249-429-11	CARBON	10K	5%	1/4W	
R900	1-247-804-11	CARBON	75	5%	1/4W	
		VARIABLE RESISTOR				
RV101	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV102	1-228-990-00	RES, ADJ, CARBON 1K				
RV103	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV104	1-228-994-00	RES, ADJ, METAL GLAZE 10K				
RV105	1-228-994-00	RES, ADJ, METAL GLAZE 10K				
RV201	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV202	1-228-995-00	RES, ADJ, CARBON 22K				
RV301	1-228-990-00	RES, ADJ, CARBON 1K				
RV302	1-228-990-00	RES, ADJ, METAL GLAZE 1K				
RV303	1-228-990-00	RES, ADJ, METAL GLAZE 1K				
RV304	1-228-990-00	RES, ADJ, METAL GLAZE 1K				
RV305	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV306	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV308	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV314	1-228-990-00	RES, ADJ, CARBON 1K				
RV315	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV316	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K				
RV317	1-228-993-00	RES, ADJ, CARBON 4.7K				
RV318	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV334	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV400	1-228-991-00	RES, ADJ, CARBON 2.2K				
		RELAY				
RY201	1-515-529-11	RELAY				
RY202	1-515-529-11	RELAY				
		CRYSTAL				
X201	1-527-723-00	VIBRATOR, CRYSTAL (14.1875MHz)				
X202	1-567-733-11	VIBRATOR, CRYSTAL (17.73MHz)				

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Ref.No	Part No.	Description				Remark
	*A-7061-749-A	WF-1 BOARD, COMPLETE				
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	*2-128-437-01	HOLDER (3), PC BOARD				
	*2-382-687-11	HOLDER (2), PC BOARD				
	3-657-842-01	SPACER (3X4)				
	*3-710-565-01	HINGE, PC BOARD				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3				
		CAPACITOR				
C001	1-124-927-11	ELECT	4.7MF	20%	50V	
C002	1-124-927-11	ELECT	4.7MF	20%	50V	
C003	1-126-233-11	ELECT	22MF	20%	25V	
C004	1-126-233-11	ELECT	22MF	20%	25V	
C005	1-123-875-11	ELECT	10MF	20%	50V	
C006	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C007	1-130-477-00	FILM	0.0033MF	5%	50V	
C008	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C009	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C010	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C011	1-124-446-11	ELECT	47MF	20%	10V	
C012	1-161-057-00	CERAMIC	0.033MF	10%	25V	
C013	1-161-057-00	CERAMIC	0.033MF	10%	25V	
C014	1-161-057-00	CERAMIC	0.033MF	10%	25V	
C114	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C115	1-124-477-11	ELECT	47MF	20%	16V	
C201	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C202	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C203	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C204	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C205	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C206	1-102-822-00	CERAMIC	390PF	5%	50V	
C207	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C208	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C209	1-130-477-00	FILM	0.0033MF	5%	50V	
C210	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C211	1-123-875-11	ELECT	10MF	20%	50V	
C212	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C213	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C214	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C215	1-124-477-11	ELECT	47MF	20%	16V	
C216	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C217	1-124-477-11	ELECT	47MF	20%	16V	
C218	1-123-875-11	ELECT	10MF	20%	50V	
C220	1-102-973-00	CERAMIC	100PF	5%	50V	
C221	1-102-973-00	CERAMIC	100PF	5%	50V	
C222	1-124-477-11	ELECT	47MF	20%	16V	
C223	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C224	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C225	1-124-477-11	ELECT	47MF	20%	16V	
C226	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C227	1-124-477-11	ELECT	47MF	20%	16V	
C250	1-124-477-11	ELECT	47MF	20%	16V	
C251	1-124-477-11	ELECT	47MF	20%	16V	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
C252	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C307	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C308	1-123-875-11	ELECT	10MF	20%	50V	
C335	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C336	1-123-875-11	ELECT	10MF	20%	50V	
C401	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C402	1-123-875-11	ELECT	10MF	20%	50V	
C403	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C404	1-123-875-11	ELECT	10MF	20%	50V	
C405	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C501	1-124-477-11	ELECT	47MF	20%	16V	
C502	1-124-477-11	ELECT	47MF	20%	16V	
C503	1-123-875-11	ELECT	10MF	20%	50V	
C504	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C505	1-123-875-11	ELECT	10MF	20%	50V	
C506	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C507	1-123-875-11	ELECT	10MF	20%	50V	
C508	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C509	1-124-477-11	ELECT	47MF	20%	16V	
C510	1-123-875-11	ELECT	10MF	20%	50V	
C511	1-123-875-11	ELECT	10MF	20%	50V	
C512	1-123-875-11	ELECT	10MF	20%	50V	
C513	1-161-051-00	CERAMIC	0.01MF	10%	25V	
C601	1-124-464-11	ELECT	0.22MF	20%	50V	
C602	1-123-875-11	ELECT	10MF	20%	50V	
C603	1-123-875-11	ELECT	10MF	20%	50V	
C604	1-124-443-00	ELECT	100MF	20%	10V	
C605	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C606	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C607	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C608	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C609	1-124-443-00	ELECT	100MF	20%	10V	
C610	1-124-443-00	ELECT	100MF	20%	10V	
C611	1-124-443-00	ELECT	100MF	20%	10V	
C614	1-124-902-00	ELECT	0.47MF	20%	50V	
C616	1-123-875-11	ELECT	10MF	20%	50V	
C617	1-124-902-00	ELECT	0.47MF	20%	50V	
C619	1-123-875-11	ELECT	10MF	20%	50V	
C620	1-124-464-11	ELECT	0.22MF	20%	50V	
C622	1-123-875-11	ELECT	10MF	20%	50V	
C623	1-124-902-00	ELECT	0.47MF	20%	50V	
C625	1-123-875-11	ELECT	10MF	20%	50V	
C628	1-124-902-00	ELECT	0.47MF	20%	50V	
C630	1-123-875-11	ELECT	10MF	20%	50V	
C634	1-124-499-11	ELECT	1MF	20%	50V	
C635	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C636	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C637	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C638	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C639	1-124-443-00	ELECT	100MF	20%	10V	
C640	1-124-443-00	ELECT	100MF	20%	10V	
C641	1-162-851-11	CERAMIC	0.1MF	10%	16V	
C643	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C645	1-124-902-00	ELECT	0.47MF	20%	50V	
C647	1-123-875-11	ELECT	10MF	20%	50V	
C648	1-124-902-00	ELECT	0.47MF	20%	50V	
C651	1-124-464-11	ELECT	0.22MF	20%	50V	
C655	1-124-902-00	ELECT	0.47MF	20%	50V	
C657	1-123-875-11	ELECT	10MF	20%	50V	
C658	1-124-902-00	ELECT	0.47MF	20%	50V	
C660	1-124-120-11	ELECT	220MF	20%	16V	
C661	1-124-464-11	ELECT	0.22MF	20%	50V	
C662	1-124-464-11	ELECT	0.22MF	20%	50V	
C663	1-102-963-00	CERAMIC	33PF	5%	50V	
C666	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C667	1-124-477-11	ELECT	47MF	20%	16V	
C668	1-124-477-11	ELECT	47MF	20%	16V	
C669	1-123-875-11	ELECT	10MF	20%	50V	
C670	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C671	1-123-875-11	ELECT	10MF	20%	50V	
C672	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C673	1-123-875-11	ELECT	10MF	20%	50V	
C674	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C675	1-123-875-11	ELECT	10MF	20%	50V	
C676	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C680	1-102-973-00	CERAMIC	100PF	5%	50V	
C681	1-102-973-00	CERAMIC	100PF	5%	50V	
C682	1-102-951-00	CERAMIC	15PF	5%	50V	
C800	1-102-961-00	CERAMIC	27PF	5%	50V	
C803	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C813	1-126-101-11	ELECT	100MF	20%	16V	
C814	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C815	1-126-233-11	ELECT	22MF	20%	25V	
C816	1-124-443-00	ELECT	100MF	20%	10V	
C817	1-124-477-11	ELECT	47MF	20%	16V	
C818	1-123-875-11	ELECT	10MF	20%	50V	
C819	1-123-875-11	ELECT	10MF	20%	50V	
C820	1-124-473-11	ELECT	1000MF	20%	10V	
C821	1-124-473-11	ELECT	1000MF	20%	10V	
C822	1-124-902-00	ELECT	0.47MF	20%	50V	
C823	1-124-902-00	ELECT	0.47MF	20%	50V	
C824	1-124-499-11	ELECT	1MF	20%	50V	
C825	1-124-499-11	ELECT	1MF	20%	50V	
C828	1-124-902-00	ELECT	0.47MF	20%	50V	
C829	1-124-902-00	ELECT	0.47MF	20%	50V	
C830	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C831	1-124-119-00	ELECT	330MF	20%	16V	
C832	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C833	1-126-101-11	ELECT	100MF	20%	16V	
C841	1-123-875-11	ELECT	10MF	20%	50V	
C926	1-123-875-11	ELECT	10MF	20%	50V	
C927	1-124-902-00	ELECT	0.47MF	20%	50V	
C962	1-126-101-11	ELECT	100MF	20%	16V	
C991	1-102-959-00	CERAMIC	22PF	5%	50V	
C992	1-124-499-11	ELECT	1MF	20%	50V	
C993	1-161-379-00	CERAMIC	0.01MF	30%	16V	

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Ref.No	Part No.	Description			Remark
C994	1-162-851-11	CERAMIC	0.1MF	10% 16V	
C995	1-124-499-11	ELECT	1MF	20% 50V	
C996	1-161-379-00	CERAMIC	0.01MF	30% 16V	
C997	1-124-477-11	ELECT	47MF	20% 16V	
C998	1-124-477-11	ELECT	47MF	20% 16V	
		CONNECTOR			
CN001	1-506-471-11	PIN, CONNECTOR 6P			
CN002	*1-564-005-21	PIN, CONNECTOR 6P			
CN107	1-506-471-11	PIN, CONNECTOR 6P			
CN109	1-506-471-11	PIN, CONNECTOR 6P			
CN116	*1-560-893-00	PIN, CONNECTOR 5P			
CN123	1-506-473-11	PIN, CONNECTOR 8P			
CN125	1-506-467-11	PIN, CONNECTOR 2P			
CN131	1-506-469-11	PIN, CONNECTOR 4P			
CN134	*1-564-001-31	PIN, CONNECTOR 2P			
CN201	*1-564-009-41	PIN, CONNECTOR 10P			
CN202	1-506-468-11	PIN, CONNECTOR 3P			
CN204	1-506-468-11	PIN, CONNECTOR 3P			
CN205	*1-564-001-41	PIN, CONNECTOR 2P			
CN226	*1-564-001-21	PIN, CONNECTOR 2P			
CN304	1-506-469-11	PIN, CONNECTOR 4P			
CN306	1-506-469-11	PIN, CONNECTOR 4P			
		DIODE			
D001	8-719-911-19	DIODE 1SS119			
D002	8-719-911-19	DIODE 1SS119			
D003	8-719-911-19	DIODE 1SS119			
D004	8-719-911-19	DIODE 1SS119			
D005	8-719-911-19	DIODE 1SS119			
D006	8-719-911-19	DIODE 1SS119			
D007	8-719-911-19	DIODE 1SS119			
D008	8-719-911-19	DIODE 1SS119			
D009	8-719-911-19	DIODE 1SS119			
D010	8-719-911-19	DIODE 1SS119			
D011	8-719-911-19	DIODE 1SS119			
D123	8-719-911-19	DIODE 1SS119			
D130	8-719-911-19	DIODE 1SS119			
D201	8-719-118-21	DIODE 1SS283			
D202	8-719-118-21	DIODE 1SS283			
D203	8-719-911-19	DIODE 1SS119			
D401	8-719-911-19	DIODE 1SS119			
D402	8-719-911-19	DIODE 1SS119			
D403	8-719-911-19	DIODE 1SS119			
D404	8-719-911-19	DIODE 1SS119			
D405	8-719-911-19	DIODE 1SS119			
D501	8-719-911-19	DIODE 1SS119			
D502	8-719-911-19	DIODE 1SS119			
D503	8-719-911-19	DIODE 1SS119			
D504	8-719-911-19	DIODE 1SS119			
D505	8-719-911-19	DIODE 1SS119			
D507	8-719-911-19	DIODE 1SS119			
D600	8-719-911-19	DIODE 1SS119			
D701	8-719-911-19	DIODE 1SS119			
D800	8-719-911-19	DIODE 1SS119			
D991	8-719-911-19	DIODE 1SS119			
		DELAY LINE			
DL201	1-415-282-31	DELAY LINE			
		FILTER			
FL601	1-409-468-11	COIL, TRAP			
FL602	1-415-643-11	DL			
		IC			
IC001	8-759-901-74	IC SN74LS174N			
IC002	8-759-291-30	IC TC9130P			
IC003	8-759-202-11	IC TC74HC00P			
IC004	8-759-291-30	IC TC9130P			
IC105	8-759-901-74	IC SN74LS174N			
IC106	8-759-901-23	IC SN74LS123N			
IC107	8-759-208-10	IC TC4053BPHB			
IC302	8-759-208-10	IC TC4053BPHB			
IC401	8-759-135-80	IC UPC358C			
IC501	8-759-140-53	IC UPD4053BC			
IC502	8-759-140-53	IC UPD4053BC			
IC503	8-759-340-13	IC HD14013BP			
IC504	8-759-132-40	IC UPC324C			
IC505	8-759-345-38	IC HD14538BP			
IC601	8-759-602-06	IC M5109P			
IC602	8-752-006-12	IC CX20061			
IC603	8-752-006-12	IC CX20061			
IC604	8-752-006-12	IC CX20061			
IC605	8-759-602-06	IC M5109P			
IC606	8-752-006-12	IC CX20061			
IC607	8-752-006-12	IC CX20061			
IC608	8-752-006-12	IC CX20061			
IC801	8-759-302-XX	IC CX20186			
IC802	8-759-030-67	IC MC14576AP			
IC991	8-752-006-12	IC CX20061			
		COIL			
L201	1-408-408-00	INDUCTOR	8.2UH		
L202	1-408-413-00	INDUCTOR	22UH		
L501	1-410-482-31	INDUCTOR	100UH		
L502	1-410-482-31	INDUCTOR	100UH		
L802	1-410-478-11	INDUCTOR	47UH		
L803	1-408-425-00	INDUCTOR	220UH		
L810	1-410-482-31	INDUCTOR	100UH		
		VARIABLE RESISTOR			
LV201	1-408-512-00	COIL (VARIABLE)	10UM		
LV202	1-408-520-00	COIL, VARIABLE	15UM		
LV203	1-408-520-00	COIL, VARIABLE	15UM		

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark
		TRANSISTOR	
Q001	8-729-900-61	TRANSISTOR DTA114ES	
Q002	8-729-900-61	TRANSISTOR DTA114ES	
Q003	8-729-900-80	TRANSISTOR DTC114ES	
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q203	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q204	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q205	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q206	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q207	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q208	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q209	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q210	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q211	8-729-173-38	TRANSISTOR 2SA733-K	
Q212	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q250	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q251	8-729-173-38	TRANSISTOR 2SA733-K	
Q252	8-729-173-38	TRANSISTOR 2SA733-K	
Q253	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q254	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-900-80	TRANSISTOR DTC114ES	
Q503	8-729-900-61	TRANSISTOR DTA114ES	
Q504	8-729-900-80	TRANSISTOR DTC114ES	
Q505	8-729-900-61	TRANSISTOR DTA114ES	
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-101-38	TRANSISTOR 2SC2785-E	
Q607	8-729-101-38	TRANSISTOR 2SC2785-E	
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q609	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q611	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q612	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q613	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q614	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q615	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q616	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q617	8-729-900-80	TRANSISTOR DTC114ES	
Q618	8-729-101-38	TRANSISTOR 2SC2785-E	
Q619	8-729-101-36	TRANSISTOR 2SC2785-H	
Q624	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q625	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q626	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q627	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q632	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q633	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q635	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q640	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q641	8-729-900-74	TRANSISTOR DTC143TS	
Q643	8-729-173-38	TRANSISTOR 2SA733-K	
Q644	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q645	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q646	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q647	8-729-173-38	TRANSISTOR 2SA733-K	
Q648	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q649	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q701	8-729-900-74	TRANSISTOR DTC143TS	
Q702	8-729-900-74	TRANSISTOR DTC143TS	
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q808	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q991	8-729-173-38	TRANSISTOR 2SC733-K	
Q992	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		RESISTOR	
R001	1-249-429-11	CARBON 10K 5% 1/4W	
R002	1-249-429-11	CARBON 10K 5% 1/4W	
R003	1-249-421-11	CARBON 2.2K 5% 1/4W	
R004	1-249-422-11	CARBON 2.7K 5% 1/4W	
R005	1-249-421-11	CARBON 2.2K 5% 1/4W	
R006	1-249-422-11	CARBON 2.7K 5% 1/4W	
R007	1-249-429-11	CARBON 10K 5% 1/4W	
R008	1-249-431-11	CARBON 15K 5% 1/4W	
R009	1-249-417-11	CARBON 1K 5% 1/4W	
R010	1-249-417-11	CARBON 1K 5% 1/4W	
R201	1-249-429-11	CARBON 10K 5% 1/4W	
R202	1-249-425-11	CARBON 4.7K 5% 1/4W	
R203	1-249-413-11	CARBON 470 5% 1/4W	
R204	1-249-413-11	CARBON 470 5% 1/4W	
R205	1-249-417-11	CARBON 1K 5% 1/4W	
R206	1-249-413-11	CARBON 470 5% 1/4W	
R207	1-249-429-11	CARBON 10K 5% 1/4W	
R208	1-249-425-11	CARBON 4.7K 5% 1/4W	
R209	1-249-412-11	CARBON 390 5% 1/4W	
R210	1-249-412-11	CARBON 390 5% 1/4W	
R211	1-249-412-11	CARBON 390 5% 1/4W	
R212	1-249-412-11	CARBON 390 5% 1/4W	
R213	1-249-412-11	CARBON 390 5% 1/4W	
R214	1-249-432-11	CARBON 18K 5% 1/4W	
R215	1-249-428-11	CARBON 8.2K 5% 1/4W	
R216	1-249-418-11	CARBON 1.2K 5% 1/4W	
R217	1-249-412-11	CARBON 390 5% 1/4W	
R218	1-249-409-11	CARBON 220 5% 1/4W	
R219	1-249-413-11	CARBON 470 5% 1/4W	
R220	1-249-416-11	CARBON 820 5% 1/4W	
R221	1-249-411-11	CARBON 330 5% 1/4W	
R222	1-249-413-11	CARBON 470 5% 1/4W	
R223	1-249-411-11	CARBON 330 5% 1/4W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R224	1-249-417-11	CARBON	1K	5%	1/4W	
R225	1-249-423-11	CARBON	3.3K	5%	1/4W	
R226	1-249-420-11	CARBON	1.8K	5%	1/4W	
R227	1-249-417-11	CARBON	1K	5%	1/4W	
R228	1-249-419-11	CARBON	1.5K	5%	1/4W	
R229	1-249-417-11	CARBON	1K	5%	1/4W	
R230	1-249-418-11	CARBON	1.2K	5%	1/4W	
R232	1-249-425-11	CARBON	4.7K	5%	1/4W	
R233	1-249-413-11	CARBON	470	5%	1/4W	
R234	1-249-413-11	CARBON	470	5%	1/4W	
R235	1-249-406-11	CARBON	120	5%	1/4W	
R237	1-249-413-11	CARBON	470	5%	1/4W	
R238	1-249-411-11	CARBON	330	5%	1/4W	
R240	1-249-413-11	CARBON	470	5%	1/4W	
R251	1-249-435-11	CARBON	33K	5%	1/4W	
R252	1-249-429-11	CARBON	10K	5%	1/4W	
R253	1-249-417-11	CARBON	1K	5%	1/4W	
R254	1-249-413-11	CARBON	470	5%	1/4W	
R255	1-249-413-11	CARBON	470	5%	1/4W	
R256	1-249-417-11	CARBON	1K	5%	1/4W	
R257	1-249-413-11	CARBON	470	5%	1/4W	
R258	1-249-421-11	CARBON	2.2K	5%	1/4W	
R259	1-249-421-11	CARBON	2.2K	5%	1/4W	
R260	1-249-429-11	CARBON	10K	5%	1/4W	
R261	1-249-429-11	CARBON	10K	5%	1/4W	
R262	1-249-421-11	CARBON	2.2K	5%	1/4W	
R401	1-249-428-11	CARBON	8.2K	5%	1/4W	
R402	1-249-422-11	CARBON	2.7K	5%	1/4W	
R403	1-249-419-11	CARBON	1.5K	5%	1/4W	
R404	1-249-419-11	CARBON	1.5K	5%	1/4W	
R405	1-249-422-11	CARBON	2.7K	5%	1/4W	
R406	1-249-427-11	CARBON	6.8K	5%	1/4W	
R407	1-249-429-11	CARBON	10K	5%	1/4W	
R408	1-247-872-11	CARBON	51K	5%	1/4W	
R409	1-249-429-11	CARBON	10K	5%	1/4W	
R410	1-249-432-11	CARBON	18K	5%	1/4W	
R411	1-249-422-11	CARBON	2.7K	5%	1/4W	
R412	1-249-429-11	CARBON	10K	5%	1/4W	
R413	1-247-872-11	CARBON	51K	5%	1/4W	
R414	1-249-431-11	CARBON	15K	5%	1/4W	
R415	1-249-439-11	CARBON	68K	5%	1/4W	
R416	1-249-413-11	CARBON	470	5%	1/4W	
R501	1-249-428-11	CARBON	8.2K	5%	1/4W	
R502	1-249-432-11	CARBON	18K	5%	1/4W	
R503	1-249-435-11	CARBON	33K	5%	1/4W	
R505	1-249-425-11	CARBON	4.7K	5%	1/4W	
R507	1-249-435-11	CARBON	33K	5%	1/4W	
R508	1-249-435-11	CARBON	33K	5%	1/4W	
R509	1-249-428-11	CARBON	8.2K	5%	1/4W	
R510	1-249-428-11	CARBON	8.2K	5%	1/4W	
R511	1-249-429-11	CARBON	10K	5%	1/4W	
R512	1-249-435-11	CARBON	33K	5%	1/4W	
R513	1-249-429-11	CARBON	10K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R514	1-249-435-11	CARBON	33K	5%	1/4W	
R515	1-249-441-11	CARBON	100K	5%	1/4W	
R516	1-249-429-11	CARBON	10K	5%	1/4W	
R517	1-249-431-11	CARBON	15K	5%	1/4W	
R518	1-249-441-11	CARBON	100K	5%	1/4W	
R519	1-249-425-11	CARBON	4.7K	5%	1/4W	
R520	1-249-433-11	CARBON	22K	5%	1/4W	
R521	1-249-417-11	CARBON	1K	5%	1/4W	
R523	1-249-441-11	CARBON	100K	5%	1/4W	
R524	1-249-429-11	CARBON	10K	5%	1/4W	
R525	1-249-433-11	CARBON	22K	5%	1/4W	
R526	1-249-409-11	CARBON	220	5%	1/4W	
R527	1-249-433-11	CARBON	22K	5%	1/4W	
R528	1-247-891-00	CARBON	330K	5%	1/4W	
R529	1-249-420-11	CARBON	1.8K	5%	1/4W	
R582	1-249-425-11	CARBON	4.7K	5%	1/4W	
R601	1-249-426-11	CARBON	5.6K	5%	1/4W	
R602	1-249-433-11	CARBON	22K	5%	1/4W	
R603	1-249-417-11	CARBON	1K	5%	1/4W	
R604	1-249-417-11	CARBON	1K	5%	1/4W	
R605	1-249-417-11	CARBON	1K	5%	1/4W	
R606	1-249-421-11	CARBON	2.2K	5%	1/4W	
R607	1-249-416-11	CARBON	820	5%	1/4W	
R608	1-249-417-11	CARBON	1K	5%	1/4W	
R609	1-249-421-11	CARBON	2.2K	5%	1/4W	
R611	1-249-411-11	CARBON	330	5%	1/4W	
R612	1-249-409-11	CARBON	220	5%	1/4W	
R614	1-249-416-11	CARBON	820	5%	1/4W	
R615	1-249-417-11	CARBON	1K	5%	1/4W	
R620	1-249-417-11	CARBON	1K	5%	1/4W	
R621	1-249-413-11	CARBON	470	5%	1/4W	
R622	1-249-417-11	CARBON	1K	5%	1/4W	
R623	1-249-413-11	CARBON	470	5%	1/4W	
R624	1-215-437-00	METAL	4.7K	1%	1/6W	
R625	1-249-433-11	CARBON	22K	5%	1/4W	
R626	1-249-437-11	CARBON	47K	5%	1/4W	
R629	1-215-437-00	METAL	4.7K	1%	1/6W	
R630	1-249-417-11	CARBON	1K	5%	1/4W	
R631	1-249-415-11	CARBON	680	5%	1/4W	
R632	1-249-413-11	CARBON	470	5%	1/4W	
R633	1-249-433-11	CARBON	22K	5%	1/4W	
R634	1-249-413-11	CARBON	470	5%	1/4W	
R635	1-249-433-11	CARBON	22K	5%	1/4W	
R636	1-249-426-11	CARBON	5.6K	5%	1/4W	
R637	1-249-426-11	CARBON	5.6K	5%	1/4W	
R638	1-249-421-11	CARBON	2.2K	5%	1/4W	
R639	1-249-425-11	CARBON	4.7K	5%	1/4W	
R640	1-249-433-11	CARBON	22K	5%	1/4W	
R641	1-249-437-11	CARBON	47K	5%	1/4W	
R644	1-249-425-11	CARBON	4.7K	5%	1/4W	
R645	1-249-415-11	CARBON	680	5%	1/4W	
R647	1-249-433-11	CARBON	22K	5%	1/4W	
R648	1-249-413-11	CARBON	470	5%	1/4W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R649	1-249-433-11	CARBON	22K	5%	1/4W	
R650	1-249-426-11	CARBON	5.6K	5%	1/4W	
R651	1-249-426-11	CARBON	5.6K	5%	1/4W	
R652	1-249-421-11	CARBON	2.2K	5%	1/4W	
R654	1-249-417-11	CARBON	1K	5%	1/4W	
R655	1-249-425-11	CARBON	4.7K	5%	1/4W	
R656	1-249-433-11	CARBON	22K	5%	1/4W	
R657	1-249-437-11	CARBON	47K	5%	1/4W	
R659	1-249-417-11	CARBON	1K	5%	1/4W	
R660	1-249-415-11	CARBON	680	5%	1/4W	
R672	1-249-421-11	CARBON	2.2K	5%	1/4W	
R673	1-249-421-11	CARBON	2.2K	5%	1/4W	
R674	1-249-416-11	CARBON	820	5%	1/4W	
R675	1-249-421-11	CARBON	2.2K	5%	1/4W	
R676	1-249-411-11	CARBON	330	5%	1/4W	
R677	1-249-417-11	CARBON	1K	5%	1/4W	
R679	1-249-413-11	CARBON	470	5%	1/4W	
R680	1-249-409-11	CARBON	220	5%	1/4W	
R682	1-249-416-11	CARBON	820	5%	1/4W	
R684	1-249-421-11	CARBON	2.2K	5%	1/4W	
R686	1-249-421-11	CARBON	2.2K	5%	1/4W	
R687	1-249-421-11	CARBON	2.2K	5%	1/4W	
R688	1-249-431-11	CARBON	15K	5%	1/4W	
R689	1-249-429-11	CARBON	10K	5%	1/4W	
R690	1-249-417-11	CARBON	1K	5%	1/4W	
R691	1-249-413-11	CARBON	470	5%	1/4W	
R692	1-249-417-11	CARBON	1K	5%	1/4W	
R694	1-249-433-11	CARBON	22K	5%	1/4W	
R695	1-249-437-11	CARBON	47K	5%	1/4W	
R696	1-249-429-11	CARBON	10K	5%	1/4W	
R697	1-249-426-11	CARBON	5.6K	5%	1/4W	
R698	1-249-423-11	CARBON	3.3K	5%	1/4W	
R700	1-249-429-11	CARBON	10K	5%	1/4W	
R702	1-249-413-11	CARBON	470	5%	1/4W	
R706	1-249-421-11	CARBON	2.2K	5%	1/4W	
R707	1-249-425-11	CARBON	4.7K	5%	1/4W	
R708	1-249-433-11	CARBON	22K	5%	1/4W	
R709	1-249-437-11	CARBON	47K	5%	1/4W	
R715	1-249-413-11	CARBON	470	5%	1/4W	
R717	1-249-421-11	CARBON	2.2K	5%	1/4W	
R719	1-249-433-11	CARBON	22K	5%	1/4W	
R720	1-249-437-11	CARBON	47K	5%	1/4W	
R721	1-249-429-11	CARBON	10K	5%	1/4W	
R722	1-249-426-11	CARBON	5.6K	5%	1/4W	
R723	1-249-423-11	CARBON	3.3K	5%	1/4W	
R725	1-249-429-11	CARBON	10K	5%	1/4W	
R726	1-249-433-11	CARBON	22K	5%	1/4W	
R727	1-249-429-11	CARBON	10K	5%	1/4W	
R728	1-249-417-11	CARBON	1K	5%	1/4W	
R729	1-249-413-11	CARBON	470	5%	1/4W	
R730	1-249-417-11	CARBON	1K	5%	1/4W	
R731	1-249-421-11	CARBON	2.2K	5%	1/4W	
R732	1-249-413-11	CARBON	470	5%	1/4W	
R733	1-249-413-11	CARBON	470	5%	1/4W	
R734	1-249-417-11	CARBON	1K	5%	1/4W	
R735	1-249-417-11	CARBON	1K	5%	1/4W	
R736	1-249-413-11	CARBON	470	5%	1/4W	
R737	1-249-421-11	CARBON	2.2K	5%	1/4W	
R740	1-249-432-11	CARBON	18K	5%	1/4W	
R743	1-249-433-11	CARBON	22K	5%	1/4W	
R744	1-249-429-11	CARBON	10K	5%	1/4W	
R745	1-249-417-11	CARBON	1K	5%	1/4W	
R746	1-249-413-11	CARBON	470	5%	1/4W	
R747	1-249-417-11	CARBON	1K	5%	1/4W	
R748	1-249-413-11	CARBON	470	5%	1/4W	
R749	1-249-413-11	CARBON	470	5%	1/4W	
R750	1-249-421-11	CARBON	2.2K	5%	1/4W	
R751	1-249-417-11	CARBON	1K	5%	1/4W	
R752	1-249-417-11	CARBON	1K	5%	1/4W	
R753	1-249-413-11	CARBON	470	5%	1/4W	
R754	1-249-421-11	CARBON	2.2K	5%	1/4W	
R755	1-249-429-11	CARBON	10K	5%	1/4W	
R760	1-249-429-11	CARBON	10K	5%	1/4W	
R801	1-249-417-11	CARBON	1K	5%	1/4W	
R802	1-249-414-11	CARBON	560	5%	1/4W	
R810	1-249-429-11	CARBON	10K	5%	1/4W	
R811	1-249-410-11	CARBON	270	5%	1/4W	
R812	1-249-413-11	CARBON	470	5%	1/4W	
R813	1-249-416-11	CARBON	820	5%	1/4W	
R814	1-249-417-11	CARBON	1K	5%	1/4W	
R815	1-249-429-11	CARBON	10K	5%	1/4W	
R816	1-249-429-11	CARBON	10K	5%	1/4W	
R817	1-249-428-11	CARBON	8.2K	5%	1/4W	
R819	1-249-417-11	CARBON	1K	5%	1/4W	
R821	1-249-429-11	CARBON	10K	5%	1/4W	
R822	1-249-429-11	CARBON	10K	5%	1/4W	
R823	1-249-429-11	CARBON	10K	5%	1/4W	
R827	1-249-423-11	CARBON	3.3K	5%	1/4W	
R828	1-249-423-11	CARBON	3.3K	5%	1/4W	
R831	1-249-423-11	CARBON	3.3K	5%	1/4W	
R832	1-249-423-11	CARBON	3.3K	5%	1/4W	
R833	1-247-804-11	CARBON	75	5%	1/4W	
R834	1-247-804-11	CARBON	75	5%	1/4W	
R835	1-247-804-11	CARBON	75	5%	1/4W	
R836	1-247-804-11	CARBON	75	5%	1/4W	
R850	1-249-417-11	CARBON	1K	5%	1/4W	
R851	1-249-433-11	CARBON	22K	5%	1/4W	
R852	1-249-433-11	CARBON	22K	5%	1/4W	
R853	1-249-426-11	CARBON	5.6K	5%	1/4W	
R854	1-249-426-11	CARBON	5.6K	5%	1/4W	
R856	1-249-429-11	CARBON	10K	5%	1/4W	
R857	1-249-429-11	CARBON	10K	5%	1/4W	
R858	1-249-429-11	CARBON	10K	5%	1/4W	
R906	1-249-424-11	CARBON	3.9K	5%	1/4W	
R991	1-249-413-11	CARBON	470	5%	1/4W	
R992	1-249-417-11	CARBON	1K	5%	1/4W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R993	1-249-417-11	CARBON	1K	5%	1/4W	
R994	1-249-433-11	CARBON	22K	5%	1/4W	
R995	1-247-883-00	CARBON	150K	5%	1/4W	
R996	1-249-413-11	CARBON	470	5%	1/4W	
R997	1-249-421-11	CARBON	2.2K	5%	1/4W	
		VARIABLE RESISTOR				
RV001	1-228-994-00	RES, ADJ, CARBON 10K				
RV201	1-228-993-00	RES, ADJ, CARBON 4.7K				
RV203	1-228-994-00	RES, ADJ, CARBON 10K				
RV204	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV205	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV601	1-228-997-00	RES, ADJ, CARBON 100K				
RV602	1-228-990-00	RES, ADJ, CARBON 1K				
RV603	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV604	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV800	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV802	1-228-991-00	RES, ADJ, CARBON 2.2K				
RV991	1-228-990-00	RES, ADJ, CARBON 1K				
		RELAY				
RY800	1-515-529-11	RELAY				

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*A-7061-750-A CA-16 BOARD, COMPLETE
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*2-352-113-01 CASE, SHIELD
*2-352-114-01 PLATE (A), SHIELD
*2-352-115-01 LID, SHIELD CASE

CAPACITOR

C101	1-124-584-00	ELECT	100MF	20%	10V
C102	1-124-584-00	ELECT	100MF	20%	10V
C103	1-124-584-00	ELECT	100MF	20%	10V
C104	1-102-973-00	CERAMIC	100PF	5%	50V
C105	1-102-973-00	CERAMIC	100PF	5%	50V
C106	1-124-438-00	ELECT	1MF	20%	50V
C107	1-162-851-11	CERAMIC	0.1MF	10%	16V
C108	1-162-851-11	CERAMIC	0.1MF	10%	16V
C109	1-162-851-11	CERAMIC	0.1MF	10%	16V
C110	1-130-471-00	MYLAR	0.001MF	5%	50V
C111	1-102-816-00	CERAMIC	120PF	5%	50V
C112	1-130-471-00	MYLAR	0.001MF	5%	50V
C113	1-124-584-00	ELECT	100MF	20%	10V
C114	1-124-584-00	ELECT	100MF	20%	10V
C115	1-102-973-00	CERAMIC	100PF	5%	50V
C117	1-161-379-00	CERAMIC	0.01MF	30%	16V
C118	1-161-379-00	CERAMIC	0.01MF	30%	16V
C119	1-162-851-11	CERAMIC	0.1MF	10%	16V
C120	1-162-851-11	CERAMIC	0.1MF	10%	16V
C121	1-102-074-00	CERAMIC	0.001MF	10%	50V
C122	1-102-074-00	CERAMIC	0.001MF	10%	50V

Ref.No	Part No.	Description				Remark
C123	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C124	1-130-477-00	FILM	0.0033MF	5%	50V	
C125	1-130-489-00	MYLAR	0.033MF	5%	50V	
C127	1-124-589-11	ELECT	47MF	20%	16V	
C128	1-126-163-11	ELECT	4.7MF	20%	50V	
C129	1-136-155-00	MYLAR	0.015MF	10%	50V	
C130	1-136-161-00	MYLAR	0.047MF	10%	50V	
C131	1-126-163-11	ELECT	4.7MF	20%	50V	
C132	1-136-155-00	MYLAR	0.015MF	10%	50V	
C133	1-130-473-00	MYLAR	0.0015MF	10%	50V	
C134	1-130-477-00	FILM	0.0033MF	5%	50V	
C135	1-126-176-11	ELECT	220MF	20%	10V	
C136	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C138	1-130-481-00	MYLAR	0.0068MF	10%	50V	
C139	1-130-479-00	MYLAR	0.0047MF	10%	50V	
C141	1-102-959-00	CERAMIC	22PF	5%	50V	
C142	1-102-963-00	CERAMIC	33PF	5%	50V	
C145	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C146	1-136-157-00	MYLAR	0.022MF	10%	50V	
C152	1-102-978-00	CERAMIC	220PF	5%	50V	
C153	1-102-978-00	CERAMIC	220PF	5%	50V	
C154	1-124-589-11	ELECT	47MF	20%	10V	
C155	1-124-589-11	ELECT	47MF	20%	10V	
C156	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C158	1-102-114-00	CERAMIC	470PF	10%	50V	
C159	1-130-479-00	MYLAR	0.0047MF	10%	50V	
C160	1-102-114-00	CERAMIC	470PF	10%	50V	
C182	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C191	1-124-589-11	ELECT	47MF	20%	10V	
C192	1-124-589-11	ELECT	47MF	20%	10V	
C205	1-124-584-00	ELECT	100MF	20%	10V	
C206	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C601	1-124-438-00	ELECT	1MF	20%	50V	
C602	1-123-875-11	ELECT	10MF	20%	50V	
C604	1-126-101-11	ELECT	100MF	20%	16V	
C605	1-102-973-00	CERAMIC	100PF	5%	50V	
C608	1-102-973-00	CERAMIC	100PF	5%	50V	
C609	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C610	1-123-875-11	ELECT	10MF	20%	50V	
C612	1-124-598-11	ELECT	22MF	20%	25V	
C613	1-126-163-11	ELECT	4.7MF	20%	50V	
C614	1-123-875-11	ELECT	10MF	20%	50V	
C615	1-123-875-11	ELECT	10MF	20%	50V	
C616	1-126-101-11	ELECT	100MF	20%	16V	
C617	1-123-875-11	ELECT	10MF	20%	50V	
C618	1-123-875-11	ELECT	10MF	20%	50V	
C619	1-123-875-11	ELECT	10MF	20%	50V	
C620	1-123-875-11	ELECT	10MF	20%	50V	
C621	1-123-875-11	ELECT	10MF	20%	50V	
C622	1-123-875-11	ELECT	10MF	20%	50V	
C623	1-126-163-11	ELECT	4.7MF	20%	50V	
C624	1-124-598-11	ELECT	22MF	20%	25V	
C625	1-123-875-11	ELECT	10MF	20%	50V	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description			Remark
C626	1-123-875-11	ELECT	10MF	20%	50V
C627	1-161-379-00	CERAMIC	0.01MF	30%	16V
C628	1-123-875-11	ELECT	10MF	20%	50V
C629	1-123-875-11	ELECT	10MF	20%	50V
C630	1-123-875-11	ELECT	10MF	20%	50V
C631	1-102-978-00	CERAMIC	220PF	5%	50V
C632	1-123-875-11	ELECT	10MF	20%	50V
C633	1-102-978-00	CERAMIC	220PF	5%	50V
C635	1-161-379-00	CERAMIC	0.01MF	30%	16V
C636	1-123-875-11	ELECT	10MF	20%	50V
C637	1-124-598-11	ELECT	22MF	20%	25V
C638	1-126-163-11	ELECT	4.7MF	20%	50V
C640	1-124-584-00	ELECT	100MF	20%	10V
C641	1-123-875-11	ELECT	10MF	20%	50V
C642	1-123-875-11	ELECT	10MF	20%	50V
C644	1-123-875-11	ELECT	10MF	20%	50V
C645	1-124-598-11	ELECT	22MF	20%	25V
C646	1-126-163-11	ELECT	4.7MF	20%	50V
C647	1-123-875-11	ELECT	10MF	20%	50V
C648	1-123-875-11	ELECT	10MF	20%	50V
C649	1-123-875-11	ELECT	10MF	20%	50V
C650	1-123-875-11	ELECT	10MF	20%	50V
C651	1-161-379-00	CERAMIC	0.01MF	30%	16V
C652	1-123-875-11	ELECT	10MF	20%	50V
C653	1-162-851-11	CERAMIC	0.1MF	10%	16V
C654	1-126-176-11	ELECT	220MF	20%	10V
C655	1-162-851-11	CERAMIC	0.1MF	10%	16V
C656	1-126-176-11	ELECT	220MF	20%	10V
C657	1-161-379-00	CERAMIC	0.01MF	30%	16V
C658	1-123-875-11	ELECT	10MF	20%	50V
C659	1-123-875-11	ELECT	10MF	20%	50V
C661	1-123-875-11	ELECT	10MF	20%	50V
C664	1-126-176-11	ELECT	220MF	20%	10V
C670	1-161-051-00	CERAMIC	0.01MF	10%	25V
C699	1-161-772-11	CERAMIC	0.1MF	10%	25V
C701	1-124-584-00	ELECT	100MF	20%	10V
C702	1-161-379-00	CERAMIC	0.01MF	30%	16V
C703	1-101-361-00	CERAMIC	150PF	5%	50V
C704	1-101-361-00	CERAMIC	150PF	5%	50V
C708	1-131-347-00	TANTALUM	1MF	10%	25V
C709	1-124-438-00	ELECT	1MF	20%	50V
C710	1-161-379-00	CERAMIC	0.01MF	30%	16V
C711	1-161-379-00	CERAMIC	0.01MF	30%	16V
C712	1-124-261-00	ELECT	10MF	20%	50V
C713	1-131-499-91	TANTALUM	1.5MF	10%	20V
C714	1-124-438-00	ELECT	1MF	20%	50V
C715	1-102-816-00	CERAMIC	120PF	5%	50V
C716	1-130-468-00	MYLAR	560PF	5%	50V
C717	1-161-379-00	CERAMIC	0.01MF	30%	16V
C718	1-136-159-00	MYLAR	0.033MF	10%	50V
C719	1-130-477-00	MYLAR	0.0033MF	5%	50V
C720	1-124-442-00	ELECT	330MF	20%	6.3V
C721	1-136-153-00	MYLAR	0.01MF	10%	50V
C723	1-102-115-00	CERAMIC	560PF	10%	50V
C724	1-161-379-00	CERAMIC	0.01MF	30%	16V
C725	1-161-379-00	CERAMIC	0.01MF	30%	16V
C726	1-124-584-00	ELECT	100MF	20%	10V
C727	1-161-379-00	CERAMIC	0.01MF	30%	16V
C730	1-101-880-00	CERAMIC	47PF	5%	50V
C731	1-102-976-00	CERAMIC	180PF	5%	50V
C732	1-102-973-00	CERAMIC	100PF	5%	50V
C733	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C734	1-161-379-00	CERAMIC	0.01MF	30%	16V
C735	1-161-379-00	CERAMIC	0.01MF	30%	16V
C736	1-131-368-00	TANTALUM	3.3MF	10%	16V
C737	1-124-589-11	ELECT	47MF	20%	10V
C738	1-123-875-11	ELECT	10MF	20%	50V
C739	1-162-851-11	CERAMIC	0.1MF	10%	16V
C740	1-162-851-11	CERAMIC	0.1MF	10%	16V
C741	1-162-851-11	CERAMIC	0.1MF	10%	16V
C742	1-124-584-00	ELECT	100MF	20%	10V
C743	1-161-379-00	CERAMIC	0.01MF	30%	16V
C744	1-161-379-00	CERAMIC	0.01MF	30%	16V
C745	1-124-589-11	ELECT	47MF	20%	10V
C746	1-161-379-00	CERAMIC	0.01MF	30%	16V
C747	1-102-971-00	CERAMIC	82PF	5%	50V
C748	1-102-953-00	CERAMIC	18PF	5%	50V
C749	1-161-379-00	CERAMIC	0.01MF	30%	16V
C750	1-161-379-00	CERAMIC	0.01MF	30%	16V
C751	1-124-589-11	ELECT	47MF	20%	10V
C752	1-161-379-00	CERAMIC	0.01MF	30%	16V
C753	1-124-589-11	ELECT	47MF	20%	10V
C754	1-161-379-00	CERAMIC	0.01MF	30%	16V
C755	1-161-379-00	CERAMIC	0.01MF	30%	16V
C756	1-124-589-11	ELECT	47MF	20%	10V
C757	1-161-379-00	CERAMIC	0.01MF	30%	16V
C758	1-161-379-00	CERAMIC	0.01MF	30%	16V
C759	1-161-379-00	CERAMIC	0.01MF	30%	16V
C760	1-124-589-11	ELECT	47MF	20%	10V
C761	1-161-379-00	CERAMIC	0.01MF	30%	16V
C762	1-102-106-00	CERAMIC	100PF	10%	50V
C763	1-102-978-00	CERAMIC	220PF	5%	50V
C764	1-102-978-00	CERAMIC	220PF	5%	50V
C765	1-102-973-00	CERAMIC	100PF	5%	50V
C766	1-161-379-00	CERAMIC	0.01MF	30%	16V
C767	1-161-051-00	CERAMIC	0.01MF	10%	25V
C768	1-124-589-11	ELECT	47MF	20%	16V
C769	1-161-379-00	CERAMIC	0.01MF	30%	16V
C770	1-161-379-00	CERAMIC	0.01MF	30%	16V
C772	1-161-379-00	CERAMIC	0.01MF	30%	16V
C781	1-102-971-00	CERAMIC	82PF	5%	50V
C782	1-102-953-00	CERAMIC	18PF	5%	50V
C783	1-162-851-11	CERAMIC	0.1MF	10%	16V
C801	1-126-101-11	ELECT	100MF	20%	16V
C802	1-124-584-00	ELECT	100MF	20%	10V
C803	1-124-589-11	ELECT	47MF	20%	16V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
C804	1-124-589-11	ELECT	47MF	20%	16V
C805	1-124-261-00	ELECT	10MF	20%	50V
C806	1-101-888-00	CERAMIC	68PF	5%	50V
C807	1-130-479-00	MYLAR	0.0047MF	10%	50V
C808	1-124-584-00	ELECT	100MF	20%	10V
C809	1-161-379-00	CERAMIC	0.01MF	30%	16V
C810	1-124-589-11	ELECT	47MF	20%	16V
C811	1-124-465-00	ELECT	0.47MF	20%	50V
C812	1-124-257-00	ELECT	2.2MF	20%	50V
C813	1-124-465-00	ELECT	0.47MF	20%	50V
C814	1-124-257-00	ELECT	2.2MF	20%	50V
C815	1-161-379-00	CERAMIC	0.01MF	30%	16V
C816	1-124-589-11	ELECT	47MF	20%	16V
C817	1-124-261-00	ELECT	10MF	20%	50V
C818	1-124-257-00	ELECT	2.2MF	20%	50V
C819	1-124-589-11	ELECT	47MF	20%	16V
C820	1-124-589-11	ELECT	47MF	20%	16V
C821	1-124-589-11	ELECT	47MF	20%	16V
C822	1-124-589-11	ELECT	47MF	20%	16V
C823	1-124-589-11	ELECT	47MF	20%	16V
C824	1-124-589-11	ELECT	47MF	20%	16V
C825	1-124-589-11	ELECT	47MF	20%	16V
C826	1-124-589-11	ELECT	47MF	20%	16V
C827	1-124-261-00	ELECT	10MF	20%	50V
C828	1-124-261-00	ELECT	10MF	20%	50V
C829	1-124-584-00	ELECT	100MF	20%	10V
C830	1-131-347-00	TANTALUM	1MF	10%	25V
C831	1-161-379-00	CERAMIC	0.01MF	30%	16V
C832	1-124-589-11	ELECT	47MF	20%	16V
C833	1-124-589-11	ELECT	47MF	20%	16V
C834	1-124-257-00	ELECT	2.2MF	20%	50V
C835	1-124-589-11	ELECT	47MF	20%	16V
C836	1-124-257-00	ELECT	2.2MF	20%	50V
C837	1-161-379-00	CERAMIC	0.01MF	30%	16V
C838	1-124-589-11	ELECT	47MF	20%	16V
C839	1-124-261-00	ELECT	10MF	20%	50V
C840	1-124-257-00	ELECT	2.2MF	20%	50V
C841	1-124-589-11	ELECT	47MF	20%	16V
C842	1-124-589-11	ELECT	47MF	20%	16V
C843	1-161-379-00	CERAMIC	0.01MF	30%	16V
C844	1-124-589-11	ELECT	47MF	20%	16V
C845	1-161-379-00	CERAMIC	0.01MF	30%	16V
C846	1-124-589-11	ELECT	47MF	20%	16V
C847	1-136-165-00	MYLAR	0.1MF	10%	50V
C848	1-161-379-00	CERAMIC	0.01MF	30%	16V
C849	1-136-169-00	MYLAR	0.22MF	10%	50V
C850	1-124-589-11	ELECT	47MF	20%	16V
C851	1-136-287-11	FILM	0.0047MF	10%	50V
C852	1-130-475-00	MYLAR	0.0022MF	10%	50V
C853	1-124-589-11	ELECT	47MF	20%	16V
C854	1-124-589-11	ELECT	47MF	20%	16V
C855	1-130-475-00	MYLAR	0.0022MF	10%	50V
C856	1-124-261-00	ELECT	10MF	20%	50V
C857	1-130-471-00	MYLAR	0.001MF	10%	50V
C858	1-124-261-00	ELECT	10MF	20%	50V
C859	1-124-261-00	ELECT	10MF	20%	50V
C860	1-124-438-00	ELECT	1MF	20%	50V
C861	1-124-261-00	ELECT	10MF	20%	50V
C862	1-136-155-00	MYLAR	0.015MF	10%	50V
C863	1-124-261-00	ELECT	10MF	20%	50V
C864	1-124-589-11	ELECT	47MF	20%	16V
C865	1-161-379-00	CERAMIC	0.01MF	30%	16V
C866	1-161-379-00	CERAMIC	0.01MF	30%	16V
C867	1-161-379-00	CERAMIC	0.01MF	30%	16V
C868	1-161-379-00	CERAMIC	0.01MF	30%	16V
C869	1-124-589-11	ELECT	47MF	20%	10V
C870	1-161-379-00	CERAMIC	0.01MF	30%	16V
C871	1-161-379-00	CERAMIC	0.01MF	30%	16V
C872	1-161-379-00	CERAMIC	0.01MF	30%	16V
C873	1-161-379-00	CERAMIC	0.01MF	30%	16V
C874	1-161-379-00	CERAMIC	0.01MF	30%	16V
C875	1-161-379-00	CERAMIC	0.01MF	30%	16V
C876	1-161-379-00	CERAMIC	0.01MF	30%	16V
C877	1-124-584-00	ELECT	100MF	20%	10V
C878	1-124-589-11	ELECT	47MF	20%	16V
C879	1-124-261-00	ELECT	10MF	20%	50V
C880	1-124-589-11	ELECT	47MF	20%	10V
C881	1-161-379-00	CERAMIC	0.01MF	30%	16V
C882	1-124-589-11	ELECT	47MF	20%	10V
C883	1-161-379-00	CERAMIC	0.01MF	30%	16V
C884	1-102-074-00	CERAMIC	0.001MF	10%	50V
C885	1-124-589-11	ELECT	47MF	20%	16V
C886	1-102-959-00	CERAMIC	22PF	5%	50V
C888	1-130-475-00	MYLAR	0.0022MF	10%	50V

CONNECTOR

CN102	1-506-469-11	PIN, CONNECTOR 4P
CN110	*1-560-892-00	PIN, CONNECTOR 4P
CN114	*1-506-474-11	PIN, CONNECTOR 9P
CN120	1-506-469-11	PIN, CONNECTOR 4P
CN121	1-506-471-11	PIN, CONNECTOR 6P
CN122	1-506-469-11	PIN, CONNECTOR 4P
CN130	1-506-473-11	PIN, CONNECTOR 8P
CN133	*1-506-467-11	PIN, CONNECTOR 2P
CN301	1-506-473-11	PIN, CONNECTOR 8P
CN302	*1-506-467-11	PIN, CONNECTOR 2P
CN303	1-506-470-11	PIN, CONNECTOR 5P
CN309	1-506-468-11	PIN, CONNECTOR 3P
CN310	*1-560-893-00	PIN, CONNECTOR 5P
CN312	1-506-472-11	PIN, CONNECTOR 7P
CN313	1-506-469-11	PIN, CONNECTOR 4P
CN315	1-506-467-11	PIN, CONNECTOR 2P

TRIMMER

CV701	1-141-245-00	TRIMMER, CERAMIC

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark
		DIODE	
D103	8-719-911-19	DIODE 1SS119	
D104	8-719-911-19	DIODE 1SS119	
D107	8-719-911-19	DIODE 1SS119	
D108	8-719-911-19	DIODE 1SS119	
D110	8-719-911-19	DIODE 1SS119	
D111	8-719-911-19	DIODE 1SS119	
D112	8-719-911-19	DIODE 1SS119	
D601	8-719-911-19	DIODE 1SS119	
D603	8-719-911-19	DIODE 1SS119	
D604	8-719-110-31	DIODE RD12E-B	
D605	8-719-911-19	DIODE 1SS119	
D606	8-719-911-19	DIODE 1SS119	
D607	8-719-911-19	DIODE 1SS119	
D701	8-719-911-19	DIODE 1SS119	
D801	8-719-911-19	DIODE 1SS119	
D802	8-719-911-19	DIODE 1SS119	
D803	8-719-911-19	DIODE 1SS119	
D804	8-719-911-19	DIODE 1SS119	
D805	8-719-911-19	DIODE 1SS119	
D806	8-719-911-19	DIODE 1SS119	
		DELAY LINE	
FL701	1-415-361-11	DELAY LINE	
		IC	
IC101	8-759-103-19	IC UPC319C	
IC102	8-759-103-19	IC UPC319C	
IC103	8-759-902-21	IC SN74LS221N	
IC104	8-759-314-41	IC HA11441	
IC105	8-759-901-23	IC SN74LS123N	
IC106	8-759-618-48	IC M51848L	
IC107	8-759-240-40	IC TC4040BP	
IC108	8-759-202-16	IC TC74HC11P	
IC109	8-759-202-14	IC TC74HC08P	
IC110	8-759-202-11	IC TC74HC00P	
IC111	8-759-902-21	IC SN74LS221N	
IC112	8-759-618-48	IC M51848L	
IC601	8-759-981-57	IC RC2043DD	
IC602	8-759-605-46	IC M51131L	
IC603	8-759-140-53	IC UPD4053BC	
IC604	8-759-981-57	IC RC2043DD	
IC605	8-759-605-46	IC M51131L	
IC606	8-759-981-57	IC RC2043DD	
IC608	8-759-605-46	IC M51131L	
IC609	8-759-605-46	IC M51131L	
IC701	8-759-202-12	IC TC74HC02P	
IC702	8-759-203-05	IC TC74HC193P	
IC703	8-759-603-53	IC M51271SP	
IC704	8-759-007-40	IC TL082CP	
IC705	8-752-030-77	IC V7040	
IC706	8-759-602-06	IC M5109P	

Ref.No	Part No.	Description	Remark
IC801	8-759-102-37	IC UPD4052BC	
IC802	8-759-102-37	IC UPD4052BC	
IC803	8-759-140-66	IC UPD4066BC	
IC804	8-759-203-83	IC TC74HC4538P	
IC805	8-759-203-83	IC TC74HC4538P	
IC806	8-759-140-53	IC UPD4053BC	
IC807	8-759-745-61	IC NJM4560D-D	
IC808	8-759-745-61	IC NJM4560D-D	
IC809	8-759-103-19	IC UPC319C	
IC810	8-759-103-19	IC UPC319C	
IC811	8-759-202-18	IC TC74HC20P	
IC812	8-759-140-66	IC UPD4066BC	
IC813	8-759-140-53	IC UPD4053BC	
IC814	8-759-001-42	IC MC74HC174N	
		COIL	
L101	1-408-413-00	INDUCTOR 22UH	
L102	1-410-482-31	INDUCTOR 100UH	
L201	1-408-413-00	INDUCTOR 22UH	
L702	1-408-419-00	INDUCTOR 68UH	
L704	1-410-473-11	INDUCTOR 18UH	
L705	1-408-420-00	INDUCTOR 82UH	
L706	1-410-473-11	INDUCTOR 18UH	
L707	1-408-420-00	INDUCTOR 82UH	
		TRANSISTOR	
Q101	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q103	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q104	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q105	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q106	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q107	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q108	8-729-173-38	TRANSISTOR 2SA733-K	
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q110	8-729-173-38	TRANSISTOR 2SA733-K	
Q111	8-729-173-38	TRANSISTOR 2SA733-K	
Q112	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q113	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q114	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q115	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q116	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q117	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q119	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q120	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q121	8-729-900-80	TRANSISTOR DTC114ES	
Q122	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q123	8-729-900-80	TRANSISTOR DTC114ES	
Q124	8-729-900-80	TRANSISTOR DTC114ES	
Q125	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q126	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q127	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q128	8-729-119-78	TRANSISTOR 2SC2785-HFE	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
Q129	8-729-900-61	TRANSISTOR DTA114ES	
Q130	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q602	8-729-173-38	TRANSISTOR 2SA733-K	
Q603	8-729-173-38	TRANSISTOR 2SA733-K	
Q604	8-729-173-38	TRANSISTOR 2SA733-K	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-105-72	TRANSISTOR 2SK523-L1	
Q607	8-729-105-72	TRANSISTOR 2SK523-L1	
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q704	8-729-173-38	TRANSISTOR 2SA733-K	
Q705	8-729-173-38	TRANSISTOR 2SA733-K	
Q706	8-729-173-38	TRANSISTOR 2SA733-K	
Q707	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q708	8-729-173-38	TRANSISTOR 2SA733-K	
Q709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q712	8-729-900-80	TRANSISTOR DTC114ES	
Q713	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q714	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q715	8-729-173-38	TRANSISTOR 2SA733-K	
Q716	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q718	8-729-900-80	TRANSISTOR DTC114ES	
Q719	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q720	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q802	8-729-173-38	TRANSISTOR 2SA733-K	
Q803	8-729-173-38	TRANSISTOR 2SA733-K	
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q805	8-729-173-38	TRANSISTOR 2SA733-K	
Q806	8-729-173-38	TRANSISTOR 2SA733-K	
Q807	8-729-900-80	TRANSISTOR DTC114ES	
Q808	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q809	8-729-173-38	TRANSISTOR 2SA733-K	
Q810	8-729-173-38	TRANSISTOR 2SA733-K	
Q811	8-729-900-80	TRANSISTOR DTC114ES	
Q812	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q813	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q814	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q815	8-729-173-38	TRANSISTOR 2SA733-K	
Q816	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q817	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q818	8-729-173-38	TRANSISTOR 2SA733-K	
Q819	8-729-900-80	TRANSISTOR DTC114ES	
Q820	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q821	8-729-173-38	TRANSISTOR 2SA733-K	
Q822	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q823	8-729-173-38	TRANSISTOR 2SA733-K	
Q824	8-729-173-38	TRANSISTOR 2SA733-K	
Q825	8-729-900-80	TRANSISTOR DTC114ES	
Q826	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q827	8-729-173-38	TRANSISTOR 2SA733-K	
Q828	8-729-173-38	TRANSISTOR 2SA733-K	
Q829	8-729-900-80	TRANSISTOR DTC114ES	
Q840	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q841	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q842	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q843	8-729-173-38	TRANSISTOR 2SA733-K	
Q844	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q845	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q846	8-729-173-38	TRANSISTOR 2SA733-K	
Q847	8-729-900-80	TRANSISTOR DTC114ES	
Q848	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q849	8-729-119-78	TRANSISTOR 2SC2785-HFE	

RESISTOR

Ref.No	Part No.	Description			Remark
R100	1-249-428-11	CARBON	8.2K	5%	1/4W
R101	1-249-409-11	CARBON	220	5%	1/4W
R102	1-249-421-11	CARBON	2.2K	5%	1/4W
R103	1-249-416-11	CARBON	820	5%	1/4W
R104	1-249-417-11	CARBON	1K	5%	1/4W
R105	1-249-417-11	CARBON	1K	5%	1/4W
R106	1-249-417-11	CARBON	1K	5%	1/4W
R107	1-247-903-00	CARBON	1M	5%	1/4W
R108	1-249-417-11	CARBON	1K	5%	1/4W
R109	1-249-421-11	CARBON	2.2K	5%	1/4W
R110	1-249-417-11	CARBON	1K	5%	1/4W
R111	1-249-428-11	CARBON	8.2K	5%	1/4W
R112	1-249-428-11	CARBON	8.2K	5%	1/4W
R113	1-247-903-00	CARBON	1M	5%	1/4W
R114	1-249-421-11	CARBON	2.2K	5%	1/4W
R115	1-249-423-11	CARBON	3.3K	5%	1/4W
R116	1-249-402-11	CARBON	56	5%	1/4W
R117	1-249-419-11	CARBON	1.5K	5%	1/4W
R118	1-249-422-11	CARBON	2.7K	5%	1/4W
R119	1-249-424-11	CARBON	3.9K	5%	1/4W
R120	1-249-429-11	CARBON	10K	5%	1/4W
R121	1-249-409-11	CARBON	220	5%	1/4W
R122	1-249-429-11	CARBON	10K	5%	1/4W
R123	1-249-421-11	CARBON	2.2K	5%	1/4W
R124	1-249-409-11	CARBON	220	5%	1/4W
R125	1-247-887-00	CARBON	220K	5%	1/4W
R126	1-249-421-11	CARBON	2.2K	5%	1/4W
R127	1-249-427-11	CARBON	6.8K	5%	1/4W
R128	1-249-421-11	CARBON	2.2K	5%	1/4W
R129	1-249-427-11	CARBON	6.8K	5%	1/4W
R130	1-249-421-11	CARBON	2.2K	5%	1/4W
R131	1-249-421-11	CARBON	2.2K	5%	1/4W
R132	1-249-423-11	CARBON	3.3K	5%	1/4W
R133	1-249-421-11	CARBON	2.2K	5%	1/4W
R134	1-249-421-11	CARBON	2.2K	5%	1/4W
R135	1-249-434-11	CARBON	27K	5%	1/4W
R136	1-249-429-11	CARBON	10K	5%	1/4W

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R137	1-249-419-11	CARBON	1.5K	5%	1/4W	
R138	1-249-424-11	CARBON	3.9K	5%	1/4W	
R139	1-249-423-11	CARBON	3.3K	5%	1/4W	
R140	1-249-419-11	CARBON	1.5K	5%	1/4W	
R141	1-249-433-11	CARBON	22K	5%	1/4W	
R142	1-249-428-11	CARBON	8.2K	5%	1/4W	
R144	1-249-431-11	CARBON	15K	5%	1/4W	
R145	1-249-397-11	CARBON	22	5%	1/4W	
R146	1-249-425-11	CARBON	4.7K	5%	1/4W	
R147	1-249-434-11	CARBON	27K	5%	1/4W	
R148	1-249-431-11	CARBON	15K	5%	1/4W	
R149	1-249-429-11	CARBON	10K	5%	1/4W	
R150	1-249-429-11	CARBON	10K	5%	1/4W	
R151	1-249-419-11	CARBON	1.5K	5%	1/4W	
R153	1-249-419-11	CARBON	1.5K	5%	1/4W	
R155	1-249-418-11	CARBON	1.2K	5%	1/4W	
R156	1-249-427-11	CARBON	6.8K	5%	1/4W	
R157	1-249-427-11	CARBON	6.8K	5%	1/4W	
R158	1-249-429-11	CARBON	10K	5%	1/4W	
R159	1-249-425-11	CARBON	4.7K	5%	1/4W	
R162	1-249-438-11	CARBON	56K	5%	1/4W	
R163	1-249-421-11	CARBON	2.2K	5%	1/4W	
R165	1-249-413-11	CARBON	470	5%	1/4W	
R166	1-249-417-11	CARBON	1K	5%	1/4W	
R167	1-249-413-11	CARBON	470	5%	1/4W	
R168	1-249-417-11	CARBON	1K	5%	1/4W	
R169	1-249-413-11	CARBON	470	5%	1/4W	
R170	1-249-417-11	CARBON	1K	5%	1/4W	
R171	1-249-413-11	CARBON	470	5%	1/4W	
R172	1-249-417-11	CARBON	1K	5%	1/4W	
R173	1-249-413-11	CARBON	470	5%	1/4W	
R174	1-249-417-11	CARBON	1K	5%	1/4W	
R175	1-249-421-11	CARBON	2.2K	5%	1/4W	
R176	1-249-417-11	CARBON	1K	5%	1/4W	
R177	1-249-426-11	CARBON	5.6K	5%	1/4W	
R178	1-249-429-11	CARBON	10K	5%	1/4W	
R179	1-249-439-11	CARBON	68K	5%	1/4W	
R180	1-249-413-11	CARBON	470	5%	1/4W	
R181	1-249-409-11	CARBON	220	5%	1/4W	
R186	1-249-413-11	CARBON	470	5%	1/4W	
R187	1-249-421-11	CARBON	2.2K	5%	1/4W	
R188	1-249-429-11	CARBON	10K	5%	1/4W	
R189	1-249-418-11	CARBON	1.2K	5%	1/4W	
R191	1-249-418-11	CARBON	1.2K	5%	1/4W	
R193	1-249-413-11	CARBON	470	5%	1/4W	
R194	1-249-417-11	CARBON	1K	5%	1/4W	
R195	1-249-421-11	CARBON	2.2K	5%	1/4W	
R196	1-249-417-11	CARBON	1K	5%	1/4W	
R197	1-249-429-11	CARBON	10K	5%	1/4W	
R198	1-249-425-11	CARBON	4.7K	5%	1/4W	
R200	1-249-417-11	CARBON	1K	5%	1/4W	
R201	1-249-413-11	CARBON	470	5%	1/4W	
R202	1-249-437-11	CARBON	47K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R203	1-249-421-11	CARBON	2.2K	5%	1/4W	
R205	1-249-421-11	CARBON	2.2K	5%	1/4W	
R206	1-249-429-11	CARBON	10K	5%	1/4W	
R207	1-249-417-11	CARBON	1K	5%	1/4W	
R601	1-249-427-11	CARBON	6.8K	5%	1/4W	
R602	1-249-431-11	CARBON	15K	5%	1/4W	
R605	1-249-431-11	CARBON	15K	5%	1/4W	
R606	1-249-409-11	CARBON	220	5%	1/4W	
R608	1-249-422-11	CARBON	2.7K	5%	1/4W	
R612	1-249-440-11	CARBON	82K	5%	1/4W	
R613	1-249-402-11	CARBON	56	5%	1/4W	
R614	1-249-423-11	CARBON	3.3K	5%	1/4W	
R615	1-247-881-00	CARBON	120K	5%	1/4W	
R617	1-249-402-11	CARBON	56	5%	1/4W	
R618	1-249-429-11	CARBON	10K	5%	1/4W	
R619	1-249-439-11	CARBON	68K	5%	1/4W	
R620	1-249-441-11	CARBON	100K	5%	1/4W	
R621	1-249-441-11	CARBON	100K	5%	1/4W	
R622	1-249-417-11	CARBON	1K	5%	1/4W	
R623	1-249-417-11	CARBON	1K	5%	1/4W	
R624	1-249-417-11	CARBON	1K	5%	1/4W	
R625	1-249-417-11	CARBON	1K	5%	1/4W	
R626	1-249-417-11	CARBON	1K	5%	1/4W	
R627	1-249-417-11	CARBON	1K	5%	1/4W	
R628	1-249-441-11	CARBON	100K	5%	1/4W	
R629	1-249-441-11	CARBON	100K	5%	1/4W	
R630	1-249-441-11	CARBON	100K	5%	1/4W	
R631	1-249-441-11	CARBON	100K	5%	1/4W	
R634	1-249-426-11	CARBON	5.6K	5%	1/4W	
R635	1-249-429-11	CARBON	10K	5%	1/4W	
R636	1-249-429-11	CARBON	10K	5%	1/4W	
R637	1-249-402-11	CARBON	56	5%	1/4W	
R638	1-249-402-11	CARBON	56	5%	1/4W	
R639	1-249-426-11	CARBON	5.6K	5%	1/4W	
R640	1-249-429-11	CARBON	10K	5%	1/4W	
R641	1-249-429-11	CARBON	10K	5%	1/4W	
R642	1-249-429-11	CARBON	10K	5%	1/4W	
R643	1-249-429-11	CARBON	10K	5%	1/4W	
R644	1-249-433-11	CARBON	22K	5%	1/4W	
R645	1-249-429-11	CARBON	10K	5%	1/4W	
R651	1-249-429-11	CARBON	10K	5%	1/4W	
R652	1-249-429-11	CARBON	10K	5%	1/4W	
R655	1-249-429-11	CARBON	10K	5%	1/4W	
R660	1-249-427-11	CARBON	6.8K	5%	1/4W	
R661	1-249-429-11	CARBON	10K	5%	1/4W	
R662	1-249-425-11	CARBON	4.7K	5%	1/4W	
R663	1-247-903-00	CARBON	1M	5%	1/4W	
R664	1-247-903-00	CARBON	1M	5%	1/4W	
R665	1-249-429-11	CARBON	10K	5%	1/4W	
R701	1-249-427-11	CARBON	6.8K	5%	1/4W	
R703	1-249-421-11	CARBON	2.2K	5%	1/4W	
R704	1-249-431-11	CARBON	15K	5%	1/4W	
R705	1-249-435-11	CARBON	33K	5%	1/4W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R706	1-249-431-11	CARBON	15K	5%	1/4W	
R707	1-249-431-11	CARBON	15K	5%	1/4W	
R708	1-247-895-00	CARBON	470K	5%	1/4W	
R709	1-249-436-11	CARBON	39K	5%	1/4W	
R710	1-249-421-11	CARBON	2.2K	5%	1/4W	
R711	1-249-413-11	CARBON	470	5%	1/4W	
R712	1-249-435-11	CARBON	33K	5%	1/4W	
R713	1-249-433-11	CARBON	22K	5%	1/4W	
R714	1-249-417-11	CARBON	1K	5%	1/4W	
R715	1-249-440-11	CARBON	82K	5%	1/4W	
R716	1-249-417-11	CARBON	1K	5%	1/4W	
R717	1-247-866-11	CARBON	30K	5%	1/4W	
R718	1-249-425-11	CARBON	4.7K	5%	1/4W	
R719	1-249-409-11	CARBON	220	5%	1/4W	
R720	1-249-403-11	CARBON	68	5%	1/4W	
R721	1-249-405-11	CARBON	100	5%	1/4W	
R722	1-249-425-11	CARBON	4.7K	5%	1/4W	
R723	1-249-419-11	CARBON	1.5K	5%	1/4W	
R724	1-249-413-11	CARBON	470	5%	1/4W	
R725	1-249-435-11	CARBON	33K	5%	1/4W	
R727	1-249-413-11	CARBON	470	5%	1/4W	
R728	1-249-413-11	CARBON	470	5%	1/4W	
R729	1-249-413-11	CARBON	470	5%	1/4W	
R730	1-249-417-11	CARBON	1K	5%	1/4W	
R731	1-249-413-11	CARBON	470	5%	1/4W	
R732	1-249-417-11	CARBON	1K	5%	1/4W	
R733	1-249-411-11	CARBON	330	5%	1/4W	
R734	1-249-419-11	CARBON	1.5K	5%	1/4W	
R735	1-249-421-11	CARBON	2.2K	5%	1/4W	
R736	1-249-413-11	CARBON	470	5%	1/4W	
R737	1-249-417-11	CARBON	1K	5%	1/4W	
R738	1-247-903-00	CARBON	1M	5%	1/4W	
R739	1-249-429-11	CARBON	10K	5%	1/4W	
R740	1-249-421-11	CARBON	2.2K	5%	1/4W	
R741	1-249-430-11	CARBON	12K	5%	1/4W	
R742	1-249-427-11	CARBON	6.8K	5%	1/4W	
R743	1-249-413-11	CARBON	470	5%	1/4W	
R744	1-249-429-11	CARBON	10K	5%	1/4W	
R745	1-249-430-11	CARBON	12K	5%	1/4W	
R746	1-249-409-11	CARBON	220	5%	1/4W	
R747	1-249-411-11	CARBON	330	5%	1/4W	
R748	1-249-420-11	CARBON	1.8K	5%	1/4W	
R749	1-249-411-11	CARBON	330	5%	1/4W	
R750	1-249-420-11	CARBON	1.8K	5%	1/4W	
R751	1-249-411-11	CARBON	330	5%	1/4W	
R752	1-249-420-11	CARBON	1.8K	5%	1/4W	
R753	1-249-421-11	CARBON	2.2K	5%	1/4W	
R754	1-249-413-11	CARBON	470	5%	1/4W	
R755	1-249-413-11	CARBON	470	5%	1/4W	
R756	1-249-413-11	CARBON	470	5%	1/4W	
R757	1-249-429-11	CARBON	10K	5%	1/4W	
R758	1-249-429-11	CARBON	10K	5%	1/4W	
R759	1-249-417-11	CARBON	1K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R760	1-249-425-11	CARBON	4.7K	5%	1/4W	
R761	1-249-429-11	CARBON	10K	5%	1/4W	
R762	1-249-413-11	CARBON	470	5%	1/4W	
R763	1-249-417-11	CARBON	1K	5%	1/4W	
R764	1-249-417-11	CARBON	1K	5%	1/4W	
R765	1-249-413-11	CARBON	470	5%	1/4W	
R766	1-249-416-11	CARBON	820	5%	1/4W	
R767	1-249-421-11	CARBON	2.2K	5%	1/4W	
R769	1-249-409-11	CARBON	220	5%	1/4W	
R770	1-249-417-11	CARBON	1K	5%	1/4W	
R771	1-249-417-11	CARBON	1K	5%	1/4W	
R772	1-249-417-11	CARBON	1K	5%	1/4W	
R773	1-249-411-11	CARBON	330	5%	1/4W	
R774	1-249-417-11	CARBON	1K	5%	1/4W	
R775	1-249-416-11	CARBON	820	5%	1/4W	
R776	1-249-429-11	CARBON	10K	5%	1/4W	
R777	1-249-409-11	CARBON	220	5%	1/4W	
R778	1-249-430-11	CARBON	12K	5%	1/4W	
R779	1-249-417-11	CARBON	1K	5%	1/4W	
R780	1-249-413-11	CARBON	470	5%	1/4W	
R781	1-249-417-11	CARBON	1K	5%	1/4W	
R782	1-249-425-11	CARBON	4.7K	5%	1/4W	
R783	1-249-409-11	CARBON	220	5%	1/4W	
R785	1-249-417-11	CARBON	1K	5%	1/4W	
R787	1-249-429-11	CARBON	10K	5%	1/4W	
R789	1-249-419-11	CARBON	1.5K	5%	1/4W	
R790	1-249-429-11	CARBON	10K	5%	1/4W	
R792	1-249-413-11	CARBON	470	5%	1/4W	
R794	1-249-429-11	CARBON	10K	5%	1/4W	
R801	1-249-409-11	CARBON	220	5%	1/4W	
R802	1-249-433-11	CARBON	22K	5%	1/4W	
R803	1-249-409-11	CARBON	220	5%	1/4W	
R804	1-249-433-11	CARBON	22K	5%	1/4W	
R805	1-249-422-11	CARBON	2.7K	5%	1/4W	
R806	1-249-429-11	CARBON	10K	5%	1/4W	
R807	1-249-437-11	CARBON	47K	5%	1/4W	
R808	1-249-413-11	CARBON	470	5%	1/4W	
R809	1-249-431-11	CARBON	15K	5%	1/4W	
R810	1-249-413-11	CARBON	470	5%	1/4W	
R811	1-249-413-11	CARBON	470	5%	1/4W	
R812	1-249-417-11	CARBON	1K	5%	1/4W	
R813	1-249-413-11	CARBON	470	5%	1/4W	
R815	1-249-425-11	CARBON	4.7K	5%	1/4W	
R816	1-215-437-00	METAL	4.7K	1%	1/6W	
R817	1-215-469-00	METAL	100K	1%	1/6W	
R818	1-215-437-00	METAL	4.7K	1%	1/6W	
R819	1-249-421-11	CARBON	2.2K	5%	1/4W	
R820	1-249-425-11	CARBON	4.7K	5%	1/4W	
R821	1-249-413-11	CARBON	470	5%	1/4W	
R823	1-249-413-11	CARBON	470	5%	1/4W	
R824	1-249-425-11	CARBON	4.7K	5%	1/4W	
R825	1-249-425-11	CARBON	4.7K	5%	1/4W	
R826	1-215-445-00	METAL	10K	1%	1/6W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R827	1-215-445-00	METAL	10K	1%	1/6W	
R828	1-249-425-11	CARBON	4.7K	5%	1/4W	
R829	1-249-413-11	CARBON	470	5%	1/4W	
R830	1-249-413-11	CARBON	470	5%	1/4W	
R831	1-249-425-11	CARBON	4.7K	5%	1/4W	
R832	1-249-425-11	CARBON	4.7K	5%	1/4W	
R833	1-215-445-00	METAL	10K	1%	1/6W	
R834	1-215-445-00	METAL	10K	1%	1/6W	
R835	1-249-425-11	CARBON	4.7K	5%	1/4W	
R836	1-249-413-11	CARBON	470	5%	1/4W	
R837	1-249-425-11	CARBON	4.7K	5%	1/4W	
R838	1-249-405-11	CARBON	100	5%	1/4W	
R839	1-249-405-11	CARBON	100	5%	1/4W	
R840	1-249-419-11	CARBON	1.5K	5%	1/4W	
R841	1-249-423-11	CARBON	3.3K	5%	1/4W	
R842	1-249-405-11	CARBON	100	5%	1/4W	
R843	1-249-405-11	CARBON	100	5%	1/4W	
R845	1-249-424-11	CARBON	3.9K	5%	1/4W	
R846	1-249-422-11	CARBON	2.7K	5%	1/4W	
R847	1-249-429-11	CARBON	10K	5%	1/4W	
R848	1-249-426-11	CARBON	5.6K	5%	1/4W	
R849	1-249-435-11	CARBON	33K	5%	1/4W	
R850	1-249-413-11	CARBON	470	5%	1/4W	
R851	1-249-417-11	CARBON	1K	5%	1/4W	
R852	1-249-413-11	CARBON	470	5%	1/4W	
R854	1-215-437-00	METAL	4.7K	1%	1/6W	
R855	1-215-469-00	METAL	100K	1%	1/6W	
R856	1-249-425-11	CARBON	4.7K	5%	1/4W	
R857	1-215-437-00	METAL	4.7K	1%	1/6W	
R858	1-249-421-11	CARBON	2.2K	5%	1/4W	
R859	1-249-425-11	CARBON	4.7K	5%	1/4W	
R860	1-249-413-11	CARBON	470	5%	1/4W	
R861	1-249-413-11	CARBON	470	5%	1/4W	
R862	1-249-425-11	CARBON	4.7K	5%	1/4W	
R863	1-249-425-11	CARBON	4.7K	5%	1/4W	
R864	1-215-445-00	METAL	10K	1%	1/6W	
R865	1-215-445-00	METAL	10K	1%	1/6W	
R866	1-249-425-11	CARBON	4.7K	5%	1/4W	
R867	1-249-413-11	CARBON	470	5%	1/4W	
R868	1-249-413-11	CARBON	470	5%	1/4W	
R869	1-249-425-11	CARBON	4.7K	5%	1/4W	
R870	1-249-425-11	CARBON	4.7K	5%	1/4W	
R871	1-215-445-00	METAL	10K	1%	1/6W	
R872	1-215-445-00	METAL	10K	1%	1/6W	
R873	1-249-425-11	CARBON	4.7K	5%	1/4W	
R874	1-249-413-11	CARBON	470	5%	1/4W	
R875	1-249-425-11	CARBON	4.7K	5%	1/4W	
R876	1-249-423-11	CARBON	3.3K	5%	1/4W	
R877	1-249-420-11	CARBON	1.8K	5%	1/4W	
R878	1-249-421-11	CARBON	2.2K	5%	1/4W	
R879	1-249-424-11	CARBON	3.9K	5%	1/4W	
R880	1-249-431-11	CARBON	15K	5%	1/4W	
R881	1-249-421-11	CARBON	2.2K	5%	1/4W	
R882	1-249-427-11	CARBON	6.8K	5%	1/4W	
R883	1-249-429-11	CARBON	10K	5%	1/4W	
R884	1-249-417-11	CARBON	1K	5%	1/4W	
R885	1-249-424-11	CARBON	3.9K	5%	1/4W	
R886	1-249-417-11	CARBON	1K	5%	1/4W	
R887	1-249-413-11	CARBON	470	5%	1/4W	
R888	1-215-441-00	METAL	6.8K	1%	1/6W	
R889	1-215-438-00	METAL	5.1K	1%	1/6W	
R890	1-215-447-00	METAL	12K	1%	1/6W	
R891	1-215-449-00	METAL	15K	1%	1/6W	
R892	1-215-429-00	METAL	2.2K	1%	1/6W	
R893	1-249-426-11	CARBON	5.6K	5%	1/4W	
R894	1-215-445-00	METAL	10K	1%	1/6W	
R895	1-215-442-00	METAL	7.5K	1%	1/6W	
R896	1-215-437-00	METAL	4.7K	1%	1/6W	
R897	1-215-447-00	METAL	12K	1%	1/6W	
R898	1-215-463-00	METAL	56K	1%	1/6W	
R899	1-215-436-00	METAL	4.3K	1%	1/6W	
R900	1-249-426-11	CARBON	5.6K	5%	1/4W	
R901	1-215-445-00	METAL	10K	1%	1/6W	
R902	1-249-441-11	CARBON	100K	5%	1/4W	
R903	1-249-441-11	CARBON	100K	5%	1/4W	
R904	1-249-441-11	CARBON	100K	5%	1/4W	
R905	1-249-441-11	CARBON	100K	5%	1/4W	
R906	1-249-429-11	CARBON	10K	5%	1/4W	
R907	1-249-429-11	CARBON	10K	5%	1/4W	
R908	1-249-429-11	CARBON	10K	5%	1/4W	
R909	1-249-429-11	CARBON	10K	5%	1/4W	
R910	1-249-429-11	CARBON	10K	5%	1/4W	
R911	1-249-429-11	CARBON	10K	5%	1/4W	
R912	1-249-429-11	CARBON	10K	5%	1/4W	
R913	1-249-429-11	CARBON	10K	5%	1/4W	
R914	1-249-433-11	CARBON	22K	5%	1/4W	
R916	1-249-417-11	CARBON	1K	5%	1/4W	
R917	1-249-441-11	CARBON	100K	5%	1/4W	
R918	1-249-437-11	CARBON	47K	5%	1/4W	
R919	1-249-412-11	CARBON	390	5%	1/4W	
R921	1-249-425-11	CARBON	4.7K	5%	1/4W	
R922	1-249-429-11	CARBON	10K	5%	1/4W	
R923	1-249-425-11	CARBON	4.7K	5%	1/4W	
R927	1-249-425-11	CARBON	4.7K	5%	1/4W	
R928	1-249-425-11	CARBON	4.7K	5%	1/4W	
R929	1-249-422-11	CARBON	2.7K	5%	1/4W	

VARIABLE RESISTOR

RV101	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV102	1-228-994-00	RES, ADJ, CARBON 10K
RV103	1-228-991-00	RES, ADJ, CARBON 2.2K
RV104	1-228-996-00	RES, ADJ, CARBON 47K
RV201	1-228-991-00	RES, ADJ, CARBON 2.2K
RV601	1-228-995-00	RES, ADJ, CARBON 22K
RV602	1-228-995-00	RES, ADJ, CARBON 22K
RV702	1-228-996-00	RES, ADJ, CARBON 47K

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
RV704	1-228-991-00	RES, ADJ, CARBON 2.2K			
RV705	1-228-991-00	RES, ADJ, CARBON 2.2K			
RV706	1-228-991-00	RES, ADJ, CARBON 2.2K			
RV707	1-228-990-00	RES, ADJ, CARBON 1K			
RV801	1-228-990-00	RES, ADJ, CARBON 1K			
RV802	1-228-989-00	RES, ADJ, CARBON 470			
RV803	1-228-989-00	RES, ADJ, CARBON 470			
RV804	1-228-990-00	RES, ADJ, CARBON 1K			
RV805	1-228-989-00	RES, ADJ, CARBON 470			
RV806	1-228-990-00	RES, ADJ, CARBON 1K			
RV807	1-228-995-00	RES, ADJ, CARBON 22K			
RV808	1-228-991-00	RES, ADJ, CARBON 2.2K			
RV809	1-228-989-00	RES, ADJ, CARBON 470			
RV810	1-228-990-00	RES, ADJ, CARBON 1K			
		CRYSTAL			
X701	1-567-733-11	VIBRATOR, CRYSTAL			
**********					
	*A-7061-751-A	PW-61 BOARD, COMPLETE (UK/AUS MODEL)			
		**********			
	*A-7061-835-A	PW-61 BOARD, COMPLETE (AEP MODEL)			
		**********			
	*1-533-189-11	HOLDER, FUSE			
	4-870-539-00	PLATE, GROUND			
		CAPACITOR			
C400	1-126-176-11	ELECT	220MF	20%	10V
C401 ⚠	1-136-472-11	FILM	0.1MF	20%	250V
C402	1-124-636-00	ELECT	3300MF	20%	25V
C404	1-161-051-00	CERAMIC	0.01MF	10%	25V
C405	1-161-051-00	CERAMIC	0.01MF	10%	25V
C406	1-161-051-00	CERAMIC	0.01MF	10%	25V
C407	1-161-051-00	CERAMIC	0.01MF	10%	25V
C408	1-124-898-11	ELECT	4700MF	20%	16V
C409	1-123-875-11	ELECT	10MF	20%	50V
C410	1-124-898-11	ELECT	4700MF	20%	16V
C412	1-124-887-00	ELECT	3300MF	20%	16V
C413	1-124-887-00	ELECT	3300MF	20%	16V
C414	1-123-875-11	ELECT	10MF	20%	50V
C415	1-123-875-11	ELECT	10MF	20%	50V
C416	1-126-176-11	ELECT	220MF	20%	10V
C417	1-161-379-00	CERAMIC	0.01MF	30%	16V
C418	1-126-176-11	ELECT	220MF	20%	10V
C419	1-161-379-00	CERAMIC	0.01MF	30%	16V
C424	1-126-176-11	ELECT	220MF	20%	10V
C426	1-124-120-11	ELECT	220MF	20%	16V
C662	1-123-875-11	ELECT	10MF	20%	50V
		CONNECTOR			
CN401	*1-564-321-00	PIN, CONNECTOR 2P			
CN402	*1-564-687-11	PIN, CONNECTOR 3P			
CN403	*1-560-896-00	PIN, CONNECTOR 8P			
CN404	*1-560-894-00	PIN, CONNECTOR 6P			
CN405	*1-560-891-00	PIN, CONNECTOR 3P			
		DIODE			
D401 ⚠	8-719-200-82	DIODE 11ES2			
D402 ⚠	8-719-200-82	DIODE 11ES2			
D403 ⚠	8-719-500-36	DIODE D2SB20			
D404 ⚠	8-719-510-06	DIODE S1WB60			
D602	8-719-911-19	DIODE 1SS119			
		FUSE			
F401 ⚠	1-532-259-00	FUSE T1.6A 250V			
		IC			
IC401	8-759-982-32	IC RC78M06FA			
IC402	8-759-701-66	IC NJM79M06FA			
		IC LINK			
PS401 ⚠	1-532-637-00	LINK, IC (ICP-N25) 1.0A			
PS402 ⚠	1-532-605-00	LINK, IC (ICP-N10) 0.4A			
PS403 ⚠	1-532-605-00	LINK, IC (ICP-N10) 0.4A			
PS405 ⚠	1-532-844-21	LINK, IC (PRF3150) 3.15A			
		RESISTOR			
R401 ⚠	1-249-470-11	CARBON	0.47	5%	1/2W F
R402 ⚠	1-249-470-11	CARBON	0.47	5%	1/2W F
R407	1-249-409-11	CARBON	220	5%	1/4W
R663	1-247-887-00	CARBON	220K	5%	1/4W
		TERMINAL PIN			
TP401	1-535-443-00	PIN, TERMINAL (AC CORD)			
TP402	1-535-443-00	PIN, TERMINAL (AC CORD)			
**********					
	*1-630-229-21	FT-38 BOARD			
		**********			
	*3-662-262-00	HOLDER (D), LED			
		DIODE			
D103	8-719-940-82	DIODE SLR-34MC3			
D104	8-719-300-71	DIODE SEL2210R (CHROMA NR)			
D118	8-719-300-71	DIODE SEL2210R (VIDEO ART REVERSE)			
D122	8-719-812-32	DIODE TLY123 (REVERSE NEGA/POSI)			
D138	8-719-940-82	DIODE SLR-34MC3 (SPLIT SCREEN)			
		RESISTOR			
R103	1-249-413-11	CARBON	470	5%	1/4W
R104	1-249-421-11	CARBON	2.2K	5%	1/4W
R105	1-249-413-11	CARBON	470	5%	1/4W
R106	1-249-437-11	CARBON	47K	5%	1/4W
R107	1-249-413-11	CARBON	470	5%	1/4W

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

FT-38 JK-44 MJ-22

Ref.No	Part No.	Description				Remark
R113	1-249-413-11	CARBON	470	5%	1/4W	
R114	1-249-413-11	CARBON	470	5%	1/4W	
R115	1-249-421-11	CARBON	2.2K	5%	1/4W	
R122	1-249-437-11	CARBON	47K	5%	1/4W	
R123	1-249-413-11	CARBON	470	5%	1/4W	
R126	1-249-437-11	CARBON	47K	5%	1/4W	
		VARIABLE RESISTOR				
RV104	1-237-400-11	RES, VAR, CARBON 10K (VIDEO ART)				
		SWITCH				
S102	1-570-797-11	SWITCH, PUSH (1 KEY) (BYPASS)				
S103	1-570-797-11	SWITCH, PUSH (1 KEY) (CHROMA NR)				
S109	1-570-797-11	SWITCH, PUSH (1 KEY) (VIDEO ART REVERSE)				
S113	1-570-797-11	SWITCH, PUSH (1 KEY) (REVERSE NEGA/POSI)				
S128	1-570-797-11	SWITCH, PUSH (1 KEY) (SPLIT SCREEN)				

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*A-7070-842-A JK-44 BOARD, COMPLETE
****

*2-128-425-01 BRACKET, S TERMINAL

CAPACITOR

C001	1-123-875-11	ELECT	10MF	20%	50V
C002	1-123-875-11	ELECT	10MF	20%	50V
C003	1-123-875-11	ELECT	10MF	20%	50V
C004	1-123-875-11	ELECT	10MF	20%	50V
C005	1-123-875-11	ELECT	10MF	20%	50V
C006	1-123-875-11	ELECT	10MF	20%	50V
C007	1-123-875-11	ELECT	10MF	20%	50V

CONNECTOR

CN051	1-506-481-11	PIN, CONNECTOR 2P
CN052	1-506-487-11	PIN, CONNECTOR 8P
CN053	1-506-482-11	PIN, CONNECTOR 3P

JACK

CNJ001	1-568-304-11	JACK, PIN 2P (LINE IN)
CNJ002	1-565-727-31	JACK, PIN 3P (SOURCE IN 1 CH)
CNJ003	1-565-727-31	JACK, PIN 3P (SOURCE IN 2 CH)
CNJ004	1-566-728-21	TERMINAL, S (SOURCE IN S VIDEO 1 CH)
CNJ005	1-566-728-21	TERMINAL, S (SOURCE IN S VIDEO 2 CH)
CNJ006	1-565-727-31	JACK, PIN 3P (OUTPUT 1 CH)
CNJ007	1-565-727-31	JACK, PIN 3P (OUTPUT 2 CH)
CNJ008	1-566-728-21	TERMINAL, S (OUTPUT S VIDEO 1 CH)
CNJ009	1-566-728-21	TERMINAL, S (OUTPUT S VIDEO 2 CH)

DIODE

D001	8-719-911-19	DIODE 1SS119
D002	8-719-911-19	DIODE 1SS119
D003	8-719-911-19	DIODE 1SS119
D016	8-719-108-12	DIODE RD9.1EW
D017	8-719-108-12	DIODE RD9.1EW
D018	8-719-108-12	DIODE RD9.1EW
D019	8-719-108-12	DIODE RD9.1EW
D020	8-719-108-12	DIODE RD9.1EW
D021	8-719-108-12	DIODE RD9.1EW
D024	8-719-108-12	DIODE RD9.1EW
D025	8-719-108-12	DIODE RD9.1EW
D026	8-719-108-12	DIODE RD9.1EW
D027	8-719-108-12	DIODE RD9.1EW
D801	8-719-108-12	DIODE RD9.1EW
D802	8-719-108-12	DIODE RD9.1EW
D803	8-719-108-12	DIODE RD9.1EW
D804	8-719-108-12	DIODE RD9.1EW

TRANSISTOR

Q001	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q002	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q003	8-729-119-78	TRANSISTOR 2SC2785-HFE

RESISTOR

R001	1-249-429-11	CARBON	10K	5%	1/4W
R002	1-249-429-11	CARBON	10K	5%	1/4W
R003	1-249-429-11	CARBON	10K	5%	1/4W
R004	1-249-429-11	CARBON	10K	5%	1/4W
R005	1-249-429-11	CARBON	10K	5%	1/4W
R006	1-249-429-11	CARBON	10K	5%	1/4W
R010	1-247-804-11	CARBON	75	5%	1/4W
R011	1-247-804-11	CARBON	75	5%	1/4W
R012	1-247-804-11	CARBON	75	5%	1/4W
R013	1-247-804-11	CARBON	75	5%	1/4W
R014	1-247-804-11	CARBON	75	5%	1/4W
R015	1-247-804-11	CARBON	75	5%	1/4W
R016	1-249-441-11	CARBON	100K	5%	1/4W
R017	1-249-441-11	CARBON	100K	5%	1/4W
R018	1-249-441-11	CARBON	100K	5%	1/4W
R019	1-249-441-11	CARBON	100K	5%	1/4W
R020	1-249-441-11	CARBON	100K	5%	1/4W
R021	1-249-441-11	CARBON	100K	5%	1/4W
R022	1-247-804-11	CARBON	75	5%	1/4W
R023	1-247-804-11	CARBON	75	5%	1/4W

RELAY

RY001	1-515-529-11	RELAY
RY002	1-515-529-11	RELAY
RY003	1-515-529-11	RELAY

****

*1-630-220-12 MJ-22 BOARD
****

DIODE

D131	8-719-108-12	DIODE RD9.1EW

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
		JACK			
J101	1-507-834-31	JACK (MIC)			
		**********			
	*1-630-222-12	PT-68 BOARD			
		**********			
		CAPACITOR			
C403	1-123-875-11	ELECT	10MF	20% 50V	
C420	1-124-477-11	ELECT	47MF	20% 25V	
C421	1-161-379-00	CERAMIC	0.01MF	30% 16V	
C427	1-124-477-11	ELECT	47MF	20% 16V	
		IC			
IC403	8-759-701-59	IC NJM78M09FA			
IC404	8-759-914-44	IC TL431CLPB			
IC405	8-759-604-29	IC M5F7805			
		RESISTOR			
R403	1-249-434-11	CARBON	27K	5% 1/4W	
R404	1-249-426-11	CARBON	5.6K	5% 1/4W	
		VARIABLE RESISTOR			
RV401	1-228-990-00	RES, ADJ, CARBON 1K			
		**********			
	*1-630-228-21	AM-13 BOARD			
		**********			
	2-118-268-01	NUT (M9), HEXAGON			
		VARIABLE RESISTOR			
RV101	1-238-519-21	RES, VAR, CARBON 1K/1K (PHASE CORRECT)			
RV102	1-237-425-11	RES, VAR, CARBON 10K/10K (GAMMA)			
RV103	1-237-399-11	RES, VAR, CARBON 1K (COLOR)			
RV108	1-237-425-21	RES, VAR, CARBON 10K/10K (AUDIO MIX)			
RV113	1-237-400-11	RES, VAR, CARBON 10K (MIC LEVEL)			
		**********			
	*1-630-227-21	AC-44 BOARD			
		**********			
		SWITCH			
S401	⚠.1-553-318-13	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)			
		**********			

Ref.No	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
	⚠.1-534-817-31	CORD, POWER (AEP MODEL)	
	⚠.1-551-732-11	CORD, POWER (AUS MODEL)	
	⚠.1-551-884-32	CORD, POWER (UK MODEL)	
	⚠.3-703-244-02	BUSHING (2104), CORD	
PT401	⚠.1-449-826-11	TRANSFORMER, POWER	
		**********	
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	Part No.	Description	Remark
	*2-128-443-01	CUSHION (UPPER)	
	*2-128-444-01	CUSHION (LOWER)	
	*2-182-811-01	INDIVIDUAL CARTON	
	3-786-993-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/GERMAN/SPANISH/DUTCH)	
	3-786-993-41	MANUAL, INSTRUCTION (AEP MODEL) (SWEDISH/ITALIAN/PORTUGUESE/ARABIC)	
	3-786-994-11	REFERENCE, COLOR	
		**********	
		HARDWARE LIST	
		**********	
		SCREW	
	7-682-661-09	SCREW +PSW 4X8	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
		**********	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SECTION 7
ELECTRICAL ADJUSTMENT

During the adjustment, see the parts location diagram relevant to the adjustment on Page 130.

This section discusses the matters and instructions required for all the adjustments of the electric circuits of this equipment.

[Instruments Used]

1) Monitor TV
2) Oscilloscope (mono-or dual trace), bandwidth of 15 MHz or more, with delay mode
3) Frequency counter (6 digits or more)
4) PAL pattern generator
5) Digital voltmeter
6) Audio level meter
7) Vectorscope
8) Audio generator
9) Audio attenuator

[Preparation]

Perform adjustment under the following conditions unless otherwise specified.

- INPUT SELECT switch ..... 1CH VIDEO
- BYPASS switch ..... OFF
- SPLIT SCREEN switch ..... OFF
- VIDEO ART REVERSE switch ..... OFF
- VIDEO ART knob ..... MAX (fully clockwise)
- CHROMA NR switch ..... OFF
- REVERSE (NEGA/POSI) switch ..... OFF
- GAMMA knob ..... Center click position
- PHASE CORRECT knob ..... Center click position
- COLOR knob ..... Center click position
- BLACK BALANCE
  - ON/OFF switch ..... OFF
  - WIDE RANGE switch ..... OFF
  - BLACK CLIP switch ..... OFF
  - BLACK CLIP knob .... MIN (fully counterclockwise)
- WHITE BALANCE
  - ON/OFF switch ..... OFF
  - WIDE RANGE switch ..... OFF
  - WHITE CLIP switch ..... OFF
  - WHITE CLIP knob .... MIN (fully counterclockwise)
- WIPE PATTERN
  -  switch ..... OFF
  -  switch ..... OFF
  -  switch ..... OFF
  -  switch ..... OFF
  -  switch ..... OFF
  -  switch ..... OFF
- WIPE lever ..... MIN (fully downward)
- FADER COLOR SELECT switch ..... COLOR BAR
- FADER lever ..... MIN (fully downward)
- AUTO SPEED
  - WIPE switch ..... OFF
  - FADER switch ..... OFF
  - SPEED knob ..... FAST (fully clockwise)
  - START switch ..... OFF
- FADER
  - VIDEO switch ..... OFF
  - AUDIO switch ..... OFF
  - WHITE switch ..... OFF
  - BLACK switch ..... OFF
  - BACK COLOR switch ..... ON
- MIC level knob ..... MIN
- AUDIO MIX knob ..... SOURCE

[Connection]

Connect the instruments as shown below.

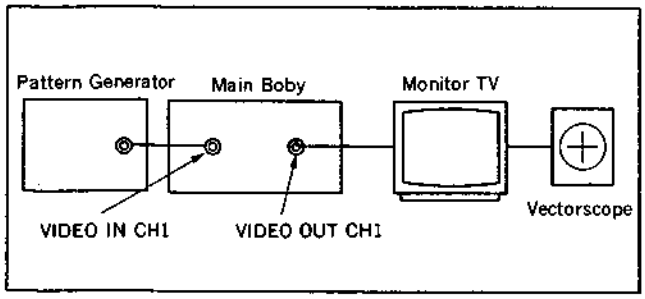


Fig. 7-1.

[Color Bar Signal]

For this adjustment, use a color bar signal obtained from video output of the PAL pattern generator.

Connect the oscilloscope to the JK-44 board CN052 pin ① and check a video input signal for the following:

(1) The amplitude of a horizontal sync. signal must be 300± 15mVp-p.
(2) The amplitude of a video signal must be 700±20 mVp-p.
(3) The amplitude of a burst signal must be 300±15 mVp-p.
(4) The amplitude of "cyan" or "red" must be 664±20m Vp-p.

Fig. 7-2. shows the video (color bar) signal used for adjustment.

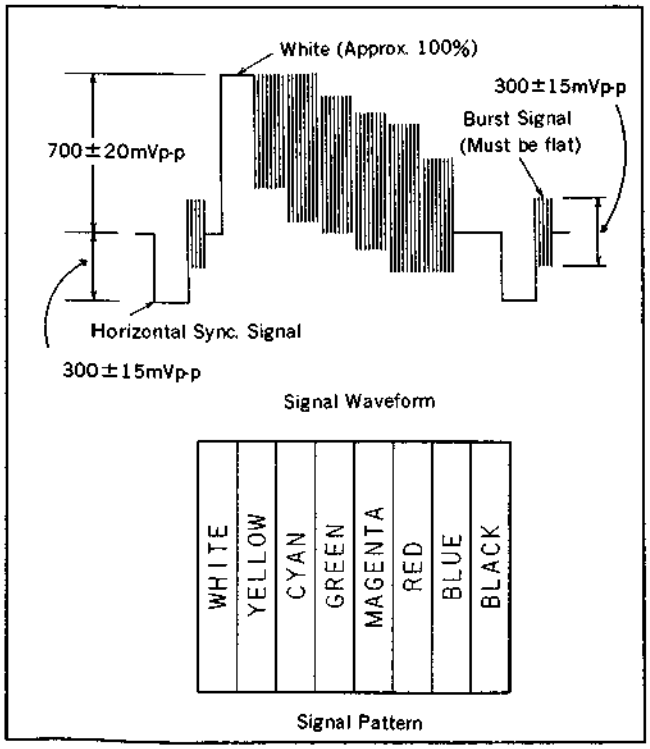


Fig. 7-2 Color Bar Signal of Pattern Generator

[Input/Output Level Impedance]

S-Video input/output

S-VIDEO SOURCE IN (4-pin mini DIN)
S-VIDEO OUTPUT (4-pin mini DIN)
Y-signal : 1Vp-p, 75 ohms, unbalanced, sync negative
C-signal : 0.3Vp-p, 75 ohms, unbalanced

Video input/output

V SOURCE IN 1 and 2 (phono jacks)
V OUTPUT (phono jacks)
1Vp-p, 75 ohms, unbalanced, sync negative

Audio input

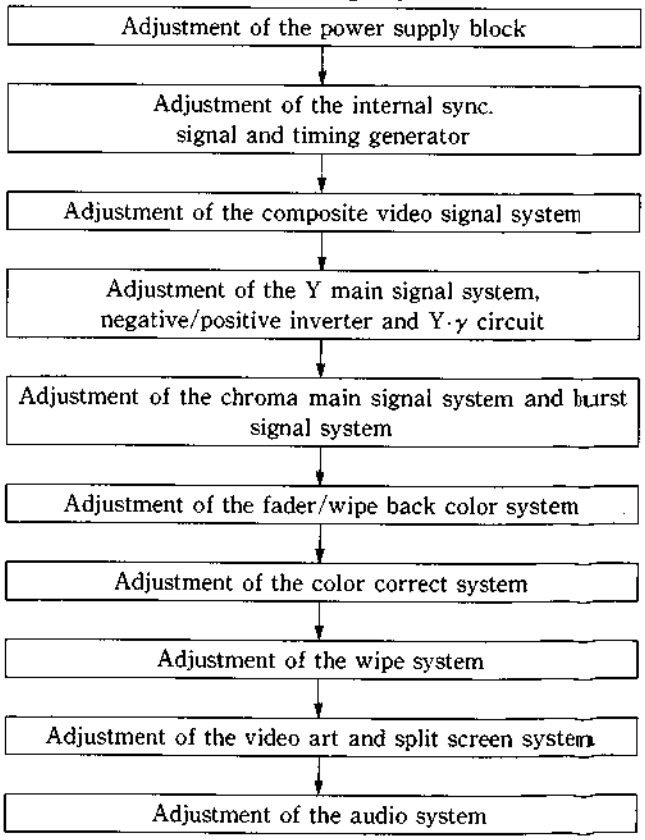
R/L SOURCE 1 and 2 (phono jacks)
LINE IN (phono jacks)
Input level : −7.5 dBs (0dBs= 0.775Vrms)
Input impedance : More than 47 kilohms
MIC (minijack)
Input level : −66 dBs
Input impedance : More than 3 kilohms

Audio output

R/L OUTPUT (phono jacks)
Output level : −7.5 dBs at 47 kilohms load
Output impedance : Less than 10 kilohms

[Adjustment Sequence]

As a rule, adjust in the following sequence.



7-1. ADJUSTMENT OF POWER SUPPLY BLOCK

7-1-1. −5V, +9V Adjustment

Measurement equipment	Digital voltmeter
−5V adjustment	
Measurement point	PW-61 board TP406 (W115 pin ④)
Adjustment element	PT-70 board RV402
Specified value	−5.00±0.01Vdc
+9V adjustment	
Measurement point	PW-61 board TP403 (W115 pin ①)
Adjustment element	PT-68 board RV401
Specified value	+9.00±0.02Vdc

[Adjustment Method]

1) Adjust each supply voltage to the specified value with each adjustment point.

7-1-2. +5V, +6V and −6V Confirmation (PW-61 Board)

Measurement equipment	Digital voltmeter
+5V check	
Measurement point	TP405 (W115 pin ②)
Specified value	5.0±0.2Vdc
+6V check	
Measurement point	TP407 (W310 pin ②)
Specified value	6.0±0.2Vdc
−6V check	
Measurement point	TP408 (W310 pin ④)
Specified value	−6.0±0.2Vdc

[Confirmation]

1) Confirm that each supply voltage meets the specified value.

7-2. ADJUSTMENT OF INTERNAL SYNC. SIGNAL AND TIMING GENERATOR

7-2-1. INT SYNC fsc Adjustment (YS-6 Board)

Signal	No signal
Measurement point	A : IC203 pin ⑦ B : Q223 Emitter
Measurement equipment	A : Frequency counter B : Digtal voltmeter
Adjustment element	CV205 CV247
Specified value	A : 4433618.75±30.00Hz B : 2.0±0.5Vdc

[Connection]

1) Remove the pattern generator.

[Adjustment Method]

1) Adjust the voltage of Q223 emitter to 3.5±0.5V with CV205.
2) Confirm that the frequency of IC203 pin ⑦ is over 4433618Hz.
   (In case of over 4433618Hz, move to procedure 5)).
3) Adjust the voltage of Q223 emitter to 0.5±0.5Vdc with CV247.
4) Repeat from 1) to 3).
5) Adjust the frequency of IC203 pin ⑦ to 4433618±20Hz with CV205.
6) Adjust the voltage of Q223 emitter to 2.0±0.5Vdc with CV247.
7) Repeat 5) and 6).

7-2-2. INT SYNC Burst Level Confirmation (YS-6 Board)

Signal	No signal
Measurement point	Q205 emitter (TP015)
Measurement equipment	Oscilloscope
Specified value	350±50mVp-p

[Connection]

1) Remove the pattern generator.

[Confirmation]

1) Confirm that a burst level is 350±50mVp-p.

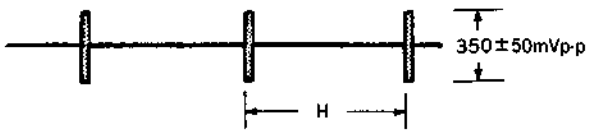


Fig. 7-3.

7-2-3. INT SYNC Level Confirmation (YS-6 Board)

Signal	No signal
Measurement point	Q206 emitter (TP013)
Measurement equipment	Oscilloscope
Specified value	300±50mVp-p

[Connection]

1) Remove the pattern generator.

[Confirmation]

1) Confirm that the INT SYNC level is 300±50mVp-p.

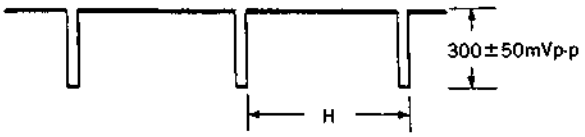


Fig. 7-4.

7-2-4. H AFC Adjustment (CA-16 Board)

Signal	No signal
Measurement point	IC104 pin ⑮
Measurement equipment	Frequency counter
Adjustment element	RV101
Specified value	15625±10Hz

[Connection]

1) Remove CN133. (Reconnect it after adjustment.)

[Adjustment Method]

1) Adjust to 15625±10Hz with RV101.

7-2-5. H Front Blanking Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV103
Specified Value	1.8 ±0.2 μsec

[Setting of Switches]

- VIDEO FADER switch ..... ON
- WHITE FADER switch ..... ON
- FADER lever ..... MAX (fully upward)

[Adjustment Method]

1) Adjust an H front blanking position to 1.8 ±0.2 μsec with RV103.

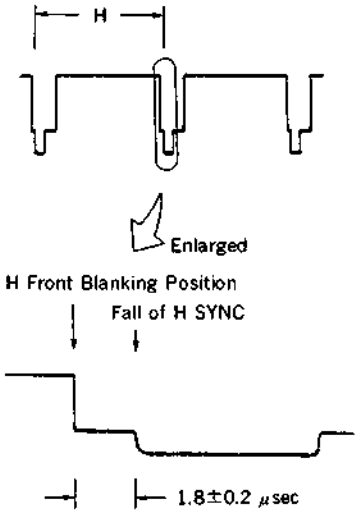


Fig. 7-5.

7-2-6. H Back Blanking Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement instrument	Oscilloscope
Adjustment element	RV102
Specified value	5.8±0.2μsec

[Setting of Switches]

- VIDEO FADER switch .....ON
- WHITE FADER switch .....ON
- FADER lever .....MAX (fully upward)

[Adjustment Method]

1) Adjust an H back blanking position to 5.8±0.2μsec with RV102.

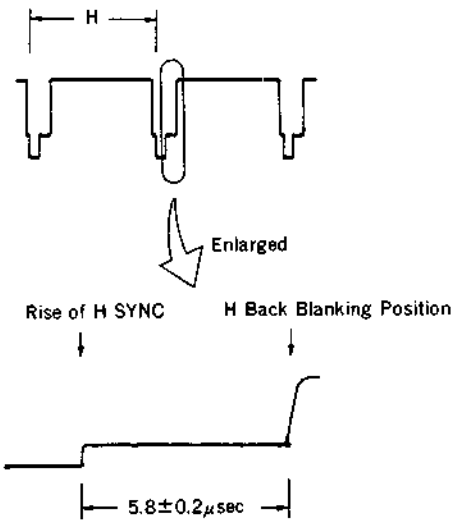


Fig. 7-6.

7-2-7. V Blanking Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	CH1 : IC106 pin ③ CH2 : S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV104
Specified value	0±30μsec

[Setting of Switches]

- BYPASS switch .....ON

[Adjustment Method]

1) With RV104, correspond a fall of a V blanking signal (CH1) to a rise of a video portion (CH2).

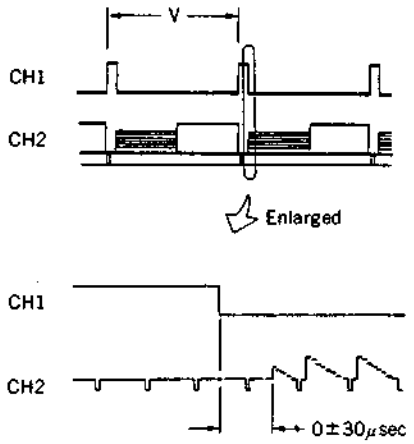


Fig. 7-7.

7-3. ADJUSTMENT OF COMPOSITE VIDEO SIGNAL SYSTEM

7-3-1. Y-SEP Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	Q253 emitter (TP017)
Measurement equipment	Oscilloscope
Adjustment element	LV202 (CHROMA) RV204 (Y+SYNC)
Specified value	0±40mVp-p (CHROMA) 1.00±0.05Vp-p (Y+SYNC)

[Adjustment Method]

1) Adjust the chroma signal level to min. (0±40mVp-p) with LV201.
2) Adjust the Y signal level to 1.00 ± 0.05Vp-p with RV204.

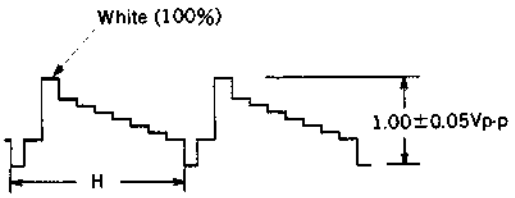


Fig. 7-8.

7-3-2. C-SEP Frequency Characteristic Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	Q254 emitter (TP018)
Measurement instrument	Oscilloscope
Adjustment element	LV203
Specified value	Maximize chroma signal

[Adjustment Method]

1) Adjust with LV203 so that chroma signal becomes maximized.

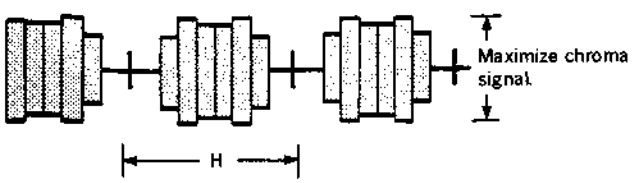


Fig. 7-9.

7-3-3. C-SEP Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	Q254 emitter (TP018)
Measurement instrument	Oscilloscope
Adjustment element	RV205
Specified value	664±20mVp-p

[Adjustment Method]

1) Adjust the chroma signal level to 664±20mVp-p.

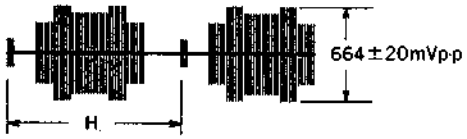


Fig. 7-10.

7-3-4 (1). Y-C SEP Frequency Characteristic Adjustment (WF-1 board) (Using color bar signal)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement instrument	Oscilloscope
Adjustment element	RV203
Specified value	Minimize the spike at border of YELLOW and CYAN.

[Adjustment Method]

1) Turn RV203 fully counterclockwise (↺)
2) Shorten the spike at border of YELLOW and CYAN by turning RV203 clockwise (↻), and stop it directly before it disappears.

Note : Do not turn RV203 too much, or the angles of CYAN round off.

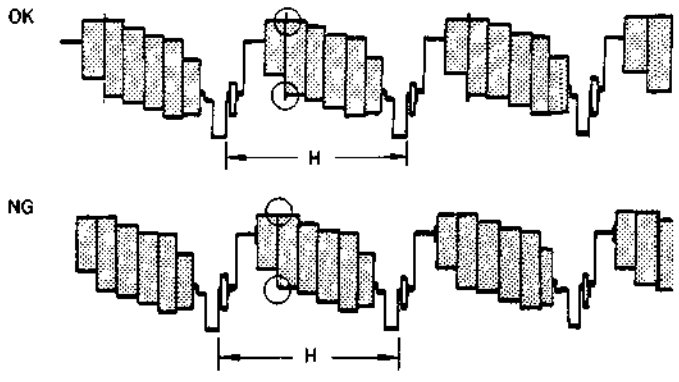


Fig. 7-11 (a).

7-3-4 (2). Y-C SEP Frequency Characteristic Adjustment (WF-1 board) (Using color bar signal)

Signal	Sweep
Measurement point	VIDEO OUT 1 terminal
Measurement instrument	Oscilloscope
Adjustment element	RV203
Specified value	Make flat around 2—6MHz

[Adjustment Method]

1) Adjust RV203 so that the waveform of 2—6MHz becomes flat.

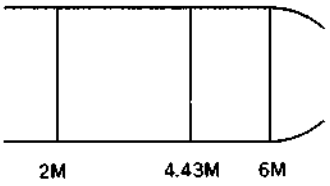


Fig. 7-11 (b).

7-3-5. Composite Y Level and Chroma Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	VIDEO OUT 1 terminal
Measurement equipment	Oscilloscope
Adjustment element	RV800 (Y level) RV802 (chroma level)
Specified value	700±30mVp-p (Y level) 664±30mVp-p (chroma level)

Note : 1) The VIDEO OUT 1 terminal must be terminated at 75Ω.

2) Be sure that the "7-5-2. Chroma Level adjustment" have been already completed.

[Adjustment Method]

1) Adjust the Y signal level to 700±30mVp-p with RV800.
2) Adjust the chroma signal level to 664±30mVp-p with RV802.

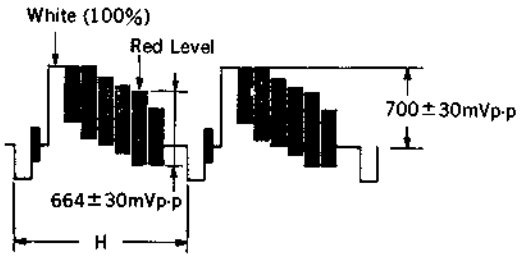


Fig. 7-12.

7-4. ADJUSTMENT OF Y MAIN SIGNAL SYSTEM, NEGATIVE/POSITIVE INVERTER AND Y-γ CIRCUIT.

7-4-1. Pilot Signal Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	Q376 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV301
Specified value	0±40mV

[Adjustment Method]

1) Adjust the pilot signal level to the white 100% level with RV301. Level difference = 0±40mV

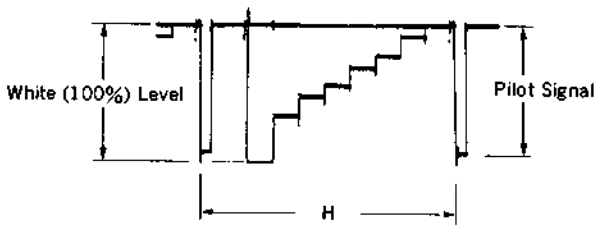


Fig. 7-13.

7-4-2. Negative AGC Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	IC303 pin ⑮
Measurement equipment	Oscilloscope
Adjustment element	RV305
Specified value	0±30mV

[Setting of Switches]

• REVERSE (NEGA/POSI) switch ..... ON

[Adjustment Method]

1) Turn RV305 slowly to correspond the white 100% level to the blanking level.
Level difference = 0±30mV

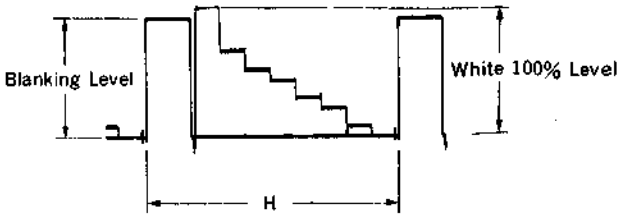


Fig. 7-14.

7-4-3. Y-γ Center Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	Q321 collector
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV302
Specified value	−1.00±0.05Vdc

[Adjustment Method]

1) Confirm the 0Vdc level of the oscilloscope.
2) Adjust the Y signal lower DC level to −1.00±0.05Vdc with RV302.

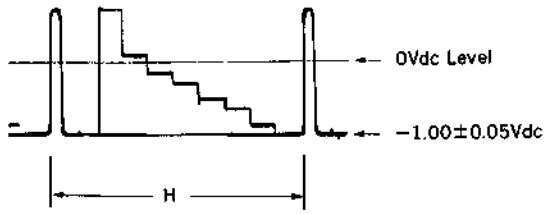


Fig. 7-15.

7-4-4. Positive AGC Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	Q343 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV306
Specified value	1.4±0.1Vp-p

[Adjustment Method]

1) Turn RV306 slowly to adjust the Y signal level to 1.4±0.1Vp-p.

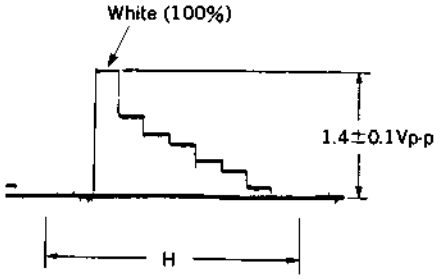


Fig. 7-16.

7-4-5. Y-γ LOW and Y-γ HIGH Adjustment (YS-6 Board)

Note : "Y-γ LOW adjustment" and "Y-γ HIGH adjustment" affect each other.
Make these adjustments until both specified values are met.

Signal	Color bar
Measurement point	CH1 : S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①) CH2 : W107 pin ③ (Y BYPASS)
Measurement equipment	Oscilloscope ADD mode CH2 polarity....INVERT

Note : 1) This S VIDEO 1 terminal must be terminated at 75Ω.
2) make even the CH1 gain and CH2 gain of the oscilloscope.

1. Y-γ LOW Adjustment

Adjustment element	RV303
Specified value	The "cyan" and "green" levels coincide with each other.

[Adjustment Method]

1) Fully turn the GAMMA knob counterclockwise (↺).
2) With RV303, make the "cyan" and "green" levels identical, and at the same time, to maximum.
3) Return the GAMMA knob to a center click position.

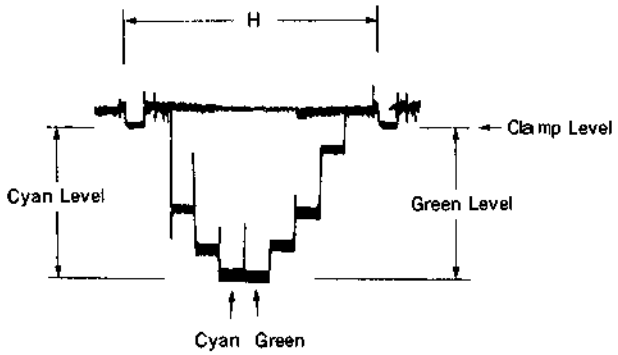


Fig. 7-17.

2. Y-γ HIGH Adjustment

Adjustment element	RV304
Specified value	The "cyan" and "magenta" levels must be equal to each other.

[Adjustment Method]

1) Fully turn the GAMMA knob clockwise (↻).
2) Viewing from the parts surface side, fully turn RV304 counterclockwise (↺).
3) Turn RV304 slowly clockwise to correspond the "cyan" level to the "magenta" level.
4) Return the GAMMA knob to a center click position.

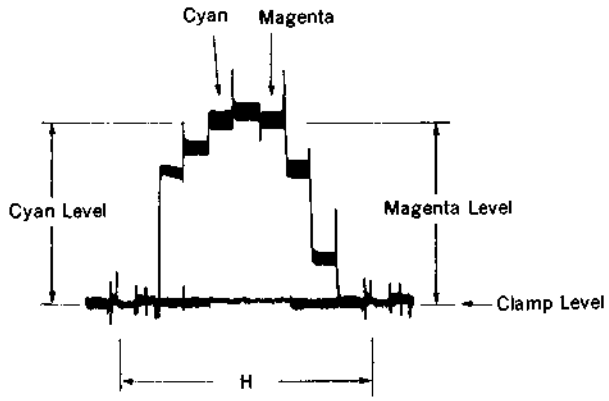


Fig. 7-18.

7-4-6. C-γ Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	IC101 pin ⑮
Measurement equipment	Oscilloscope
Adjustment element	RV101
Specified value	0±40mV

[Adjustment Method]

1) Correspond the white 100% level to the blanking level with RV101.
   Level difference = 0±40mV

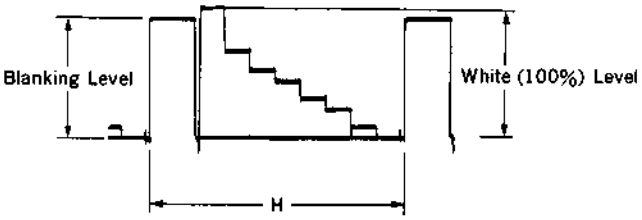


Fig. 7-19.

7-4-7. Y Level and SYNC Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV315 (Y level) RV400 (SYNC level)
Specified value	700±30mVp-p (Y level) 300±20mVp-p (SYNC level)

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Adjustment Method]

1) Adjust the Y level to 700±30mVp-p with RV315.
2) Adjust the SYNC level to 300±20mVp-p with RV400.

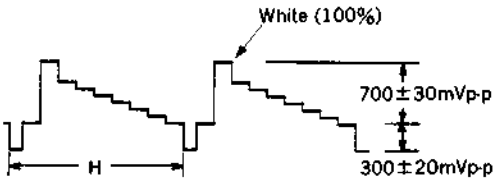


Fig. 7-20.

7-5. ADJUSTMENT OF CHROMA MAIN SIGNAL SYSTEM AND BURST SIGNAL SYSTEM

7-5-1. COLOR VR Center Adjustment (YS-6 Board)

Signal	Color bar
Measurment point	TP007 (CN127 pin ②)
Measurement equipment	Digital voltmeter
Adjustment element	RV308
Specified value	0±20mVdc

[Adjustment Method]

1) Confirm that the COLOR knob is at a center click position.
2) Adjust to 0±20 mVdc with RV308.

7-5-2. Chroma Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV317
Specified value	664±30mVp-p

Note : The S VIDEO 1 terminal must be terminated at 75Ω.

[Adjustment Method]

1) Confirm that the WHITE BALANCE and BLACK BALANCE switches are turned off.
2) Adjust the chroma signal level to 664±30mVp-p with RV317.

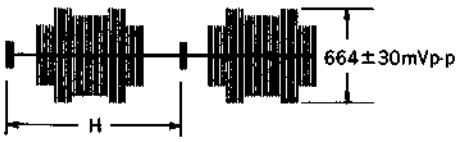


Fig. 7-21.

7-5-3. Burst Phase Adjustment (YS-6 Board) (Using the vectorscope)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement equipment	Vectorscope
Adjustment element	RV314
Specified value	0±2°

[Setting of Switches]

• SPLIT SCREEN switch ..... ON

[Adjustment Method]

1) Turn on the BYPASS switch.
2) Measure the chroma phase of each color bright point (particularly red and yellow).
3) Turn off the BYPASS switch.
4) Adjust RV314 so that the chroma phase of each color bright point (particularly red and yellow) will be 0±2° against the chroma phase measured in the step 2).
5) Make "burst level adjustment".

7-5-4. Burst Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment point	RV318
Specified value	300±15mVp-p

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Adjustment Method]

1) Adjust to 300±15mVp-p with RV318.
2) Confirm the "burst phase adjustment".

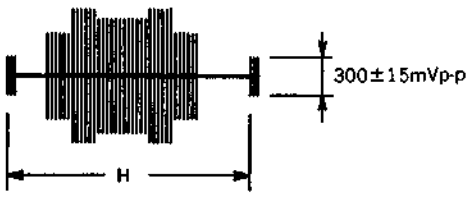


Fig. 7-22.

7-5-5. CNR Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	VIDEO OUT terminal (75Ω terminated)
Measurement equipment	Vector scope
Adjustment element	LEVEL : RV201, PHASE : LV201
Specified value	LEVEL : 0±2% PHASE : 0±2°

[Adjustment Method]

1) Turn on the CHROMA NR switch.
2) Adjust the level as shown in Fig. 7-23 with RV201.
3) Adjust the phase as shown in Fig. 7-23 with LV201.
4) Repeat 2) and 3).
5) Turn on/off the CHROMA NR switch, and confirm that the phase and the level of each luminescent spot does not change.
6) Turn off the CHROMA NR switch.

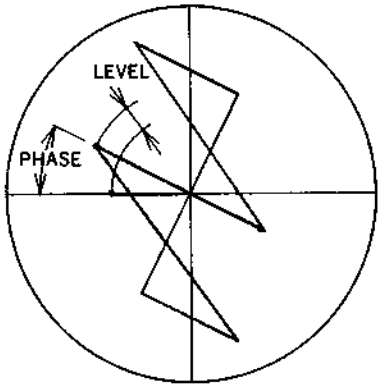


Fig. 7-23.

7-6. ADJUSTMENT OF FADER/WIPE BACK COLOR SYSTEM

7-6-1. Back Color bar Adjustment (CA-16 Board)

Signal	Optional
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV201
Specified value	7.2±0.2μsec

[Setting of Switches]

- WIPE PATTERN switch ..... ▬ ON
- WIPE lever .....MAX (fully upward)

[Adjustment Method]

1) Adjust to 7.2±0.2μsec with RV201.

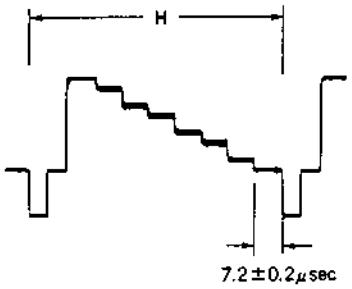


Fig. 7-24.

7-6-2. Fader/Wipe Back Color Y Level and Back Color Y Level Adjustment.

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Setting of Switches]

- FADER VIDEO switch .....ON
- FADER BACK COLOR switch .....ON
- FADER lever.....MAX (fully upward)
- WIPE PATTERN switch ..... ▬ ON
- WIPE lever .....Center
- BACK COLOR SELECT switch .....COLOR BAR
- VIDEO ART knob .....MAX (fully clockwise)

1. Fader/Wipe Back Color Y Level Adjustment (WF-1 Board)

Adjustment element	RV603
Specified value	0±10mV

[Adjustment Method]

1) With RV603, make the fader back color Y signal level correspond to the wipe back color Y signal level.

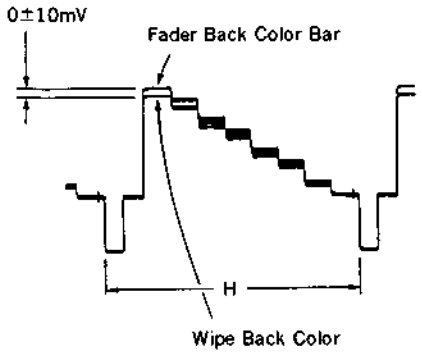


Fig. 7-25.

2. Back Color Y Level Adjustment (CA-16 Board)

Adjustment element	RV707
Specified value	550±20mV

[Adjustment Method]

1) Adjust the back color Y signal level to 550±20mV with RV707.

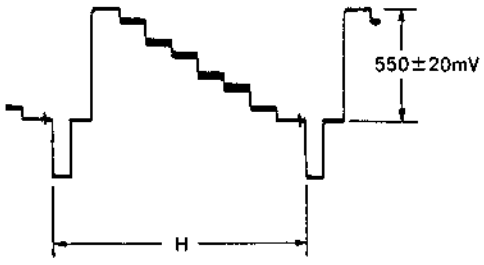


Fig. 7-26.

7-6-3. Fader White Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV601
Specified value	630±30mVp-p

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Setting of Switches]

- FADER VIDEO switch ..... ON
- FADER WHITE switch ..... ON
- FADER lever ..... MAX(fully upward)

[Adjustment Method]

1) Adjust the Y signal level to 630±30mVp-p with RV601.

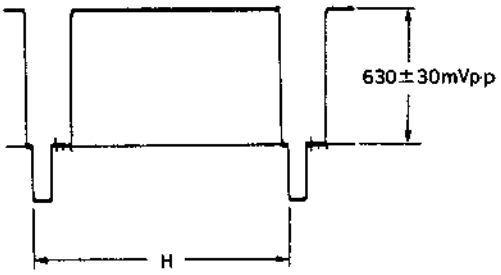


Fig. 7-27.

7-6-4. fsc Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Q702 emitter
Measurement equipment	Frequency counter
Adjustment element	CV701
Specified value	4433618 ± 25Hz

[Connection]

1) Remove CN130.
2) With a 10μF capacitor, connect between the IC703 pin ⑤ and GND.
   (Restore those parts mentioned above in 1) and 2).)

[Adjustment Method]

1) Adjust to 4433618±25Hz with CV701.
2) After completing this adjustment, be sure to make ACC peak Adjustment as described in 7-6-5.

7-6-5. ACC Peak Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Q707 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV702
Specified value	Portion Ⓐ : 0±40mVp-p Portion Ⓑ : over 400mVp-p

[Adjustment Method]

1) Adjust RV702 so that portion Ⓐ is 0±40mVp-p and portion Ⓑ is over 400mVp-p.
2) Make fsc Adjustment described in 7-6-4. below.

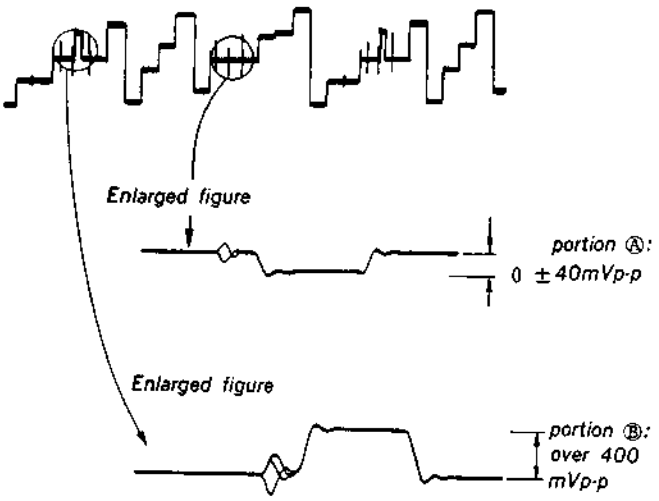


Fig. 7-28.

7-6-6. ACC Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	CH1 : YS-6 board W107 pin ⑤ (C BYPASS) CH2 : S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV704 (back color chroma level) RV705 (ACC)
Specified value	664±40mVp-p (at the burst level of 300 mVp-p) 200±50 mVp-p (at the burst level of 100 mVp-p)

Note : The S VIDEO 1 terminal must be connected at 75Ω.

[Setting of Switches]

- FADER lever.....MAX (fully upward)
- FADER VIDEO switch .....ON
- FADER BACK COLOR switch .....ON
- COLOR SELECT switch.....COLOR BAR

[Preparation]

1) Prepare a semi-fixed resistor (2.2 kΩ to 4.7kΩ).
2) Confirm that the burst level of oscilloscope CH1 is 300± 15mVp-p.
   (When this value is not met, adjust the output level of the pattern generator.)
3) Connect the semi-fixed resistor prepared in 1) between the YS-6 board Q214 base and GND. (Use a clip, etc. for connection so that it can be removed readily.)
4) With the semi-fixed resistor, adjust the burst level of oscilloscope CH1 to 100±5mVp-p.
5) Remove the semi-fixed resistor.

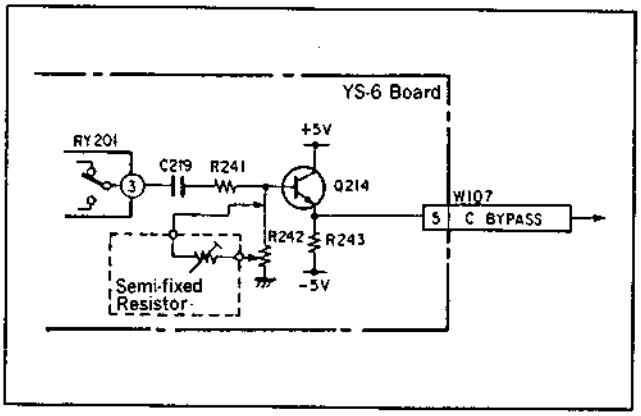
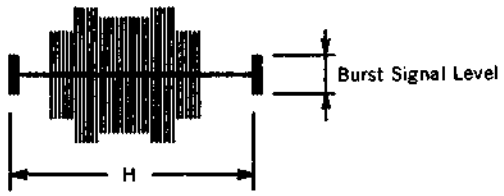


Fig. 7-29.

[Adjustment Method]

1) Confirm that the CH1 burst signal level is 300±15m Vp-p.
2) Turn RV704 slowly to adjust the CH2 chroma signal level to 664±40mVp-p.
3) Connect the semi-fixed resistor prepared in the step 1) of [Preparation] between the Q214 base and GND.
4) Confirm that the CH1 burst signal level is 100±5mVp-p.
5) With RV705, adjust the CH2 chroma signal level to 200±50mVp-p.
6) Remove the semi-fixed resistor connected in the step 4).
7) Repeat the steps 2) through 7) until the specified value is met.

CH1 Burst Signal Level



CH2 Chroma Signal Level

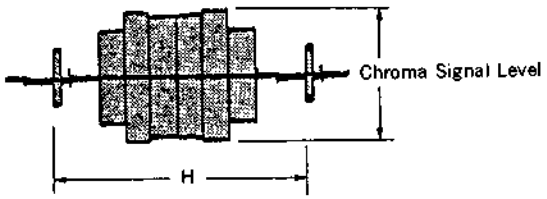


Fig. 7-30.

7-6-7. Fader/Wipe Back Color Chroma Level/Phase Adjustment (Using the Vectorscope)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement equipment	Vectorscope

[Setting of Switches]

- FADER VIDEO switch .....ON
- FADER BACK COLOR switch .....ON
- FADER lever.....MAX (fully upward)
- WIPE PATTERN switch.....
- WIPE lever .....Center
- BACK COLOR SELECT switch .....COLOR BAR
- VIDEO ART knob .....MAX (fully clockwise)

1. Fader/Wipe Back Color Chroma Level Adjustment (WF-1 Board)

Adjustment element	RV604 (level) RV602 (phase)
Specified value	0±1% (level) 0±1° (phase)

[Adjustment Method]

1) With RV602 and RV604, make the color bright point for fader back color chroma correspond to that for wipe back color chroma.

2. Back Color Chroma Level/Phase Adjustment (YS-6, CA-16 Board)

Adjustment element	YS-6 board RV334 (phase) CA-16 board RV706 (level)
Specified value	Each color bright point must be within the specified frame of the vectorscope. ( )

[Adjustment Method]

1) With RV706, place each color bright point within the specified frame of the vectorscope.
   ※ When each color bright point cannot be put within the specified phase frame, adjust the YS-6 board RV334. After RV334 is adjusted, make "color correct phase adjustment".

7-6-8. Fader/Wipe Back Color Chroma Level/Phase Adjustment (Using the Oscilloscope)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope

[Setting of Switches]

- FADER VIDEO switch .....ON
- FADER BACK COLOR switch .....ON
- FADER lever.....MAX (fully upward)
- BACK COLOR SELECT switch .....COLOR BAR
- VIDEO ART knob .....MAX (fully clockwise)

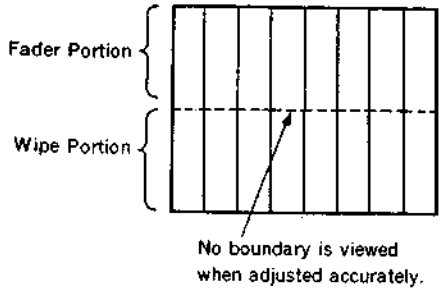
1. Fader/Wipe Back Color Chroma Level/Phase Adjustment (WF-1 Board)

Adjustment element	RV604 (level) RV602 (phase)

[Adjustment Method]

1) Shift the WIPE lever to the MAX position (fully upward).
2) Confirm that all the WIPE PATTERN switches are turned off, and read the chroma signal level.
3) Turn on the WIPE PATTERN switch (▬). With RV604, adjust the chroma signal level to the value read in the step 2.)
4) Shift the WIPE lever to the center position. With RV602, make equal the hue of the upper color bar (fader color bar) and that of the lower color bar (wipe color bar) on the screen to each other.

- Monitor TV Screen (WIPE Lever at Center)



- Oscilloscope Waveform (WIPE Lever at MAX)

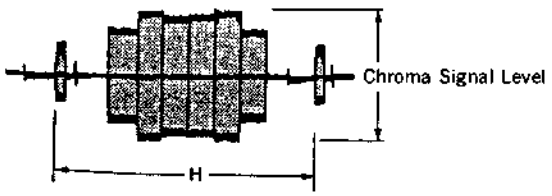


Fig. 7-31.

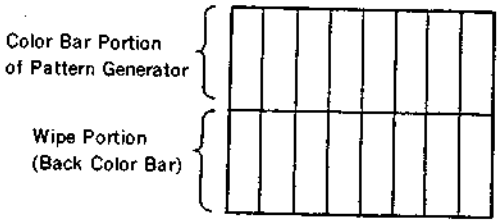
2. Back Color Chroma Level/Phase Adjustment (YS-6 and CA-16 Boards)

Adjustment element	YS-6 board RV334 (phase) CA-16 board RV706 (level)
Specified value	664±30mVp-p (level)

[Adjustment Method]

1) Turn off the FADER VIDEO switch.
2) Turn on the WIPE PATTERN swtich (▬) and shift the WIPE lever to its MAX position (fully upward).
3) With RV706, adjust the chroma signal level to 664± 30mVp-p.
4) Shift the WIPE lever to the center position.
5) With RV706, make equal the hue of the upper color bar (pattern generator color bar) and that of the lower color bar (back color bar) on the screen to each other.

- Monitor TV Screen (WIPE Lever at Center)



- Oscilloscope Waveform (WIPE Lever at MAX)

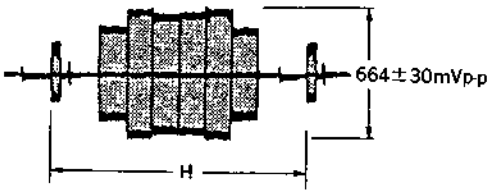


Fig. 7-32.

7-6-9. Back Color INT Mode Phase Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	VIDEO OUT terminal (75Ω terminated)
Measurement instrument	Vectorscope
Adjustment element	RV991
Specified value	Chroma should be within the specified frame.

[Preparation]

1) Set WIPE PATTERN □■ switch to ON.
2) Raise WIPE lever fully.

[Adjustment Method]

1) Adjust RV991 so that each chroma color comes to the center of the specified frame

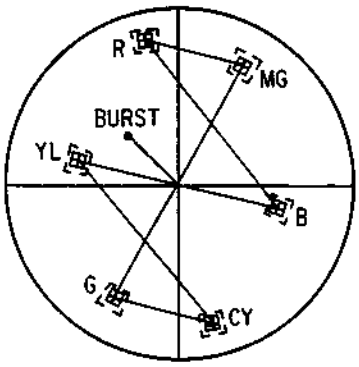


Fig. 7-33.

7-7. ADJUSTMENT OF COLOR CORRECT SYSTEM

7-7-1. Color Correct Carrier Balance Adjustment (YS-6 Board)

Signal	Optional
Measurement point	Q117 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV104, RV105
Specified value	Chroma signal carrier amplitude minimized

[Connection]

1) Connect the Q109 collector and GND with a jumper wire.

[Setting of Switches]

- WHITE BALANCE switch .....ON
- WIDE RANGE (W. B) switch .....ON

[Adjustment Method]

1) Turn RV104 and RV105 alternately to minimize the chroma signal carrier amplitude.

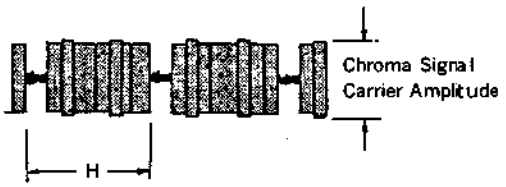


Fig. 7-34.

7-7-2. Chroma Limiter Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV316
specified value	900±50mVp-p

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Setting of Switches]

- COLOR knob.....MAX (fully clockwise)
- WHITE BALANCE switch .....ON
- WIDE RANGE (W. B) switch .....ON

[Adjustment Method]

1) Maximize the chroma signal level with the COLOR CORRECT lever.
   (Shift the lever almost to its most downward position.)
2) Adjust the chroma signal level to 900±50mVp-p with RV316.

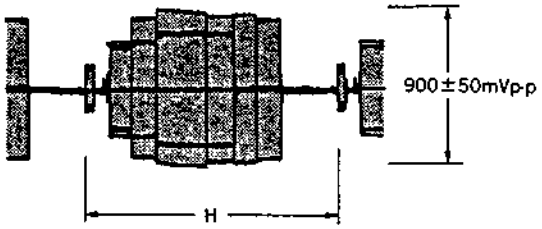


Fig. 7-35.

7-7-3. Color Correct Phase Adjustment (YS-6 Board) (Using the Vectorscope)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement equipment	Vectorscope
Adjustment element	RV102
Specified value	90±4°

[Setting of Switches]

- COLOR knob .....MIN (fully counterclockwise)
- WHITE BALANCE switch .....ON
- WIDE RANGE (W. B) switch .....ON
- WHITE BALANCE lever .....Fully upward (12 o'clock position)

[Adjustment Method]

1) Adjust with RV102 so that the two color bright points come together on R-Y axis.

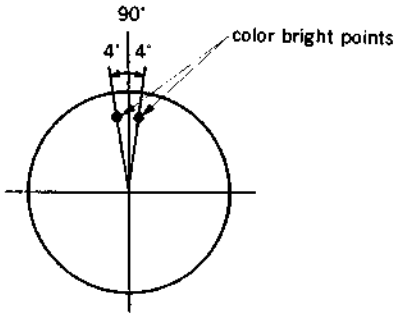


Fig. 7-36.

7-7-4. Color Correct Position Adjustment (YS-6 Board) (Using the Monitor TV)

Signal	Color bar
Measurement point	Monitor TV screen
Measurement equipment	
Adjustment element	RV102
Specified value	A color correct portion must have the same hue (magenta) as a wipe portion.

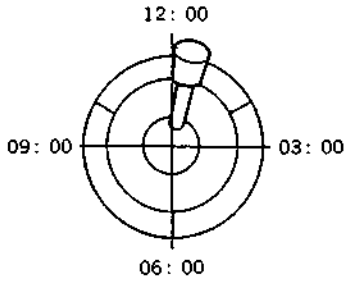
[Setting of Switches]

- COLOR knob .....MIN (fully counterclockwise)
- WHITE BALANCE switch .....ON
- WIDE RANGE (W.B) switch .....ON
- WIPE PATTERN switch.....
- WIPE lever .....Center
- COLOR SELECT switch .....Magenta (purple)

[Adjustment Method]

1) As shown in the figure below, set the left edge of the WHITE BALANCE lever to a 12 o'clock position.
2) With RV102, adjust the color correct portion (top of the screen) to the same hue of the bottom of the screen (magenta).

- WHITE BALANCE Lever Position



- Monitor TV Screen

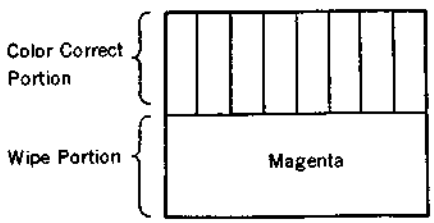


Fig. 7-37.

7-7-5. Color Correct Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV103
Specified value	300±10mVp-p

Note: The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Setting of Switches]

- COLOR knob .....MIN (fully counterclockwise)
- WHITE BALANCE switch .....ON
- WIDE RANGE (W. B) switch .....OFF

[Adjustment Method]

1) Maximize the chroma signal level with the WHITE BALANCE lever.
2) Adjust the chroma level signal to 300±10mVp-p with RV103.

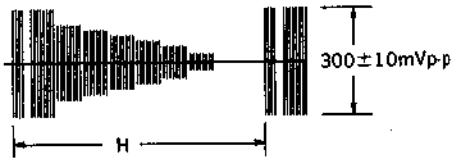


Fig. 7-38.

7-8. ADJUSTMENT OF WIPE SYSTEM

7-8-1. H RAMP Level Adjustment (CA-16 Board)

Signal	Optional
Measurement point	Q808 emitter
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV802 (lower DC level) RV801 (upper DC level)
Specified value	1.6±0.05Vdc (lower DC level) 3.8±0.05Vdc (upper DC level)

[Adjustment Method]

1) With RV802, adjust the lower DC level of the H RAMP waveform to 1.6±0.05Vdc.
2) With RV801, adjust the upper DC level of the H RAMP waveform to 3.8±0.05Vdc.

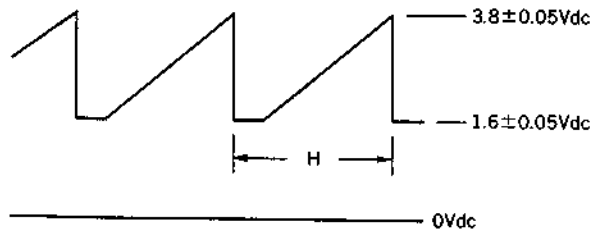


Fig. 7-39.

7-8-2. V RAMP Level Adjustment (CA-16 Board)

Signal	Optional
Measurement point	Q826 emitter
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV806
Specified value	3.8±0.05Vdc

[Adjustment Method]

1) Confirm that the lower DC level of the V RAMP waveform is 1.6±0.1Vdc.
   When the specified value is not met, make "H RAMP level adjustment".
2) With RV806, adjust the upper DC level of the V RAMP waveform to 3.8±0.05Vdc.

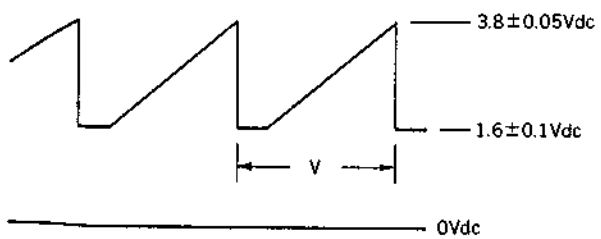


Fig. 7-40.

7-8-3. $\overline{H}$ RAMP, $\overline{V}$ RAMP DC Clamp Level Adjustment (CA-16 Board)

Signal	Optional
Measurement point	Q812 emitter
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV803
Specified value	1.6±0.05Vdc

[Adjustment Method]

1) With RV803, adjust the lower DC level of the H RAMP waveform to 1.6±0.05Vdc.

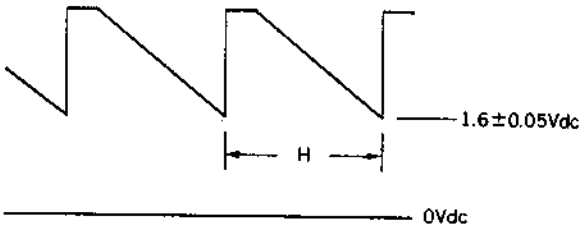


Fig. 7-41.

7-8-4. Diamond Pattern Center Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV804, RV805
Specified value	0±5mm (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ..... ◘ ON

[Adjustment Method]

1) With the WIPE lever, bring the corners of the wipe pattern into contact with the monitor screen frame.
2) With RV804, make the right corner of the wipe pattern correspond to the vertical center of the screen.
3) With RV805, make the left corner of the wipe pattern correspond to the vertical center of the screen.
4) Make the wipe pattern smaller with the WIPE lever*1 and confirm that it is a diamond-shaped pattern with its right and left symmetrical.

*1. A horizontal width is about 2 cm on the 20-inch monitor TV screen.

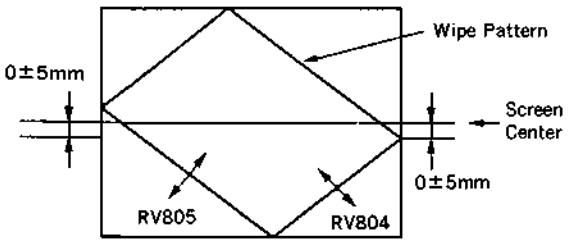


Fig. 7-42.

7-8-5. Round Wipe Pattern Roundness Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV810
Specified value	0±5mm (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ..... ◘ ON

[Adjustment Method]

1) With the WIPE lever, adjust the diameter of the round wipe pattern to about 15cm*1.
2) Make the round wipe pattern a true circle with RV810.
3) Operating the WIPE lever, confirm that the round pattern is not deformed if its size is changed. (Within a circle size of 2 to 30 cm*1.)

*1. Size on the 20-inch monitor TV.

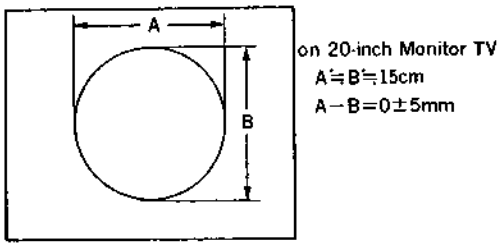


Fig. 7-43.

7-8-6. Round Wipe Pattern Position Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV807(vertical position) RV808 (horizontal position)
Specified value	0±5mm (vertical position) 0±5mm (horizontal position) (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ..... ◘ ON

[Adjustment Method]

1) With the WIPE lever, adjust the diameter of the round wipe pattern to about 3cm*1.
2) With RV807 and RV808, center the round wipe pattern with the monitor TV screen.

*1. Size on the 20-inch monitor TV.

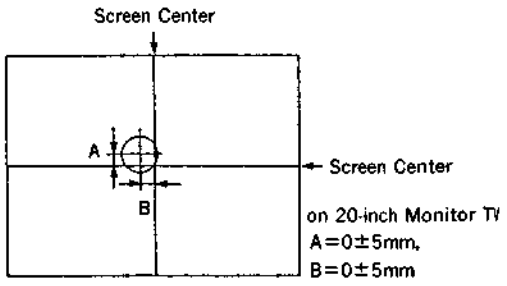


Fig. 7-44.

7-8-7. Round Wipe Pattern Size Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV809
Specified value	0±1cm (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ..... ◆ ON

[Adjustment Method]

1) With the WIPE lever, adjust the vertical size of the diamond pattern to about 10cm*1.
2) Select the WIPE PATTERN switch ◆.
3) With RV809, make the vertical size of the round wipe pattern equal to that of the diamond pattern.

* 1. Size on the 20-inch monitor TV.

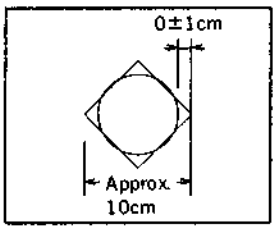


Fig. 7-45.

7-9. ADJUSTMENT OF VIDEO ART AND SPLIT SCREEN SYSTEM

7-9-1. VIDEO ART REVERSE Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	IC208 pin ④ (TP017)
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV201
Specified value	0±50mV

[Adjustment Method]

1) Confirm the lower DC level of the Y signal.
2) Turn on the VIDEO ART REVERSE switch.
3) With RV201, make the lower DC level of the Y signal correspond to the DC level confirmed in the step 1).
4) Turn off the VIDEO ART REVERSE switch.

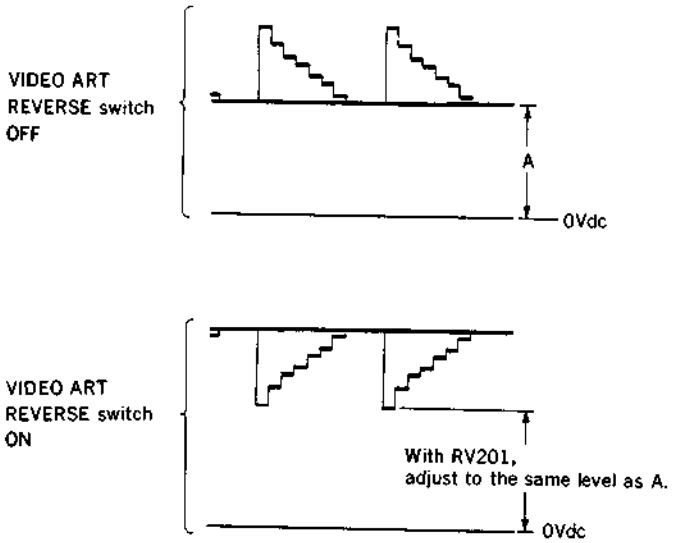


Fig. 7-46.

7-9-2. VIDEO ART VR Center Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	CH1 : TP017 (IC208 pin ④) CH2 : TP018 (IC208 pin ⑤)
Measurement point	Oscilloscope (DC range)
Adjustment element	RV202
Specified value	550±50mVdc

[Adjustment Method]

1) Set the VIDEO ART knob to its center position.
2) Make even the 0Vdc level of the oscilloscope CH1 and CH2.
3) With RV202, adjust the level difference between CH1 and CH2 to 550±50mVdc.

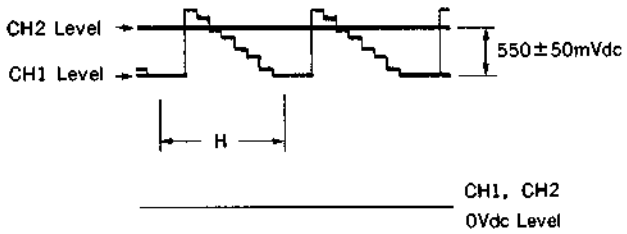


Fig. 7-47.

7-9-3. Split Screen Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV001
Specified value	36.5±0.5μsec

[Setting of Switches]

- SPILIT SCREEN switch .....ON
- REVERSE (NEGA/POSI) switch .....ON

[Adjustment Method]

1) With RV001, adjust a negative/positive switching position to 36.5±0.5μsec from a fall of H SYNC.

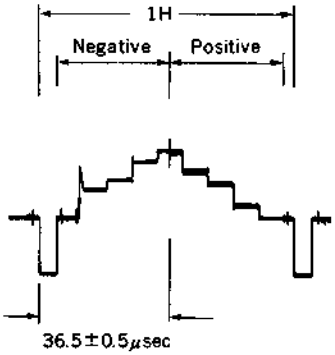


Fig. 7-48.

7-10. ADJUSTMENT OF AUDIO SYSTEM

Connect as shown below.

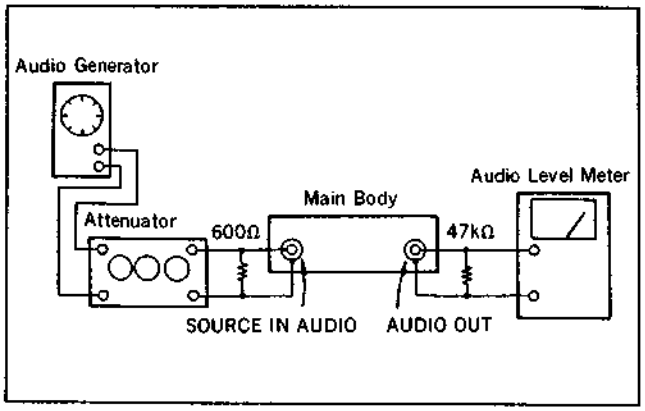


Fig. 7-49.

[Setting of Switches]

- AUDIO FADER switch .....OFF
- MIC level knob .....MIN
- AUDIO MIX knob .....SOURCE

7-10-1. Audio Output Level Adjustment (CA-16 Board)

R channel adjustment points are shown in [ ] .

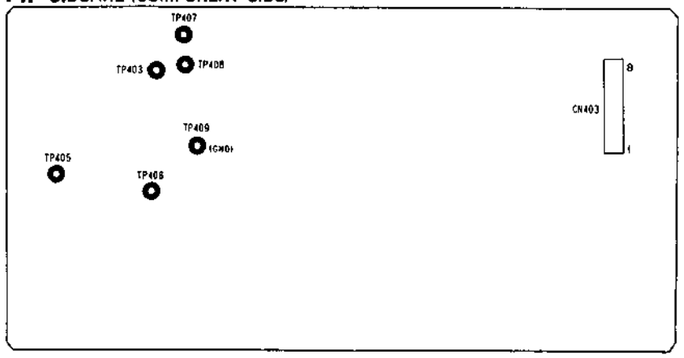
Signal	1kHz, −7.5dBs SOURCE IN terminal L [R]
Measurement point	AUDIO OUTPUT terminal L [R]
Measurement equipment	Audio level meter
Adjustment element	RV601 [RV602]
Specified value	−7.5±0.5dBs

[Adjustment Method]

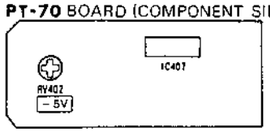
1) With RV601, adjust the output level to −7.5±0.5dBs.
2) Confirm that the audio output level difference between the L and R channels is 0±1 dB.

7-11. PARTS LOCATION DIAGRAM RELEVANT TO THE ADJUSTMENT

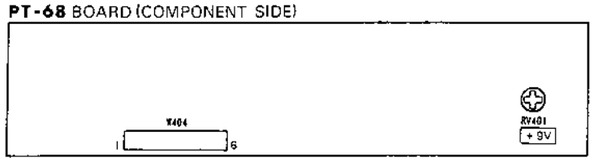
PW-61BOARD (COMPONENT SIDE)



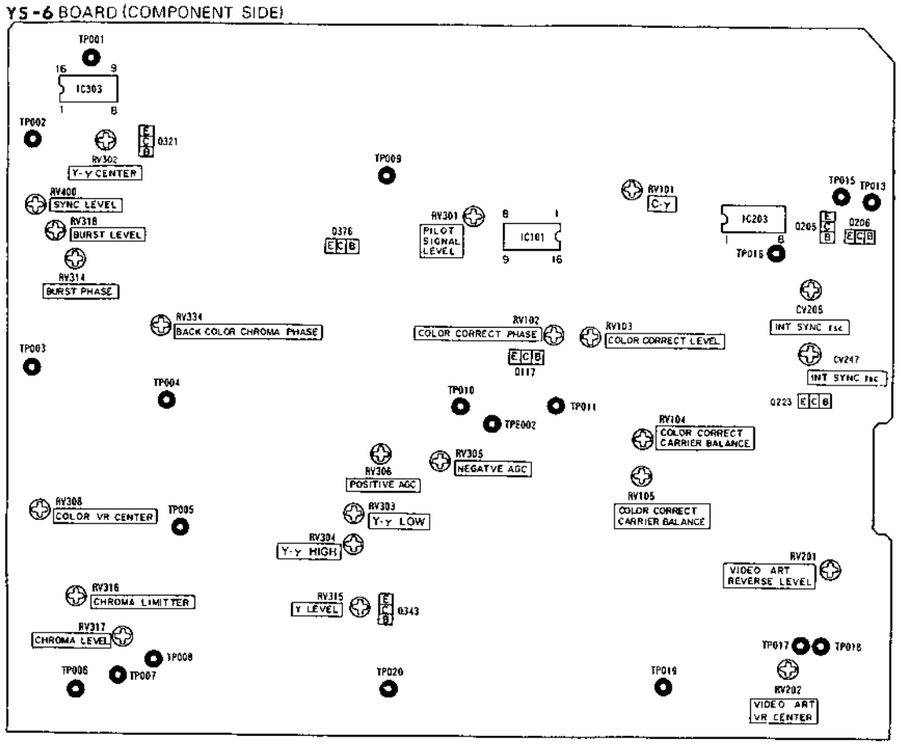
PT-70 BOARD (COMPONENT SIDE)



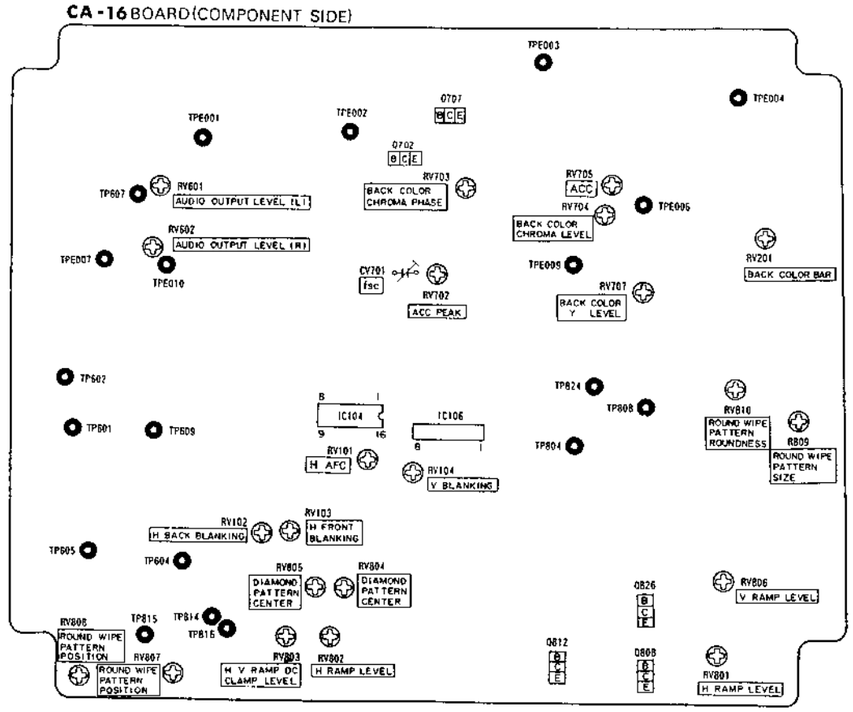
PT-68 BOARD (COMPONENT SIDE)



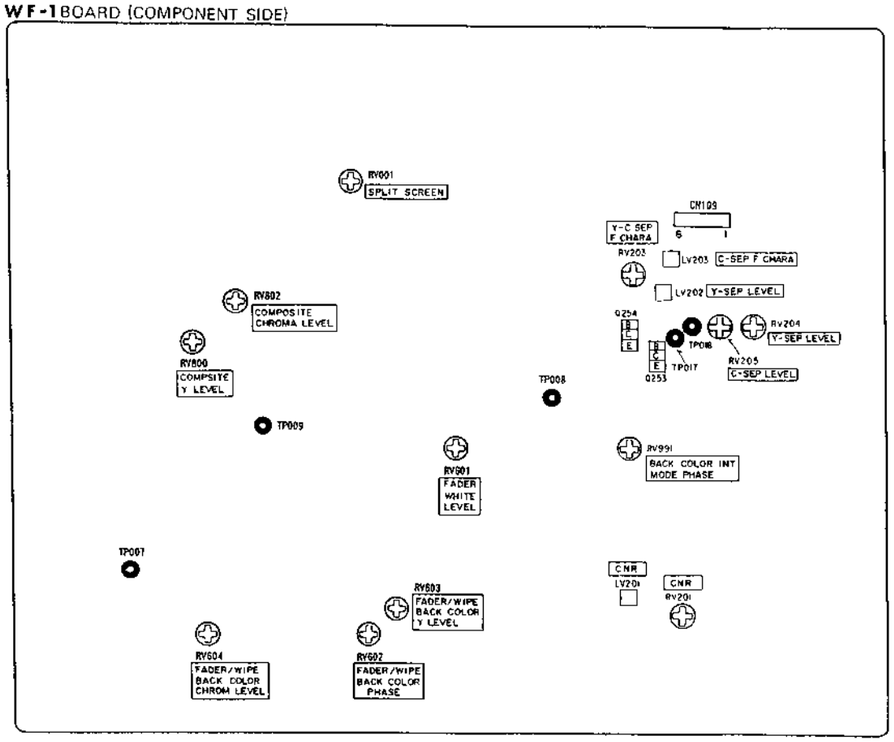
YS-6 BOARD (COMPONENT SIDE)



CA-16 BOARD (COMPONENT SIDE)



WF-1 BOARD (COMPONENT SIDE)



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