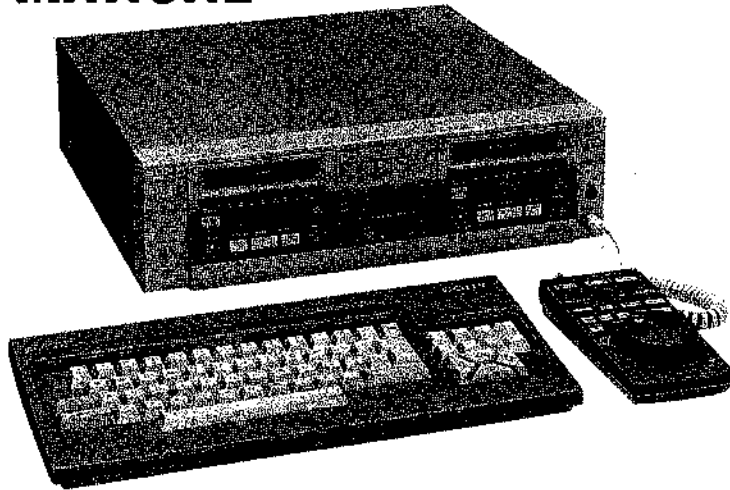


EVO-9700P

RM-E9700/KI-9700P

SERVICE MANUAL

AEP Model
UK Model



SPECIFICATIONS

Video section

Video signal CCIR standard, PAL colour
Video recording system Rotary two-head helical scanning
Luminance signal recording system FM
Horizontal resolution 400 lines (typical, Hi8 mode)
Signal-to-noise ratio 45 dB (Hi8 mode, colour)
45 dB (SP mode, colour)

Audio section

Audio recording system Rotary head, PCM 2-channel and FM 1-channel system
Dynamic range Standard track: more than 60 dB (SP)
PCM track: more than 85 dB
Frequency response Standard track: 30 – 15,000 Hz (SP)
PCM track: 20 – 15,000 Hz

Inputs/outputs

RECORDER IN S VIDEO input: 4-pin mini DIN connector (1)
Luminance signal 1 Vp-p,
75 ohms, unbalanced, sync negative
Chrominance signal 300 mVp-p,
75 ohms, unbalanced

VIDEO input: BNC connector (1)
1 Vp-p, 75 ohms, unbalanced,
sync negative
AUDIO inputs: Phono jack (2)
–7.5 dBs, more than 47 kilohms,
stereo

RECORDER OUT/PLAYER OUT

S VIDEO output: 4-pin mini DIN connector (1 each)
Luminance signal 1 Vp-p,
75 ohms, unbalanced, sync negative
Chrominance signal 300 mVp-p,
75 ohms, unbalanced
VIDEO output: BNC connector (1 each)
1 Vp-p, 75 ohms, unbalanced,
sync negative
AUDIO outputs: Phono jack (2 each)
–7.5 dBs, more than 47 kilohms,
stereo

MONITOR OUT

VIDEO output:
BNC connector (1), Phono jack (1)
1 Vp-p, 75 ohms, unbalanced,
sync negative
AUDIO outputs: Phono jack (2)
–7.5 dBs, more than 47 kilohms,
monaural
RFU DC OUT: Special minijack (1),
5 V DC

– Continued on next page –

Hi8 VIDEO CASSETTE RECORDER
SONY®



HEADPHONES output

Stereo minijack (1)
-29 dBs, 50 ohms load

MIC input

Phone jack (1), monaural
-60 dBs, 4.3 kilohms

General

Power requirements 220 - 240 V AC, 50/60 Hz
Power consumption 48 W
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 × 130 × 470 mm (w/h/d)
(17 × 5¹/₈ × 18⁵/₈ inches)
incl. projecting parts and controls
Weight Approx. 12 kg (26 lb 7 oz)

Editing controller

Power requirements 5 V DC, supplied from the EVO-9700P
Power consumption 0.75W
Dimensions Approx. 90 × 43 × 182 mm (w/h/d)
(3⁵/₈ × 1³/₄ × 7¹/₄ inches)
incl. projecting parts and controls
Cable length Approx. 35 cm (13⁷/₈ inches) when curled
Weight Approx. 300 g (11 oz)

Title keyboard

Keyboard 74 keys, N-key rollover
Power requirements 5 V DC, supplied from the EVO-9700P
Power consumption 0.13W
Dimensions Approx. 409 × 36 × 183 mm (w/h/d)
(16¹/₈ × 1⁷/₁₆ × 7¹/₄ inches)
incl. projecting parts and controls
not incl. connecting cable
Cable length Approx. 130 cm (51¹/₄ inches)
Weight Approx. 1.3 kg (2 lb 14 oz)
incl. connecting cable

Accessories supplied

Editing controller RM-E9700 (1)
Title keyboard KI-9700P (1)
Audio/video cable VMC-710M (2 phono to 2 phono) (1)
Plug adaptor (BNC to phono) (1)
Pause control cord (mini to mini) (1)
Pause control cord with converter (mini to 5-pin) (1)
Plug adaptor (mini to special mini)
Cleaning cassette V8-25CLH (1)
Power cord (1)

Design and specifications are subject to change without notice.

Note



This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

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 MARK  OR DOTTED LINE WITH 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.

EVO-9700P

RM-E9700/KI-9700P

SONY
SERVICE MANUAL

AEP Model
UK Model

CORRECTION-1

<p>SECTION 5 EXPLODED VIEWS 5-1. FRONT PANEL AND CABINET ASSEMBLIES</p>

Use this correction with the service manual published previously.

SECTION 5 EXPLODED VIEWS

NOTE:

• -XX, -X mean standardized parts, so they may have some difference from the original one.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

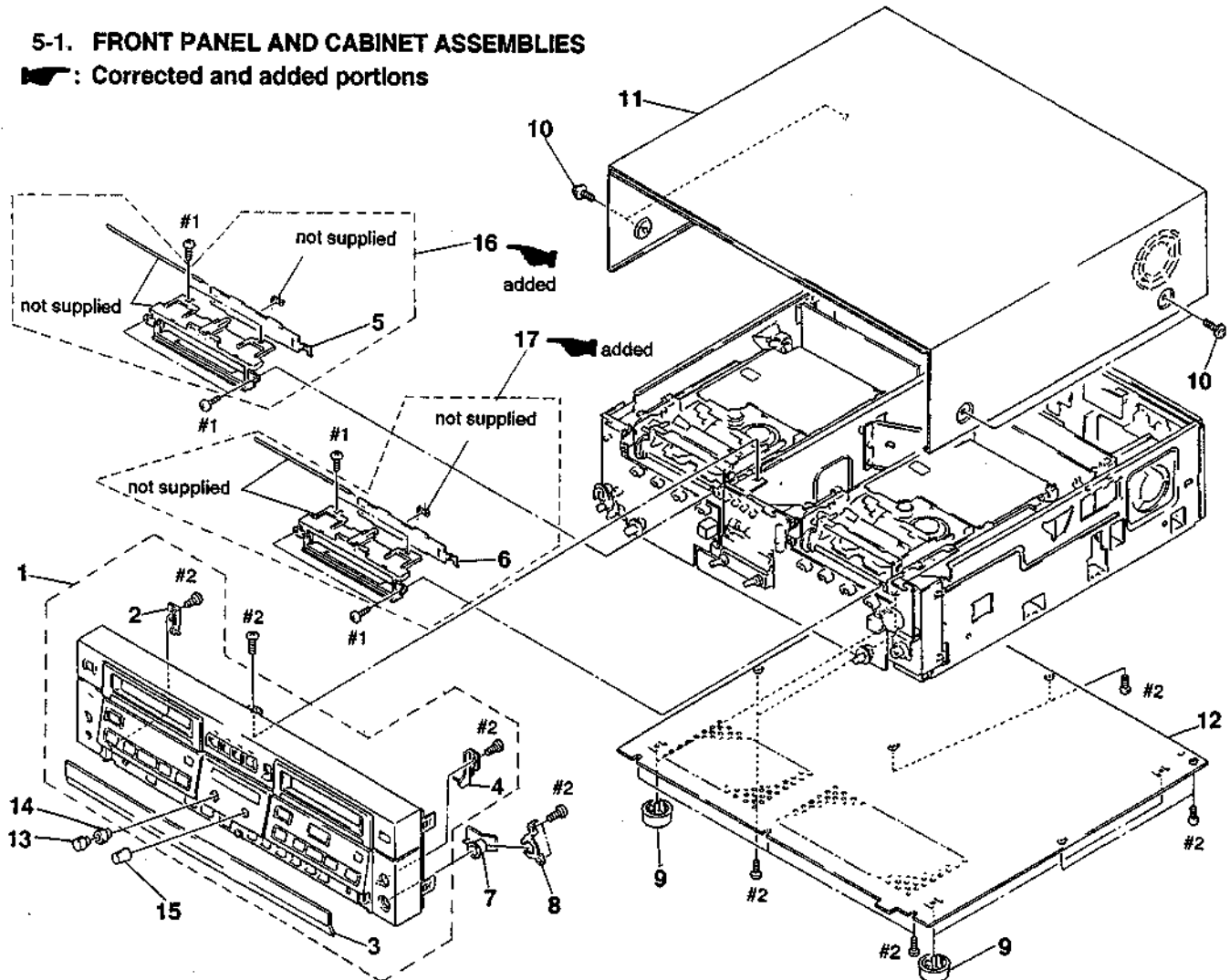
• The mechanical parts with no reference number in the exploded views are not supplied.

• Hardware (# mark) list is given in the last of this parts list.

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

5-1. FRONT PANEL AND CABINET ASSEMBLIES

: Corrected and added portions



Ref. No.	Part No.	Description	Remark
1	X-3940-885-1	PANEL ASSY, FRONT	
2	X-3747-005-1	SUPPORT (L) ASSY, DOOR	
3	X-3940-884-1	DOOR ASSY	
4	X-3747-006-1	SUPPORT (R) ASSY, DOOR	
5	3-721-101-21	DOOR	
		corrected	
6	3-721-101-11	DOOR	
7	* 1-635-324-11	CC-84 BOARD	
8	* 3-724-111-01	HOLDER, CONNECTOR	

Ref. No.	Part No.	Description	Remark
9	X-3701-069-0	FOOT ASSY, M. F	
10	4-886-821-11	SCREW, M3 CASE	
11	3-747-057-01	CASE, UPPER	
12	3-747-058-01	PLATE, BOTTOM	
13	3-747-004-03	KNOB (R), LEVEL	
14	3-747-003-02	KNOB (L), LEVEL	
15	3-747-013-02	KNOB, AFM LEVEL	
16	X-3689-096-1	WINDOW ASSY (P)	
17	X-3689-097-1	WINDOW ASSY (R)	

added

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Technical Information

What is a Time Code?

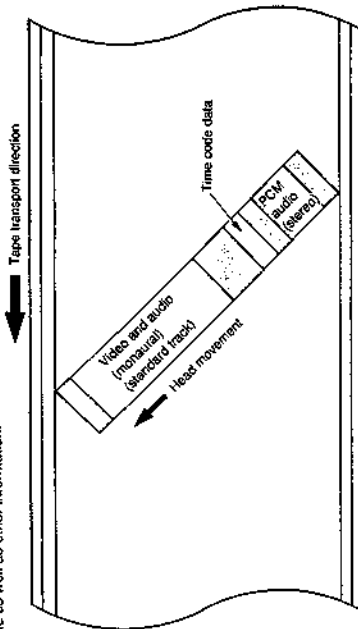
Each scene recorded on a tape can be numbered in units of frame (1/25 second) by the hour, minute, second and frame. This is a time code. The time code is automatically recorded during editing, or it can be recorded separately. Programme editing and insert editing are carried out by using the recorded time code.

Important!

The time code used in this unit is the special 8 mm format time code for institutional products.

8 mm Format Video Cassette Tape

The video and audio information are recorded on an 8 mm format video cassette tape according to the following allocation. This unit allows recording of the time code as well as other information.



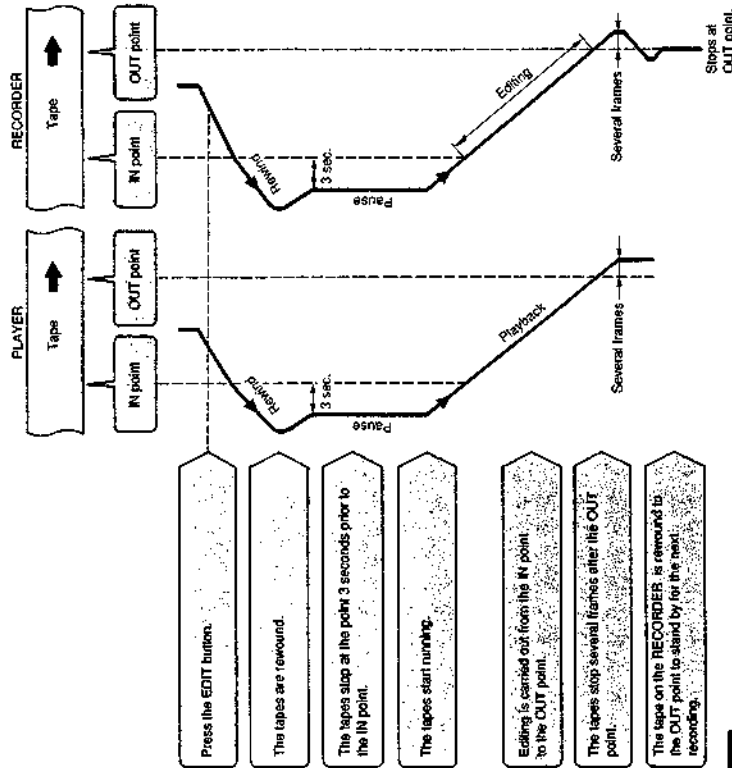
Recording time, playback time
This VTR records in SP mode only, and plays back in both SP and LP modes.
When playing back a tape, the mode in which the tape was recorded is selected automatically.

Hi8 tape Hi8i	Cassettes used	
	SP	LP
Standard 8 mm tape	P5-30HMPX, ES-30HIMEX	1 hr.
	P5-60HMPX, ES-60HIMEX	2 hr.
	P5-90HMPX, ES-90HIMEX	3 hr.
Hi	P5-15MFP	15 min.
	P5-30MF/30HMP/30HGA	30 min.
	P5-60MF/60HMP/60HGA	60 min.
	P5-90MF/90HMP/90HGA	1 hr. 30 min.

What is a Pre-roll?

"Pre-roll" is a method designed to run the original tape and the tape to be edited for several seconds (3 seconds for this unit) before the (press) editing starting point. During this period of pre-roll, two video decks are fully controlled for synchronized operations, thus making possible highly accurate editing.

The editing accuracy is 0 frames with the time code, and ± 3 frames without the time code.



Press the EDIT button.

The tapes are rewound.

The tapes stop at the point 3 seconds prior to the IN point.

The tapes start running.

Editing is carried out from the IN point to the OUT point.

The tapes stop several frames after the OUT point.

The tape on the RECORDER is rewound to the OUT point to stand by for the next recording.

Notes

- During pre-roll, the tapes start running and stop automatically.
- The period required of pre-roll is 3 seconds for this unit.
- Therefore, if there is any recording within 3 seconds from the beginning of the original tape, this part will not be edited correctly. In addition, a blank portion for 3 seconds will be made at the beginning of the edited tape.

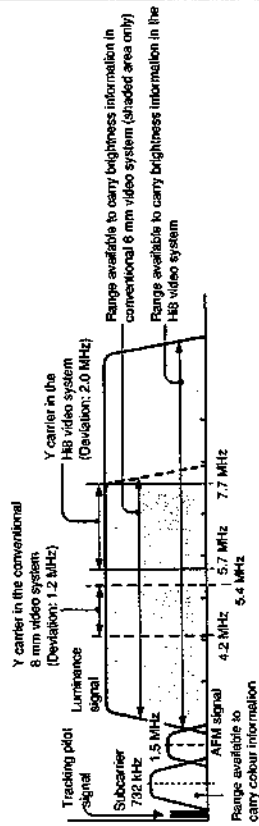
Hi8 Video System

In the Hi8 video system that is a new 8mm video system, Y (luminance) carrier frequency which carries information on brightness is shifted up 1.5 MHz, and the Y carrier deviation is changed to 2.0 MHz while the conventional deviation is 1.2 MHz. As a result, a wider bandwidth can be used for recording and playback (see below), and a higher quality picture with horizontal resolution of 400 lines or more can be obtained.

To take full advantage of the Hi8 video system, a Hi8 tape is prepared using a metal tape which has characteristics superior to a conventional tape.

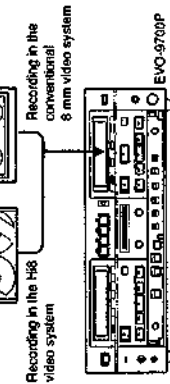
Recording in the Hi8 Video System and Conventional 8mm Video System

The chroma subcarrier frequency which carries information on colours is kept unchanged at 732 kHz. The frequency of the Y carrier is shifted up 1.5 MHz, and the deviation is widened to 2.0 MHz.

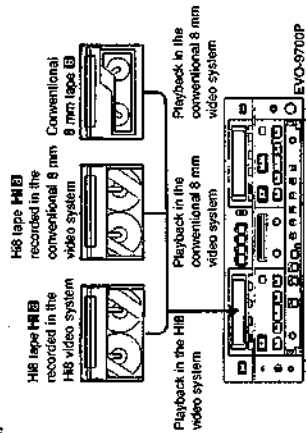


Cassette Tape and Automatic Switching of Recording/Playback Mode

When using a Hi8 cassette tape **MI** for recording, this unit senses the detection holes on the cassette shell (see below), and automatically performs the recording in the SP mode of Hi8 video system.



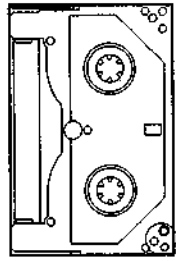
In playback, the unit can detect the system mode used in recording by verifying the recorded signal, and plays back the tape in the appropriate mode.



- The Hi8 indicator on the front panel lights during recording or when a tape recorded in the Hi8 video system is played back.

Hi8 Cassette Tape Hi8

This new Hi8 tape with high durability was specially developed for Hi8 video system recording/playback and features characteristics best suited for the Hi8 video system. Hi8 cassettes have a detection hole on the bottom of the cassette shell to automatically set Hi8 VTRs in the Hi8 video system recording.

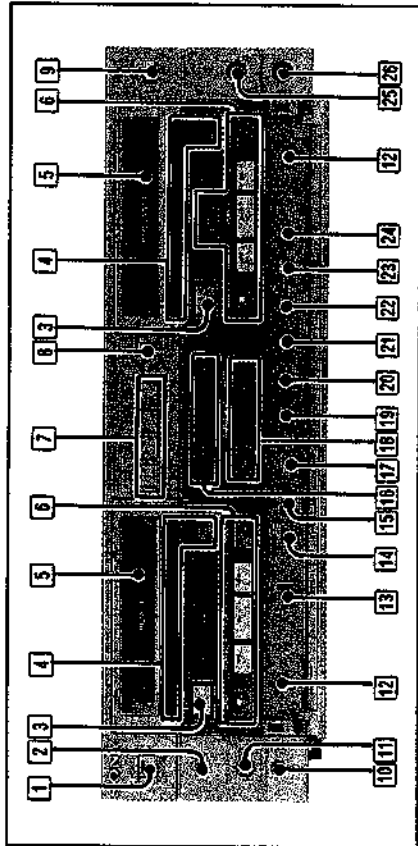


Detection holes

Location and Function of Controls

For details on the use of each control, refer to the pages indicated in the circle ●.

Front of the VTR



- 1 Power switch and indicator
- 2 STANDBY indicator
When the AC power cord is plugged in, this indicator lights to show that the unit is in standby condition. When the POWER switch is turned on, the indicator goes off.
- 3 EJECT button
Press to eject the cassette.
- 4 Indicators
●: Lights when a cassette is in the cassette compartment.
H8: Lights up when the power is on, and goes out when a tape recorded in the standard system is inserted or when the system used in recording cannot be determined.
PCM: Lights when PCM sound is recorded on the tape or during PCM audio recording.
SP: Lights when the tape speed is in SP mode.
J/S: Lights when the JOG dial or SHUTTLE ring on the editing controller is in use.
- 5 Cassette compartments
The left one is for the PLAYER deck, and the right one is for the RECORDER deck.
- 6 Tape transport buttons and indicators
The indicator lights when the button is in operation.
■ STOP button
◀ REW (rewind) button
▶ PLAY button
▶▶ FF (fast-forward) button
■ PAUSE button
● REC button (on RECORDER only)
- 7 AUDIO OUTPUT SELECT-PLAYER buttons
Select the standard or PCM track of the PLAYER so that the sound of the selected track is output to the RECORDER and the PLAYER OUT-AUDIO jacks on the rear.
For details, see page 12.
- 8 AUDIO OUTPUT SELECT-RECORDER/MONITOR selector
Select the sound to be output to the MONITOR OUT-AUDIO jacks and the RECORDER OUT-AUDIO jacks on the rear.
For details, see page 12.
- 9 COUNTER RESET button
Press to reset the tape counter displayed on the main picture to 0000.
- 10 HEADPHONES jack (stereo minijack)
- 11 PHONE LEVEL control
- 12 STOP button
- 13 REW (rewind) button
- 14 PLAY button
- 15 FF (fast-forward) button
- 16 PAUSE button
- 17 REC button (on RECORDER only)
- 18 AUDIO OUTPUT SELECT-PLAYER buttons
- 19 AUDIO OUTPUT SELECT-RECORDER/MONITOR selector
- 20 BEEP switch
- 21 DATA SCREEN switch
- 22 CNR (Chroma Noise Reducer) switch
- 23 COUNTER RESET button
- 24 HEADPHONES jack (stereo minijack)
- 25 PHONE LEVEL control

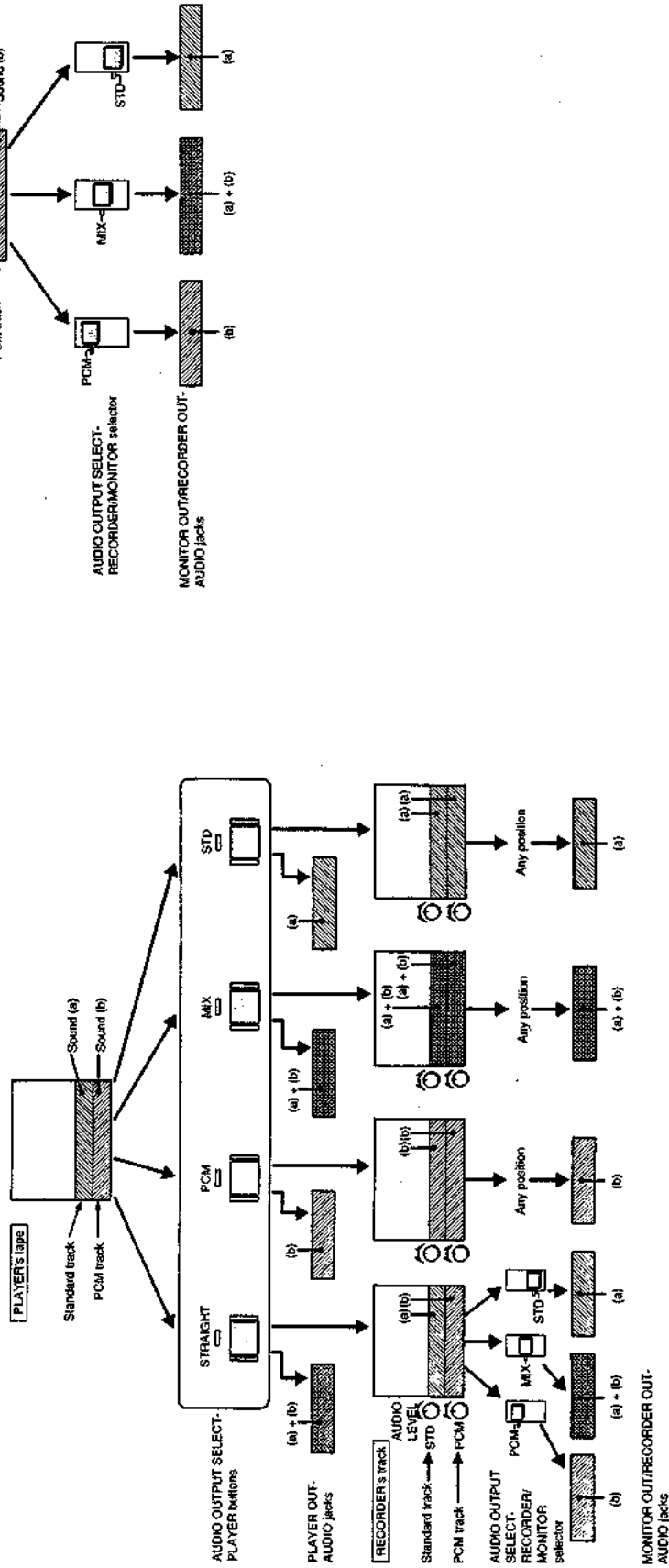
- 27 SLOW ADJ (slow-motion picture adjustment) knob
Normally keep this knob at the center detent position. If streaks or snow appear during slow-motion playback, adjust this knob.
- 28 8 mm TIME CODE WRITE button and indicator ●
Press to record the time code on the tape in the PLAYER. The indicator blinks during pre-roll prior to time code recording. During time code recording, the indicator on the button lights.
- 29 EDITING DATA LOAD button and indicator ●
Press to load the editing data saved on the tape, such as the line codes of the IN and OUT points for programme editing, to the memory of this unit. The indicator on the button lights during loading.
- 30 EDITING DATA SAVE button and indicator ●
Press to save the editing data stored in the memory of this unit onto the tape in the PLAYER. The indicator on the button lights.
- 31 AUDIO LEVEL meters ●
Audio recording level of the sound selected with the AUDIO OUTPUT SELECT-RECORDER/MONITOR selector is shown during recording, and the audio playback level during playback.
- 32 EDITING DATA ALL CLEAR button ●
Press to clear all editing data stored in the memory of this unit.
- 33 AUDIO LEVEL controls ●
Adjust the audio recording level.
PCM: Adjust the level to be recorded on the PCM track.
STD (standard): Adjust the level to be recorded on the standard track.
- 34 BEEP switch
Set to ON so that the beep sounds for guiding the editing process such as the start of editing, the entry of the IN and OUT points of editing, etc.
- 35 DATA SCREEN switch
The time code, editing data, tape counter, etc. can be displayed on the monitor screen together with a picture. To display such data, set this switch to ON. To turn off the display, set it to OFF.
- 36 CNR (Chroma Noise Reducer) switch
Selects the digital chroma noise reduction level for the PLAYER's picture.
H: High level
L: Low level
OFF: To turn off the chroma noise reducer
- 37 RECORDER INPUT SELECT - AUDIO selector
Select the recording audio source for the RECORDER.
PLAYER: To record the audio signal of the PLAYER
LINE: To record the audio signal input to the RECORDER IN-AUDIO jacks on the rear
- 38 RECORDER INPUT SELECT - VIDEO selector
Select the recording video source for the RECORDER.
PLAYER: To record the video signal of the PLAYER
PROCESSOR: To process the PLAYER's signal with an external signal processor and record it on the RECORDER
LINE: To record the video signal input to the RECORDER IN VIDEO jacks on the rear
- 39 RECORDER INPUT SELECT - LINE selector
Select the S video signal or the composite video signal, S VIDEO. To record the S video signal input to the RECORDER IN S VIDEO connector
VIDEO: To record the composite video signal input to the BNC-type RECORDER IN VIDEO connector
- 40 MIC jack (phone jack, monoaural)
Connect a microphone.
- 41 CONTROLLER connector
Connect the supplied editing controller here.

Location and Function of Controls

Selection of the sound

You can select the sound to be recorded on the RECORDER and the sound to be monitored through the MONITOR OUT/RECORDER OUT-AUDIO jacks with the AUDIO OUTPUT SELECT-PLAYER buttons and the AUDIO OUTPUT SELECT-RECORDER/MONITOR selector. The recording sound level can be adjusted with the AUDIO LEVEL controls.

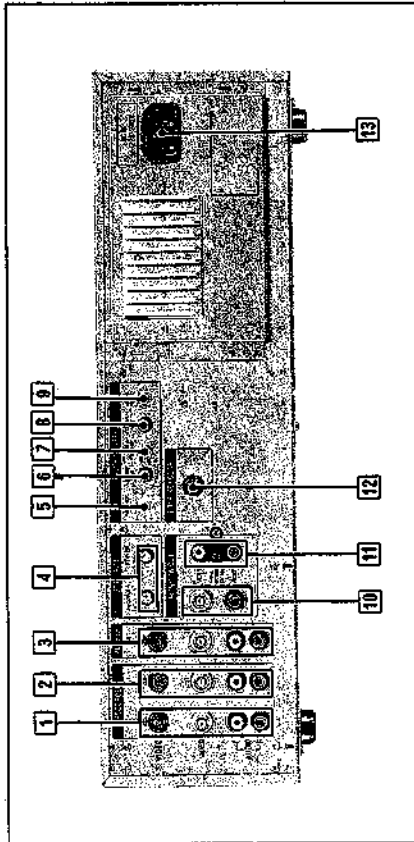
The following chart helps you choose the audio output signals.



⊕ indicates the audio level adjustment by the AUDIO LEVEL controls.

Location and Function of Controls

Rear of the VTR



- 1** **RECORDER IN jacks**
S VIDEO: 4-pin mini DIN connector
VIDEO: BNC connector
AUDIO: 2 phono jacks, stereo
 The video and audio signals to be recorded on the RECORDER are input.
- 2** **RECORDER OUT jacks**
S VIDEO: 4-pin mini DIN connector
VIDEO: BNC connector
AUDIO: 2 phono jacks, stereo
 The video and audio signals being played back or being recorded on the RECORDER are output.
- 3** **PLAYER OUT jacks**
S VIDEO: 4-pin mini DIN connector
VIDEO: BNC connector
AUDIO: 2 phono jacks, stereo
 The video and audio signals being played back on the PLAYER are output. Select the output audio signal with the AUDIO OUTPUT SELECT-PLAYER buttons.
- 4** **STILL ADJ. (still picture adjustment) screws**
 When the still picture appears to flicker, turn these screws in order to stabilize the picture best. The RECORDER screw is for the tape in the RECORDER, and the PLAYER screw for the tape in the PLAYER.

13

The picture may not become stable completely by adjusting these screws. This is not a failure of the unit.

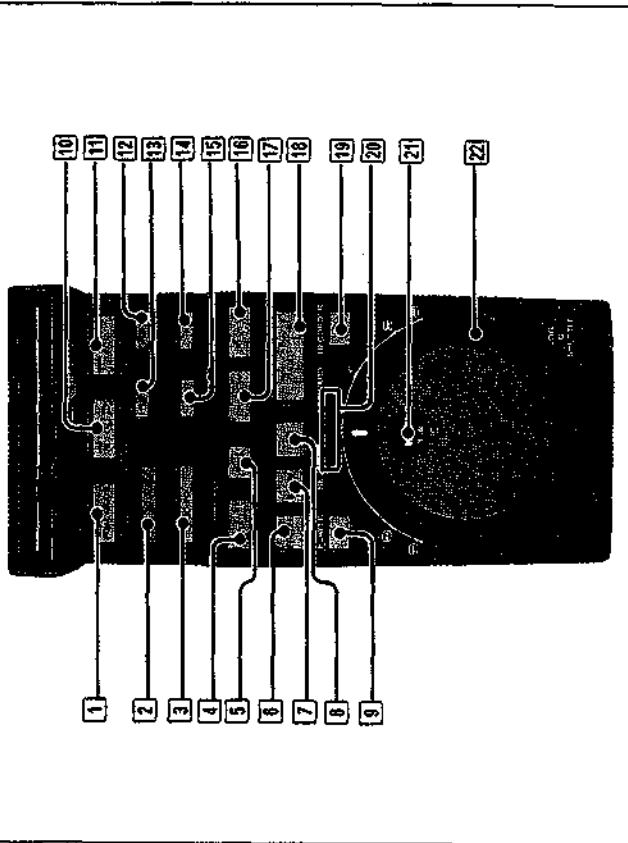
- 5** **MONITOR OUT jacks** (for a monitor equipped with a BNC-type video input)
VIDEO: BNC connector
AUDIO: phono jack, monaural
 Connect the colour monitor equipped with the BNC-type video input connector and the phono-type audio input jack to these jacks. The picture-in-picture function is operable on the screen of the monitor connected to these jacks. Select the output signal with the AUDIO OUTPUT SELECT-RECORDER/MONITOR selector.
- 6** **MONITOR OUT jacks** (for a monitor equipped with a photo-type video input)
VIDEO: phono jack
AUDIO: phono jack
RFU DC OUT: special minijack
 When the TV or colour monitor is equipped with photo-type video and audio input jacks, connect it to the VIDEO and AUDIO jacks of this unit.
 When the TV or colour monitor is not equipped with the video and audio input jacks, use the RFU-689EKA RFU adaptor (not supplied). Connect the RFU adaptor to the VIDEO, AUDIO and RFU DC OUT jacks of this unit.
 The picture-in-picture function is operable on the screen of the monitor connected to these jacks. Select the output audio signal with the AUDIO OUTPUT SELECT-RECORDER/MONITOR selector.
- 7** **TITLE KEYBOARD connector (5-pin DIN)**
 Connect the supplied title keyboard.
- 8** **AC IN (inlet)**
 Connect the supplied AC power cord.

Output audio signal

The audio signal output from each output jack is specified by the positions of the selectors on the front panel. See pages 12 and 13.

Location and Function of Controls

Editing Controller



1 PGM MODE (programme mode) button and indicator
Press to set the unit to the programme editing mode. The indicator lights in the programme editing mode.

2 P IN P button
Press to run the tape to the IN or OUT point of the programme selected with the +/– buttons. When the selected point is located, the PLAYER is set to the playback pause mode.

3 GO TO button
Press to start quick editing, programme editing or insert editing. The indicator blinks during pre-roll before editing, and it lights during editing.

4 END button
Press to stop quick editing, programme editing or insert editing. When this button is pressed, both the RECORDER and PLAYER are set to the playback pause mode.

5 FREEZE button
When the RECORDER INPUT SELECT-VIDEO selector is set to PLAYER, press to set the PLAYER to the freeze picture editing mode. "FRZ" appears on the monitor screen. Press it again to release the freeze picture editing mode. When the RECORDER INPUT SELECT-VIDEO selector is set to LINE, use this button to edit the picture from external equipment as a freeze picture.

7 SLOW button

When the RECORDER INPUT SELECT-VIDEO selector is set to PLAYER, press to set the PLAYER to the slow-motion picture editing mode. "SLOW" appears on the monitor screen. Press it again to release the slow-motion picture editing mode. When the RECORDER INPUT SELECT-VIDEO selector is set to LINE, this button does not operate.

8 TITLE button

Press to set the unit to the title mode. Press it again to release the title mode. This button has the same function as the TITLE button on the title keyboard.

9 PLAYER button and indicator

Press to set the unit to the PLAYER mode. The picture of the tape inserted into the PLAYER is displayed as the main picture on the screen, and can be controlled by means of the JOG dial and SHUTTLE ring. The indicator lights to indicate the PLAYER mode.

10 INSERT VIDEO/STD (video/standard track) button and indicator

Press to set the unit to the video insert mode. The indicator lights to indicate the video insert mode.

11 INSERT PCM button and indicator

Press to set the unit to the audio insert mode. The indicator lights to indicate the audio insert mode.

12 PGM INS (one programme insert) button
In the programme editing mode, press to add one scene between the previously stored programmes.

13 PGM DEL (one programme delete) button
In the programme editing mode, press to delete the editing data of a programme number selected with the +/– buttons.

14 SHUTTLE ring
Turn and hold this ring. The tape will be played back at a speed according to the angle at which you hold the ring: 1/5, normal, double, 9 times or 15 times normal speed in the forward direction; and 1/5, normal, 3 times, 7 times or 13 times normal speed in the reverse direction.

15 – button

Press to display the desired editing data on the monitor screen.

Each time this button is pressed, the next editing data appears: the IN point of programme 1, the OUT point of programme 1, the IN point of programme 2, etc. in order.

16 + button

Press to display the desired editing data on the monitor screen.

Each time this button is pressed, the previous editing data appears.

17 REVIEW button

In the quick editing, programme editing, or insert editing mode, press to review the edited scene.

18 PREVIEW button

In the programme editing mode, press to preview one of the designated scenes. (One Programme Play) In the insert editing mode, press to preview the scene to be inserted.

This button operates only when the time code is recorded on the tape in the PLAYER.

19 ENTRY button

In the programme editing or insert editing mode, press to store the editing data such as the IN and OUT points in memory.

20 RECORDER button and indicator

Press to set the unit to the RECORDER mode. The picture of the tape inserted into the RECORDER is displayed as the main picture on the screen, and can be controlled by means of the JOG dial and SHUTTLE ring. The indicator lights to indicate the RECORDER mode.

21 JOG/SHUTTLE indicator

Light when the JOG dial or SHUTTLE ring is in use.

Light when the tape is transported in a forward direction.

Light when the tape is transported in a reverse direction.

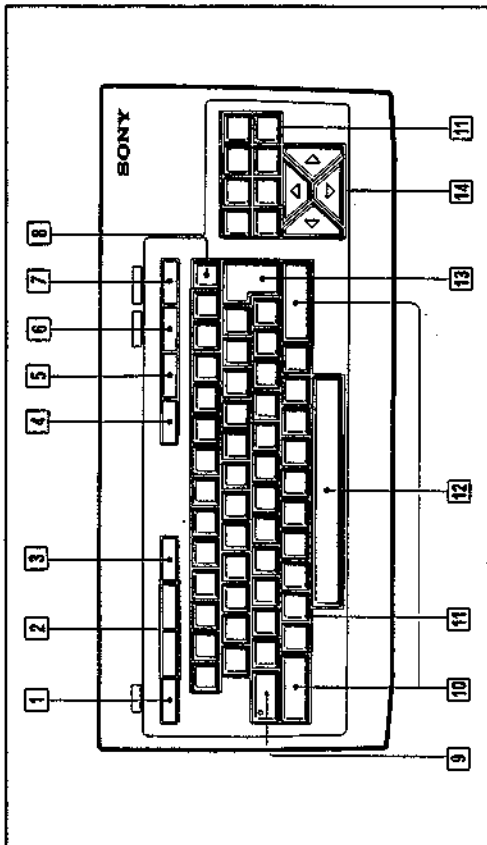
22 JOG dial

Turn this dial in the playback-pause mode. The playback tape speed will be according to the speed you are turning the dial: between 1/25 normal speed frame-by-frame (playback) and double speed in the forward direction, and between 1/25 normal speed and 3 times normal speed in the reverse direction.

Location and Function of Controls

Title Keyboard

For the use of the title keyboard, see page 78.



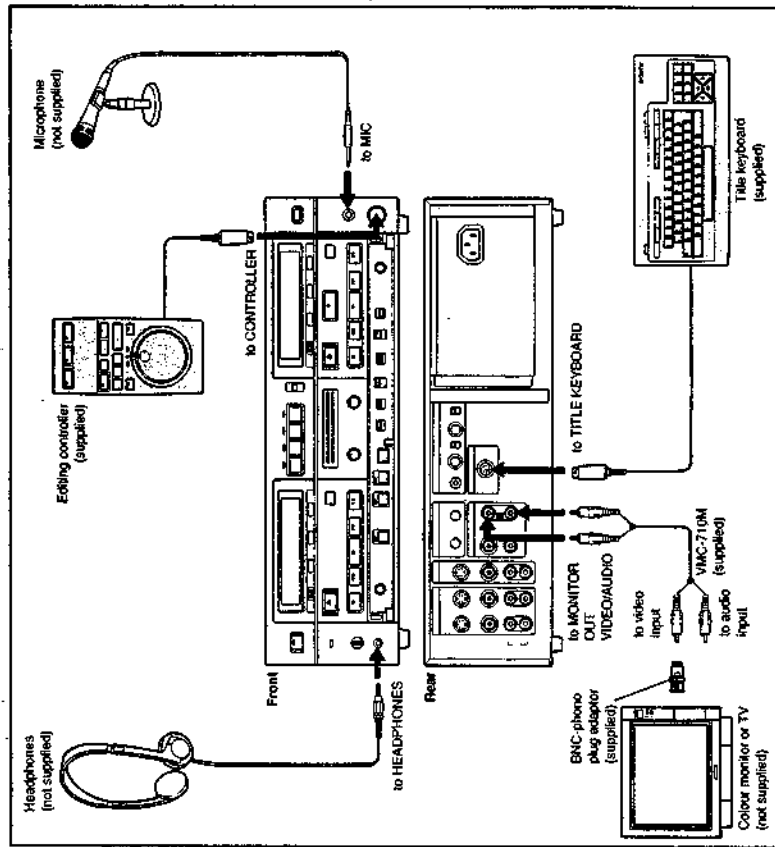
- 1 **TITLE/CLEAR key**
This key has the same function as the TITLE button on the controller.
Press to set the VTR to title mode. The cursor blinks on the monitor screen to allow the creation of a title.
To clear the title being displayed, press this key while pressing the SHIFT key.
- 2 **PAGE +/- keys**
Select the title page (1 through 25). Press the PAGE + key to display the next page, and the PAGE - key to display the previous page.
- 3 **GO TO key**
This key has the same function as the GO TO key on the controller.
Press to run the taps to the IN or OUT point of the programme selected with the +/- buttons on the editing controller. When the selected point is located, the PLAYER is set to the playback/pause mode.

- 4 **SIZE key**
Four character sizes can be selected.
Two sizes of characters can be used in one title, one size for the characters of the first line, and the other for the characters of the second line and later.
- 5 **COLOR key**
Select the background colour. Seven colours and a transparent background can be selected.
- 6 **CHA. INSLINE INS (character insert/line insert) key**
Press to insert one space. To insert a blank line, press this key while pressing the SHIFT key.

- 7 **CHA DEL/LINE DEL (character delete/line delete) key**
Press to delete the character at the cursor position.
To delete all characters on one line, press this key while pressing the SHIFT key.
- 8 **BS (back space) key**
Press to move the cursor by one space to the left. If there is a character at that position, it will be deleted.
- 9 **CAPS LOCK (capitals lock) key**
Press to lock this key to obtain capital letters when you press character keys. Press it again to release.
- 10 **SHIFT key**
Keeping this key pressed, press a character key for a capital letter, or press a number or symbol key for the symbol indicated on the upper part of the key.
- 11 **Character, number and symbol keys**
Use these keys as you would with an ordinary typewriter.
- 12 **Space bar**
Press to move the cursor by one space to the right. If there is a character at that position, it will be deleted and a space will remain.
- 13 **↵ (cursor return) key**
Press to move the cursor to the left margin of the next line.
- 14 **Cursor control keys**
Press to move the cursor in the direction indicated on the keys.

Basic System Connection

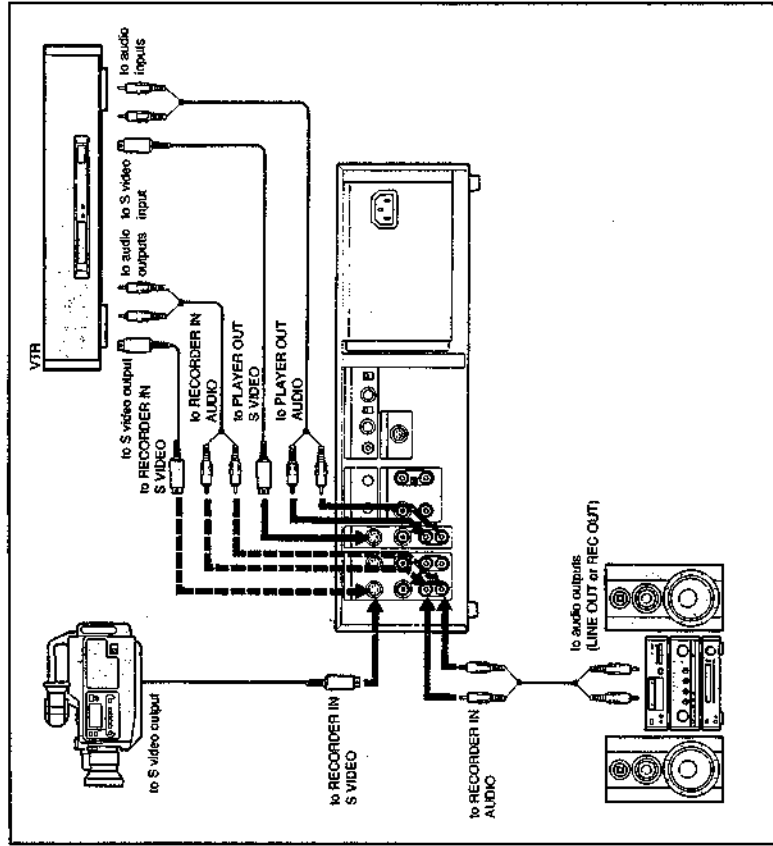
For tape playback and editing, connect a colour monitor (not supplied), the supplied editing controller and title keyboard as illustrated. The headphones and microphone may be connected as required.



Note
To connect a TV not equipped with the video/audio inputs, use the RFU-89EKA RFU adaptor (not supplied).

Connection of External Equipment

When recording from a video camera, another VTR, stereo system, etc. connect the required equipment using the appropriate connecting cord, in addition to the basic system connection.



When the external video equipment is not provided with the S video input/output
Connect the video input/output of the equipment to the BNC-type VIDEO OUT or VIDEO IN connector of this unit. If the video input/output of the equipment is a phono jack, use the supplied BNC-phono plug adaptor.

Creating Titles

The title keyboard supplied allows creation of the titles to be inserted in quick editing, programme editing or insert editing. You can create a title during the editing process or before and after the editing data designation. For connection of the title keyboard, see page 20.

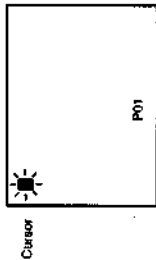
How to Use the Title Keyboard

To start creating a title

Press the TITLE button on the controller or on the keyboard. The cursor blinks on the monitor screen. A character can be input at the cursor position.

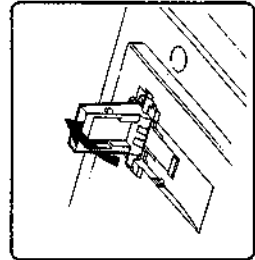
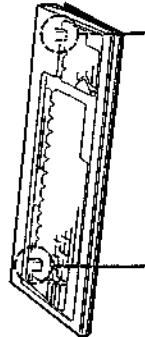
To input a character

Press the desired character key. "SHIFT + ." in the table below means: keeping the SHIFT key pressed, press the key on the right of the "." symbol.

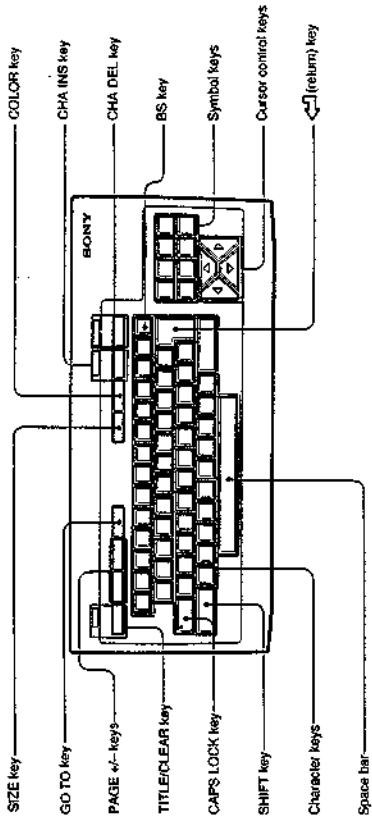


Character to be input	Keys to be pressed	To Input	Example Press:
Capital letter	SHIFT + Character key Character key (with CAPS LOCK locked)	M	SHIFT + M
Small letter	Character key	m	M
Number	Number key	7	7
Symbol indicated on the lower part of the key	Symbol key		
Symbol indicated on the upper part of the key	SHIFT + Symbol key	@	SHIFT + @

How to use the feet on the bottom



To create a title

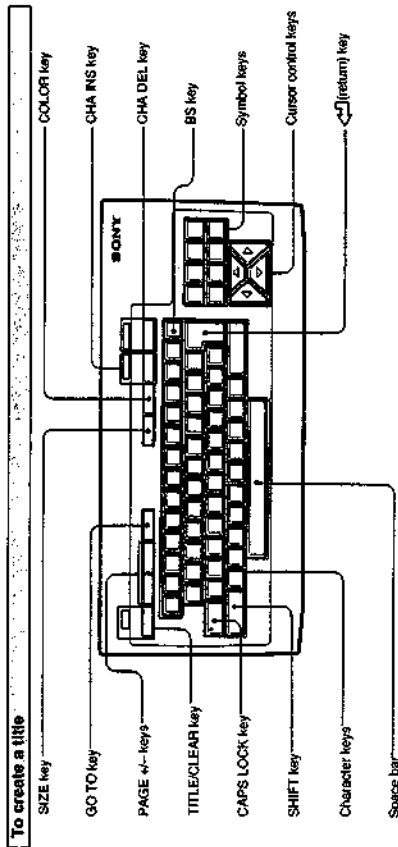


Background colour	To select the colour	Press the COLOR key. Seven colours and a transparent background can be selected. Each time the key is pressed, the colour cyclically changes as follows: transparent → black → gray → violet → blue → magenta → ochre → green → transparent
Character	To superimpose the title	Select transparent with the COLOR key.
	To delete a character at the cursor position	Press the CHA DEL key.
	To delete characters on the entire line	Keeping the SHIFT key pressed, press the CHA DEL key.
	To delete the previous character	Press the BS (back space) key.
	To insert a character	Press the CHA INS key.
	To insert a blank line	Move the cursor to the left margin, and keeping the SHIFT key pressed, press the CHA INS key.

(Continued)

Background colour designated in programme editing mode
The background colour designated in programme editing mode is not effective in other editing modes. Only the title characters are displayed in those modes.

Creating titles



Character	<p>To change the character size</p> <p>Press the SIZE key. Each time the key is pressed, the cursor size, that is the character size, changes in the order as illustrated below.</p> <p>Characters of two different sizes can be used on one line: one for the first line, and the other for the second line or later. Press the SIZE key when the cursor is on the first line, and when it is on the second line or later, respectively.</p> <p>Keeping the SHIFT key pressed, press the TITLE/CLEAR key.</p>
Cursor	<p>To delete all the characters on the screen</p> <p>Press the cursor control key. The cursor moves in the direction indicated on the key.</p> <p>To move</p> <p>Press the key.</p>

To display the title on the next or previous title page

Press the PAGE + key for the next page, and the PAGE - key for the previous page. Pages 1 through 25 can be selected. The characters displayed on each page are retained in memory.

To display the IN point on which a title is to be superimposed

In programme editing or insert editing mode, press the +/- buttons on the controller to display the editing data of the desired IN point, and press the GO TO button on the keyboard. The tape automatically runs to the designated point, and the PLAYER is set to the playback pause mode.

Creating Titles before or after Scene Designation

Titles of up to 25 pages can be created in a lamp and stored in memory, independently of scene designation.

To create titles before scene designation

- 1 Press the TITLE button on the controller to turn on the indicator of the button. The cursor blinks and the title page number appears.
- 2 Create a title using the title keyboard.
- 3 Press the PAGE + key. The next title page appears.
- 4 Repeat steps 2 and 3 for each title page. Titles of up to 25 pages can be created and stored in memory.

To delete the title

- 1 Press the TITLE button on the controller.
- 2 Press the PAGE + or - key on the title keyboard to display the title to be deleted.
- 3 While pressing the SHIFT key, press the TITLE/CLEAR key on the keyboard.

You can recall the desired titles during scene designation by pressing the TITLE button and the PAGE +/- key.

To create titles after the scene designation of programme editing

When you have assigned the title pages to the programme numbers during scene designation (page 49), create a title on each title page as follows:

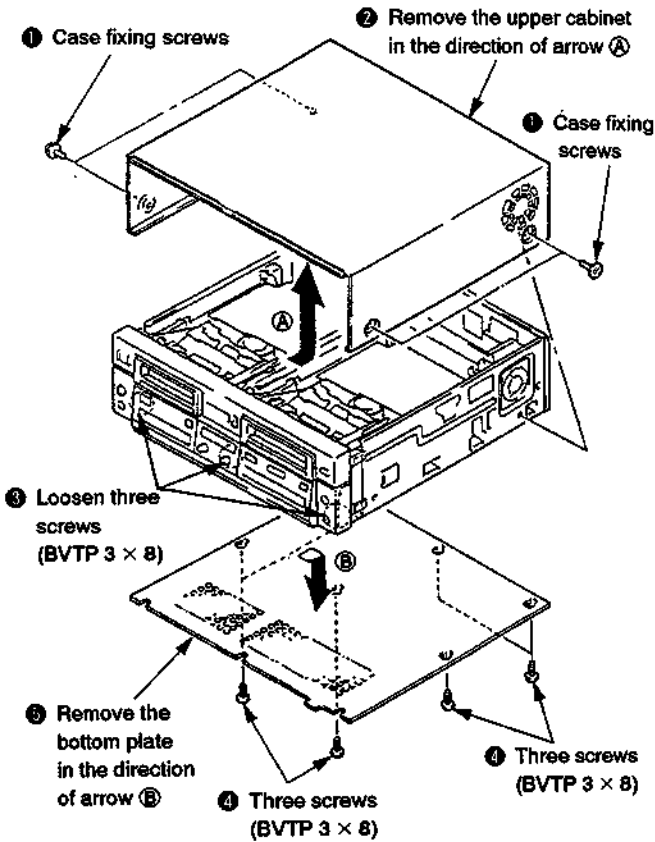
- 1 When the PCM MODE button is lit, press the +/- button on the controller to select the programme number for which you want to create a title.
- 2 If necessary, press the GO TO button to display the scene to superimpose the title.
- 3 Press the TITLE button.
- 4 Create the title using the supplied title keyboard.
- 5 Repeat steps 1 to 3 for other programme numbers. Titles of up to 25 pages can be created.

To change the contents of a title

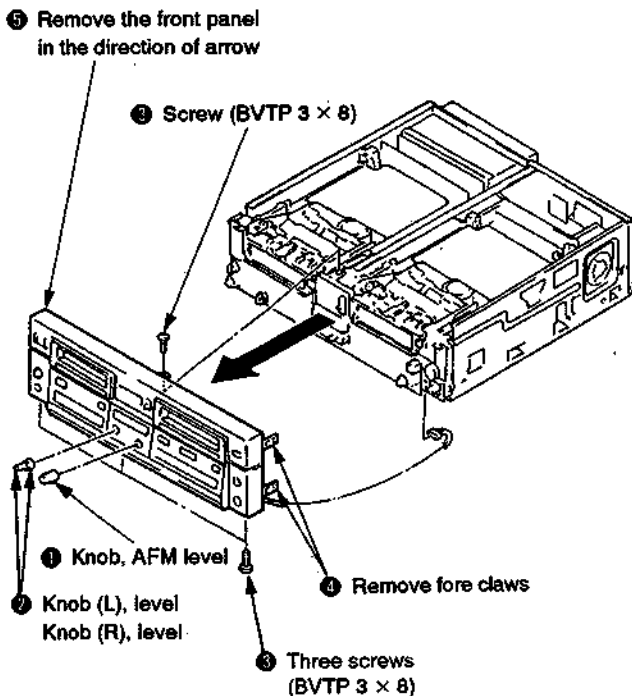
- 1 Press the TITLE button on the controller.
- 2 Press the PAGE + or - key on the title keyboard to display the title to be changed.
- 3 Change the title using the title keyboard.

SECTION 2 DISASSEMBLY

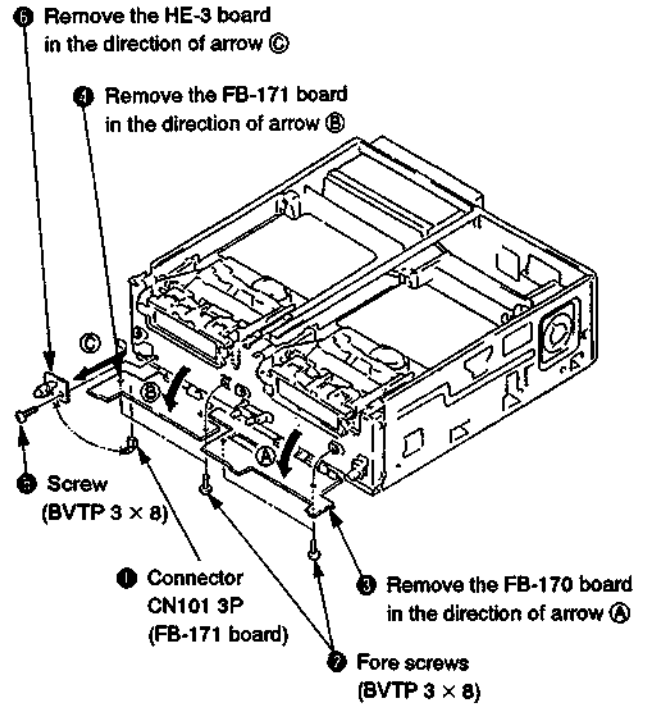
2-1. REMOVAL OF CABINET



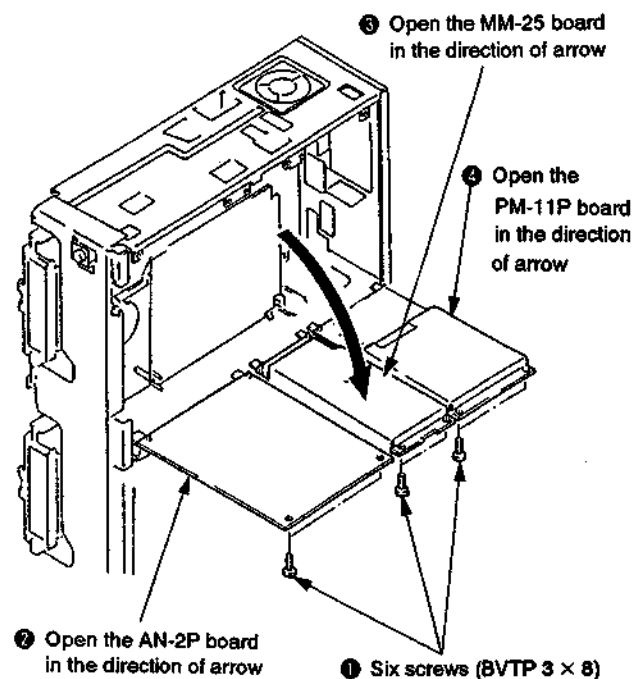
2-2. REMOVAL OF FRONT PANEL



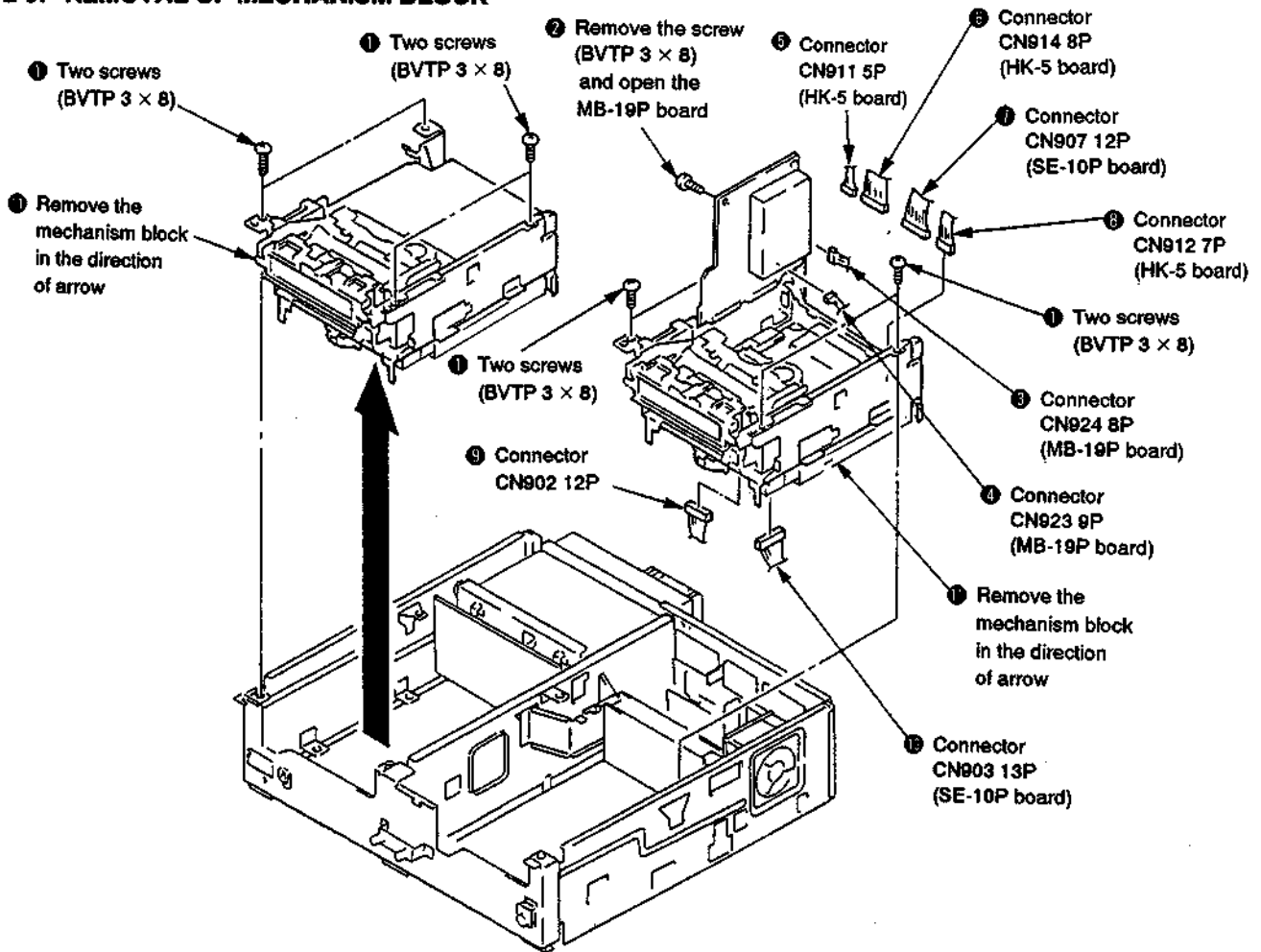
2-3. REMOVAL OF FB-170, FB-171, HE-3 BOARDS



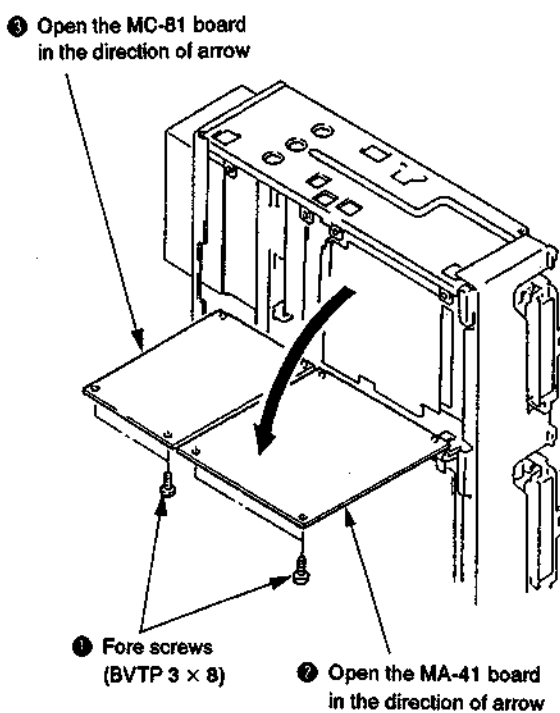
2-4. OPENING OF AN-2P, MM-25, PM-11P BOARDS



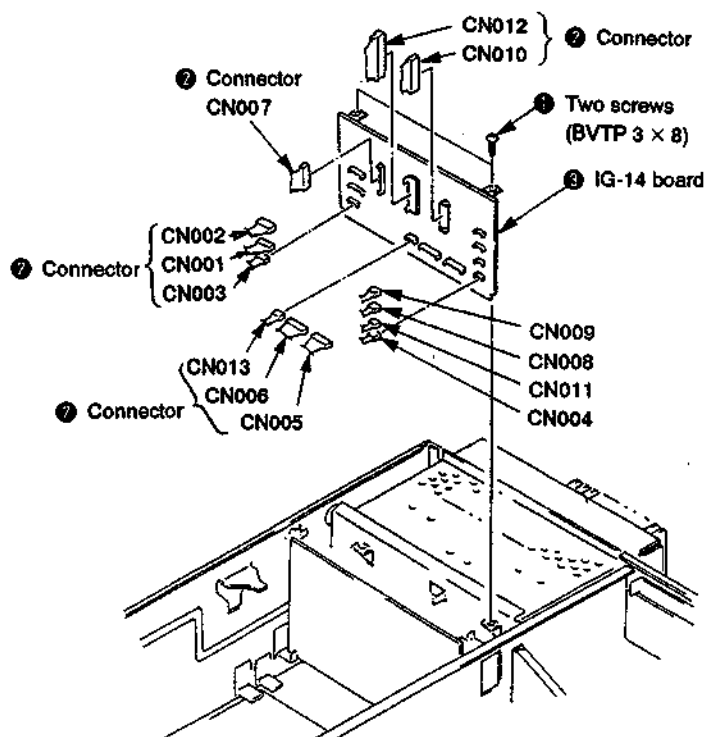
2-5. REMOVAL OF MECHANISM BLOCK



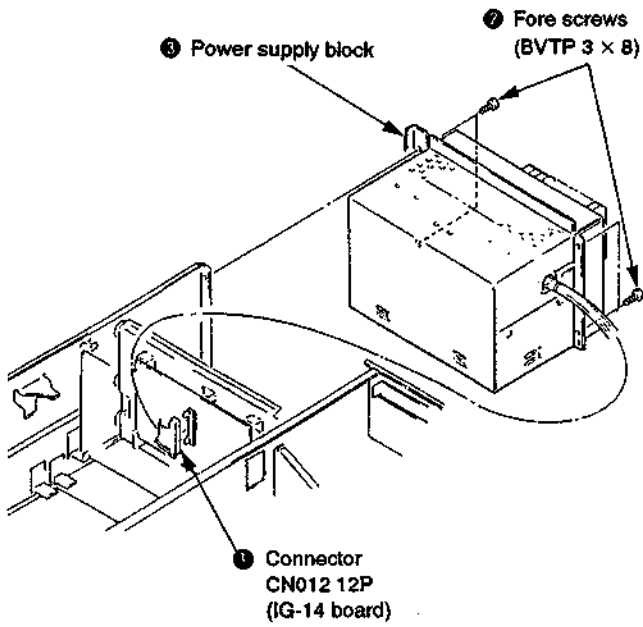
2-6. OPENING OF MA-41, MC-81 BOARDS



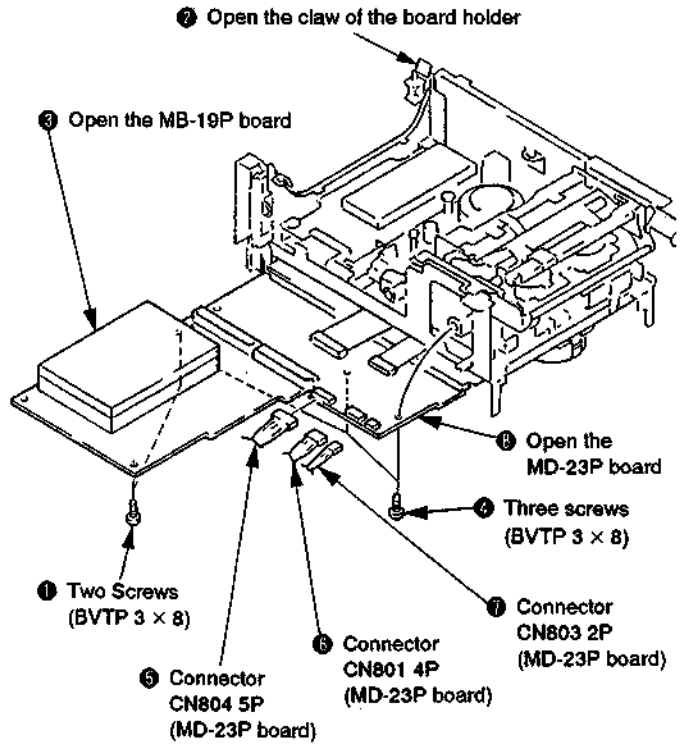
2-7. REMOVE OF IG-14 BOARD



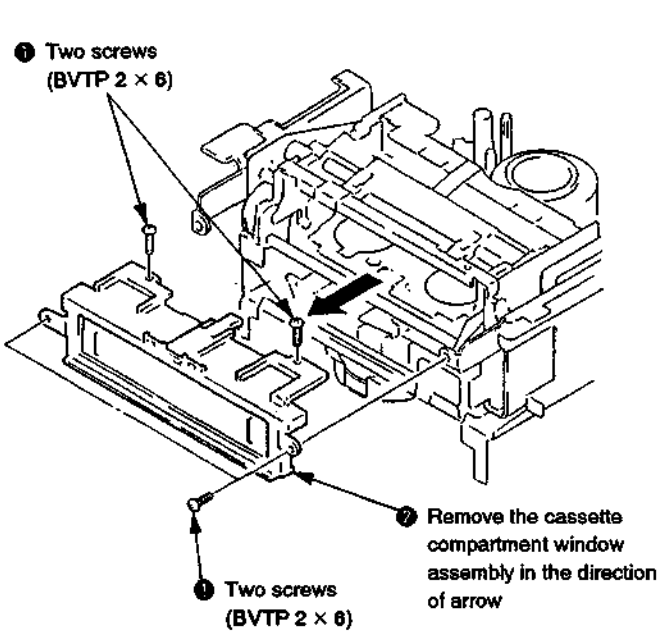
2-8. REMOVAL OF POWER SUPPLY BLOCK



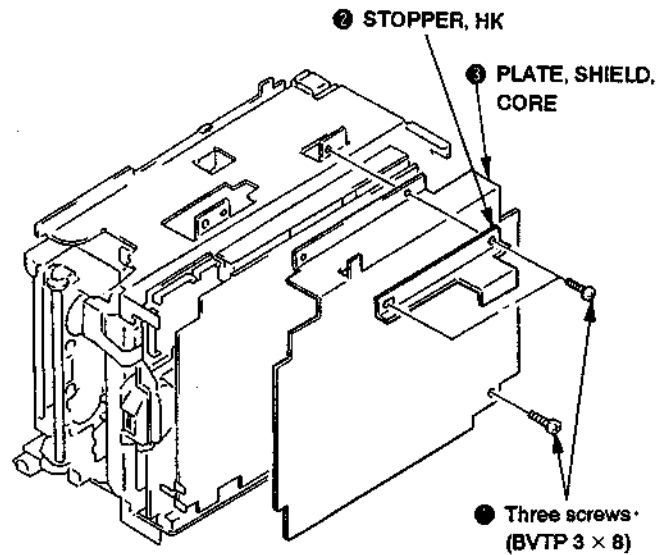
2-10. OPENING OF MB-19P, MD-23P BOARD



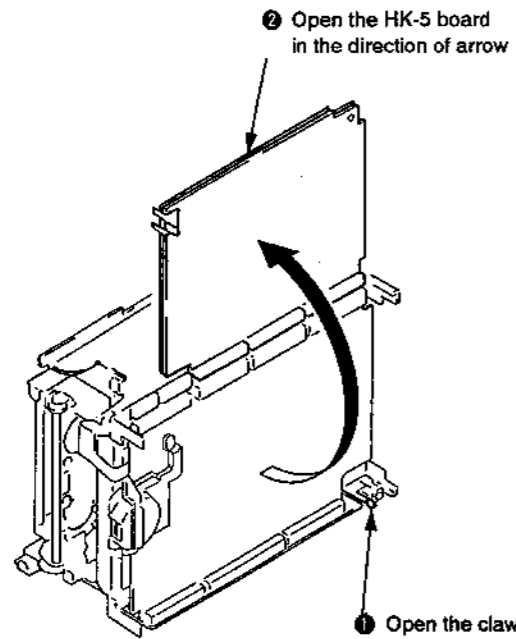
2-9. REMOVAL OF CASSETTE COMPARTMENT WINDOW ASSEMBLY



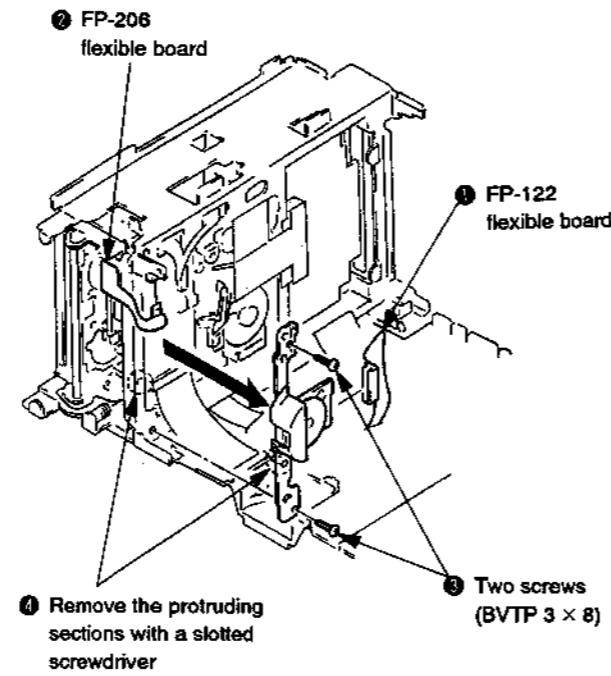
2-11. PLATE, SHIELD, CORE



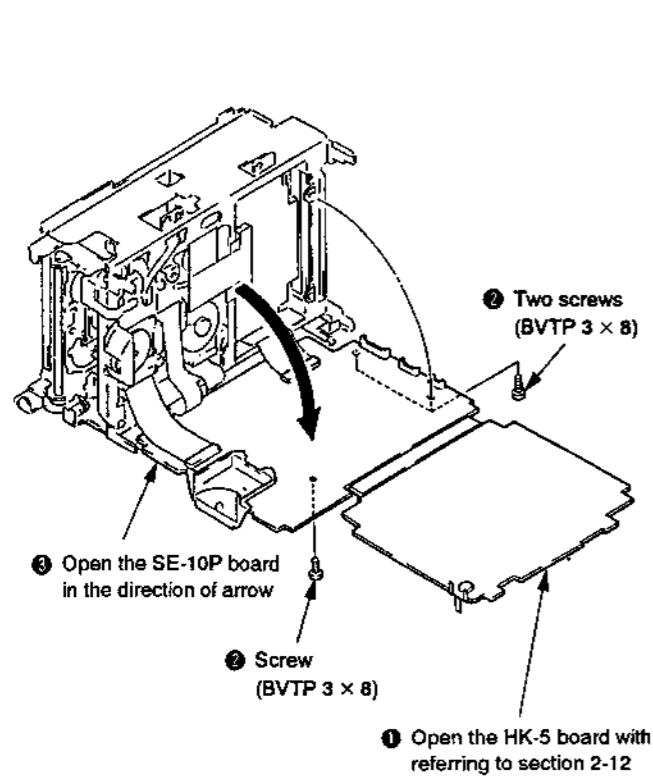
2-12. OPENING OF HK-5 BOARD



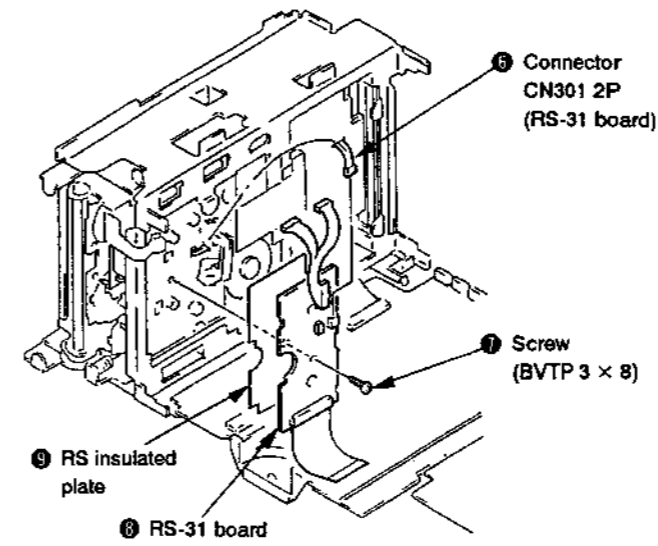
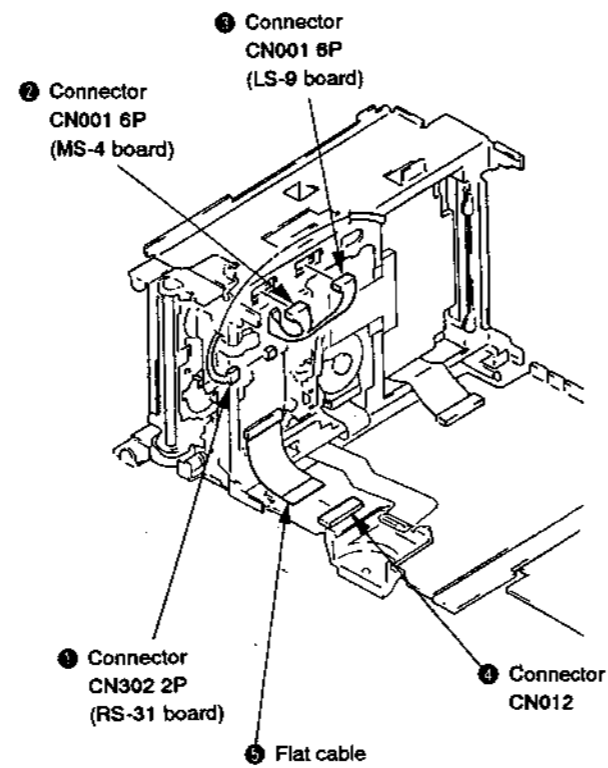
2-14. REMOVAL OF REEL MOTOR



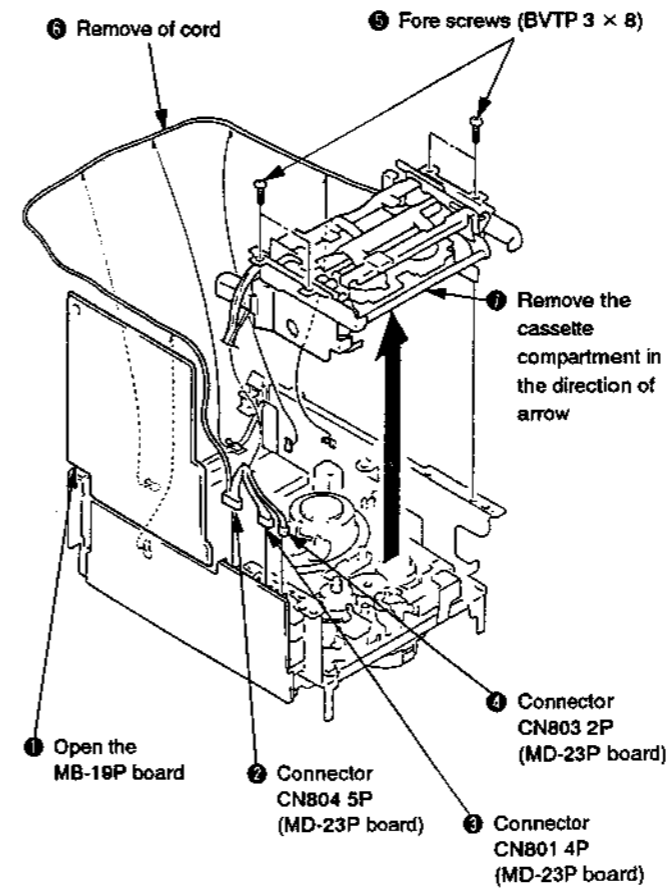
2-13. OPENING OF SE-10P BOARD



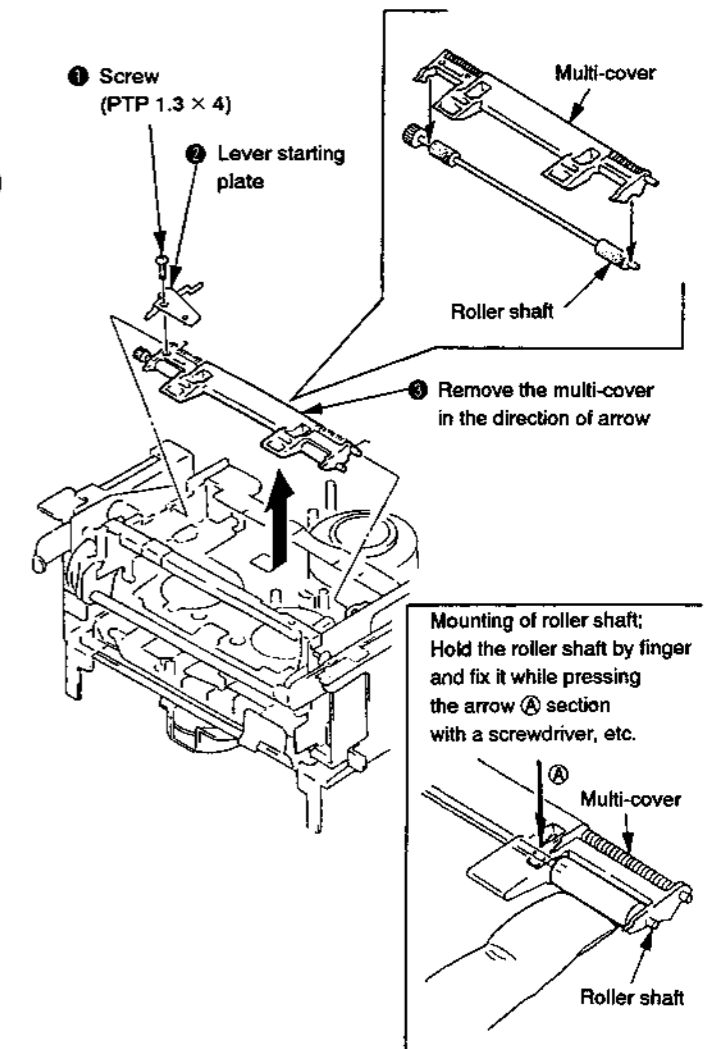
2-15. REMOVAL OF RS-31 BOARD



2-16. REMOVAL OF CASSETTE COMPARTMENT

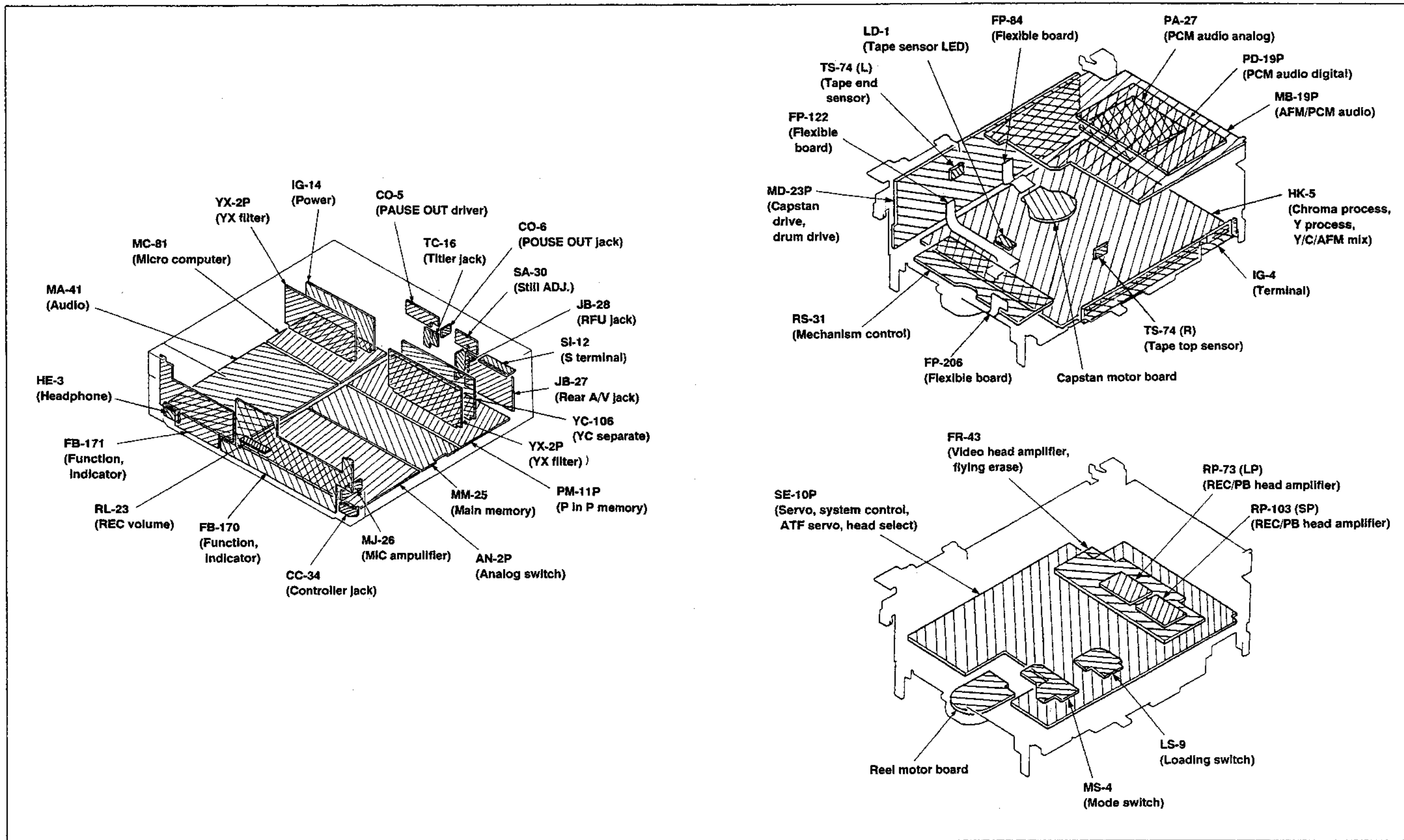


2-17. REMOVAL OF MULTI-COVER, ROLLER SHAFT

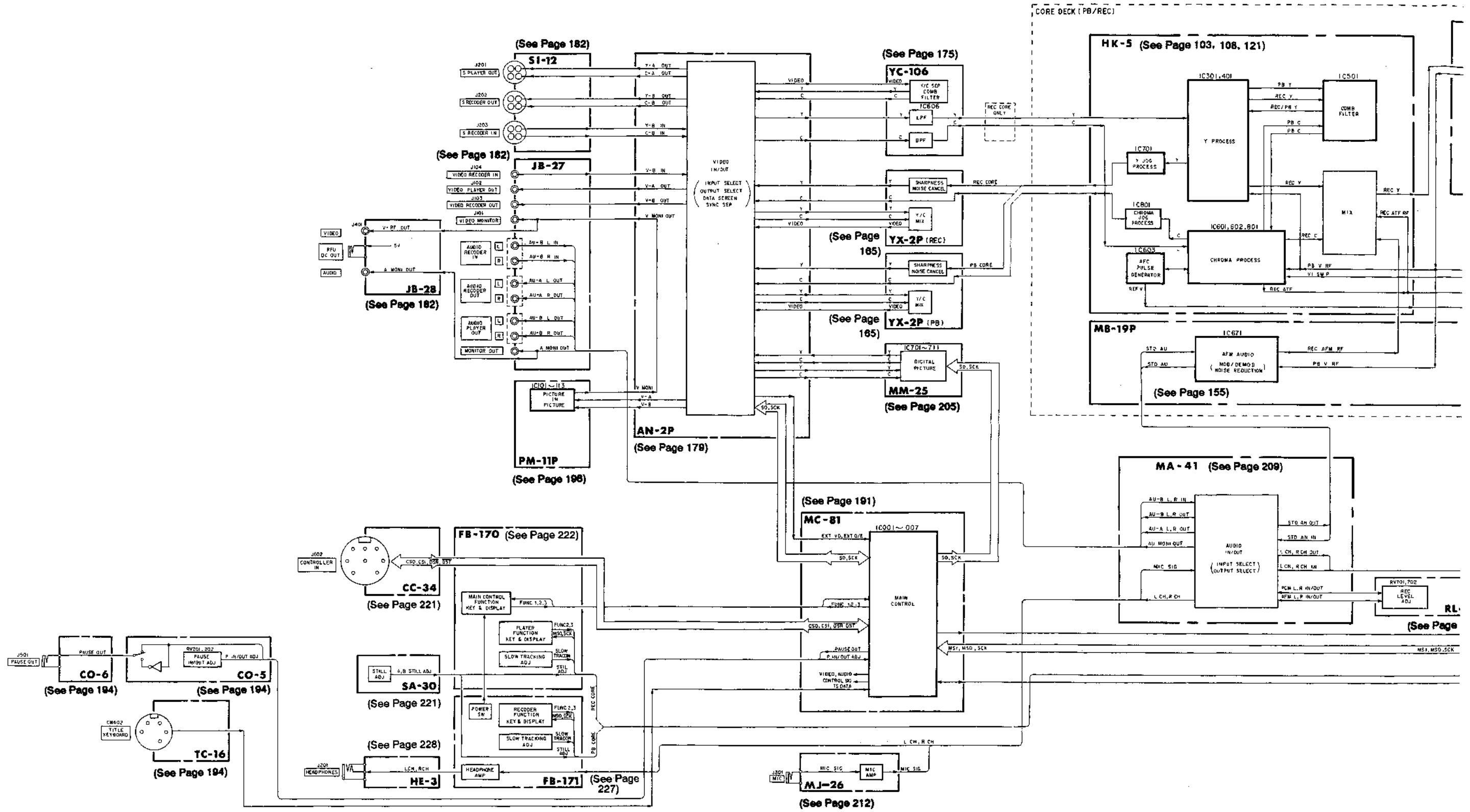


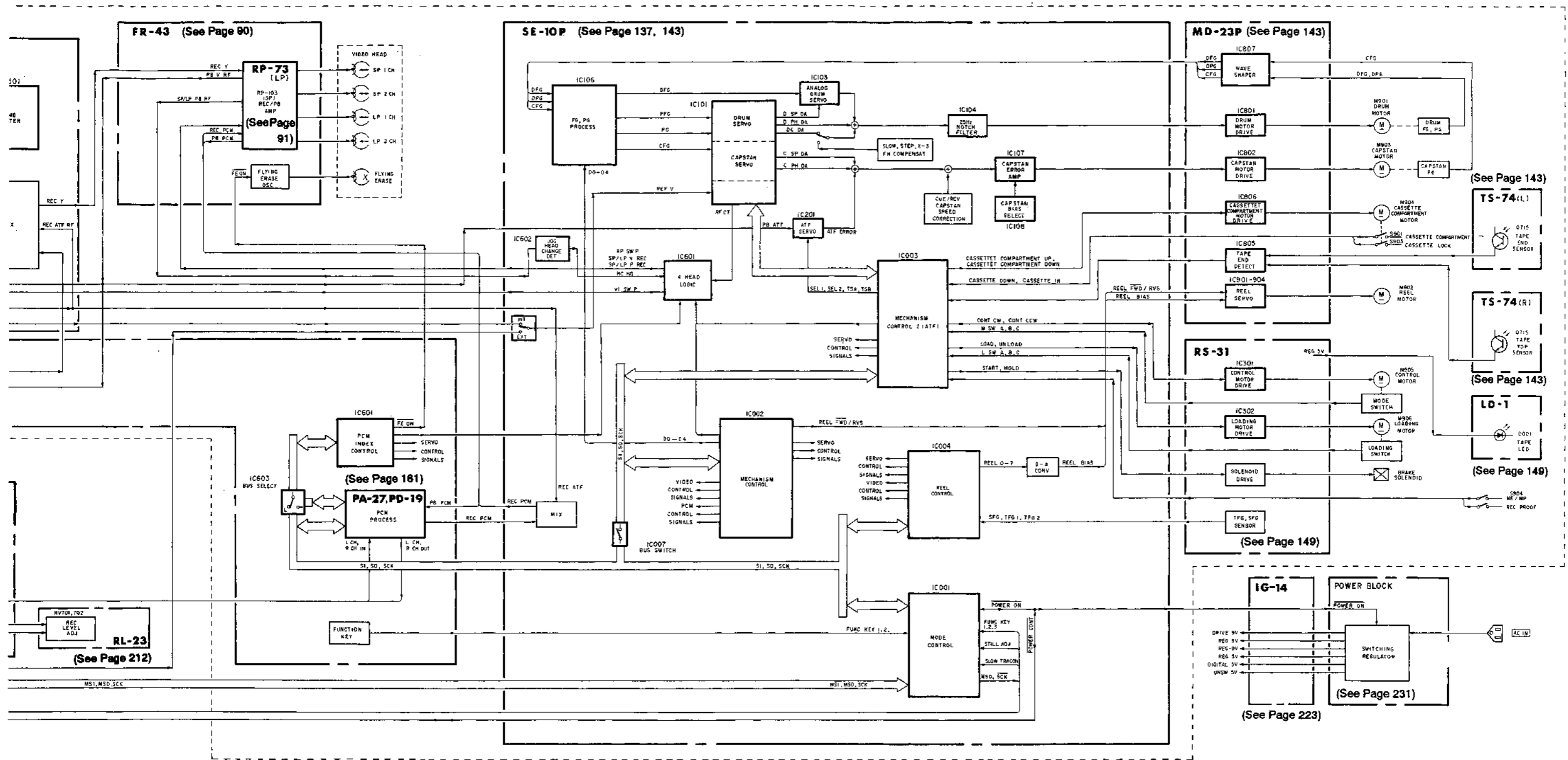
**SECTION 3
DIAGRAMS**

3-1. CIRCUIT BOARDS LOCATION

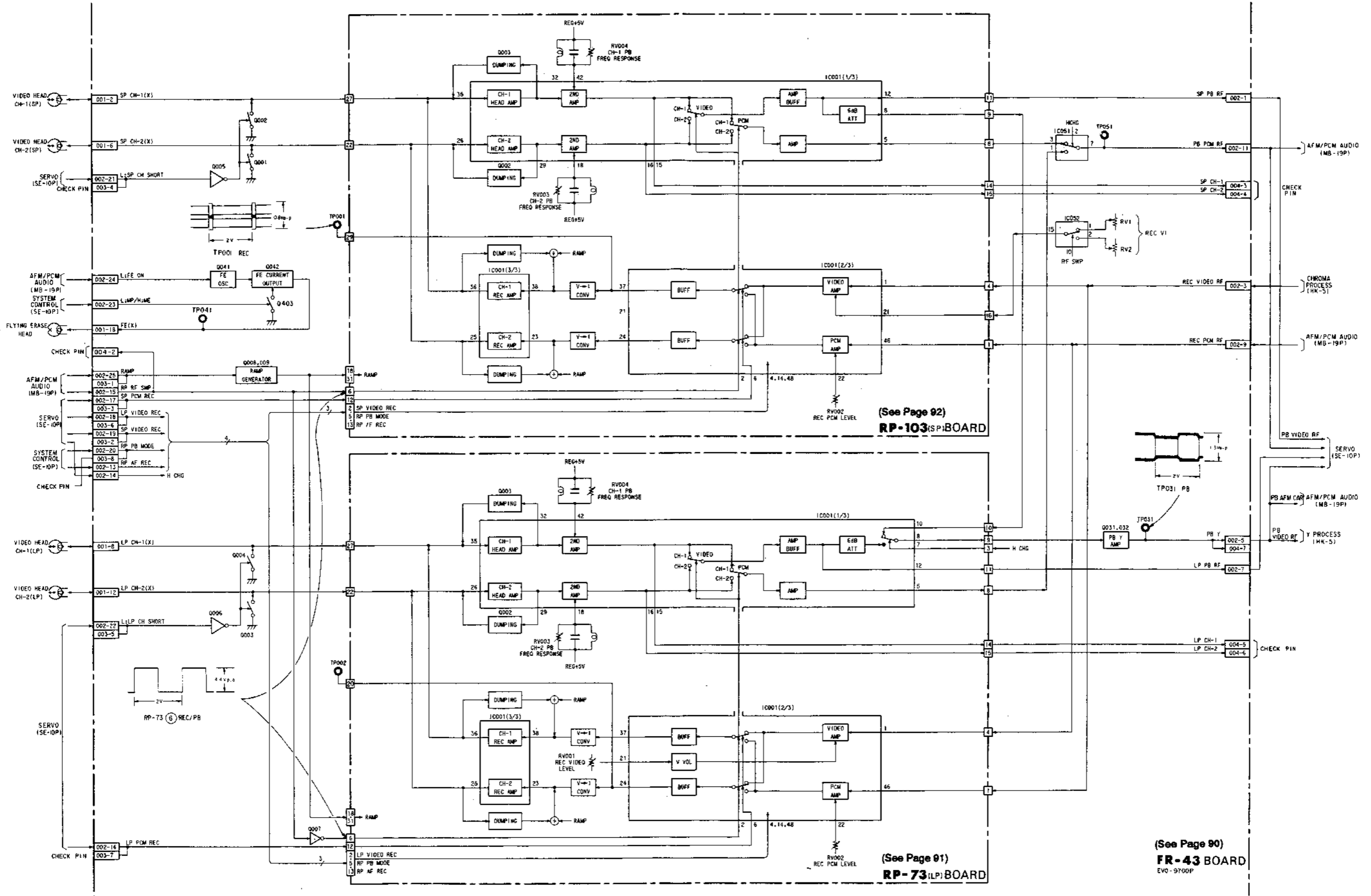


3-2. OVERALL BLOCK DIAGRAM

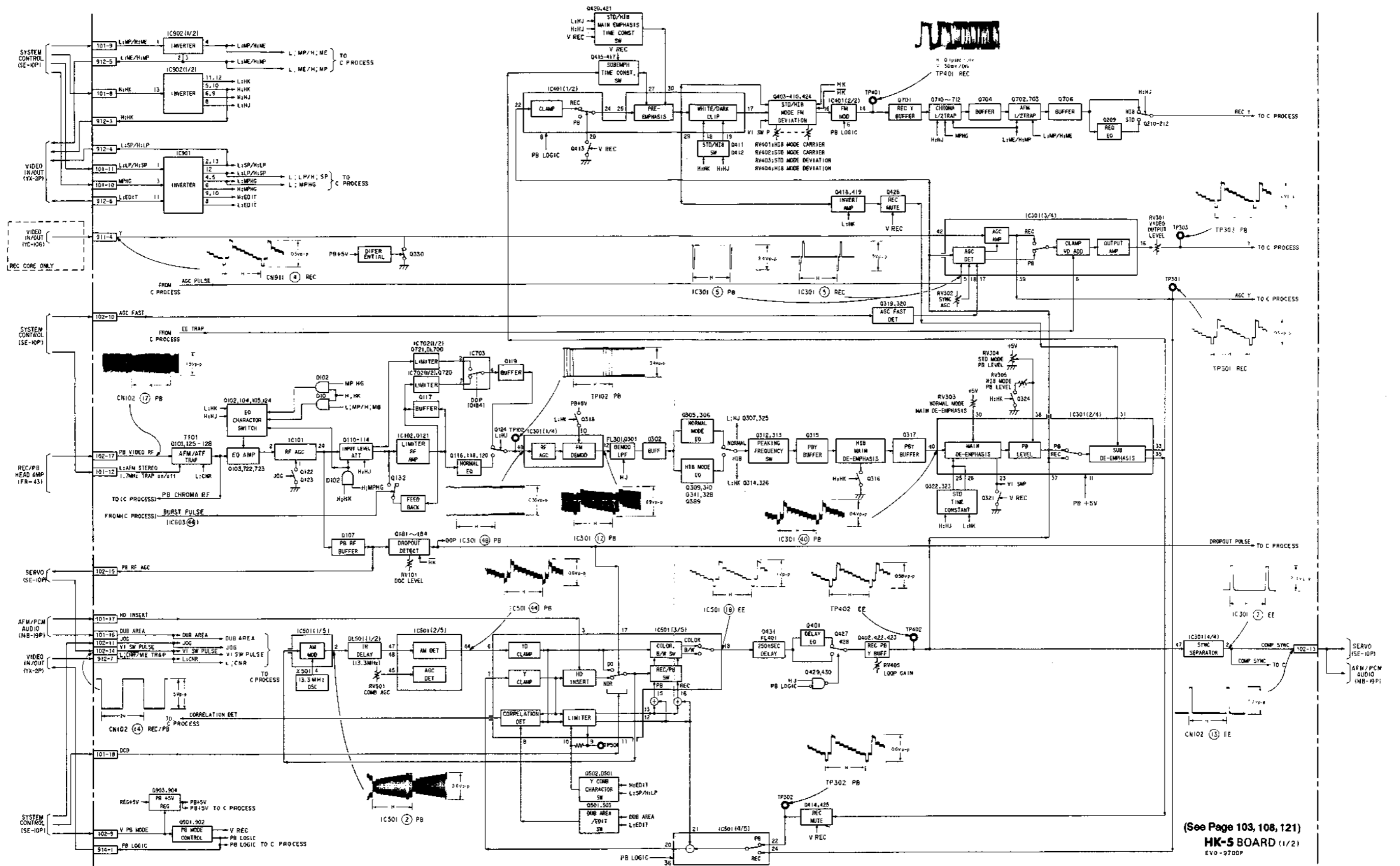




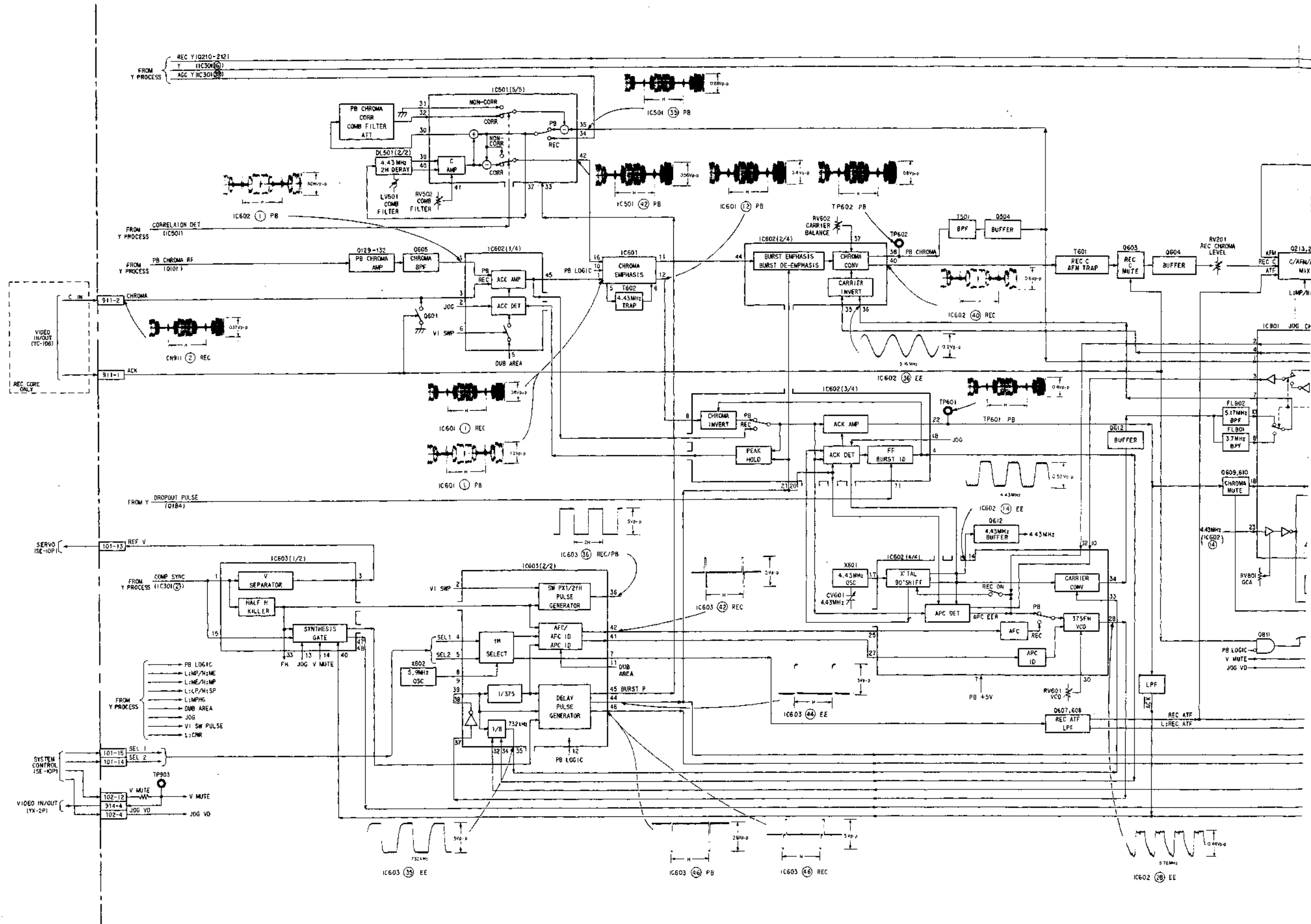
3-3. REC/PB HEAD AMP BLOCK DIAGRAM

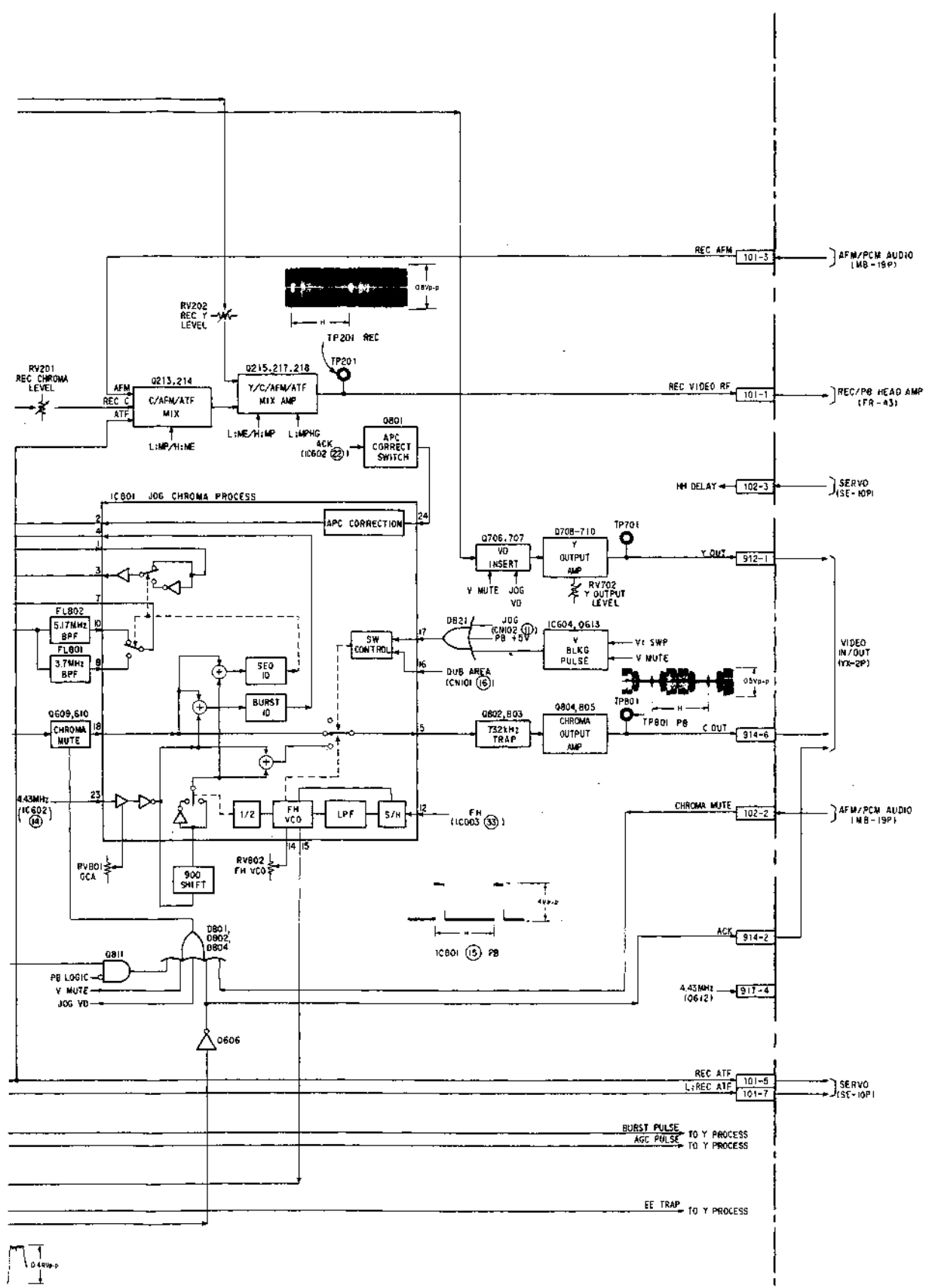


3-4. Y PROCESS BLOCK DIAGRAM



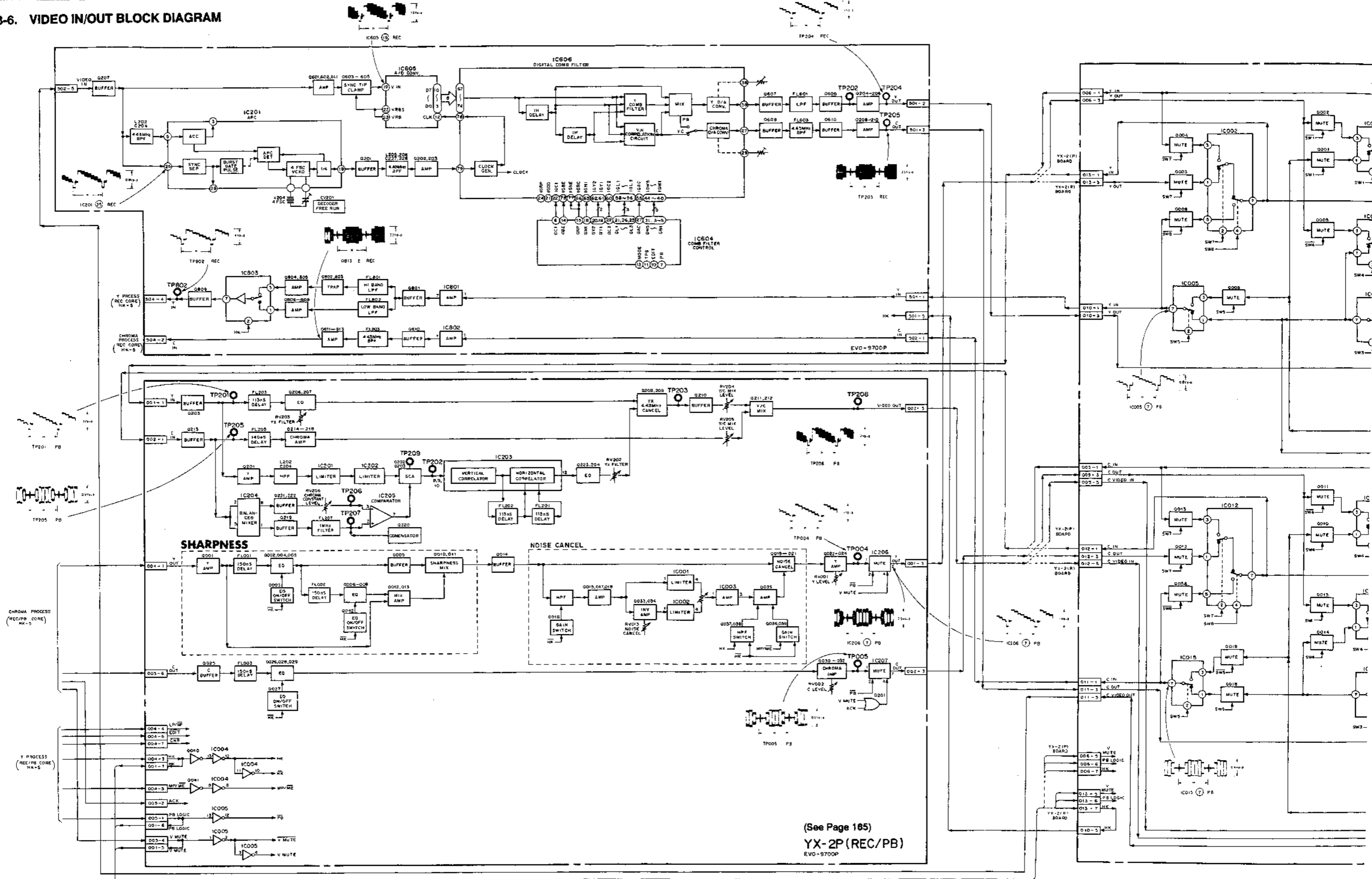
3-5. CHROMA PROCESS BLOCK DIAGRAM

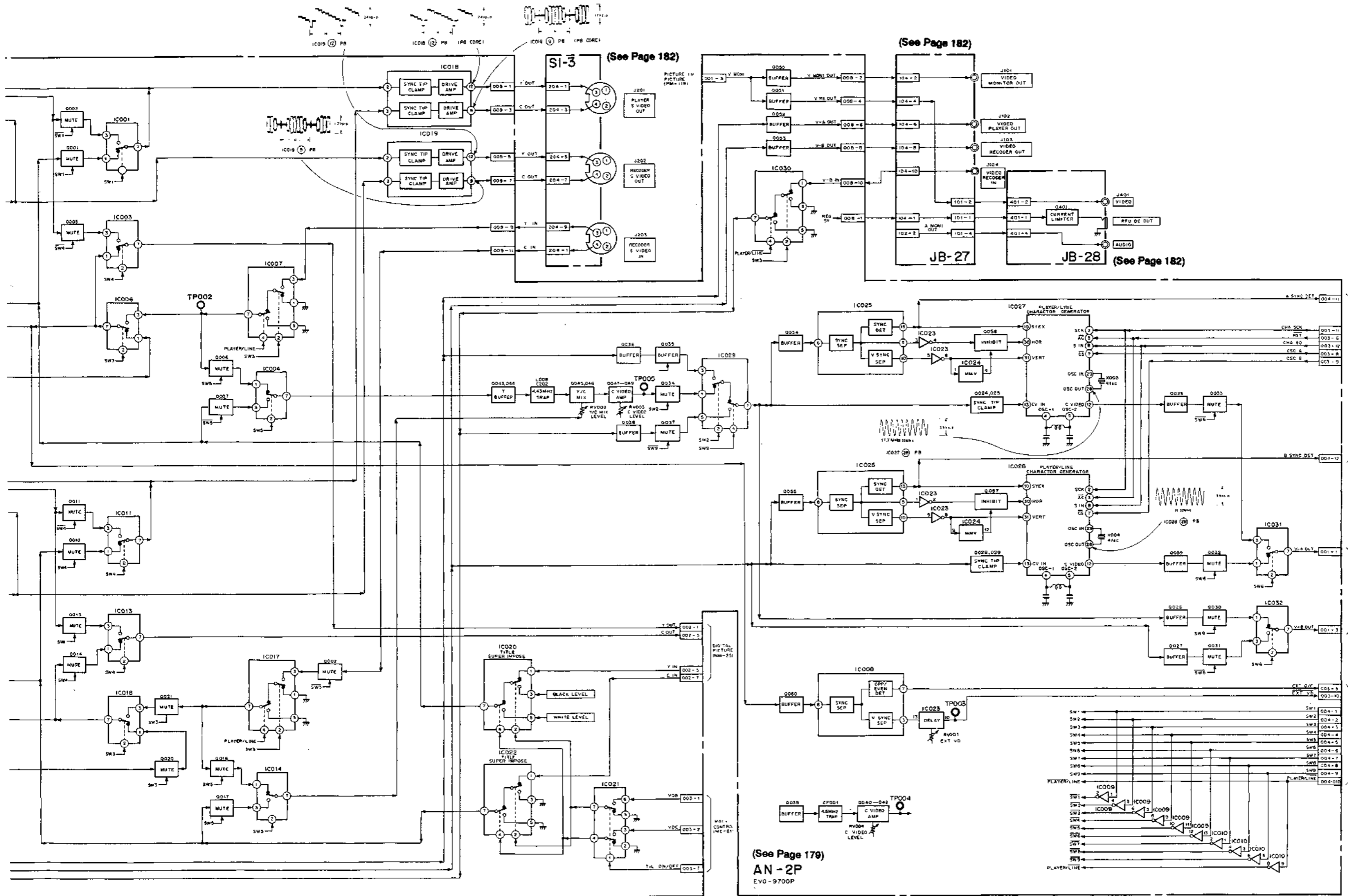




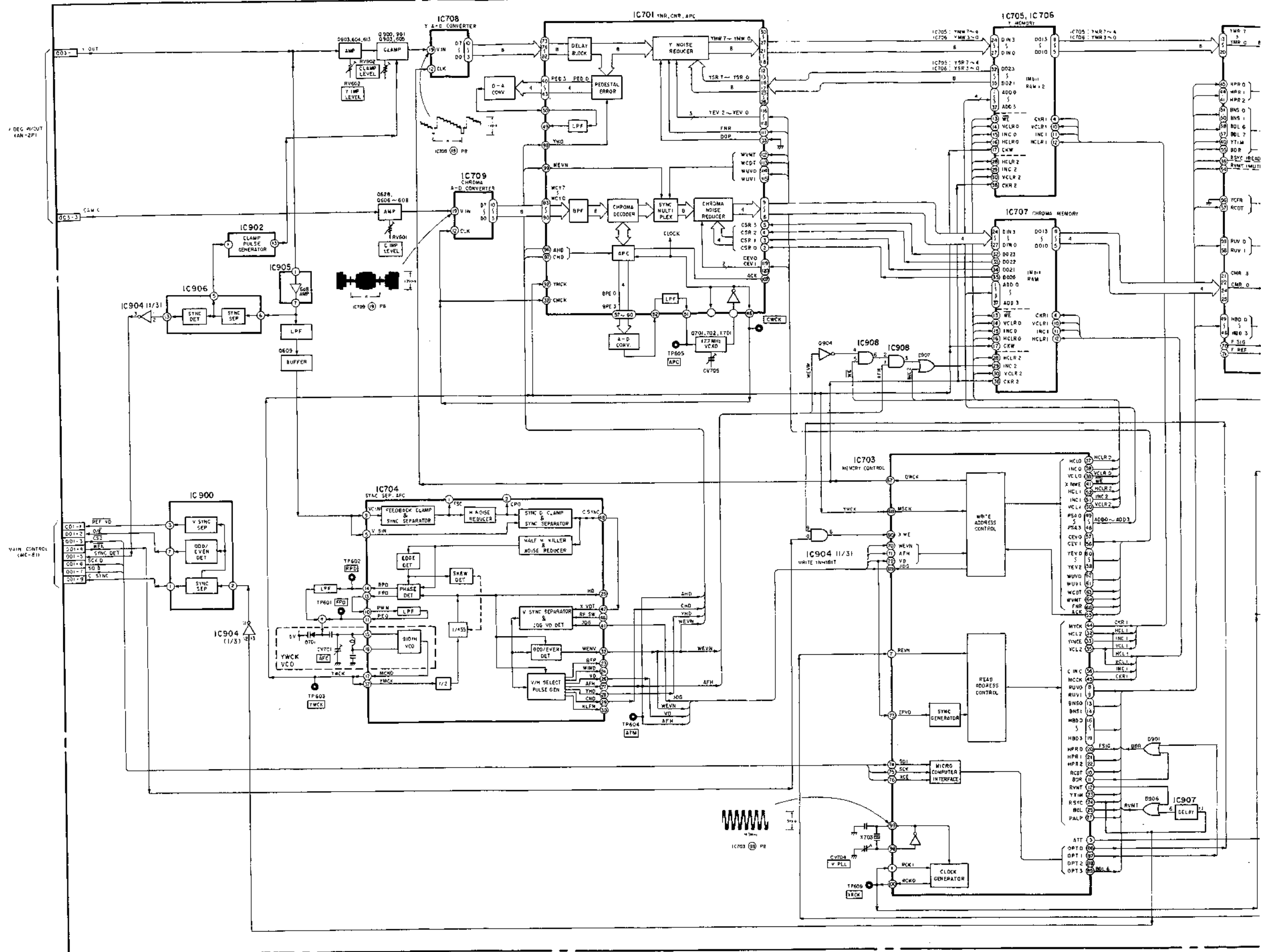
(See Page 103, 108, 121)
HK-5 BOARD (2/2)
 EVO-9700P

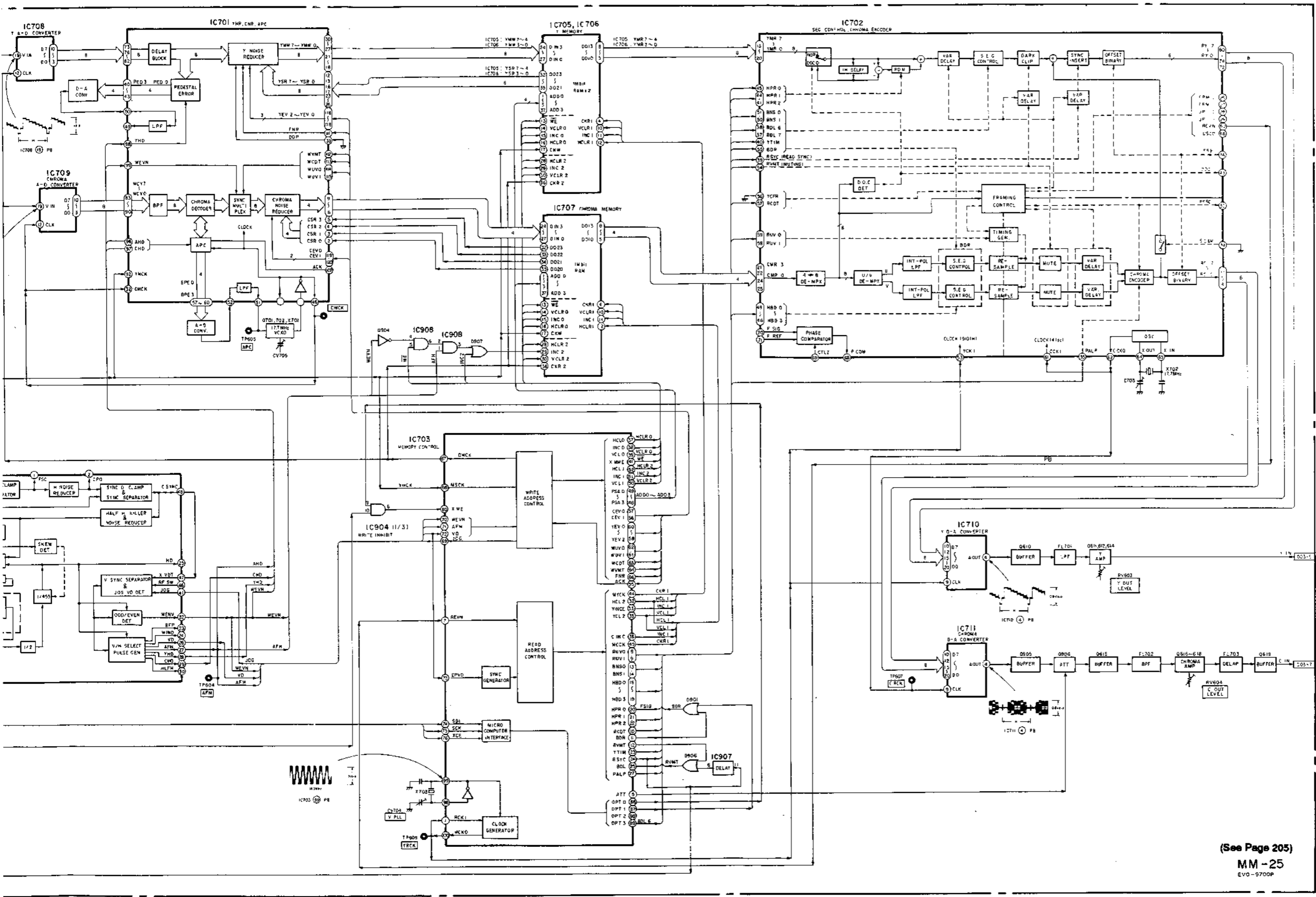
3-6. VIDEO IN/OUT BLOCK DIAGRAM





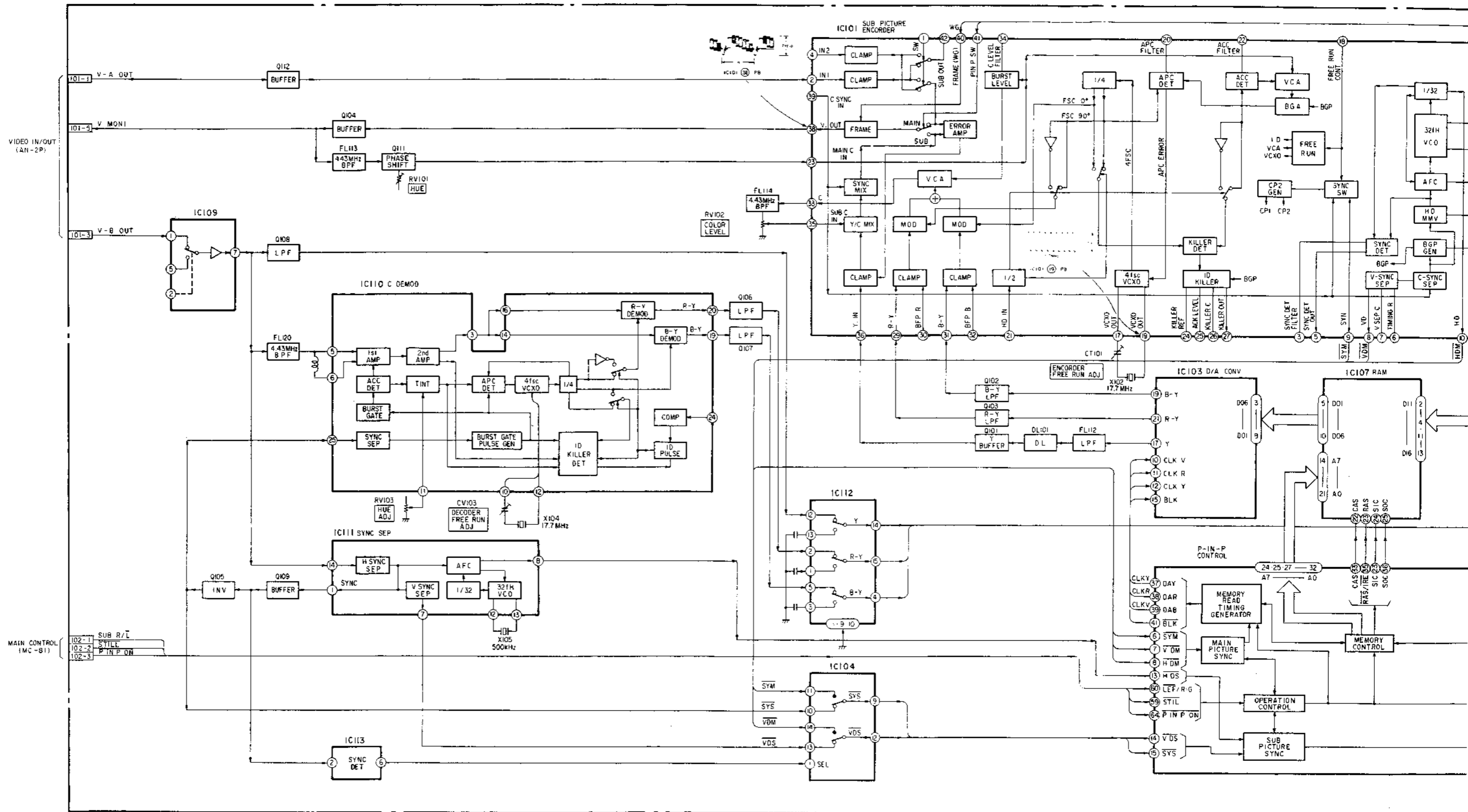
3-7. DIGITAL PICTURE BLOCK DIAGRAM

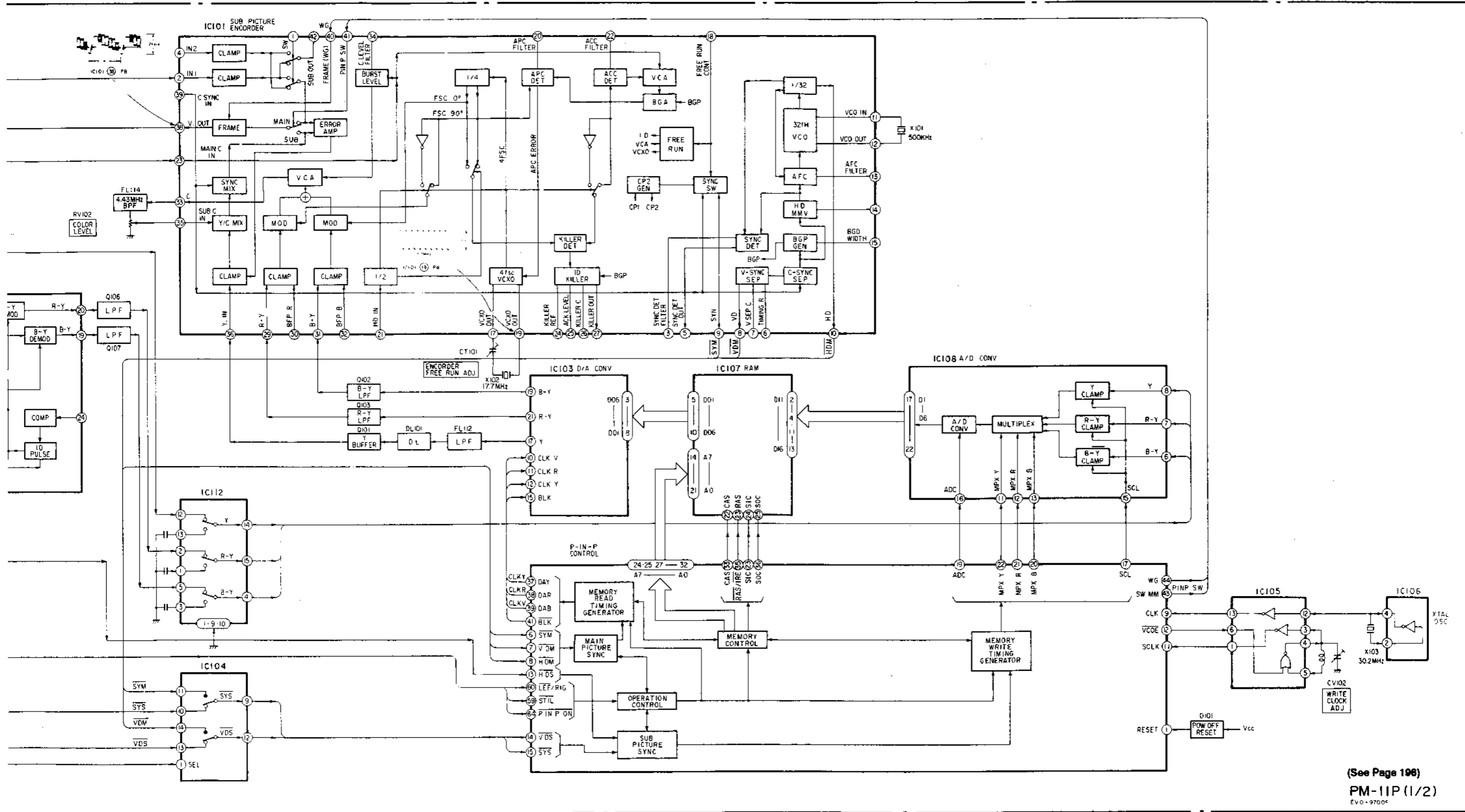




(See Page 205)
MM-25
EVO-9700P

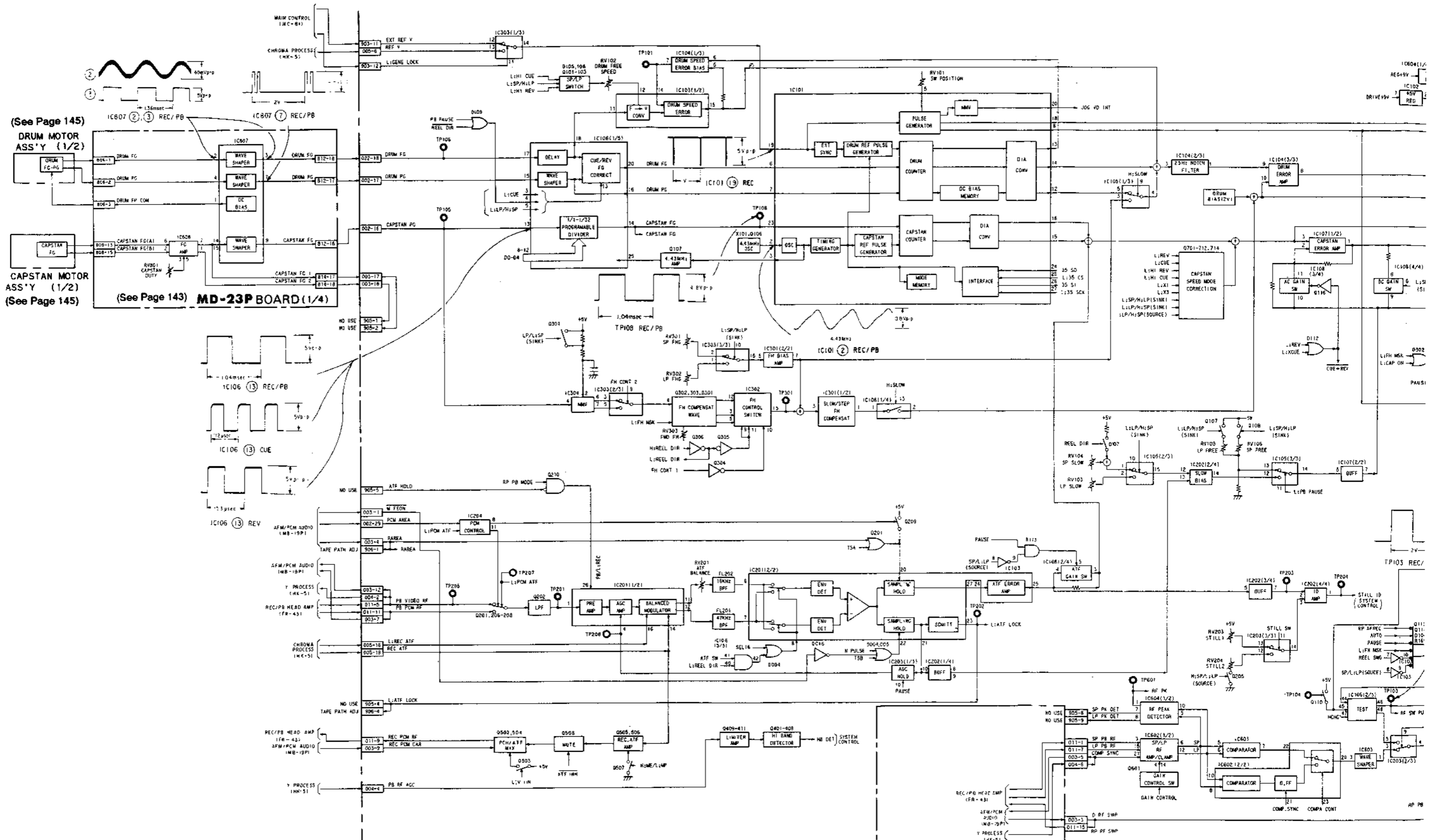
3-8. PICTURE IN PICTURE BLOCK DIAGRAM

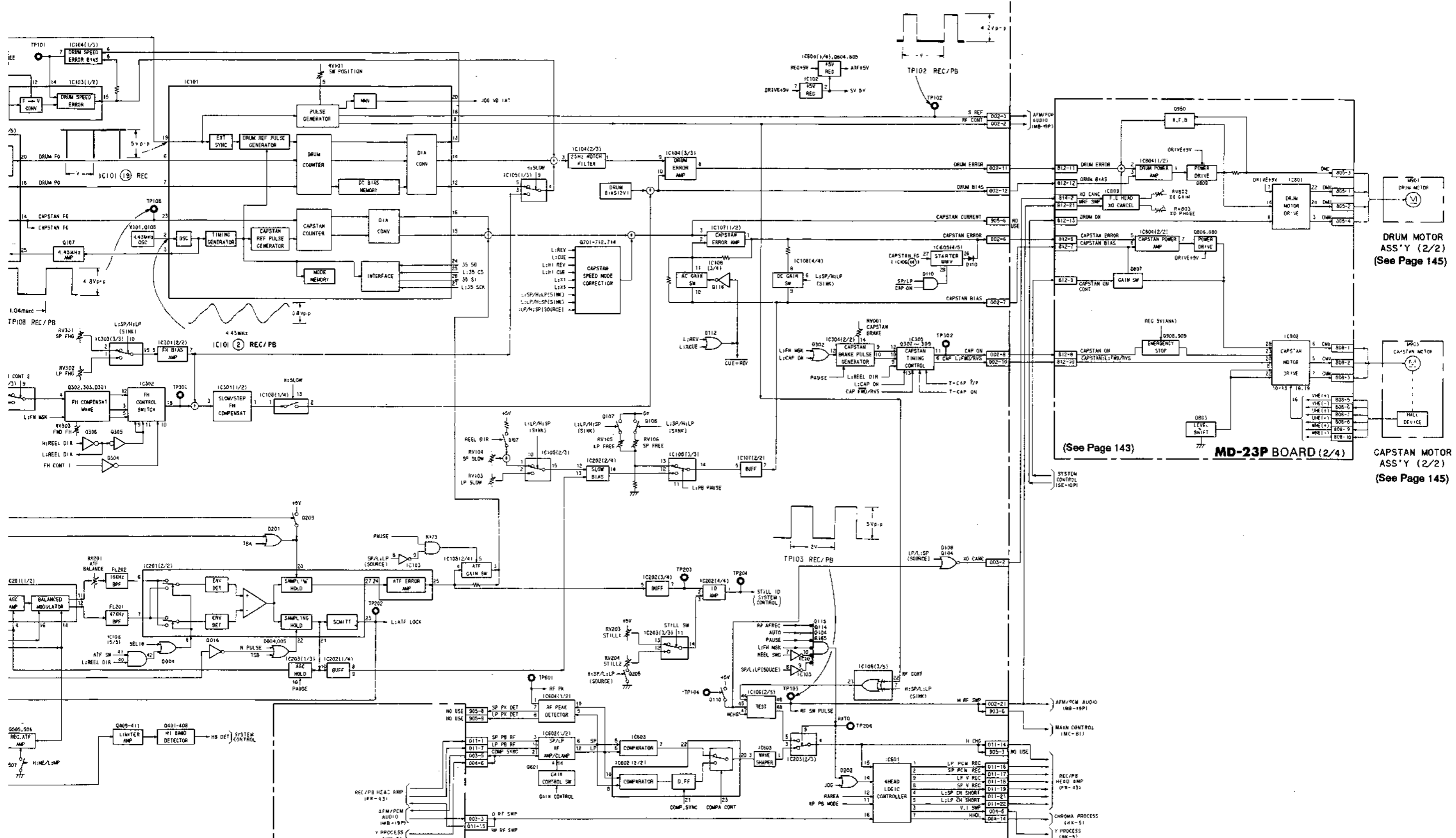




(See Page 198)
PM-11P (1/2)
 EVO-9700C

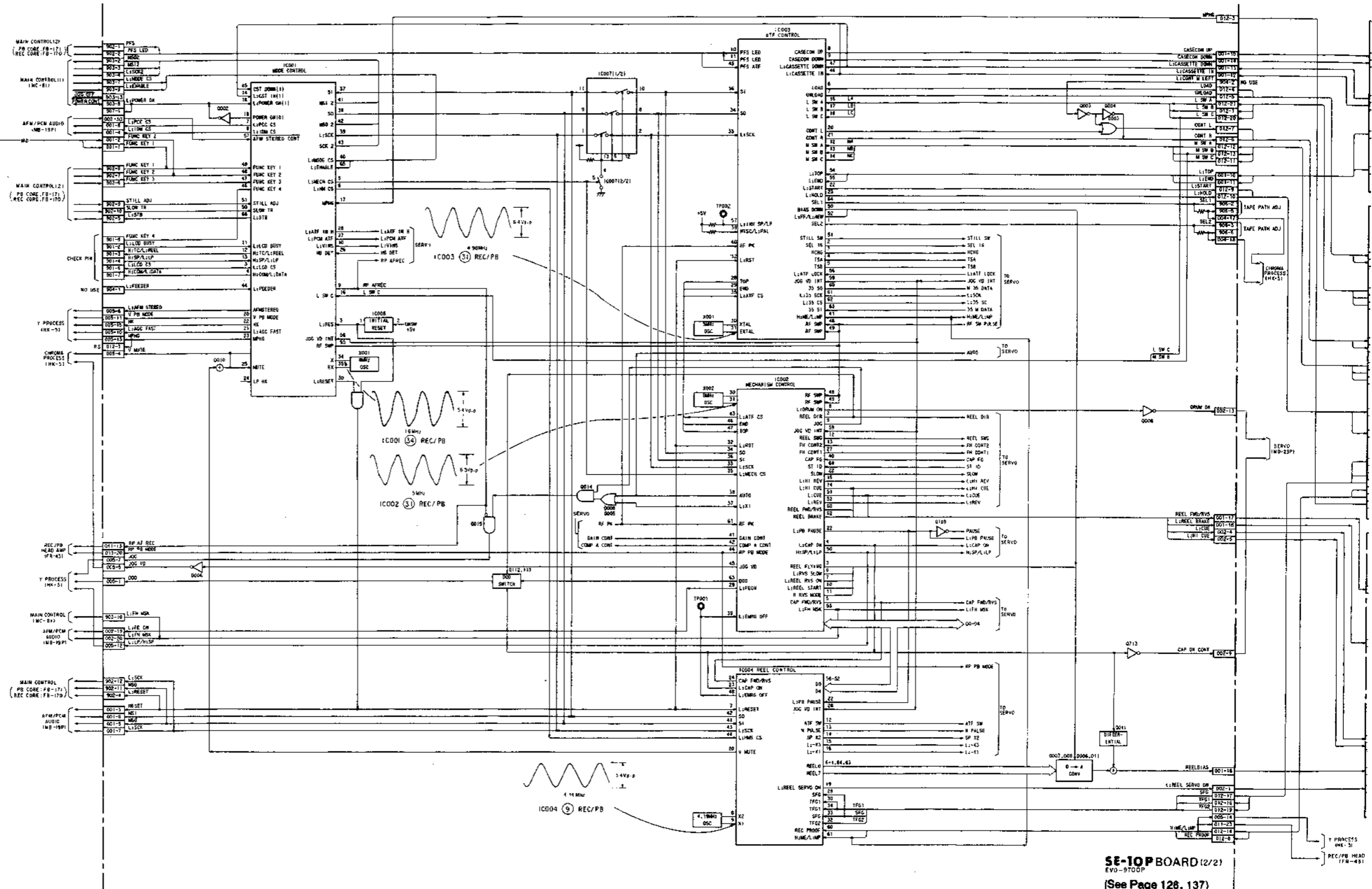
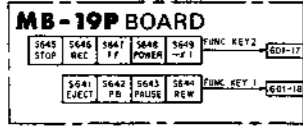
3-9. SERVO BLOCK DIAGRAM



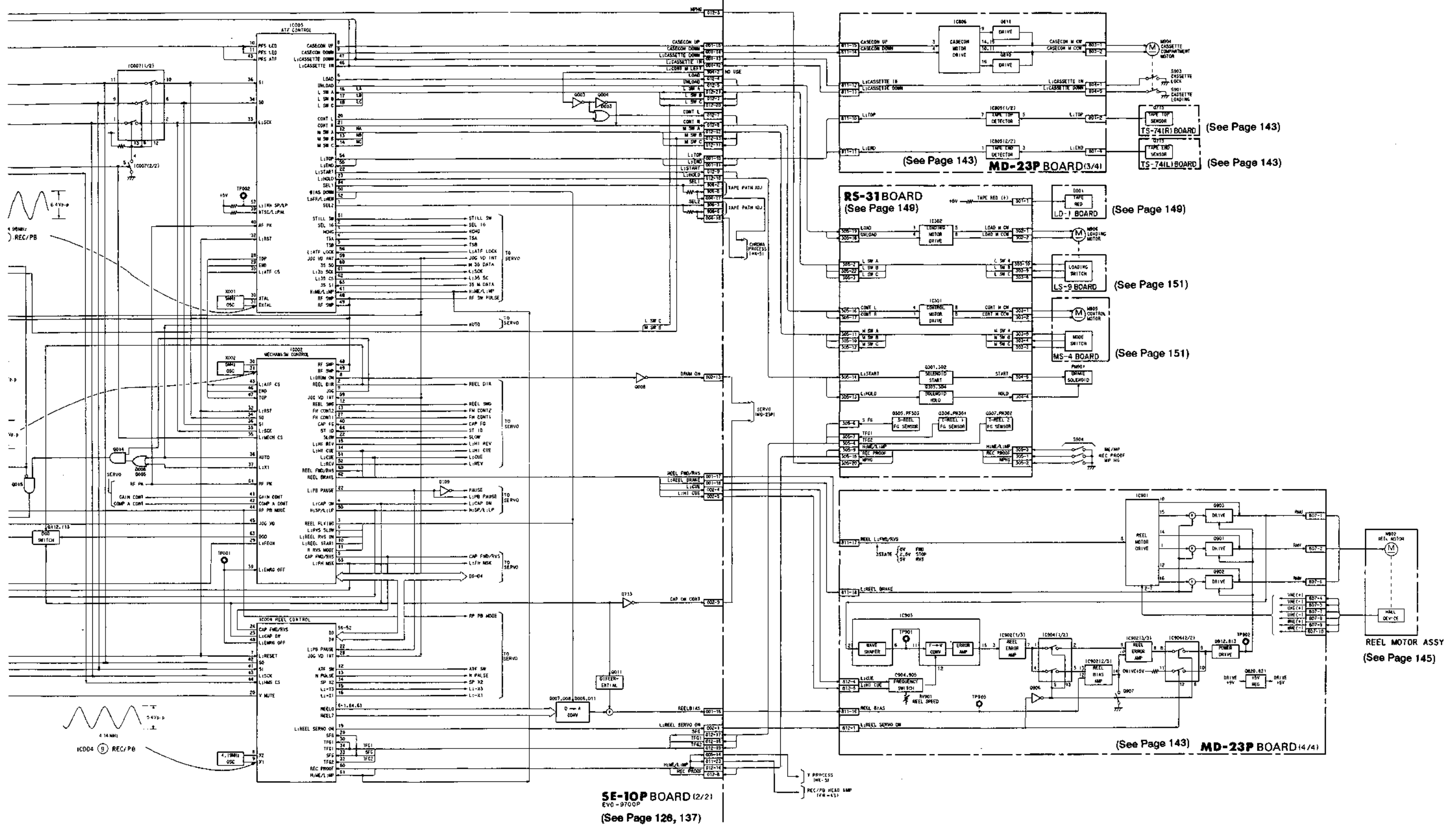


3-10. SYSTEM CONTROL BLOCK DIAGRAM

(See Page 155)



SE-10P BOARD (2/2)
EVO-9700P
(See Page 126, 137)



3-11. SYSTEM CONTROL — VIDEO (Y PROCESS, CHROMA PROCESS, REC/PB HEAD AMP) BLOCK INTERFACE

Signal	I/O	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HI CUE (x19)	HI REV (-x17)			
			Pin No.																						
RP AF REC	O		Pin ⑨ of IC001	L	L	L	L	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L		
JOG	O		Pin ⑨ of IC002	L	L	L	L	L	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H		
X1	O		Pin ⑩ of IC002	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H	H	H	H		
RP PB MODE	O		Pin ⑫ of IC002	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H		
JOG VD	O		Pin ⑬ of IC002	H					VD pulse		H	VD pulse													
SP/LP	O		Pin ⑭ of IC002	"H" at REC or PB in SP mode																					
DOD	O		Pin ⑮ of IC002	L	L	L	L	L	H	L	L	L	L	H	H	H	H	H	L	H	H	H	H		
VIDEO MUTE	O		Pin ⑯ of IC004	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L		
ME/MP	O		Pin ⑰ of CN012	"L" when using MP or MPHG tape																					

3-12. SYSTEM CONTROL — SERVO (CAPSTAN MOTOR) BLOCK INTERFACE

Signal	I/O	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HI CUE (x19)	HI REV (-x17)
			Pin No.																			
CAP ON	O		Pin ④ of IC002	H	H	H	L	H	L	H	L	H	L	L	L	L	L	L	*1	*1	L	L
CAP FWD/RVS	O		Pin ⑤ of IC002	L	L	L	L	L	L	L	L	L	L	H	L	H	L	H	*1	*1	L	H
HI CUE	O		Pin ⑬ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H
HI REV	O		Pin ⑭ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
D0 - D4*2	O		Pins ⑮ to ⑳ of IC002	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"2"	"3"	"9"	"7"	"1"	"1"	"19"	"17"
PB PAUSE	O		Pin ⑰ of IC002	H	H	H	H	H	H	L	H	L	H	H	H	H	H	H	L	L	H	H
CUE	O		Pin ⑱ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H	L	H
REV	O		Pin ⑲ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H	L
-x1	O		Pin ⑳ of IC004	H	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H	H
-x3	O		Pin ㉑ of IC004	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H

*1. Pulse output

*2. Capstan FG dividing data output

		"1"	"2"	"7"	"9"	"19"	"17"	"3"
D0	Pin ⑮ of IC002	H	L	H	H	H	H	H
D1	Pin ⑯ of IC002	L	H	H	L	H	L	H
D2	Pin ⑰ of IC002	L	L	H	L	L	L	L
D3	Pin ⑱ of IC002	L	L	L	H	L	L	L
D4	Pin ⑲ of IC002	L	L	L	L	H	H	L

3-13. SYSTEM CONTROL — SERVO (DRUM MOTOR) BLOCK INTERFACE

Signal	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	×1	-×1	×2	-×3	CUE (×9)	REV (-×7)	SLOW (1/5)	SLOW (-1/5)	HII CUE (×19)	HI REV (-×17)	
	I/O	Pin No.																				
DRUM ON	O	Pin ② of IC002	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
FH CONT2	O	Pin ⑬ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	*1	*1	L	L	L
SLOW	O	Pin ⑫ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	H	H	L	L	L
FH CONT1	O	Pin ⑭ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	H	H	*1	*1	L	L	L
FH MASK	O	Pin ⑮ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	*1	*1	H	H	H

*1. Pulse output

3-14. SYSTEM CONTROL — SERVO (REEL MOTOR) BLOCK INTERFACE

Signal	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	×1	-×1	×2	-×3	CUE (×9)	REV (-×7)	SLOW (1/5)	SLOW (-1/5)	HII CUE (×19)	HI REV (-×17)	
	I/O	Pin No.																				
REEL DIR	O	Pin ② of IC002	H/L	L	H	L	L	L	L	L	H/L	L	H	L	H	L	H	L	H	L	H	H
REEL FLYING	O	Pin ③ of IC002	Normally "L", "H" pulse when shifting STOP → FF/REW mode																			
REEL RVS SLOW	O	Pin ⑥ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	L	H
REEL RVS ON	O	Pin ⑦ of IC002	Normally "H", "L" pulse when shifting FWD → REV mode (-×1 or more)																			
REEL START	O	Pin ⑩ of IC002	Normally "H", "L" pulse when shifting STOP → FF/REW mode																			
R RVS MODE	O	Pin ⑪ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
REEL SWG	O	Pin ⑫ of IC002	Normally "L", "H" pulse when FWD ≠ REV running direction changes.																			
REEL FWD/RVS	O	Pin ⑬ of IC002	2.5V	L	H	L	2.5V	L	2.5V	L	2.5V	L	H	L	H	L	H	"H" pulse	"L" pulse	L	H	H
REEL BRK	O	Pin ⑭ of IC002	Normally "H", "L" pulse when shifting REC → REC-PAUSE mode																			
REEL 0 - 7 *1	O	Pins ① to ⑧ of IC004	"59"	"87"	"87"	"59"	"46"	"59"	"46"	"59"	"48"	"59"	*2	"6F"	*2	*3	*3	*4	*4	*3	*3	H
REEL SERVO ON	O	Pin ⑩ of IC004	H	H	H	L	H	L	H	L	H	L	H	L	H	L	H	H	H	L	H	H

*1. Reel bias voltage output (8 bit digital data)

		"46"	"48"	"59"	"6F"	"87"
REEL 0	Pin ⑥ of IC004	L	L	H	H	H
REEL 1	Pin ⑤ of IC004	H	L	L	H	H
REEL 2	Pin ④ of IC004	H	L	L	H	H
REEL 3	Pin ③ of IC004	L	H	H	H	L
REEL 4	Pin ② of IC004	L	L	H	L	L
REEL 5	Pin ① of IC004	L	L	L	H	L
REEL 6	Pin ⑧ of IC004	H	H	H	H	L
REEL 7	Pin ⑦ of IC004	L	L	L	L	H
REEL BIAS	Pin ⑩ of CN001	1.45V	1.5V	1.8V	2.3V	2.8V


- *2. Changed by SFG frequency.
- *3. Changed by tape speed (SP/LP mode).
- *4. Changed by synchronizing to the capstan operation.
- *5. Take up tape slack by becoming "H" at shifting HI REV → STOP mode.

3-15. SYSTEM CONTROL — SERVO (ATF SERVO) BLOCK INTERFACE

Signal	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HI CUE (x19)	HI REV (-x17)	
	I/O	Pin No.																				
RP PB MODE	O	Pin ④ of IC002	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
JOG VD INT	I	Pins ⑤ of IC002, IC003	L	Pulse input																		
SEL 2	O	Pin ① of IC003	H	H	H	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	
SEL 16	O	Pin ② of IC003	L	L	L	*2	L	*2	L	*2	L	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	
TSA	O	Pin ④ of IC003	L	L	L	L	L	*2	L	*2	L	*2	*2	*2	*2	L	L	L	L	L	L	
TSB	O	Pin ⑤ of IC003	L	L	L	L	L	*2	L	*2	L	*2	*2	*2	*2	L	L	L	L	L	L	
M RF SW PULSE	I	Pins ⑥, ⑦ of IC003	H/L	Field sync pulse																		
SEL 1	O	Pin ⑥ of IC003	H	H	H	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	
ATF SW	O	Pin ⑫ of IC004	L	L	L	L	L	L	*1	L	*1	L	L	L	L	L	L	*1	*1	L	L	
N PULSE	O	Pin ⑬ of IC004	L	L	L	L	L	L	L	L	*1	L	*1	L	L	L	L	*1	*1	L	L	

- *1. Pulse output
- *2. Pulse output by ATF sequence

3-16. SYSTEM CONTROL — SERVO (STILL) BLOCK INTERFACE

Signal	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HI CUE (x19)	HI REV (-x17)
	I/O	Pin No.																			
RF PK	I	Pin ① of IC002	Pulse input at PB pause.																		
ST ID	I	Pin ② of IC002																			
STILL SW	O	Pin ③ of IC003	V period pulse output ()																		

3-17. SYSTEM CONTROL — SERVO (HEAD SELECTION) BLOCK INTERFACE

Signal	Mode		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HI CUE (x19)	HI REV (-x17)	
	I/O	Pin No.																				
AUTO	O	Pin ④ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	H	H	*2	*2	H	H	
GAIN CONT	O	Pin ⑤ of IC002	H	H	H	H	H	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	H	H	
COMPA CONT	O	Pin ⑥ of IC002	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	*1	*1	
SP/LP	O	Pin ⑦ of IC002	*H* at REC or PB in SP mode.																			
HCHG	O	Pin ⑧ of IC003	*1	*1	*1	*1	*1	*1	*2	*1	*2	*1	*2	*2	*2	*2	*2	*2	*2	*2	*1	*1

- *1. Changed by tape speed (SP/LP) SP="H", LP="L"
- *2. Pulse output

3-18. SYSTEM CONTROL — SERVO (OTHERS) BLOCK INTERFACE

Signal	I/O	Mode Pin No.	STOP	FF	REW	REC	REC- PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB- PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HII CUE (x19)	HI REV (-x17)		
JOG	O	Pin ⑤ of IC002	L	L	L	L	L	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H	
CAP FG	I	Pin ⑩ of IC002	Undefined				*1	Undefined	*1	Undefined	*1	Undefined	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1
MATF LOCK	I	Pin ⑤ of IC003		*1	*1					*2		*2	*2	*2	*2	*1	*1				*1	*1	

- *1. Pulse input
- *2. "L" at ATF servo in phase lock

3-19. SYSTEM CONTROL — MD BLOCK INTERFACE

Signal	I/O	Mode Pin No.	STOP	FF	REW	REC	REC- PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB- PAUSE	x1	-x1	x2	-x3	CUE (x9)	REV (-x7)	SLOW (1/5)	SLOW (-1/5)	HII CUE (x19)	HI REV (-x17)		
LOAD	O	Pin ⑤ of IC003	Normally "L", "H" at tape threading																				
UNLOAD	O	Pin ⑦ of IC003	Normally "L", "H" at tape unthreading																				
CASECON UP	O	Pin ⑧ of IC003	Normally "L", "H" at cassette unloading																				
CASECON DOWN	O	Pin ⑨ of IC003	Normally "L", "H" at cassette loading																				
MA - MC *2	I	Pins ⑫ to ⑭ of IC003	"3"	"6"	"6"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	
LA - LC *3	I	Pins ⑯ to ⑰ of IC003	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	
CONT L	O	Pin ⑱ of IC003	Normally "L", "H" pulse when shifting to mechanical mode																				
CONT R	O	Pin ⑲ of IC003																					
START	O	Pin ⑳ of IC003	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
HOLD	O	Pin ㉑ of IC003	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
CST IN	I	Pin ㉒ of IC003	Normally "L", "H" at cassette ejection																				
CC DOWN	I	Pin ㉓ of IC003	"H" in eject mode, "L" at cassette compartment down																				
TOP	I	Pin ㉔ of IC004	Normally "H", "L" at tape top signal input } Can be detected that cassette is in when both signals are "H" and no cassette when "L".																				
END	I	Pin ㉕ of IC004																					
SFG	I	Pins ㉖, ㉗ of IC004	Undefined	*1	*1	*1	Undefined	*1	Undefined	*1	Undefined	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	
TFG 1	I	Pins ㉘, ㉙ of IC004	Undefined	*1	*1	*1	Undefined	*1	Undefined	*1	Undefined	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	
TFG 2	I	Pin ㉚ of IC004	Undefined	*1	*1	*1	Undefined	*1	Undefined	*1	Undefined	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	
REC PROOF	I	Pin ㉛ of IC004	"L" when inserting cassette possible to record																				
ME/MP	I	Pin ㉜ of IC004	"L" when using MP or MPHG tape																				






- *1. Pulse accompanied with reel rotation
- *2. Mode switch input


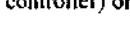
		"4"	"2"	"6"	"3"	"1"
MA	Pin ⑫ of IC003	L	L	L	H	H
MB	Pin ⑬ of IC003	L	H	H	H	L
MC	Pin ⑭ of IC003	H	L	H	L	L
Mode switch position		EJECT	LOAD/ UNLOAD	FF/ REW	STOP	FWD/ RVS

- *3. Loading switch input

		"1"	"5"	"4"	"6"	"3"
LA	Pin ⑯ of IC003	H	H	L	L	H
LB	Pin ⑰ of IC003	L	L	L	H	H
LC	Pin ⑱ of IC003	L	H	H	H	L
Loading switch position		LOADING TOP	LOADING WAIT	DRUM START	T REEL START	LOADING END

3-20. MODE CONTROL MICROPROCESSER
— PERIPHERAL CIRCUIT INTERFACE (IC001 (CXP80116) ON SE-10P BOARD)

Signal	I/O	Pin No.	Input/Output Level
T ENS	O	1	Normally "H", H when shifting REVIEW → STILL
T-CAP ON	O	2	Normally "L"
LCD CS	O	3	Connect to check pin, V period pulse ()
COM/DATA	O	4	Connect to check pin, V period pulse ()
MECH CS	O	5	Mechanical control chip select signal, V period pulse ()
REEL CS	O	6	Reel control chip select signal, V period pulse ()
PCC CS	O	7	PCM microprocessor chip select signal, V period pulse ()
IDM CS	O	8	
RP AFREC	O	9	AUDIO DUB mode "H"
VINS	O	10	Video insertion signal, Normally "H"
LCD BSUY	I	11	Connect to check pin.
T.C/REEL	O	12	
SP/LP SW	I	13	
CASETE IN	I	14	"L" at cassette insertion
CCDOWN	I	15	"L" at cassette compartment down
L SW C	I	16	"H" at loading switch signal input
HG SW	I	17	MPHG tape detection input, "L" at MP or ME cassette insertion
POWER ON (I)	I	18	"L" at power ON
POWER ON (O)	O	19	"H" at power ON
V PB MODE	O	20	"H" in video circuit PB mode
AGC FAST	O	21	Normally "L"
HK	O	22	"H" at Hi8 tape insertion
MPHG	O	23	"H" at MPHG tape insertion
LPHK		24	Not used
MUTE (I)	I	25	Normally "L", H when shifting STOP → PB mode, etc.
HB DET	I	26	"L" when playing a tape other than it in Hi8 mode
PCMATF	O	27	Normally "H"
ATFINH	O	28	
AFM STEREO V CONT	O	29	"L" at REC mode, Normally "H" at PB mode
RESET	O	30	Reset output, "L" at resetting
MP	I	31	Microprocessor mode selector terminal → not selected, Connect to GND.
RESET (I)	I	32	Reset input, "L" at resetting
Vss		33	Connect to GND.
XTAL	O	34	Crystal connector terminal for system clock oscillation, oscillates at 16 MHz.
EXTAL	I	35	
—		36	Connect to UNSW5V
MSI	I	37	Serial data input terminal
MSO	O	38	Serial data output terminal
SCK	I	39	Serial data transmitting clock signal
MODE CS	I	40	Chip select signal from IC001 (main controller) on MC-81 board, V period pulse

Signal	I/O	PIN No.	Input/Output Level
MSI2	I	41	Communication signal for IC001 (main controller) on MC-81 board, V period pulse
MSO2	O	42	
SCK2	O	43	
FEEDER	I	44	Not used
TEST	I	45	Fixed to "H" level, Not used
FUNC KEY4	I	46	Function key (check pin) input
FUNC KEY3	I	47	Function key (FB-171 or FB-170 board) input
FUNC KEY2	I	48	Function key (MB-19P, FB-170 or FB-171 board) input
FUNC KEY1	I	49	
SLOW TR	I	50	SLOW ADJ input, Voltage according to SLOW ADJ position (0 to 5 Vdc)
STILL ADJ	I	51	STILL ADJ input, Voltage according to STILL ADJ position (0 to 5 Vdc)
AVSS		52	Connect to GND
AVREF	I	53	Connect to UNSWSV
AVDD	I	54	
SW PLS	I	55	RF SW PULSE input, 2V period pulse ()
JOG VD INT	I	56	JOG VD input of digital servo (IC101 20035), Microprocessor interrupting signal, V period pulse
AFM STEREO CONT (1)	I	57	Not used. Fixed to "H" level
---		58	
---		59	
---		60	
---		61	
---		62	
---		63	
---		64	
ENABLE	I	65	Communication signal for IC001 (main controller) on MC-81 board, V period pulse ()
SP STB	O	66	Serial data (for lighting FB-170 and FB-171 board LEDs) transmitting strobe signal
---		67	
---		68	
NT/PAL	I	69	Fixed to "L" level
INTD	I	70	Fixed to "H" level
NMI	I	71	
VDD		72	Connect to UNSWSV
VSS		73	Connect to GND
VPP		74	Connect to UNSWSV
---		75	
---		76	
---		77	
---		78	
SCRMBL	O	79	Normally "L"
T-CAP F/R	O	80	Normally "L"

3-21. SYSTEM CONTROL — PCM AUDIO BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
FE ON	O	Pin ② of IC002	Normally "H", "L" at REC mode or AUDIO DUB
FH MASK	O	Pin ③ of IC002	"L" at SLOW PB mode, "H" at other PB modes

3-22. SERVO—VIDEO (Y PROCESS, CHROMA PROCESS AND REC/PB HEAD AMP) BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
LP PCM REC	O	Pin ① of IC601	Normally "L", V period "H" pulse at REC in LP mode (including AUDIO DUB)
SP PCM REC	O	Pin ② of IC601	Normally "L", V period "H" pulse at REC in SP mode (including AUDIO DUB)
VI SWP	O	Pin ③ of IC601	2V period 50% duty pulse
SP CH SHORT	O	Pin ④ of IC601	Normally "H", "L" at REC/PB in LP mode
LP CH SHORT	O	Pin ⑤ of IC601	Normally "L", "H" at REC/PB in LP mode
HH DL	O	Pin ⑦ of IC601	Normally "H", pulse at varying-speed PB
SP VIDEO REC	O	Pin ⑧ of IC601	Normally "L", "H" at REC in SP mode
LP VIDEO REC	O	Pin ⑨ of IC601	Normally "L", "H" at REC in LP mode
COMP SYNC	I	Pin ⑥ of CN004	Positive polarity composite sync signal
REF V	I	Pin ⑥ of CN005	V period "L" pulse
H CHG	O	Pin ⑭ of CN011	"H" at REC/PB in SP mode, "L" at REC/PB in LP mode, pulse at varying-speed PB

3-23. PCM AUDIO — VIDEO (Y PROCESS, CHROMA PROCESS AND REC/PB HEAD AMP) BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
M FE ON	O	Pin ① of IC601	Normally "H", "L" at REC mode, 2V period "L" pulse at AUDIO DUB
RP AFTER REC	O	Pin ⑩ of IC601	Normally "L", "H" at AUDIO DUB
D RF SWP (RP RF SWP)	O	Pin ④ on PD-19P board	2V period 50% duty pulse Normally "L", "H" during AUDIO DUB writing, (V period "H" pulse)
RAMP	O	Pin ④ on PD-19P board	Positive polarity composite sync signal
COMP SYNC	O	Pin ⑤ on PD-19P board	Normally "L", "H" during AUDIO DUB writing, (V period "H" pulse)
C MUTE	O	Pin ⑤ on PD-19P board	Normally "L", H period "H" pulse during AUDIO DUB writing
HD INSERT	O	Pin ⑤ on PD-19P board	(H period "H" pulse) Normally "L", "H" during AUDIO DUB writing (V period "H" pulse)
AFTER REC MASC	I	Pin ⑥ on PD-19P board	





3-24. PCM AUDIO — SERVO BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
M FE ON	O	Pin ① of IC601	Normally "H", "L" at REC mode, 2V period "L" pulse when AUDIO DUB
RF CONT SWP	I	Pins ⑳, ㉑ of IC601 Pin ㉒ on PD-19P board	2V period 50% duty pulse
MS REF	I	Pin ㉓ on PD-19P board	V period "H" pulse
R AREA	O	Pin ㉔ on PD-19P board	Normally "L", V period "H" pulse at REC mode (including AUDIO DUB)
D RF SWP	O	Pin ㉕ on PD-19P board	2V period 50% duty pulse
PCM AREA	O	Pin ㉖ on PD-19P board	V period "H" pulse
M RF SWP	I	Pin ㉗ on PD-19P board	2V period 50% duty pulse




3-25. PCM AUDIO — AUDIO IN/OUT BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
MONO/STE OUT	O	Pin ⑪ IC601	Normally "L", "H" when playing back monaural PCM audio signal
JOG AU MUTE	O	Pin ⑰ IC601	Normally "L", "H" at varying-speed PB
MONO/STE IN	I	Pin ㉘ IC601	Normally "L", "H" at microphone input or when tape played back by player is recorded in monaural PCM sound
PCM MUTE	O	Pin ㉙ IC601	"H" when PCM sound is not played back and when shifting to SLOW, STILL mode
AFM REC/PB	O	Pin ⑱ IC601	Normally "H", "L" at PB mode (including varying-speed PB)
AFM MUTE	O	Pin ㉚ IC601	Normally "L", "H" at varying-speed PB and at mode shifting
AUEE PORT	O	Pin ㉛ IC601	Normally "L", "H" at PB mode (including varying-speed PB)
MODE	O	Pin ㉜ on PD-19P board	

3-26. MAIN CONTROL — VIDEO IN/OUT BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
SW1	O	Pin ① of CN006	"H" when input select video switch is "LINE"
SW2	O	Pin ② of CN006	"H" when input select video switch is "PLAYER"
SW3	O	Pin ③ of CN006	"H" when input select line switch is "S VIDEO"
SW4	O	Pin ④ of CN006	"L" when input select video switch is "LINE"
SW5	O	Pin ⑤ of CN006	"H" when input select video switch is "PLAYER" or still picture (FREEZE) edit mode.
SW6	O	Pin ⑥ of CN006	"H" when PLAYER/RECORDER selector of controller is "PLAYER"
SW7	O	Pin ⑦ of CN006	"L" when recorder is PB mode (including varying-speed PB)
SW8	O	Pin ⑧ of CN006	
SW9	O	Pin ⑨ of CN006	"H" when input select video switch is "PROCESSOR" or "LINE" and input select line switch is "VIDEO", however, "L" in still picture (FREEZE) edit mode
PLAYER/LINE	O	Pin ⑩ of CN006	"H" when input select video switch is "PLAYER"
B SYNC DET	I	Pin ⑪ of CN006	"H" at no video signal input to recorder character generator (IC028 on AN-2P board)
A SYNC DET	I	Pin ⑫ of CN006	"H" at no video signal input to player/LINE character generator (IC027 on AN-2P board)
VOB	O	Pin ① of CN007	"L" when title character signal is not indicating title.
VOC	O	Pin ② of CN007	
CHA SCLK	O	Pin ⑩ of CN007	Serial data to data screen character generator (IC027 and IC028 on AN-2P board)
CHA SO	O	Pin ⑫ of CN007	
$\overline{\text{CSC A}}$	O	Pin ③ of CN007	Chip select signal to player/LINE character generator (IC027 on AN-2P board), V period pulse ()
$\overline{\text{CSC B}}$	O	Pin ④ of CN007	Chip select signal to recorder character generator (IC028 on AN-2P board), V period pulse ()
RST	O	Pin ⑥ of CN007	Reset signal to data screen character generator. Normally "H"
TIL ON/OFF	O	Pin ⑦ of CN007	"H" when indicating title
EXT VD	I	Pin ⑩ of CN007	VD signal separated from external input video signal ()
EXT O/E	I	Pin ⑤ of CN007	Signal for discriminating odd/even field in external input video signal ()




3-27. MAIN CONTROL — DIGITAL PICTURE BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
REF VD	I	Pin ① of CN012	Reference VD signal, V period "L" pulse ()
O/E	I	Pin ② of CN012	Signal for discriminating odd/even field, 2V period pulse ()
CSD	O	Pin ③ of CN012	Serial communication chip select signal to memory controller in digital picture circuit, V period "L" pulse ()
WEN	O	Pin ④ of CN012	Memory writing enable signal, Normally "L"
SYNC DET	I	Pin ⑤ of CN012	"L" when video signal is input to digital picture circuit
SCKD	O	Pin ⑥ of CN012	Serial communication signal to memory controller of digital picture circuit
SO D	O	Pin ⑦ of CN012	
C SYNC	I	Pin ⑨ of CN012	Negative polarity composite sync signal for title character generator (IC005)

3-28. MAIN CONTROL — PICTURE IN PICTURE BLOCK INTERFACE

Signal	I/O	Pin No.	Input/Output Level
SUB R/L	O	Pin ① of CN011	"H" when indicating child picture on right side, "L" when indicating on left side
STILL	O	Pin ② of CN011	"L" when setting child picture in still picture
P-IN-P ON	O	Pin ③ of CN011	"L" when indicating child picture

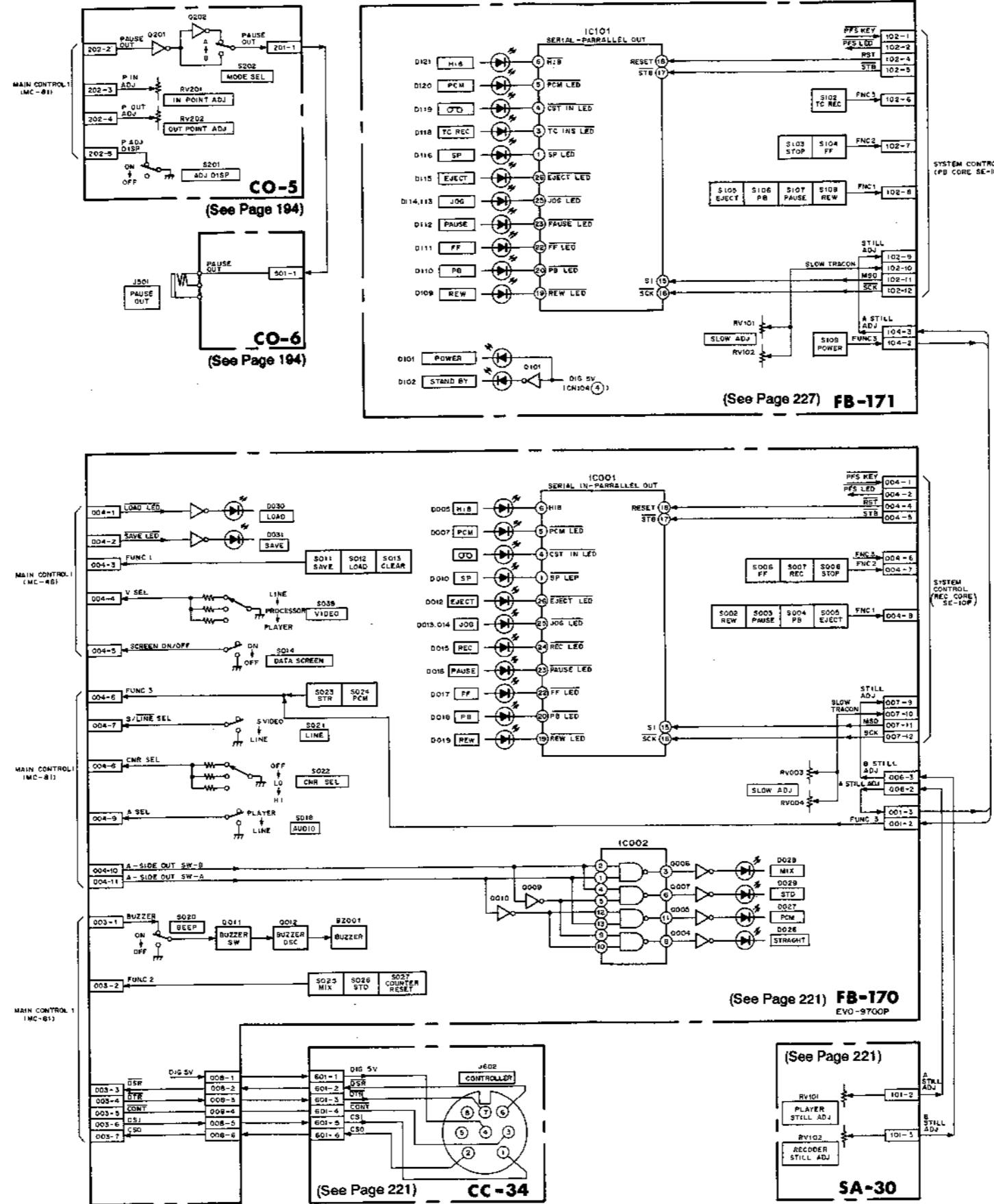
3-29. MAIN CONTROL — SERVO BLOCK INTERFACE

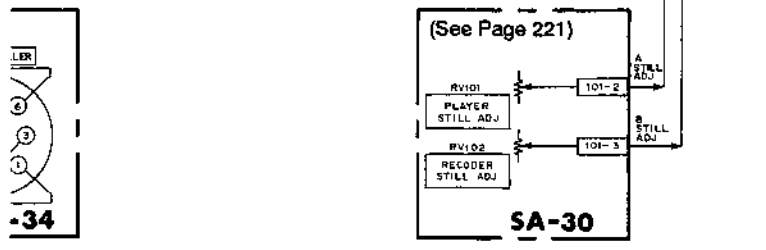
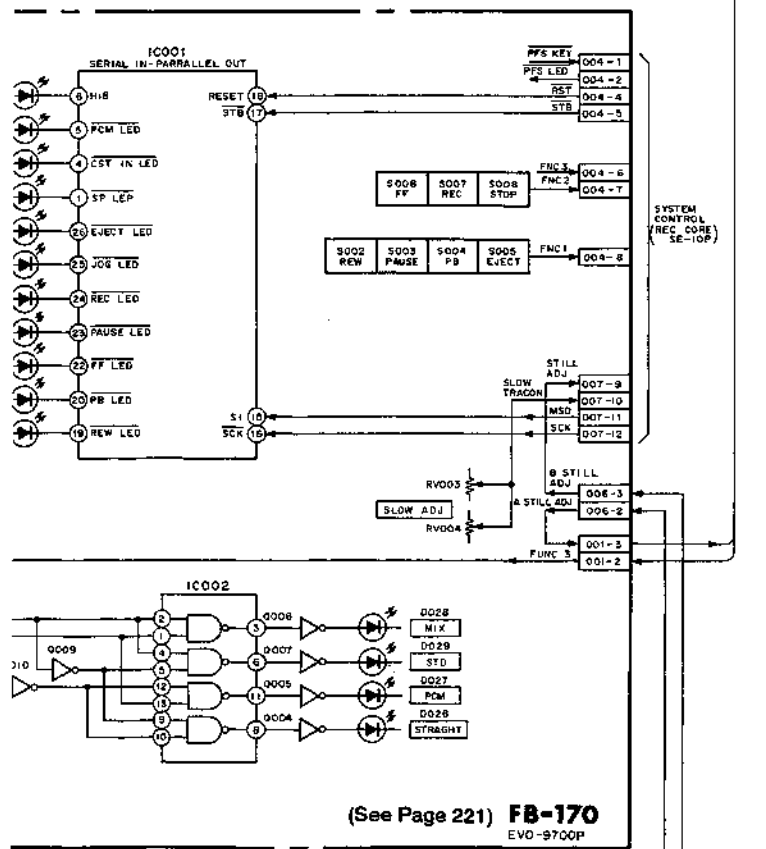
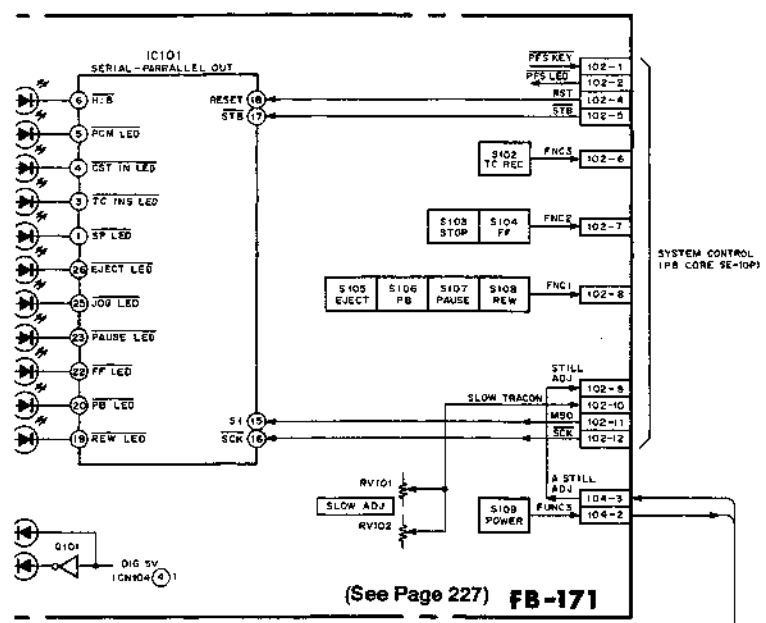
Signal	I/O	Pin No.	Input/Output Level
M RF SWP A	I	Pin ⑥ of CN001	RF SW pulse of player ()
REF V A	I	Pin ⑩ of CN001	Servo reference VD signal () for player, signal delayed 18.0 msec of REF VD (Pin ① of CN012)
GEN LOCK A	O	Pin ⑫ of CN001	"L" when operating by synchronizing player with REF V A signal (to "L" during editing from player to recorder)
M RF SWP B	I	Pin ⑥ of CN002	RF SW pulse of recorder ()
REF V B	O	Pin ⑩ of CN002	Servo reference VD signal for recorder When PLAYER input: signal delayed 108 μsec of REF VD (Pin ① of CN012) When LINE input: EXT VD (Pin ⑩ of CN007)
GEN LOCK B	O	Pin ⑫ of CN002	"L" when operating by synchronizing recorder with REF V B signal (to "L" during editing from player to recorder)

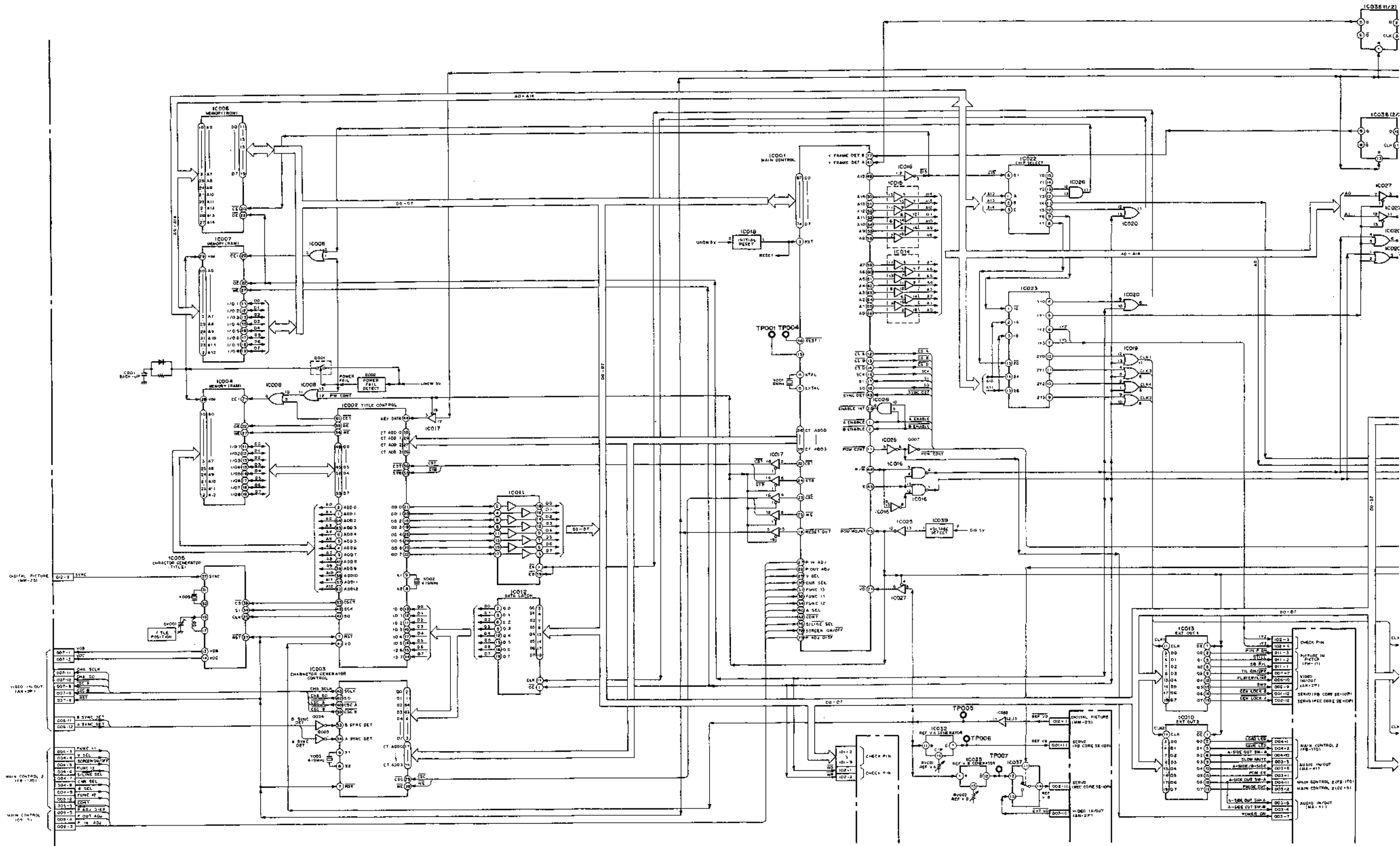
3-30. MAIN CONTROL — AUDIO IN/OUT BLOCK INTERFACE

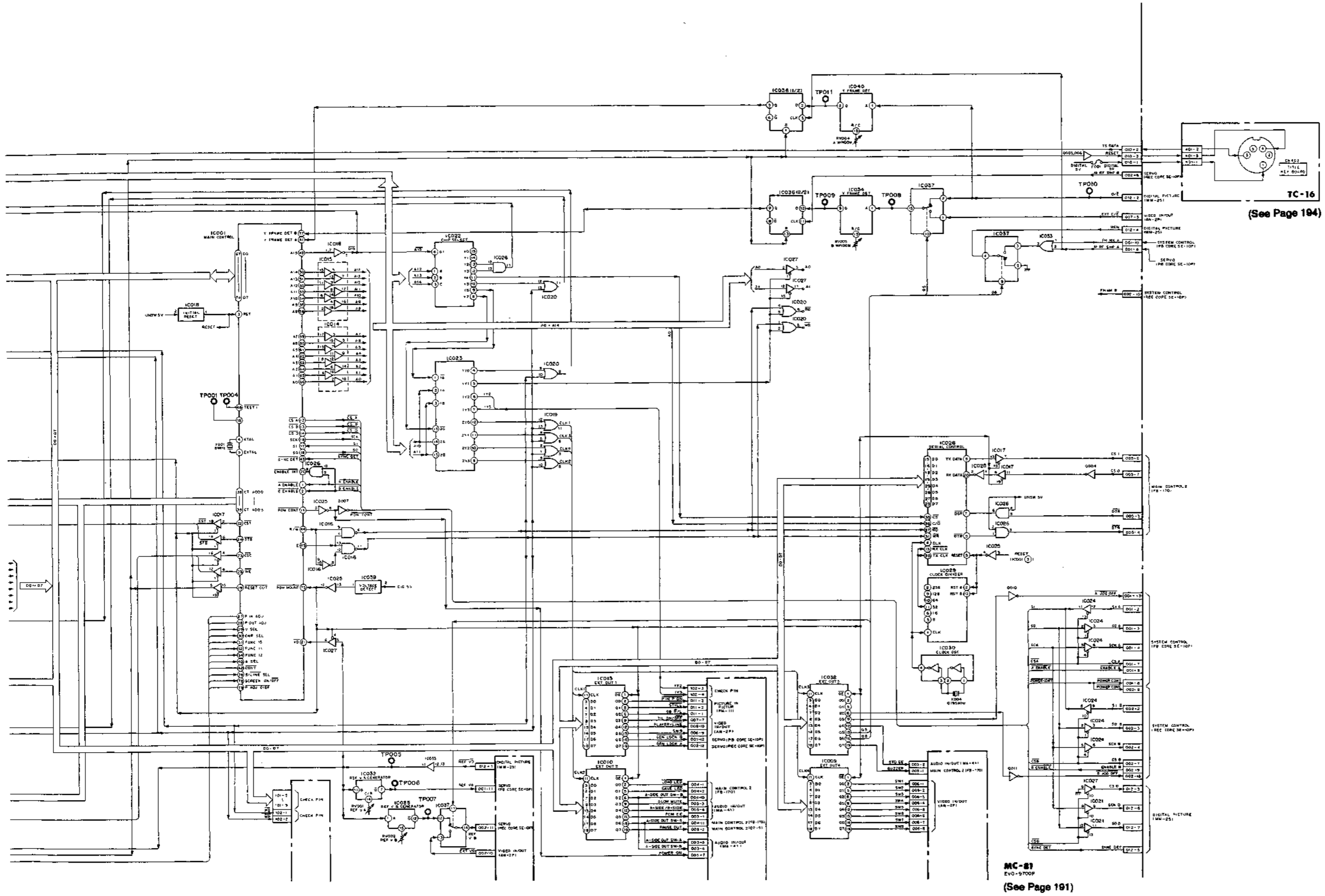
Signal	I/O	Pin No.	Input/Output Level															
A SIDE OUT SW A	O	Pin ⑤ of CN003	Changed by audio output select player button <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>STRAIGHT</th> <th>PCM</th> <th>MIX</th> <th>STD</th> </tr> </thead> <tbody> <tr> <td>A SIDE OUT SW A</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> </tr> <tr> <td>B SIDE OUT SW B</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>		STRAIGHT	PCM	MIX	STD	A SIDE OUT SW A	L	H	H	L	B SIDE OUT SW B	L	L	H	H
	STRAIGHT	PCM		MIX	STD													
A SIDE OUT SW A	L	H	H	L														
B SIDE OUT SW B	L	L	H	H														
B SIDE OUT SW B	O	Pin ④ of CN003																
A-SIDE/B-SIDE	O	Pin ⑥ of CN003	"H" when PLAYER/RECORDER selector of controller is "PLAYER"															
SLOW MUTE	O	Pin ③ of CN003	"H" when SLOW (slow PB picture) editing															
PCM EE	O	Pin ① of CN003	"H" when inserting PCM audio															
STD EE	O	Pin ② of CN003	Normally "L"															

3-31. MAIN CONTROL BLOCK DIAGRAM (1)



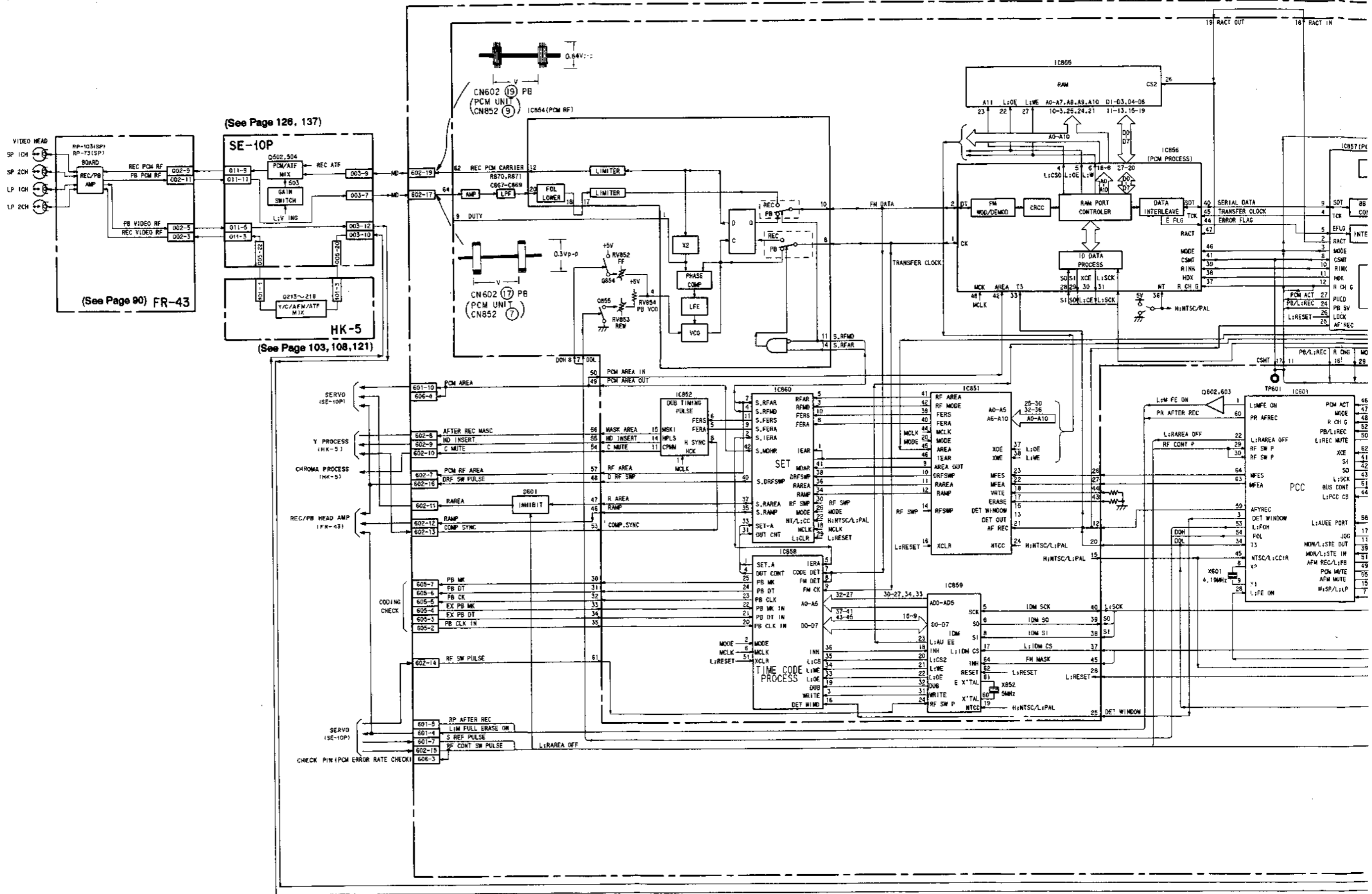


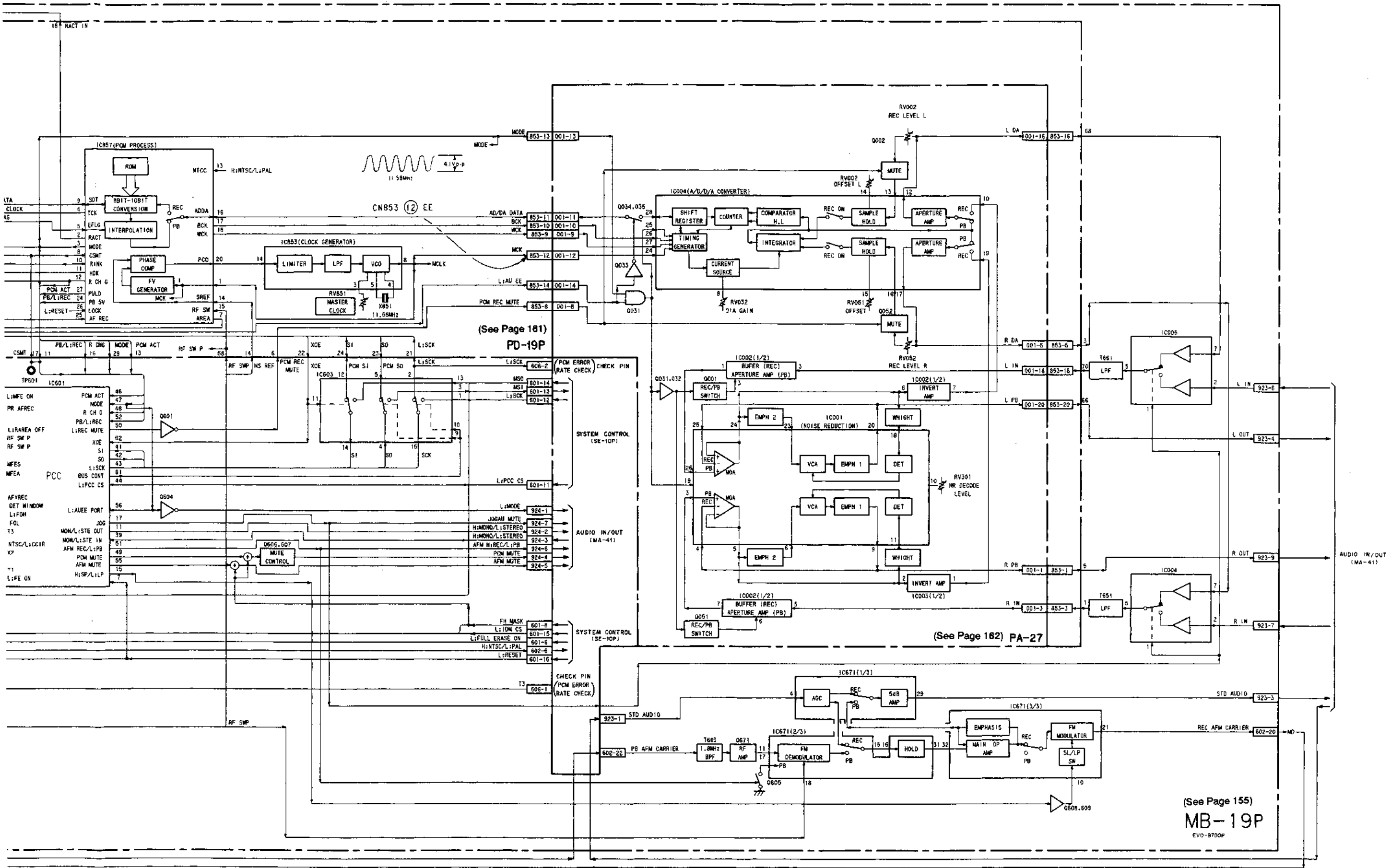




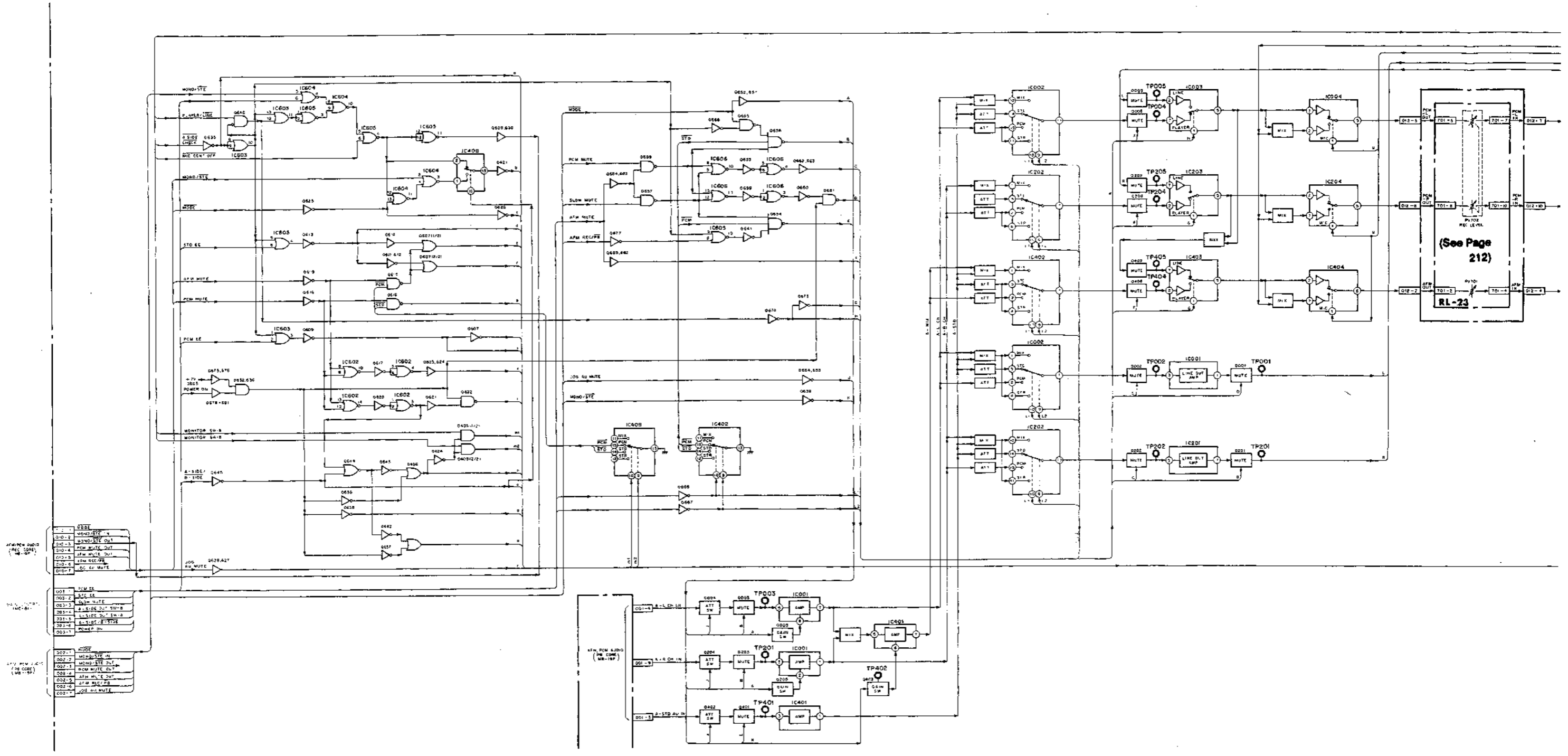
TC-16
(See Page 184)

3-33. AFM/PCM AUDIO BLOCK DIAGRAM





3-34. AUDIO IN/OUT BLOCK DIAGRAM

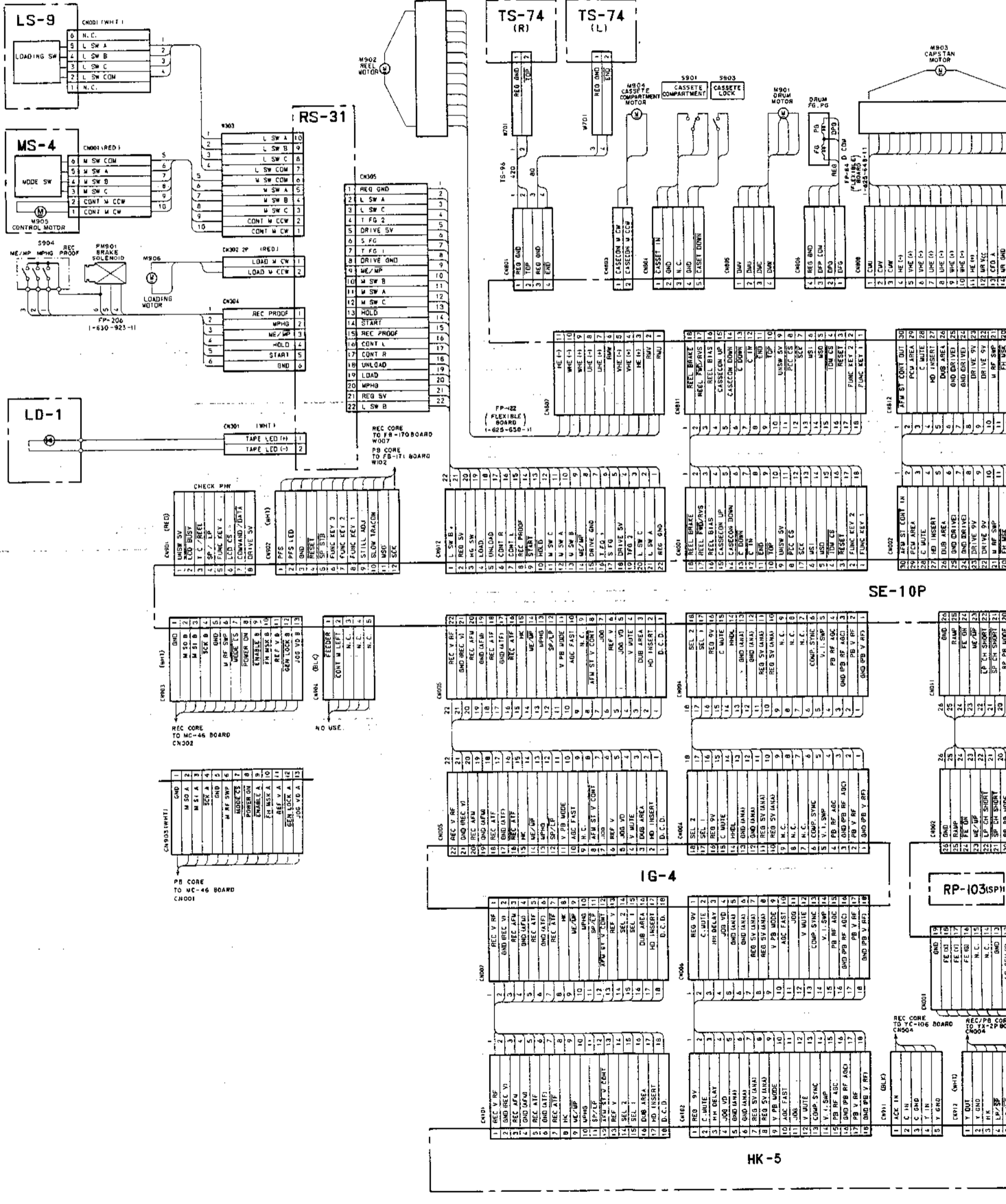


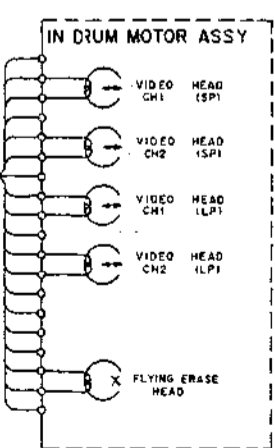
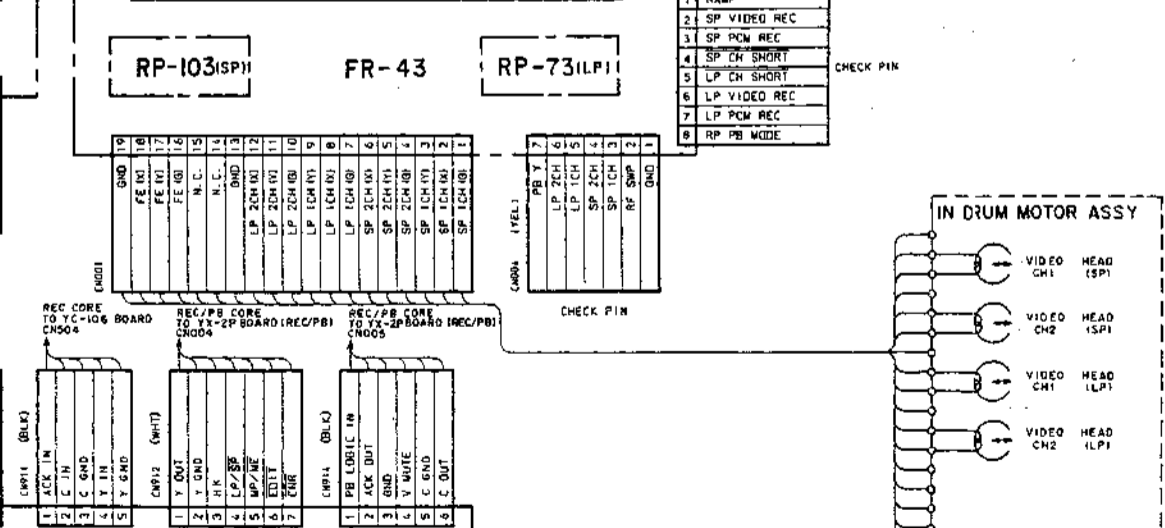
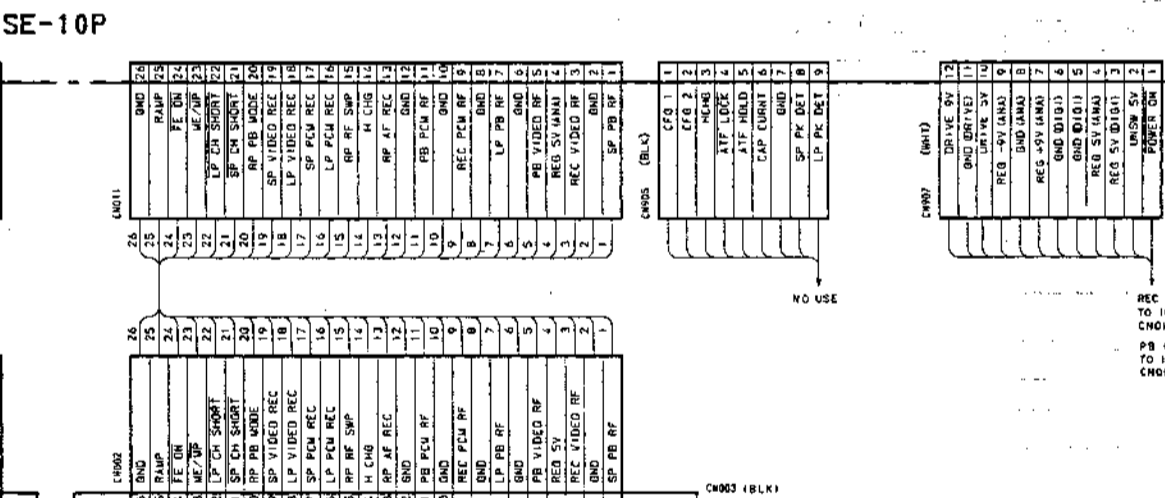
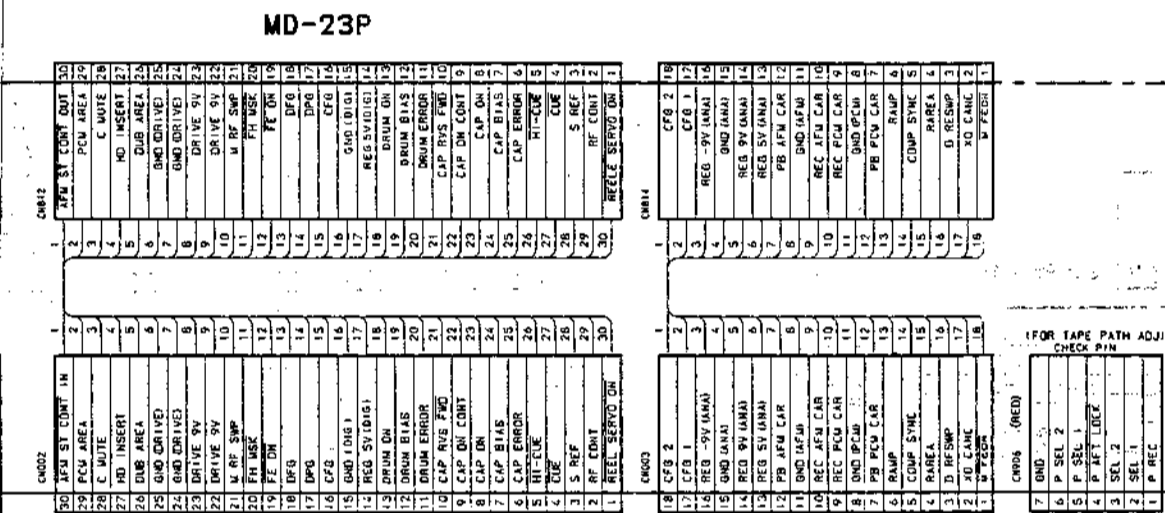
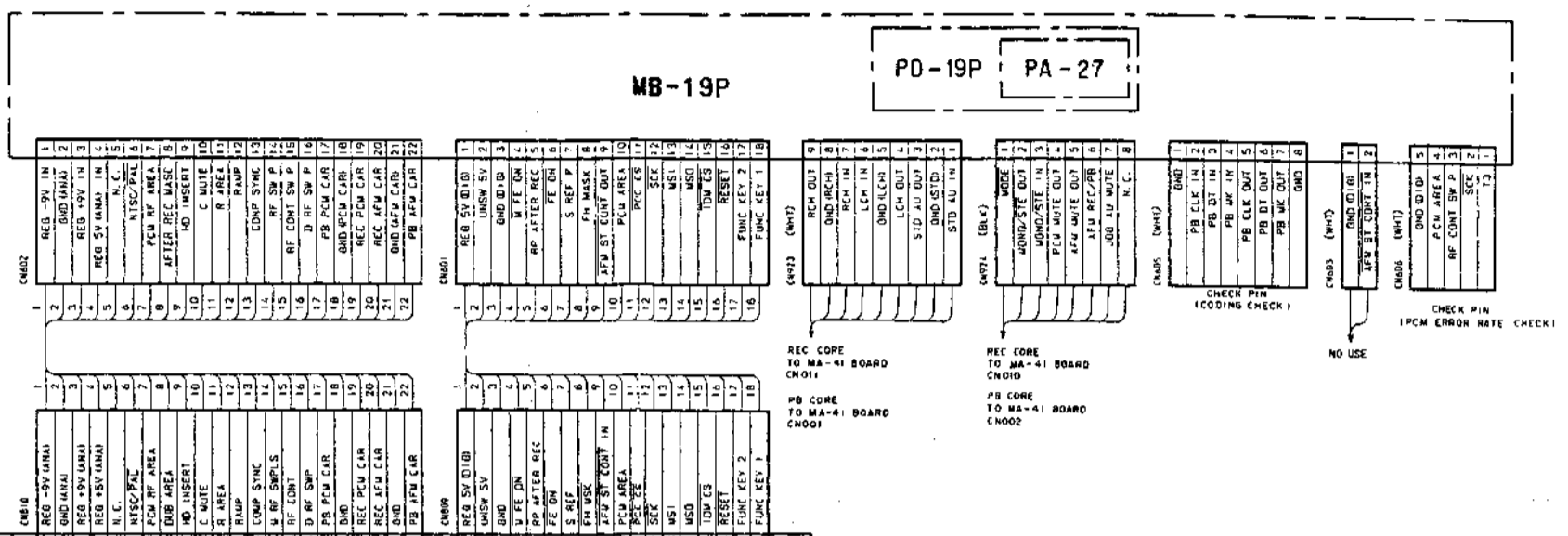
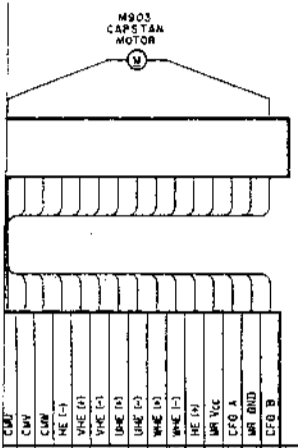
PRINTED WIRING AND SCHEMATIC DIAGRAMS

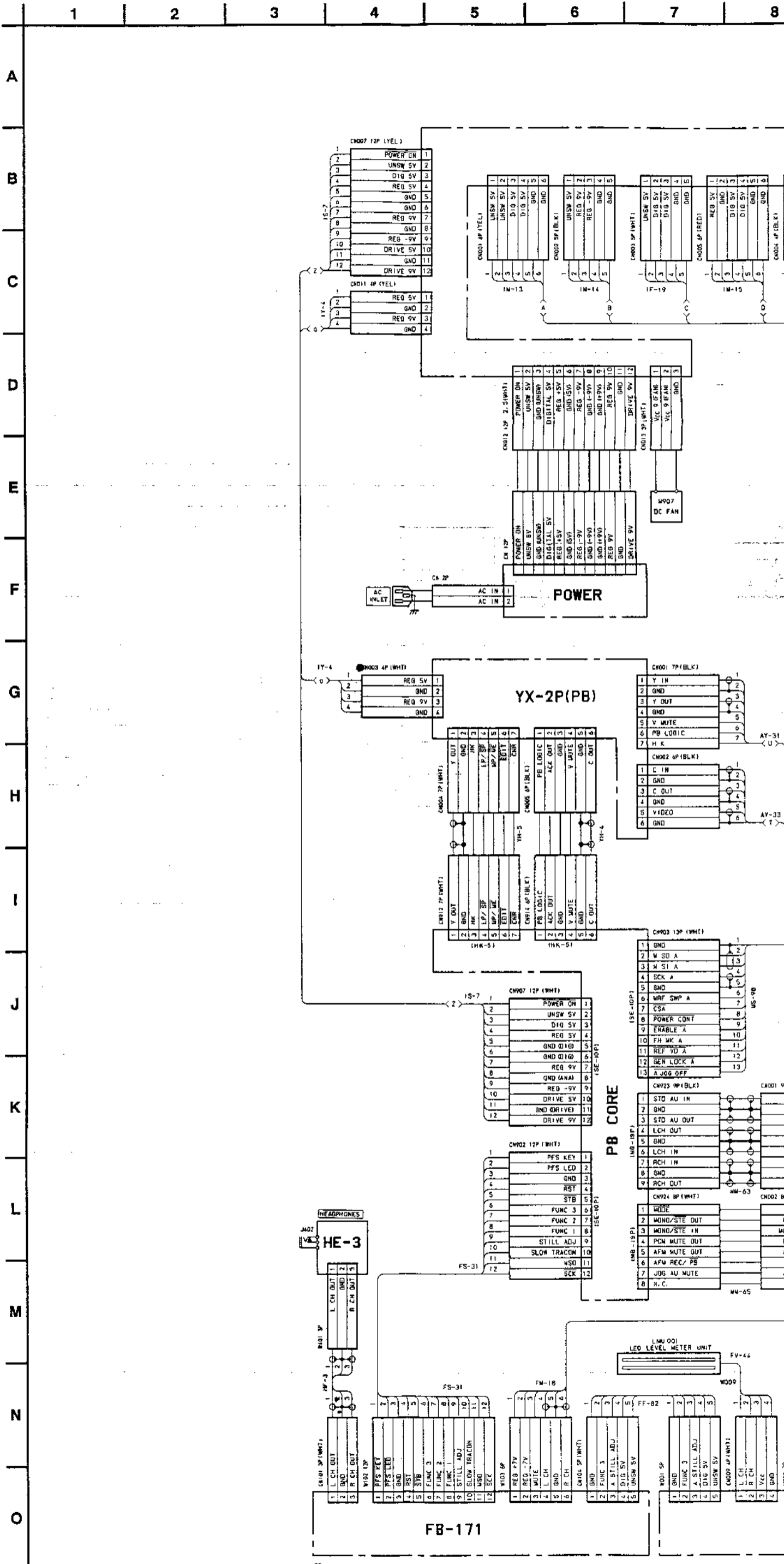
4-1. FRAME SCHEMATIC DIAGRAM

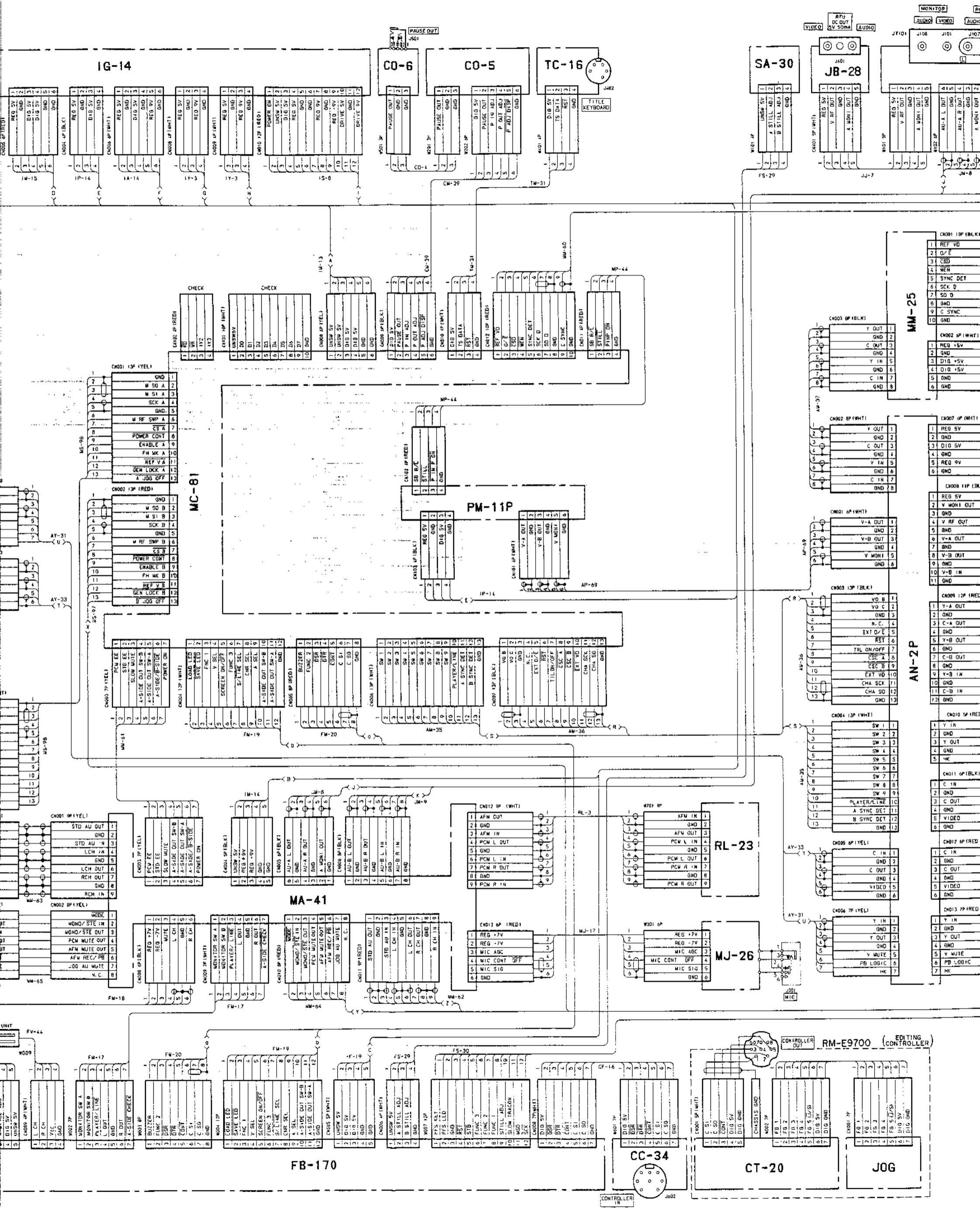
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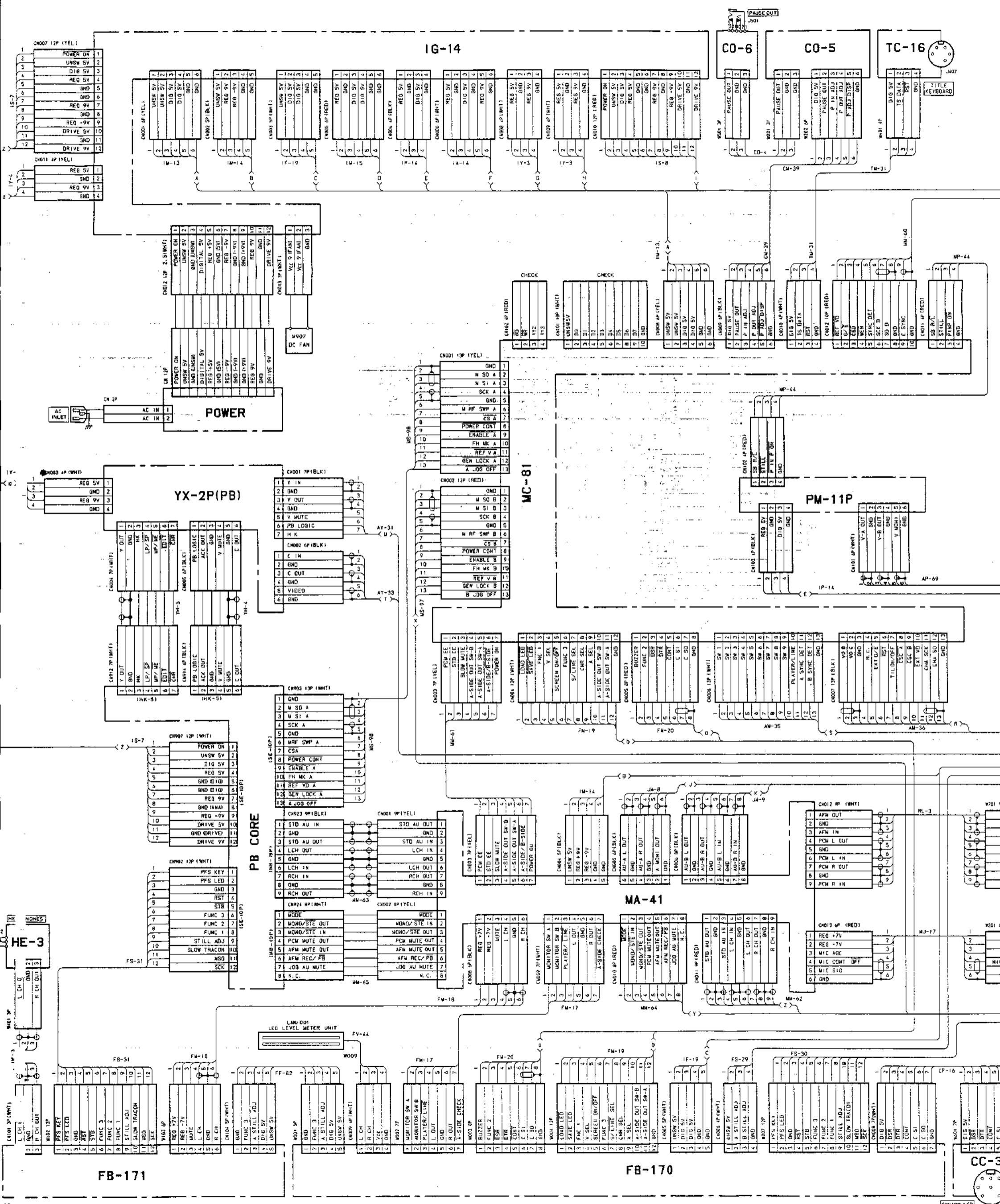
CORE BLOCK (REC/PB)

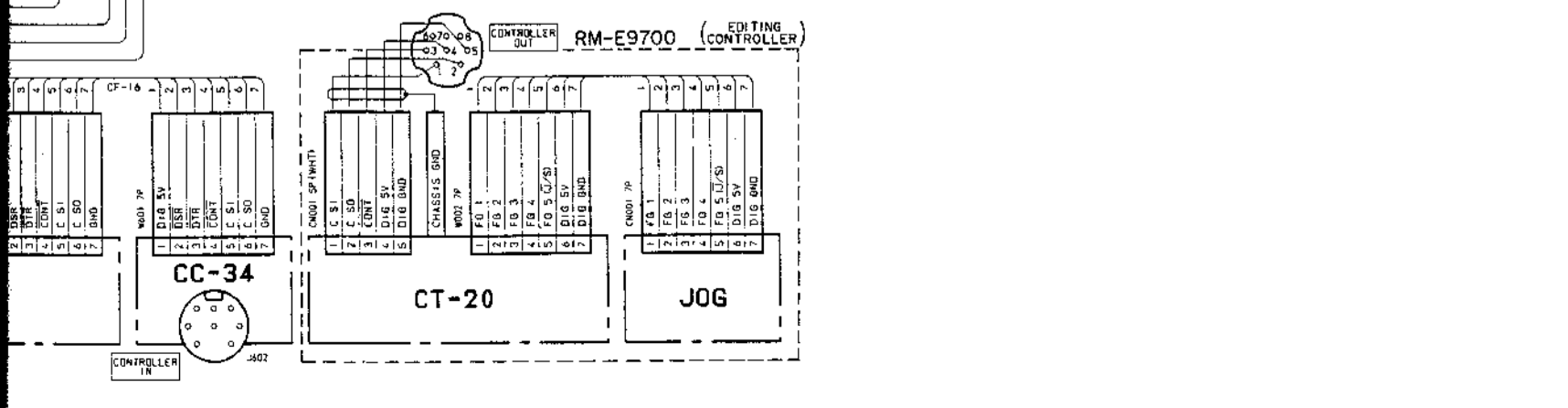
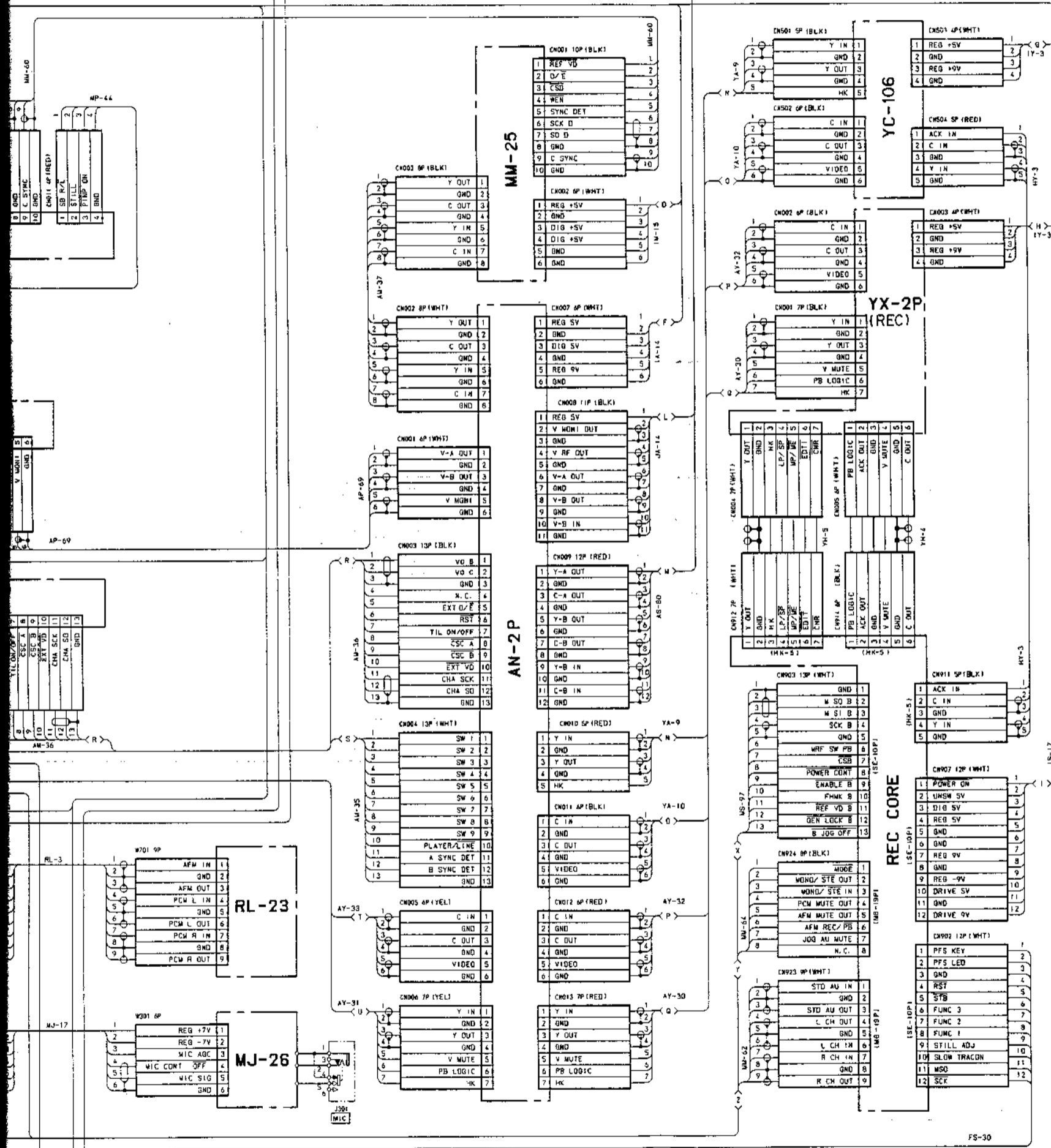
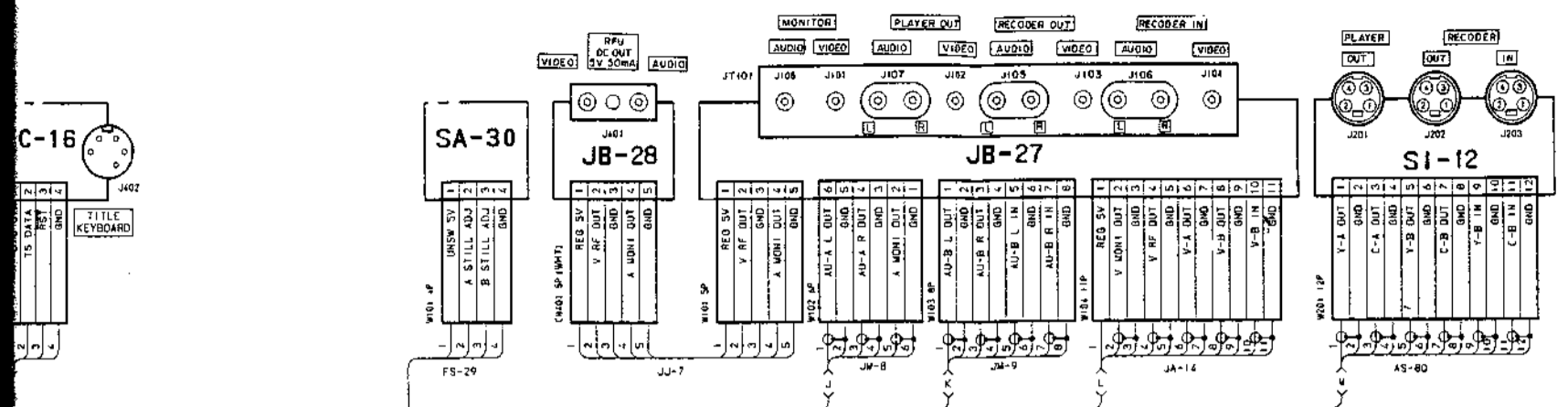








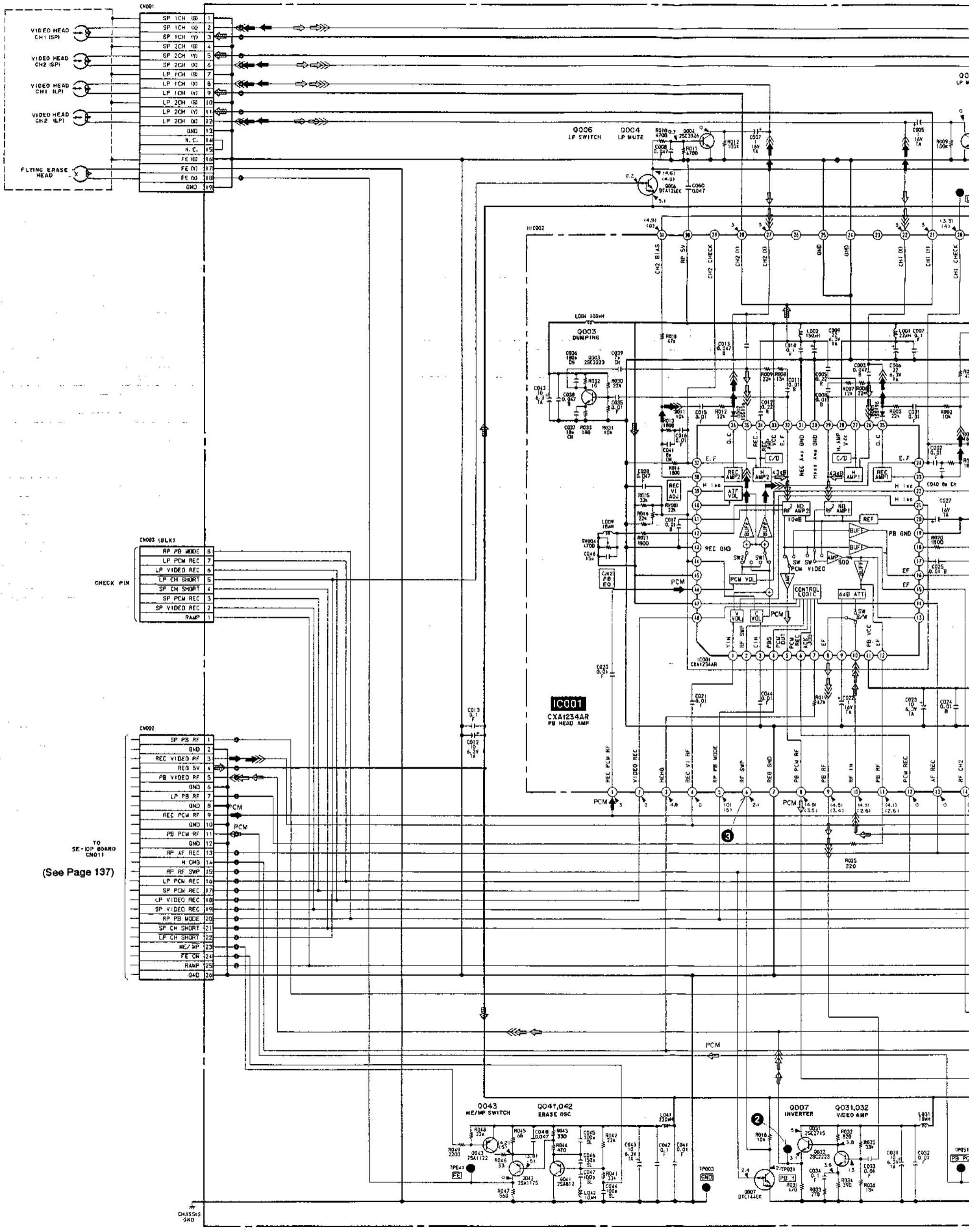




FR-43 (HEAD AMP), RP-73 (LP) (HEAD AMP (LP)), RP-103 (SP) (HEAD AMP (SP)) SCHEMATIC DIAGRAMS

— Ref. No. FR-43 BOARD: 1000 series, RP-73 (SP) BOARD: 2000 series, RP-103 (LP) BOARD : 3000 series —

A
B
C
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L
M
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O



CH001

SP 1CH (S)	1
SP 1CH (O)	2
SP 1CH (Y)	3
SP 2CH (S)	4
SP 2CH (O)	5
SP 2CH (Y)	6
LP 1CH (S)	7
LP 1CH (O)	8
LP 1CH (Y)	9
LP 2CH (S)	10
LP 2CH (O)	11
LP 2CH (Y)	12
GND	13
N.C.	14
N.C.	15
FE (O)	16
FE (Y)	17
FE (S)	18
GND	19

CH003 (BLK)

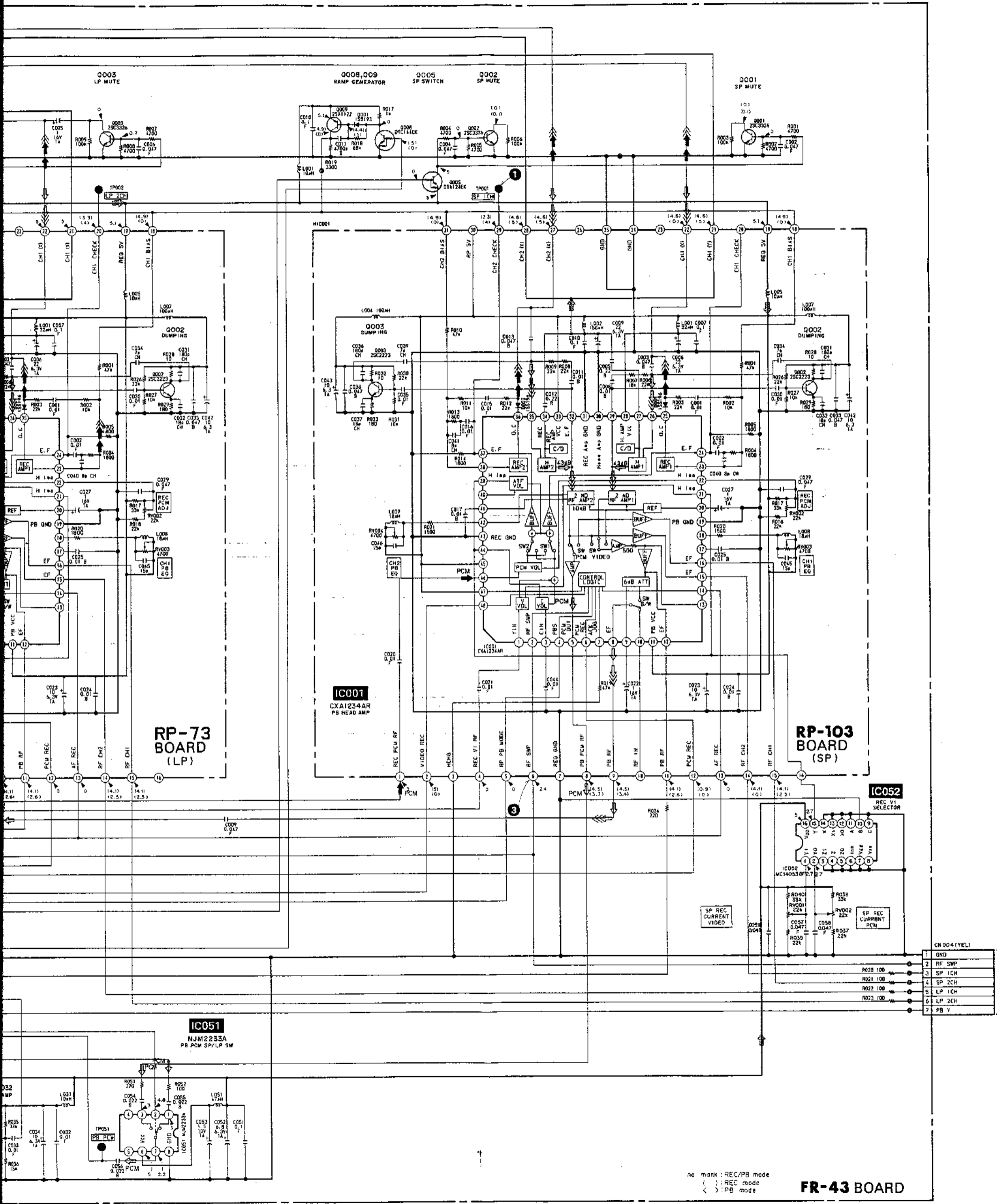
RP PB MODE	8
LP PCM REC	7
LP VIDEO REC	6
LP CH SHORT	5
SP CH SHORT	4
SP PCM REC	3
SP VIDEO REC	2
RAMP	1

CHECK PIN

CH002

SP PB RF	1
GND	2
REC VIDEO RF	3
REC SV	4
PB VIDEO RF	5
GND	6
LP PB RF	7
GND	8
REC PCM RF	9
GND	10
PB PCM RF	11
GND	12
RP AF REC	13
H CHG	14
RP RF SWP	15
LP PCM REC	16
SP PCM REC	17
LP VIDEO REC	18
SP VIDEO REC	19
RP PB MODE	20
SP CH SHORT	21
LP CH SHORT	22
ME/MP	23
FE ON	24
RAMP	25
GND	26

TO SE-10P BOARD
CN011
(See Page 137)



RP-73 BOARD (LP)

RP-103 BOARD (SP)

IC051
NJM2233A
PB PCM SP/LP SW

IC052
REC V1 SELECTOR
MC14053 82.727

IC001
CXAI234AR
PB HEAD AMP

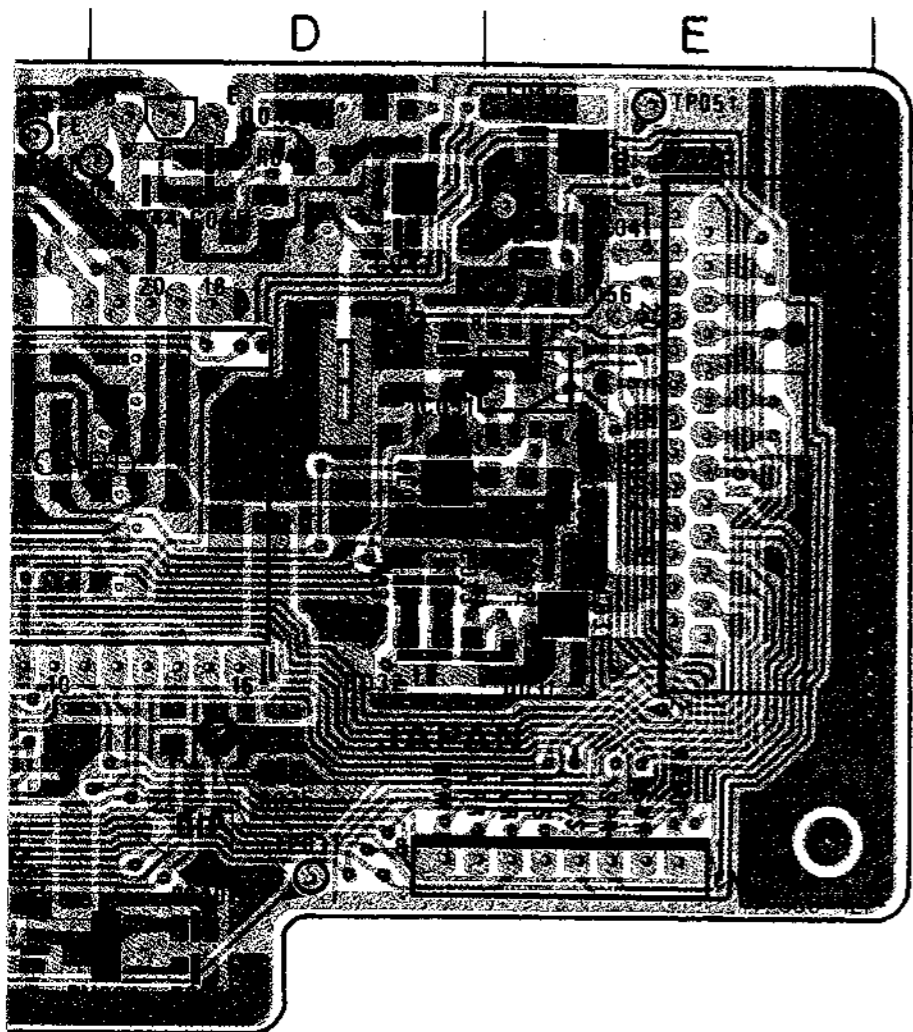
no mark : REC/PB mode
: REC mode
< : PB mode

FR-43 BOARD

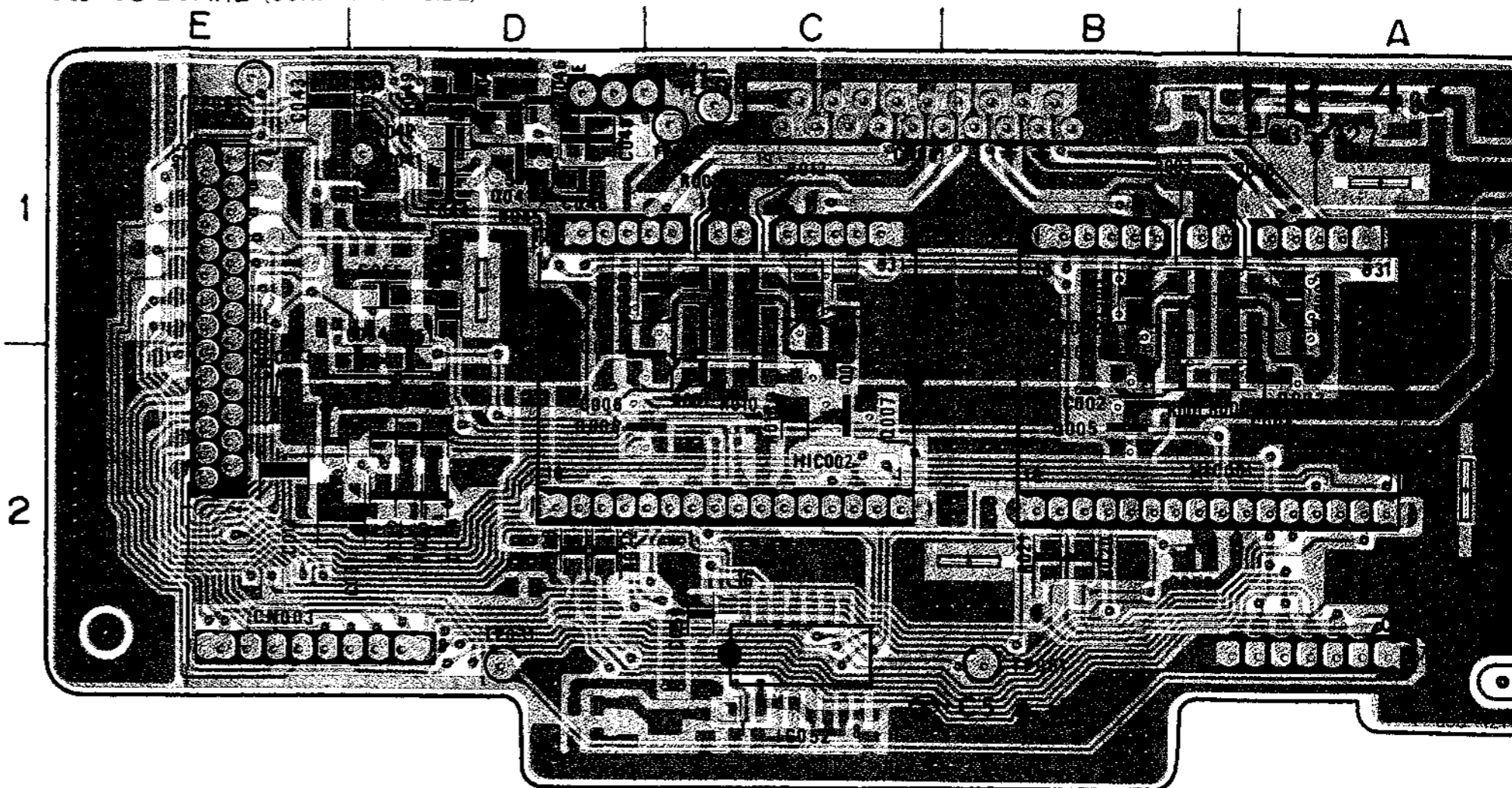
1	GND
2	RF SWP
3	SP 1CH
4	SP 2CH
5	LP 1CH
6	LP 2CH
7	PB Y

CHECK PIN

FR-43 BOARD (CONDUCTOR SIDE)



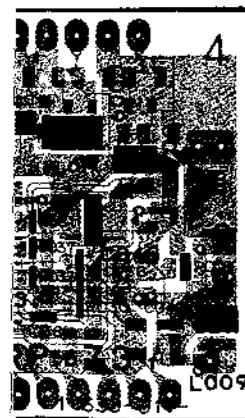
13



1

2

CTOR SIDE)



11

* A-7061-827-A RP-73 BOARD, COMPLETE

(Ref. No 2,000 Series)

< DIODE >

D001 8-719-801-41 DIODE 1SS196-TE85L
D002 8-719-801-41 DIODE 1SS196-TE85L

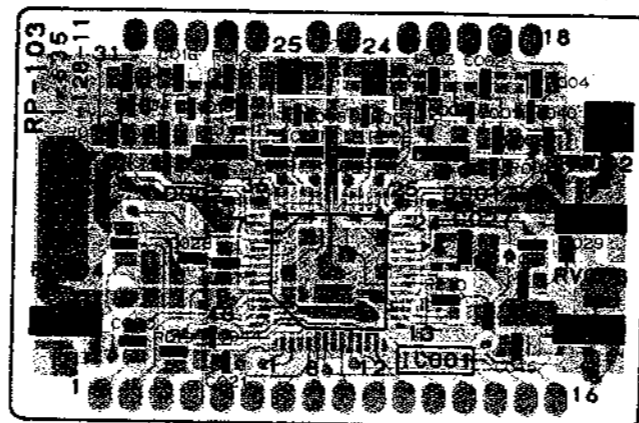
< IC >

IC001 8-752-033-00 IC CXA1234AR-T3

< TRANSISTOR >

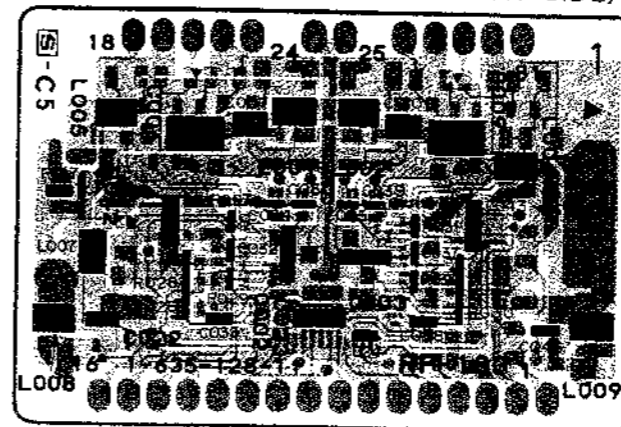
Q002 8-729-102-07 TRANSISTOR 2SC2223
Q003 8-729-102-07 TRANSISTOR 2SC2223

RP-103 BOARD (COMPONENT SIDE)



11

RP-103 BOARD (CONDUCTOR SIDE)



11

* A-7062-166-A RP-103 BOARD, COMPLETE

(Ref. No 3,000 Seri

< DIODE >

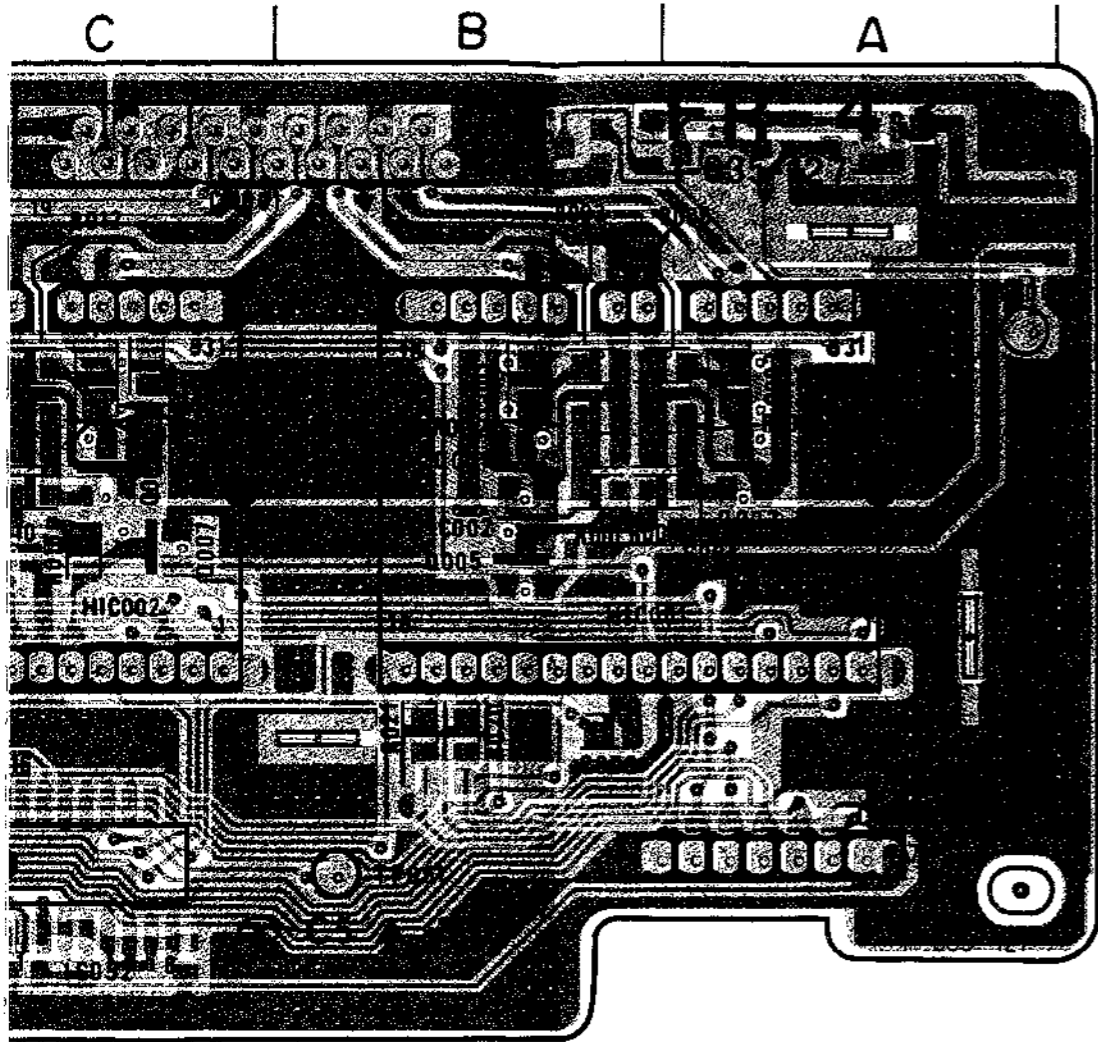
D001 8-719-801-41 DIODE 1SS196-TE85L
D002 8-719-801-41 DIODE 1SS196-TE85L

< IC >

IC001 8-752-033-00 IC CXA1234AR-T3

< TRANSISTOR >

Q002 8-729-102-07 TRANSISTOR 2SC2223
Q003 8-729-102-07 TRANSISTOR 2SC2223



* A-7062-165-A FR-43 BOARD, COMPLETE

 (Ref. No 1, 000 Series)

< DIODE >

D001 8-719-400-18 DIODE MA152WK

< IC >

IC051 8-759-710-09 IC NJM2233AM
 IC052 8-759-300-71 IC MC14053BF-T1

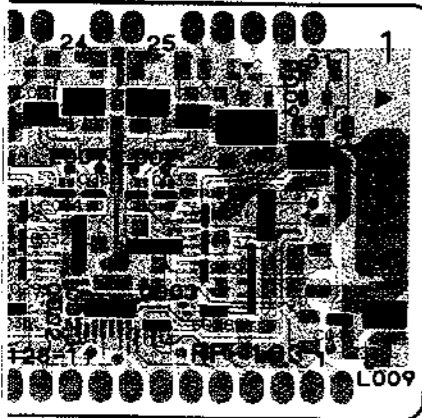
< TRANSISTOR >

Q001 8-729-202-38 TRANSISTOR 2SC3326W
 Q002 8-729-202-38 TRANSISTOR 2SC3326W
 Q003 8-729-202-38 TRANSISTOR 2SC3326W
 Q004 8-729-202-38 TRANSISTOR 2SC3326W
 Q005 8-729-901-05 TRANSISTOR DTA124EK

 Q006 8-729-901-05 TRANSISTOR DTA124EK
 Q007 8-729-901-01 TRANSISTOR DTC144EK
 Q008 8-729-901-01 TRANSISTOR DTC144EK
 Q009 8-729-320-17 TRANSISTOR 2SA1122CD
 Q031 8-729-201-27 TRANSISTOR 2SC2715

 Q032 8-729-102-07 TRANSISTOR 2SC2223
 Q041 8-729-216-22 TRANSISTOR 2SA1162
 Q042 8-729-119-76 TRANSISTOR 2SA1175
 Q043 8-729-320-17 TRANSISTOR 2SA1122CD

BOARD (CONDUCTOR SIDE)



* A-7062-166-A RP-103 BOARD, COMPLETE

 (Ref. No 3, 000 Series)

< DIODE >

D001 8-719-801-41 DIODE 1SS196-TE85L
 D002 8-719-801-41 DIODE 1SS196-TE85L

< IC >

IC001 8-752-033-00 IC CXA1234AR-T3

< TRANSISTOR >

Q002 8-729-102-07 TRANSISTOR 2SC2223
 Q003 8-729-102-07 TRANSISTOR 2SC2223

EVO-9700P

* A-7062-164-A HK-5 BOARD, COMPLETE

(Ref. No 4,000 Series)

< DIODE >

D101	8-719-400-18	DIODE	MA152WK
D102	8-719-400-18	DIODE	MA152WK
D105	8-719-800-76	DIODE	1SS226
D106	8-719-400-18	DIODE	MA152WK
D107	8-719-400-18	DIODE	MA152WK
D108	8-719-400-18	DIODE	MA152WK
D109	8-719-400-18	DIODE	MA152WK
D301	8-719-400-18	DIODE	MA152WK
D302	8-719-400-18	DIODE	MA152WK
D401	8-719-400-18	DIODE	MA152WK
D402	8-719-400-18	DIODE	MA152WK
D403	8-719-400-18	DIODE	MA152WK
D404	8-719-400-18	DIODE	MA152WK
D405	8-719-400-18	DIODE	MA152WK
D501	8-719-400-18	DIODE	MA152WK

D601	8-719-800-76	DIODE	1SS226
D602	8-719-400-18	DIODE	MA152WK
D603	8-719-400-18	DIODE	MA152WK
D604	8-719-400-18	DIODE	MA152WK
D605	8-719-400-18	DIODE	MA152WK

D801	8-719-400-18	DIODE	MA152WK
D802	8-719-400-18	DIODE	MA152WK
D804	8-719-400-18	DIODE	MA152WK
D821	8-719-400-18	DIODE	MA152WK
D822	8-719-800-76	DIODE	1SS226

D823	8-719-800-76	DIODE	1SS226
D901	8-719-400-18	DIODE	MA152WK

< IC >

IC101	8-759-233-94	IC	TA8607F
IC102	8-759-925-60	IC	BA401
IC301	8-752-002-XX	IC	CX20030
IC401	8-752-031-01	IC	CXA1047M
IC501	8-752-003-12	IC	CX20031

IC601	8-752-202-10	IC	CX22021
IC602	8-752-003-22	IC	CX20032
IC603	8-752-305-47	IC	CX23054
IC604	8-759-005-51	IC	MC14538BF
IC702	8-759-012-00	IC	MC10H116M

IC703	8-752-006-12	IC	CX20061
IC801	8-759-202-67	IC	CX20117
IC901	8-759-925-74	IC	SN74HCO4ANS
IC902	8-759-925-74	IC	SN74HCO4ANS

< TRANSISTOR >

Q101	8-729-200-86	TRANSISTOR	2SC27140
Q102	8-729-901-04	TRANSISTOR	DTA1144EK
Q103	8-729-200-86	TRANSISTOR	2SC27140
Q104	8-729-901-01	TRANSISTOR	DTA1444EK
Q105	8-729-904-07	TRANSISTOR	FMS2

Q107	8-729-201-27	TRANSISTOR	2SC2715
Q110	8-729-901-01	TRANSISTOR	DTA1444EK
Q111	8-729-200-86	TRANSISTOR	2SC27140
Q112	8-729-901-01	TRANSISTOR	DTA1444EK
Q113	8-729-200-86	TRANSISTOR	2SC27140

Q116	8-729-201-27	TRANSISTOR	2SC2715
Q117	8-729-200-86	TRANSISTOR	2SC27140
Q118	8-729-200-86	TRANSISTOR	2SC27140
Q119	8-729-200-86	TRANSISTOR	2SC27140
Q120	8-729-200-86	TRANSISTOR	2SC27140

Q121	8-729-201-27	TRANSISTOR	2SC2715
Q122	8-729-901-01	TRANSISTOR	DTA1444EK
Q123	8-729-901-01	TRANSISTOR	DTA1444EK
Q124	8-729-901-06	TRANSISTOR	DTA1444EK
Q125	8-729-901-01	TRANSISTOR	DTA1444EK

Q126	8-729-201-27	TRANSISTOR	2SC2715
Q127	8-729-201-27	TRANSISTOR	2SC2715
Q128	8-729-202-38	TRANSISTOR	2SC3326H
Q129	8-729-201-27	TRANSISTOR	2SC2715
Q130	8-729-201-27	TRANSISTOR	2SC2715

Q131	8-729-216-22	TRANSISTOR	2SA1162
Q132	8-729-201-27	TRANSISTOR	2SC2715
Q181	8-729-907-46	TRANSISTOR	1M71
Q182	8-729-903-10	TRANSISTOR	FMM1
Q183	8-729-200-86	TRANSISTOR	2SC27140

Q184	8-729-216-22	TRANSISTOR	2SA1162
Q209	8-729-200-86	TRANSISTOR	2SC27140
Q210	8-729-200-86	TRANSISTOR	2SC27140
Q211	8-729-200-86	TRANSISTOR	2SC27140
Q212	8-729-901-01	TRANSISTOR	DTA1444EK

Q213	8-729-901-06	TRANSISTOR	DTA1444EK
Q214	8-729-200-86	TRANSISTOR	2SC27140
Q215	8-729-902-95	TRANSISTOR	FMS1
Q217	8-729-200-86	TRANSISTOR	2SC27140
Q218	8-729-200-86	TRANSISTOR	2SC27140

Q301	8-729-201-27	TRANSISTOR	2SC2715
Q302	8-729-201-27	TRANSISTOR	2SC2715
Q305	8-729-201-27	TRANSISTOR	2SC2715
Q306	8-729-201-27	TRANSISTOR	2SC2715
Q307	8-729-201-27	TRANSISTOR	2SC2715

Q309	8-729-201-27	TRANSISTOR	2SC2715
Q310	8-729-201-27	TRANSISTOR	2SC2715
Q311	8-729-201-27	TRANSISTOR	2SC2715
Q312	8-729-901-06	TRANSISTOR	DTA1444EK
Q313	8-729-216-22	TRANSISTOR	2SA1162

Q314	8-729-201-27	TRANSISTOR	2SC2715
Q315	8-729-201-27	TRANSISTOR	2SC2715
Q316	8-729-901-01	TRANSISTOR	DTA1444EK
Q317	8-729-201-27	TRANSISTOR	2SC2715
Q318	8-729-901-06	TRANSISTOR	DTA1444EK

Q319	8-729-201-27	TRANSISTOR	2SC2715
Q320	8-729-901-01	TRANSISTOR	DTA1444EK
Q321	8-729-901-01	TRANSISTOR	DTA1444EK
Q322	8-729-216-22	TRANSISTOR	2SA1162
Q323	8-729-901-01	TRANSISTOR	DTA1444EK

Q324	8-729-901-01	TRANSISTOR	DTA1444EK
Q325	8-729-901-06	TRANSISTOR	DTA1444EK
Q326	8-729-901-06	TRANSISTOR	DTA1444EK
Q327	8-729-201-27	TRANSISTOR	2SC2715
Q328	8-729-201-27	TRANSISTOR	2SC2715

Q330	8-729-901-06	TRANSISTOR	DTA1444EK
Q389	8-729-201-27	TRANSISTOR	2SC2715
Q401	8-729-201-27	TRANSISTOR	2SC2715
Q402	8-729-201-27	TRANSISTOR	2SC2715

Q403	8-729-901-01	TRANSISTOR	DTA1444EK
Q404	8-729-901-01	TRANSISTOR	DTA1444EK
Q405	8-729-901-06	TRANSISTOR	DTA1444EK
Q406	8-729-201-27	TRANSISTOR	2SC2715
Q407	8-729-216-22	TRANSISTOR	2SA1162
Q408	8-729-216-22	TRANSISTOR	2SA1162

Q409	8-729-201-27	TRANSISTOR	2SC2715
Q410	8-729-216-22	TRANSISTOR	2SA1162
Q411	8-729-901-01	TRANSISTOR	DTA1444EK
Q412	8-729-901-01	TRANSISTOR	DTA1444EK
Q413	8-729-901-01	TRANSISTOR	DTA1444EK

Q414	8-729-201-27	TRANSISTOR	2SC2715
Q415	8-729-216-22	TRANSISTOR	2SA1162
Q416	8-729-216-22	TRANSISTOR	2SA1162
Q417	8-729-901-01	TRANSISTOR	DTA1444EK
Q418	8-729-201-27	TRANSISTOR	2SC2715

Q419	8-729-201-27	TRANSISTOR	2SC2715
Q420	8-729-202-38	TRANSISTOR	2SC3326H
Q421	8-729-202-38	TRANSISTOR	2SC3326H
Q422	8-729-201-27	TRANSISTOR	2SC2715
Q423	8-729-201-27	TRANSISTOR	2SC2715

Q424	8-729-901-01	TRANSISTOR	DTA1444EK
Q425	8-729-201-27	TRANSISTOR	2SC2715
Q426	8-729-201-27	TRANSISTOR	2SC2715
Q427	8-729-216-22	TRANSISTOR	2SA1162
Q428	8-729-216-22	TRANSISTOR	2SA1162

Q429	8-729-901-01	TRANSISTOR	DTA1444EK
Q430	8-729-901-01	TRANSISTOR	DTA1444EK
Q431	8-729-216-22	TRANSISTOR	2SA1162
Q501	8-729-901-06	TRANSISTOR	DTA1444EK
Q502	8-729-901-01	TRANSISTOR	DTA1444EK

Q503	8-729-901-00	TRANSISTOR	DTA1244EK
Q504	8-729-201-27	TRANSISTOR	2SC2715
Q601	8-729-901-01	TRANSISTOR	DTA1444EK
Q603	8-729-901-01	TRANSISTOR	DTA1444EK
Q604	8-729-201-27	TRANSISTOR	2SC2715

Q605	8-729-201-27	TRANSISTOR	2SC2715
Q606	8-729-901-01	TRANSISTOR	DTA1444EK
Q607	8-729-201-27	TRANSISTOR	2SC2715
Q608	8-729-216-22	TRANSISTOR	2SA1162
Q609	8-729-901-00	TRANSISTOR	DTA1244EK

Q610	8-729-904-04	TRANSISTOR	FMS2
Q611	8-729-201-27	TRANSISTOR	2SC2715
Q612	8-729-201-27	TRANSISTOR	2SC2715
Q613	8-729-901-01	TRANSISTOR	DTA1444EK
Q701	8-729-201-27	TRANSISTOR	2SC2715

Q702	8-729-202-38	TRANSISTOR	2SC3326H
Q703	8-729-202-38	TRANSISTOR	2SC3326H
Q704	8-729-216-22	TRANSISTOR	2SA1162
Q706	8-729-201-27	TRANSISTOR	2SC2715
Q707	8-729-201-27	TRANSISTOR	2SC2715

Q710	8-729-901-01	TRANSISTOR	DTA1444EK
Q711	8-729-901-01	TRANSISTOR	DTA1444EK
Q712	8-729-901-01	TRANSISTOR	DTA1444EK
Q720	8-729-200-86	TRANSISTOR	2SC27140
Q721	8-729-200-86	TRANSISTOR	2SC27140

Q722	8-729-200-86	TRANSISTOR	2SC27140
Q723	8-729-201-27	TRANSISTOR	2SC2715
Q724	8-729-901-01	TRANSISTOR	DTA1444EK
Q801	8-729-920-08	TRANSISTOR	DTA1244EK-T146
Q802	8-729-201-27	TRANSISTOR	2SC2715

Q803	8-729-201-27	TRANSISTOR	2SC2715
Q804	8-729-201-27	TRANSISTOR	2SC2715
Q805	8-729-216-22	TRANSISTOR	2SA1162
Q811	8-729-901-01	TRANSISTOR	DTA1444EK
Q901	8-729-901-01	TRANSISTOR	DTA1444EK

Q902	8-729-901-01	TRANSISTOR	DTA1444EK
Q903	8-729-104-25	TRANSISTOR	2SB804-AV
Q904	8-729-201-27	TRANSISTOR	2SC2715

HK-5 (CHROMA SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX) PRINTED WIRING BOARD

— Ref. No. HK-5 BOARD: 4000 series —

HK-5 BOARD (COMPONENT SIDE)
HK-5 BOARD (CONDUCTOR SIDE)

D301	E-1	D101	F-4
D404	E-2	D102	F-4
D601	D-4	D105	G-3
D605	C-5	D106	G-4
D802	G-6	D107	F-4
D804	G-6	D108	G-3
		D109	H-4
		D302	E-1
IC101	G-4	D401	D-2
IC102	G-3	D402	D-1
IC301	F-2	D403	D-1
IC401	D-1	D403	D-1
IC601	A-5	D405	D-2
IC602	B-5	D501	C-2
IC702	G-2	D602	D-5
IC703	H-3	D603	A-1
IC901	E-5	D604	A-1
IC902	E-5	D801	C-5
		D821	A-3
		D822	A-3
		D901	G-6

Q101	H-5	IC501	C-3
Q105	F-4	IC603	C-5
Q107	H-4	IC801	A-4
Q112	G-4	Q102	F-5
Q119	G-3	Q103	G-5
Q125	F-5	Q104	G-4
Q126	G-5	Q110	G-4
Q131	H-4	Q111	G-4
Q181	H-3	Q113	H-4
Q182	H-3	Q116	F-4
Q215	E-5	Q117	G-2
Q306	F-2	Q118	F-3
Q307	F-2	Q120	G-3
Q315	F-2	Q121	H-3
Q316	G-2	Q122	G-4
Q317	F-3	Q123	G-4
Q322	E-2	Q127	G-5
Q323	D-2	Q128	H-5
Q324	F-3	Q129	H-4
Q325	E-2	Q130	H-4
Q403	D-3	Q132	H-5
Q404	D-3	Q183	H-3
Q405	D-2	Q184	H-3
Q4			

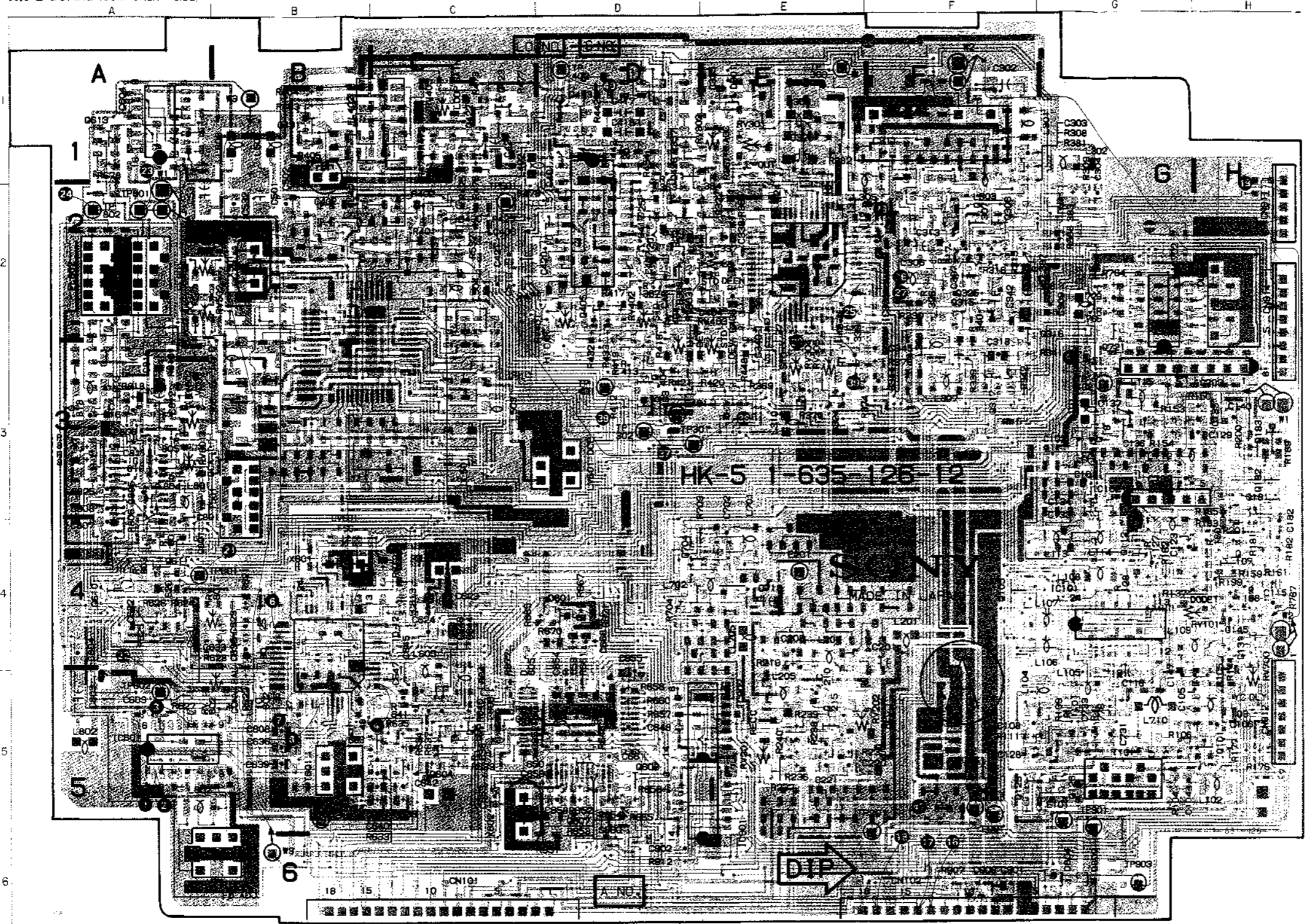
SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX) PRINTED WIRING BOARD

RD: 4000 series —

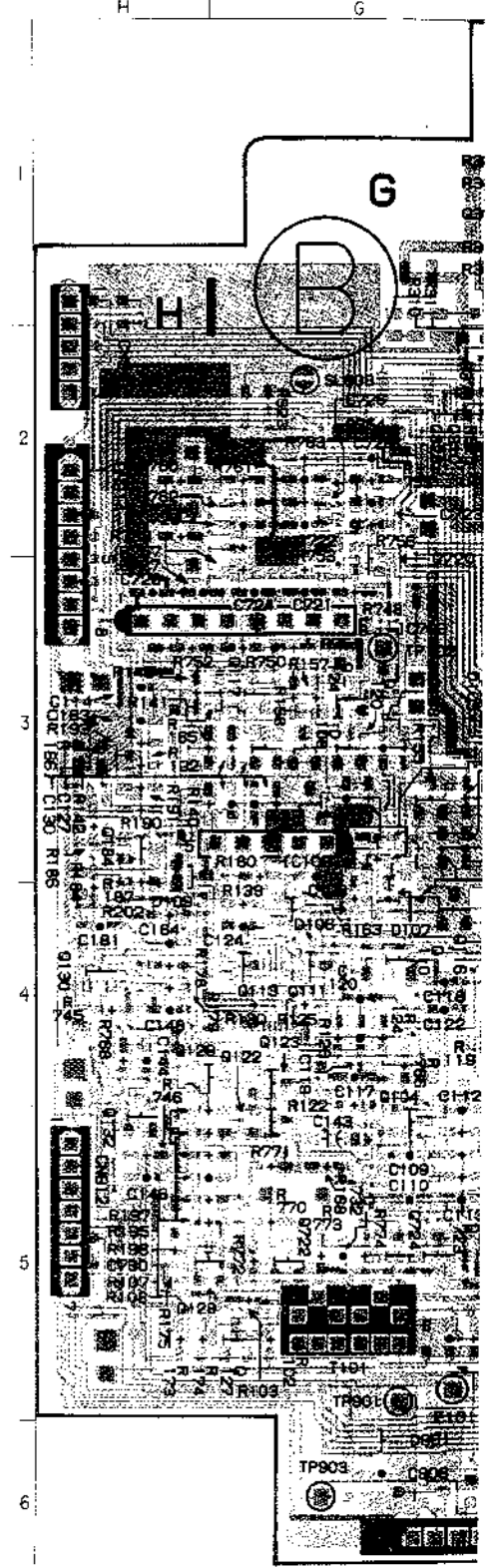
BOARD
DUCTOR

- | | | | |
|---|-----|------|-----|
| 6 | F-4 | Q501 | C-2 |
| 6 | F-4 | Q502 | C-1 |
| 7 | G-3 | Q503 | C-2 |
| 7 | G-4 | Q504 | B-3 |
| 7 | F-4 | Q601 | B-5 |
| 7 | G-3 | Q606 | C-5 |
| 7 | H-4 | Q609 | A-4 |
| 7 | E-1 | Q612 | A-1 |
| 7 | D-2 | Q613 | A-1 |
| 7 | D-1 | Q701 | D-3 |
| 7 | D-1 | Q702 | D-3 |
| 7 | D-2 | Q703 | D-4 |
| 7 | C-2 | Q706 | D-3 |
| 7 | D-6 | Q707 | E-4 |
| 7 | A-1 | Q710 | D-4 |
| 7 | A-1 | Q711 | D-4 |
| 7 | C-5 | Q712 | D-5 |
| 7 | A-3 | Q720 | C-5 |
| 7 | A-3 | Q722 | C-5 |
| 7 | G-6 | Q723 | C-5 |
| 7 | G-6 | Q724 | C-5 |
| 7 | C-3 | Q802 | A-4 |
| 7 | C-5 | Q803 | A-4 |
| 7 | A-4 | Q804 | A-4 |
| 7 | A-4 | Q805 | A-4 |
| 7 | F-5 | Q811 | C-5 |
| 7 | C-5 | Q901 | C-5 |
| 7 | C-4 | Q902 | C-5 |
| 7 | C-4 | Q903 | C-5 |
| 7 | F-4 | Q904 | C-5 |
| 7 | C-3 | | |
| 7 | C-3 | | |
| 7 | H-3 | | |
| 7 | H-3 | | |
| 7 | H-4 | | |
| 7 | H-4 | | |
| 7 | H-3 | | |
| 7 | H-3 | | |
| 7 | F-4 | | |
| 7 | F-5 | | |
| 7 | F-4 | | |
| 7 | F-5 | | |
| 7 | F-5 | | |
| 7 | F-5 | | |
| 7 | F-5 | | |
| 7 | F-1 | | |
| 7 | G-1 | | |
| 7 | G-2 | | |
| 7 | F-3 | | |
| 7 | F-3 | | |
| 7 | F-2 | | |
| 7 | F-2 | | |
| 7 | E-1 | | |
| 7 | E-2 | | |
| 7 | F-2 | | |
| 7 | F-3 | | |
| 7 | F-2 | | |
| 7 | C-1 | | |
| 7 | D-2 | | |
| 7 | D-2 | | |
| 7 | D-3 | | |
| 7 | D-3 | | |
| 7 | F-3 | | |
| 7 | F-3 | | |
| 7 | D-2 | | |
| 7 | D-2 | | |
| 7 | D-1 | | |
| 7 | D-1 | | |
| 7 | D-1 | | |
| 7 | D-2 | | |
| 7 | F-3 | | |
| 7 | C-1 | | |
| 7 | C-1 | | |
| 7 | C-1 | | |
| 7 | C-1 | | |

HK-5 BOARD (COMPONENT SIDE)

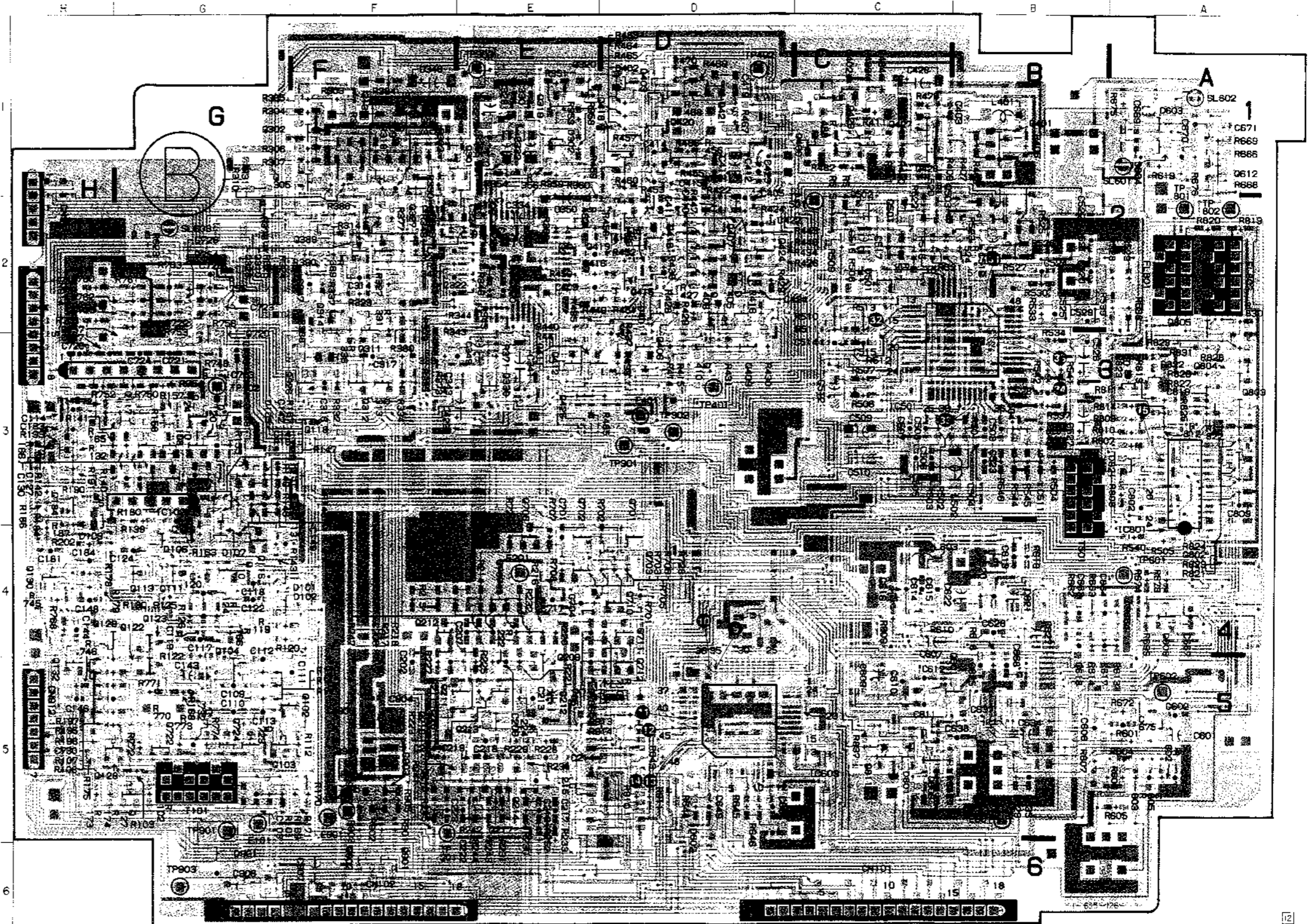
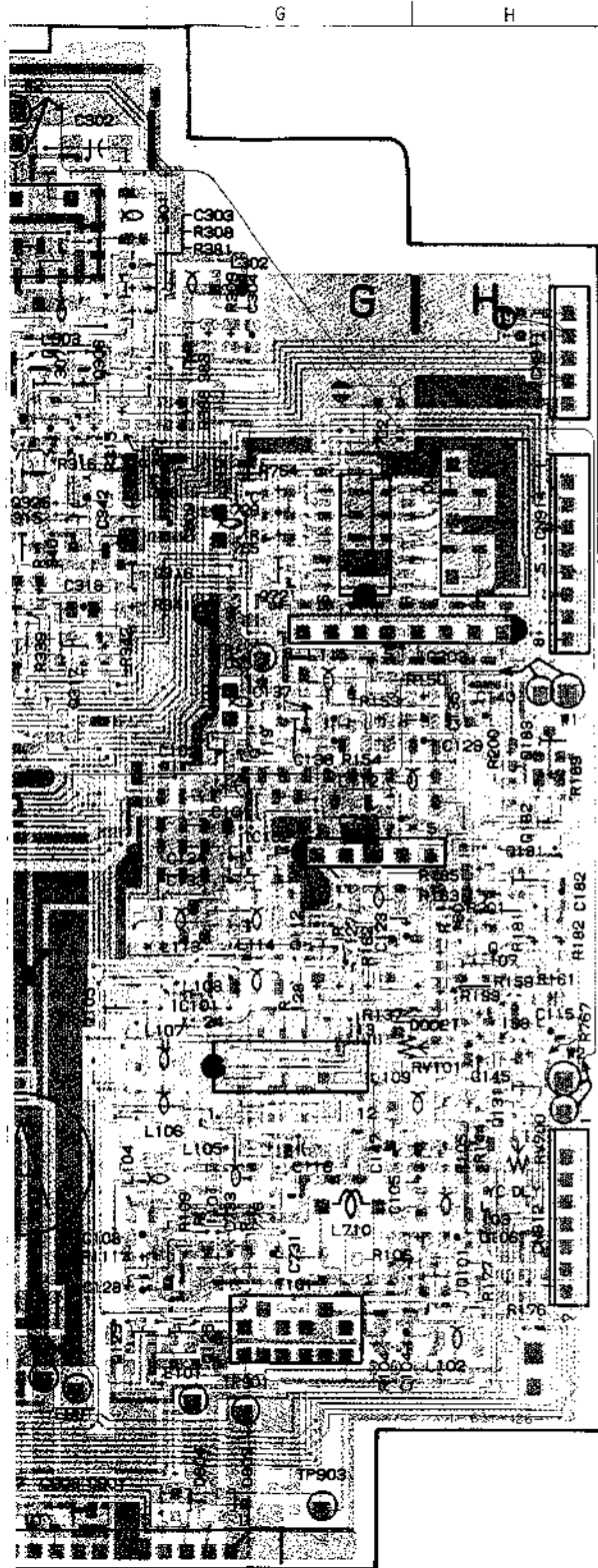


HK-5 BOARD (CONDUCTOR SIDE)



VIDEO VIDEO

HK-5 BOARD (CONDUCTOR SIDE)

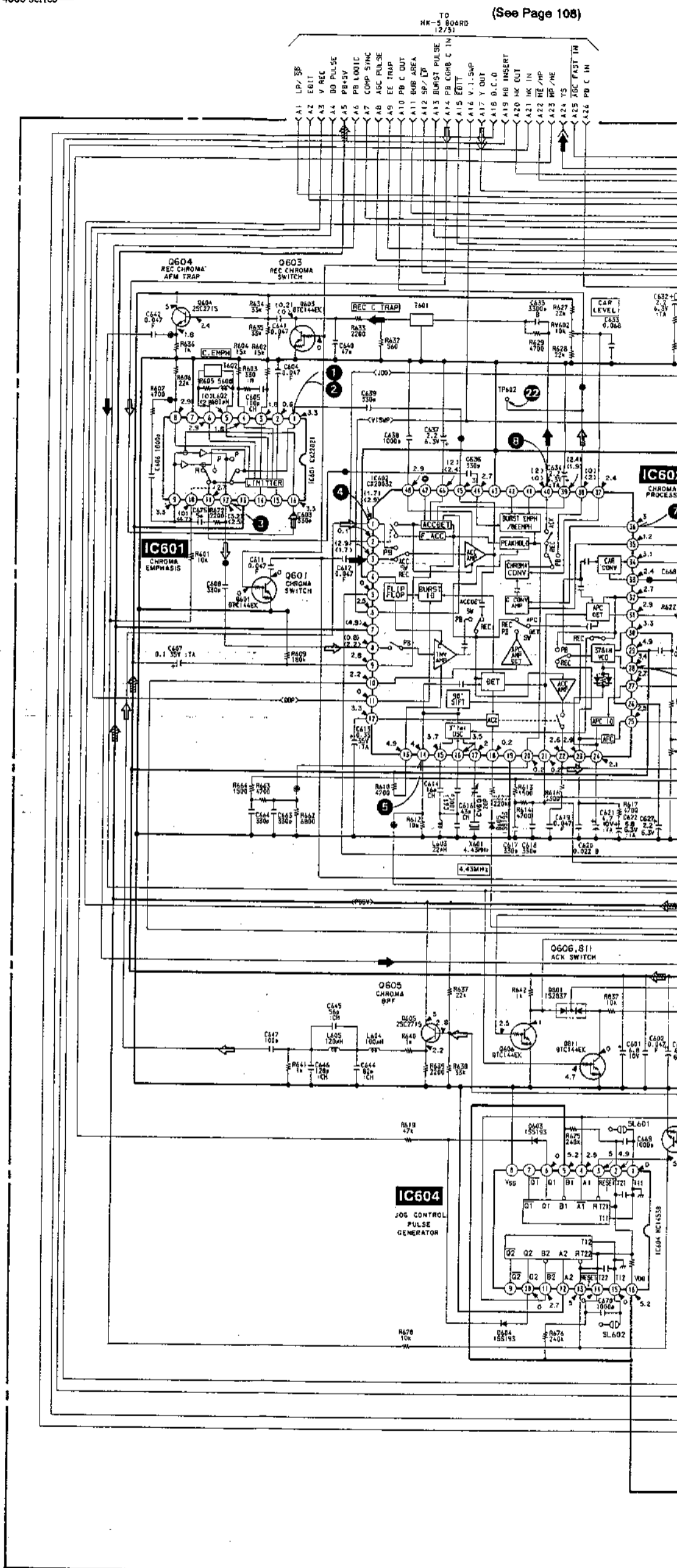


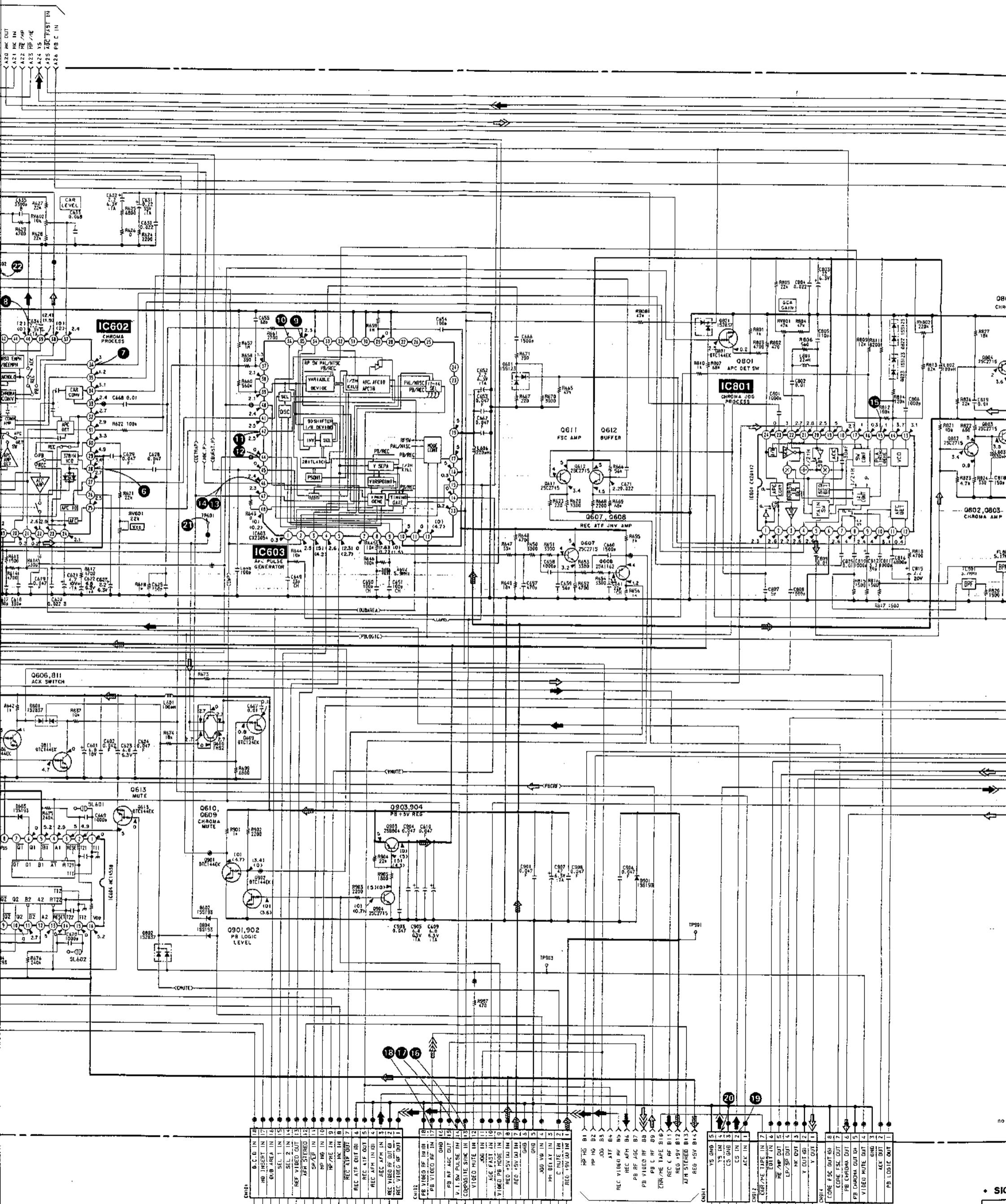
HK-5 (CHROMA SIGNAL PROCESS) SCHEMATIC DIAGRAM

— Ref. No. HK-5 BOARD: 4000 series —

(See Page 108)

A
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L
M
N
O





(See Page 138)

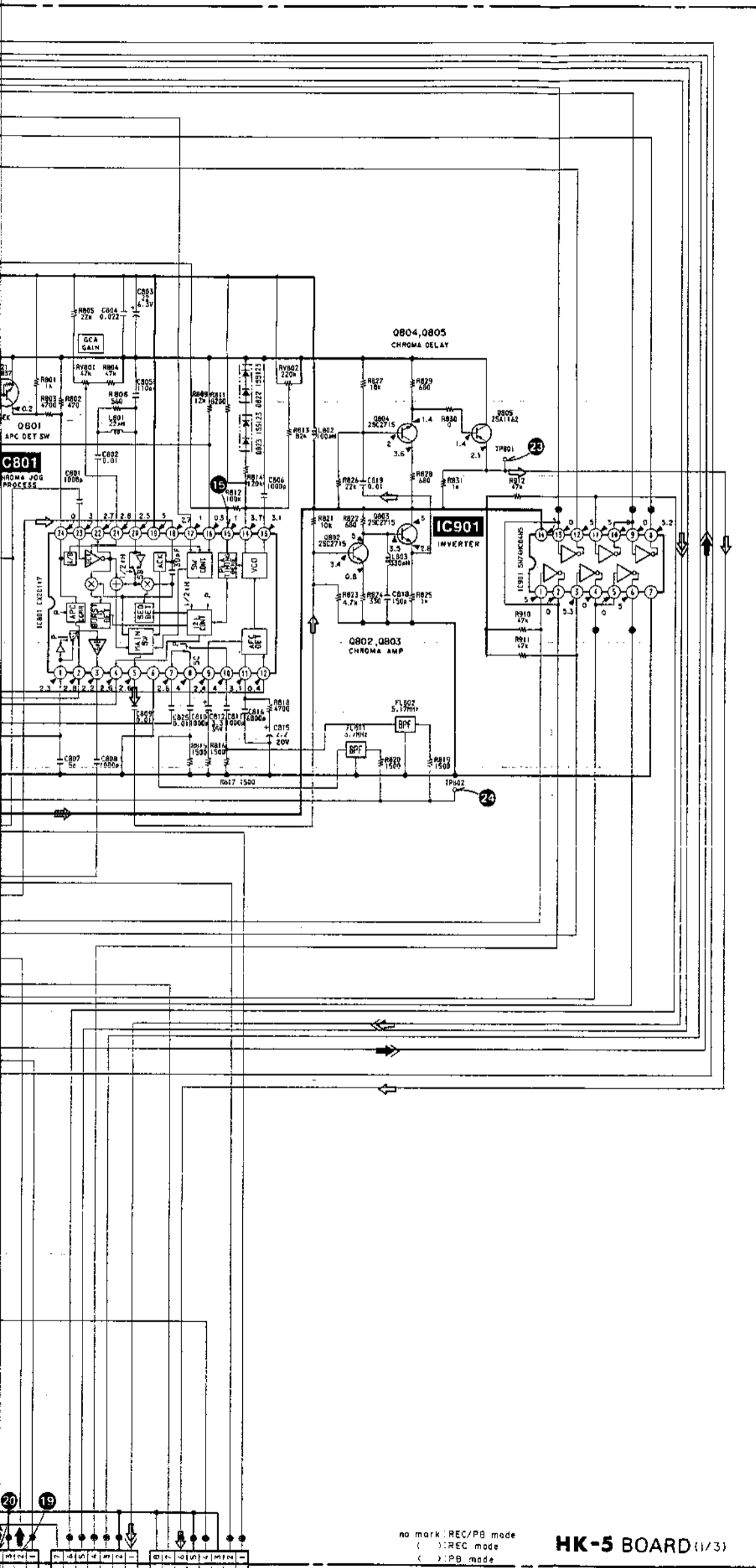
(See Page 138)

(See Page 123)

(See Page 175)

(See Page 165)

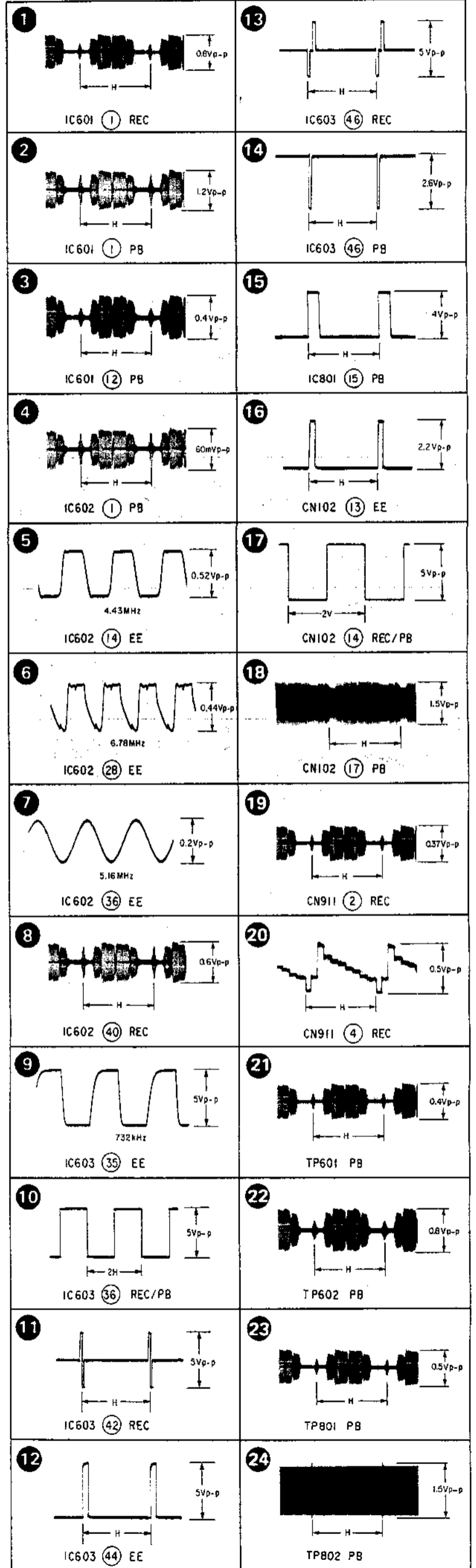
(See Page 165)



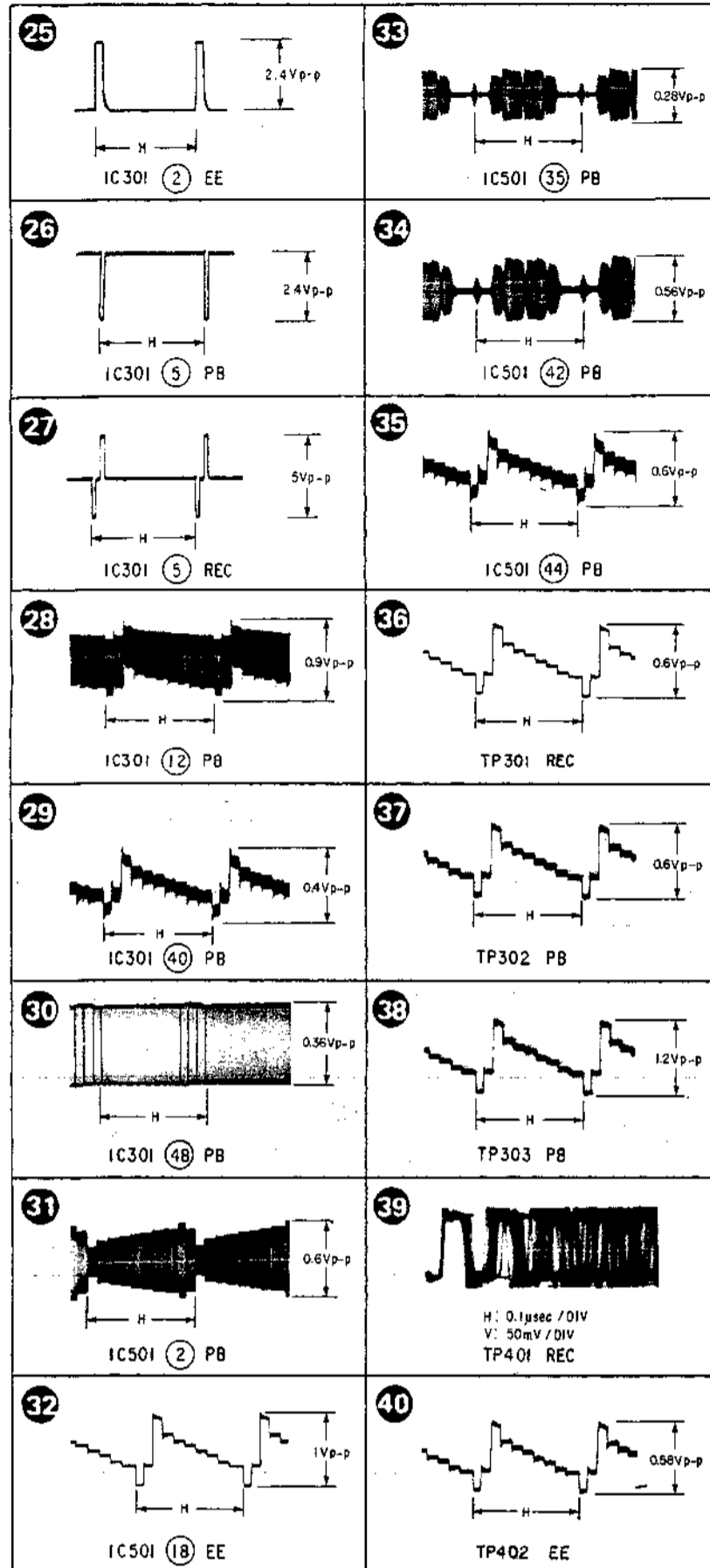
• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	⇒	⇒⇒	→
PB	⇐	⇐⇐	⇐⇐⇐	⇐

HK-5 BOARD (1/3)



HK-5 BOARD (2/3)



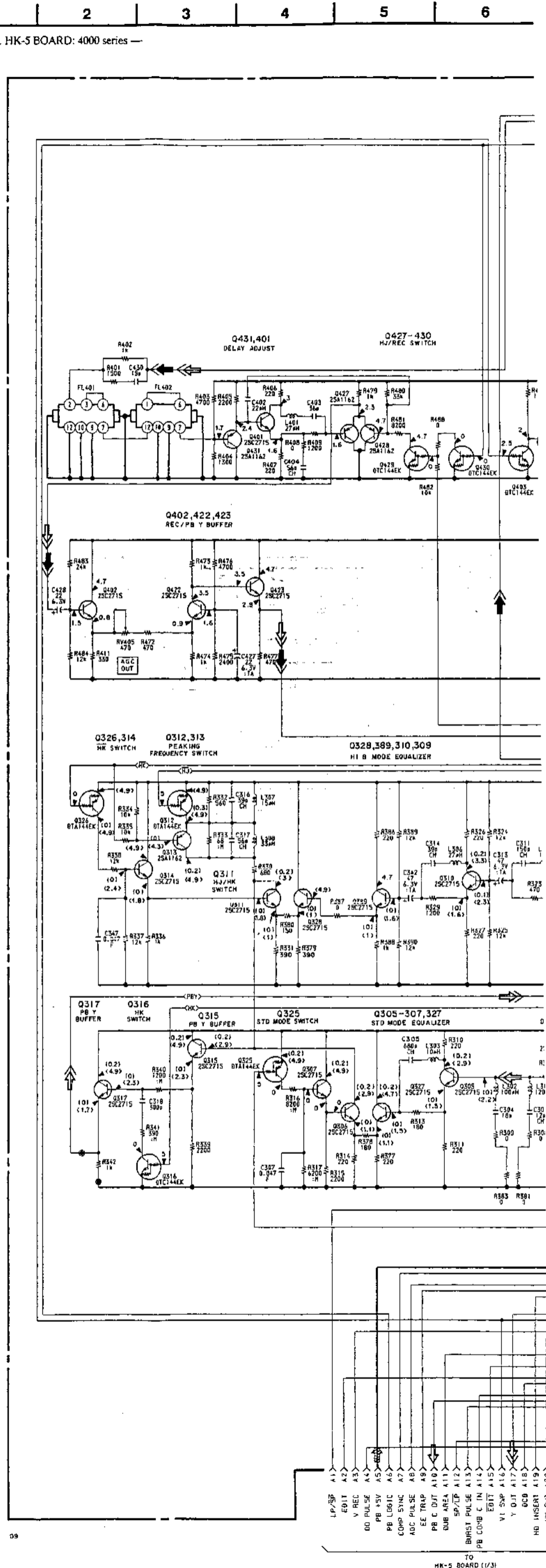
• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC		→		
PB	⇒	⇒		

HK-5 (Y SIGNAL PROCESS) SCHEMATIC DIAGRAM

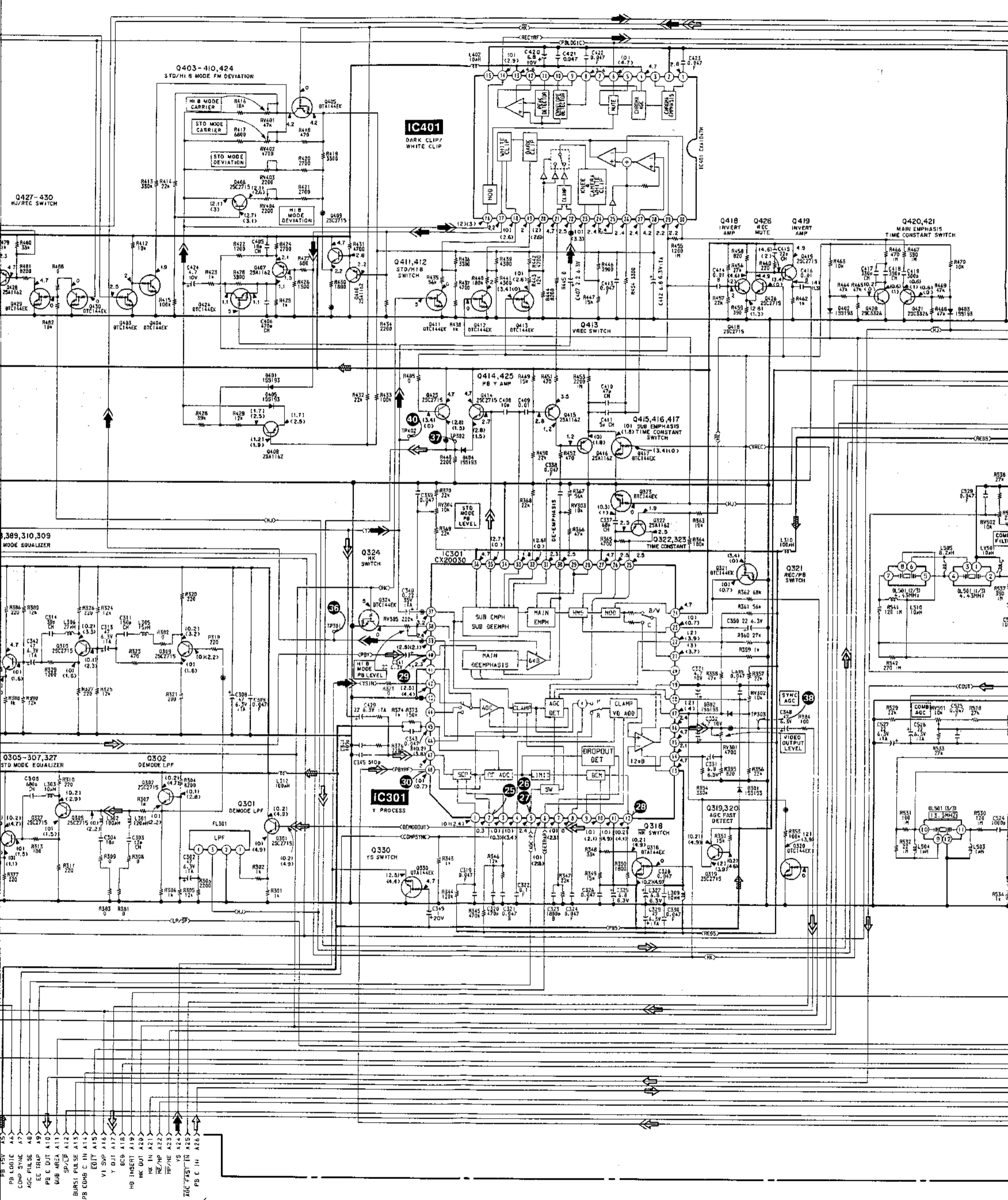
— Ref. No. HK-5 BOARD: 4000 series —

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(See Page 104)

VIDEO VIDEO



(See Page 104)

HK-5 (CHROMA SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX) PRINTED WIRING BOARD

— Ref. No. HK-5 BOARD: 4000 series —

HK-5 BOARD
(COMPONENT
SIDE)

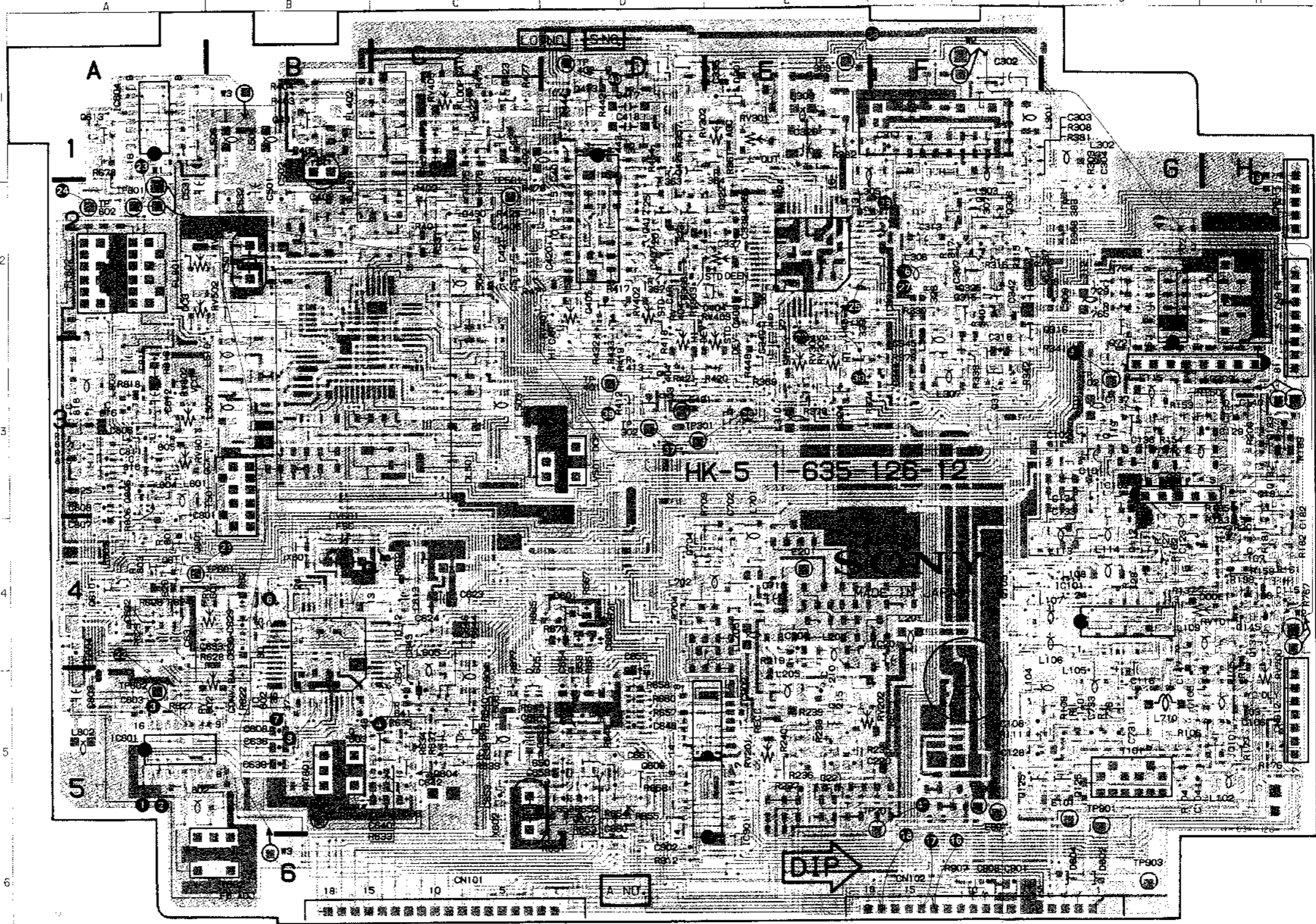
- D3Q1 E-1
- D404 E-2
- D601 D-4
- D605 C-5
- D802 G-6
- D804 G-6
- IC101 G-4
- IC102 G-3
- IC301 F-2
- IC401 D-1
- IC601 A-5
- IC602 B-5
- IC702 G-2
- IC703 H-3
- IC901 E-5
- IC902 E-5
- Q101 H-5
- Q105 F-4
- Q107 H-4
- Q112 G-4
- Q119 G-3
- Q125 F-5
- Q126 G-5
- Q131 H-4
- Q181 H-3
- Q182 H-3
- Q215 E-5
- Q306 F-2
- Q307 F-2
- Q315 F-2
- Q316 G-2
- Q317 F-3
- Q322 E-2
- Q323 D-2
- Q324 E-3
- Q325 F-2
- Q403 D-3
- Q404 D-3
- Q405 D-2
- Q413 D-1
- Q414 E-2
- Q417 D-2
- Q422 C-1
- Q423 C-1
- Q426 D-1
- Q431 B-1
- Q503 B-5
- Q604 C-5
- Q605 C-5
- Q607 D-5
- Q608 D-5
- Q610 A-4
- Q611 A-4
- Q704 D-4
- Q721 G-3
- Q801 A-4

HK-5 BOARD
(CONDUCTOR
SIDE)

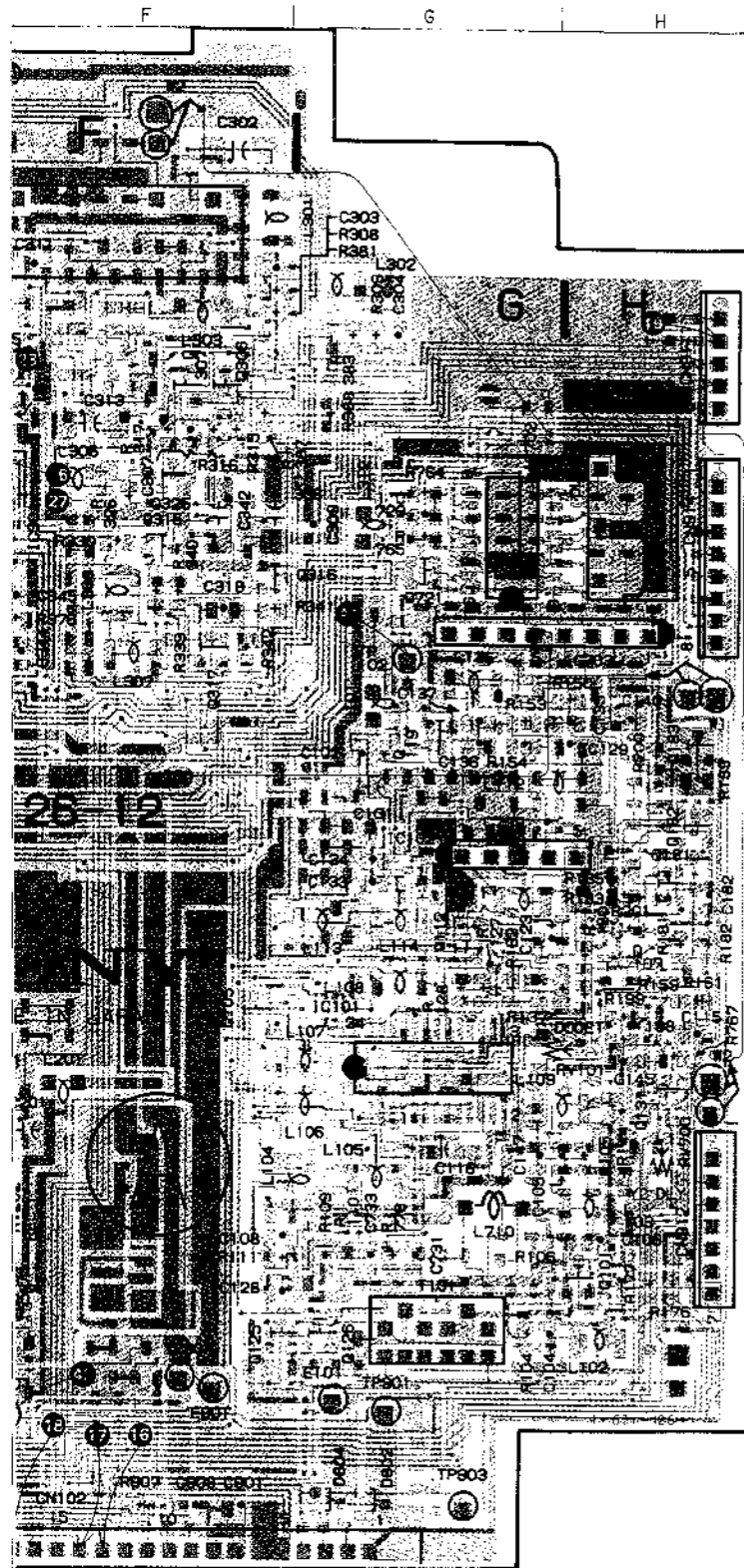
- D101 F-4
- D102 F-4
- D105 G-3
- D106 G-4
- D107 F-4
- D108 G-3
- D109 H-4
- D302 E-1
- D401 D-2
- D402 D-1
- D403 D-1
- D405 D-2
- D501 C-2
- D602 D-5
- D603 A-1
- D604 A-1
- D801 C-5
- D821 A-3
- D822 A-3
- D901 G-6
- IC501 C-3
- IC603 C-5
- IC801 A-4
- Q102 F-5
- Q103 G-5
- Q104 G-4
- Q110 G-4
- Q111 G-4
- Q113 H-4
- Q116 F-4
- Q117 G-3
- Q118 F-3
- Q120 G-3
- Q121 H-3
- Q122 G-4
- Q123 G-4
- Q127 G-5
- Q128 H-5
- Q129 H-4
- Q130 H-4
- Q132 H-5
- Q183 H-3
- Q184 H-3
- Q209 E-4
- Q210 F-5
- Q211 F-5
- Q212 F-4
- Q213 F-3
- Q214 F-3
- Q217 F-5
- Q218 F-5
- Q301 G-1
- Q302 G-1
- Q305 G-1
- Q309 F-1
- Q310 G-2
- Q311 F-3
- Q312 F-3
- Q313 F-3
- Q314 F-2
- Q318 F-2
- Q319 F-1
- Q320 F-1
- Q321 F-2
- Q326 F-2
- Q327 F-2
- Q328 G-2
- Q330 F-3
- Q389 F-2
- Q401 G-1
- Q402 G-1
- Q406 D-3
- Q407 D-2
- Q408 D-2
- Q409 D-3
- Q410 D-3
- Q411 F-3
- Q412 F-3
- Q415 D-2
- Q416 D-2
- Q418 D-1
- Q419 D-2
- Q420 D-1
- Q421 D-1
- Q424 D-2
- Q425 F-3
- Q427 C-1
- Q428 C-1
- Q429 C-1
- Q430 C-1

- Q501 C-2
- Q502 C-1
- Q503 C-2
- Q504 B-3
- Q601 B-5
- Q606 C-5
- Q609 A-4
- Q612 A-1
- Q613 A-1
- Q701 D-3
- Q702 D-3
- Q703 D-4
- Q706 E-3
- Q707 E-4
- Q710 D-4
- Q711 D-4
- Q712 D-5
- Q720 G-2
- Q722 G-5
- Q723 G-5
- Q724 G-5
- Q802 A-4
- Q803 A-3
- Q804 A-3
- Q805 A-2
- Q811 C-5
- Q901 F-5
- Q902 F-5
- Q903 F-5
- Q904 F-5

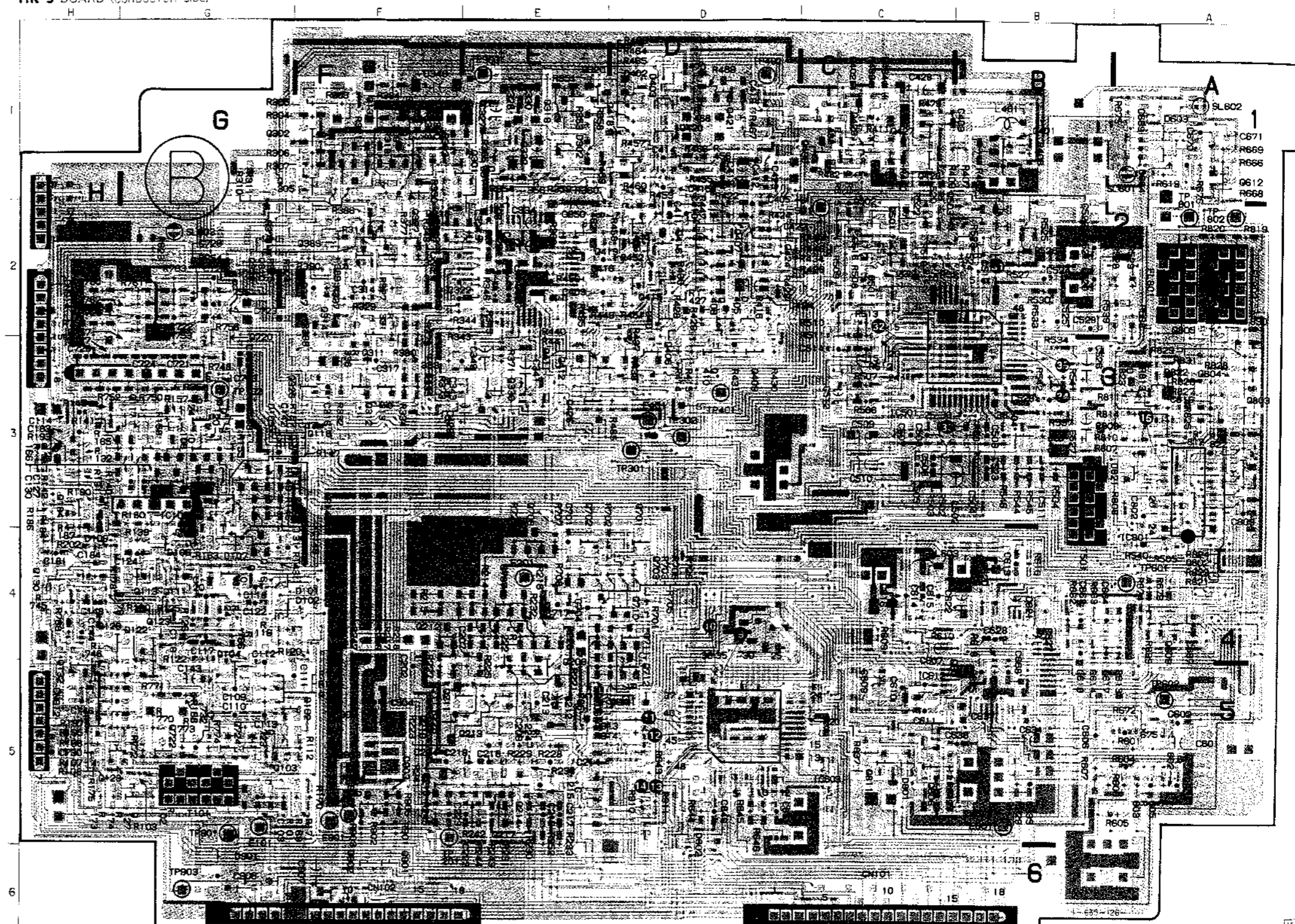
HK-5 BOARD (COMPONENT SIDE)



HK-5 I



HK-5 BOARD (CONDUCTOR SIDE)



A-7062-164-A HK-5 BOARD, COMPLETE

 (Ref. No 4,000 Series)

< DIODE >

D101	8-719-400-18	DIODE	MA152WK
D102	8-719-400-18	DIODE	MA152WK
D105	8-719-800-76	DIODE	1SS226
D106	8-719-400-18	DIODE	MA152WK
D107	8-719-400-18	DIODE	MA152WK
D108	8-719-400-18	DIODE	MA152WK
D109	8-719-400-18	DIODE	MA152WK
D301	8-719-400-18	DIODE	MA152WK
D302	8-719-400-18	DIODE	MA152WK
D401	8-719-400-18	DIODE	MA152WK
D402	8-719-400-18	DIODE	MA152WK
D403	8-719-400-18	DIODE	MA152WK
D404	8-719-400-18	DIODE	MA152WK
D405	8-719-400-18	DIODE	MA152WK
D501	8-719-400-18	DIODE	MA152WK
D601	8-719-800-76	DIODE	1SS226
D602	8-719-400-18	DIODE	MA152WK
D603	8-719-400-18	DIODE	MA152WK
D604	8-719-400-18	DIODE	MA152WK
D605	8-719-400-18	DIODE	MA152WK
D801	8-719-400-18	DIODE	MA152WK
D802	8-719-400-18	DIODE	MA152WK
D804	8-719-400-18	DIODE	MA152WK
D821	8-719-400-18	DIODE	MA152WK
D822	8-719-800-76	DIODE	1SS226
D823	8-719-800-76	DIODE	1SS226
D901	8-719-400-18	DIODE	MA152WK

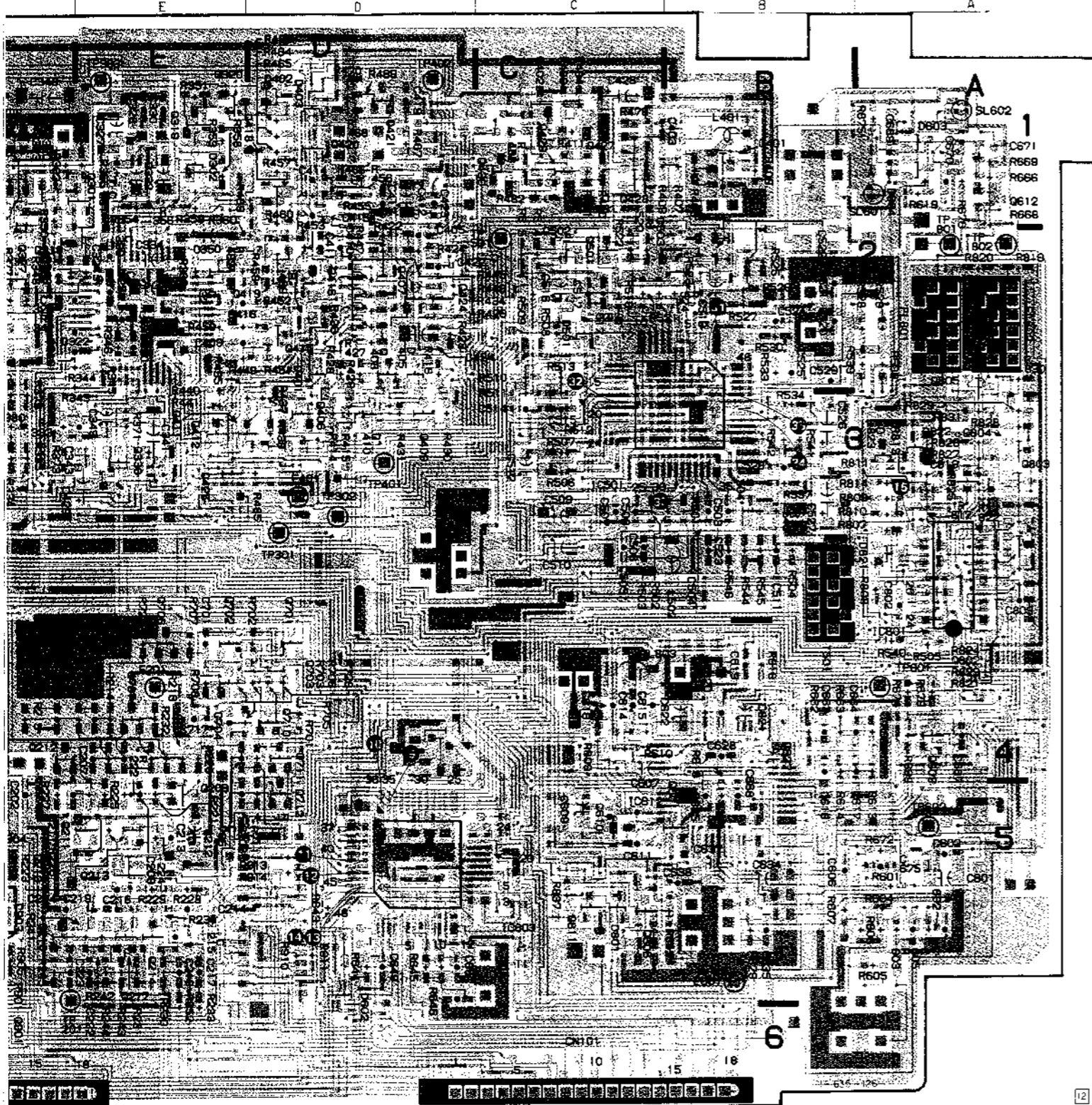
< IC >

IC101	8-759-233-94	IC	TA8607F
IC102	8-759-925-50	IC	BA401
IC301	8-752-002-XX	IC	CX20030
IC401	8-752-031-01	IC	CXA1047M
IC501	8-752-003-12	IC	CX20031
IC601	8-752-202-10	IC	CX22021
IC602	8-752-003-22	IC	CX20032
IC603	8-752-305-47	IC	CX23054
IC604	8-759-009-51	IC	MC14538BF
IC702	8-759-012-00	IC	MC10H116M
IC703	8-752-006-12	IC	CX20061
IC801	8-759-202-67	IC	CX20117
IC901	8-759-925-74	IC	SN74MCO4ANS
IC902	8-759-925-74	IC	SN74MCO4ANS

< TRANSISTOR >

Q101	8-729-200-85	TRANSISTOR	2SC27140
Q102	8-729-901-01	TRANSISTOR	DTA114EK
Q103	8-729-200-85	TRANSISTOR	2SC27140
Q104	8-729-901-01	TRANSISTOR	DTA144EK
Q105	8-729-904-07	TRANSISTOR	FM92
Q107	8-729-201-27	TRANSISTOR	2SC2715
Q110	8-729-901-01	TRANSISTOR	DTC144EK
Q111	8-729-200-86	TRANSISTOR	2SC27140
Q112	8-729-901-01	TRANSISTOR	DTC144EK
Q113	8-729-200-86	TRANSISTOR	2SC27140
Q116	8-729-201-27	TRANSISTOR	2SC2715
Q117	8-729-200-86	TRANSISTOR	2SC27140
Q118	8-729-200-86	TRANSISTOR	2SC27140
Q119	8-729-200-86	TRANSISTOR	2SC27140
Q120	8-729-200-86	TRANSISTOR	2SC27140

Q121	8-729-201-27	TRANSISTOR	2SC2715	Q414	8-729-201-27	TRANSISTOR	2SC2715
Q122	8-729-901-01	TRANSISTOR	DTC144EK	Q415	8-729-216-22	TRANSISTOR	2SA1162
Q123	8-729-901-01	TRANSISTOR	DTC144EK	Q416	8-729-216-22	TRANSISTOR	2SA1162
Q124	8-729-901-06	TRANSISTOR	DTA144EK	Q417	8-729-901-01	TRANSISTOR	DTC144EK
Q125	8-729-901-01	TRANSISTOR	DTC144EK	Q418	8-729-201-27	TRANSISTOR	2SC2715
Q126	8-729-201-27	TRANSISTOR	2SC2715	Q419	8-729-201-27	TRANSISTOR	2SC2715
Q127	8-729-201-27	TRANSISTOR	2SC2715	Q420	8-729-202-38	TRANSISTOR	2SC3326N
Q128	8-729-202-38	TRANSISTOR	2SC3326N	Q421	8-729-202-38	TRANSISTOR	2SC3326N
Q129	8-729-201-27	TRANSISTOR	2SC2715	Q422	8-729-201-27	TRANSISTOR	2SC2715
Q130	8-729-201-27	TRANSISTOR	2SC2715	Q423	8-729-201-27	TRANSISTOR	2SC2715
Q131	8-729-216-22	TRANSISTOR	2SA1162	Q424	8-729-901-01	TRANSISTOR	DTC144EK
Q132	8-729-201-27	TRANSISTOR	2SC2715	Q425	8-729-201-27	TRANSISTOR	2SC2715
Q181	8-729-901-46	TRANSISTOR	1M21	Q426	8-729-201-27	TRANSISTOR	2SC2715
Q182	8-729-903-10	TRANSISTOR	FMW1	Q427	8-729-216-22	TRANSISTOR	2SA1162
Q183	8-729-200-86	TRANSISTOR	2SC27140	Q428	8-729-216-22	TRANSISTOR	2SA1162
Q184	8-729-216-22	TRANSISTOR	2SA1162	Q429	8-729-901-01	TRANSISTOR	DTC144EK
Q209	8-729-200-86	TRANSISTOR	2SC27140	Q430	8-729-901-01	TRANSISTOR	DTC144EK
Q210	8-729-200-86	TRANSISTOR	2SC27140	Q431	8-729-216-22	TRANSISTOR	2SA1162
Q211	8-729-200-86	TRANSISTOR	2SC27140	Q501	8-729-901-06	TRANSISTOR	DTA144EK
Q212	8-729-901-01	TRANSISTOR	DTC144EK	Q502	8-729-901-01	TRANSISTOR	DTC144EK
Q213	8-729-901-06	TRANSISTOR	DTA144EK	Q503	8-729-901-00	TRANSISTOR	DTC124EK
Q214	8-729-200-86	TRANSISTOR	2SC27140	Q504	8-729-201-27	TRANSISTOR	2SC2715
Q215	8-729-902-96	TRANSISTOR	FMS1	Q601	8-729-901-01	TRANSISTOR	DTC144EK
Q217	8-729-200-86	TRANSISTOR	2SC27140	Q603	8-729-901-01	TRANSISTOR	DTC144EK
Q218	8-729-200-86	TRANSISTOR	2SC27140	Q604	8-729-201-27	TRANSISTOR	2SC2715
Q301	8-729-201-27	TRANSISTOR	2SC2715	Q605	8-729-201-27	TRANSISTOR	2SC2715
Q302	8-729-201-27	TRANSISTOR	2SC2715	Q606	8-729-901-01	TRANSISTOR	DTC144EK
Q305	8-729-201-27	TRANSISTOR	2SC2715	Q607	8-729-201-27	TRANSISTOR	2SC2715
Q306	8-729-201-27	TRANSISTOR	2SC2715	Q608	8-729-216-22	TRANSISTOR	2SA1162
Q307	8-729-201-27	TRANSISTOR	2SC2715	Q609	8-729-901-00	TRANSISTOR	DTC124EK
Q309	8-729-201-27	TRANSISTOR	2SC2715	Q610	8-729-904-04	TRANSISTOR	FMS2
Q310	8-729-201-27	TRANSISTOR	2SC2715	Q611	8-729-201-27	TRANSISTOR	2SC2715
Q311	8-729-201-27	TRANSISTOR	2SC2715	Q612	8-729-201-27	TRANSISTOR	2SC2715
Q312	8-729-901-06	TRANSISTOR	DTA144EK	Q613	8-729-901-01	TRANSISTOR	DTC144EK
Q313	8-729-216-22	TRANSISTOR	2SA1162	Q701	8-729-201-27	TRANSISTOR	2SC2715
Q314	8-729-201-27	TRANSISTOR	2SC2715	Q702	8-729-202-38	TRANSISTOR	2SC3326N
Q315	8-729-201-27	TRANSISTOR	2SC2715	Q703	8-729-202-38	TRANSISTOR	2SC3326N
Q316	8-729-901-01	TRANSISTOR	DTC144EK	Q704	8-729-216-22	TRANSISTOR	2SA1162
Q317	8-729-201-27	TRANSISTOR	2SC2715	Q706	8-729-201-27	TRANSISTOR	2SC2715
Q318	8-729-901-06	TRANSISTOR	DTA144EK	Q707	8-729-201-27	TRANSISTOR	2SC2715
Q319	8-729-201-27	TRANSISTOR	2SC2715	Q710	8-729-901-01	TRANSISTOR	DTC144EK
Q320	8-729-901-01	TRANSISTOR	DTC144EK	Q711	8-729-901-01	TRANSISTOR	DTC144EK
Q321	8-729-901-01	TRANSISTOR	DTC144EK	Q712	8-729-901-01	TRANSISTOR	DTC144EK
Q322	8-729-216-22	TRANSISTOR	2SA1162	Q720	8-729-200-86	TRANSISTOR	2SC27140
Q323	8-729-901-01	TRANSISTOR	DTC144EK	Q721	8-729-200-86	TRANSISTOR	2SC27140
Q324	8-729-901-01	TRANSISTOR	DTC144EK	Q722	8-729-200-86	TRANSISTOR	2SC27140
Q325	8-729-901-06	TRANSISTOR	DTA144EK	Q723	8-729-201-27	TRANSISTOR	2SC2715
Q326	8-729-901-06	TRANSISTOR	DTA144EK	Q724	8-729-901-01	TRANSISTOR	DTC144EK
Q327	8-729-201-27	TRANSISTOR	2SC2715	Q801	8-729-920-08	TRANSISTOR	DTC124TK-T146
Q328	8-729-201-27	TRANSISTOR	2SC2715	Q802	8-729-201-27	TRANSISTOR	2SC2715
Q330	8-729-901-06	TRANSISTOR	DTA144EK	Q803	8-729-201-27	TRANSISTOR	2SC2715
Q389	8-729-201-27	TRANSISTOR	2SC2715	Q804	8-729-201-27	TRANSISTOR	2SC2715
Q401	8-729-201-27	TRANSISTOR	2SC2715	Q805	8-729-216-22	TRANSISTOR	2SA1162
Q402	8-729-201-27	TRANSISTOR	2SC2715	Q811	8-729-901-01	TRANSISTOR	DTC144EK
Q403	8-729-901-01	TRANSISTOR	DTC144EK	Q901	8-729-901-01	TRANSISTOR	DTC144EK
Q404	8-729-901-01	TRANSISTOR	DTC144EK	Q902	8-729-901-01	TRANSISTOR	DTC144EK
Q405	8-729-901-06	TRANSISTOR	DTA144EK	Q903	8-729-104-25	TRANSISTOR	2SB804-AV
Q406	8-729-201-27	TRANSISTOR	2SC2715	Q904	8-729-201-27	TRANSISTOR	2SC2715
Q407	8-729-216-22	TRANSISTOR	2SA1162				
Q408	8-729-216-22	TRANSISTOR	2SA1162				
Q409	8-729-201-27	TRANSISTOR	2SC2715				
Q410	8-729-216-22	TRANSISTOR	2SA1162				
Q411	8-729-901-01	TRANSISTOR	DTC144EK				
Q412	8-729-901-01	TRANSISTOR	DTC144EK				
Q413	8-729-901-01	TRANSISTOR	DTC144EK				



* A-7062-164-A HK-5 BOARD, COMPLETE

(Ref. No 4,000 Series)

< DIODE >

Table listing diode components with part numbers (e.g., D101, D102), descriptions (e.g., 8-719-400-18 DIODE), and manufacturer codes (e.g., MA152WK, 1SS226).

< IC >

Table listing IC components with part numbers (e.g., IC101, IC102), descriptions (e.g., 8-759-233-94 IC), and manufacturer codes (e.g., TAB607F, BA401).

< TRANSISTOR >

Table listing transistor components with part numbers (e.g., Q101, Q102), descriptions (e.g., 8-729-200-86 TRANSISTOR), and manufacturer codes (e.g., 2SC27140, DTA1144EK).

Table listing transistor components with part numbers (e.g., Q121, Q122), descriptions (e.g., 8-729-201-27 TRANSISTOR), and manufacturer codes (e.g., 2SC2715, DTC144EK).

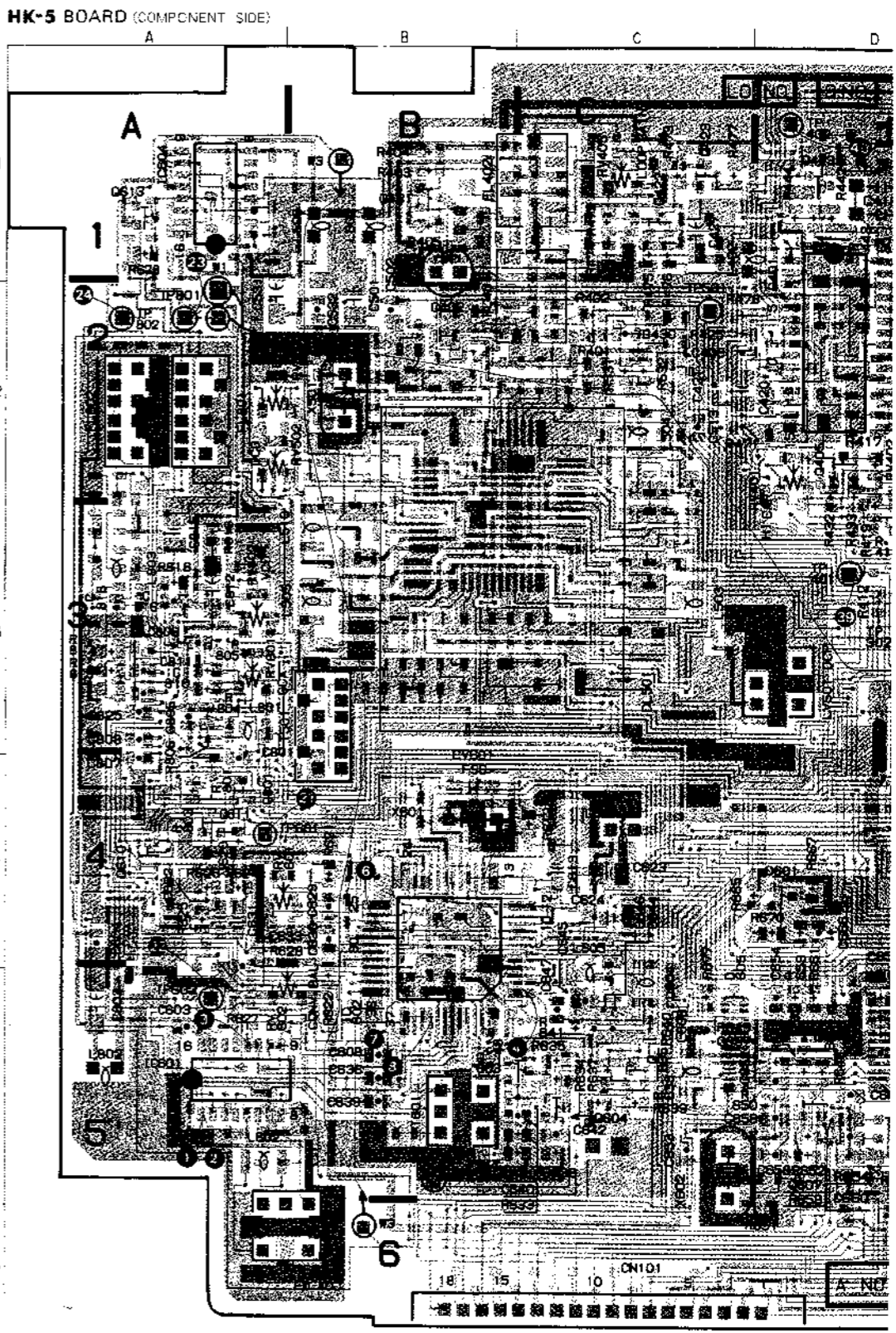
Table listing transistor components with part numbers (e.g., Q414, Q415), descriptions (e.g., 8-729-201-27 TRANSISTOR), and manufacturer codes (e.g., 2SC2715, 2SA1162).

Table listing transistor components with part numbers (e.g., Q419, Q420), descriptions (e.g., 8-729-201-27 TRANSISTOR), and manufacturer codes (e.g., 2SC2715, 2SC3326H).

Table listing components for HK-5 BOARD (COMPONENT SIDE) and HK-5 BOARD (CONDUCTOR SIDE), including part numbers (e.g., D301, D404) and descriptions (e.g., E-1, F-4).

HK-5 (CHROMA SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX)

— Ref. No. HK-5 BOARD: 4000 series —



HK-5 (CHROMA SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX) PRINTED WIRING BOARD

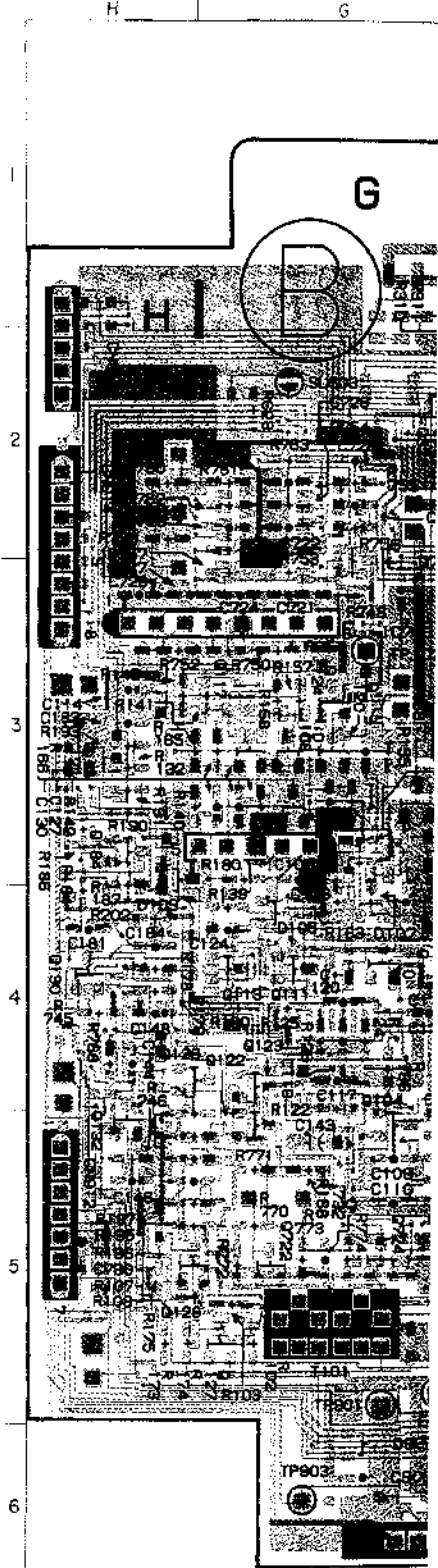
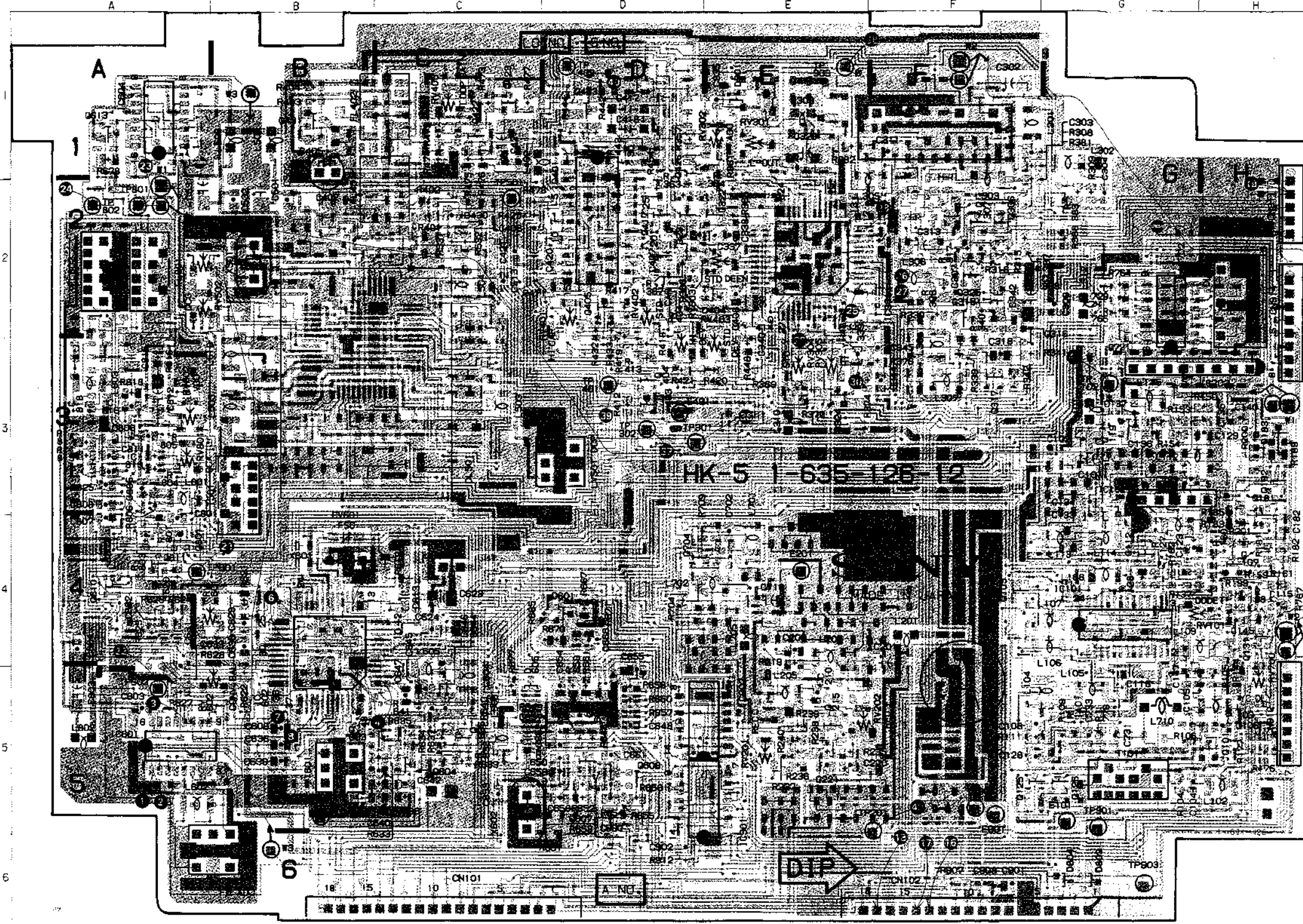
— Ref. No. HK-5 BOARD: 4000 series —

K-5 BOARD
CONDUCTOR
SIDE)

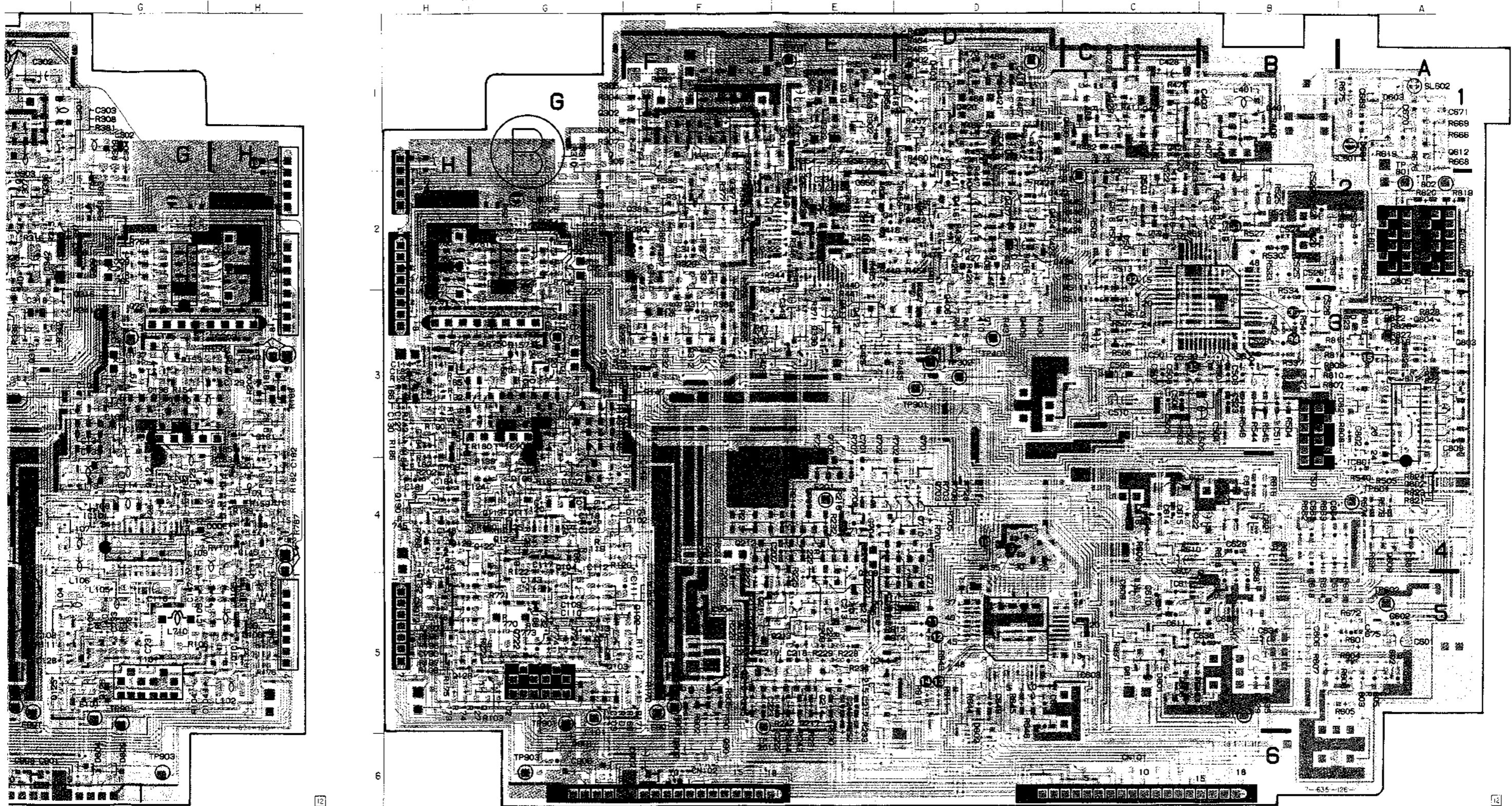
HK-5 BOARD (COMPONENT SIDE)

HK-5 BOARD (CONDUCTOR SIDE)

- | | | | |
|------|-----|------|-----|
| 101 | F-4 | Q501 | C-2 |
| 102 | F-4 | Q502 | C-1 |
| 105 | G-3 | Q503 | C-2 |
| 106 | G-4 | Q504 | B-3 |
| 107 | F-4 | Q601 | B-5 |
| 108 | G-3 | Q606 | C-5 |
| 109 | H-4 | Q609 | A-4 |
| 302 | E-1 | Q812 | A-1 |
| 401 | D-2 | Q813 | A-1 |
| 402 | D-1 | Q701 | D-3 |
| 403 | D-1 | Q702 | D-3 |
| 405 | D-2 | Q703 | D-4 |
| 501 | C-2 | Q706 | E-3 |
| 602 | D-5 | Q707 | E-4 |
| 603 | A-1 | Q710 | D-4 |
| 604 | A-1 | Q711 | D-4 |
| 801 | C-5 | Q712 | D-5 |
| 821 | A-3 | Q720 | G-2 |
| 822 | A-3 | Q722 | G-5 |
| 901 | G-6 | Q723 | G-5 |
| | | Q724 | G-5 |
| 3501 | C-3 | Q802 | A-4 |
| 3603 | C-5 | Q803 | A-3 |
| 3801 | A-4 | Q804 | A-3 |
| | | Q805 | A-2 |
| | | Q811 | C-5 |
| 1102 | F-5 | Q901 | F-6 |
| 1103 | G-5 | Q902 | F-6 |
| 1104 | G-4 | Q903 | F-5 |
| 1110 | G-4 | Q903 | F-5 |
| 1111 | G-4 | Q904 | F-5 |
| 1113 | H-4 | | |
| 1116 | F-4 | | |
| 1117 | G-3 | | |
| 1118 | F-3 | | |
| 1120 | G-3 | | |
| 1121 | H-3 | | |
| 1122 | G-4 | | |
| 1123 | G-4 | | |
| 1127 | G-5 | | |
| 1128 | H-5 | | |
| 1129 | H-4 | | |
| 1130 | H-4 | | |
| 1132 | H-5 | | |
| 1183 | H-3 | | |
| 1184 | H-3 | | |
| 1209 | E-4 | | |
| 1210 | F-6 | | |
| 1211 | F-5 | | |
| 1212 | F-4 | | |
| 1213 | E-5 | | |
| 1214 | E-5 | | |
| 1217 | E-5 | | |
| 1218 | F-5 | | |
| 1301 | E-1 | | |
| 1302 | G-1 | | |
| 1305 | G-1 | | |
| 1309 | F-1 | | |
| 1310 | G-2 | | |
| 1311 | F-3 | | |
| 1312 | F-3 | | |
| 1313 | F-3 | | |
| 1314 | F-2 | | |
| 1318 | F-2 | | |
| 1319 | E-1 | | |
| 1320 | E-1 | | |
| 1321 | E-2 | | |
| 1326 | G-3 | | |
| 1327 | F-2 | | |
| 1328 | G-2 | | |
| 1330 | E-3 | | |
| 1389 | F-2 | | |
| 1401 | B-1 | | |
| 1402 | C-1 | | |
| 1406 | D-3 | | |
| 1407 | D-2 | | |
| 1408 | D-2 | | |
| 1409 | D-3 | | |
| 1410 | D-3 | | |
| 1411 | E-3 | | |
| 1412 | E-3 | | |
| 1415 | D-2 | | |
| 1416 | D-2 | | |
| 1418 | D-1 | | |
| 1419 | D-2 | | |
| 1420 | D-1 | | |
| 1421 | D-1 | | |
| 1424 | D-2 | | |
| 1425 | E-3 | | |
| 1427 | C-1 | | |
| 1428 | C-1 | | |
| 1429 | C-1 | | |
| 1430 | C-1 | | |



HK-5 BOARD (CONDUCTOR SIDE)



IC702

LIMITER AMP/HIGH FREQUENCY AMP

Q722, Q723, Q724
Y EQUALIZER

Q127
AFM STEREO SWITCH

IC102

LIMITER AMP

IC101

DROPOUT DETECT

Q126
CNR SWITCH

Q181, 182
DROPOUT DETECT

Q110, 112
H18/STD
GAIN SWITCH

Q105, 104
EQ CHARACTER SWITCH

Q128
CNR SWITCH

Q125
INVERTER

Q121
LIMITER SWITCH

Q122, 123
TIME CONSTANT SWITCH

Q107
PB RF BUFFER

Q215
ME/MP/MPHG SWITCH

Q217, 218
Y/C/AFM/ATF MIX

Q213
ME/MP SWITCH

REC CHROMA LEVEL

Q209
REC Y EQ

Q210, 211
H18/STD SWITCH

Q212
H18/STD SWITCH

Q214
C/AFM/ATF MIX

Q129
PB C EQ

Q130
CNR DETECT

Q131
PB C AMP

Q132
PB C AMP

Q133
PB C AMP

Q134
PB C AMP

Q135
PB C AMP

Q136
PB C AMP

Q137
PB C AMP

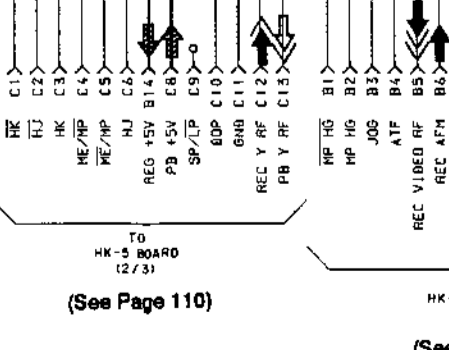
Q138
PB C AMP

Q139
PB C AMP

Q140
PB C AMP

Q141
PB C AMP

Q142
PB C AMP

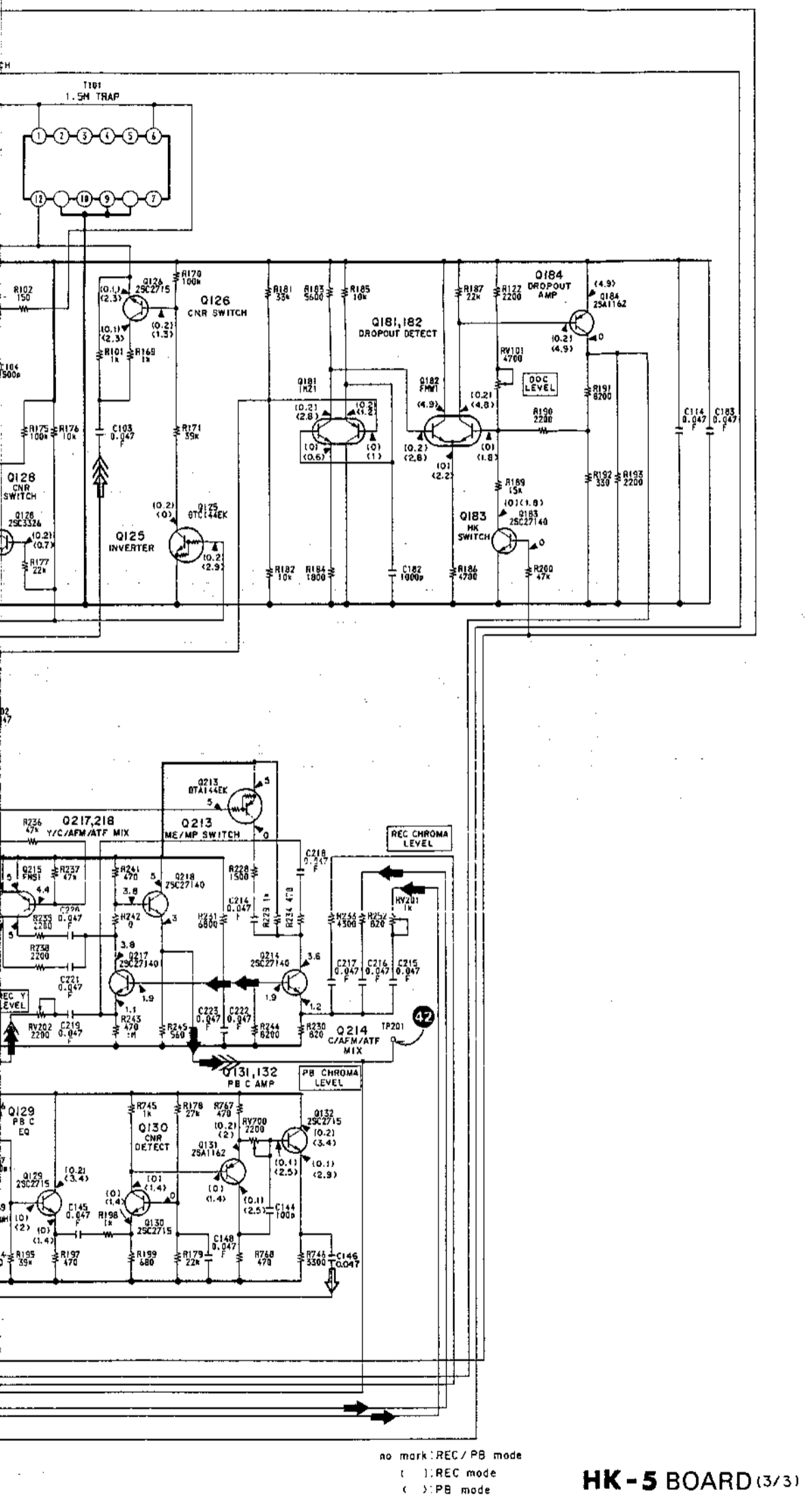


TO
HK-5 BOARD
(2/3)

TO
HK-5 BOARD
(1/3)

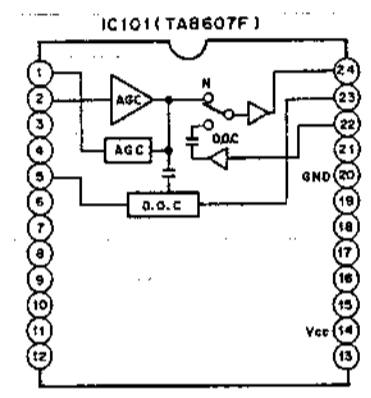
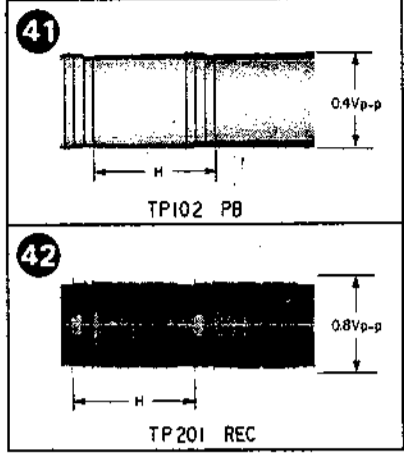
(See Page 110)

(See Page 105)



HK-5 BOARD (3/3)

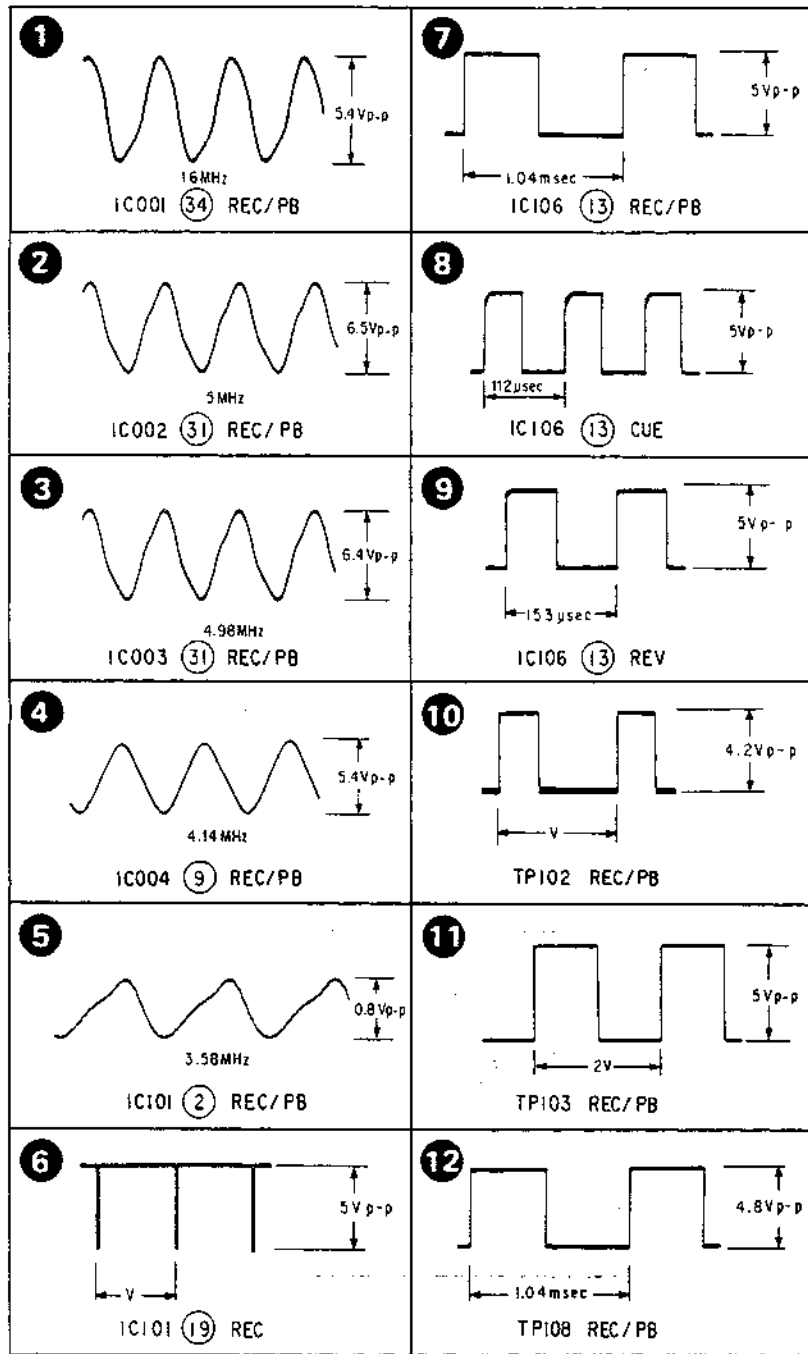
HK-5 BOARD (3/3)



SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	→	→	→
PB	⇒	⇒	⇒	⇒

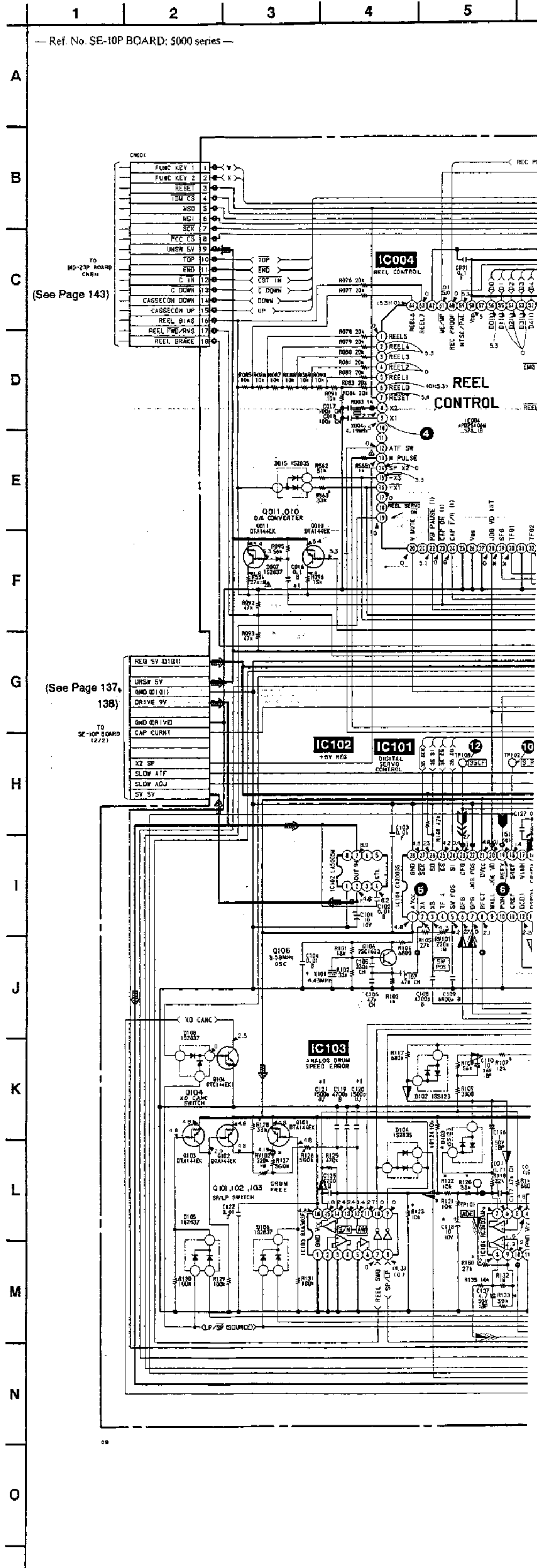
SE-10P BOARD (1/2)



• SIGNAL PATH

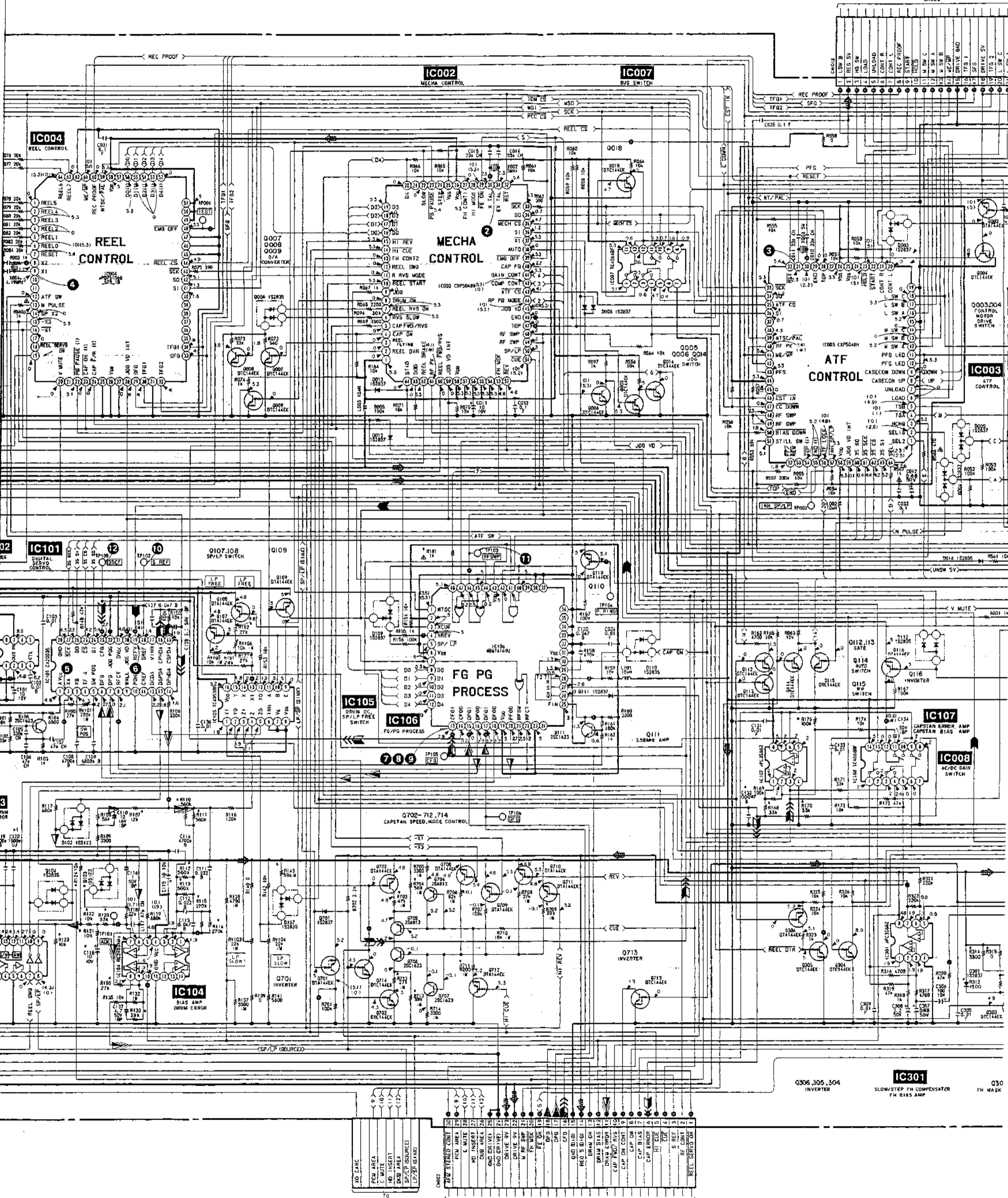
	REC	REC/PB	PB
Drum speed servo		▶	
Drum phase servo		▶	
Drum servo (speed and phase)		▶▶	
Capstan speed servo		▶	
Capstan phase servo		▶	
Capstan servo (speed and phase)		▶▶	
Ref. signal	▶▶		

SE-10P (SERVO, SYSTEM CONTROL) SCHEMATIC DIAGRAM



(See Page 150)

TS
RS-34 BOARD
CM305



(See Page 137.)
138)

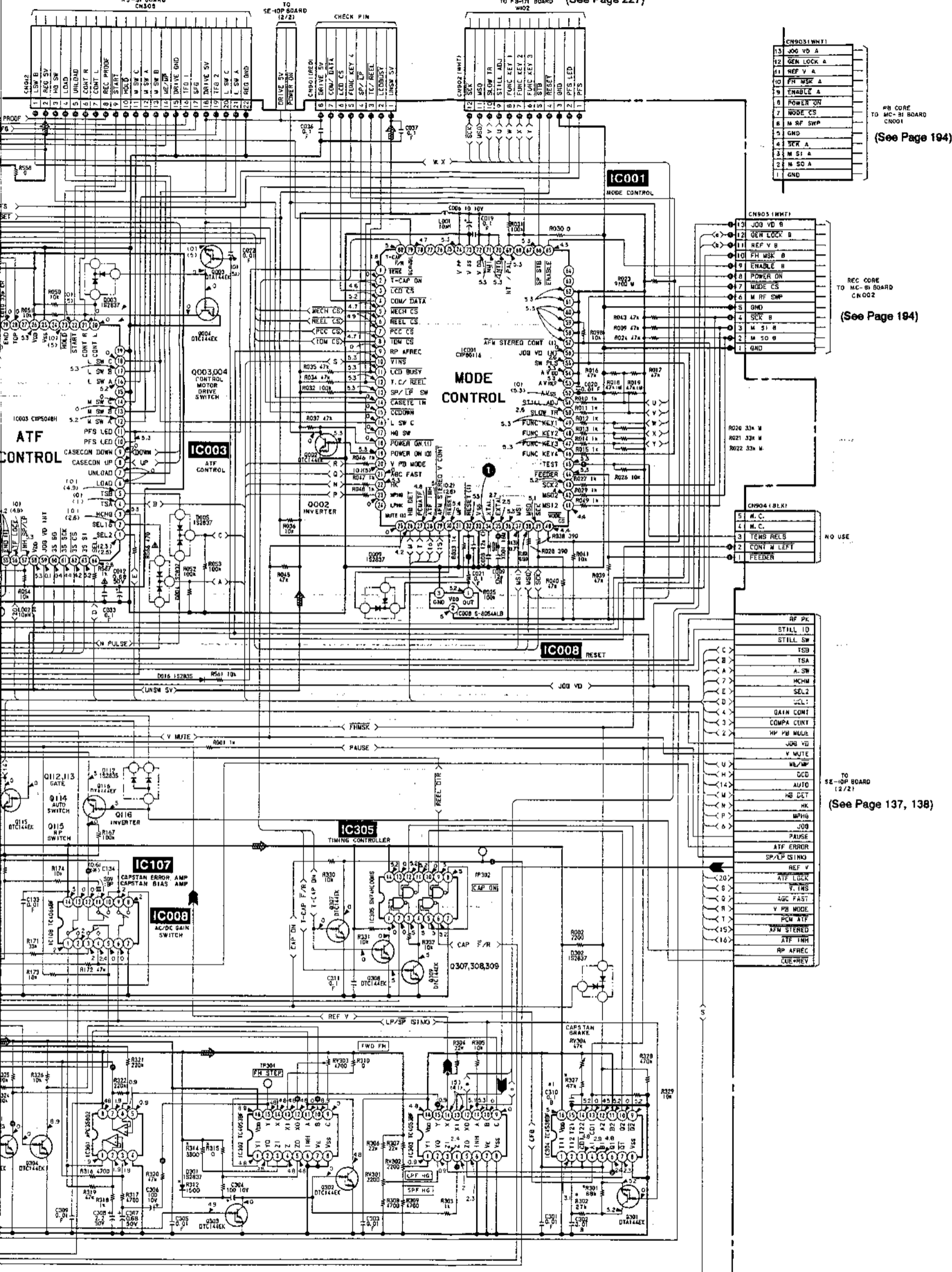
(See Page 144.)

(See Page 150)

(See Page 138)

(See Page 223)

(See Page 227)



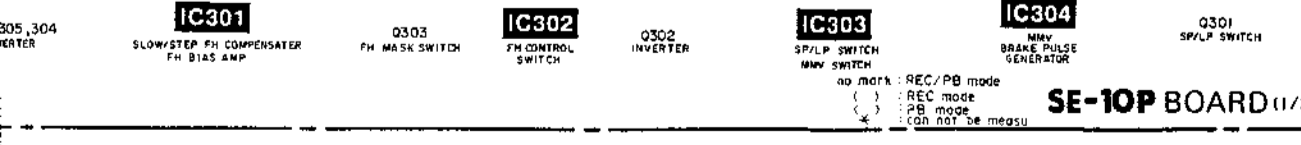
CH9031WMT1

13	JOB VD A
12	GEN LOCK A
11	REF V A
10	FH WSK A
9	ENABLE A
8	POWER ON
7	MODE CS
6	M RF SWP
5	GND
4	SEK A
3	M SI A
2	M SO A
1	GND

REC CORE TO MC-31 BOARD C9001 (See Page 194)

REC CORE TO MC-31 BOARD C9002 (See Page 184)

TO SE-10P BOARD 12/21 (See Page 137, 138)

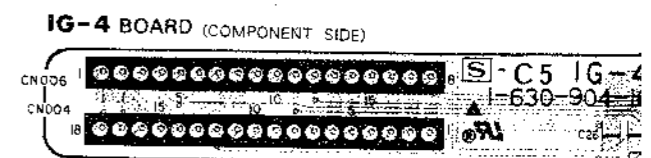
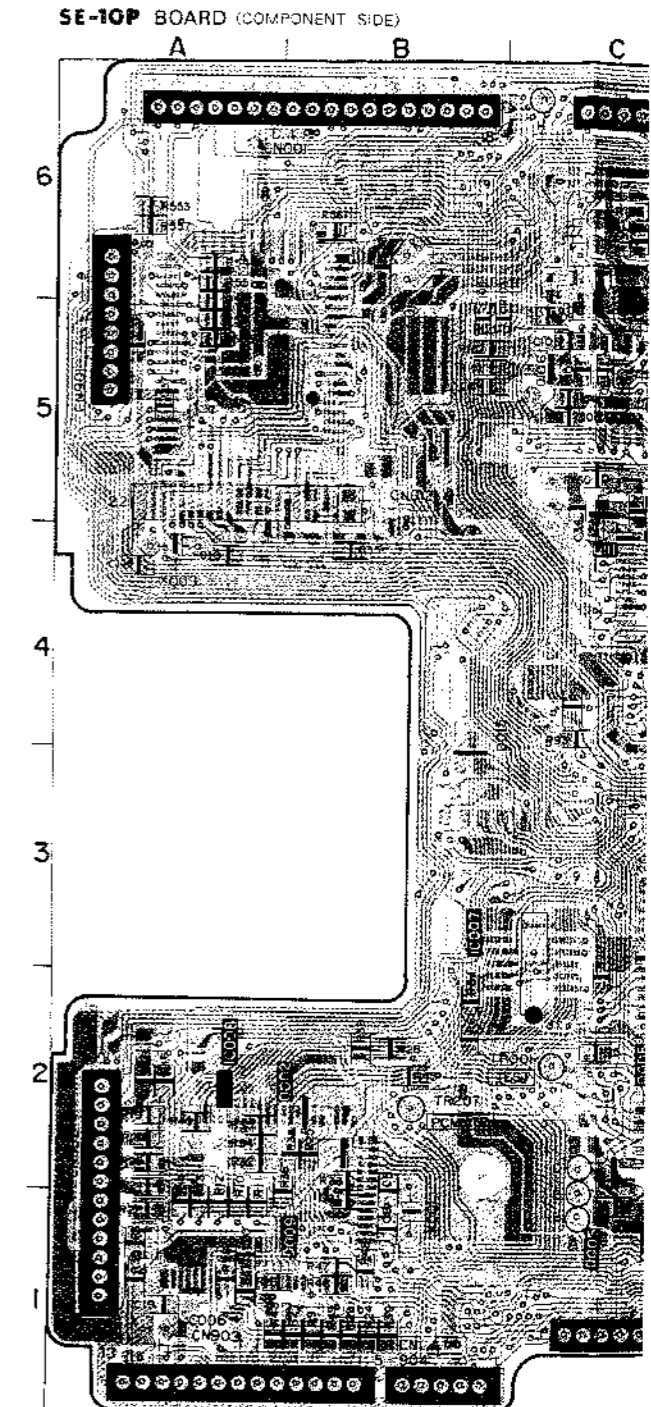
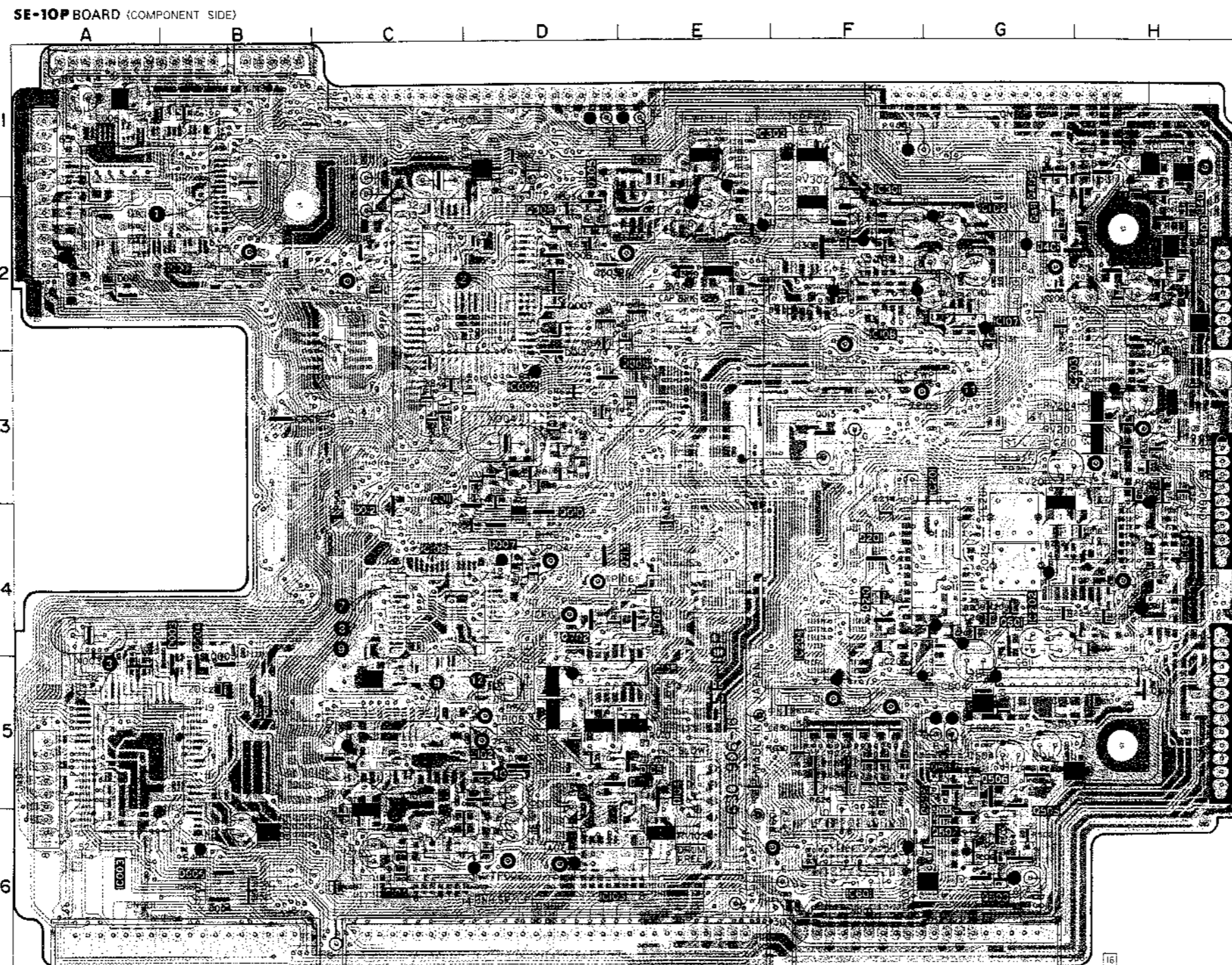


SE-10P BOARD (1/2)

SE-10P (SERVO, SYSTEM CONTROL), IG-4 (BOARD LINK) PRINTED WIRING BOARDS

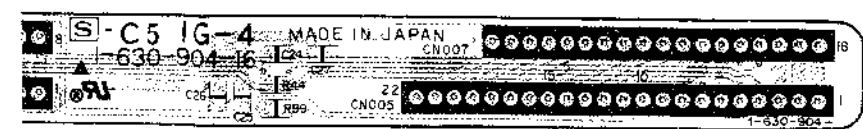
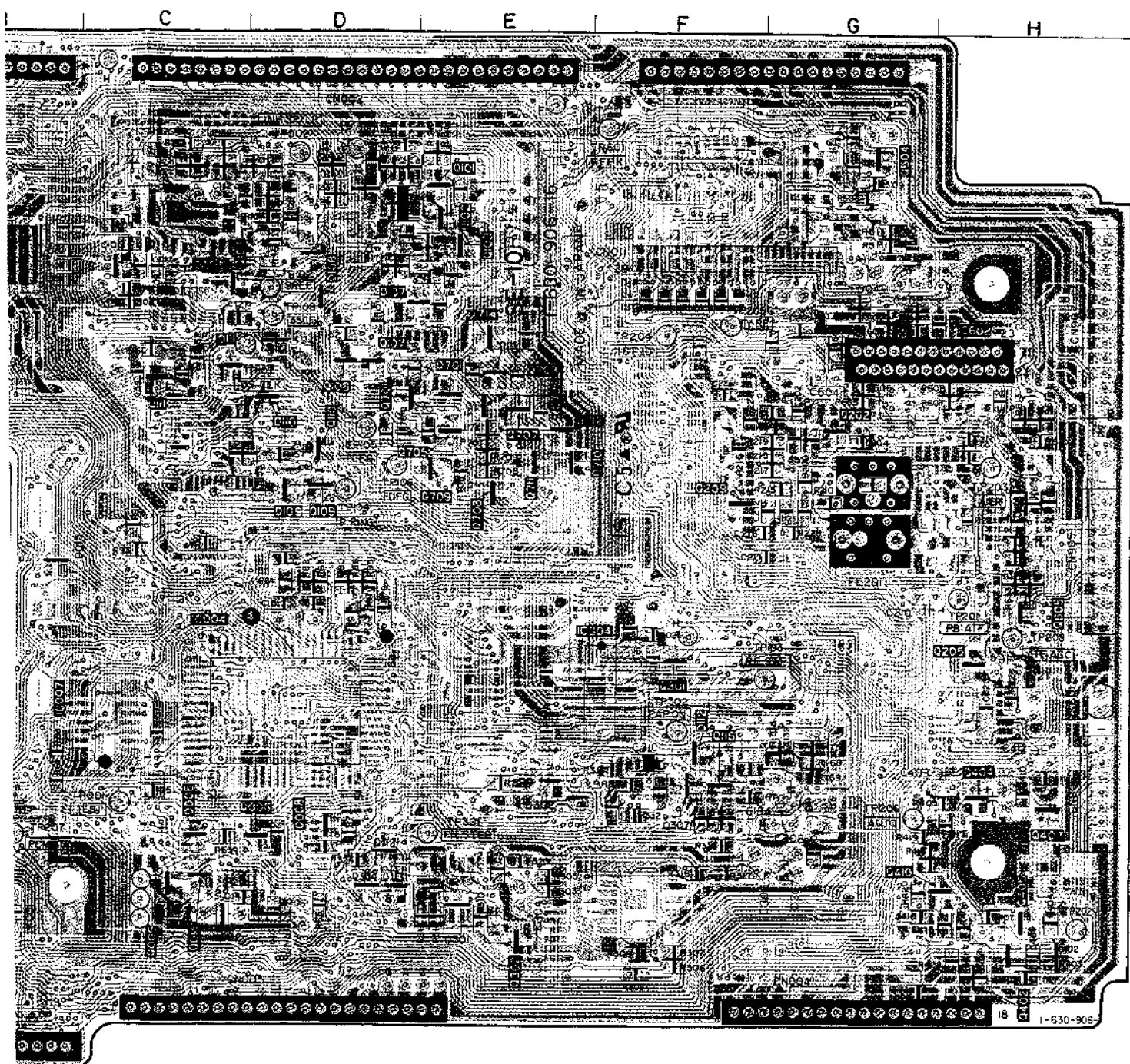
--- Ref. No. SE-10P BOARD: 5000 series, IG-4 BOARD: 6000 series ---

SE-10P BOARD (COMPONENT SIDE)		SE-10P BOARD (CONDUCTOR SIDE)	
D003	B-5	D008	C-2
D004	B-6	D009	B-1
D005	B-6	D015	B-4
D006	D-2	D107	D-5
D007	D-4	D108	D-5
D012	C-4	D109	D-4
D013	D-3	D110	D-4
D016	A-2	D111	C-5
D101	D-6	D112	F-3
D102	D-5	D203	H-3
D103	D-5	D301	E-1
D104	E-5	D302	E-2
D105	E-5	D701	E-5
D106	E-5		
D201	F-4	IC004	C-3
D401	G-2	IC007	C-3
		IC008	A-2
		IC304	F-3
IC001	B-2	Q002	B-2
IC002	D-3	Q005	C-1
IC003	A-5	Q006	D-2
IC101	C-5	Q008	D-2
IC102	G-2	Q014	C-1
IC103	D-6	Q101	E-6
IC104	C-6	Q102	E-5
IC105	E-5	Q103	E-5
IC106	C-4	Q104	C-6
IC107	G-2	Q106	B-5
IC108	F-2	Q107	D-5
IC201	G-4	Q108	D-5
IC202	G-4	Q109	D-4
IC203	H-3	Q110	D-4
IC204	F-4	Q111	C-4
IC205	F-4	Q112	D-2
IC301	F-2	Q113	D-1
IC302	E-2	Q115	F-2
IC303	E-1	Q116	F-2
IC305	E-3	Q202	G-4
IC601	F-6	Q205	H-3
IC602	G-5	Q209	F-4
IC603	H-4	Q301	F-3
IC604	H-4	Q302	F-1
Q003	B-4	Q304	D-2
Q004	B-4	Q307	F-2
Q007	D-2	Q402	H-1
Q009	E-3	Q404	H-2
Q010	D-4	Q405	H-1
Q011	C-3	Q407	H-2
Q015	F-3	Q410	G-2
Q018	C-2	Q504	G-6
Q114	D-2	Q605	H-3
Q210	F-4	Q701	D-4
Q303	E-2	Q703	E-5
Q305	D-2	Q705	E-4
Q306	D-2	Q706	E-4
Q308	F-2	Q707	E-4
Q309	E-2	Q708	E-4
Q401	H-2	Q709	E-4
Q403	H-1	Q710	E-4
Q406	H-2	Q711	E-4
Q408	H-2	Q712	E-4
Q409	C-2	Q714	E-5
Q411	G-2		
Q502	G-6		
Q503	C-6		
Q505	C-5		
Q506	C-5		
Q507	C-5		
Q508	C-5		
Q601	C-4		
Q604	H-3		
Q606	H-5		
Q702	D-4		
Q704	E-4		
Q713	E-4		



* A-7062-167-A SE-10 (P) BOARD, COMPLETE

 (Ref. No 5,000 Series)



< DIODE >			
D003	8-719-400-18	DIODE	MA152WK
D004	8-719-400-18	DIODE	MA152WK
D005	8-719-400-18	DIODE	MA152WK
D006	8-719-104-34	DIODE	1S2836
D007	8-719-400-18	DIODE	MA152WK
D008	8-719-400-18	DIODE	MA152WK
D009	8-719-400-18	DIODE	MA152WK
D012	8-719-400-18	DIODE	MA152WK
D013	8-719-400-18	DIODE	MA152WK
D015	8-719-104-34	DIODE	1S2836
D016	8-719-104-34	DIODE	1S2836
D018	8-719-400-18	DIODE	MA152WK
D102	8-719-800-76	DIODE	1SS226
D103	8-719-800-76	DIODE	1SS226
D104	8-719-104-34	DIODE	1S2836
D105	8-719-400-18	DIODE	MA152WK
D106	8-719-400-18	DIODE	MA152WK
D107	8-719-104-34	DIODE	1S2836
D108	8-719-400-18	DIODE	MA152WK
D109	8-719-400-18	DIODE	MA152WK
D110	8-719-104-34	DIODE	1S2836
D111	8-719-400-18	DIODE	MA152WK
D112	8-719-104-34	DIODE	1S2836
D201	8-719-400-18	DIODE	MA152WK
D203	8-719-105-82	DIODE	RD5.1M
D301	8-719-400-18	DIODE	MA152WK
D302	8-719-400-18	DIODE	MA152WK
D401	8-719-800-76	DIODE	1SS226
D701	8-719-400-18	DIODE	MA152WK
< IC >			
IC001	8-752-816-72	IC	CXP80116-6920
IC003	8-752-815-13	IC	CXP5048H-2220
IC004	8-759-144-21	IC	uPD75106G-573-1B
IC007	8-759-008-67	IC	MC14066BF
IC008	8-759-937-56	IC	S-8054ALB
IC101	8-752-003-50	IC	CX20035
IC102	8-752-817-64	IC	CXP5048H-2440
IC102	8-759-803-47	IC	LA5005M
IC103	8-759-925-66	IC	8A6303F
IC104	8-759-981-75	IC	RC3403AM
IC105	8-759-300-71	IC	TC4053BF
IC106	8-759-971-25	IC	MB674169U
IC107	8-759-100-94	IC	uPC358G2
IC108	8-759-008-67	IC	MC14066BF
IC201	8-759-928-56	IC	CXA1042M
IC202	8-759-150-05	IC	uPC324G2
IC203	8-759-300-71	IC	TC4053BF
IC204	8-759-927-46	IC	SN74HC00ANS
IC205	8-759-711-79	IC	NJM2233BM
IC206	8-759-035-93	IC	SC7532F
IC301	8-759-100-94	IC	uPC358G2
IC302	8-759-300-71	IC	TC4053BF
IC303	8-759-300-71	IC	TC4053BF
IC304	8-759-200-90	IC	TC4538BF
IC305	8-759-927-46	IC	SN74HC00ANS
IC601	8-759-927-94	IC	8U3707F
IC602	8-759-927-52	IC	BA7036LS
IC603	8-759-100-93	IC	uPC39362
IC604	8-759-150-05	IC	uPC324G2
< TRANSISTOR >			
Q002	8-729-901-01	TRANSISTOR	DTC144EK
Q003	8-729-901-06	TRANSISTOR	DTA144EK
Q004	8-729-901-01	TRANSISTOR	DTC144EK
Q005	8-729-901-01	TRANSISTOR	DTC144EK
Q006	8-729-901-01	TRANSISTOR	DTC144EK
Q007	8-729-901-01	TRANSISTOR	DTC144EK
Q008	8-729-901-01	TRANSISTOR	DTC144EK
Q009	8-729-901-01	TRANSISTOR	DTC144EK
Q010	8-729-901-06	TRANSISTOR	DTA144EK
Q011	8-729-901-06	TRANSISTOR	DTA144EK
Q014	8-729-901-01	TRANSISTOR	DTC144EK
Q015	8-729-901-01	TRANSISTOR	DTC144EK
Q018	8-729-901-01	TRANSISTOR	DTC144EK
Q101	8-729-901-06	TRANSISTOR	DTA144EK
Q102	8-729-901-06	TRANSISTOR	DTA144EK
Q103	8-729-901-06	TRANSISTOR	DTA144EK
Q104	8-729-901-01	TRANSISTOR	DTC144EK
Q106	8-729-100-66	TRANSISTOR	2SC1623
Q107	8-729-901-06	TRANSISTOR	DTA144EK
Q108	8-729-901-06	TRANSISTOR	DTA144EK
Q109	8-729-901-06	TRANSISTOR	DTA144EK
Q110	8-729-901-06	TRANSISTOR	DTA144EK
Q111	8-729-100-66	TRANSISTOR	2SC1623
Q112	8-729-901-01	TRANSISTOR	DTC144EK
Q113	8-729-901-01	TRANSISTOR	DTC144EK
Q114	8-729-901-01	TRANSISTOR	DTC144EK
Q115	8-729-901-01	TRANSISTOR	DTC144EK
Q116	8-729-901-06	TRANSISTOR	DTA144EK
Q202	8-729-216-22	TRANSISTOR	2SA1162
Q205	8-729-901-01	TRANSISTOR	DTC144EK
Q209	8-729-901-06	TRANSISTOR	DTA144EK
Q210	8-729-901-01	TRANSISTOR	DTC144EK
Q301	8-729-901-06	TRANSISTOR	DTA144EK
Q302	8-729-901-01	TRANSISTOR	DTC144EK
Q303	8-729-901-01	TRANSISTOR	DTC144EK
Q304	8-729-901-01	TRANSISTOR	DTC144EK
Q305	8-729-901-01	TRANSISTOR	DTC144EK
Q306	8-729-901-06	TRANSISTOR	DTA144EK
Q307	8-729-901-01	TRANSISTOR	DTC144EK
Q308	8-729-901-01	TRANSISTOR	DTC144EK
Q309	8-729-901-01	TRANSISTOR	DTC144EK
Q401	8-729-216-22	TRANSISTOR	2SA1162
Q402	8-729-100-66	TRANSISTOR	2SC1623
Q403	8-729-100-66	TRANSISTOR	2SC1623
Q404	8-729-216-22	TRANSISTOR	2SA1162
Q405	8-729-100-66	TRANSISTOR	2SC1623
Q406	8-729-216-22	TRANSISTOR	2SA1162
Q407	8-729-100-66	TRANSISTOR	2SC1623
Q408	8-729-216-22	TRANSISTOR	2SA1162
Q409	8-729-100-66	TRANSISTOR	2SC1623
Q410	8-729-100-66	TRANSISTOR	2SC1623
Q411	8-729-100-66	TRANSISTOR	2SC1623
Q502	8-729-100-66	TRANSISTOR	2SC1623
Q503	8-729-901-06	TRANSISTOR	DTA144EK
Q504	8-729-100-66	TRANSISTOR	2SC1623
Q505	8-729-100-66	TRANSISTOR	2SC1623
Q506	8-729-100-66	TRANSISTOR	2SC1623
Q507	8-729-901-06	TRANSISTOR	DTA144EK
Q508	8-729-901-06	TRANSISTOR	DTA144EK
Q601	8-729-901-06	TRANSISTOR	DTA144EK
Q604	8-729-805-25	TRANSISTOR	2SB1121
Q605	8-729-100-66	TRANSISTOR	2SC1623
Q606	8-729-901-06	TRANSISTOR	DTA144EK
Q701	8-729-901-06	TRANSISTOR	DTA144EK
Q702	8-729-901-06	TRANSISTOR	DTA144EK
Q703	8-729-901-01	TRANSISTOR	DTC144EK
Q704	8-729-216-22	TRANSISTOR	2SA1162
Q705	8-729-216-22	TRANSISTOR	2SA1162
Q706	8-729-100-66	TRANSISTOR	2SC1623
Q707	8-729-100-66	TRANSISTOR	2SC1623
Q708	8-729-901-06	TRANSISTOR	DTA144EK
Q709	8-729-901-06	TRANSISTOR	DTA144EK
Q710	8-729-901-06	TRANSISTOR	DTA144EK
Q711	8-729-901-06	TRANSISTOR	DTA144EK
Q712	8-729-901-06	TRANSISTOR	DTA144EK
Q713	8-729-901-01	TRANSISTOR	DTC144EK
Q714	8-729-901-01	TRANSISTOR	DTC144EK

* A-7062-167-A SE-10 (P) BOARD, COMPLETE

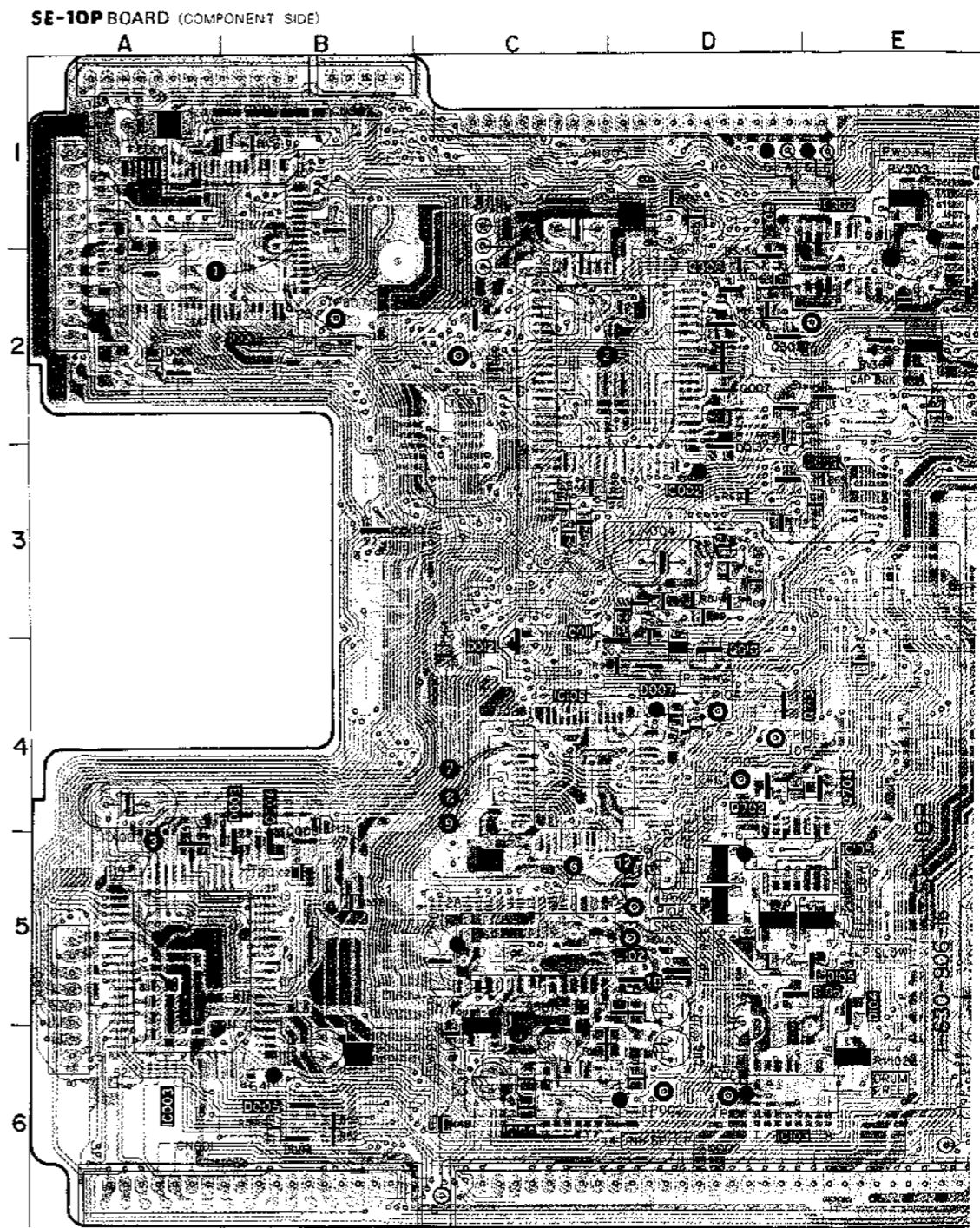
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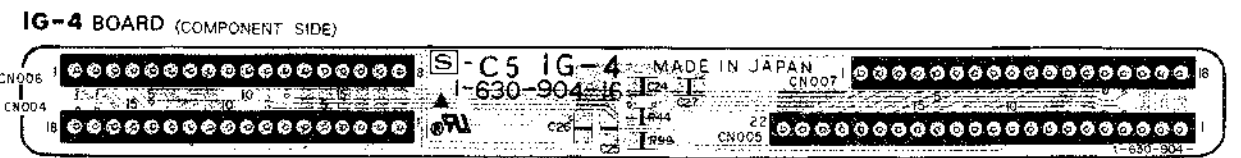
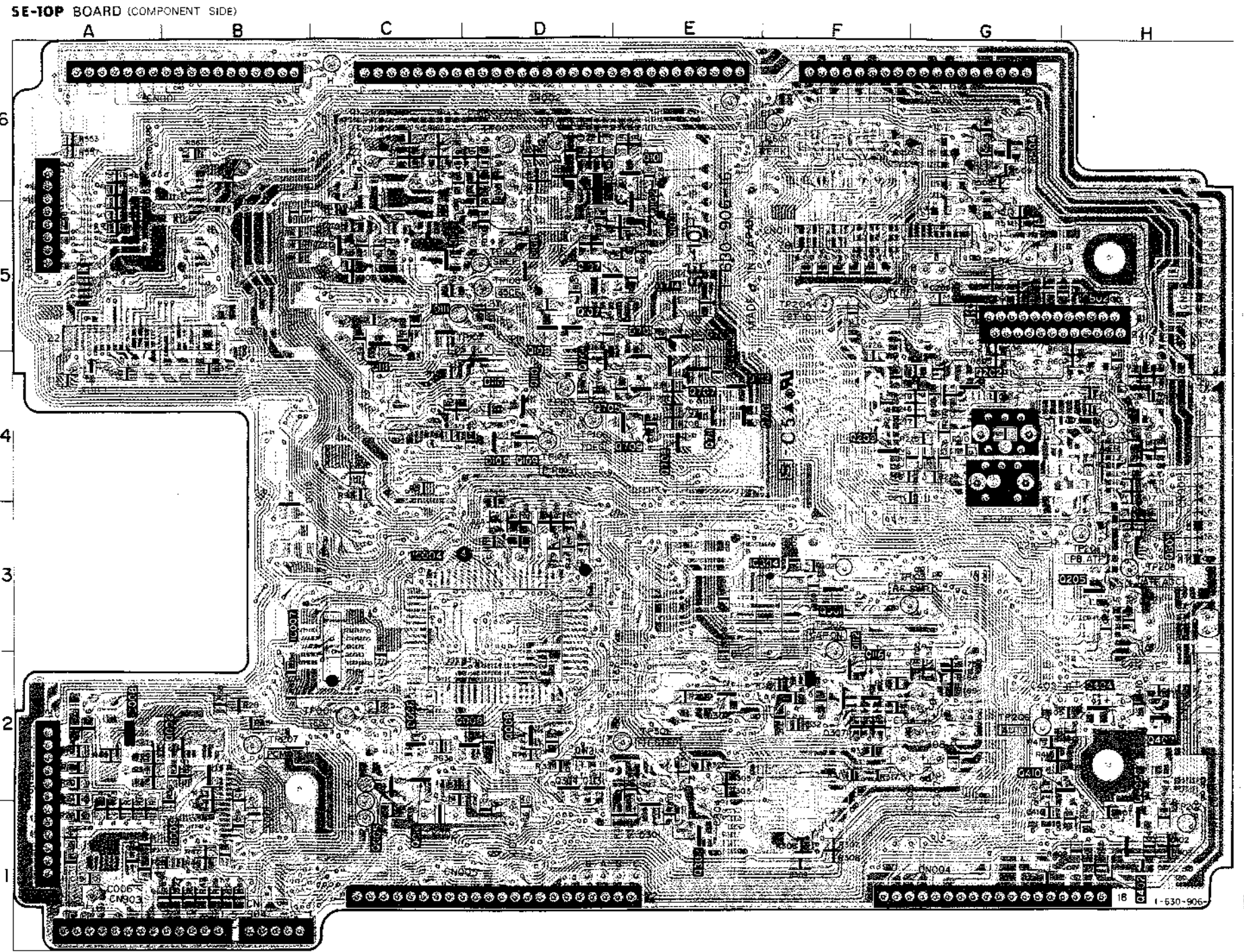
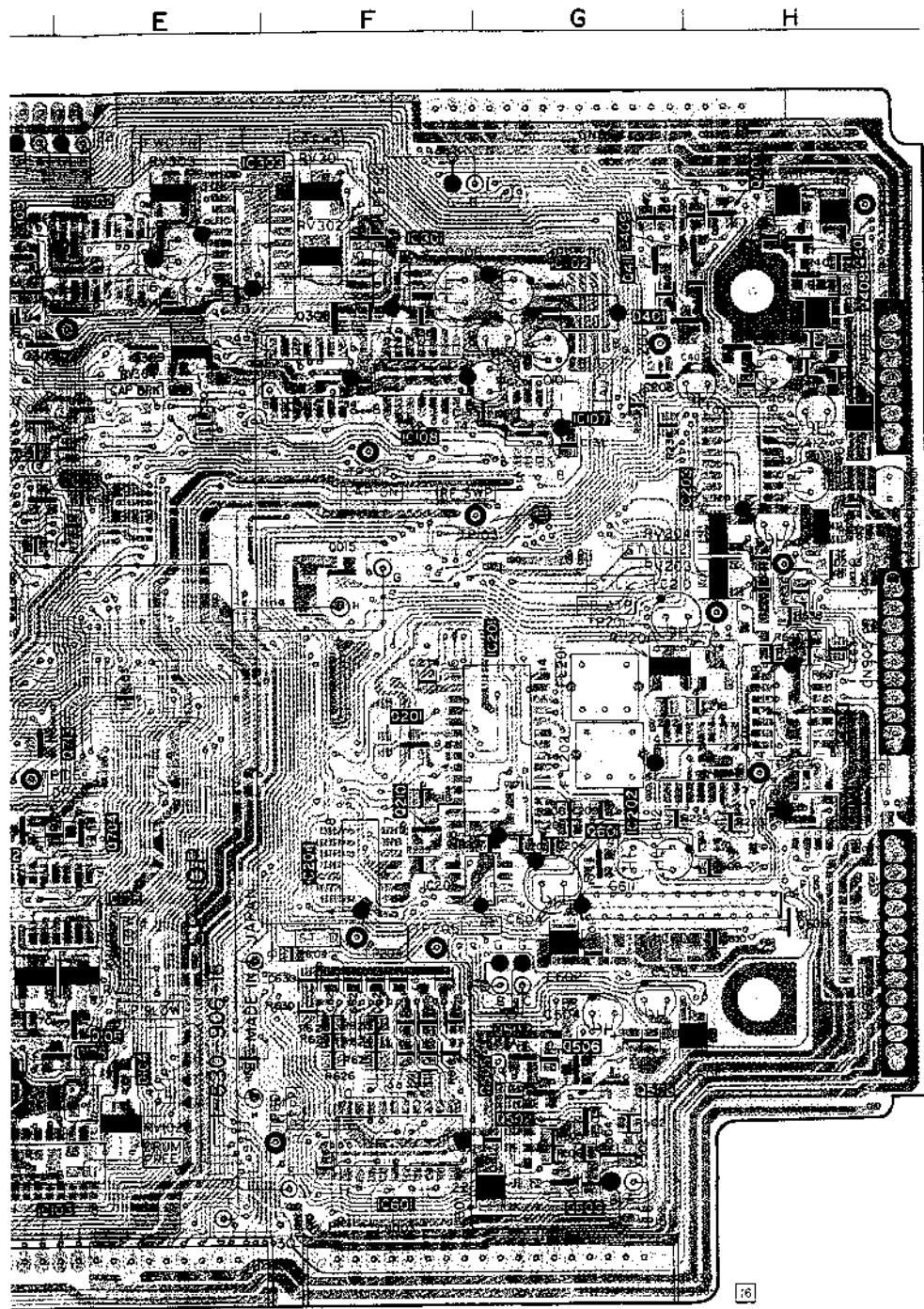
SE-10P (SERVO, SYSTEM CONTROL), IG-4 (BOARD LINK) PRINTED WIRING BOARDS

— Ref. No. SE-10P BOARD: 5000 series, IG-4 BOARD: 6000 series —

< DIODE >			
D003	8-719-400-18	DIODE	MA152WK
D004	8-719-400-18	DIODE	MA152WK
D005	8-719-400-18	DIODE	MA152WK
D006	8-719-104-34	DIODE	1S2836
D007	8-719-400-18	DIODE	MA152WK
D008	8-719-400-18	DIODE	MA152WK
D009	8-719-400-18	DIODE	MA152WK
D012	8-719-400-18	DIODE	MA152WK
D013	8-719-400-18	DIODE	MA152WK
D015	8-719-104-34	DIODE	1S2836
D016	8-719-104-34	DIODE	1S2836
D018	8-719-400-18	DIODE	MA152WK
D102	8-719-800-76	DIODE	1S5226
D103	8-719-800-76	DIODE	1S5226
D104	8-719-104-34	DIODE	1S2836
D105	8-719-400-18	DIODE	MA152WK
D106	8-719-400-18	DIODE	MA152WK
D107	8-719-104-34	DIODE	1S2836
D108	8-719-400-18	DIODE	MA152WK
D109	8-719-400-18	DIODE	MA152WK
D110	8-719-104-34	DIODE	1S2836
D111	8-719-400-18	DIODE	MA152WK
D112	8-719-104-34	DIODE	1S2836
D201	8-719-400-18	DIODE	MA152WK
D203	8-719-105-82	DIODE	RD5. 1M
D301	8-719-400-18	DIODE	MA152WK
D302	8-719-400-18	DIODE	MA152WK
D401	8-719-800-76	DIODE	1S5226
D701	8-719-400-18	DIODE	MA152WK
< IC >			
IC001	8-752-816-72	IC	CXP80116-6920
IC003	8-752-815-13	IC	CXP5048H-2220
IC004	8-759-144-21	IC	uPD75106G-573-1B
IC007	8-759-008-67	IC	MC14068BF
IC008	8-759-937-56	IC	S-8054ALB
IC101	8-752-003-50	IC	CX20035
IC102	8-752-817-64	IC	CXP5048H-2440
IC102	8-759-803-47	IC	LA5005M
IC103	8-759-925-66	IC	8A5303F
IC104	8-759-981-75	IC	RC3403AM
IC105	8-759-300-71	IC	TC4053BF
IC106	8-759-971-25	IC	MB574169U
IC107	8-759-100-94	IC	uPC35802
IC108	8-759-008-67	IC	MC14068BF
IC201	8-759-928-56	IC	CXA1042M
IC202	8-759-150-05	IC	uPC324G2
IC203	8-759-300-71	IC	TC4053BF
IC204	8-759-927-46	IC	SN74HC00ANS
IC205	8-759-711-79	IC	NJM22338M
IC206	8-759-035-93	IC	SC7S32F
< TRANSISTOR >			
Q002	8-729-901-01	TRANSISTOR	DTC144EK
Q003	8-729-901-06	TRANSISTOR	DTA144EK
Q004	8-729-901-01	TRANSISTOR	DTC144EK
Q005	8-729-901-01	TRANSISTOR	DTC144EK
Q006	8-729-901-01	TRANSISTOR	DTC144EK
Q007	8-729-901-01	TRANSISTOR	DTC144EK
Q008	8-729-901-01	TRANSISTOR	DTC144EK
Q009	8-729-901-01	TRANSISTOR	DTC144EK
Q010	8-729-901-06	TRANSISTOR	DTA144EK
Q011	8-729-901-06	TRANSISTOR	DTA144EK
Q014	8-729-901-01	TRANSISTOR	DTC144EK
Q015	8-729-901-01	TRANSISTOR	DTC144EK
Q018	8-729-901-01	TRANSISTOR	DTC144EK
Q101	8-729-901-06	TRANSISTOR	DTA144EK
Q102	8-729-901-06	TRANSISTOR	DTA144EK
Q103	8-729-901-06	TRANSISTOR	DTA144EK
Q104	8-729-901-01	TRANSISTOR	DTA144EK
Q106	8-729-100-66	TRANSISTOR	2SC1623
Q107	8-729-901-06	TRANSISTOR	DTA144EK
Q108	8-729-901-06	TRANSISTOR	DTA144EK
Q109	8-729-901-06	TRANSISTOR	DTA144EK
Q110	8-729-901-06	TRANSISTOR	DTA144EK
Q111	8-729-100-66	TRANSISTOR	2SC1623
Q112	8-729-901-01	TRANSISTOR	DTC144EK
Q113	8-729-901-01	TRANSISTOR	DTC144EK
Q114	8-729-901-01	TRANSISTOR	DTC144EK
Q115	8-729-901-01	TRANSISTOR	DTC144EK
Q116	8-729-901-06	TRANSISTOR	DTA144EK
Q202	8-729-216-22	TRANSISTOR	2SA1162
Q205	8-729-901-01	TRANSISTOR	DTC144EK
Q209	8-729-901-06	TRANSISTOR	DTA144EK
Q210	8-729-901-01	TRANSISTOR	DTC144EK
Q301	8-729-901-06	TRANSISTOR	DTA144EK
Q302	8-729-901-01	TRANSISTOR	DTC144EK
Q303	8-729-901-01	TRANSISTOR	DTC144EK
Q304	8-729-901-01	TRANSISTOR	DTC144EK
Q305	8-729-901-01	TRANSISTOR	DTC144EK
Q306	8-729-901-06	TRANSISTOR	DTA144EK
Q307	8-729-901-01	TRANSISTOR	DTC144EK
Q308	8-729-901-01	TRANSISTOR	DTC144EK
Q309	8-729-901-01	TRANSISTOR	DTC144EK

SE-10P BOARD (COMPONENT SIDE)	SE-10P BOARD (CONDUCTOR SIDE)
D003	B-5
D004	B-6
D005	B-6
D006	D-2
D007	D-4
D012	C-4
D013	D-3
D016	A-2
D101	D-6
D102	D-5
D103	D-5
D104	E-5
D105	E-5
D106	E-5
D201	F-4
D401	G-2
IC001	B-2
IC002	D-3
IC003	A-5
IC101	C-5
IC102	G-2
IC103	D-6
IC104	C-6
IC105	E-5
IC106	C-4
IC107	G-2
IC108	F-2
IC201	G-4
IC202	G-4
IC203	H-3
IC204	F-4
IC205	F-4
IC301	F-2
IC302	E-2
IC303	E-1
IC305	E-3
IC601	F-6
IC602	G-5
IC603	H-4
IC604	H-4
Q003	B-4
Q004	B-4
Q007	D-2
Q009	E-3
Q010	D-4
Q011	C-3
Q015	F-3
Q018	C-2
Q114	D-2
Q210	F-4
Q303	E-2
Q305	D-2
Q306	D-2
Q308	F-2
Q309	E-2
Q401	H-2
Q403	H-1
Q406	H-2
Q408	H-2
Q409	G-2
Q411	G-2
Q502	G-6
Q503	G-6
Q505	G-5
Q506	G-5
Q507	G-5
Q508	G-5
Q601	G-4
Q604	H-3
Q606	H-5
Q702	D-4
Q704	E-4
Q713	E-4
D008	C-2
D009	B-1
D015	B-4
D107	D-5
D108	D-5
D109	D-4
D110	D-4
D111	C-5
D112	F-3
D203	H-3
D301	E-1
D302	E-2
D701	E-5
IC004	C-3
IC007	C-3
IC008	A-2
IC304	F-3
Q002	B-2
Q005	C-1
Q006	D-2
Q008	C-2
Q014	C-1
Q101	E-5
Q102	E-5
Q103	E-5
Q104	C-5
Q106	B-5
Q107	D-5
Q108	D-5
Q109	D-4
Q110	D-4
Q111	C-4
Q112	D-2
Q113	D-1
Q115	E-2
Q116	F-2
Q202	G-4
Q205	F-3
Q209	F-4
Q301	F-3
Q302	E-1
Q304	D-2
Q307	F-2
Q402	H-1
Q404	H-2
Q405	H-1
Q407	H-2
Q410	G-2
Q504	G-6
Q605	H-3
Q701	D-4
Q703	E-5
Q705	E-4
Q706	E-4
Q707	E-4
Q708	E-4
Q709	E-4
Q710	E-4
Q711	E-4
Q712	E-4
Q714	E-5

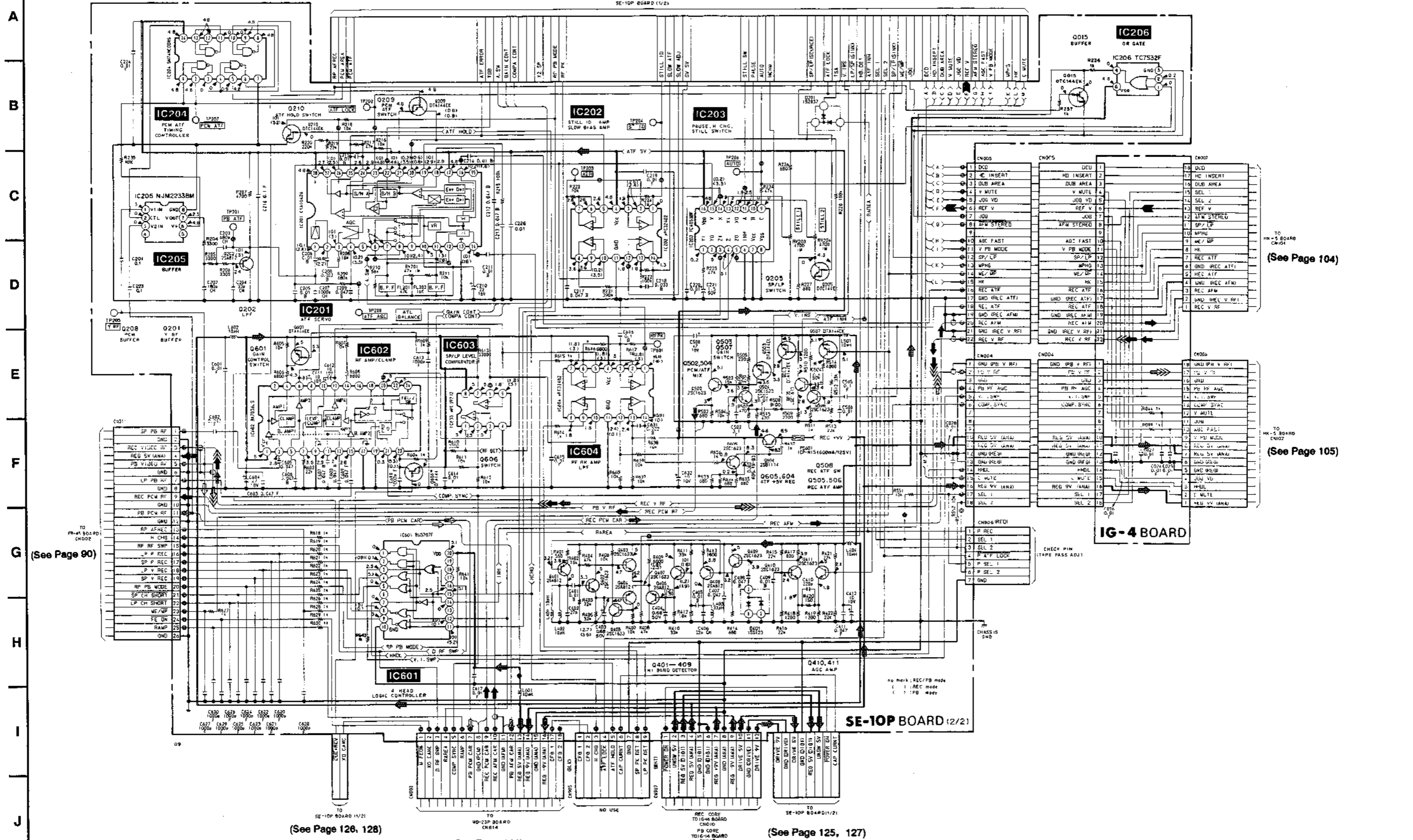




SE-10P (SERVO, SYSTEM CONTROL), IG-4 (BOARD LINK) SCHEMATIC DIAGRAMS

— Ref. No. SE-10P BOARD: 5000 series, IG-4 BOARD: 6000 series —

(See Page 125, 126, 128)



(See Page 90)

(See Page 104)

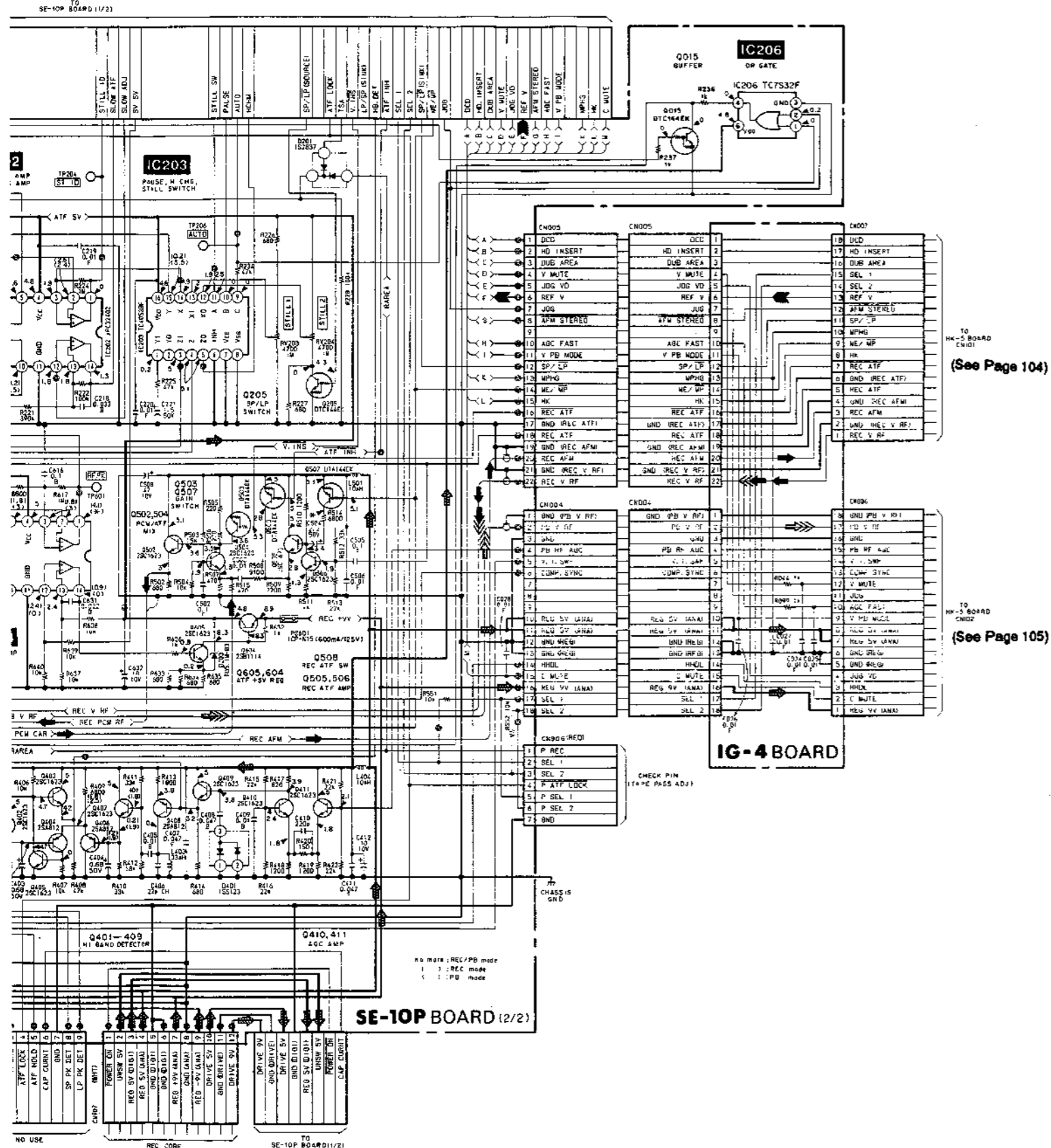
(See Page 105)

(See Page 126, 128)

(See Page 144)

(See Page 125, 127)

(See Page 125, 126, 128)



(See Page 104)

(See Page 105)

• SIGNAL PATH

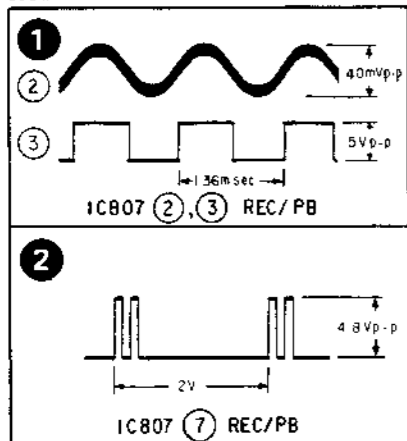
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC			⇒⇒⇒	⇒
PB			⇒⇒⇒	⇒

	REC	REC/PB	PB
Drum speed servo			
Drum phase servo			
Drum servo (speed and phase)			
Capstan speed servo			
Capstan phase servo			
Capstan servo (speed and phase)			
Ref. signal	⇒		

(See Page 125, 127)

(See Page 232)

MD-23P BOARD



* A-7062-168-A MD-23 (P) BOARD, COMPLETE

 (Ref. No. 1,000 Series)

< DIODE >

D803	8-719-200-27	DIODE	E10DS2
D810	8-719-400-18	DIODE	MA152WK
D811	8-719-200-27	DIODE	E10DS2
D901	8-719-400-18	DIODE	MA152WK
D902	8-719-400-18	DIODE	MA152WK
D903	8-719-400-18	DIODE	MA152WK
D904	8-719-800-76	DIODE	1SS226
D905	8-719-400-18	DIODE	MA152WK

< IC >

IC801	8-752-037-08	IC	CXA1109M
IC802	8-759-802-79	IC	LB1616M
IC804	8-759-981-82	IC	RC3414M
IC805	8-759-100-93	IC	uPC39362
IC806	8-759-207-00	IC	TA7733F
IC807	8-759-107-68	IC	CX20115A
IC808	8-759-700-62	IC	NJM4562D
IC809	8-759-100-94	IC	uPC35862
IC901	8-759-207-50	IC	TA7745F
IC902	8-759-150-05	IC	uPC22462
IC903	8-759-925-66	IC	BA6303F
IC904	8-759-008-67	IC	MC140668F

< TRANSISTOR >

Q806	8-729-111-14	TRANSISTOR	2SA1385
Q807	8-729-901-06	TRANSISTOR	DTA144EK
Q809	8-729-111-95	TRANSISTOR	2SC3518
Q810	8-729-805-25	TRANSISTOR	2SB1121
Q811	8-729-805-25	TRANSISTOR	2SB1121
Q812	8-729-111-14	TRANSISTOR	2SA1385
Q813	8-729-100-66	TRANSISTOR	2SC1623
Q820	8-729-111-95	TRANSISTOR	2SC3518
Q821	8-729-100-66	TRANSISTOR	2SC1623
Q880	8-729-100-66	TRANSISTOR	2SC1623
Q901	8-729-920-82	TRANSISTOR	2SB1188
Q902	8-729-920-82	TRANSISTOR	2SB1188
Q903	8-729-920-82	TRANSISTOR	2SB1188
Q904	8-729-901-06	TRANSISTOR	DTA144EK
Q905	8-729-901-06	TRANSISTOR	DTA144EK
Q906	8-729-901-01	TRANSISTOR	DTC144EK
Q907	8-729-901-01	TRANSISTOR	DTC144EK
Q908	8-729-901-01	TRANSISTOR	DTC144EK
Q909	8-729-901-06	TRANSISTOR	DTA144EK
Q950	8-729-903-97	TRANSISTOR	FMS1FE
Q990	8-729-100-66	TRANSISTOR	2SC1623

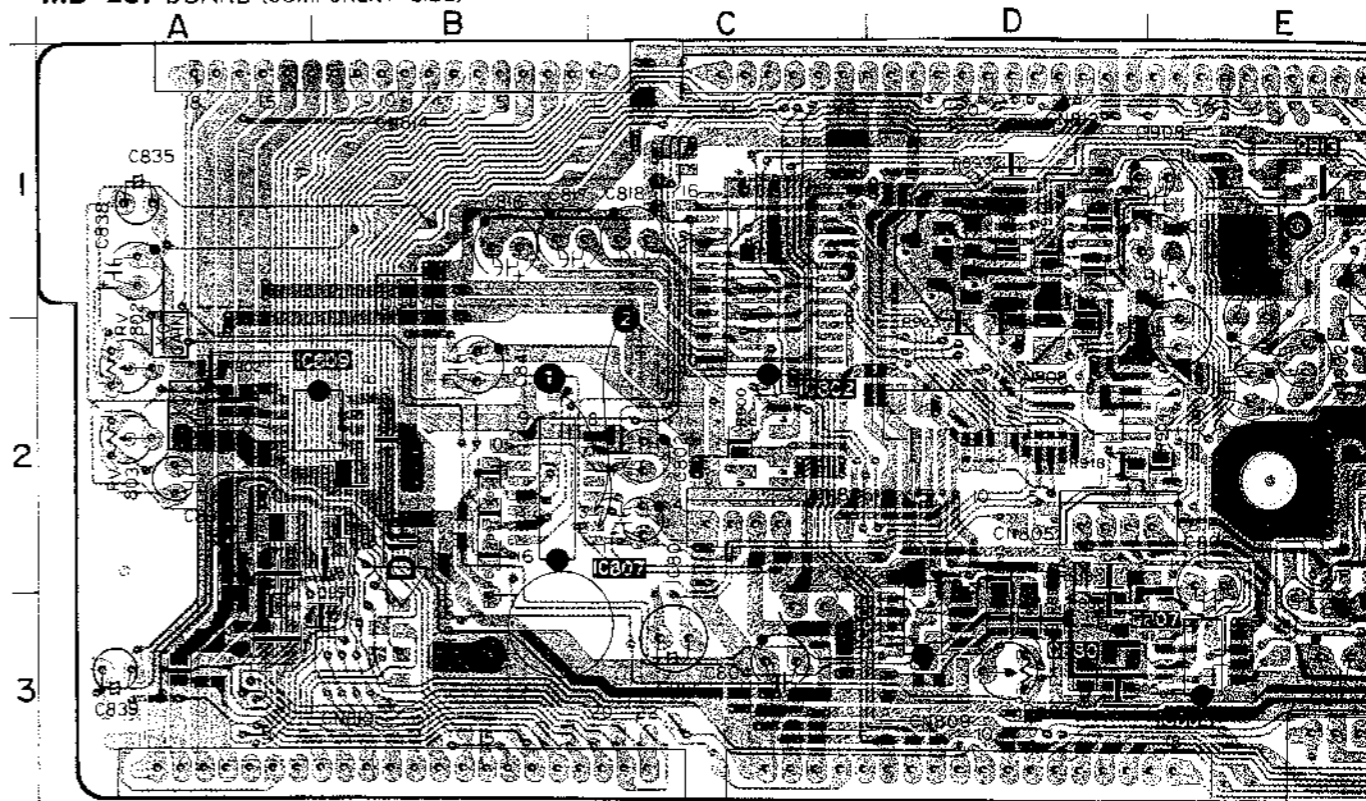
MD-23P (DRUM, REEL, CAPSTAN, CASECOM MOTOR DRIVE), TS-74 (L) (TAPE END SENSOR), TS-74 (R) (TAPE TOP SENSOR)

— Ref. No. MD-23P BOARD, TS-74(L) BOARD: 1000 series, TS-74(R) BOARD: 2000 series —

MD-23P BOARD (COMPONENT SIDE)

D810	F-3
D811	F-3
IC801	F-2
IC802	C-2
IC804	E-3
IC805	G-3
IC807	B-2
IC808	D-3
IC809	A-2
Q807	E-3
Q810	G-2
Q811	G-2
Q813	F-1
Q880	D-3
Q904	F-1
Q905	G-1
Q950	F-2
Q990	B-2

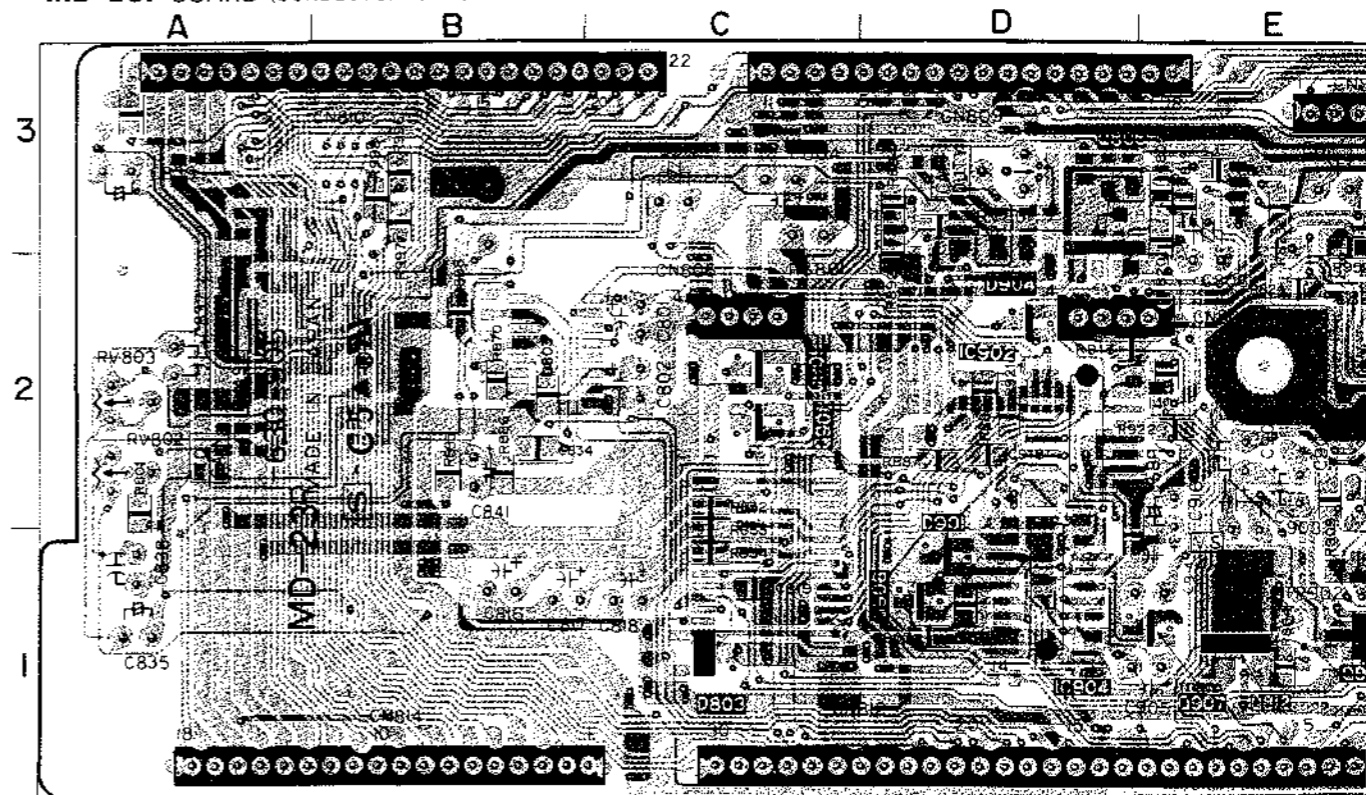
MD-23P BOARD (COMPONENT SIDE)



MD-23P BOARD (CONDUCTOR SIDE)

D803	C-1
D901	D-1
D902	F-1
D903	F-1
D904	D-2
D905	G-1
IC806	G-2
IC901	F-2
IC902	D-2
IC903	F-1
IC904	D-1
Q806	D-3
Q809	F-3
Q812	E-1
Q820	G-2
Q821	F-2
Q901	E-1
Q902	F-1
Q903	F-1
Q906	D-1
Q907	E-1
Q908	C-2
Q909	C-2

MD-23P BOARD (CONDUCTOR SIDE)

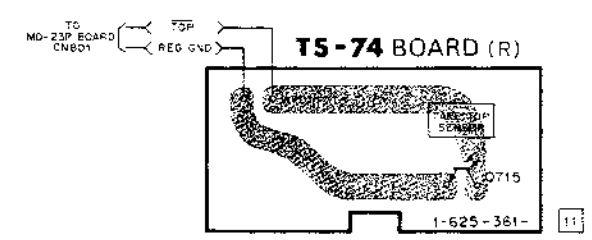
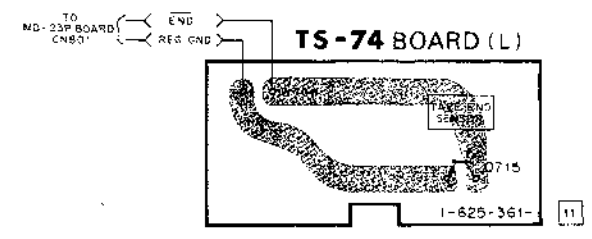
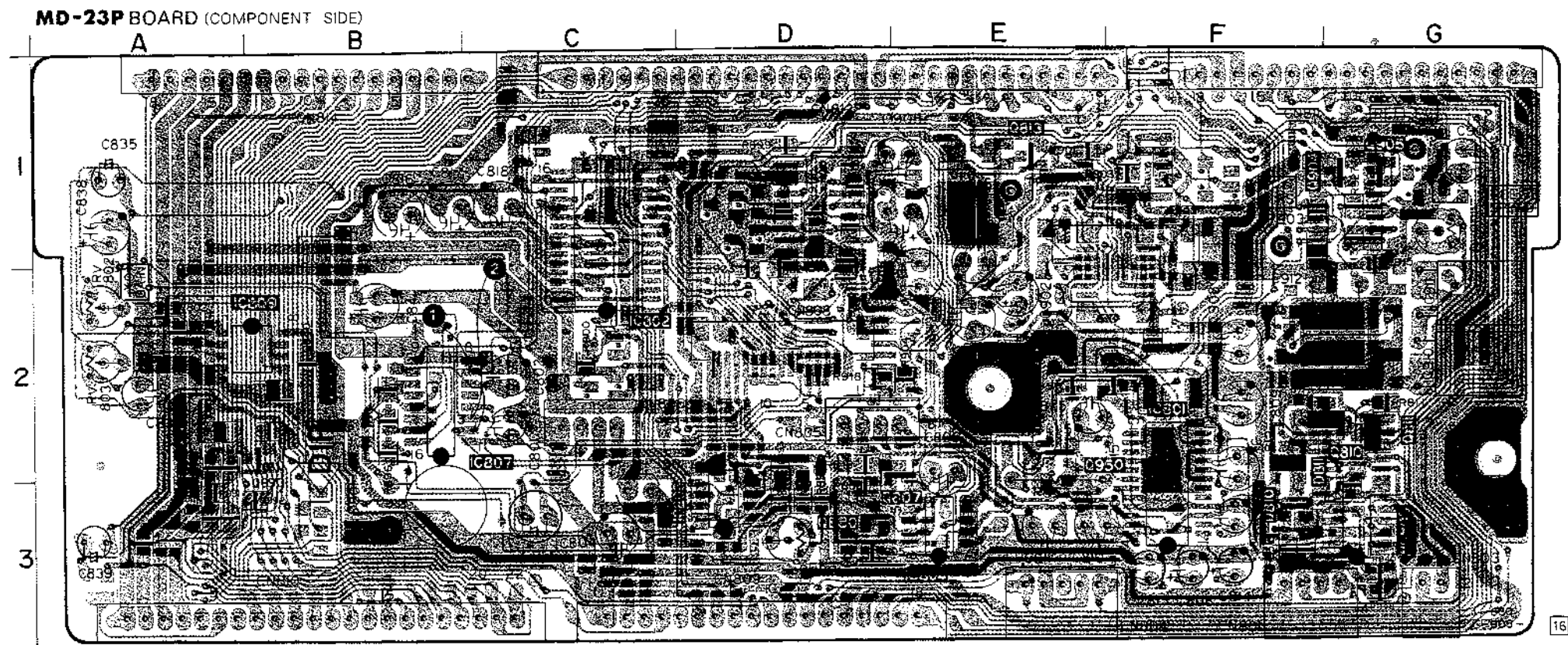


MD-23P (DRUM, REEL, CAPSTAN, CASECOM MOTOR DRIVE), TS-74 (L) (TAPE END SENSOR), TS-74 (R) (TAPE TOP SENSOR) PRINTED WIRING BOARDS

— Ref. No. MD-23P BOARD, TS-74(L) BOARD: 1000 series, TS-74(R) BOARD: 2000 series —

**MD-23P BOARD
(COMPONENT SIDE)**

- DB10 F-3
- DB11 F-3
- IC801 F-2
- IC802 C-2
- IC804 E-3
- IC805 G-3
- IC807 B-2
- IC808 D-3
- IC809 A-2
- Q807 E-3
- Q810 G-2
- Q811 G-2
- Q813 E-1
- Q880 D-3
- Q904 F-1
- Q905 G-1
- Q950 E-2
- Q990 B-2



A-7070-628-A TS-74 (LEFT) BOARD, COMPLETE

(Ref. No 1,000 Series)

< TRANSISTOR >

Q715 8-729-700-11 TRANSISTOR NJL7141E

A-7070-627-A TS-74 (RIGHT) BOARD, COMPLETE

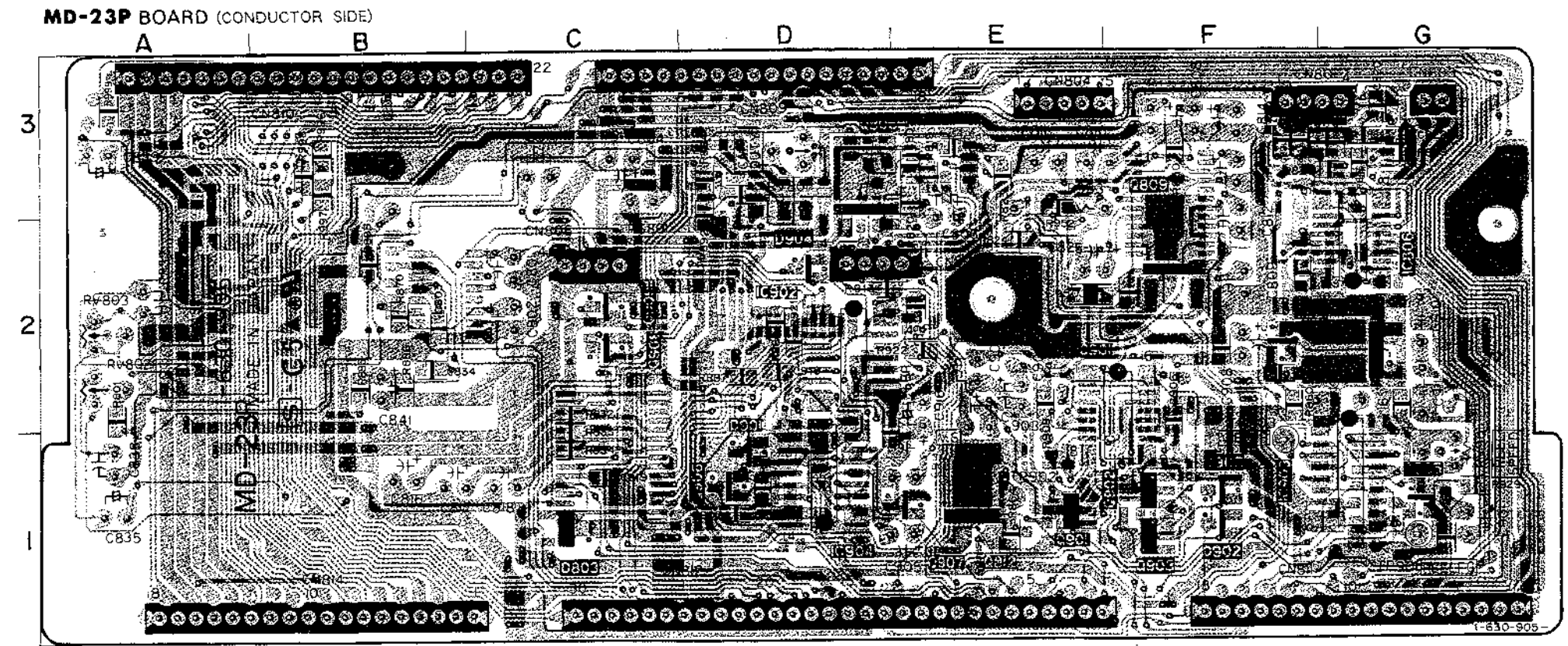
(Ref. No 2,000 Series)

< TRANSISTOR >

Q715 8-729-700-11 TRANSISTOR NJL7141E

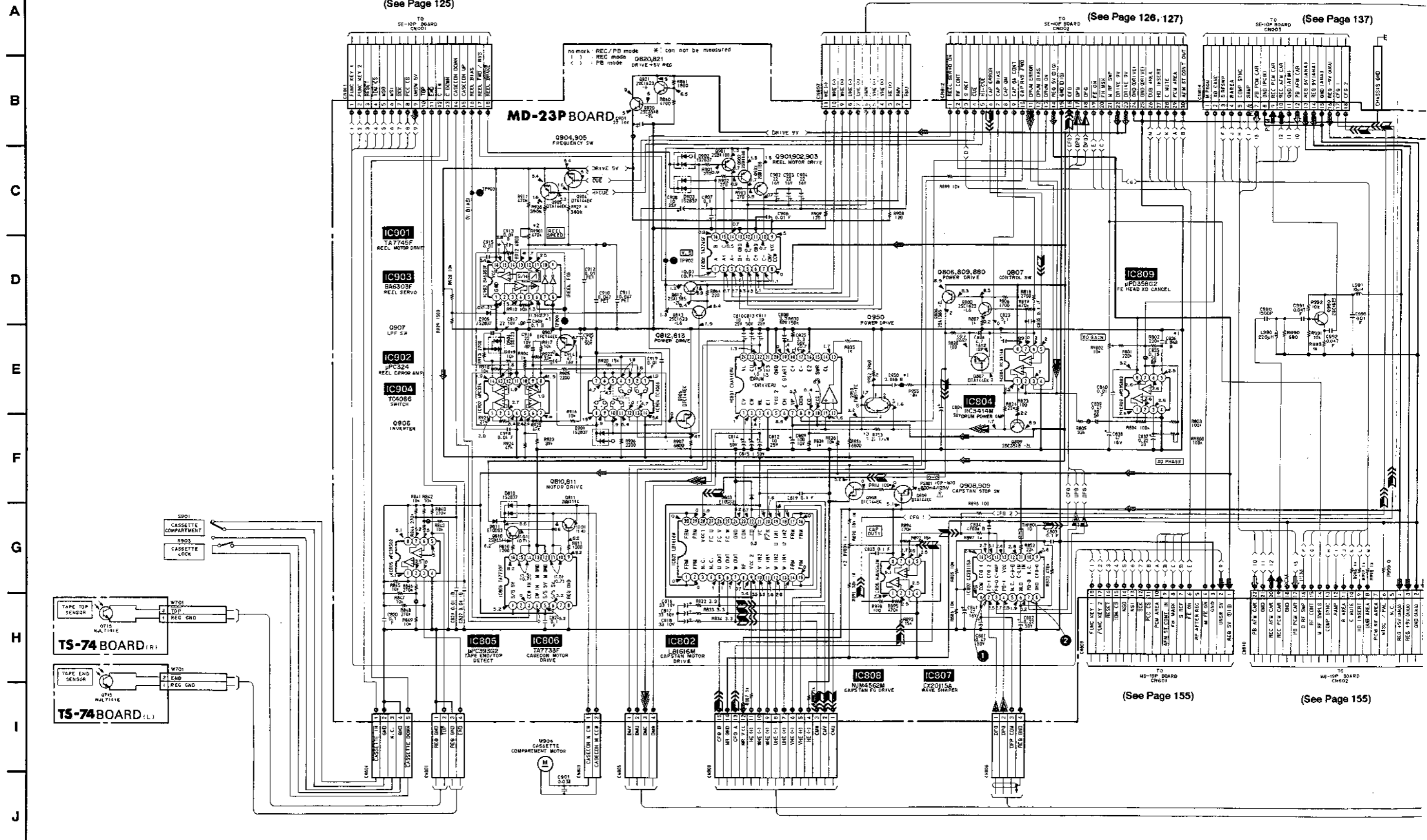
**MD-23P BOARD
(CONDUCTOR SIDE)**

- D803 C-1
- D901 D-1
- D902 F-1
- D903 F-1
- D904 D-2
- D905 G-1
- IC806 G-2
- IC901 F-2
- IC902 D-2
- IC903 F-1
- IC904 D-1
- Q806 D-3
- Q809 F-3
- Q812 E-1
- Q820 G-2
- Q821 F-2
- Q901 E-1
- Q902 F-1
- Q903 F-1
- Q906 D-1
- Q907 E-1
- Q908 C-2
- Q909 C-2

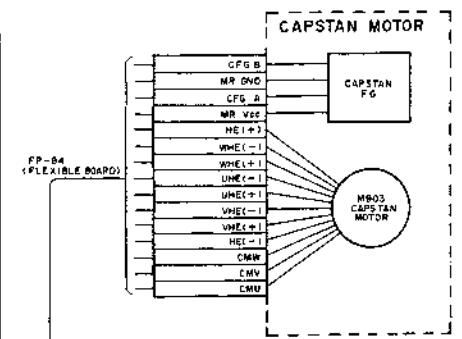
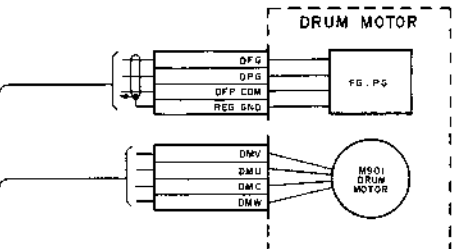
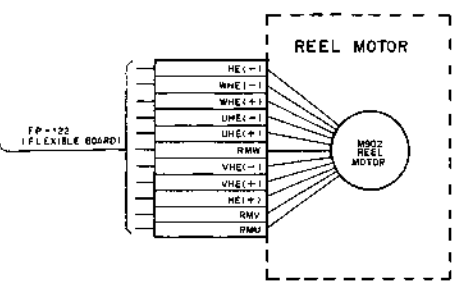
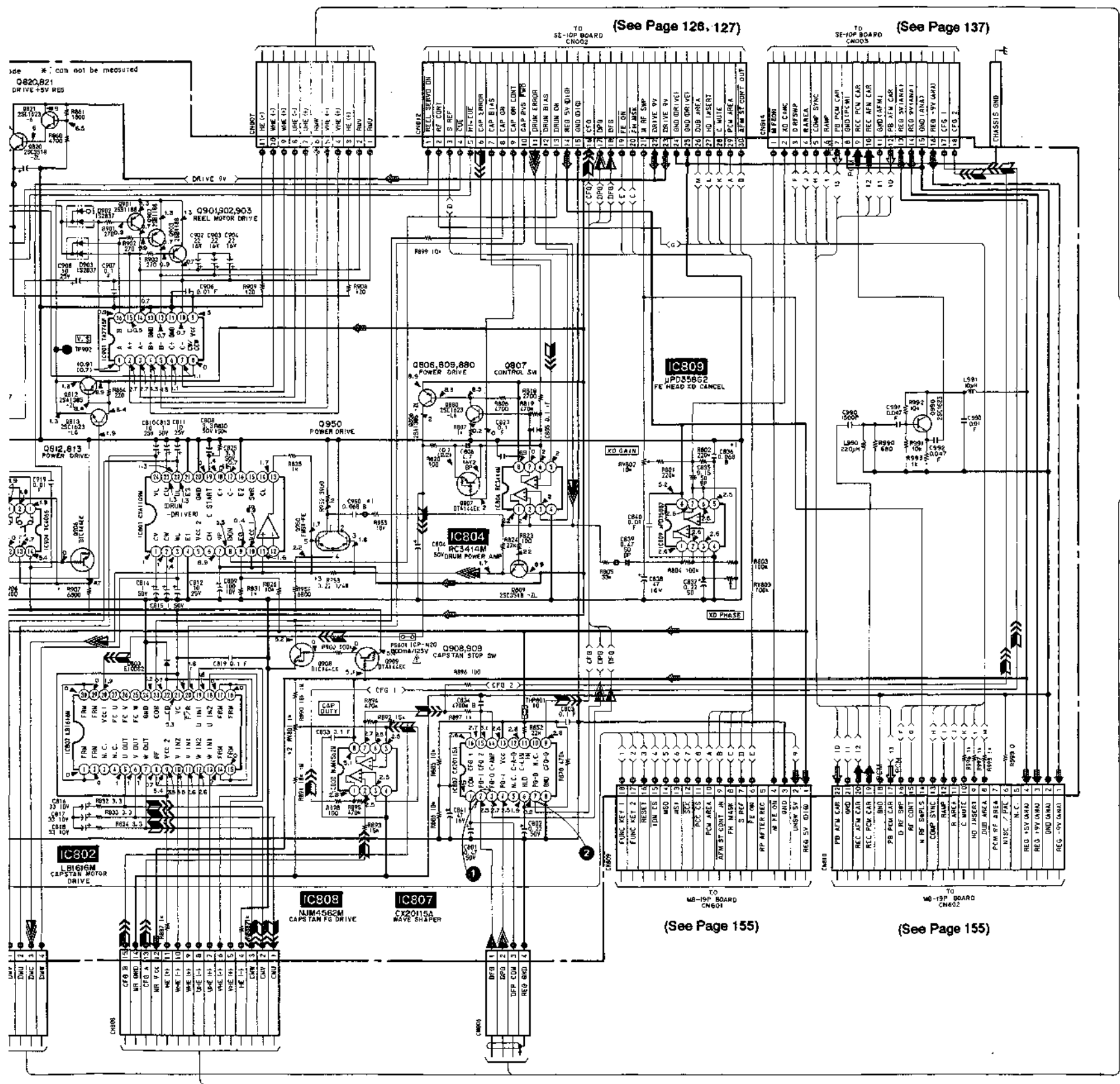


MD-23P (DRUM, REEL, CAPSTAN, CASECOM MOTOR DRIVE), TS-74 (L) (TAPE END SENSOR), TS-74 (R) (TAPE TOP SENSOR) SCHEMATIC DIAGRAMS

— Ref. No. MD-23P BOARD, TS-74(L) BOARD: 1000 series, TS-74(R) BOARD: 2000 series —



(R) (TAPE TOP SENSOR) SCHEMATIC DIAGRAMS



• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				→
PB				⇨

	REC	REC/PB	PB
Drum speed servo		▶	
Drum phase servo		▶	
Drum servo (speed and phase)		▶	
Capstan speed servo			
Capstan phase servo			
Capstan servo (speed and phase)		▶▶	
Ref. signal			

RS-31 (LOADING MOTOR DRIVE, REL SENSOR), LD-1 (TAPE SENSOR), MS-4 (CONTROL MOTOR, MODE SWITCH), LS-9 (TAPE LOADING SWITCH) PRINT

— Ref. No. RS-31 BOARD, LD-1 BOARD: 6000 series, MS-4 BOARD, LS-9 BOARD: 8000 series —

MS-4, LS-9 boards is replaced as a block, so that the PRINTED WIRING BOARD of it is omitted.

* A-7061-818-A RS-31 BOARD, COMPLETE

 (Ref. No 6,000 Series)

< DIODE >

D320	8-719-800-76	DIODE	1SS226
D321	8-719-800-76	DIODE	1SS226

< IC >

IC301	8-759-908-81	IC	MB3763PF
IC302	8-759-908-81	IC	MB3763PF

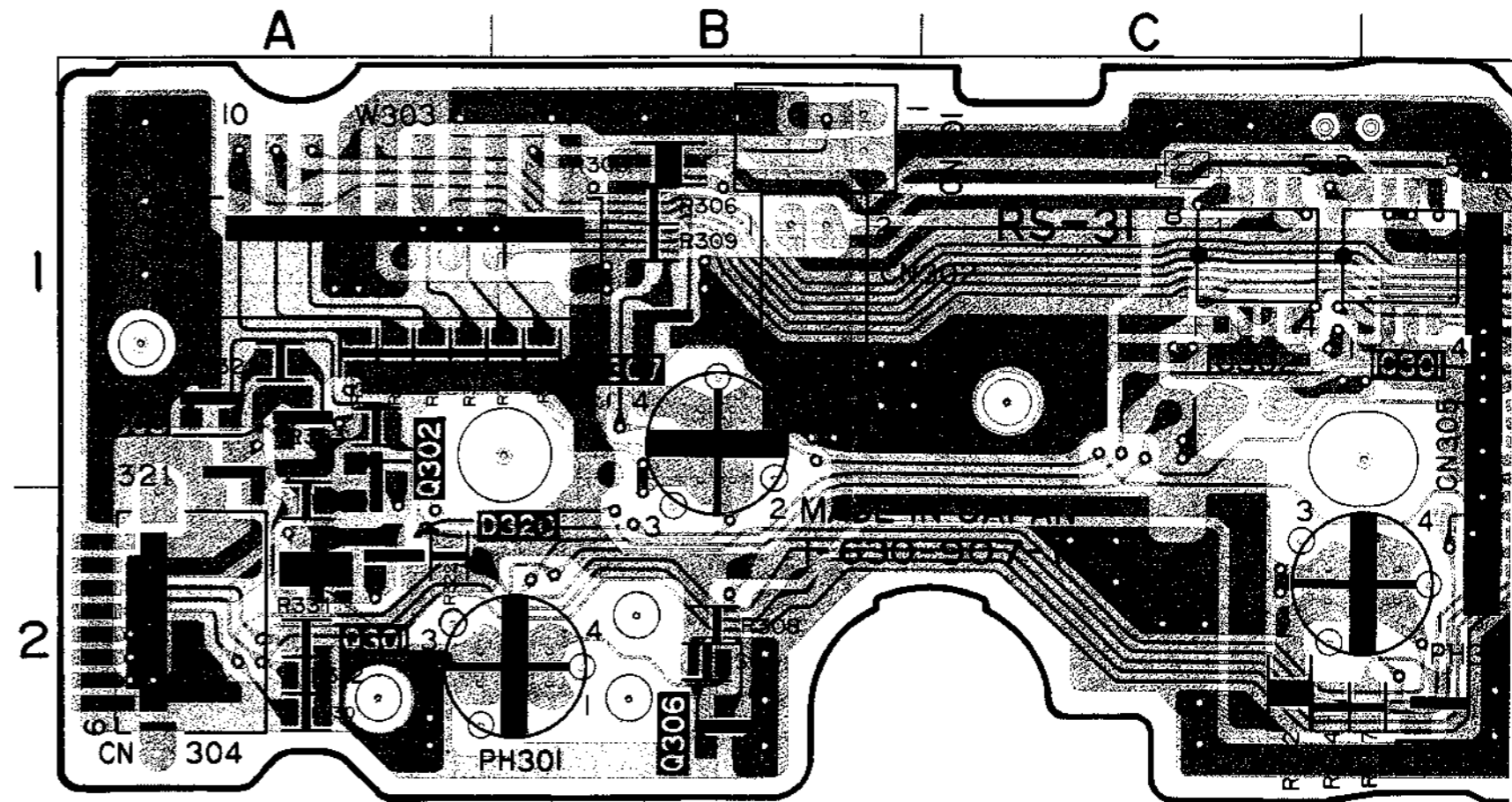
< TRANSISTOR >

Q301	8-729-805-25	TRANSISTOR	2SB1121
Q302	8-729-216-22	TRANSISTOR	2SA1162
Q303	8-729-216-22	TRANSISTOR	2SA1162
Q304	8-729-216-22	TRANSISTOR	2SA1162
Q305	8-729-901-01	TRANSISTOR	DTC144EK
Q306	8-729-901-01	TRANSISTOR	DTC144EK
Q307	8-729-901-01	TRANSISTOR	DTC144EK

RS-31 BOARD
 (COMPONENT
 SIDE)

D320	B-2
D321	A-1
IC301	D-1
IC302	C-1
Q301	A-2
Q302	A-1
Q303	A-1
Q304	A-1
Q305	D-2
Q306	B-2
Q307	B-1

RS-31 BOARD (COMPONENT SIDE)

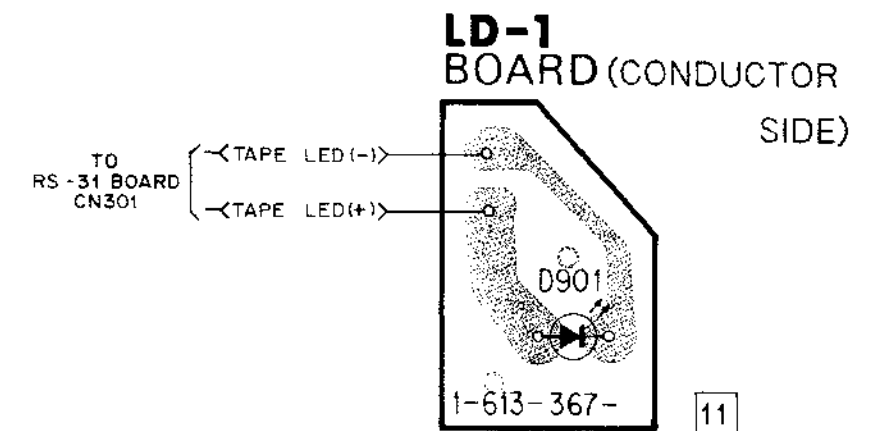
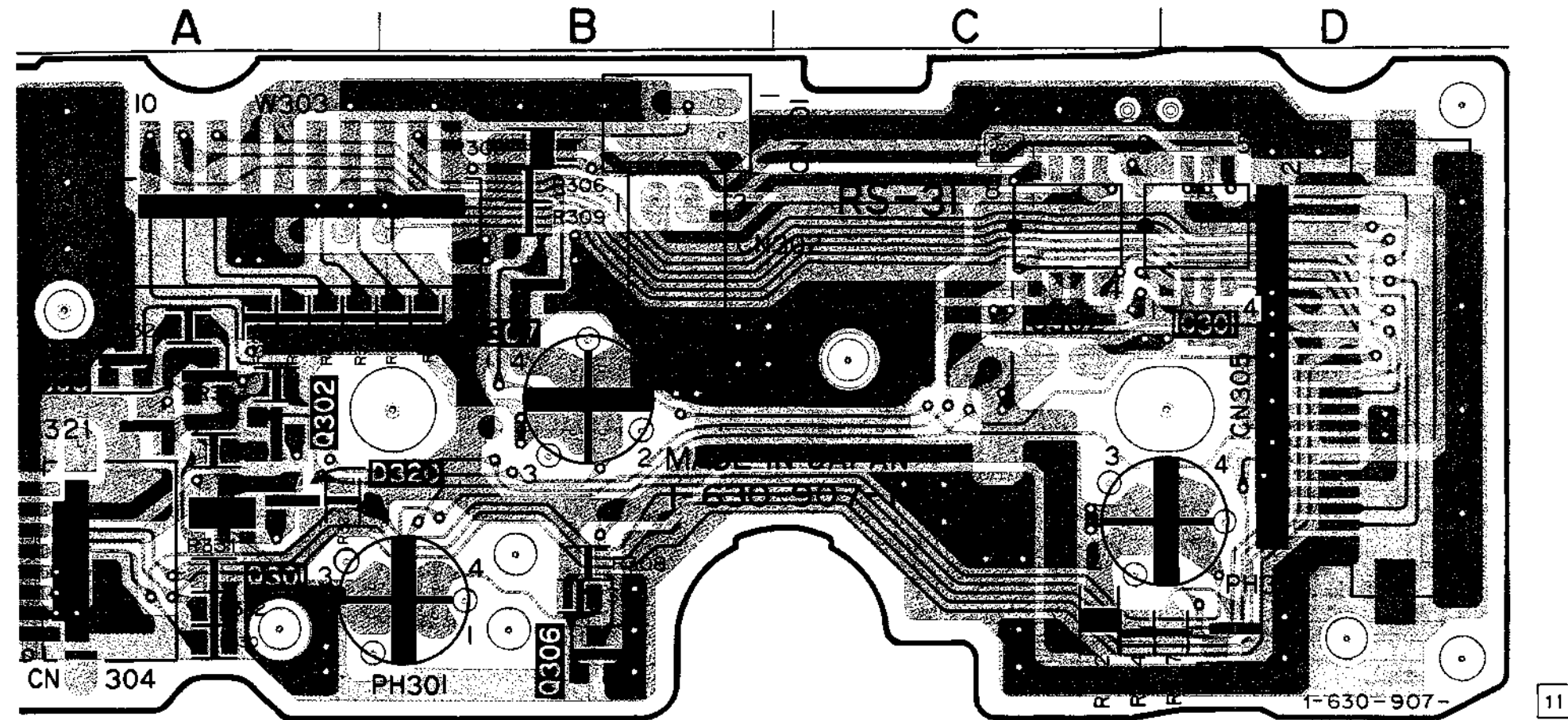


OR DRIVE, REEL SENSOR), LD-1 (TAPE SENSOR), MS-4 (CONTROL MOTOR, MODE SWITCH), LS-9 (TAPE LOADING SWITCH) PRINTED WIRING BOARDS

-1 BOARD: 6000 series, MS-4 BOARD, LS-9 BOARD: 8000 series —

ad as a block, so that the PRINTED WIRING BOARD of it is omitted.

S-31 BOARD (COMPONENT SIDE)



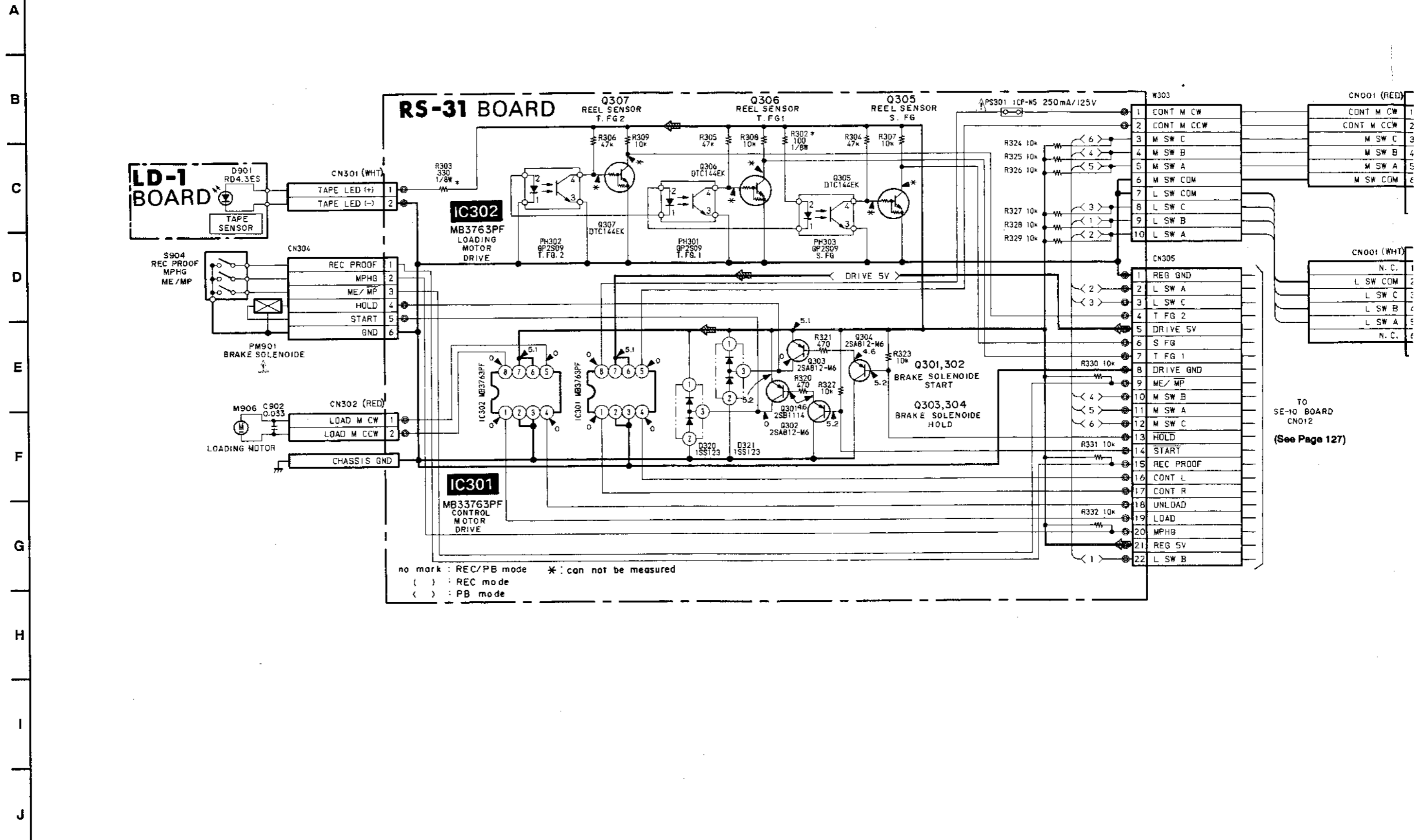
* A-7070-024-A LD-1 BOARD, COMPLETE

 (Ref. No 6,000 Series)

< DIODE >
 D901 8-719-928-54 DIODE GL-450S

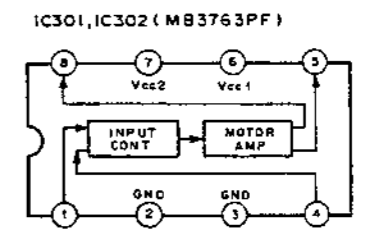
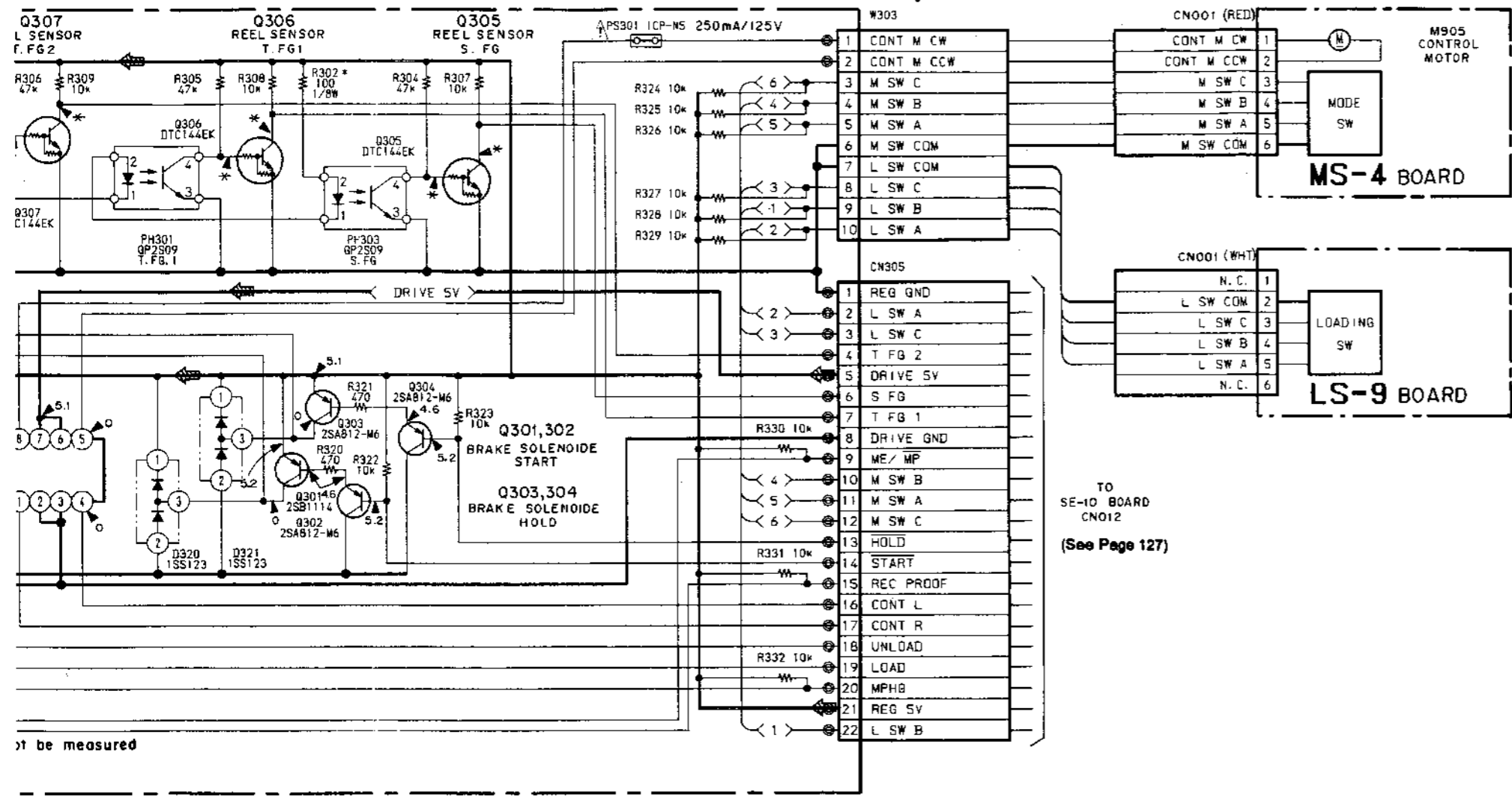
RS-31 (LOADING MOTOR DRIVE, REEL SENSOR), LD-1 (TAPE SENSOR), MS-4 (CONTROL MOTOR, MODE SWITCH), LS-9 (TAPE LOADING SWITCH) SCHEMATIC DIAGRAMS

— Ref. No. RS-31 BOARD, LD-1 BOARD: 6000 series, MS-4 BOARD, LS-9 BOARD: 8000 series —



JR, MODE SWITCH), LS-9 (TAPE LOADING SWITCH) SCHEMATIC DIAGRAMS

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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MB-19P (VTR FUNCTION SWITCH, AUDIO PROCESS) PRINTED WIRING BOARD

— Ref. No. MB-19P BOARD: 7000 series —

* A-7061-824-A MB-19 (P) BOARD, COMPLETE

 (Ref. No 7,000 Series)

< DIODE >

D601	8-719-104-34	DIODE	1S2835-T1
D602	8-719-104-34	DIODE	1S2835-T1
D603	8-719-104-34	DIODE	1S2835-T1
D604	8-719-400-18	DIODE	MA152WK
D641	8-719-800-76	DIODE	1SS226
D642	8-719-800-76	DIODE	1SS226

< IC >

IC004	8-752-322-57	IC	CXD1077M
IC005	8-759-908-15	IC	TL431CLP
IC601	8-759-149-34	IC	μPD751066-591-1B
IC603	8-759-300-71	IC	TC4053BFHB-TP1
IC651	8-759-603-27	IC	M5201FP
IC661	8-759-603-27	IC	M5201FP
IC671	8-741-150-50	IC	SBX1505-01

< TRANSISTOR >

Q601	8-729-901-06	TRANSISTOR	DTA144EK
Q602	8-729-901-01	TRANSISTOR	DTC144EK
Q603	8-729-901-01	TRANSISTOR	DTC144EK
Q604	8-729-901-01	TRANSISTOR	DTC144EK
Q605	8-729-901-06	TRANSISTOR	DTA144EK
Q606	8-729-901-06	TRANSISTOR	DTA144EK
Q607	8-729-901-01	TRANSISTOR	DTC144EK
Q608	8-729-901-01	TRANSISTOR	DTC144EK
Q609	8-729-901-06	TRANSISTOR	DTA144EK
Q671	8-729-100-66	TRANSISTOR	2SC1623

MB-19P BOARD
(COMPONENT
SIDE)

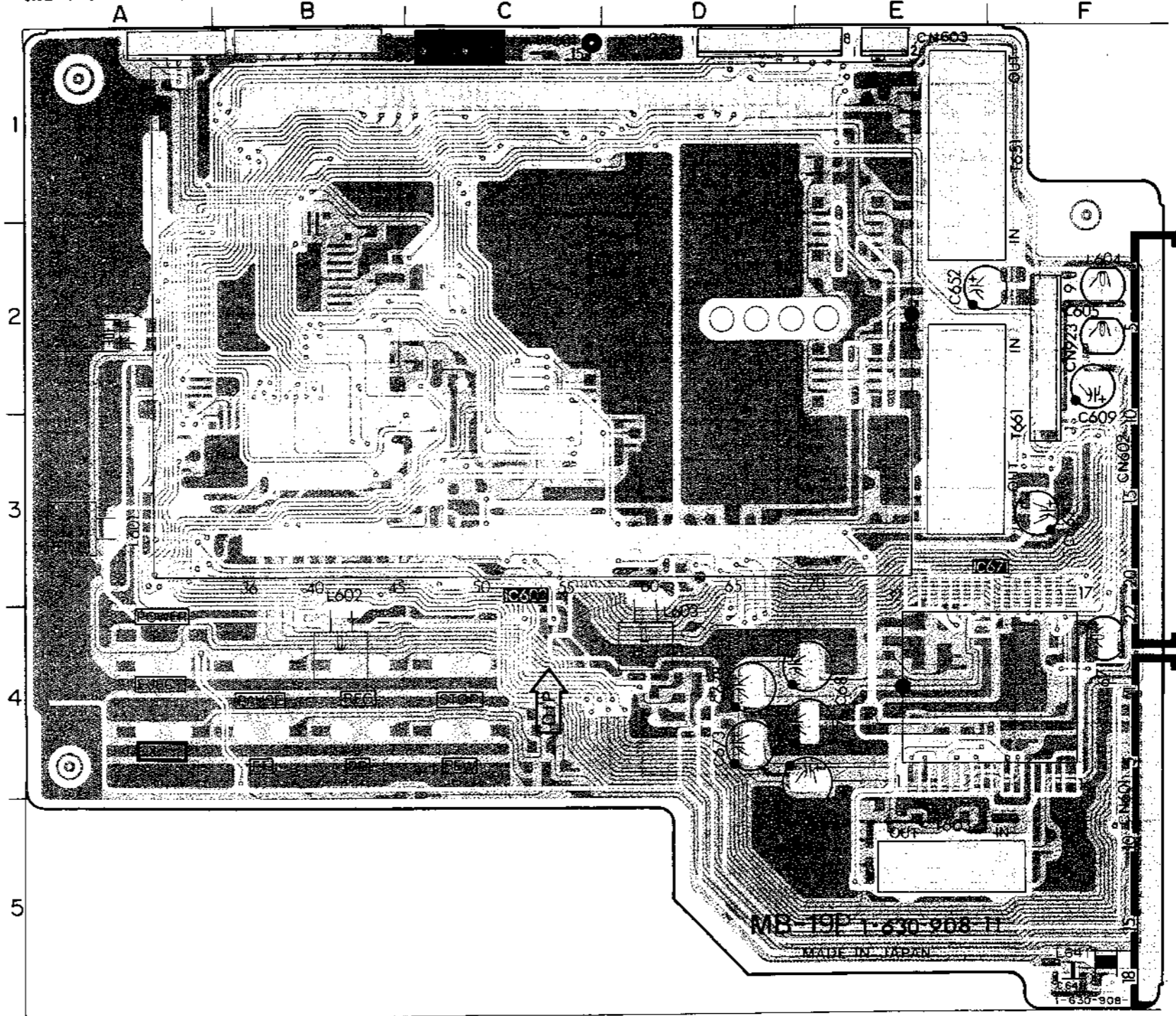
MB-19P BOARD
(CONDUCTOR
SIDE)

D601	C-4
D602	C-2
D603	C-2
D604	C-1
D641	F-5
D642	F-5

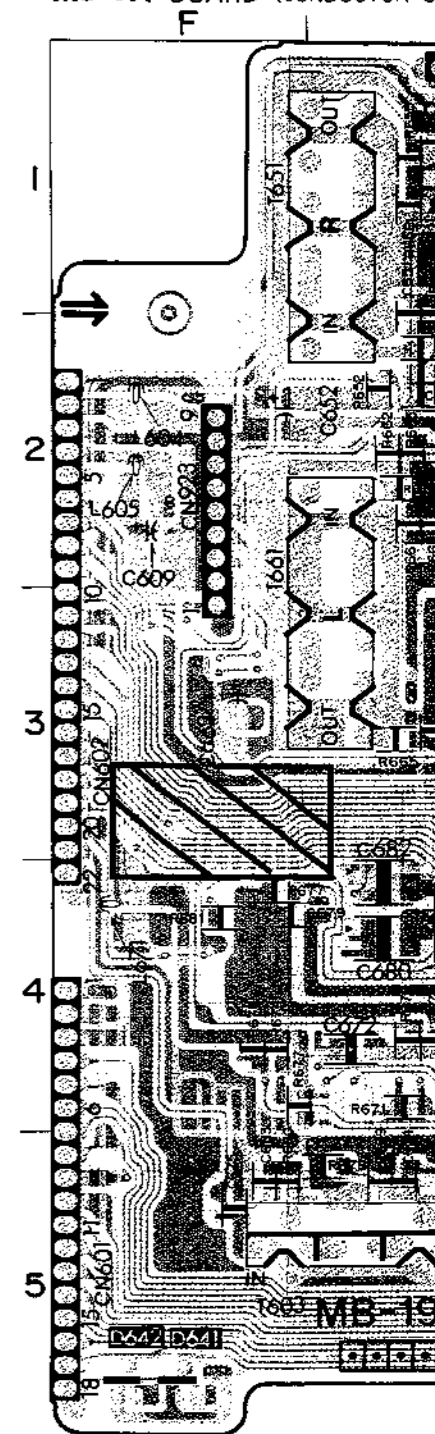
IC601	B-2
IC603	C-2
IC651	E-2
IC661	E-2

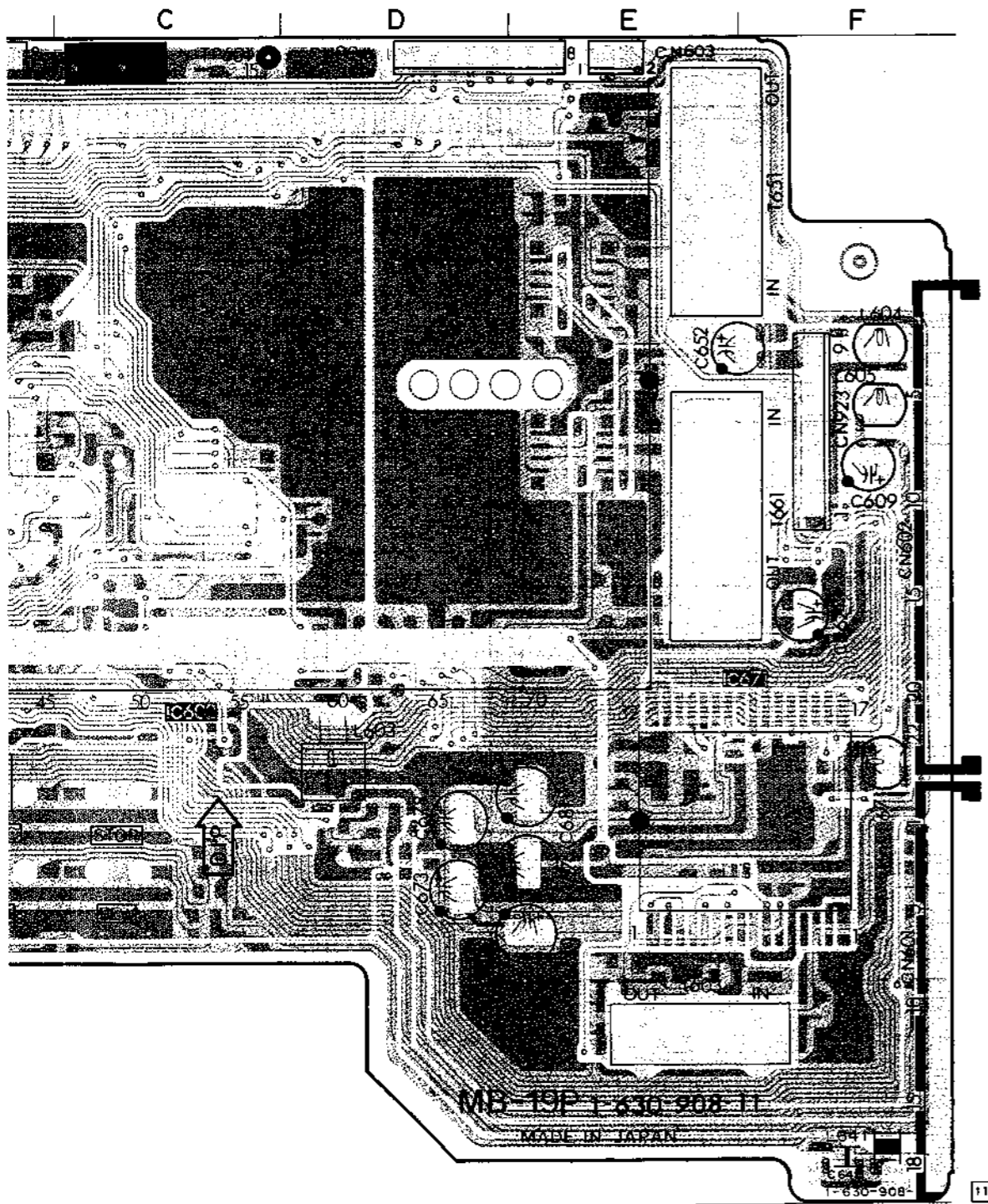
Q601	B-3
Q602	A-3
Q603	A-3
Q604	C-2
Q605	C-2
Q606	C-3
Q607	B-3
Q608	D-4
Q609	D-4
Q671	E-5

MB-19P BOARD (COMPONENT SIDE)

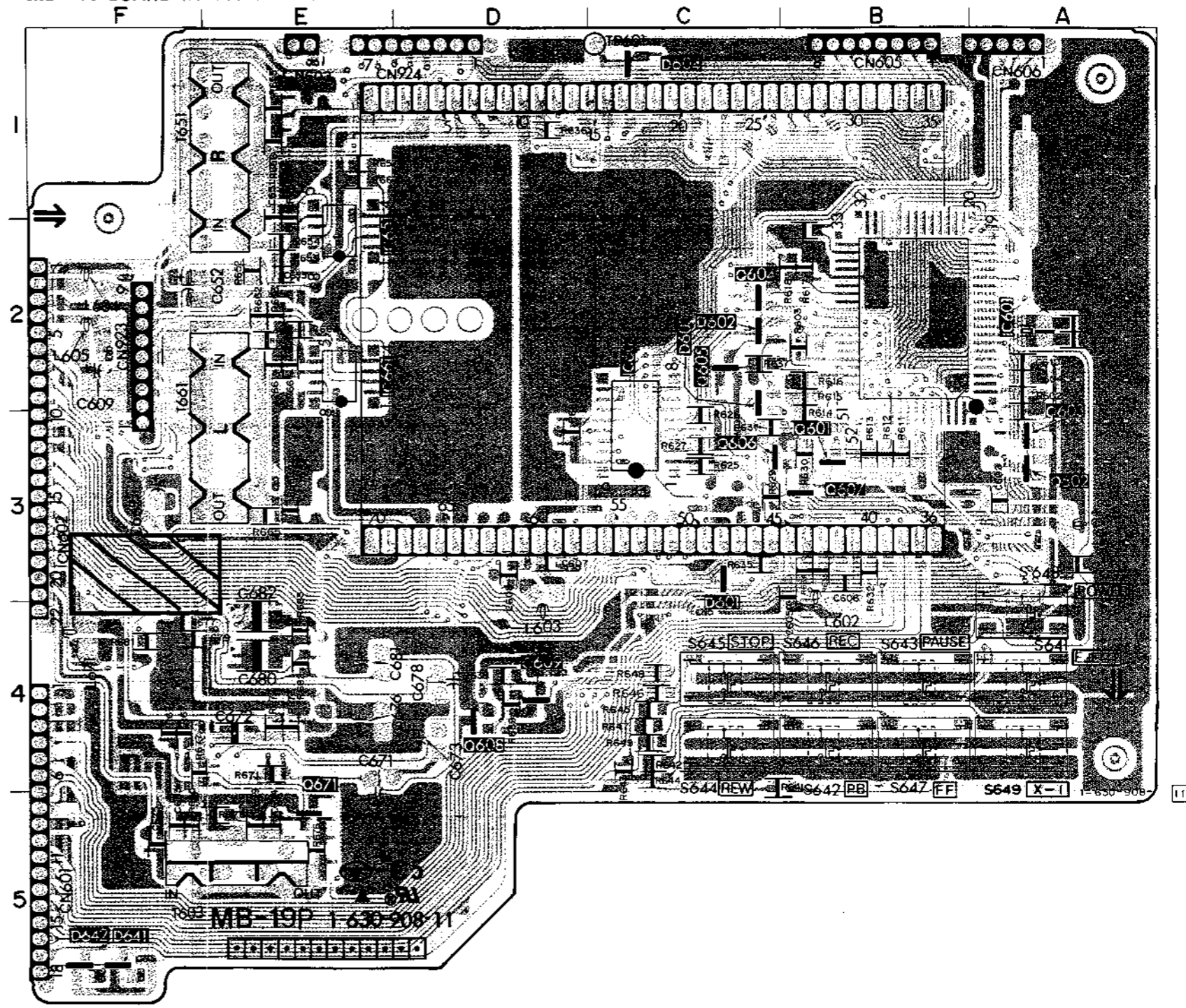


MB-19P BOARD (CONDUCTOR SIDE)





MB-19P BOARD (CONDUCTOR SIDE)



AUDIO AUDIO

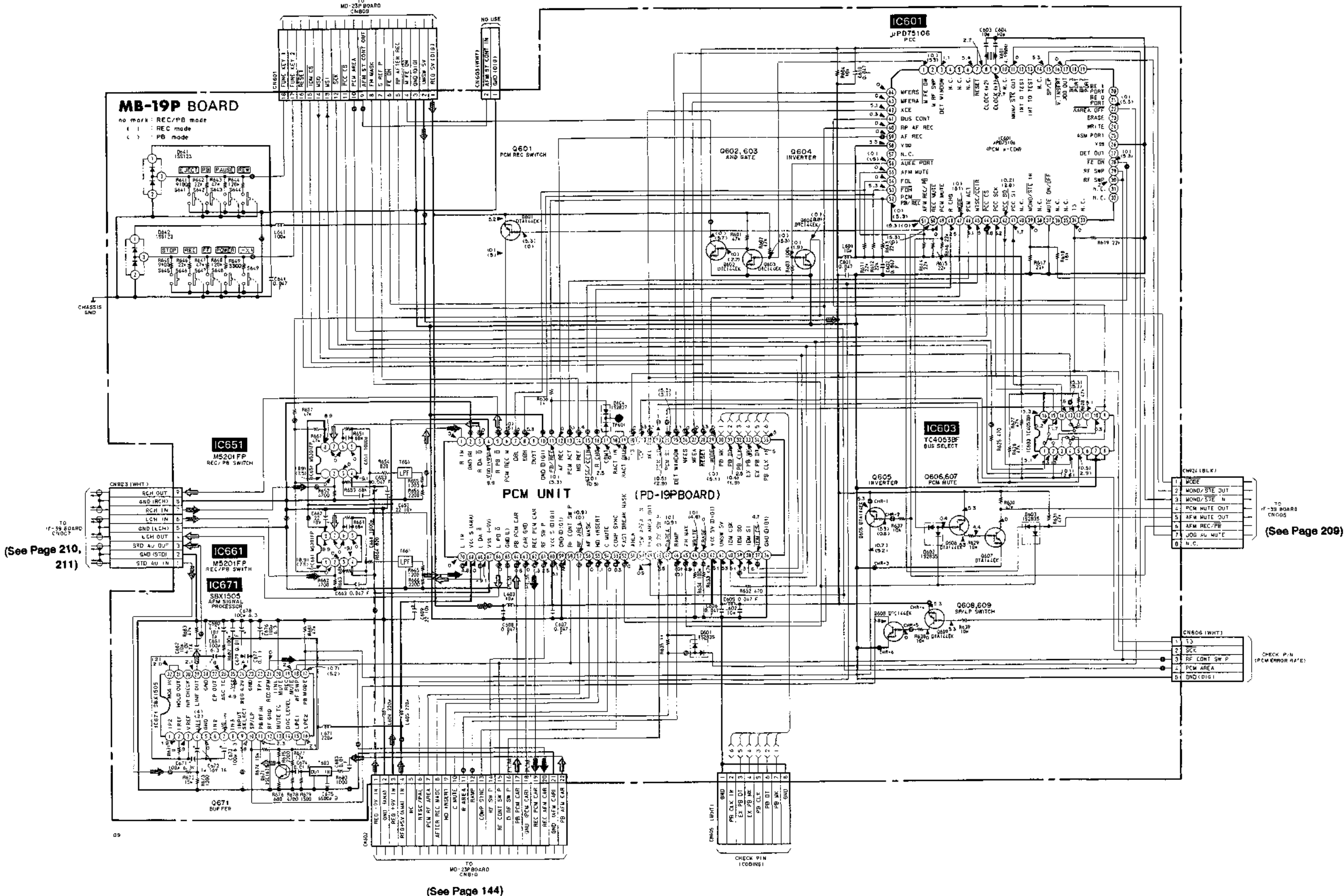
MB-19P (VTR FUNCTION SWITCH, AUDIO PROCESS) SCHEMATIC DIAGRAM

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

Ref. No. MB-19P BOARD: 7000 series

(See Page 144)

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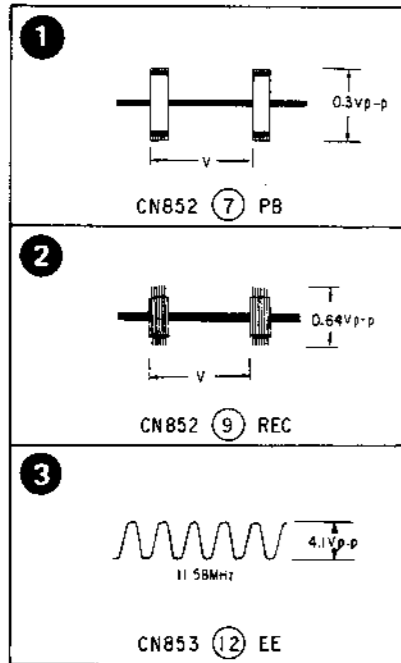


(See Page 210, 211)

(See Page 209)

(See Page 144)

PD-19P BOARD



* A-7061-825-A PD-19 (P) BOARD, COMPLETE

 (Ref. No 7,000 Series)

< DIODE >

D851	8-719-104-34	DIODE	1S2835-T1
D852	8-719-400-18	DIODE	MA152WK
D853	8-719-400-18	DIODE	MA152WK

< IC >

IC851	8-752-324-45	IC	CXD1066Q-Z
IC852	8-759-929-17	IC	CXD1051M-T1
IC853	8-752-010-30	IC	CX20103-T1
IC854	8-752-010-20	IC	CX20102-T1
IC855	8-752-331-00	IC	CXK58648M-12L-T6

IC856	8-759-948-51	IC	CX23011-T1-C
IC857	8-759-911-19	IC	CX23012-T1
IC858	8-759-972-12	IC	CF77305FT
IC859	8-752-809-58	IC	CXP5024H-079Q
IC860	8-759-972-13	IC	CF77309FR

< TRANSISTOR >

Q851	8-729-102-06	TRANSISTOR	2SC2223
Q852	8-729-122-63	TRANSISTOR	2SA1226
Q853	8-729-102-06	TRANSISTOR	2SC2223

* A-7061-826-A PA-27 BOARD, COMPLETE

 (Ref. No 7,000 Series)

< DIODE >

D031	8-719-104-34	DIODE	1S2835-T1
D032	8-719-104-34	DIODE	1S2835-T1
D033	8-719-104-34	DIODE	1S2835-T1

< IC >

IC001	8-752-009-90	IC	CX20099
IC002	8-759-981-92	IC	NJM4558M-T1
IC003	8-759-981-92	IC	NJM4558M-T1

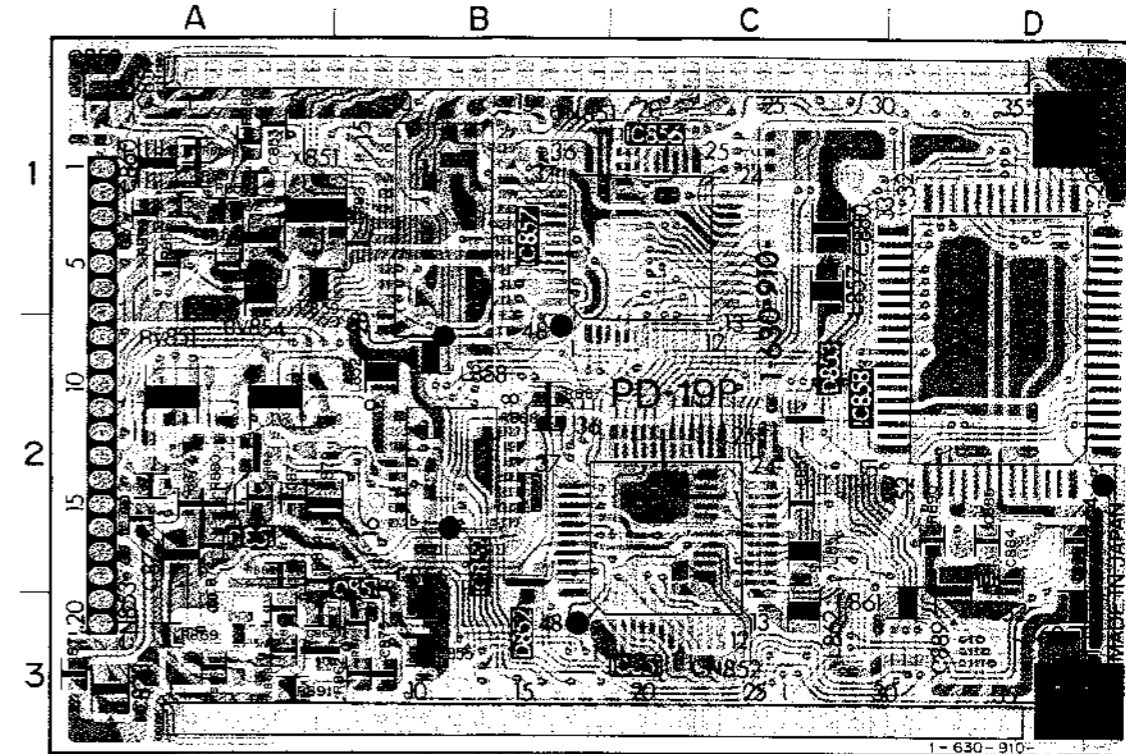
< TRANSISTOR >

Q001	8-729-202-38	TRANSISTOR	2SC3326N
Q002	8-729-202-38	TRANSISTOR	2SC3326N
Q031	8-729-901-06	TRANSISTOR	DTA144EK
Q032	8-729-901-06	TRANSISTOR	DTA144EK
Q033	8-729-901-06	TRANSISTOR	DTA144EK
Q034	8-729-216-22	TRANSISTOR	2SA1162
Q035	8-729-216-22	TRANSISTOR	2SA1162
Q051	8-729-202-38	TRANSISTOR	2SC3326N
Q052	8-729-202-38	TRANSISTOR	2SC3326N

PD-19P (DIGITAL PCM AUDIO), PA-27 (ANALOG PCM AUDIO) PRINTED WIRING BOARDS

— Ref. No. PD-19P BOARD, PA-27 BOARD: 7000 series —

PD-19P BOARD (COMPONENT SIDE)



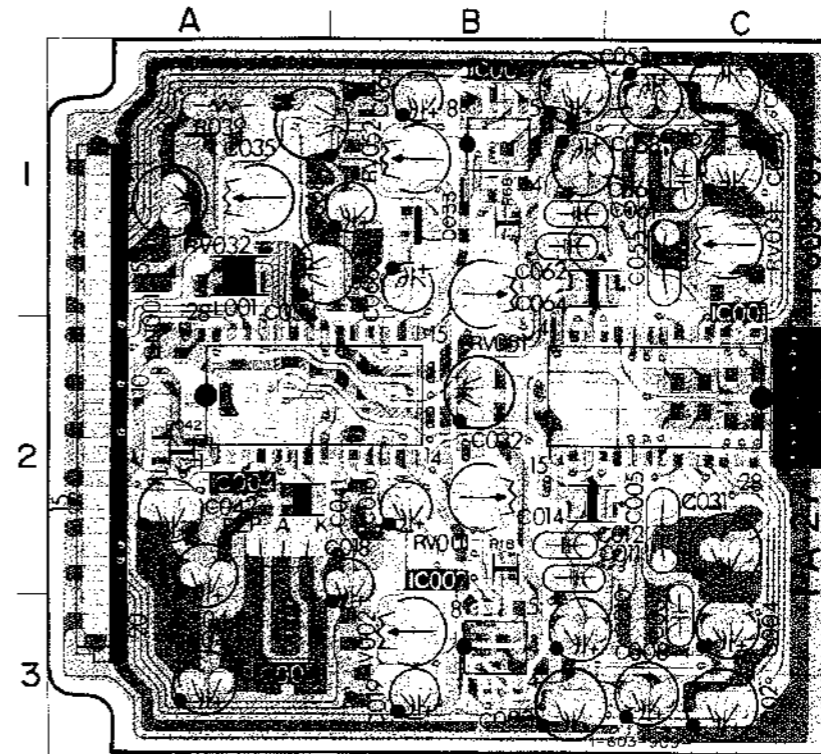
PD-19P BOARD
 (COMPONENT
 SIDE)

D851	A-2
D852	B-3
D853	C-2
IC851	C-3
IC852	B-2
IC856	C-1
IC857	B-1
IC858	D-2
Q851	B-3

PD-19P BOARD
 (CONDUCTOR
 SIDE)

IC853	A-1
IC854	A-2
IC855	C-1
IC859	D-1
IC860	C-2
Q852	A-3
Q853	A-3

PA-27 BOARD (COMPONENT SIDE)



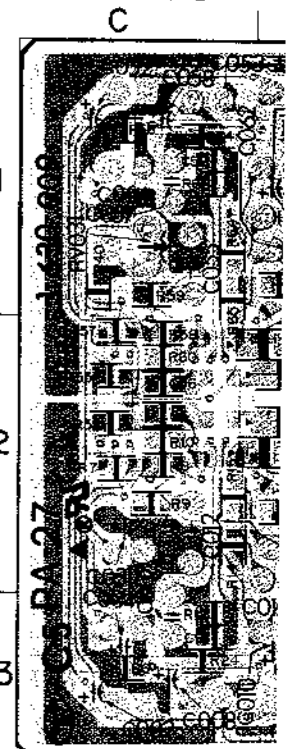
PA-27 BOARD
 (COMPONENT
 SIDE)

D033	B-1
IC001	C-2
IC002	B-3
IC003	B-1
IC004	A-2
IC005	A-3

PA-27 BOARD
 (CONDUCTOR
 SIDE)

D031	A-2
D032	B-2
Q001	B-3
Q002	B-2
Q031	A-1
Q032	A-1
Q033	A-2
Q034	A-2
Q035	A-2
Q051	B-1
Q052	B-1

PA-27 BOARD (COND)



PD-19P (DIGITAL PCM AUDIO), PA-27 (ANALOG PCM AUDIO) PRINTED WIRING BOARDS

— Ref. No. PD-19P BOARD, PA-27 BOARD: 7000 series —

**PD-19P BOARD
(COMPONENT
SIDE)**

D851 A-2
D852 B-3
D853 C-2

IC851 C-3
IC852 B-2
IC856 C-1
IC857 B-1
IC858 D-2

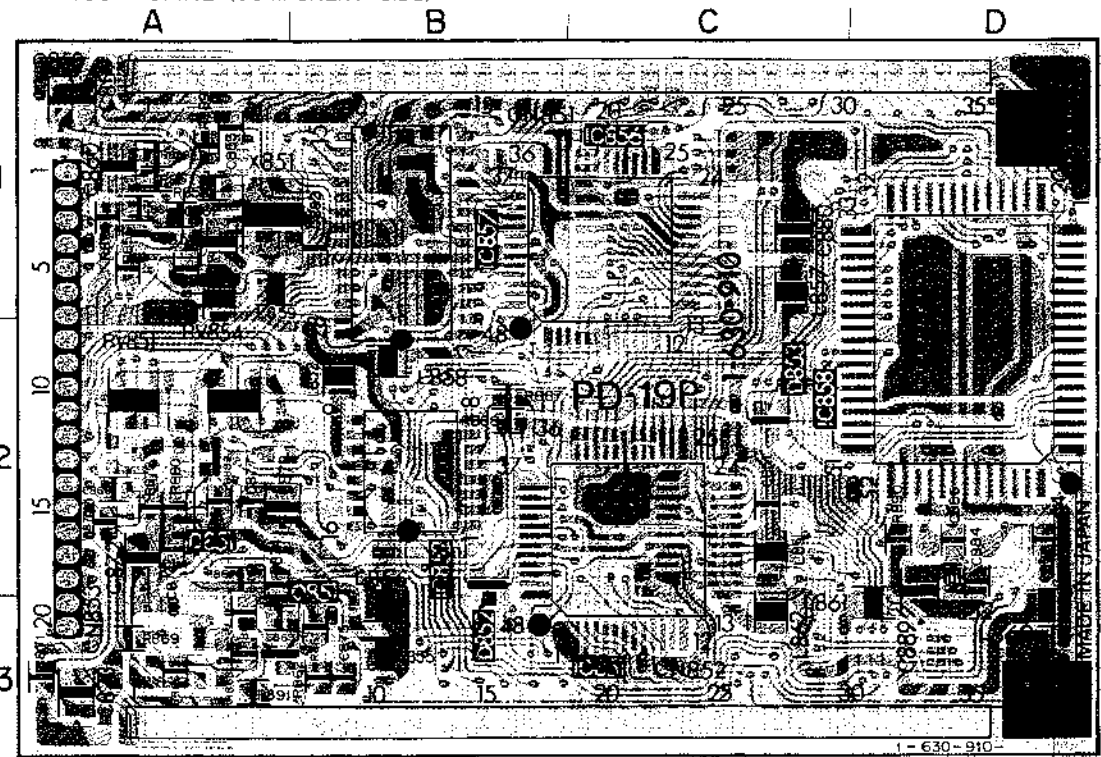
Q851 B-3

**PD-19P BOARD
(CONDUCTOR
SIDE)**

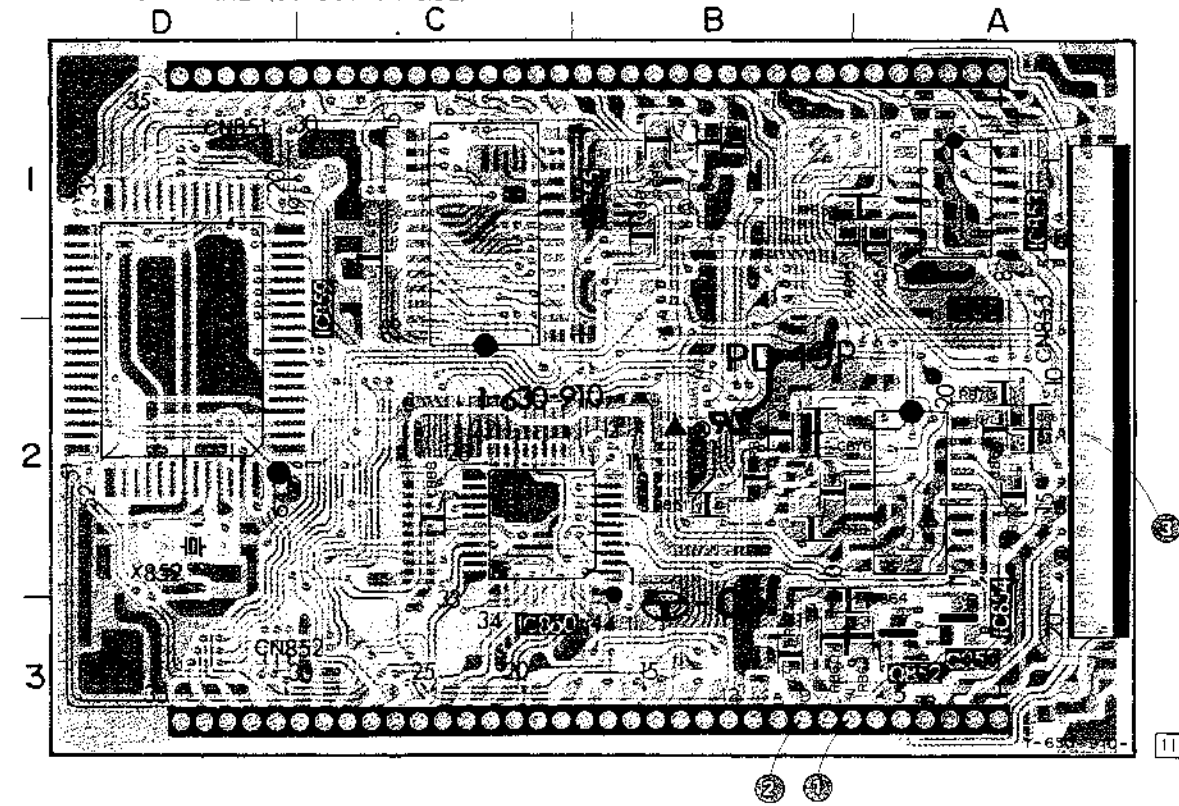
IC853 A-1
IC854 A-2
IC856 C-1
IC859 D-1
IC860 C-2

Q852 A-3
Q853 A-3

PD-19P BOARD (COMPONENT SIDE)



PD-19P BOARD (CONDUCTOR SIDE)



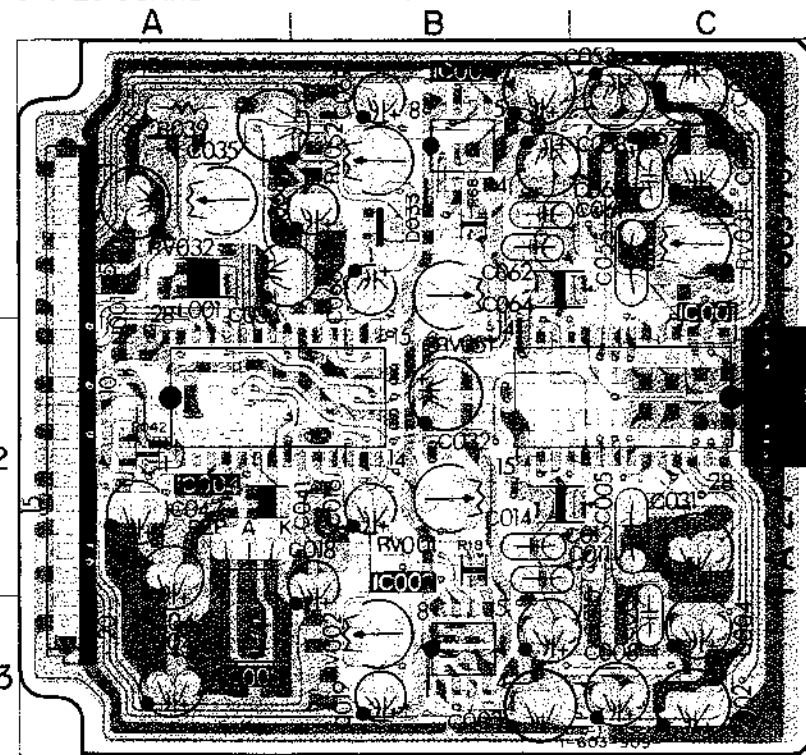
PA-27 BOARD (COMPONENT SIDE)

**PA-27 BOARD
(COMPONENT
SIDE)**

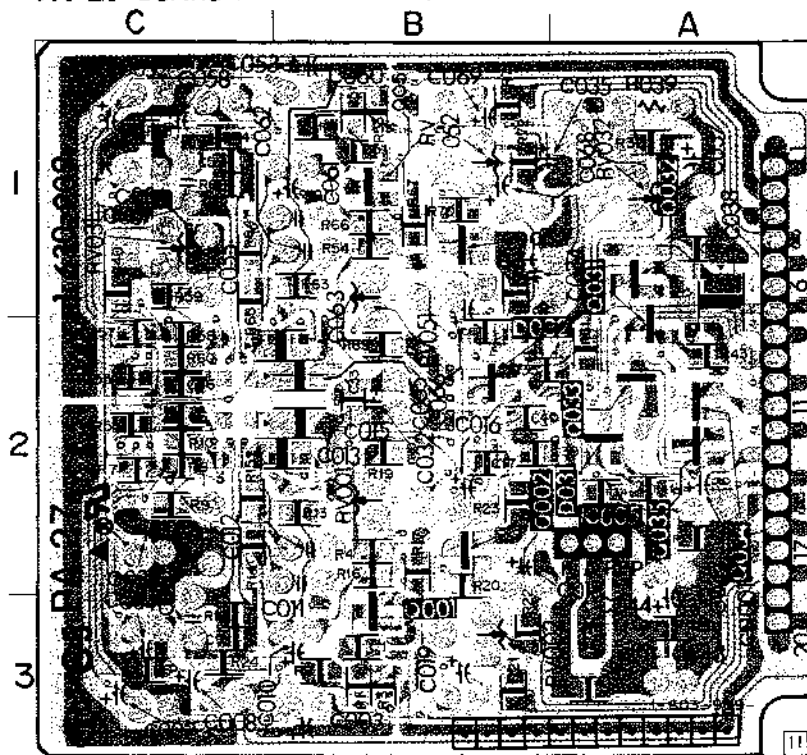
D033 B-1
IC001 C-2
IC002 B-3
IC003 B-1
IC004 A-2
IC005 A-3

**PA-27 BOARD
(CONDUCTOR
SIDE)**

D031 A-2
D032 B-2
Q001 B-3
Q002 B-2
Q031 A-1
Q032 A-1
Q033 A-2
Q034 A-2
Q035 A-2
Q051 B-1
Q052 B-1



PA-27 BOARD (CONDUCTOR SIDE)

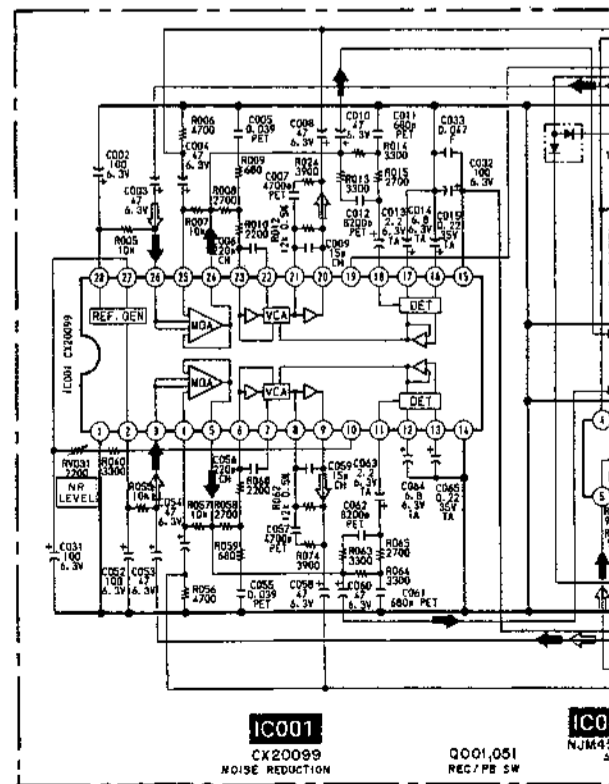
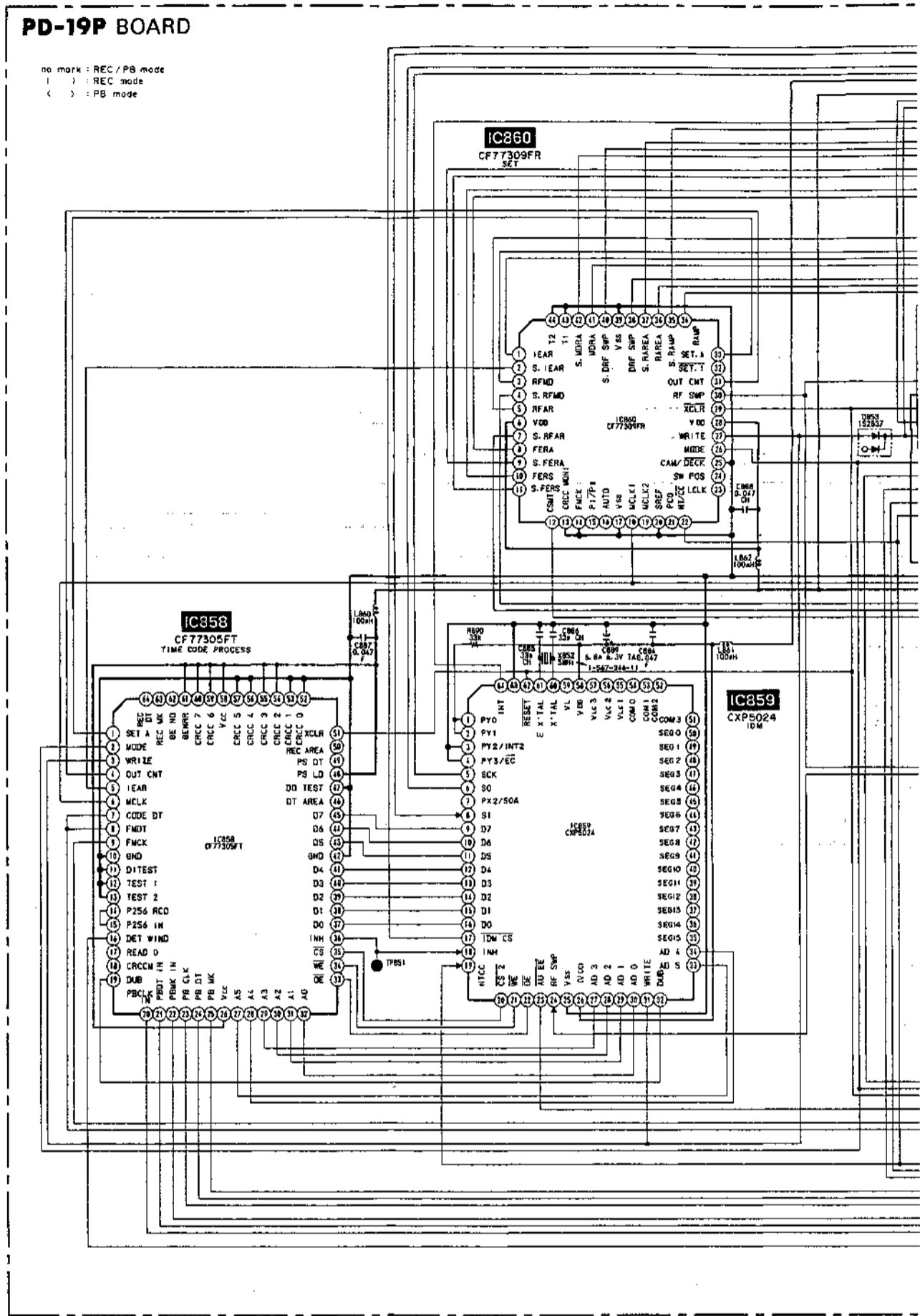


— Ref. No. PD-19P BOARD, PA-27 BOARD: 7000 series —

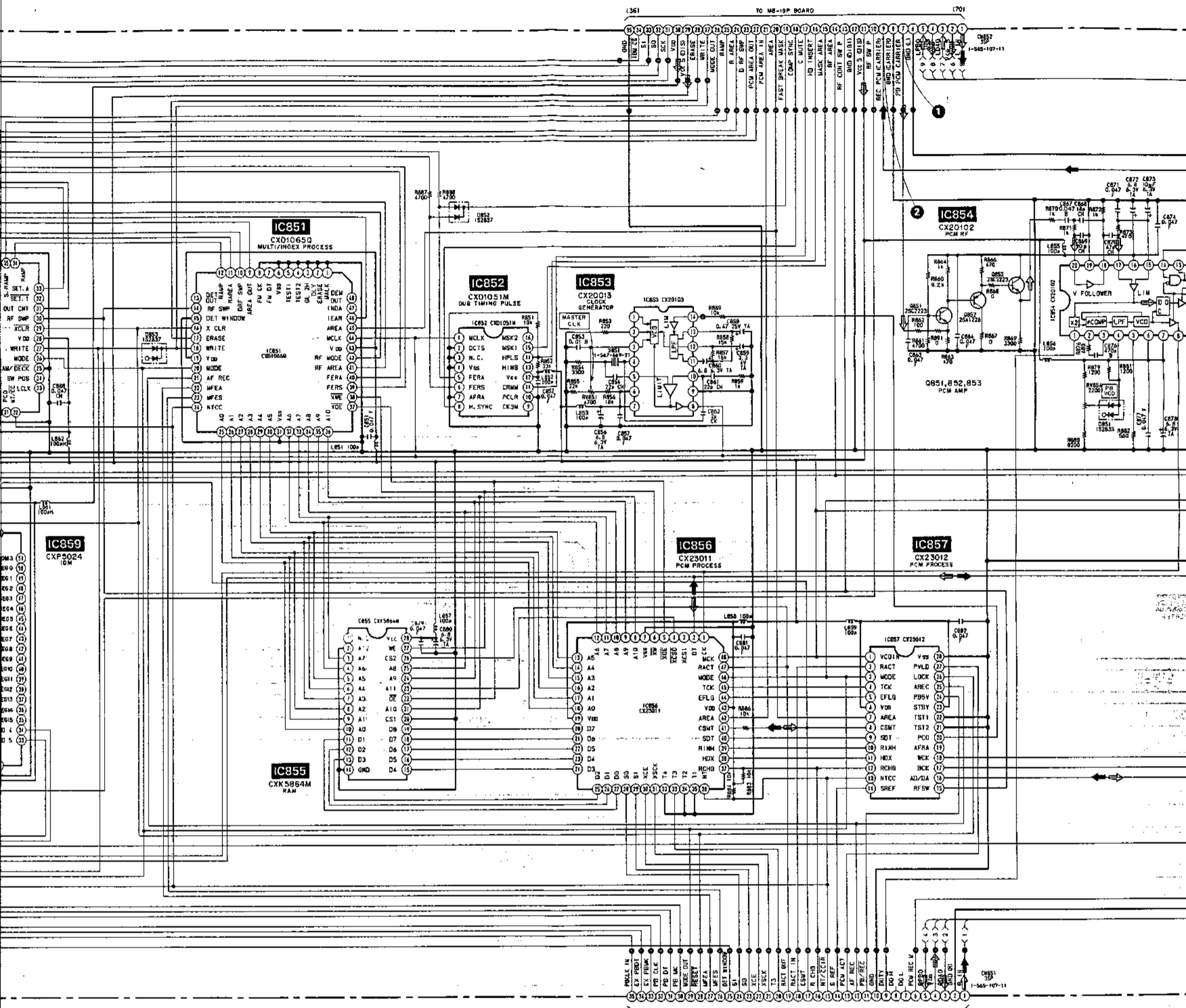
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PD-19P BOARD

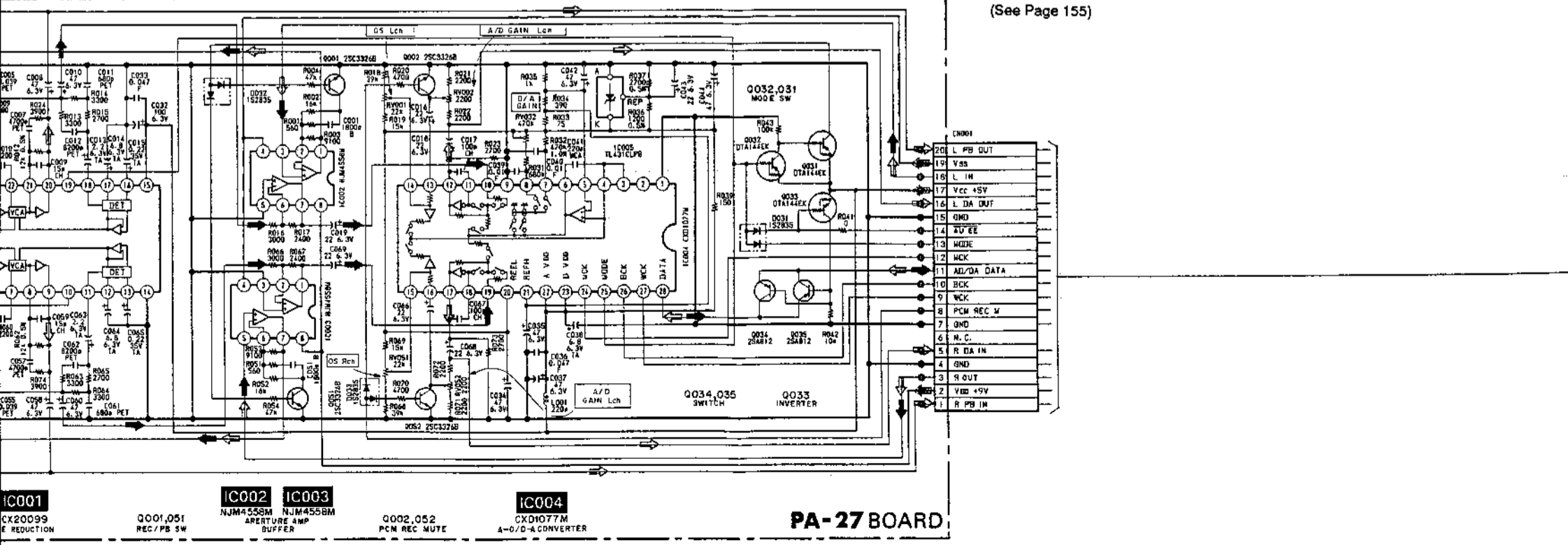
no mark : REC / PB mode
 | : REC mode
 < : PB mode

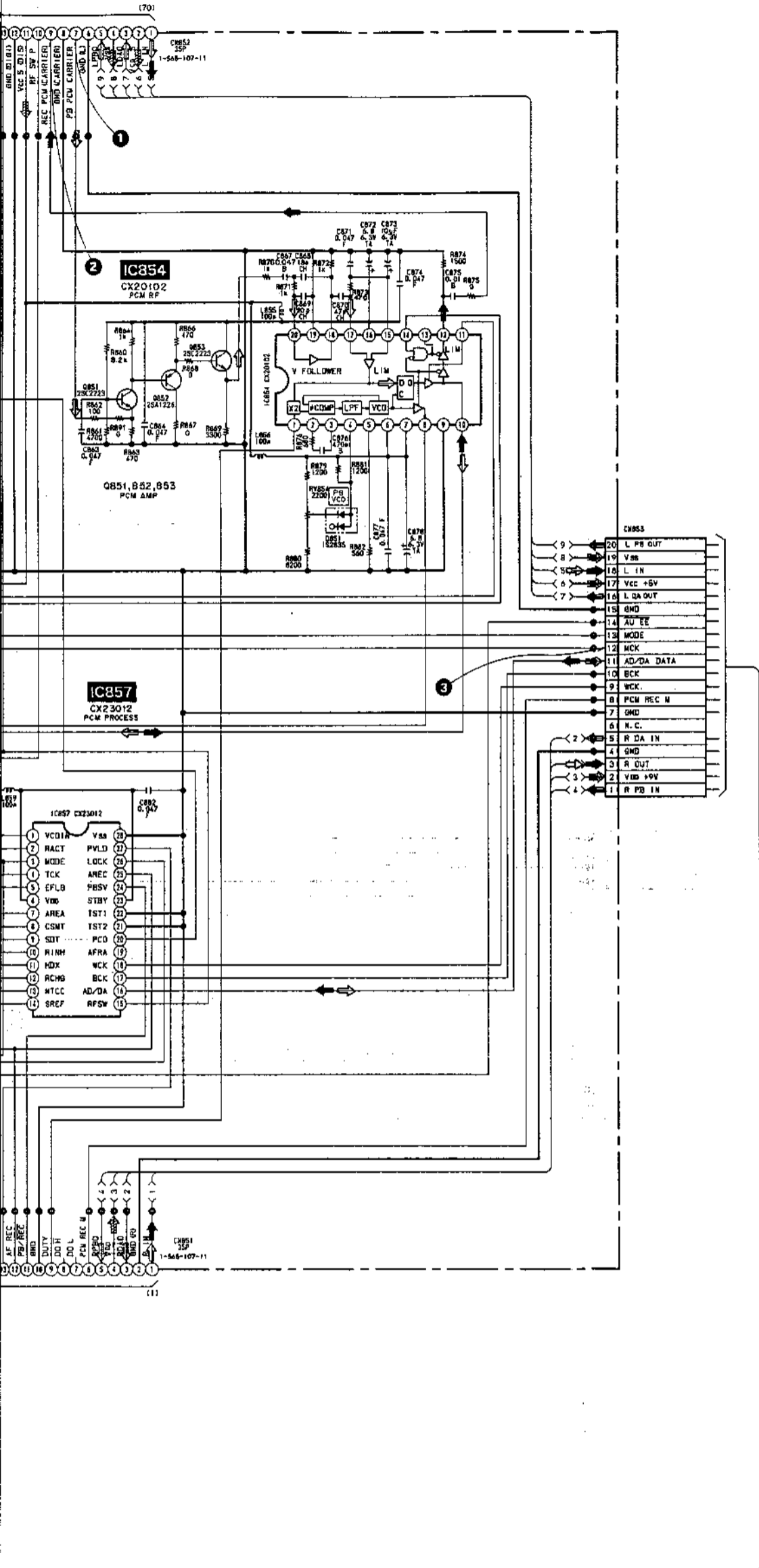


(See Page 155)



(See Page 155)



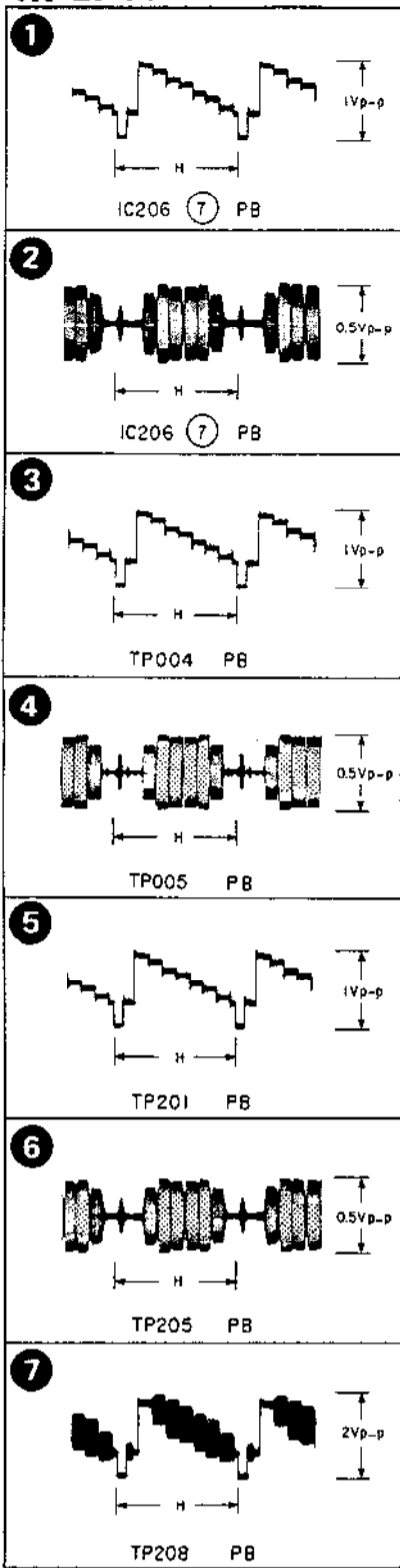


• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				→
PB				⇔

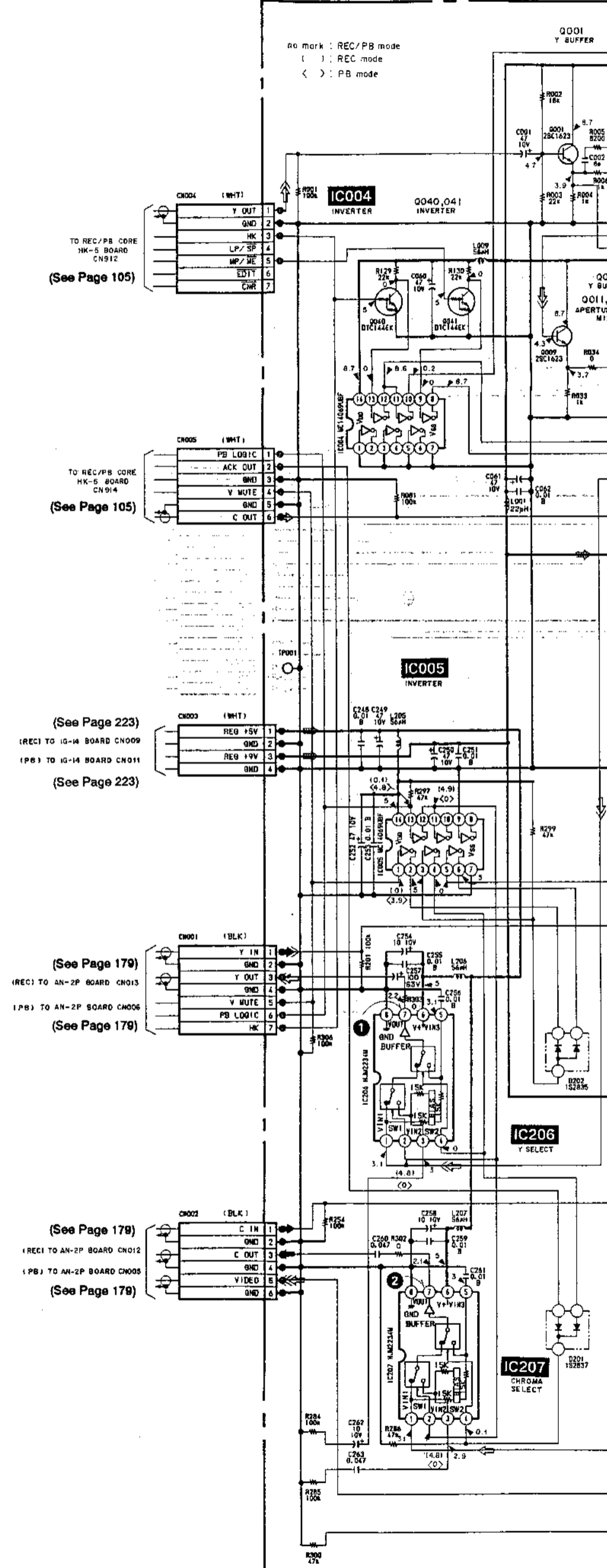
YX-2P (VIDEO) SCHEMATIC DIAGRAM

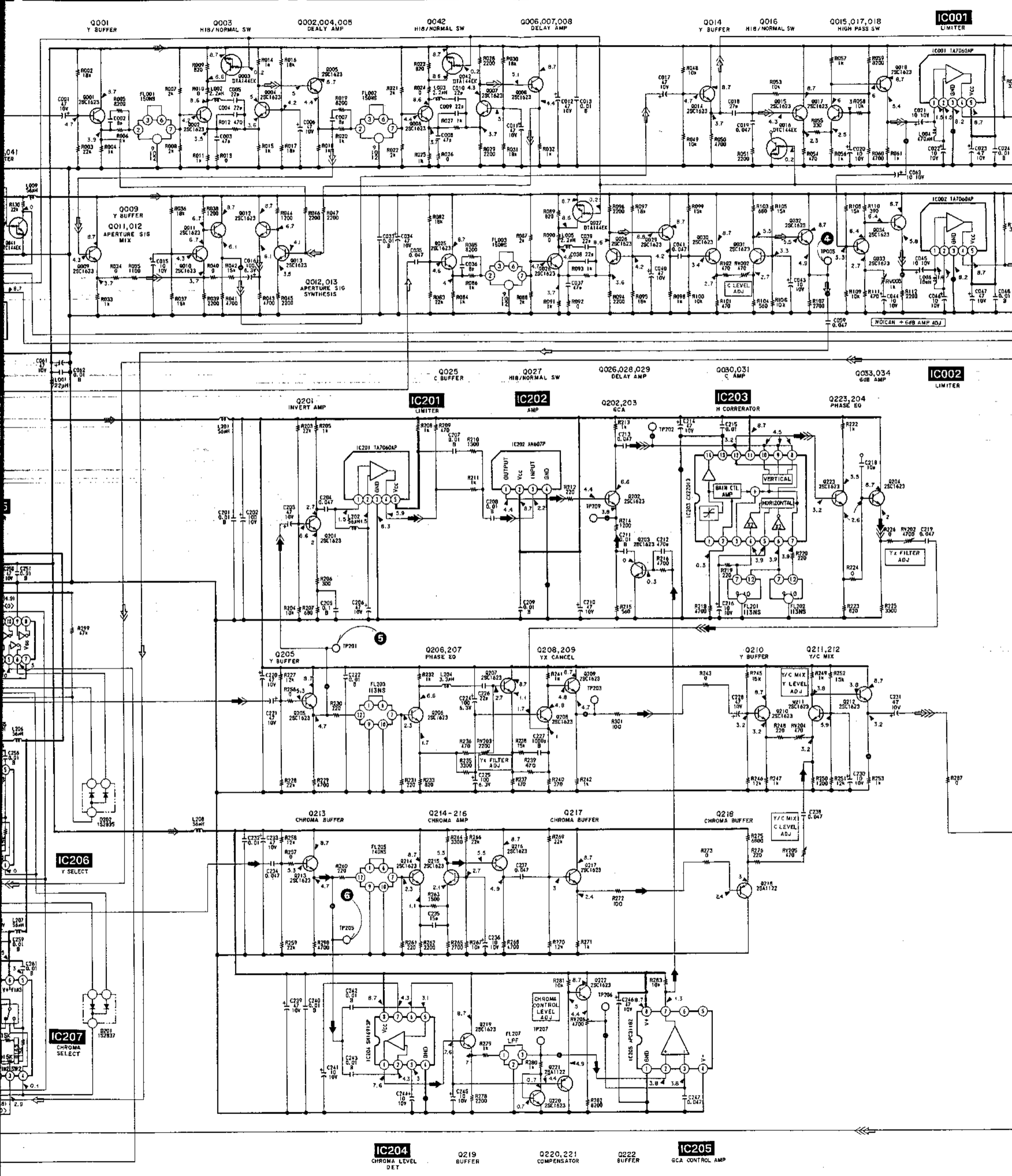
YX-2P BOARD

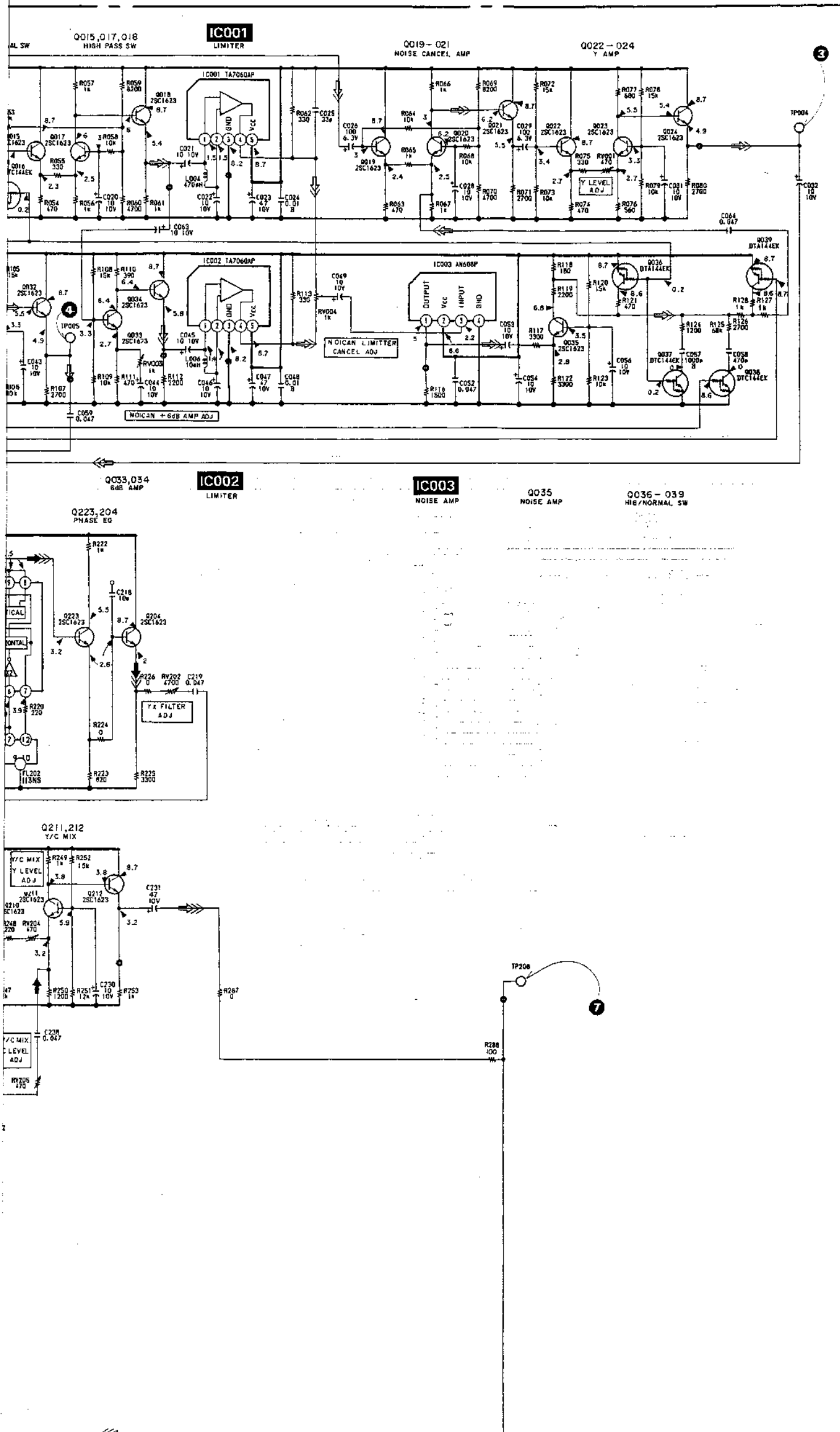


— Ref. No. YX-2P BOARD: 11000 series —

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YX-2P BOARD (REC/PB)

• SIGNAL PATH

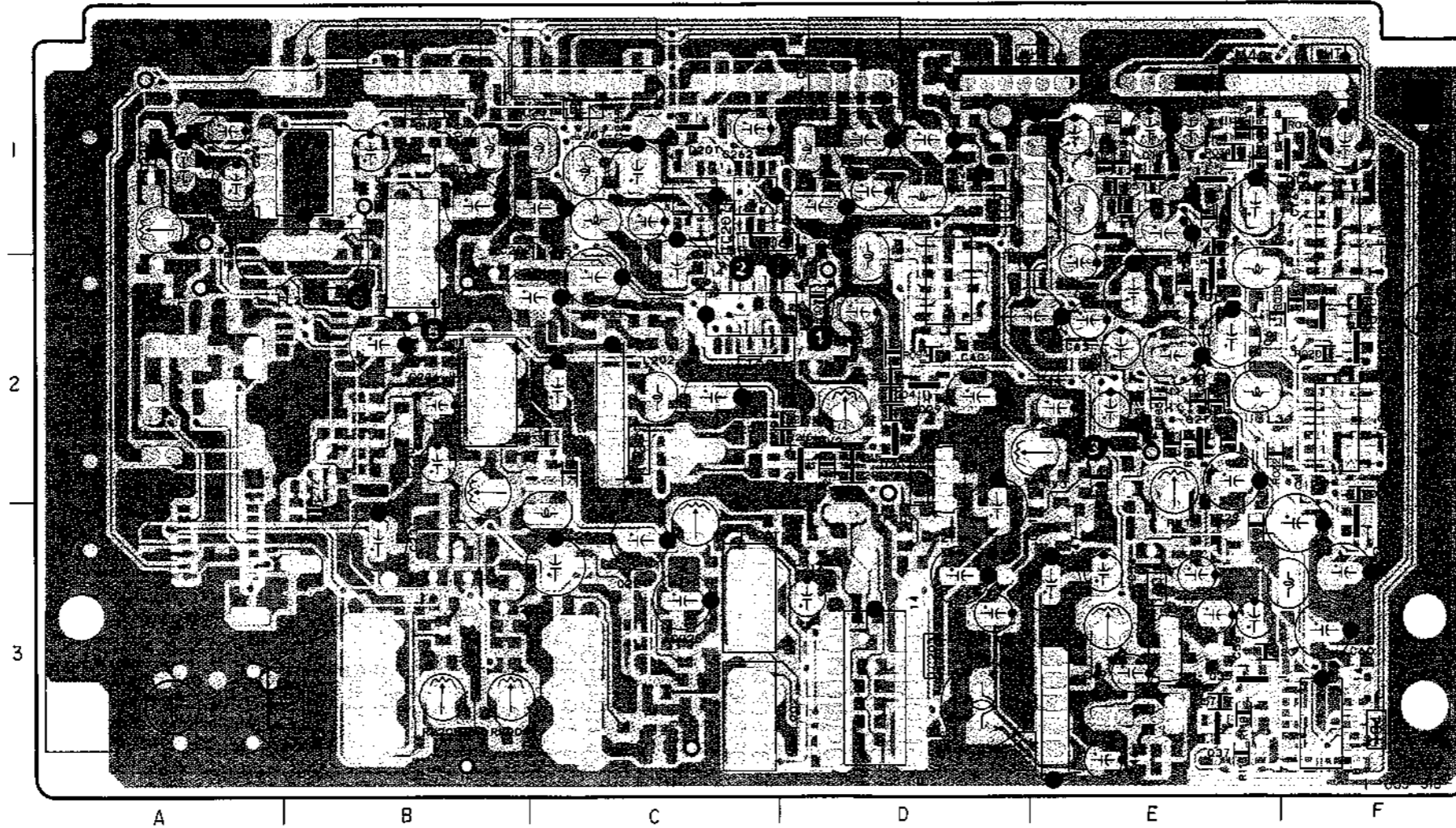
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	⇒	⇒⇒	
PB	⇨	⇨⇨	⇨⇨⇨	

YX-2P (VIDEO) PRINTED WIRING BOARD

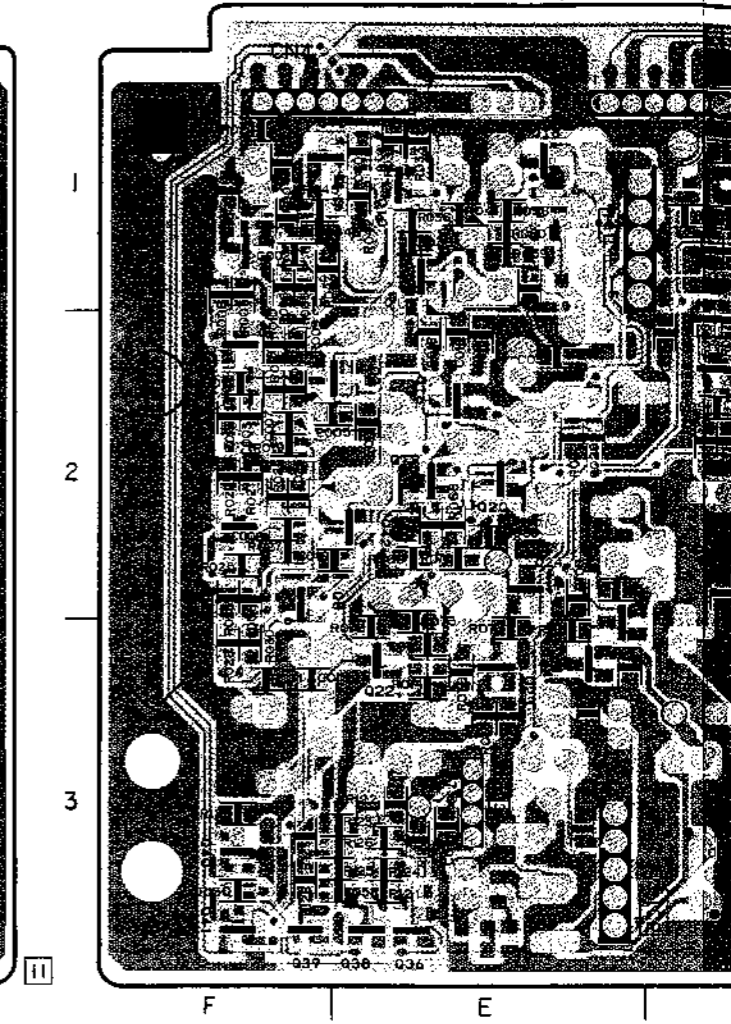
— Ref. No. YX-2P BOARD: 11000 series —

YX-2P BOARD (COMPONENT SIDE)	YX-2P BOARD (CONDUCTOR SIDE)
D201 C-1	D202 C-2
IC001 D-1	IC205 B-2
IC002 E-3	Q001 F-1
IC003 E-3	Q002 F-2
IC004 F-3	Q003 F-2
IC005 C-2	Q006 F-2
IC201 C-2	Q008 F-2
IC202 D-2	Q010 E-1
IC203 D-2	Q011 E-1
IC204 B-1	Q013 F-1
IC206 C-1	Q016 E-2
IC207 C-1	Q018 E-1
Q004 F-2	Q019 E-2
Q005 F-2	Q020 E-2
Q007 F-3	Q022 E-3
Q009 E-1	Q023 E-3
Q012 E-1	Q024 E-2
Q014 E-1	Q025 D-1
Q015 E-1	Q026 D-2
Q017 E-1	Q027 D-2
Q021 E-2	Q028 D-2
Q029 D-2	Q031 D-2
Q030 D-2	Q032 D-2
Q035 E-3	Q033 E-2
Q037 E-3	Q034 E-3
Q203 D-2	Q036 E-3
Q206 C-2	Q038 E-3
	Q039 F-4
	Q040 F-4
	Q041 F-4
	Q042 E-2
	Q201 C-2
	Q202 D-3
	Q204 D-3
	Q205 B-2
	Q207 C-3
	Q208 C-3
	Q209 C-3
	Q210 B-3
	Q211 B-3
	Q212 B-3
	Q213 B-1
	Q214 B-2
	Q215 B-2
	Q216 B-2
	Q217 B-2
	Q218 B-3
	Q219 B-1
	Q220 A-1
	Q221 A-1
	Q222 A-1
	Q223 D-3

YX-2P BOARD (COMPONENT SIDE)



YX-2P BOARD (CONDUCTOR SIDE)



* A-7062-845-A YX-2 (P) BOARD, COMPLETE

(Ref. No 11,000 Series)

DIODE

D201	8-719-400-18	DIODE 1S2836
D202	8-719-104-34	DIODE MA152MK

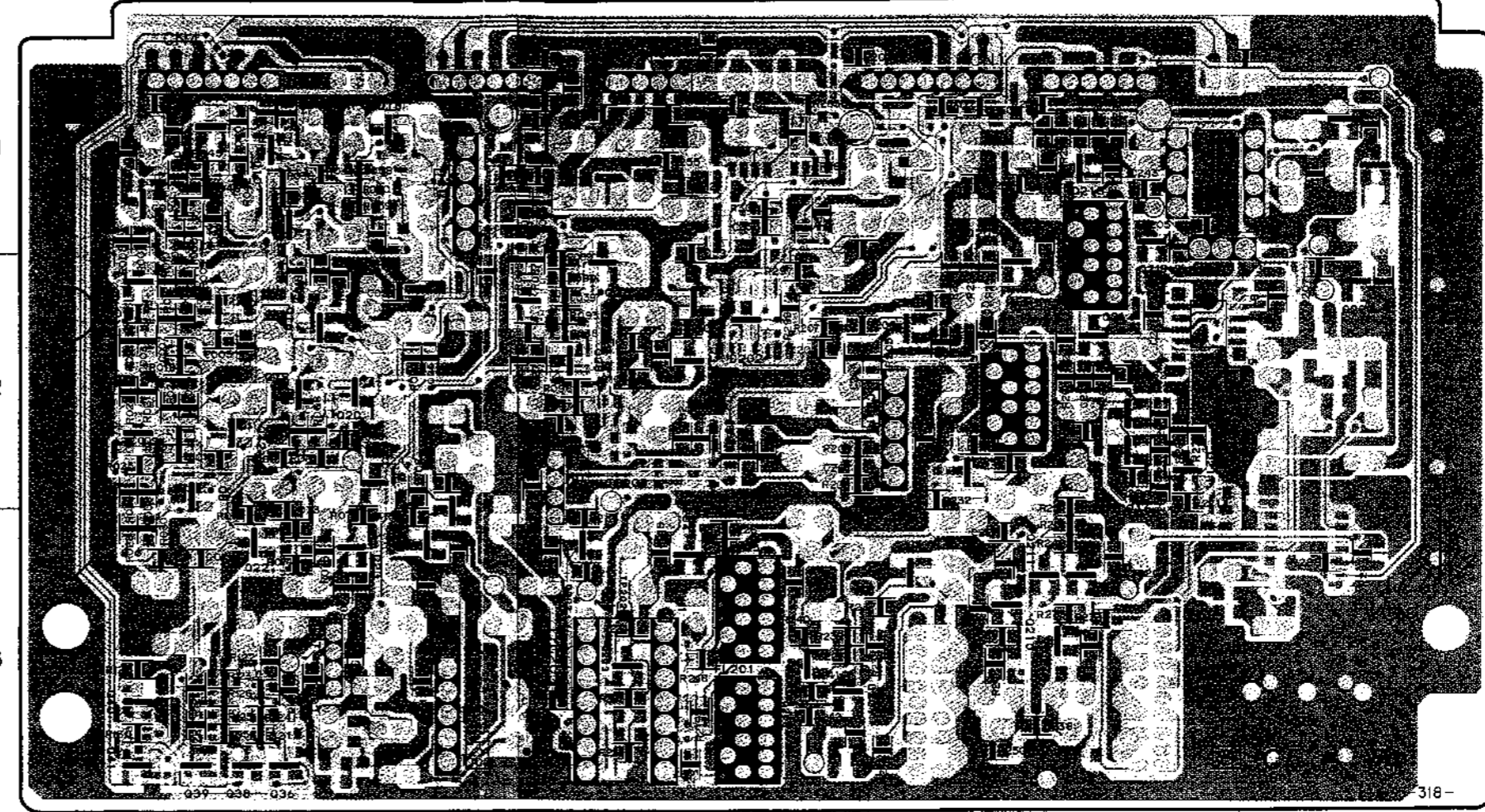
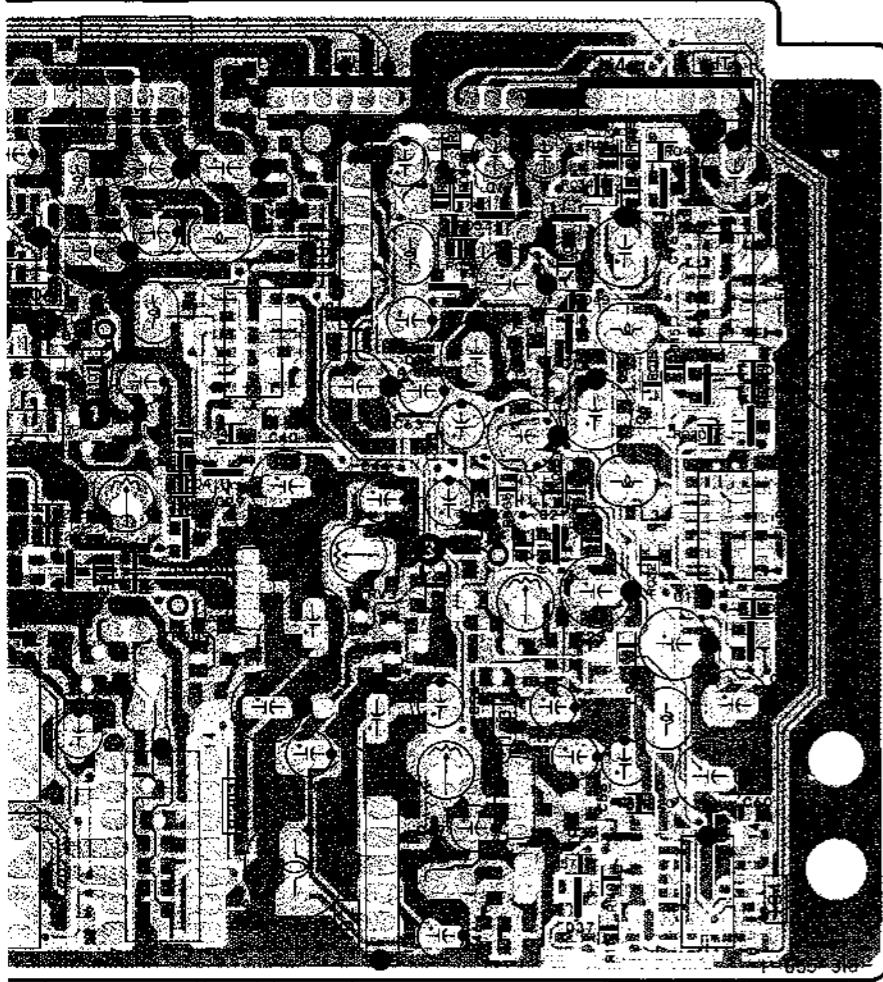
IC

IC001	8-759-200-60	IC TA7060AP
IC002	8-759-200-60	IC TA7060AP
IC003	8-759-400-06	IC AN608P
IC004	8-759-009-10	IC MC14069UBF
IC005	8-759-009-10	IC MC14069UBF
IC201	8-759-200-60	IC TA7060AP
IC202	8-759-402-33	IC AN607P
IC203	8-752-201-30	IC CX22013
IC204	8-759-969-13	IC SN16913P
IC205	8-759-101-12	IC UPC311G2
IC206	8-759-710-07	IC NJM2234M
IC207	8-759-710-07	IC NJM2234M

TRANSISTOR

Q001	8-729-100-66	TRANSISTOR 2SC1623
Q002	8-729-100-66	TRANSISTOR 2SC1623
Q003	8-729-901-06	TRANSISTOR DTA144EK
Q004	8-729-100-66	TRANSISTOR 2SC1623
Q005	8-729-100-66	TRANSISTOR 2SC1623
Q006	8-729-100-66	TRANSISTOR 2SC1623
Q007	8-729-100-66	TRANSISTOR 2SC1623
Q008	8-729-100-66	TRANSISTOR 2SC1623
Q009	8-729-100-66	TRANSISTOR 2SC1623
Q010	8-729-100-66	TRANSISTOR 2SC1623
Q011	8-729-100-66	TRANSISTOR 2SC1623
Q012	8-729-100-66	TRANSISTOR 2SC1623
Q013	8-729-100-66	TRANSISTOR 2SC1623
Q014	8-729-100-66	TRANSISTOR 2SC1623
Q015	8-729-100-66	TRANSISTOR 2SC1623
Q016	8-729-901-01	TRANSISTOR DTC144EK
Q017	8-729-100-66	TRANSISTOR 2SC1623
Q018	8-729-100-66	TRANSISTOR 2SC1623
Q019	8-729-100-66	TRANSISTOR 2SC1623
Q020	8-729-100-66	TRANSISTOR 2SC1623
Q021	8-729-100-66	TRANSISTOR 2SC1623
Q022	8-729-100-66	TRANSISTOR 2SC1623
Q023	8-729-100-66	TRANSISTOR 2SC1623
Q024	8-729-100-66	TRANSISTOR 2SC1623
Q025	8-729-100-66	TRANSISTOR 2SC1623
Q026	8-729-100-66	TRANSISTOR 2SC1623
Q027	8-729-901-06	TRANSISTOR DTA144EK
Q028	8-729-100-66	TRANSISTOR 2SC1623
Q029	8-729-100-66	TRANSISTOR 2SC1623
Q030	8-729-100-66	TRANSISTOR 2SC1623
Q031	8-729-100-66	TRANSISTOR 2SC1623
Q032	8-729-100-66	TRANSISTOR 2SC1623
Q033	8-729-100-66	TRANSISTOR 2SC1623
Q034	8-729-100-66	TRANSISTOR 2SC1623
Q035	8-729-100-66	TRANSISTOR 2SC1623
Q036	8-729-901-06	TRANSISTOR DTA144EK
Q037	8-729-901-01	TRANSISTOR DTC144EK
Q038	8-729-901-01	TRANSISTOR DTC144EK
Q039	8-729-901-06	TRANSISTOR DTA144EK
Q040	8-729-901-01	TRANSISTOR DTC144EK
Q041	8-729-901-01	TRANSISTOR DTC144EK
Q042	8-729-901-06	TRANSISTOR DTA144EK
Q201	8-729-100-66	TRANSISTOR 2SC1623
Q202	8-729-100-66	TRANSISTOR 2SC1623
Q203	8-729-100-66	TRANSISTOR 2SC1623
Q204	8-729-100-66	TRANSISTOR 2SC1623
Q205	8-729-100-66	TRANSISTOR 2SC1623
Q206	8-729-100-66	TRANSISTOR 2SC1623
Q207	8-729-100-66	TRANSISTOR 2SC1623
Q208	8-729-100-66	TRANSISTOR 2SC1623
Q209	8-729-100-66	TRANSISTOR 2SC1623
Q210	8-729-100-66	TRANSISTOR 2SC1623
Q211	8-729-100-66	TRANSISTOR 2SC1623
Q212	8-729-100-66	TRANSISTOR 2SC1623
Q213	8-729-100-66	TRANSISTOR 2SC1623
Q214	8-729-100-66	TRANSISTOR 2SC1623
Q215	8-729-100-66	TRANSISTOR 2SC1623
Q216	8-729-100-66	TRANSISTOR 2SC1623
Q217	8-729-100-66	TRANSISTOR 2SC1623
Q218	8-729-320-17	TRANSISTOR 2SA1122CD
Q219	8-729-100-66	TRANSISTOR 2SC1623
Q220	8-729-100-66	TRANSISTOR 2SC1623
Q221	8-729-320-17	TRANSISTOR 2SA1122CD
Q222	8-729-100-66	TRANSISTOR 2SC1623
Q223	8-729-100-66	TRANSISTOR 2SC1623

YX-2P BOARD (CONDUCTOR SIDE)



TRANSISTOR

TRANSISTOR 2SC1623	Q026	8-729-100-66	TRANSISTOR 2SC1623	Q207	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q027	8-729-901-06	TRANSISTOR DTA144EK	Q208	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR DTA144EK	Q028	8-729-100-66	TRANSISTOR 2SC1623	Q209	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q029	8-729-100-66	TRANSISTOR 2SC1623	Q210	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q030	8-729-100-66	TRANSISTOR 2SC1623	Q211	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q031	8-729-100-66	TRANSISTOR 2SC1623	Q212	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q032	8-729-100-66	TRANSISTOR 2SC1623	Q213	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q033	8-729-100-66	TRANSISTOR 2SC1623	Q214	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q034	8-729-100-66	TRANSISTOR 2SC1623	Q215	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q035	8-729-100-66	TRANSISTOR 2SC1623	Q216	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q036	8-729-901-06	TRANSISTOR DTA144EK	Q217	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q037	8-729-901-01	TRANSISTOR DTC144EK	Q218	8-729-320-17	TRANSISTOR 2SA1122CD
TRANSISTOR 2SC1623	Q038	8-729-901-01	TRANSISTOR DTC144EK	Q219	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q039	8-729-901-06	TRANSISTOR DTA144EK	Q220	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q040	8-729-901-01	TRANSISTOR DTC144EK	Q221	8-729-320-17	TRANSISTOR 2SA1122CD
TRANSISTOR DTC144EK	Q041	8-729-901-01	TRANSISTOR DTC144EK	Q222	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q042	8-729-901-06	TRANSISTOR DTA144EK	Q223	8-729-100-66	TRANSISTOR 2SC1623
TRANSISTOR 2SC1623	Q201	8-729-100-66	TRANSISTOR 2SC1623			
TRANSISTOR 2SC1623	Q202	8-729-100-66	TRANSISTOR 2SC1623			
TRANSISTOR 2SC1623	Q203	8-729-100-66	TRANSISTOR 2SC1623			
TRANSISTOR 2SC1623	Q204	8-729-100-66	TRANSISTOR 2SC1623			
TRANSISTOR 2SC1623	Q205	8-729-100-66	TRANSISTOR 2SC1623			
TRANSISTOR 2SC1623	Q206	8-729-100-66	TRANSISTOR 2SC1623			

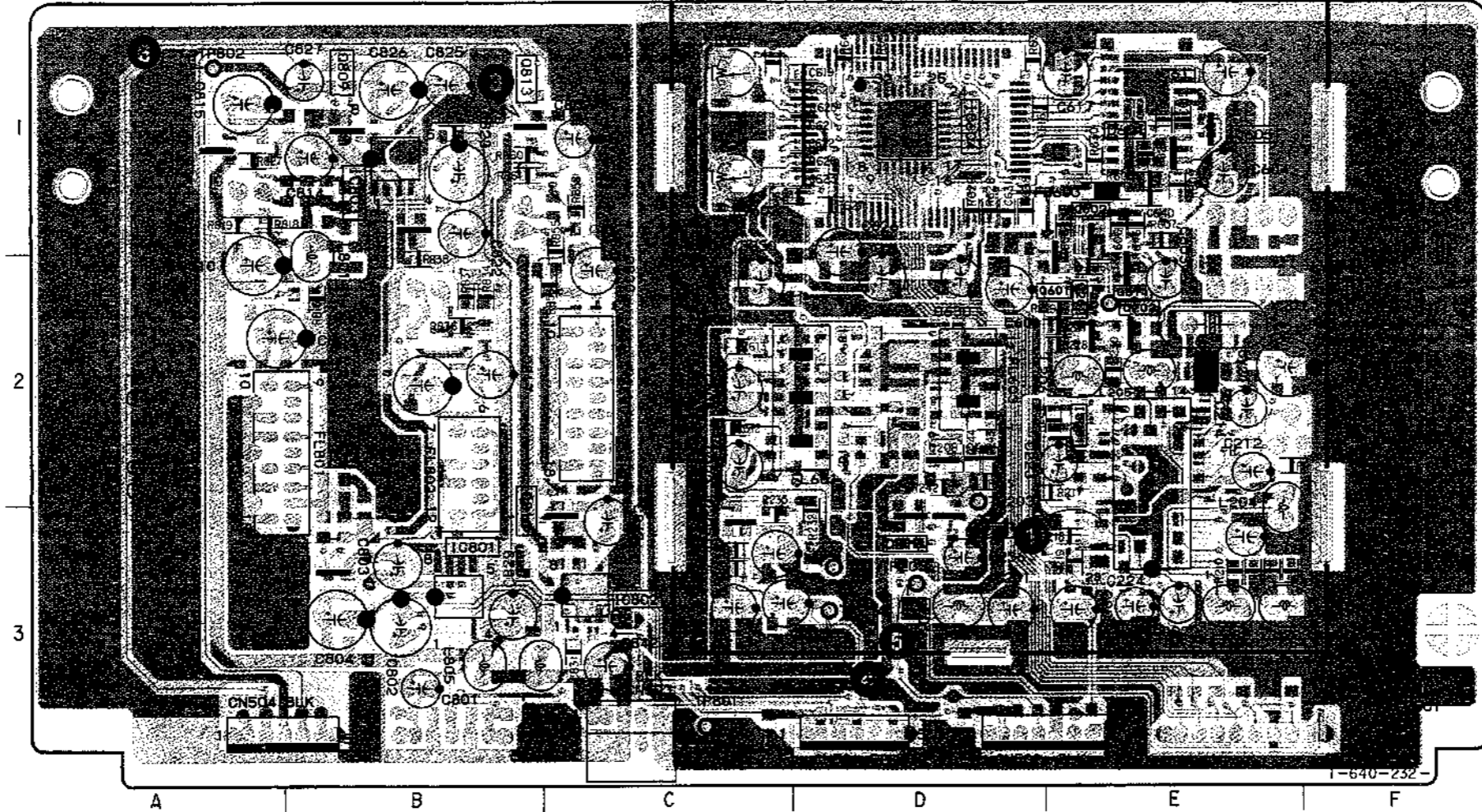
EVO-9700P

YC-106 (VIDEO) PRINTED WIRING BOARD

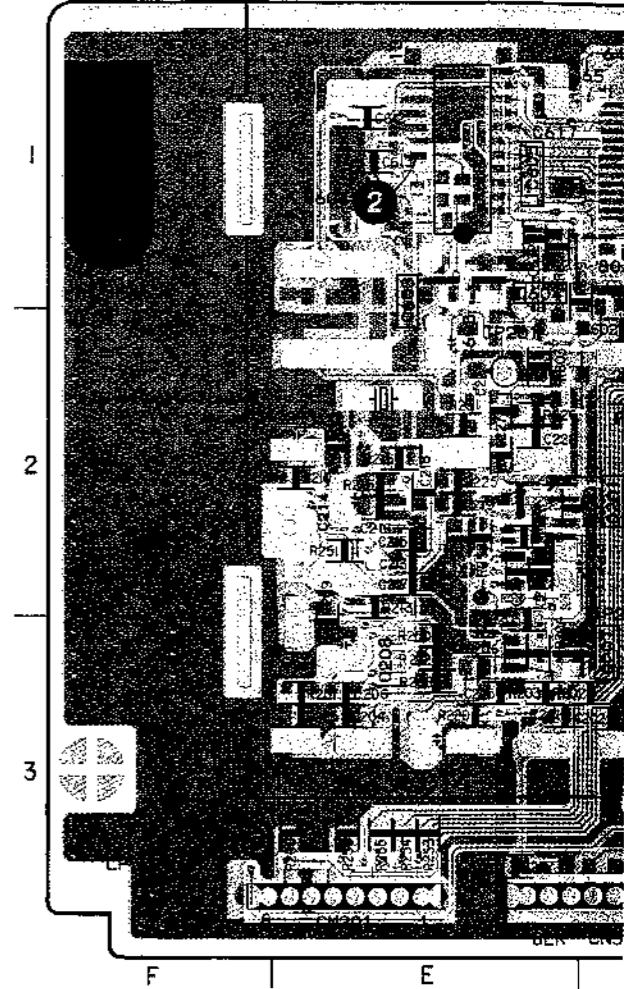
— Ref. No. YC-106 BOARD: 12000 series —

YC-106 BOARD (COMPONENT SIDE)	YC-106 BOARD (CONDUCTOR SIDE)
D601 E-1	IC605 E-1
IC201 E-2	IC606 E-4
IC604 D-1	Q201 E-2
IC801 B-3	Q204 D-2
IC802 C-3	Q206 C-3
IC803 B-1	Q207 E-3
Q202 E-2	Q208 D-2
Q203 E-2	Q603 E-1
Q205 C-3	Q604 E-1
Q209 D-3	Q606 C-2
Q210 D-3	Q607 C-2
Q601 D-2	Q609 D-2
Q602 E-2	Q610 D-2
Q605 E-1	Q802 A-2
Q611 E-1	Q803 A-1
Q801 B-3	Q804 A-1
Q805 A-1	Q806 B-2
Q808 B-2	Q807 B-2
Q809 B-1	Q811 B-2
Q810 C-3	Q812 B-1
Q813 B-1	

YC-106 BOARD (COMPONENT SIDE)



YC-106 BOARD (CONDUCTOR SIDE)



* A-7062-844-A YC-106 BOARD, COMPLETE

< DIODE >

D601 8-719-400-18 DIODE MA152WK

< IC >

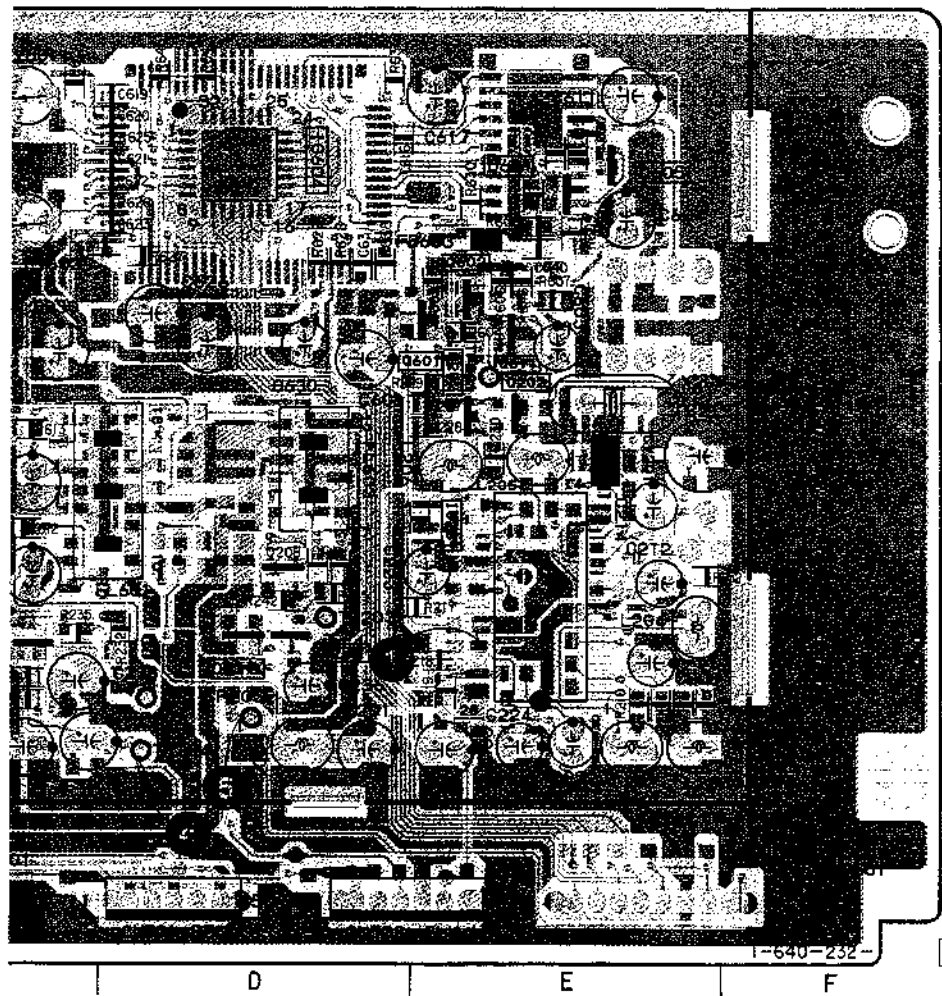
IC201 8-759-603-54 IC M51271FP
 IC604 8-759-506-97 IC BU5801K
 IC605 8-752-334-55 IC CXD1175AM
 IC606 8-752-342-61 IC CXD2105AQ
 IC801 8-759-711-79 IC NJM2233BM
 IC802 8-759-711-79 IC NJM2233BM
 IC803 8-759-711-79 IC NJM2233BM

< TRANSISTOR >

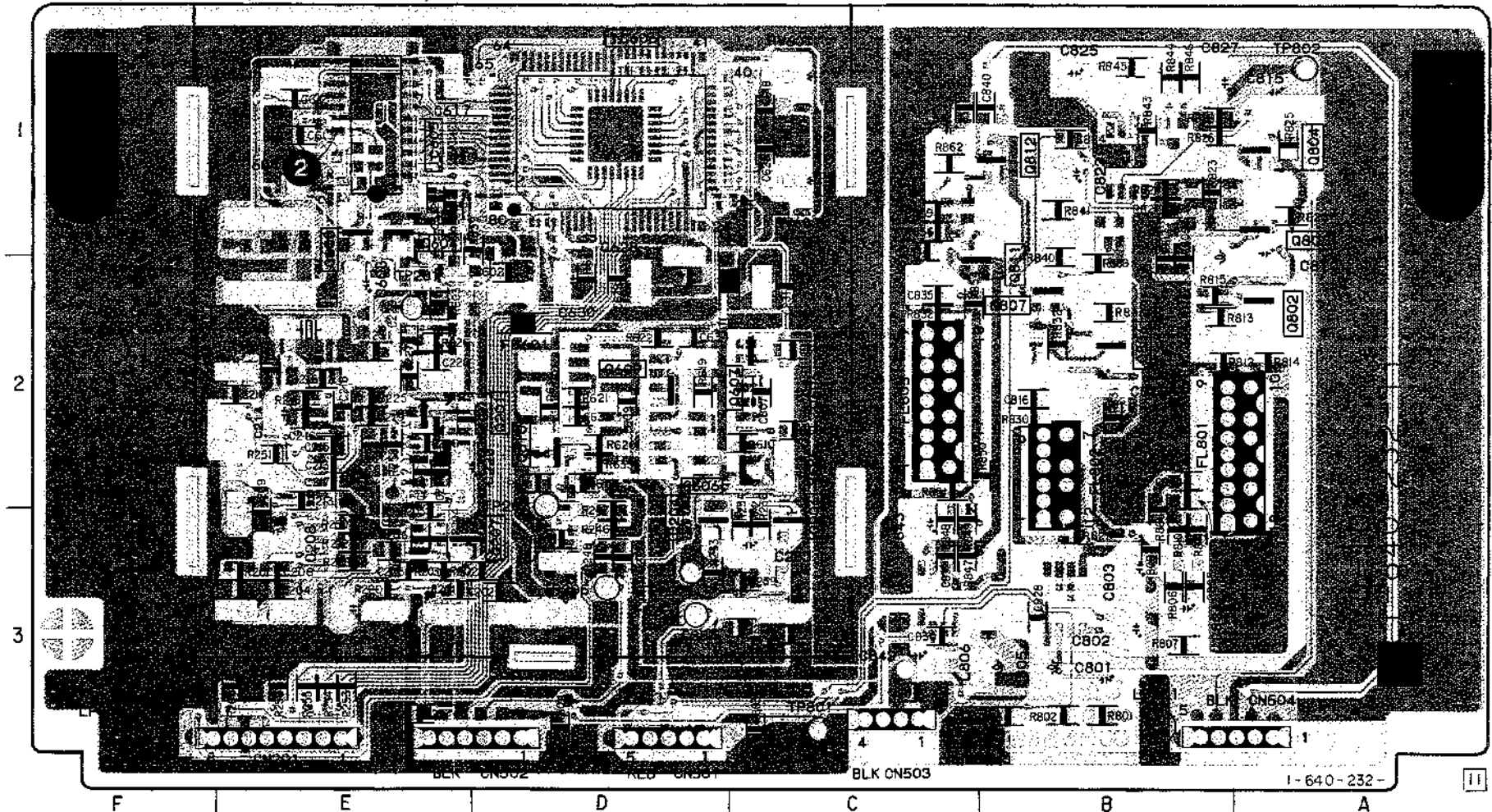
Q201	8-729-100-66	TRANSISTOR	2SC1623
Q202	8-729-100-66	TRANSISTOR	2SC1623
Q203	8-729-100-66	TRANSISTOR	2SC1623
Q204	8-729-100-66	TRANSISTOR	2SC1623
Q205	8-729-100-66	TRANSISTOR	2SC1623
Q206	8-729-100-66	TRANSISTOR	2SC1623
Q207	8-729-100-66	TRANSISTOR	2SC1623
Q208	8-729-100-66	TRANSISTOR	2SC1623
Q209	8-729-100-66	TRANSISTOR	2SC1623
Q210	8-729-100-66	TRANSISTOR	2SC1623
Q601	8-729-100-66	TRANSISTOR	2SC1623
Q602	8-729-216-22	TRANSISTOR	2SA1162
Q603	8-729-100-66	TRANSISTOR	2SC1623
Q604	8-729-100-66	TRANSISTOR	2SC1623
Q605	8-729-216-22	TRANSISTOR	2SA1162
Q606	8-729-100-66	TRANSISTOR	2SC1623
Q607	8-729-216-22	TRANSISTOR	2SA1162
Q609	8-729-216-22	TRANSISTOR	2SA1162
Q610	8-729-216-22	TRANSISTOR	2SA1162
Q611	8-729-216-22	TRANSISTOR	2SA1162
Q801	8-729-100-66	TRANSISTOR	2SC1623
Q802	8-729-100-66	TRANSISTOR	2SC1623
Q803	8-729-100-66	TRANSISTOR	2SC1623
Q804	8-729-100-66	TRANSISTOR	2SC1623
Q805	8-729-100-66	TRANSISTOR	2SC1623
Q806	8-729-100-66	TRANSISTOR	2SC1623
Q807	8-729-100-66	TRANSISTOR	2SC1623
Q808	8-729-100-66	TRANSISTOR	2SC1623
Q809	8-729-100-66	TRANSISTOR	2SC1623
Q810	8-729-100-66	TRANSISTOR	2SC1623
Q811	8-729-100-66	TRANSISTOR	2SC1623
Q812	8-729-100-66	TRANSISTOR	2SC1623
Q813	8-729-100-66	TRANSISTOR	2SC1623

VIDEO

VIDEO VIC



YC-106 BOARD (CONDUCTOR SIDE)



STOR >	Q606	8-729-100-66	TRANSISTOR	2SC1623
	Q607	8-729-216-22	TRANSISTOR	2SA1162
JR 2SC1623	Q609	8-729-216-22	TRANSISTOR	2SA1162
JR 2SC1623	Q610	8-729-216-22	TRANSISTOR	2SA1162
JR 2SC1623	Q611	8-729-216-22	TRANSISTOR	2SA1162
JR 2SC1623	Q801	8-729-100-66	TRANSISTOR	2SC1623
	Q802	8-729-100-66	TRANSISTOR	2SC1623
JR 2SC1623	Q803	8-729-100-66	TRANSISTOR	2SC1623
JR 2SC1623	Q804	8-729-100-66	TRANSISTOR	2SC1623
OR 2SC1623	Q805	8-729-100-66	TRANSISTOR	2SC1623
OR 2SC1623	Q806	8-729-100-66	TRANSISTOR	2SC1623
OR 2SC1623	Q807	8-729-100-66	TRANSISTOR	2SC1623
OR 2SC1623	Q808	8-729-100-66	TRANSISTOR	2SC1623
OR 2SA1162	Q809	8-729-100-66	TRANSISTOR	2SC1623
OR 2SC1623	Q810	8-729-100-66	TRANSISTOR	2SC1623
OR 2SC1623	Q811	8-729-100-66	TRANSISTOR	2SC1623
OR 2SA1162	Q812	8-729-100-66	TRANSISTOR	2SC1623
	Q813	8-729-100-66	TRANSISTOR	2SC1623

YC-106 (VIDEO) SCHEMATIC DIAGRAM

— Ref. No. YC-106 BOARD: 12000 series —

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

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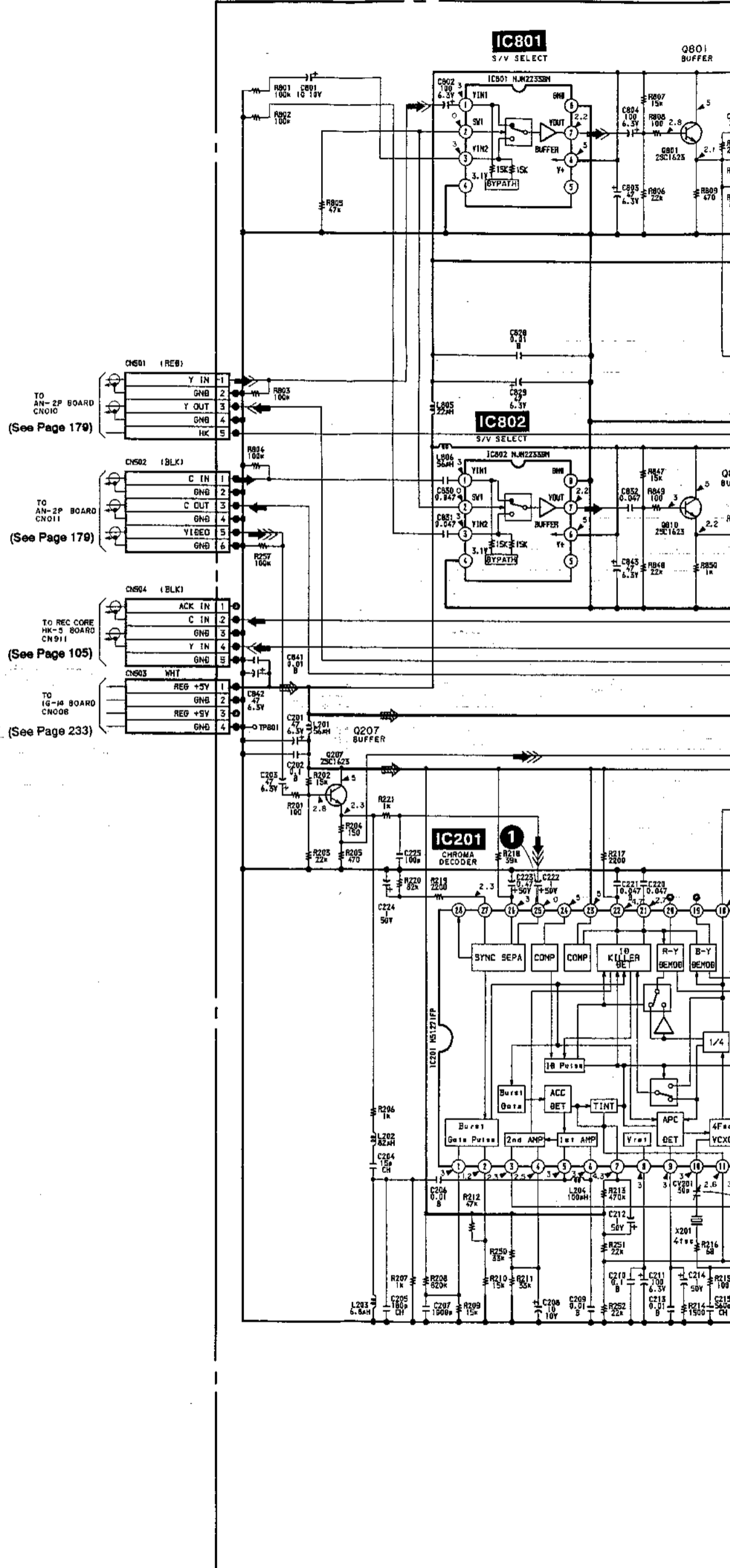
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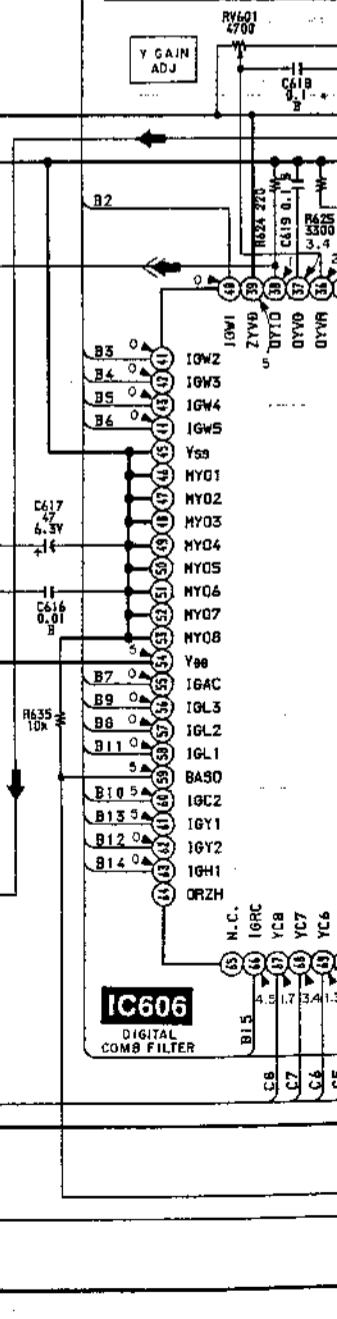
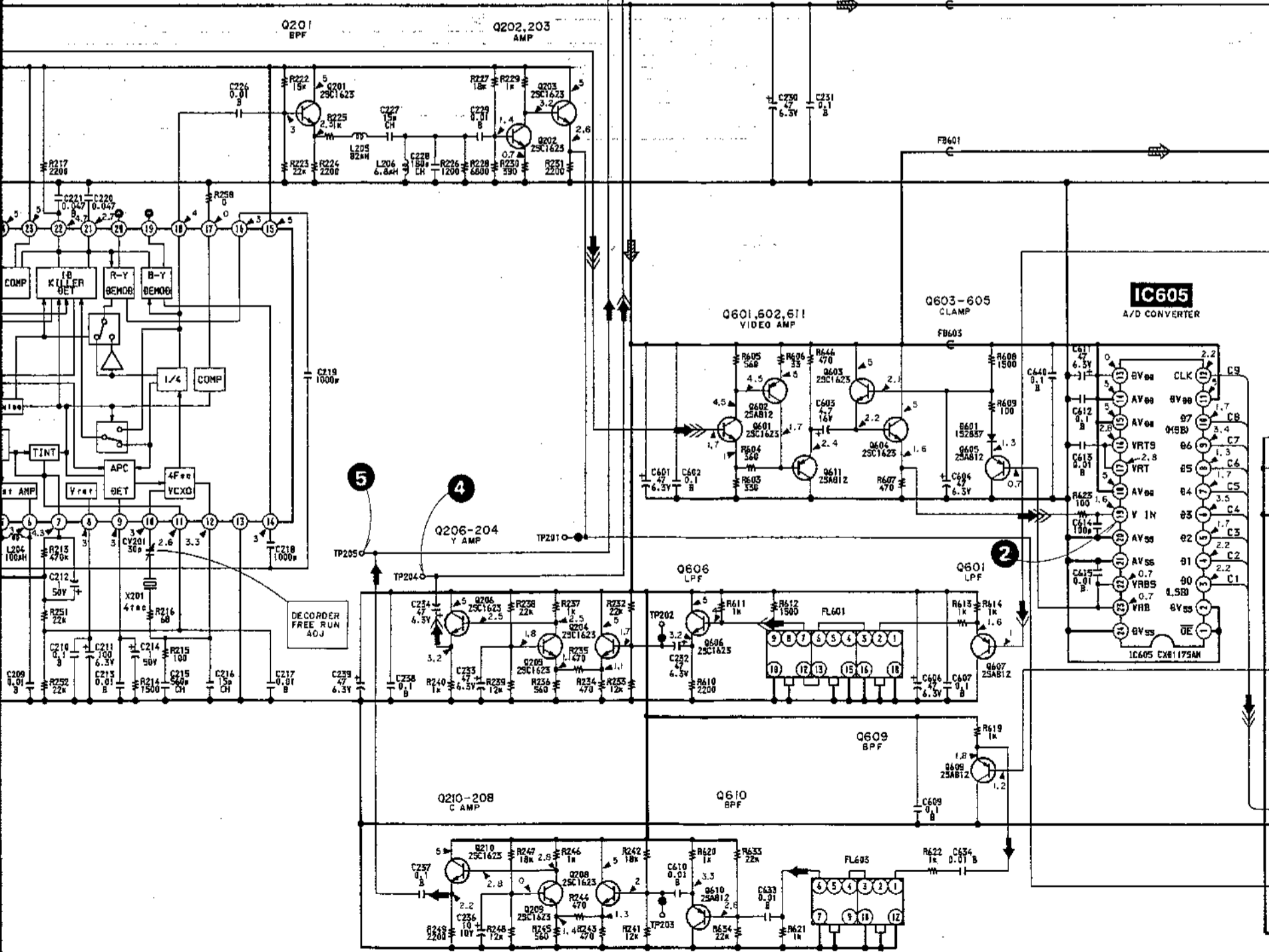
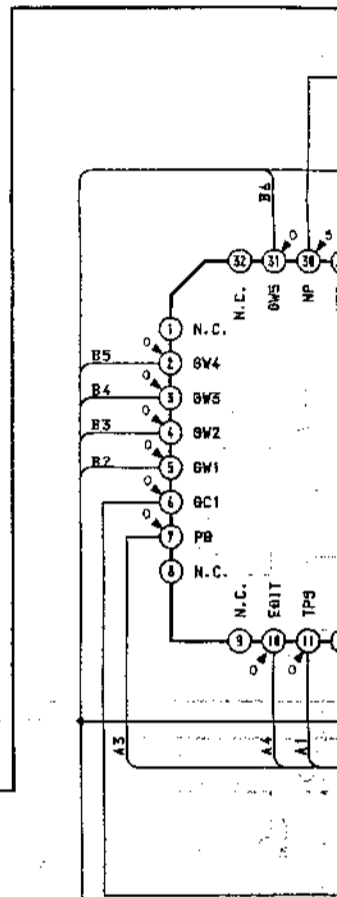
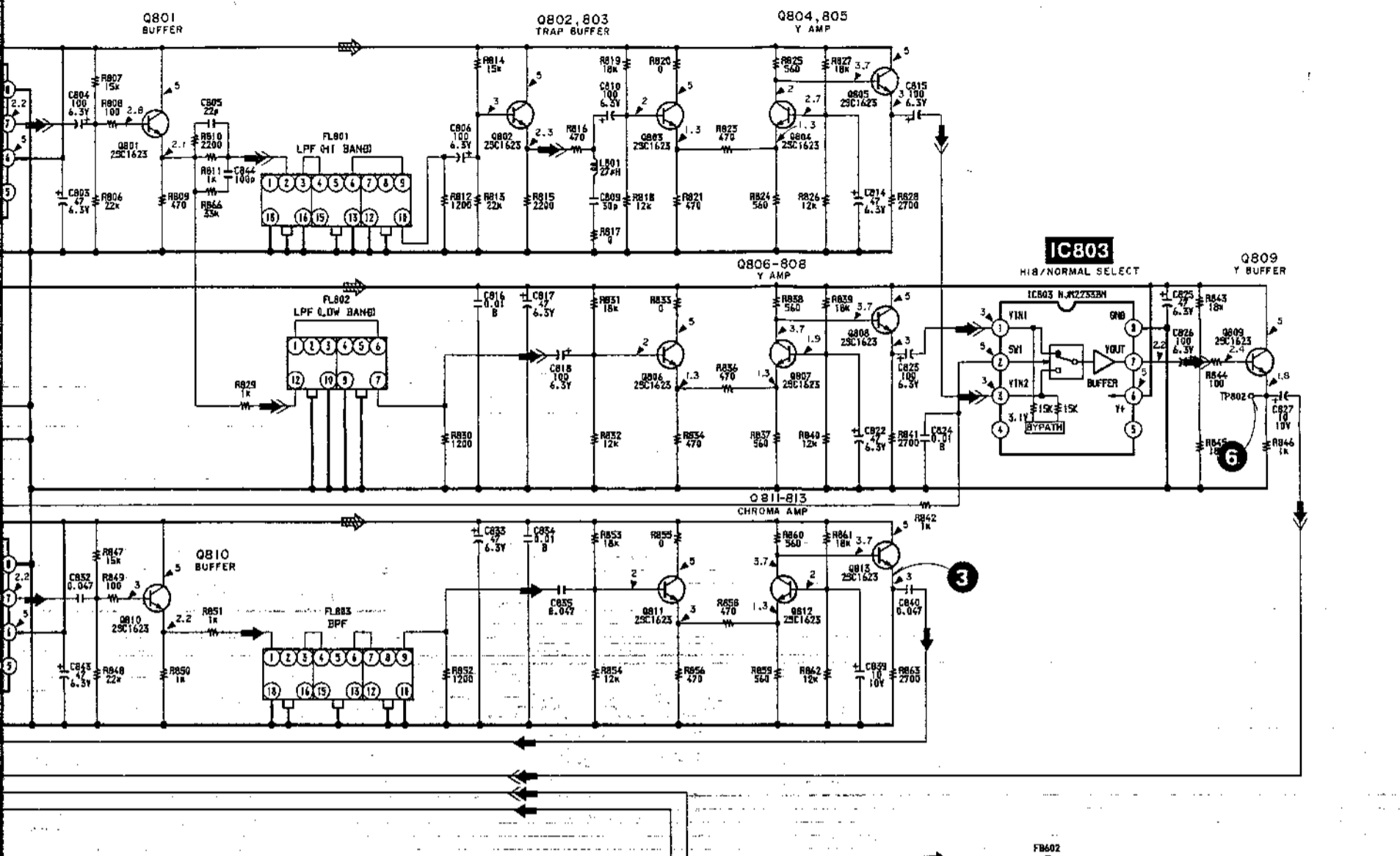
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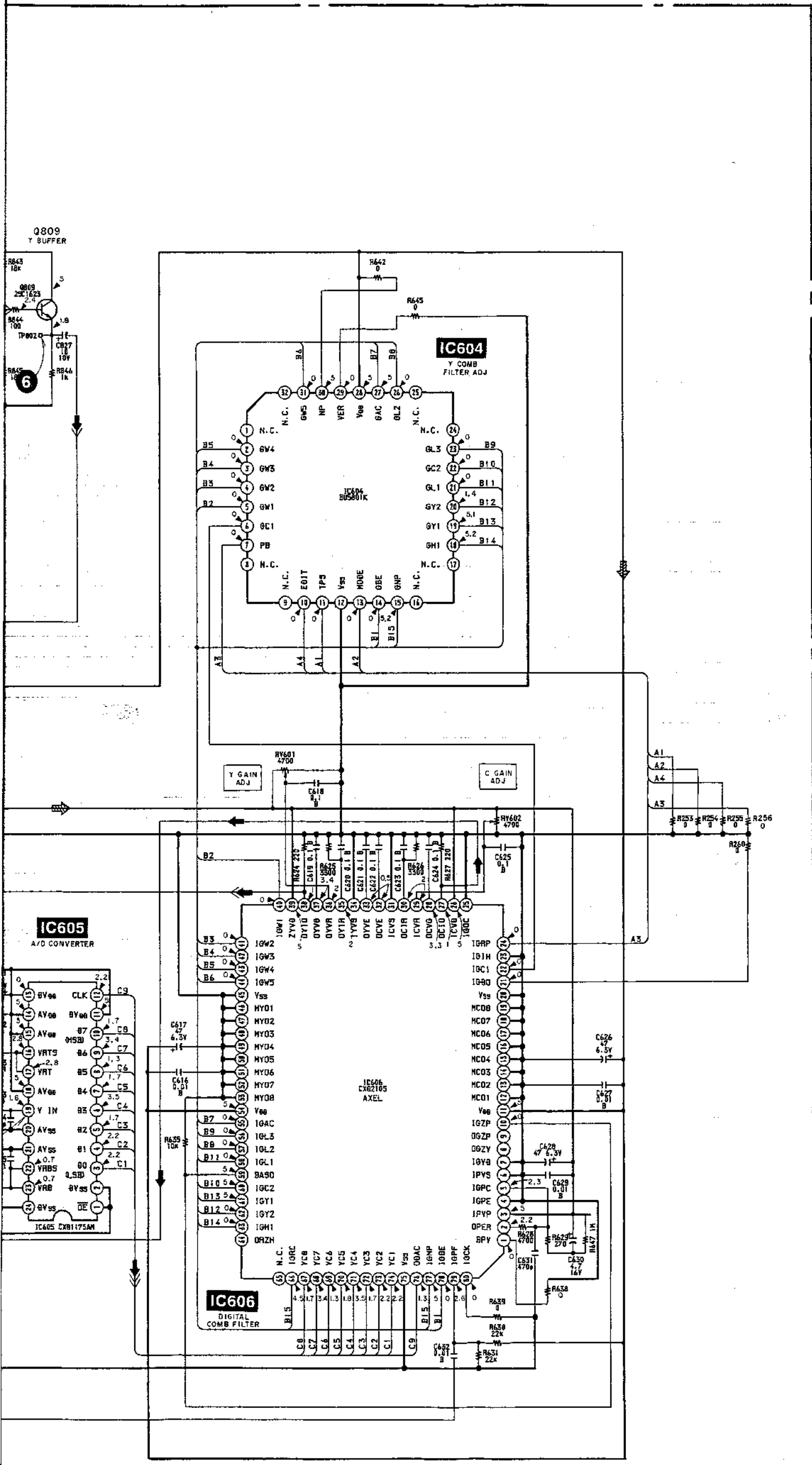
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7

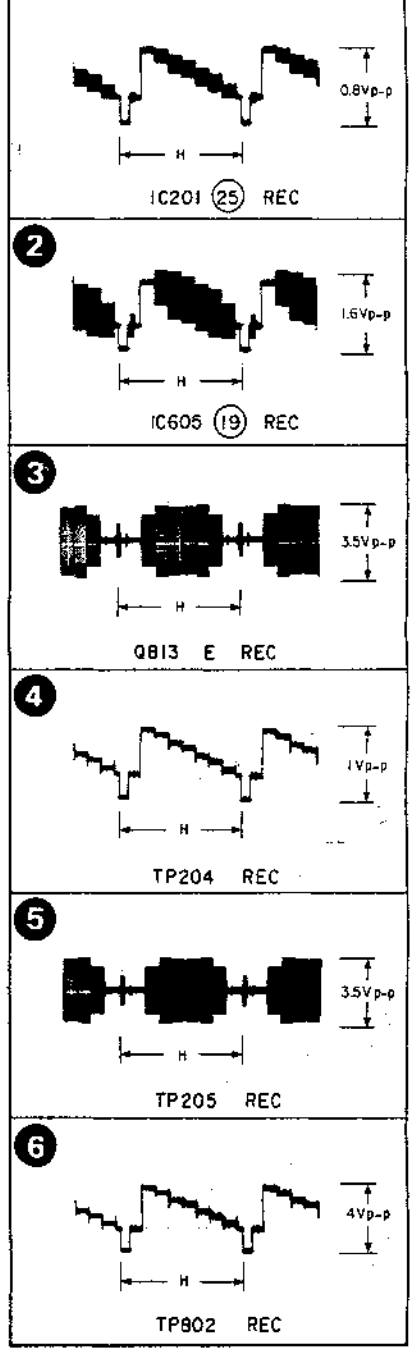
8







YC-106 BOARD



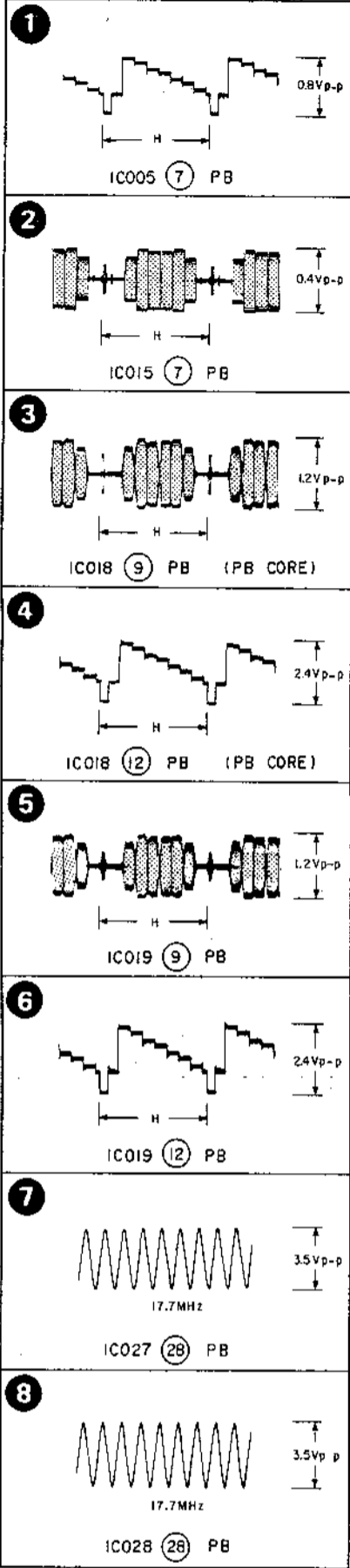
• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	⇒	⇒⇒	
PB				

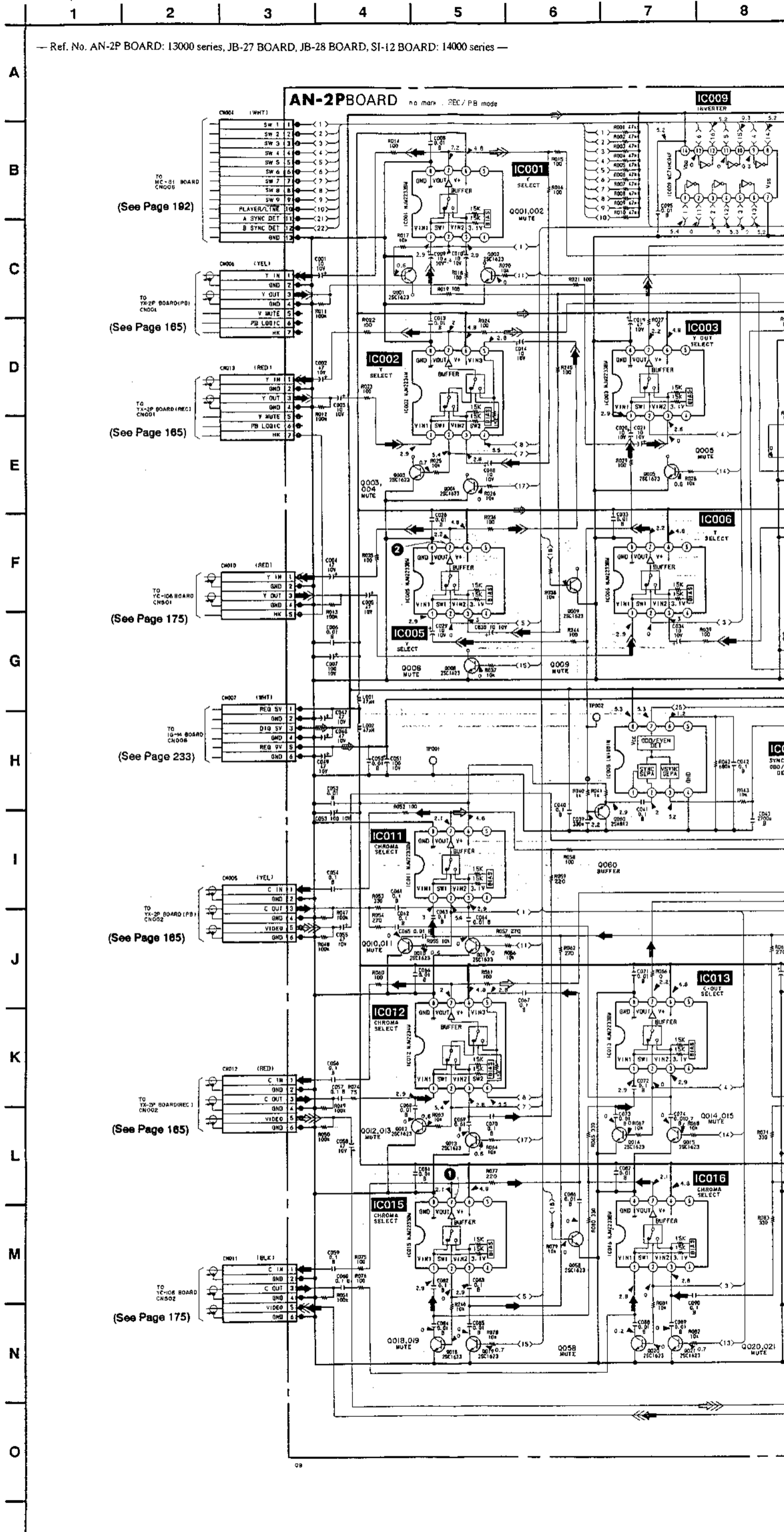
YC-106 BOARD

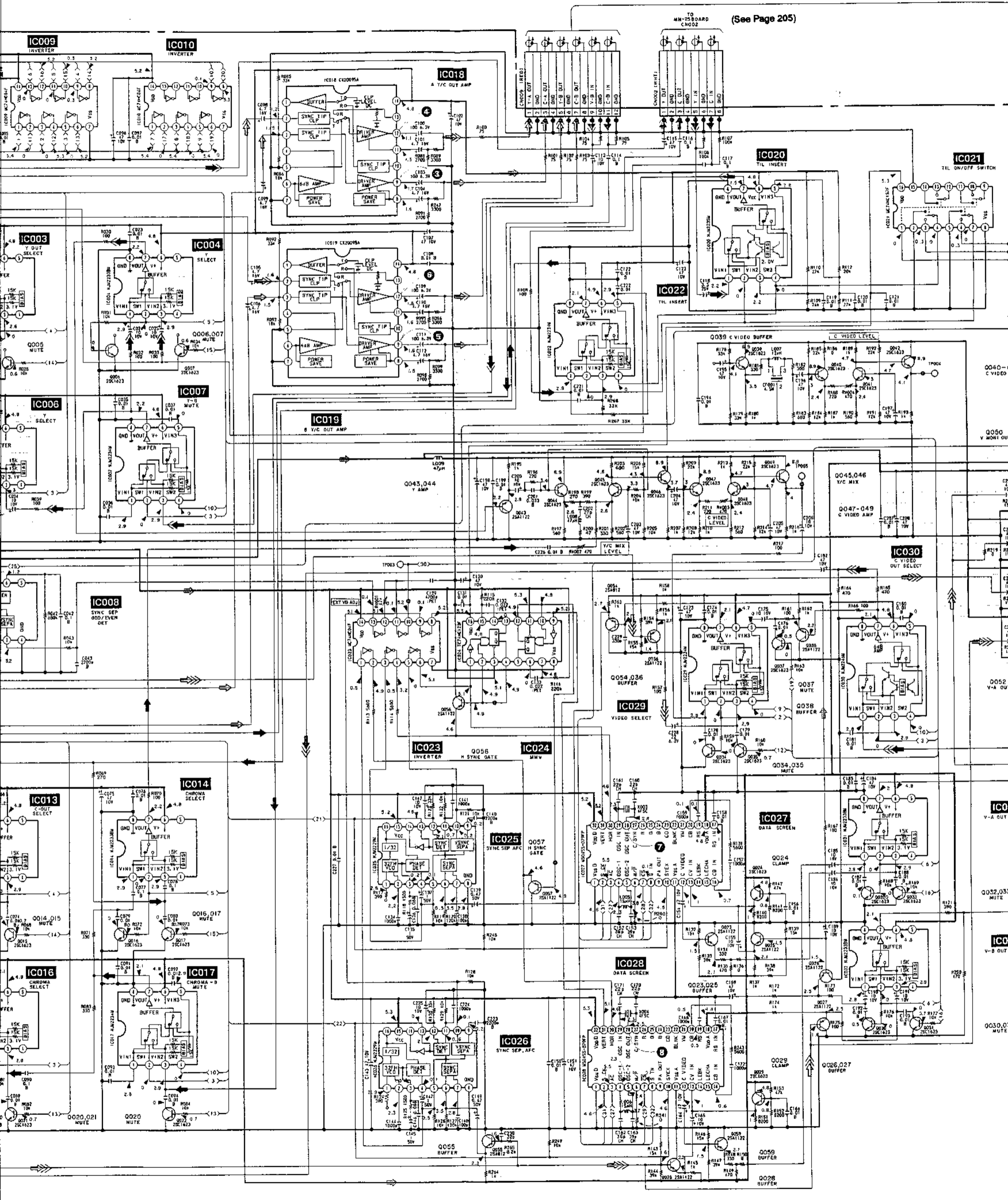
no mark: REC/PB mode

AN-2P BOARD



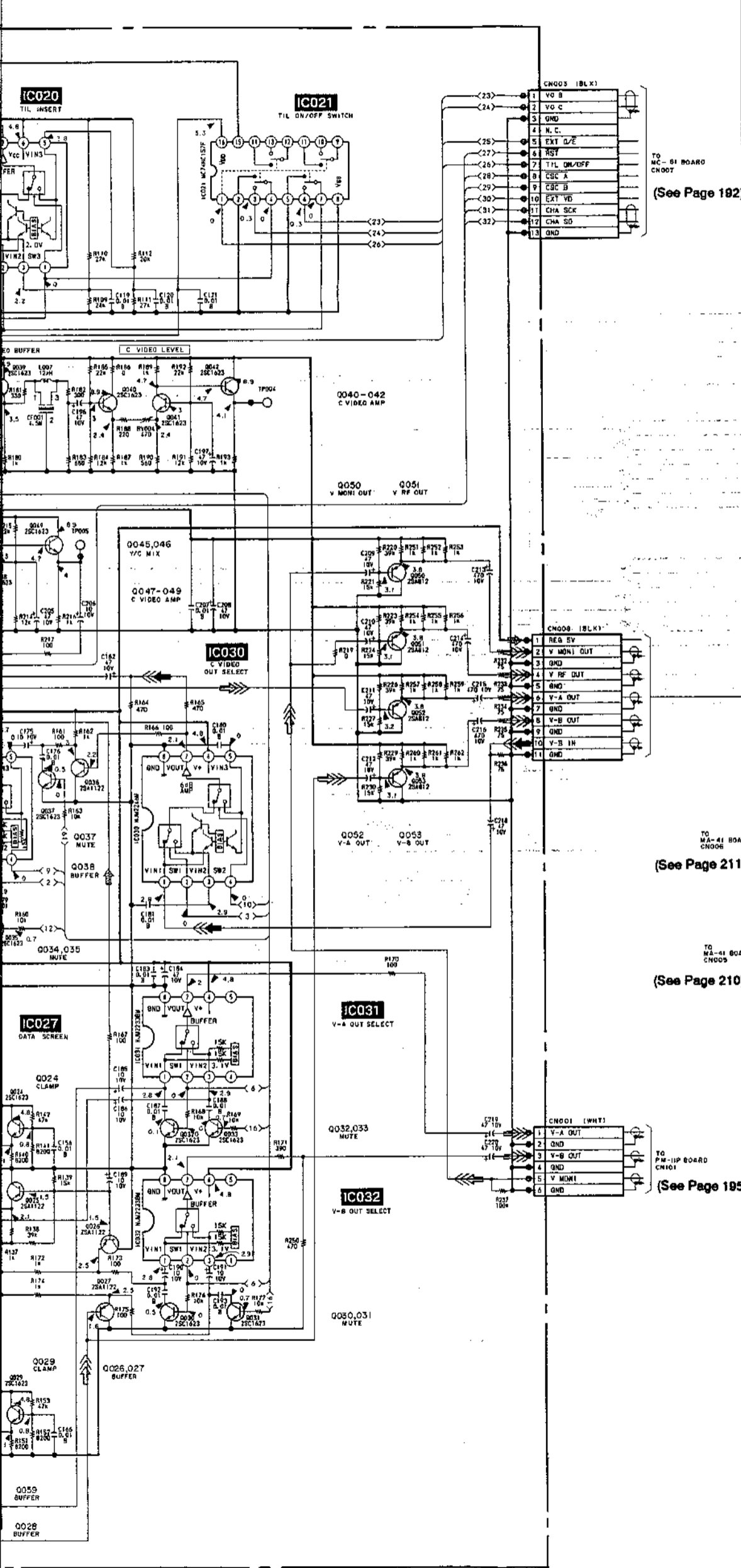
— Ref. No. AN-2P BOARD: 13000 series, JB-27 BOARD, JB-28 BOARD, SI-12 BOARD: 14000 series —





(See Page 205)

See Page 205)

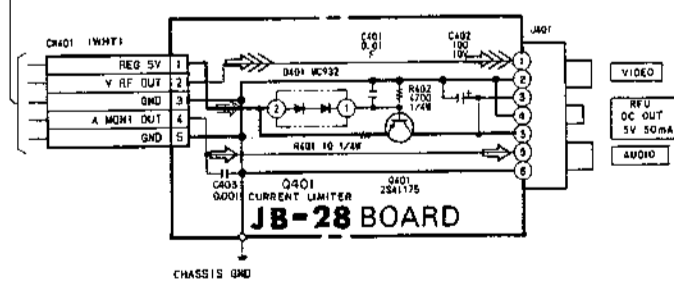
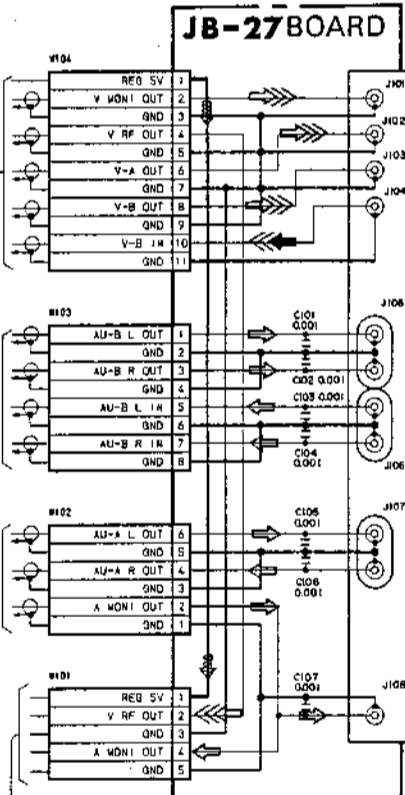
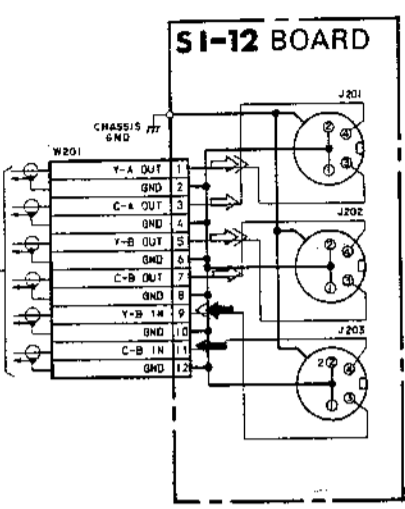


(See Page 192)

(See Page 211)

(See Page 210)

(See Page 195)



• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	→	→	→
PB	→	→	→	→

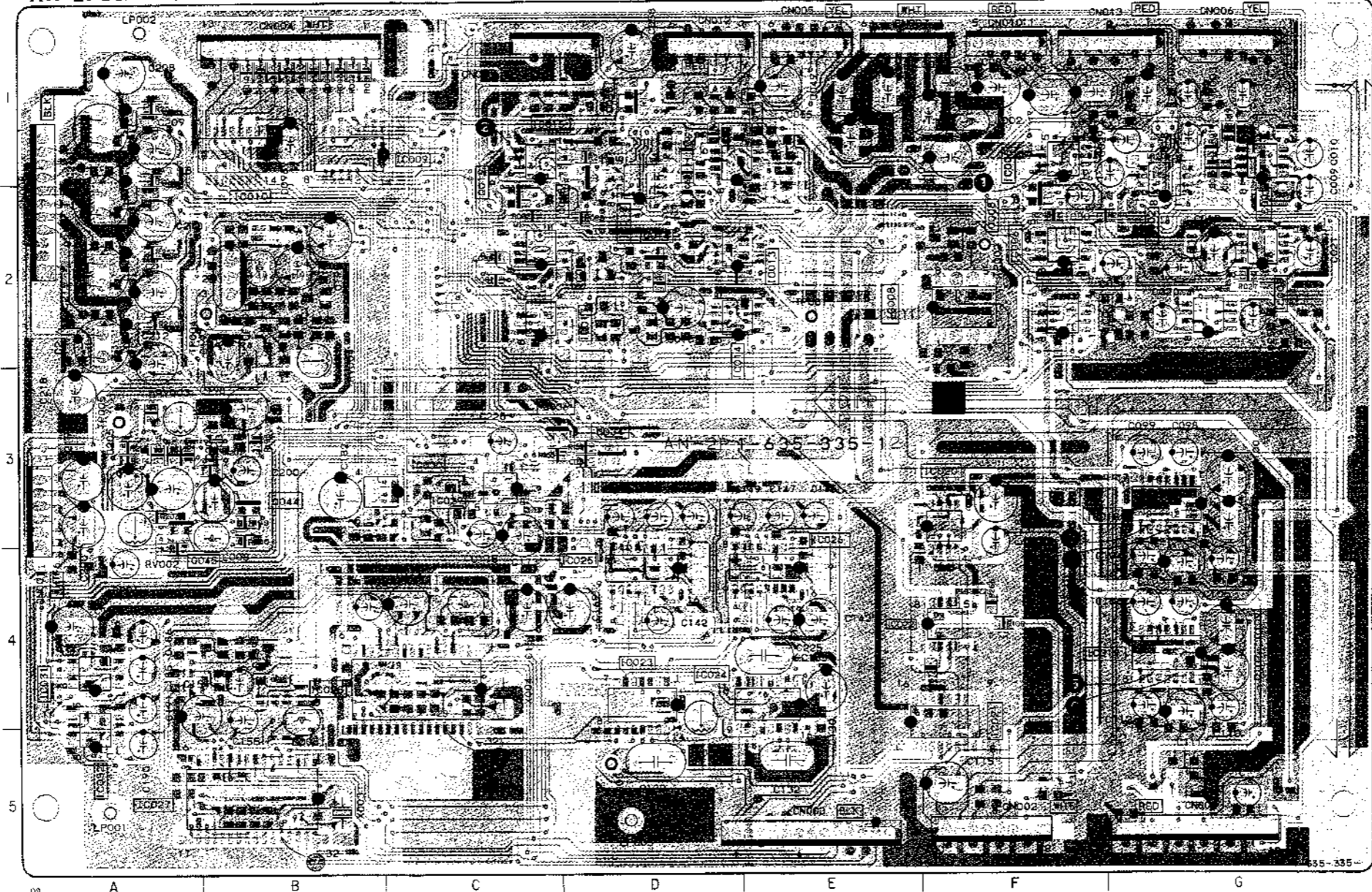
AN-2P (VIDEO), JB-28 (VIDEO, AUDIO JACK), JB-27 (MONITOR JACK), SI-12 (S VIDEO JACK) PRINTED WIRING BOARDS

— Ref. No. AN-2P BOARD: 13000 series, JB-27 BOARD, JB-28 BOARD, SI-12 BOARD: 14000 series —

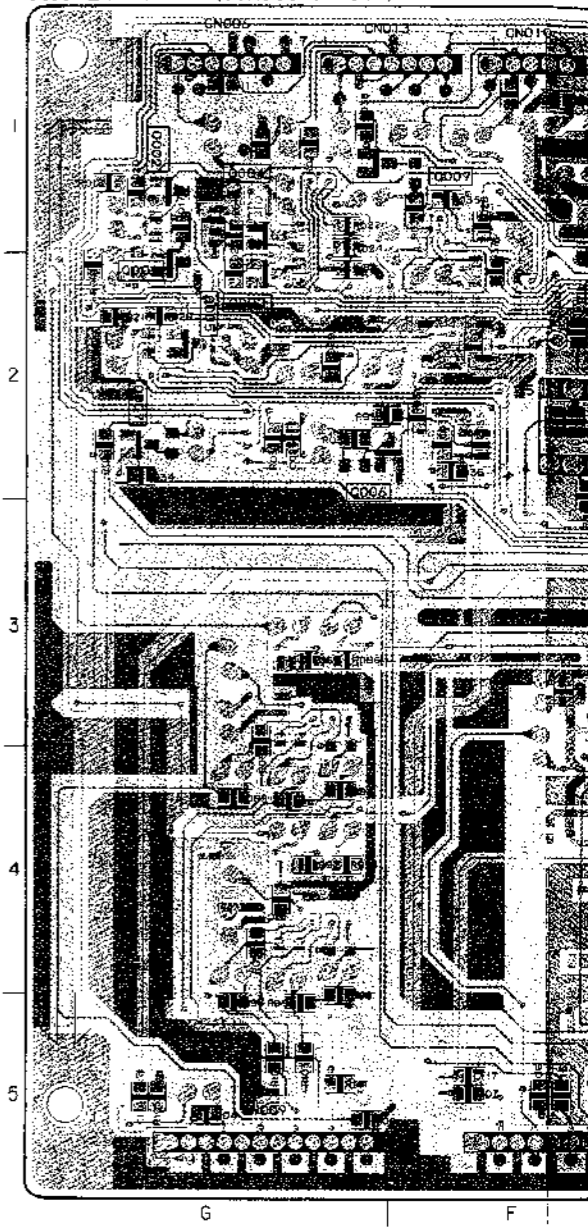
AN-2P BOARD (COMPONENT SIDE)
AN-2P BOARD (CONDUCTOR SIDE)

IC001	G-1	Q001	G-2
IC002	G-1	Q002	G-1
IC003	G-2	Q003	G-2
IC004	G-2	Q004	G-1
IC005	F-1	Q005	G-2
IC006	F-2	Q006	G-2
IC007	F-2	Q007	G-2
IC008	F-2	Q009	G-1
IC009	B-1	Q010	E-1
IC010	B-1	Q011	E-1
IC011	D-1	Q012	D-2
IC012	D-1	Q013	D-1
IC013	D-2	Q015	D-2
IC014	D-2	Q016	D-2
IC015	C-1	Q017	E-2
IC016	C-2	Q020	C-3
IC017	C-2	Q021	D-3
IC018	G-3	Q022	D-2
IC019	G-4	Q023	B-5
IC020	F-2	Q024	B-5
IC021	F-4	Q025	B-4
IC022	F-4	Q025	B-4
IC023	D-4	Q026	B-4
IC024	E-4	Q027	B-4
IC025	D-4	Q028	B-4
IC026	E-4	Q029	C-4
IC027	B-5	Q030	A-5
IC028	C-4	Q031	A-4
IC029	C-3	Q032	A-4
IC030	C-3	Q033	A-4
IC031	A-4	Q035	C-3
IC032	A-5	Q037	C-3
		Q038	B-3
Q008	F-2	Q039	B-2
Q014	D-2	Q040	B-2
Q018	D-1	Q041	B-2
Q019	C-2	Q042	B-2
Q034	D-3	Q043	B-4
Q036	C-3	Q046	A-4
Q044	B-3	Q047	A-4
Q045	A-3	Q048	A-4
Q058	D-1	Q049	A-4
		Q050	A-1
		Q051	A-2
		Q052	A-2
		Q053	A-2
		Q054	D-3
		Q055	E-3
		Q056	E-4
		Q057	E-4
		Q059	C-4
		Q060	F-2

AN-2P BOARD (COMPONENT SIDE)



AN-2P BOARD (CONDUCTOR SIDE)



* A-7062-848-A AN-2 (P) BOARD, COMPLETE

(Ref. No 13,000 Series)

< IC >

IC001	8-759-711-79	IC	NJM2233BM
IC002	8-759-711-71	IC	NJM2234M
IC003	8-759-711-79	IC	NJM2233BM
IC004	8-759-711-79	IC	NJM2233BM
IC005	8-759-711-79	IC	NJM2233BM
IC006	8-759-711-79	IC	NJM2233BM
IC007	8-759-711-71	IC	NJM2234M
IC008	8-759-972-26	IC	LM1881N
IC009	8-759-032-11	IC	MC74HC04AF
IC010	8-759-032-11	IC	MC74HC04AF

IC011	8-759-711-79	IC	NJM2233BM
IC012	8-759-711-71	IC	NJM2234M
IC013	8-759-711-79	IC	NJM2233BM
IC014	8-759-711-79	IC	NJM2233BM
IC015	8-759-711-79	IC	NJM2233BM
IC016	8-759-711-79	IC	NJM2233BM
IC017	8-759-711-71	IC	NJM2234M
IC018	8-752-009-51	IC	CX20095A
IC019	8-752-009-51	IC	CX20095A
IC020	8-759-710-29	IC	NJM2235M
IC021	8-759-032-41	IC	MC74HC157AF
IC022	8-759-711-71	IC	NJM2234M
IC023	8-759-032-11	IC	MC74HC04AF
IC024	8-759-206-28	IC	TC74HC123F

IC025	8-759-710-61	IC	NJM2229M
IC026	8-759-710-61	IC	NJM2229M
IC027	8-759-630-81	IC	M50455-079FP
IC028	8-759-630-81	IC	M50455-079FP
IC029	8-759-711-71	IC	NJM2234M
IC030	8-759-710-62	IC	NJM2246M
IC031	8-759-711-79	IC	NJM2233BM
IC032	8-759-711-79	IC	NJM2233BM

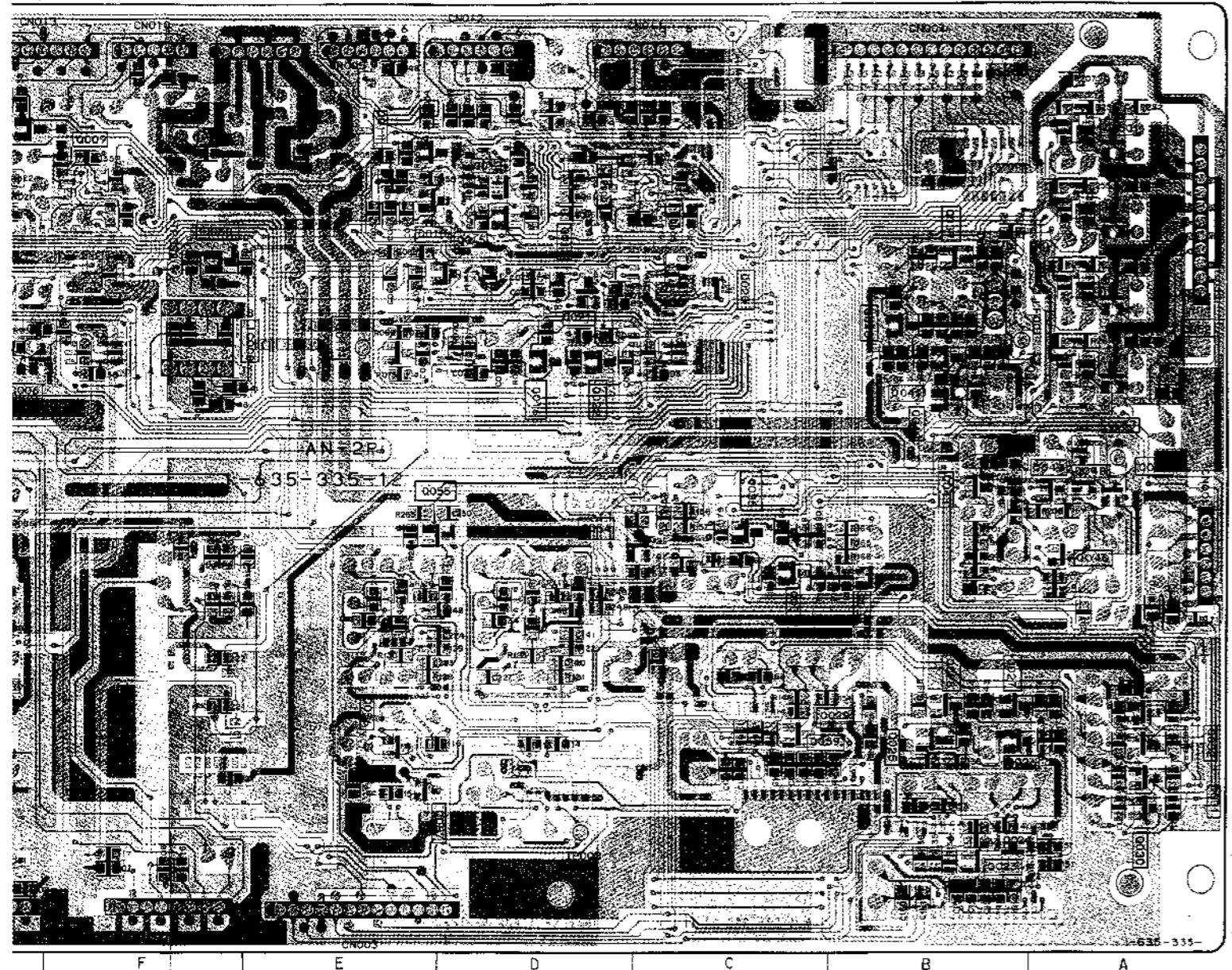
< TRANSISTOR >

Q001	8-729-100-66	TRANSISTOR	2SC1623
Q002	8-729-100-66	TRANSISTOR	2SC1623
Q003	8-729-100-66	TRANSISTOR	2SC1623
Q004	8-729-100-66	TRANSISTOR	2SC1623
Q005	8-729-100-66	TRANSISTOR	2SC1623
Q006	8-729-100-66	TRANSISTOR	2SC1623
Q007	8-729-100-66	TRANSISTOR	2SC1623
Q008	8-729-100-66	TRANSISTOR	2SC1623
Q009	8-729-100-66	TRANSISTOR	2SC1623
Q010	8-729-100-66	TRANSISTOR	2SC1623
Q011	8-729-100-66	TRANSISTOR	2SC1623
Q012	8-729-100-66	TRANSISTOR	2SC1623

Q013	8-729-100-66	TRANSISTOR	2SC1623
Q014	8-729-100-66	TRANSISTOR	2SC1623
Q015	8-729-100-66	TRANSISTOR	2SC1623
Q016	8-729-100-66	TRANSISTOR	2SC1623
Q017	8-729-100-66	TRANSISTOR	2SC1623
Q018	8-729-100-66	TRANSISTOR	2SC1623
Q019	8-729-100-66	TRANSISTOR	2SC1623
Q020	8-729-100-66	TRANSISTOR	2SC1623
Q021	8-729-100-66	TRANSISTOR	2SC1623
Q022	8-729-100-66	TRANSISTOR	2SC1623
Q023	8-729-320-17	TRANSISTOR	2SA1122CD
Q024	8-729-100-66	TRANSISTOR	2SC1623
Q025	8-729-320-17	TRANSISTOR	2SA1122CD

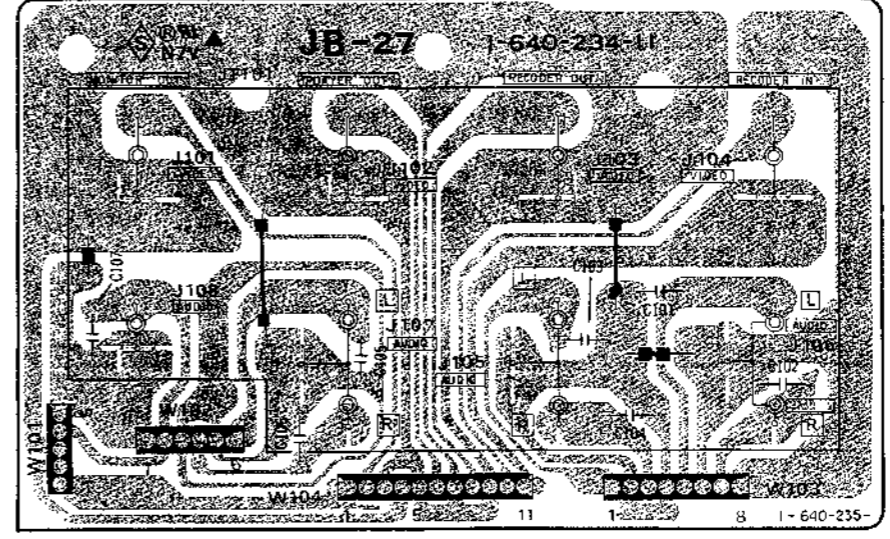
Q026	8-729-320-17	TRANSISTOR	2SA
Q027	8-729-320-17	TRANSISTOR	2SA
Q028	8-729-320-17	TRANSISTOR	2SA
Q029	8-729-100-66	TRANSISTOR	2SC
Q030	8-729-100-66	TRANSISTOR	2SC
Q031	8-729-100-66	TRANSISTOR	2SC
Q032	8-729-100-66	TRANSISTOR	2SC
Q033	8-729-100-66	TRANSISTOR	2SC
Q034	8-729-100-66	TRANSISTOR	2SC
Q035	8-729-100-66	TRANSISTOR	2SC
Q036	8-729-320-17	TRANSISTOR	2SA
Q037	8-729-100-66	TRANSISTOR	2SC
Q038	8-729-320-17	TRANSISTOR	2SA
Q039	8-729-100-66	TRANSISTOR	2SC
Q040	8-729-100-66	TRANSISTOR	2SC

SIDE)

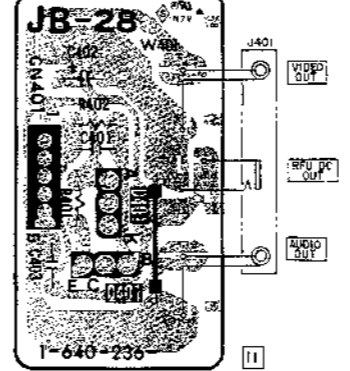


1-320-17 TRANSISTOR	2SA1122CD	Q041	8-729-100-66 TRANSISTOR	2SC1623	Q055	8-729-216-22 TRANSISTOR	2SA1162
1-320-17 TRANSISTOR	2SA1122CD	Q042	8-729-100-66 TRANSISTOR	2SC1623			
1-320-17 TRANSISTOR	2SA1122CD	Q043	8-729-320-17 TRANSISTOR	2SA1122CD	Q056	8-729-320-17 TRANSISTOR	2SA1122CD
1-100-66 TRANSISTOR	2SC1623	Q044	8-729-100-66 TRANSISTOR	2SC1623	Q057	8-729-320-17 TRANSISTOR	2SA1122CD
1-100-66 TRANSISTOR	2SC1623	Q045	8-729-100-66 TRANSISTOR	2SC1623	Q058	8-729-100-66 TRANSISTOR	2SC1623
					Q059	8-729-320-17 TRANSISTOR	2SA1122CD
1-100-66 TRANSISTOR	2SC1623	Q046	8-729-100-66 TRANSISTOR	2SC1623	Q060	8-729-216-22 TRANSISTOR	2SA1162
1-100-66 TRANSISTOR	2SC1623	Q047	8-729-100-66 TRANSISTOR	2SC1623			
1-100-66 TRANSISTOR	2SC1623	Q048	8-729-100-66 TRANSISTOR	2SC1623			
1-100-66 TRANSISTOR	2SC1623	Q049	8-729-100-66 TRANSISTOR	2SC1623			
1-100-66 TRANSISTOR	2SC1623	Q050	8-729-216-22 TRANSISTOR	2SA1162			
9-320-17 TRANSISTOR	2SA1122CD	Q051	8-729-216-22 TRANSISTOR	2SA1162			
9-100-66 TRANSISTOR	2SC1623	Q052	8-729-216-22 TRANSISTOR	2SA1162			
9-320-17 TRANSISTOR	2SA1122CD	Q053	8-729-216-22 TRANSISTOR	2SA1162			
9-100-66 TRANSISTOR	2SC1623	Q054	8-729-216-22 TRANSISTOR	2SA1162			
9-100-66 TRANSISTOR	2SC1623						

JB-27 BOARD



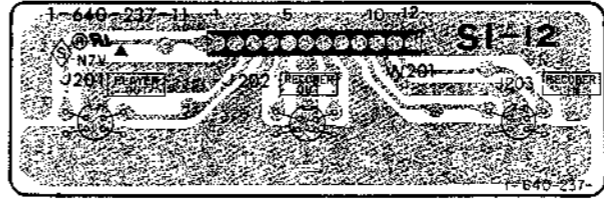
JB-28 BOARD



- * A-7071-453-A JB-28 BOARD, COMPLETE

 (Ref. No 1,000 Series)
- < DIODE >
- D401 8-719-016-42 DIODE MC932TP
- < TRANSISTOR >
- Q401 8-729-119-76 TRANSISTOR 2SA1175

SI-12 BOARD



MC-81 (MAIN CONTROL), CO-5 (DATA SCREEN SWITCH, IN/OUT)

— Ref. No. MC-81 BOARD, CO-5 BOARD, CO-6 BOARD, TC-16 BOARD: 15000 series —

* A-7062-843-A MC-81 BOARD, COMPLETE

 (Ref. No 15,000 Series)

< DIODE >

D001	8-719-105-64	DIODE	RD4.3M
D002	8-719-981-01	DIODE	ERA81-004
D003	8-719-400-18	DIODE	MA152WK
D004	8-719-400-18	DIODE	MA152WK
D005	8-719-400-18	DIODE	MA152WK

< IC >

IC001	8-759-320-29	IC	HD53B0520-A28F
IC002	8-759-154-29	IC	uPD75108G
IC003	8-759-149-66	IC	uPD75108G-F52-1B
IC004	8-752-331-00	IC	CXK5864BM-12L
IC005	8-759-516-74	IC	MB90061

IC006	8-759-048-71	IC	LH53259-73
IC007	8-752-331-00	IC	CXK5864BM-12L
IC008	8-759-916-25	IC	SN74HC32AN
IC009	8-759-926-67	IC	SN74HC374ANS
IC010	8-759-926-67	IC	SN74HC374ANS

IC011	8-759-926-48	IC	SN74HC244ANS
IC012	8-759-926-67	IC	SN74HC374ANS
IC013	8-759-926-67	IC	SN74HC374ANS
IC014	8-759-926-48	IC	SN74HC244ANS
IC015	8-759-926-48	IC	SN74HC244ANS

IC016	8-759-927-46	IC	SN74HC00ANS
IC017	8-759-926-48	IC	SN74HC244ANS
IC018	8-759-937-56	IC	S-8054ALB-LM-S
IC019	8-759-916-25	IC	SN74HC32AN
IC020	8-759-916-25	IC	SN74HC32AN

IC021	8-759-926-05	IC	SN74HC125NS
IC022	8-759-926-11	IC	SN74HC138ANS
IC023	8-759-926-12	IC	SN74HC139ANS
IC024	8-759-926-05	IC	SN74HC125NS

< TRANSISTOR >

Q001	8-729-216-22	TRANSISTOR	2SA116Z
Q002	8-729-100-66	TRANSISTOR	2SC1623
Q003	8-729-901-01	TRANSISTOR	DTC144EK
Q004	8-729-901-01	TRANSISTOR	DTC144EK
Q005	8-729-901-06	TRANSISTOR	DTA144EK

Q006	8-729-901-01	TRANSISTOR	DTC144EK
Q007	8-729-100-66	TRANSISTOR	2SC1623
Q010	8-729-901-01	TRANSISTOR	DTC144EK
Q011	8-729-901-01	TRANSISTOR	DTC144EK
Q012	8-729-100-66	TRANSISTOR	2SC1623

IC025	8-759-925-74	IC	SN74HC04ANS
IC026	8-759-925-76	IC	SN74HC08ANS
IC027	8-759-926-05	IC	SN74HC125NS
IC028	8-759-145-50	IC	uPD71051GB-3B4
IC029	8-759-926-74	IC	SN74HC393ANS
IC030	8-759-009-10	IC	MC14069UBF

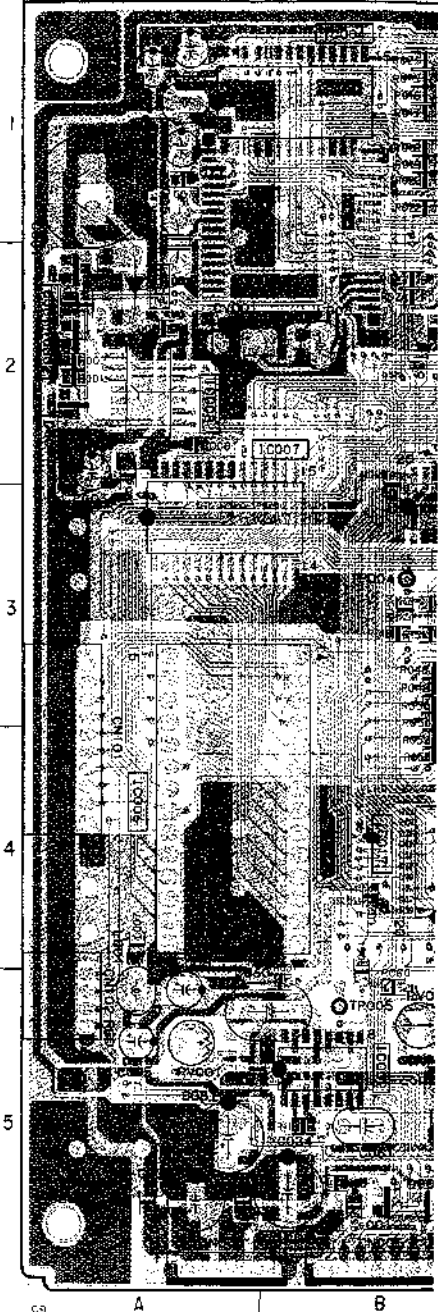
IC032	8-759-009-51	IC	MC14538BF
IC033	8-759-916-25	IC	SN74HC32AN
IC034	8-759-206-28	IC	MC74HC123AF
IC035	8-759-206-28	IC	MC74HC123AF
IC036	8-759-925-90	IC	SN74HC74ANS

IC037	8-759-011-65	IC	MC74HC4053F
IC037	8-759-230-XX	IC	TC74HC4053AF
IC038	8-759-926-67	IC	SN74HC374ANS
IC039	8-759-937-56	IC	S-8054ALB-LM-S
IC040	8-759-206-28	IC	MC74HC123AF

MC-81 BOARD (COMPONENT SIDE) MC-81 BOARD (CONDUCTOR SIDE)

D001	A-2	IC001	C-3
D002	A-2	IC002	B-1
D003	C-4	IC003	E-2
D004	B-5	IC005	B-1
D005	C-5	IC028	D-3
IC004	B-1	Q010	F-4
IC006	A-4	Q011	F-3
IC007	B-2		
IC008	A-2		
IC009	D-3		
IC010	D-3		
IC011	D-2		
IC012	D-1		
IC013	D-2		
IC014	C-2		
IC015	B-3		
IC016	C-4		
IC017	B-4		
IC018	C-4		
IC019	E-2		
IC020	E-2		
IC021	E-3		
IC022	E-2		
IC023	E-2		
IC024	F-4		
IC025	E-3		
IC026	E-3		
IC027	F-5		
IC029	E-4		
IC030	E-4		
IC032	B-5		
IC033	C-5		
IC034	D-5		
IC035	B-5		
IC036	C-4		
IC037	C-5		
IC038	F-2		
IC039	E-3		
IC040	E-5		
Q001	A-2		
Q002	A-2		
Q003	E-2		
Q004	E-2		
Q005	D-1		
Q006	D-1		
Q007	E-3		
Q012	B-5		

MC-81 BOARD (COMPONENT SIDE)



* 1-635-322-11 CO-6 BOARD (Ref. No 1,600 Series)

< DIODE >

D501	8-719-106-09	DIODE	RD6.2M-T1B3
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* 1-635-321-11 CO-5 BOARD (Ref. No 15,000 Series)

< DIODE >

D201	8-719-800-76	DIODE	1SS226
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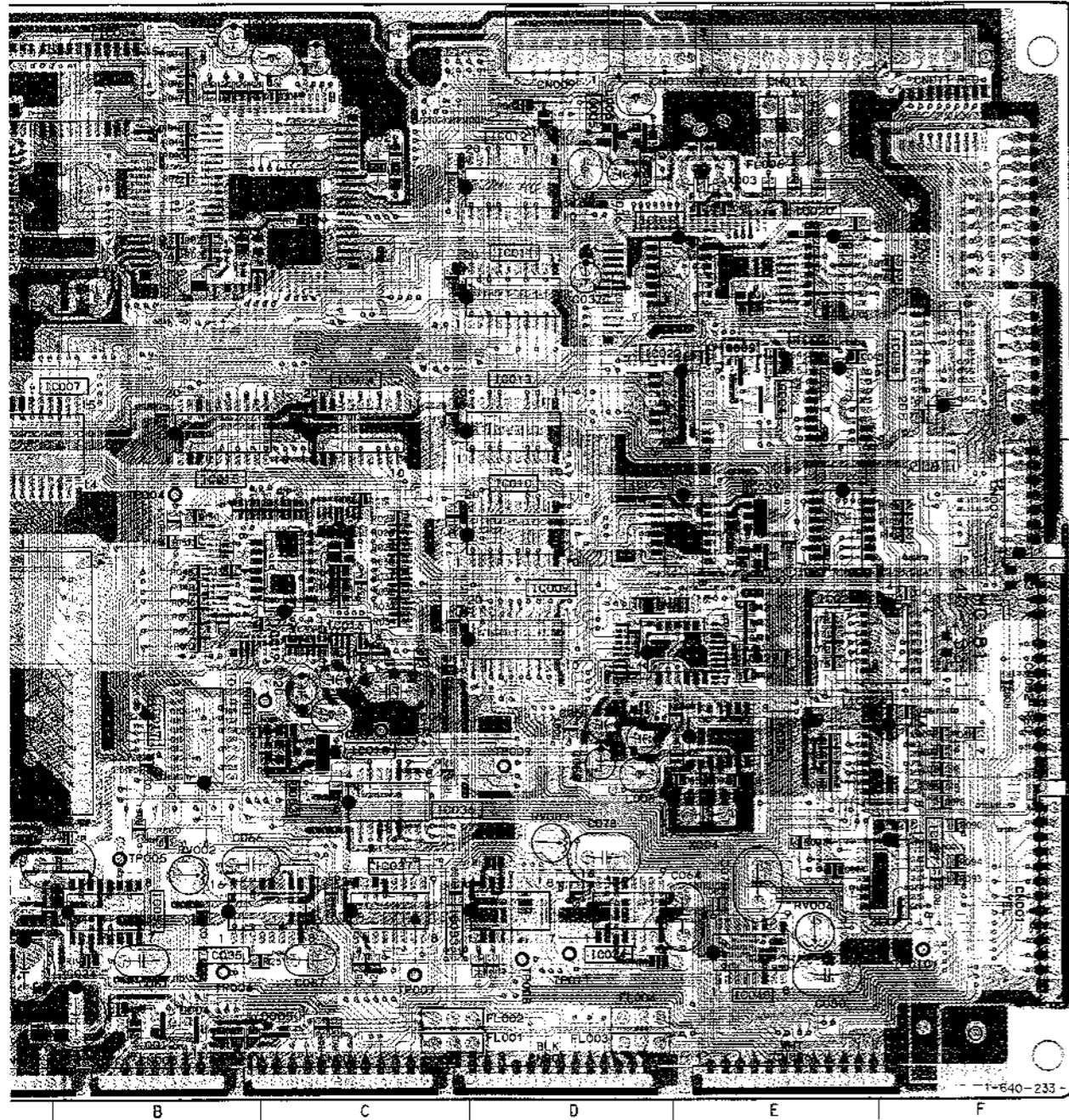
< TRANSISTOR >

Q201	8-729-901-01	TRANSISTOR	DTC144EK
Q202	8-729-901-01	TRANSISTOR	DTC144EK

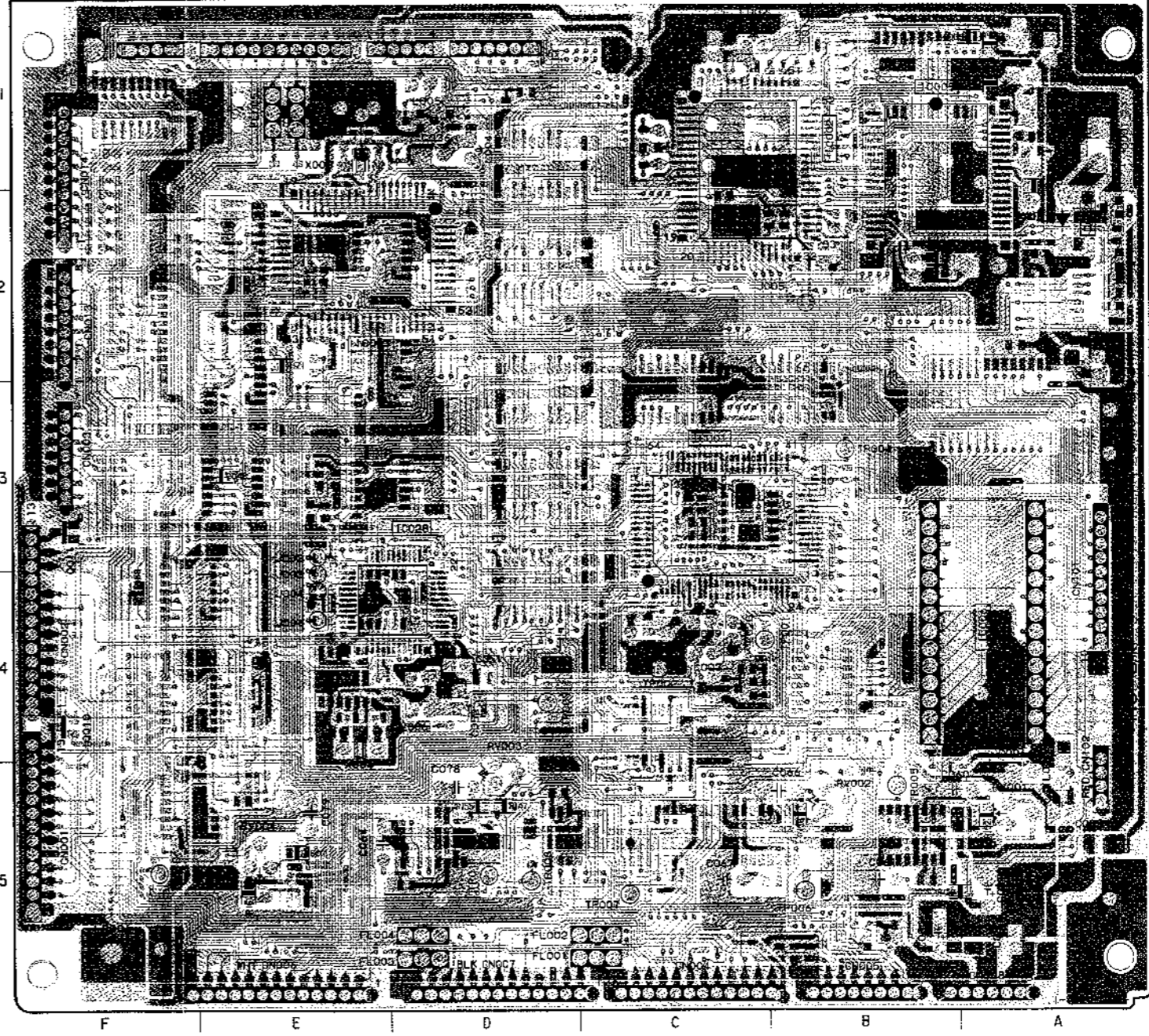
I SWITCH, IN/OUT POINT ADJ, CO-6 (PAUSE OUT JACK), TC-16 (TITLER JACK) PRINTED WIRING BOARDS

BOARD: 15000 series —

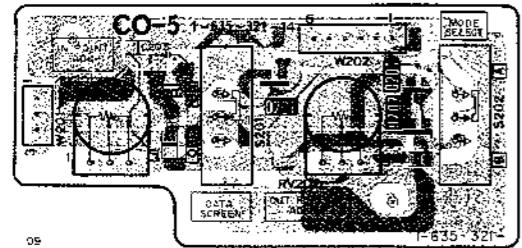
(COMPONENT SIDE)



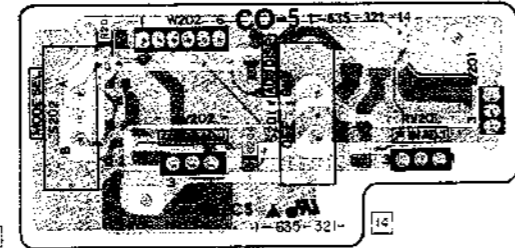
MC-81 BOARD (CONDUCTOR SIDE)



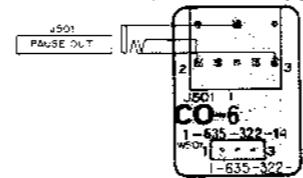
CO-5 BOARD (COMPONENT SIDE)



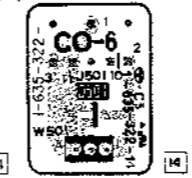
CO-5 BOARD (CONDUCTOR SIDE)



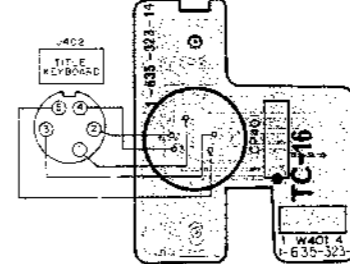
CO-6 BOARD (COMPONENT SIDE)



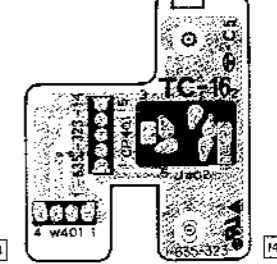
CO-6 BOARD (CONDUCTOR SIDE)



TC-16 BOARD (COMPONENT SIDE)

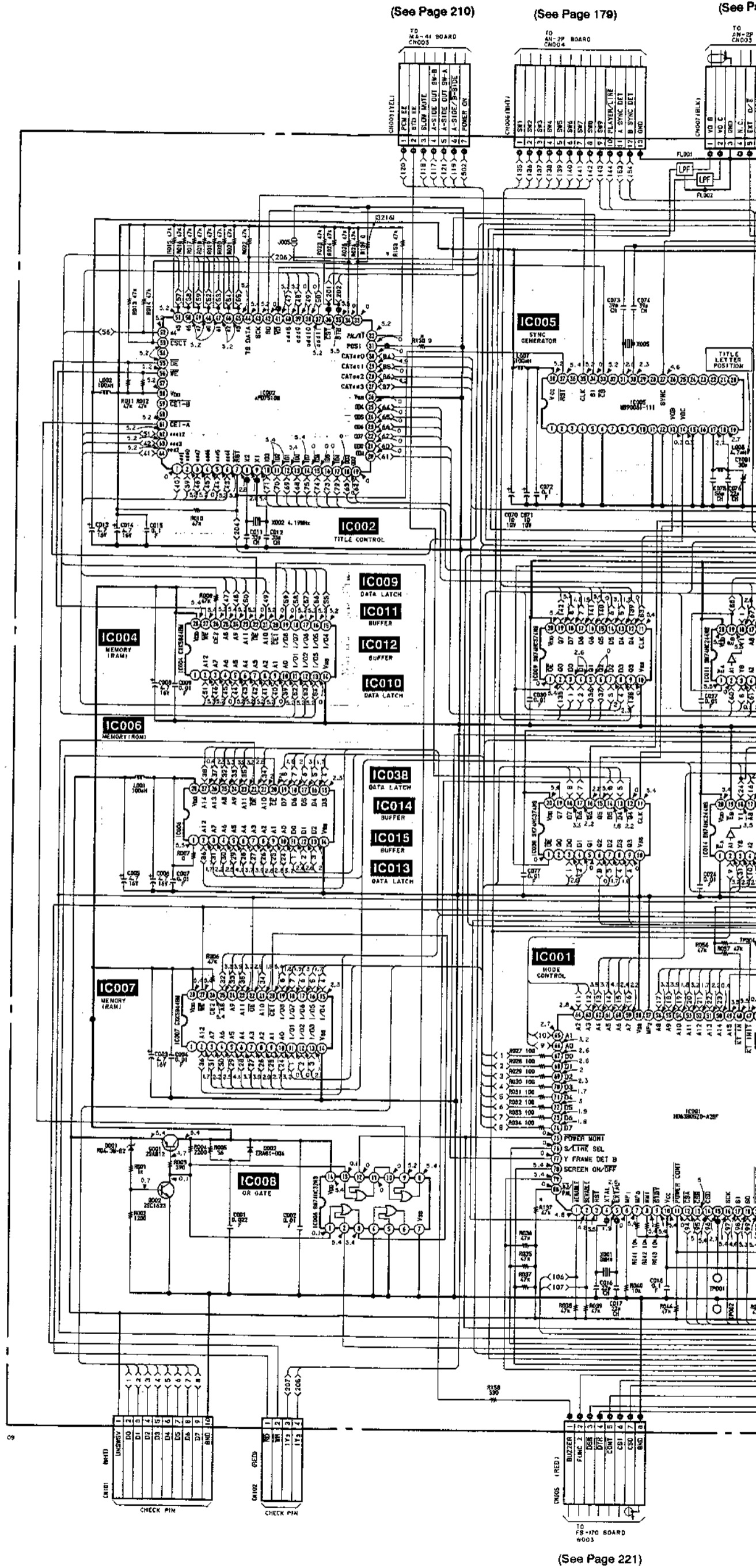


TC-16 BOARD (CONDUCTOR SIDE)



— Ref. No. MC-81 BOARD, CO-5 BOARD, CO-6 BOARD, TC-16 BOARD: 15000 series —

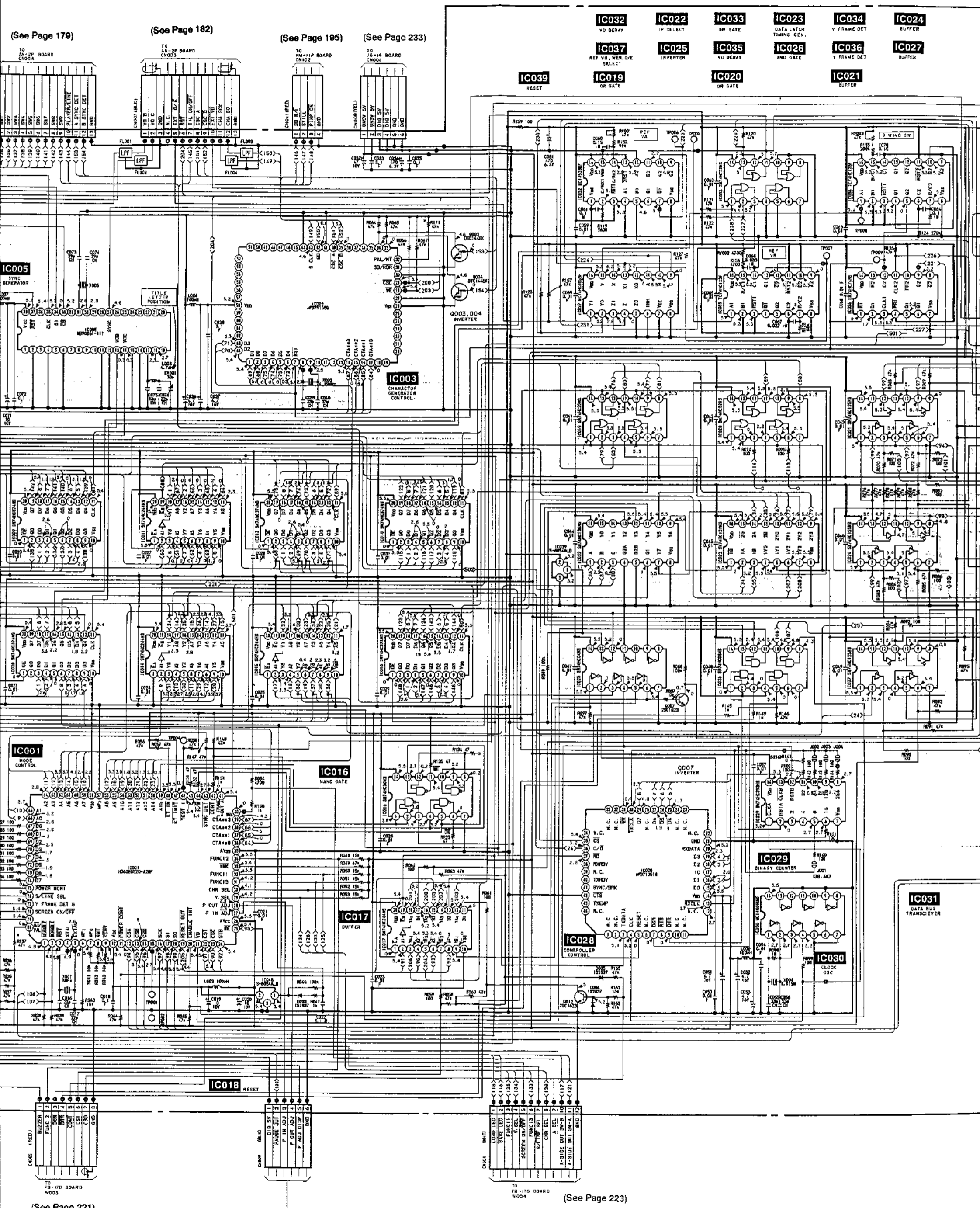
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(See Page 210)

(See Page 179)

(See Page 221)



(See Page 179)

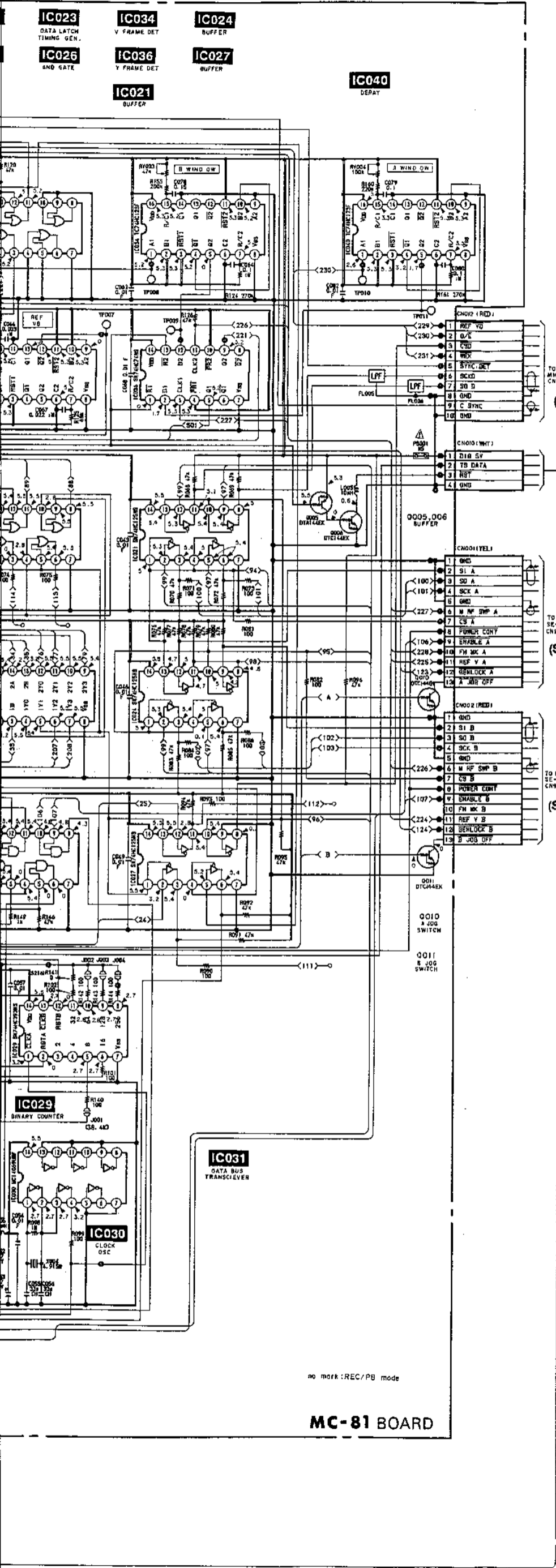
(See Page 182)

(See Page 185)

(See Page 233)

(See Page 223)

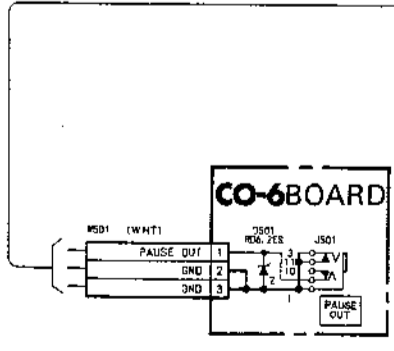
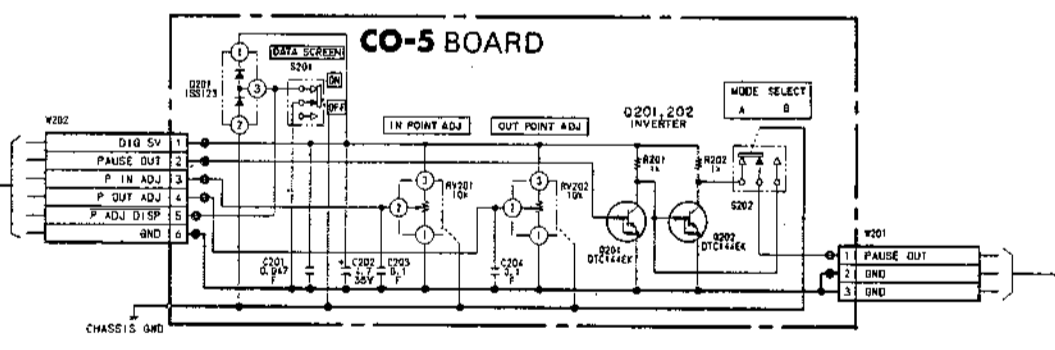
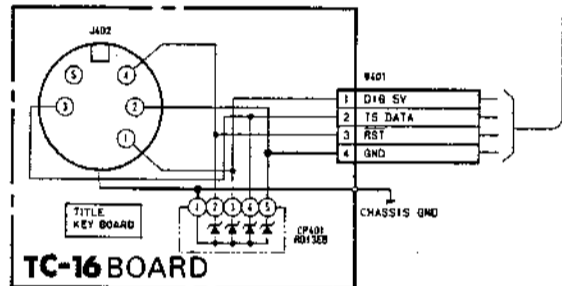
(See Page 221)



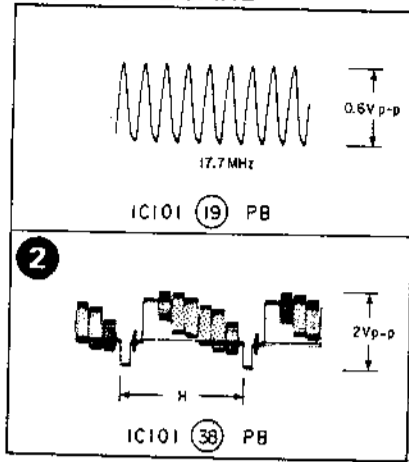
TO MM-25 BOARD
 CN001
 (See Page 205)

TO PB CORE
 SE-107 BOARD
 CN003
 (See Page 128)

TO REC CORE
 SE-107 BOARD
 CN003
 (See Page 128)

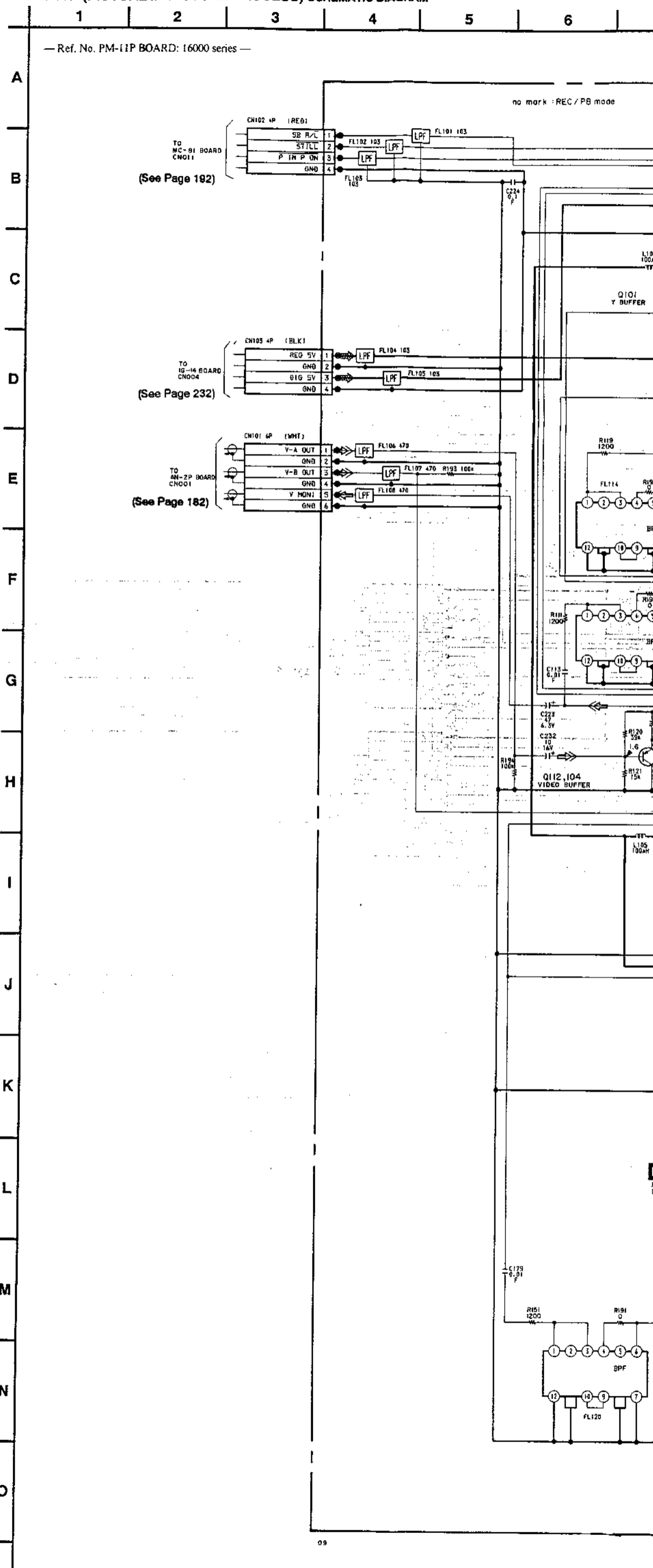


PM-11P BOARD



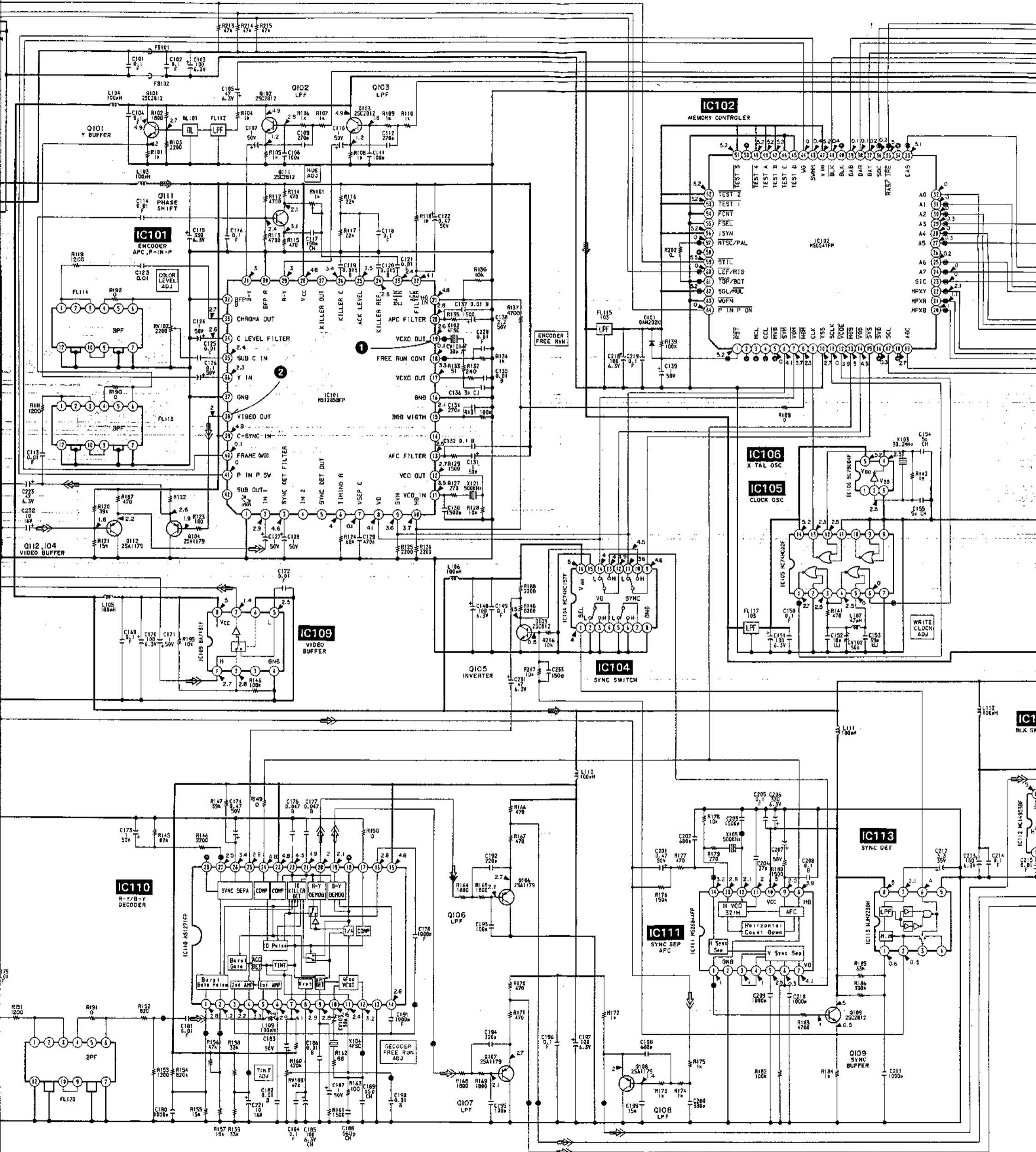
PM-11P (PICTURE IN PICTURE PROCESS) SCHEMATIC DIAGRAM

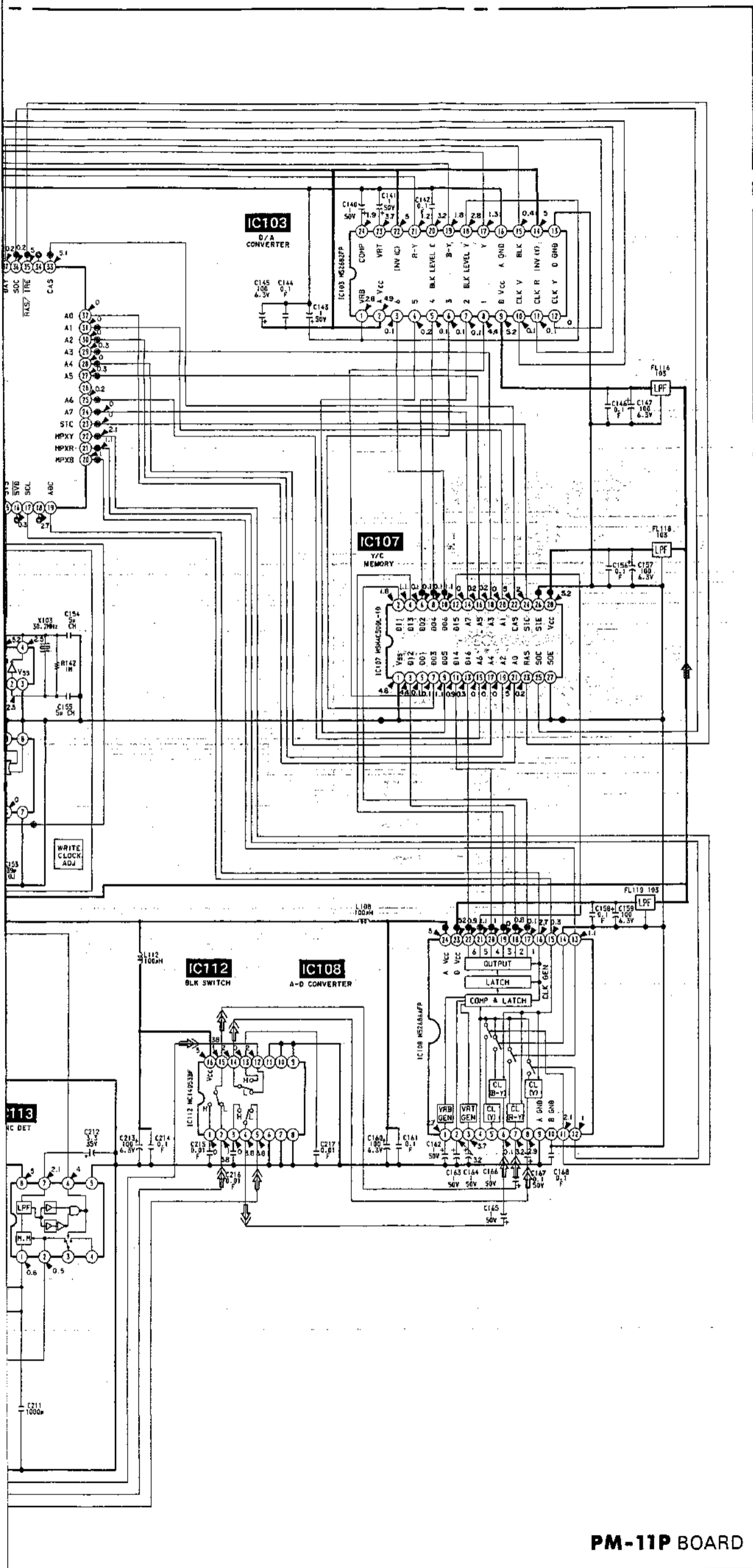
— Ref. No. PM-11P BOARD: 16000 series —



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mark : REC / PB mode





PM-11P BOARD

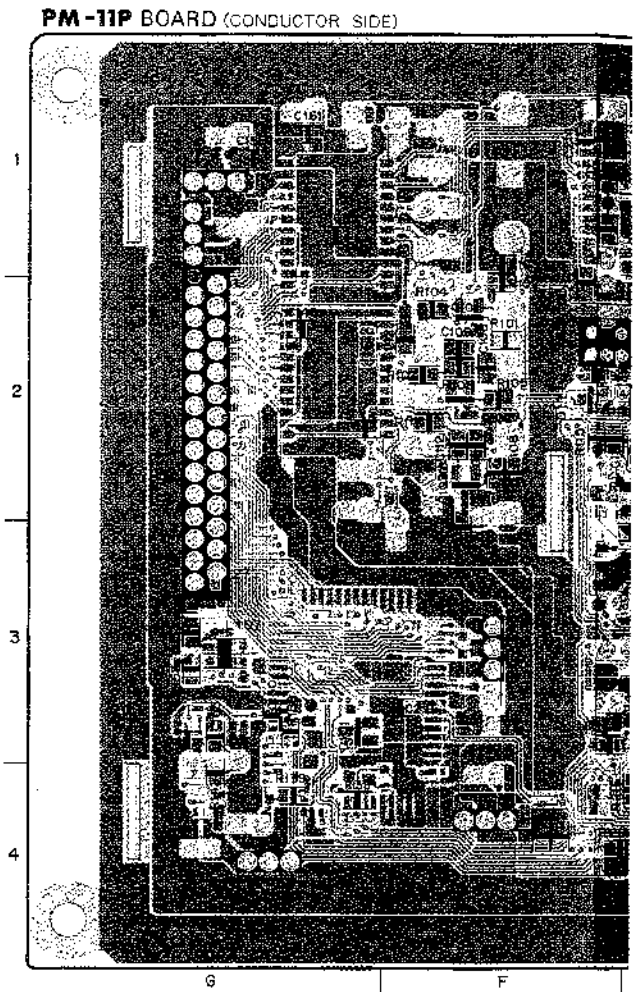
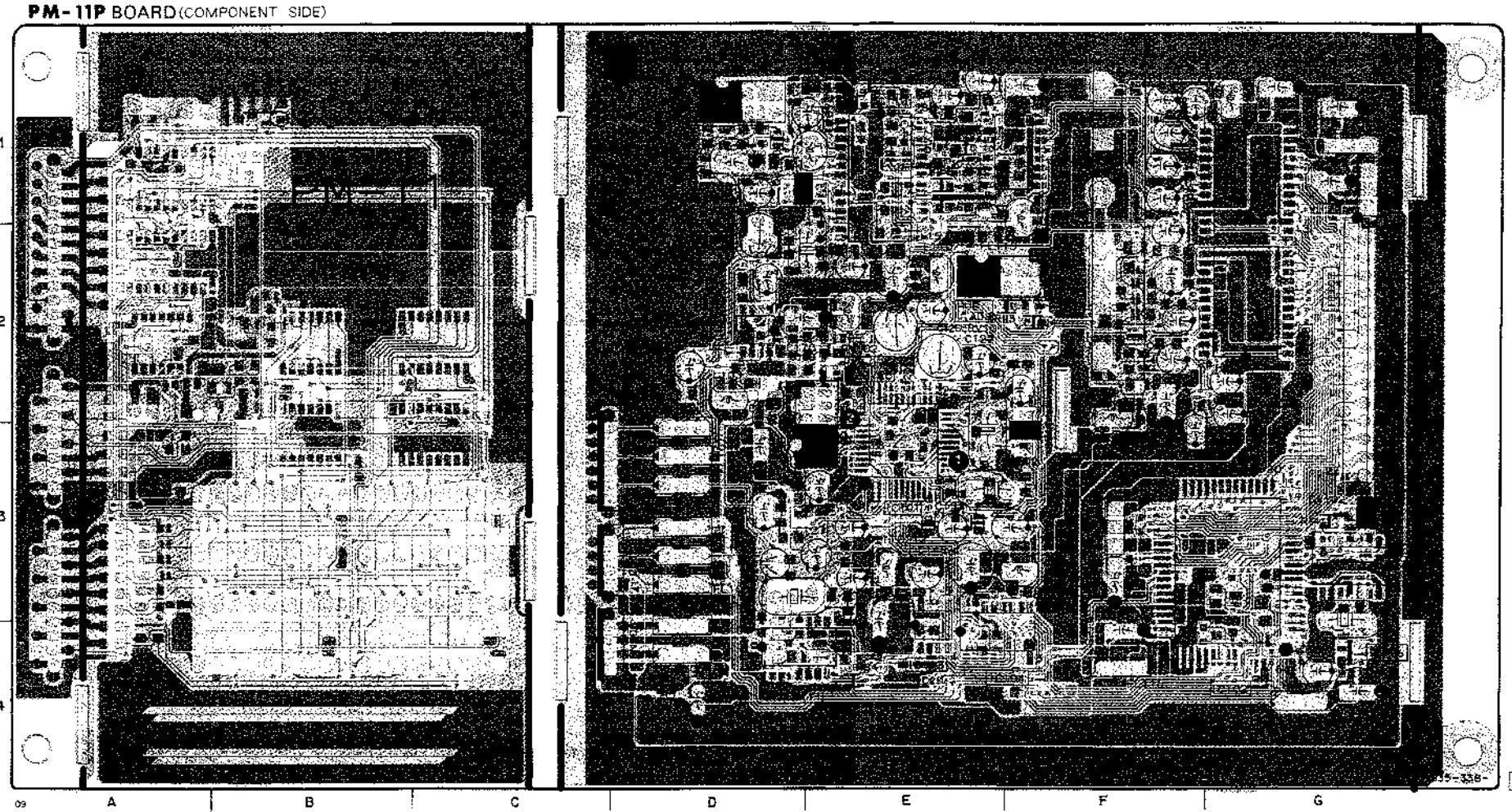
• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	⇒	⇒⇒	
PB		⇒		

PM-11P (PICTURE IN PICTURE PROCESS) PRINTED WIRING BOARD

— Ref. No. PM-11P BOARD: 16000 series —

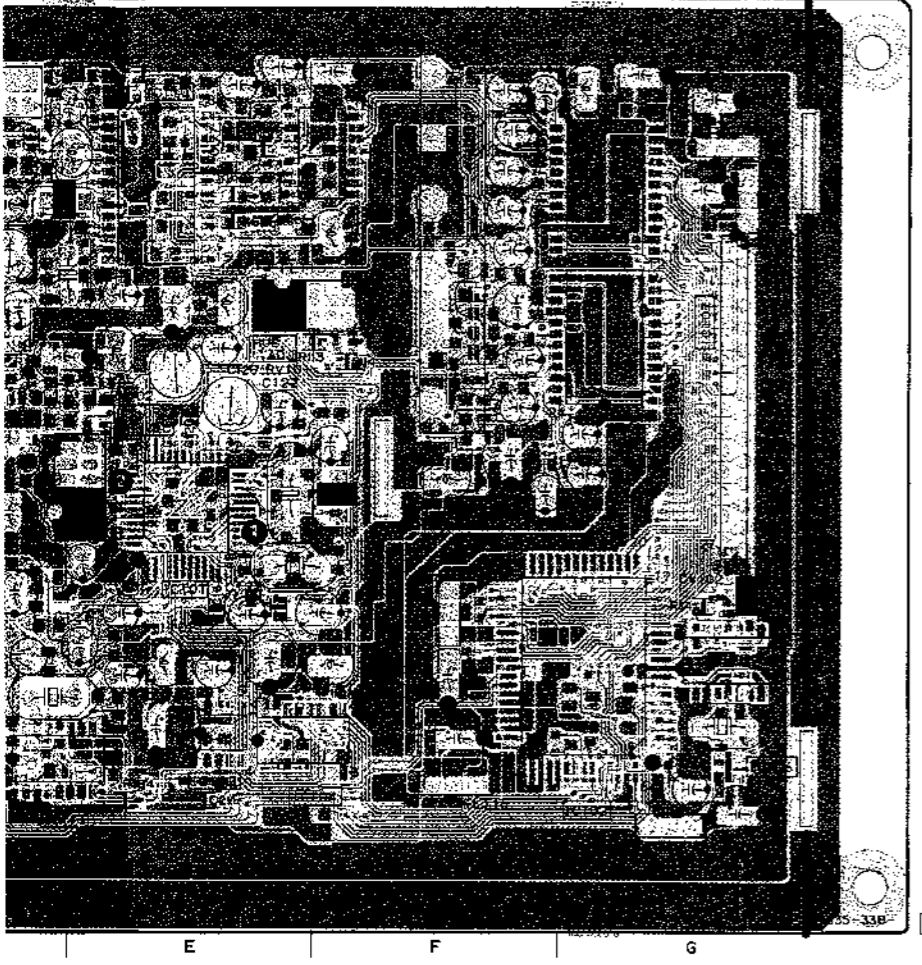
PM-11P BOARD (COMPONENT SIDE)		PM-11P BOARD (CONDUCTOR SIDE)	
IC101	E-3	D101	G-3
IC102	G-3	Q101	F-2
IC103	G-2	Q102	F-2
IC104	E-4	Q103	F-2
IC105	G-3	Q104	D-3
IC106	G-4	Q105	E-3
IC107	G-2	Q106	E-1
IC108	G-1	Q107	E-1
IC109	D-2	Q108	E-2
IC110	E-1	Q109	D-4
IC111	D-1	Q111	F-2
IC112	F-1	Q112	D-2
IC113	E-4		



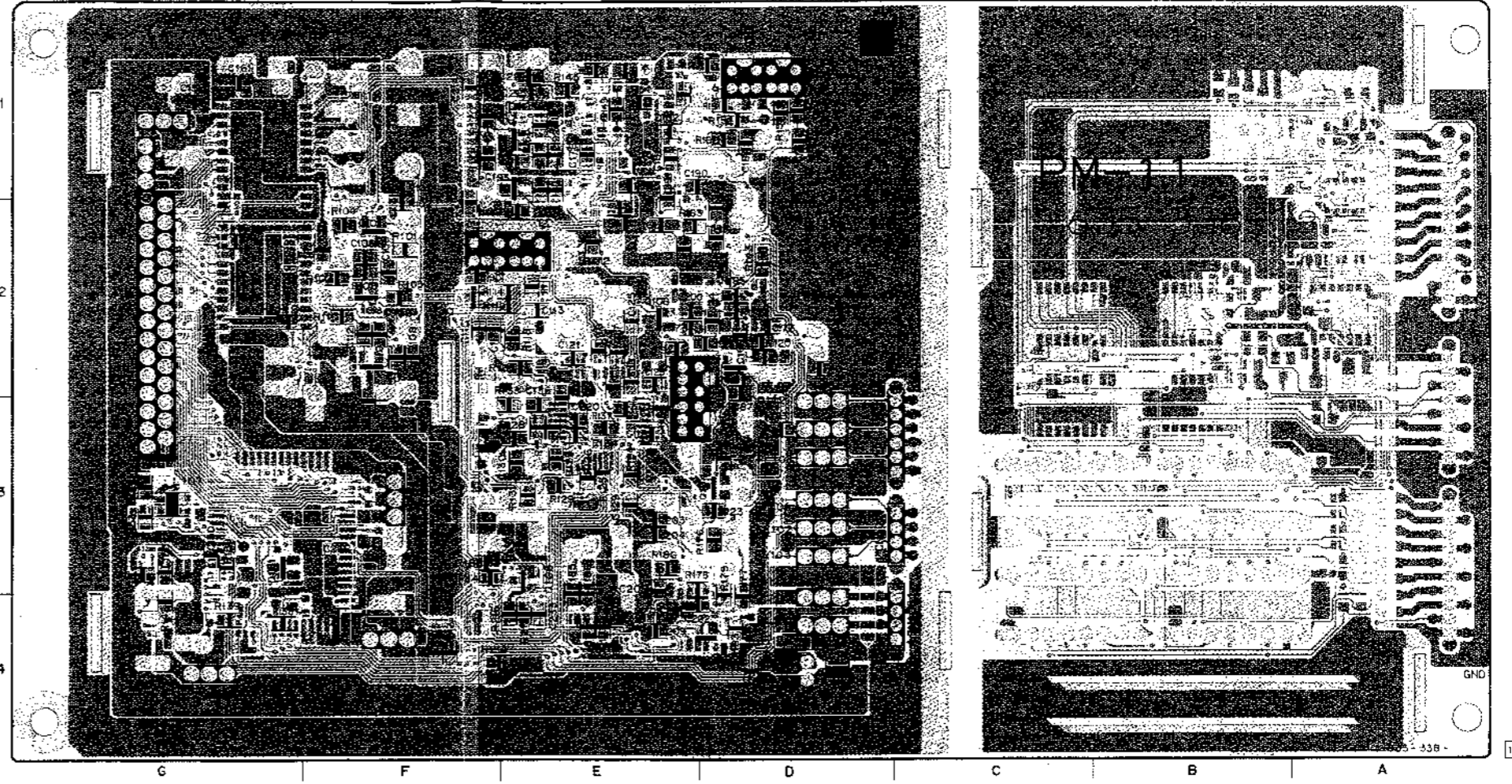
* A-7062-846-A PM-11 (P) BOARD, COMPLETE

 (Ref. No 16,000 Series)

< DIODE >			< IC >			< TRANSISTOR >		
D101	8-719-400-18	DIODE MA152WK	IC101	8-759-633-99	IC M51285BFP-V	Q101	8-729-230-49	TRANSISTOR 2SC2712
			IC102	8-759-631-06	IC M50541FP	Q102	8-729-230-49	TRANSISTOR 2SC2712
			IC103	8-759-633-96	IC M52682FP	Q103	8-729-230-49	TRANSISTOR 2SC2712
			IC104	8-759-032-41	IC MC74HC157AF	Q104	8-729-216-22	TRANSISTOR 2SA1162
			IC104	8-759-926-18	IC SN74HC157ANS	Q105	8-729-230-49	TRANSISTOR 2SC2712
			IC105	8-759-925-72	IC SN74HC02ANS	Q106	8-729-216-22	TRANSISTOR 2SA1162
			IC106	8-759-031-58	IC SC75U04F	Q107	8-729-216-22	TRANSISTOR 2SA1162
			IC107	8-759-605-15	IC MSM4C500L	Q108	8-729-216-22	TRANSISTOR 2SA1162
			IC108	8-759-633-04	IC M52688AFP	Q109	8-729-230-49	TRANSISTOR 2SC2712
			IC109	8-759-941-58	IC BA7131F	Q111	8-729-230-49	TRANSISTOR 2SC2712
			IC110	8-759-603-54	IC M51271FP	Q112	8-729-216-22	TRANSISTOR 2SA1162
			IC111	8-759-631-10	IC M52684AFP			
			IC112	8-759-300-71	IC TC4053BF			
			IC113	8-759-710-12	IC NJM2230M			



PM-11P BOARD (CONDUCTOR SIDE)



< TRANSISTOR >

Q101	8-729-230-49	TRANSISTOR	2SC2712
Q102	8-729-230-49	TRANSISTOR	2SC2712
Q103	8-729-230-49	TRANSISTOR	2SC2712
Q104	8-729-216-22	TRANSISTOR	2SA1162
Q105	8-729-230-49	TRANSISTOR	2SC2712
Q106	8-729-216-22	TRANSISTOR	2SA1162
Q107	8-729-216-22	TRANSISTOR	2SA1162
Q108	8-729-216-22	TRANSISTOR	2SA1162
Q109	8-729-230-49	TRANSISTOR	2SC2712
Q111	8-729-230-49	TRANSISTOR	2SC2712
Q112	8-729-216-22	TRANSISTOR	2SA1162

* A-7062-847-A MM-25 BOARD, COMPLETE

 (Ref. No 16,000 Series)

< DIODE >

D701	8-713-300-88	DIODE	1T33C-01
D702	8-719-949-46	DIODE	1T32
D901	8-719-400-18	DIODE	MA152WK
D906	8-719-400-18	DIODE	MA152WK
D907	8-719-400-18	DIODE	MA152WK

< IC >

IC701	8-759-987-17	IC	CXD1226Q
IC702	8-759-987-18	IC	CXD1227Q
IC703	8-759-500-94	IC	CXD2108Q
IC704	8-759-987-20	IC	CXD1229Q
IC705	8-752-337-41	IC	CXK1206M
IC706	8-752-337-41	IC	CXK1206M
IC707	8-752-334-55	IC	CXD1175AM
IC708	8-752-334-55	IC	CXD1175AM
IC709	8-752-032-96	IC	CXA1106M
IC710	8-752-032-96	IC	CXA1106M
IC711	8-752-032-96	IC	CXA1106M
IC900	8-759-987-27	IC	LM1881M
IC902	8-759-206-28	IC	MC74HC123AF
IC904	8-759-927-46	IC	SN74HC00ANS
IC905	8-759-710-62	IC	NJM2246M
IC906	8-759-710-61	IC	NJM2229M
IC907	8-759-239-34	IC	TC74HC4538AF
IC908	8-759-925-76	IC	SN74HC08ANS

< TRANSISTOR >

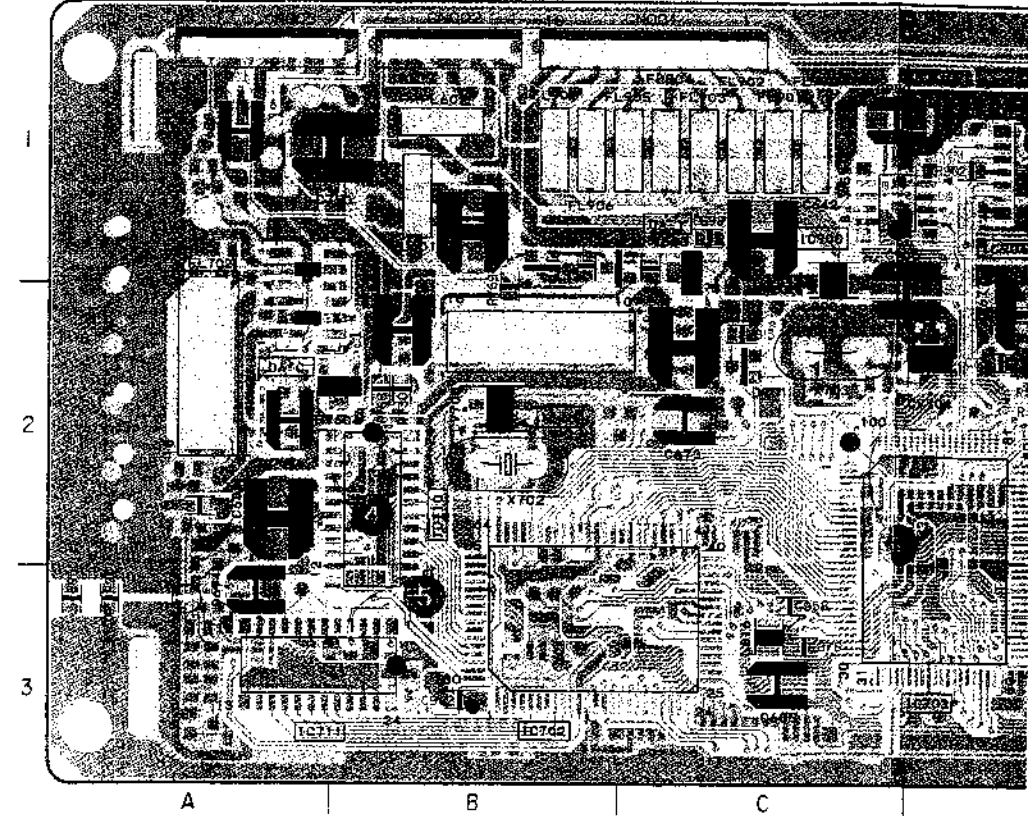
Q603	8-729-100-66	TRANSISTOR	2SC1623
Q604	8-729-100-66	TRANSISTOR	2SC1623
Q605	8-729-100-66	TRANSISTOR	2SC1623
Q606	8-729-100-66	TRANSISTOR	2SC1623
Q607	8-729-100-66	TRANSISTOR	2SC1623
Q608	8-729-100-66	TRANSISTOR	2SC1623
Q609	8-729-216-22	TRANSISTOR	2SA1162
Q610	8-729-100-66	TRANSISTOR	2SC1623
Q611	8-729-100-66	TRANSISTOR	2SC1623
Q612	8-729-100-66	TRANSISTOR	2SC1623
Q613	8-729-100-66	TRANSISTOR	2SC1623
Q614	8-729-100-66	TRANSISTOR	2SC1623
Q615	8-729-100-66	TRANSISTOR	2SC1623
Q616	8-729-100-66	TRANSISTOR	2SC1623
Q617	8-729-100-66	TRANSISTOR	2SC1623
Q618	8-729-100-66	TRANSISTOR	2SC1623
Q619	8-729-100-66	TRANSISTOR	2SC1623
Q628	8-729-100-66	TRANSISTOR	2SC1623
Q701	8-729-102-08	TRANSISTOR	2SC2223
Q702	8-729-122-63	TRANSISTOR	2SA1226
Q900	8-729-100-66	TRANSISTOR	2SC1623
Q901	8-729-216-22	TRANSISTOR	2SA1162
Q903	8-729-100-66	TRANSISTOR	2SC1623
Q904	8-729-901-01	TRANSISTOR	DTC144EK
Q905	8-729-100-66	TRANSISTOR	2SC1623
Q906	8-729-100-66	TRANSISTOR	2SC1623

MM-25 (DIGITAL PICTURE PROCESS) PRINTED WIRING BOARD

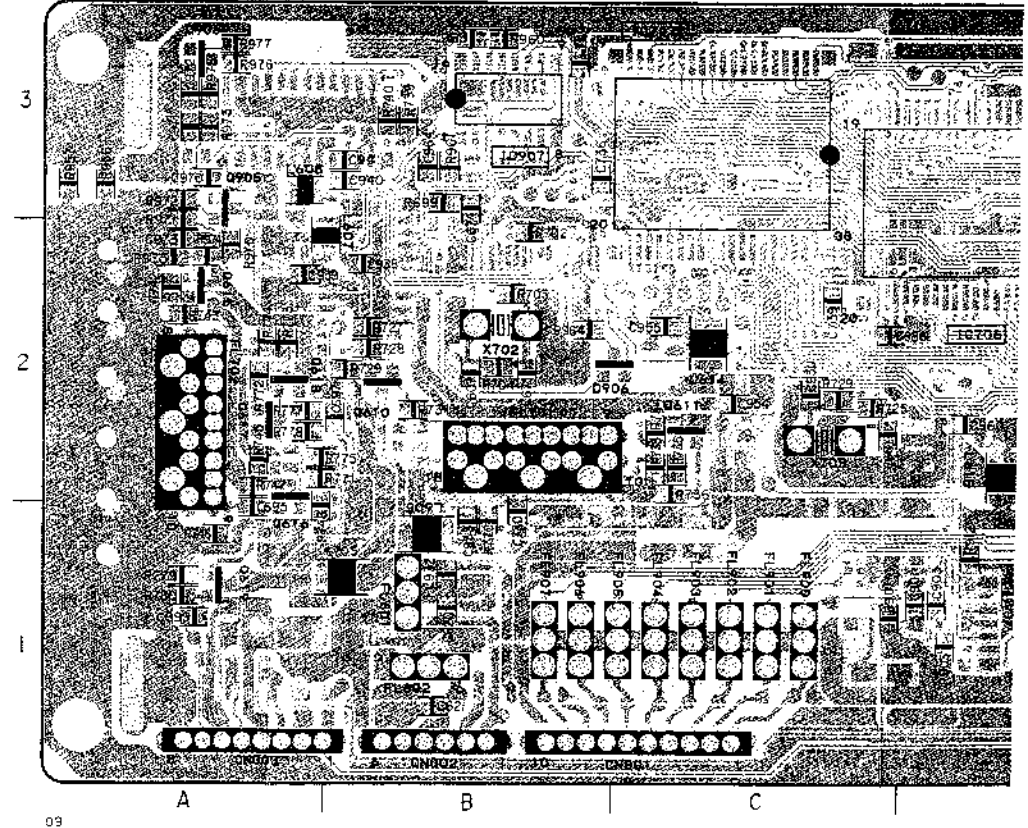
— Ref. No. MM-25 BOARD: 16000 series —

MM-25 BOARD (COMPONENT SIDE)	MM-25 BOARD (CONDUCTOR SIDE)
D901 C-2	D701 G-2
D907 F-2	D702 F-2
	D906 B-2
IC701 E-2	IC705 E-3
IC702 B-2	IC706 D-2
IC703 D-3	IC707 C-3
IC704 G-3	IC907 B-3
IC708 F-2	IC908 E-1
IC709 E-1	
IC710 B-2	Q603 G-2
IC711 A-3	Q604 G-2
IC900 C-1	Q605 G-2
IC902 E-1	Q606 F-1
IC904 D-1	Q607 F-2
IC905 G-1	Q608 F-1
IC906 G-1	Q609 G-2
Q612 B-1	Q610 B-2
Q614 B-1	Q611 C-2
Q903 G-3	Q613 G-2
	Q615 A-2
	Q616 A-1
	Q617 A-2
	Q618 A-2
	Q619 A-1
	Q628 F-2
	Q701 F-3
	Q702 F-3
	Q900 G-1
	Q901 G-2
	Q904 E-2
	Q905 A-3
	Q906 A-3

MM-25 BOARD (COMPONENT SIDE)



MM-25 BOARD (CONDUCTOR SIDE)

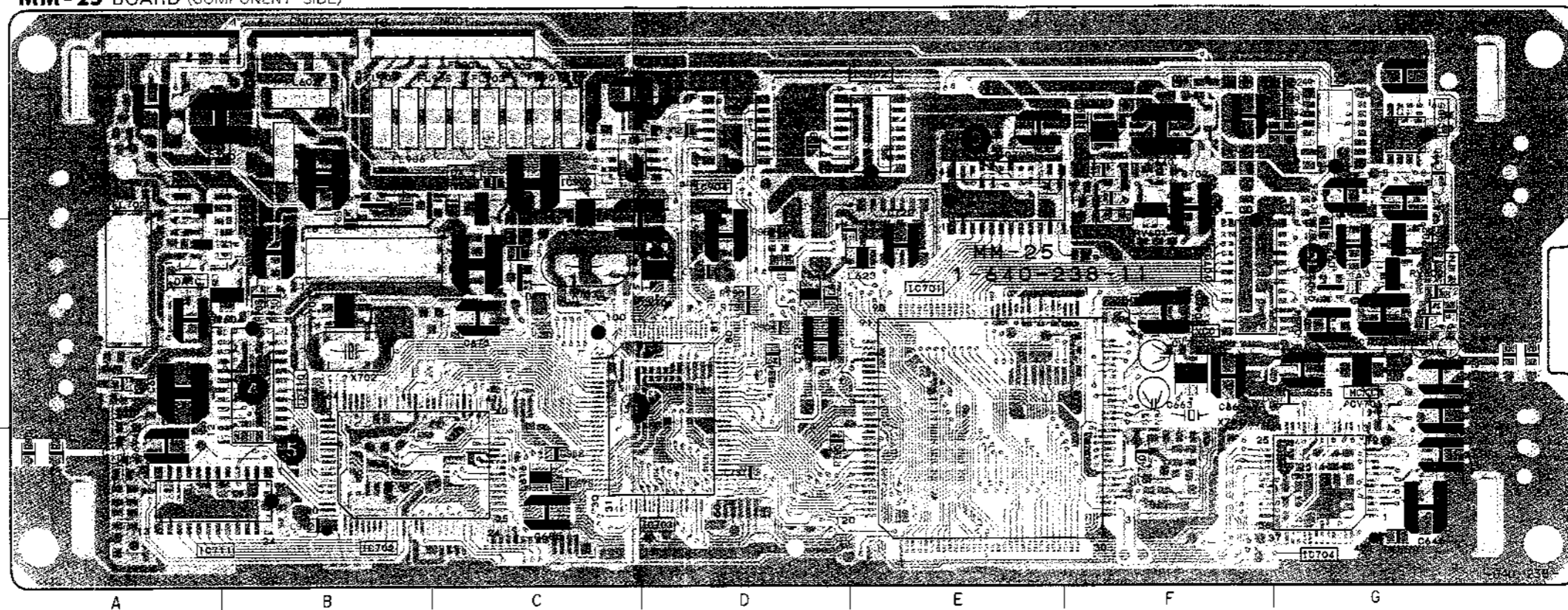


MM-25 (DIGITAL PICTURE PROCESS) PRINTED WIRING BOARD

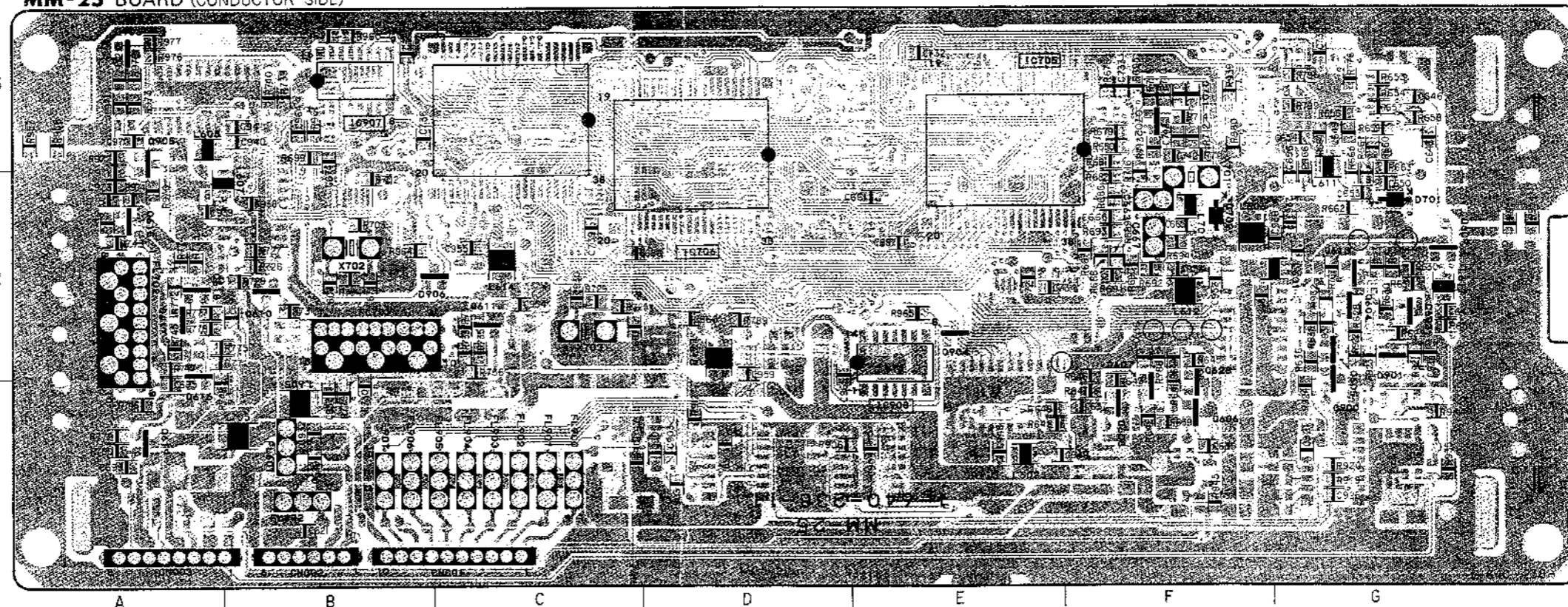
— Ref. No. MM-25 BOARD: 16000 series —

MM-25 BOARD (COMPONENT SIDE)		MM-25 BOARD (CONDUCTOR SIDE)	
D901	C-2	D701	G-2
D907	F-2	D702	F-2
		D906	B-2
IC701	E-2	IC705	E-3
IC702	B-2	IC706	D-2
IC703	D-3	IC707	C-3
IC704	G-3	IC907	B-3
IC708	F-2	IC908	E-1
IC709	E-1		
IC710	B-2	Q503	G-2
IC711	A-3	Q604	G-2
IC900	C-1	Q605	G-2
IC902	E-1	Q606	F-1
IC904	D-1	Q607	F-2
IC905	G-1	Q608	F-1
IC906	G-1	Q609	G-2
		Q610	B-2
Q612	B-1	Q611	C-2
Q614	B-1	Q613	G-2
Q903	G-3	Q615	A-2
		Q616	A-1
		Q617	A-2
		Q618	A-2
		Q619	A-1
		Q628	F-2
		Q701	F-3
		Q702	F-3
		Q900	G-1
		Q901	G-2
		Q904	E-2
		Q905	A-3
		Q906	A-3

MM-25 BOARD (COMPONENT SIDE)



MM-25 BOARD (CONDUCTOR SIDE)

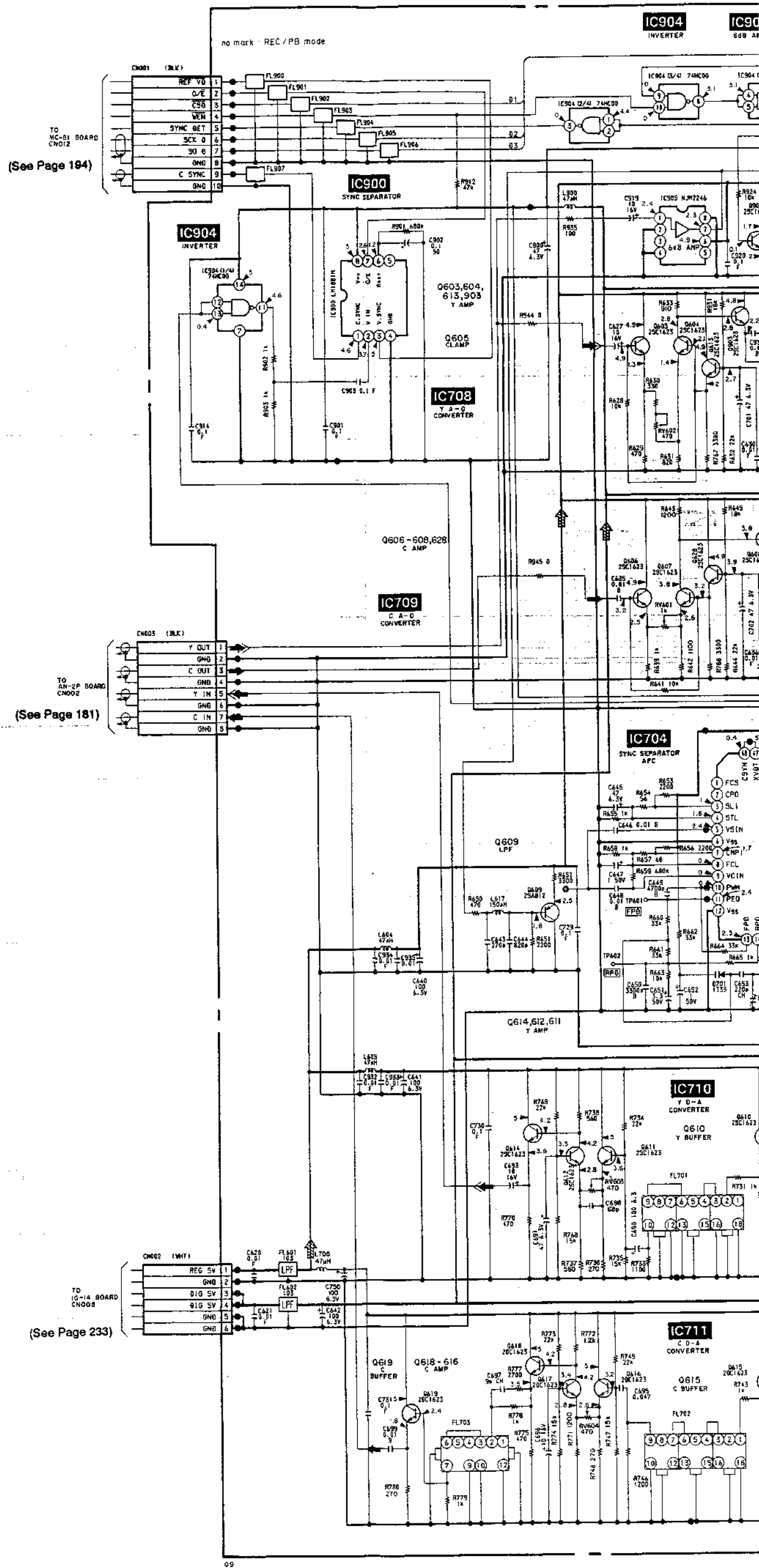


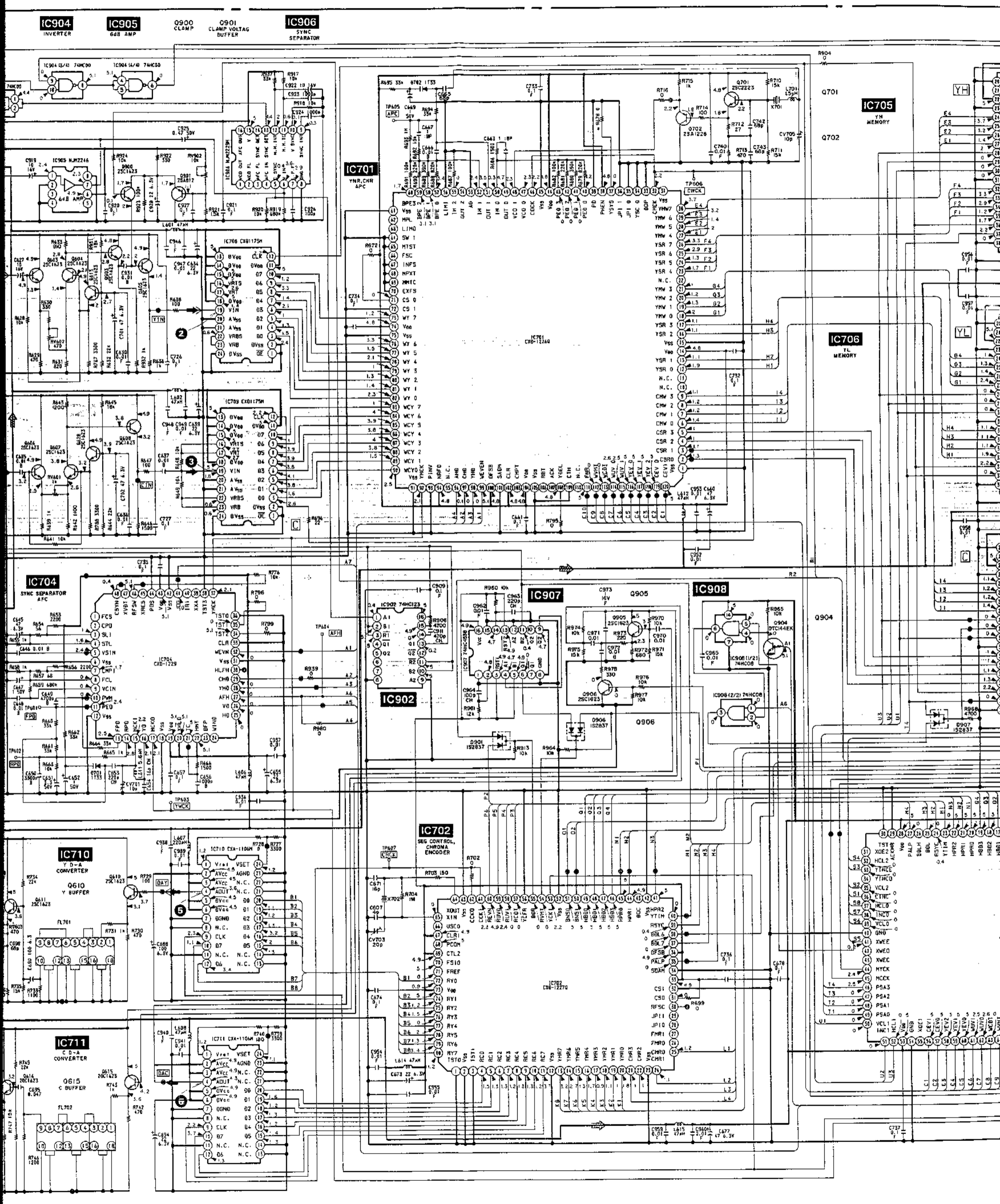
MM-25 (DIGITAL PICTURE PROCESS) SCHEMATIC DIAGRAM

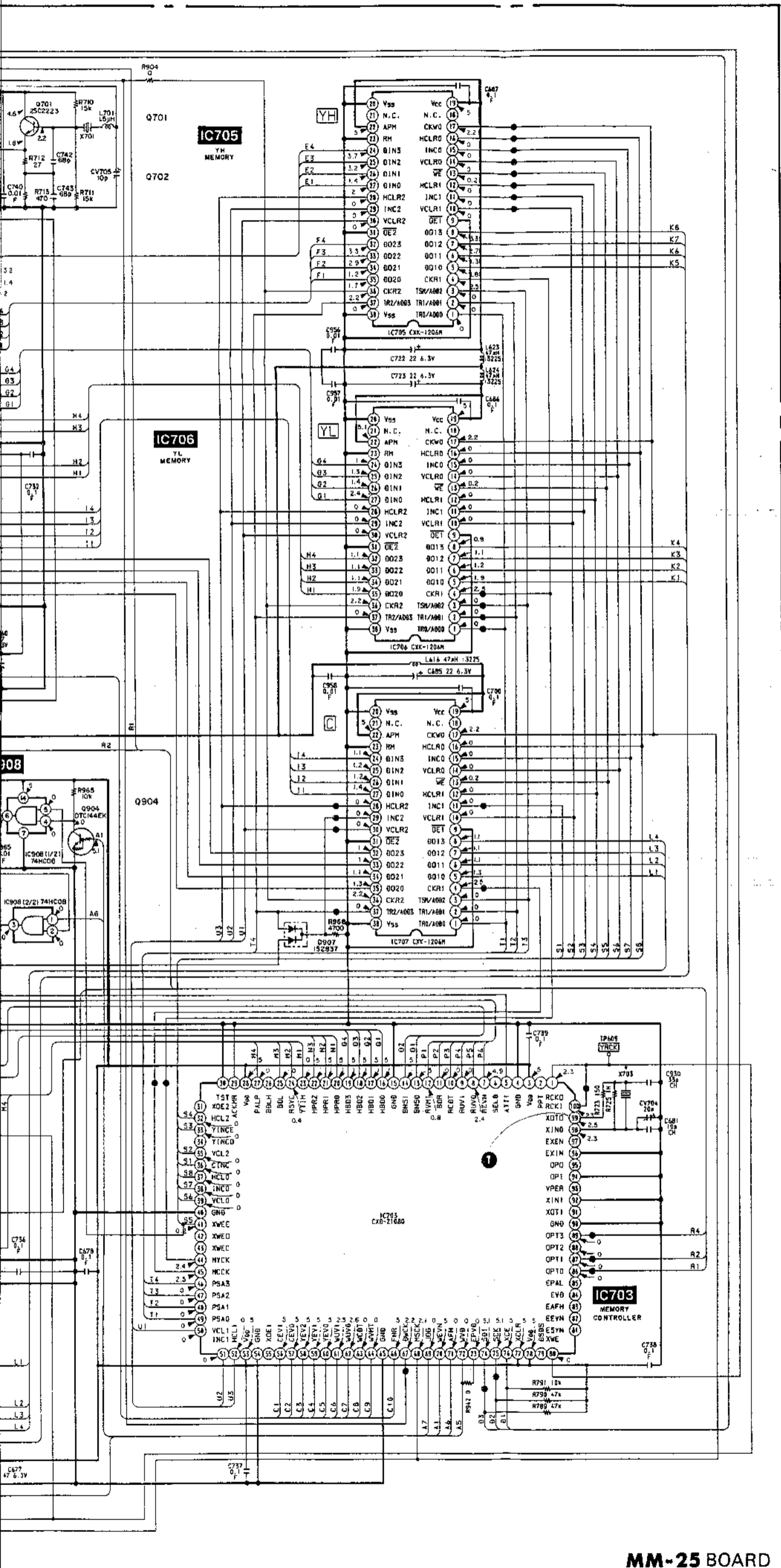
1 2 3 4 5 6 7 8

— Ref. No. MM-25 BOARD: 16000 series —

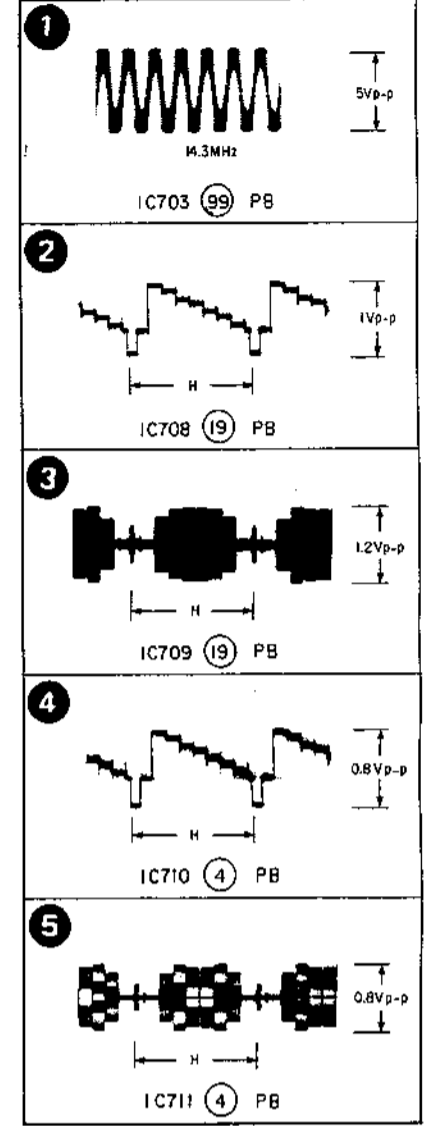
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MM-25 BOARD



• SIGNAL PATH

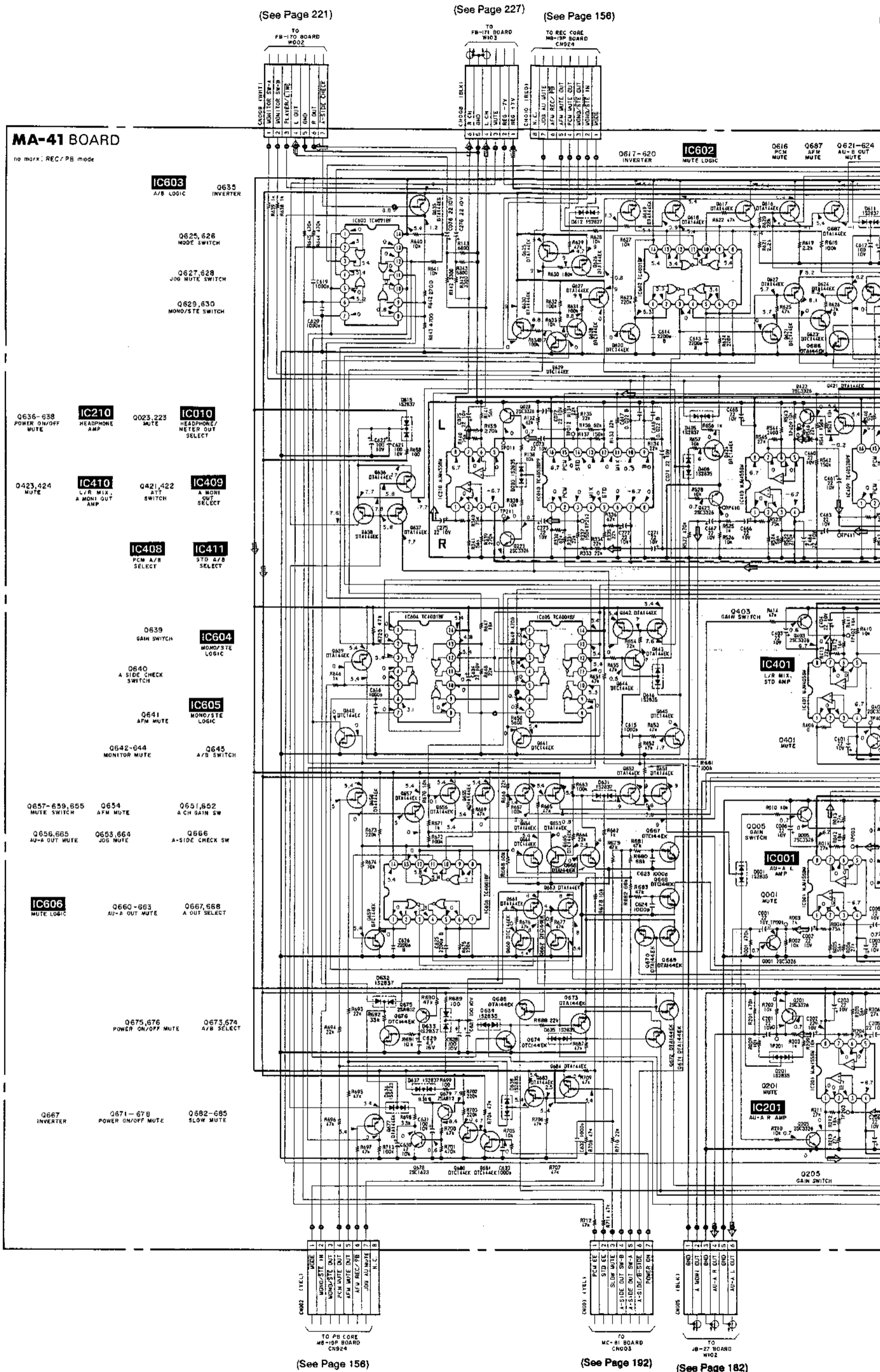
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC	→	→		
PB				

MA-41 (AUDIO IN/OUT), RL-23 (REC AUDIO LEVEL), MJ-26 (MIC JACK, MIC AMP) SCHEMATIC DIAGRAMS

— Ref. No. MA-41 BOARD: 17000 series. RL-23 BOARD. MJ-26 BOARD: 12000 series —

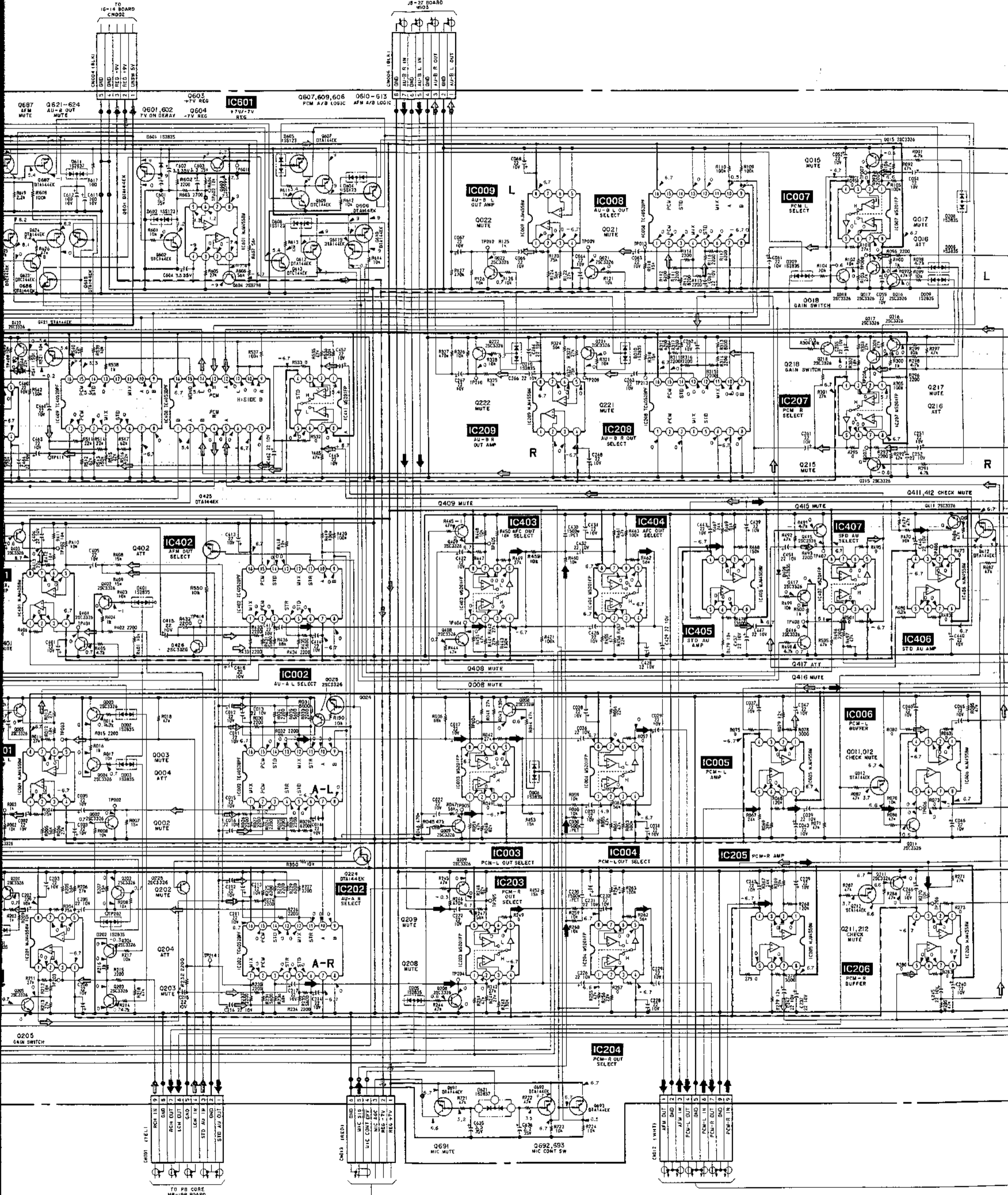
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

1 2 3 4 5 6 7 8 9 10 11



(See Page 233)

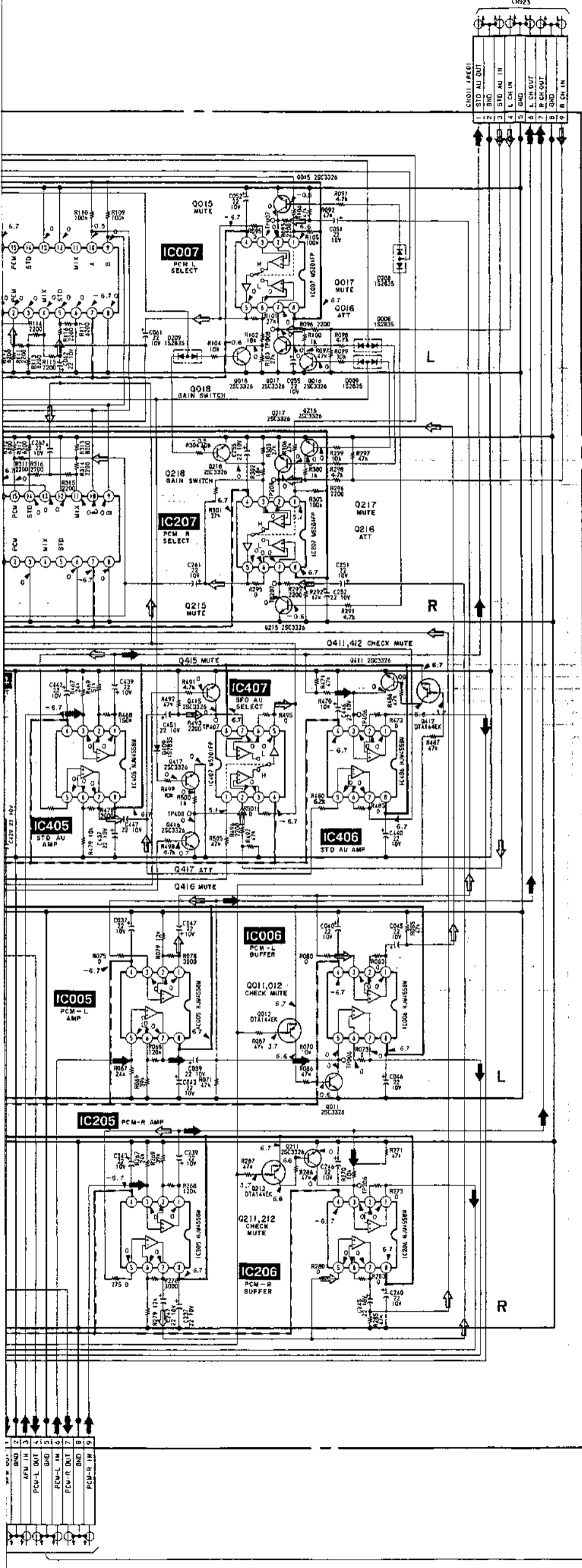
(See Page 182)



(See Page 155)

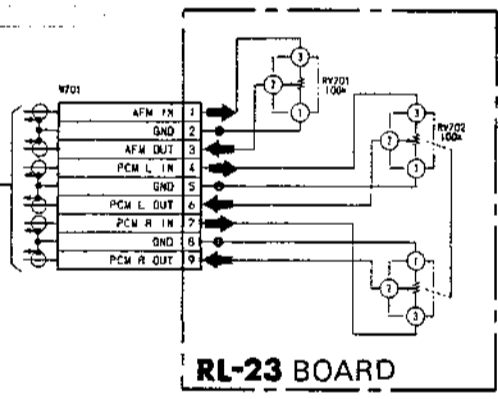
(See Page 155)

TO REC CORE
MB-18 P BOARD
CH923

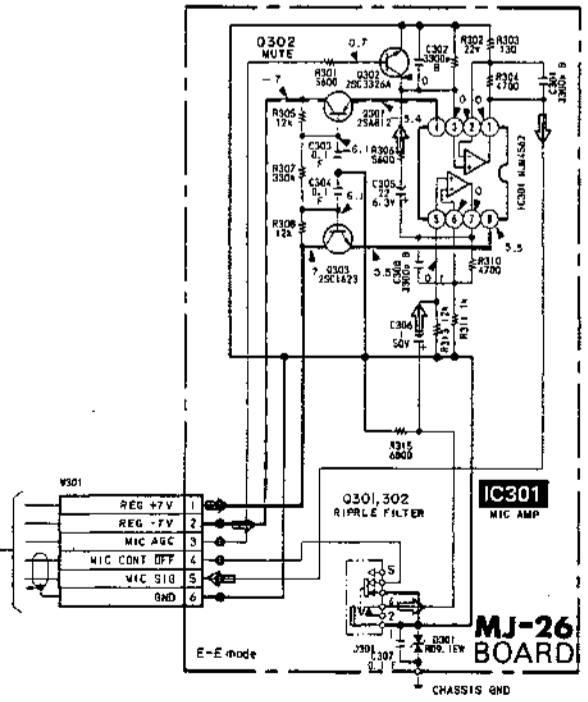


• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				→
PB				⇌



RL-23 BOARD



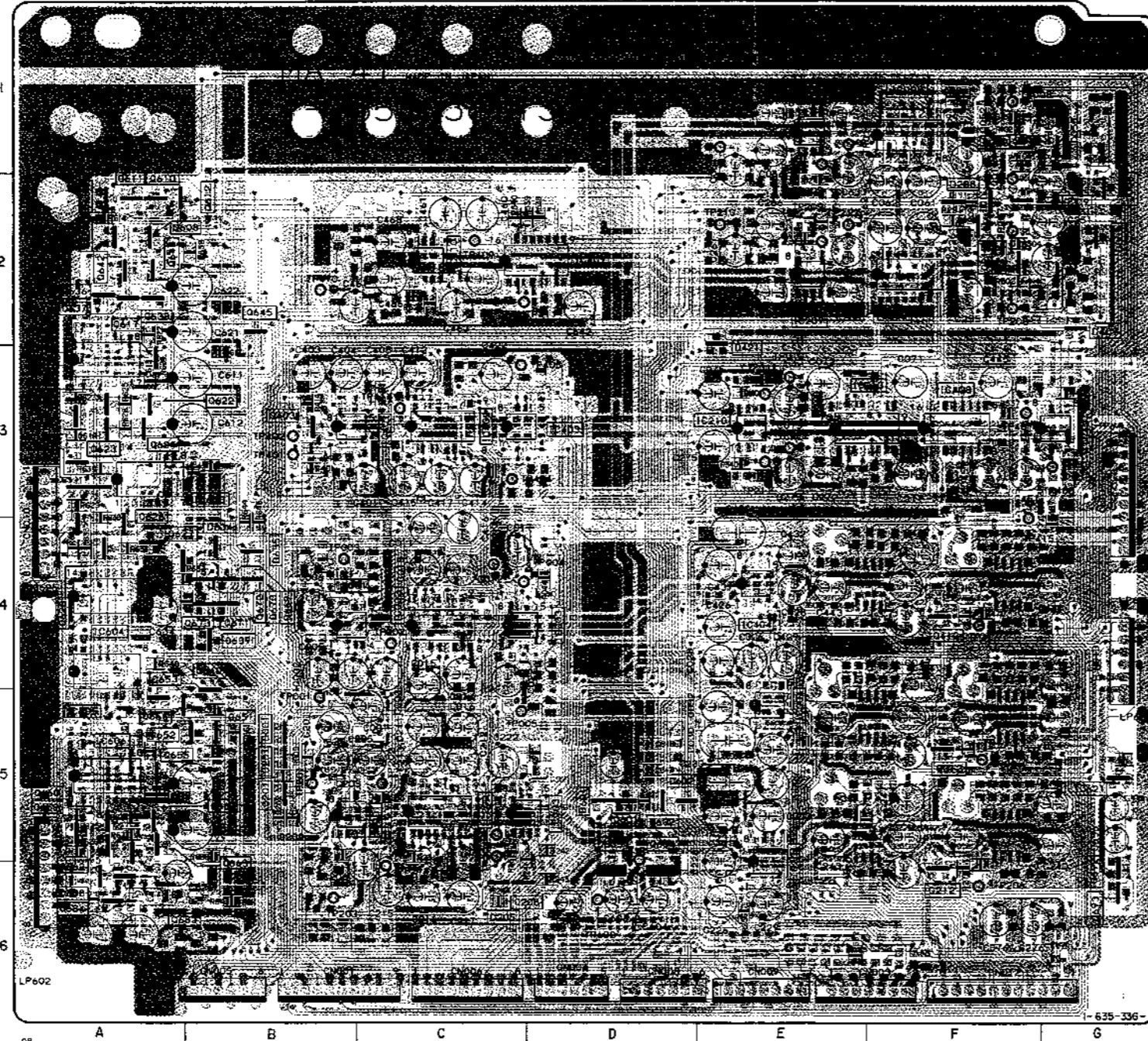
MJ-26 BOARD

MA-41 (AUDIO IN/OUT), RL-23 (REC AUDIO LEVEL), MJ-26 (MIC JACK, MIC AMP) PRINTED WIRING BOARDS

— Ref. No. MA-41 BOARD: 17000 series, RL-23 BOARD, MJ-26 BOARD: 12000 series —

MA-41 BOARD (COMPONENT SIDE)	MA-41 BOARD (CONDUCTOR SIDE)
D001 B-5	D002 B-4
D008 G-2	D003 C-4
D009 G-2	D005 D-5
D201 B-5	D006 D-4
D205 C-6	D010 E-2
D206 D-5	D202 B-5
D208 F-2	D203 E-3
D209 F-2	D210 E-2
D409 G-2	D401 B-3
D601 D-5	D402 B-3
D602 D-5	D405 C-2
D603 A-2	D406 B-2
D607 A-2	D604 A-2
D612 A-3	D605 A-2
D621 G-5	D606 A-2
D634 B-4	D611 B-3
D635 B-4	D615 B-2
D638 A-6	D616 A-2
	D631 A-5
	D632 A-5
	D633 B-5
	D636 A-5
	D637 A-6
IC001 B-4	IC005 E-5
IC002 C-4	IC006 F-5
IC003 C-4	IC007 F-1
IC004 E-5	IC205 E-5
IC008 F-1	IC206 F-5
IC009 E-1	IC207 G-2
IC010 E-3	IC405 E-4
IC201 B-5	IC406 F-4
IC202 C-5	IC411 F-3
IC203 C-5	IC601 D-6
IC204 F-5	
IC208 F-2	Q001 C-5
IC209 E-2	Q002 C-3
IC210 E-3	Q003 C-3
IC401 B-3	Q004 C-3
IC402 C-3	Q005 B-4
IC403 C-3	Q008 D-4
IC404 E-4	Q009 D-5
IC407 G-3	Q011 F-5
IC408 F-3	Q016 G-1
IC409 D-2	Q017 G-1
IC410 C-2	Q021 E-2
IC602 A-3	Q022 E-2
IC603 A-3	Q023 E-3
IC604 G-3	Q202 C-5
IC605 G-4	Q203 C-6
IC606 A-5	Q204 C-6
	Q205 B-5
Q012 F-5	Q209 C-5
Q015 F-2	Q211 F-5
Q018 F-1	Q212 F-6
Q201 B-5	Q215 F-2
Q208 C-6	Q216 F-2
Q212 F-6	Q217 G-2
Q215 F-2	Q221 E-2
Q218 F-2	Q222 E-2
Q403 B-3	Q223 E-3
Q412 F-4	Q401 B-3
Q601 D-5	Q402 B-3
Q602 D-5	Q408 C-3
Q603 D-6	Q409 C-3
Q604 D-6	Q411 F-4
Q608 A-2	Q415 F-3
Q610 A-2	Q416 G-3
Q611 A-2	Q417 G-3
Q612 A-2	Q421 D-2
Q617 A-2	Q422 C-2
Q620 A-3	Q423 C-2
Q621 A-3	Q424 B-2
Q622 A-3	Q606 A-2
Q623 A-3	Q607 A-2
Q624 A-3	Q609 A-2
Q625 A-4	Q613 A-2
Q626 A-4	Q615 A-2
Q627 A-4	Q616 A-2
Q628 A-4	Q618 A-2
Q629 A-3	Q619 A-3
Q630 A-3	Q635 E-6
Q636 A-2	Q641 A-4
Q637 A-2	Q644 A-2
Q638 A-2	Q654 A-5
Q639 B-4	Q658 A-5
Q640 B-4	Q657 A-5
Q642 A-2	Q658 A-5
Q643 A-2	Q658 A-5
Q645 B-2	Q664 A-5
Q651 B-5	Q665 A-5
Q652 A-5	Q666 A-5
Q653 A-5	Q667 E-6
Q655 A-5	Q668 E-6
Q659 A-5	Q675 A-5
Q660 A-5	Q676 A-5
Q661 A-5	Q677 A-5
Q662 A-5	Q678 A-6
Q663 A-5	Q679 A-6
Q673 A-4	Q680 A-6
Q674 A-4	Q681 B-6
Q682 A-6	Q681 B-6
Q683 A-6	Q691 G-5
Q684 A-6	
Q685 A-6	
Q692 G-6	
Q693 G-6	

MA-41 BOARD (COMPONENT SIDE)

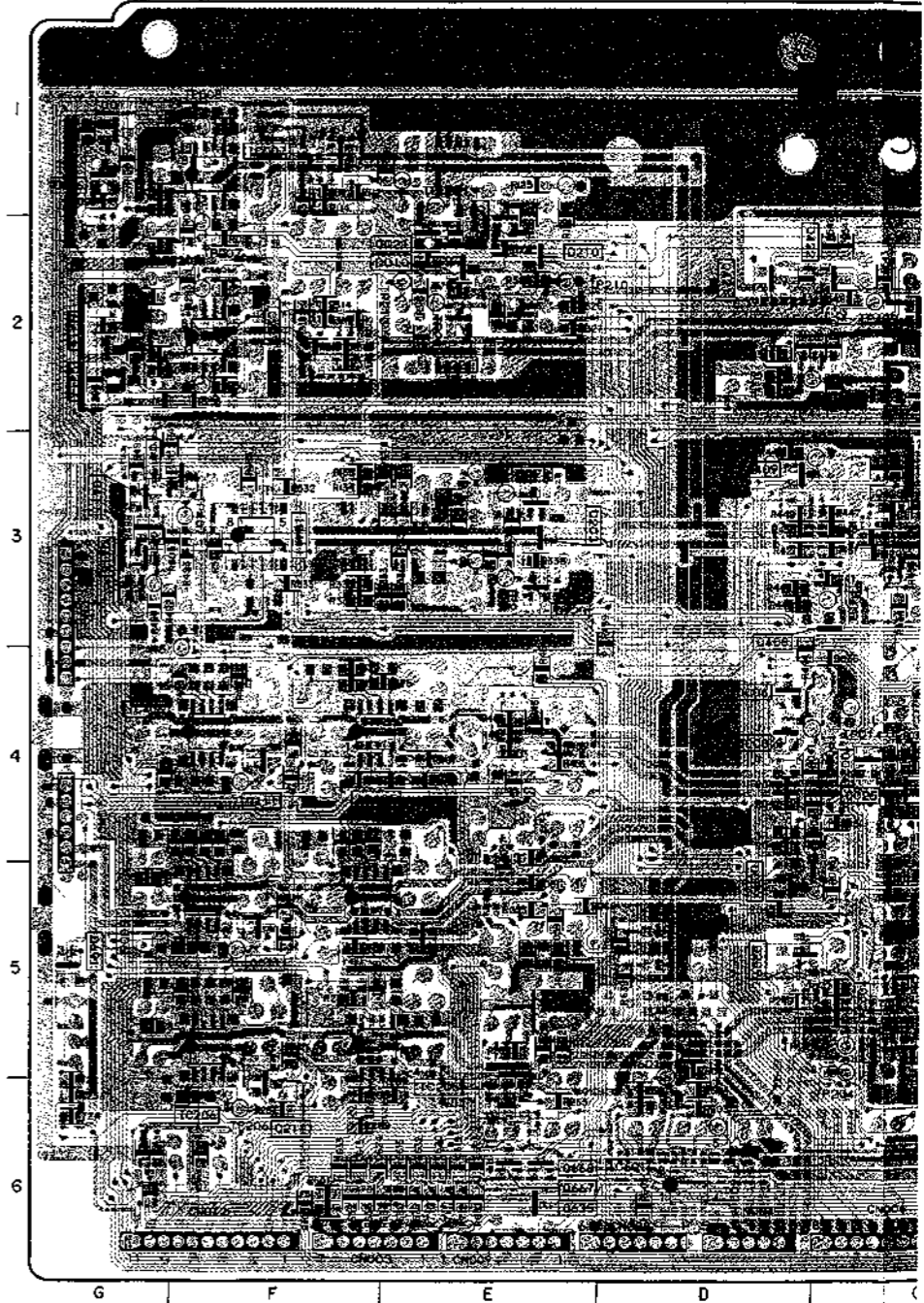


* A-7062-215-B MA-41 BOARD, COMPLETE

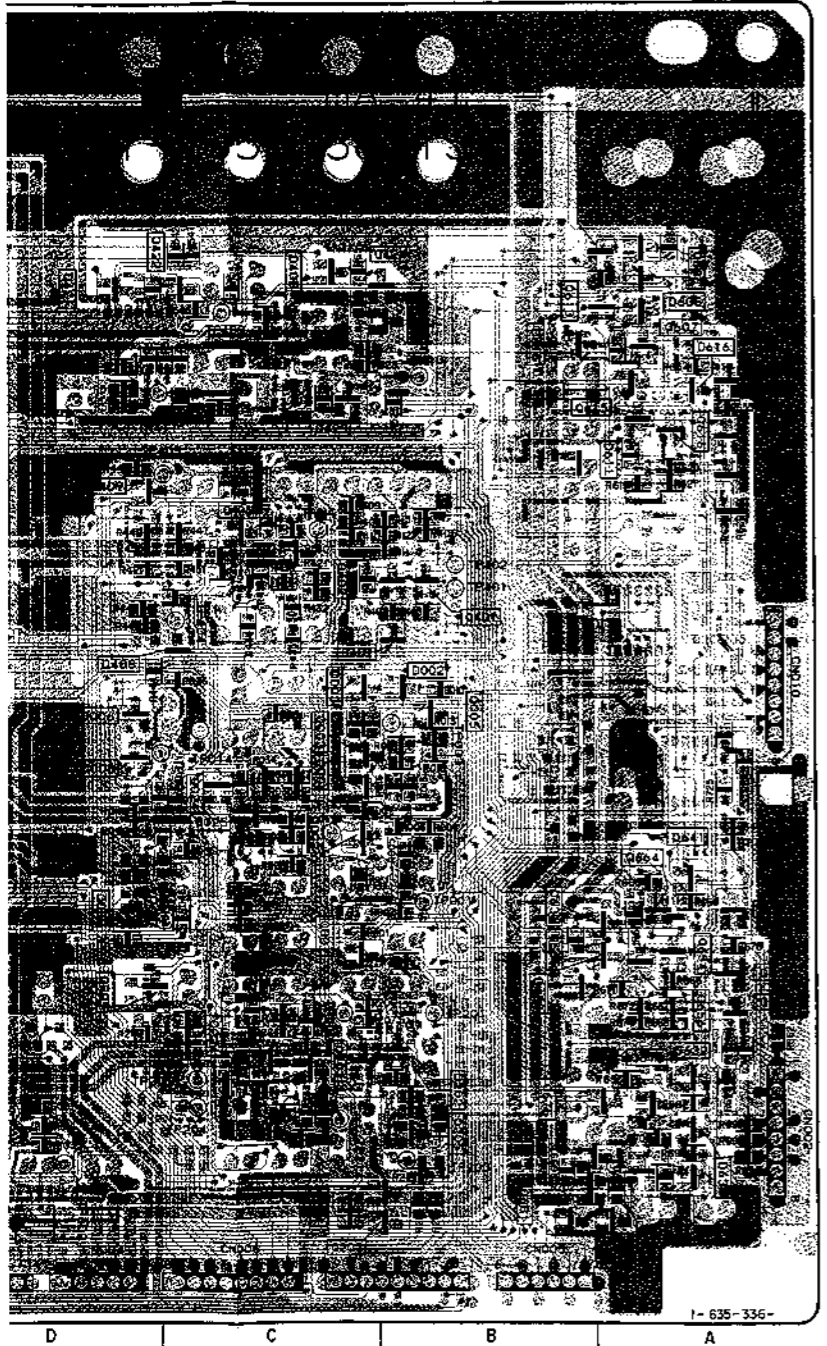
(Ref. No 17,000 Series)

< DIODE >		
D201	8-719-104-34	D101
D202	8-719-104-34	D101
D203	8-719-104-34	D101
D205	8-719-104-34	D101
D208	8-719-104-34	D101
D209	8-719-104-34	D101
D210	8-719-104-34	D101
D401	8-719-104-34	D101
D405	8-719-400-18	D101
D406	8-719-104-34	D101
D409	8-719-104-34	D101
D421	8-719-104-34	D101
D001	8-719-104-34 DIODE	1S2836
D002	8-719-104-34 DIODE	1S2836
D003	8-719-104-34 DIODE	1S2836
D006	8-719-104-34 DIODE	1S2836
D008	8-719-104-34 DIODE	1S2836
D009	8-719-104-34 DIODE	1S2836
D010	8-719-104-34 DIODE	1S2836

MA-41 BOARD (CONDUCTOR SIDE)



D201	8-719-104-34	DIODE	1S2836
D202	8-719-104-34	DIODE	1S2836
D203	8-719-104-34	DIODE	1S2836
D205	8-719-104-34	DIODE	1S2836
D208	8-719-104-34	DIODE	1S2836
D209	8-719-104-34	DIODE	1S2836
D210	8-719-104-34	DIODE	1S2836
D401	8-719-104-34	DIODE	1S2836
D405	8-719-400-18	DIODE	MA152WK
D406	8-719-104-34	DIODE	1S2836
D409	8-719-104-34	DIODE	1S2836
D421	8-719-104-34	DIODE	1S2836
D601	8-719-104-34	DIODE	1S2836
D602	8-719-800-76	DIODE	1SS226
D604	8-719-800-76	DIODE	1SS226
D605	8-719-800-76	DIODE	1SS226
D606	8-719-800-76	DIODE	1SS226
D611	8-719-400-18	DIODE	MA152WK
D612	8-719-400-18	DIODE	MA152WK
D615	8-719-400-18	DIODE	MA152WK
D616	8-719-104-34	DIODE	1S2836
D621	8-719-400-18	DIODE	MA152WK
D631	8-719-400-18	DIODE	MA152WK
D632	8-719-400-18	DIODE	MA152WK
D633	8-719-400-18	DIODE	MA152WK
D634	8-719-104-34	DIODE	1S2836
D635	8-719-104-34	DIODE	1S2836
D636	8-719-800-76	DIODE	1SS226
D637	8-719-400-18	DIODE	MA152WK
D638	8-719-104-34	DIODE	1S2836



1-635-325-11 RL-23 BOARD

(Ref. No 12, 000 Series)

< IC >

IC701	8-759-700-62	IC	NJM4562D
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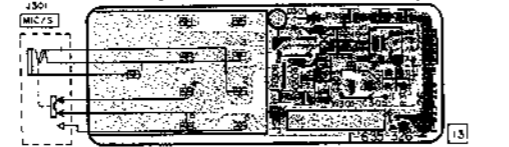
RL-23 BOARD (COMPONENT SIDE)



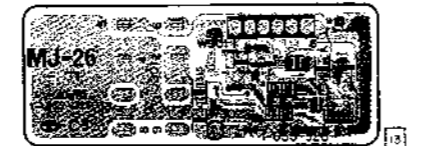
RL-23 BOARD (CONDUCTOR SIDE)



MJ-26 BOARD (COMPONENT SIDE)



MJ-26 BOARD (CONDUCTOR SIDE)



A-7062-225-A MJ-26 BOARD, COMPLETE

(Ref. No 12, 000 Series)

< DIODE >

D301	8-719-108-12	DIODE	RDS. 1E-W
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< IC >

IC301	8-759-700-62	IC	NJM4562D
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< TRANSISTOR >

Q301	8-729-216-22	TRANSISTOR	2SA1162
Q302	8-729-202-38	TRANSISTOR	2SC3326N
Q303	8-729-100-66	TRANSISTOR	2SC1623

< IC >

IC001	8-759-981-92	IC	NJM4558M
IC002	8-759-932-64	IC	BU4052BF
IC003	8-759-603-27	IC	M5201FP
IC004	8-759-603-27	IC	M5201FP
IC005	8-759-981-92	IC	NJM4558M
IC006	8-759-981-92	IC	NJM4558M
IC007	8-759-603-27	IC	M5201FP
IC008	8-759-932-64	IC	BU4052BF
IC009	8-759-981-92	IC	NJM4558M
IC010	8-759-932-64	IC	BU4052BF
IC201	8-759-981-92	IC	NJM4558M
IC202	8-759-932-64	IC	BU4052BF
IC203	8-759-603-27	IC	M5201FP
IC204	8-759-603-27	IC	M5201FP
IC205	8-759-981-92	IC	NJM4558M
IC206	8-759-981-92	IC	NJM4558M
IC207	8-759-603-27	IC	M5201FP
IC208	8-759-932-64	IC	BU4052BF
IC209	8-759-981-92	IC	NJM4558M
IC210	8-759-981-92	IC	NJM4558M
IC401	8-759-981-92	IC	NJM4558M
IC402	8-759-932-64	IC	BU4052BF
IC403	8-759-603-27	IC	M5201FP
IC404	8-759-603-27	IC	M5201FP
IC405	8-759-981-92	IC	NJM4558M
IC406	8-759-981-92	IC	NJM4558M
IC407	8-759-603-27	IC	M5201FP
IC408	8-759-300-71	IC	TC4053BFBH
IC409	8-759-932-64	IC	BU4052BF
IC410	8-759-981-92	IC	NJM4558M
IC411	8-759-603-27	IC	M5201FP
IC601	8-759-981-92	IC	NJM4558M
IC602	8-759-200-67	IC	TC4001BF
IC603	8-759-200-83	IC	TC4071BF
IC604	8-759-200-67	IC	TC4001BF
IC605	8-759-200-67	IC	TC4001BF
IC606	8-759-200-67	IC	TC4001BF

< TRANSISTOR >

Q001	8-729-202-38	TRANSISTOR	2SC3326N
Q002	8-729-202-38	TRANSISTOR	2SC3326N
Q003	8-729-202-38	TRANSISTOR	2SC3326N
Q004	8-729-202-38	TRANSISTOR	2SC3326N
Q005	8-729-202-38	TRANSISTOR	2SC3326N
Q008	8-729-202-38	TRANSISTOR	2SC3326N
Q009	8-729-202-38	TRANSISTOR	2SC3326N
Q011	8-729-202-38	TRANSISTOR	2SC3326N
Q012	8-729-901-06	TRANSISTOR	DTA144EK
Q015	8-729-202-38	TRANSISTOR	2SC3326N
Q016	8-729-202-38	TRANSISTOR	2SC3326N
Q017	8-729-202-38	TRANSISTOR	2SC3326N
Q018	8-729-202-38	TRANSISTOR	2SC3326N
Q021	8-729-202-38	TRANSISTOR	2SC3326N
Q022	8-729-202-38	TRANSISTOR	2SC3326N
Q023	8-729-202-38	TRANSISTOR	2SC3326N

Q024	8-729-901-06	TRANSISTOR	DTA144EK
Q025	8-729-202-38	TRANSISTOR	2SC3326N
Q201	8-729-202-38	TRANSISTOR	2SC3326N
Q202	8-729-202-38	TRANSISTOR	2SC3326N
Q203	8-729-202-38	TRANSISTOR	2SC3326N
Q204	8-729-202-38	TRANSISTOR	2SC3326N
Q205	8-729-202-38	TRANSISTOR	2SC3326N
Q208	8-729-202-38	TRANSISTOR	2SC3326N
Q209	8-729-202-38	TRANSISTOR	2SC3326N
Q211	8-729-202-38	TRANSISTOR	2SC3326N
Q212	8-729-901-06	TRANSISTOR	DTA144EK
Q215	8-729-202-38	TRANSISTOR	2SC3326N
Q216	8-729-202-38	TRANSISTOR	2SC3326N
Q217	8-729-202-38	TRANSISTOR	2SC3326N
Q218	8-729-202-38	TRANSISTOR	2SC3326N
Q221	8-729-202-38	TRANSISTOR	2SC3326N
Q222	8-729-202-38	TRANSISTOR	2SC3326N
Q223	8-729-202-38	TRANSISTOR	2SC3326N
Q224	8-729-901-06	TRANSISTOR	DTA144EK
Q225	8-729-202-38	TRANSISTOR	2SC3326N
Q401	8-729-202-38	TRANSISTOR	2SC3326N
Q402	8-729-202-38	TRANSISTOR	2SC3326N
Q403	8-729-202-38	TRANSISTOR	2SC3326N
Q408	8-729-202-38	TRANSISTOR	2SC3326N
Q409	8-729-202-38	TRANSISTOR	2SC3326N
Q411	8-729-202-38	TRANSISTOR	2SC3326N
Q412	8-729-901-06	TRANSISTOR	DTA144EK
Q415	8-729-202-38	TRANSISTOR	2SC3326N
Q416	8-729-202-38	TRANSISTOR	2SC3326N
Q417	8-729-202-38	TRANSISTOR	2SC3326N
Q421	8-729-901-06	TRANSISTOR	DTA144EK
Q422	8-729-202-38	TRANSISTOR	2SC3326N
Q423	8-729-202-38	TRANSISTOR	2SC3326N
Q424	8-729-901-01	TRANSISTOR	DTC144EK
Q425	8-729-901-06	TRANSISTOR	DTA144EK
Q426	8-729-202-38	TRANSISTOR	2SC3326N
Q601	8-729-901-06	TRANSISTOR	DTA144EK
Q602	8-729-901-01	TRANSISTOR	DTC144EK
Q603	8-729-140-75	TRANSISTOR	2SD999-CL
Q604	8-729-101-07	TRANSISTOR	2SB798-DL0K
Q606	8-729-901-06	TRANSISTOR	DTA144EK
Q607	8-729-901-06	TRANSISTOR	DTA144EK
Q608	8-729-901-06	TRANSISTOR	DTA144EK
Q609	8-729-901-01	TRANSISTOR	DTC144EK
Q610	8-729-901-06	TRANSISTOR	DTA144EK
Q611	8-729-901-06	TRANSISTOR	DTA144EK
Q612	8-729-901-06	TRANSISTOR	DTA144EK
Q613	8-729-901-01	TRANSISTOR	DTC144EK
Q615	8-729-901-06	TRANSISTOR	DTA144EK
Q616	8-729-901-06	TRANSISTOR	DTA144EK
Q617	8-729-901-06	TRANSISTOR	DTA144EK
Q618	8-729-901-06	TRANSISTOR	DTA144EK
Q619	8-729-901-06	TRANSISTOR	DTA144EK
Q620	8-729-901-01	TRANSISTOR	DTC144EK
Q621	8-729-901-01	TRANSISTOR	DTC144EK
Q622	8-729-901-06	TRANSISTOR	DTA144EK

Q623	8-729-901-01	TRANSISTOR	DTC144EK
Q624	8-729-901-06	TRANSISTOR	DTA144EK
Q625	8-729-901-06	TRANSISTOR	DTA144EK
Q626	8-729-901-06	TRANSISTOR	DTA144EK
Q627	8-729-901-06	TRANSISTOR	DTA144EK
Q628	8-729-901-01	TRANSISTOR	DTC144EK
Q629	8-729-901-01	TRANSISTOR	DTC144EK
Q630	8-729-901-06	TRANSISTOR	DTA144EK
Q635	8-729-901-06	TRANSISTOR	DTA144EK
Q636	8-729-901-06	TRANSISTOR	DTA144EK
Q637	8-729-901-06	TRANSISTOR	DTA144EK
Q638	8-729-901-06	TRANSISTOR	DTA144EK
Q639	8-729-901-06	TRANSISTOR	DTA144EK
Q640	8-729-901-01	TRANSISTOR	DTC144EK
Q641	8-729-901-01	TRANSISTOR	DTC144EK
Q642	8-729-901-06	TRANSISTOR	DTA144EK
Q643	8-729-901-06	TRANSISTOR	DTA144EK
Q644	8-729-901-01	TRANSISTOR	DTC144EK
Q645	8-729-901-01	TRANSISTOR	DTC144EK
Q651	8-729-901-06	TRANSISTOR	DTA144EK
Q652	8-729-901-06	TRANSISTOR	DTA144EK
Q653	8-729-901-06	TRANSISTOR	DTA144EK
Q654	8-729-901-06	TRANSISTOR	DTA144EK
Q655	8-729-901-06	TRANSISTOR	DTA144EK
Q656	8-729-901-06	TRANSISTOR	DTA144EK
Q657	8-729-901-06	TRANSISTOR	DTA144EK
Q658	8-729-901-06	TRANSISTOR	DTA144EK
Q659	8-729-901-01	TRANSISTOR	DTC144EK
Q660	8-729-901-01	TRANSISTOR	DTC144EK
Q661	8-729-901-06	TRANSISTOR	DTA144EK
Q662	8-729-901-01	TRANSISTOR	DTC144EK
Q663	8-729-901-06	TRANSISTOR	DTA144EK
Q664	8-729-901-01	TRANSISTOR	DTC144EK
Q665	8-729-901-01	TRANSISTOR	DTC144EK
Q666	8-729-901-01	TRANSISTOR	DTC144EK
Q667	8-729-901-01	TRANSISTOR	DTC144EK
Q668	8-729-901-01	TRANSISTOR	DTC144EK
Q669	8-729-901-06	TRANSISTOR	DTA144EK
Q670	8-729-901-06	TRANSISTOR	DTA144EK
Q673	8-729-901-06	TRANSISTOR	DTA144EK
Q674	8-729-901-01	TRANSISTOR	DTC144EK
Q675	8-729-216-22	TRANSISTOR	2SA1162
Q676	8-729-901-01	TRANSISTOR	DTC144EK
Q677	8-729-901-06	TRANSISTOR	DTA144EK
Q678	8-729-100-66	TRANSISTOR	2SC1623
Q679	8-729-216-22	TRANSISTOR	2SA1162
Q680	8-729-901-01	TRANSISTOR	DTC144EK
Q681	8-729-901-01	TRANSISTOR	DTC144EK
Q683	8-729-901-06	TRANSISTOR	DTA144EK
Q684	8-729-901-06	TRANSISTOR	DTA144EK
Q686	8-729-901-06	TRANSISTOR	DTA144EK
Q687	8-729-901-06	TRANSISTOR	DTA144EK
Q688	8-729-901-06	TRANSISTOR	DTA144EK
Q691	8-729-901-06	TRANSISTOR	DTA144EK
Q692	8-729-901-06	TRANSISTOR	DTA144EK
Q693	8-729-901-06	TRANSISTOR	DTA144EK

— Ref. No. FB-170 BOARD, SA-30 BOARD, CC-34 BOARD: 18000 series —

* A-7062-219-A FB-170 BOARD, COMPLETE

 (Ref. No 18,000 Series)

< DIODE >

D002	8-719-800-76	DIODE	1SS226
D003	8-719-800-76	DIODE	1SS226
D004	8-719-800-76	DIODE	1SS226
D005	8-719-939-36	DIODE	GL5HY42 (HI 8)
D007	8-719-939-37	DIODE	GL5EG42 (PCM)
D008	8-719-939-36	DIODE	GL5HY42 (σ)
D010	8-719-939-36	DIODE	GL5HY42 (SP)
D012	8-719-812-32	DIODE	TLY123 (EJECT ▲)
D013	8-719-939-36	DIODE	GL5HY42 (JOG/S)
D014	8-719-939-36	DIODE	GL5HY42 (JOG/S)
D015	8-719-918-75	DIODE	SLR-34VR3 (REC ●)
D016	8-719-812-32	DIODE	TLY123 (PAUSE ■)
D017	8-719-812-32	DIODE	TLY123 (FF ►►)
D018	8-719-920-05	DIODE	TLG123A (PB ►)
D019	8-719-812-32	DIODE	TLY123 (REW ◀◀)
D026	8-719-812-32	DIODE	TLY123 (STRAIGHT)
D027	8-719-812-32	DIODE	TLY123 (PCM)
D028	8-719-812-32	DIODE	TLY123 (MIX)
D029	8-719-812-32	DIODE	TLY123 (STD)
D030	8-719-812-32	DIODE	TLY123 (LOAD)
D031	8-719-812-31	DIODE	TLR123 (SAVE)
D032	8-719-800-76	DIODE	1SS226
D033	8-719-800-76	DIODE	1SS226
D034	8-719-800-76	DIODE	1SS226
D035	8-719-800-76	DIODE	1SS226
D042	8-719-800-76	DIODE	1SS226
D043	8-719-800-76	DIODE	1SS226
D044	8-719-800-76	DIODE	1SS226
D045	8-719-800-76	DIODE	1SS226

< IC >

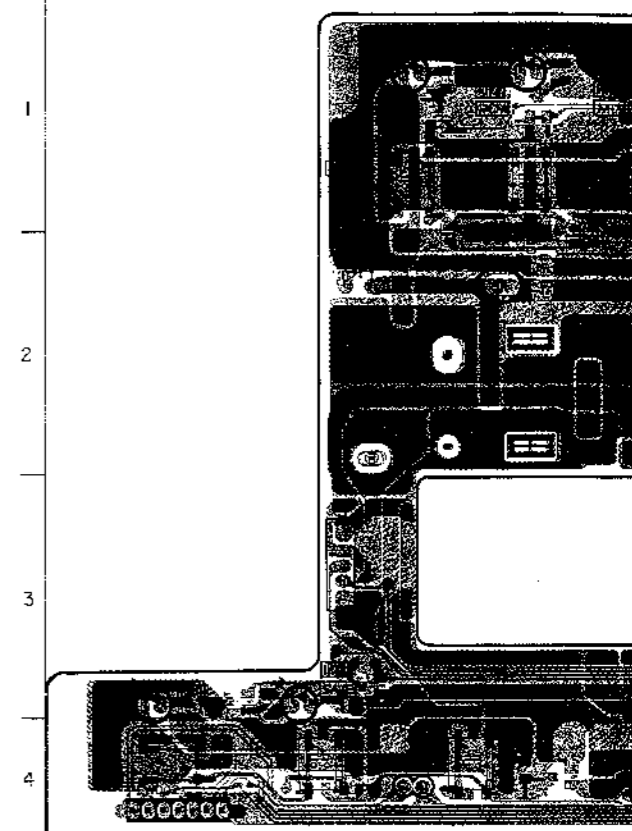
IC001	8-759-937-21	IC	CXD1078M
IC002	8-759-927-46	IC	μPD74HC000

< TRANSISTOR >

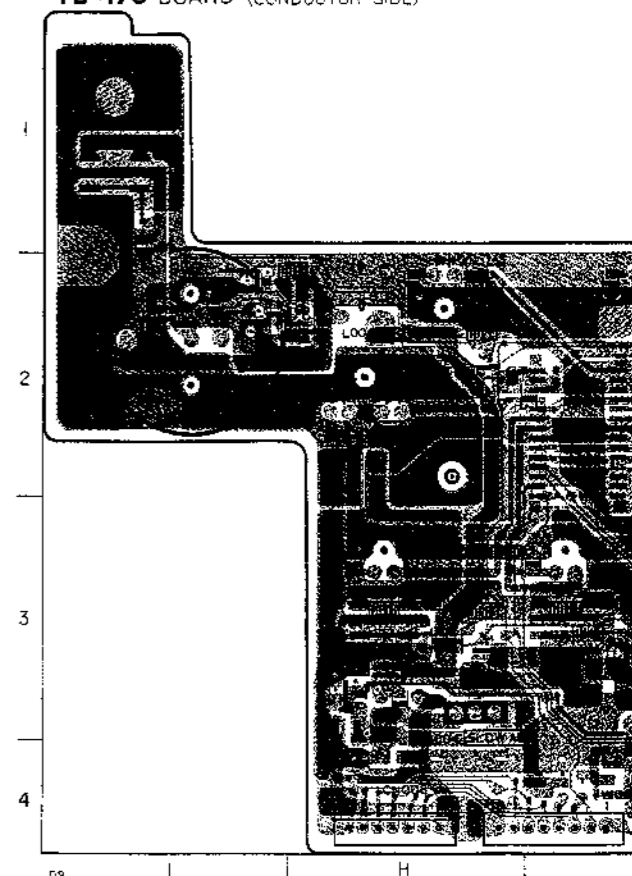
Q002	8-729-901-06	TRANSISTOR	DTA144EK
Q003	8-729-901-06	TRANSISTOR	DTA144EK
Q004	8-729-901-06	TRANSISTOR	DTA144EK
Q005	8-729-901-06	TRANSISTOR	DTA144EK
Q006	8-729-901-06	TRANSISTOR	DTA144EK
Q007	8-729-901-06	TRANSISTOR	DTA144EK
Q009	8-729-901-01	TRANSISTOR	DTC144EK
Q010	8-729-901-01	TRANSISTOR	DTC144EK
Q011	8-729-100-56	TRANSISTOR	2SC1623
Q012	8-729-100-56	TRANSISTOR	2SC1623

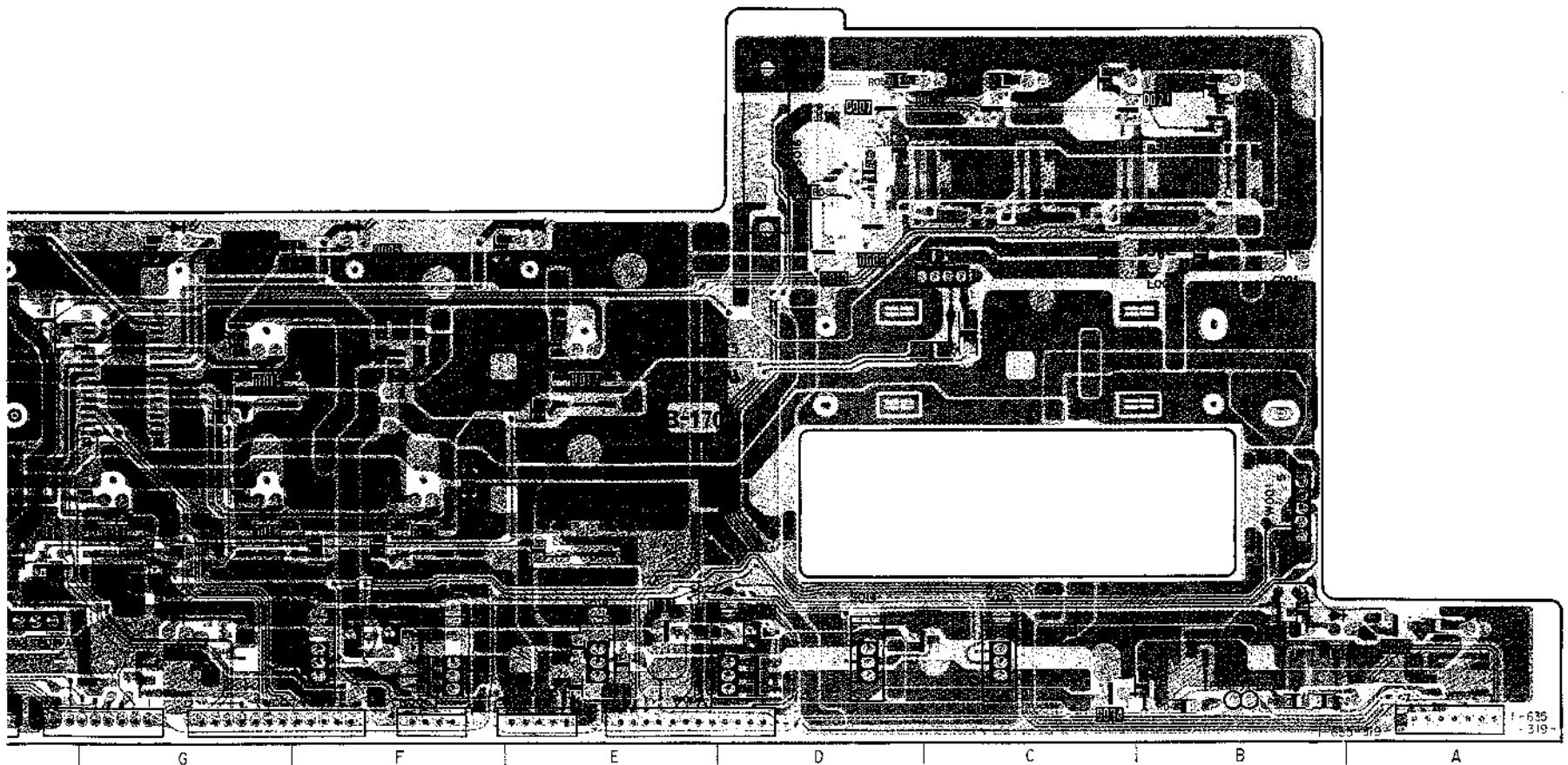
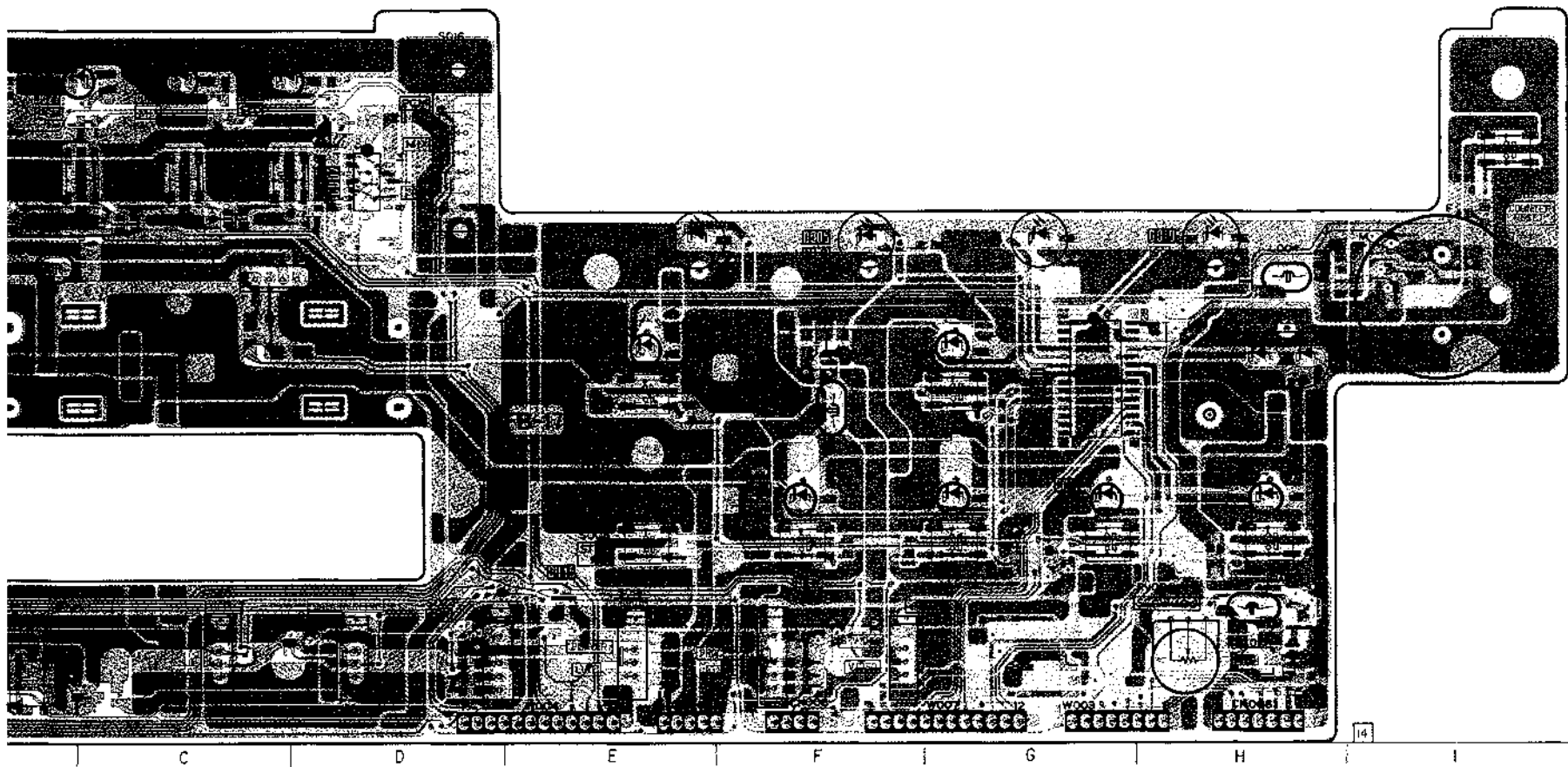
FB-170 BOARD (COMPONENT SIDE)	FB-170 BOARD (CONDUCTOR SIDE)
D005 D-2	D002 H-3
D007 C-2	D003 H-3
D008 E-2	D004 G-3
D010 B-2	D032 F-3
D012 E-2	D033 E-3
D013 B-2	D034 C-4
D014 B-2	D035 D-3
D015 G-2	D042 F-3
D016 H-3	D043 D-3
D017 G-3	D044 H-2
D018 G-3	D045 E-3
D019 F-3	
D026 H-1	Q002 A-3
D027 H-1	Q003 B-3
D028 G-1	Q004 B-1
D029 G-1	Q005 C-1
D030 I-3	Q006 C-1
D031 H-3	Q007 D-1
D045 E-3	Q009 D-2
	Q010 D-2
IC001 C-2	Q012 I-2
IC002 F-1	

FB-170 BOARD (COMPONENT SIDE)

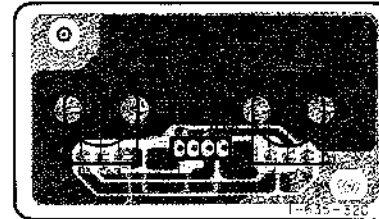


FB-170 BOARD (CONDUCTOR SIDE)

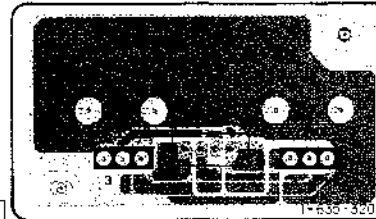




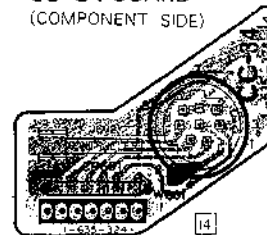
SA-30 BOARD (COMPONENT SIDE)



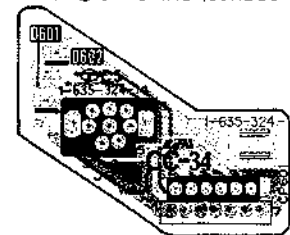
SA-30 BOARD (CONDUCTOR SIDE)



CC-34 BOARD
(COMPONENT SIDE)



CC-34 BOARD (CONDUCTOR SIDE)



* 1-635-324-11 CC-34 BOARD (Ref. No 18,000 Series)

< DIODE >

D601	8-719-106-80 DIODE	RD13M
D602	8-719-106-80 DIODE	RD13M

FB-170 (REC DECK FUNCTION CONTROL), SA-30 (STILL ADJ VOLUME), CC-34 (CONTROLLER JACK) SCHEMATIC DIAGRAMS

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

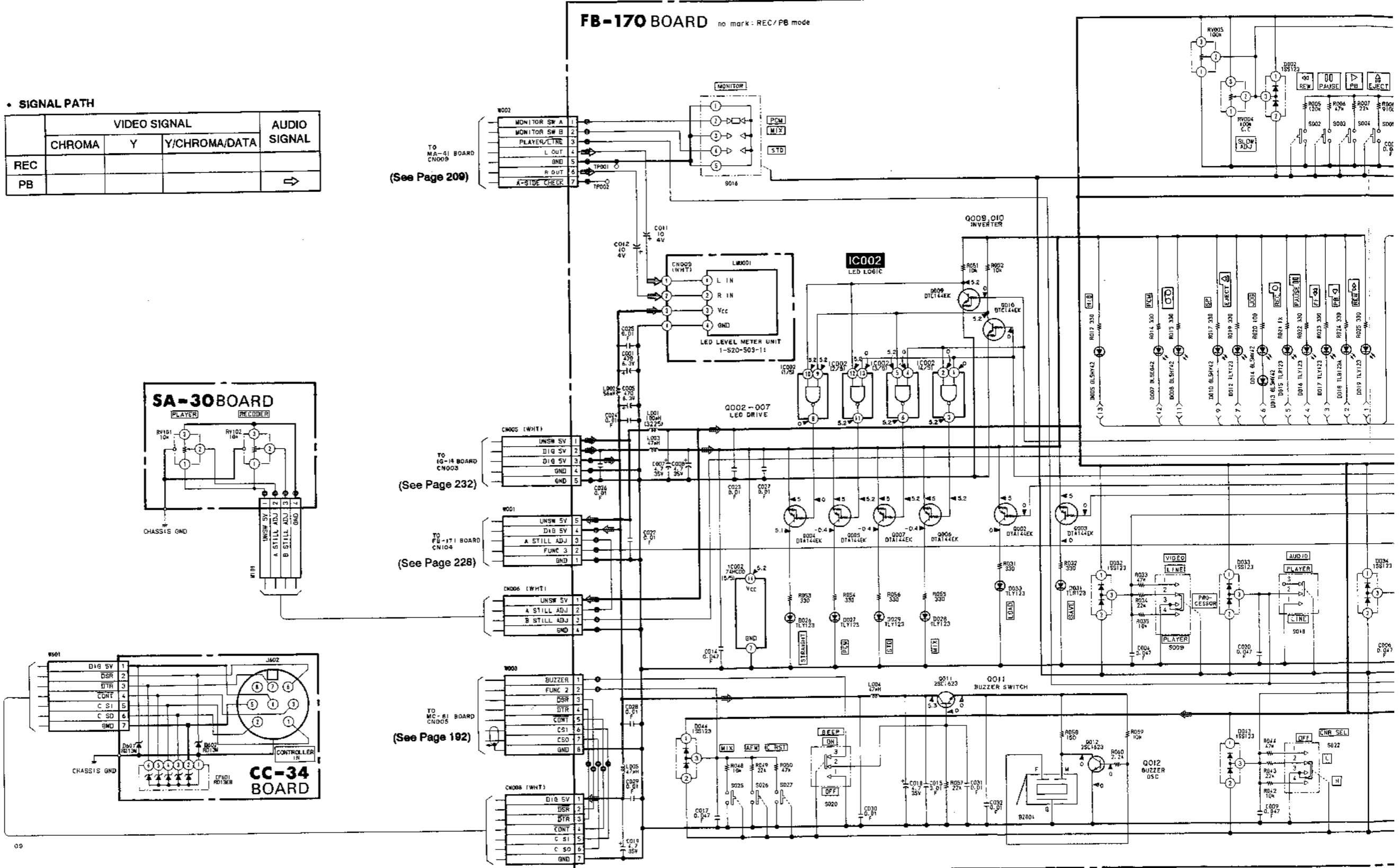
— Ref. No. FB-170 BOARD, SA-30 BOARD, CC-34 BOARD: 18000 series —

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• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				
PB				→

FB-170 BOARD no mark: REC/PB mode

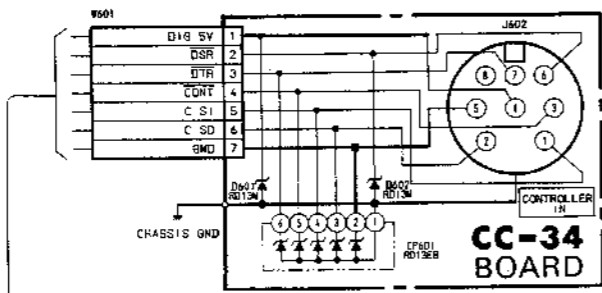
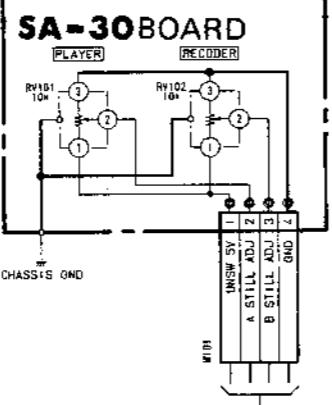


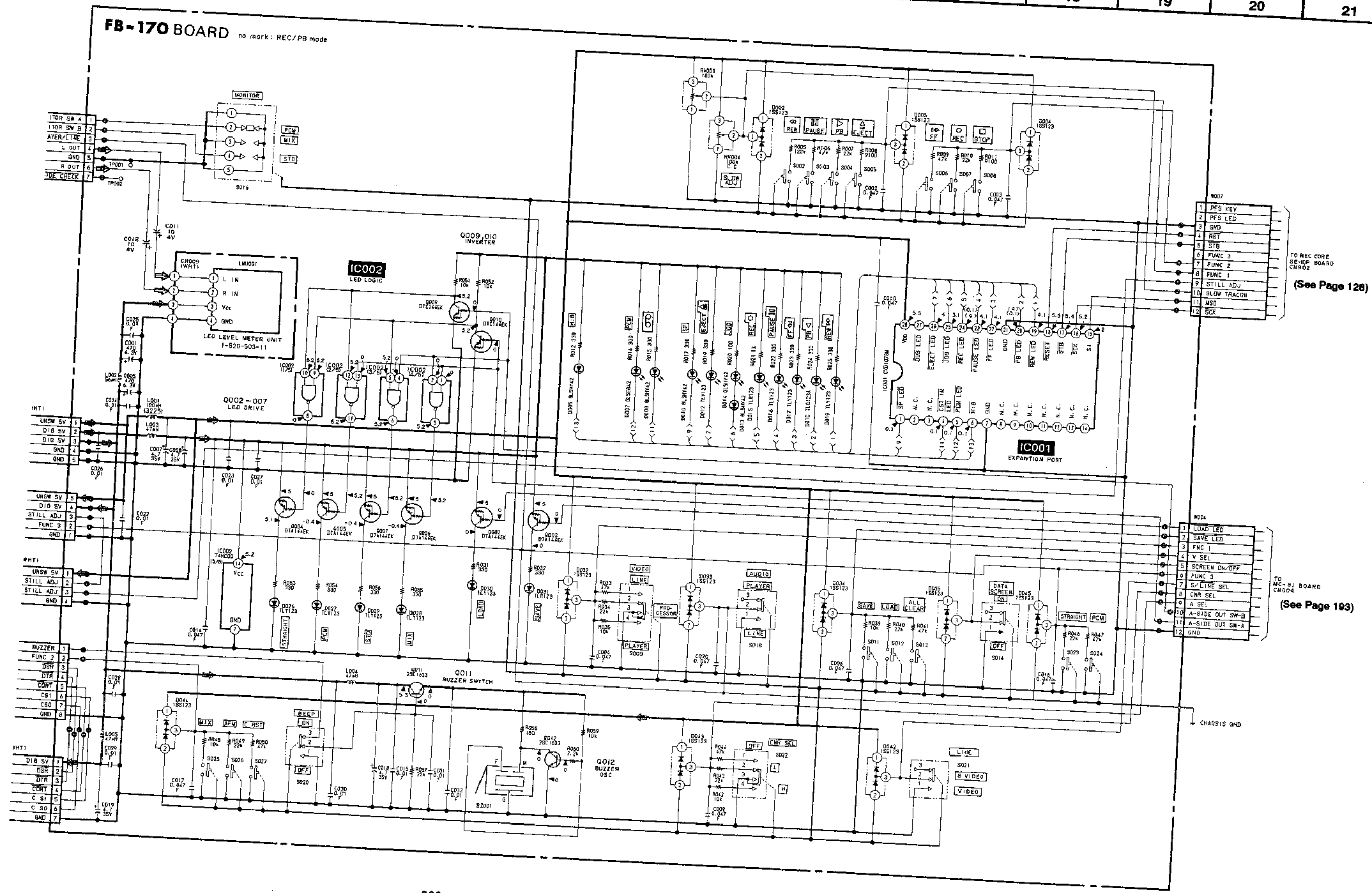
TO MC-81 BOARD
CND09
(See Page 209)

TO IG-14 BOARD
CND03
(See Page 232)

TO FB-171 BOARD
CND104
(See Page 228)

TO MC-81 BOARD
CND05
(See Page 192)





FB-171 (PB DECK FUNCTION CONTROL), HE-3 (HEADPHONE JACK) PRINTED WIRING BOARDS

— Ref. No. FB-171 BOARD, HE-3 BOARD: 19000 series —

A-7062-220-A FB-171 BOARD, COMPLETE

 (Ref. No 19,000 Series)

< DIODE >

D101.	8-719-920-05	DIODE	TLG123A
D102	8-719-939-42	DIODE	GL5HD42
D104	8-719-800-76	DIODE	1SS226
D105	8-719-800-76	DIODE	1SS226
D106	8-719-800-76	DIODE	1SS226
D107	8-719-800-76	DIODE	1SS226
D109	8-719-812-32	DIODE	TLY123
D110	8-719-920-05	DIODE	TLG123A
D111	8-719-812-32	DIODE	TLY123
D112	8-719-812-32	DIODE	TLY123
D113	8-719-939-36	DIODE	GL5HY42
D114	8-719-939-36	DIODE	GL5HY42
D115	8-719-812-32	DIODE	TLY123
D116	8-719-939-36	DIODE	GL5HY42
D118	8-719-812-31	DIODE	TLR123
D119	8-719-939-36	DIODE	GL5HY42
D120	8-719-939-37	DIODE	GL5EG42
D121	8-719-939-36	DIODE	GL5HY42
D122	8-719-800-76	DIODE	1SS226
D123	8-719-104-34	DIODE	1S2835
D124	8-719-104-34	DIODE	1S2835

< IC >

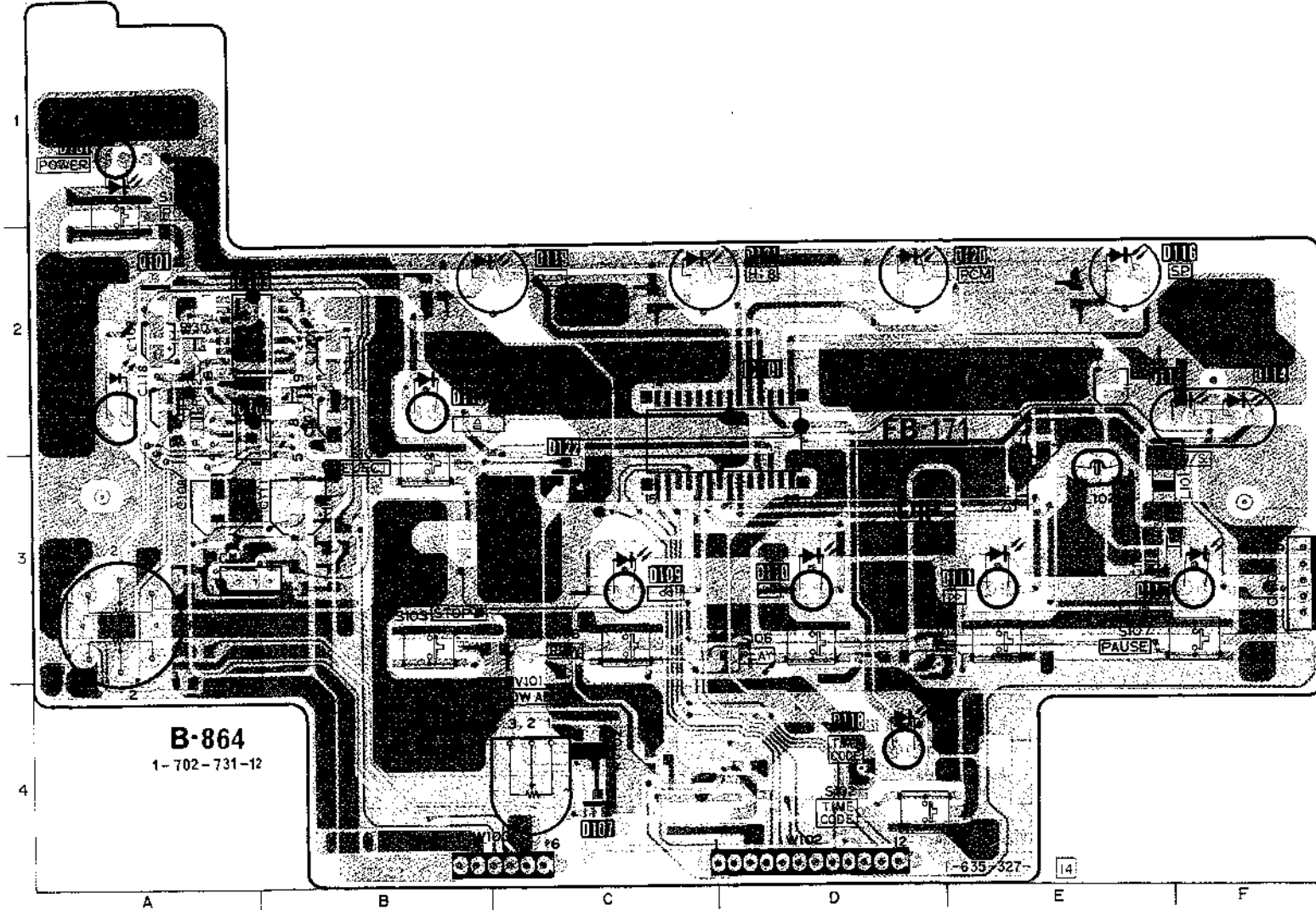
IC101	8-759-937-21	IC	CXD1078M
IC102	8-759-981-XX	IC	NJM4560M
IC103	8-759-300-71	IC	TC4053BFH8

< TRANSISTOR >

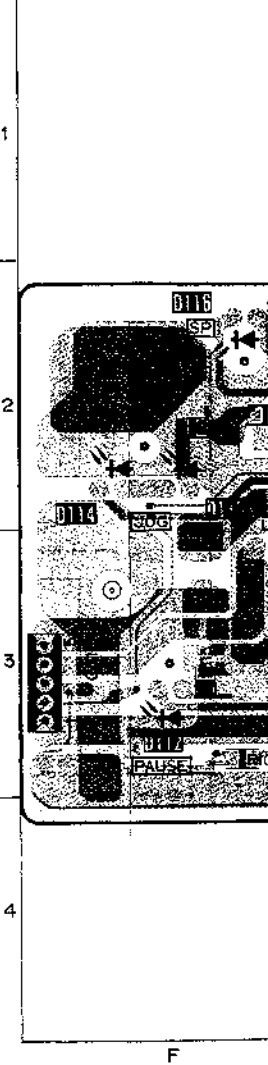
Q101	8-729-901-06	TRANSISTOR	DTA144EK
Q103	8-729-100-66	TRANSISTOR	2SC1623
Q104	8-729-216-22	TRANSISTOR	2SA1162
Q105	8-729-901-01	TRANSISTOR	DTC144EK
Q106	8-729-202-38	TRANSISTOR	2SC3326N
Q107	8-729-202-38	TRANSISTOR	2SC3326N

FB-171 BOARD (COMPONENT SIDE)	FB-171 BOARD (CONDUCTOR SIDE)
D101 A-1	D104 D-4
D102 A-2	D105 C-3
D107 C-4	D106 E-3
D109 C-3	D123 B-2
D110 D-3	D124 B-3
D111 E-3	Q103 B-2
D112 F-3	Q104 B-2
D113 F-2	Q105 B-2
D114 F-2	Q106 B-3
D115 B-2	Q107 B-3
D116 E-2	
D118 D-4	
D119 C-2	
D120 D-2	
D121 C-2	
D122 C-3	
IC101 D-2	
IC102 A-2	
IC103 A-2	
Q101 A-2	

FB-171 BOARD (COMPONENT SIDE)

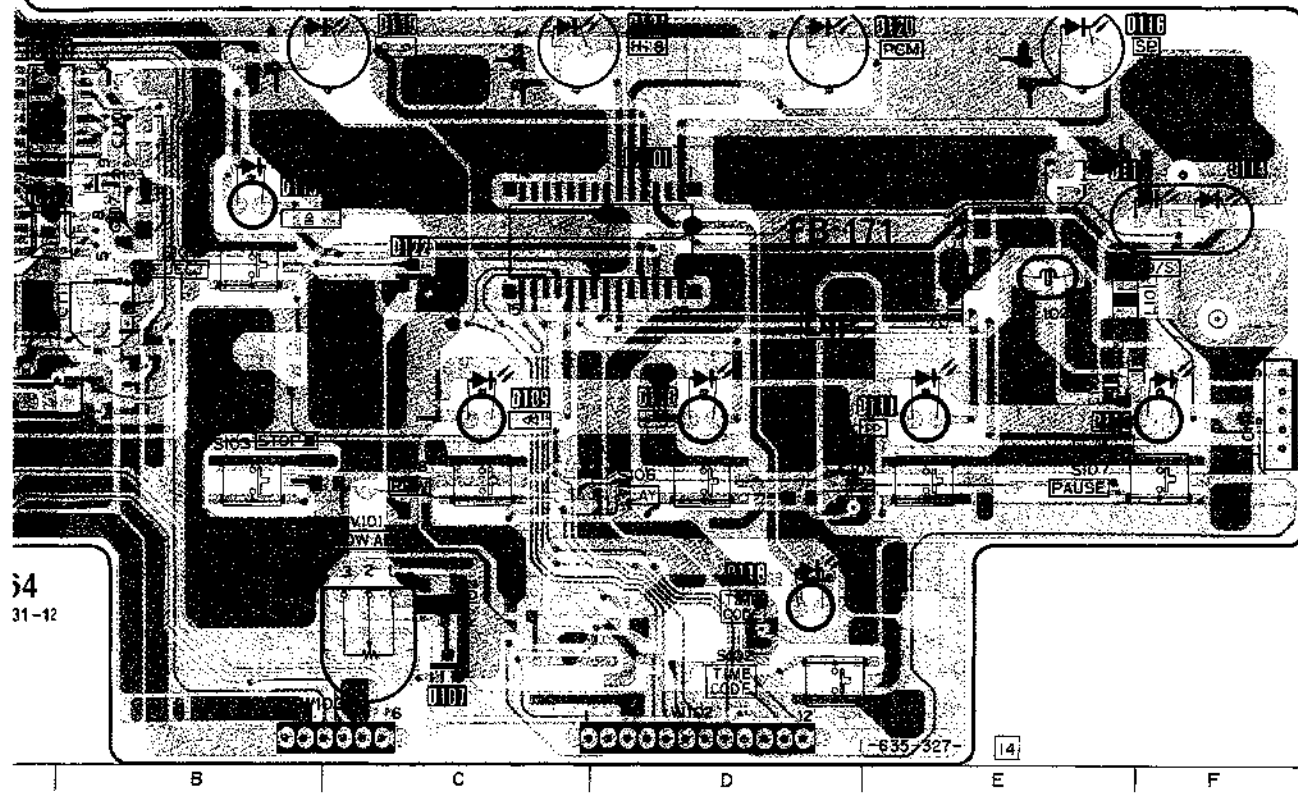


FB-171 BOARD (CONDUCTOR SIDE)



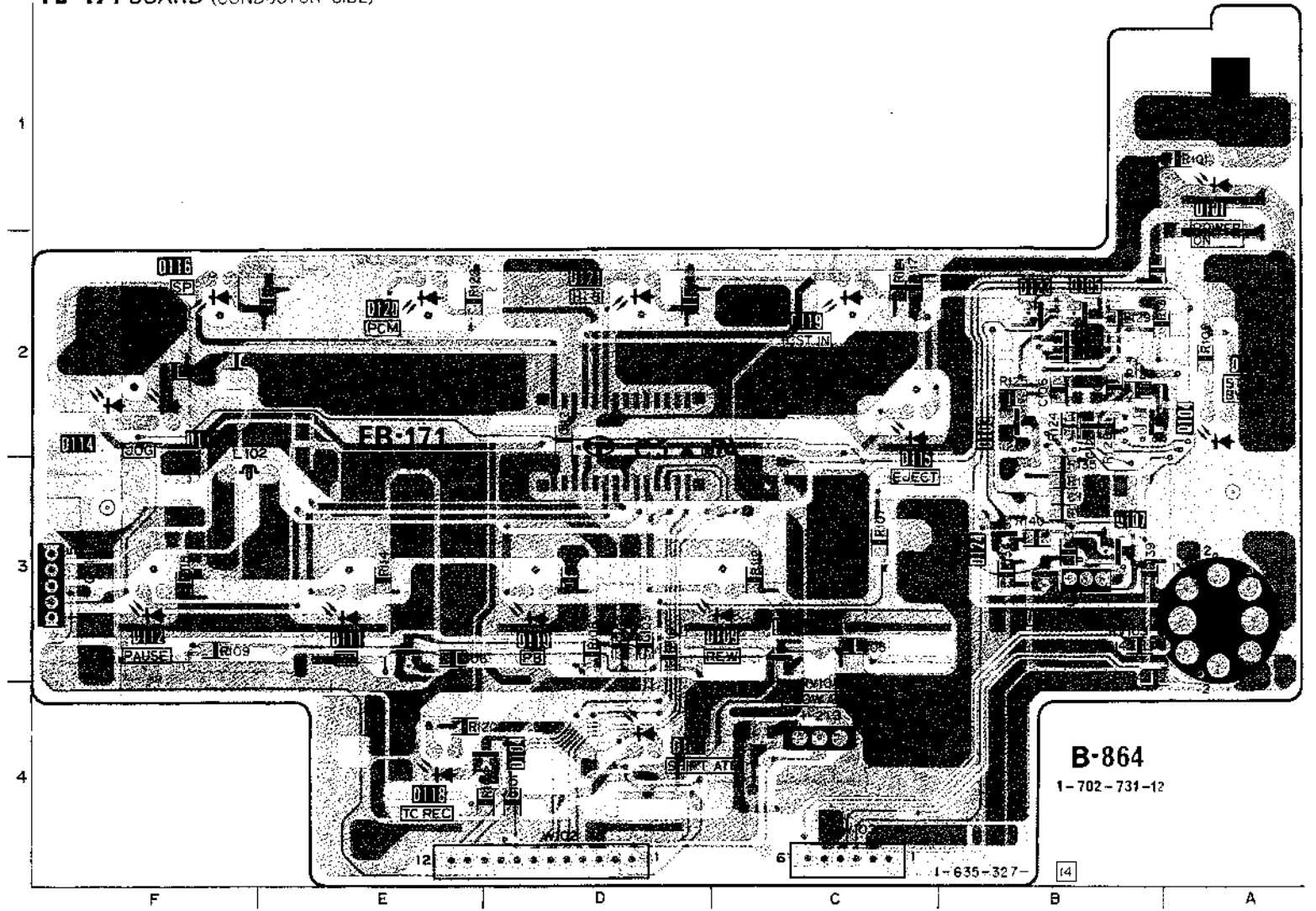
HEADPHONE JACK) PRINTED WIRING BOARDS

COMPONENT SIDE)

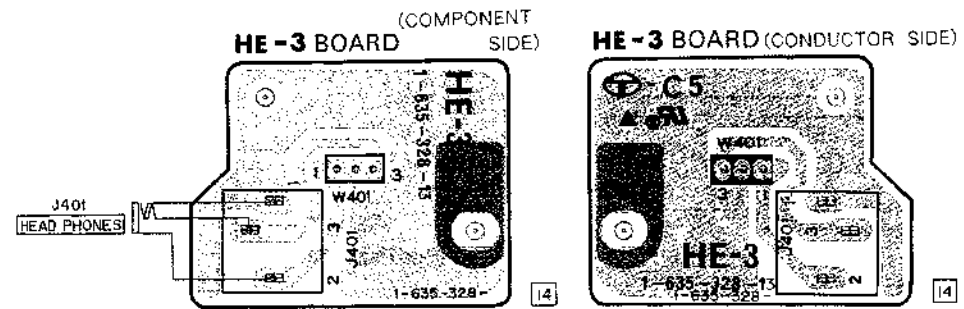


34
31-12

FB-171 BOARD (CONDUCTOR SIDE)



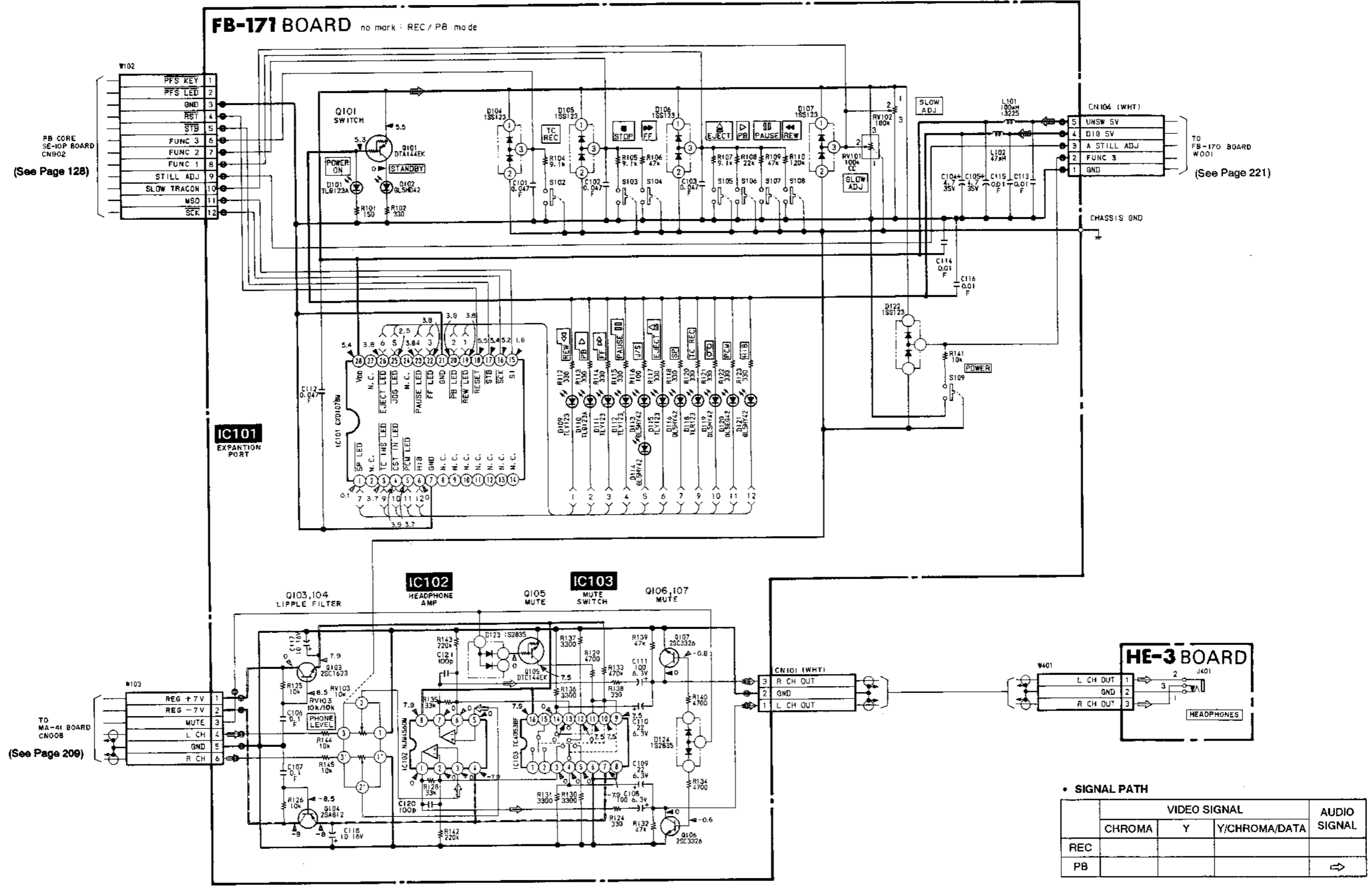
B-864
1-702-731-12



FB-171 (PB DECK FUNCTION CONTROL), HE-3 (HEADPHONE JACK) SCHEMATIC DIAGRAMS

— Ref. No. FB-171 BOARD, HE-3 BOARD: 19000 series —

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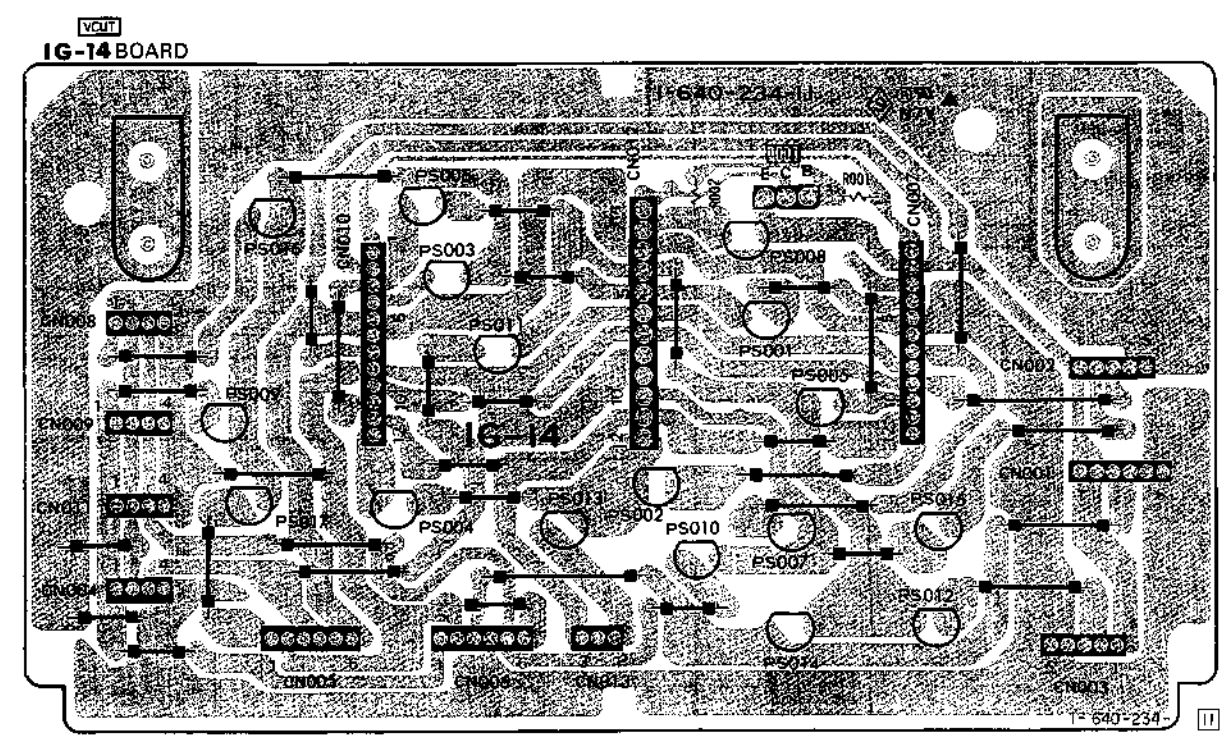
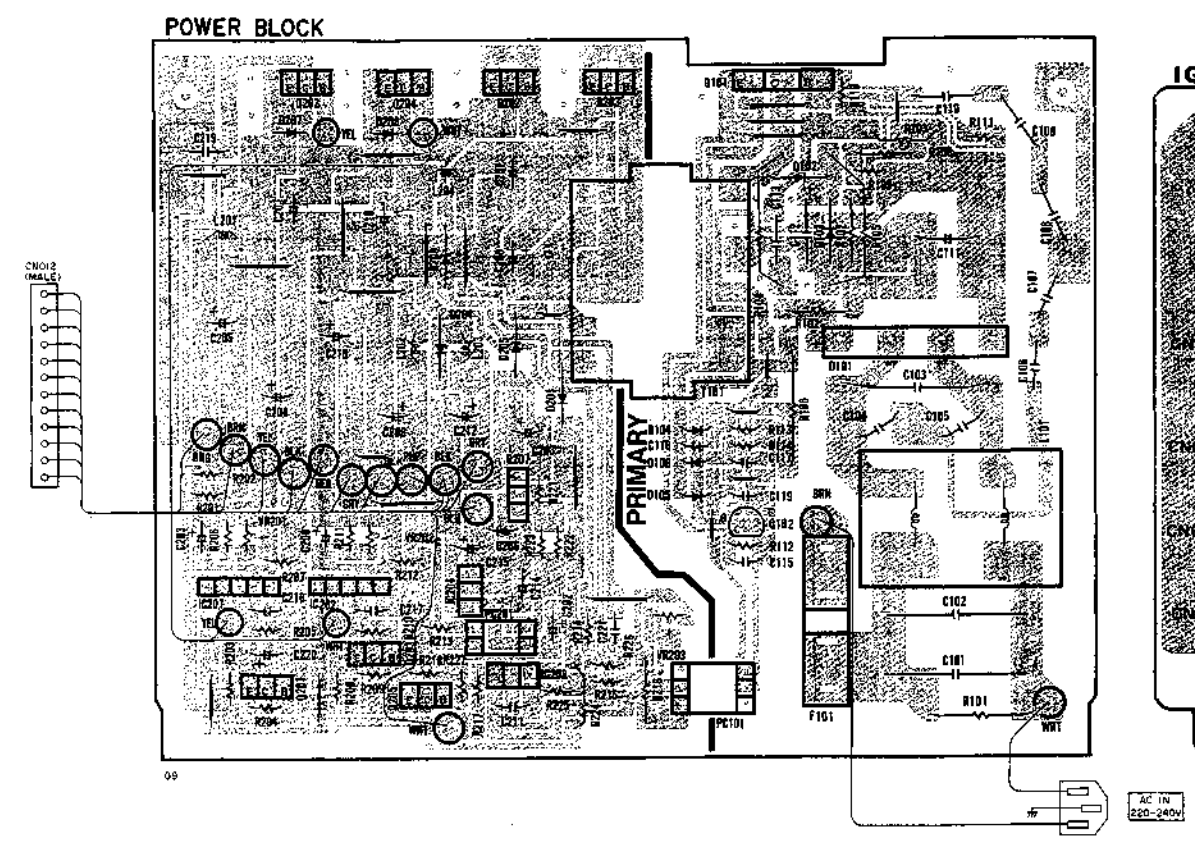


• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				
PB				⇒

POWER BLOCK (POWER SUPPLY), IG-14 (POWER DISTRIBUTION) PRINTED WIRING BOARD

— Ref. No. POWER BLOCK: 20000 series, IG-14 BOARD: 19000 series —



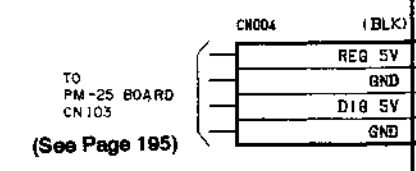
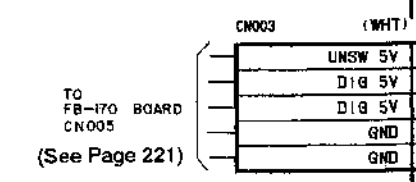
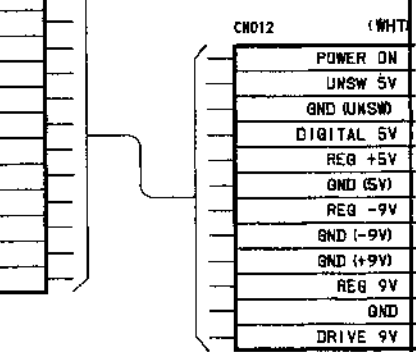
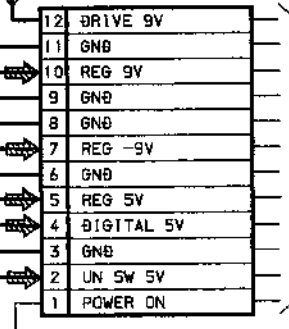
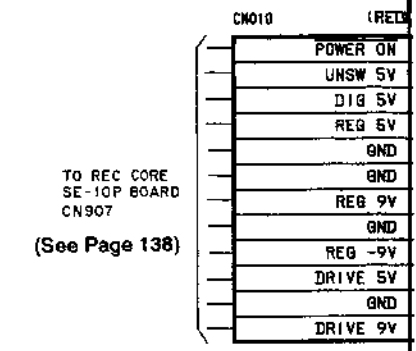
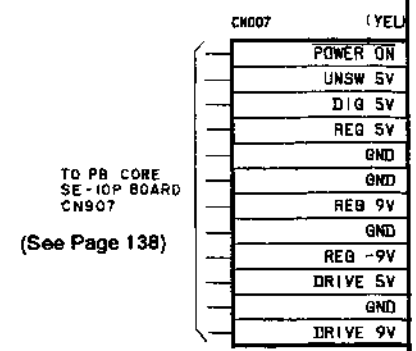
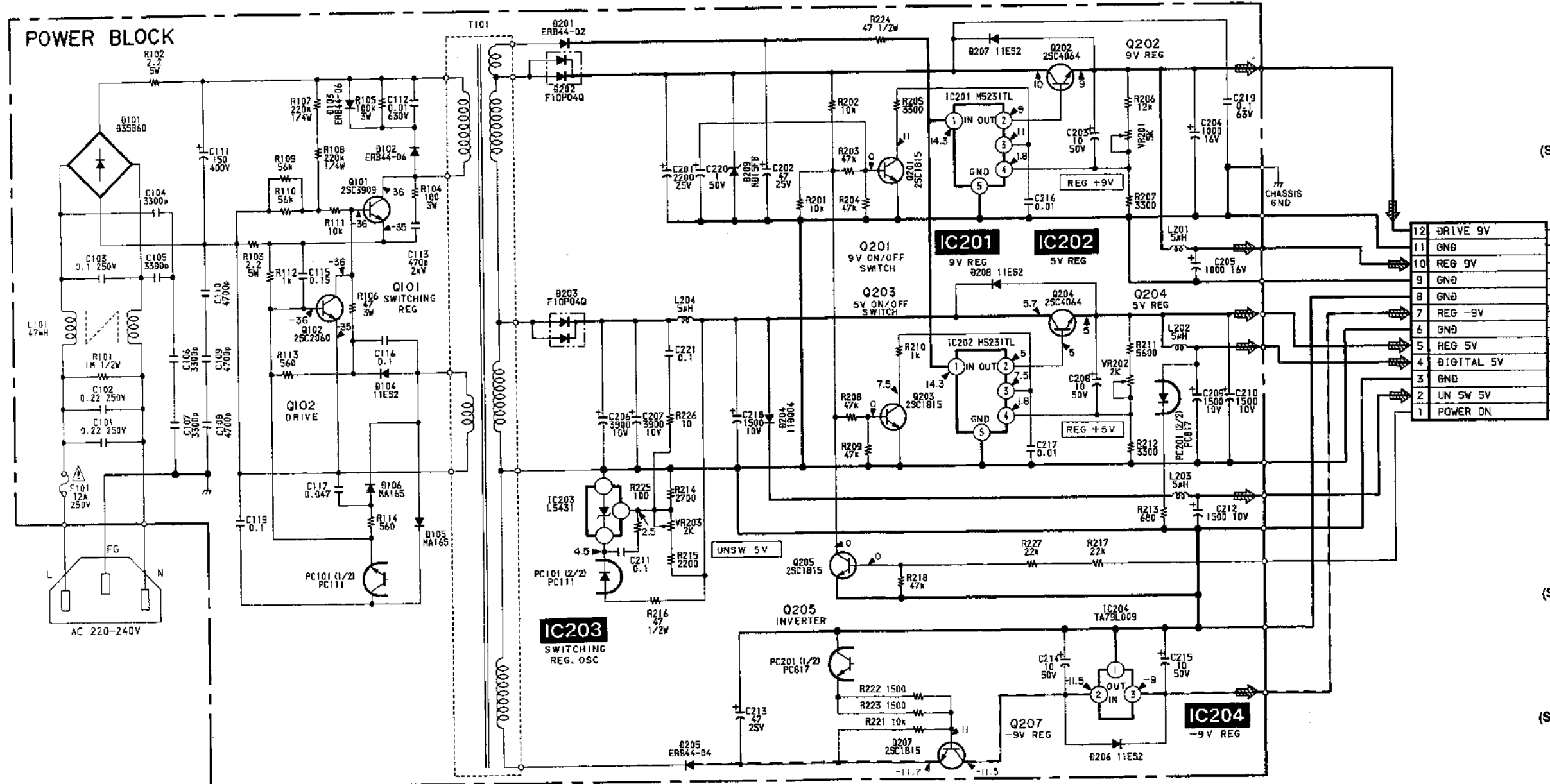
* A-7052-849-A IG-14 BOARD, COMPLETE

 (Ref. No 19,000 Series)
 < TRANSISTOR >
 0001 8-729-119-76 TRANSISTOR 2SA1175

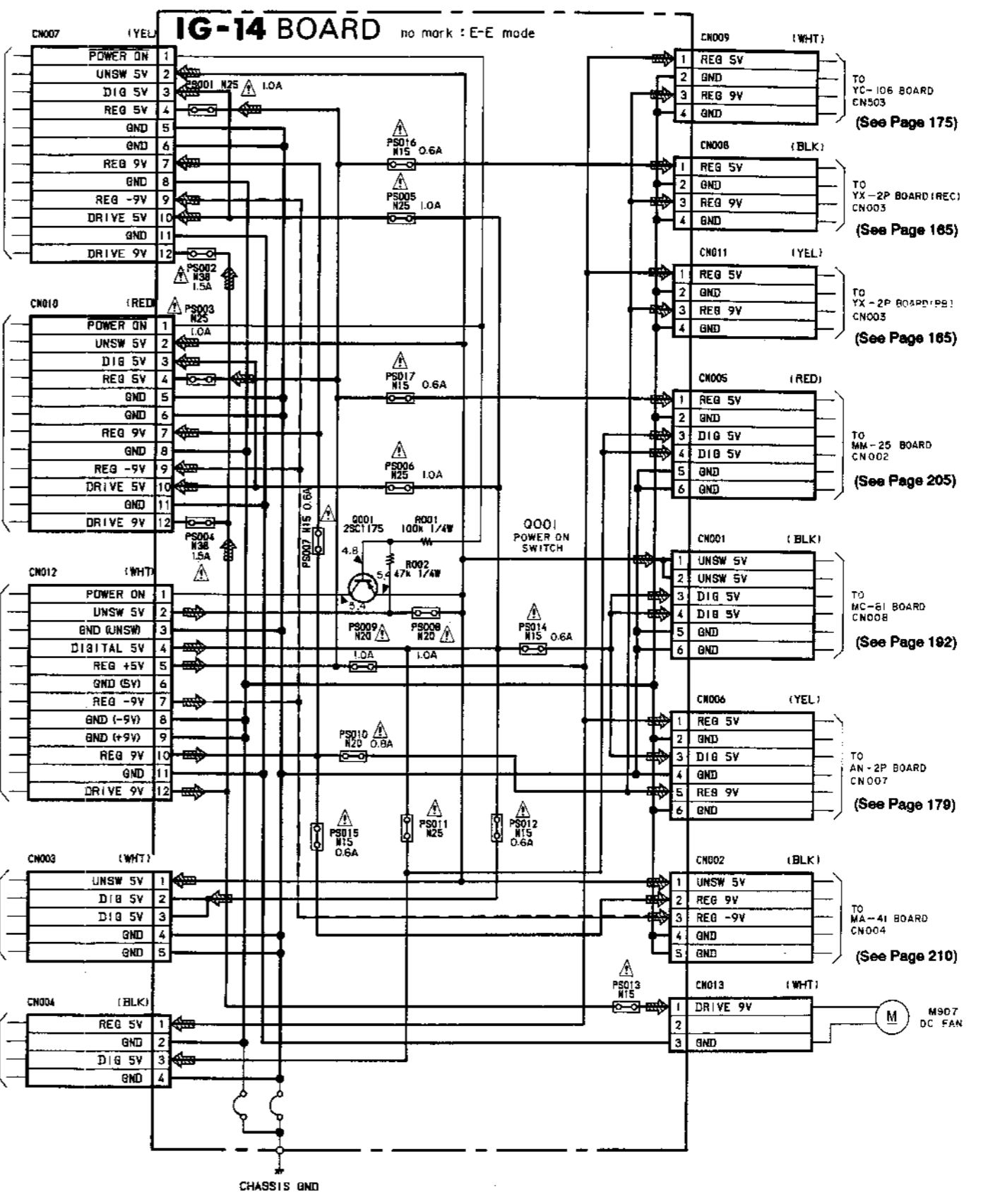
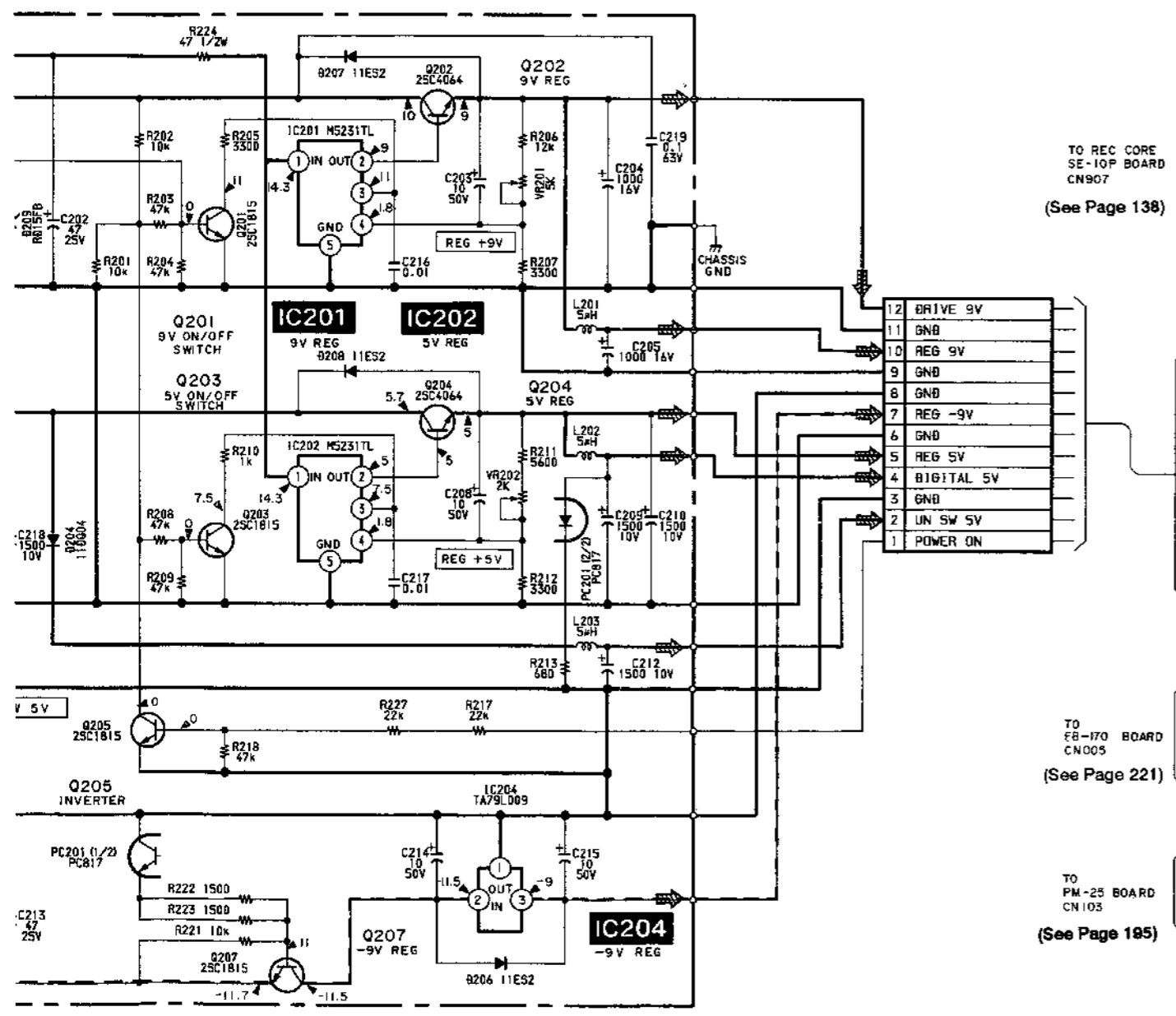
POWER BLOCK (POWER SUPPLY), IG-14 (POWER DISTRIBUTION) SCHEMATIC DIAGRAM

— Ref. No. POWER BLOCK: 20000 series, IG-14 BOARD: 19000 series —

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TO PB CORE SE-10P BOARD CN907 (See Page 138)

TO REC CORE SE-10P BOARD CN907 (See Page 138)

TO EB-170 BOARD CN005 (See Page 221)

TO PM-25 BOARD CN103 (See Page 195)

TO YC-106 BOARD CN503 (See Page 175)

TO YX-2P BOARD (REC) CN005 (See Page 165)

TO YX-2P BOARD (PB) CN005 (See Page 165)

TO MM-25 BOARD CN002 (See Page 205)

TO MC-61 BOARD CN008 (See Page 192)

TO AN-2P BOARD CN007 (See Page 179)

TO MA-41 BOARD CN004 (See Page 210)

4-3. SEMICONDUCTORS

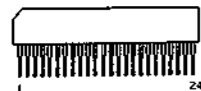
AN607P
AN608P



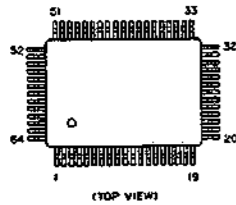
BA401
TA7060AP



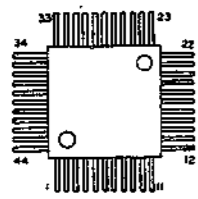
BA7036LS



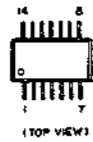
CF77305FT
CXP5024H
CXP5048H-204Q
CXP5048H-205Q
CXP5048H-210Q
M50541FP
 μ PD75106G-573-1B
 μ PD75106G-589-1B
 μ PD75108G



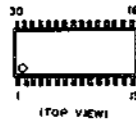
CF77309FR
 μ PD71051GB
 μ PD7507HG



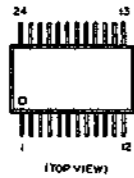
CX20095A
CX22013
M52684AFB
MC14069UBF
MC1496MR
MC74HC04F
SN74HC00NS
SN74HC04NS
SN74HC08NS



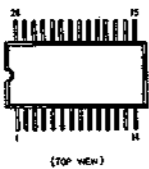
CXA1047M
LB1616M



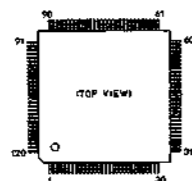
CXA1106M
CXA1109M
CXD1175M
M50760
M52682FP
M52686AFP
TA8607F



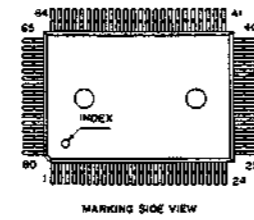
CXD1078M
CXK5064BM
M51271FP



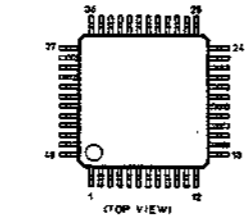
CXD1226Q



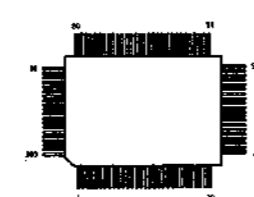
CXD1227Q
CXP80116-638Q



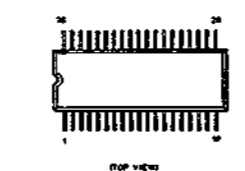
CXD1229Q



CXD2106Q



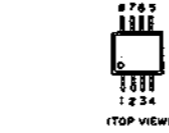
CXK1200M
MB90061



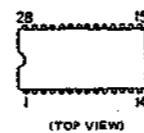
HD63B05Z0-A28F



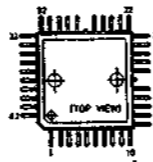
LM1881M
M5201FP
NJM2230M
NJM2233M
NJM2234M
NJM2235M
NJM2238M
NJM2246M



M51271FP



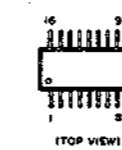
M51285BFP



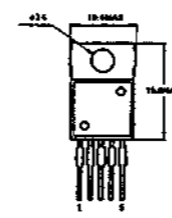
M5M4C500L



MC14053BF
MC74HC4053F
NJM2229M
SN74HC175NS
TA7745F
TC4052BFHB
TC4053BFHB
TC74HC123F



MC14538BF



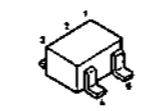
MC74HC157F
SN74HC08NS
SN74HC138NS
SN74HC139NS
TC74HC670AP



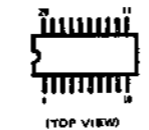
S-8054ALB



SC78U04FER



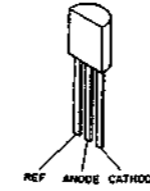
SN74HC244NS
SN74HC245NS
SN74HC374NS



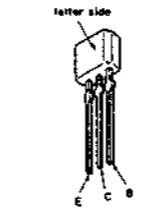
SBX1595-01



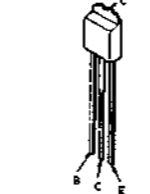
TL431CLP



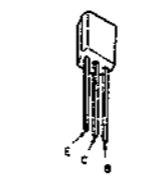
2SA1175-HFE



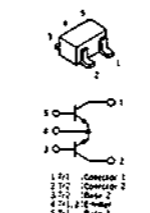
2SA1385-ZL
2SC3518



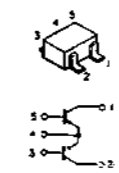
2SC3327-B
DTA144ES



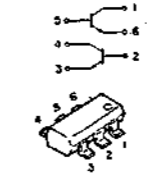
FMG2
FMW1



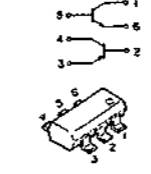
FMS1



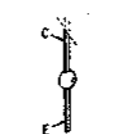
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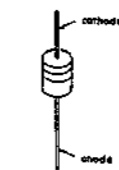
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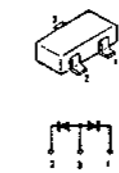
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RD5.1ESB3



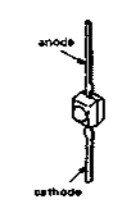
IS2836



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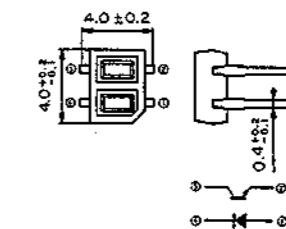
GL-1EG11



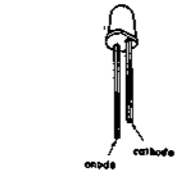
GL-1PR102



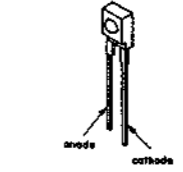
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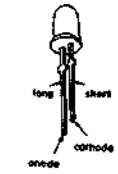
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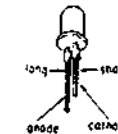
GL-450S



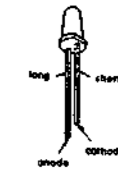
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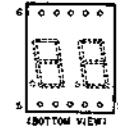
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GL-5HY41



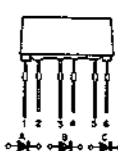
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GL-5HY42



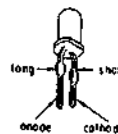
LB-202DB



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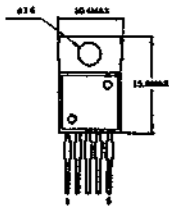
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6

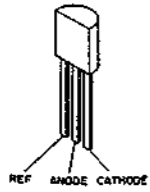
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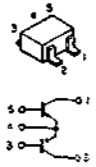
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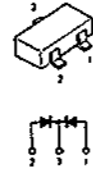
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FMS1



IS2837
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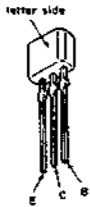
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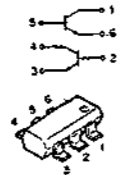
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SN74HC08NS
SN74HC138NS
SN74HC139NS
TC74HC670AP



2SA1175-HFE



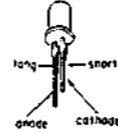
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GL-1EG11



GL-5HD21
GL-5HY41



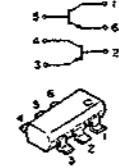
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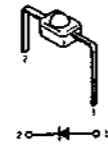
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2SC3518



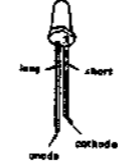
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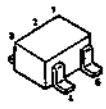
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GL-5HS42
GL-5HY42



SC78U04FER



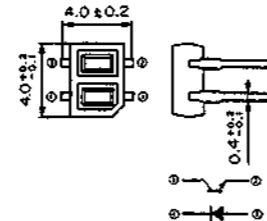
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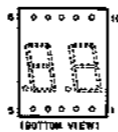
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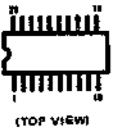
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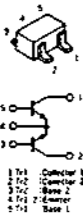
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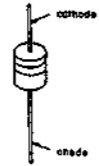
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SN74HC245NS
SN74HC374NS



FMG2
FMW1



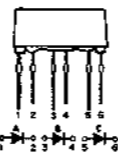
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RDS.1ESB2
RDS.1ESB3



AA3422S



LT-9230D



SBX1595-01



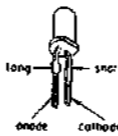
IS2836



GL-450S



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TLR123
TLY123



SECTION 5 EXPLODED VIEWS

NOTE:

• -XX, -X mean standardized parts, so they may have some difference from the original one.

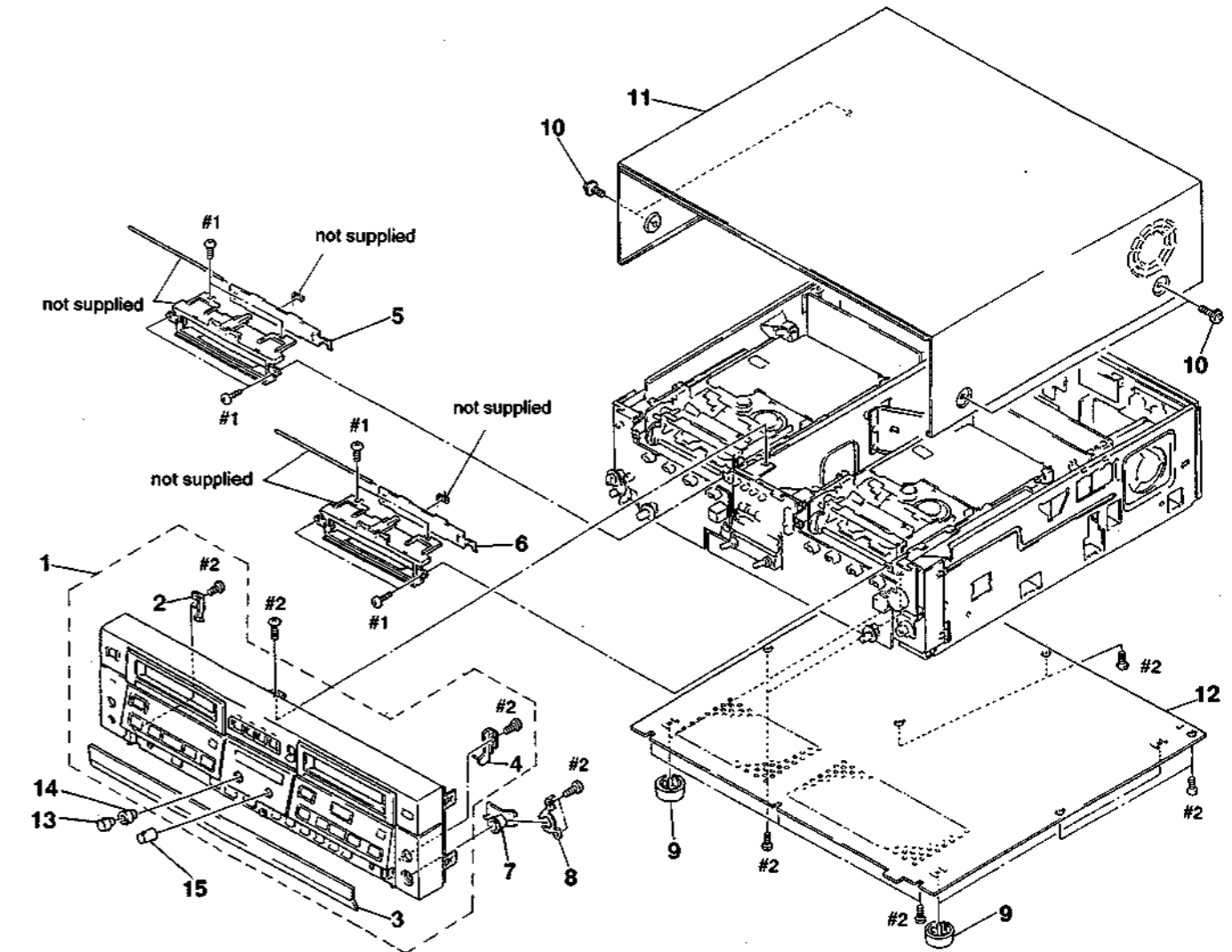
• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• The mechanical parts with no reference number in the exploded views are not supplied.

• Hardware (# mark) list is given in the last of this parts list.

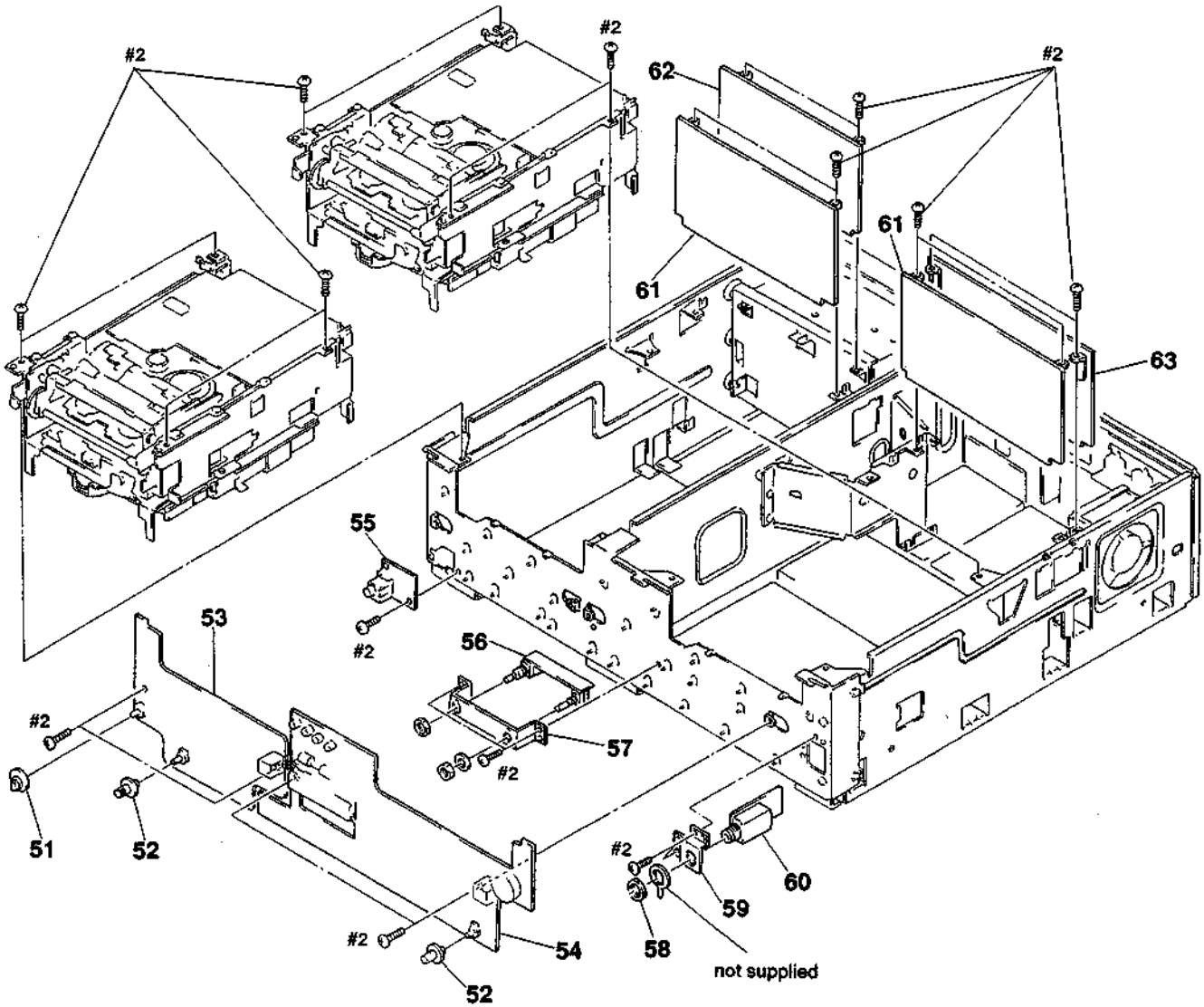
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

5-1. FRONT PANEL AND CABINET ASSEMBLIES



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3940-885-1	PANEL ASSY. FRONT		9	X-3701-069-0	FOOT ASSY. M.F	
2	X-3747-005-1	SUPPORT (L) ASSY. DOOR		10	4-886-821-11	SCREW, M3 CASE	
3	X-3940-884-1	DOOR ASSY		11	3-747-057-01	CASE, UPPER	
4	X-3747-006-1	SUPPORT (R) ASSY. DOOR		12	3-747-058-01	PLATE, BOTTOM	
5	3-721-101-11	DOOR		13	3-747-004-03	KNOB (R), LEVEL	
6	3-721-101-21	DOOR		14	3-747-003-02	KNOB (L), LEVEL	
7	* 1-635-324-11	CC-34 BOARD		15	3-747-013-02	KNOB, AFM LEVEL	
8	* 3-724-111-01	HOLDER, CONNECTOR					

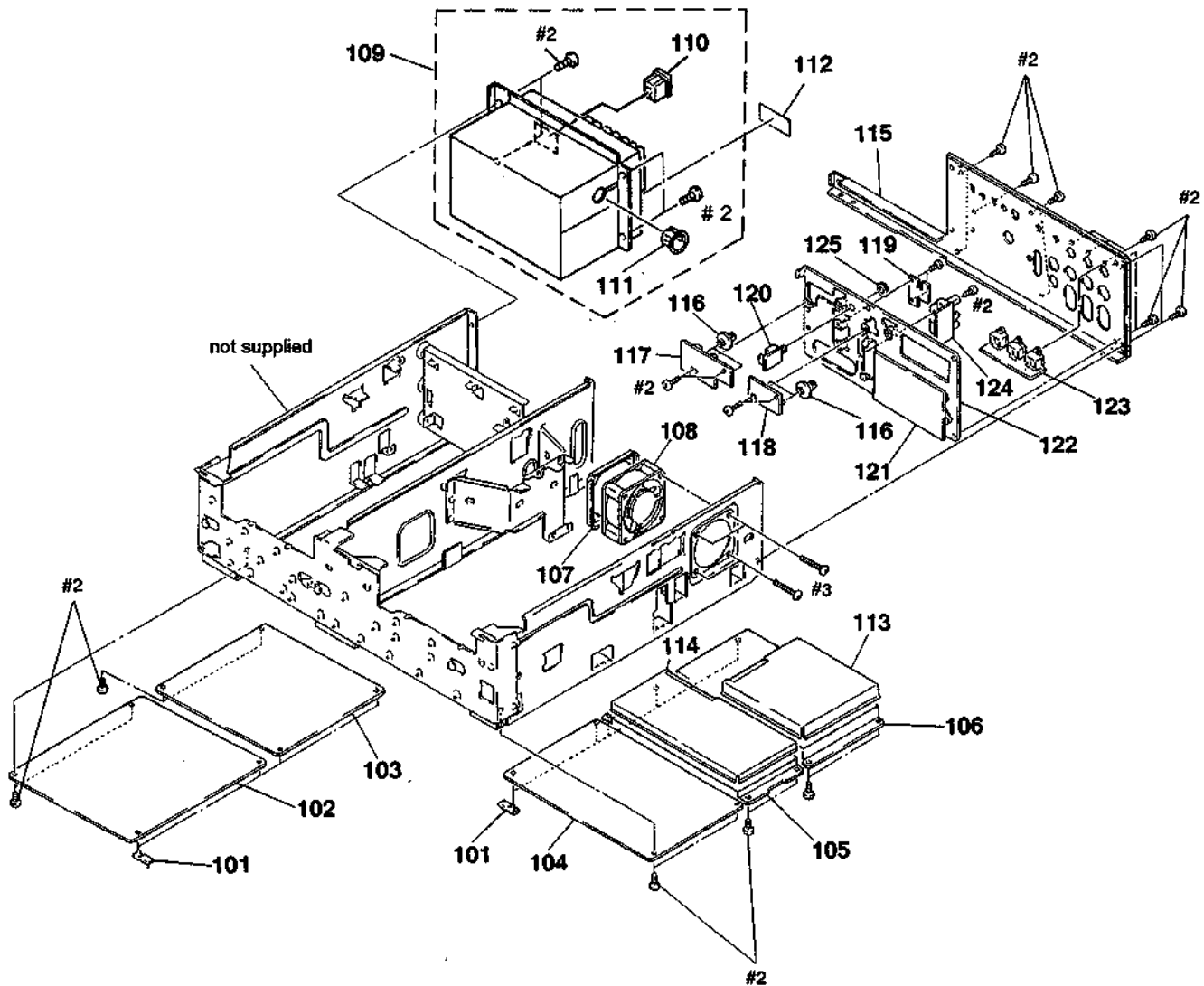
5-2. PC BOARDS ASSEMBLIES



Ref. No.	Part No.	Description	Remark
51	3-724-112-01	KNOB, PHONE	
52	3-724-113-01	KNOB, ADJUST	
53	* A-7062-220-A	FB-171 BOARD, COMPLETE	
54	* A-7062-219-A	FB-170 BOARD, COMPLETE	
55	* 1-635-328-11	HE-3 BOARD	
56	* 1-635-325-11	RL-23 BOARD	
57	* 3-747-016-02	HOLDER, VR	

Ref. No.	Part No.	Description	Remark
58	3-684-465-01	NUT	
59	* 3-747-022-01	HOLDER, MIC	
60	* A-7062-225-A	MJ-26 BOARD, COMPLETE	
61	* A-7062-845-A	YX-2 (P) BOARD, COMPLETE	
62	* A-7062-849-A	10-14 BOARD, COMPLETE	
63	* A-7062-844-A	YC-106 BOARD, COMPLETE	

5-3. PC BOARDS AND POWER SUPPLY ASSEMBLIES

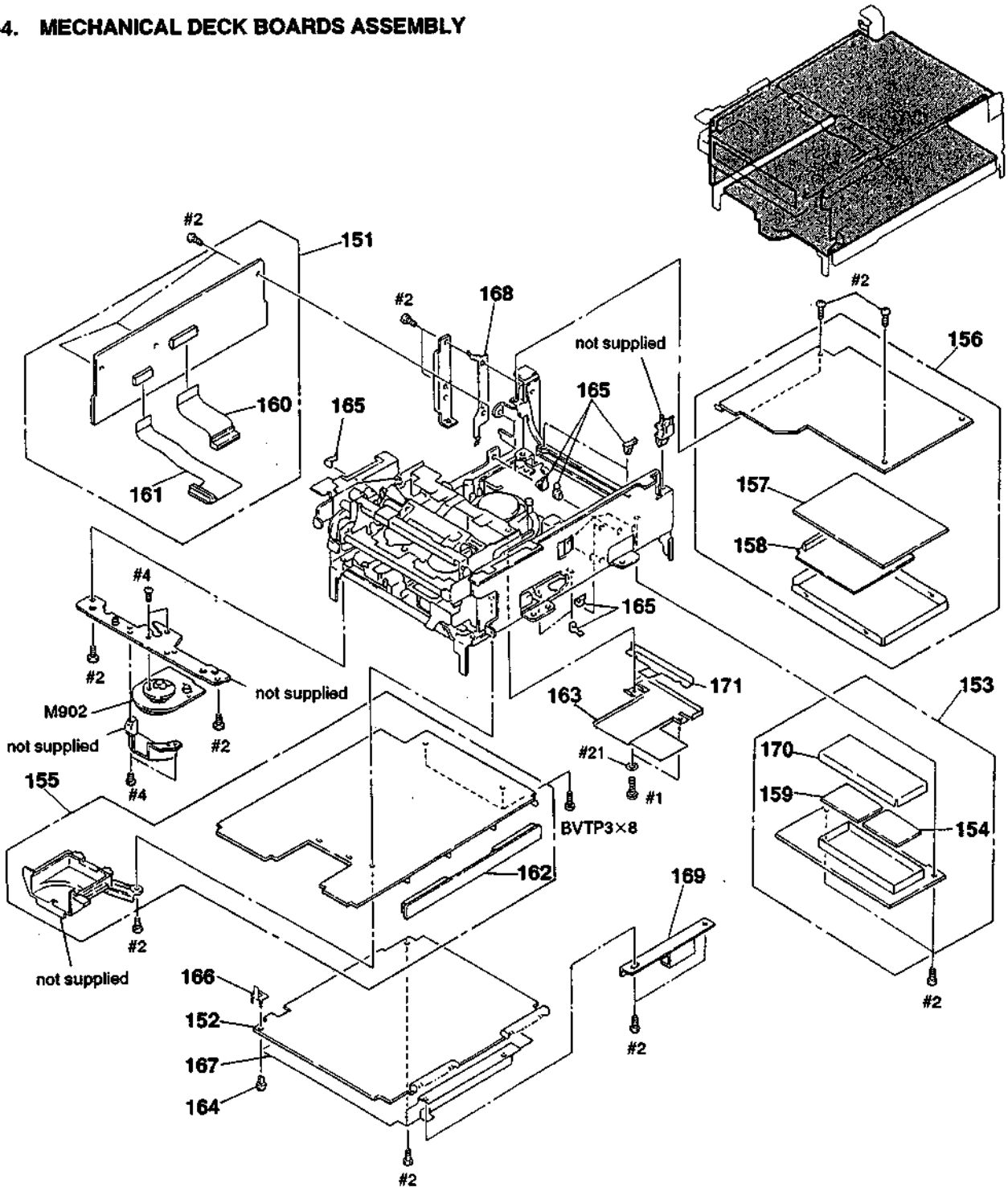


The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
101	* 3-696-448-01	HINGE, SS	
102	* A-7062-215-B	MA-41 BOARD, COMPLETE	
103	* A-7062-843-A	MC-81 BOARD, COMPLETE	
104	* A-7062-848-A	AN-2 (P) BOARD, COMPLETE	
105	* A-7062-847-A	MM-25 BOARD, COMPLETE	
106	* A-7062-846-A	PM-11 (P) BOARD, COMPLETE	
107	* 3-697-996-01	BRACKET, FAN	
108	Δ 1-541-360-21	MOTOR, DC BLUSHLESS FAN	
109	Δ 1-413-629-21	SWITCHING BLOCK	
110	Δ - - -	INLET, AC	
111	Δ - - -	BUSHING	
112	* 3-943-827-01	LABEL, MODEL NUMBER	
113	* 3-747-037-01	LID, UPPER, PM SHIELD CASE (L)	

Ref. No.	Part No.	Description	Remark
114	* 3-747-033-01	LID, UPPER, MM SHIELD CASE	
115	* 3-747-055-11	PANEL, REAR	
116	3-724-113-01	KNOB, ADJUST	
117	* 1-635-321-11	CO-5 BOARD	
118	* 1-635-320-11	SA-30 BOARD	
119	* 1-635-323-11	TC-16 BOARD	
120	* 1-635-322-11	CO-6 BOARD	
121	* A-7071-452-A	JB-27 BOARD, COMPLETE	
122	1-537-301-11	TERMINAL BOARD	
123	* A-7071-451-A	SI-12 BOARD, COMPLETE	
124	* A-7071-453-A	JB-28 BOARD, COMPLETE	
125	3-724-182-01	NUT (SMALL JACK), M6	

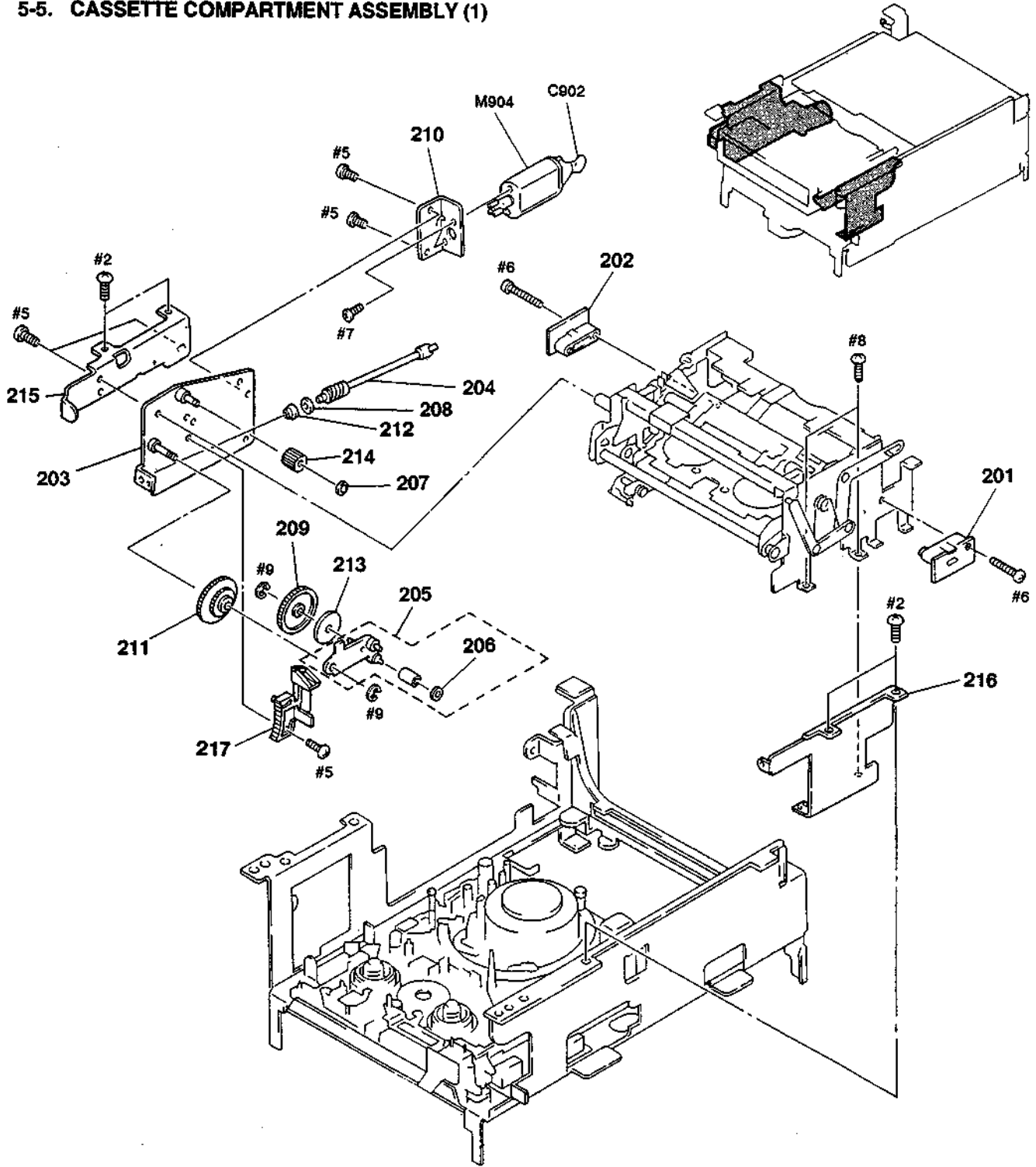
5-4. MECHANICAL DECK BOARDS ASSEMBLY



Ref. No.	Part No.	Description	Remark
151	* A-7062-158-A	MD-23 (P) BOARD, COMPLETE	
152	* A-7062-164-A	HK-5 BOARD, COMPLETE	
153	* A-7062-165-A	FR-43 BOARD, COMPLETE	
154	* A-7062-166-A	RP-103 BOARD, COMPLETE	
155	* A-7062-167-A	SE-10 (P) BOARD, COMPLETE	
156	* A-7061-824-A	MB-19 (P) BOARD, COMPLETE	
157	* A-7061-825-A	PD-19 (P) BOARD, COMPLETE	
158	* A-7061-826-A	PA-27 BOARD, COMPLETE	
159	* A-7061-827-A	RP-73 (LP) BOARD, COMPLETE	
160	* A-7070-624-A	FP-84 BOARD, COMPLETE	
161	* A-7070-625-A	FP-122 BOARD, COMPLETE	

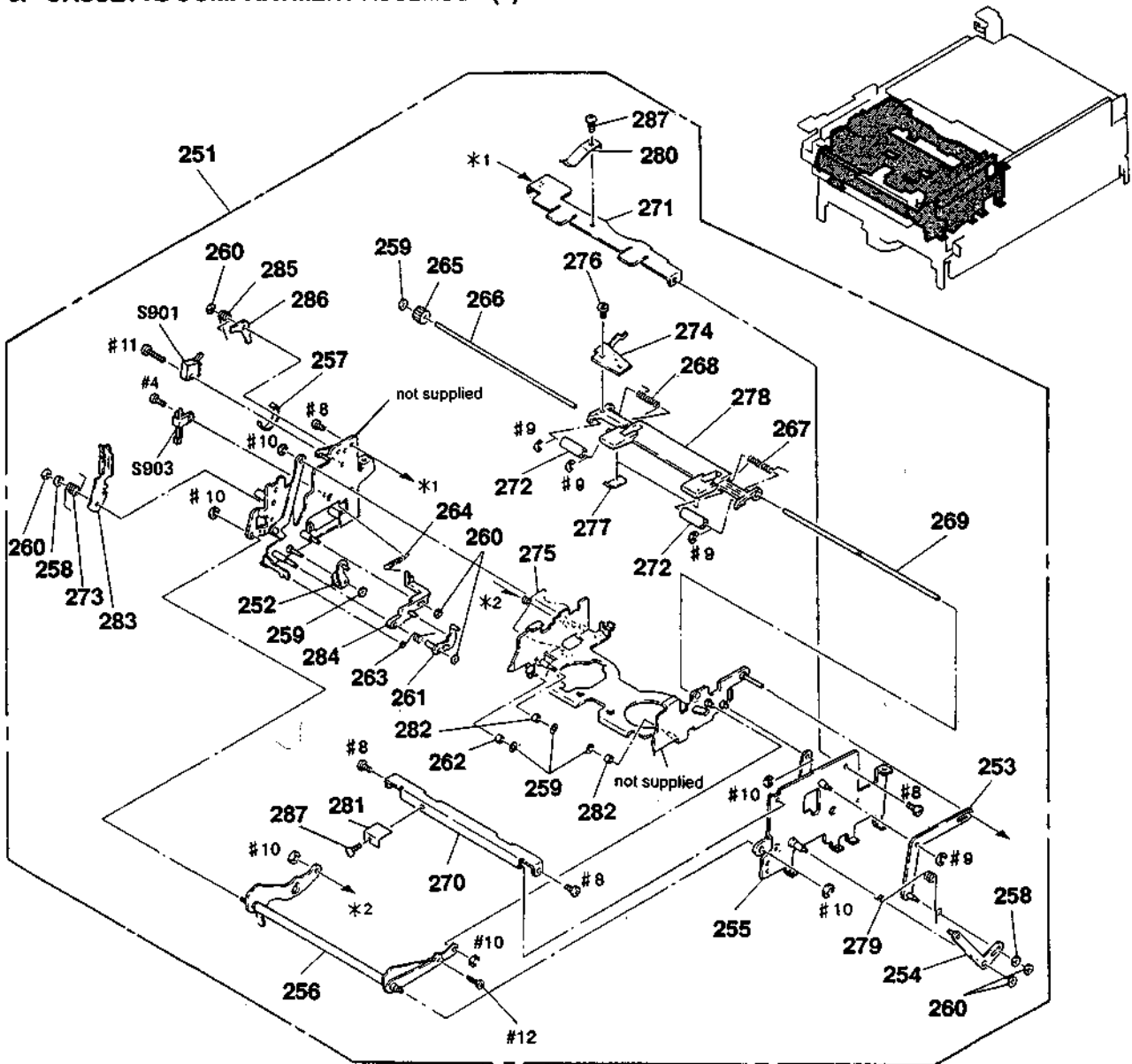
Ref. No.	Part No.	Description	Remark
162	* A-7070-955-A	10-4 BOARD, COMPLETE	
163	* X-3749-135-1	COVER BLOCK ASSY, FLEXIBLE	
164	3-531-576-01	RIVET	
165	* 3-571-150-11	CLAMP	
166	3-724-107-01	RETAINER, PC BOARD	
167	* 3-940-849-01	PLATE, SHIELD, CORE	
168	* 3-724-199-01	PLATE, SUPPORT, MB	
169	* 3-738-954-01	STOPPER, HK	
170	3-739-102-01	LID (H), UPPER, FR SHIELD CASE	
171	3-724-106-01	PLATE, GUARD, FLEXIBLE	
M902	8-835-304-11	MOTOR, DC U-11B	

5-5. CASSETTE COMPARTMENT ASSEMBLY (1)



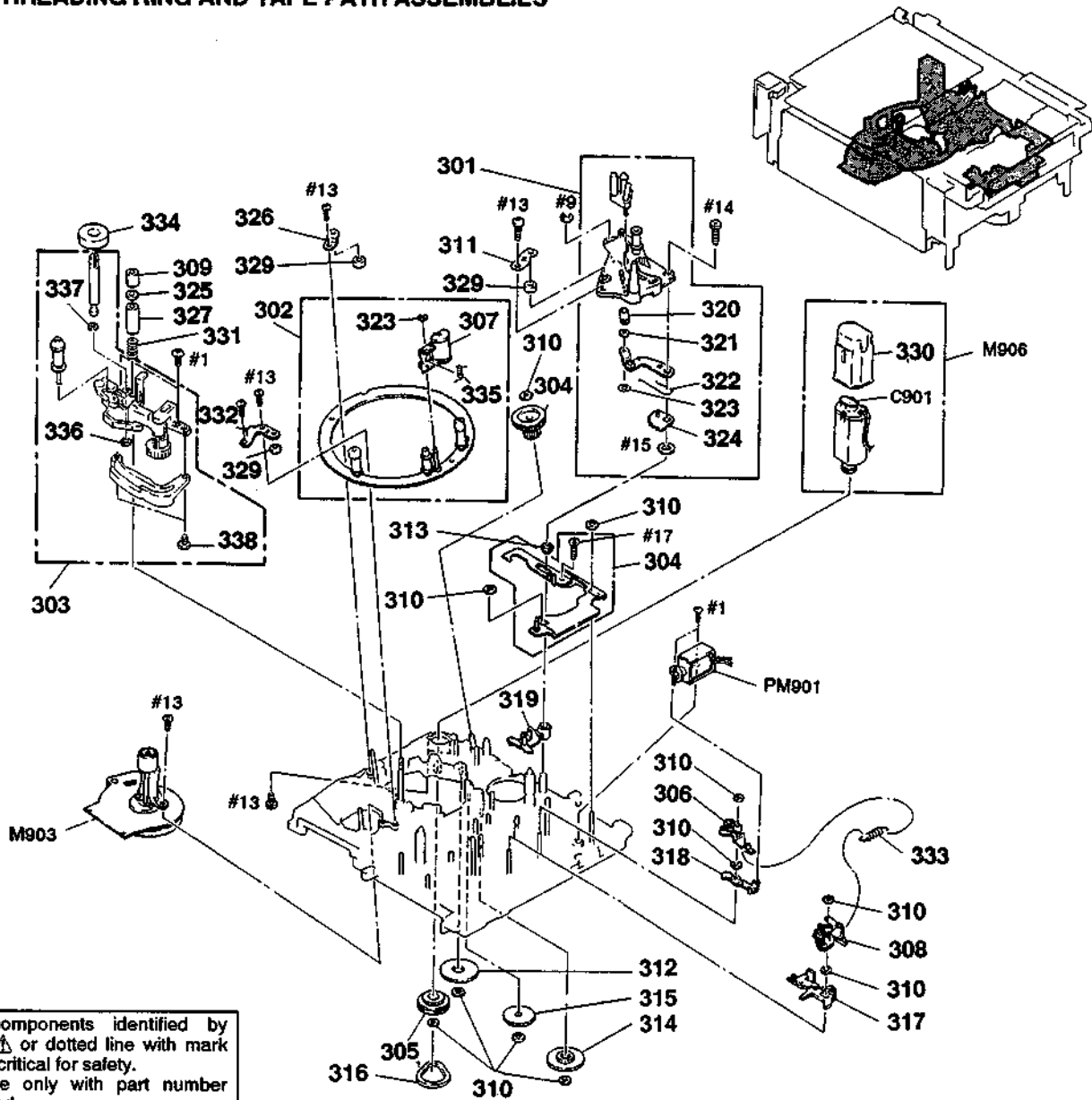
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	*A-7070-627-A	TS-74 (RIGHT) BOARD, COMPLETE		211	3-713-433-01	GEAR (A)	
202	*A-7070-628-A	TS-74 (LEFT) BOARD, COMPLETE		212	3-713-439-01	BEARING	
203	*X-3711-934-1	PLATE SUB ASSY, BLOCK		213	*3-713-441-01	SPRING, LEAF	
204	X-3711-935-3	SHAFT ASSY, WORM		214	3-713-452-01	GEAR (C)	
205	X-3714-193-1	LEVER ASSY (B), GEAR		215	*3-724-140-01	BRACKET (LEFT)	
206	3-315-414-31	WASHER		216	*3-724-141-01	BRACKET (RIGHT)	
207	3-669-465-00	WASHER (1.5), STOPPER		217	3-724-913-02	RACK	
208	3-701-437-11	WASHER		C902	1-161-057-00	CERAMIC	0.033μF 1% 50V
209	3-713-430-01	GEAR (B)		M904	X-3711-936-1	MOTOR ASSY, FL (CASSETTE LOADING)	
210	*3-713-431-01	BRACKET, MOTOR					

5-6. CASSETTE COMPARTMENT ASSEMBLY (2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	A-7090-645-A	CASSETTE COMPARTMENT BLOCK ASSY		271	*3-713-462-03	STOPPER, HOLDER	
252	*X-3686-541-1	CLAW ASSY, LOCK		272	3-713-466-01	ROLLER	
253	X-3711-930-1	LEVER ASSY, HOLDER		273	3-713-488-01	SPRINT (2), TORSION	
254	X-3711-931-4	LEVER ASSY, DOOR		274	3-724-912-01	PLATE, FUNCTION, LEVER	
255	*X-3711-932-1	PLATE (R) ASSY, SIDE		275	3-713-620-01	SPRING (1), TORSION	
256	*X-3711-937-1	JOINT ASSY		276	3-713-622-01	SCREW (M1.3X4), TAPPING, 0	
257	*3-337-402-01	BAND, BINDING		277	3-713-625-01	SHOE, BRAKE	
258	3-533-073-01	WASHER		278	3-713-626-01	COVER, MULTI	
259	3-578-265-11	WASHER, STOPPER		279	3-713-628-01	SPRING, TORSION	
260	3-669-465-00	WASHER (1.5), STOPPER		280	3-713-658-01	SPRING	
261	3-686-692-01	PREVENTION, SLIDER		281	3-716-921-01	SPRING, LEAF	
262	*3-686-693-01	ROLLER, LOCK		282	3-719-590-01	ROLLER, ASSIST	
263	3-686-694-01	SPRING, TORSION		283	3-721-125-01	LEVER, LOCK	
264	3-696-047-01	SPRING, TENSION		284	3-721-136-01	SLIDER, LOCK	
265	3-713-429-01	GEAR (D)		285	3-721-163-01	SPRING	
266	*3-713-440-01	SHAFT, ROLLER		286	3-721-166-01	LEVER, SWITCH	
267	3-713-442-01	SPRING (RIGHT)		287	3-739-116-01	SCREW (2X3), +PS	
268	3-713-445-01	SPRING (LEFT)		S901	1-570-407-11	SWITCH, SLIDE (CASSETTE LOADING)	
269	*3-713-457-01	SHAFT, JOINT		S903	1-553-226-00	SWITCH, LEAF (CASSETTE LOCK)	
270	*3-713-458-01	REINFORCEMENT					

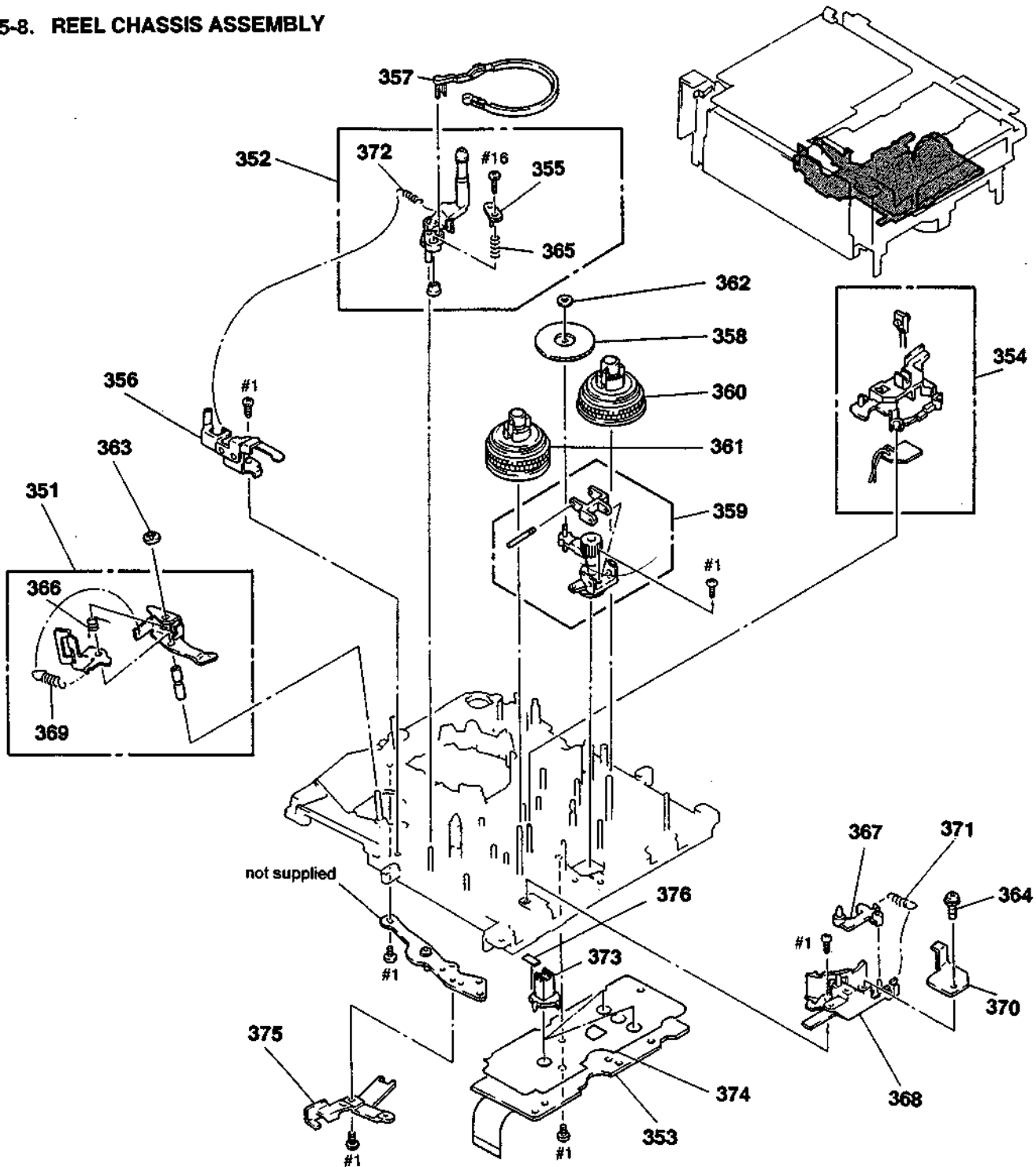
5-7. THREADING RING AND TAPE PATH ASSEMBLIES



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

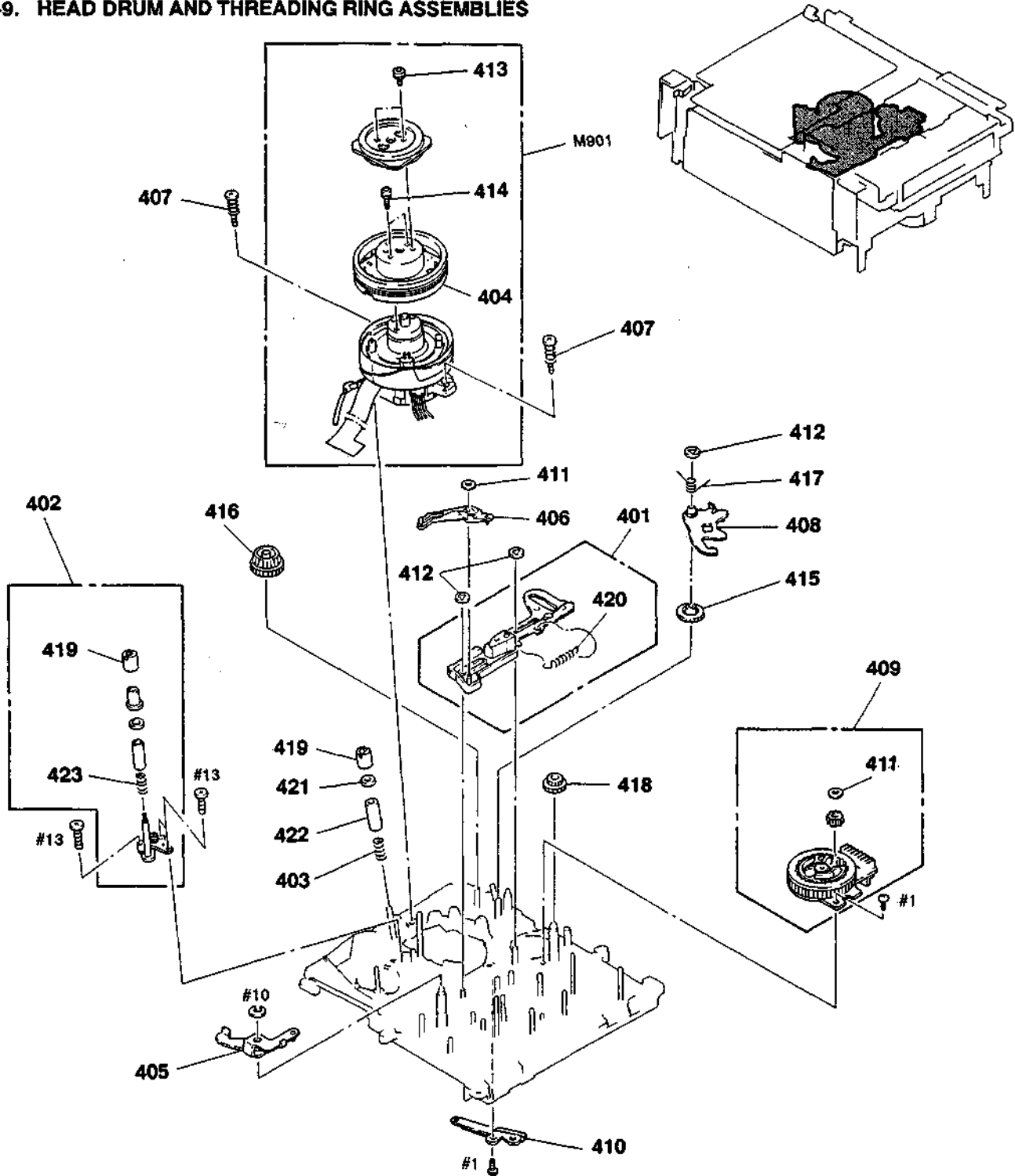
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	A-7040-001-A	GUIDE BLOCK ASSY, SLANT		322	3-686-701-01	SPRING	
302	A-7040-123-A	RING ASSY, THREADING		323	3-315-384-31	WASHER, STOPPER	
303	A-7040-169-D	GUIDE (P) ASSY, ENTRANCE		324	3-699-509-01	GEAR, SECTOR	
304	A-7040-199-A	SLIDER (M) BLOCK ASSY, LOCK		325	*3-686-894-01	FLANGE, #3 #4 GUIDE	
305	X-3686-514-1	GEAR ASSY, NO. 1		326	*3-686-911-01	PLATE, TOP, ROLLER	
306	X-3686-574-1	BRAKE ASSY, MAIN, TAKE-UP		327	3-686-912-01	GUIDE, #3 #4	
307	X-3686-576-1	ARM ASSY, PINCH ROLLER		328	3-697-518-01	GEAR, NO. 10	
308	X-3713-429-1	BRAKE ASSY, MAIN, S		329	3-697-538-01	ROLLER, RING	
309	3-686-724-01	NUT, GUIDE		330	*3-686-757-01	CAP, SHIELD, L MOTOR	
310	3-869-465-00	WASHER (1.5), STOPPER		331	3-699-609-01	SPRING, COMPRESSION	
311	*3-686-503-01	RETAINER, ROLLER		332	*3-686-675-01	STOPPER, RING	
312	3-686-508-01	GEAR, NO. 2		333	3-713-560-01	SPRING, TENSION	
313	3-686-537-01	RETAINER, LOCK SLIDER		334	3-722-153-01	FLYWHEEL	
314	3-686-544-01	GEAR, NO. 4		335	*3-726-704-01	SPRING, TORSION	
315	3-686-545-01	GEAR, NO. 3		336	3-315-414-00	WASHER	
316	3-686-546-01	BELT, L-MOTOR		337	3-578-254-00	RING, RETAINING, E1.2	
317	*3-686-629-01	SLIDER, SELECTION, UPPER & LOWER		338	3-316-938-31	SCREW (B1.4X4), TAPPING	
318	*3-686-635-01	ARM, P		C901	1-161-057-00	CERAMIC 0.033uF 10% 50V	
319	*3-686-636-04	ARM, T.S RELEASE		M903	8-835-364-01	MOTOR, DC BHF-2802B (CAPSTAN)	
320	3-686-663-01	WASHER, STOPPER, 2 GANG		M906	A-7040-065-A	MOTOR ASSY, L (LOADING)	
321	3-701-436-21	WASHER, POLYETHYLENE		PM901 \triangle	1-454-377-31	SOLENOID, PLUNGER	

5-8. REEL CHASSIS ASSEMBLY



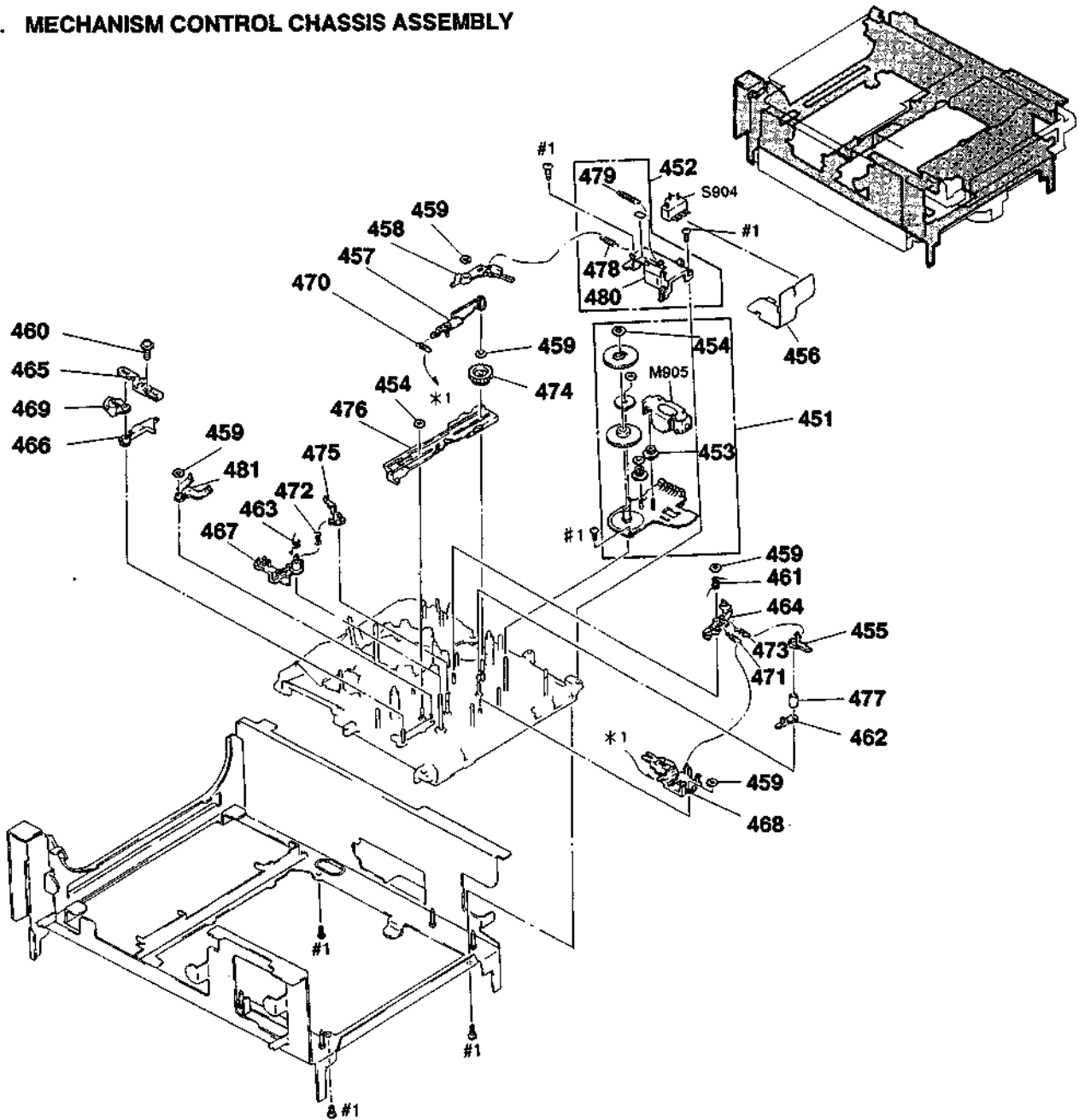
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	A-7040-008-A	ARM ASSY, PINCH PRESS		364	3-669-480-11	+ PTPWH 2	
352	A-7040-071-A	ARM ASSY, TENSION REGULATOR		365	3-669-666-00	SPRING, COMPRESSION	
353	*A-7061-818-A	RS-31 BOARD, COMPLETE		366	3-886-568-01	SPRING, TORSION	
354	*A-7070-024-A	LD-1 BOARD, COMPLETE		367	*3-686-637-01	BRAKE (S), SOFT	
355	*X-3686-523-1	PLATE ASSY, TENSION REGULATOR		368	*3-686-760-01	GUIDE, BAND	
356	*X-3686-525-1	HOOK ASSY, SPRING		369	3-686-885-01	SPRING, TENSION	
357	X-3686-531-1	BAND ASSY, TENSION REGULATOR		370	*3-686-991-01	STOPPER, REEL TABLE	
358	X-3686-763-1	GEAR (B) ASSY, DRIVING		371	3-714-014-01	SPRING, TENSION	
359	X-3711-963-1	DRIVING COMPLETE ASSY		372	3-699-519-01	SPRING, TENSION	
360	X-3711-998-1	TABLE ASSY, REEL, TAKE-UP		373	3-712-410-01	HOLDER, RS	
361	X-3713-427-1	TABLE ASSY, REEL, S		374	3-712-411-01	INSULATOR, RS	
362	3-315-384-31	WASHER, STOPPER		375	3-712-406-01	CLAMP, WIRE	
363	3-669-465-00	WASHER (1.5), STOPPER		376	3-722-175-01	SPACER, MD	

5-9. HEAD DRUM AND THREADING RING ASSEMBLIES



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
401	*A-7040-010-A	SLIDER ASSY, L		413	3-686-422-01	WASHER (2X2.7), BOLT HOLE	
402	A-7040-058-A	GUIDE BLOCK COMPLETE ASSY, #5		414	3-686-493-01	SCREW (M2X5), P1	
403	A-7048-389-A	DRUM ASSY, ROTALLY (DGH-68A-R)		415	3-686-535-01	GEAR, NO. 8	
404	A-7049-328-A	DRUM ASSY, ROTALLY UPPER (DGR-68-R)		416	3-686-539-01	GEAR, NO. 9	
405	*X-3686-509-1	LEVER ASSY, PINCH PRESS		417	3-686-540-01	SPRING, TORSION	
406	*X-3686-518-3	ARM ASSY		418	3-686-702-01	GEAR, DRIVING, GUIDE, SLANT	
407	X-3686-569-1	SCREW ASSY, FITTING		419	3-686-724-01	NUT, GUIDE	
408	X-3686-579-1	CHANGE ASSY, DRIVE		420	3-686-886-01	SPRING, TENSION	
409	X-3712-403-1	L-SW ASSY (LS-9 BOARD)		421	*3-686-894-01	FLANGE, #3 #4 GUIDE	
410	1-535-535-11	TERMINAL, SHAFT GROUND		422	3-686-912-01	GUIDE, #3 #4	
411	3-315-384-31	WASHER, STOPPER		423	3-699-514-01	SPRING, COMPRESSION	
412	3-669-465-00	WASHER (1.5), STOPPER		M901	A-7048-389-A	DRUM ASSY (DGH-68A-R)	

5-10. MECHANISM CONTROL CHASSIS ASSEMBLY



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
451	A-7040-159-A	M-SW ASSY		468	*3-686-656-01	SLIDER, B RELEASE	
452	A-7040-198-A	COVER (M) ASSY, C MOTOR		469	*3-686-755-01	DISK, EJECT	
453	3-308-502-00	WHEEL, WORM		470	3-686-903-01	SPRING, TENSION	
454	3-315-384-31	WASHER, STOPPER		471	3-686-904-01	SPRING, TENSION	
455	X-3711-993-1	BRAKE ASSY, REW		472	3-686-905-02	SPRING, TENSION	
456	*1-630-923-11	FP-206 FLEXIBLE BOARD		473	3-686-906-01	SPRING, TENSION	
457	*X-3686-528-4	ARM ASSY, B RELEASE		474	3-686-909-01	GEAR, MODE OUTPUT	
458	X-3711-987-2	BRAKE ASSY, T. S		475	3-686-996-01	BRAKE (S), HARD	
459	3-689-465-00	WASHER (1.5), STOPPER		476	3-716-935-01	SLIDER, M	
460	3-686-528-01	SCREW (2X6), +PSW		477	3-716-933-01	SPACER, REW BRAKE	
461	3-686-579-01	SPRING		478	3-714-035-01	SPRING, TENSION	
462	*3-686-580-01	ARM, SET UP		479	3-722-110-01	SPRING, TENSION	
463	3-686-603-04	SPRING		480	3-739-107-01	COVER (M), C MOTOR	
464	*3-686-634-01	ARM, RL		481	*X-3686-530-01	ARM (A) ASSY, SELECTION	
465	*3-686-642-01	PLATE, ADJUSTMENT, BAND		M905	8-835-138-01	MOTOR, DC (DNR-5301B) (CONTROL)	
466	*3-686-643-01	ARM, MODE		S904	1-572-298-21	SWITCH, PUSH (REC PROOF, MPHG, ME/MP)	
467	*3-686-644-01	ARM, BAND					

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SECTION 6 ELECTRICAL PARTS LIST

NOTE:

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

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

- 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.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* A-7062-848-A	AN-2 (P) BOARD: COMPLETE			C041	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
	*****			C042	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
	(Ref. No 13,000 Series)			C043	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V
	< CAPACITOR >			C047	1-124-589-11	ELECT	47uF 20% 16V
C001	1-126-157-11	ELECT	10uF 20% 16V	C048	1-124-589-11	ELECT	47uF 20% 16V
C002	1-124-589-11	ELECT	47uF 20% 16V	C049	1-124-589-11	ELECT	47uF 20% 16V
C003	1-126-157-11	ELECT	10uF 20% 16V	C050	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C004	1-124-589-11	ELECT	47uF 20% 16V	C051	1-124-584-00	ELECT	100uF 20% 10V
C005	1-124-589-11	ELECT	47uF 20% 16V	C052	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C006	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C053	1-124-584-00	ELECT	100uF 20% 10V
C007	1-124-584-00	ELECT	100uF 20% 10V	C054	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C008	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C055	1-124-589-11	ELECT	47uF 20% 16V
C009	1-126-157-11	ELECT	10uF 20% 16V	C056	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C010	1-126-157-11	ELECT	10uF 20% 16V	C057	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C013	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C058	1-124-589-11	ELECT	47uF 20% 16V
C014	1-126-157-11	ELECT	10uF 20% 16V	C059	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C018	1-126-157-11	ELECT	10uF 20% 16V	C060	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C019	1-124-589-11	ELECT	47uF 20% 16V	C061	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C020	1-126-157-11	ELECT	10uF 20% 16V	C062	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C021	1-126-157-11	ELECT	10uF 20% 16V	C063	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C023	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C064	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C024	1-126-157-11	ELECT	10uF 20% 16V	C065	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C025	1-126-157-11	ELECT	10uF 20% 16V	C066	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C028	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C067	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C029	1-126-157-11	ELECT	10uF 20% 16V	C068	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C030	1-126-157-11	ELECT	10uF 20% 16V	C069	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C033	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C070	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C034	1-126-157-11	ELECT	10uF 20% 16V	C071	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C035	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C072	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C036	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C073	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C037	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C074	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C039	1-163-129-00	CERAMIC CHIP	330PF 5% 50V	C075	1-124-589-11	ELECT	47uF 20% 16V
C040	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C076	1-164-232-11	CERAMIC CHIP	0.01uF 50V
				C077	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C078	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C131	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C079	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C132	1-130-487-00	MYLAR	0.022uF 5% 50V
C080	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C133	1-130-487-00	MYLAR	0.022uF 5% 50V
C081	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C134	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C082	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C135	1-126-160-11	ELECT	1uF 20% 50V
C083	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C136	1-163-036-00	CERAMIC CHIP	0.068uF 50V
C084	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C137	1-126-160-11	ELECT	1uF 20% 50V
C085	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C138	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C086	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C139	1-124-465-00	ELECT	0.47uF 20% 50V
C087	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C140	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V
C088	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C141	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C089	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C142	1-126-157-11	ELECT	10uF 20% 16V
C090	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C143	1-124-589-11	ELECT	47uF 20% 16V
C091	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C144	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C092	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C145	1-126-160-11	ELECT	1uF 20% 50V
C093	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C146	1-163-036-00	CERAMIC CHIP	0.058uF 50V
C094	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C147	1-126-160-11	ELECT	1uF 20% 50V
C095	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C148	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C096	1-124-589-11	ELECT	47uF 20% 16V	C149	1-124-465-00	ELECT	0.47uF 20% 50V
C097	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C150	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C098	1-126-163-11	ELECT	4.7uF 20% 50V	C151	1-124-589-11	ELECT	47uF 20% 16V
C099	1-126-163-11	ELECT	4.7uF 20% 50V	C152	1-163-106-00	CERAMIC CHIP	36PF 5% 50V
C100	1-124-584-00	ELECT	100uF 20% 10V	C153	1-163-241-11	CERAMIC CHIP	39PF 5% 50V
C101	1-126-163-11	ELECT	4.7uF 20% 50V	C154	1-124-589-11	ELECT	47uF 20% 16V
C102	1-124-589-11	ELECT	47uF 20% 16V	C155	1-126-157-11	ELECT	10uF 20% 16V
C103	1-124-584-00	ELECT	100uF 20% 10V	C156	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C104	1-126-163-11	ELECT	4.7uF 20% 50V	C157	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C105	1-126-163-11	ELECT	4.7uF 20% 50V	C158	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C106	1-126-163-11	ELECT	4.7uF 20% 50V	C159	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C107	1-124-589-11	ELECT	47uF 20% 16V	C160	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
C108	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C161	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
C109	1-124-584-00	ELECT	100uF 20% 10V	C162	1-163-106-00	CERAMIC CHIP	36PF 5% 50V
C110	1-126-163-11	ELECT	4.7uF 20% 50V	C163	1-163-241-11	CERAMIC CHIP	39PF 5% 50V
C111	1-124-584-00	ELECT	100uF 20% 10V	C164	1-124-589-11	ELECT	47uF 20% 16V
C112	1-126-163-11	ELECT	4.7uF 20% 50V	C165	1-126-157-11	ELECT	10uF 20% 16V
C113	1-126-157-11	ELECT	10uF 20% 16V	C166	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C114	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C167	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C115	1-124-589-11	ELECT	47uF 20% 16V	C168	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C116	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C169	1-124-589-11	ELECT	47uF 20% 16V
C117	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V	C170	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
C118	1-126-162-11	ELECT	3.3uF 20% 50V	C171	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
C119	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C172	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C120	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C173	1-124-589-11	ELECT	47uF 20% 16V
C121	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C174	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C122	1-164-232-11	CERAMIC CHIP	0.01uF 50V	C175	1-126-157-11	ELECT	10uF 20% 16V
C123	1-124-589-11	ELECT	47uF 20% 16V	C176	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C129	1-130-479-00	MYLAR	0.0047uF 5% 50V	C178	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C130	1-124-589-11	ELECT	47uF 20% 16V	C179	1-164-232-11	CERAMIC CHIP	0.01uF 50V
				C180	1-164-232-11	CERAMIC CHIP	0.01uF 50V

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Ref. No.	Part No.	Description		Remark
C181	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C182	1-124-589-11	ELECT	47uF	20% 16V
C183	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C184	1-124-589-11	ELECT	47uF	20% 16V
C185	1-126-157-11	ELECT	10uF	20% 16V
C186	1-126-157-11	ELECT	10uF	20% 16V
C187	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C188	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C189	1-126-157-11	ELECT	10uF	20% 16V
C190	1-126-157-11	ELECT	10uF	20% 16V
C191	1-126-157-11	ELECT	10uF	20% 16V
C192	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C193	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C194	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C195	1-124-589-11	ELECT	47uF	20% 16V
C196	1-124-589-11	ELECT	47uF	20% 16V
C197	1-124-589-11	ELECT	47uF	20% 16V
C198	1-124-589-11	ELECT	47uF	20% 16V
C199	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C200	1-126-157-11	ELECT	10uF	20% 16V
C201	1-163-989-11	CERAMIC CHIP	0.033uF	10% 25V
C202	1-163-103-00	CERAMIC CHIP	27PF	5% 50V
C203	1-124-589-11	ELECT	47uF	20% 16V
C204	1-124-589-11	ELECT	47uF	20% 16V
C205	1-124-589-11	ELECT	47uF	20% 16V
C206	1-126-157-11	ELECT	10uF	20% 16V
C207	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C208	1-124-589-11	ELECT	47uF	20% 16V
C209	1-124-589-11	ELECT	47uF	20% 16V
C210	1-124-589-11	ELECT	47uF	20% 16V
C211	1-124-589-11	ELECT	47uF	20% 16V
C212	1-124-589-11	ELECT	47uF	20% 16V
C213	1-124-472-11	ELECT	470uF	20% 10V
C214	1-124-472-11	ELECT	470uF	20% 10V
C215	1-124-472-11	ELECT	470uF	20% 10V
C216	1-124-472-11	ELECT	470uF	20% 10V
C218	1-124-589-11	ELECT	47uF	20% 16V
C219	1-124-589-11	ELECT	47uF	20% 16V
C220	1-124-589-11	ELECT	47uF	20% 16V
C221	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C222	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C223	1-164-161-11	CERAMIC CHIP	0.0022uF	10% 100V
C224	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C225	1-126-157-11	ELECT	10uF	20% 16V
C226	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C227	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C228	1-126-153-11	ELECT	22uF	20% 6.3V
C229	1-163-129-00	CERAMIC CHIP	330PF	5% 50V
C230	1-163-235-11	CERAMIC CHIP	22PF	5% 50V

Ref. No.	Part No.	Description	Remark
		< FILTER >	
CF001	1-409-332-00	CERAMIC TRAP (4.5MHZ)	
		< CONNECTOR >	
CN001	1-506-471-11	CONNECTOR 6P. MALE	
CN002	1-506-473-11	CONNECTOR 8P. MALE	
CN003	1-506-478-11	CONNECTOR 13P. MALE	
CN004	1-506-478-11	CONNECTOR 13P. MALE	
CN005	1-506-471-11	CONNECTOR 6P. MALE	
CN006	1-564-006-81	PIN, CONNECTOR 7P	
CN007	1-506-471-11	CONNECTOR 6P. MALE	
CN008	1-506-476-11	CONNECTOR 11P. MALE	
CN009	* 1-564-011-71	PIN, CONNECTOR 12P	
CN010	1-506-470-11	CONNECTOR 5P. MALE	
CN011	1-506-471-11	CONNECTOR 6P. MALE	
CN012	1-506-471-11	CONNECTOR 6P. MALE	
CN013	1-564-006-71	PIN, CONNECTOR 7P	
		< IC >	
IC001	8-759-711-79	IC NJM2233BM	
IC002	8-759-711-71	IC NJM2234M	
IC003	8-759-711-79	IC NJM2233BM	
IC004	8-759-711-79	IC NJM2233BM	
IC005	8-759-711-79	IC NJM2233BM	
IC006	8-759-711-79	IC NJM2233BM	
IC007	8-759-711-71	IC NJM2234M	
IC008	8-759-972-26	IC LM1881N	
IC009	8-759-032-11	IC MC74HC04AF	
IC010	8-759-032-11	IC MC74HC04AF	
IC011	8-759-711-79	IC NJM2233BM	
IC012	8-759-711-71	IC NJM2234M	
IC013	8-759-711-79	IC NJM2233BM	
IC014	8-759-711-79	IC NJM2233BM	
IC015	8-759-711-79	IC NJM2233BM	
IC016	8-759-711-79	IC NJM2233BM	
IC017	8-759-711-71	IC NJM2234M	
IC018	8-752-009-51	IC CX20095A	
IC019	8-752-009-51	IC CX20095A	
IC020	8-759-710-29	IC NJM2235M	
IC021	8-759-032-41	IC MC74HC157AF	
IC022	8-759-711-71	IC NJM2234M	
IC023	8-759-032-11	IC MC74HC04AF	
IC024	8-759-206-28	IC TC74HC123F	
IC025	8-759-710-61	IC NJM2229M	
IC026	8-759-710-61	IC NJM2229M	
IC027	8-759-630-81	IC M50455-079FP	
IC028	8-759-630-81	IC M50455-079FP	
IC029	8-759-711-71	IC NJM2234M	

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Ref. No.	Part No.	Description	Remark
IC030	8-759-710-62	IC NJM2246M	
IC031	8-759-711-79	IC NJM2233BM	
IC032	8-759-711-79	IC NJM22339M	
< COIL >			
L001	1-408-978-21	INDUCTOR 47uH	
L002	1-408-978-21	INDUCTOR 47uH	
L005	1-408-972-21	INDUCTOR 15uH	
L006	1-408-972-21	INDUCTOR 15uH	
L007	1-408-971-21	INDUCTOR 12uH	
L008	1-408-978-21	INDUCTOR 47uH	
L009	1-408-978-21	INDUCTOR 47uH	
< TRANSISTOR >			
Q001	8-729-100-66	TRANSISTOR 2SC1623	
Q002	8-729-100-66	TRANSISTOR 2SC1623	
Q003	8-729-100-66	TRANSISTOR 2SC1623	
Q004	8-729-100-66	TRANSISTOR 2SC1623	
Q005	8-729-100-66	TRANSISTOR 2SC1623	
Q006	8-729-100-66	TRANSISTOR 2SC1623	
Q007	8-729-100-66	TRANSISTOR 2SC1623	
Q008	8-729-100-66	TRANSISTOR 2SC1623	
Q009	8-729-100-66	TRANSISTOR 2SC1623	
Q010	8-729-100-66	TRANSISTOR 2SC1623	
Q011	8-729-100-66	TRANSISTOR 2SC1623	
Q012	8-729-100-66	TRANSISTOR 2SC1623	
Q013	8-729-100-66	TRANSISTOR 2SC1623	
Q014	8-729-100-66	TRANSISTOR 2SC1623	
Q015	8-729-100-66	TRANSISTOR 2SC1623	
Q016	8-729-100-66	TRANSISTOR 2SC1623	
Q017	8-729-100-66	TRANSISTOR 2SC1623	
Q018	8-729-100-66	TRANSISTOR 2SC1623	
Q019	8-729-100-66	TRANSISTOR 2SC1623	
Q020	8-729-100-66	TRANSISTOR 2SC1623	
Q021	8-729-100-66	TRANSISTOR 2SC1623	
Q022	8-729-100-66	TRANSISTOR 2SC1623	
Q023	8-729-320-17	TRANSISTOR 2SA1122CD	
Q024	8-729-100-66	TRANSISTOR 2SC1623	
Q025	8-729-320-17	TRANSISTOR 2SA1122CD	
Q026	8-729-320-17	TRANSISTOR 2SA1122CD	
Q027	8-729-320-17	TRANSISTOR 2SA1122CD	
Q028	8-729-320-17	TRANSISTOR 2SA1122CD	
Q029	8-729-100-66	TRANSISTOR 2SC1623	
Q030	8-729-100-66	TRANSISTOR 2SC1623	
Q031	8-729-100-66	TRANSISTOR 2SC1623	
Q032	8-729-100-66	TRANSISTOR 2SC1623	
Q033	8-729-100-66	TRANSISTOR 2SC1623	
Q034	8-729-100-66	TRANSISTOR 2SC1623	
Q035	8-729-100-66	TRANSISTOR 2SC1623	

Ref. No.	Part No.	Description	Remark
Q036	8-729-320-17	TRANSISTOR 2SA1122CD	
Q037	8-729-100-66	TRANSISTOR 2SC1623	
Q038	8-729-320-17	TRANSISTOR 2SA1122CD	
Q039	8-729-100-66	TRANSISTOR 2SC1623	
Q040	8-729-100-66	TRANSISTOR 2SC1623	
Q041	8-729-100-66	TRANSISTOR 2SC1623	
Q042	8-729-100-66	TRANSISTOR 2SC1623	
Q043	8-729-320-17	TRANSISTOR 2SA1122CD	
Q044	8-729-100-66	TRANSISTOR 2SC1623	
Q045	8-729-100-66	TRANSISTOR 2SC1623	
Q046	8-729-100-66	TRANSISTOR 2SC1623	
Q047	8-729-100-66	TRANSISTOR 2SC1623	
Q048	8-729-100-66	TRANSISTOR 2SC1623	
Q049	8-729-100-66	TRANSISTOR 2SC1623	
Q050	8-729-216-22	TRANSISTOR 2SA1162	
Q051	8-729-216-22	TRANSISTOR 2SA1162	
Q052	8-729-216-22	TRANSISTOR 2SA1162	
Q053	8-729-216-22	TRANSISTOR 2SA1162	
Q054	8-729-216-22	TRANSISTOR 2SA1162	
Q055	8-729-216-22	TRANSISTOR 2SA1162	
Q056	8-729-320-17	TRANSISTOR 2SA1122CD	
Q057	8-729-320-17	TRANSISTOR 2SA1122CD	
Q058	8-729-100-66	TRANSISTOR 2SC1623	
Q059	8-729-320-17	TRANSISTOR 2SA1122CD	
Q060	8-729-216-22	TRANSISTOR 2SA1162	
< RESISTOR >			
R001	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R002	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R003	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R004	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R005	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R006	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R007	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R008	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R009	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R010	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R011	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R012	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R013	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R014	1-216-025-00	METAL CHIP 100 5% 1/10W	
R015	1-216-025-00	METAL CHIP 100 5% 1/10W	
R016	1-216-025-00	METAL CHIP 100 5% 1/10W	
R017	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R018	1-216-025-00	METAL CHIP 100 5% 1/10W	
R019	1-216-025-00	METAL CHIP 100 5% 1/10W	
R020	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R021	1-216-025-00	METAL CHIP 100 5% 1/10W	
R022	1-216-025-00	METAL CHIP 100 5% 1/10W	

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R023	1-216-025-00	METAL CHIP	100	5%	1/10W	R074	1-216-022-00	METAL CHIP	75	5%	1/10W
R024	1-216-025-00	METAL CHIP	100	5%	1/10W	R075	1-216-025-00	METAL CHIP	100	5%	1/10W
R025	1-216-073-00	METAL CHIP	10K	5%	1/10W	R076	1-216-025-00	METAL CHIP	100	5%	1/10W
R026	1-216-073-00	METAL CHIP	10K	5%	1/10W	R077	1-216-033-00	METAL CHIP	220	5%	1/10W
R027	1-216-295-00	METAL CHIP	0	5%	1/10W	R078	1-216-073-00	METAL CHIP	10K	5%	1/10W
R028	1-216-073-00	METAL CHIP	10K	5%	1/10W	R079	1-216-073-00	METAL CHIP	10K	5%	1/10W
R029	1-216-025-00	METAL CHIP	100	5%	1/10W	R080	1-216-037-00	METAL CHIP	330	5%	1/10W
R030	1-216-025-00	METAL CHIP	100	5%	1/10W	R081	1-216-073-00	METAL CHIP	10K	5%	1/10W
R031	1-216-073-00	METAL CHIP	10K	5%	1/10W	R082	1-216-073-00	METAL CHIP	10K	5%	1/10W
R032	1-216-025-00	METAL CHIP	100	5%	1/10W	R083	1-216-037-00	METAL CHIP	330	5%	1/10W
R033	1-216-025-00	METAL CHIP	100	5%	1/10W	R084	1-216-073-00	METAL CHIP	10K	5%	1/10W
R034	1-216-073-00	METAL CHIP	10K	5%	1/10W	R085	1-216-085-00	METAL CHIP	33K	5%	1/10W
R035	1-216-025-00	METAL CHIP	100	5%	1/10W	R086	1-216-079-00	METAL CHIP	18K	5%	1/10W
R036	1-216-025-00	METAL CHIP	100	5%	1/10W	R088	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R037	1-216-073-00	METAL CHIP	10K	5%	1/10W	R089	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R038	1-216-073-00	METAL CHIP	10K	5%	1/10W	R091	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R039	1-216-025-00	METAL CHIP	100	5%	1/10W	R092	1-216-085-00	METAL CHIP	33K	5%	1/10W
R040	1-216-049-00	METAL CHIP	1K	5%	1/10W	R093	1-216-079-00	METAL CHIP	18K	5%	1/10W
R041	1-216-049-00	METAL CHIP	1K	5%	1/10W	R095	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R042	1-216-117-00	METAL CHIP	880K	5%	1/10W	R096	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R043	1-216-073-00	METAL CHIP	10K	5%	1/10W	R098	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R047	1-216-097-00	METAL CHIP	100K	5%	1/10W	R099	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R048	1-216-097-00	METAL CHIP	100K	5%	1/10W	R100	1-216-022-00	METAL CHIP	75	5%	1/10W
R049	1-216-097-00	METAL CHIP	100K	5%	1/10W	R101	1-216-022-00	METAL CHIP	75	5%	1/10W
R050	1-216-097-00	METAL CHIP	100K	5%	1/10W	R102	1-216-022-00	METAL CHIP	75	5%	1/10W
R051	1-216-097-00	METAL CHIP	100K	5%	1/10W	R103	1-216-022-00	METAL CHIP	75	5%	1/10W
R052	1-216-025-00	METAL CHIP	100	5%	1/10W	R104	1-216-022-00	METAL CHIP	75	5%	1/10W
R053	1-216-037-00	METAL CHIP	330	5%	1/10W	R105	1-216-022-00	METAL CHIP	75	5%	1/10W
R054	1-216-035-00	METAL CHIP	270	5%	1/10W	R106	1-216-097-00	METAL CHIP	100K	5%	1/10W
R055	1-216-073-00	METAL CHIP	10K	5%	1/10W	R107	1-216-097-00	METAL CHIP	100K	5%	1/10W
R056	1-216-073-00	METAL CHIP	10K	5%	1/10W	R108	1-216-025-00	METAL CHIP	100	5%	1/10W
R057	1-216-035-00	METAL CHIP	270	5%	1/10W	R109	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R058	1-216-025-00	METAL CHIP	100	5%	1/10W	R110	1-216-083-00	METAL CHIP	27K	5%	1/10W
R059	1-216-033-00	METAL CHIP	220	5%	1/10W	R111	1-216-083-00	METAL CHIP	27K	5%	1/10W
R060	1-216-025-00	METAL CHIP	100	5%	1/10W	R112	1-216-080-00	METAL CHIP	20K	5%	1/10W
R061	1-216-025-00	METAL CHIP	100	5%	1/10W	R113	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R062	1-216-035-00	METAL CHIP	270	5%	1/10W	R114	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R063	1-216-073-00	METAL CHIP	10K	5%	1/10W	R115	1-216-105-00	METAL CHIP	220K	5%	1/10W
R064	1-216-073-00	METAL CHIP	10K	5%	1/10W	R116	1-216-105-00	METAL CHIP	220K	5%	1/10W
R065	1-216-037-00	METAL CHIP	330	5%	1/10W	R117	1-216-039-00	METAL CHIP	390	5%	1/10W
R066	1-216-295-00	METAL CHIP	0	5%	1/10W	R118	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R067	1-216-073-00	METAL CHIP	10K	5%	1/10W	R119	1-216-073-00	METAL CHIP	10K	5%	1/10W
R068	1-216-073-00	METAL CHIP	10K	5%	1/10W	R120	1-216-099-00	METAL CHIP	120K	5%	1/10W
R069	1-216-035-00	METAL CHIP	270	5%	1/10W	R121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R070	1-216-025-00	METAL CHIP	100	5%	1/10W	R122	1-216-073-00	METAL CHIP	10K	5%	1/10W
R071	1-216-037-00	METAL CHIP	330	5%	1/10W	R123	1-216-085-00	METAL CHIP	33K	5%	1/10W
R072	1-216-073-00	METAL CHIP	10K	5%	1/10W	R124	1-216-039-00	METAL CHIP	390	5%	1/10W
R073	1-216-073-00	METAL CHIP	10K	5%	1/10W	R125	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
						R126	1-216-073-00	METAL CHIP	10K	5%	1/10W

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R127	1-216-099-00	METAL CHIP	120K 5% 1/10W	R176	1-216-073-00	METAL CHIP	10K 5% 1/10W
R128	1-216-073-00	METAL CHIP	10K 5% 1/10W	R177	1-216-073-00	METAL CHIP	10K 5% 1/10W
R129	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R130	1-216-085-00	METAL CHIP	33K 5% 1/10W	R178	1-216-085-00	METAL CHIP	33K 5% 1/10W
R131	1-216-067-00	METAL CHIP	5.6K 5% 1/10W	R179	1-216-085-00	METAL CHIP	33K 5% 1/10W
R132	1-216-077-00	METAL CHIP	15K 5% 1/10W	R180	1-216-049-00	METAL CHIP	1K 5% 1/10W
				R181	1-216-037-00	METAL CHIP	330 5% 1/10W
R133	1-216-748-11	METAL CHIP	39K 5% 1/10W	R182	1-216-036-00	METAL CHIP	300 5% 1/10W
R134	1-216-037-00	METAL CHIP	330 5% 1/10W				
R135	1-216-041-00	METAL CHIP	470 5% 1/10W	R183	1-216-045-00	METAL CHIP	680 5% 1/10W
R136	1-216-295-00	METAL CHIP	0 5% 1/10W	R184	1-216-075-00	METAL CHIP	12K 5% 1/10W
R137	1-216-049-00	METAL CHIP	1K 5% 1/10W	R185	1-216-081-00	METAL CHIP	22K 5% 1/10W
				R186	1-216-295-00	METAL CHIP	0 5% 1/10W
R138	1-216-748-11	METAL CHIP	39K 5% 1/10W	R187	1-216-049-00	METAL CHIP	1K 5% 1/10W
R139	1-216-077-00	METAL CHIP	15K 5% 1/10W				
R140	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R188	1-216-033-00	METAL CHIP	220 5% 1/10W
R141	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R189	1-216-049-00	METAL CHIP	1K 5% 1/10W
R142	1-216-089-00	METAL CHIP	47K 5% 1/10W	R190	1-216-043-00	METAL CHIP	560 5% 1/10W
				R191	1-216-075-00	METAL CHIP	12K 5% 1/10W
R143	1-216-077-00	METAL CHIP	15K 5% 1/10W	R192	1-216-081-00	METAL CHIP	22K 5% 1/10W
R144	1-216-748-11	METAL CHIP	39K 5% 1/10W				
R145	1-216-049-00	METAL CHIP	1K 5% 1/10W	R193	1-216-049-00	METAL CHIP	1K 5% 1/10W
R146	1-216-077-00	METAL CHIP	15K 5% 1/10W	R195	1-216-049-00	METAL CHIP	1K 5% 1/10W
R147	1-216-748-11	METAL CHIP	39K 5% 1/10W	R196	1-216-033-00	METAL CHIP	220 5% 1/10W
				R197	1-216-043-00	METAL CHIP	560 5% 1/10W
R148	1-216-037-00	METAL CHIP	330 5% 1/10W	R198	1-216-035-00	METAL CHIP	270 5% 1/10W
R149	1-216-041-00	METAL CHIP	470 5% 1/10W				
R150	1-216-295-00	METAL CHIP	0 5% 1/10W	R199	1-216-039-00	METAL CHIP	390 5% 1/10W
R151	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R200	1-216-017-00	METAL CHIP	47 5% 1/10W
R152	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R201	1-216-037-00	METAL CHIP	330 5% 1/10W
				R202	1-216-043-00	METAL CHIP	560 5% 1/10W
R153	1-216-089-00	METAL CHIP	47K 5% 1/10W	R203	1-216-045-00	METAL CHIP	680 5% 1/10W
R154	1-216-748-11	METAL CHIP	39K 5% 1/10W				
R155	1-216-077-00	METAL CHIP	15K 5% 1/10W	R204	1-216-073-00	METAL CHIP	10K 5% 1/10W
R156	1-216-049-00	METAL CHIP	1K 5% 1/10W	R205	1-216-073-00	METAL CHIP	10K 5% 1/10W
R157	1-216-025-00	METAL CHIP	100 5% 1/10W	R206	1-216-077-00	METAL CHIP	15K 5% 1/10W
				R207	1-216-049-00	METAL CHIP	1K 5% 1/10W
R158	1-216-049-00	METAL CHIP	1K 5% 1/10W	R208	1-216-075-00	METAL CHIP	12K 5% 1/10W
R159	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R160	1-216-073-00	METAL CHIP	10K 5% 1/10W	R209	1-216-081-00	METAL CHIP	22K 5% 1/10W
R161	1-216-025-00	METAL CHIP	100 5% 1/10W	R210	1-216-049-00	METAL CHIP	1K 5% 1/10W
R162	1-216-049-00	METAL CHIP	1K 5% 1/10W	R211	1-216-033-00	METAL CHIP	220 5% 1/10W
				R212	1-216-043-00	METAL CHIP	560 5% 1/10W
R163	1-216-073-00	METAL CHIP	10K 5% 1/10W	R213	1-216-049-00	METAL CHIP	1K 5% 1/10W
R164	1-216-041-00	METAL CHIP	470 5% 1/10W				
R165	1-216-041-00	METAL CHIP	470 5% 1/10W	R214	1-216-075-00	METAL CHIP	12K 5% 1/10W
R166	1-216-025-00	METAL CHIP	100 5% 1/10W	R215	1-216-081-00	METAL CHIP	22K 5% 1/10W
R167	1-216-025-00	METAL CHIP	100 5% 1/10W	R216	1-216-049-00	METAL CHIP	1K 5% 1/10W
				R217	1-216-025-00	METAL CHIP	100 5% 1/10W
R168	1-216-073-00	METAL CHIP	10K 5% 1/10W	R219	1-216-295-00	METAL CHIP	0 5% 1/10W
R169	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R170	1-216-025-00	METAL CHIP	100 5% 1/10W	R220	1-216-748-11	METAL CHIP	39K 5% 1/10W
R171	1-216-039-00	METAL CHIP	390 5% 1/10W	R221	1-216-077-00	METAL CHIP	15K 5% 1/10W
R172	1-216-049-00	METAL CHIP	1K 5% 1/10W	R223	1-216-748-11	METAL CHIP	39K 5% 1/10W
				R224	1-216-077-00	METAL CHIP	15K 5% 1/10W
R173	1-216-025-00	METAL CHIP	100 5% 1/10W	R226	1-216-748-11	METAL CHIP	39K 5% 1/10W
R174	1-216-049-00	METAL CHIP	1K 5% 1/10W				
R175	1-216-025-00	METAL CHIP	100 5% 1/10W	R227	1-216-077-00	METAL CHIP	15K 5% 1/10W

AN-2 (P)**CC-34****CO-5**

Ref. No.	Part No.	Description	Remark		
R229	1-216-748-11	METAL CHIP	39K	5%	1/10W
R230	1-216-077-00	METAL CHIP	16K	5%	1/10W
R232	1-216-022-00	METAL CHIP	75	5%	1/10W
R233	1-216-022-00	METAL CHIP	75	5%	1/10W
R234	1-216-022-00	METAL CHIP	75	5%	1/10W
R235	1-216-022-00	METAL CHIP	75	5%	1/10W
R236	1-216-022-00	METAL CHIP	75	5%	1/10W
R237	1-216-097-00	METAL CHIP	100K	5%	1/10W
R240	1-216-295-00	METAL CHIP	0	5%	1/10W
R241	1-216-295-00	METAL CHIP	0	5%	1/10W
R243	1-216-087-00	METAL CHIP	5.6K	5%	1/10W
R244	1-216-025-00	METAL CHIP	100	5%	1/10W
R245	1-216-025-00	METAL CHIP	100	5%	1/10W
R246	1-216-073-00	METAL CHIP	10K	5%	1/10W
R247	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R248	1-216-073-00	METAL CHIP	10K	5%	1/10W
R249	1-216-073-00	METAL CHIP	10K	5%	1/10W
R250	1-216-041-00	METAL CHIP	470	5%	1/10W
R251	1-216-049-00	METAL CHIP	1K	5%	1/10W
R252	1-216-049-00	METAL CHIP	1K	5%	1/10W
R253	1-216-049-00	METAL CHIP	1K	5%	1/10W
R254	1-216-049-00	METAL CHIP	1K	5%	1/10W
R255	1-216-049-00	METAL CHIP	1K	5%	1/10W
R256	1-216-049-00	METAL CHIP	1K	5%	1/10W
R257	1-216-049-00	METAL CHIP	1K	5%	1/10W
R258	1-216-049-00	METAL CHIP	1K	5%	1/10W
R259	1-216-049-00	METAL CHIP	1K	5%	1/10W
R260	1-216-049-00	METAL CHIP	1K	5%	1/10W
R261	1-216-049-00	METAL CHIP	1K	5%	1/10W
R262	1-216-049-00	METAL CHIP	1K	5%	1/10W
R263	1-216-049-00	METAL CHIP	1K	5%	1/10W
R264	1-216-049-00	METAL CHIP	1K	5%	1/10W
R265	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R266	1-216-085-00	METAL CHIP	33K	5%	1/10W
R267	1-216-085-00	METAL CHIP	33K	5%	1/10W
< VARIABLE RESISTOR >					
RV001	1-230-526-11	RES. ADJ. METAL 47K			
RV002	1-230-519-11	RES. ADJ. METAL 470			
RV003	1-230-519-11	RES. ADJ. METAL 470			
RV004	1-230-519-11	RES. ADJ. METAL 470			
< VIBRATOR >					
X003	1-567-344-21	VIBRATOR, CRYSTAL (VCO)			
X004	1-567-344-21	VIBRATOR, CRYSTAL (VCO)			

Ref. No.	Part No.	Description	Remark		
* 1-635-324-11 CC-34 BOARD (Ref. No 18,000 Series)					

3-697-998-01 PLATE, GROUND					
< COMPOSITION CIRCUIT BLOCK >					
CP601	1-232-128-11	COMPOSITION CIRCUIT BLOCK			
< DIODE >					
D601	8-719-106-80	DIODE RD13M			
D602	8-719-106-80	DIODE RD13M			
< JACK >					
J602	1-566-770-11	SOCKET, CONNECTOR 8P (CONTROLLER IN)			

* 1-635-321-11 CO-5 BOARD (Ref. No 15,000 Series)					

< CAPACITOR >					
C201	1-163-035-00	CERAMIC CHIP 0.047uF			50V
C202	1-126-603-11	ELECT CHIP 4.7uF		20%	35V
C203	1-163-038-00	CERAMIC CHIP 0.1uF			25V
C204	1-163-038-00	CERAMIC CHIP 0.1uF			25V
< DIODE >					
D201	8-719-800-76	DIODE 1SS226			
< TRANSISTOR >					
Q201	8-729-901-01	TRANSISTOR DTC144EK			
Q202	8-729-901-01	TRANSISTOR DTC144EK			
< RESISTOR >					
R201	1-216-049-00	METAL CHIP 1K	5%		1/10W
R202	1-216-049-00	METAL CHIP 1K	5%		1/10W
< VARIABLE RESISTOR >					
RV201	1-230-661-11	RES. VAR. CARBON 10K			
RV202	1-230-661-11	RES. VAR. CARBON 10K			
< SWITCH >					
S201	1-570-157-11	SWITCH, SLIDE (DATA SCREEN)			
S202	1-570-157-11	SWITCH, SLIDE (MODE SELECT)			

Ref. No.	Part No.	Description	Remark
	* 1-635-322-11	CO-6 BOARD (Ref. No 1,600 Series) *****	
		< DIODE >	
D501	8-719-106-09	DIODE RD6.2M-T103	
		< JACK >	
J501	1-507-980-21	JACK (PAUSE OUT)	

Ref. No.	Part No.	Description	Remark
	* A-7062-219-A	FB-170 BOARD, COMPLETE ***** (Ref. No 18,000 Series)	
	* 3-689-521-01	HOLDER, LED, ROUND	
	* 3-697-607-01	HOLDER (SU), LED	
	* 3-747-015-01	HOLDER, FUNCTION LED	
	* 3-747-017-01	HOLDER, J/S LED	
	* 3-747-018-01	HOLDER, MODE LED	
	* 3-747-049-01	HOLDER, LEVEL METER	
		< BUZZER >	
BZ001	1-529-016-00	BUZZER, PIEZOELECTRIC	
		< CAPACITOR >	
C001	1-124-472-11	ELECT 470uF 20% 10V	
C002	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C003	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C004	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C005	1-124-472-11	ELECT 470uF 20% 10V	
C006	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C007	1-126-603-11	ELECT CHIP 4.7uF 20% 35V	

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Ref. No.	Part No.	Description	Remark
C008	1-126-603-11	ELECT CHIP 4.7uF 20%	35V
C009	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C010	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C011	1-135-201-11	TANTALUM CHIP 10uF 20%	4V
C012	1-135-201-11	TANTALUM CHIP 10uF 20%	4V
C014	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C015	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C016	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C017	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C018	1-126-603-11	ELECT CHIP 4.7uF 20%	35V
C019	1-126-603-11	ELECT CHIP 4.7uF 20%	35V
C020	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C022	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C023	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C024	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C025	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C026	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C027	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C028	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C029	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C030	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C031	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C032	1-164-232-11	CERAMIC CHIP 0.01uF	50V
< CONNECTOR >			
CN005	1-506-470-11	CONNECTOR 5P. MALE	
CN006	1-506-469-11	CONNECTOR 4P. MALE	
CN008	1-506-472-11	CONNECTOR 7P. MALE	
CN009	1-506-469-11	CONNECTOR 4P. MALE	
< DIODE >			
D002	8-719-800-76	DIODE 1SS226	
D003	8-719-800-76	DIODE 1SS226	
D004	8-719-800-76	DIODE 1SS226	
D005	8-719-939-36	DIODE 6L5HY42 (Hi 8)	
D007	8-719-939-37	DIODE 6L5EG42 (PCM)	
D008	8-719-939-36	DIODE 6L5HY42 (σ)	
D010	8-719-939-36	DIODE 6L5HY42 (SP)	
D012	8-719-812-32	DIODE TLY123 (EJECT ▲)	
D013	8-719-939-36	DIODE 6L5HY42 (JOG/S)	
D014	8-719-939-36	DIODE 6L5HY42 (JOG/S)	
D015	8-719-918-76	DIODE SLR-34VR3 (REC ●)	
D016	8-719-812-32	DIODE TLY123 (PAUSE ■)	
D017	8-719-812-32	DIODE TLY123 (FF ►►)	
D018	8-719-920-05	DIODE TLG123A (PB ►)	
D019	8-719-812-32	DIODE TLY123 (REW ◀◀)	
D026	8-719-812-32	DIODE TLY123 (STRAIGHT)	
D027	8-719-812-32	DIODE TLY123 (PCM)	
D028	8-719-812-32	DIODE TLY123 (MIX)	

Ref. No.	Part No.	Description	Remark
D029	8-719-812-32	DIODE TLY123 (STD)	
D030	8-719-812-32	DIODE TLY123 (LOAD)	
D031	8-719-812-31	DIODE TLR123 (SAVE)	
D032	8-719-800-76	DIODE 1SS226	
D033	8-719-800-76	DIODE 1SS226	
D034	8-719-800-76	DIODE 1SS226	
D035	8-719-800-76	DIODE 1SS226	
D042	8-719-800-76	DIODE 1SS226	
D043	8-719-800-76	DIODE 1SS226	
D044	8-719-800-76	DIODE 1SS226	
D045	8-719-800-76	DIODE 1SS226	
< IC >			
IC001	8-759-937-21	IC CXD1078M	
IC002	8-759-927-46	IC uPD74HC06	
< COIL >			
L001	1-410-393-11	INDUCTOR CHIP 100uH	
L002	1-408-979-21	INDUCTOR 56uH	
L003	1-410-671-31	INDUCTOR 47uH	
L004	1-410-671-31	INDUCTOR 47uH	
L005	1-410-671-31	INDUCTOR 47uH	
< METER UNIT >			
LMU001	1-520-503-11	METER UNIT, LED LEVEL	
< TRANSISTOR >			
Q002	8-729-901-06	TRANSISTOR DTA144EK	
Q003	8-729-901-06	TRANSISTOR DTA144EK	
Q004	8-729-901-06	TRANSISTOR DTA144EK	
Q005	8-729-901-06	TRANSISTOR DTA144EK	
Q006	8-729-901-06	TRANSISTOR DTA144EK	
Q007	8-729-901-06	TRANSISTOR DTA144EK	
Q009	8-729-901-01	TRANSISTOR DTC144EK	
Q010	8-729-901-01	TRANSISTOR DTC144EK	
Q011	8-729-100-66	TRANSISTOR 2SC1623	
Q012	8-729-100-66	TRANSISTOR 2SC1623	
< RESISTOR >			
R005	1-216-099-00	METAL CHIP 120K 5%	1/10W
R006	1-216-089-00	METAL CHIP 47K 5%	1/10W
R007	1-216-081-00	METAL CHIP 22K 5%	1/10W
R008	1-216-072-00	METAL CHIP 9.1K 5%	1/10W
R009	1-216-089-00	METAL CHIP 47K 5%	1/10W
R010	1-216-081-00	METAL CHIP 22K 5%	1/10W
R011	1-216-072-00	METAL CHIP 9.1K 5%	1/10W
R012	1-216-037-00	METAL CHIP 330 5%	1/10W
R014	1-216-037-00	METAL CHIP 330 5%	1/10W
R015	1-216-037-00	METAL CHIP 330 5%	1/10W

Ref. No.	Part No.	Description	Remark
R017	1-216-037-00	METAL CHIP	330 5% 1/10W
R019	1-216-037-00	METAL CHIP	330 5% 1/10W
R020	1-216-025-00	METAL CHIP	100 5% 1/10W
R021	1-216-049-00	METAL CHIP	1K 5% 1/10W
R022	1-216-037-00	METAL CHIP	330 5% 1/10W
R023	1-216-037-00	METAL CHIP	330 5% 1/10W
R024	1-216-037-00	METAL CHIP	330 5% 1/10W
R025	1-216-037-00	METAL CHIP	330 5% 1/10W
R031	1-216-037-00	METAL CHIP	330 5% 1/10W
R032	1-216-037-00	METAL CHIP	330 5% 1/10W
R033	1-216-089-00	METAL CHIP	47K 5% 1/10W
R034	1-216-081-00	METAL CHIP	22K 5% 1/10W
R035	1-216-073-00	METAL CHIP	10K 5% 1/10W
R039	1-216-073-00	METAL CHIP	10K 5% 1/10W
R040	1-216-081-00	METAL CHIP	22K 5% 1/10W
R041	1-216-089-00	METAL CHIP	47K 5% 1/10W
R042	1-216-073-00	METAL CHIP	10K 5% 1/10W
R043	1-216-081-00	METAL CHIP	22K 5% 1/10W
R044	1-216-089-00	METAL CHIP	47K 5% 1/10W
R046	1-216-081-00	METAL CHIP	22K 5% 1/10W
R047	1-216-089-00	METAL CHIP	47K 5% 1/10W
R048	1-216-073-00	METAL CHIP	10K 5% 1/10W
R049	1-216-081-00	METAL CHIP	22K 5% 1/10W
R050	1-216-089-00	METAL CHIP	47K 5% 1/10W
R051	1-216-073-00	METAL CHIP	10K 5% 1/10W
R052	1-216-073-00	METAL CHIP	10K 5% 1/10W
R053	1-216-037-00	METAL CHIP	330 5% 1/10W
R054	1-216-037-00	METAL CHIP	330 5% 1/10W
R055	1-216-037-00	METAL CHIP	330 5% 1/10W
R056	1-216-037-00	METAL CHIP	330 5% 1/10W
R057	1-216-081-00	METAL CHIP	22K 5% 1/10W
R058	1-216-029-00	METAL CHIP	150 5% 1/10W
R059	1-216-097-00	METAL CHIP	100K 5% 1/10W
R060	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
< VARIABLE RESISTOR >			
RV003	1-230-874-11	RES. ADJ. METAL 100K	
RV004	1-230-122-00	RES. VAR. CARBON 100K (SLOW ADJ)	
< SWITCH >			
S002	1-571-787-11	SWITCH, TACTILE (REW ◀◀)	
S003	1-571-787-11	SWITCH, TACTILE (PAUSE ■■)	
S004	1-571-787-11	SWITCH, TACTILE (PB ▶)	
S005	1-571-787-11	SWITCH, TACTILE (EJECT ▲)	
S006	1-571-787-11	SWITCH, TACTILE (FF ▶▶)	
S007	1-571-787-11	SWITCH, TACTILE (REC ●)	
S008	1-571-787-11	SWITCH, TACTILE (STOP ■)	
S009	1-570-854-11	SWITCH, SLIDE (VIDEO/LINE/PLAYER)	
S011	1-571-787-11	SWITCH, TACTILE (SAVE)	

Ref. No.	Part No.	Description	Remark
S012	1-571-787-11	SWITCH, TACTILE (LOAD)	
S013	1-571-787-11	SWITCH, TACTILE (ALL CLEAR)	
S014	1-570-864-11	SWITCH, SLIDE (DATA SCREEN)	
S016	1-572-268-11	SWITCH, SLIDE (MONITOR PCM/MIX/STD)	
S018	1-570-864-11	SWITCH, SLIDE (AUDIO PLAYER/LINE)	
S020	1-570-865-11	SWITCH, SLIDE (BEEP ON/OFF)	
S021	1-570-864-11	SWITCH, SLIDE (LINE/VIDEO/S VIDEO)	
S022	1-570-854-11	SWITCH, SLIDE (CNR SEL)	
S023	1-571-787-11	SWITCH, TACTILE (STRAIGHT)	
S024	1-571-787-11	SWITCH, TACTILE (PCM)	
S025	1-571-787-11	SWITCH, TACTILE (MIX)	
S026	1-571-787-11	SWITCH, TACTILE (AFM)	
S027	1-571-787-11	SWITCH, TACTILE (C RST)	

* A-7062-220-A FB-171 BOARD, COMPLETE			

(Ref. No 19,000 Series)			
* 3-689-521-01 HOLDER, LED, ROUND			
* 3-747-015-01 HOLDER, FUNCTION LED			
* 3-747-017-01 HOLDER, J/S LED			
* 3-747-018-01 HOLDER, MODE LED			
< CAPACITOR >			
C101	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C102	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C103	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C104	1-126-603-11	ELECT CHIP	4.7uF 20% 35V
C105	1-126-603-11	ELECT CHIP	4.7uF 20% 35V
C106	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C107	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C108	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C109	1-124-778-00	ELECT CHIP	22uF 20% 6.3V
C110	1-124-778-00	ELECT CHIP	22uF 20% 6.3V
C111	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C112	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C113	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C114	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C115	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C116	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C117	1-124-779-00	ELECT CHIP	10uF 20% 16v
C118	1-124-779-00	ELECT CHIP	10uF 20% 16v
C120	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C121	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
< CONNECTOR >			
CN101	1-506-468-11	CONNECTOR 3P, MALE	
CN104	1-506-470-11	CONNECTOR 5P, MALE	

Ref. No.	Part No.	Description	Remark
< DIODE >			
D101	8-719-920-05	DIODE TLG123A	
D102	8-719-939-42	DIODE GL5HD42	
D104	8-719-800-76	DIODE 1SS226	
D105	8-719-800-76	DIODE 1SS226	
D106	8-719-800-76	DIODE 1SS226	
D107	8-719-800-76	DIODE 1SS226	
D109	8-719-812-32	DIODE TLY123	
D110	8-719-920-05	DIODE TLG123A	
D111	8-719-812-32	DIODE TLY123	
D112	8-719-812-32	DIODE TLY123	
D113	8-719-939-36	DIODE GL5HY42	
D114	8-719-939-36	DIODE GL5HY42	
D115	8-719-812-32	DIODE TLY123	
D116	8-719-939-36	DIODE GL5HY42	
D118	8-719-812-31	DIODE TLR123	
D119	8-719-939-36	DIODE GL5HY42	
D120	8-719-939-37	DIODE GL5E642	
D121	8-719-939-36	DIODE GL5HY42	
D122	8-719-800-76	DIODE 1SS226	
D123	8-719-104-34	DIODE 1S2835	
D124	8-719-104-34	DIODE 1S2835	
< IC >			
IC101	8-759-937-21	IC CXD1078M	
IC102	8-759-981-XX	IC NJM4560M	
IC103	8-759-309-71	IC TC4053BFHB	
< COIL >			
L101	1-410-393-11	INDUCTOR CHIP 100uH	
L102	1-410-671-31	INDUCTOR 47uH	
< TRANSISTOR >			
Q101	8-729-901-06	TRANSISTOR DTA144EK	
Q103	8-729-100-66	TRANSISTOR 2SC1623	
Q104	8-729-216-22	TRANSISTOR 2SA1162	
Q105	8-729-901-01	TRANSISTOR DTC144EK	
Q106	8-729-202-38	TRANSISTOR 2SC3326N	
Q107	8-729-202-38	TRANSISTOR 2SC3326N	
< RESISTOR >			
R101	1-216-029-00	METAL CHIP 150 5%	1/10W
R102	1-216-037-00	METAL CHIP 330 5%	1/10W
R104	1-216-072-00	METAL CHIP 9.1K 5%	1/10W
R105	1-216-072-00	METAL CHIP 9.1K 5%	1/10W
R106	1-216-089-00	METAL CHIP 47K 5%	1/10W
R107	1-216-072-00	METAL CHIP 9.1K 5%	1/10W

Ref. No.	Part No.	Description	Remark
R108	1-216-081-00	METAL CHIP 22K 5%	1/10W
R109	1-216-089-00	METAL CHIP 47K 5%	1/10W
R110	1-216-099-00	METAL CHIP 120K 5%	1/10W
R112	1-216-037-00	METAL CHIP 330 5%	1/10W
R113	1-216-037-00	METAL CHIP 330 5%	1/10W
R114	1-216-037-00	METAL CHIP 330 5%	1/10W
R115	1-216-037-00	METAL CHIP 330 5%	1/10W
R116	1-216-025-00	METAL CHIP 100 5%	1/10W
R117	1-216-037-00	METAL CHIP 330 5%	1/10W
R118	1-216-037-00	METAL CHIP 330 5%	1/10W
R120	1-216-037-00	METAL CHIP 330 5%	1/10W
R121	1-216-037-00	METAL CHIP 330 5%	1/10W
R122	1-216-037-00	METAL CHIP 330 5%	1/10W
R123	1-216-037-00	METAL CHIP 330 5%	1/10W
R124	1-216-037-00	METAL CHIP 330 5%	1/10W
R125	1-216-073-00	METAL CHIP 10K 5%	1/10W
R126	1-216-073-00	METAL CHIP 10K 5%	1/10W
R128	1-216-085-00	METAL CHIP 33K 5%	1/10W
R129	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R130	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R131	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R132	1-216-089-00	METAL CHIP 47K 5%	1/10W
R133	1-216-113-00	METAL CHIP 470K 5%	1/10W
R134	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R135	1-216-085-00	METAL CHIP 33K 5%	1/10W
R136	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R137	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R138	1-216-037-00	METAL CHIP 330 5%	1/10W
R139	1-216-089-00	METAL CHIP 47K 5%	1/10W
R140	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R141	1-216-073-00	METAL CHIP 10K 5%	1/10W
R142	1-216-105-00	METAL CHIP 220K 5%	1/10W
R143	1-216-105-00	METAL CHIP 220K 5%	1/10W
R144	1-216-073-00	METAL CHIP 10K 5%	1/10W
R145	1-216-073-00	METAL CHIP 10K 5%	1/10W
< VARIABLE RESISTOR >			
RV101	1-230-122-00	RES. VAR. CARBON 100K (SLOW ADJ)	
RV102	1-230-874-11	RES. ADJ. METAL 100K	
RV103	1-228-988-00	RES. VAR. CARBON 10K/10K (HEADPHONE LEVEL)	
< SWITCH >			
S102	1-571-787-11	SWITCH, TACTILE (TC REC)	
S103	1-571-787-11	SWITCH, TACTILE (STOP ■)	
S104	1-571-787-11	SWITCH, TACTILE (FF ►►)	
S105	1-571-787-11	SWITCH, TACTILE (EJECT ▲)	
S106	1-571-787-11	SWITCH, TACTILE (PB ►)	

Ref. No.	Part No.	Description	Remark
S107	1-571-787-11	SWITCH, TACTILE (PAUSE ■■)	
S108	1-571-787-11	SWITCH, TACTILE (REW ◀◀)	
S109	1-571-787-11	SWITCH, TACTILE (POWER)	

* A-7062-165-A FR-43 BOARD, COMPLETE			

(Ref. No 1,000 Series)			
* 3-739-102-01 LID (H), UPPER, FR SHIELD CASE			
< WIRE >			
A3	1-559-763-11	WIRE, FLAT TYPE 26P	
< CAPACITOR >			
C002	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C004	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C005	1-135-091-00	TANTALUM CHIP 1uF 20%	16V
C006	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C007	1-135-091-00	TANTALUM CHIP 1uF 20%	16V
C008	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C009	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C010	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C011	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V
C012	1-135-157-21	TANTALUM CHIP 10uF 20%	6.3V
C013	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C031	1-135-157-21	TANTALUM CHIP 10uF 20%	6.3V
C032	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C033	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C034	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C041	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C042	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C044	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C045	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C046	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
C047	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C048	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C051	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C052	1-135-211-11	TANTAL. CHIP 6.8uF 20%	6.3V
C053	1-135-148-21	TANTAL. CHIP 1.5uF 20%	10V
C054	1-163-037-11	CERAMIC CHIP 0.022uF 10%	25V
C055	1-163-037-11	CERAMIC CHIP 0.022uF 10%	25V
C056	1-163-037-11	CERAMIC CHIP 0.022uF 10%	25V
C057	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C058	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C059	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C060	1-163-035-00	CERAMIC CHIP 0.047uF	50V

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CN001	1-562-629-11	SOCKET, CONNECTOR 19P	
CN002	1-565-209-11	CONNECTOR, FPC (ZIF) 26P	
CN003	1-506-473-11	CONNECTOR 8P, MALE	
CN004	1-506-472-11	CONNECTOR 7P, MALE	
< DIODE >			
D001	8-719-400-18	DIODE MA152WK	
< IC >			
IC051	8-759-710-09	IC NJM2233AM	
IC052	8-759-300-71	IC MC14053BF-T1	
< COIL >			
L031	1-408-777-00	INDUCTOR CHIP 10uH	
L041	1-408-793-21	INDUCTOR CHIP 220uH	
L042	1-408-777-00	INDUCTOR CHIP 10uH	
L051	1-408-785-21	INDUCTOR CHIP 47uH	
< TRANSISTOR >			
Q001	8-729-202-38	TRANSISTOR 2SC3326N	
Q002	8-729-202-38	TRANSISTOR 2SC3326N	
Q003	8-729-202-38	TRANSISTOR 2SC3326N	
Q004	8-729-202-38	TRANSISTOR 2SC3326N	
Q005	8-729-901-05	TRANSISTOR DTA124EK	
Q006	8-729-901-05	TRANSISTOR DTA124EK	
Q007	8-729-901-01	TRANSISTOR DTC144EK	
Q008	8-729-901-01	TRANSISTOR DTC144EK	
Q009	8-729-320-17	TRANSISTOR 2SA1122CD	
Q031	8-729-201-27	TRANSISTOR 2SC2715	
Q032	8-729-102-07	TRANSISTOR 2SC2223	
Q041	8-729-216-22	TRANSISTOR 2SA1162	
Q042	8-729-119-76	TRANSISTOR 2SA1175	
Q043	8-729-320-17	TRANSISTOR 2SA1122CD	
< RESISTOR >			
R001	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R002	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R003	1-216-097-00	METAL CHIP 100K 5%	1/10W
R004	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R005	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R006	1-216-097-00	METAL CHIP 100K 5%	1/10W
R007	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R008	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R009	1-216-097-00	METAL CHIP 100K 5%	1/10W
R010	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R011	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R012	1-216-097-00	METAL CHIP 100K 5%	1/10W

FR-43**HE-3****HK-5**

Ref. No.	Part No.	Description	Remark		
R015	1-216-085-00	METAL CHIP	33K	5%	1/10W
R016	1-216-073-00	METAL CHIP	10K	5%	1/10W
R017	1-216-049-00	METAL CHIP	1K	5%	1/10W
R018	1-216-095-11	METAL CHIP	68K	0.5%	1/10W
R019	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R020	1-216-025-00	METAL CHIP	100	5%	1/10W
R021	1-216-025-00	METAL CHIP	100	5%	1/10W
R022	1-216-025-00	METAL CHIP	100	5%	1/10W
R023	1-216-025-00	METAL CHIP	100	5%	1/10W
R024	1-216-033-00	METAL CHIP	220	5%	1/10W
R025	1-216-033-00	METAL CHIP	220	5%	1/10W
R031	1-216-041-00	METAL CHIP	470	5%	1/10W
R032	1-216-047-00	METAL CHIP	820	5%	1/10W
R033	1-216-035-00	METAL CHIP	270	5%	1/10W
R034	1-216-039-00	METAL CHIP	390	5%	1/10W
R035	1-216-085-00	METAL CHIP	33K	5%	1/10W
R036	1-216-077-00	METAL CHIP	15K	5%	1/10W
R037	1-216-081-00	METAL CHIP	22K	5%	1/10W
R038	1-216-085-00	METAL CHIP	33K	5%	1/10W
R039	1-216-081-00	METAL CHIP	22K	5%	1/10W
R040	1-216-085-00	METAL CHIP	33K	5%	1/10W
R041	1-216-085-00	METAL CHIP	33K	5%	1/10W
R042	1-216-081-00	METAL CHIP	22K	5%	1/10W
R043	1-216-037-00	METAL CHIP	330	5%	1/10W
R044	1-216-041-00	METAL CHIP	470	5%	1/10W
R045	1-216-021-00	METAL CHIP	68	5%	1/10W
R046	1-216-013-00	METAL CHIP	33	5%	1/10W
R047	1-216-043-00	METAL CHIP	560	5%	1/10W
R048	1-216-081-00	METAL CHIP	22K	5%	1/10W
R049	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R051	1-216-035-00	METAL CHIP	270	5%	1/10W
R052	1-216-025-00	METAL CHIP	100	5%	1/10W

< VARIABLE RESISTOR >

RV1	1-230-871-11	RES. ADJ. METAL 22K
RV2	1-230-871-11	RES. ADJ. METAL 22K

* 1-635-328-11 HE-3 BOARD (Ref. No 19,000 Series)

< JACK >

J401	1-507-792-00	JACK (HEAD PHONES)
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Ref. No.	Part No.	Description	Remark		
* A-7062-164-A HK-5 BOARD, COMPLETE					

(Ref. No 4,000 Series)					
3-531-576-01 RIVET					
* 3-724-107-01 RETAINER, PC BOARD					
3-831-441-XX CUSHION (5)					
< CAPACITOR >					
C101	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C102	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C103	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C104	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C105	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C106	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C108	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C109	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C110	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C111	1-163-114-00	CERAMIC CHIP	75PF	5%	50V
C112	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C113	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C114	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C115	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C116	1-135-070-00	TANTALUM CHIP	0.1uF	10%	35V
C117	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C118	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V
C119	1-163-227-11	CERAMIC CHIP	10PF	5%	50V
C120	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C122	1-163-085-00	CERAMIC CHIP	2PF		50V
C123	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C124	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C126	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C127	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C128	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C129	1-163-227-11	CERAMIC CHIP	10PF	5%	50V
C130	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C131	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C132	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C133	1-163-089-00	CERAMIC CHIP	8PF		50V
C134	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C135	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V
C136	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C137	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C138	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C139	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C140	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C141	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C142	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C143	1-135-145-11	TANTALUM CHIP	0.47uF	10%	25V

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C144	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C322	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C145	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C323	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C146	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C324	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C147	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	C325	1-135-156-21	TANTALUM CHIP	6.8uF	10%	6.3V
C148	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C326	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C149	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	C327	1-135-156-21	TANTALUM CHIP	6.8uF	10%	6.3V
C181	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	C328	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C182	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	C329	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C183	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C330	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C184	1-163-109-00	CERAMIC CHIP	47PF	5%	50V	C331	1-135-211-11	TANTAL. CHIP	6.8uF	20%	6.3V
C201	1-135-166-21	TANTALUM CHIP	47uF	10%	10V	C332	1-135-155-21	TANTALUM CHIP	4.7uF	10%	10V
C202	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C334	1-135-155-21	TANTALUM CHIP	4.7uF	10%	10V
C203	1-163-109-00	CERAMIC CHIP	47PF	5%	50V	C335	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C204	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C337	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C206	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C338	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C207	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C339	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C208	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	C340	1-135-072-21	TANTALUM CHIP	0.22uF	10%	35V
C209	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	C341	1-135-161-21	TANTALUM CHIP	22uF	10%	6.3V
C210	1-163-106-00	CERAMIC CHIP	36PF	5%	50V	C342	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C211	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C343	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C212	1-135-211-11	TANTAL. CHIP	6.8uF	20%	6.3V	C344	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C213	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C345	1-163-134-00	CERAMIC CHIP	510PF	5%	50V
C214	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C347	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C215	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C348	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C216	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C349	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C217	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C350	1-135-161-21	TANTALUM CHIP	22uF	10%	6.3V
C218	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C402	1-124-968-11	ELECT	22uF	20%	6.3V
C219	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C403	1-163-106-00	CERAMIC CHIP	36PF	5%	50V
C220	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C404	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C221	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C405	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C222	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C406	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C223	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C407	1-135-149-21	TANTALUM CHIP	2.2uF	20%	10V
C224	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C408	1-163-227-11	CERAMIC CHIP	10PF	5%	50V
C302	1-135-166-21	TANTALUM CHIP	47uF	10%	10V	C409	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C303	1-163-095-00	CERAMIC CHIP	12PF	5%	50V	C410	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C304	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	C411	1-163-088-00	CERAMIC CHIP	5PF		50V
C305	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	C412	1-135-156-21	TANTALUM CHIP	6.8uF	10%	6.3V
C307	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C413	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C308	1-135-166-21	TANTALUM CHIP	47uF	10%	10V	C414	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C309	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C415	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C311	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	C416	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C313	1-135-166-21	TANTALUM CHIP	47uF	10%	10V	C417	1-162-722-11	CERAMIC	330PF	1%	50V
C314	1-163-241-11	CERAMIC CHIP	39PF	5%	50V	C418	1-162-724-11	CERAMIC	390PF	1%	50V
C316	1-163-241-11	CERAMIC CHIP	39PF	5%	50V	C419	1-164-491-11	CERAMIC CHIP	300PF	1%	50V
C317	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	C420	1-135-156-21	TANTALUM CHIP	6.8uF	10%	6.3V
C318	1-164-491-11	CERAMIC CHIP	300PF	1%	50V	C421	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C319	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C422	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C320	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	C423	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C321	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C424	1-135-155-21	TANTALUM CHIP	4.7uF	10%	10V

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C427	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V	C615	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C428	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V	C616	1-163-108-00	CERAMIC CHIP 43PF	5% 50V
C429	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V	C617	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C430	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	C618	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C501	1-135-166-21	TANTALUM CHIP 47uF	10% 10V	C619	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C502	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C620	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C503	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C621	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V
C504	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C622	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C505	1-164-232-11	CERAMIC CHIP 0.01uF	50V	C623	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C506	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	C624	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C507	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C625	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C508	1-163-245-11	CERAMIC CHIP 56PF	5% 50V	C627	1-163-075-00	CERAMIC CHIP 0.047uF	50V
C509	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V	C628	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C510	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V	C629	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C511	1-164-232-11	CERAMIC CHIP 0.01uF	50V	C630	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C512	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V	C631	1-135-072-21	TANTALUM CHIP 0.22uF	10% 35V
C513	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C632	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C514	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C633	1-163-833-00	CERAMIC CHIP 0.068uF	25V
C515	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C634	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C516	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V	C635	1-164-182-11	CERAMIC CHIP 0.0033uF	10% 50V
C517	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	C636	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C519	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V	C637	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C520	1-163-245-11	CERAMIC CHIP 56PF	5% 50V	C638	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C521	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	C639	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C522	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C640	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C523	1-164-232-11	CERAMIC CHIP 0.01uF	50V	C641	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C524	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C642	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C525	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C644	1-163-115-00	CERAMIC CHIP 82PF	5% 50V
C526	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V	C645	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C527	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V	C646	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
C528	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C647	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C529	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C648	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C531	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V	C649	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C532	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V	C650	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C601	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V	C651	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C602	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C652	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C603	1-163-263-11	CERAMIC CHIP 330PF	5% 50V	C653	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C604	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C654	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C605	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C655	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C606	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C657	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C607	1-135-070-00	TANTALUM CHIP 0.1uF	10% 35V	C658	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C608	1-163-263-11	CERAMIC CHIP 330PF	5% 50V	C659	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C609	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V	C660	1-163-011-11	CERAMIC CHIP 0.0015uF	10% 50V
C610	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C661	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C611	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C662	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C612	1-163-035-00	CERAMIC CHIP 0.047uF	50V	C663	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C613	1-135-073-00	TANTALUM CHIP 0.33uF	10% 35V	C664	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C614	1-163-098-00	CERAMIC CHIP 16PF	5% 50V	C666	1-163-011-11	CERAMIC CHIP 0.0015uF	10% 50V
				C667	1-164-232-11	CERAMIC CHIP 0.01uF	50V

Ref. No.	Part No.	Description		Remark
C668	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C669	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C670	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C671	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C675	1-163-088-00	CERAMIC CHIP	5PF	50V
C701	1-163-097-00	CERAMIC CHIP	15PF	5% 50V
C702	1-163-136-00	CERAMIC CHIP	620PF	5% 50V
C704	1-163-120-00	CERAMIC CHIP	130PF	5% 50V
C705	1-163-122-00	CERAMIC CHIP	160PF	5% 50V
C706	1-163-122-00	CERAMIC CHIP	160PF	5% 50V
C717	1-163-038-00	CERAMIC CHIP	0.1uF	25V
C718	1-135-161-21	TANTALUM CHIP	22uF	10% 6.3V
C720	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C721	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C722	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C723	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C724	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C725	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C726	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C727	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C728	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C729	1-163-251-11	CERAMIC CHIP	100PF	5% 50V
C730	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C731	1-163-241-11	CERAMIC CHIP	39PF	5% 50V
C732	1-163-099-00	CERAMIC CHIP	18PF	5% 50V
C733	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C799	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C801	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C802	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C803	1-135-161-21	TANTALUM CHIP	22uF	10% 6.3V
C804	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C805	1-163-118-00	CERAMIC CHIP	110PF	5% 50V
C806	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C807	1-163-088-00	CERAMIC CHIP	5PF	50V
C808	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C809	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C810	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C811	1-163-141-00	CERAMIC CHIP	0.001uF	5% 50V
C812	1-135-079-21	TANTALUM CHIP	3.3uF	10% 35V
C815	1-135-153-21	TANTALUM CHIP	2.2uF	10% 20V
C816	1-163-019-00	CERAMIC CHIP	0.0068uF	10% 50V
C818	1-163-121-00	CERAMIC CHIP	150PF	5% 50V
C819	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C825	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C901	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C902	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C903	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C904	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C905	1-135-156-21	TANTALUM CHIP	6.8uF	10% 6.3V

Ref. No.	Part No.	Description		Remark
C906	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C907	1-135-166-21	TANTALUM CHIP	47uF	10% 10V
C908	1-163-035-00	CERAMIC CHIP	0.047uF	50V
< CONNECTOR >				
CN101	1-566-943-11	CONNECTOR, BOARD TO BOARD	18P	
CN102	1-566-943-11	CONNECTOR, BOARD TO BOARD	18P	
CN911	1-506-470-11	CONNECTOR	5P, MALE	
CN912	1-506-472-11	CONNECTOR	7P, MALE	
CN914	1-506-473-11	CONNECTOR	8P, MALE	
< TRIMMER >				
CV601	1-141-311-11	CAP. TRIMMER	20PF	
< DIODE >				
D101	8-719-400-18	DIODE	MA152WK	
D102	8-719-400-18	DIODE	MA152WK	
D105	8-719-800-76	DIODE	1SS226	
D106	8-719-400-18	DIODE	MA152WK	
D107	8-719-400-18	DIODE	MA152WK	
D108	8-719-400-18	DIODE	MA152WK	
D109	8-719-400-18	DIODE	MA152WK	
D301	8-719-400-18	DIODE	MA152WK	
D302	8-719-400-18	DIODE	MA152WK	
D401	8-719-400-18	DIODE	MA152WK	
D402	8-719-400-18	DIODE	MA152WK	
D403	8-719-400-18	DIODE	MA152WK	
D404	8-719-400-18	DIODE	MA152WK	
D405	8-719-400-18	DIODE	MA152WK	
D501	8-719-400-18	DIODE	MA152WK	
D601	8-719-800-76	DIODE	1SS226	
D602	8-719-400-18	DIODE	MA152WK	
D603	8-719-400-18	DIODE	MA152WK	
D604	8-719-400-18	DIODE	MA152WK	
D605	8-719-400-18	DIODE	MA152WK	
D801	8-719-400-18	DIODE	MA152WK	
D802	8-719-400-18	DIODE	MA152WK	
D804	8-719-400-18	DIODE	MA152WK	
D821	8-719-400-18	DIODE	MA152WK	
D822	8-719-800-76	DIODE	1SS226	
D823	8-719-800-76	DIODE	1SS226	
D901	8-719-400-18	DIODE	MA152WK	
< DELAY LINE >				
DL501	1-415-517-21	DELAY LINE, DUAL	1H-2H	
DL700	1-415-154-00	DELAY LINE	35nS	

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Ref. No.	Part No.	Description	Remark
< FILTER >			
FL301	1-236-370-11	LPF, DEMOD (Y)	
FL401	1-415-761-11	DELAY LINE, LC	
FL402	1-415-760-11	DELAY LINE, LC	
FL801	1-235-632-11	BPF	
FL802	1-235-633-11	BPF	
< IC >			
IC101	8-759-233-94	IC TA8607F	
IC102	8-759-925-60	IC BA401	
IC301	8-752-002-XX	IC CX20030	
IC401	8-752-031-01	IC CXA1047M	
IC501	8-752-003-12	IC CX20031	
IC601	8-752-202-10	IC CX22021	
IC602	8-752-003-22	IC CX20032	
IC603	8-752-305-47	IC CX23054	
IC604	8-759-009-51	IC MC14538BF	
IC702	8-759-012-00	IC MC10H116M	
IC703	8-752-006-12	IC CX20061	
IC801	8-759-202-67	IC CX20117	
IC901	8-759-925-74	IC SN74HC04ANS	
IC902	8-759-925-74	IC SN74HC04ANS	
< COIL >			
L101	1-408-974-21	INDUCTOR 22uH	
L102	1-410-167-41	INDUCTOR CHIP 820uH	
L103	1-408-792-00	INDUCTOR CHIP 180uH	
L104	1-408-777-00	INDUCTOR CHIP 10uH	
L105	1-408-770-11	INDUCTOR CHIP 2.7uH	
L106	1-408-775-21	INDUCTOR CHIP 6.8uH	
L107	1-408-775-21	INDUCTOR CHIP 6.8uH	
L108	1-408-780-21	INDUCTOR CHIP 18uH	
L109	1-408-797-11	INDUCTOR CHIP 470uH	
L111	1-408-797-11	INDUCTOR CHIP 470uH	
L112	1-408-797-11	INDUCTOR CHIP 470uH	
L113	1-408-777-00	INDUCTOR CHIP 10uH	
L114	1-408-779-31	INDUCTOR CHIP 15uH	
L115	1-408-780-21	INDUCTOR CHIP 18uH	
L201	1-408-982-11	INDUCTOR 100uH	
L204	1-408-782-11	INDUCTOR CHIP 27uH	
L205	1-408-776-00	INDUCTOR CHIP 8.2uH	
L301	1-408-790-00	INDUCTOR CHIP 120uH	
L302	1-408-789-21	INDUCTOR CHIP 100uH	
L303	1-408-777-00	INDUCTOR CHIP 10uH	
L305	1-408-779-31	INDUCTOR CHIP 15uH	
L306	1-408-782-11	INDUCTOR CHIP 27uH	
L307	1-408-779-31	INDUCTOR CHIP 15uH	
L308	1-408-783-00	INDUCTOR CHIP 33uH	
L309	1-408-970-21	INDUCTOR 10uH	

Ref. No.	Part No.	Description	Remark
L310	1-408-982-11	INDUCTOR 100uH	
L312	1-408-982-11	INDUCTOR 100uH	
L401	1-408-782-11	INDUCTOR CHIP 27uH	
L402	1-408-970-21	INDUCTOR 10uH	
L501	1-408-984-21	INDUCTOR 150uH	
L502	1-408-781-00	INDUCTOR CHIP 22uH	
L503	1-408-765-21	INDUCTOR CHIP 1uH	
L504	1-408-765-21	INDUCTOR CHIP 1uH	
L505	1-408-776-00	INDUCTOR CHIP 8.2uH	
L506	1-408-982-11	INDUCTOR 100uH	
L510	1-408-777-00	INDUCTOR CHIP 10uH	
L601	1-408-982-11	INDUCTOR 100uH	
L602	1-408-792-00	INDUCTOR CHIP 180uH	
L603	1-408-781-00	INDUCTOR CHIP 22uH	
L604	1-408-789-21	INDUCTOR CHIP 100uH	
L605	1-408-790-00	INDUCTOR CHIP 120uH	
L606	1-408-793-21	INDUCTOR CHIP 220uH	
L701	1-408-780-21	INDUCTOR CHIP 18uH	
L702	1-408-795-21	INDUCTOR CHIP 330uH	
L705	1-408-978-21	INDUCTOR 47uH	
L710	1-410-476-11	INDUCTOR 33uH	
L801	1-408-781-00	INDUCTOR CHIP 22uH	
L802	1-408-982-11	INDUCTOR 100uH	
L803	1-408-795-21	INDUCTOR CHIP 330uH	
< VARIABLE COIL >			
LV501	1-404-594-11	COIL, VARIABLE	
< TRANSISTOR >			
Q101	8-729-200-86	TRANSISTOR 2SC27140	
Q102	8-729-901-04	TRANSISTOR DTA114EK	
Q103	8-729-200-86	TRANSISTOR 2SC27140	
Q104	8-729-901-01	TRANSISTOR DTC144EK	
Q105	8-729-904-07	TRANSISTOR FMG2	
Q107	8-729-201-27	TRANSISTOR 2SC2715	
Q110	8-729-901-01	TRANSISTOR DTC144EK	
Q111	8-729-200-86	TRANSISTOR 2SC27140	
Q112	8-729-901-01	TRANSISTOR DTC144EK	
Q113	8-729-200-86	TRANSISTOR 2SC27140	
Q116	8-729-201-27	TRANSISTOR 2SC2715	
Q117	8-729-200-86	TRANSISTOR 2SC27140	
Q118	8-729-200-86	TRANSISTOR 2SC27140	
Q119	8-729-200-86	TRANSISTOR 2SC27140	
Q120	8-729-200-86	TRANSISTOR 2SC27140	
Q121	8-729-201-27	TRANSISTOR 2SC2715	
Q122	8-729-901-01	TRANSISTOR DTC144EK	
Q123	8-729-901-01	TRANSISTOR DTA144EK	
Q124	8-729-901-06	TRANSISTOR DTA144EK	
Q125	8-729-901-01	TRANSISTOR DTC144EK	

Ref. No.	Part No.	Description	Remark
Q126	8-729-201-27	TRANSISTOR	2SC2715
Q127	8-729-201-27	TRANSISTOR	2SC2715
Q128	8-729-202-38	TRANSISTOR	2SC3326N
Q129	8-729-201-27	TRANSISTOR	2SC2715
Q130	8-729-201-27	TRANSISTOR	2SC2715
Q131	8-729-216-22	TRANSISTOR	2SA1162
Q132	8-729-201-27	TRANSISTOR	2SC2715
Q181	8-729-907-46	TRANSISTOR	1MZ1
Q182	8-729-903-10	TRANSISTOR	FMM1
Q183	8-729-200-86	TRANSISTOR	2SC27140
Q184	8-729-216-22	TRANSISTOR	2SA1162
Q209	8-729-200-86	TRANSISTOR	2SC27140
Q210	8-729-200-86	TRANSISTOR	2SC27140
Q211	8-729-200-86	TRANSISTOR	2SC27140
Q212	8-729-901-01	TRANSISTOR	DTC144EK
Q213	8-729-901-06	TRANSISTOR	DTA144EK
Q214	8-729-200-86	TRANSISTOR	2SC27140
Q215	8-729-902-96	TRANSISTOR	FMS1
Q217	8-729-200-86	TRANSISTOR	2SC27140
Q218	8-729-200-86	TRANSISTOR	2SC27140
Q301	8-729-201-27	TRANSISTOR	2SC2715
Q302	8-729-201-27	TRANSISTOR	2SC2715
Q305	8-729-201-27	TRANSISTOR	2SC2715
Q306	8-729-201-27	TRANSISTOR	2SC2715
Q307	8-729-201-27	TRANSISTOR	2SC2715
Q309	8-729-201-27	TRANSISTOR	2SC2715
Q310	8-729-201-27	TRANSISTOR	2SC2715
Q311	8-729-201-27	TRANSISTOR	2SC2715
Q312	8-729-901-06	TRANSISTOR	DTA144EK
Q313	8-729-216-22	TRANSISTOR	2SA1162
Q314	8-729-201-27	TRANSISTOR	2SC2715
Q315	8-729-201-27	TRANSISTOR	2SC2715
Q316	8-729-901-01	TRANSISTOR	DTC144EK
Q317	8-729-201-27	TRANSISTOR	2SC2715
Q318	8-729-901-06	TRANSISTOR	DTA144EK
Q319	8-729-201-27	TRANSISTOR	2SC2715
Q320	8-729-901-01	TRANSISTOR	DTC144EK
Q321	8-729-901-01	TRANSISTOR	DTC144EK
Q322	8-729-216-22	TRANSISTOR	2SA1162
Q323	8-729-901-01	TRANSISTOR	DTC144EK
Q324	8-729-901-01	TRANSISTOR	DTC144EK
Q325	8-729-901-06	TRANSISTOR	DTA144EK
Q326	8-729-901-06	TRANSISTOR	DTA144EK
Q327	8-729-201-27	TRANSISTOR	2SC2715
Q328	8-729-201-27	TRANSISTOR	2SC2715
Q330	8-729-901-06	TRANSISTOR	DTA144EK
Q389	8-729-201-27	TRANSISTOR	2SC2715
Q401	8-729-201-27	TRANSISTOR	2SC2715
Q402	8-729-201-27	TRANSISTOR	2SC2715

Ref. No.	Part No.	Description	Remark
Q403	8-729-901-01	TRANSISTOR	DTC144EK
Q404	8-729-901-01	TRANSISTOR	DTC144EK
Q405	8-729-901-06	TRANSISTOR	DTA144EK
Q406	8-729-201-27	TRANSISTOR	2SC2715
Q407	8-729-216-22	TRANSISTOR	2SA1162
Q408	8-729-216-22	TRANSISTOR	2SA1162
Q409	8-729-201-27	TRANSISTOR	2SC2715
Q410	8-729-216-22	TRANSISTOR	2SA1162
Q411	8-729-901-01	TRANSISTOR	DTC144EK
Q412	8-729-901-01	TRANSISTOR	DTC144EK
Q413	8-729-901-01	TRANSISTOR	DTC144EK
Q414	8-729-201-27	TRANSISTOR	2SC2715
Q415	8-729-216-22	TRANSISTOR	2SA1162
Q416	8-729-216-22	TRANSISTOR	2SA1162
Q417	8-729-901-01	TRANSISTOR	DTC144EK
Q418	8-729-201-27	TRANSISTOR	2SC2715
Q419	8-729-201-27	TRANSISTOR	2SC2715
Q420	8-729-202-38	TRANSISTOR	2SC3326N
Q421	8-729-202-38	TRANSISTOR	2SC3326N
Q422	8-729-201-27	TRANSISTOR	2SC2715
Q423	8-729-201-27	TRANSISTOR	2SC2715
Q424	8-729-901-01	TRANSISTOR	DTC144EK
Q425	8-729-201-27	TRANSISTOR	2SC2715
Q426	8-729-201-27	TRANSISTOR	2SC2715
Q427	8-729-216-22	TRANSISTOR	2SA1162
Q428	8-729-216-22	TRANSISTOR	2SA1162
Q429	8-729-901-01	TRANSISTOR	DTC144EK
Q430	8-729-901-01	TRANSISTOR	DTC144EK
Q431	8-729-216-22	TRANSISTOR	2SA1162
Q501	8-729-901-06	TRANSISTOR	DTA144EK
Q502	8-729-901-01	TRANSISTOR	DTC144EK
Q503	8-729-901-00	TRANSISTOR	DTC124EK
Q504	8-729-201-27	TRANSISTOR	2SC2715
Q601	8-729-901-01	TRANSISTOR	DTC144EK
Q603	8-729-901-01	TRANSISTOR	DTC144EK
Q604	8-729-201-27	TRANSISTOR	2SC2715
Q605	8-729-201-27	TRANSISTOR	2SC2715
Q606	8-729-901-01	TRANSISTOR	DTC144EK
Q607	8-729-201-27	TRANSISTOR	2SC2715
Q608	8-729-216-22	TRANSISTOR	2SA1162
Q609	8-729-901-00	TRANSISTOR	DTC124EK
Q610	8-729-904-04	TRANSISTOR	FMS2
Q611	8-729-201-27	TRANSISTOR	2SC2715
Q612	8-729-201-27	TRANSISTOR	2SC2715
Q613	8-729-901-01	TRANSISTOR	DTC144EK
Q701	8-729-201-27	TRANSISTOR	2SC2715
Q702	8-729-202-38	TRANSISTOR	2SC3326N
Q703	8-729-202-38	TRANSISTOR	2SC3326N
Q704	8-729-216-22	TRANSISTOR	2SA1162

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q706	8-729-201-27	TRANSISTOR	2SC2715	R139	1-216-295-00	METAL CHIP	0 5% 1/10W
Q707	8-729-201-27	TRANSISTOR	2SC2715	R140	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
Q710	8-729-901-01	TRANSISTOR	DTC144EK	R141	1-216-075-00	METAL CHIP	12K 5% 1/10W
Q711	8-729-901-01	TRANSISTOR	DTC144EK	R142	1-216-748-11	METAL CHIP	39K 5% 1/10W
Q712	8-729-901-01	TRANSISTOR	DTC144EK	R143	1-216-039-00	METAL CHIP	390 5% 1/10W
Q720	8-729-200-86	TRANSISTOR	2SC27140	R144	1-216-045-00	METAL CHIP	680 5% 1/10W
Q721	8-729-200-86	TRANSISTOR	2SC27140	R145	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q722	8-729-200-86	TRANSISTOR	2SC27140	R146	1-216-645-11	METAL CHIP	560 0.5% 1/10W
Q723	8-729-201-27	TRANSISTOR	2SC2715	R147	1-216-081-00	METAL CHIP	22K 5% 1/10W
Q724	8-729-901-01	TRANSISTOR	DTC144EK	R148	1-216-081-00	METAL CHIP	22K 5% 1/10W
Q801	8-729-920-08	TRANSISTOR	DTC124TK-7146	R149	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q802	8-729-201-27	TRANSISTOR	2SC2715	R150	1-216-047-00	METAL CHIP	820 5% 1/10W
Q803	8-729-201-27	TRANSISTOR	2SC2715	R151	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q804	8-729-201-27	TRANSISTOR	2SC2715	R153	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q805	8-729-216-22	TRANSISTOR	2SA1162	R154	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q811	8-729-901-01	TRANSISTOR	DTC144EK	R155	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q901	8-729-901-01	TRANSISTOR	DTC144EK	R157	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
Q902	8-729-901-01	TRANSISTOR	DTC144EK	R158	1-216-083-00	METAL CHIP	27K 5% 1/10W
Q903	8-729-104-25	TRANSISTOR	2SB804-AV	R159	1-216-025-00	METAL CHIP	100 5% 1/10W
Q904	8-729-201-27	TRANSISTOR	2SC2715	R160	1-216-643-11	METAL CHIP	470 0.5% 1/10W
< RESISTOR >				R161	1-216-295-00	METAL CHIP	0 5% 1/10W
R101	1-216-049-00	METAL CHIP	1K 5% 1/10W	R162	1-216-045-00	METAL CHIP	680 5% 1/10W
R102	1-216-029-00	METAL CHIP	150 5% 1/10W	R163	1-216-073-00	METAL CHIP	10K 5% 1/10W
R103	1-216-073-00	METAL CHIP	10K 5% 1/10W	R164	1-216-073-00	METAL CHIP	10K 5% 1/10W
R104	1-216-073-00	METAL CHIP	10K 5% 1/10W	R165	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
R105	1-216-037-00	METAL CHIP	330 5% 1/10W	R166	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R106	1-216-041-00	METAL CHIP	470 5% 1/10W	R167	1-216-041-00	METAL CHIP	470 5% 1/10W
R107	1-216-035-00	METAL CHIP	270 5% 1/10W	R168	1-216-073-00	METAL CHIP	10K 5% 1/10W
R108	1-216-043-00	METAL CHIP	560 5% 1/10W	R169	1-216-049-00	METAL CHIP	1K 5% 1/10W
R109	1-216-081-00	METAL CHIP	22K 5% 1/10W	R170	1-216-097-00	METAL CHIP	100K 5% 1/10W
R110	1-216-081-00	METAL CHIP	22K 5% 1/10W	R171	1-216-748-11	METAL CHIP	39K 5% 1/10W
R111	1-216-045-00	METAL CHIP	680 5% 1/10W	R173	1-216-097-00	METAL CHIP	100K 5% 1/10W
R112	1-216-041-00	METAL CHIP	470 5% 1/10W	R174	1-216-748-11	METAL CHIP	39K 5% 1/10W
R113	1-216-041-00	METAL CHIP	470 5% 1/10W	R175	1-216-097-00	METAL CHIP	100K 5% 1/10W
R115	1-216-639-11	METAL CHIP	330 0.5% 1/10W	R176	1-216-073-00	METAL CHIP	10K 5% 1/10W
R116	1-216-639-11	METAL CHIP	330 0.5% 1/10W	R177	1-216-081-00	METAL CHIP	22K 5% 1/10W
R117	1-249-401-11	CARBON	47 5% 1/4W	R178	1-216-083-00	METAL CHIP	27K 5% 1/10W
R119	1-216-073-00	METAL CHIP	10K 5% 1/10W	R179	1-216-081-00	METAL CHIP	22K 5% 1/10W
R120	1-216-073-00	METAL CHIP	10K 5% 1/10W	R180	1-216-077-00	METAL CHIP	15K 5% 1/10W
R122	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R181	1-216-085-00	METAL CHIP	33K 5% 1/10W
R124	1-216-049-00	METAL CHIP	1K 5% 1/10W	R182	1-216-073-00	METAL CHIP	10K 5% 1/10W
R125	1-216-073-00	METAL CHIP	10K 5% 1/10W	R183	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R126	1-216-073-00	METAL CHIP	10K 5% 1/10W	R184	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R127	1-216-049-00	METAL CHIP	1K 5% 1/10W	R185	1-216-073-00	METAL CHIP	10K 5% 1/10W
R128	1-216-041-00	METAL CHIP	470 5% 1/10W	R186	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R130	1-216-033-00	METAL CHIP	220 5% 1/10W	R187	1-216-081-00	METAL CHIP	22K 5% 1/10W
R137	1-216-033-00	METAL CHIP	220 5% 1/10W	R189	1-216-077-00	METAL CHIP	15K 5% 1/10W
				R190	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
				R191	1-216-071-00	METAL CHIP	8.2K 5% 1/10W

Ref. No.	Part No.	Description	Remark		
R192	1-216-037-00	METAL CHIP	330	5%	1/10W
R193	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R195	1-216-748-11	METAL CHIP	39K	5%	1/10W
R196	1-216-089-00	METAL CHIP	47K	5%	1/10W
R197	1-216-041-00	METAL CHIP	470	5%	1/10W
R198	1-216-049-00	METAL CHIP	1K	5%	1/10W
R199	1-216-045-00	METAL CHIP	680	5%	1/10W
R200	1-216-089-00	METAL CHIP	47K	5%	1/10W
R201	1-216-641-11	METAL CHIP	390	0.5%	1/10W
R202	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R213	1-216-035-00	METAL CHIP	270	5%	1/10W
R214	1-216-041-00	METAL CHIP	470	5%	1/10W
R215	1-216-041-00	METAL CHIP	470	5%	1/10W
R216	1-216-081-00	METAL CHIP	22K	5%	1/10W
R217	1-216-081-00	METAL CHIP	22K	5%	1/10W
R218	1-216-041-00	METAL CHIP	470	5%	1/10W
R219	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R220	1-216-041-00	METAL CHIP	470	5%	1/10W
R221	1-216-041-00	METAL CHIP	470	5%	1/10W
R222	1-216-295-00	METAL CHIP	0	5%	1/10W
R223	1-216-041-00	METAL CHIP	470	5%	1/10W
R224	1-216-041-00	METAL CHIP	470	5%	1/10W
R225	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R226	1-216-073-00	METAL CHIP	10K	5%	1/10W
R227	1-216-077-00	METAL CHIP	15K	5%	1/10W
R228	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R229	1-216-049-00	METAL CHIP	1K	5%	1/10W
R230	1-216-047-00	METAL CHIP	820	5%	1/10W
R231	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R232	1-216-049-00	METAL CHIP	1K	5%	1/10W
R233	1-216-064-00	METAL CHIP	4.3K	5%	1/10W
R234	1-216-041-00	METAL CHIP	470	5%	1/10W
R235	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R236	1-216-089-00	METAL CHIP	47K	5%	1/10W
R237	1-216-089-00	METAL CHIP	47K	5%	1/10W
R238	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R239	1-216-089-00	METAL CHIP	47K	5%	1/10W
R240	1-216-089-00	METAL CHIP	47K	5%	1/10W
R241	1-216-041-00	METAL CHIP	470	5%	1/10W
R242	1-216-295-00	METAL CHIP	0	5%	1/10W
R243	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R244	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R245	1-216-043-00	METAL CHIP	560	5%	1/10W
R247	1-216-041-00	METAL CHIP	470	5%	1/10W
R252	1-216-047-00	METAL CHIP	820	5%	1/10W
R301	1-216-049-00	METAL CHIP	1K	5%	1/10W
R302	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R303	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R304	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W

Ref. No.	Part No.	Description	Remark		
R305	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R306	1-216-049-00	METAL CHIP	1K	5%	1/10W
R307	1-216-049-00	METAL CHIP	1K	5%	1/10W
R308	1-216-295-00	METAL CHIP	0	5%	1/10W
R309	1-216-295-00	METAL CHIP	0	5%	1/10W
R310	1-216-033-00	METAL CHIP	220	5%	1/10W
R311	1-216-033-00	METAL CHIP	220	5%	1/10W
R313	1-216-633-11	METAL CHIP	180	0.5%	1/10W
R314	1-216-033-00	METAL CHIP	220	5%	1/10W
R315	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R316	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R317	1-216-670-11	METAL CHIP	6.2K	0.5%	1/10W
R318	1-216-033-00	METAL CHIP	220	5%	1/10W
R320	1-216-033-00	METAL CHIP	220	5%	1/10W
R321	1-216-032-00	METAL CHIP	200	5%	1/10W
R323	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R324	1-216-075-00	METAL CHIP	12K	5%	1/10W
R325	1-216-075-00	METAL CHIP	12K	5%	1/10W
R326	1-216-033-00	METAL CHIP	220	5%	1/10W
R327	1-216-033-00	METAL CHIP	220	5%	1/10W
R329	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R330	1-216-045-00	METAL CHIP	680	5%	1/10W
R331	1-216-039-00	METAL CHIP	390	5%	1/10W
R332	1-216-645-11	METAL CHIP	560	0.5%	1/10W
R333	1-216-623-11	METAL CHIP	68	0.5%	1/10W
R334	1-216-073-00	METAL CHIP	10K	5%	1/10W
R335	1-216-073-00	METAL CHIP	10K	5%	1/10W
R336	1-216-049-00	METAL CHIP	1K	5%	1/10W
R337	1-216-075-00	METAL CHIP	12K	5%	1/10W
R338	1-216-075-00	METAL CHIP	12K	5%	1/10W
R339	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R340	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R341	1-216-641-11	METAL CHIP	390	0.5%	1/10W
R342	1-216-049-00	METAL CHIP	1K	5%	1/10W
R343	1-216-049-00	METAL CHIP	1K	5%	1/10W
R344	1-216-099-00	METAL CHIP	120K	5%	1/10W
R345	1-216-113-00	METAL CHIP	470K	5%	1/10W
R346	1-216-075-00	METAL CHIP	12K	5%	1/10W
R347	1-216-081-00	METAL CHIP	22K	5%	1/10W
R348	1-216-085-00	METAL CHIP	33K	5%	1/10W
R349	1-216-077-00	METAL CHIP	15K	5%	1/10W
R350	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R351	1-216-077-00	METAL CHIP	15K	5%	1/10W
R353	1-216-097-00	METAL CHIP	100K	5%	1/10W
R354	1-216-109-00	METAL CHIP	330K	5%	1/10W
R355	1-216-047-00	METAL CHIP	820	5%	1/10W
R356	1-216-081-00	METAL CHIP	22K	5%	1/10W
R357	1-216-081-00	METAL CHIP	22K	5%	1/10W
R358	1-216-089-00	METAL CHIP	47K	5%	1/10W

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Ref. No.	Part No.	Description			Remark
R359	1-216-049-00	METAL CHIP	1K	5%	1/10W
R360	1-216-083-00	METAL CHIP	27K	5%	1/10W
R361	1-216-091-00	METAL CHIP	56K	5%	1/10W
R362	1-216-093-00	METAL CHIP	68K	5%	1/10W
R363	1-216-073-00	METAL CHIP	10K	5%	1/10W
R364	1-216-097-00	METAL CHIP	100K	5%	1/10W
R365	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R366	1-216-089-00	METAL CHIP	47K	5%	1/10W
R367	1-216-091-00	METAL CHIP	56K	5%	1/10W
R368	1-216-081-00	METAL CHIP	22K	5%	1/10W
R369	1-216-081-00	METAL CHIP	22K	5%	1/10W
R370	1-216-081-00	METAL CHIP	22K	5%	1/10W
R371	1-216-295-00	METAL CHIP	0	5%	1/10W
R373	1-216-101-00	METAL CHIP	150K	5%	1/10W
R374	1-216-049-00	METAL CHIP	1K	5%	1/10W
R376	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R377	1-216-033-00	METAL CHIP	220	5%	1/10W
R378	1-216-031-00	METAL CHIP	180	5%	1/10W
R379	1-216-039-00	METAL CHIP	390	5%	1/10W
R380	1-216-029-00	METAL CHIP	150	5%	1/10W
R381	1-216-295-00	METAL CHIP	0	5%	1/10W
R382	1-216-295-00	METAL CHIP	0	5%	1/10W
R383	1-216-295-00	METAL CHIP	0	5%	1/10W
R384	1-216-025-00	METAL CHIP	100	5%	1/10W
R386	1-216-033-00	METAL CHIP	220	5%	1/10W
R387	1-216-295-00	METAL CHIP	0	5%	1/10W
R388	1-216-049-00	METAL CHIP	1K	5%	1/10W
R389	1-216-075-00	METAL CHIP	12K	5%	1/10W
R390	1-216-075-00	METAL CHIP	12K	5%	1/10W
R401	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R402	1-216-049-00	METAL CHIP	1K	5%	1/10W
R403	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R404	1-216-654-11	METAL CHIP	1.3K	0.5%	1/10W
R405	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R406	1-216-033-00	METAL CHIP	220	5%	1/10W
R407	1-216-033-00	METAL CHIP	220	5%	1/10W
R408	1-216-295-00	METAL CHIP	0	5%	1/10W
R409	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R411	1-216-037-00	METAL CHIP	330	5%	1/10W
R412	1-216-073-00	METAL CHIP	10K	5%	1/10W
R413	1-216-109-00	METAL CHIP	330K	5%	1/10W
R414	1-216-081-00	METAL CHIP	22K	5%	1/10W
R415	1-216-097-00	METAL CHIP	100K	5%	1/10W
R416	1-216-079-00	METAL CHIP	18K	5%	1/10W
R417	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R418	1-216-041-00	METAL CHIP	470	5%	1/10W
R419	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R420	1-216-059-00	METAL CHIP	2.7K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R421	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R422	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R423	1-216-049-00	METAL CHIP	1K	5%	1/10W
R424	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R425	1-216-049-00	METAL CHIP	1K	5%	1/10W
R426	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R427	1-216-045-00	METAL CHIP	680	5%	1/10W
R428	1-216-748-11	METAL CHIP	39K	5%	1/10W
R429	1-216-075-00	METAL CHIP	12K	5%	1/10W
R430	1-216-055-00	METAL CHIP	1.3K	5%	1/10W
R431	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R432	1-216-081-00	METAL CHIP	22K	5%	1/10W
R433	1-216-097-00	METAL CHIP	100K	5%	1/10W
R434	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R435	1-216-693-11	METAL CHIP	56K	0.5%	1/10W
R436	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R437	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R438	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R439	1-216-666-11	METAL CHIP	4.3K	0.5%	1/10W
R440	1-216-103-00	METAL CHIP	180K	5%	1/10W
R441	1-216-666-11	METAL CHIP	4.3K	0.5%	1/10W
R442	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R443	1-216-075-00	METAL CHIP	12K	5%	1/10W
R444	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R445	1-216-295-00	METAL CHIP	0	5%	1/10W
R446	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R447	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R448	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R449	1-216-077-00	METAL CHIP	15K	5%	1/10W
R450	1-216-081-00	METAL CHIP	22K	5%	1/10W
R451	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R452	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R453	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R454	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R455	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R456	1-216-083-00	METAL CHIP	27K	5%	1/10W
R457	1-216-081-00	METAL CHIP	22K	5%	1/10W
R458	1-216-047-00	METAL CHIP	820	5%	1/10W
R459	1-216-039-00	METAL CHIP	390	5%	1/10W
R460	1-216-033-00	METAL CHIP	220	5%	1/10W
R462	1-216-049-00	METAL CHIP	1K	5%	1/10W
R463	1-216-073-00	METAL CHIP	10K	5%	1/10W
R464	1-216-089-00	METAL CHIP	47K	5%	1/10W
R465	1-216-089-00	METAL CHIP	47K	5%	1/10W
R466	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R467	1-216-641-11	METAL CHIP	390	0.5%	1/10W
R468	1-216-089-00	METAL CHIP	47K	5%	1/10W
R469	1-216-089-00	METAL CHIP	47K	5%	1/10W
R470	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R471	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R472	1-216-041-00	METAL CHIP	470	5%	1/10W
R473	1-216-049-00	METAL CHIP	1K	5%	1/10W
R474	1-216-049-00	METAL CHIP	1K	5%	1/10W
R475	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R476	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R477	1-216-041-00	METAL CHIP	470	5%	1/10W
R478	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R479	1-216-049-00	METAL CHIP	1K	5%	1/10W
R480	1-216-085-00	METAL CHIP	33K	5%	1/10W
R481	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R482	1-216-073-00	METAL CHIP	10K	5%	1/10W
R483	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R484	1-216-075-00	METAL CHIP	12K	5%	1/10W
R485	1-216-295-00	METAL CHIP	0	5%	1/10W
R488	1-216-295-00	METAL CHIP	0	5%	1/10W
R501	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R502	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R503	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R504	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W
R505	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R506	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R507	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R508	1-216-095-00	METAL CHIP	33K	5%	1/10W
R509	1-216-077-00	METAL CHIP	15K	5%	1/10W
R510	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R511	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R512	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R513	1-216-645-11	METAL CHIP	560	0.5%	1/10W
R514	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R515	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R516	1-216-669-11	METAL CHIP	2.2K	0.5%	1/10W
R517	1-216-641-11	METAL CHIP	390	0.5%	1/10W
R519	1-216-295-00	METAL CHIP	0	5%	1/10W
R520	1-216-035-00	METAL CHIP	270	5%	1/10W
R521	1-216-073-00	METAL CHIP	10K	5%	1/10W
R522	1-216-748-11	METAL CHIP	39K	5%	1/10W
R523	1-216-121-00	METAL CHIP	1M	5%	1/10W
R524	1-216-113-00	METAL CHIP	470K	5%	1/10W
R525	1-216-075-00	METAL CHIP	12K	5%	1/10W
R526	1-216-081-00	METAL CHIP	22K	5%	1/10W
R527	1-216-075-00	METAL CHIP	12K	5%	1/10W
R528	1-216-083-00	METAL CHIP	27K	5%	1/10W
R529	1-216-081-00	METAL CHIP	22K	5%	1/10W
R530	1-216-629-11	METAL CHIP	120	0.5%	1/10W
R531	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R532	1-216-611-11	METAL CHIP	22	0.5%	1/10W
R533	1-216-083-00	METAL CHIP	27K	5%	1/10W
R534	1-216-049-00	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R537	1-216-641-11	METAL CHIP	390	0.5%	1/10W
R538	1-216-083-00	METAL CHIP	27K	5%	1/10W
R539	1-216-081-00	METAL CHIP	22K	5%	1/10W
R540	1-216-295-00	METAL CHIP	0	5%	1/10W
R541	1-216-629-11	METAL CHIP	120	0.5%	1/10W
R542	1-216-637-11	METAL CHIP	270	0.5%	1/10W
R543	1-216-748-11	METAL CHIP	39K	5%	1/10W
R544	1-216-748-11	METAL CHIP	39K	5%	1/10W
R545	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R546	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R601	1-216-073-00	METAL CHIP	10K	5%	1/10W
R602	1-216-077-00	METAL CHIP	15K	5%	1/10W
R603	1-216-639-11	METAL CHIP	330	0.5%	1/10W
R604	1-216-077-00	METAL CHIP	15K	5%	1/10W
R605	1-216-669-11	METAL CHIP	5.6K	0.5%	1/10W
R606	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R607	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R609	1-216-103-00	METAL CHIP	180K	5%	1/10W
R610	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R612	1-216-073-00	METAL CHIP	10K	5%	1/10W
R613	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R614	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R616	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R617	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R618	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R619	1-216-089-00	METAL CHIP	47K	5%	1/10W
R620	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R621	1-216-081-00	METAL CHIP	22K	5%	1/10W
R622	1-216-097-00	METAL CHIP	100K	5%	1/10W
R623	1-216-033-00	METAL CHIP	220	5%	1/10W
R624	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R625	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R626	1-216-295-00	METAL CHIP	0	5%	1/10W
R627	1-216-081-00	METAL CHIP	22K	5%	1/10W
R628	1-216-081-00	METAL CHIP	22K	5%	1/10W
R629	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R632	1-216-645-11	METAL CHIP	560	0.5%	1/10W
R633	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R634	1-216-085-00	METAL CHIP	33K	5%	1/10W
R635	1-216-085-00	METAL CHIP	33K	5%	1/10W
R636	1-216-049-00	METAL CHIP	1K	5%	1/10W
R637	1-216-081-00	METAL CHIP	22K	5%	1/10W
R638	1-216-085-00	METAL CHIP	33K	5%	1/10W
R639	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R640	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R641	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R642	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R643	1-216-295-00	METAL CHIP	0	5%	1/10W
R644	1-216-073-00	METAL CHIP	10K	5%	1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R645	1-216-073-00	METAL CHIP	10K	5%	1/10W	R745	1-216-049-00	METAL CHIP	1K	5%	1/10W
R646	1-216-097-00	METAL CHIP	100K	5%	1/10W	R746	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R647	1-216-085-00	METAL CHIP	33K	5%	1/10W	R748	1-216-025-00	METAL CHIP	100	5%	1/10W
R648	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R750	1-216-043-00	METAL CHIP	560	5%	1/10W
R649	1-216-079-00	METAL CHIP	18K	5%	1/10W	R751	1-216-037-00	METAL CHIP	330	5%	1/10W
R650	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R752	1-216-085-00	METAL CHIP	33K	5%	1/10W
R651	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R753	1-216-049-00	METAL CHIP	1K	5%	1/10W
R652	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R754	1-216-049-00	METAL CHIP	1K	5%	1/10W
R653	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R755	1-216-049-00	METAL CHIP	1K	5%	1/10W
R654	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R756	1-216-049-00	METAL CHIP	1K	5%	1/10W
R655	1-216-049-00	METAL CHIP	1K	5%	1/10W	R757	1-216-049-00	METAL CHIP	1K	5%	1/10W
R656	1-216-049-00	METAL CHIP	1K	5%	1/10W	R758	1-216-041-00	METAL CHIP	470	5%	1/10W
R657	1-216-121-00	METAL CHIP	1M	5%	1/10W	R759	1-216-295-00	METAL CHIP	0	5%	1/10W
R658	1-216-039-00	METAL CHIP	390	5%	1/10W	R760	1-216-041-00	METAL CHIP	470	5%	1/10W
R659	1-216-121-00	METAL CHIP	1M	5%	1/10W	R761	1-216-034-00	METAL CHIP	240	5%	1/10W
R660	1-216-115-00	METAL CHIP	560K	5%	1/10W	R762	1-216-049-00	METAL CHIP	1K	5%	1/10W
R661	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	R763	1-216-037-00	METAL CHIP	330	5%	1/10W
R662	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	R764	1-216-037-00	METAL CHIP	330	5%	1/10W
R663	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W	R765	1-216-041-00	METAL CHIP	470	5%	1/10W
R664	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W	R766	1-216-089-00	METAL CHIP	47K	5%	1/10W
R665	1-216-089-00	METAL CHIP	47K	5%	1/10W	R767	1-216-041-00	METAL CHIP	470	5%	1/10W
R666	1-216-091-00	METAL CHIP	56K	5%	1/10W	R768	1-216-041-00	METAL CHIP	470	5%	1/10W
R667	1-216-033-00	METAL CHIP	220	5%	1/10W	R770	1-216-081-00	METAL CHIP	22K	5%	1/10W
R668	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R771	1-216-081-00	METAL CHIP	22K	5%	1/10W
R669	1-216-093-00	METAL CHIP	68K	5%	1/10W	R772	1-216-041-00	METAL CHIP	470	5%	1/10W
R670	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	R773	1-216-041-00	METAL CHIP	470	5%	1/10W
R671	1-216-039-00	METAL CHIP	390	5%	1/10W	R774	1-216-650-11	METAL CHIP	2.4K	0.5%	1/10W
R672	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R776	1-216-049-00	METAL CHIP	1K	5%	1/10W
R673	1-216-073-00	METAL CHIP	10K	5%	1/10W	R801	1-216-049-00	METAL CHIP	1K	5%	1/10W
R674	1-216-073-00	METAL CHIP	10K	5%	1/10W	R802	1-216-041-00	METAL CHIP	470	5%	1/10W
R675	1-216-106-00	METAL CHIP	240K	5%	1/10W	R803	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R676	1-216-106-00	METAL CHIP	240K	5%	1/10W	R804	1-216-089-00	METAL CHIP	47K	5%	1/10W
R677	1-216-105-00	METAL CHIP	220K	5%	1/10W	R805	1-216-081-00	METAL CHIP	22K	5%	1/10W
R678	1-216-073-00	METAL CHIP	10K	5%	1/10W	R806	1-216-043-00	METAL CHIP	560	5%	1/10W
R699	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	R807	1-216-093-00	METAL CHIP	68K	5%	1/10W
R701	1-216-049-00	METAL CHIP	1K	5%	1/10W	R808	1-216-089-00	METAL CHIP	47K	5%	1/10W
R702	1-216-089-00	METAL CHIP	47K	5%	1/10W	R809	1-216-075-00	METAL CHIP	32K	5%	1/10W
R703	1-216-089-00	METAL CHIP	47K	5%	1/10W	R810	1-216-049-00	METAL CHIP	1K	5%	1/10W
R704	1-216-645-11	METAL CHIP	560	0.5%	1/10W	R811	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R705	1-216-635-11	METAL CHIP	220	0.5%	1/10W	R812	1-216-097-00	METAL CHIP	100K	5%	1/10W
R706	1-216-073-00	METAL CHIP	10K	5%	1/10W	R813	1-216-095-00	METAL CHIP	82K	5%	1/10W
R707	1-216-651-11	METAL CHIP	1K	0.5%	1/10W	R814	1-216-099-00	METAL CHIP	120K	5%	1/10W
R708	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	R815	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R709	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W	R816	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R710	1-216-643-11	METAL CHIP	470	0.5%	1/10W	R817	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R711	1-216-645-11	METAL CHIP	560	0.5%	1/10W	R818	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R728	1-216-073-00	METAL CHIP	10K	5%	1/10W	R819	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R729	1-216-049-00	METAL CHIP	1K	5%	1/10W	R820	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
						R821	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description	Remark
R822	1-216-045-00	METAL CHIP	680 5% 1/10W
R823	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R824	1-216-037-00	METAL CHIP	330 5% 1/10W
R825	1-216-049-00	METAL CHIP	1K 5% 1/10W
R826	1-216-081-00	METAL CHIP	22K 5% 1/10W
R827	1-216-079-00	METAL CHIP	18K 5% 1/10W
R828	1-216-045-00	METAL CHIP	680 5% 1/10W
R829	1-216-045-00	METAL CHIP	680 5% 1/10W
R830	1-216-295-00	METAL CHIP	0 5% 1/10W
R831	1-216-049-00	METAL CHIP	1K 5% 1/10W
R837	1-216-073-00	METAL CHIP	10K 5% 1/10W
R901	1-216-049-00	METAL CHIP	1K 5% 1/10W
R902	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R903	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R904	1-216-081-00	METAL CHIP	22K 5% 1/10W
R905	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R907	1-216-041-00	METAL CHIP	470 5% 1/10W
R910	1-216-089-00	METAL CHIP	47K 5% 1/10W
R911	1-216-089-00	METAL CHIP	47K 5% 1/10W
R912	1-216-089-00	METAL CHIP	47K 5% 1/10W
R913	1-216-089-00	METAL CHIP	47K 5% 1/10W
R914	1-216-089-00	METAL CHIP	47K 5% 1/10W
< VARIABLE RESISTOR >			
RV101	1-230-869-11	RES. ADJ. METAL	4.7K
RV201	1-230-867-11	RES. ADJ. METAL	1K
RV202	1-230-868-11	RES. ADJ. METAL	2.2K
RV301	1-230-869-11	RES. ADJ. METAL	4.7K
RV302	1-230-870-11	RES. ADJ. METAL	10K
RV303	1-230-870-11	RES. ADJ. METAL	10K
RV304	1-230-870-11	RES. ADJ. METAL	10K
RV305	1-230-875-21	RES. ADJ. METAL	220K
RV401	1-230-873-11	RES. ADJ. METAL	47K
RV402	1-230-869-11	RES. ADJ. METAL	4.7K
RV403	1-230-868-11	RES. ADJ. METAL	2.2K
RV404	1-230-868-11	RES. ADJ. METAL	2.2K
RV405	1-230-866-11	RES. ADJ. METAL	470
RV501	1-230-870-11	RES. ADJ. METAL	10K
RV502	1-230-870-11	RES. ADJ. METAL	10K
RV601	1-230-871-11	RES. ADJ. METAL	22K
RV602	1-230-870-11	RES. ADJ. METAL	10K
RV700	1-230-868-11	RES. ADJ. METAL	2.2K
RV801	1-230-873-11	RES. ADJ. METAL	47K
RV802	1-230-875-21	RES. ADJ. METAL	220K
< COIL >			
T101	1-409-466-21	TRAP (1.5/1.7MHz)	
T501	1-235-437-11	BPF, PB C (4.43MHz)	
T601	1-409-396-11	REC C TRAP	

Ref. No.	Part No.	Description	Remark
T602	1-409-394-11	TRAP, CHROMA EMPHASIS (4.43MHz)	
< VIBRATOR >			
X501	1-567-347-11	OSCILLATOR, CERAMIC (13.301MHz)	
X601	1-567-504-11	OSCILLATOR, CRYSTAL (4.433619MHz)	
X602	1-567-827-11	VIBRATOR, CRYSTAL (5.85938MHz)	

* A-7070-955-A IG-4 BOARD, COMPLETE			

(Ref. No 6,000 Series)			
< CAPACITOR >			
C024	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C025	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C026	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C027	1-164-232-11	CERAMIC CHIP	0.01uF 50V
< CONNECTOR >			
CN004	1-566-943-11	CONNECTOR, BOARD TO BOARD	18P
CN005	1-566-944-11	CONNECTOR, BOARD TO BOARD	22P
CN006	1-566-945-11	CONNECTOR, BOARD TO BOARD	18P
CN007	1-566-945-11	CONNECTOR, BOARD TO BOARD	18P
< RESISTOR >			
R044	1-216-049-00	METAL CHIP	1K 5% 1/10W
R099	1-216-049-00	METAL CHIP	1K 5% 1/10W

* A-7062-849-A IG-14 BOARD, COMPLETE			

(Ref. No 19,000 Series)			
7-685-646-79 SCREW +BVTP 3X8 TYPE2 1T-3			
< CONNECTOR >			
CN001	1-506-471-11	CONNECTOR 6P, MALE	
CN002	1-506-470-11	CONNECTOR 5P, MALE	
CN003	1-506-484-11	CONNECTOR 5P, MALE	
CN004	1-506-469-11	CONNECTOR 4P, MALE	
CN005	1-506-471-11	CONNECTOR 6P, MALE	
CN006	1-506-471-11	CONNECTOR 6P, MALE	
CN007	1-506-477-11	CONNECTOR 12P, MALE	
CN008	1-506-469-11	CONNECTOR 4P, MALE	
CN009	1-506-469-11	CONNECTOR 4P, MALE	
CN010	1-506-477-11	CONNECTOR 12P, MALE	
CN011	1-506-469-11	CONNECTOR 4P, MALE	
CN012	* 1-560-900-00	PIN, CONNECTOR	12P
CN013	1-506-482-11	CONNECTOR 3P, MALE	

IG-14**JB-27****JB-28****LD-1****LS-9****MA-41**

Ref. No.	Part No.	Description	Remark
		< IC LINK >	
PS001	△ 1-532-637-00	LINK, IC 1.0A	
PS002	△ 1-532-675-00	LINK, IC 1.5A	
PS003	△ 1-532-637-00	LINK, IC 1.0A	
PS004	△ 1-532-675-00	LINK, IC 1.5A	
PS005	△ 1-532-637-00	LINK, IC 1.0A	
PS006	△ 1-532-637-00	LINK, IC 1.0A	
PS007	△ 1-532-679-00	LINK, IC (ICP-N15)	
PS008	△ 1-532-685-00	LINK, IC	
PS009	△ 1-532-685-00	LINK, IC	
PS010	△ 1-532-685-00	LINK, IC	
PS011	△ 1-532-637-00	LINK, IC 1.0A	
PS012	△ 1-532-679-00	LINK, IC (ICP-N15)	
PS013	△ 1-532-679-00	LINK, IC (ICP-N15)	
PS014	△ 1-532-679-00	LINK, IC (ICP-N15)	
PS015	△ 1-532-679-00	LINK, IC (ICP-N15)	
PS016	△ 1-532-679-00	LINK, IC (ICP-N15)	
PS017	△ 1-532-679-00	LINK, IC (ICP-N15)	
		< TRANSISTOR >	
Q001	8-729-119-76	TRANSISTOR 2SA1175	
		< RESISTOR >	
R001	1-249-441-11	CARBON 100K 5% 1/4W	
R002	1-249-437-11	CARBON 47K 5% 1/4W	

	* A-7071-452-A JB-27 BOARD, COMPLETE ***** (Ref. No 14,000 Series)		
		< CAPACITOR >	
C101	1-102-074-00	CERAMIC 0.001uF 10% 50V	
C102	1-102-074-00	CERAMIC 0.001uF 10% 50V	
C103	1-102-074-00	CERAMIC 0.001uF 10% 50V	
C104	1-102-074-00	CERAMIC 0.001uF 10% 50V	
C105	1-102-074-00	CERAMIC 0.001uF 10% 50V	
C106	1-102-074-00	CERAMIC 0.001uF 10% 50V	
C107	1-102-074-00	CERAMIC 0.001uF 10% 50V	

	* A-7071-453-A JB-28 BOARD, COMPLETE ***** (Ref. No 1,000 Series)		
		< CAPACITOR >	
C401	1-101-004-00	CERAMIC 0.01uF 50V	

Ref. No.	Part No.	Description	Remark
C402	1-124-584-00	ELECT 100uF 20% 10V	
C403	1-102-074-00	CERAMIC 0.001uF 10% 50V	
		< CONNECTOR >	
CN401	1-506-470-11	CONNECTOR 5P. MALE	
		< DIODE >	
D401	8-719-016-42	DIODE MC932TP	
		< JACK >	
J401	1-537-005-21	JACK BOARD (VIDEO/AUDIO/RFU DC OUT)	
		< TRANSISTOR >	
Q401	8-729-119-76	TRANSISTOR 2SA1175	
		< RESISTOR >	
R401	1-249-393-11	CARBON 10 5% 1/4W	
R402	1-249-425-11	CARBON 4.7K 5% 1/4W	

	* A-7070-024-A LD-1 BOARD, COMPLETE ***** (Ref. No 6,000 Series)		
	* 1-513-367-11 LD-1 BOARD		
		< DIODE >	
D901	8-719-928-54	DIODE GL-450S	

	LS-9 BOARD, COMPLETE ***** (Ref. No 8,000 Series)		
	1-506-485-11 CONNECTOR 5P. MALE		

	* A-7062-215-B MA-41 BOARD, COMPLETE ***** (Ref. No 17,000 Series)		
		< CAPACITOR >	
C001	1-124-234-00	ELECT 22uF 20% 16V	
C002	1-124-234-00	ELECT 22uF 20% 16V	
C003	1-124-234-00	ELECT 22uF 20% 16V	
C005	1-124-234-00	ELECT 22uF 20% 16V	
C006	1-124-234-00	ELECT 22uF 20% 16V	

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

MA-41

Ref. No.	Part No.	Description			Remark
C457	1-124-234-00	ELECT	22uF	20%	16V
C460	1-124-234-00	ELECT	22uF	20%	16V
C461	1-124-234-00	ELECT	22uF	20%	16V
C462	1-124-234-00	ELECT	22uF	20%	16V
C463	1-124-234-00	ELECT	22uF	20%	16V
C464	1-124-234-00	ELECT	22uF	20%	16V
C466	1-124-234-00	ELECT	22uF	20%	16V
C467	1-124-234-00	ELECT	22uF	20%	16V
C468	1-124-234-00	ELECT	22uF	20%	16V
C601	1-126-162-11	ELECT	3.3uF	20%	50V
C602	1-126-162-11	ELECT	3.3uF	20%	50V
C603	1-126-162-11	ELECT	3.3uF	20%	50V
C604	1-126-162-11	ELECT	3.3uF	20%	50V
C611	1-124-584-00	ELECT	100uF	20%	10V
C612	1-124-584-00	ELECT	100uF	20%	10V
C613	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C614	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C615	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C616	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C617	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C618	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C619	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C620	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C621	1-124-584-00	ELECT	100uF	20%	10V
C622	1-124-584-00	ELECT	100uF	20%	10V
C623	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C624	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C625	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C626	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C627	1-124-584-00	ELECT	100uF	20%	10V
C628	1-124-584-00	ELECT	100uF	20%	10V
C629	1-126-163-11	ELECT	4.7uF	20%	50V
C630	1-124-589-11	ELECT	47uF	20%	16V
C631	1-124-584-00	ELECT	100uF	20%	10V
C632	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C633	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C634	1-124-234-00	ELECT	22uF	20%	16V
C635	1-126-162-11	ELECT	3.3uF	20%	50V
C636	1-124-257-00	ELECT	2.2uF	20%	50V
< CONNECTOR >					
CN001	1-506-474-11	CONNECTOR 9P, MALE			
CN002	1-506-473-11	CONNECTOR 8P, MALE			
CN003	1-564-006-81	PIN, CONNECTOR 7P			
CN004	1-506-470-11	CONNECTOR 5P, MALE			
CN005	1-506-471-11	CONNECTOR 6P, MALE			
CN006	1-506-473-11	CONNECTOR 8P, MALE			
CN008	1-506-471-11	CONNECTOR 6P, MALE			

Ref. No.	Part No.	Description		Remark
CN009	1-506-472-11	CONNECTOR 7P, MALE		
CN010	1-506-473-11	CONNECTOR 8P, MALE		
CN011	1-506-474-11	CONNECTOR 9P, MALE		
CN012	1-506-474-11	CONNECTOR 9P, MALE		
CN012	1-506-476-11	CONNECTOR 11P, MALE		
CN013	1-506-471-11	CONNECTOR 6P, MALE		
< DIODE >				
D001	8-719-104-34	DIODE	1S2836	
D002	8-719-104-34	DIODE	1S2836	
D003	8-719-104-34	DIODE	1S2836	
D006	8-719-104-34	DIODE	1S2836	
D008	8-719-104-34	DIODE	1S2836	
D009	8-719-104-34	DIODE	1S2836	
D010	8-719-104-34	DIODE	1S2836	
D201	8-719-104-34	DIODE	1S2836	
D202	8-719-104-34	DIODE	1S2836	
D203	8-719-104-34	DIODE	1S2836	
D205	8-719-104-34	DIODE	1S2836	
D208	8-719-104-34	DIODE	1S2836	
D209	8-719-104-34	DIODE	1S2836	
D210	8-719-104-34	DIODE	1S2836	
D401	8-719-104-34	DIODE	1S2836	
D405	8-719-400-18	DIODE	MA152WK	
D406	8-719-104-34	DIODE	1S2836	
D409	8-719-104-34	DIODE	1S2836	
D421	8-719-104-34	DIODE	1S2836	
D601	8-719-104-34	DIODE	1S2836	
D602	8-719-800-76	DIODE	1S2226	
D604	8-719-800-76	DIODE	1S2226	
D605	8-719-800-76	DIODE	1S2226	
D606	8-719-800-76	DIODE	1S2226	
D611	8-719-400-18	DIODE	MA152WK	
D612	8-719-400-18	DIODE	MA152WK	
D615	8-719-400-18	DIODE	MA152WK	
D616	8-719-104-34	DIODE	1S2836	
D621	8-719-400-18	DIODE	MA152WK	
D631	8-719-400-18	DIODE	MA152WK	
D632	8-719-400-18	DIODE	MA152WK	
D633	8-719-400-18	DIODE	MA152WK	
D634	8-719-104-34	DIODE	1S2836	
D635	8-719-104-34	DIODE	1S2836	
D636	8-719-800-76	DIODE	1S2226	
D637	8-719-400-18	DIODE	MA152WK	
D638	8-719-104-34	DIODE	1S2836	
< IC >				
IC001	8-759-981-92	IC	NJM4558M	

Ref. No.	Part No.	Description	Remark
IC002	8-759-932-64	IC BU4052BF	
IC003	8-759-603-27	IC M5201FP	
IC004	8-759-603-27	IC M5201FP	
IC005	8-759-981-92	IC NJM4558M	
IC006	8-759-981-92	IC NJM4558M	
IC007	8-759-603-27	IC M5201FP	
IC008	8-759-932-64	IC BU4052BF	
IC009	8-759-981-92	IC NJM4558M	
IC010	8-759-932-64	IC BU4052BF	
IC201	8-759-981-92	IC NJM4558M	
IC202	8-759-932-64	IC BU4052BF	
IC203	8-759-603-27	IC M5201FP	
IC204	8-759-603-27	IC M5201FP	
IC205	8-759-981-92	IC NJM4558M	
IC206	8-759-981-92	IC NJM4558M	
IC207	8-759-603-27	IC M5201FP	
IC208	8-759-932-64	IC BU4052BF	
IC209	8-759-981-92	IC NJM4558M	
IC210	8-759-981-92	IC NJM4558M	
IC401	8-759-981-92	IC NJM4558M	
IC402	8-759-932-64	IC BU4052BF	
IC403	8-759-603-27	IC M5201FP	
IC404	8-759-603-27	IC M5201FP	
IC405	8-759-981-92	IC NJM4558M	
IC406	8-759-981-92	IC NJM4558M	
IC407	8-759-603-27	IC M5201FP	
IC408	8-759-300-71	IC TC40530FHB	
IC409	8-759-932-64	IC BU4052BF	
IC410	8-759-981-92	IC NJM4558M	
IC411	8-759-603-27	IC M5201FP	
IC601	8-759-981-92	IC NJM4558M	
IC602	8-759-200-67	IC TC4001BF	
IC603	8-759-200-83	IC TC4071BF	
IC604	8-759-200-67	IC TC4001BF	
IC605	8-759-200-67	IC TC4001BF	
IC606	8-759-200-67	IC TC4001BF	
< TRANSISTOR >			
Q001	8-729-202-38	TRANSISTOR 2SC3326N	
Q002	8-729-202-38	TRANSISTOR 2SC3326N	
Q003	8-729-202-38	TRANSISTOR 2SC3326N	
Q004	8-729-202-38	TRANSISTOR 2SC3326N	
Q005	8-729-202-38	TRANSISTOR 2SC3326N	
Q008	8-729-202-38	TRANSISTOR 2SC3326N	
Q009	8-729-202-38	TRANSISTOR 2SC3326N	
Q011	8-729-202-38	TRANSISTOR 2SC3326N	
Q012	8-729-901-06	TRANSISTOR DTA144EK	
Q015	8-729-202-38	TRANSISTOR 2SC3326N	

Ref. No.	Part No.	Description	Remark
Q016	8-729-202-38	TRANSISTOR 2SC3326N	
Q017	8-729-202-38	TRANSISTOR 2SC3326N	
Q018	8-729-202-38	TRANSISTOR 2SC3326N	
Q021	8-729-202-38	TRANSISTOR 2SC3326N	
Q022	8-729-202-38	TRANSISTOR 2SC3326N	
Q023	8-729-202-38	TRANSISTOR 2SC3326N	
Q024	8-729-901-06	TRANSISTOR DTA144EK	
Q025	8-729-202-38	TRANSISTOR 2SC3326N	
Q201	8-729-202-38	TRANSISTOR 2SC3326N	
Q202	8-729-202-38	TRANSISTOR 2SC3326N	
Q203	8-729-202-38	TRANSISTOR 2SC3326N	
Q204	8-729-202-38	TRANSISTOR 2SC3326N	
Q205	8-729-202-38	TRANSISTOR 2SC3326N	
Q208	8-729-202-38	TRANSISTOR 2SC3326N	
Q209	8-729-202-38	TRANSISTOR 2SC3326N	
Q211	8-729-202-38	TRANSISTOR 2SC3326N	
Q212	8-729-901-06	TRANSISTOR DTA144EK	
Q215	8-729-202-38	TRANSISTOR 2SC3326N	
Q216	8-729-202-38	TRANSISTOR 2SC3326N	
Q217	8-729-202-38	TRANSISTOR 2SC3326N	
Q218	8-729-202-38	TRANSISTOR 2SC3326N	
Q221	8-729-202-38	TRANSISTOR 2SC3326N	
Q222	8-729-202-38	TRANSISTOR 2SC3326N	
Q223	8-729-202-38	TRANSISTOR 2SC3326N	
Q224	8-729-901-06	TRANSISTOR DTA144EK	
Q225	8-729-202-38	TRANSISTOR 2SC3326N	
Q401	8-729-202-38	TRANSISTOR 2SC3326N	
Q402	8-729-202-38	TRANSISTOR 2SC3326N	
Q403	8-729-202-38	TRANSISTOR 2SC3326N	
Q408	8-729-202-38	TRANSISTOR 2SC3326N	
Q409	8-729-202-38	TRANSISTOR 2SC3326N	
Q411	8-729-202-38	TRANSISTOR 2SC3326N	
Q412	8-729-901-06	TRANSISTOR DTA144EK	
Q415	8-729-202-38	TRANSISTOR 2SC3326N	
Q416	8-729-202-38	TRANSISTOR 2SC3326N	
Q417	8-729-202-38	TRANSISTOR 2SC3326N	
Q421	8-729-901-06	TRANSISTOR DTA144EK	
Q422	8-729-202-38	TRANSISTOR 2SC3326N	
Q423	8-729-202-38	TRANSISTOR 2SC3326N	
Q424	8-729-901-01	TRANSISTOR DTC144EK	
Q425	8-729-901-06	TRANSISTOR DTA144EK	
Q426	8-729-202-38	TRANSISTOR 2SC3326N	
Q601	8-729-901-06	TRANSISTOR DTA144EK	
Q602	8-729-901-01	TRANSISTOR DTC144EK	
Q603	8-729-140-75	TRANSISTOR 2SD999-CL	
Q604	8-729-101-07	TRANSISTOR 2SB798-DL0K	
Q606	8-729-901-06	TRANSISTOR DTA144EK	
Q607	8-729-901-06	TRANSISTOR DTA144EK	
Q608	8-729-901-06	TRANSISTOR DTA144EK	

Ref. No.	Part No.	Description	Remark		
R032	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R033	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R034	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R035	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R036	1-216-093-00	METAL CHIP	68K	5%	1/10W
R041	1-216-083-00	METAL CHIP	27K	5%	1/10W
R042	1-216-083-00	METAL CHIP	27K	5%	1/10W
R043	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R044	1-216-089-00	METAL CHIP	47K	5%	1/10W
R045	1-216-089-00	METAL CHIP	47K	5%	1/10W
R046	1-216-113-00	METAL CHIP	470K	5%	1/10W
R047	1-216-091-00	METAL CHIP	56K	5%	1/10W
R048	1-216-095-00	METAL CHIP	82K	5%	1/10W
R049	1-216-295-00	METAL CHIP	0	5%	1/10W
R051	1-216-089-00	METAL CHIP	47K	5%	1/10W
R055	1-216-089-00	METAL CHIP	47K	5%	1/10W
R056	1-216-081-00	METAL CHIP	22K	5%	1/10W
R057	1-216-295-00	METAL CHIP	0	5%	1/10W
R059	1-216-073-00	METAL CHIP	10K	5%	1/10W
R060	1-216-073-00	METAL CHIP	10K	5%	1/10W
R061	1-216-089-00	METAL CHIP	47K	5%	1/10W
R062	1-216-091-00	METAL CHIP	56K	5%	1/10W
R063	1-216-097-00	METAL CHIP	100K	5%	1/10W
R067	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R068	1-216-099-00	METAL CHIP	120K	5%	1/10W
R069	1-216-748-11	METAL CHIP	39K	5%	1/10W
R070	1-216-073-00	METAL CHIP	10K	5%	1/10W
R071	1-216-089-00	METAL CHIP	47K	5%	1/10W
R073	1-216-295-00	METAL CHIP	0	5%	1/10W
R075	1-216-295-00	METAL CHIP	0	5%	1/10W
R078	1-216-066-00	METAL GLAZE	3K	5%	1/10W
R079	1-216-075-00	METAL CHIP	12K	5%	1/10W
R080	1-216-295-00	METAL CHIP	0	5%	1/10W
R083	1-216-295-00	METAL CHIP	0	5%	1/10W
R085	1-216-089-00	METAL CHIP	47K	5%	1/10W
R086	1-216-089-00	METAL CHIP	47K	5%	1/10W
R087	1-216-089-00	METAL CHIP	47K	5%	1/10W
R091	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R092	1-216-089-00	METAL CHIP	47K	5%	1/10W
R093	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R095	1-216-295-00	METAL CHIP	0	5%	1/10W
R096	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R097	1-216-089-00	METAL CHIP	47K	5%	1/10W
R098	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R099	1-216-073-00	METAL CHIP	10K	5%	1/10W
R100	1-216-049-00	METAL CHIP	1K	5%	1/10W
R101	1-216-083-00	METAL CHIP	27K	5%	1/10W
R102	1-216-079-00	METAL CHIP	18K	5%	1/10W
R103	1-216-083-00	METAL CHIP	27K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R104	1-216-073-00	METAL CHIP	10K	5%	1/10W
R105	1-216-097-00	METAL CHIP	100K	5%	1/10W
R106	1-216-089-00	METAL CHIP	47K	5%	1/10W
R109	1-216-097-00	METAL CHIP	100K	5%	1/10W
R110	1-216-097-00	METAL CHIP	100K	5%	1/10W
R111	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R112	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R113	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R114	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R115	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R116	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R117	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R118	1-216-077-00	METAL CHIP	15K	5%	1/10W
R121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R122	1-216-083-00	METAL CHIP	27K	5%	1/10W
R123	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W
R125	1-216-049-00	METAL CHIP	1K	5%	1/10W
R126	1-216-073-00	METAL CHIP	10K	5%	1/10W
R127	1-216-113-00	METAL CHIP	470K	5%	1/10W
R128	1-216-073-00	METAL CHIP	10K	5%	1/10W
R131	1-216-081-00	METAL CHIP	22K	5%	1/10W
R132	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R133	1-216-081-00	METAL CHIP	22K	5%	1/10W
R134	1-216-081-00	METAL CHIP	22K	5%	1/10W
R135	1-216-081-00	METAL CHIP	22K	5%	1/10W
R136	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R137	1-216-101-00	METAL CHIP	150K	5%	1/10W
R138	1-216-073-00	METAL CHIP	10K	5%	1/10W
R139	1-216-107-00	METAL CHIP	270K	5%	1/10W
R140	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R141	1-216-091-00	METAL CHIP	56K	5%	1/10W
R142	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R143	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R150	1-216-073-00	METAL CHIP	10K	5%	1/10W
R201	1-216-113-00	METAL CHIP	470K	5%	1/10W
R202	1-216-073-00	METAL CHIP	10K	5%	1/10W
R203	1-216-049-00	METAL CHIP	1K	5%	1/10W
R204	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R205	1-216-091-00	METAL CHIP	56K	5%	1/10W
R206	1-216-083-00	METAL CHIP	27K	5%	1/10W
R207	1-216-077-00	METAL CHIP	15K	5%	1/10W
R208	1-216-073-00	METAL CHIP	10K	5%	1/10W
R209	1-216-073-00	METAL CHIP	10K	5%	1/10W
R210	1-216-073-00	METAL CHIP	10K	5%	1/10W
R211	1-216-083-00	METAL CHIP	27K	5%	1/10W
R212	1-216-079-00	METAL CHIP	18K	5%	1/10W
R213	1-216-083-00	METAL CHIP	27K	5%	1/10W
R214	1-216-065-00	METAL CHIP	4.7K	5%	1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R215	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R291	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R216	1-216-049-00	METAL CHIP	1K	5%	1/10W	R292	1-216-089-00	METAL CHIP	47K	5%	1/10W
R217	1-216-073-00	METAL CHIP	10K	5%	1/10W	R293	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R218	1-216-089-00	METAL CHIP	47K	5%	1/10W	R295	1-216-295-00	METAL CHIP	0	5%	1/10W
R224	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R296	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R225	1-216-068-00	METAL CHIP	6.2K	5%	1/10W	R297	1-216-089-00	METAL CHIP	47K	5%	1/10W
R226	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R298	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R227	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R299	1-216-073-00	METAL CHIP	10K	5%	1/10W
R228	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R300	1-216-049-00	METAL CHIP	1K	5%	1/10W
R229	1-216-068-00	METAL CHIP	6.2K	5%	1/10W	R301	1-216-083-00	METAL CHIP	27K	5%	1/10W
R230	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R302	1-216-079-00	METAL CHIP	18K	5%	1/10W
R231	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R303	1-216-083-00	METAL CHIP	27K	5%	1/10W
R232	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R304	1-216-073-00	METAL CHIP	10K	5%	1/10W
R233	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R305	1-216-097-00	METAL CHIP	100K	5%	1/10W
R234	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R306	1-216-089-00	METAL CHIP	47K	5%	1/10W
R235	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R311	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R236	1-216-093-00	METAL CHIP	68K	5%	1/10W	R312	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R241	1-216-083-00	METAL CHIP	27K	5%	1/10W	R313	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R242	1-216-083-00	METAL CHIP	27K	5%	1/10W	R314	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R243	1-216-100-00	METAL GLAZE	130K	5%	1/10W	R315	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R244	1-216-089-00	METAL CHIP	47K	5%	1/10W	R316	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R245	1-216-089-00	METAL CHIP	47K	5%	1/10W	R317	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R246	1-216-113-00	METAL CHIP	470K	5%	1/10W	R318	1-216-077-00	METAL CHIP	15K	5%	1/10W
R247	1-216-091-00	METAL CHIP	56K	5%	1/10W	R321	1-216-073-00	METAL CHIP	10K	5%	1/10W
R248	1-216-095-00	METAL CHIP	82K	5%	1/10W	R322	1-216-083-00	METAL CHIP	27K	5%	1/10W
R249	1-216-295-00	METAL CHIP	0	5%	1/10W	R323	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R251	1-216-089-00	METAL CHIP	47K	5%	1/10W	R324	1-216-091-00	METAL CHIP	56K	5%	1/10W
R255	1-216-089-00	METAL CHIP	47K	5%	1/10W	R325	1-216-049-00	METAL CHIP	1K	5%	1/10W
R256	1-216-081-00	METAL CHIP	22K	5%	1/10W	R326	1-216-073-00	METAL CHIP	18K	5%	1/10W
R257	1-216-295-00	METAL CHIP	0	5%	1/10W	R327	1-216-113-00	METAL CHIP	470K	5%	1/10W
R259	1-216-073-00	METAL CHIP	10K	5%	1/10W	R328	1-216-073-00	METAL CHIP	10K	5%	1/10W
R260	1-216-073-00	METAL CHIP	10K	5%	1/10W	R331	1-216-081-00	METAL CHIP	22K	5%	1/10W
R261	1-216-089-00	METAL CHIP	47K	5%	1/10W	R332	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R262	1-216-091-00	METAL CHIP	56K	5%	1/10W	R333	1-216-081-00	METAL CHIP	22K	5%	1/10W
R263	1-216-097-00	METAL CHIP	100K	5%	1/10W	R334	1-216-081-00	METAL CHIP	22K	5%	1/10W
R267	1-216-082-00	METAL GLAZE	24K	5%	1/10W	R335	1-216-081-00	METAL CHIP	22K	5%	1/10W
R268	1-216-099-00	METAL CHIP	120K	5%	1/10W	R336	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R269	1-216-748-11	METAL CHIP	39K	5%	1/10W	R337	1-216-101-00	METAL CHIP	150K	5%	1/10W
R270	1-216-073-00	METAL CHIP	10K	5%	1/10W	R338	1-216-073-00	METAL CHIP	18K	5%	1/10W
R271	1-216-089-00	METAL CHIP	47K	5%	1/10W	R339	1-216-107-00	METAL CHIP	270K	5%	1/10W
R273	1-216-295-00	METAL CHIP	0	5%	1/10W	R340	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R275	1-216-295-00	METAL CHIP	0	5%	1/10W	R341	1-216-091-00	METAL CHIP	56K	5%	1/10W
R278	1-216-060-00	METAL GLAZE	3K	5%	1/10W	R342	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R279	1-216-075-00	METAL CHIP	12K	5%	1/10W	R343	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R280	1-216-295-00	METAL CHIP	0	5%	1/10W	R350	1-216-073-00	METAL CHIP	10K	5%	1/10W
R283	1-216-295-00	METAL CHIP	0	5%	1/10W	R401	1-216-073-00	METAL CHIP	10K	5%	1/10W
R285	1-216-089-00	METAL CHIP	47K	5%	1/10W	R402	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R286	1-216-089-00	METAL CHIP	47K	5%	1/10W	R403	1-216-073-00	METAL CHIP	10K	5%	1/10W
R287	1-216-089-00	METAL CHIP	47K	5%	1/10W						

Ref. No.	Part No.	Description	Remark		
R404	1-216-049-00	METAL CHIP	1K	5%	1/10W
R405	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R406	1-216-295-00	METAL CHIP	0	5%	1/10W
R408	1-216-077-00	METAL CHIP	15K	5%	1/10W
R409	1-216-077-00	METAL CHIP	15K	5%	1/10W
R410	1-216-073-00	METAL CHIP	10K	5%	1/10W
R411	1-216-079-00	METAL CHIP	18K	5%	1/10W
R412	1-216-078-00	METAL GLAZE	16K	5%	1/10W
R413	1-216-081-00	METAL CHIP	22K	5%	1/10W
R414	1-216-089-00	METAL CHIP	47K	5%	1/10W
R418	1-216-073-00	METAL CHIP	10K	5%	1/10W
R419	1-216-097-00	METAL CHIP	100K	5%	1/10W
R420	1-216-097-00	METAL CHIP	100K	5%	1/10W
R421	1-216-097-00	METAL CHIP	100K	5%	1/10W
R430	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R431	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R432	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R433	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R434	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R435	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R436	1-216-093-00	METAL CHIP	68K	5%	1/10W
R441	1-216-083-00	METAL CHIP	27K	5%	1/10W
R442	1-216-083-00	METAL CHIP	27K	5%	1/10W
R443	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R444	1-216-089-00	METAL CHIP	47K	5%	1/10W
R445	1-216-089-00	METAL CHIP	47K	5%	1/10W
R447	1-216-295-00	METAL CHIP	0	5%	1/10W
R448	1-216-073-00	METAL CHIP	10K	5%	1/10W
R449	1-216-083-00	METAL CHIP	27K	5%	1/10W
R450	1-216-079-00	METAL CHIP	18K	5%	1/10W
R451	1-216-089-00	METAL CHIP	47K	5%	1/10W
R452	1-216-077-00	METAL CHIP	15K	5%	1/10W
R453	1-216-077-00	METAL CHIP	15K	5%	1/10W
R455	1-216-089-00	METAL CHIP	47K	5%	1/10W
R456	1-216-081-00	METAL CHIP	22K	5%	1/10W
R457	1-216-295-00	METAL CHIP	0	5%	1/10W
R459	1-216-073-00	METAL CHIP	10K	5%	1/10W
R460	1-216-073-00	METAL CHIP	10K	5%	1/10W
R461	1-216-089-00	METAL CHIP	47K	5%	1/10W
R462	1-216-091-00	METAL CHIP	56K	5%	1/10W
R463	1-216-097-00	METAL CHIP	100K	5%	1/10W
R467	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R468	1-216-101-00	METAL CHIP	150K	5%	1/10W
R469	1-216-090-00	METAL CHIP	51K	5%	1/10W
R470	1-216-073-00	METAL CHIP	10K	5%	1/10W
R471	1-216-089-00	METAL CHIP	47K	5%	1/10W
R473	1-216-295-00	METAL CHIP	0	5%	1/10W
R475	1-216-295-00	METAL CHIP	0	5%	1/10W
R478	1-216-060-00	METAL GLAZE	3K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R479	1-216-073-00	METAL CHIP	10K	5%	1/10W
R480	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R483	1-216-295-00	METAL CHIP	0	5%	1/10W
R485	1-216-089-00	METAL CHIP	47K	5%	1/10W
R486	1-216-089-00	METAL CHIP	47K	5%	1/10W
R487	1-216-089-00	METAL CHIP	47K	5%	1/10W
R491	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R492	1-216-089-00	METAL CHIP	47K	5%	1/10W
R493	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R495	1-216-295-00	METAL CHIP	0	5%	1/10W
R496	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R497	1-216-089-00	METAL CHIP	47K	5%	1/10W
R498	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R499	1-216-073-00	METAL CHIP	10K	5%	1/10W
R500	1-216-049-00	METAL CHIP	1K	5%	1/10W
R501	1-216-295-00	METAL CHIP	0	5%	1/10W
R505	1-216-089-00	METAL CHIP	47K	5%	1/10W
R511	1-216-081-00	METAL CHIP	22K	5%	1/10W
R512	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R513	1-216-101-00	METAL CHIP	150K	5%	1/10W
R514	1-216-081-00	METAL CHIP	22K	5%	1/10W
R515	1-216-081-00	METAL CHIP	22K	5%	1/10W
R516	1-216-081-00	METAL CHIP	22K	5%	1/10W
R517	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R521	1-216-073-00	METAL CHIP	10K	5%	1/10W
R522	1-216-107-00	METAL CHIP	270K	5%	1/10W
R523	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R524	1-216-091-00	METAL CHIP	56K	5%	1/10W
R525	1-216-049-00	METAL CHIP	1K	5%	1/10W
R526	1-216-073-00	METAL CHIP	10K	5%	1/10W
R527	1-216-113-00	METAL CHIP	470K	5%	1/10W
R528	1-216-073-00	METAL CHIP	10K	5%	1/10W
R532	1-216-295-00	METAL CHIP	0	5%	1/10W
R533	1-216-295-00	METAL CHIP	0	5%	1/10W
R535	1-216-089-00	METAL CHIP	47K	5%	1/10W
R536	1-216-097-00	METAL CHIP	100K	5%	1/10W
R537	1-216-097-00	METAL CHIP	100K	5%	1/10W
R538	1-216-049-00	METAL CHIP	1K	5%	1/10W
R539	1-216-073-00	METAL CHIP	10K	5%	1/10W
R540	1-216-081-00	METAL CHIP	22K	5%	1/10W
R541	1-216-101-00	METAL CHIP	150K	5%	1/10W
R542	1-216-101-00	METAL CHIP	150K	5%	1/10W
R543	1-216-073-00	METAL CHIP	10K	5%	1/10W
R544	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R545	1-216-083-00	METAL CHIP	27K	5%	1/10W
R546	1-216-081-00	METAL CHIP	22K	5%	1/10W
R550	1-216-073-00	METAL CHIP	10K	5%	1/10W
R601	1-216-073-00	METAL CHIP	10K	5%	1/10W
R602	1-216-057-00	METAL CHIP	2.2K	5%	1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R603	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	R662	1-216-049-00	METAL CHIP	1K	5%	1/10W
R604	1-216-075-00	METAL CHIP	12K	5%	1/10W	R663	1-216-097-00	METAL CHIP	100K	5%	1/10W
R605	1-216-083-00	METAL CHIP	27K	5%	1/10W	R664	1-216-081-00	METAL CHIP	22K	5%	1/10W
R606	1-216-091-00	METAL CHIP	56K	5%	1/10W	R665	1-216-089-00	METAL CHIP	47K	5%	1/10W
R607	1-216-091-00	METAL CHIP	56K	5%	1/10W	R666	1-216-081-00	METAL CHIP	22K	5%	1/10W
R611	1-216-049-00	METAL CHIP	1K	5%	1/10W	R667	1-216-097-00	METAL CHIP	100K	5%	1/10W
R612	1-216-073-00	METAL CHIP	10K	5%	1/10W	R668	1-216-073-00	METAL CHIP	10K	5%	1/10W
R613	1-216-049-00	METAL CHIP	1K	5%	1/10W	R669	1-216-089-00	METAL CHIP	47K	5%	1/10W
R614	1-216-073-00	METAL CHIP	10K	5%	1/10W	R670	1-216-073-00	METAL CHIP	10K	5%	1/10W
R617	1-216-025-00	METAL CHIP	100	5%	1/10W	R671	1-216-049-00	METAL CHIP	1K	5%	1/10W
R618	1-216-081-00	METAL CHIP	22K	5%	1/10W	R672	1-216-097-00	METAL CHIP	100K	5%	1/10W
R619	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R673	1-216-105-00	METAL CHIP	220K	5%	1/10W
R620	1-216-081-00	METAL CHIP	22K	5%	1/10W	R674	1-216-073-00	METAL CHIP	10K	5%	1/10W
R621	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R675	1-216-105-00	METAL CHIP	220K	5%	1/10W
R622	1-216-089-00	METAL CHIP	47K	5%	1/10W	R676	1-216-089-00	METAL CHIP	47K	5%	1/10W
R623	1-216-105-00	METAL CHIP	220K	5%	1/10W	R677	1-216-089-00	METAL CHIP	47K	5%	1/10W
R624	1-216-105-00	METAL CHIP	220K	5%	1/10W	R678	1-216-073-00	METAL CHIP	10K	5%	1/10W
R625	1-216-089-00	METAL CHIP	47K	5%	1/10W	R679	1-216-089-00	METAL CHIP	47K	5%	1/10W
R626	1-216-089-00	METAL CHIP	47K	5%	1/10W	R680	1-216-093-00	METAL CHIP	68K	5%	1/10W
R627	1-216-073-00	METAL CHIP	10K	5%	1/10W	R681	1-216-089-00	METAL CHIP	47K	5%	1/10W
R628	1-216-073-00	METAL CHIP	10K	5%	1/10W	R682	1-216-093-00	METAL CHIP	68K	5%	1/10W
R629	1-216-089-00	METAL CHIP	47K	5%	1/10W	R683	1-216-089-00	METAL CHIP	47K	5%	1/10W
R630	1-216-103-00	METAL CHIP	180K	5%	1/10W	R687	1-216-073-00	METAL CHIP	10K	5%	1/10W
R631	1-216-097-00	METAL CHIP	100K	5%	1/10W	R688	1-216-089-00	METAL CHIP	47K	5%	1/10W
R632	1-216-097-00	METAL CHIP	100K	5%	1/10W	R689	1-216-025-00	METAL CHIP	100	5%	1/10W
R633	1-216-073-00	METAL CHIP	10K	5%	1/10W	R690	1-216-089-00	METAL CHIP	47K	5%	1/10W
R634	1-216-097-00	METAL CHIP	100K	5%	1/10W	R691	1-216-073-00	METAL CHIP	10K	5%	1/10W
R638	1-216-049-00	METAL CHIP	1K	5%	1/10W	R692	1-216-085-00	METAL CHIP	33K	5%	1/10W
R639	1-216-049-00	METAL CHIP	1K	5%	1/10W	R693	1-216-081-00	METAL CHIP	22K	5%	1/10W
R640	1-216-073-00	METAL CHIP	10K	5%	1/10W	R694	1-216-081-00	METAL CHIP	22K	5%	1/10W
R641	1-216-073-00	METAL CHIP	10K	5%	1/10W	R695	1-216-089-00	METAL CHIP	47K	5%	1/10W
R642	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	R696	1-216-089-00	METAL CHIP	47K	5%	1/10W
R643	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R697	1-216-089-00	METAL CHIP	47K	5%	1/10W
R644	1-216-113-00	METAL CHIP	470K	5%	1/10W	R698	1-216-085-00	METAL CHIP	33K	5%	1/10W
R645	1-216-113-00	METAL CHIP	470K	5%	1/10W	R699	1-216-025-00	METAL CHIP	100	5%	1/10W
R646	1-216-049-00	METAL CHIP	1K	5%	1/10W	R700	1-216-089-00	METAL CHIP	47K	5%	1/10W
R647	1-216-079-00	METAL CHIP	18K	5%	1/10W	R701	1-216-113-00	METAL CHIP	470K	5%	1/10W
R648	1-216-081-00	METAL CHIP	22K	5%	1/10W	R702	1-216-105-00	METAL CHIP	220K	5%	1/10W
R649	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R703	1-216-105-00	METAL CHIP	220K	5%	1/10W
R650	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R704	1-216-089-00	METAL CHIP	47K	5%	1/10W
R651	1-216-089-00	METAL CHIP	47K	5%	1/10W	R705	1-216-073-00	METAL CHIP	10K	5%	1/10W
R652	1-216-089-00	METAL CHIP	47K	5%	1/10W	R706	1-216-089-00	METAL CHIP	47K	5%	1/10W
R653	1-216-089-00	METAL CHIP	47K	5%	1/10W	R708	1-216-089-00	METAL CHIP	47K	5%	1/10W
R654	1-216-081-00	METAL CHIP	22K	5%	1/10W	R709	1-216-089-00	METAL CHIP	47K	5%	1/10W
R655	1-216-089-00	METAL CHIP	47K	5%	1/10W	R710	1-216-081-00	METAL CHIP	22K	5%	1/10W
R656	1-216-049-00	METAL CHIP	1K	5%	1/10W	R711	1-216-089-00	METAL CHIP	47K	5%	1/10W
R657	1-216-073-00	METAL CHIP	10K	5%	1/10W	R712	1-216-089-00	METAL CHIP	47K	5%	1/10W
R658	1-216-025-00	METAL CHIP	100	5%	1/10W	R713	1-216-097-00	METAL CHIP	100K	5%	1/10W
R661	1-216-097-00	METAL CHIP	100K	5%	1/10W						

Ref. No.	Part No.	Description	Remark
R721	1-216-089-00	METAL CHIP 47K 5%	1/10W
R722	1-216-089-00	METAL CHIP 47K 5%	1/10W
R723	1-216-073-00	METAL CHIP 10K 5%	1/10W
R724	1-216-073-00	METAL CHIP 10K 5%	1/10W
R725	1-216-089-00	METAL CHIP 47K 5%	1/10W

* A-7061-824-A MB-19 (P) BOARD, COMPLETE

 (Ref. No 7,000 Series)

* 4-911-047-01 VIBRATION CONTROL (D)

< CAPACITOR >

C601	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C602	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C603	1-163-093-00	CERAMIC CHIP 10PF 5%	50V
C604	1-163-093-00	CERAMIC CHIP 10PF 5%	50V
C605	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C606	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C607	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C608	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C609	1-124-234-00	ELECT 22uF 20%	16V
C610	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C641	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C651	1-163-141-00	CERAMIC CHIP 0.001uF 5%	50V
C652	1-124-234-00	ELECT 22uF 20%	16V
C653	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C661	1-163-141-00	CERAMIC CHIP 0.001uF 5%	50V
C662	1-124-234-00	ELECT 22uF 20%	16V
C663	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C671	1-124-584-00	ELECT 100uF 20%	10V
C672	1-135-091-00	TANTALUM CHIP 1uF 20%	16V
C673	1-124-584-00	ELECT 100uF 20%	10V
C674	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C675	1-163-019-00	CERAMIC CHIP 0.0068uF 10%	50V
C676	1-124-584-00	ELECT 100uF 20%	10V
C677	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C678	1-124-584-00	ELECT 100uF 20%	10V
C679	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C680	1-135-155-21	TANTALUM CHIP 4.7uF 10%	10V
C681	1-124-584-00	ELECT 100uF 20%	10V
C682	1-135-157-21	TANTALUM CHIP 10uF 20%	6.3V
C683	1-164-232-11	CERAMIC CHIP 0.01uF	50V

< CONNECTOR >

CN601	1-566-943-11	CONNECTOR, BOARD TO BOARD 18P
CN602	1-566-944-11	CONNECTOR, BOARD TO BOARD 22P
CN603	1-506-467-11	CONNECTOR 2P, MALE
CN605	1-506-473-11	CONNECTOR 8P, MALE

Ref. No.	Part No.	Description	Remark
CN606	1-506-470-11	CONNECTOR 5P, MALE	
CN923	1-506-474-11	CONNECTOR 9P, MALE	
CN924	1-506-473-11	CONNECTOR 8P, MALE	

< DIODE >

D601	8-719-104-34	DIODE 1S2835-T1
D602	8-719-104-34	DIODE 1S2835-T1
D603	8-719-104-34	DIODE 1S2835-T1
D604	8-719-400-18	DIODE MA152WK
D641	8-719-800-76	DIODE 1SS226

D642	8-719-800-76	DIODE 1SS226
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< IC >

IC004	8-752-322-57	IC CXD1077M
IC005	8-759-908-15	IC TL431CLP
IC601	8-759-149-34	IC uPD751066-591-18
IC603	8-759-309-71	IC TC4053BFHB-TP1
IC651	8-759-603-27	IC M5201FP

IC661	8-759-603-27	IC M5201FP
IC671	8-741-150-50	IC SBX1505-01

< COIL >

L601	1-408-970-21	INDUCTOR 10uH
L602	1-408-970-21	INDUCTOR 10uH
L603	1-408-970-21	INDUCTOR 10uH
L604	1-408-948-00	INDUCTOR 220uH
L605	1-408-948-00	INDUCTOR 220uH

L641	1-410-393-11	INDUCTOR CHIP 100uH
L671	1-408-948-00	INDUCTOR 220uH

< TRANSISTOR >

Q601	8-729-901-06	TRANSISTOR DTA144EK
Q602	8-729-901-01	TRANSISTOR DTC144EK
Q603	8-729-901-01	TRANSISTOR DTC144EK
Q604	8-729-901-01	TRANSISTOR DTC144EK
Q605	8-729-901-06	TRANSISTOR DTA144EK

Q606	8-729-901-06	TRANSISTOR DTA144EK
Q607	8-729-901-01	TRANSISTOR DTC144EK
Q608	8-729-901-01	TRANSISTOR DTC144EK
Q609	8-729-901-06	TRANSISTOR DTA144EK
Q671	8-729-100-66	TRANSISTOR 2SC1623

< RESISTOR >

R601	1-216-089-00	METAL CHIP 47K 5%	1/10W
R602	1-216-089-00	METAL CHIP 47K 5%	1/10W
R603	1-216-097-00	METAL CHIP 100K 5%	1/10W
R604	1-216-073-00	METAL CHIP 10K 5%	1/10W
R611	1-216-081-00	METAL CHIP 22K 5%	1/10W

MB-19 (P)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R612	1-216-081-00	METAL CHIP	22K 5% 1/10W	R674	1-216-077-00	METAL CHIP	15K 5% 1/10W
R613	1-216-081-00	METAL CHIP	22K 5% 1/10W	R675	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R614	1-216-081-00	METAL CHIP	22K 5% 1/10W	R676	1-216-045-00	METAL CHIP	680 5% 1/10W
R615	1-216-081-00	METAL CHIP	22K 5% 1/10W	R677	1-216-075-00	METAL CHIP	12K 5% 1/10W
R616	1-216-081-00	METAL CHIP	22K 5% 1/10W	R678	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R617	1-216-081-00	METAL CHIP	22K 5% 1/10W	R679	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R618	1-216-079-00	METAL CHIP	18K 5% 1/10W	R680	1-216-049-00	METAL CHIP	1K 5% 1/10W
R619	1-216-081-00	METAL CHIP	22K 5% 1/10W	R681	1-216-039-00	METAL CHIP	47K 5% 1/10W
R625	1-216-041-00	METAL CHIP	470 5% 1/10W	R682	1-216-097-00	METAL CHIP	100K 5% 1/10W
R626	1-216-089-00	METAL CHIP	47K 5% 1/10W	R683	1-216-089-00	METAL CHIP	47K 5% 1/10W
R627	1-216-089-00	METAL CHIP	47K 5% 1/10W	< VARIABLE RESISTOR >			
R628	1-216-089-00	METAL CHIP	47K 5% 1/10W	RV001	1-230-524-11	RES. ADJ. METAL 22K	
R629	1-216-073-00	METAL CHIP	10K 5% 1/10W	RV002	1-230-521-11	RES. ADJ. METAL 2.2K	
R630	1-216-089-00	METAL CHIP	47K 5% 1/10W	RV031	1-230-521-11	RES. ADJ. METAL 2.2K	
R631	1-216-089-00	METAL CHIP	47K 5% 1/10W	RV032	1-230-529-11	RES. ADJ. METAL 470K	
R632	1-216-041-00	METAL CHIP	470 5% 1/10W	RV051	1-230-524-11	RES. ADJ. METAL 22K	
R633	1-216-089-00	METAL CHIP	47K 5% 1/10W	RV052	1-230-521-11	RES. ADJ. METAL 2.2K	
R634	1-216-097-00	METAL CHIP	100K 5% 1/10W	< SWITCH >			
R635	1-216-049-00	METAL CHIP	1K 5% 1/10W	S641	1-554-371-51	SWITCH, TACT (EJECT)	
R636	1-216-049-00	METAL CHIP	1K 5% 1/10W	S642	1-554-371-51	SWITCH, TACT (PB)	
R637	1-216-073-00	METAL CHIP	10K 5% 1/10W	S643	1-554-371-51	SWITCH, TACT (PAUSE)	
R638	1-216-073-00	METAL CHIP	10K 5% 1/10W	S644	1-554-371-51	SWITCH, TACT (REW)	
R639	1-216-073-00	METAL CHIP	10K 5% 1/10W	S645	1-554-371-51	SWITCH, TACT (STOP)	
R641	1-216-072-00	METAL CHIP	9.1K 5% 1/10W	S646	1-554-371-51	SWITCH, TACT (REC)	
R642	1-216-081-00	METAL CHIP	22K 5% 1/10W	S647	1-554-371-51	SWITCH, TACT (FF)	
R643	1-216-089-00	METAL CHIP	47K 5% 1/10W	S648	1-570-909-21	SWITCH, TACTIL (REFLOW TYPE) (POWER)	
R644	1-216-099-00	METAL CHIP	120K 5% 1/10W	S649	1-554-371-51	SWITCH, TACT (X-1)	
R645	1-216-072-00	METAL CHIP	9.1K 5% 1/10W	< FILTER >			
R646	1-216-081-00	METAL CHIP	22K 5% 1/10W	T603	1-235-398-11	BPF	
R647	1-216-089-00	METAL CHIP	47K 5% 1/10W	T651	1-235-900-11	FILTER, LOW PASS	
R648	1-216-099-00	METAL CHIP	120K 5% 1/10W	T661	1-235-900-11	FILTER, LOW PASS	
R649	1-216-061-00	METAL CHIP	3.3K 5% 1/10W	< VIBRATOR >			
R651	1-216-093-00	METAL CHIP	68K 5% 1/10W	X601	1-567-121-00	VIBRATOR, CRYSTAL (4.19430MHz)	
R652	1-216-065-00	METAL CHIP	4.7K 5% 1/10W	*****			
R653	1-216-093-00	METAL CHIP	68K 5% 1/10W				
R654	1-216-047-00	METAL CHIP	820 5% 1/10W				
R655	1-216-051-00	METAL CHIP	1.2K 5% 1/10W				
R656	1-216-057-00	METAL CHIP	2.2K 5% 1/10W				
R657	1-216-089-00	METAL CHIP	47K 5% 1/10W				
R661	1-216-093-00	METAL CHIP	68K 5% 1/10W				
R662	1-216-065-00	METAL CHIP	4.7K 5% 1/10W				
R663	1-216-093-00	METAL CHIP	68K 5% 1/10W				
R664	1-216-047-00	METAL CHIP	820 5% 1/10W				
R665	1-216-051-00	METAL CHIP	1.2K 5% 1/10W				
R666	1-216-057-00	METAL CHIP	2.2K 5% 1/10W				
R667	1-216-089-00	METAL CHIP	47K 5% 1/10W				
R671	1-216-295-00	METAL CHIP	0 5% 1/10W				
R672	1-216-077-00	METAL CHIP	15K 5% 1/10W				
R673	1-216-052-00	METAL CHIP	1.3K 5% 1/10W				



Ref. No.	Part No.	Description	Remark
* A-7062-843-A MC-81 BOARD, COMPLETE			

(Ref. No 15, 000 Series)			
9-911-841-XX CUSHION			
< CAPACITOR >			
C001	1-126-442-11	CAP, DOUBLE LAYERS 0.022F	
C002	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C003	1-126-163-11	ELECT 4.7uF	20% 50V
C004	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C005	1-126-163-11	ELECT 4.7uF	20% 50V
C006	1-126-163-11	ELECT 4.7uF	20% 50V
C007	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C008	1-126-163-11	ELECT 4.7uF	20% 50V
C009	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C011	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C012	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C013	1-126-163-11	ELECT 4.7uF	20% 50V
C014	1-126-163-11	ELECT 4.7uF	20% 50V
C015	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C016	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C017	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C018	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C019	1-126-157-11	ELECT 10uF	20% 16V
C020	1-126-157-11	ELECT 10uF	20% 16V
C021	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C022	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C023	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C024	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C025	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C026	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C027	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C028	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C029	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C030	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C031	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C032	1-124-589-11	ELECT 47uF	20% 16V
C033	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C034	1-124-472-11	ELECT 470uF	20% 10V
C035	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C036	1-126-163-11	ELECT 4.7uF	20% 50V
C037	1-126-163-11	ELECT 4.7uF	20% 50V
C038	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C039	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C040	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C041	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C042	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C043	1-164-232-11	CERAMIC CHIP 0.01uF	50V

Ref. No.	Part No.	Description	Remark
C044	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C045	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C046	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C047	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C048	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C049	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C050	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C051	1-126-163-11	ELECT 4.7uF	20% 50V
C052	1-126-163-11	ELECT 4.7uF	20% 50V
C053	1-126-163-11	ELECT 4.7uF	20% 50V
C054	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C055	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C056	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C057	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C059	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C060	1-130-497-00	MYLAR 0.15uF	5% 50V
C061	1-130-495-00	MYLAR 0.1uF	5% 50V
C062	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C063	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C064	1-130-491-00	MYLAR 0.047uF	5% 50V
C065	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C066	1-130-485-00	MYLAR 0.015uF	5% 50V
C067	1-130-483-00	MYLAR 0.01uF	5% 50V
C068	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C069	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C070	1-126-157-11	ELECT 10uF	20% 16V
C071	1-126-157-11	ELECT 10uF	20% 16V
C072	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C073	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
C074	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
C075	1-163-245-11	CERAMIC CHIP 58PF	5% 50V
C076	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C077	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C078	1-130-493-00	MYLAR 0.068uF	5% 50V
C079	1-130-491-00	MYLAR 0.047uF	5% 50V
C080	1-130-491-00	MYLAR 0.047uF	5% 50V
C081	1-124-472-11	ELECT 470uF	20% 10V
C082	1-164-232-11	CERAMIC CHIP 0.01uF	50V
< CONNECTOR >			
CN001	1-506-478-11	CONNECTOR 13P, MALE	
CN002	1-506-478-11	CONNECTOR 13P, MALE	
CN003	1-506-486-11	PIN, CONNECTOR 7P	
CN004	1-506-477-11	CONNECTOR 12P, MALE	
CN005	1-506-473-11	CONNECTOR 8P, MALE	
CN006	1-506-478-11	CONNECTOR 13P, MALE	
CN007	1-506-478-11	CONNECTOR 13P, MALE	
CN008	1-506-471-11	CONNECTOR 6P, MALE	
CN009	1-506-485-11	CONNECTOR 6P, MALE	

MC-81

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
CN010	1-506-483-21	CONNECTOR 4P, MALE		IC025	8-759-925-74	IC SN74HC04ANS	
CN011	1-506-483-21	CONNECTOR 4P, MALE		IC026	8-759-925-76	IC SN74HC08ANS	
CN012	1-506-489-11	CONNECTOR 10P, MALE		IC027	8-759-926-05	IC SN74HC125NS	
CN101	1-506-489-11	CONNECTOR 10P, MALE		IC028	8-759-145-50	IC uPD71051GB-3B4	
CN102	1-506-483-21	CONNECTOR 4P, MALE		IC029	8-759-926-74	IC SN74HC393ANS	
		< TRIMMER >		IC030	8-759-009-10	IC MC14069UBF	
CV001	1-141-245-00	CAP, TRIMMER 30PF		IC032	8-759-009-51	IC MC14538BF	
		< DIODE >		IC033	8-759-916-25	IC SN74HC32AN	
D001	8-719-105-64	DIODE RD4. 3M		IC034	8-759-206-28	IC MC74HC123AF	
D002	8-719-981-01	DIODE ERA81-004		IC035	8-759-206-28	IC MC74HC123AF	
D003	8-719-400-18	DIODE MA152WK		IC036	8-759-925-90	IC SN74HC74ANS	
D004	8-719-400-18	DIODE MA152WK		IC037	8-759-011-65	IC MC74HC4053F	
D005	8-719-400-18	DIODE MA152WK		IC037	8-759-236-XX	IC TC74HC4053AF	
		< FILTER >		IC038	8-759-926-67	IC SN74HC374ANS	
FL001	1-421-928-11	FILTER, NOISE		IC039	8-759-937-56	IC S-8054ALB-LM-S	
FL002	1-421-928-11	FILTER, NOISE		IC040	8-759-206-28	IC MC74HC123AF	
FL003	1-421-928-11	FILTER, NOISE				< IC SOCKET >	
FL004	1-421-928-11	FILTER, NOISE		ICS006 *	1-526-659-00	SOCKET, IC (DP) 28P	
FL005	1-421-928-11	FILTER, NOISE				< COIL >	
FL006	1-421-928-11	FILTER, NOISE		L001	1-407-169-XX	INDUCTOR 100uH	
		< IC >		L002	1-407-169-XX	INDUCTOR 100uH	
IC001	8-759-320-29	IC HD63B05Z0-A28F		L003	1-407-169-XX	INDUCTOR 100uH	
IC002	8-759-154-29	IC uPD75108G		L004	1-407-169-XX	INDUCTOR 100uH	
IC003	8-759-149-66	IC uPD75108G-F52-1B		L005	1-408-970-21	INDUCTOR 10uH	
IC004	8-752-331-00	IC CXK5864BM-12L		L006	1-407-169-XX	INDUCTOR 100uH	
IC005	8-759-516-74	IC MB90061		L007	1-407-169-XX	INDUCTOR 100uH	
IC006	8-759-048-71	IC LH53259-73		L008	1-408-966-21	INDUCTOR 4.7uH	
IC007	8-752-331-00	IC CXK5864BM-12L				< IC LINK >	
IC008	8-759-916-25	IC SN74HC32AN		PS001	△1-532-727-11	LINK, IC 0.25A	
IC009	8-759-926-67	IC SN74HC374ANS				< TRANSISTOR >	
IC010	8-759-926-67	IC SN74HC374ANS		Q001	8-729-216-22	TRANSISTOR 2SA1162	
IC011	8-759-926-48	IC SN74HC244ANS		Q002	8-729-100-66	TRANSISTOR 2SC1623	
IC012	8-759-926-67	IC SN74HC374ANS		Q003	8-729-901-01	TRANSISTOR DTC144EK	
IC013	8-759-926-67	IC SN74HC374ANS		Q004	8-729-901-01	TRANSISTOR DTC144EK	
IC014	8-759-926-48	IC SN74HC244ANS		Q005	8-729-901-06	TRANSISTOR DTA144EK	
IC015	8-759-926-48	IC SN74HC244ANS		Q006	8-729-901-01	TRANSISTOR DTC144EK	
IC016	8-759-927-46	IC SN74HC00ANS		Q007	8-729-100-66	TRANSISTOR 2SC1623	
IC017	8-759-926-48	IC SN74HC244ANS		Q010	8-729-901-01	TRANSISTOR DTC144EK	
IC018	8-759-937-56	IC S-8054ALB-LM-S		Q011	8-729-901-01	TRANSISTOR DTC144EK	
IC019	8-759-916-25	IC SN74HC32AN		Q012	8-729-100-66	TRANSISTOR 2SC1623	
IC020	8-759-916-25	IC SN74HC32AN				< RESISTOR >	
IC021	8-759-926-05	IC SN74HC125NS		R001	1-216-049-00	METAL CHIP 1K 5% 1/10W	
IC022	8-759-926-11	IC SN74HC138ANS		R002	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
IC023	8-759-926-12	IC SN74HC139ANS		R003	1-216-039-00	METAL CHIP 390 5% 1/10W	
IC024	8-759-926-05	IC SN74HC125NS					

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

MC-81**MD-23 (P)**

Ref. No.	Part No.	Description	Remark		
R119	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R120	1-216-089-00	METAL CHIP	47K	5%	1/10W
R121	1-216-089-00	METAL CHIP	47K	5%	1/10W
R122	1-216-089-00	METAL CHIP	47K	5%	1/10W
R123	1-216-089-00	METAL CHIP	47K	5%	1/10W
R124	1-216-107-00	METAL CHIP	270K	5%	1/10W
R125	1-216-091-00	METAL CHIP	56K	5%	1/10W
R126	1-216-089-00	METAL CHIP	47K	5%	1/10W
R127	1-216-089-00	METAL CHIP	47K	5%	1/10W
R129	1-216-089-00	METAL CHIP	47K	5%	1/10W
R131	1-216-017-00	METAL CHIP	47	5%	1/10W
R132	1-216-017-00	METAL CHIP	47	5%	1/10W
R133	1-216-017-00	METAL CHIP	47	5%	1/10W
R134	1-216-017-00	METAL CHIP	47	5%	1/10W
R135	1-216-017-00	METAL CHIP	47	5%	1/10W
R137	1-216-089-00	METAL CHIP	47K	5%	1/10W
R139	1-216-296-00	METAL CHIP	0	5%	1/8W
R140	1-216-025-00	METAL CHIP	100	5%	1/10W
R141	1-216-296-00	METAL CHIP	0	5%	1/8W
R142	1-216-025-00	METAL CHIP	100	5%	1/10W
R143	1-216-025-00	METAL CHIP	100	5%	1/10W
R144	1-216-025-00	METAL CHIP	100	5%	1/10W
R145	1-216-049-00	METAL CHIP	1K	5%	1/10W
R146	1-216-089-00	METAL CHIP	47K	5%	1/10W
R147	1-216-089-00	METAL CHIP	47K	5%	1/10W
R148	1-216-089-00	METAL CHIP	47K	5%	1/10W
R149	1-216-049-00	METAL CHIP	1K	5%	1/10W
R150	1-216-049-00	METAL CHIP	1K	5%	1/10W
R151	1-216-049-00	METAL CHIP	1K	5%	1/10W
R152	1-216-096-00	METAL GLAZE	91K	5%	1/10W
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W
R155	1-216-104-00	METAL CHIP	200K	5%	1/10W
R156	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R157	1-216-089-00	METAL CHIP	47K	5%	1/10W
R158	1-216-037-00	METAL CHIP	330	5%	1/10W
R159	1-216-025-00	METAL CHIP	100	5%	1/10W
R160	1-216-105-00	METAL CHIP	220K	5%	1/10W
R161	1-216-107-00	METAL CHIP	270K	5%	1/10W
R162	1-216-073-00	METAL CHIP	10K	5%	1/10W
R163	1-216-089-00	METAL CHIP	47K	5%	1/10W
R165	1-216-089-00	METAL CHIP	47K	5%	1/10W
R171	1-216-089-00	METAL CHIP	47K	5%	1/10W

< VARIABLE RESISTOR >

RV001	1-230-526-11	RES. ADJ. METAL 47K
RV002	1-230-522-11	RES. ADJ. METAL 4.7K
RV003	1-230-526-11	RES. ADJ. METAL 47K
RV004	1-230-527-11	RES. ADJ. METAL 100K

Ref. No.	Part No.	Description	Remark
< VIBRATOR >			
X001	1-567-132-00	OSCILLATOR, CERAMIC (8.00MHz)	
X002	1-567-160-21	OSCILLATOR, CERAMIC (4.19MHz)	
X003	1-567-160-21	OSCILLATOR, CERAMIC (4.19MHz)	
X004	1-527-827-00	OSCILLATOR, CRYSTAL	
X005	1-567-344-21	VIBRATOR, CRYSTAL (VCO)	

* A-7062-168-A MD-23 (P) BOARD, COMPLETE

(Ref. No 1,000 Series)

1-625-649-11 FP-84 FLEXIBLE BOARD
 1-625-650-11 FP-122 FLEXIBLE BOARD

< CAPACITOR >

C801	1-124-465-00	ELECT	0.47uF	20%	50V
C802	1-124-464-11	ELECT	0.22uF	20%	50V
C803	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C804	1-126-160-11	ELECT	1uF	20%	50V
C805	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C806	1-126-151-11	ELECT, NONPOLAR	4.7uF	20%	16V
C808	1-126-162-11	ELECT	3.3uF	20%	50V
C809	1-124-584-00	ELECT	100uF	20%	10V
C810	1-126-096-11	ELECT	10uF	20%	35V
C811	1-126-096-11	ELECT	10uF	20%	35V
C812	1-126-096-11	ELECT	10uF	20%	35V
C813	1-126-160-11	ELECT	1uF	20%	50V
C814	1-126-160-11	ELECT	1uF	20%	50V
C815	1-126-160-11	ELECT	1uF	20%	50V
C816	1-124-229-00	ELECT	33uF	20%	10V
C817	1-124-229-00	ELECT	33uF	20%	10V
C818	1-124-229-00	ELECT	33uF	20%	10V
C819	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C820	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C821	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C822	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C823	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C824	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C825	1-126-162-11	ELECT	3.3uF	20%	50V
C833	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C834	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C835	1-126-501-11	ELECT	0.15uF	20%	50V
C836	1-164-157-11	CERAMIC CHIP	0.068uF	10%	25V
C837	1-124-464-11	ELECT	0.22uF	20%	50V
C838	1-124-589-11	ELECT	47uF	20%	16V
C839	1-126-529-11	ELECT	0.47uF	20%	50V
C840	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C841	1-124-589-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description	Remark
C901	1-124-234-00	ELECT	22uF 20% 16V
C902	1-124-234-00	ELECT	22uF 20% 16V
C903	1-124-234-00	ELECT	22uF 20% 16V
C904	1-124-234-00	ELECT	22uF 20% 16V
C905	1-124-257-00	ELECT	2.2uF 20% 50V
C906	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C907	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C908	1-126-096-11	ELECT	10uF 20% 35V
C909	1-163-077-00	CERAMIC CHIP	0.1uF 10% 25V
C910	1-130-491-00	MYLAR	0.047uF 5% 50V
C911	1-130-491-00	MYLAR	0.047uF 5% 50V
C912	1-130-483-00	MYLAR	0.01uF 5% 50V
C913	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C914	1-124-589-11	ELECT	47uF 20% 16V
C915	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C916	1-126-530-11	ELECT	22uF 20% 10V
C917	1-126-530-11	ELECT	22uF 20% 10V
C918	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C919	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C950	1-164-157-11	CERAMIC CHIP	0.068uF 10% 25V
C990	1-163-145-00	CERAMIC CHIP	0.0015uF 5% 50V
C991	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C992	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C993	1-164-232-11	CERAMIC CHIP	0.01uF 50V
< CONNECTOR >			
CN801	1-506-483-21	CONNECTOR 4P, MALE	
CN803	1-506-481-11	CONNECTOR 2P, MALE	
CN804	1-506-484-11	CONNECTOR 5P, MALE	
CN805	1-506-469-11	CONNECTOR 4P, MALE	
CN806	1-506-469-11	CONNECTOR 4P, MALE	
CN807	1-566-627-11	CONNECTOR, FPC (ZIF) 11P	
CN808	1-566-531-11	CONNECTOR, FPC (ZIF) 15P	
CN809	1-566-945-11	CONNECTOR, BOARD TO BOARD 18P	
CN810	1-566-946-11	CONNECTOR, BOARD TO BOARD 22P	
CN811	* 1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
CN812	1-566-942-11	CONNECTOR, HINGE (RECEPTACLE)	30P
CN814	* 1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
< DIODE >			
D803	8-719-200-27	DIODE E10DS2	
D810	8-719-400-18	DIODE MA152WK	
D811	8-719-200-27	DIODE E10DS2	
D901	8-719-400-18	DIODE MA152WK	
D902	8-719-400-18	DIODE MA152WK	
D903	8-719-400-18	DIODE MA152WK	
D904	8-719-800-76	DIODE 1SS226	
D905	8-719-400-18	DIODE MA152WK	

Ref. No.	Part No.	Description	Remark
< IC >			
IC801	8-752-037-08	IC CXA1109M	
IC802	8-759-802-79	IC LB1616M	
IC804	8-759-981-82	IC RC3414M	
IC805	8-759-100-93	IC uPC39362	
IC806	8-759-207-00	IC TA7733F	
IC807	8-759-107-68	IC CX20115A	
IC808	8-759-700-62	IC NJM4562D	
IC809	8-759-100-94	IC uPC35862	
IC901	8-759-207-50	IC TA7745F	
IC902	8-759-150-05	IC uPC32462	
IC903	8-759-925-66	IC BA6303F	
IC904	8-759-008-67	IC MC140668F	
< COIL >			
L990	1-408-793-21	INDUCTOR, CHIP 220uH	
L991	1-408-777-00	INDUCTOR CHIP 10uH	
< IC LINK >			
PS801	△ 1-532-665-00	LINK, IC	
< TRANSISTOR >			
Q806	8-729-111-14	TRANSISTOR 2SA1385	
Q807	8-729-901-06	TRANSISTOR DTA144EK	
Q809	8-729-111-95	TRANSISTOR 2SC3518	
Q810	8-729-805-25	TRANSISTOR 2SB1121	
Q811	8-729-805-25	TRANSISTOR 2SB1121	
Q812	8-729-111-14	TRANSISTOR 2SA1385	
Q813	8-729-100-66	TRANSISTOR 2SC1623	
Q820	8-729-111-95	TRANSISTOR 2SC3518	
Q821	8-729-100-66	TRANSISTOR 2SC1623	
Q880	8-729-100-66	TRANSISTOR 2SC1623	
Q901	8-729-920-82	TRANSISTOR 2SB1188	
Q902	8-729-920-82	TRANSISTOR 2SB1188	
Q903	8-729-920-82	TRANSISTOR 2SB1188	
Q904	8-729-901-06	TRANSISTOR DTA144EK	
Q905	8-729-901-06	TRANSISTOR DTA144EK	
Q906	8-729-901-01	TRANSISTOR DTC144EK	
Q907	8-729-901-01	TRANSISTOR DTC144EK	
Q908	8-729-901-01	TRANSISTOR DTC144EK	
Q909	8-729-901-06	TRANSISTOR DTA144EK	
Q950	8-729-903-97	TRANSISTOR FMS1FE	
Q990	8-729-100-66	TRANSISTOR 2SC1623	
< RESISTOR >			
R801	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R802	1-216-105-00	METAL CHIP 220K 5% 1/10W	

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

MD-23 (P)

Ref. No.	Part No.	Description	Remark
R803	1-216-097-00	METAL CHIP	100K 5% 1/10W
R804	1-216-097-00	METAL CHIP	100K 5% 1/10W
R805	1-216-085-00	METAL CHIP	33K 5% 1/10W
R806	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R807	1-216-049-00	METAL CHIP	1K 5% 1/10W
R810	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R811	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R818	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R819	1-216-113-00	METAL CHIP	470K 5% 1/10W
R820	1-216-025-00	METAL CHIP	100 5% 1/10W
R823	1-216-025-00	METAL CHIP	100 5% 1/10W
R824	1-216-081-00	METAL CHIP	22K 5% 1/10W
R826	1-216-073-00	METAL CHIP	10K 5% 1/10W
R830	1-216-101-00	METAL CHIP	150K 5% 1/10W
R831	1-216-049-00	METAL CHIP	1K 5% 1/10W
R832	1-216-304-11	METAL CHIP	3.3 5% 1/10W
R833	1-216-304-11	METAL CHIP	3.3 5% 1/10W
R834	1-216-304-11	METAL CHIP	3.3 5% 1/10W
R835	1-216-049-00	METAL CHIP	1K 5% 1/10W
R840	1-216-107-00	METAL CHIP	270K 5% 1/10W
R841	1-216-073-00	METAL CHIP	10K 5% 1/10W
R842	1-216-073-00	METAL CHIP	10K 5% 1/10W
R843	1-216-073-00	METAL CHIP	10K 5% 1/10W
R844	1-216-107-00	METAL CHIP	270K 5% 1/10W
R845	1-216-073-00	METAL CHIP	10K 5% 1/10W
R846	1-216-107-00	METAL CHIP	270K 5% 1/10W
R847	1-216-073-00	METAL CHIP	10K 5% 1/10W
R848	1-216-107-00	METAL CHIP	270K 5% 1/10W
R849	1-216-073-00	METAL CHIP	10K 5% 1/10W
R852	1-216-081-00	METAL CHIP	22K 5% 1/10W
R850	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R851	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R854	1-216-033-00	METAL CHIP	220 5% 1/10W
R870	1-216-113-00	METAL CHIP	470K 5% 1/10W
R885	1-216-073-00	METAL CHIP	10K 5% 1/10W
R886	1-216-073-00	METAL CHIP	10K 5% 1/10W
R887	1-216-049-00	METAL CHIP	1K 5% 1/10W
R888	1-216-049-00	METAL CHIP	1K 5% 1/10W
R890	1-216-681-11	METAL CHIP	18K 0.5% 1/10W
R891	1-216-681-11	METAL CHIP	18K 0.5% 1/10W
R892	1-216-077-00	METAL CHIP	15K 5% 1/10W
R893	1-216-077-00	METAL CHIP	15K 5% 1/10W
R894	1-216-113-00	METAL CHIP	470K 5% 1/10W
R895	1-216-113-00	METAL CHIP	470K 5% 1/10W
R896	1-216-025-00	METAL CHIP	100 5% 1/10W
R897	1-216-049-00	METAL CHIP	1K 5% 1/10W
R898	1-216-025-00	METAL CHIP	100 5% 1/10W
R899	1-216-073-00	METAL CHIP	10K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R900	1-216-097-00	METAL CHIP	100K 5% 1/10W
R901	1-216-035-00	METAL CHIP	270 5% 1/10W
R902	1-216-035-00	METAL CHIP	270 5% 1/10W
R903	1-216-035-00	METAL CHIP	270 5% 1/10W
R904	1-216-049-00	METAL CHIP	1K 5% 1/10W
R905	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R906	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R907	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
R908	1-216-027-00	METAL CHIP	120 5% 1/10W
R909	1-216-027-00	METAL CHIP	120 5% 1/10W
R910	1-216-073-00	METAL CHIP	10K 5% 1/10W
R911	1-216-113-00	METAL CHIP	470K 5% 1/10W
R912	1-216-089-00	METAL CHIP	6.8K 5% 1/10W
R913	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R916	1-216-073-00	METAL CHIP	10K 5% 1/10W
R917	1-216-073-00	METAL CHIP	10K 5% 1/10W
R918	1-216-073-00	METAL CHIP	10K 5% 1/10W
R919	1-216-073-00	METAL CHIP	10K 5% 1/10W
R920	1-216-077-00	METAL CHIP	15K 5% 1/10W
R921	1-216-083-00	METAL CHIP	27K 5% 1/10W
R922	1-216-085-00	METAL CHIP	33K 5% 1/10W
R923	1-216-748-11	METAL CHIP	39K 1% 1/10W
R924	1-216-089-00	METAL CHIP	47K 5% 1/10W
R925	1-216-089-00	METAL CHIP	47K 5% 1/10W
R926	1-216-111-00	METAL CHIP	390K 5% 1/10W
R927	1-216-110-00	METAL GLAZE	360K 5% 1/10W
R928	1-216-073-00	METAL CHIP	10K 5% 1/10W
R929	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R951	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
R952	1-216-063-00	METAL CHIP	3.9K 5% 1/10W
R953	1-214-972-00	METAL	0.22 1% 1/4W
R955	1-216-079-00	METAL CHIP	18K 5% 1/10W
R990	1-216-045-00	METAL CHIP	680 5% 1/10W
R991	1-216-073-00	METAL CHIP	10K 5% 1/10W
R992	1-216-073-00	METAL CHIP	10K 5% 1/10W
R993	1-216-049-00	METAL CHIP	1K 5% 1/10W
R996	1-216-049-00	METAL CHIP	1K 5% 1/10W
R997	1-216-049-00	METAL CHIP	1K 5% 1/10W
R998	1-216-049-00	METAL CHIP	1K 5% 1/10W
R999	1-216-295-00	METAL CHIP	0 5% 1/10W
< VARIABLE RESISTOR >			
RV801	1-230-520-11	RES. ADJ. METAL 1K	
RV802	1-230-523-11	RES. ADJ. METAL 10K	
RV803	1-230-527-11	RES. ADJ. METAL 100K	
RV901	1-230-529-11	RES. ADJ. METAL 470K	
< THERMISTOR >			
THP801	1-202-854-00	THERMISTOR (POSITIVE)	

MD-23 (P)**MJ-26****MM-25**

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
W801	1-562-880-11	CONNECTOR, CARD EDGE 15P	
W901	1-562-880-11	CONNECTOR, CARD EDGE 15P	

* A-7062-226-A MJ-26 BOARD, COMPLETE			

(Ref. No 12,000 Series)			
3-684-465-01 NUT, HEXAGON			
* 3-747-022-01 HOLDER, MIC			
< CAPACITOR >			
C301	1-164-182-11	CERAMIC CHIP 0.0033uF 10%	50V
C302	1-164-182-11	CERAMIC CHIP 0.0033uF 10%	50V
C303	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C304	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C305	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C306	1-126-193-11	ELECT 1uF 20%	50V
C307	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C308	1-164-182-11	CERAMIC CHIP 0.0033uF 10%	50V
< DIODE >			
D301	8-719-108-12	DIODE RD9.1E-W	
< IC >			
IC301	8-759-700-62	IC NJM4562D	
< JACK >			
J301	1-507-932-11	JACK, LARGE TYPE (MIC)	
< TRANSISTOR >			
Q301	8-729-216-22	TRANSISTOR 2SA1162	
Q302	8-729-202-38	TRANSISTOR 2SC3326N	
Q303	8-729-100-66	TRANSISTOR 2SC1623	
< RESISTOR >			
R301	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R302	1-216-081-00	METAL CHIP 22K 5%	1/10W
R303	1-216-028-00	METAL CHIP 130 5%	1/10W
R304	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R305	1-216-075-00	METAL CHIP 12K 5%	1/10W
R306	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R307	1-216-109-00	METAL CHIP 330K 5%	1/10W
R308	1-216-075-00	METAL CHIP 12K 5%	1/10W
R310	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R311	1-216-049-00	METAL CHIP 1K 5%	1/10W

Ref. No.	Part No.	Description	Remark
R313	1-216-075-00	METAL CHIP 12K 5%	1/10W
R315	1-216-069-00	METAL CHIP 6.8K 5%	1/10W

* A-7062-847-A MM-25 BOARD, COMPLETE			

(Ref. No 16,000 Series)			
< CAPACITOR >			
C607	1-163-087-00	CERAMIC CHIP 4PF	50V
C620	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C621	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C627	1-124-779-00	ELECT CHIP 10uF 20%	16V
C630	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C634	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C635	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C636	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C637	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C639	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C640	1-126-206-11	ELECT CHIP 100uF 20%	6.3V
C641	1-126-206-11	ELECT CHIP 100uF 20%	6.3V
C642	1-126-206-11	ELECT CHIP 100uF 20%	6.3V
C643	1-163-127-00	CERAMIC CHIP 270PF 5%	50V
C644	1-163-139-00	CERAMIC CHIP 820PF 5%	50V
C645	1-126-205-11	ELECT CHIP 47uF 20%	6.3V
C646	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C647	1-126-193-11	ELECT 1uF 20%	50V
C648	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C649	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V
C650	1-164-182-11	CERAMIC CHIP 0.0033uF 10%	50V
C651	1-126-602-11	ELECT CHIP 3.3uF 20%	50V
C652	1-126-193-11	ELECT 1uF 20%	50V
C653	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C654	1-163-098-00	CERAMIC CHIP 16PF 5%	50V
C655	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C656	1-163-009-11	CERAMIC CHIP 0.001uF 10%	50V
C657	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C660	1-126-205-11	ELECT CHIP 47uF 20%	6.3V
C661	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C663	1-124-499-11	ELECT, NONPOLAR 1uF 20%	50V
C665	1-163-113-00	CERAMIC CHIP 68PF 5%	50V
C666	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C667	1-124-499-11	ELECT, NONPOLAR 1uF 20%	50V
C669	1-126-193-11	ELECT 1uF 20%	50V
C671	1-163-098-00	CERAMIC CHIP 16PF 5%	50V
C673	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C674	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C677	1-126-205-11	ELECT CHIP 47uF 20%	6.3V
C678	1-163-038-00	CERAMIC CHIP 0.1uF	25V

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Ref. No.	Part No.	Description	Remark
C681	1-163-227-11	CERAMIC CHIP 10PF	5% 50V
C685	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C686	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C687	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C688	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C690	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C691	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C693	1-124-779-00	ELECT CHIP 10uF	20% 16v
C694	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C695	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C696	1-124-779-00	ELECT CHIP 10uF	20% 16v
C697	1-163-092-00	CERAMIC CHIP 9PF	0.25PF 50V
C698	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C699	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C700	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C701	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C702	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C722	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C723	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C726	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C727	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C729	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C730	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C731	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C732	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C733	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C734	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C735	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C736	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C737	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C738	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C739	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C740	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C742	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C743	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C750	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C900	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C901	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C902	1-126-187-11	ELECT CHIP 0.1uF	20% 50V
C903	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C909	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C911	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C914	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C919	1-124-779-00	ELECT CHIP 10uF	20% 16v
C920	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C921	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C922	1-124-779-00	ELECT CHIP 10uF	20% 16v
C923	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C924	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V

Ref. No.	Part No.	Description	Remark
C925	1-126-191-11	ELECT CHIP 0.47uF	20% 50V
C926	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C927	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C928	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C930	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C931	1-164-633-11	CERAMIC CHIP 0.1uF	10% 25V
C932	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C933	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C934	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C935	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C936	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C937	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C938	1-164-346-11	CERAMIC CHIP 1uF	16V
C939	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C940	1-164-346-11	CERAMIC CHIP 1uF	16V
C941	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C946	1-164-346-11	CERAMIC CHIP 1uF	16V
C947	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C948	1-164-346-11	CERAMIC CHIP 1uF	16V
C949	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C952	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C953	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C954	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C955	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C956	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C957	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C958	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C959	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C960	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C962	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C963	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C964	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C965	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C972	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C973	1-164-346-11	CERAMIC CHIP 1uF	16V
< CONNECTOR >			
CN001	1-506-475-11	CONNECTOR 10P, MALE	
CN002	1-506-471-11	CONNECTOR 6P, MALE	
CN003	1-506-473-11	CONNECTOR 8P, MALE	
< TRIMMER >			
CV701	1-141-347-11	CAP. VAR, TRIMMER (CHIP)	
CV703	1-141-311-11	CAP. TRIMMER 20PF	
CV704	1-141-311-11	CAP. TRIMMER 20PF	
CV705	1-141-347-11	CAP. VAR, TRIMMER (CHIP)	
< DIODE >			
D701	8-713-300-88	DIODE 1T33C-01	

Ref. No.	Part No.	Description	Remark
D702	8-719-949-46	DIODE 1T32	
D901	8-719-400-18	DIODE MA152WK	
D906	8-719-400-18	DIODE MA152WK	
D907	8-719-400-18	DIODE MA152WK	
< FILTER >			
FL601	1-421-927-21	FILTER, NOISE	
FL602	1-421-927-21	FILTER, NOISE	
FL701	1-236-564-11	FILTER, LOW PASS	
FL702	1-236-835-11	FILTER, BAND PASS	
FL703	1-415-637-11	DL (LC)	
FL900	1-421-928-11	FILTER, NOISE	
FL901	1-421-928-11	FILTER, NOISE	
FL902	1-421-928-11	FILTER, NOISE	
FL903	1-421-928-11	FILTER, NOISE	
FL904	1-421-928-11	FILTER, NOISE	
FL905	1-421-928-11	FILTER, NOISE	
FL906	1-421-928-11	FILTER, NOISE	
FL907	1-421-928-11	FILTER, NOISE	
< IC >			
IC701	8-759-987-17	IC CXD1226Q	
IC702	8-759-987-18	IC CXD1227Q	
IC703	8-759-500-94	IC CXD2108Q	
IC704	8-759-987-20	IC CXD1229Q	
IC705	8-752-337-41	IC CXK1206M	
IC706	8-752-337-41	IC CXK1206M	
IC707	8-752-337-41	IC CXK1206M	
IC708	8-752-334-55	IC CXD1175AM	
IC709	8-752-334-55	IC CXD1175AM	
IC710	8-752-032-96	IC CXA1106M	
IC711	8-752-032-96	IC CXA1106M	
IC900	8-759-987-27	IC LM1881M	
IC902	8-759-206-28	IC MC74HC123AF	
IC904	8-759-927-46	IC SN74HC00ANS	
IC905	8-759-710-62	IC NJM2246M	
IC906	8-759-710-61	IC NJM2229M	
IC907	8-759-239-34	IC TC74HC4538AF	
IC908	8-759-925-75	IC SN74HC08ANS	
< COIL >			
L601	1-410-389-31	INDUCTOR, CHIP 47uH	
L602	1-410-389-31	INDUCTOR, CHIP 47uH	
L604	1-408-785-21	INDUCTOR, CHIP 47uH	
L605	1-408-785-21	INDUCTOR, CHIP 47uH	
L606	1-408-785-21	INDUCTOR, CHIP 47uH	
L607	1-410-658-31	INDUCTOR, CHIP 220uH	
L608	1-410-389-31	INDUCTOR, CHIP 47uH	
L611	1-410-378-11	INDUCTOR, CHIP 5.6uH	

Ref. No.	Part No.	Description	Remark
L612	1-408-785-21	INDUCTOR, CHIP 47uH	
L614	1-408-785-21	INDUCTOR, CHIP 47uH	
L615	1-408-785-21	INDUCTOR, CHIP 47uH	
L616	1-410-389-31	INDUCTOR, CHIP 47uH	
L617	1-410-656-11	INDUCTOR, CHIP 150uH	
L623	1-410-389-31	INDUCTOR, CHIP 47uH	
L624	1-410-389-31	INDUCTOR, CHIP 47uH	
L701	1-410-371-41	INDUCTOR, CHIP 1.5uH	
L705	1-408-785-21	INDUCTOR, CHIP 47uH	
L900	1-408-785-21	INDUCTOR, CHIP 47uH	
< TRANSISTOR >			
Q603	8-729-100-66	TRANSISTOR 2SC1623	
Q604	8-729-100-66	TRANSISTOR 2SC1623	
Q605	8-729-100-66	TRANSISTOR 2SC1623	
Q606	8-729-100-66	TRANSISTOR 2SC1623	
Q607	8-729-100-66	TRANSISTOR 2SC1623	
Q608	8-729-100-66	TRANSISTOR 2SC1623	
Q609	8-729-216-22	TRANSISTOR 2SA1162	
Q610	8-729-100-66	TRANSISTOR 2SC1623	
Q611	8-729-100-66	TRANSISTOR 2SC1623	
Q612	8-729-100-66	TRANSISTOR 2SC1623	
Q613	8-729-100-66	TRANSISTOR 2SC1623	
Q614	8-729-100-66	TRANSISTOR 2SC1623	
Q615	8-729-100-66	TRANSISTOR 2SC1623	
Q616	8-729-100-66	TRANSISTOR 2SC1623	
Q617	8-729-100-66	TRANSISTOR 2SC1623	
Q618	8-729-100-66	TRANSISTOR 2SC1623	
Q619	8-729-100-66	TRANSISTOR 2SC1623	
Q628	8-729-100-66	TRANSISTOR 2SC1623	
Q701	8-729-102-08	TRANSISTOR 2SC2223	
Q702	8-729-122-63	TRANSISTOR 2SA1226	
Q900	8-729-100-66	TRANSISTOR 2SC1623	
Q901	8-729-216-22	TRANSISTOR 2SA1162	
Q903	8-729-100-66	TRANSISTOR 2SC1623	
Q904	8-729-901-01	TRANSISTOR DTC144EK	
Q905	8-729-100-66	TRANSISTOR 2SC1623	
Q906	8-729-100-66	TRANSISTOR 2SC1623	
< RESISTOR >			
R628	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R629	1-216-041-00	METAL CHIP 470 5% 1/10W	
R630	1-216-037-00	METAL CHIP 330 5% 1/10W	
R631	1-216-047-00	METAL CHIP 820 5% 1/10W	
R632	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R633	1-216-048-00	METAL CHIP 910 5% 1/10W	
R636	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R638	1-216-025-00	METAL CHIP 100 5% 1/10W	
R639	1-216-049-00	METAL CHIP 1K 5% 1/10W	

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R641	1-216-073-00	METAL CHIP	10K	5%	1/10W	R712	1-216-011-00	METAL CHIP	27	5%	1/10W
R642	1-216-050-00	METAL GLAZE	1.1K	5%	1/10W	R713	1-216-041-00	METAL CHIP	470	5%	1/10W
R643	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	R714	1-216-025-00	METAL CHIP	100	5%	1/10W
R644	1-216-081-00	METAL CHIP	22K	5%	1/10W	R715	1-216-049-00	METAL CHIP	1K	5%	1/10W
R645	1-216-079-00	METAL CHIP	18K	5%	1/10W	R716	1-216-295-00	METAL CHIP	0	5%	1/10W
R646	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	R723	1-216-029-00	METAL CHIP	150	5%	1/10W
R647	1-216-025-00	METAL CHIP	100	5%	1/10W	R725	1-216-121-00	METAL CHIP	1M	5%	1/10W
R648	1-216-073-00	METAL CHIP	10K	5%	1/10W	R727	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R649	1-216-073-00	METAL CHIP	10K	5%	1/10W	R728	1-216-295-00	METAL CHIP	0	5%	1/10W
R650	1-216-041-00	METAL CHIP	470	5%	1/10W	R729	1-216-025-00	METAL CHIP	100	5%	1/10W
R651	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R730	1-216-041-00	METAL CHIP	470	5%	1/10W
R652	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R731	1-216-049-00	METAL CHIP	1K	5%	1/10W
R653	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R733	1-216-050-00	METAL GLAZE	1.1K	5%	1/10W
R654	1-216-019-00	METAL CHIP	56	5%	1/10W	R734	1-216-081-00	METAL CHIP	22K	5%	1/10W
R655	1-216-049-00	METAL CHIP	1K	5%	1/10W	R735	1-216-077-00	METAL CHIP	15K	5%	1/10W
R656	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R736	1-216-035-00	METAL CHIP	270	5%	1/10W
R657	1-216-021-00	METAL CHIP	68	5%	1/10W	R737	1-216-043-00	METAL CHIP	560	5%	1/10W
R658	1-216-049-00	METAL CHIP	1K	5%	1/10W	R738	1-216-043-00	METAL CHIP	560	5%	1/10W
R659	1-216-117-00	METAL CHIP	680K	5%	1/10W	R739	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R660	1-216-085-00	METAL CHIP	33K	5%	1/10W	R740	1-216-031-00	METAL CHIP	180	5%	1/10W
R661	1-216-085-00	METAL CHIP	33K	5%	1/10W	R741	1-216-025-00	METAL CHIP	100	5%	1/10W
R662	1-216-085-00	METAL CHIP	33K	5%	1/10W	R742	1-216-041-00	METAL CHIP	470	5%	1/10W
R663	1-216-073-00	METAL CHIP	10K	5%	1/10W	R743	1-216-049-00	METAL CHIP	1K	5%	1/10W
R664	1-216-085-00	METAL CHIP	33K	5%	1/10W	R745	1-216-081-00	METAL CHIP	22K	5%	1/10W
R665	1-216-049-00	METAL CHIP	1K	5%	1/10W	R746	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R666	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	R747	1-216-077-00	METAL CHIP	15K	5%	1/10W
R672	1-216-295-00	METAL CHIP	0	5%	1/10W	R748	1-216-035-00	METAL CHIP	270	5%	1/10W
R678	1-216-295-00	METAL CHIP	0	5%	1/10W	R767	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R679	1-216-119-00	METAL CHIP	820K	5%	1/10W	R768	1-216-077-00	METAL CHIP	15K	5%	1/10W
R680	1-216-111-00	METAL CHIP	390K	5%	1/10W	R769	1-216-081-00	METAL CHIP	22K	5%	1/10W
R681	1-216-105-00	METAL CHIP	220K	5%	1/10W	R770	1-216-041-00	METAL CHIP	470	5%	1/10W
R682	1-216-097-00	METAL CHIP	100K	5%	1/10W	R771	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R686	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	R772	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R687	1-216-097-00	METAL CHIP	100K	5%	1/10W	R773	1-216-081-00	METAL CHIP	22K	5%	1/10W
R688	1-216-119-00	METAL CHIP	820K	5%	1/10W	R774	1-216-077-00	METAL CHIP	15K	5%	1/10W
R689	1-216-111-00	METAL CHIP	390K	5%	1/10W	R775	1-216-041-00	METAL CHIP	470	5%	1/10W
R690	1-216-105-00	METAL CHIP	220K	5%	1/10W	R776	1-216-073-00	METAL CHIP	10K	5%	1/10W
R691	1-216-097-00	METAL CHIP	100K	5%	1/10W	R777	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R692	1-216-073-00	METAL CHIP	10K	5%	1/10W	R778	1-216-049-00	METAL CHIP	1K	5%	1/10W
R693	1-216-121-00	METAL CHIP	1M	5%	1/10W	R779	1-216-049-00	METAL CHIP	1K	5%	1/10W
R694	1-216-085-00	METAL CHIP	33K	5%	1/10W	R780	1-216-035-00	METAL CHIP	270	5%	1/10W
R695	1-216-085-00	METAL CHIP	33K	5%	1/10W	R788	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R696	1-216-009-00	METAL CHIP	22	5%	1/10W	R789	1-216-089-00	METAL CHIP	47K	5%	1/10W
R699	1-216-295-00	METAL CHIP	0	5%	1/10W	R790	1-216-089-00	METAL CHIP	47K	5%	1/10W
R702	1-216-295-00	METAL CHIP	0	5%	1/10W	R791	1-216-073-00	METAL CHIP	10K	5%	1/10W
R703	1-216-029-00	METAL CHIP	150	5%	1/10W	R795	1-216-295-00	METAL CHIP	0	5%	1/10W
R704	1-216-121-00	METAL CHIP	1M	5%	1/10W	R796	1-216-295-00	METAL CHIP	0	5%	1/10W
R710	1-216-077-00	METAL CHIP	15K	5%	1/10W	R799	1-216-295-00	METAL CHIP	0	5%	1/10W
R711	1-216-077-00	METAL CHIP	15K	5%	1/10W						

MM-25

MS-4

PA-27

Ref. No.	Part No.	Description	Remark
R901	1-216-117-00	METAL CHIP	680K 5% 1/10W
R902	1-216-049-00	METAL CHIP	1K 5% 1/10W
R903	1-216-049-00	METAL CHIP	1K 5% 1/10W
R904	1-216-295-00	METAL CHIP	0 5% 1/10W
R906	1-216-081-00	METAL CHIP	3.3K 5% 1/10W
R912	1-216-089-00	METAL CHIP	47K 5% 1/10W
R913	1-216-073-00	METAL CHIP	10K 5% 1/10W
R917	1-216-073-00	METAL CHIP	10K 5% 1/10W
R918	1-216-073-00	METAL CHIP	10K 5% 1/10W
R919	1-216-117-00	METAL CHIP	680K 5% 1/10W
R920	1-216-073-00	METAL CHIP	10K 5% 1/10W
R921	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R922	1-216-037-00	METAL CHIP	330 5% 1/10W
R923	1-216-097-00	METAL CHIP	100K 5% 1/10W
R924	1-216-073-00	METAL CHIP	10K 5% 1/10W
R931	1-216-079-00	METAL CHIP	18K 5% 1/10W
R932	1-216-049-00	METAL CHIP	1K 5% 1/10W
R935	1-216-025-00	METAL CHIP	100 5% 1/10W
R937	1-216-085-00	METAL CHIP	33K 5% 1/10W
R939	1-216-295-00	METAL CHIP	0 5% 1/10W
R942	1-216-295-00	METAL CHIP	0 5% 1/10W
R944	1-216-295-00	METAL CHIP	0 5% 1/10W
R945	1-216-295-00	METAL CHIP	0 5% 1/10W
R950	1-216-295-00	METAL CHIP	0 5% 1/10W
R951	1-216-295-00	METAL CHIP	0 5% 1/10W
R952	1-216-295-00	METAL CHIP	0 5% 1/10W
R953	1-216-295-00	METAL CHIP	0 5% 1/10W
R954	1-216-295-00	METAL CHIP	0 5% 1/10W
R955	1-216-295-00	METAL CHIP	0 5% 1/10W
R956	1-216-295-00	METAL CHIP	0 5% 1/10W
R957	1-216-295-00	METAL CHIP	0 5% 1/10W
R960	1-216-073-00	METAL CHIP	10K 5% 1/10W
R961	1-216-075-00	METAL CHIP	12K 5% 1/10W
R964	1-216-073-00	METAL CHIP	10K 5% 1/10W
R965	1-216-073-00	METAL CHIP	10K 5% 1/10W
R968	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R970	1-216-073-00	METAL CHIP	10K 5% 1/10W
R971	1-216-077-00	METAL CHIP	15K 5% 1/10W
R972	1-216-045-00	METAL CHIP	680 5% 1/10W
R973	1-216-033-00	METAL CHIP	220 5% 1/10W
R976	1-216-073-00	METAL CHIP	10K 5% 1/10W
R977	1-216-073-00	METAL CHIP	10K 5% 1/10W
R978	1-216-037-00	METAL CHIP	330 5% 1/10W
R980	1-216-295-00	METAL CHIP	0 5% 1/10W
R984	1-216-819-11	METAL CHIP	680 5% 1/16W
< VARIABLE RESISTOR >			
RV601	1-230-867-11	RES. ADJ. METAL 1K	

Ref. No.	Part No.	Description	Remark
RV602	1-230-866-11	RES. ADJ. METAL 470	
RV603	1-230-866-11	RES. ADJ. METAL 470	
RV604	1-230-866-11	RES. ADJ. METAL 470	
RV902	1-230-870-11	RES. ADJ. METAL 10K	
< VIBRATOR >			
X701	1-567-344-21	VIBRATOR, CRYSTAL (VCO)	
X702	1-567-733-11	VIBRATOR, CRYSTAL	
X703	1-577-704-11	VIBRATOR, CRYSTAL	

A-7040-159-A MS-4 BOARD, COMPLETE			

(Ref. No 8,000 Series)			
1-163-038-00 CERAMIC CHIP 0.1uF 25V			
1-506-485-11 CONNECTOR 6P. MALE			

* A-7061-826-A PA-27 BOARD, COMPLETE			

(Ref. No 7,000 Series)			
< CAPACITOR >			
C001	1-163-012-00	CERAMIC CHIP	0.0018uF 10% 50V
C002	1-124-584-00	ELECT	100uF 20% 10V
C003	1-126-154-11	ELECT	47uF 20% 6.3V
C004	1-126-154-11	ELECT	47uF 20% 6.3V
C005	1-130-490-11	MYLAR	0.039uF 5% 50V
C006	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
C007	1-130-479-00	MYLAR	0.0047uF 5% 50V
C008	1-126-154-11	ELECT	47uF 20% 6.3V
C009	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C010	1-126-154-11	ELECT	47uF 20% 6.3V
C011	1-130-469-00	MYLAR	680PF 5% 50V
C012	1-130-482-00	MYLAR	0.0082uF 5% 50V
C013	1-135-149-21	TANTALUM CHIP	2.2uF 20% 10V
C014	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V
C015	1-135-072-21	TANTALUM CHIP	0.22uF 10% 35V
C016	1-126-153-11	ELECT	22uF 20% 6.3V
C017	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C018	1-126-153-11	ELECT	22uF 20% 6.3V
C019	1-126-153-11	ELECT	22uF 20% 6.3V
C031	1-124-584-00	ELECT	100uF 20% 10V
C032	1-124-584-00	ELECT	100uF 20% 10V
C033	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C034	1-126-154-11	ELECT	47uF 20% 6.3V
C035	1-126-154-11	ELECT	47uF 20% 6.3V
C036	1-163-035-00	CERAMIC CHIP	0.047uF 50V

Ref. No.	Part No.	Description	Remark
C037	1-126-154-11	ELECT 47uF	20% 6.3V
C038	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C039	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C040	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C041	1-109-814-11	CAP. CHIP MICA 220PF	
C042	1-126-154-11	ELECT 47uF	20% 6.3V
C043	1-126-153-11	ELECT 22uF	20% 6.3V
C044	1-126-154-11	ELECT 47uF	20% 6.3V
C051	1-163-012-00	CERAMIC CHIP 0.0018uF	10% 50V
C052	1-124-584-00	ELECT 100uF	20% 10V
C053	1-126-154-11	ELECT 47uF	20% 6.3V
C054	1-126-154-11	ELECT 47uF	20% 6.3V
C055	1-130-490-11	MYLAR 0.039uF	5% 50V
C056	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C057	1-130-479-00	MYLAR 0.0047uF	5% 50V
C058	1-126-154-11	ELECT 47uF	20% 6.3V
C059	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C060	1-126-154-11	ELECT 47uF	20% 6.3V
C061	1-130-469-00	MYLAR 680PF	5% 50V
C062	1-130-482-00	MYLAR 0.0082uF	5% 50V
C063	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C064	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C065	1-135-072-21	TANTALUM CHIP 0.22uF	10% 35V
C066	1-126-153-11	ELECT 22uF	20% 6.3V
C067	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C068	1-126-153-11	ELECT 22uF	20% 6.3V
C069	1-126-153-11	ELECT 22uF	20% 6.3V
< CONNECTOR >			
CN001	1-563-314-11	CONNECTOR. BOARD TO BOARD 20P	
< DIODE >			
D031	8-719-104-34	DIODE 1S2835-T1	
D032	8-719-104-34	DIODE 1S2835-T1	
D033	8-719-104-34	DIODE 1S2835-T1	
< IC >			
IC001	8-752-009-90	IC CX20099	
IC002	8-759-981-92	IC NJM4558M-T1	
IC003	8-759-981-92	IC NJM4558M-T1	
< COIL >			
L001	1-408-793-21	INDUCTOR. CHIP 220uH	
< TRANSISTOR >			
Q001	8-729-202-38	TRANSISTOR 2SC3326N	
Q002	8-729-202-38	TRANSISTOR 2SC3326N	
Q031	8-729-901-06	TRANSISTOR DTA144EK	

Ref. No.	Part No.	Description	Remark
Q032	8-729-901-06	TRANSISTOR DTA144EK	
Q033	8-729-901-06	TRANSISTOR DTA144EK	
Q034	8-729-216-22	TRANSISTOR 2SA1162	
Q035	8-729-216-22	TRANSISTOR 2SA1162	
Q051	8-729-202-38	TRANSISTOR 2SC3326N	
Q052	8-729-202-38	TRANSISTOR 2SC3326N	
< RESISTOR >			
R001	1-216-043-00	METAL CHIP 560	5% 1/10W
R002	1-216-078-00	METAL GLAZE 16K	5% 1/10W
R003	1-216-072-00	METAL CHIP 9.1K	5% 1/10W
R004	1-216-089-00	METAL CHIP 47K	5% 1/10W
R005	1-216-073-00	METAL CHIP 10K	5% 1/10W
R006	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R007	1-216-073-00	METAL CHIP 10K	5% 1/10W
R008	1-216-059-00	METAL CHIP 2.7K	5% 1/10W
R009	1-216-045-00	METAL CHIP 680	5% 1/10W
R010	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R012	1-216-677-11	METAL CHIP 12K	0.5% 1/10W
R013	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R014	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R015	1-216-059-00	METAL CHIP 2.7K	5% 1/10W
R016	1-216-060-00	METAL GLAZE 3K	5% 1/10W
R017	1-216-058-00	METAL GLAZE 2.4K	5% 1/10W
R018	1-216-748-11	METAL CHIP 39K	5% 1/10W
R019	1-216-077-00	METAL CHIP 15K	5% 1/10W
R020	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R021	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R022	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R023	1-216-059-00	METAL CHIP 2.7K	5% 1/10W
R024	1-216-063-00	METAL CHIP 3.9K	5% 1/10W
R031	1-216-117-00	METAL CHIP 680K	5% 1/10W
R032	1-216-700-11	METAL CHIP 470K	1% 1/10W
R033	1-216-022-00	METAL CHIP 75	5% 1/10W
R034	1-216-039-00	METAL CHIP 390	5% 1/10W
R035	1-216-049-00	METAL CHIP 1K	5% 1/10W
R036	1-216-653-11	METAL CHIP 1.2K	0.5% 1/10W
R037	1-216-661-11	METAL CHIP 2.7K	0.5% 1/10W
R039	1-215-401-11	METAL 150	1% 1/6W
R040	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R041	1-216-295-00	METAL CHIP 0	5% 1/10W
R042	1-216-073-00	METAL CHIP 10K	5% 1/10W
R043	1-216-097-00	METAL CHIP 100K	5% 1/10W
R051	1-216-043-00	METAL CHIP 560	5% 1/10W
R052	1-216-078-00	METAL GLAZE 16K	5% 1/10W
R053	1-216-072-00	METAL CHIP 9.1K	5% 1/10W
R054	1-216-089-00	METAL CHIP 47K	5% 1/10W
R055	1-216-073-00	METAL CHIP 10K	5% 1/10W

Ref.No.	Part No.	Description	Remark
R056	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R057	1-216-073-00	METAL CHIP	10K 5% 1/10W
R058	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R059	1-216-045-00	METAL CHIP	680 5% 1/10W
R060	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R062	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R063	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R064	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R065	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R066	1-216-060-00	METAL GLAZE	3K 5% 1/10W
R067	1-216-058-00	METAL GLAZE	2.4K 5% 1/10W
R068	1-216-748-11	METAL CHIP	39K 5% 1/10W
R069	1-216-077-00	METAL CHIP	15K 5% 1/10W
R070	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R071	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R072	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R073	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R074	1-216-063-00	METAL CHIP	3.9K 5% 1/10W

* A-7061-825-A PD-19 (P) BOARD, COMPLETE

(Ref.No 7,000 Series)

< CAPACITOR >

C851	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C852	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C853	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C854	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
C856	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V
C857	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C858	1-135-145-11	TANTALUM CHIP	0.47uF 10% 25V
C859	1-135-180-21	TANTALUM CHIP	3.3uF 20% 6.3V
C860	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V
C861	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
C862	1-163-085-00	CERAMIC CHIP	2PF 50V
C863	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C864	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C867	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C868	1-163-109-00	CERAMIC CHIP	47PF 5% 50V
C869	1-163-227-11	CERAMIC CHIP	10PF 5% 50V
C870	1-163-115-00	CERAMIC CHIP	82PF 5% 50V
C871	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C872	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V
C873	1-135-157-21	TANTALUM CHIP	10uF 20% 6.3V
C874	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C875	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C876	1-163-005-11	CERAMIC CHIP	470PF 10% 50V
C877	1-163-035-00	CERAMIC CHIP	0.047uF 50V

Ref.No.	Part No.	Description	Remark
C878	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V
C879	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C880	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V
C881	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C882	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C884	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C885	1-163-105-00	CERAMIC CHIP	33PF 5% 50V
C886	1-163-105-00	CERAMIC CHIP	33PF 5% 50V
C887	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C888	1-163-035-00	CERAMIC CHIP	0.047uF 50V
C889	1-135-156-21	TANTALUM CHIP	6.8uF 10% 6.3V

< CONNECTOR >

CN851	* 1-565-107-21	PIN, CONNECTOR (PC BOARD)	35P
CN852	* 1-565-107-21	PIN, CONNECTOR (PC BOARD)	35P
CN853	1-506-777-11	CONNECTOR, BOARD TO BOARD	20P

< DIODE >

D851	8-719-104-34	DIODE	1S2835-T1
D852	8-719-400-18	DIODE	MA152WK
D853	8-719-400-18	DIODE	MA152WK

< IC >

IC851	8-752-324-45	IC	CXD1066Q-Z
IC852	8-759-929-17	IC	CXD1051M-T1
IC853	8-752-010-30	IC	CX20103-T1
IC854	8-752-010-20	IC	CX20102-T1
IC855	8-752-331-00	IC	CXR5864BM-12L-T6
IC856	8-759-948-61	IC	CX23011-T1-C
IC857	8-759-911-19	IC	CX23012-T1
IC858	8-759-972-12	IC	CF77305FT
IC859	8-752-809-68	IC	CXP5024H-079Q
IC860	8-759-972-13	IC	CF77309FR

< COIL >

L851	1-410-393-11	INDUCTOR CHIP	100uH
L852	1-410-393-11	INDUCTOR CHIP	100uH
L853	1-410-393-11	INDUCTOR CHIP	100uH
L855	1-410-393-11	INDUCTOR CHIP	100uH
L856	1-410-393-11	INDUCTOR CHIP	100uH
L857	1-410-393-11	INDUCTOR CHIP	100uH
L858	1-410-393-11	INDUCTOR CHIP	100uH
L859	1-410-393-11	INDUCTOR CHIP	100uH
L860	1-410-393-11	INDUCTOR CHIP	100uH
L861	1-410-393-11	INDUCTOR CHIP	100uH
L862	1-410-393-11	INDUCTOR CHIP	100uH

< TRANSISTOR >

Q851	8-729-102-06	TRANSISTOR	2SC2223
Q852	8-729-122-63	TRANSISTOR	2SA1226

PD-19 (P) PM-11 (P)

Ref. No.	Part No.	Description	Remark
Q853	8-729-102-06	TRANSISTOR	2SC2223
< RESISTOR >			
R851	1-216-073-00	METAL CHIP	10K 5% 1/10W
R852	1-216-085-00	METAL CHIP	33K 5% 1/10W
R853	1-216-033-00	METAL CHIP	220 5% 1/10W
R854	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R855	1-216-081-00	METAL CHIP	22K 5% 1/10W
R856	1-216-079-00	METAL CHIP	18K 5% 1/10W
R857	1-216-077-00	METAL CHIP	15K 5% 1/10W
R858	1-216-077-00	METAL CHIP	15K 5% 1/10W
R859	1-216-049-00	METAL CHIP	1K 5% 1/10W
R860	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
R861	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R862	1-216-025-00	METAL CHIP	100 5% 1/10W
R863	1-216-041-00	METAL CHIP	470 5% 1/10W
R864	1-216-049-00	METAL CHIP	1K 5% 1/10W
R866	1-216-041-00	METAL CHIP	470 5% 1/10W
R867	1-216-295-00	METAL CHIP	0 5% 1/10W
R868	1-216-295-00	METAL CHIP	0 5% 1/10W
R869	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R870	1-216-049-00	METAL CHIP	1K 5% 1/10W
R871	1-216-049-00	METAL CHIP	1K 5% 1/10W
R872	1-216-049-00	METAL CHIP	1K 5% 1/10W
R873	1-216-041-00	METAL CHIP	470 5% 1/10W
R874	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R875	1-216-295-00	METAL CHIP	0 5% 1/10W
R876	1-216-045-00	METAL CHIP	680 5% 1/10W
R879	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R880	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
R881	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R882	1-216-043-00	METAL CHIP	560 5% 1/10W
R883	1-216-073-00	METAL CHIP	10K 5% 1/10W
R884	1-216-073-00	METAL CHIP	10K 5% 1/10W
R886	1-216-073-00	METAL CHIP	10K 5% 1/10W
R887	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R888	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R889	1-216-073-00	METAL CHIP	10K 5% 1/10W
R890	1-216-085-00	METAL CHIP	33K 5% 1/10W
R891	1-216-295-00	METAL CHIP	0 5% 1/10W
< VARIABLE RESISTOR >			
RV851	1-230-869-11	RES, ADJ. METAL	4.7K
RV854	1-230-868-11	RES, ADJ. METAL	2.2K
< VIBRATOR >			
X851	1-567-669-91	VIBRATOR, LITHIUM TANTALATE	
X852	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)	

Ref. No.	Part No.	Description	Remark
* A-7062-046-A PM-11 (P) BOARD, COMPLETE			

(Ref. No 16,000 Series)			
* 3-747-038-01 LID. BOTTOM PM SHIELD CASE (L)			
< CAPACITOR >			
C101	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C102	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C103	1-126-177-11	ELECT	100uF 20% 10V
C104	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C105	1-126-154-11	ELECT	47uF 20% 6.3V
C107	1-126-301-11	ELECT	1uF 20% 50V
C108	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C109	1-163-127-00	CERAMIC CHIP	270PF 5% 50V
C110	1-126-301-11	ELECT	1uF 20% 50V
C111	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C112	1-163-127-00	CERAMIC CHIP	270PF 5% 50V
C113	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C114	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C115	1-126-599-11	ELECT	330uF 20% 6.3V
C116	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C117	1-163-121-00	CERAMIC CHIP	150PF 5% 50V
C118	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C119	1-163-023-00	CERAMIC CHIP	0.015uF 5% 50V
C120	1-163-023-00	CERAMIC CHIP	0.015uF 5% 50V
C121	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C122	1-124-465-00	ELECT	0.47uF 20% 50V
C123	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C124	1-126-301-11	ELECT	1uF 20% 50V
C125	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C126	1-124-463-00	ELECT	0.1uF 20% 50V
C127	1-126-301-11	ELECT	1uF 20% 50V
C128	1-126-301-11	ELECT	1uF 20% 50V
C129	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
C130	1-163-145-00	CERAMIC CHIP	0.0015uF 5% 50V
C131	1-126-301-11	ELECT	1uF 20% 50V
C132	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C134	1-163-127-00	CERAMIC CHIP	270PF 5% 50V
C135	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C136	1-163-086-00	CERAMIC CHIP	3PF 50V
C137	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C138	1-124-257-00	ELECT	2.2uF 20% 50V
C139	1-126-301-11	ELECT	1uF 20% 50V
C140	1-126-301-11	ELECT	1uF 20% 50V
C141	1-126-301-11	ELECT	1uF 20% 50V
C142	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C143	1-126-301-11	ELECT	1uF 20% 50V
C144	1-163-038-00	CERAMIC CHIP	0.1uF 25V

Ref. No.	Part No.	Description	Remark
C145	1-126-177-11	ELECT	100uF 20% 10V
C146	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C147	1-126-177-11	ELECT	100uF 20% 10V
C148	1-126-177-11	ELECT	100uF 20% 10V
C149	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C150	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C151	1-126-177-11	ELECT	100uF 20% 10V
C152	1-163-093-00	CERAMIC CHIP	10PF 5% 50V
C153	1-163-107-00	CERAMIC CHIP	39PF 5% 50V
C154	1-163-088-00	CERAMIC CHIP	5PF 50V
C155	1-163-088-00	CERAMIC CHIP	5PF 50V
C156	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C157	1-126-177-11	ELECT	100uF 20% 10V
C158	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C159	1-126-177-11	ELECT	100uF 20% 10V
C160	1-126-177-11	ELECT	100uF 20% 10V
C161	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C162	1-126-301-11	ELECT	1uF 20% 50V
C163	1-126-301-11	ELECT	1uF 20% 50V
C164	1-126-301-11	ELECT	1uF 20% 50V
C165	1-126-301-11	ELECT	1uF 20% 50V
C166	1-126-301-11	ELECT	1uF 20% 50V
C167	1-124-463-00	ELECT	0.1uF 20% 50V
C168	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C169	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C170	1-126-177-11	ELECT	100uF 20% 10V
C171	1-126-301-11	ELECT	1uF 20% 50V
C172	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C173	1-126-301-11	ELECT	1uF 20% 50V
C174	1-124-465-00	ELECT	0.47uF 20% 50V
C176	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V
C177	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V
C178	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C179	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C180	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C181	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C182	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C183	1-126-301-11	ELECT	1uF 20% 50V
C184	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C185	1-126-177-11	ELECT	100uF 20% 10V
C186	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C187	1-126-301-11	ELECT	1uF 20% 50V
C188	1-163-135-00	CERAMIC CHIP	560PF 5% 50V
C189	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C190	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C191	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C192	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
C193	1-163-117-00	CERAMIC CHIP	100PF 5% 50V

Ref. No.	Part No.	Description	Remark
C194	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
C195	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C196	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C197	1-126-177-11	ELECT	100uF 20% 10V
C198	1-163-137-00	CERAMIC CHIP	680PF 5% 50V
C199	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C200	1-163-129-00	CERAMIC CHIP	330PF 5% 50V
C201	1-124-465-00	ELECT	0.47uF 20% 50V
C202	1-163-137-00	CERAMIC CHIP	680PF 5% 50V
C203	1-163-145-00	CERAMIC CHIP	0.0015uF 5% 50V
C204	1-163-103-00	CERAMIC CHIP	27PF 5% 50V
C205	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C206	1-126-599-11	ELECT	330uF 20% 6.3V
C207	1-126-301-11	ELECT	1uF 20% 50V
C208	1-164-633-11	CERAMIC CHIP	0.1uF 10% 25V
C209	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C210	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C211	1-163-141-00	CERAMIC CHIP	0.001uF 5% 50V
C212	1-126-162-11	ELECT	3.3uF 20% 50V
C213	1-126-177-11	ELECT	100uF 20% 10V
C214	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C215	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C216	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C217	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C218	1-126-177-11	ELECT	100uF 20% 10V
C219	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C220	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C221	1-126-157-11	ELECT	10uF 20% 16V
C223	1-126-154-11	ELECT	47uF 20% 6.3V
C224	1-163-038-00	CERAMIC CHIP	0.1uF 25V
C231	1-126-154-11	ELECT	47uF 20% 6.3V
C232	1-126-157-11	ELECT	10uF 20% 16V
C233	1-163-121-00	CERAMIC CHIP	150PF 5% 50V
< CONNECTOR >			
CN101	1-506-471-11	CONNECTOR 6P, MALE	
CN102	1-506-469-11	CONNECTOR 4P, MALE	
CN103	1-506-469-11	CONNECTOR 4P, MALE	
< TRIMMER >			
CV101	1-141-368-11	CAP, CHIP TRIMMER	
CV102	1-141-370-11	CAP, CHIP TRIMMER	
CV103	1-141-368-11	CAP, CHIP TRIMMER	
< DIODE >			
D101	8-719-400-18	DIODE MA152WX	

PM-11 (P)

Ref. No.	Part No.	Description	Remark
< DELAY LINE >			
DL101	1-415-440-11	DELAY LINE, LC (444NS)	
< FERRITE BEAD >			
FB101	1-543-309-21	BEAD, FERRITE	
FB102	1-543-309-21	BEAD, FERRITE	
< FILTER >			
FL101	1-421-927-21	FILTER, NOISE	
FL102	1-421-927-21	FILTER, NOISE	
FL103	1-421-927-21	FILTER, NOISE	
FL104	1-421-927-21	FILTER, NOISE	
FL105	1-421-927-21	FILTER, NOISE	
FL106	1-421-928-11	FILTER, NOISE	
FL107	1-421-928-11	FILTER, NOISE	
FL108	1-421-928-11	FILTER, NOISE	
FL112	1-236-054-11	FILTER, LC (LOW PASS)	
FL113	1-236-360-11	BPF, C	
FL114	1-236-360-11	BPF, C	
FL115	1-421-927-21	FILTER, NOISE	
FL116	1-421-927-21	FILTER, NOISE	
FL117	1-421-927-21	FILTER, NOISE	
FL118	1-421-927-21	FILTER, NOISE	
FL119	1-421-927-21	FILTER, NOISE	
FL120	1-236-360-11	BPF, C	
< IC >			
IC101	8-759-633-99	IC M51285BFP-V	
IC102	8-759-631-06	IC M50541FP	
IC103	8-759-633-96	IC M52682FP	
IC104	8-759-032-41	IC MC74HC157AF	
IC104	8-759-926-18	IC SN74HC157AWS	
IC105	8-759-925-72	IC SN74HC02AWS	
IC106	8-759-031-58	IC SC7SU04F	
IC107	8-759-605-15	IC M5M4C500L	
IC108	8-759-633-04	IC M52686AFP	
IC109	8-759-941-68	IC 8A7131F	
IC110	8-759-603-54	IC M51271FP	
IC111	8-759-631-10	IC M52684AFP	
IC112	8-759-300-71	IC TC4053BF	
IC113	8-759-710-12	IC NJM2230M	
< COIL >			
L103	1-407-169-XX	INDUCTOR 100uH	
L104	1-407-169-XX	INDUCTOR 100uH	
L105	1-407-169-XX	INDUCTOR 100uH	
L106	1-407-169-XX	INDUCTOR 100uH	
L107	1-410-389-31	INDUCTOR CHIP 47uH	

Ref. No.	Part No.	Description	Remark
L108	1-407-169-XX	INDUCTOR 100uH	
L109	1-407-169-XX	INDUCTOR 100uH	
L110	1-407-169-XX	INDUCTOR 100uH	
L111	1-407-169-XX	INDUCTOR 100uH	
L112	1-407-169-XX	INDUCTOR 100uH	
< TRANSISTOR >			
Q101	8-729-230-49	TRANSISTOR 2SC2712	
Q102	8-729-230-49	TRANSISTOR 2SC2712	
Q103	8-729-230-49	TRANSISTOR 2SC2712	
Q104	8-729-216-22	TRANSISTOR 2SA1162	
Q105	8-729-230-49	TRANSISTOR 2SC2712	
Q106	8-729-216-22	TRANSISTOR 2SA1162	
Q107	8-729-216-22	TRANSISTOR 2SA1162	
Q108	8-729-216-22	TRANSISTOR 2SA1162	
Q109	8-729-230-49	TRANSISTOR 2SC2712	
Q111	8-729-230-49	TRANSISTOR 2SC2712	
Q112	8-729-216-22	TRANSISTOR 2SA1162	
< RESISTOR >			
R101	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R102	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R103	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R104	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R105	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R106	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R107	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R108	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R109	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R110	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R111	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R112	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R113	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R114	1-216-041-00	METAL CHIP 470 5% 1/10W	
R115	1-216-041-00	METAL CHIP 470 5% 1/10W	
R116	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R117	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R118	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R119	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R120	1-216-748-11	METAL CHIP 39K 1% 1/10W	
R121	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R122	1-216-041-00	METAL CHIP 470 5% 1/10W	
R123	1-216-025-00	METAL CHIP 100 5% 1/10W	
R124	1-216-093-00	METAL CHIP 68K 5% 1/10W	
R125	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R126	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R127	1-216-035-00	METAL CHIP 270 5% 1/10W	
R128	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R129	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	

Ref. No.	Part No.	Description	Remark
R131	1-216-097-00	METAL CHIP	100K 5% 1/10W
R132	1-216-034-00	METAL CHIP	240 5% 1/10W
R133	1-216-018-00	METAL CHIP	51 5% 1/10W
R134	1-216-049-00	METAL CHIP	1K 5% 1/10W
R135	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R136	1-216-073-00	METAL CHIP	10K 5% 1/10W
R137	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R138	1-216-295-00	METAL CHIP	0 5% 1/10W
R139	1-216-097-00	METAL CHIP	100K 5% 1/10W
R140	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
R141	1-216-041-00	METAL CHIP	470 5% 1/10W
R142	1-216-121-00	METAL CHIP	1M 5% 1/10W
R143	1-216-097-00	METAL CHIP	100K 5% 1/10W
R145	1-216-095-00	METAL CHIP	82K 5% 1/10W
R146	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R147	1-216-748-11	METAL CHIP	39K 1% 1/10W
R149	1-216-295-00	METAL CHIP	0 5% 1/10W
R150	1-216-295-00	METAL CHIP	0 5% 1/10W
R151	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R152	1-216-047-00	METAL CHIP	820 5% 1/10W
R153	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R154	1-216-119-00	METAL CHIP	820K 5% 1/10W
R155	1-216-077-00	METAL CHIP	15K 5% 1/10W
R156	1-216-089-00	METAL CHIP	47K 5% 1/10W
R157	1-216-077-00	METAL CHIP	15K 5% 1/10W
R158	1-216-085-00	METAL CHIP	33K 5% 1/10W
R159	1-216-085-00	METAL CHIP	33K 5% 1/10W
R160	1-216-113-00	METAL CHIP	470K 5% 1/10W
R161	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R162	1-216-021-00	METAL CHIP	68 5% 1/10W
R163	1-216-025-00	METAL CHIP	100 5% 1/10W
R164	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R165	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R166	1-216-041-00	METAL CHIP	470 5% 1/10W
R167	1-216-041-00	METAL CHIP	470 5% 1/10W
R168	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R169	1-216-055-00	METAL CHIP	1.8K 5% 1/10W
R170	1-216-041-00	METAL CHIP	470 5% 1/10W
R171	1-216-041-00	METAL CHIP	470 5% 1/10W
R172	1-216-049-00	METAL CHIP	1K 5% 1/10W
R173	1-216-049-00	METAL CHIP	1K 5% 1/10W
R174	1-216-049-00	METAL CHIP	1K 5% 1/10W
R175	1-216-049-00	METAL CHIP	1K 5% 1/10W
R176	1-216-101-00	METAL CHIP	150K 5% 1/10W
R177	1-216-041-00	METAL CHIP	470 5% 1/10W
R178	1-216-073-00	METAL CHIP	10K 5% 1/10W
R179	1-216-035-00	METAL CHIP	270 5% 1/10W
R180	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R182	1-216-097-00	METAL CHIP	100K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R183	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R184	1-216-049-00	METAL CHIP	1K 5% 1/10W
R185	1-216-085-00	METAL CHIP	33K 5% 1/10W
R186	1-216-109-00	METAL CHIP	330K 5% 1/10W
R187	1-216-041-00	METAL CHIP	470 5% 1/10W
R188	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R189	1-216-295-00	METAL CHIP	0 5% 1/10W
R190	1-216-295-00	METAL CHIP	0 5% 1/10W
R191	1-216-295-00	METAL CHIP	0 5% 1/10W
R192	1-216-295-00	METAL CHIP	0 5% 1/10W
R193	1-216-097-00	METAL CHIP	100K 5% 1/10W
R194	1-216-097-00	METAL CHIP	100K 5% 1/10W
R195	1-216-073-00	METAL CHIP	10K 5% 1/10W
R213	1-216-089-00	METAL CHIP	47K 5% 1/10W
R214	1-216-089-00	METAL CHIP	47K 5% 1/10W
R215	1-216-089-00	METAL CHIP	47K 5% 1/10W
R216	1-216-073-00	METAL CHIP	10K 5% 1/10W
R217	1-216-073-00	METAL CHIP	10K 5% 1/10W
< VARIABLE RESISTOR >			
RV101	1-230-520-11	RES. ADJ. METAL 1K	
RV102	1-230-521-11	RES. ADJ. METAL 2.2K	
RV103	1-230-526-11	RES. ADJ. METAL 47K	
< VIBLATOR >			
X101	1-577-165-11	VIBLATOR, CERAMIC (500KHz)	
X102	1-567-733-11	VIBRATOR, CRYSTAL	
X103	1-577-184-11	VIBLATOR, CERAMIC (30.2MHz)	
X104	1-567-733-11	VIBRATOR, CRYSTAL	
X105	1-577-165-11	VIBLATOR, CERAMIC (500KHz)	

* 1-635-325-11 RL-23 BOARD (Ref.No 12.000 Series)			

* 3-747-016-01 HOLDER, VOLUME			
< CAPACITOR >			
C701	1-126-217-11	ELECT CHIP 15uF	20% 10V
C702	1-126-217-11	ELECT CHIP 15uF	20% 10V
< IC >			
IC701	8-759-700-62	IC NJM4562D	
< RESISTOR >			
R701	1-216-082-00	METAL GLAZE 24K	5% 1/10W
R702	1-216-082-00	METAL GLAZE 24K	5% 1/10W

RL-23**RP-73**

Ref. No.	Part No.	Description	Remark
< VARIABLE RESISTOR >			
RV701	1-241-210-11	RES. VAR. CARBON 100K (STD)	
RV702	1-241-211-11	RES. VAR. CARBON 100K/100K (PCM R/L)	

* A-7061-827-A RP-73 BOARD, COMPLETE			

(Ref. No 2,000 Series)			
< CAPACITOR >			
C001	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C002	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C003	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C005	1-164-330-21	CERAMIC CHIP 0.22uF	10% 16V
C006	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C007	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C008	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C009	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C010	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C011	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C012	1-164-330-21	CERAMIC CHIP 0.22uF	10% 16V
C013	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C015	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C016	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C017	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C020	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C021	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C022	1-135-091-00	TANTALUM CHIP 1uF	20% 16V
C023	1-135-157-21	TANTALUM CHIP 10uF	20% 6.3V
C024	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C025	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C027	1-135-091-00	TANTALUM CHIP 1uF	20% 16V
C028	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C029	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C030	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C031	1-164-218-11	CERAMIC CHIP 180PF	0.25PF 50V
C032	1-162-918-11	CERAMIC CHIP 18PF	5% 50V
C033	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C034	1-162-912-11	CERAMIC CHIP 7PF	0.5PF 50V
C035	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C036	1-164-218-11	CERAMIC CHIP 180PF	0.25PF 50V
C037	1-162-918-11	CERAMIC CHIP 18PF	5% 50V
C038	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C039	1-162-912-11	CERAMIC CHIP 7PF	0.5PF 50V
C040	1-162-913-11	CERAMIC CHIP 8PF	0.5PF 50V
C041	1-162-913-11	CERAMIC CHIP 8PF	0.5PF 50V
C042	1-135-157-21	TANTALUM CHIP 10uF	20% 6.3V
C043	1-135-157-21	TANTALUM CHIP 10uF	20% 6.3V

Ref. No.	Part No.	Description	Remark
C044	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C045	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C046	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
< DIODE >			
D001	8-719-801-41	DIODE 1SS196-TE85L	
D002	8-719-801-41	DIODE 1SS196-TE85L	
< IC >			
IC001	8-752-033-00	IC CXA1234AR-T3	
< COIL >			
L001	1-408-777-00	INDUCTOR CHIP 10uH	
L001	1-410-385-11	INDUCTOR CHIP 22uH	
L002	1-410-656-11	INDUCTOR CHIP 150uH	
L004	1-410-393-11	INDUCTOR CHIP 100uH	
L005	1-410-381-11	INDUCTOR CHIP 10uH	
L007	1-410-393-11	INDUCTOR CHIP 100uH	
L008	1-410-384-31	INDUCTOR CHIP 18uH	
L009	1-410-384-31	INDUCTOR CHIP 18uH	
< TRANSISTOR >			
Q002	8-729-102-07	TRANSISTOR 2SC2223	
Q003	8-729-102-07	TRANSISTOR 2SC2223	
< RESISTOR >			
R001	1-216-089-00	METAL CHIP 47K 5%	1/10W
R002	1-216-073-00	METAL CHIP 10K 5%	1/10W
R003	1-216-081-00	METAL CHIP 22K 5%	1/10W
R004	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R005	1-216-824-11	METAL CHIP 1.8K 5%	1/16W
R006	1-216-081-00	METAL CHIP 22K 5%	1/10W
R007	1-216-834-11	METAL CHIP 12K 5%	1/16W
R008	1-216-835-11	METAL CHIP 15K 5%	1/16W
R009	1-216-081-00	METAL CHIP 22K 5%	1/10W
R010	1-216-089-00	METAL CHIP 47K 5%	1/10W
R011	1-216-073-00	METAL CHIP 10K 5%	1/10W
R012	1-216-081-00	METAL CHIP 22K 5%	1/10W
R013	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R014	1-216-824-11	METAL CHIP 1.8K 5%	1/16W
R016	1-216-081-00	METAL CHIP 22K 5%	1/10W
R017	1-216-085-00	METAL CHIP 33K 5%	1/10W
R018	1-216-081-00	METAL CHIP 22K 5%	1/10W
R019	1-216-089-00	METAL CHIP 47K 5%	1/10W
R020	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R021	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R026	1-216-837-11	METAL CHIP 22K 5%	1/16W
R027	1-216-833-11	METAL CHIP 10K 5%	1/16W

Ref. No.	Part No.	Description	Remark		
R028	1-216-797-11	METAL CHIP	10	5%	1/16W
R029	1-216-812-11	METAL CHIP	180	5%	1/16W
R030	1-216-837-11	METAL CHIP	22K	5%	1/16W
R031	1-216-833-11	METAL CHIP	10K	5%	1/16W
R032	1-216-797-11	METAL CHIP	10	5%	1/16W
R033	1-216-812-11	METAL CHIP	180	5%	1/16W

< VARIABLE RESISTOR >

RV001	1-230-871-11	RES. ADJ. METAL 22K
RV002	1-230-871-11	RES. ADJ. METAL 22K
RV003	1-230-869-11	RES. ADJ. METAL 4.7K
RV004	1-230-869-11	RES. ADJ. METAL 4.7K

* A-7062-166-A RP-103 BOARD, COMPLETE

 (Ref. No 3,000 Series)

< CAPACITOR >

C001	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C002	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C003	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C005	1-164-330-21	CERAMIC CHIP	0.22uF	10%	16V
C006	1-135-161-21	TANTALUM CHIP	22uF	10%	6.3V
C007	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C008	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C009	1-135-161-21	TANTALUM CHIP	22uF	10%	6.3V
C010	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C011	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C012	1-164-330-21	CERAMIC CHIP	0.22uF	10%	16V
C013	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C015	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C016	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C017	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C020	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C021	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C022	1-135-091-00	TANTALUM CHIP	1uF	20%	16V
C023	1-135-157-21	TANTALUM CHIP	10uF	20%	6.3V
C024	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C025	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C027	1-135-091-00	TANTALUM CHIP	1uF	20%	16V
C028	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C029	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C030	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C031	1-164-218-11	CERAMIC CHIP	180PF	0.25PF	50V
C032	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C033	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C034	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V
C035	1-162-974-11	CERAMIC CHIP	0.01uF		50V

Ref. No.	Part No.	Description	Remark		
C036	1-164-218-11	CERAMIC CHIP	180PF	0.25PF	50V
C037	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C038	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C039	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V
C040	1-162-913-11	CERAMIC CHIP	8PF	0.5PF	50V
C041	1-162-913-11	CERAMIC CHIP	8PF	0.5PF	50V
C042	1-135-157-21	TANTALUM CHIP	10uF	20%	6.3V
C043	1-135-157-21	TANTALUM CHIP	10uF	20%	6.3V
C044	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C045	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C046	1-163-097-00	CERAMIC CHIP	15PF	5%	50V

< DIODE >

D001	8-719-801-41	DIODE	1SS196-TE85L
D002	8-719-801-41	DIODE	1SS196-TE85L

< IC >

IC001	8-752-033-00	IC	CXA1234AR-T3
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< COIL >

L001	1-408-777-00	INDUCTOR CHIP	10uH
L001	1-410-385-11	INDUCTOR CHIP	22uH
L002	1-410-656-11	INDUCTOR CHIP	150uH
L004	1-410-393-11	INDUCTOR CHIP	100uH
L005	1-410-381-11	INDUCTOR CHIP	10uH
L007	1-410-393-11	INDUCTOR CHIP	100uH
L008	1-410-384-31	INDUCTOR CHIP	18uH
L009	1-410-384-31	INDUCTOR CHIP	18uH

< TRANSISTOR >

Q002	8-729-102-07	TRANSISTOR	2SC2223
Q003	8-729-102-07	TRANSISTOR	2SC2223

< RESISTOR >

R001	1-216-089-00	METAL CHIP	47K	5%	1/10W
R002	1-216-073-00	METAL CHIP	10K	5%	1/10W
R003	1-216-081-00	METAL CHIP	22K	5%	1/10W
R004	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R005	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R006	1-216-081-00	METAL CHIP	22K	5%	1/10W
R007	1-216-836-11	METAL CHIP	18K	5%	1/16W
R008	1-216-837-11	METAL CHIP	22K	5%	1/16W
R009	1-216-081-00	METAL CHIP	22K	5%	1/10W
R010	1-216-089-00	METAL CHIP	47K	5%	1/10W
R011	1-216-073-00	METAL CHIP	10K	5%	1/10W
R012	1-216-081-00	METAL CHIP	22K	5%	1/10W
R013	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R014	1-216-824-11	METAL CHIP	1.8K	5%	1/16W

RP-103**RS-31****SA-30**

Ref. No.	Part No.	Description	Remark
R016	1-216-081-00	METAL CHIP 22K 5%	1/10W
R017	1-216-085-00	METAL CHIP 33K 5%	1/10W
R018	1-216-081-00	METAL CHIP 22K 5%	1/10W
R019	1-216-089-00	METAL CHIP 47K 5%	1/10W
R020	1-216-053-00	METAL CHIP 1.5K 5%	1/10W
R021	1-216-053-00	METAL CHIP 1.5K 5%	1/10W
R026	1-216-837-11	METAL CHIP 22K 5%	1/16W
R027	1-216-833-11	METAL CHIP 10K 5%	1/16W
R028	1-216-797-11	METAL CHIP 10 5%	1/16W
R029	1-216-812-11	METAL CHIP 180 5%	1/16W
R030	1-216-837-11	METAL CHIP 22K 5%	1/16W
R031	1-216-833-11	METAL CHIP 10K 5%	1/16W
R032	1-216-797-11	METAL CHIP 10 5%	1/16W
R033	1-216-812-11	METAL CHIP 180 5%	1/16W

< VARIABLE RESISTOR >

RV001	1-230-871-11	RES. ADJ. METAL 22K
RV002	1-230-871-11	RES. ADJ. METAL 22K
RV003	1-230-869-11	RES. ADJ. METAL 4.7K
RV004	1-230-869-11	RES. ADJ. METAL 4.7K

* A-7061-818-A RS-31 BOARD, COMPLETE

(Ref. No 6,000 Series)

* 1-559-762-11 WIRE, FLAT TYPE 22P
3-712-410-01 HOLDER, RS
3-722-175-01 SPACER, MD

< CONNECTOR >

CN301	1-506-481-11	CONNECTOR 2P, MALE
CN302	1-506-481-11	CONNECTOR 2P, MALE
CN304	* 1-563-494-11	CONNECTOR, F. P. C 6P
CN305	* 1-565-211-11	CONNECTOR, FPC (21F) 22P

< DIODE >

D320	8-719-800-76	DIODE 1SS226
D321	8-719-800-76	DIODE 1SS226

< IC >

IC301	8-759-908-81	IC MB3763PF
IC302	8-759-908-81	IC MB3763PF

< PHOTO INTERRUPTER >

PH301	8-719-939-11	DIODE GP-2S09-B
PH302	8-719-939-11	DIODE GP-2S09-B
PH303	8-719-939-11	DIODE GP-2S09-B

Ref. No.	Part No.	Description	Remark
		< IC LINK >	

PS301 Δ 1-532-727-11 LINK, IC 0.25A

< TRANSISTOR >

Q301	8-729-805-25	TRANSISTOR 2SB1121
Q302	8-729-216-22	TRANSISTOR 2SA1162
Q303	8-729-216-22	TRANSISTOR 2SA1162
Q304	8-729-216-22	TRANSISTOR 2SA1162
Q305	8-729-901-01	TRANSISTOR DTC144EK
Q306	8-729-901-01	TRANSISTOR DTC144EK
Q307	8-729-901-01	TRANSISTOR DTC144EK

< RESISTOR >

R302	1-216-174-00	METAL GLAZE 100 5%	1/8W
R303	1-216-186-00	METAL GLAZE 330 5%	1/8W
R304	1-216-089-00	METAL CHIP 47K 5%	1/10W
R305	1-216-089-00	METAL CHIP 47K 5%	1/10W
R306	1-216-089-00	METAL CHIP 47K 5%	1/10W
R307	1-216-073-00	METAL CHIP 10K 5%	1/10W
R308	1-216-073-00	METAL CHIP 10K 5%	1/10W
R309	1-216-073-00	METAL CHIP 10K 5%	1/10W
R320	1-216-041-00	METAL CHIP 470 5%	1/10W
R321	1-216-041-00	METAL CHIP 470 5%	1/10W
R322	1-216-073-00	METAL CHIP 10K 5%	1/10W
R323	1-216-073-00	METAL CHIP 10K 5%	1/10W
R324	1-216-073-00	METAL CHIP 10K 5%	1/10W
R325	1-216-073-00	METAL CHIP 10K 5%	1/10W
R326	1-216-073-00	METAL CHIP 10K 5%	1/10W
R327	1-216-073-00	METAL CHIP 10K 5%	1/10W
R328	1-216-073-00	METAL CHIP 10K 5%	1/10W
R329	1-216-073-00	METAL CHIP 10K 5%	1/10W
R330	1-216-073-00	METAL CHIP 10K 5%	1/10W
R331	1-216-073-00	METAL CHIP 10K 5%	1/10W
R332	1-216-073-00	METAL CHIP 10K 5%	1/10W

* 1-635-320-11 SA-30 BOARD (Ref. No 18,000 Series)

< VARIABLE RESISTOR >

RV101	1-230-661-11	RES. VAR. CARBON 10K
RV102	1-230-661-11	RES. VAR. CARBON 10K

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

SE-10 (P)

Ref. No.	Part No.	Description	Remark		
* A-7062-167-A SE-10 (P) BOARD, COMPLETE					

(Ref. No 5, 000 Series)					
3-831-441-XX CUSHION (5)					
< CAPACITOR >					
C006	1-126-157-11	ELECT	10uF	20%	16V
C008	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C009	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C010	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C011	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C012	1-126-163-11	ELECT	4.7uF	20%	50V
C013	1-126-157-11	ELECT	10uF	20%	16V
C014	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C015	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C016	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C017	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C018	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C019	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C020	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C021	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C022	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C028	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C031	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C032	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C033	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C034	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C035	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C036	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C037	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C101	1-126-157-11	ELECT	10uF	20%	16V
C102	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C103	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C104	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C105	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C106	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C107	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C108	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C109	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C110	1-126-320-11	ELECT. NONPOLAR	10uF	20%	16V
C111	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C112	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C113	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C114	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C115	1-126-157-11	ELECT	10uF	20%	16V
C116	1-124-499-11	ELECT. NONPOLAR	1uF	20%	50V
C117	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C118	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description	Remark		
C119	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C120	1-163-209-00	CERAMIC CHIP	0.0015uF	5%	50V
C121	1-163-209-00	CERAMIC CHIP	0.0015uF	5%	50V
C122	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C127	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C128	1-124-767-00	ELECT	2.2uF	20%	50V
C130	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C131	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C132	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C133	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C134	1-124-499-11	ELECT. NONPOLAR	1uF	20%	50V
C135	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C136	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C137	1-124-768-11	ELECT	4.7uF	20%	50V
C201	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C202	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C203	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C204	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C205	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C206	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C207	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C208	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C209	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C210	1-124-234-00	ELECT	22uF	20%	16V
C211	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C212	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C213	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C214	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C215	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C216	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C217	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C218	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C219	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C220	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C221	1-124-256-00	ELECT	1.5uF	20%	50V
C223	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C224	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C226	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C301	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C302	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C303	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C304	1-124-584-00	ELECT	100uF	20%	10V
C305	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C306	1-124-584-00	ELECT	100uF	20%	10V
C307	1-126-163-11	ELECT	4.7uF	20%	50V
C308	1-124-257-00	ELECT	2.2uF	20%	50V
C309	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C310	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V

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Ref. No.	Part No.	Description		Remark
C311	1-163-038-00	CERAMIC CHIP	0.1uF	25V
C401	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C402	1-163-103-00	CERAMIC CHIP	27PF	5% 50V
C403	1-126-163-11	ELECT	4.7uF	20% 50V
C404	1-126-163-11	ELECT	4.7uF	20% 50V
C405	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C406	1-163-235-11	CERAMIC CHIP	22PF	5% 50V
C407	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C408	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V
C409	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C410	1-163-125-00	CERAMIC CHIP	220PF	5% 50V
C411	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C412	1-126-157-11	ELECT	10uF	20% 16V
C502	1-163-038-00	CERAMIC CHIP	0.1uF	25V
C503	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C504	1-124-257-00	ELECT	2.2uF	20% 50V
C505	1-163-038-00	CERAMIC CHIP	0.1uF	25V
C506	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C508	1-124-589-11	ELECT	47uF	20% 16V
C601	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C602	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C603	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C604	1-124-589-11	ELECT	47uF	20% 16V
C605	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C606	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V
C607	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V
C608	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V
C609	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C610	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C611	1-126-157-11	ELECT	10uF	20% 16V
C612	1-126-157-11	ELECT	10uF	20% 16V
C613	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C614	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C615	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C616	1-164-833-11	CERAMIC CHIP	0.1uF	10% 25V
C617	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C620	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C621	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C622	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C623	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C624	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C625	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C626	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C627	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C628	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C629	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C630	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C631	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C632	1-126-157-11	ELECT	10uF	20% 16V

Ref. No.	Part No.	Description	Remark
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< CONNECTOR >

CN001	* 1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
CN002	* 1-566-941-11	CONNECTOR, HINGE (TAB) 30P	
CN003	* 1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
CN004	1-566-945-11	CONNECTOR, BOARD TO BOARD 18P	
CN005	1-566-946-11	CONNECTOR, BOARD TO BOARD 22P	
CN011	1-565-212-11	CONNECTOR, FPC (ZIF) 26P	
CN012	* 1-565-211-11	CONNECTOR, FPC (ZIF) 22P	
CN901	1-506-473-11	CONNECTOR 8P, MALE	
CN902	1-506-477-11	CONNECTOR 12P, MALE	
CN903	1-506-478-11	CONNECTOR 13P, MALE	
CN904	1-506-470-11	CONNECTOR 5P, MALE	
CN905	1-506-474-11	CONNECTOR 9P, MALE	
CN906	1-506-472-11	CONNECTOR 7P, MALE	
CN907	1-506-477-11	CONNECTOR 12P, MALE	

< DIODE >

D003	8-719-400-18	DIODE	MA152WK
D004	8-719-400-18	DIODE	MA152WK
D005	8-719-400-18	DIODE	MA152WK
D006	8-719-104-34	DIODE	1S2836
D007	8-719-400-18	DIODE	MA152WK
D008	8-719-400-18	DIODE	MA152WK
D009	8-719-400-18	DIODE	MA152WK
D012	8-719-400-18	DIODE	MA152WK
D013	8-719-400-18	DIODE	MA152WK
D015	8-719-104-34	DIODE	1S2836
D016	8-719-104-34	DIODE	1S2836
D018	8-719-400-18	DIODE	MA152WK
D102	8-719-800-76	DIODE	1S5226
D103	8-719-800-76	DIODE	1S5226
D104	8-719-104-34	DIODE	1S2836
D105	8-719-400-18	DIODE	MA152WK
D106	8-719-400-18	DIODE	MA152WK
D107	8-719-104-34	DIODE	1S2836
D108	8-719-400-18	DIODE	MA152WK
D109	8-719-400-18	DIODE	MA152WK
D110	8-719-104-34	DIODE	1S2836
D111	8-719-400-18	DIODE	MA152WK
D112	8-719-104-34	DIODE	1S2836
D201	8-719-400-18	DIODE	MA152WK
D203	8-719-105-82	DIODE	RD5. 1M
D301	8-719-400-18	DIODE	MA152WK
D302	8-719-400-18	DIODE	MA152WK
D401	8-719-800-76	DIODE	1S5226
D701	8-719-400-18	DIODE	MA152WK

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Ref. No.	Part No.	Description	Remark
< FILTER >			
FL201	1-235-611-21	BPF	
FL202	1-235-612-21	BPF	
< IC >			
IC001	8-752-816-72	IC CXP80116-692Q	
IC003	8-752-815-13	IC CXP5048H-222Q	
IC004	8-759-144-21	IC uPD75106G-573-18	
IC007	8-759-008-67	IC MC14066BF	
IC008	8-759-937-56	IC S-8054ALB	
IC101	8-752-003-50	IC CX20035	
IC102	8-752-817-64	IC CXP5048H-244Q	
IC102	8-759-803-47	IC LA5005M	
IC103	8-759-925-66	IC BA6303F	
IC104	8-759-981-75	IC RC3403AM	
IC105	8-759-300-71	IC TC4053BF	
IC106	8-759-971-25	IC MB674169U	
IC107	8-759-100-94	IC uPC3580Z	
IC108	8-759-008-67	IC MC14066BF	
IC201	8-759-928-56	IC CXA1042M	
IC202	8-759-150-05	IC uPC3240Z	
IC203	8-759-300-71	IC TC4053BF	
IC204	8-759-927-46	IC SN74HC00ANS	
IC205	8-759-711-79	IC NJM2233BM	
IC206	8-759-035-93	IC SC7S32F	
IC301	8-759-100-94	IC uPC3580Z	
IC302	8-759-300-71	IC TC4053BF	
IC303	8-759-300-71	IC TC4053BF	
IC304	8-759-200-90	IC TC4538BF	
IC305	8-759-927-46	IC SN74HC00ANS	
IC601	8-759-927-94	IC BU3707F	
IC602	8-759-927-52	IC BA7036LS	
IC603	8-759-100-93	IC uPC3980Z	
IC604	8-759-150-05	IC uPC3240Z	
< COIL >			
L001	1-408-777-00	INDUCTOR CHIP 10uH	
L002	1-408-777-00	INDUCTOR CHIP 10uH	
L003	1-408-777-00	INDUCTOR CHIP 10uH	
L101	1-408-777-00	INDUCTOR CHIP 10uH	
L401	1-408-777-00	INDUCTOR CHIP 10uH	
L402	1-408-777-00	INDUCTOR CHIP 10uH	
L403	1-408-783-00	INDUCTOR CHIP 33uH	
L404	1-408-777-00	INDUCTOR CHIP 10uH	
L501	1-408-777-00	INDUCTOR CHIP 10uH	
L601	1-408-777-00	INDUCTOR CHIP 10uH	
L602	1-408-777-00	INDUCTOR CHIP 10uH	

Ref. No.	Part No.	Description	Remark
< IC LINK >			
PS601	△1-532-679-00	LINK, IC	
< TRANSISTOR >			
Q002	8-729-901-01	TRANSISTOR DTC144EK	
Q003	8-729-901-06	TRANSISTOR DTA144EK	
Q004	8-729-901-01	TRANSISTOR DTC144EK	
Q005	8-729-901-01	TRANSISTOR DTC144EK	
Q006	8-729-901-01	TRANSISTOR DTC144EK	
Q007	8-729-901-01	TRANSISTOR DTC144EK	
Q008	8-729-901-01	TRANSISTOR DTC144EK	
Q009	8-729-901-01	TRANSISTOR DTC144EK	
Q010	8-729-901-06	TRANSISTOR DTA144EK	
Q011	8-729-901-06	TRANSISTOR DTA144EK	
Q014	8-729-901-01	TRANSISTOR DTC144EK	
Q015	8-729-901-01	TRANSISTOR DTC144EK	
Q018	8-729-901-01	TRANSISTOR DTC144EK	
Q101	8-729-901-06	TRANSISTOR DTA144EK	
Q102	8-729-901-06	TRANSISTOR DTA144EK	
Q103	8-729-901-06	TRANSISTOR DTA144EK	
Q104	8-729-901-01	TRANSISTOR DTC144EK	
Q106	8-729-100-66	TRANSISTOR 2SC1623	
Q107	8-729-901-06	TRANSISTOR DTA144EK	
Q108	8-729-901-06	TRANSISTOR DTA144EK	
Q109	8-729-901-06	TRANSISTOR DTA144EK	
Q110	8-729-901-06	TRANSISTOR DTA144EK	
Q111	8-729-100-66	TRANSISTOR 2SC1623	
Q112	8-729-901-01	TRANSISTOR DTC144EK	
Q113	8-729-901-01	TRANSISTOR DTC144EK	
Q114	8-729-901-01	TRANSISTOR DTC144EK	
Q115	8-729-901-01	TRANSISTOR DTC144EK	
Q116	8-729-901-06	TRANSISTOR DTA144EK	
Q202	8-729-216-22	TRANSISTOR 2SA1162	
Q205	8-729-901-01	TRANSISTOR DTC144EK	
Q209	8-729-901-06	TRANSISTOR DTA144EK	
Q210	8-729-901-01	TRANSISTOR DTC144EK	
Q301	8-729-901-06	TRANSISTOR DTA144EK	
Q302	8-729-901-01	TRANSISTOR DTC144EK	
Q303	8-729-901-01	TRANSISTOR DTC144EK	
Q304	8-729-901-01	TRANSISTOR DTC144EK	
Q305	8-729-901-01	TRANSISTOR DTC144EK	
Q306	8-729-901-06	TRANSISTOR DTA144EK	
Q307	8-729-901-01	TRANSISTOR DTC144EK	
Q308	8-729-901-01	TRANSISTOR DTC144EK	
Q309	8-729-901-01	TRANSISTOR DTC144EK	
Q401	8-729-216-22	TRANSISTOR 2SA1162	
Q402	8-729-100-66	TRANSISTOR 2SC1623	
Q403	8-729-100-66	TRANSISTOR 2SC1623	

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

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q404	8-729-216-22	TRANSISTOR	2SA1162	R019	1-216-691-11	METAL CHIP	47K 0.5% 1/10W
Q405	8-729-100-66	TRANSISTOR	2SC1623	R020	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
Q406	8-729-216-22	TRANSISTOR	2SA1162	R021	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
Q407	8-729-100-66	TRANSISTOR	2SC1623	R022	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
Q408	8-729-216-22	TRANSISTOR	2SA1162	R023	1-216-674-11	METAL CHIP	9.1K 0.5% 1/10W
Q409	8-729-100-66	TRANSISTOR	2SC1623	R024	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q410	8-729-100-66	TRANSISTOR	2SC1623	R025	1-216-097-00	METAL CHIP	100K 5% 1/10W
Q411	8-729-100-66	TRANSISTOR	2SC1623	R026	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q502	8-729-100-66	TRANSISTOR	2SC1623	R027	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q503	8-729-901-06	TRANSISTOR	DTA144EK	R028	1-216-039-00	METAL CHIP	390 5% 1/10W
Q504	8-729-100-66	TRANSISTOR	2SC1623	R029	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q505	8-729-100-66	TRANSISTOR	2SC1623	R030	1-216-295-00	METAL CHIP	0 5% 1/10W
Q506	8-729-100-66	TRANSISTOR	2SC1623	R031	1-216-097-00	METAL CHIP	100K 5% 1/10W
Q507	8-729-901-06	TRANSISTOR	DTA144EK	R032	1-216-097-00	METAL CHIP	100K 5% 1/10W
Q508	8-729-901-06	TRANSISTOR	DTA144EK	R033	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q601	8-729-901-06	TRANSISTOR	DTA144EK	R034	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q604	8-729-805-25	TRANSISTOR	2SB1121	R035	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q605	8-729-100-66	TRANSISTOR	2SC1623	R036	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q606	8-729-901-06	TRANSISTOR	DTA144EK	R037	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q701	8-729-901-06	TRANSISTOR	DTA144EK	R038	1-216-039-00	METAL CHIP	390 5% 1/10W
Q702	8-729-901-06	TRANSISTOR	DTA144EK	R039	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q703	8-729-901-01	TRANSISTOR	DTC144EK	R040	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q704	8-729-216-22	TRANSISTOR	2SA1162	R041	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q705	8-729-216-22	TRANSISTOR	2SA1162	R043	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q706	8-729-100-66	TRANSISTOR	2SC1623	R045	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q707	8-729-100-66	TRANSISTOR	2SC1623	R046	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q708	8-729-901-06	TRANSISTOR	DTA144EK	R047	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q709	8-729-901-06	TRANSISTOR	DTA144EK	R048	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q710	8-729-901-06	TRANSISTOR	DTA144EK	R049	1-216-049-00	METAL CHIP	1K 5% 1/10W
Q711	8-729-901-06	TRANSISTOR	DTA144EK	R050	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q712	8-729-901-06	TRANSISTOR	DTA144EK	R051	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q713	8-729-901-01	TRANSISTOR	DTC144EK	R052	1-216-097-00	METAL CHIP	100K 5% 1/10W
Q714	8-729-901-01	TRANSISTOR	DTC144EK	R053	1-216-097-00	METAL CHIP	100K 5% 1/10W
< RESISTOR >				R054	1-216-073-00	METAL CHIP	10K 5% 1/10W
R001	1-216-049-00	METAL CHIP	1K 5% 1/10W	R055	1-216-073-00	METAL CHIP	10K 5% 1/10W
R002	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R056	1-216-073-00	METAL CHIP	10K 5% 1/10W
R003	1-216-049-00	METAL CHIP	1K 5% 1/10W	R057	1-216-073-00	METAL CHIP	10K 5% 1/10W
R005	1-216-101-00	METAL CHIP	150K 5% 1/10W	R058	1-216-073-00	METAL CHIP	10K 5% 1/10W
R009	1-216-089-00	METAL CHIP	47K 5% 1/10W	R059	1-216-073-00	METAL CHIP	10K 5% 1/10W
R010	1-216-049-00	METAL CHIP	1K 5% 1/10W	R060	1-216-073-00	METAL CHIP	10K 5% 1/10W
R011	1-216-049-00	METAL CHIP	1K 5% 1/10W	R061	1-216-073-00	METAL CHIP	10K 5% 1/10W
R012	1-216-049-00	METAL CHIP	1K 5% 1/10W	R062	1-216-039-00	METAL CHIP	390 5% 1/10W
R013	1-216-049-00	METAL CHIP	1K 5% 1/10W	R063	1-216-073-00	METAL CHIP	10K 5% 1/10W
R014	1-216-049-00	METAL CHIP	1K 5% 1/10W	R064	1-216-073-00	METAL CHIP	10K 5% 1/10W
R015	1-216-049-00	METAL CHIP	1K 5% 1/10W	R065	1-216-073-00	METAL CHIP	10K 5% 1/10W
R016	1-216-089-00	METAL CHIP	47K 5% 1/10W	R066	1-216-073-00	METAL CHIP	10K 5% 1/10W
R017	1-216-089-00	METAL CHIP	47K 5% 1/10W	R067	1-216-049-00	METAL CHIP	1K 5% 1/10W
R018	1-216-691-11	METAL CHIP	47K 0.5% 1/10W	R068	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
				R069	1-216-061-00	METAL CHIP	3.3K 5% 1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R070	1-216-073-00	METAL CHIP	10K	5%	1/10W	R120	1-216-085-00	METAL CHIP	33K	5%	1/10W
R071	1-216-073-00	METAL CHIP	18K	5%	1/10W	R121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R072	1-216-043-00	METAL CHIP	560	5%	1/10W	R122	1-216-073-00	METAL CHIP	10K	5%	1/10W
R073	1-216-085-00	METAL CHIP	33K	5%	1/10W	R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R074	1-216-049-00	METAL CHIP	1K	5%	1/10W	R124	1-216-073-00	METAL CHIP	10K	5%	1/10W
R075	1-216-039-00	METAL CHIP	390	5%	1/10W	R125	1-216-113-00	METAL CHIP	470K	5%	1/10W
R076	1-216-080-00	METAL CHIP	20K	5%	1/10W	R126	1-216-115-00	METAL CHIP	560K	5%	1/10W
R077	1-216-080-00	METAL CHIP	20K	5%	1/10W	R127	1-216-115-00	METAL CHIP	560K	5%	1/10W
R078	1-216-080-00	METAL CHIP	20K	5%	1/10W	R128	1-216-085-00	METAL CHIP	33K	5%	1/10W
R079	1-216-080-00	METAL CHIP	20K	5%	1/10W	R129	1-216-097-00	METAL CHIP	100K	5%	1/10W
R080	1-216-080-00	METAL CHIP	20K	5%	1/10W	R130	1-216-097-00	METAL CHIP	100K	5%	1/10W
R081	1-216-080-00	METAL CHIP	20K	5%	1/10W	R131	1-216-097-00	METAL CHIP	100K	5%	1/10W
R082	1-216-080-00	METAL CHIP	20K	5%	1/10W	R132	1-216-121-00	METAL CHIP	1M	5%	1/10W
R083	1-216-080-00	METAL CHIP	20K	5%	1/10W	R133	1-216-748-11	METAL CHIP	39K	1%	1/10W
R084	1-216-080-00	METAL CHIP	20K	5%	1/10W	R135	1-216-073-00	METAL CHIP	10K	5%	1/10W
R085	1-216-073-00	METAL CHIP	10K	5%	1/10W	R137	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R086	1-216-073-00	METAL CHIP	10K	5%	1/10W	R138	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R087	1-216-073-00	METAL CHIP	10K	5%	1/10W	R139	1-216-295-00	METAL CHIP	0	5%	1/10W
R088	1-216-073-00	METAL CHIP	10K	5%	1/10W	R140	1-216-295-00	METAL CHIP	0	5%	1/10W
R089	1-216-073-00	METAL CHIP	10K	5%	1/10W	R141	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R090	1-216-073-00	METAL CHIP	10K	5%	1/10W	R142	1-216-073-00	METAL CHIP	10K	5%	1/10W
R091	1-216-073-00	METAL CHIP	10K	5%	1/10W	R143	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R092	1-216-089-00	METAL CHIP	47K	5%	1/10W	R148	1-216-089-00	METAL CHIP	47K	5%	1/10W
R093	1-216-089-00	METAL CHIP	47K	5%	1/10W	R149	1-216-097-00	METAL CHIP	100K	5%	1/10W
R094	1-216-686-11	METAL CHIP	30K	0.5%	1/10W	R150	1-216-073-00	METAL CHIP	10K	5%	1/10W
R095	1-216-091-00	METAL CHIP	56K	5%	1/10W	R151	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R096	1-216-077-00	METAL CHIP	15K	5%	1/10W	R152	1-216-083-00	METAL CHIP	27K	5%	1/10W
R097	1-216-049-00	METAL CHIP	1K	5%	1/10W	R153	1-216-073-00	METAL CHIP	10K	5%	1/10W
R098	1-216-073-00	METAL CHIP	10K	5%	1/10W	R154	1-216-073-00	METAL CHIP	10K	5%	1/10W
R101	1-216-073-00	METAL CHIP	18K	5%	1/10W	R155	1-216-049-00	METAL CHIP	1K	5%	1/10W
R102	1-216-085-00	METAL CHIP	33K	5%	1/10W	R156	1-216-097-00	METAL CHIP	100K	5%	1/10W
R103	1-216-049-00	METAL CHIP	1K	5%	1/10W	R157	1-216-097-00	METAL CHIP	100K	5%	1/10W
R104	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	R158	1-216-113-00	METAL CHIP	470K	5%	1/10W
R105	1-216-083-00	METAL CHIP	27K	5%	1/10W	R159	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-109-00	METAL CHIP	330K	5%	1/10W	R160	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R107	1-216-075-00	METAL CHIP	12K	5%	1/10W	R161	1-216-103-00	METAL CHIP	180K	5%	1/10W
R108	1-216-091-00	METAL CHIP	56K	5%	1/10W	R162	1-216-049-00	METAL CHIP	1K	5%	1/10W
R109	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R163	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R110	1-216-115-00	METAL CHIP	560K	5%	1/10W	R164	1-216-073-00	METAL CHIP	10K	5%	1/10W
R111	1-216-115-00	METAL CHIP	560K	5%	1/10W	R165	1-216-073-00	METAL CHIP	10K	5%	1/10W
R112	1-216-115-00	METAL CHIP	560K	5%	1/10W	R167	1-216-097-00	METAL CHIP	100K	5%	1/10W
R113	1-216-115-00	METAL CHIP	560K	5%	1/10W	R168	1-216-085-00	METAL CHIP	33K	5%	1/10W
R114	1-216-107-00	METAL CHIP	270K	5%	1/10W	R169	1-216-097-00	METAL CHIP	100K	5%	1/10W
R115	1-216-107-00	METAL CHIP	270K	5%	1/10W	R170	1-216-085-00	METAL CHIP	33K	5%	1/10W
R116	1-216-099-00	METAL CHIP	120K	5%	1/10W	R171	1-216-085-00	METAL CHIP	33K	5%	1/10W
R117	1-216-117-00	METAL CHIP	680K	5%	1/10W	R172	1-216-089-00	METAL CHIP	47K	5%	1/10W
R118	1-216-081-00	METAL CHIP	22K	5%	1/10W	R173	1-216-073-00	METAL CHIP	10K	5%	1/10W
R119	1-216-117-00	METAL CHIP	680K	5%	1/10W	R174	1-216-073-00	METAL CHIP	10K	5%	1/10W
						R175	1-216-097-00	METAL CHIP	100K	5%	1/10W

SE-10 (P)

Ref. No.	Part No.	Description	Remark
R177	1-216-083-00	METAL CHIP	27K 5% 1/10W
R180	1-216-083-00	METAL CHIP	27K 5% 1/10W
R181	1-216-049-00	METAL CHIP	1K 5% 1/10W
R204	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R205	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R206	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R207	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R208	1-216-079-00	METAL CHIP	18K 5% 1/10W
R209	1-216-117-00	METAL CHIP	680X 5% 1/10W
R210	1-216-091-00	METAL CHIP	56K 5% 1/10W
R211	1-216-073-00	METAL CHIP	10K 5% 1/10W
R215	1-216-097-00	METAL CHIP	100K 5% 1/10W
R216	1-216-073-00	METAL CHIP	10K 5% 1/10W
R217	1-216-089-00	METAL CHIP	47K 5% 1/10W
R218	1-216-073-00	METAL CHIP	10K 5% 1/10W
R219	1-216-081-00	METAL CHIP	22K 5% 1/10W
R220	1-216-105-00	METAL CHIP	220K 5% 1/10W
R221	1-216-111-00	METAL CHIP	390K 5% 1/10W
R222	1-216-097-00	METAL CHIP	100K 5% 1/10W
R223	1-216-073-00	METAL CHIP	10K 5% 1/10W
R224	1-216-121-00	METAL CHIP	1M 5% 1/10W
R225	1-216-089-00	METAL CHIP	47K 5% 1/10W
R226	1-216-045-00	METAL CHIP	680 5% 1/10W
R227	1-216-045-00	METAL CHIP	680 5% 1/10W
R228	1-216-097-00	METAL CHIP	100K 5% 1/10W
R234	1-216-089-00	METAL CHIP	47K 5% 1/10W
R235	1-216-073-00	METAL CHIP	10K 5% 1/10W
R236	1-216-049-00	METAL CHIP	1K 5% 1/10W
R237	1-216-295-00	METAL CHIP	0 5% 1/10W
R301	1-216-093-00	METAL CHIP	68K 5% 1/10W
R302	1-216-083-00	METAL CHIP	27K 5% 1/10W
R303	1-216-049-00	METAL CHIP	1K 5% 1/10W
R304	1-216-081-00	METAL CHIP	22K 5% 1/10W
R305	1-216-073-00	METAL CHIP	10K 5% 1/10W
R306	1-216-081-00	METAL CHIP	22K 5% 1/10W
R307	1-216-081-00	METAL CHIP	22K 5% 1/10W
R308	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R309	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R310	1-216-295-00	METAL CHIP	0 5% 1/10W
R312	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R314	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R315	1-216-295-00	METAL CHIP	0 5% 1/10W
R316	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R317	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R318	1-216-049-00	METAL CHIP	1K 5% 1/10W
R319	1-216-089-00	METAL CHIP	47K 5% 1/10W
R320	1-216-089-00	METAL CHIP	47K 5% 1/10W
R321	1-216-105-00	METAL CHIP	220K 5% 1/10W
R322	1-216-105-00	METAL CHIP	220K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R323	1-216-049-00	METAL CHIP	1K 5% 1/10W
R324	1-216-073-00	METAL CHIP	10K 5% 1/10W
R325	1-216-073-00	METAL CHIP	10K 5% 1/10W
R326	1-216-073-00	METAL CHIP	10K 5% 1/10W
R327	1-216-089-00	METAL CHIP	47K 5% 1/10W
R328	1-216-113-00	METAL CHIP	470K 5% 1/10W
R329	1-216-073-00	METAL CHIP	10K 5% 1/10W
R330	1-216-073-00	METAL CHIP	10K 5% 1/10W
R331	1-216-073-00	METAL CHIP	10K 5% 1/10W
R332	1-216-073-00	METAL CHIP	10K 5% 1/10W
R401	1-216-043-00	METAL CHIP	560 5% 1/10W
R402	1-216-077-00	METAL CHIP	15K 5% 1/10W
R403	1-216-081-00	METAL CHIP	22K 5% 1/10W
R404	1-216-089-00	METAL CHIP	47K 5% 1/10W
R405	1-216-085-00	METAL CHIP	33K 5% 1/10W
R406	1-216-073-00	METAL CHIP	10K 5% 1/10W
R407	1-216-073-00	METAL CHIP	10K 5% 1/10W
R408	1-216-089-00	METAL CHIP	47K 5% 1/10W
R409	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
R410	1-216-085-00	METAL CHIP	33K 5% 1/10W
R411	1-216-085-00	METAL CHIP	33K 5% 1/10W
R412	1-216-079-00	METAL CHIP	18K 5% 1/10W
R413	1-216-052-00	METAL CHIP	1.3K 5% 1/10W
R414	1-216-045-00	METAL CHIP	680 5% 1/10W
R415	1-216-081-00	METAL CHIP	22K 5% 1/10W
R416	1-216-081-00	METAL CHIP	22K 5% 1/10W
R417	1-216-047-00	METAL CHIP	820 5% 1/10W
R418	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R419	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R420	1-216-029-00	METAL CHIP	150 5% 1/10W
R421	1-216-081-00	METAL CHIP	22K 5% 1/10W
R422	1-216-081-00	METAL CHIP	22K 5% 1/10W
R502	1-216-045-00	METAL CHIP	680 5% 1/10W
R503	1-216-077-00	METAL CHIP	15K 5% 1/10W
R504	1-216-073-00	METAL CHIP	10K 5% 1/10W
R505	1-216-033-00	METAL CHIP	220 5% 1/10W
R506	1-216-035-00	METAL CHIP	270 5% 1/10W
R507	1-216-041-00	METAL CHIP	470 5% 1/10W
R508	1-216-072-00	METAL CHIP	9.1K 5% 1/10W
R509	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R510	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R511	1-216-049-00	METAL CHIP	1K 5% 1/10W
R512	1-216-085-00	METAL CHIP	33K 5% 1/10W
R513	1-216-081-00	METAL CHIP	22K 5% 1/10W
R514	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
R515	1-216-041-00	METAL CHIP	470 5% 1/10W
R551	1-216-073-00	METAL CHIP	10K 5% 1/10W
R552	1-216-073-00	METAL CHIP	10K 5% 1/10W
R553	1-216-748-11	METAL CHIP	39K 1% 1/10W

SE-10 (P) SI-12

Ref. No.	Part No.	Description	Remark		
R554	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R555	1-216-073-00	METAL CHIP	10K	5%	1/10W
R556	1-216-073-00	METAL CHIP	10K	5%	1/10W
R557	1-216-109-00	METAL CHIP	330K	5%	1/10W
R558	1-216-295-00	METAL CHIP	0	5%	1/10W
R561	1-216-073-00	METAL CHIP	10K	5%	1/10W
R562	1-216-090-00	METAL CHIP	51K	5%	1/10W
R563	1-216-085-00	METAL CHIP	33K	5%	1/10W
R564	1-216-073-00	METAL CHIP	10K	5%	1/10W
R565	1-216-049-00	METAL CHIP	1K	5%	1/10W
R566	1-216-041-00	METAL CHIP	470	5%	1/10W
R567	1-216-049-00	METAL CHIP	1K	5%	1/10W
R602	1-216-081-00	METAL CHIP	22K	5%	1/10W
R604	1-216-049-00	METAL CHIP	1K	5%	1/10W
R605	1-216-073-00	METAL CHIP	10K	5%	1/10W
R606	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R607	1-216-073-00	METAL CHIP	10K	5%	1/10W
R608	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R609	1-216-049-00	METAL CHIP	1K	5%	1/10W
R610	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R611	1-216-073-00	METAL CHIP	10K	5%	1/10W
R612	1-216-073-00	METAL CHIP	10K	5%	1/10W
R613	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R614	1-216-049-00	METAL CHIP	1K	5%	1/10W
R615	1-216-049-00	METAL CHIP	1K	5%	1/10W
R616	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R617	1-216-121-00	METAL CHIP	1M	5%	1/10W
R618	1-216-049-00	METAL CHIP	1K	5%	1/10W
R619	1-216-049-00	METAL CHIP	1K	5%	1/10W
R620	1-216-049-00	METAL CHIP	1K	5%	1/10W
R621	1-216-049-00	METAL CHIP	1K	5%	1/10W
R622	1-216-049-00	METAL CHIP	1K	5%	1/10W
R623	1-216-049-00	METAL CHIP	1K	5%	1/10W
R624	1-216-049-00	METAL CHIP	1K	5%	1/10W
R625	1-216-049-00	METAL CHIP	1K	5%	1/10W
R626	1-216-049-00	METAL CHIP	1K	5%	1/10W
R627	1-216-049-00	METAL CHIP	1K	5%	1/10W
R628	1-216-049-00	METAL CHIP	1K	5%	1/10W
R629	1-216-049-00	METAL CHIP	1K	5%	1/10W
R630	1-216-049-00	METAL CHIP	1K	5%	1/10W
R632	1-216-049-00	METAL CHIP	1K	5%	1/10W
R633	1-216-045-00	METAL CHIP	680	5%	1/10W
R634	1-216-045-00	METAL CHIP	680	5%	1/10W
R635	1-216-045-00	METAL CHIP	680	5%	1/10W
R636	1-216-049-00	METAL CHIP	1K	5%	1/10W
R637	1-216-073-00	METAL CHIP	10K	5%	1/10W
R638	1-216-073-00	METAL CHIP	10K	5%	1/10W
R639	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R640	1-216-073-00	METAL CHIP	10K	5%	1/10W
R641	1-216-073-00	METAL CHIP	10K	5%	1/10W
R643	1-216-049-00	METAL CHIP	1K	5%	1/10W
R701	1-216-097-00	METAL CHIP	100K	5%	1/10W
R702	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R703	1-216-691-11	METAL CHIP	47K	0.5%	1/10W
R704	1-216-693-11	METAL CHIP	56K	0.5%	1/10W
R705	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R706	1-216-697-11	METAL CHIP	82K	0.5%	1/10W
R707	1-216-101-00	METAL CHIP	150K	5%	1/10W
R708	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R709	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R710	1-216-681-11	METAL CHIP	18K	0.5%	1/10W
R711	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R712	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R713	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R714	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W

< VARIABLE RESISTOR >

RV101	1-230-875-21	RES. ADJ. METAL 220K
RV102	1-230-875-21	RES. ADJ. METAL 220K
RV103	1-230-871-11	RES. ADJ. METAL 22K
RV104	1-230-871-11	RES. ADJ. METAL 22K
RV105	1-230-870-11	RES. ADJ. METAL 10K
RV106	1-230-870-11	RES. ADJ. METAL 10K
RV201	1-230-873-11	RES. ADJ. METAL 47K
RV203	1-230-869-11	RES. ADJ. METAL 4.7K
RV204	1-230-869-11	RES. ADJ. METAL 4.7K
RV301	1-230-868-11	RES. ADJ. METAL 2.2K
RV302	1-230-868-11	RES. ADJ. METAL 2.2K
RV303	1-230-869-11	RES. ADJ. METAL 4.7K
RV304	1-230-873-11	RES. ADJ. METAL 47K

< CRYSTAL >

X001	1-577-116-21	OSCILLATOR, CRYSTAL (16MHz)
X002	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)
X003	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)
X004	1-567-160-21	OSCILLATOR, CERAMIC (4.19MHz)
X101	1-567-504-81	OSCILLATOR, CRYSTAL (4.433619MH)

* A-7071-451-A SI-12 BOARD, COMPLETE

< JACK >

J201	1-566-847-41	CONNECTOR, (S) TERMINAL 4P (PLAYER OUT)
J202	1-566-847-41	CONNECTOR, (S) TERMINAL 4P (RECORDER OUT)
J203	1-566-847-41	CONNECTOR, (S) TERMINAL 4P (RECORDER IN)

TC-16

TS-74 (LEFT)

TS-74 (RIGHT)

YC-106

Ref. No.	Part No.	Description	Remark
	* 1-635-323-11	TC-16 BOARD *****	
	* 3-724-111-01	HOLDER, CONNECTOR < COMPOSITION CIRCUIT BLOCK >	
CP401	1-232-159-00	COMPOSITION CIRCUIT BLOCK < JACK >	
J402	1-566-769-11	SOCKET, DIN (SMALL TYPE) 5P (TITLE KEY BOARD)	

	A-7070-628-A	TS-74 (LEFT) BOARD, COMPLETE ***** (Ref. No 1,000 Series)	
		< TRANSISTOR >	
Q715	8-729-700-11	TRANSISTOR NJL7141E	

	A-7070-627-A	TS-74 (RIGHT) BOARD, COMPLETE ***** (Ref. No 2,000 Series)	
		< TRANSISTOR >	
Q715	8-729-700-11	TRANSISTOR NJL7141E	

	* A-7062-844-A	YC-106 BOARD, COMPLETE *****	
	* 3-943-824-01	LID, UPPER, YC SHIELD CASE	
	* 3-943-825-01	LID, BOTTOM, YC SHIELD CASE	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3 < CAPACITOR >	
C201	1-126-154-11	ELECT 47uF 20% 5.3V	
C202	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C203	1-126-154-11	ELECT 47uF 20% 6.3V	
C204	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C205	1-163-123-00	CERAMIC CHIP 180PF 5% 50V	
C206	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C207	1-163-141-00	CERAMIC CHIP 0.001uF 5% 50V	
C208	1-126-157-11	ELECT 10uF 20% 16V	
C209	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C210	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C211	1-124-584-00	ELECT 100uF 20% 10V	

Ref. No.	Part No.	Description	Remark
C212	1-126-160-11	ELECT 1uF 20% 50V	
C213	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C214	1-126-160-11	ELECT 1uF 20% 50V	
C215	1-163-135-00	CERAMIC CHIP 560PF 5% 50V	
C216	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C217	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C218	1-163-141-00	CERAMIC CHIP 0.001uF 5% 50V	
C219	1-163-141-00	CERAMIC CHIP 0.001uF 5% 50V	
C220	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C221	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C222	1-126-160-11	ELECT 1uF 20% 50V	
C223	1-124-465-00	ELECT 0.47uF 20% 50V	
C224	1-126-160-11	ELECT 1uF 20% 50V	
C225	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C226	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C227	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C228	1-163-123-00	CERAMIC CHIP 180PF 5% 50V	
C229	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C230	1-126-154-11	ELECT 47uF 20% 6.3V	
C231	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C232	1-126-154-11	ELECT 47uF 20% 6.3V	
C233	1-126-154-11	ELECT 47uF 20% 6.3V	
C234	1-126-154-11	ELECT 47uF 20% 6.3V	
C236	1-126-157-11	ELECT 10uF 20% 16V	
C237	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C238	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C239	1-126-154-11	ELECT 47uF 20% 6.3V	
C601	1-126-154-11	ELECT 47uF 20% 6.3V	
C602	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C603	1-126-163-11	ELECT 4.7uF 20% 50V	
C604	1-126-154-11	ELECT 47uF 20% 6.3V	
C606	1-126-154-11	ELECT 47uF 20% 6.3V	
C607	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C609	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C610	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C611	1-126-154-11	ELECT 47uF 20% 6.3V	
C612	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C613	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C614	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C615	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C616	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C617	1-126-154-11	ELECT 47uF 20% 6.3V	
C618	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C619	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C620	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C621	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C622	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C623	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C624	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	

Ref. No.	Part No.	Description	Remark
C625	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C626	1-126-154-11	ELECT 47uF	20% 6.3V
C627	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C628	1-126-154-11	ELECT 47uF	20% 6.3V
C629	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C630	1-126-163-11	ELECT 4.7uF	20% 50V
C631	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C632	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C633	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C634	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C640	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C801	1-126-157-11	ELECT 10uF	20% 16V
C802	1-124-584-00	ELECT 100uF	20% 10V
C803	1-126-154-11	ELECT 47uF	20% 6.3V
C804	1-124-584-00	ELECT 100uF	20% 10V
C805	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C806	1-124-584-00	ELECT 100uF	20% 10V
C809	1-163-104-00	CERAMIC CHIP 30PF	5% 50V
C810	1-124-584-00	ELECT 100uF	20% 10V
C814	1-126-154-11	ELECT 47uF	20% 6.3V
C815	1-124-584-00	ELECT 100uF	20% 10V
C816	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C817	1-126-154-11	ELECT 47uF	20% 6.3V
C818	1-124-584-00	ELECT 100uF	20% 10V
C822	1-126-154-11	ELECT 47uF	20% 6.3V
C823	1-124-584-00	ELECT 100uF	20% 10V
C824	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C825	1-126-154-11	ELECT 47uF	20% 6.3V
C826	1-124-584-00	ELECT 100uF	20% 10V
C827	1-126-157-11	ELECT 10uF	20% 16V
C828	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C829	1-126-154-11	ELECT 47uF	20% 6.3V
C830	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C831	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C832	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C833	1-126-154-11	ELECT 47uF	20% 6.3V
C834	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C835	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C839	1-126-157-11	ELECT 10uF	20% 16V
C840	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C841	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C842	1-126-154-11	ELECT 47uF	20% 6.3V
C843	1-126-154-11	ELECT 47uF	20% 6.3V
C844	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
< CONNECTOR >			
CN501	1-506-470-11	CONNECTOR 5P, MALE	
CN502	1-506-471-11	CONNECTOR 6P, MALE	
CN503	1-506-483-21	CONNECTOR 4P, MALE	

Ref. No.	Part No.	Description	Remark
CN504	1-506-470-11	CONNECTOR 5P, MALE	
< TRIMMER >			
CV201	1-141-368-11	CAP. CHIP TRIMMER	
< DIODE >			
D601	8-719-400-18	DIODE MA152WK	
< INDUCTOR >			
FB601	1-412-364-11	INDUCTOR CHIP 00H	
FB602	1-412-364-11	INDUCTOR CHIP 00H	
FB603	1-412-364-11	INDUCTOR CHIP 00H	
< FILTER >			
FL601	1-236-925-11	FILTER, LOW PASS	
FL603	1-239-153-21	FILTER, BAND PASS	
FL801	1-236-564-11	FILTER, LOW PASS	
FL802	1-235-779-11	LPF	
FL803	1-236-835-11	FILTER, BAND PASS	
< IC >			
IC201	8-759-603-54	IC M51271FP	
IC604	8-759-506-97	IC BU5801K	
IC605	8-752-334-55	IC CXD1175AM	
IC606	8-752-342-61	IC CXD2105AQ	
IC801	8-759-711-79	IC NJM2233BM	
IC802	8-759-711-79	IC NJM2233BM	
IC803	8-759-711-79	IC NJM2233BM	
< COIL >			
L201	1-408-979-21	INDUCTOR 56uH	
L202	1-408-981-21	INDUCTOR 82uH	
L203	1-408-968-21	INDUCTOR 6.8uH	
L204	1-407-169-XX	INDUCTOR 100uH	
L205	1-408-981-21	INDUCTOR 82uH	
L206	1-408-968-21	INDUCTOR 6.8uH	
L801	1-408-975-21	INDUCTOR 27uH	
L805	1-408-974-21	INDUCTOR 22uH	
L806	1-408-979-21	INDUCTOR 56uH	
< TRANSISTOR >			
Q201	8-729-100-66	TRANSISTOR 2SC1623	
Q202	8-729-100-66	TRANSISTOR 2SC1623	
Q203	8-729-100-66	TRANSISTOR 2SC1623	
Q204	8-729-100-66	TRANSISTOR 2SC1623	
Q205	8-729-100-66	TRANSISTOR 2SC1623	
Q206	8-729-100-66	TRANSISTOR 2SC1623	
Q207	8-729-100-66	TRANSISTOR 2SC1623	

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q208	8-729-100-66	TRANSISTOR 2SC1623		R221	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q209	8-729-100-66	TRANSISTOR 2SC1623		R222	1-216-077-00	METAL CHIP 15K 5% 1/10W	
Q210	8-729-100-66	TRANSISTOR 2SC1623		R223	1-216-081-00	METAL CHIP 22K 5% 1/10W	
Q601	8-729-100-66	TRANSISTOR 2SC1623		R224	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q602	8-729-216-22	TRANSISTOR 2SA1162		R225	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q603	8-729-100-66	TRANSISTOR 2SC1623		R226	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
Q604	8-729-100-66	TRANSISTOR 2SC1623		R227	1-216-079-00	METAL CHIP 18K 5% 1/10W	
Q605	8-729-216-22	TRANSISTOR 2SA1162		R228	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
Q606	8-729-100-66	TRANSISTOR 2SC1623		R229	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q607	8-729-216-22	TRANSISTOR 2SA1162		R230	1-216-039-00	METAL CHIP 390 5% 1/10W	
Q609	8-729-216-22	TRANSISTOR 2SA1162		R231	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q610	8-729-216-22	TRANSISTOR 2SA1162		R232	1-216-081-00	METAL CHIP 22K 5% 1/10W	
Q611	8-729-216-22	TRANSISTOR 2SA1162		R233	1-216-075-00	METAL CHIP 12K 5% 1/10W	
Q801	8-729-100-66	TRANSISTOR 2SC1623		R234	1-216-041-00	METAL CHIP 470 5% 1/10W	
Q802	8-729-100-66	TRANSISTOR 2SC1623		R235	1-216-041-00	METAL CHIP 470 5% 1/10W	
Q803	8-729-100-66	TRANSISTOR 2SC1623		R236	1-216-043-00	METAL CHIP 560 5% 1/10W	
Q804	8-729-100-66	TRANSISTOR 2SC1623		R237	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q805	8-729-100-66	TRANSISTOR 2SC1623		R238	1-216-081-00	METAL CHIP 22K 5% 1/10W	
Q806	8-729-100-66	TRANSISTOR 2SC1623		R239	1-216-075-00	METAL CHIP 12K 5% 1/10W	
Q807	8-729-100-66	TRANSISTOR 2SC1623		R240	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q808	8-729-100-66	TRANSISTOR 2SC1623		R241	1-216-075-00	METAL CHIP 12K 5% 1/10W	
Q809	8-729-100-66	TRANSISTOR 2SC1623		R242	1-216-079-00	METAL CHIP 18K 5% 1/10W	
Q810	8-729-100-66	TRANSISTOR 2SC1623		R243	1-216-041-00	METAL CHIP 470 5% 1/10W	
Q811	8-729-100-66	TRANSISTOR 2SC1623		R244	1-216-041-00	METAL CHIP 470 5% 1/10W	
Q812	8-729-100-66	TRANSISTOR 2SC1623		R245	1-216-043-00	METAL CHIP 560 5% 1/10W	
Q813	8-729-100-66	TRANSISTOR 2SC1623		R246	1-216-049-00	METAL CHIP 1K 5% 1/10W	
< RESISTOR >				R247	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R201	1-216-025-00	METAL CHIP 100 5% 1/10W		R248	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R202	1-216-077-00	METAL CHIP 15K 5% 1/10W		R249	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R203	1-216-081-00	METAL CHIP 22K 5% 1/10W		R250	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R204	1-216-029-00	METAL CHIP 150 5% 1/10W		R251	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R205	1-216-041-00	METAL CHIP 470 5% 1/10W		R252	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R206	1-216-049-00	METAL CHIP 1K 5% 1/10W		R253	1-216-295-00	METAL CHIP 0 5% 1/10W	
R207	1-216-049-00	METAL CHIP 1K 5% 1/10W		R254	1-216-295-00	METAL CHIP 0 5% 1/10W	
R208	1-216-119-00	METAL CHIP 820K 5% 1/10W		R255	1-216-295-00	METAL CHIP 0 5% 1/10W	
R209	1-216-077-00	METAL CHIP 15K 5% 1/10W		R256	1-216-295-00	METAL CHIP 0 5% 1/10W	
R210	1-216-077-00	METAL CHIP 15K 5% 1/10W		R257	1-216-097-00	METAL CHIP 100X 5% 1/10W	
R211	1-216-085-00	METAL CHIP 33K 5% 1/10W		R258	1-216-295-00	METAL CHIP 0 5% 1/10W	
R212	1-216-089-00	METAL CHIP 47K 5% 1/10W		R260	1-216-295-00	METAL CHIP 0 5% 1/10W	
R213	1-216-113-00	METAL CHIP 470K 5% 1/10W		R603	1-216-037-00	METAL CHIP 330 5% 1/10W	
R214	1-216-053-00	METAL CHIP 1.5K 5% 1/10W		R604	1-216-038-00	METAL CHIP 360 5% 1/10W	
R215	1-216-025-00	METAL CHIP 100 5% 1/10W		R605	1-216-043-00	METAL CHIP 560 5% 1/10W	
R216	1-216-021-00	METAL CHIP 68 5% 1/10W		R606	1-216-013-00	METAL CHIP 33 5% 1/10W	
R217	1-216-057-00	METAL CHIP 2.2K 5% 1/10W		R607	1-216-041-00	METAL CHIP 470 5% 1/10W	
R218	1-216-748-11	METAL CHIP 39K 1% 1/10W		R608	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R219	1-216-057-00	METAL CHIP 2.2K 5% 1/10W		R609	1-216-025-00	METAL CHIP 100 5% 1/10W	
R220	1-216-095-00	METAL CHIP 82K 5% 1/10W		R610	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
				R611	1-216-049-00	METAL CHIP 1K 5% 1/10W	
				R612	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	

Ref. No.	Part No.	Description	Remark
R613	1-216-049-00	METAL CHIP	1K 5% 1/10W
R614	1-216-049-00	METAL CHIP	1K 5% 1/10W
R619	1-216-049-00	METAL CHIP	1K 5% 1/10W
R620	1-216-049-00	METAL CHIP	1K 5% 1/10W
R621	1-216-049-00	METAL CHIP	1K 5% 1/10W
R622	1-216-049-00	METAL CHIP	1K 5% 1/10W
R623	1-216-025-00	METAL CHIP	100 5% 1/10W
R624	1-216-033-00	METAL CHIP	220 5% 1/10W
R625	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R626	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R627	1-216-033-00	METAL CHIP	220 5% 1/10W
R628	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R629	1-216-035-00	METAL CHIP	270 5% 1/10W
R630	1-216-081-00	METAL CHIP	22K 5% 1/10W
R631	1-216-081-00	METAL CHIP	22K 5% 1/10W
R633	1-216-081-00	METAL CHIP	22K 5% 1/10W
R634	1-216-081-00	METAL CHIP	22K 5% 1/10W
R635	1-216-073-00	METAL CHIP	10K 5% 1/10W
R638	1-216-295-00	METAL CHIP	0 5% 1/10W
R639	1-216-295-00	METAL CHIP	0 5% 1/10W
R642	1-216-295-00	METAL CHIP	0 5% 1/10W
R645	1-216-295-00	METAL CHIP	0 5% 1/10W
R646	1-216-041-00	METAL CHIP	470 5% 1/10W
R647	1-216-121-00	METAL CHIP	1M 5% 1/10W
R801	1-216-097-00	METAL CHIP	100K 5% 1/10W
R802	1-216-097-00	METAL CHIP	100K 5% 1/10W
R803	1-216-097-00	METAL CHIP	100K 5% 1/10W
R804	1-216-097-00	METAL CHIP	100K 5% 1/10W
R805	1-216-089-00	METAL CHIP	47K 5% 1/10W
R806	1-216-081-00	METAL CHIP	22K 5% 1/10W
R807	1-216-077-00	METAL CHIP	15K 5% 1/10W
R808	1-216-025-00	METAL CHIP	100 5% 1/10W
R809	1-216-041-00	METAL CHIP	470 5% 1/10W
R810	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R811	1-216-049-00	METAL CHIP	1K 5% 1/10W
R812	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R813	1-216-081-00	METAL CHIP	22K 5% 1/10W
R814	1-216-077-00	METAL CHIP	15K 5% 1/10W
R815	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R816	1-216-041-00	METAL CHIP	470 5% 1/10W
R817	1-216-295-00	METAL CHIP	0 5% 1/10W
R818	1-216-075-00	METAL CHIP	12K 5% 1/10W
R819	1-216-079-00	METAL CHIP	18K 5% 1/10W
R820	1-216-295-00	METAL CHIP	0 5% 1/10W
R821	1-216-041-00	METAL CHIP	470 5% 1/10W
R823	1-216-041-00	METAL CHIP	470 5% 1/10W
R824	1-216-043-00	METAL CHIP	560 5% 1/10W
R825	1-216-043-00	METAL CHIP	560 5% 1/10W
R826	1-216-075-00	METAL CHIP	12K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R827	1-216-079-00	METAL CHIP	18K 5% 1/10W
R828	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R829	1-216-049-00	METAL CHIP	1K 5% 1/10W
R830	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R831	1-216-079-00	METAL CHIP	18K 5% 1/10W
R832	1-216-075-00	METAL CHIP	12K 5% 1/10W
R833	1-216-295-00	METAL CHIP	0 5% 1/10W
R834	1-216-041-00	METAL CHIP	470 5% 1/10W
R836	1-216-041-00	METAL CHIP	470 5% 1/10W
R837	1-216-043-00	METAL CHIP	560 5% 1/10W
R838	1-216-043-00	METAL CHIP	560 5% 1/10W
R839	1-216-079-00	METAL CHIP	18K 5% 1/10W
R840	1-216-075-00	METAL CHIP	12K 5% 1/10W
R841	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R842	1-216-049-00	METAL CHIP	1K 5% 1/10W
R843	1-216-079-00	METAL CHIP	18K 5% 1/10W
R844	1-216-025-00	METAL CHIP	100 5% 1/10W
R845	1-216-079-00	METAL CHIP	18K 5% 1/10W
R846	1-216-049-00	METAL CHIP	1K 5% 1/10W
R847	1-216-077-00	METAL CHIP	15K 5% 1/10W
R848	1-216-081-00	METAL CHIP	22K 5% 1/10W
R849	1-216-025-00	METAL CHIP	100 5% 1/10W
R850	1-216-049-00	METAL CHIP	1K 5% 1/10W
R851	1-216-049-00	METAL CHIP	1K 5% 1/10W
R852	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R853	1-216-079-00	METAL CHIP	18K 5% 1/10W
R854	1-216-075-00	METAL CHIP	12K 5% 1/10W
R855	1-216-295-00	METAL CHIP	0 5% 1/10W
R856	1-216-041-00	METAL CHIP	470 5% 1/10W
R858	1-216-041-00	METAL CHIP	470 5% 1/10W
R859	1-216-043-00	METAL CHIP	560 5% 1/10W
R860	1-216-043-00	METAL CHIP	560 5% 1/10W
R861	1-216-079-00	METAL CHIP	18K 5% 1/10W
R862	1-216-075-00	METAL CHIP	12K 5% 1/10W
R863	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R866	1-216-085-00	METAL CHIP	33K 5% 1/10W

< VARIABLE RESISTOR >

RV601	1-230-522-11	RES. ADJ. METAL 4.7K
RV602	1-230-522-11	RES. ADJ. METAL 4.7K

< VIBRATOR >

X201	1-567-733-11	VIBRATOR, CRYSTAL
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YX-2 (P)

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
* A-7062-845-A YX-2 (P) BOARD, COMPLETE							

(Ref. No 11,000 Series)							
	7-685-646-79	SCREW +BVTP 3X8 TYPE 2, IT-3		C053	1-126-157-11	ELECT 10MF	20% 10V
	7-685-646-79	SCREW +BVTP 3X8 TYPE 2		C054	1-126-157-11	ELECT 10MF	20% 10V
CAPACITOR				C056	1-126-157-11	ELECT 10MF	20% 10V
C001	1-124-589-11	ELECT 47MF	20% 10V	C057	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C002	1-163-091-00	CERAMIC CHIP 8PF	0.25PF 50V	C058	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C003	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	C059	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C004	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	C060	1-124-589-11	ELECT 47MF	20% 10V
C005	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	C061	1-124-589-11	ELECT 47MF	20% 10V
C006	1-124-589-11	ELECT 47MF	20% 10V	C062	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C007	1-163-091-00	CERAMIC CHIP 8PF	0.25PF 50V	C063	1-126-157-11	ELECT 10MF	20% 10V
C008	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	C064	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C009	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	C201	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C010	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	C202	1-124-584-00	ELECT 100MF	20% 10V
C011	1-124-589-11	ELECT 47MF	20% 10V	C203	1-124-589-11	ELECT 47MF	20% 10V
C012	1-124-589-11	ELECT 47MF	20% 10V	C204	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C013	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C205	1-164-633-11	CERAMIC CHIP 0.1MF	10% 25V
C015	1-126-157-11	ELECT 10MF	20% 10V	C206	1-124-589-11	ELECT 47MF	20% 10V
C016	1-124-225-00	ELECT 100MF	20% 6.3V	C207	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C017	1-124-589-11	ELECT 47MF	20% 10V	C208	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C018	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	C209	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C019	1-163-035-00	CERAMIC CHIP 0.047MF	50V	C210	1-124-589-11	ELECT 47MF	20% 10V
C020	1-126-157-11	ELECT 10MF	20% 10V	C211	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C021	1-126-157-11	ELECT 10MF	20% 10V	C212	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C022	1-126-157-11	ELECT 10MF	20% 10V	C213	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C023	1-124-589-11	ELECT 47MF	20% 10V	C214	1-124-589-11	ELECT 47MF	20% 10V
C024	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C215	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C025	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C216	1-126-157-11	ELECT 10MF	20% 10V
C026	1-124-225-00	ELECT 100MF	20% 6.3V	C218	1-163-093-00	CERAMIC CHIP 10PF	5% 50V
C028	1-126-157-11	ELECT 10MF	20% 10V	C219	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C029	1-124-225-00	ELECT 100MF	20% 6.3V	C220	1-124-589-11	ELECT 47MF	20% 10V
C031	1-126-157-11	ELECT 10MF	20% 10V	C221	1-124-589-11	ELECT 47MF	20% 10V
C032	1-126-157-11	ELECT 10MF	20% 10V	C222	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C033	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C224	1-124-225-00	ELECT 100MF	20% 6.3V
C034	1-124-589-11	ELECT 47MF	20% 10V	C225	1-124-225-00	ELECT 100MF	20% 6.3V
C035	1-163-035-00	CERAMIC CHIP 0.047MF	50V	C226	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C036	1-163-091-00	CERAMIC CHIP 8PF	0.25PF 50V	C227	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C037	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	C228	1-124-589-11	ELECT 47MF	20% 10V
C038	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	C230	1-126-157-11	ELECT 10MF	20% 10V
C039	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	C231	1-124-589-11	ELECT 47MF	20% 10V
C040	1-124-589-11	ELECT 47MF	20% 10V	C232	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C041	1-163-035-00	CERAMIC CHIP 0.047MF	50V	C233	1-124-589-11	ELECT 47MF	20% 10V
C043	1-126-157-11	ELECT 10MF	20% 10V	C234	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C044	1-126-157-11	ELECT 10MF	20% 10V	C235	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C045	1-126-157-11	ELECT 10MF	20% 10V	C236	1-126-157-11	ELECT 10MF	20% 10V
C046	1-126-157-11	ELECT 10MF	20% 10V	C237	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C047	1-124-589-11	ELECT 47MF	20% 10V	C238	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C048	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C239	1-124-589-11	ELECT 47MF	20% 10V
C049	1-126-157-11	ELECT 10MF	20% 10V	C240	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C052	1-163-035-00	CERAMIC CHIP 0.047MF	50V	C241	1-126-157-11	ELECT 10MF	20% 10V
				C242	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C243	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C244	1-126-157-11	ELECT 10MF	20% 10V

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
C245	1-126-157-11	ELECT 10MF	20% 10V	IC207	8-759-710-07	IC NJM2234M	
C246	1-124-589-11	ELECT 47MF	20% 10V			<u>COIL</u>	
C247	1-163-035-00	CERAMIC CHIP 0.047MF	50V	L001	1-408-974-21	INDUCTOR 22UH	
C248	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L002	1-408-962-21	INDUCTOR 2.2UH	
C249	1-124-589-11	ELECT 47MF	20% 10V	L003	1-408-962-21	INDUCTOR 2.2UH	
C250	1-124-589-11	ELECT 47MF	20% 10V	L004	1-408-989-21	INDUCTOR 47UH	
C251	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L005	1-408-962-21	INDUCTOR 2.2UH	
C252	1-124-589-11	ELECT 47MF	20% 10V	L006	1-410-071-11	INDUCTOR 10MMH	
C253	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L009	1-408-979-21	INDUCTOR 56UH	
C254	1-126-157-11	ELECT 10MF	20% 10V	L201	1-408-979-21	INDUCTOR 56UH	
C255	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L202	1-408-979-21	INDUCTOR 56UH	
C256	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L204	1-408-964-21	INDUCTOR 3.3UH	
C257	1-124-225-00	ELECT 100MF	20% 6.3V	L205	1-408-979-21	INDUCTOR 56UH	
C258	1-126-157-11	ELECT 10MF	20% 10V	L206	1-408-979-21	INDUCTOR 56UH	
C259	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L207	1-408-979-21	INDUCTOR 56UH	
C260	1-163-035-00	CERAMIC CHIP 0.047MF	50V	L208	1-408-979-21	INDUCTOR 56UH	
C261	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V			<u>TRANSISTOR</u>	
C262	1-126-157-11	ELECT 10MF	20% 10V	Q001	8-729-100-66	TRANSISTOR 2SC1623	
C263	1-163-035-00	CERAMIC CHIP 0.047MF	50V	Q002	8-729-100-66	TRANSISTOR 2SC1623	
		<u>CONNECTOR</u>		Q003	8-729-901-06	TRANSISTOR DTA144EK	
CN001	1-506-486-11	PIN, CONNECTOR 7P		Q004	8-729-100-66	TRANSISTOR 2SC1623	
CN002	1-506-485-11	PIN, CONNECTOR 6P		Q005	8-729-100-66	TRANSISTOR 2SC1623	
CN003	1-506-483-21	PIN, CONNECTOR 4P		Q006	8-729-100-66	TRANSISTOR 2SC1623	
CN004	1-506-472-11	PIN, CONNECTOR 7P		Q007	8-729-100-66	TRANSISTOR 2SC1623	
CN005	1-506-471-11	PIN, CONNECTOR 6P		Q008	8-729-100-66	TRANSISTOR 2SC1623	
		<u>DIODE</u>		Q009	8-729-100-66	TRANSISTOR 2SC1623	
D201	8-719-400-18	DIODE 1S2836		Q010	8-729-100-66	TRANSISTOR 2SC1623	
D202	8-719-104-34	DIODE MA152MK		Q011	8-729-100-66	TRANSISTOR 2SC1623	
		<u>FILTER</u>		Q012	8-729-100-66	TRANSISTOR 2SC1623	
FL001	1-415-637-11	DL (LC)		Q013	8-729-100-66	TRANSISTOR 2SC1623	
FL002	1-415-637-11	DL (LC)		Q014	8-729-100-66	TRANSISTOR 2SC1623	
FL003	1-415-637-11	DL (LC)		Q015	8-729-100-66	TRANSISTOR 2SC1623	
FL201	1-415-821-11	DELAY LINE		Q016	8-729-901-01	TRANSISTOR DTC144EK	
FL202	1-415-821-11	DELAY LINE		Q017	8-729-100-66	TRANSISTOR 2SC1623	
FL203	1-415-821-11	DELAY LINE		Q018	8-729-100-66	TRANSISTOR 2SC1623	
FL205	1-415-551-11	DELAY LINE		Q019	8-729-100-66	TRANSISTOR 2SC1623	
FL207	1-235-617-11	FILTER, LOW PASS		Q020	8-729-100-66	TRANSISTOR 2SC1623	
		<u>IC</u>		Q021	8-729-100-66	TRANSISTOR 2SC1623	
IC001	8-759-200-60	IC TA7060AP		Q022	8-729-100-66	TRANSISTOR 2SC1623	
IC002	8-759-200-60	IC TA7060AP		Q023	8-729-100-66	TRANSISTOR 2SC1623	
IC003	8-759-400-06	IC AN608P		Q024	8-729-100-66	TRANSISTOR 2SC1623	
IC004	8-759-009-10	IC MC14069UBF		Q025	8-729-100-66	TRANSISTOR 2SC1623	
IC005	8-759-009-10	IC MC14069UBF		Q026	8-729-100-66	TRANSISTOR 2SC1623	
IC201	8-759-200-60	IC TA7060AP		Q027	8-729-901-06	TRANSISTOR DTA144EK	
IC202	8-759-402-33	IC AN607P		Q028	8-729-100-66	TRANSISTOR 2SC1623	
IC203	8-752-201-30	IC CX22013		Q029	8-729-100-66	TRANSISTOR 2SC1623	
IC204	8-759-969-13	IC SN16913P		Q030	8-729-100-66	TRANSISTOR 2SC1623	
IC205	8-759-101-12	IC UPC311G2		Q031	8-729-100-66	TRANSISTOR 2SC1623	
IC206	8-759-710-07	IC NJM2234M		Q032	8-729-100-66	TRANSISTOR 2SC1623	
				Q033	8-729-100-66	TRANSISTOR 2SC1623	

YX-2 (P)

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
Q034	8-729-100-66	TRANSISTOR 2SC1623		R020	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q035	8-729-100-66	TRANSISTOR 2SC1623		R021	1-216-056-00	METAL GLAZE 2K 5% 1/10W	
Q036	8-729-901-06	TRANSISTOR DTA144EK		R022	1-216-056-00	METAL GLAZE 2K 5% 1/10W	
Q037	8-729-901-01	TRANSISTOR DTC144EK		R023	1-216-047-00	METAL GLAZE 820 5% 1/10W	
Q038	8-729-901-01	TRANSISTOR DTC144EK		R024	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q039	8-729-901-06	TRANSISTOR DTA144EK		R025	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q040	8-729-901-01	TRANSISTOR DTC144EK		R026	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q041	8-729-901-01	TRANSISTOR DTC144EK		R027	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q042	8-729-901-06	TRANSISTOR DTA144EK		R028	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q201	8-729-100-66	TRANSISTOR 2SC1623		R029	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q202	8-729-100-66	TRANSISTOR 2SC1623		R030	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
Q203	8-729-100-66	TRANSISTOR 2SC1623		R031	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
Q204	8-729-100-66	TRANSISTOR 2SC1623		R032	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q205	8-729-100-66	TRANSISTOR 2SC1623		R033	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q206	8-729-100-66	TRANSISTOR 2SC1623		R034	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q207	8-729-100-66	TRANSISTOR 2SC1623		R035	1-216-050-00	METAL GLAZE 1.1K 5% 1/10W	
Q208	8-729-100-66	TRANSISTOR 2SC1623		R036	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
Q209	8-729-100-66	TRANSISTOR 2SC1623		R037	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
Q210	8-729-100-66	TRANSISTOR 2SC1623		R038	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
Q211	8-729-100-66	TRANSISTOR 2SC1623		R039	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q212	8-729-100-66	TRANSISTOR 2SC1623		R040	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q213	8-729-100-66	TRANSISTOR 2SC1623		R041	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q214	8-729-100-66	TRANSISTOR 2SC1623		R042	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
Q215	8-729-100-66	TRANSISTOR 2SC1623		R043	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q216	8-729-100-66	TRANSISTOR 2SC1623		R044	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
Q217	8-729-100-66	TRANSISTOR 2SC1623		R045	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q218	8-729-320-17	TRANSISTOR 2SA1122CD		R046	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q219	8-729-100-66	TRANSISTOR 2SC1623		R047	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q220	8-729-100-66	TRANSISTOR 2SC1623		R048	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q221	8-729-320-17	TRANSISTOR 2SA1122CD		R049	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q222	8-729-100-66	TRANSISTOR 2SC1623		R050	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q223	8-729-100-66	TRANSISTOR 2SC1623		R051	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
<u>RESISTOR</u>				R053	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R001	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R054	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R002	1-216-079-00	METAL GLAZE 18K 5% 1/10W		R055	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R003	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R056	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R004	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R057	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R005	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W		R058	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R006	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R059	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R007	1-216-056-00	METAL GLAZE 2K 5% 1/10W		R060	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R008	1-216-056-00	METAL GLAZE 2K 5% 1/10W		R061	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R009	1-216-047-00	METAL GLAZE 820 5% 1/10W		R062	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R010	1-216-295-00	METAL GLAZE 0 5% 1/10W		R063	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R011	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R064	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R012	1-216-041-00	METAL GLAZE 470 5% 1/10W		R065	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R013	1-216-295-00	METAL GLAZE 0 5% 1/10W		R066	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R014	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R067	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R015	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R068	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R016	1-216-079-00	METAL GLAZE 18K 5% 1/10W		R069	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R017	1-216-079-00	METAL GLAZE 18K 5% 1/10W		R070	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R018	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R071	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R019	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W		R072	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
				R073	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R074	1-216-041-00	METAL GLAZE	470 5% 1/10W	R129	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R075	1-216-037-00	METAL GLAZE	330 5% 1/10W	R130	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R076	1-216-043-00	METAL GLAZE	560 5% 1/10W	R201	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R077	1-216-045-00	METAL GLAZE	680 5% 1/10W	R203	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R078	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R204	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R079	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R205	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R080	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R206	1-216-036-00	METAL GLAZE	300 5% 1/10W
R081	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R207	1-216-045-00	METAL GLAZE	680 5% 1/10W
R082	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R208	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R083	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R209	1-216-041-00	METAL GLAZE	470 5% 1/10W
R084	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R210	1-216-052-00	METAL GLAZE	1.3K 5% 1/10W
R085	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R211	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R086	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R212	1-216-033-00	METAL GLAZE	220 5% 1/10W
R087	1-216-056-00	METAL GLAZE	2K 5% 1/10W	R213	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R088	1-216-056-00	METAL GLAZE	2K 5% 1/10W	R214	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R089	1-216-047-00	METAL GLAZE	820 5% 1/10W	R215	1-216-043-00	METAL GLAZE	560 5% 1/10W
R090	1-216-295-00	METAL GLAZE	0 5% 1/10W	R216	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R091	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R218	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R092	1-216-295-00	METAL GLAZE	0 5% 1/10W	R219	1-216-033-00	METAL GLAZE	220 5% 1/10W
R093	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R220	1-216-033-00	METAL GLAZE	220 5% 1/10W
R094	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R222	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R095	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R223	1-216-047-00	METAL GLAZE	820 5% 1/10W
R096	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R224	1-216-295-00	METAL GLAZE	0 5% 1/10W
R097	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R225	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R098	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R226	1-216-295-00	METAL GLAZE	0 5% 1/10W
R099	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R227	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R100	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R228	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R101	1-216-041-00	METAL GLAZE	470 5% 1/10W	R229	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R102	1-216-041-00	METAL GLAZE	470 5% 1/10W	R230	1-216-033-00	METAL GLAZE	220 5% 1/10W
R103	1-216-045-00	METAL GLAZE	680 5% 1/10W	R231	1-216-033-00	METAL GLAZE	220 5% 1/10W
R104	1-216-043-00	METAL GLAZE	560 5% 1/10W	R232	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R105	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R233	1-216-047-00	METAL GLAZE	820 5% 1/10W
R106	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R235	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R107	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R236	1-216-041-00	METAL GLAZE	470 5% 1/10W
R108	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R237	1-216-041-00	METAL GLAZE	470 5% 1/10W
R109	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R238	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R110	1-216-039-00	METAL GLAZE	390 5% 1/10W	R239	1-216-041-00	METAL GLAZE	470 5% 1/10W
R111	1-216-041-00	METAL GLAZE	470 5% 1/10W	R240	1-216-035-00	METAL GLAZE	270 5% 1/10W
R112	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R241	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R113	1-216-037-00	METAL GLAZE	330 5% 1/10W	R242	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R116	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R243	1-216-295-00	METAL GLAZE	0 5% 1/10W
R117	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R245	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R118	1-216-031-00	METAL GLAZE	180 5% 1/10W	R246	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R119	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R247	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R120	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R248	1-216-033-00	METAL GLAZE	220 5% 1/10W
R121	1-216-041-00	METAL GLAZE	470 5% 1/10W	R249	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R122	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R250	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R123	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R251	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R124	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	R252	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R125	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R253	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R126	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R254	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R127	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R256	1-216-295-00	METAL GLAZE	0 5% 1/10W
R128	1-216-049-00	METAL GLAZE	1K 5% 1/10W				

YX-2 (P)

Ref.No	Part No.	Description	Remark
R257	1-216-295-00	METAL GLAZE 0 5%	1/10W
R258	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R259	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R260	1-216-033-00	METAL GLAZE 220 5%	1/10W
R261	1-216-033-00	METAL GLAZE 220 5%	1/10W
R262	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R263	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R264	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R265	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
R266	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R267	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R268	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R269	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R270	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R271	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R272	1-216-025-00	METAL GLAZE 100 5%	1/10W
R273	1-216-295-00	METAL GLAZE 0 5%	1/10W
R275	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R276	1-216-033-00	METAL GLAZE 220 5%	1/10W
R278	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R279	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R280	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R281	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R282	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R283	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R284	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R285	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R286	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R287	1-216-295-00	METAL GLAZE 0 5%	1/10W
R288	1-216-025-00	METAL GLAZE 100 5%	1/10W
R297	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R298	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R299	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R300	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R301	1-216-025-00	METAL GLAZE 100 5%	1/10W
R302	1-216-295-00	METAL GLAZE 0 5%	1/10W
R303	1-216-295-00	METAL GLAZE 0 5%	1/10W
R306	1-216-097-00	METAL GLAZE 100K 5%	1/10W

VARIABLE RESISTOR

RV001	1-228-520-00	RES, ADJ, METAL GLAZE 470
RV002	1-228-520-00	RES, ADJ, METAL GLAZE 470
RV003	1-230-520-11	RES, ADJ, METAL GLAZE 1K
RV004	1-230-520-11	RES, ADJ, METAL GLAZE 1K
RV202	1-230-522-11	RES, ADJ, METAL GLAZE 4.7K
RV203	1 230 521-11	RES, ADJ, METAL GLAZE 2.2K
RV204	1-230-519-11	RES, ADJ, METAL GLAZE 470
RV205	1-230-519-11	RES, ADJ, METAL GLAZE 470
RV206	1-230-522-11	RES, ADJ, METAL GLAZE 4.7K

Ref.No	Part No.	Description	Remark
MISCELLANEOUS *****			
	1-413-629-21	SWITCHING BLOCK	
△	1-526-920-12	OUTLET, AC (15A 125V)	
△	1-534-517-81	CORD POWER (10A 125V)	
	1-535-535-11	TERMINAL, SHAFT GROUND	
	1-572-298-21	SWITCH, PUSH	
	1-559-726-11	CABLE (WITH DIN PLUG) 8P	
	1-464-924-11	ENCODER, ROTARY	
	1-454-377-31	SOLENOID PLUNGER	
	1-630-923-11	FP-206 FLEXIBLE BOARD	
C901	1-161-057-00	CAP, CERAMIC 0.033ME X	
C902	1-161-057-00	CAP, CERAMIC 0.033ME X	
M902	8-835-304-11	MOTOR, DC U-11B (REEL)	
M903	8-835-364-01	MOTOR, DC BHF-2802B (CAPSTAN)	
M904	X-3711-936-1	MOTOR ASSY, FL (CASSETTE LOADING)	
M905	8-835-138-01	MOTOR, DC (DNR-5301B) (CONTROL)	
M906	A-7040-065-A	MOTOR ASSY, L (LOADING MOTOR)	
M907	1-541-360-21	MOTOR, DC BLUSHLESS FAN	
PM901△	1-454-377-31	SOLENOID, PLUNGER	
S901	1-570-407-11	SWITCH, SLIDE (CASSETTE LOADING)	
S903	1-553-226-00	SWITCH, LEAF (CASSETTE LOCK)	
S904	X-3713-429-1	BRAKE ASSY, MAIN, S (RE COG)	

ACCESSORIES & PACKING MATERIALS *****			
	A-7061-563-A	CORD ASSY, CONNECTION	
	1-506-412-11	ADAPTOR, PLUG	
	1-506-521-11	PLUG ADAPTOR	
	1-556-760-11	CORD, POWER (3 CORE)	
	1-557-037-21	CABLE, AUDIO VIDEO	
	1-558-102-11	CORD, CONNECTION	
*	3-697-980-01	CUSHION, KEY BOARD	
*	3-704-334-01	SHEET (STANDARD), PROTECTION	
*	3-747-064-01	CUSHION (UPPER)	
*	3-747-066-01	CUSHION (LOWER)	
	3-751-992-11	MANUAL, INSTRUCTION (ENGLISH)	
	3-751-992-41	MANUAL, INSTRUCTION (FRENCH)	
	3-751-992-51	MANUAL, INSTRUCTION (GERMANY)	
	3-751-994-11	INSTRUCTION	
	3-751-994-41	INSTRUCTION	
	3-751-994-51	INSTRUCTION	
	3-751-994-61	INSTRUCTION	
	3-751-994-71	INSTRUCTION	
	3-751-994-81	INSTRUCTION	

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

Ref. No.	Part No.	Description	Remark
	3-753-697-41	INSTRUCTION (KEY BOARD)	
	3-753-697-51	INSTRUCTION (KEY BOARD)	
	3-753-698-11	MANUAL, INSTRUCTION (ITALIAN)	
	3-753-698-41	MANUAL, INSTRUCTION (SPANISH)	
	3-753-698-51	MANUAL, INSTRUCTION (CHINESE)	
	3-944-397-01	SPACER	
	8-759-009-11	IC MC140708F	
	8-759-207-74	IC TC4030BFH8	
	8-759-918-77	IC MP4589	

HARDWARE LIST

#1	7-621-255-45	SCREW +BVTT 2X6 (S)
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
#3	7-682-555-09	SCREW +P 3X30
#4	7-627-850-18	SCREW, PRECISION +P 1.4X2.5
#5	7-621-772-10	SCREW +B 2X4
#6	7-621-255-65	SCREW +P 2X10
#7	7-627-553-28	SCREW, PRECISION +P 2X2.5
#8	7-621-255-25	SCREW +P 2X4
#9	7-624-102-04	STOP RING 1.5, TYPE -E
#10	7-624-105-04	STOP RING 2.3, TYPE -E
#11	7-628-253-20	SCREW +PS 2X4
#12	7-628-253-00	SCREW +PSW 2X4
#13	7-627-553-48	SCREW, PRECISION +P 2X4
#14	7-621-255-50	SCREW +P 2X8
#15	7-624-106-04	STOP RING 3.0, TYPE -E
#16	7-627-553-68	SCREW (+M2X6), SPECIAL
#17	7-621-255-15	SCREW +PTT 2X3 (S)
#18	7-621-255-20	SCREW +P 2X4
#19	7-685-133-19	SCREW +P 2.6X6 TYPE2 NON-SLIT
#20	7-671-154-01	STEEL, BALL
#21	7-623-420-07	LW 2, TYPE B
#22	7-621-759-45	+PSW, 2.6X6
#23	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT
#24	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3

SECTION 7 MECHANICAL ADJUSTMENT

7-1. PERIODIC CHECK AND MAINTENANCE

It is recommended that the following periodic check and maintenance schedule are employed in order to obtain maximum performance of the unit and longer tape life.

7-1-1. MAINTENANCE AFTER REPAIRS

Perform the following maintenance after repair regardless the operating hours of the unit.

(1) Cleaning of the Rotary Upper Drum

- Press the cleaning piece moistend with cleaning fluid lightly against the Rotary Upper Drum and turn slowly the Upper Drum counterclockwise with a hand.

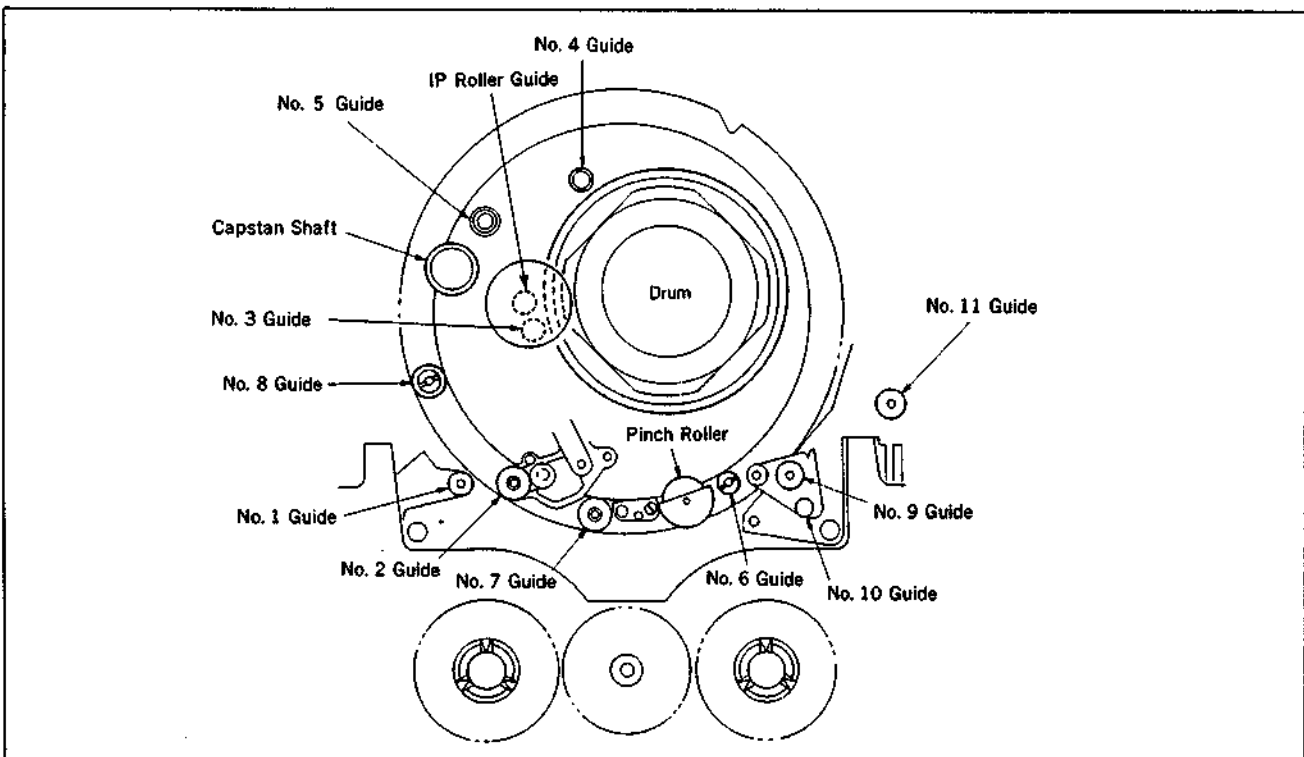
Note: Never turn the Upper Drum by the electric power and never turn the Upper Drum clockwise with a hand. Never move the cleaning piece in the vertical direction of head tips in the cleaning. It tends to damage the video head tips. Please follow the instruction above for cleaning.

2) Cleaning of Tape Running System (fig.1)

- Put the cassette compartment into the EJECT completion mode and clean the tape running system (No.1 thru No.11 Guides, Capstan Shaft, Pinch Roller and IP Roller Guide) with cleaning piece moistend with the cleaning fluid.

(3) Cleaning of Drive System

- Clean the Drive system (reel table surface, belt and timing belt) with cleaning piece moistend with the cleaning fluid.



7-1-2. PERIODIC CHECK

Perform the maintenance and periodic checks described below in accordance with the operational hour of the unit.

○: Cleaning ◆: Replacement ◇: Checking ■: Oiling

Location			Hours of Use (H)										Reference Section
Parts Name	Parts No.	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000		
Tape Path	Tape Path surface	-	○	○	○	○	○	○	○	○	○	○	7-1-1
	Upper Drum Ass'y (DGR-68-R)	A-7049-328-A	○	◇	○	◇	○	◇	○	◇	○	◇	7-2-2
	Drum Ass'y (DGH-68A-R)	A-7048-389-A	○	◇	○	◇	○	◇	○	◇	○	◇	7-2-3
	Pinch Roller Arm Ass'y	X-3686-648-1	○	○	○	○	○	○	○	○	○	○	7-2-5
	(Note 4:) Capstan shaft bearing	8-835-364-01	-	■	-	■	-	■	-	■	-	■	—
Drive System	Threading motor belt	3-686-546-01	○	○	○	○	○	○	○	◆	○	○	7-2-7
	Blake plunger	1-454-377-31	-	-	-	○	-	-	-	○	-	-	7-2-20
	Threading motor	A-7040-065-A	-	◇	-	◇	-	◇	-	◇	-	◇	7-2-7
	Control motor	8-835-138-01	-	◇	-	◇	-	◇	-	◇	-	◇	7-2-21
	Reel motor	8-835-304-11	-	◇	-	◇	-	◇	-	◇	-	◇	7-2-8
	T Reel Table Ass'y	X-3711-998-1	○	○	○	○	○	○	○	○	○	○	7-2-14
	S Reel Table Ass'y	X-3713-427-1	○	○	○	○	○	○	○	○	○	○	7-2-13
	T•Main Brake Ass'y	X-3686-574-1	-	◇	-	◇	-	◇	-	◇	-	◇	—
	S•Main Brake Ass'y	X-3713-429-1	-	◇	-	◇	-	◇	-	◇	-	◇	—
	T•S Brake Ass'y	X-3711-987-2	-	◇	-	◇	-	◇	-	◇	-	◇	—
	REW Brake Ass'y	X-3711-993-1	-	◇	-	◇	-	◇	-	◇	-	◇	—
	Tension Regulator Band Ass'y	X-3686-531-1	-	◇	-	◇	-	◇	-	◇	-	◇	7-2-16
	Roller (Cassette-up Compartment)	3-713-466-01	-	-	-	-	-	○	-	-	-	-	—
Performance Check	Abnormal-noise	-	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	—
	FWD Back tension measurement	-	-	◇	-	◇	-	◇	-	◇	-	◇	7-3-5
	Brake torque measurement	-	-	◇	-	◇	-	◇	-	◇	-	◇	7-3-1 to 7-3-3
	FWD, RVS torque measurement	-	-	◇	-	◇	-	◇	-	◇	-	◇	7-3-4

Note 1: When overhauling the unit, refer to the items above for replacement of parts.

Note 2: The time of parts replacement will differ with operating environment

Note 3: Be sure to clean the tape path surface in repairing.


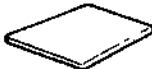

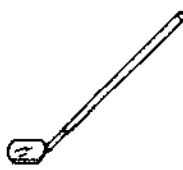
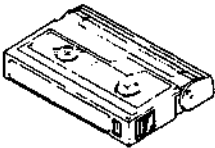
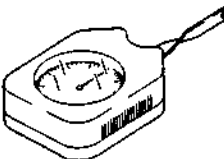





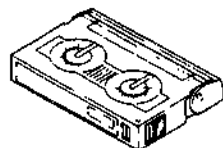
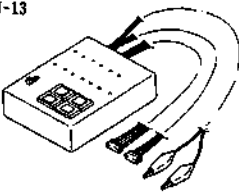
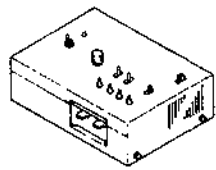
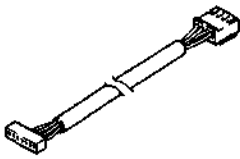
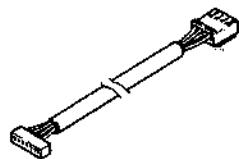
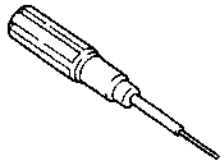
Note 4: Oiling to the Capstan Shaft Bearing.

Apply one-half drop of oil to the Capstan Shaft Bearing.

(Never apply oil to the tape path surface.)

7-1-3. SERVICING TOOLS

Ref. No.	Parts No.	Description	Application
J-1	Y-2031-001-1	Cleaning Fluid	Cleaning
J-2	7-741-900-53	Wiping Cloth	Cleaning
J-3	Commercially sold	Head Degausser	Head degauss
J-4	J-6080-840-A	Small Adjustment Mirror	Tape path adjustment
J-5	8-967-995-07	Alignment Tape, WR5-1CP	Tape path adjustment
	8-967-995-18	Alignment Tape, WR5-7CE	Video frequency response adjustment
	8-967-995-47	Alignment Tape, WR5-5CSP	Video adjustment
	8-967-995-48	Alignment Tape, WR5-8CSE	Serve, audio and video adjustment (SP)
	8-967-995-57	Alignment Tape, WR5-8CLE	Servo, audio and video adjustment (LP)
J-6	J-6080-827-A	Dial Tension Gauge	Measurement of torque
J-7	J-6080-831-A	Tension Measurement Reel	FWD Back tension adjustment
J-8	J-6080-832-A	Tension Measurement Reel	Brake torque check
J-9	J-6080-823-A	No. 10 Gear Phase Tool	Threading ring assembly replacement
J-10	J-6080-826-A	No. 6 Guide Lock Screwdriver	Tape path adjustment
J-11	—	Rotary Drum Tool (packed with the Rotary Upper Drum for repair)	Rotary upper drum replacement
J-12	J-6080-824-A	FWD, RVS Winding Torque Cassette	S-T reel table winding torque check
J-13	J-6080-825-A	Mode Selector	Mechanical check, adjustment and replacement
J-14	J-6080-891-A	Track Shift Tool	Tape path adjustment
J-15	J-6080-883-A	RE/SWP Connector	Tape path adjustment
J-16	J-6080-884-A	CTL Connector	Tape path adjustment
J-17	7-700-766-01	Hexagonal Screwdriver (0.89 mm)	Tape path adjustment

<p>J-1</p> 	<p>J-2</p> 	<p>J-3</p> 	<p>J-4</p> 
<p>J-5</p> 	<p>J-6</p> 	<p>J-7</p> 	<p>J-8</p> 
<p>J-9</p> 	<p>J-10</p> 	<p>J-11</p> <p>(Packed with the rotary upper drum for repair)</p> 	<p>J-12</p> 
<p>J-13</p> 	<p>J-14</p> 	<p>J-15</p> 	<p>J-16</p> 
<p>J-17</p> 			

7-1-4. HOW TO USE THE CLEANING TAPE

Cleaning Tape: V8-25CLH (separately available)

. Never use the cleaning tape, V8-25CLN.

- (1) When the rotary heads clog and head cleaning described Section 7-1-1 can not clean the heads, use the cleaning tape.

If use the cleaning tape except for the above, it will shorten the life of the heads.

- (2) The one time cleaning is within fifteen seconds and never reuse the cleaning tape after rewinding.

7-1-5. OTHERS

(1) Sony oil

- . Be sure to use the Sony oil as the lubrication oil. (If other oil is used, various troubles due to different viscosity tends to be caused.)

Sony oil: Part No. 7-661-018-18

- . Use the Sony oil in which dust or other foreign material have not mixed for lubricating the bearing. (If foreign material is in the oil, wear or burning of the bearing tends to be caused.)
- . One drop of oil means the amount which sticks to a 2 mm diameter rod, as shown in the figure.

(2) Sony grease

- . Be sure to use the Sony grease as the lubrication grease.

Sony grease: Part No. 7-662-001-62

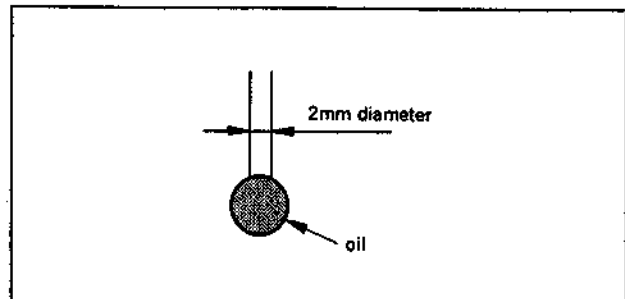
(SGL-501)

(3) MOLYTONE GREASE

- . Be sure to use the MOLYTONE GREASE as the lubrication grease.

MOLYTONE GREASE: Part No. 7-662-001-41

(No. 320)



7-2. REPLACEMENT OF MAJOR PARTS

PREPARATION FOR REPLACEMENT OF PARTS

Replacement of some parts use the *Mode Selector. The mode (marked mode) in the replacement procedure is set by pressing the button on the Mode Selector.

*It is a kind of tool.

Part No. : J-6080-825-A

. Operation of Mode selector

1. Location of parts and controls (fig. 1)

2. Connection (fig. 2)

- (1) Remove the Front Panel, Top Plate and Bottom Plate referring to Section 2-1.
- (2) Remove the Mecha Deck Block from the unit referring to Section 2-5.
- (3) Remove the MB-19P, MD-23P, HK-5 and SE-10P Boards from the unit referring to Sections 2-10, 2-11, 2-12 and 2-13
- (4) Disconnect the connectors (6P) on the MS-4 and LS-9 Boards.
- (5) Connect the 6P connector (six harness, white) for the M-switch of the Mode Selector to the MS-4 Board.
- (6) Connect the 6P connector (four harness, black) for the L-switch of the Mode Selector to the LS-9 Board.
- (7) Remove the cover of the Threading Motor.
- (8) Connect the red clip of the Threading Motor driver lead to the red terminal of the Threading Motor and the black clip to the brown terminal.

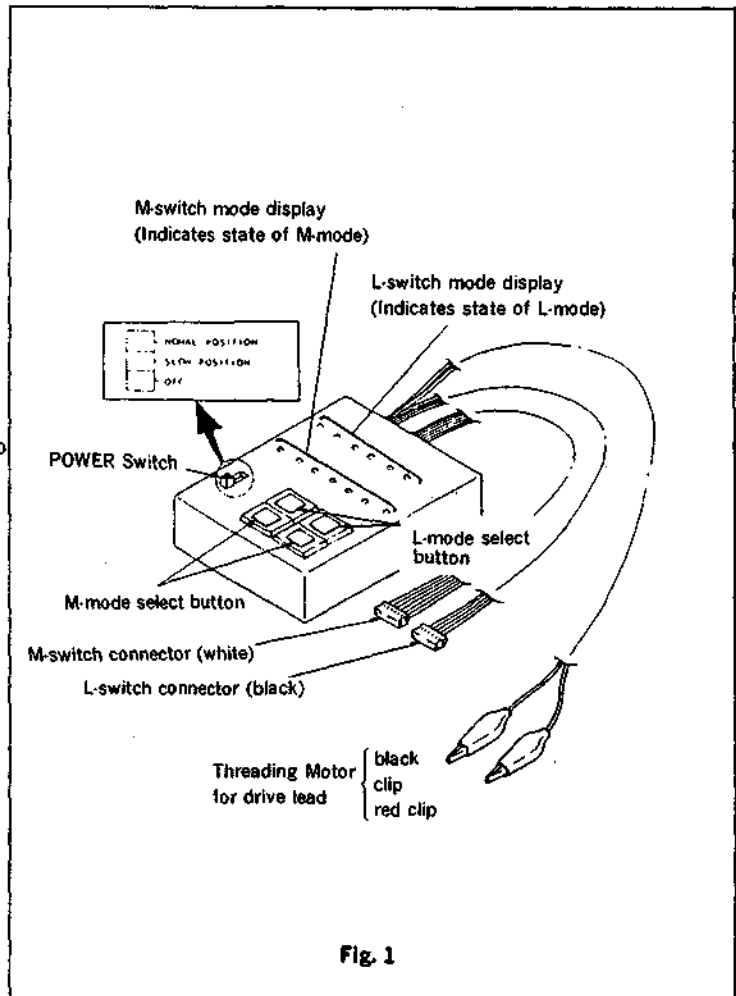


Fig. 1

3. Note

- (1) When operating L-switch, be sure to set the mode of M-switch to LOADING/UNLOADING mode.
- (2) When operating M-switch, be sure to set the mode of L-switch to LOADING TOP or LOADING END mode.

4. Operation

When L-mode or M-mode does not set in each mode during mode selection, the BLANK position lights up.

(1) L-mode

- . When the right side L-mode select button is pressed continuously, the mode changes from LOADING TOP to LOADING END in order from left.
- . When the mode changes from LOADING END to LOADING TOP in order, press the left side L-mode select button continuously.
- . When the power switch is set to the SLOW position, the L-mode operates more slowly than the NORMAL position.

(2) M-mode

- . When performing EJECT, set the mode of L-switch to LOADING TOP.
- . When performing from FF/REW to RVS or from RVS to FF/REW, set the mode of L-switch to LOADING END.
- . When the right side M-mode select button is pressed continuously, the mode changes from EJECT to RVS in order from left.
- . When the mode changes from RVS to EJECT, press the left side M-mode select button continuously.

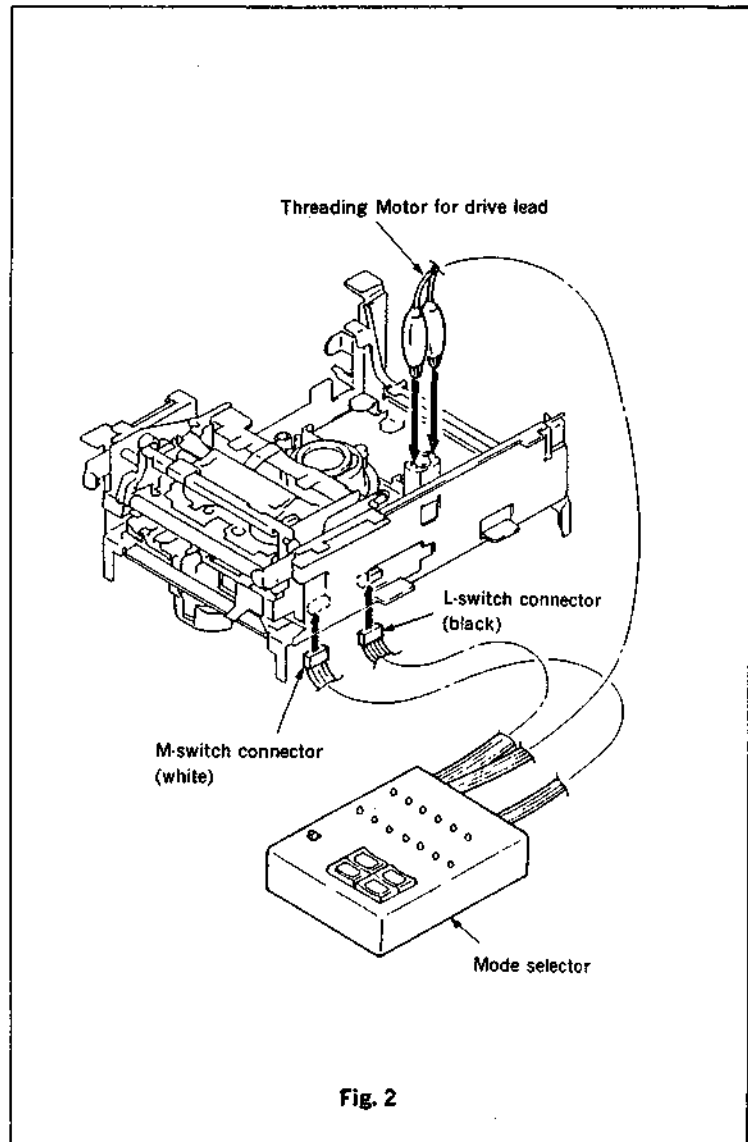


Fig. 2

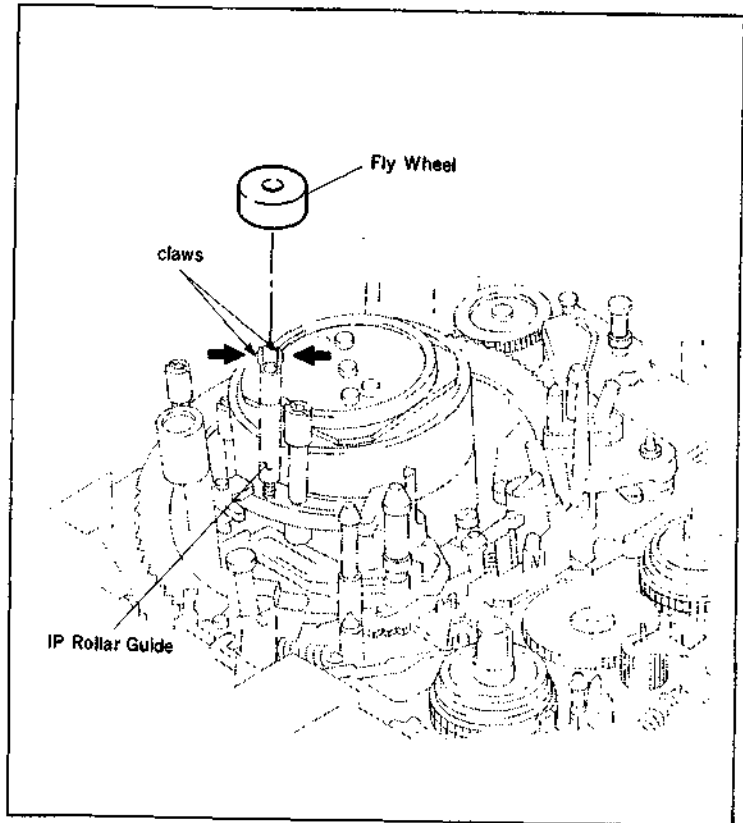
7-2-1. REPLACEMENT OF THE FLY WHEEL

Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Fly Wheel while picking the claws.

Installation:

- (1) Replace the Fly Wheel with a new one. Insert the Fly Wheel in the IP Rollar Guide from the big hole side until click sound can be heard.



7-2-2. REPLACEMENT OF THE ROTARY UPPER DRUM

- . The video heads can not be replaced as a single parts. Replace the whole Rotary Upper Drum Assembly.
- . There is a relay PC Board (DH-6 Board) for the video and audio signals in the Rotary Upper Drum. It is not necessary to replace the DH-6 Board, if it is broken, replace the whole the Rotary Upper Drum Assembly.

Tools: Rotary Drum Tool (Ref No. J-11)
(it is packed together with the Repair Rotary Upper Drum.)
L-shaped wrench
(across flat has 1.5 mm)

Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Fly Wheel referring to Section 7-2-1.
- (3) Remove the two screws (M2 X 2.7) and remove the Dynamic Damper.
- (4) Unsolder the ten terminals at A positions. Check that the terminals which are projected out from the PC Board move freely with a pair of tweezers, etc. (fig. 1)
- (5) Remove the two screws (M2 X 5).
- (6) Install the tool A to the two screw holes of installing the Dynamic Damper with the two accessory supplied screws. Thread the accessory supplied hexagon screw into the center hole of the tool A, and remove the Rotary Upper Drum. (fig. 2)

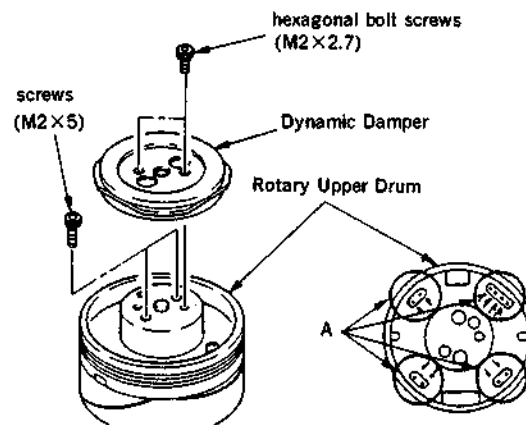


Fig. 1

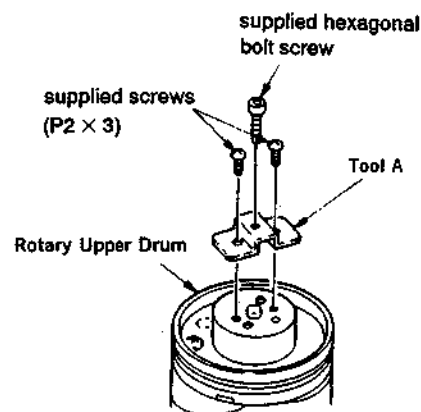


Fig. 2

Installation:

- (1) Clean the flange surface of the Lower Drum and the contact point of the new Rotary Upper Drum with a cleaning piece. Check that no dust or flaw are left.
- (2) While adjusting the positional relationship of the Rotary Upper Drum and positioning hole with the tool B, insert the Rotary Upper Drum lightly. At this time, Check that the terminals project out from the PC Board of the Rotary Upper Drum. When the terminals are caught, correct them with a pair of tweezers, etc.. Remove the tool B and lightly push the Rotary Upper Drum by hand. If the Rotary Upper Drum does not down to the botom, thread the two fixing screws to the Rotary Upper Drum alternately, but do not tighten them. Insert the tool B in the positioning hole and check that the tool B can be inserted smoothly again. If the tool B can not be inserted, loosen the two screws (M 2 X 5) and adjust the position of the Rotary Upper Drum by precision screwdriver.

(fig. 3 and 4)

- (3) Tighten the two screws (M2 X 5).
- (4) Assemble the parts with Removal Steps (1) to (4) in reverse order.

Note: . Do not tighten all the screws too strongly.

. Be carefull not to flow solder below the PC Board.

After replacement, perform the Tape Path Adjustment referring to Section 7-4.

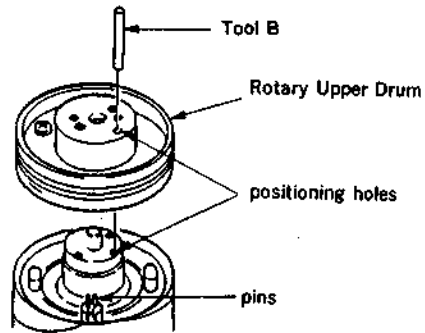


Fig. 3

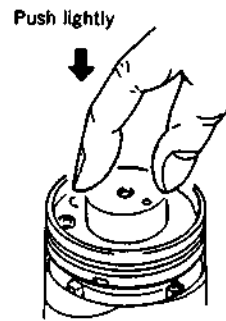


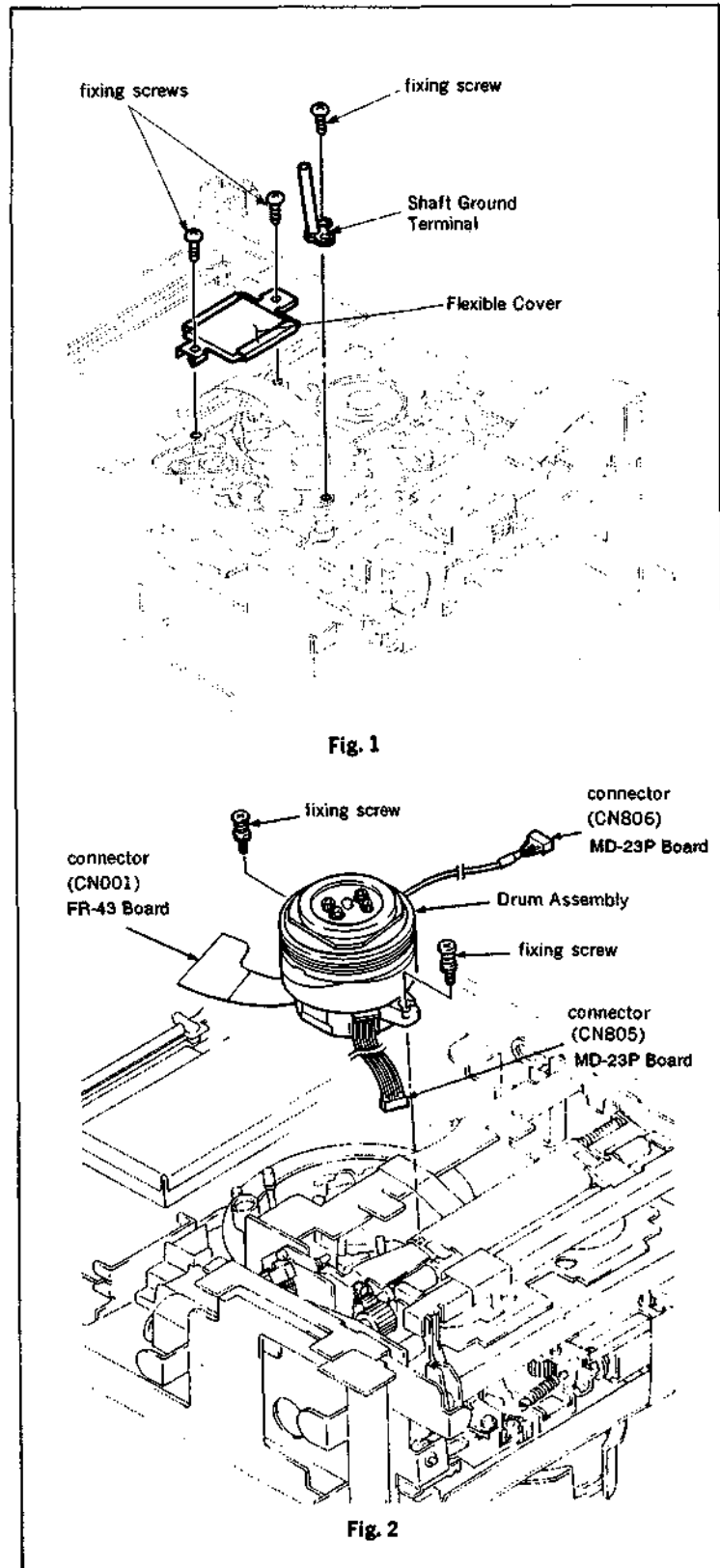
Fig. 4

7-2-3. REPLACEMENT OF THE DRUM ASSEMBLY

Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (3) Remove the Fly Wheel referring to Section 7-2-1.
- (4) Open the RK-5 and SE-10P Boards referring to Sections 2-12 and 2-13.
- (5) Remove the two fixing screws and remove the Flexible Cover. (fig. 1)
- (6) Disconnect the connectors (CN805, 806) on the MD-23P Board and disconnect the connector (CN001) on the FR-43 Board.
- (7) Remove the fixing screw and remove the Shaft Ground Terminal.
- (8) Remove the two fixing screws and remove the Drum Assembly. (fig. 2)

Note: At this time, be careful that the Drum Assembly does not touch the No. 3 Guide and the IP Roller Guide, etc..



Installation:

(1) Clean the flange surface of the new Drum Assembly and the contact point of the mechanical chassis with a cleaning piece.

(2) Set the Drum Assembly to the two projections of the Mecha chassis and tighten the two fixing screws.

Note: At this time, be careful that the screwdriver does not touch the head chips. (fig. 3)

(3) Peel off the tape from the Rotor and FG Stator of the Drum Assembly.

(4) Clean the shaft of the Drum Assembly with a cleaning piece.

(5) Clean the Shaft Ground Terminal which contact to the Drum Shaft with a cleaning piece and set the Shaft Ground Terminal to the projection of mechanical chassis and tighten the fixing screw.

(6) Assemble the parts with Removal Steps (1) to (6) in reverse order.

After replacement, perform the Tape Path Adjustment referring to Section 7-4.

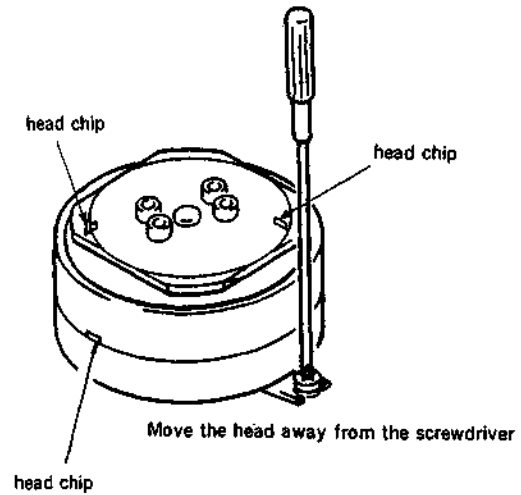


Fig. 3

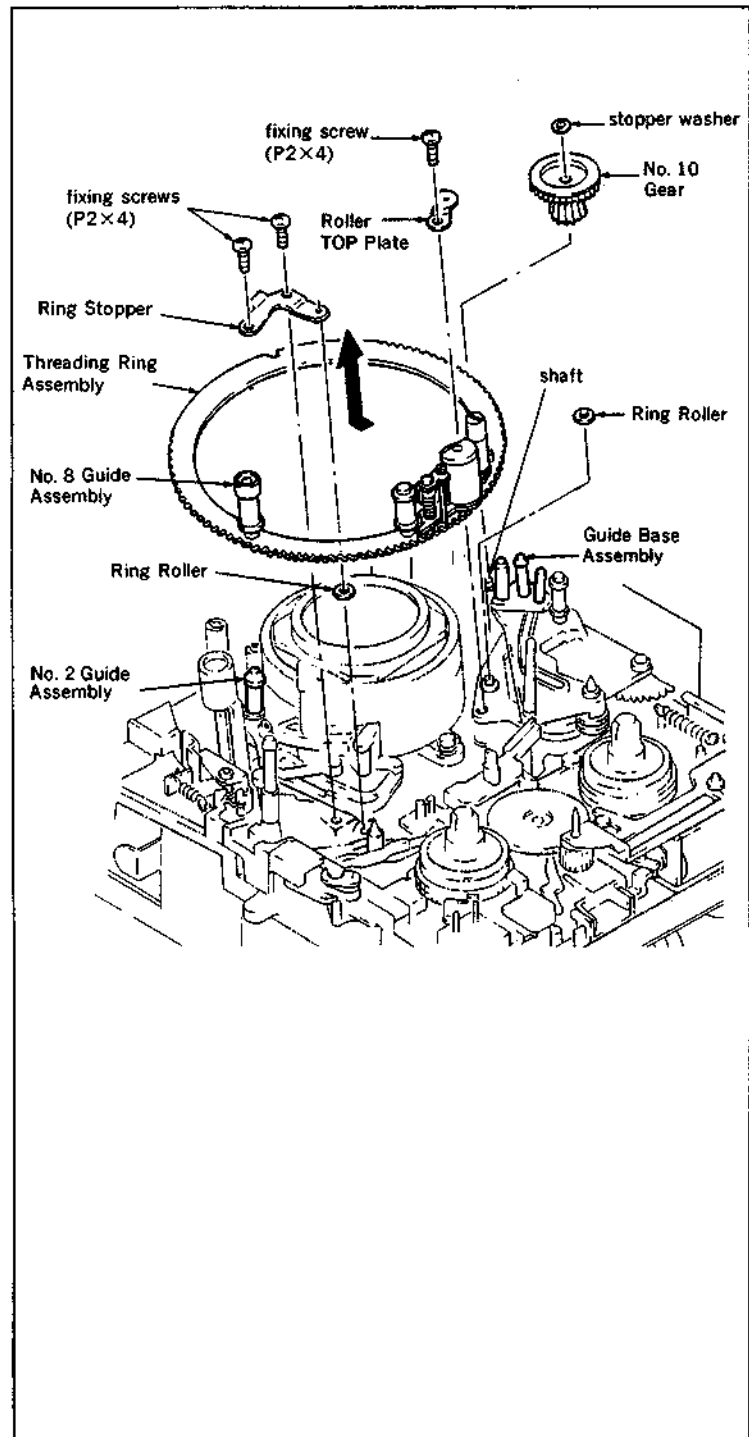
7-2-4. REPLACEMENT OF THE THREADING RING ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)
No. 10 Gear Phase Tool
(Ref. No. J-9)
Sony Oil

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Press the L-mode select button of the Mode Selector and move the Guide Base Assembly and the No. 2 Guide Assembly until just before it is locked. (Do not move the Threading Ring Assembly.)
- (3) Remove the stopper washer and remove the No. 10 Gear Assembly.
- (4) Remove the fixing screw and remove the Roller Top Plate and Ring Roller.
- (5) Remove the two fixing screws and remove the Ring Stopper and Ring Roller.
- (6) Remove the Threading Ring Assembly in the direction of the arrow.

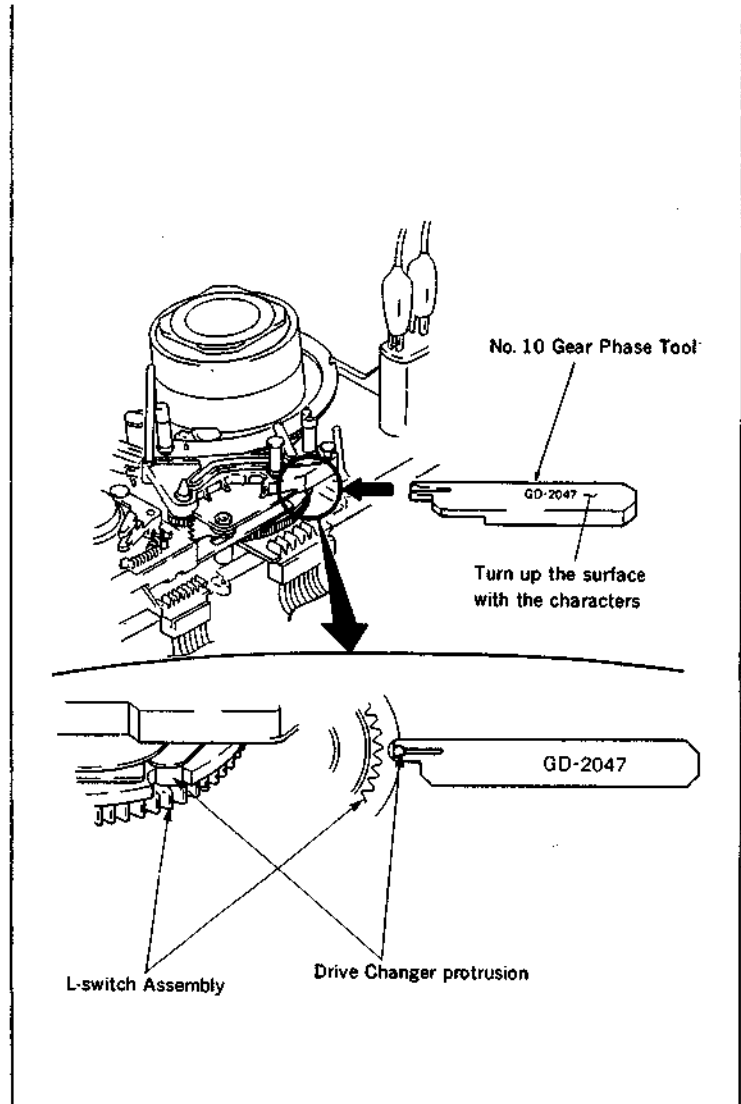
Note: When removing the Threading Ring Assembly, be careful that the Threading Ring Assembly does not touch the Drum and Capstan Shaft.



Installation:

- (1) Replace the Threading Ring Assembly with a new one.
- (2) Install the Threading Ring Assembly so that it puts into the unthreading mode. The Pinch Roller Arm Assembly is the Reel Table side. (Check that each assembly is put into the Step (2) at removal procedure.)
- (3) Install the Ring Roller and Ring Stopper and tighten them with two fixing screws. (Check that the No. 8 Guide Assembly is in front of Ring Stopper.)
- (4) Install the Ring Roller and Roller Top Plate and tighten them with the screw. (Check that the Threading Ring Assembly matches the three Ring Rollers.)
- (5) Apply a half drop of oil on the shaft.
- (6) Check that the pin of the Drive Changer Assembly is into the notch of the L-switch Assembly. Insert the No. 10 Gear Phase Tool (Ref. No. J-9) into the notch of the L-SW Assembly.
- (7) While pushing the No. 8 Guide Assembly against the Ring Stopper, install the No.10 Gear Assembly with a stopper washer.
- (8) Pull out the No. 10 Gear Phase Tool.
- (9) Press the L-mode select button of the Mode Selector and set to the LOADING TOP mode.
- (10) Install the Cassette-up Compartment Assembly referring to Section 2-16.

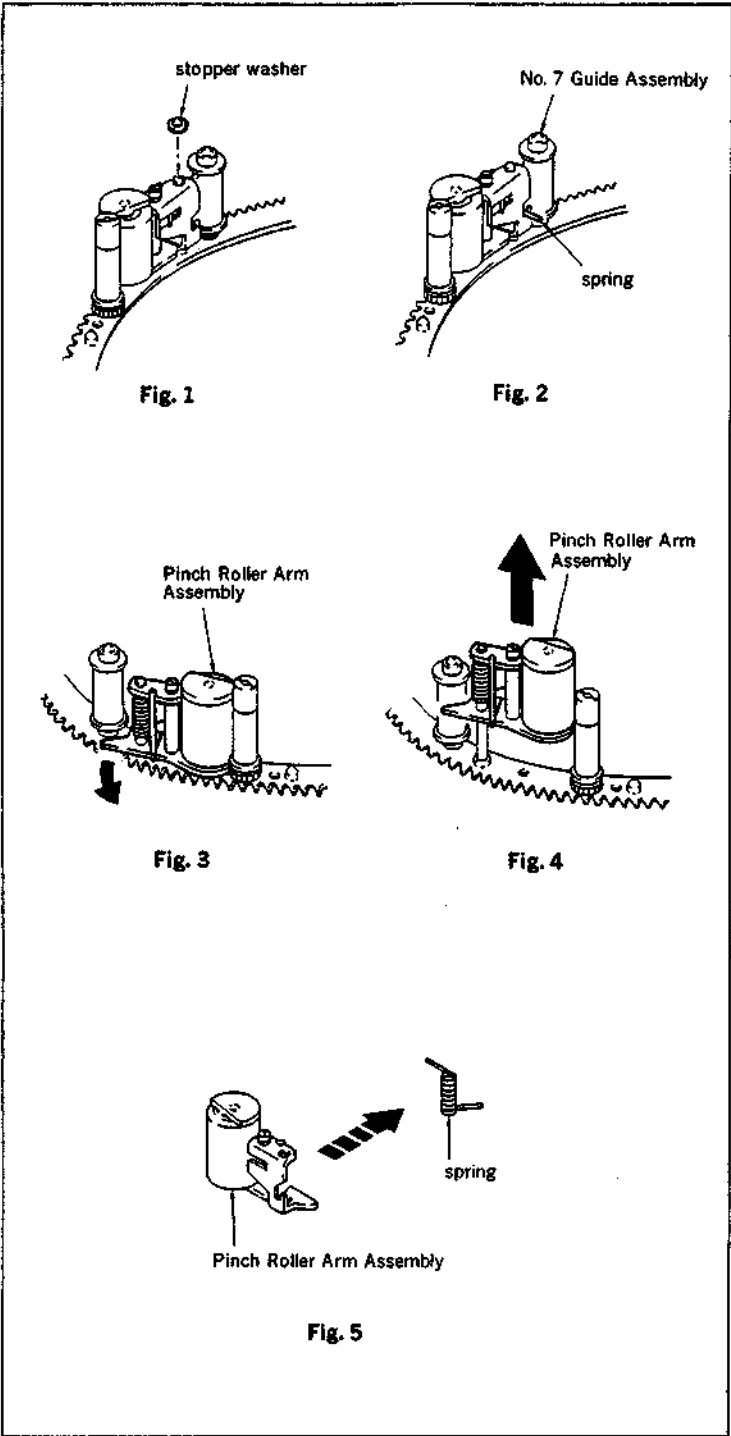
After replacement, perform the Tape Path Adjustment referring to Section 7-4.



7-2-5. REPLACEMENT OF THE PINCH ROLLER ARM ASSEMBLY

Removal:

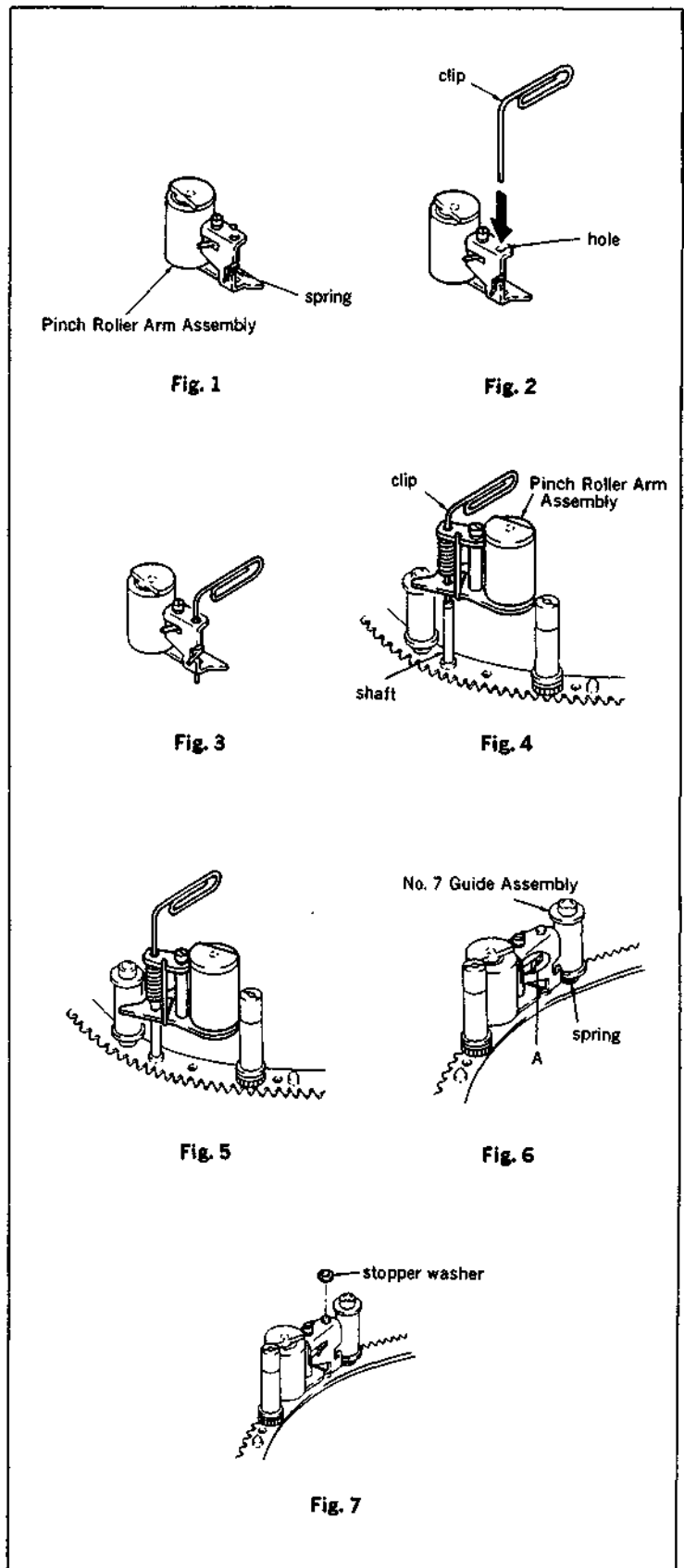
- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (3) Remove the stopper washer. (fig. 1)
- (4) Hook the spring which is hooked to the No. 7 Guide Assembly to the groove of the Pinch Roller Arm (fig. 2)
- (5) Turn the Pinch Roller Arm Assembly in the direction of the arrow. (fig. 3)
- (6) Remove the Pinch Roller Arm Assembly in the direction of the arrow. (fig. 4)
- (7) Remove the spring. (fig. 5)



Installation:

- (1) Replace the Pinch Roller Arm Assembly with a new one.
- (2) Install the spring and hook the ends of the spring to the Pinch Roller Arm Assembly. (fig. 1)
- (3) Insert the end of the clip or another thin rod into the hole of the Pinch Roller Arm Assembly. (fig. 2 and 3)
- (4) Put the end of the clip to the shaft of the Threading Ring Assembly and install the Pinch Roller Assembly. (fig. 4 and 5)
- (5) Hook the end of the spring to the No. 7 Guide Assembly. At this time, check that the another end of the spring is hooked to "A". (fig. 6)
- (6) Assemble the parts with Removal Steps (1) to (3) in reverse order.

After replacement, perform the Tape Path Check referring to Section 7-4-6.



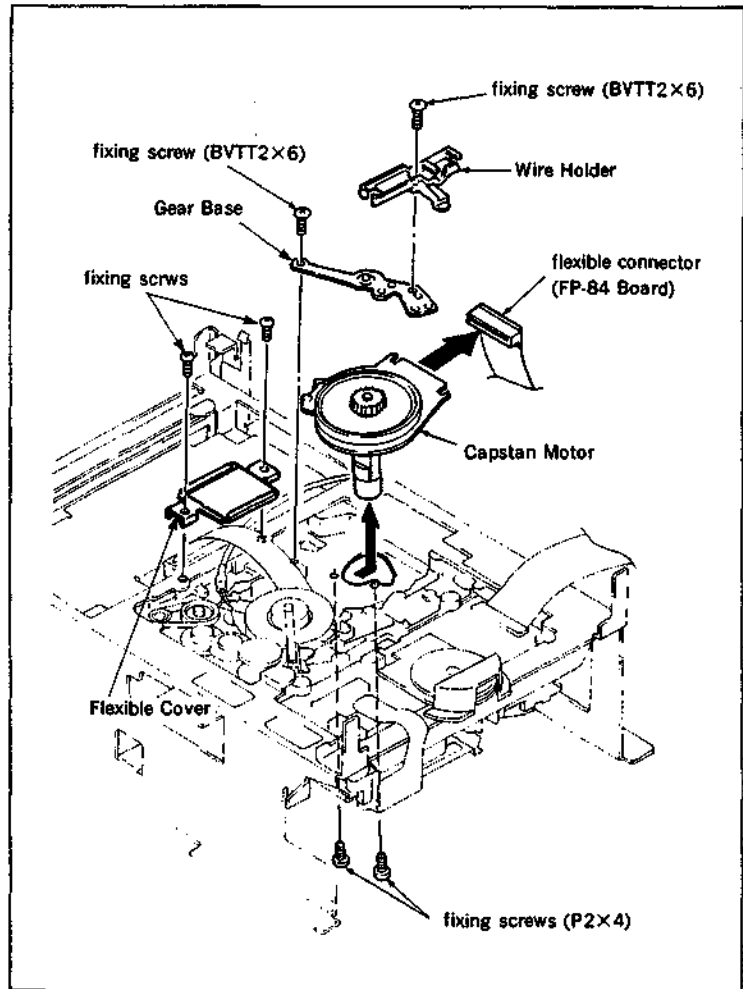
7-2-6. REPLACEMENT OF THE CAPSTAN MOTOR

Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (3) Remove the Threading Ring Assembly referring to Section 7-2-4.
- (4) Open the HK-5 and SE-10P Boards referring to Sections 2-12 and 2-13.
- (5) Remove the two fixing screws and remove the Flexible Cover.
- (6) Remove the harness of the Capstan Motor from the Wire Holder.
- (7) Remove the fixing screw and remove the Wire Holder.
- (8) Remove the fixing screw and remove the Gear Base.
- (9) Disconnect the flexible connector of the Capstan Motor.
- (10) Remove the two fixing screws and remove the Capstan Motor in the direction of the arrow.

Installation:

- (1) Replace the Capstan Motor with a new one and assemble the parts with Removal Steps (1) to (10) in reverse order.



7-2-7. REPLACEMENT OF THE THREADING MOTOR ASSEMBLY

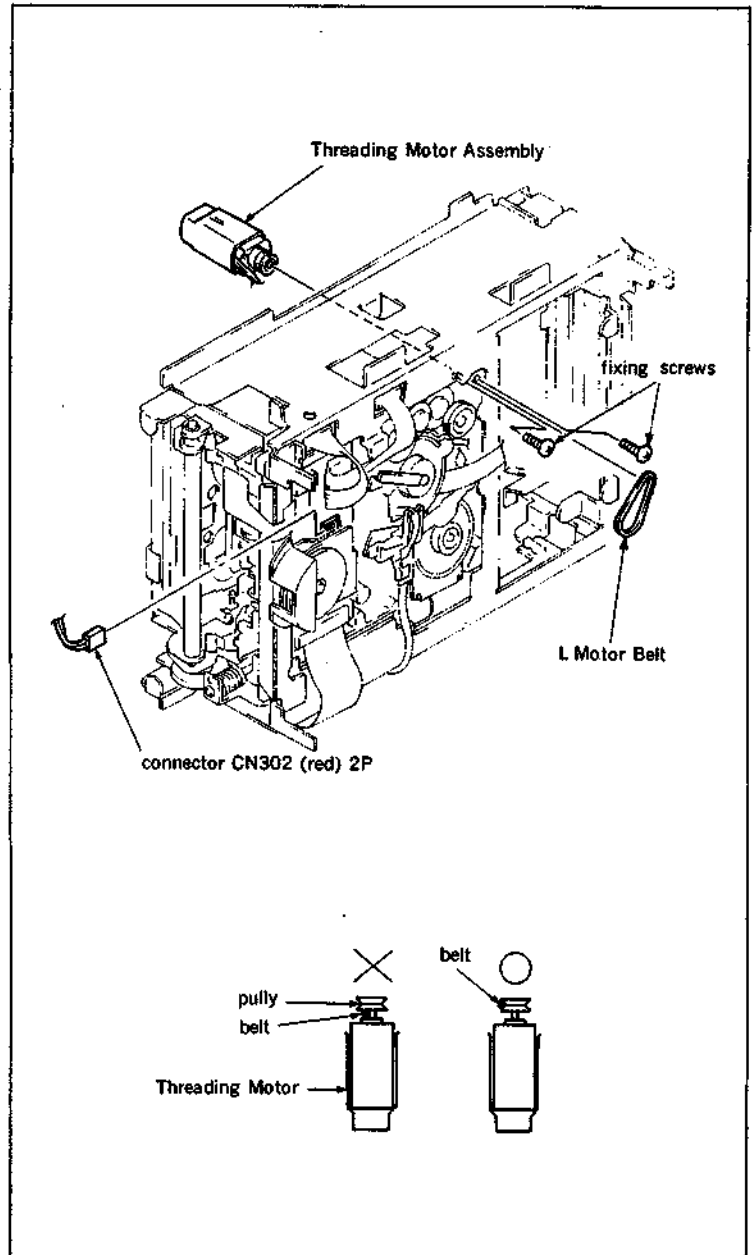
Removal:

- (1) Open the WB-19P Board referring to Section 2-10.
- (2) Open the HK-5 and SE-10P Boards referring to Section 2-12 and 2-13.
- (3) Remove the L Motor Belt.
- (4) Disconnect the connector (CN302) on the RS-31 Board.
- (5) Remove the two fixing screws and remove the Threading Motor Assembly.

Installation:

- (1) Replace the Threading Motor Assembly with a new one and assemble the parts with Removal Steps (1) to (5) in reverse order.

Note: Before installing the L Motor Belt, clean it with a cleaning piece and be sure to install the belt in the groove of pulley.



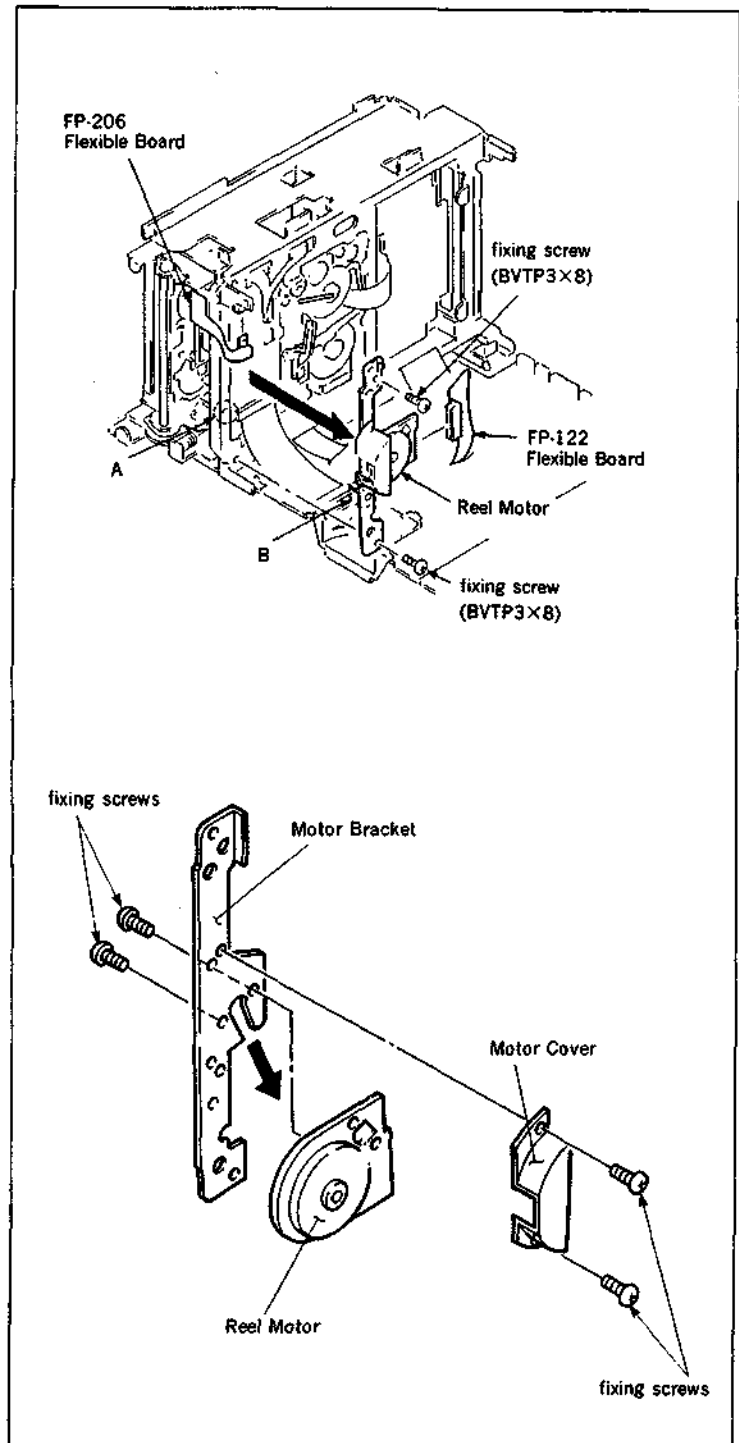
7-2-8. REPLACEMENT OF THE REEL MOTOR

Removals:

- (1) Open the HK-5 and SE-10P Boards referring to Section 2-12 and 2-13.
- (2) Remove the FP-122 Flexible Board from the PC Board of the Reel Motor.
- (3) Remove the FP-206 Flexible Board from the RS-31 Board.
- (4) Remove the two fixing screws of the Motor Bracket.
- (5) Insert a flatblade screwdriver into A, release the projection B and remove the Motor Bracket.
- Note:** If the Motor Bracket is removed by hand directly, it tends to damage the Motor Bracket.
- (6) Remove the two fixing screws and remove the Motor Cover from the Motor Bracket.
- (7) Remove the two fixing screws and remove the Reel Motor in the direction of the arrow.

Installation:

- (1) Replace the Reel Motor with a new one. Assemble the parts with Removal Steps (1) to (7) in reverse order.



7-2-9. REPLACEMENT OF THE No. 3 and No. 4 GUIDES

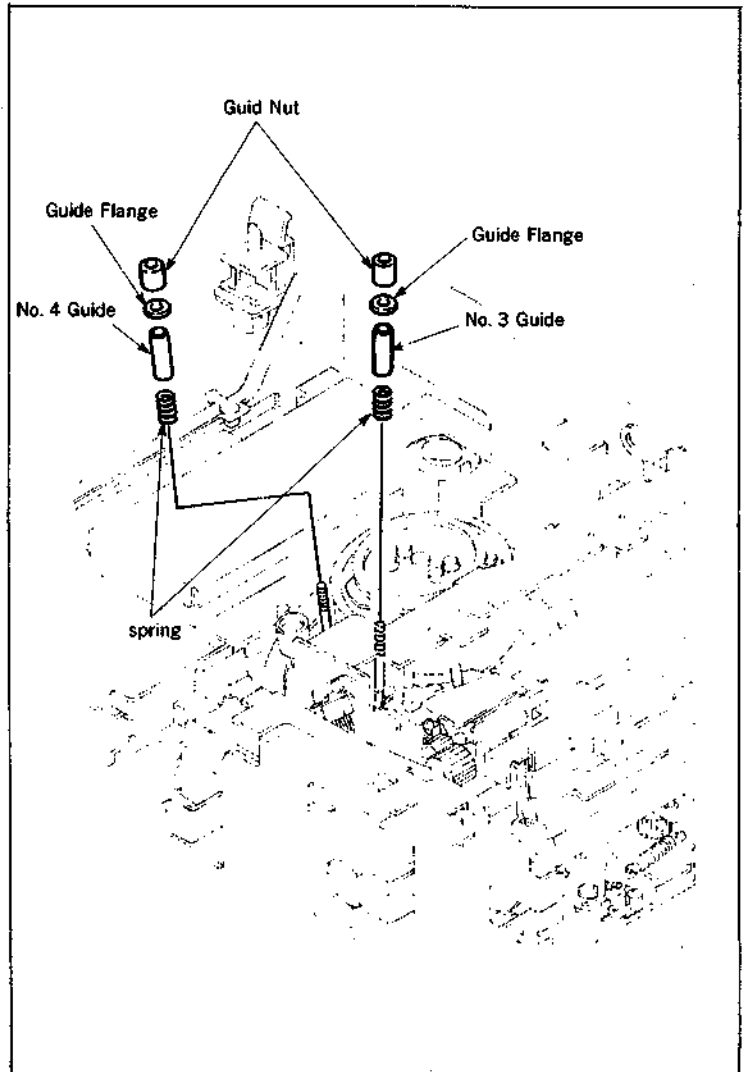
Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) When replacing the No. 3 Guide, remove the Fly Wheel referring to Section 7-2-1.
- (3) Turn the Rotary Upper Drum counterclockwise and keep heads away from the No. 3 Guide or No. 4 Guide.
- (4) Remove the Guide Nut and remove the Guide Flange, No. 3 Guide (or No. 4 Guide) and spring.

Installation:

- (1) Replace the No. 3 Guide (or No. 4 Guide) with a new one.
- (2) Assemble the parts with Removal Steps (1) to (4) in reverse order.

After replacement, adjust the height of the No. 3 and No. 4 Guides to meet the tape path condition of Section 7-4-6-3 by turning the Guide Nut.



7-2-10. REPLACEMENT OF THE ENTRANCE GUIDE (P) ASSEMBLY (No. 2 GUIDE ASSEMBLY)

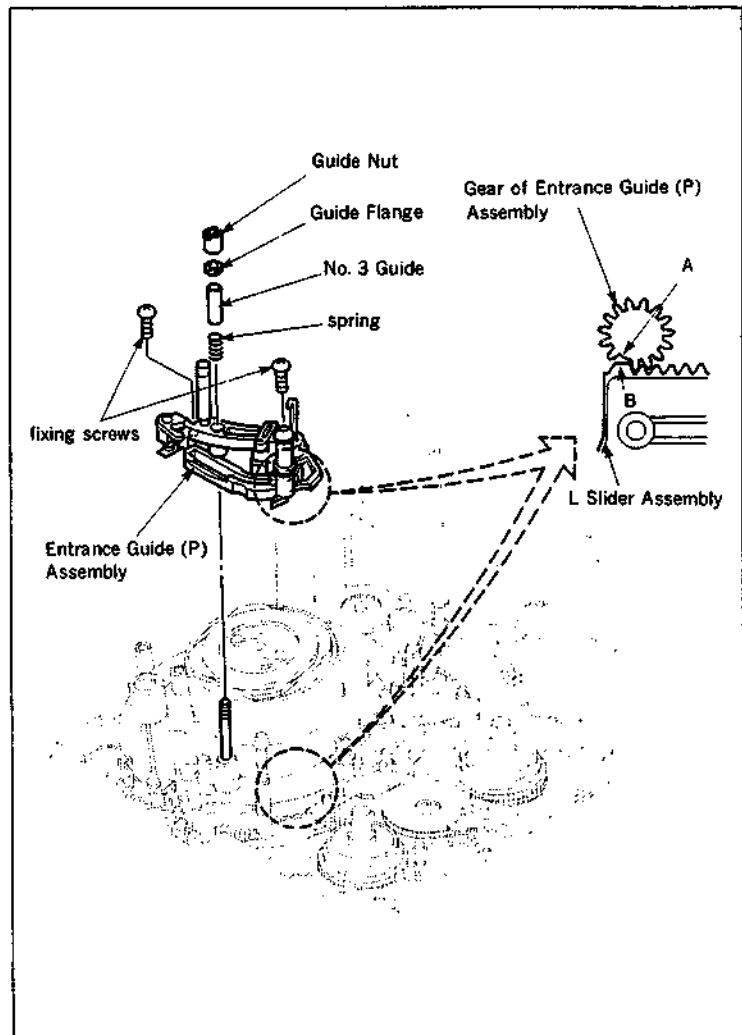
Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (3) Remove the Fly Wheel referring to Section 7-2-1.
- (4) Turn the Rotary Upper Drum counterclockwise and keep heads away from the Entrance Guide (P) Assembly.
- (5) Remove the Guide Nut and remove the Guide Flange, No. 3 Guide and spring.
- (6) Remove the two fixing screws and remove the Entrance Guide (P) Assembly.

Installation:

- (1) Check that the mechanical block is put into the **LOADING TOP** mode.
- (2) Replace the Entrance Guide (P) Assembly with a new one.
- (3) Engage the Entrance Guide (P) Assembly and L Slider Assembly so that their flat portions A and B are matched, and tighten it with two fixing screws.
- (4) Assemble the parts with Removal Steps (3) and (5) in reverse order.
- (5) Perform the FWD Back Tension Adjustment referring to Section 7-3-5.
- (6) Assemble the parts with Removal Steps (1) and (2) in reverse order.

After replacement, perform the Tape Path Adjustment referring to Section 7-4.



7-2-11. REPLACEMENT OF THE SLANT GUIDE ASSEMBLY

Tool: Mode Selector (Ref. No. J-13)

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Remove the Threading Ring Assembly referring to Section 7-2-4.
- (3) Remove the fixing screw and E ring.
- (4) Remove the Slant Guide Block Assembly.

Installation:

- (1) Operate the L-mode select button of the Mode Selector and align the right edge of the L Slider Assembly and the right side of the Lock Slider M Assembly. (fig. 2)

Note: At this time, check that the position of the notch on the Slant Guide Drive Gear is placed as shown in figure 2.

- (2) Assemble the Guide Base Assembly of new Slant Guide Block Assembly the position of the *unthreading end.
*The Guide Base Assembly is the Reel Table side.
- (3) Assemble the parts with Removal Steps (1) to (3) in reverse order.

After replacement, perform the Tape Path Check referring to Section 7-4-6.

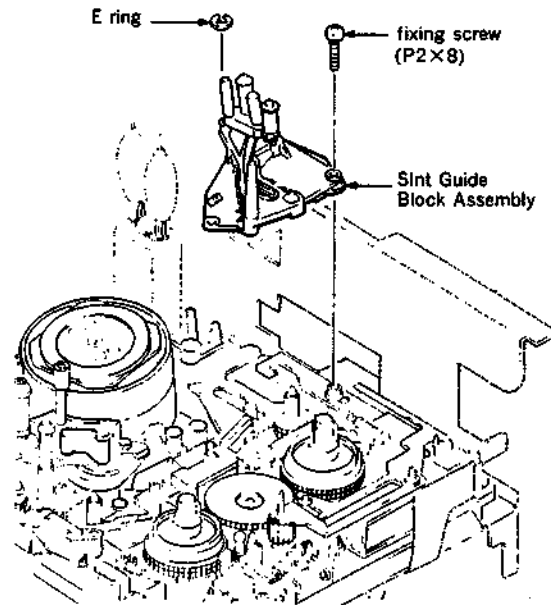


Fig. 1

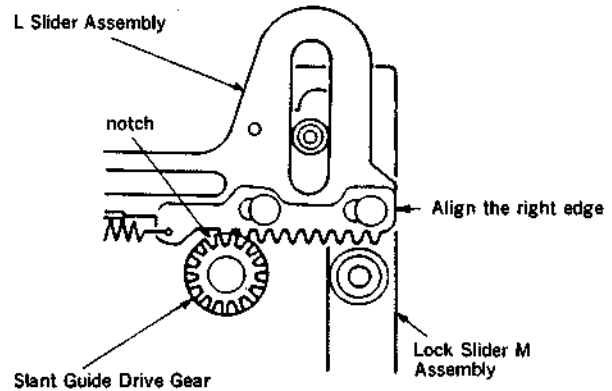


Fig. 2

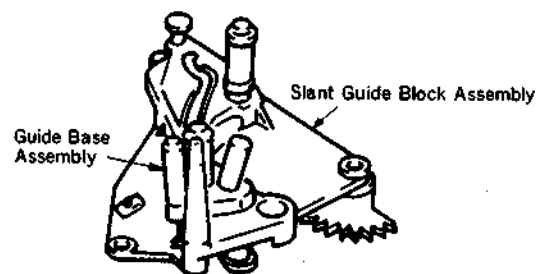


Fig. 3

7-2-12. REPLACEMENT OF THE No. 5 GUIDE BLOCK COMPLETE ASSEMBLY

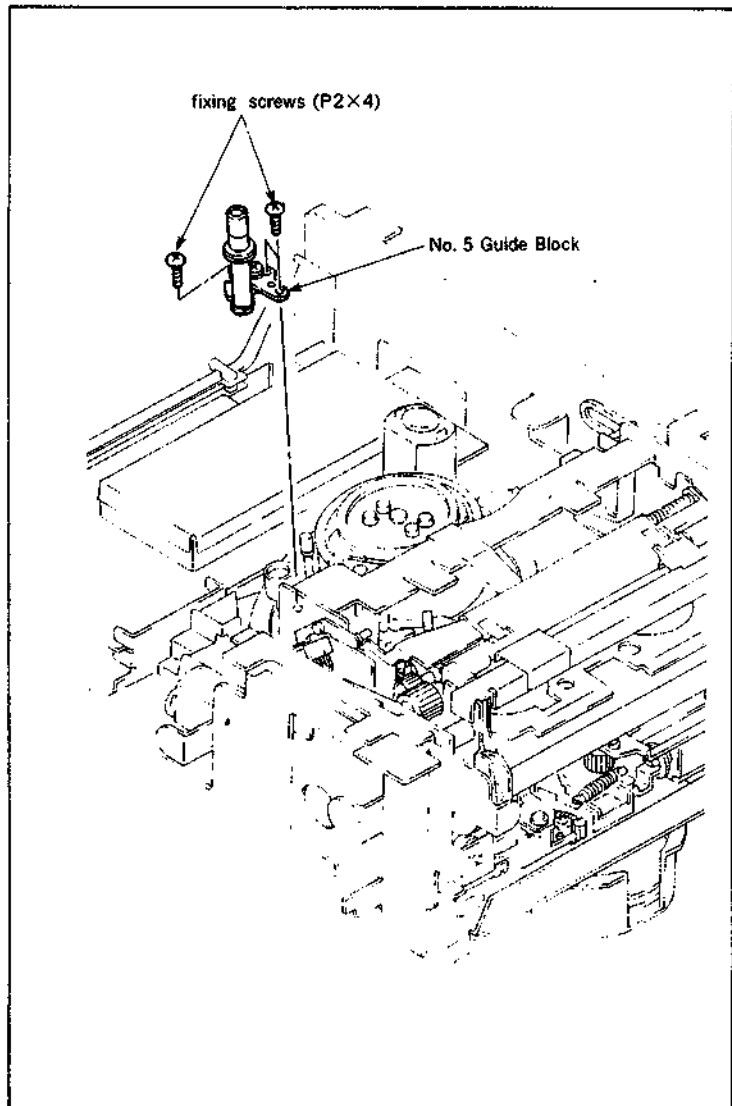
Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Turn the Rotary Upper Drum counterclockwise and keep heads away from the fixing screw of the Guide Block.
- (3) Remove the three fixing screws and remove the No. 5 Guide Block Complete Assembly.

Installation:

- (1) Replace the No. 5 Guide Block Complete Assembly with a new one.
- (2) Assemble the parts with Removal Steps (1) and (3) in reverse order.

After replacement, perform the Tape Path Adjustment referring to Section 7-4.



7-2-13. REPLACEMENT OF THE S REEL TABLE ASSEMBLY

Tools: Mode Selector (Ref. No. J-14)
Cassette Tape
Dial Tension Gauge (Ref. No. J-6)
Tension Measurement Reel (30 mm dia.)
(Ref. No. J-7)
Sony Oil

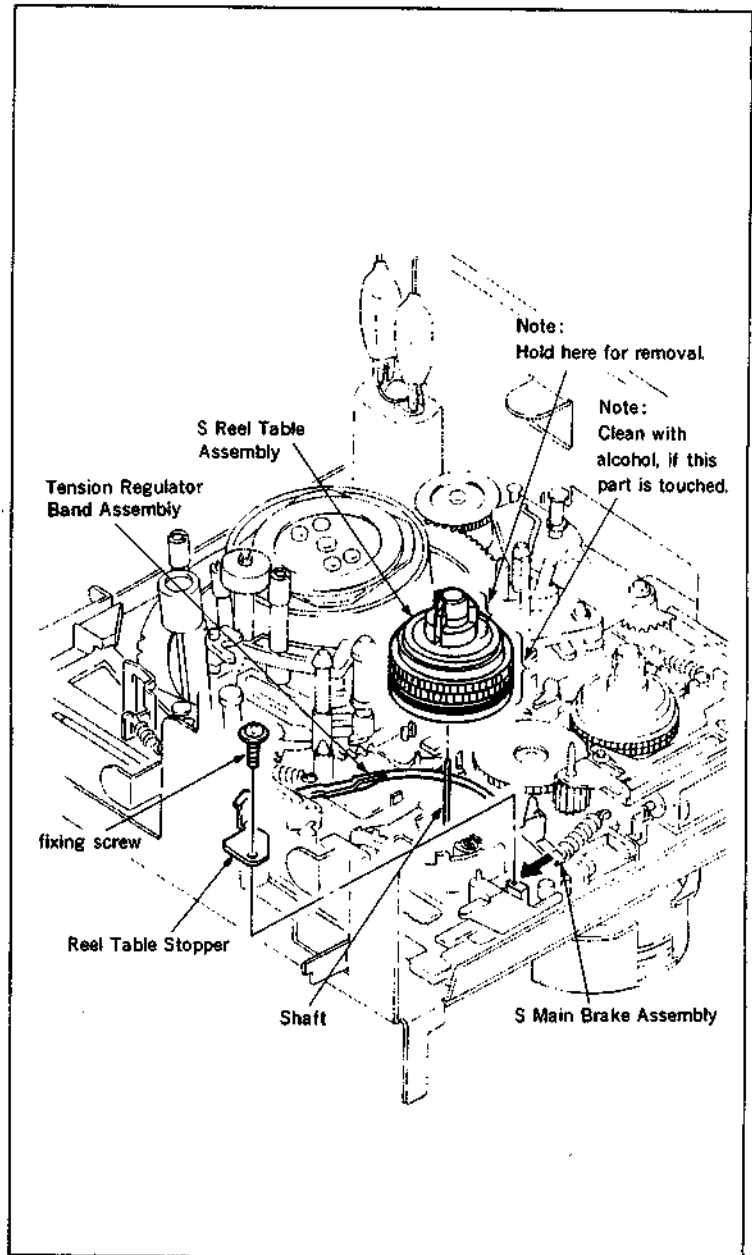
Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.
- (3) Remove the fixing screw and remove the Reel Table Stopper.
- (4) Remove the S Reel Table Assembly.

Note: Be sure to hold the upper reel claw when removing the S Reel Table. (Note of figure)

Installation:

- (1) Apply a half drop of oil on the top point of the Reel Shaft.
- (2) Move the S Main Brake Assembly in the direction of the arrow.
- (3) Install the new S Reel Table Assembly while being careful not to pinch the Tension Regulator Band Assembly.
- (4) Install the Reel Table Stopper and tighten it with the fixing screw.
- (5) Press the M-mode select button of the Mode Selector and set to the **LOADING/UNLOADING** mode.
- (6) After replacement, perform the FWD running more than two minutes. Then, perform the FWD Back Tension Adjustment referring to Section 7-3-5.
- (7) Install the Cassette-up Compartment Assembly referring to Section 2-16.



7-2-14. REPLACEMENT OF THE T REEL TABLE ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)

Sony Oil

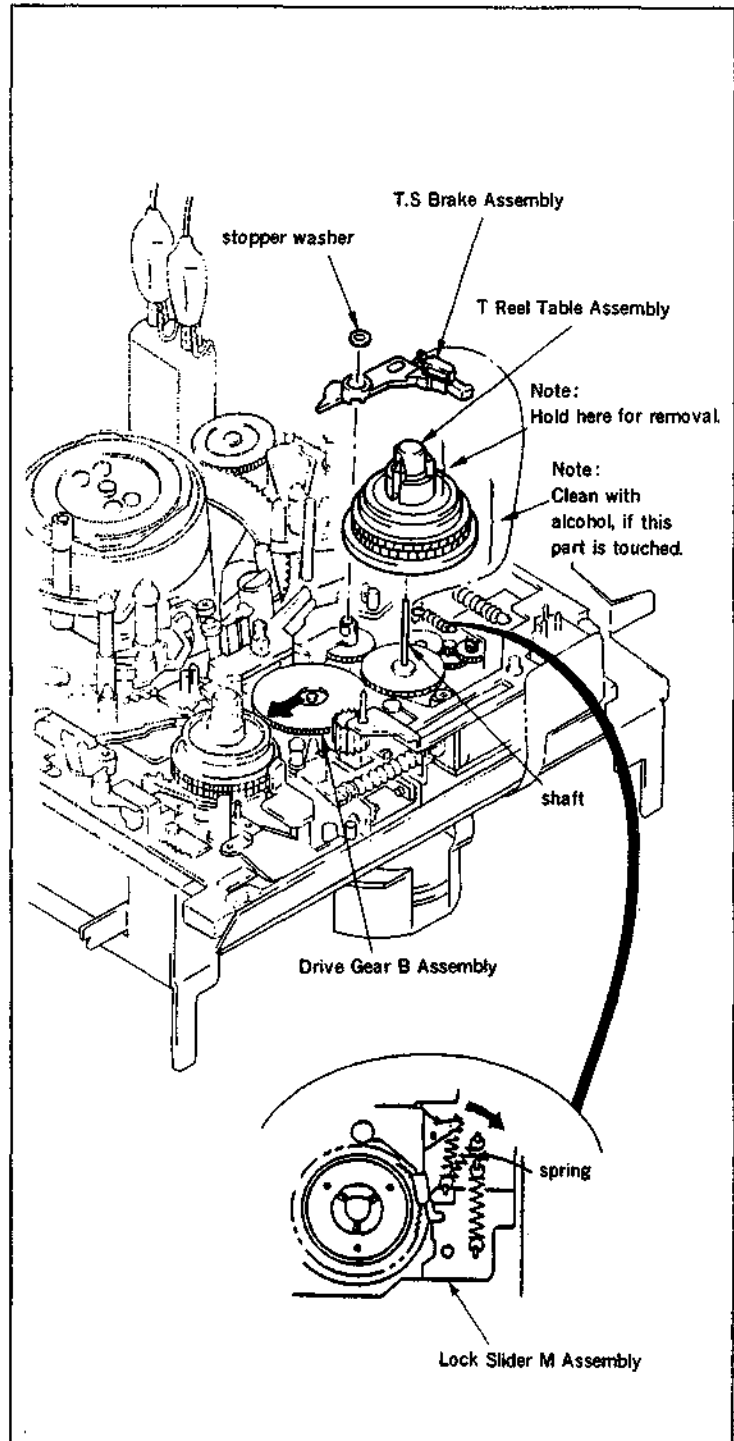
Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Press the L-mode select button of the Mode Selector and set to the **UNLOADING WAIT** mode.
- (3) Hook the spring which is hooked on the T.S Brake Assembly to the claw of the Lock Slider Assembly.
- (4) Remove the stopper washer and remove the T.S Brake Assembly.
- (5) Press the M-mode select button of the Mode Selector and set to the **EJECT** mode.
- (6) Move the Drive Gear B Assembly in the direction of the arrow.
- (7) Remove the T Reel Table Assembly.

Note: Be sure to hold the upper reel claw when removing the T Reel Table. (Note of figure)

Installation:

- (1) Apply a half drop of oil on the top point of the Reel Shaft.
- (2) Move the Drive Gear B Assembly in the direction of the arrow. (Check that the Mode Selector sets to **EJECT** mode.)
- (3) Replace the T Reel Table Assembly with a new one.
- (4) Assemble the parts with Steps (4) and (5) in reverse order.
- (5) Set the L-mode to **LOADING TOP** mode and set the M-mode to **LOADING/UNLOADING** mode.
- (6) Install the Cassette-up Compartment Assembly referring to Section 2-16.



7-2-15. REPLACEMENT OF THE PINCH PRESS ARM ASSEMBLY

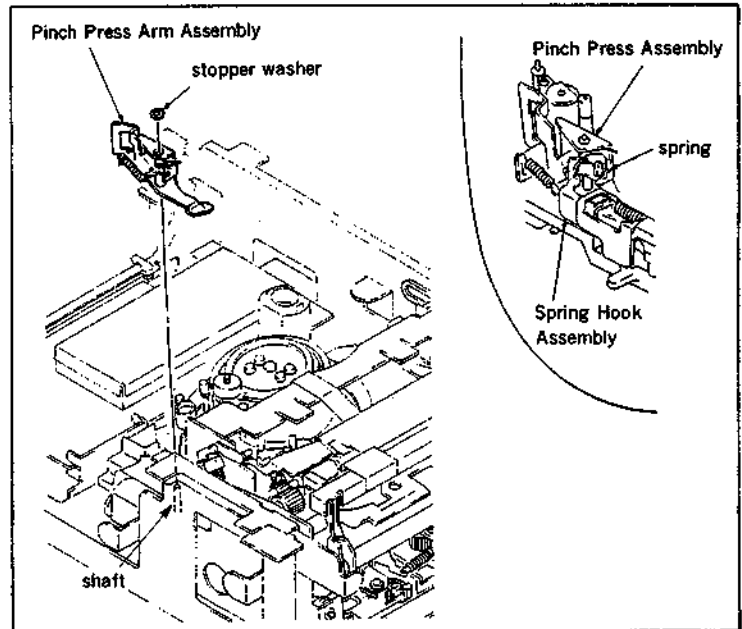
Tool: Sony Oil

Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Hook the spring which is hooked to the Spring Hook Assembly to the Pinch Press Assembly as shown in the figure.
- (3) Remove the stopper washer and remove the Pinch Press Arm Assembly.

Installation:

- (1) Apply a half drop of oil on the shaft.
- (2) Replace the Pinch Press Arm Assembly with a new one.
- (3) Assemble the parts with Removal Steps (1) to (3) in reverse order.

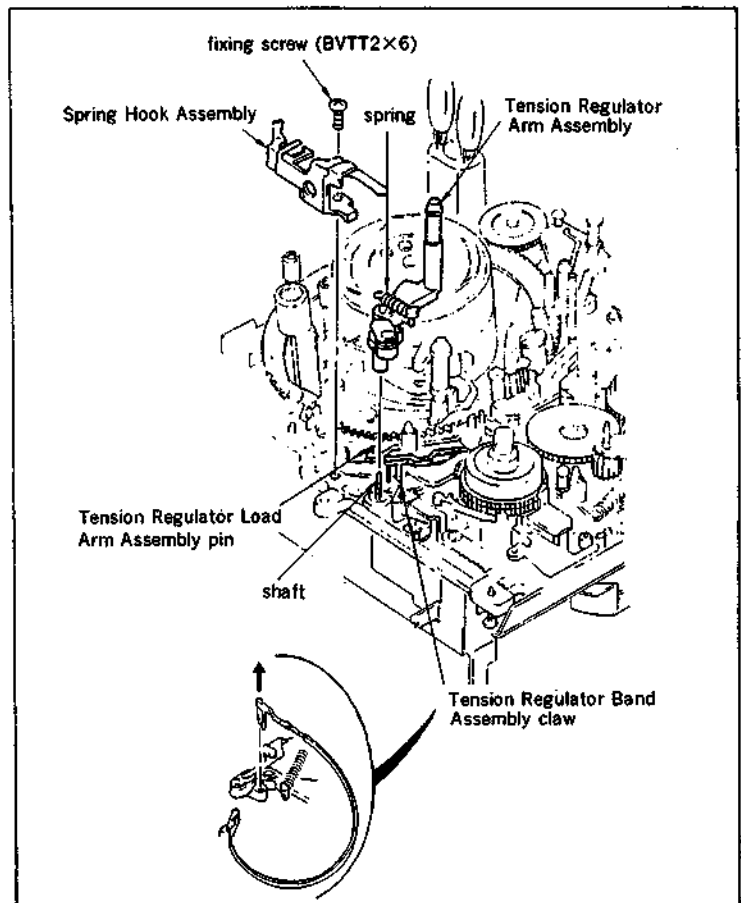


7-2-16. REPLACEMENT OF THE TENSION REGULATOR ARM ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)
Sony Oil
Locking Compound

Removal:

- (1) Remove the Cassette-up Assembly referring to Section 2-16.
- (2) Replace the spring referring to Removal step (2) of Section 7-2-15.
- (3) Remove the spring which is hooked to the Tension Regulator Spring Hook Assembly.
(Make a note of the hooking position.)
- (4) Remove the fixing screw and remove the Tension Regulator Spring Hook Assembly.
- (5) Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.
- (6) Remove the claw of the Tension Regulator Band Assembly.
- (7) Remove the Tension Regulator Arm Assembly.



Installation:

- (1) Apply a half drop of oil on the shaft.
- (2) Replace the Tension Regulator Arm Assembly with a new one.
- (3) Install the Tension Regulator Arm Assembly while inserting the pin of the Tension Regulator Load Arm Assembly in the cam groove (on the back of the Arm) of the Tension Regulator Arm Assembly.
- (4) Install the claw of the Tension Regulator Band Assembly.

Note: Do not touch the inside of the band and bend it.

- (5) Press the M-mode select button of the Mode Selector and set to the LOADING/UNLOADING mode.
- (6) Install the Tension Regulator Spring Hook Assembly and tighten it with the fixing screw.
- (7) Smear the Locking Compound to the head of the fixing screw.
- (8) Assemble the Parts with Removal Steps (1) to (3) in reverse order.

After replacement, perform the Tape Path Check referring to Section 7-4-6.

7-2-17. REPLACEMENT OF THE TENSION REGULATOR BAND ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)
Cassette Tape
Dial Tension Gauge (Ref. No. J-6)
Tension Measurement Reel (30 mm dia.)
(Ref. No. J-7)

Removal:

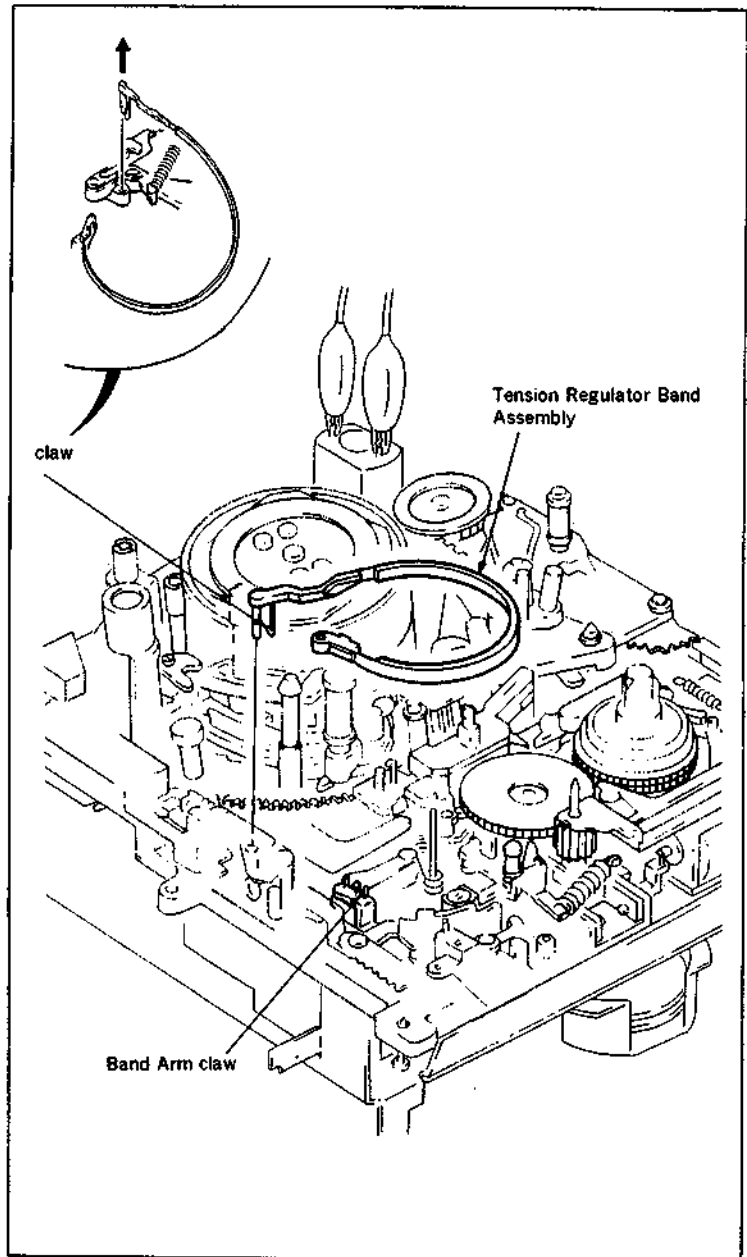
- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Remove the S Reel Table Assembly referring to Removal of Section 7-2-13.
- (3) Release the claw of the Band Arm and remove one side of the Tension Regulator Band Assembly.
- (4) Release the claw from the Tension Regulator Arm Assembly and remove the Tension Regulator Band Assembly.

Installation:

- (1) Replace the Tension Regulator Band Assembly with a new one.
- (2) Install the Tension Regulator Band Assembly with Removal Steps (3) and (4) in reverse order.

Note: Do not touch the inside of the band and bend it.

- (3) Install the S Reel Table Assembly referring Installation of Section 7-2-13.
- (4) After replacement, perform the FWD running more than two minutes and then perform the FWD Back Tension Adjustment referring to Section 7-3-5.
- (5) Install the Cassette-up Compartment Assembly referring to Section 2-16.



7-2-18. REPLACEMENT OF THE L SLIDER ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)
Sony Grease

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Remove the Fly Wheel referring to Section 7-2-1.
- (3) Remove the Threading Ring Assembly referring to Section 7-2-4.
- (4) Remove the Entrance Guide (P) Assembly referring to 7-2-10.
- (5) Remove the Slant Guide Block Assembly referring to Section 7-2-11.
- (6) Press the L-mode select button of the Mode Selector and set to the **DRUM START** mode.
- (7) Remove the Slant Guide Drive Gear.
- (8) Remove the two stopper washers from the L Slider Assembly.
- (9) While pushing the projection of the RL Arm Assembly in the direction of the arrow, lift the right side of the L Slider Assembly and remove it from the shaft.
- (10) Lift the right side of the L Slider Assembly as shown in figure 2 and remove the pin of the Tension Regulator Load Arm Assembly from the cam groove of the Tension Regulator Arm Assembly, and then remove the L Slider Assembly.
- (11) Remove the stopper washer and remove the Tension Regulator Load Arm Assembly.

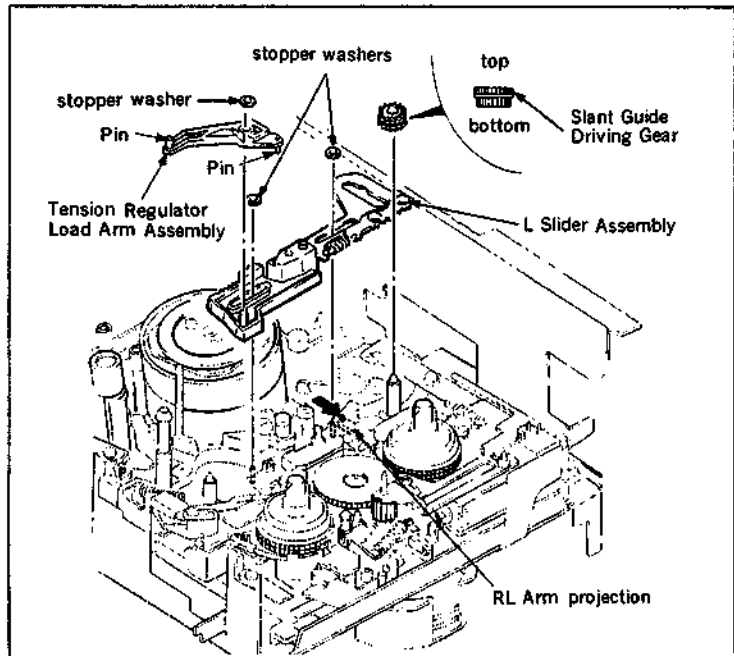


Fig. 1

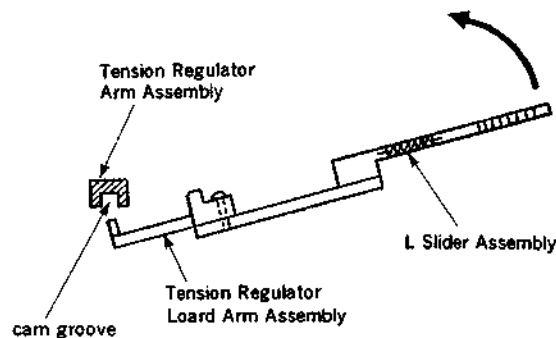


Fig. 2

Installation:

(1) Replace the L Slider Assembly with a new one and smear Sony Grease to the three longitudinal holes as shown in figure 3.

(2) Assemble the parts with Removal Steps (8) to (11) in reverse order.

Note: When inserting the pin of the Tension Regulator Load Arm Assembly in the cam groove of the Tension Regulator Arm Assembly, insert the another pin into the groove of the M Slider.

(3) Press the L-mode select button of the Mode Selector and align the right edges of the L Slider Assembly and the Lock Slider M Assembly. (fig. 4)

(4) Engage the Slant Guide Drive Gear with L Slider Assembly so that the notch of the Drive Gear is 1 tooth away from the left and gear of the L Slider Assembly as shown in the figure 4.

(5) Assemble the parts with Removal Steps (1) to (5) in reverse order.

After replacement, perform the Tape Path Adjustment referring to Section 7-4.

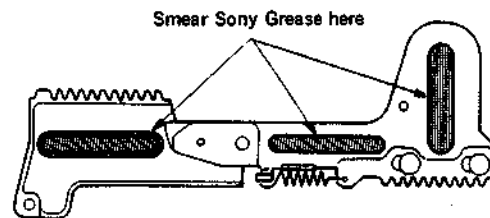


Fig. 3

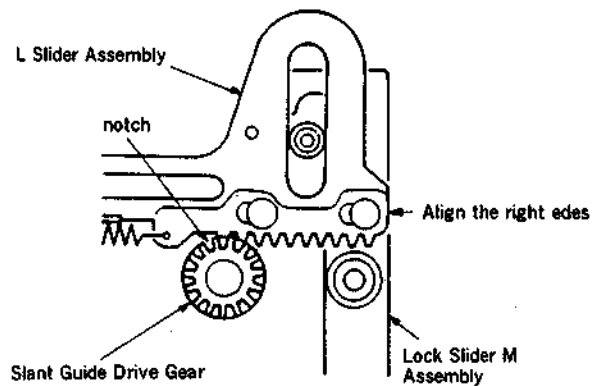


Fig. 4

7-2-19. REPLACEMENT OF THE L-SWITCH ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)
Sony Oil
Sony Grease

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Remove the Fly Wheel referring to Section 7-2-1.
- (3) Remove the Threading Ring Assembly referring to Section 7-2-4.
- (4) Remove the Entrance Guide (P) Assembly referring to Section 7-2-10.
- (5) Remove the Slant Guide Block Assembly referring to Section 7-2-11.
- (6) Remove the L Slider Assembly referring to Section 7-2-18.
- (7) Remove the Lock Slider Retainer.
- (8) Remove the tension spring which is hooked to the Lock Slider A.
- (9) Remove the fixing screw and remove the Lock Slider A.
- (10) Remove the stop washer of the Drive Changer Assembly and remove the torsion spring.
- (11) Remove the Drive Changer Assembly.
- (12) Disconnect the connector (6P) on the L-switch Assembly.
- (13) Remove the two fixing screws and remove the L-switch Assembly.

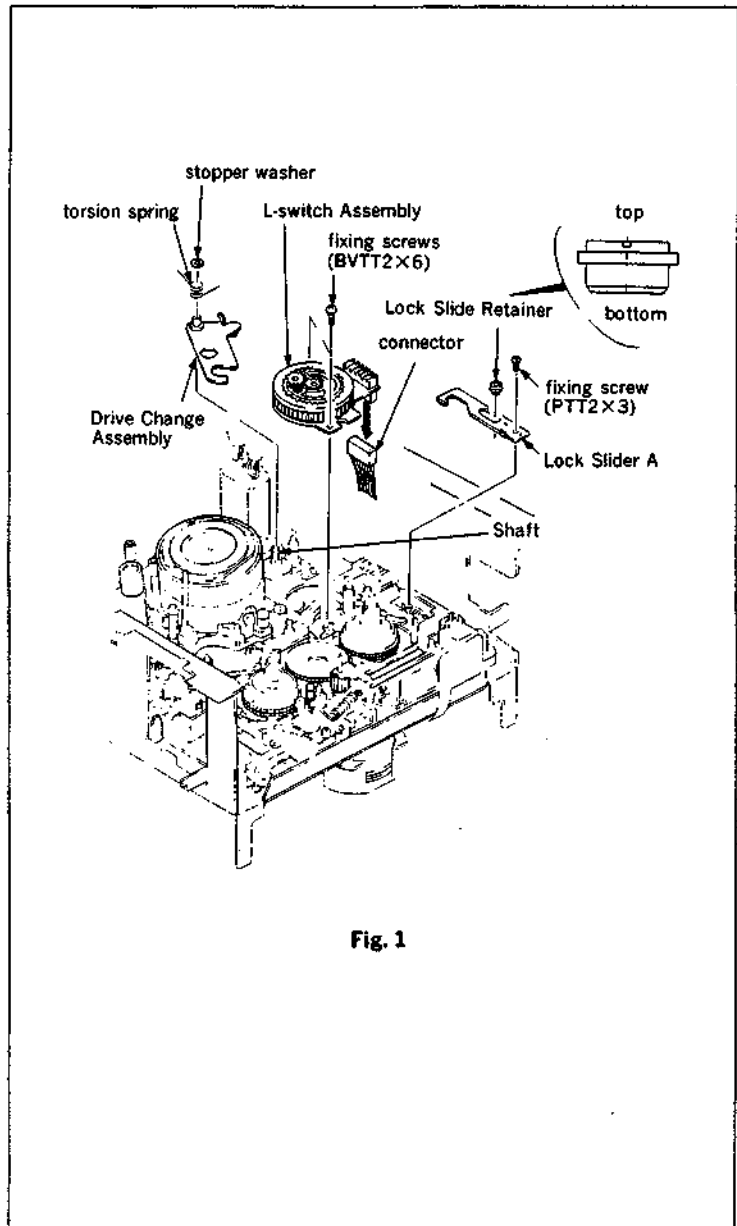


Fig. 1

Installation:

- (1) Replace the L-switch Assembly with a new one and apply a half drop of oil on the Planetary Roller Shaft.
- (2) Assemble the parts with Removal Steps (12) and (13) in reverse order.
- (3) Press the L-mode select button (right or left) of the Mode Selector and check that the L-switch Assembly rotates.
- (4) Apply a half drop of oil on the fixing shaft of the Drive Changer Assembly.
- (5) Smear Sony Grease to the U groove of the Drive Changer Assembly as shown in figure 2.
- (6) Assemble the parts with Removal Steps (10) and (11) in reverse order.
- (7) Press the L-mode select button (right or left) of the Mode Selector and check that the L-switch Assembly rotates.
- (8) Assemble the parts with Removal Steps (7) to (9) in reverse order.
- (9) Press the L-mode select button (right or left) of the Mode Selector so that the Planetary Roller Shaft is placed to the position shown in figure 3.
- (10) Assemble the parts with Removal Steps (1) to (6) in reverse order.

After replacement, perform the Tape Path Adjustment referring to Section 7-4.

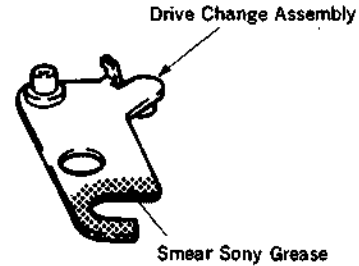


Fig. 2

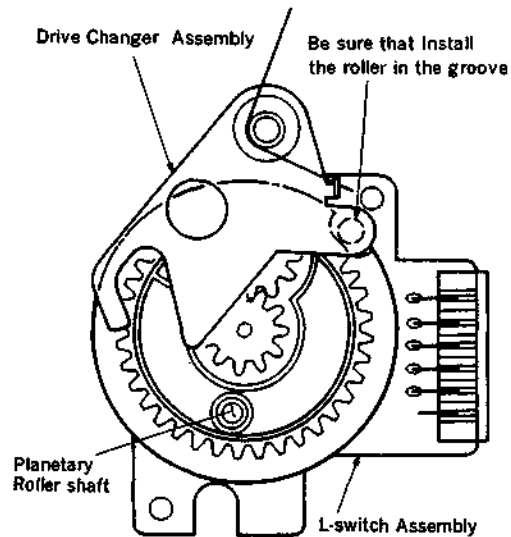


Fig. 3

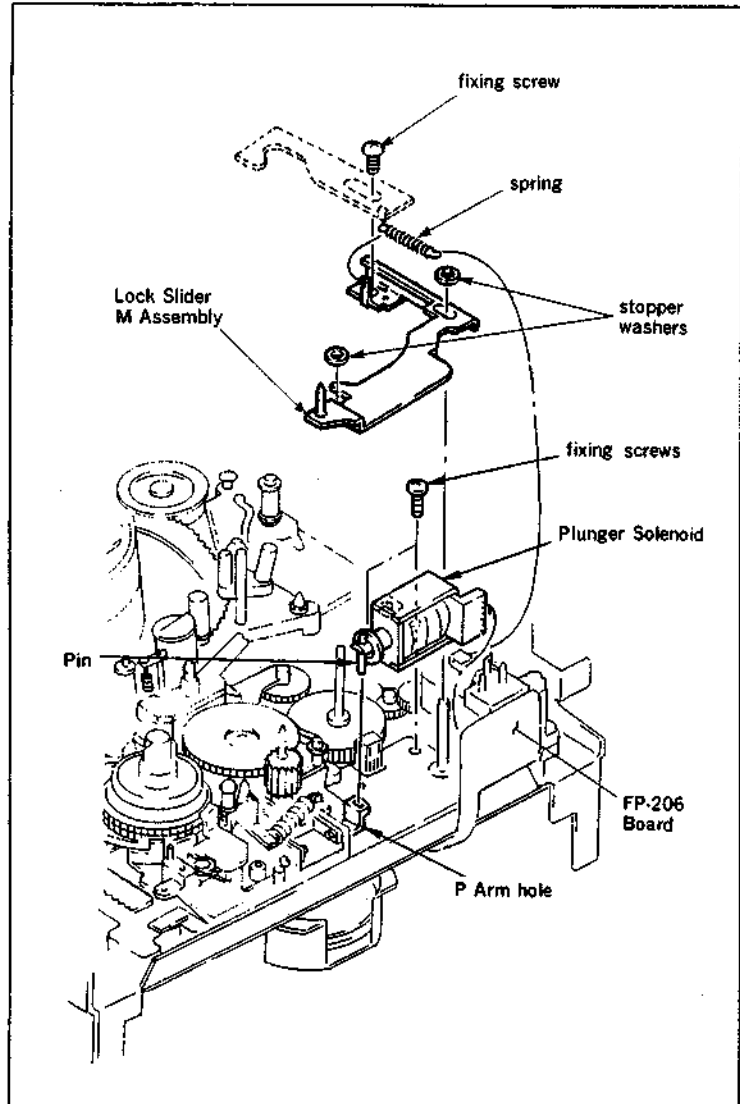
7-2-20. REPLACEMENT OF THE PLUNGER SOLENOID

Removal:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (3) Remove the spring which is hooked to the Lock Slider M Assembly.
- (4) Remove the two stopper washers.
- (5) Remove the fixing screw and remove the Lock Slider M Assembly.
- (6) Unsolder the three terminals of the Plunger Solenoid of the FP-206 Board.
- (7) Remove the two fixing screws and remove the Plunger Solenoid. (At this time, be careful not to damage the T Reel Assembly with a screwdriver, and do not touch it.)

Installation:

- (1) Replace the Plunger Solenoid with a new one.
- (2) Insert the pin of the Plunger Solenoid into the hole of the P Arm and install the new Plunger Solenoid with the two fixing screws. (At this time, be careful not to damage the T Reel Assembly with a screwdriver and do not touch it.)
- (3) Assemble the parts with Removal Steps (1) to (6) in reverse order.



7-2-21. REPLACEMENT OF THE M-SWITCH ASSEMBLY

Tools: Mode Selector (Ref. No. J-13)
Sony Oil

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Disconnect the connector (CN301) on the RS-31 Board.
- (3) Remove the T Reel Table Assembly referring to Section 7-2-14.
- (4) Remove the stopper washer and remove the Drive Gear B Assembly.
- (5) Remove the LD-1 Board. (fig. 1)
- (6) Remove the Lock Slider M Assembly referring to Removal Steps (3) to (5) of Section 7-2-20.
- (7) Remove the tension spring and remove the B Release Arm Assembly.
- (8) Check that the M-mode is put into **EJECT** mode.
- (9) Remove the stopper washer and remove the Mode Output Gear.
- (10) Release the two claws of the Control Motor Cover and remove the Push Switch.
- (11) Disconnect the connector (6P) on the M-switch Assembly.
- (12) Remove the two fixing screws and remove the Control Motor Cover L.
- (13) Remove the fixing screw and while lifting up the M-switch Assembly, push the T.S Release Arm in the direction of the arrow A. Then push the T Main Brake Assembly in the direction of the arrow B and remove the M-switch Assembly.

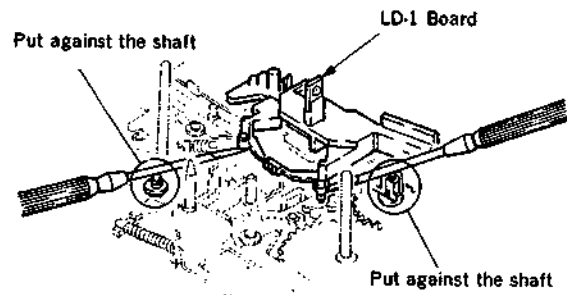


Fig. 1

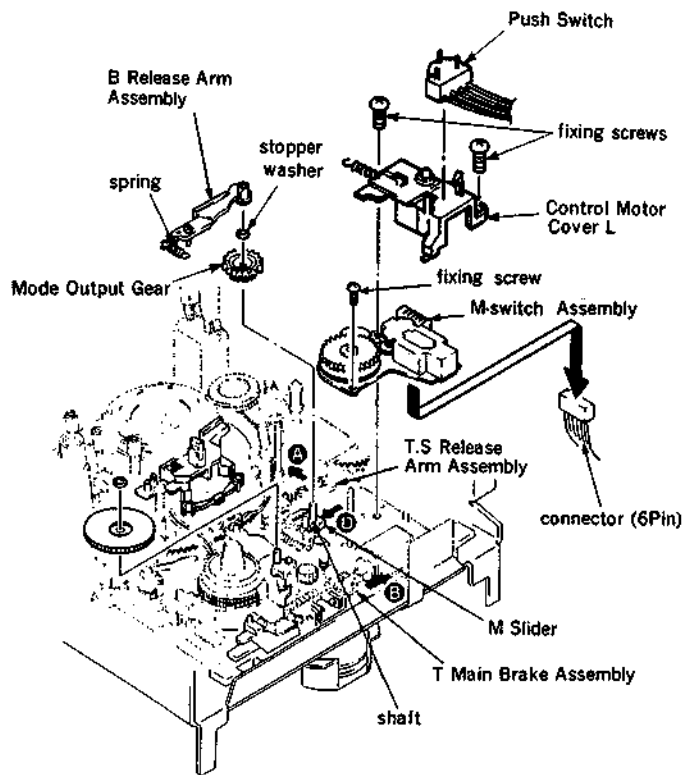


Fig. 2

How to removal the DC Motor:

- (1) Unsolder the two terminals at the C points as shown in figure 3 and remove the DC Motor from the MS-4 Board. (fig. 3)

Installation:

- (1) Replace the M-switch Assembly with a new one.
- (2) Assemble the parts with Removal Steps (10) to (13) in reverse order.
- (3) Check that the mechanical block is put into **EJECT** mode.
- (4) Check that the M Slider moves fully in the direction of arrow D. (fig. 2)
- (5) Apply a half drop of oil on the shaft of the Mode Output Gear. (fig. 2)
- (6) Install the Mode Output Gear so that the center of the M-switch Assembly Gear and the two positioning holes are lined up. (fig. 4)
- (7) Install the stopper washer to the shaft of the Mode Output Gear.
- (8) Press the M-mode select button of the Mode Selector and set to the **LOADING/UNLOADING** mode.
- (9) Assemble the parts with Removal Steps (1) to (7) in reverse order.

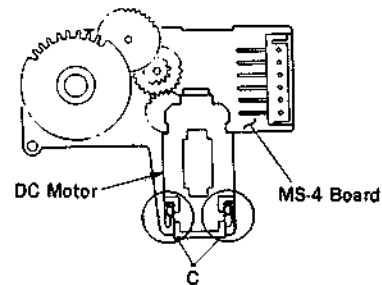


Fig. 3

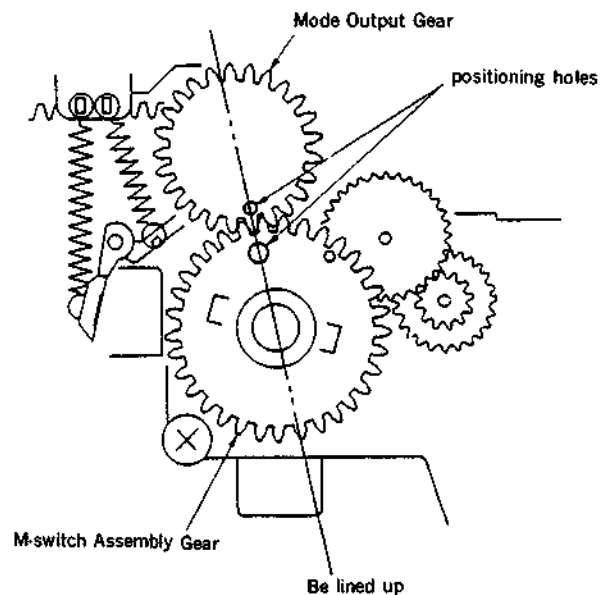


Fig. 4

7-2-22. REPLACEMENT OF THE M SLIDER

Tools: Mode Selector (Ref. No. J-13)

Sony Oil

Sony Grease

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (2) Remove the Threading Ring Assembly referring to Section 7-2-4.
- (3) Remove the S Reel Table Assembly referring to Section 7-2-13.
- (4) Remove the T Reel Table Assembly referring to Section 7-2-14.
- (5) Remove the Pinch Press Arm Assembly referring to Section 7-2-15.
- (6) Remove the Tension Regulator Arm Assembly referring to Section 7-2-16.
- (7) Remove the Tension Regulator Band Assembly referring to Section 7-2-17.
- (8) Remove the Drive Gear (B) Assembly, LD-1 Board, Lock Slider M Assembly and B Release Arm Assembly referring to Removal Steps (2) to (7) of Section 7-2-21.
- (9) Remove the Tension Regulator Load Arm Assembly referring to Removal Step (11) of Section 7-2-18.
- (10) Remove the tension spring which is hooked to the S Main Brake Assembly.
- (11) Remove the two stopper washers and remove the S Main Brake Assembly and T Main Brake Assembly.
- (12) Operate the Mode Selector and set the L-mode to **LOADING TOP** mode and the M-mode to **LOADING/UNLOADING** mode.
- (13) Remove the fixing screw and remove the Drive Complete Assembly.
- (14) Remove the Mode Output Gear referring to Removal Steps (8) and (9) of Section 7-2-21.
- (15) Remove the two tension springs which are hooked to the REW Brake Assembly and B Release Slider.
- (16) Remove the REW Brake Assembly and remove the REW Brake Spacer.

- (17) Remove the stopper washer and remove the B Release Slider.
- (18) Remove the stopper washer and remove the Ring Lock Spring and RL Arm.
- (19) Move the M Slider to the right.
At this time, leave about 5mm space between the fixing shaft and left edge of M Slider's longitudinal hole.
- (20) Remove the E ring and remove the Pinch Press Lever Assembly.
- (21) Remove the tension spring and remove the Hard Brake S.
- (22) Remove the stopper washer and push the Mode Arm in the direction of the arrow. Lift up the left side of the M Slider to remove.

Installation:

- (1) Replace the M Slider with a new one and smear grease. (fig. 2)
- (2) Push the Mode Arm in the direction of the arrow. (fig. 1) While being careful to the positional relationship with other parts install the M Slider. Then install the stopper washer. (fig. 3)
- (3) Install the Hard Brake S and hook the tension spring to it.
- (4) Smear grease to the Pinch Press Lever Assembly. (fig. 4)
- (5) Apply a half drop of oil to the part under the groove of Pinch Press Lever Assembly's shaft.
- (6) Assemble the parts with Removal Steps (16) to (18) and (20) in reverse order.
- (7) Hook the two tension springs to the REW Brake Assembly and B Release Slider.

Note: Hook the two tension springs as follows and be careful not to mix them.

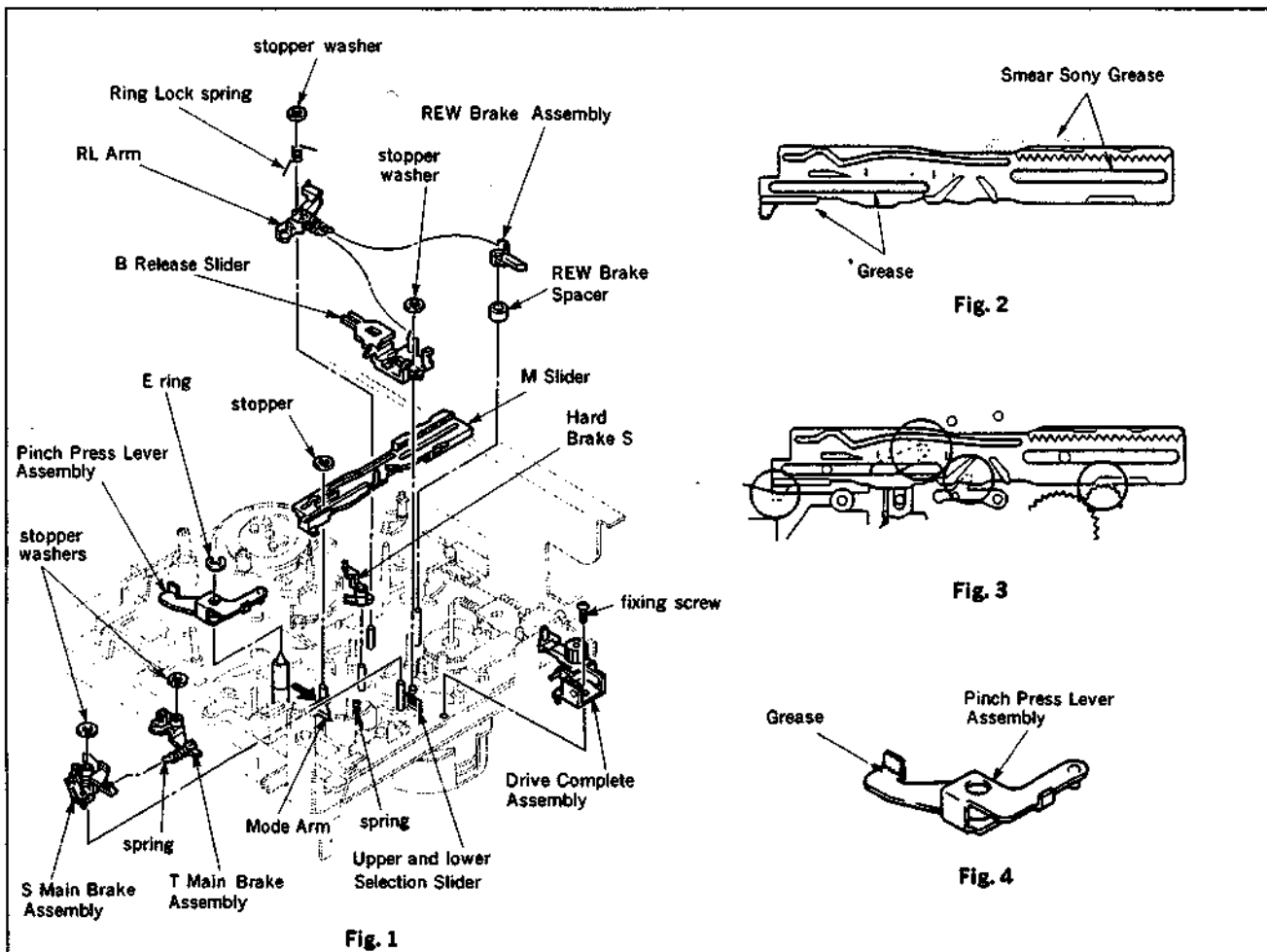
- . B Release Slider Spring:
diameter 2 mm, wire diameter 0.18mm
- . REW Brake Assembly Spring:
diameter 1.6 mm, wire diameter 0.12mm

- (8) Move the M Slider to the left fully.
- (9) Press the M mode select button of the Mode Selector and set to **EJECT** mode.
- (10) Install the Mode Output Gear referring to Installation Steps (5) to (7) in Section 7-2-21.
- (11) Press the M mode select button of the Mode Selector and set to the **LOADING/UNLOADING** mode.

- (12) Insert the horizontal shaft of the Drive Complete Assembly into the groove of the Upper and Lower Selection Arm and tighten the fixing screw.

- (13) Assemble the parts with Removal Steps (1) to (11) in reverse order.

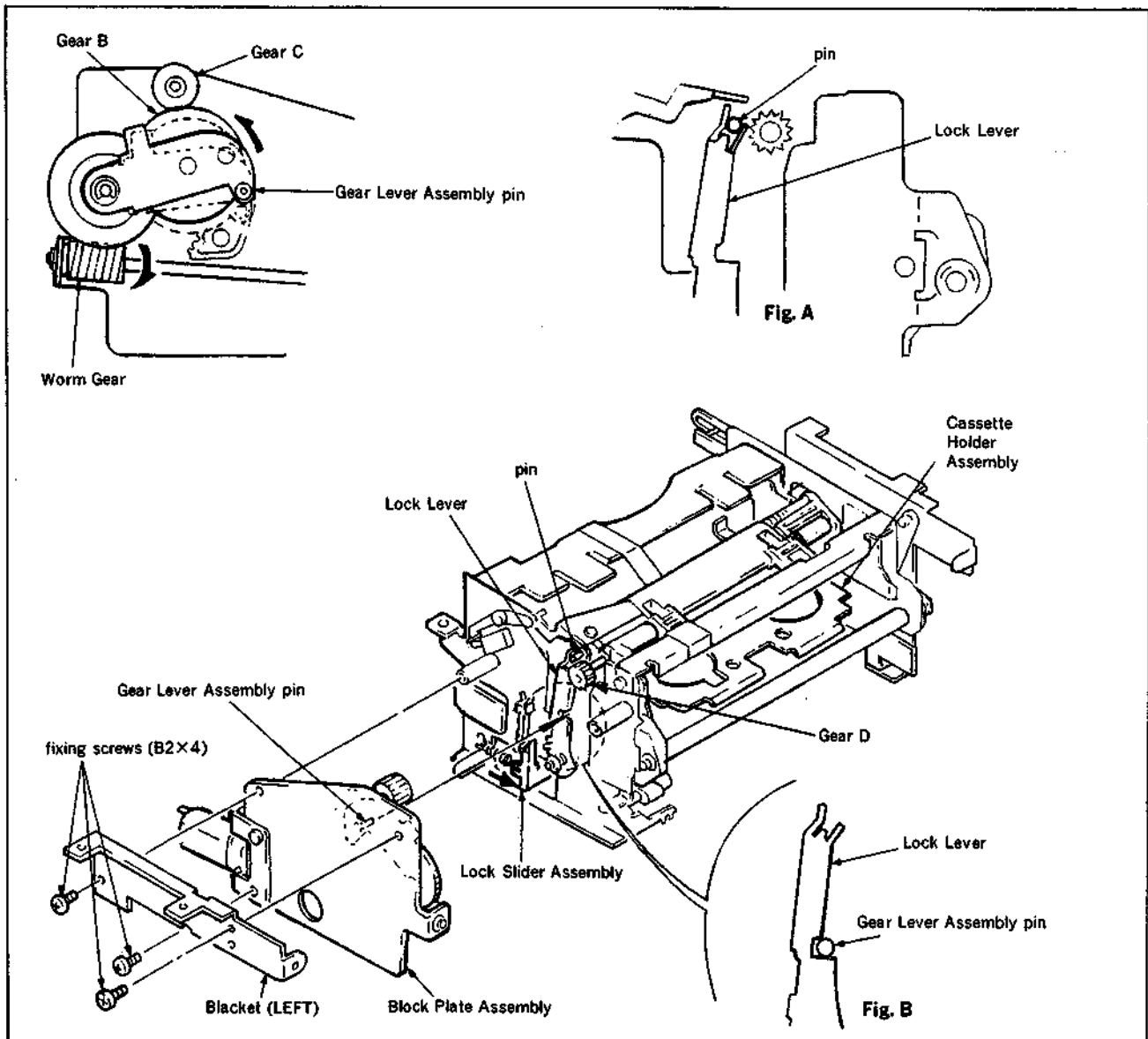
After replacement, perform the Tape Path Check referring to Section 7-4-6.



7-2-23. INSTALLATION OF THE BLOCK PLATE ASSEMBLY

When removing the Block Plate Assembly, installing procedures are as follows:

- (1) Push the Lock Slider Assembly in the direction of the arrow and lift the Cassette Holder.
- (2) Check that the positional relationship between the Lock Lever and pin is as shown in figure A.
- (3) Turn the Worm Gear in the direction of the arrow and engage the Gear B and Gear C.
- (4) While checking that positional relationship between the pin of the Gear Lever Assembly and Lock Lever is as shown in figure B, fix the Block Plate Assembly and Bracket (LEFT) with three fixing screws.
- (5) Check that the Gear C and D are engaged.

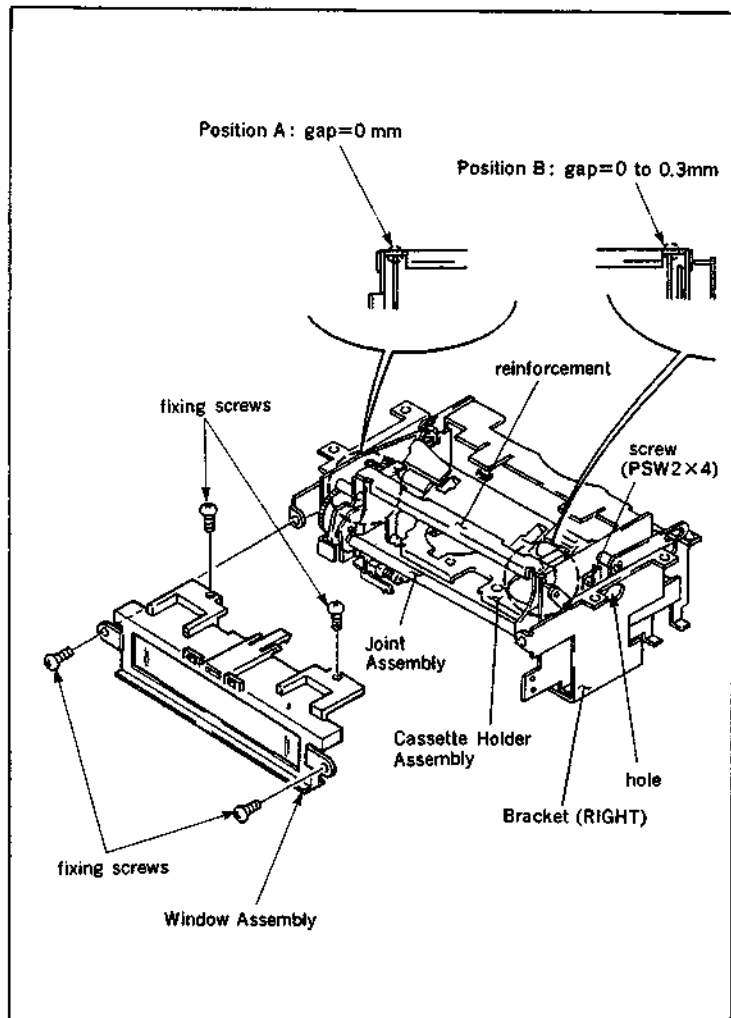


7-2-24. PARALLELISM ADJUSTMENT OF THE CASSETTE HOLDER BLOCK

When the following trouble happen, perform this adjustment. When inserting or ejecting the cassette, it is caught in the Cassette Holder Assembly or Joint Assembly, etc., and does not move smoothly.

Adjustment procedure:

- (1) Open the MB-19P Board referring to Section 2-10.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-16.
- (3) Remove the four fixing screws and remove the Window Assembly.
- (4) Loosen the screw (PSW2 X 4) from the hole of the Bracket (RIGHT).
- (5) Push the bottom of the Cassette Holder Assembly against the reinforcement, and adjust the position so that there is no clearance at points A and B.
- (6) Tighten the screw (PSW2 X 4) and smear locking compound to it.
- (7) Assemble the parts with Steps (1) to (3) in reverse order.



7-3. TORQUE AND BACK TENSION ADJUSTMENT

After removing the Mechanical Deck and Cassette-up Compartment from the unit referring to Section 2-5 and 2-16, perform these adjustments except for Section 7-3-4.

7-3-1. CHECK OF THE MAIN BRAKE TORQUE

1. S Main Brake Torque

Tools: Mode Selector (Ref. No. J-13)

Tension Measurement Reel

(Ref. No. J-8)

Dial Tension Gauge (Ref. No. J-6)

Mode: Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.

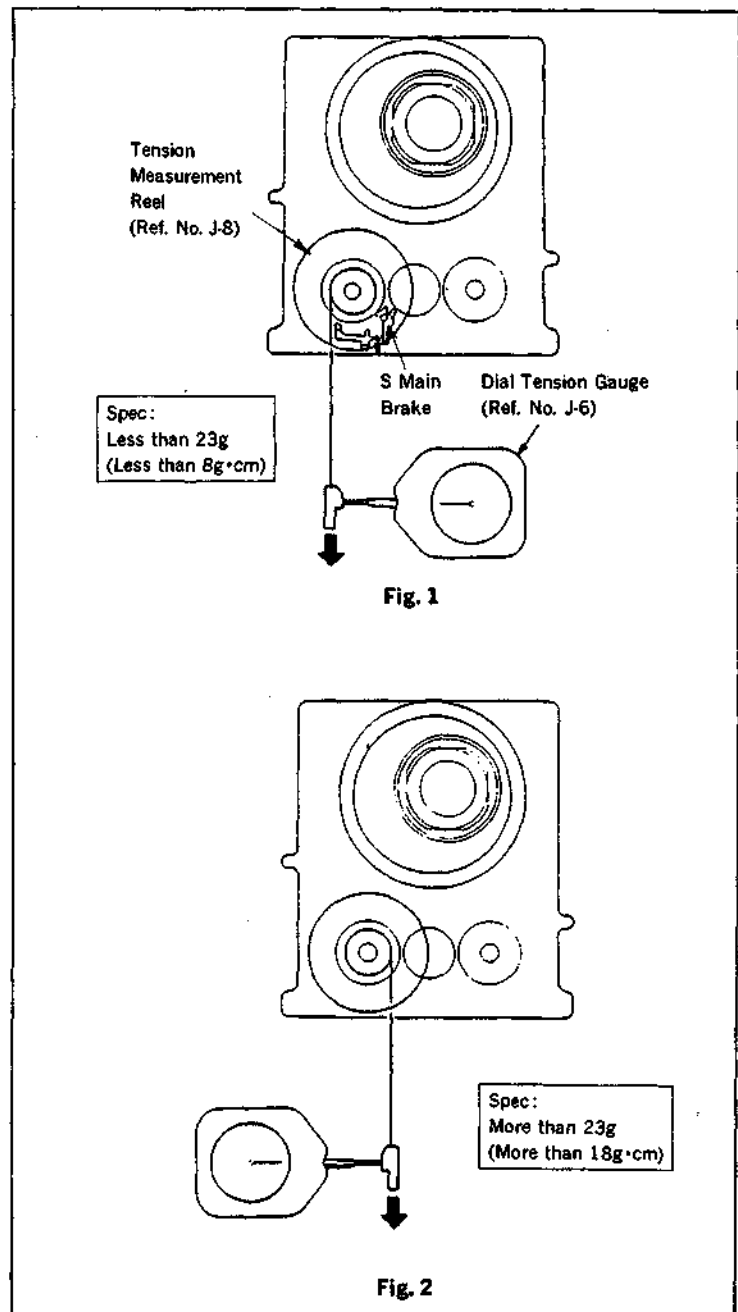
Check Procedures:

- (1) Set the Tension Measurement Reel on the S Reel Table and put the Dial Tension Gauge at the end of the string.
- (2) Pull out the Dial Tension Gauge in the direction of the arrows and check that those readings meet the required specifications as shown in figure 1 and 2.

Note: Both S Main Brake and S Soft Brake work in the **FF/REW** mode.

Adjustment Procedure:

- (1) If the reading do not meet the required specification, replace the S Main Brake or S Reel Table Assembly.



2. T Main Brake Torque

Tools: Mode Selector (Ref. No. J-13)

Tension Measurement Reel

(Ref. No. J-8)

Dial Tension Gauge (Ref. No. J-6)

Mode: Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.

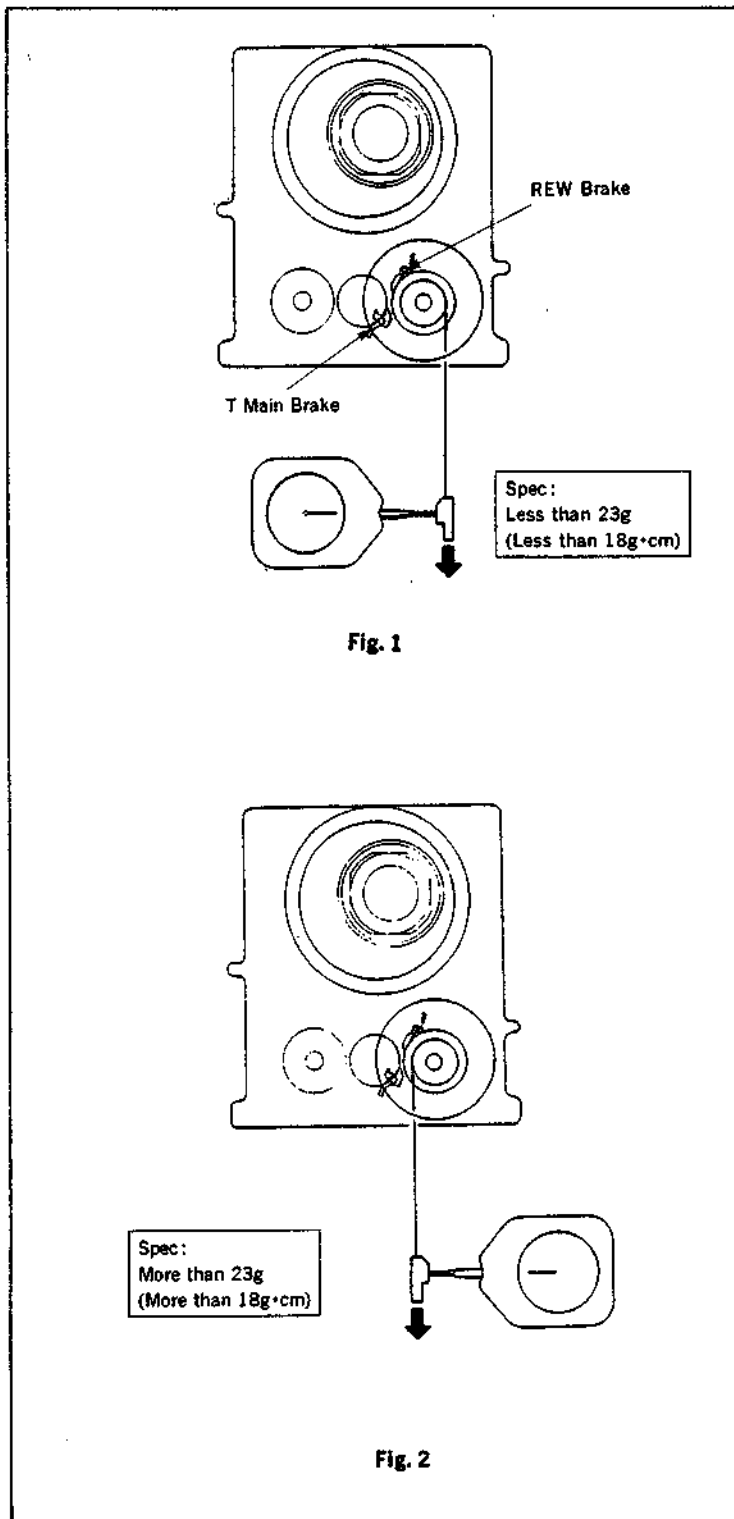
Check Procedure:

- (1) Set the Tension Measurement Reel on the T Reel Table and put the Dial Tension Gauge at the end of the string.
- (2) Pull out the Dial Tension Gauge in the direction of the arrows and check that these readings meet the required specifications as shown in figure 1 and 2.

Note: Both T Main Brake and REW Brake work in the **FF/REW** mode.

Adjustment Procedure:

- (1) If the reading do not meet the required specification, replace T Main Brake or T Reel Table.



7-3-2. CHECK OF THE SOFT BRAKE TORQUE

1. S Side Soft Brake Torque

Tools: Mode Selector (Ref. No. J-13)
Tension Measurement Reel
(Ref. No. J-8)
Dial Tension Gauge (Ref. No. J-6)

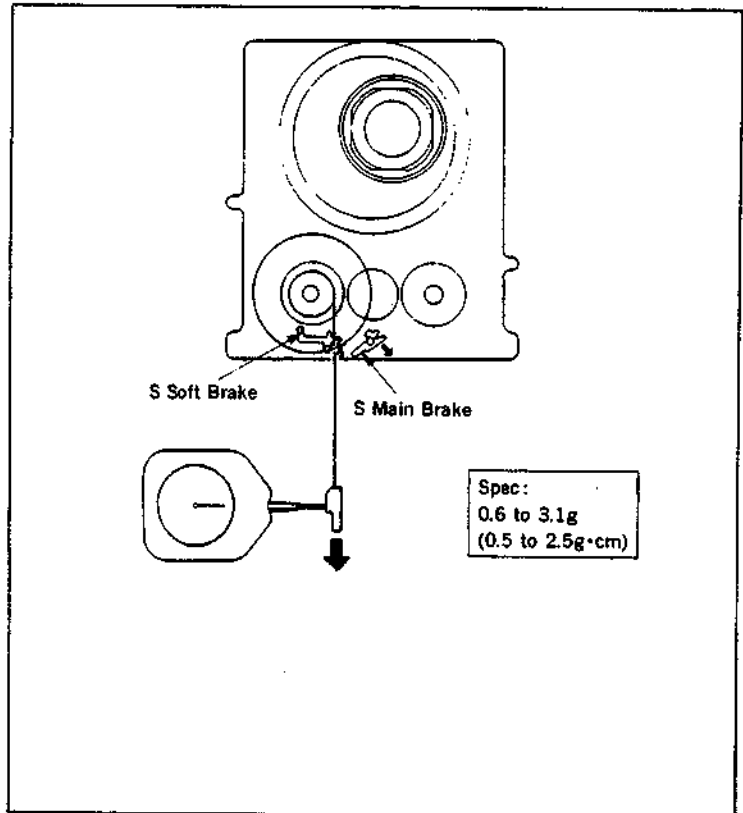
Mode: Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.

Check Procedure:

- (1) Set the Tension Measurement Reel on the S Reel Table and put the Dial Tension Gauge at the end of the string.
- (2) Release the S Main Brake by hand.
- (3) While releasing the S Main Brake, pull out the Dial Tension Gauge in the direction of the arrow. Check that this reading meets the required specification.

Adjustment Procedure:

- (1) Adjust the strength of S Soft Brake Spring by stretching or cutting.



2. T Side Soft Brake Torque

Tools: Mode Selector (Ref. No. J-13)

Tension Measurement Reel
(Ref. No. J-8)

Dial Tension Gauge (Ref. No. J-6)

Mode: Press the M-mode button of the Mode Selector and set to the **RVS** mode.

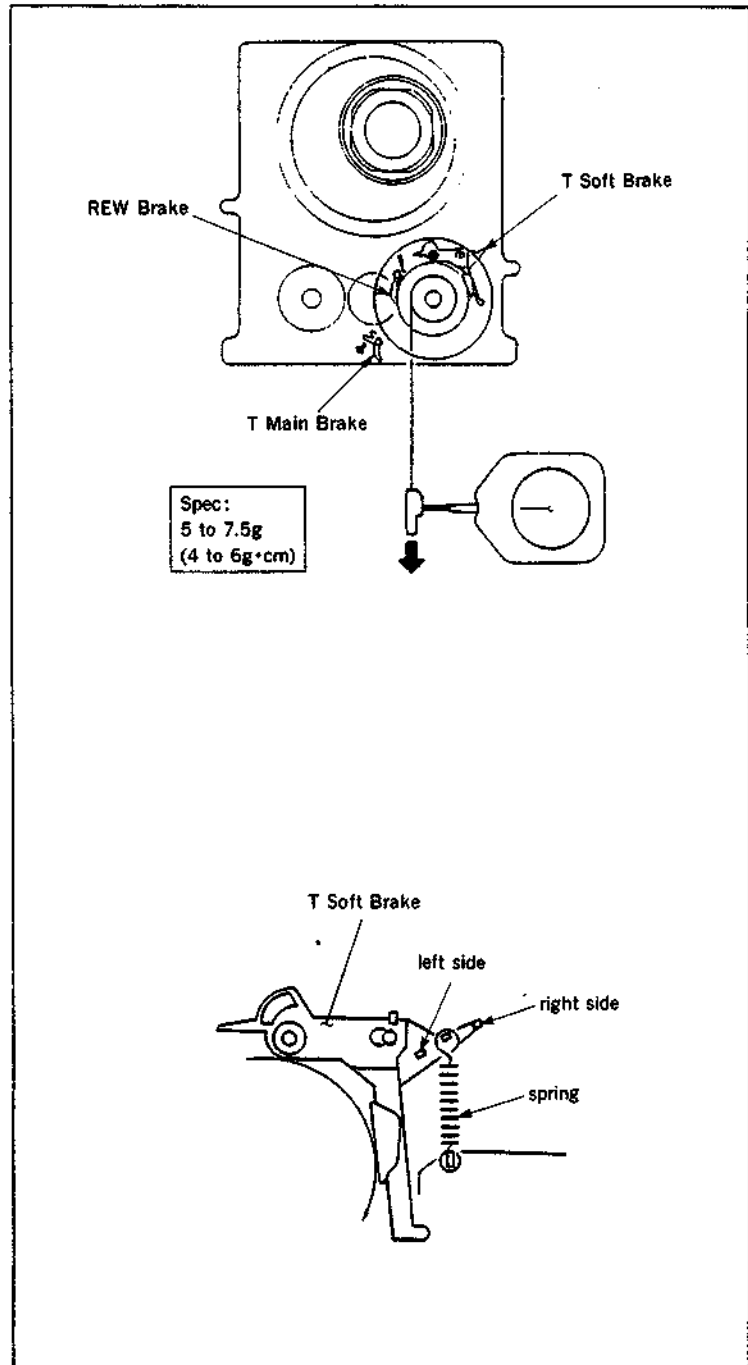
Check Procedure:

- (1) Set the Tension Measurement Reel on the T Reel Table and put the Dial Tension Gauge at the end of the string.
- (2) Release the T Main Brake by hand.
- (3) While releasing the S Main Brake, pull out the Dial Tension Gauge in the direction of the arrow. Check that this reading meets the required specification.

Note: Both T Soft Brake and REW Brake work in the RVS mode.

Adjustment Procedure:

- (1) Change the position of the tension spring which is hooked to the T Soft Brake.
 - . more than the spec. : Hook the left side.
 - . less than the spec. : Hook the right side.
- (2) If the reading do not meet the required specification with Step (1), replace the T Soft Brake or REW Brake, or both of them.



7-3-3. CHECK OF THE REW BRAKE TORQUE

Tools: Mode Selector (Ref. No. J-13)
Tension Measurement Reel
(Ref. No. J-8)
Dial Tension Gauge (Ref. No. J-6)

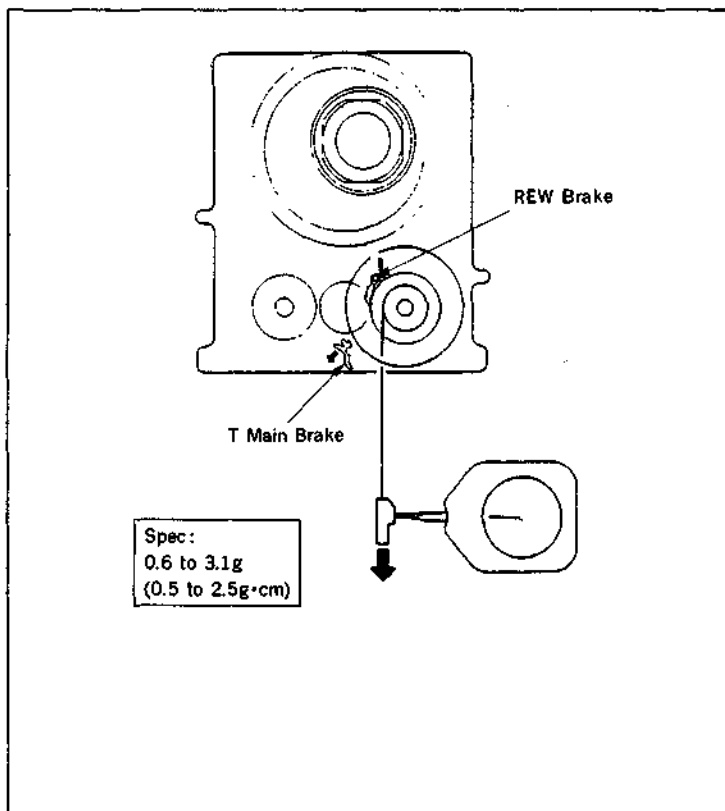
Mode: Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.

Check procedure:

- (1) Set the Tension Measurement Reel on the T Reel Table and put the Dial Tension Gauge at the end of the string.
- (2) Release the T Main Brake by hand.
- (3) While the releasing the T Main Brake, pull out the Dial Tension Gauge in the direction of the arrow. Check that this reading meet the required specification.

Adjustment Procedure:

- (1) Adjust the strength of the tension spring by stretching or cutting, or replace the REW Brake with a new one.



7-3-4. CHECK BY THE FWD, RVS TAKE-UP TORQUE CASSETTE

Tool: FWD, RVS take-up torque cassette
(Ref. No. J-12)

Mode: PLAY mode

Check Procedure:

- (1) Insert the FWD, RVS take-up torque cassette in the unit.
- (2) Put the unit into the PLAY mode, check that the torque reading of the T Reel Table meets the required specification.

Spec. : 9.5 to 15.5 g.cm

- (3) Put the unit into the PLAY mode and press the REW button. Immediately check that the torque reading of the S Reel Table meets the required specification.

Spec. : 17 to 23 g.cm

Adjustment procedure:

- (1) If the readings do not meet the required specifications, replace each Reel Table Assembly.

7-3-5. FWD BACK TENSION ADJUSTMENT

Tools: Mode Selector (Ref. No. J-13)
Tension Measurement Reel
(Ref. No. J-7)
Dial Tension Gauge (Ref. No. J-6)

Mode: Press the L-mode select button of the Mode Selector and set to the **LOADING END**. Press the M-mode select button and set to the **FWD** mode.

Check Procedure:

- (1) Remove the Cassette-up Compartment referring to Section 2-16.
- (2) Press the L-mode select button of the Mode Selector and set to the **LOADING END** mode. Press the M-mode select button and set to the **FWD** mode.
- (3) Loosen the fixing screw and move the Band Adjustment Plate in the direction of the arrow A. Check the possible movement range θ of the No. 1 Guide.
- (4) Tighten the fixing screw where the No. 1 Guide Cap is positioned at one-third of θ .
- (5) Set the Tension Measurement Reel on the S Reel Table and trail the tape along the No. 1 Guide, No. 2 Guide, No. 3 Guide, IP Roller Guide and Drum.
- (6) Put the Dial Tension Gauge at the end of the tape. Pull out the Dial Tension Gauge at a contact speed approx. 15cm/sec. in the direction of the arrow B. At this time, check that this reading meets the required specification.

Spec. : 12 to 14 g

Adjustment Procedure:

- (1) If the reading do not meet the required specification, change the position of the tension spring which is hooked to the Tension Regulator Spring Hook Assembly.
 - . more than the Spec. :
the direction of the arrow C
 - . less than the Spec. :
the direction of the arrow D

NOTE:

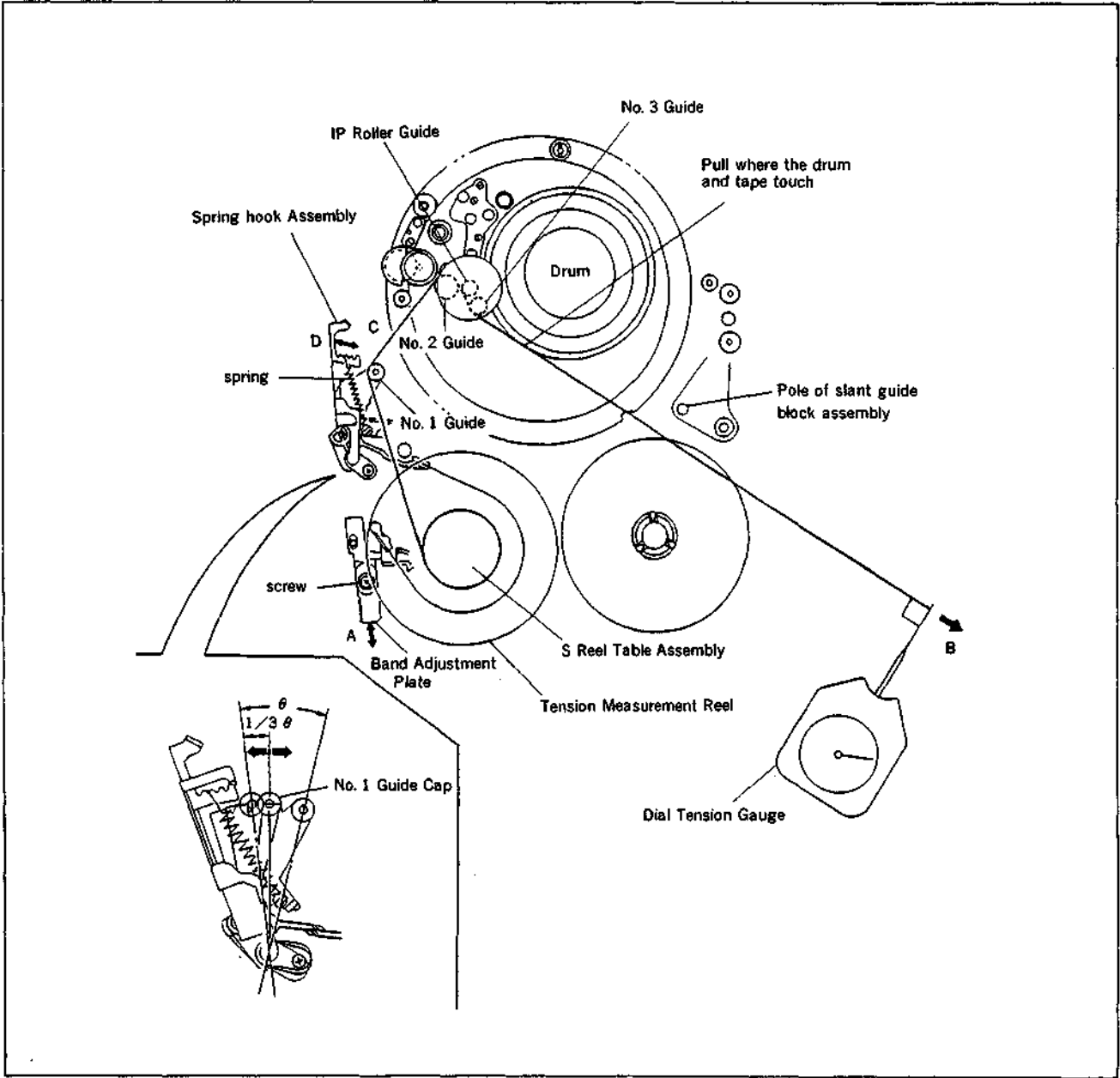
When replacing the parts as follows, perform the FWD Back Tension Adjustment.

- . Tension Regulator Band Assembly
- . S Reel Table Assembly
- . Entrance Guide (P) Assembly

When replacing these parts, perform the free running in the FWD mode for two minutes and then adjust the FWD Back Tension.

Adjustment Procedure:

- (1) Install the Cassette-up Compartment Assembly with Removal Steps Section 2-16 in reverse order.
- (2) Install the Mechanical Deck with Removal Steps Section 2-5 in reverse order.
- (3) Insert the cassette tape in the unit and perform the FWD running for two minutes.
- (4) Eject the cassette tape.
- (5) Remove the Mechanical Deck from the unit referring to Section 2-5.
- (6) Perform the FWD Back Tension Adjustment referring to Section 7-3-5.



7-4. TAPE PATH ADJUSTMENT

After check that the Electrical Adjustments (Sections 8) are completed, perform this adjustment.

Alignment Information

Track Shift Tool

The 8 mm Video System employs a high precision tracking ATF (Auto Track Finding) system which instantaneously controls the tape running speed with four kinds of pilot signals. In this way, the Tracking Adjustment Knob is unnecessary and it is possible to trace with accuracy. On the other hand, the adjustment of the Tape Path System was difficult in the ATF system. It was impossible to adjust perfectly because the ATF system automatically corrected even it small miss-tracking occurs. Then the Track Shift Tool (Ref. No. J-14) is used in the adjustment of Tape Path System. The Track Shift Tool can forcibly release the ATF system and can easily adjust the Tape Path System by setting the tracking amount (track shift) manually.

7-4-1. CONNECTION OF THE TRACK SHIFT TOOL

Use the connection cords (Ref. No. J-15 and J-16) for connection. Connect the Track Shift Tool and the unit as shown in figure 1.

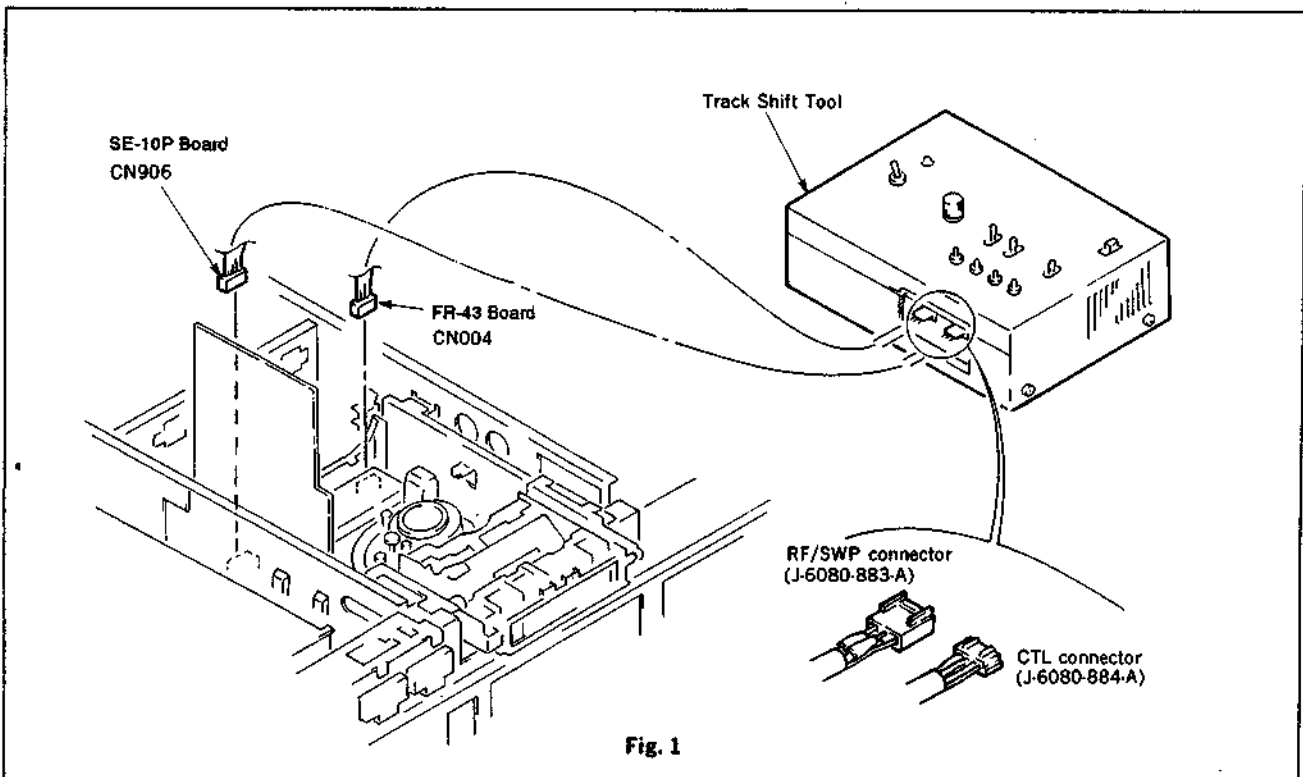
. RF/SWP connector ...

to CN004 on the FR-43 Board

. CTL connector ...

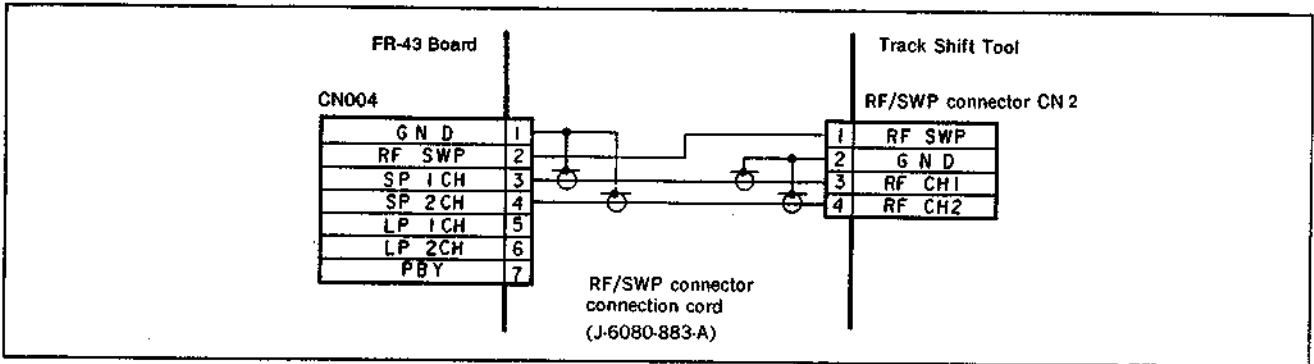
to CN906 on the SE-10P Board

(Please refer to operation manual of the Track Shift Tool for details.)

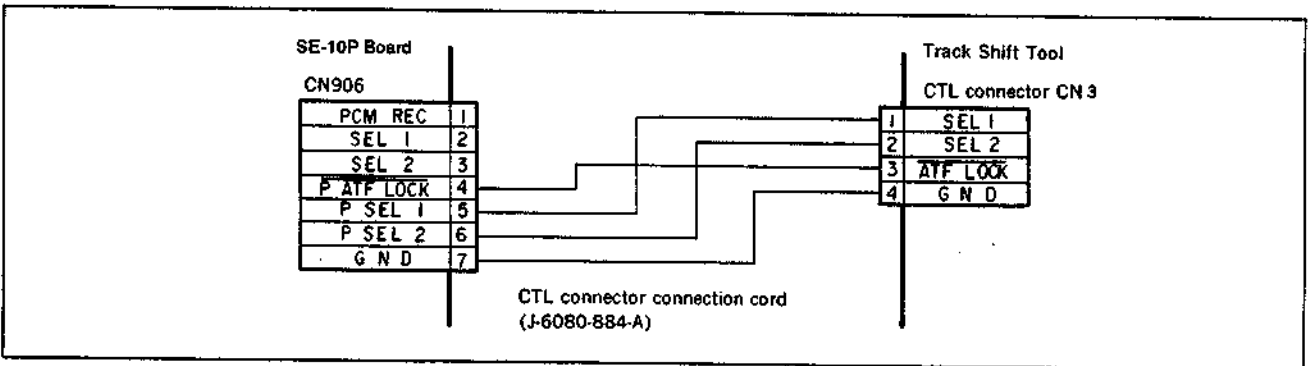


[Designated Connecting Cord]

- . RF/SWP connector connection cord
(Part No. J-6080-883-A)



- . CTL connector connection cord
(Part No. J-6080-884-A)



[Setting of the Switches]

SEL switch

When performing the track shift, set the switch to ON. When setting to OFF, the unit side controls.

PATTERN swich

Set to EV side.

ATF ADJ

Set to OFF side.

When adjusting EVO-9700P, the other switches are not used.

7-4-2. PREPARATION FOR ADJUSTMENT

Tools: Track Shift Tool (Ref. No. J-14)
RF/SWP connector (Ref. No. J-15)
CTL connector (Ref. No. J-16)
Oscilloscope
Alignment tape for tracking
(WR5-1NP) (Ref. No. J-5)

- (1) Clean the tape path surface (the individual tape guides, drum, capstan shaft and pinch roller).
- (2) Connection of the oscilloscope
1CH:CH2 checking pin of the Track Shift Tool
EXT TRIG:RF SWP checking pin of the Track Shift Tool
- (3) Set the SEL switch of the Track Shift Tool to OFF and play back the alignment tape for tracking (WR5-1NP). Check that the RF waveforms of both entrance and exit sides are flat. (fig. 1 (a)) If the RF waveforms of both sides are not flat, adjust them as follows.
 - . In case of the RF waveform at the entrance side is not flat. (fig. 1 (b))
 - ... Perform entrance Side Adjustment referring to Section 7-4-4.
 - . In case of the RF waveform at the exit side is not flat. (fig. 1 (c))
 - ... Perform Exit Side Adjustment referring to Section 7-4-5.

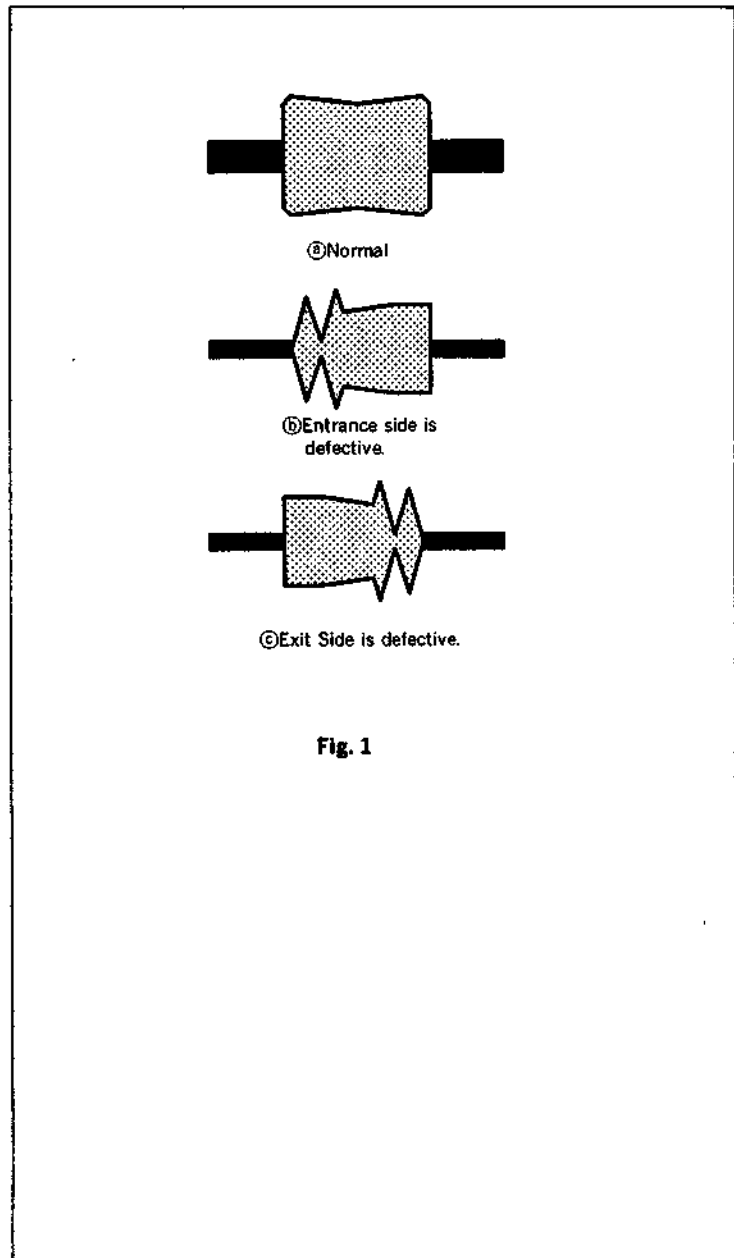


Fig. 1

7-4-3. TAPE PATH SYSTEM ADJUSTMENT TABLE

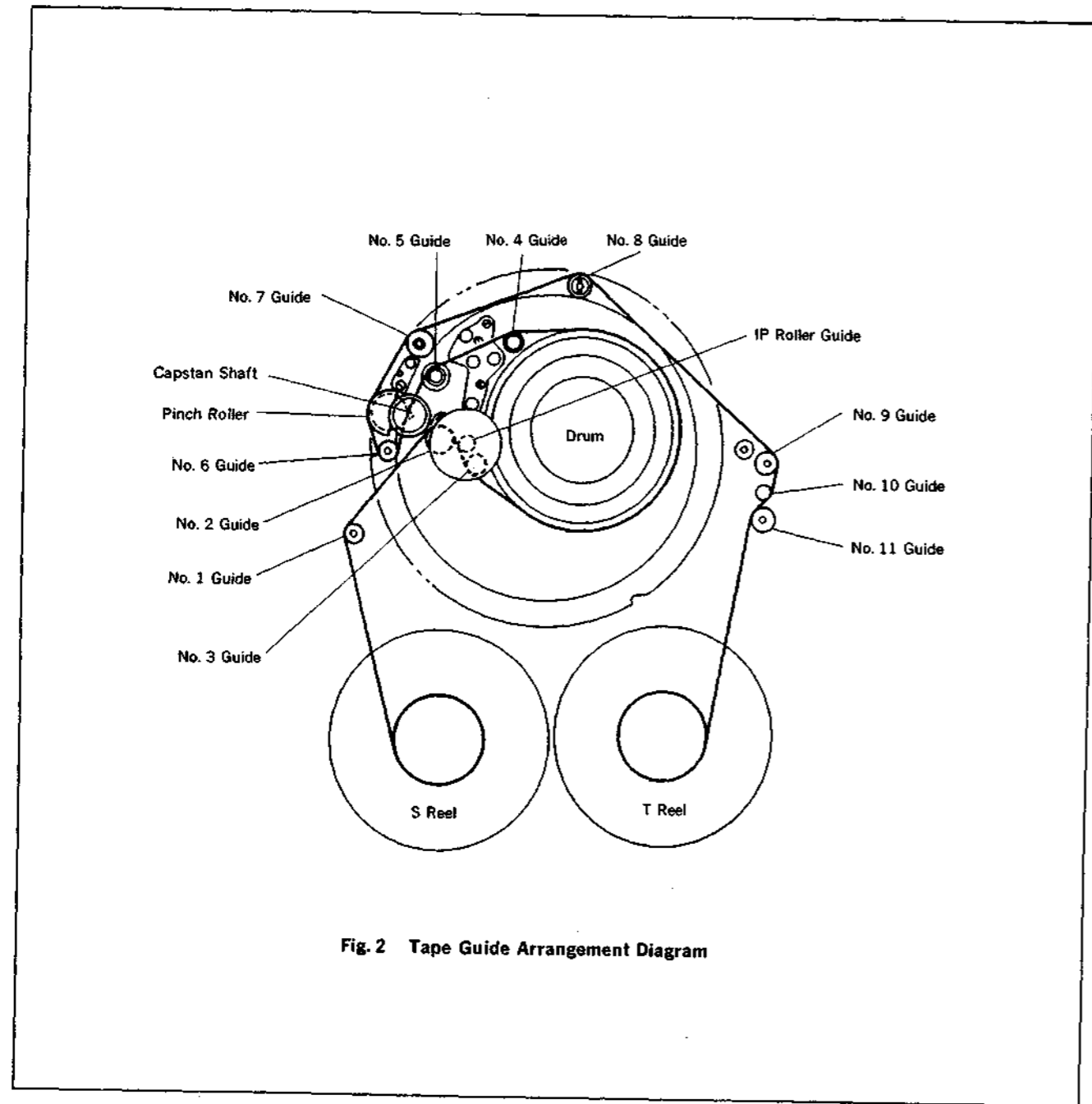
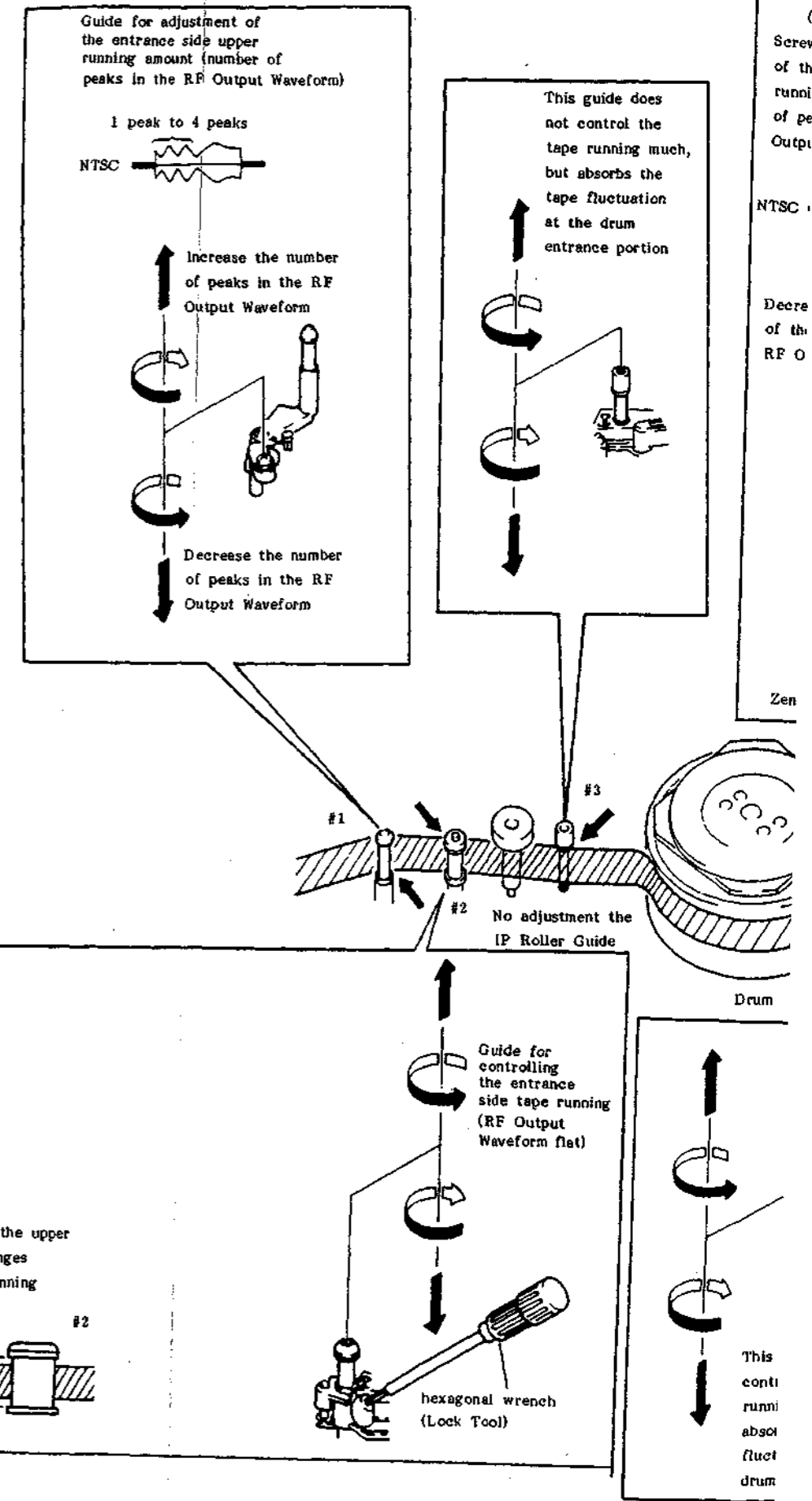
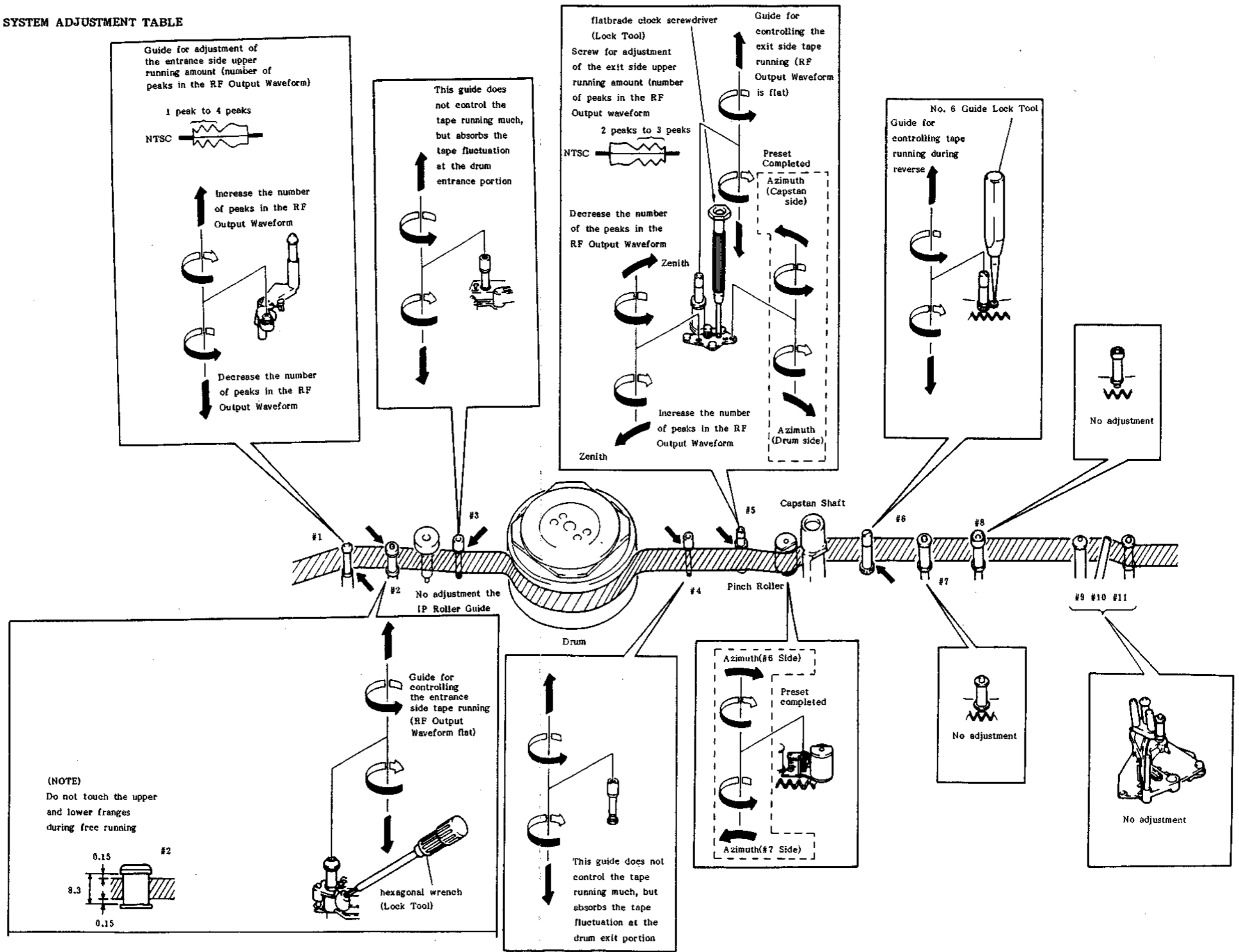


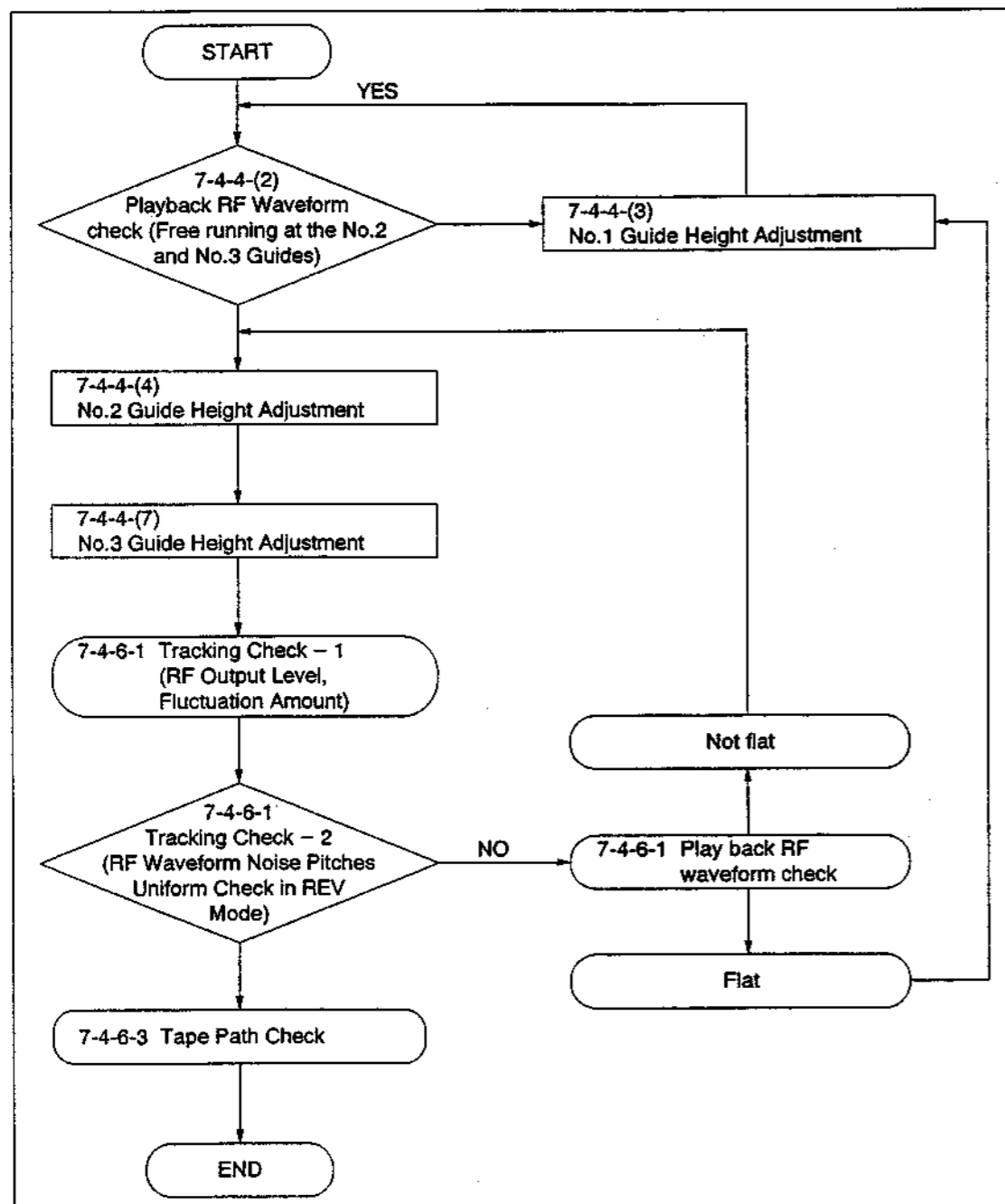
Fig. 2 Tape Guide Arrangement Diagram



7-4-3. TAPE PATH SYSTEM ADJUSTMENT TABLE



7-4-4. Tape Entrance Side Adjustment
Flow Chart of Adjustment



Mode: Play back the alignment tape
Tools: Alignment tape for tracking (WR5-1NP) (Ref. No. J-5)
 Oscilloscope
 Track Shift Tool (Ref. No. J-14)
 RF/SWP connector (Ref. No. J-15)
 CTL connector (Ref. No. J-16)
 Hexagonal screwdriver (across flat has 0.89 mm) (Ref. No. J-17)
 Small adjustment mirror (Ref. No. J-4)

Preparation:

- (i) Remove the Top Plate referring to Section 2-1.
- (ii) Open the MB-19P Board referring to Section 2-10.
- (iii) Connect the Track Shift Tool and oscilloscope to the unit referring to Sections 7-4-1 and 7-4-2.
- (iv) Play back the alignment tape.

Procedure:

- (1) Remove the Fly Wheel referring to Section 7-2-1.
- (2) Loosen the No. 2 Guide Lock Screw and turn the No. 2 and No. 3 Guides counterclockwise to free the tape path at the entrance side. (fig. 1 and 2)

Note: The space between upper and lower flanges of the No. 2 Guide is narrow. Therefore, then check that the tape is not touch the upper and lower flanges. If loosen the No. 2 Guide too much, the tape touches the lower flange and the RF waveform at the entrance side exceeds the original free waveform.

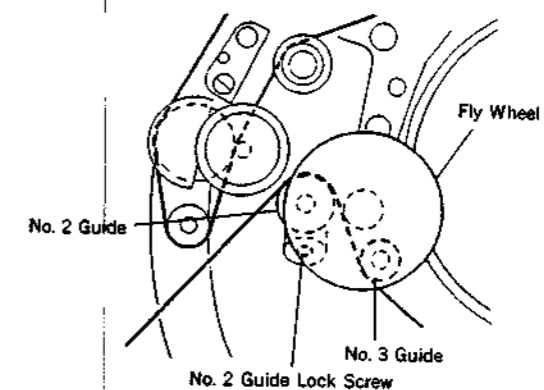


Fig. 1

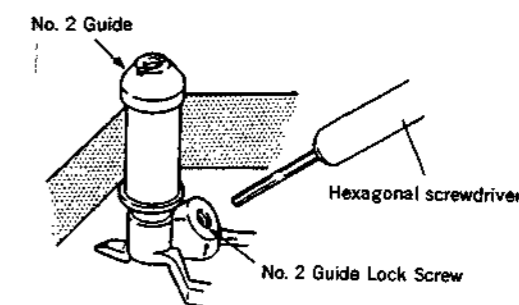


Fig. 2

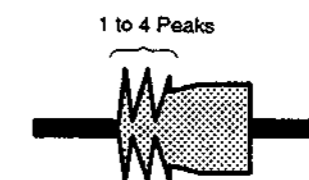


Fig. 3

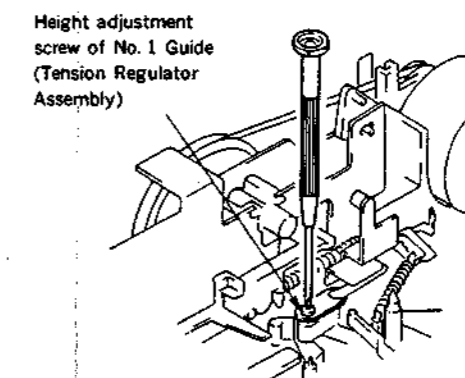


Fig. 4

(3)

(4)

(5)

(6)

(7)

(8)

(9)

(10)

Note:

Mode: Play back the alignment tape

Tools: Alignment tape for tracking (WR5-1NP) (Ref. No. J-5)
Oscilloscope
Track Shift Tool (Ref. No. J-14)
RF/SWP connector (Ref. No. J-15)
CTL connector (Ref. No. J-16)
Hexagonal screwdriver (across flat has 0.89 mm) (Ref. No. J-17)
Small adjustment mirror (Ref. No. J-4)

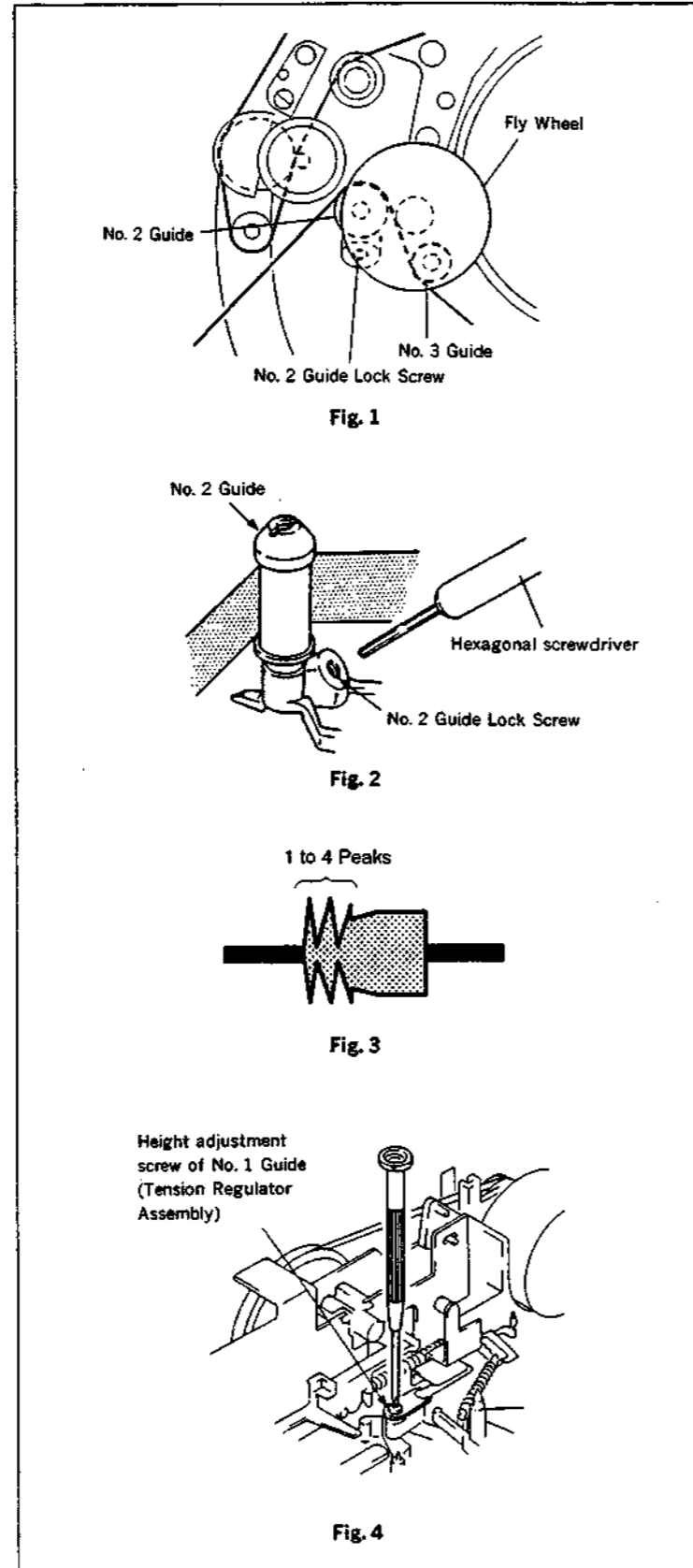
Preparation:

- (i) Remove the Top Plate referring to Section 2-1.
- (ii) Open the MB-19P Board referring to Section 2-10.
- (iii) Connect the Track Shift Tool and oscilloscope to the unit referring to Sections 7-4-1 and 7-4-2.
- (iv) Play back the alignment tape.

Procedure:

- (1) Remove the Fly Wheel referring to Section 7-2-1.
- (2) Loosen the No. 2 Guide Lock Screw and turn the No. 2 and No. 3 Guides counterclockwise to free the tape path at the entrance side. (fig. 1 and 2)

Note: The space between upper and lower flanges of the No. 2 Guide is narrow. Therefore, then check that the tape is not touch the upper and lower flanges. If loosen the No. 2 Guide too much, the tape touches the lower flange and the RF waveform at the entrance side exceeds the original free waveform.



- (3) Check that the RF waveform at the entrance side has 1 to 4 peaks in this condition. If not, adjust as follows. (fig. 3)

less than 1 peak

Turn and adjust the height adjustment screw of the No. 1 Guide (Tension Regulator Arm Assembly) clockwise 90 degrees step. (fig. 4)

more than 4 peaks

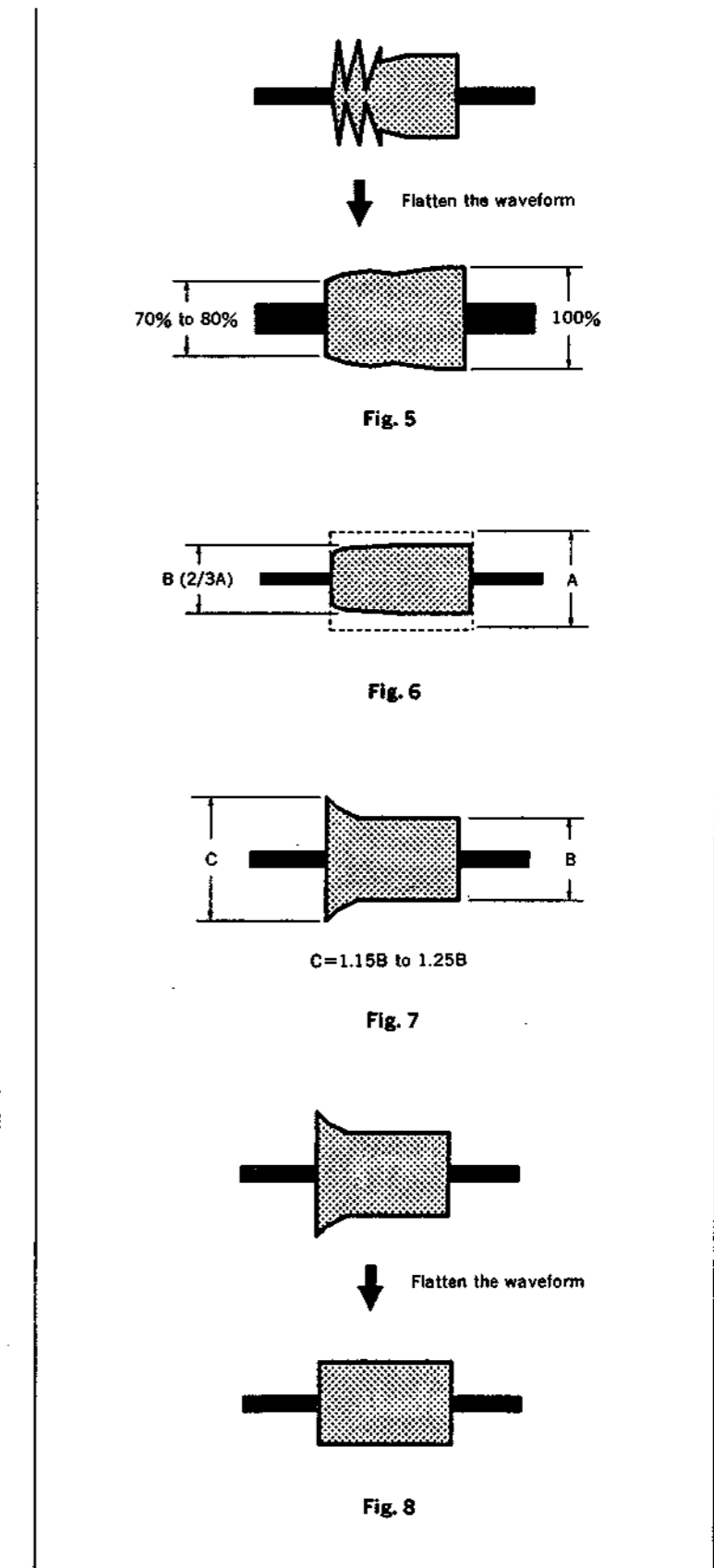
Turn and adjust the height adjustment screw counterclockwise 90 degrees step. (fig. 4)

- (4) Turn slowly the No. 2 Guide clockwise so that flatten the waveform at the entrance side. (fig. 5)

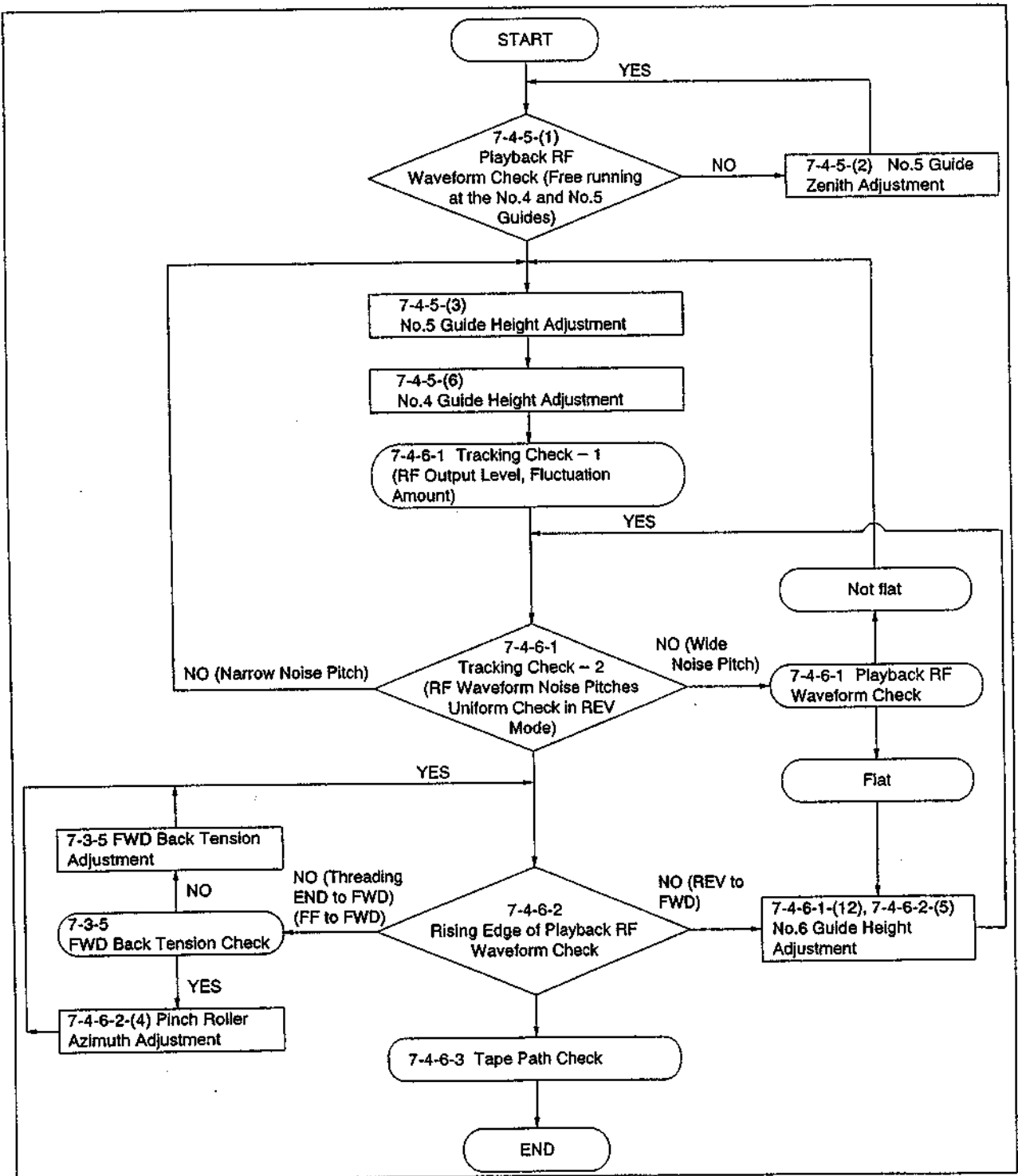
Note: At this time, do not turn the No. 2 Guide too much.

- (5) Set the SEL switch of the Track Shift Tool to ON. Turn the Track Shift Knob and set the amplitude of the RF waveform to two-third position. (fig. 6)
- (6) Turn the No. 2 Guide and raise the entrance side waveform slightly. (fig. 7)
- (7) Flatten the waveform with the No. 3 Guide. (fig. 8)
- (8) Tighten the lock screw of the No. 2 Guide. (fig. 2)
- (9) Smear locking compound to the No. 1 Guide Height Adjustment Screw and top portion of the No. 3 Guide.
- (10) Install the Fly Wheel referring to Section 7-2-1.

Note: After adjustment, perform Check After Adjustment referring to Section 7-4-6.



7-4-5. Tape Exit Side Adjustment
Flow Chart of Adjustment



Mode: Play back the alignment tape

Tools: Alignment tape for tracking
(WR5-1NP) (Ref. No. J-5)

Oscilloscope

Track Shift Tool (Ref. No. J-14)

RF/SWP connector (Ref. No. J-15)

CTL connector (Ref. No. J-16)

Hexagonal screwdriver (across flat
has 0.89 mm) (Ref. No. J-17)

Small adjustment mirror (Ref. No.
J-4)

Preparation:

- (i) Remove the Top Plate referring to Section 2-1.
- (ii) Open the MB-19P Board referring to Section 2-10.
- (iii) Connect the Track Shift Tool and oscilloscope to the unit referring to Sections 7-4-1 and 7-4-2.
- (iv) Play back the alignment tape.

Procedure:

- (1) Turn the No. 4 and No. 5 Guides counterclockwise to free the tape path at the exit side. (fig. 1)

Note: If the No. 5 Guide nut is not loosen because of locking compound, dissolve locking compound with alcohol. Check that the tape does not touch the lower flange of the No. 5 Guide in free running.

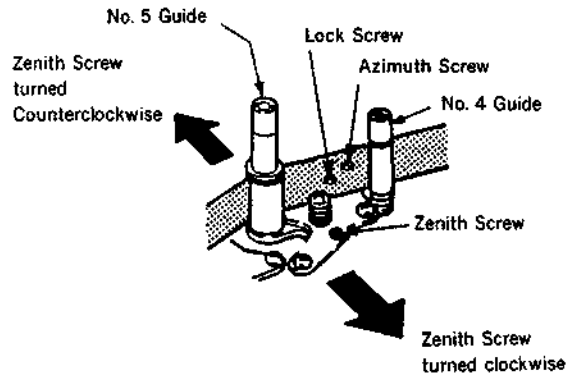


Fig. 1

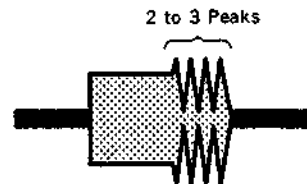


Fig. 2

(2) Check that the RF waveform at the exit side has 2 to 3 peaks in this condition. If not, adjust as follows. (fig. 2)

- Turn and loosen the lock screw counterclockwise.

- less than 2 peaks

Turn and adjust slowly the zenith screw clockwise 45 degrees step.

- more than 3 peaks

Turn and adjust slowly the zenith screw of the No. 5 Guide counterclockwise 45 degrees step.

After adjustment, tighten the lock screw clockwise.(fig. 1)

Note: If tighten the lock screw too strongly, the waveform will change. Tighten suitably the lock screw. Never turn the azimuth screw of the No. 5 Guide.

(3) Turn the No. 5 Guide clockwise and flatten the RF waveform at the exit side. (fig. 3)

Note: At this time, the waveform reaction is slow against the nut rotation. After checking that the waveform variation is stabilized, turn the nut more.

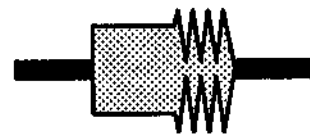
(4) Set the SEL switch of the Track Shift Tool to ON. Turn the Track Shift Knob and set the amplitude of the RF waveform to two-third position. (fig. 4)

(5) Turn the No. 5 Guide and raise the exit side waveform slightly. (fig. 5)

(6) Turn the No. 4 Guide and flatten the waveform. (fig. 6)

(7) Smear locking compound to the lock screw, zenith screw and top portions of the No. 4 Guide and No. 5 Guide.

Note: After adjustment, perform Check After Adjustment referring to Section 7-4-6.



Flatten the waveform

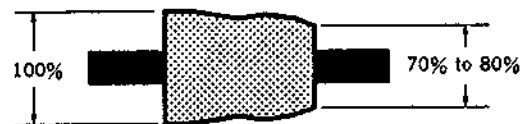


Fig. 3

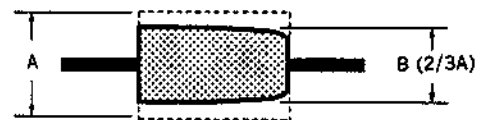
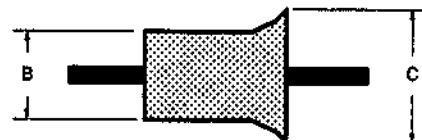
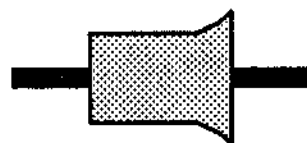


Fig. 4



$$C = 1.15B \text{ to } 1.25B$$

Fig. 5



Flatten the waveform



Fig. 6

7-4-6. CHECK AFTER ADJUSTMENT

Tool: No. 6 Guide Lock Screwdriver (Ref. No. J-10)
Alignment tape for tracking (WR5-1NP) (Ref. No. J-5)

1. Video Tracking Check

- (1) Play back the alignment tape for tracking.
- (2) Set the SEL switch of the Track Shift Tool to ON. Turn the Track Shift Knob and set the amplitude of the RF waveform to two-third position. (fig. 1)
- (3) In this time, check that the amplitude minimum value (E MIN) of the RF waveform is more than 75% of maximum value (E MAX). (fig. 2)
- (4) In this time, check that the fluctuation amount of th RF waveform at entrance and exit sides meet the required specification as shown in figure. 3.
- (5) Set the SEL switch of the Track Shift Tool to OFF.
- (6) Set to the REV mode and check that the noise pitches of the waveform are uniform. (fig. 4) If not, adjust as follows.

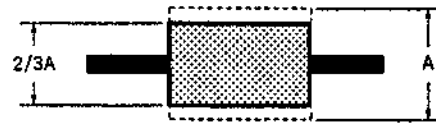


Fig. 1

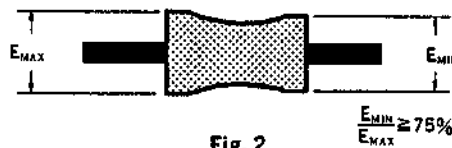


Fig. 2

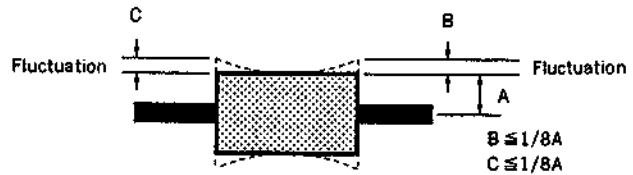


Fig. 3

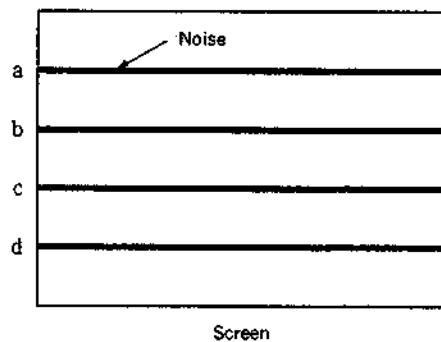
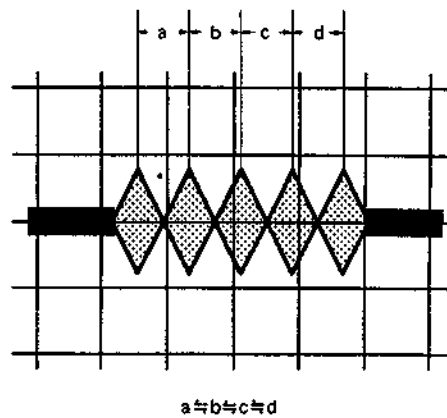


Fig. 4

When the Noise pitch is narrow at the entrance side (upper of screen). (fig. 5)

- (7) Check that the RF waveform is flat in the PLAY mode.
- (8) Perform the height adjustment of the No. 1 Guide referring to Section 7-4-4.
Note: After adjustment, perform the Tracking Check referring to Section 7-4-6-1.

When the RF waveform is not flat.

- (9) Perform the height adjustment of the No. 2 and No. 3 Guides referring to Section 7-4-4.
Note: After adjustment, perform the Tracking Check referring to Section 7-4-6-1.

When the noise pitch is narrow at the exit side (lower of screen). (fig. 6)

- (10) Set to PLAY mode and perform the height adjustment of the No. 4 and No. 5 Guides referring to Section 7-4-5.
 After adjustment, perform the Tracking Check referring to Section 7-4-6-1 and check that it meet the required specification.

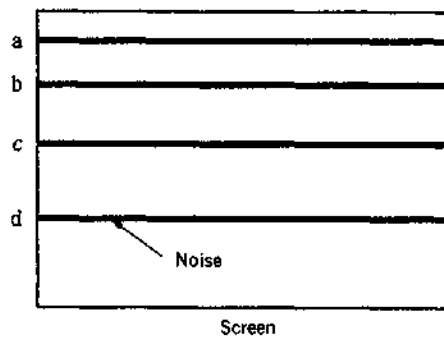
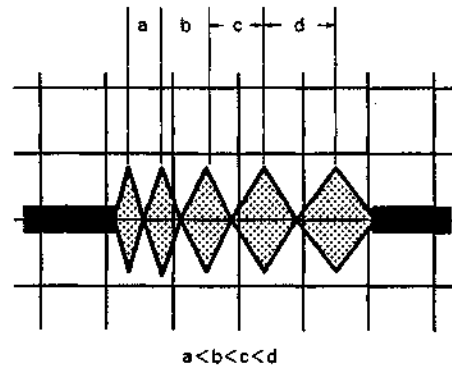


Fig. 5

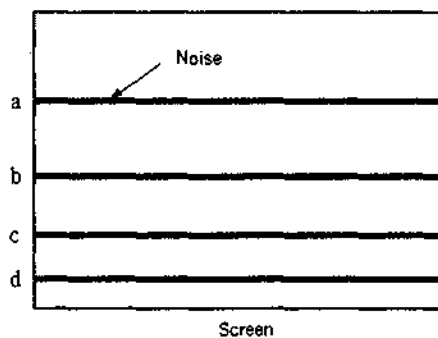
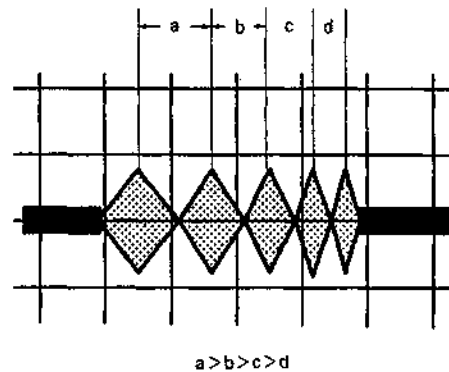


Fig. 6

When the noise pitch is wide at the exit side (lower of screen). (fig. 7)

- (11) Set to PLAY mode and check that the RF waveform is flat.
- (12) Turn and loosen the Guide Lower Gear counterclockwise with the No. 6 guide lock tool. (fig. 8)
- (13) Turn the No. 6 Guide and perform the height adjustment.

Note: At this time, if the No. 6 Guide is raised too much, the wrinkles may occur between the Capstan Shaft and No. 5 Guide (A' portion). Check that the wrinkles are not occur. (fig. 9)

- (14) Turn and *lock the Guide Lower Gear clockwise with the NO. 6 guide lock tool.

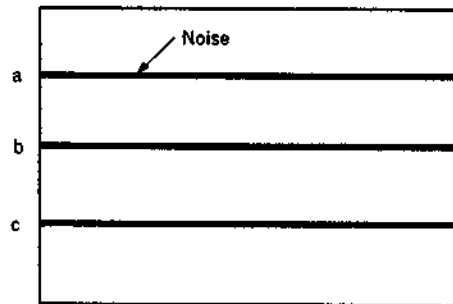
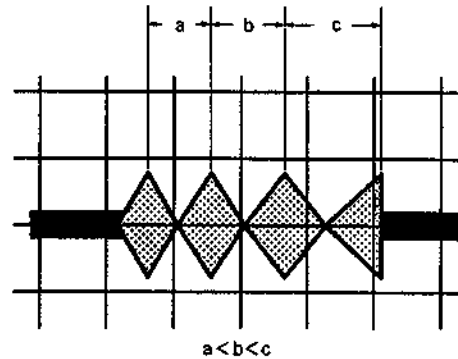
*Touch the Guide Lower Gear against the lower flange of the No. 6 Guide and turn it more about 10 degrees.

Note: After adjustment, perform the Tracking Check referring to Section 7-4-6-1.

When the waveform is not flat.

- (15) Perform the height adjustment of the No. 4 and No. 5 Guides referring to Section 7-4-5.

Note: After adjustment, perform the Tracking Check referring to Section 7-4-6-1.



Screen

Fig. 7

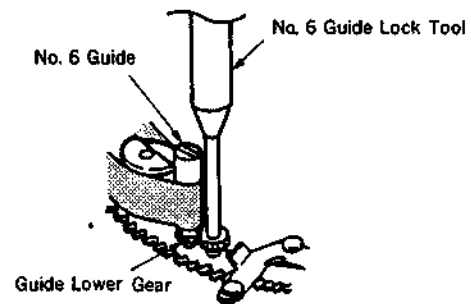


Fig. 8

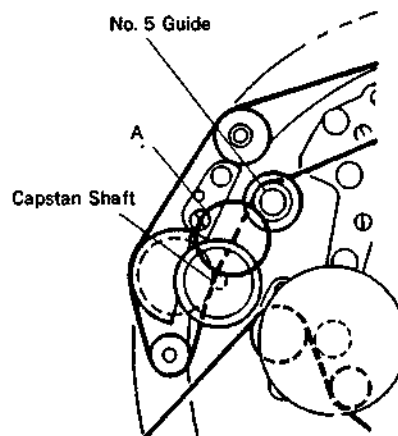


Fig. 9

2. Rising Edge of Waveform Check

- (1) Check that the RF waveform rises horizontally (flat waveform) in playback after threading is completed, playback after CUE/REV or FF mode. If the RF waveform do not rise horizontally (flat waveform), adjust as follows.

In case of the noise occurs at the exit side (lower of screen) at the rising edge of the playback, after threading is completed. (fig. 11)

- (2) Check that the FWD Back Tension.

When the FWD Back Tension is too low.

- (3) Adjust again referring to FWD Back Tension Adjustment of Section 7-3-5.

When the FWD Back Tension is normal.

- (4) While adjusting the waveform at the rising edge of the playback, turn the azimuth screw of the Pinch Roller clockwise about 5 degrees step. Then check the rising edge of waveform.

In case of the noise occurs at the exit side (lower of screen) at the rising edge of the playback after REV mode. (fig. 11)

- (5) Turn and loosen the Guide Lower Gear counterclockwise with No. 6 guide lock tool. (fig. 8)

- (6) Turn the No. 6 Guide and perform the height adjustment.

Note: At this time, if the No. 6 Guide is raised too much, the wrinkles may occur between the Capstan Shaft and No. 5 Guide(A portion). Check that the wrinkles are not occur. (fig. 9)

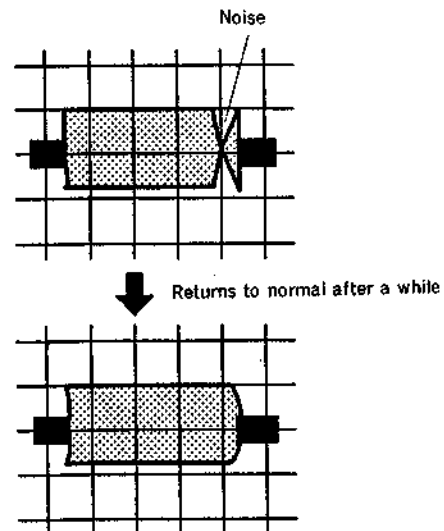


Fig. 11

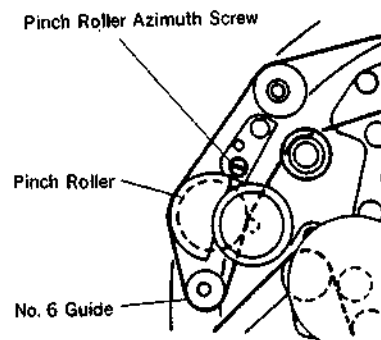


Fig. 12

In case of the noise occurs at the exit side (lower of screen) at the start of the playback after FF mode. (fig. 11)

(7) Check that the FWD Back Tension.

When the FWD Back Tension is too low.

(8) Adjust again referring to FWD Back Tension Adjustment of Section 7-3-5.

When the FWD Back Tension is normal.

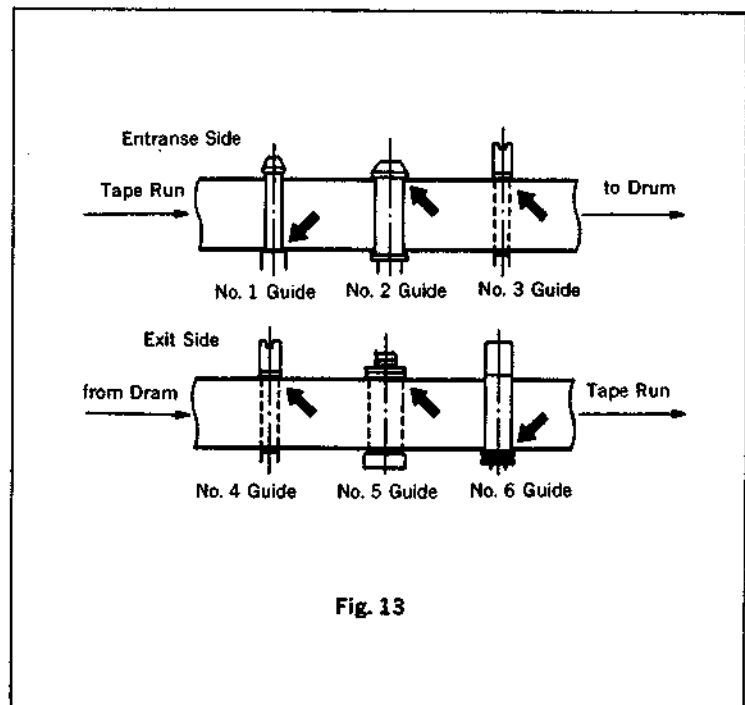
(9) While adjusting the waveform at the rising edge of the playback, turn the azimuth screw of the Pinch Roller clockwise about 5 degrees step. Then check the rising edge of waveform. (fig. 12)

Note: After adjustment, be sure to check that waveform again at the rising edge of the playback after threading is completed.

3. Tape Running Check

Check the tape running at the flange of the Guides (shown by arrows) in PLAY and REV modes.

- | | | |
|-------------|-----|--|
| No. 1 Guide | ... | Tape runs in contact with upper or lower flange. If tape curl exist, less than 0.3mm at the tape curl is acceptable. |
| No. 2 Guide | ... | Tape runs in contact with upper or lower flange without curl. |
| No. 5 Guide | ... | Tape runs in contact with upper flange. If tape curl exists, less than 0.5mm of tape curl is acceptable. |
| No. 3 Guide | ... | |
| No. 6 Guide | ... | |
| No. 4 Guide | ... | |



**SECTION 8
ELECTRICAL ADJUSTMENT**

8-1. POWER SUPPLY ADJUSTMENT

8-1-1. Equipment Required

- Digital voltmeter

8-1-2. UNSW 5V Adjustment

Machine condition for adjustment	Specifications	Adjustments
• STANDBY mode	CN012-2/IG-14 5.4 ± 0.1Vdc	⊗ VR203/ POWER BLOCK

8-1-3. REG +5V Adjustment

Machine condition for adjustment	Specifications	Adjustments
• E-E mode	CN012-5/IG-14 5.2 ± 0.1Vdc	⊗ VR202/ POWER BLOCK

8-1-4. REG +9V Adjustment

Machine condition for adjustment	Specifications	Adjustments
• E-E mode	CN012-10/IG-14 9.0 ± 0.1Vdc	⊗ VR201/ POWER BLOCK

8-2. SERVO SYSTEM ADJUSTMENT

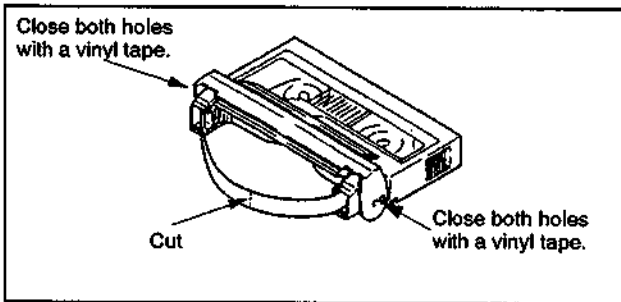
8-2-1. Equipment Required

- Oscilloscope
- Frequency counter
- Digital voltmeter
- Alignment tape

Name (Part No.)	REC mode	Tape Type	Tape Speed	Contents	
				Video Area	PCM Area
SP operation check WR5-8CSE (8-967-995-48)	Hi8	ME	SP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) 400 Hz: 20 min.
LP operation check WR5-8CLE (8-967-995-57)	Hi8	ME	LP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) 400 Hz: 40 min.
Tracking check WR5-1CP (8-967-995-07)	STD	MP	SP	CH2: 1MHz tape path adjustment signal switching position adjustment marker (CH1: 9 MHz)	

• Empty cassette (See below.)

1. Draw out a tape and cut it.
2. Cover two holes on both side of the cassette with a vinyl tape.

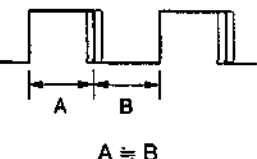


8-2-2. DS Clock Check

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: color-bar signal • STOP mode 	<p>TP107/SE-10P (C-5)</p> <p>Level=more than 2.5 Vp-p Frequency=4433619 ± 300 Hz</p>	

8-2-3. Capstan FG Duty Adjustment

When adjusting the MD-23P board, remove CN902 (12 Pin) and CN903 (13 Pin) on the SE-10P board then remove the mechanical block (core block) from the chassis. The VTR is operated by pressing the buttons on the MB-19P board.

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect each TP001 AND TP002 on the SE-10P board to ground with jumper wires. • Insert the empty cassette tape and put the machine into the play back mode. • After adjustment, remove the jumper wires. 	TP105/SE-10P (D-4)  $A \approx B$	● RV801/MD-23P (D-3)

8-2-4. Reel FG Adjustment

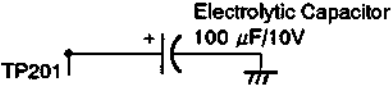
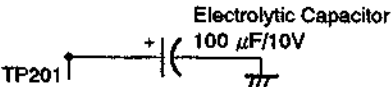
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the alignment tape WR5-8CLE. 	TP901/MD-23P (G-1) $21 \pm 1 \text{ Hz}$	● RV901/MD-23P (G-1)
<ul style="list-style-type: none"> • Perform confirmation while playing back the alignment tape WR5-8CLE. 	TP902/MD-23P (E-1) $1.0 \text{ through } 1.4\text{Vdc}$	
<ul style="list-style-type: none"> • Perform confirmation while playing back the alignment tape WR5-8CLE with CUE (×9) mode. CUE (×9): After pressing the PB button, press the FF button on the MB-19P Board. 	TP901/MD-23P (G-1) $37 \text{ through } 50 \text{ Hz}$ TP902/MD-23P (E-1) $1.4 \text{ through } 1.9\text{Vdc}$	

Note: After adjustment, install the mechanical block.

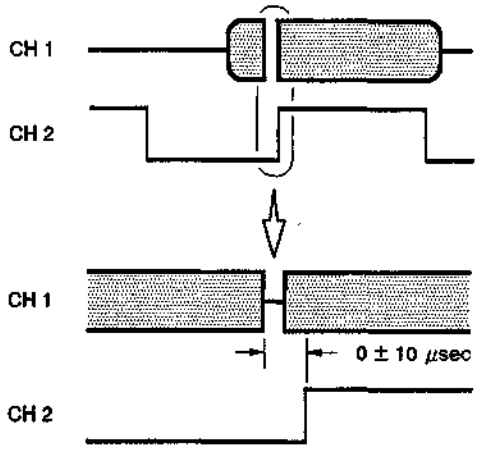
8-2-5. Drum Free Speed Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal • Use the Hi8 MP tape. • REC mode 	TP101/SE-10P (D-6) $1.9 \pm 0.1\text{Vdc}$	● RV102/SE-10P (E-6)

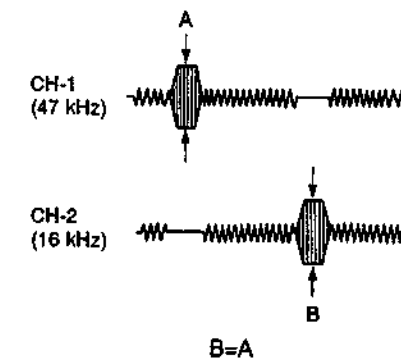
8-2-6. Capstan Free Speed Adjustment

Machine condition for adjustment	Specifications	Adjustments
<p>Step 1 (SP mode)</p> <ul style="list-style-type: none"> • Connect TP201/SE-10P (H-3) to ground with electrolytic capacitor (100 μF/10V) during STOP mode.  <ul style="list-style-type: none"> • Connect TP002/SE-10P (D-6) to ground with jumper wire during STOP mode. • Play back the alignment tape WR5-8CSE. • After adjustment, remove the jumper wire and capacitor. 	<p>TP105/SE-10P (D-4)</p> <p>1341 \pm 1 Hz</p>	<p>● RV106/SE-10P (D-5)</p>
<p>Step 2 (LP mode)</p> <ul style="list-style-type: none"> • Connect TP201/SE-10P (H-3) to ground with electrolytic capacitor (100 μF/10V) during STOP mode.  <ul style="list-style-type: none"> • Connect TP002/SE-10P (D-6) to ground with jumper wire during STOP mode. • Connect pin 4 of CN901/SE-10P (A-5) to ground with jumper wire during STOP mode. • Play back the alignment tape WR5-8CSE. • After adjustment, remove the jumper wire and capacitor. 	<p>TP105/SE-10P (D-4)</p> <p>670 \pm 1 Hz</p>	<p>● RV105/SE-10P (D-5)</p>

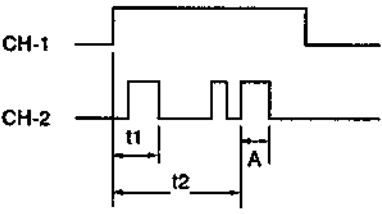
8-2-7. Switching Position Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the alignment tape WR5-1CP. 	<p>CH-1: CN004-4/FR-43 (A-2) CH-2: CN004-2/FR-43 (A-2)</p>  <p>TRIG: CN004-2/FR-43 (A-2)</p>	<p>RV101/SE-10P (C-6)</p>

8-2-8. ATF BPF Balance Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect TP208/SE-10P (H-3) to ground with jumper wire. • VIDEO IN : color-bar signal • Perform the self-recording /play back with a Hi8 ME tape. • After adjustment, remove the jumper wire. 	<p>CH-1: IC201-7/SE-10P (G-4) CH-2: IC201-6/SE-10P (G-4)</p>  <p>B=A</p> <p>TRIG: TP103/SE-10P (F-3)</p>	<p>RV201/SE-10P (G-4)</p>

8-2-9. STILL Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN : color-bar signal • Perform the self-recording/play back with a Hi8 ME tape. • Put the unit into the PAUSE mode and measure the pulse width of A portion. • Advance one frame and perform adjustment if the pulse width of A is narrow. If it is wide, advance the frame for one more frame and perform adjustment by observing narrower pulse width. 	CH-1: TP103/SE-10P (F-3) CH-2: TP204/SE-10P (F-5)  $t1 = 4.8 \pm 0.1 \text{ msec}$ $t2 = 13.6 \pm 0.1 \text{ msec}$	t1 Ⓞ RV203/SE-10P (H-3) t2 Ⓞ RV204/SE-10P (H-3) TRIG: TP103/SE-10P (F-3)

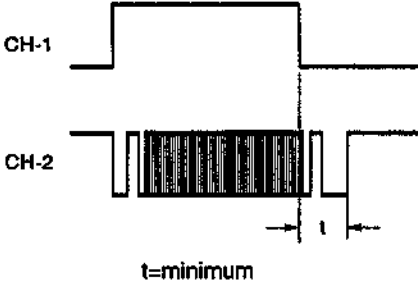
8-2-10. Recoder Slow Tracking Center Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Set the slow adjustment control (RV004/FB-170) to the center click position. 	Step 1 Measure DC voltage (A) of W006-1/FB-170 (F-4). Step 2 Decrease the DC voltage (B) of W007-10/FB-170 (G-4) to the half of DC voltage (A) with RV003. $B = \frac{A}{2} \pm 0.01 \text{ (Vdc)}$	Ⓞ RV003/FB-170 (H-4)

8-2-11. Player Slow Tracking Center Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Set the slow adjustment control (RV101/FB-171) to the center click position. 	Step 1 Measure DC voltage (A) of CN104-5/FB-171 (F-3). Step 2 Decrease the DC voltage (B) of W102-10/FB-171 (D-4) to the half of DC voltage (A) with RV102. $B = \frac{A}{2} \pm 0.01 \text{ (Vdc)}$	Ⓞ RV102/FB-171 (C-4)

8-2-12. SP Slow Adjustment

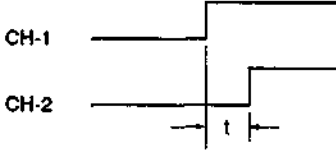

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN : color-bar signal • Using P5-MP series tape, perform the short recording of the color-bar signal at the end of tape. • Connect TP001/SE-10P (C-2) to ground with jumper wire. • Playback the recorded portion with SLOW (×1/5 speed) mode. • When the noise appears on the monitor screen, adjust RV104 temporarily. • When the noise appears on the monitor screen, adjust RV104 so that noise at the bottom of the screen disappears. • After adjustment, remove the jumper wire. 	<p>CH-1: TP302/SE-10P (F-3) CH-2: TP105/SE-10P (D-4)</p> 	<ul style="list-style-type: none"> ● RV304/SE-10P (E-2) ● RV104/SE-10P (D-5) <p>TRIG: TP302/SE-10P (F-3)</p>

8-2-13. LP Slow Adjustment

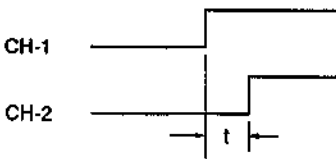
Note: This adjustment should be performed after completion of "8-2-12. SP Slow Adjustment".

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect pin 4 of CN901/SE-10P (A-5) to ground with jumper wire. • VIDEO IN : color-bar signal • Perform the a short recording of the color-bar signal at the end of P5-MP series tape. • Connect TP001/SE-10P (C-2) to ground with jumper wire. • Playback the recorded portion with SLOW (×1/5 speed). • After adjustment, remove jumper wires. 	<p>Adjust RV103 so that the noise at the bottom of the screen disappears.</p>	<ul style="list-style-type: none"> ● RV103/SE-10P (E-5)

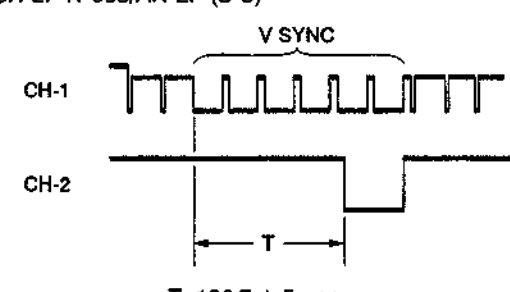
8-2-14. SP Slow fh Adjustment

Machine condition for adjustment	Specifications	Adjustments
<p>Step 1</p> <ul style="list-style-type: none"> Perform the short recording of the color-bar signal with a Hi8 ME tape. Play back the recorded portion with SLOW (×1/30 speed). <p>SLOW (×1/30 speed): Short-circuit pin 5 of CN901/SE-10P (A-5) to ground for one second with 6.2kΩ resistor.</p>	<p>CH-1: TP103/SE-10P (F-3) CH-2: TP102/SE-10P (D-5)</p>  <p>$t=580 \pm 10 \mu\text{sec}$</p>	<p>RV301/SE-10P (F-1)</p>
<p>Step 2</p> <ul style="list-style-type: none"> Perform the short recording of the color-bar signal with a Hi8 ME tape. Play back the recorded portion with SLOW (×1/5 speed). <p>SLOW (×1/5 speed): Press SLOW button or short-circuit pin 5 of CN901/SE-10P (A-5) to ground for one second with 3.6kΩ resistor.</p>	<p>TP301/SE-10P (E-2)</p>  <p>$V=1.5 \pm 0.1 \text{ Vdc}$</p>	<p>RV303/SE-10P (E-1)</p>


8-2-15. LP Slow fh Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> Connect pin 4 of CN901/SE-10P (A-5) to GND with jumper wire. (LP mode) Perform the short recording of the color-bar signal with a Hi8 ME tape. Play back the recorded portion with SLOW (×1/5 speed). 	<p>CH-1: TP103/SE-10P (F-3) CH-2: TP102/SE-10P (D-5)</p>  <p>$t=580 \pm 10 \mu\text{sec}$</p>	<p>RV302/SE-10P (F-2)</p>

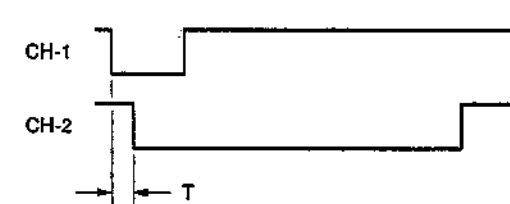
8-2-16. REF VD Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	CH-1: TP002/AN-2P (F-2) CH-2: TP003/AN-2P (D-5)  $T = 136.7 \pm 5 \mu\text{sec}$	<ul style="list-style-type: none"> ⊗ RV001/AN-2P (D-5)

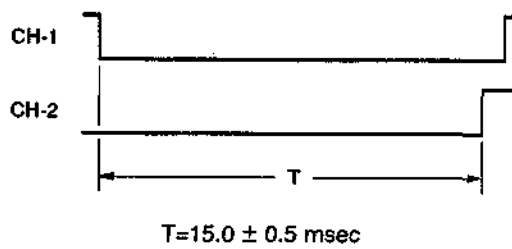
8-2-17. REF V A Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	CH-1: TP005/MC-81 (B-5) CH-2: TP006/MC-81 (B-5)  $T = 18.0 \pm 0.5 \text{ msec}$	<ul style="list-style-type: none"> ⊗ RV001/MC-81 (A-5)

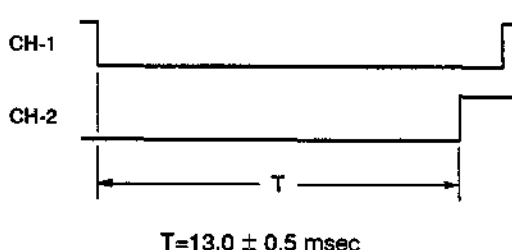
8-2-18. REF V B Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	CH-1: TP005/MC-81 (B-5) CH-2: TP007/MC-81 (C-5)  $T = 108 \pm 5 \mu\text{sec}$	<ul style="list-style-type: none"> ⊗ RV002/MC-81 (B-5)

8-2-19. B WINDOW Adjustment

Machine condition for adjustment	Specifications	Adjustments
• VIDEO IN: Color-bar signal	CH-1: TP008/MC-81 (D-5) CH-2: TP009/MC-81 (D-4)  $T = 15.0 \pm 0.5 \text{ msec}$	Ⓞ RV003/MC-81 (D-5)

8-2-20. A WINDOW Adjustment

Machine condition for adjustment	Specifications	Adjustments
• VIDEO IN: Color-bar signal	CH-1: TP010/MC-81 (F-5) CH-2: TP011/MC-81 (D-5)  $T = 13.0 \pm 0.5 \text{ msec}$	Ⓞ RV004/MC-81 (E-5)

8-2-21. Picture Splitting Adjustment

Machine condition for adjustment	Specifications	Adjustments
	Set RV802 and RV803 on the MD-23P board to the mechanical center position,	Ⓞ RV802/MD-23P (A-2) Ⓞ RV803/MD-23P (A-2)

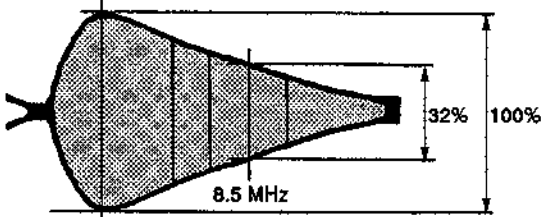
8-3. VIDEO SIGNAL SYSTEM ADJUSTMENT

8-3-1. Equipment Required

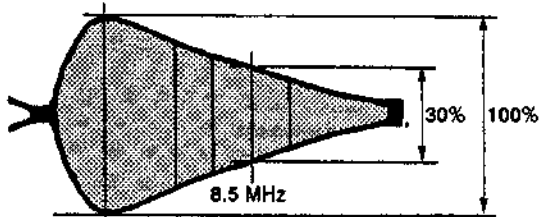
- Oscilloscope
- Frequency counter
- Pattern generator
- Digital voltmeter

Name (Part No.)	REC mode	Tape Type	Tape Speed	Contents	
				Video Area	PCM Area
Video freq. resp. WR5-7CE (8-967-995-18)	Hi8	ME	LP	RF sweep 0 to 15 MHz Marker: 2.0 MHz 4.5 MHz 7.0 MHz 8.5 MHz 10.0 MHz	
SP operation check WR5-5CSP (8-967-995-47)	STD	MP	SP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) • Monoscope Section 20 Hz: 20 sec. 400 Hz: 20 sec. 14 kHz: 20 sec. • Color-Bar Section 1 kHz: 4 min.
SP operation check WR5-8CSE (8-967-995-48)	Hi8	ME	SP		AUDIO SIGNAL (PCM) 400 Hz: 20 min.
LP operation check WR5-8CLE (8-967-995-57)	Hi8	ME	LP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	

8-3-2. SP PB Frequency Response Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect TP104/SE-10P (D-4) to ground with a jumper wire. • Play back the alignment tape WR5-7CE. • After adjustment, remove the jumper wire. 	<p>CN004-3/FR-43 (A-2)</p>  <p>2 MHz 8.5 MHz=32 ±1% (in reference to 2 MHz)</p>	<p>RV004/RP-103 (SP)</p> <p>TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: -</p>
	<p>CN004-4/FR-43 (A-2)</p> <p>8.5 MHz=32 ±1% (in reference to 2 MHz)</p>	<p>RV003/RP-103 (SP)</p> <p>TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: +</p>

8-3-3. LP PB Frequency Response Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the alignment tape WR5-7CE. 	<p>CN004-5/FR-43 (A-2)</p>  <p>2 MHz 8.5 MHz=30 ±4% (in reference to 2 MHz)</p>	<p>RV004/RP-73 (LP)</p> <p>TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: +</p>
	<p>CN004-6/FR-43 (A-2)</p> <p>8.5 MHz=30 ±4% (in reference to 2 MHz)</p>	<p>RV003/RP-73 (LP)</p> <p>TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: -</p>

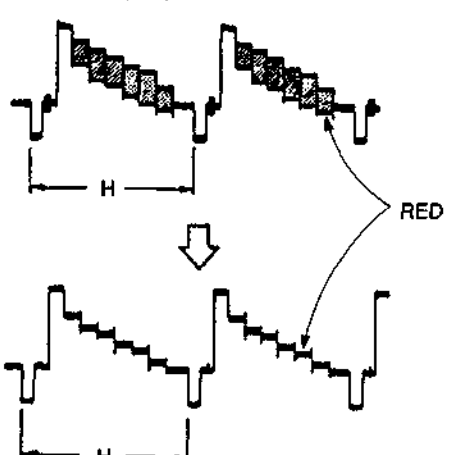
8-3-4. Flying Erase Confirmation

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN : color-bar signal • Use a Hi8 ME tape. • REC mode 	<p>TP041/FR-43 (C-1)</p> <p>8.0 ± 0.5 MHz</p>	

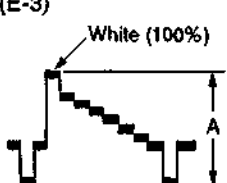
8-3-5. SubCarrier Frequency Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: no signal • PB mode 	CN914-7/HK-5 (H-3) $4433618 \pm 50 \text{ Hz}$	● CV601/HK-5 (B-4)

8-3-6. PB C Comb Filter Adjustment

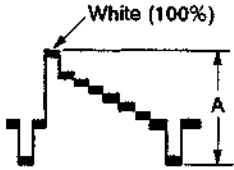
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • When adjusting the recorder, disconnect CN911/HK-5 (H-2). • Supply the composite color-bar signal (Y=0.5 Vp-p, burst=0.15 Vp-p) to CN911-4/HK-5 (H-2). • E-E mode • After adjustment, connect the CN911. 	IC501-26/HK-5 (B-3)  <p>Minimize residual chroma component at RED portion (30 mVp-p or less)</p>	● RV502/HK-5 (B-2) ● LV501/HK-5 (D-3)

8-3-7. SYNC AGC Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: color-bar signal • E-E mode 	TP402/HK-5 (E-3)  <p>$A = 0.50 \pm 0.02 \text{ Vp-p}$</p>	● RV302/HK-5 (E-1)

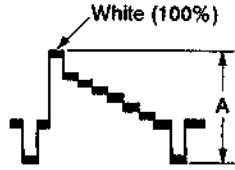
Note: This adjustment is not required for the player.

8-3-8. AGC Output Level Adjustment


Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: color-bar signal • E-E mode 	TP301/HK-5 (D-3)  $A=0.50 \pm 0.02 \text{ Vp-p}$	Ⓞ RV405/HK-5 (C-1)

Note: This adjustment is not required for the player.

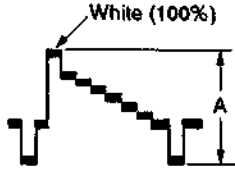
8-3-9. STD Mode PB Y Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar signal portion of the alignment tape WR5-5CSP. 	TP302/HK-5 (D-3)  $A=0.50 \pm 0.02 \text{ Vp-p}$	Ⓞ RV304/HK-5 (E-3)

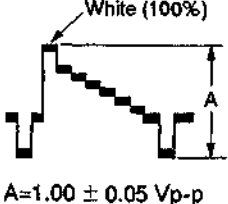
8-3-10. PB De-emphasis Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar signal portion of the alignment tape WR5-5CSP. 	TP302/HK-5 (D-3)  100% white level=makes flat	Ⓞ RV303/HK-5 (D-2)

8-3-11. HI8 Mode PB Y Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar signal portion of the alignment tape WR5-8CSE. 	TP302/HK-5 (D-3)  $A=0.50 \pm 0.02 \text{ Vp-p}$	Ⓞ RV305/HK-5 (E-3)

8-3-12. E-E Y Output Level Adjustment

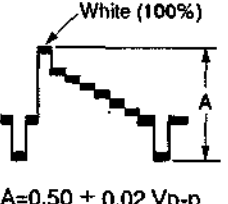
At recorder adjustment:	• VIDEO IN: color-bar signal	Machine condition for
At recorder adjustment: • VIDEO IN: color-bar signal • E-E mode	TP303/HK-5 (E-1)	● RV301/HK-5 (E-1)
At player adjustment: • Play back the color-bar portion of the alignment tape WR5-8CSE.	 <p>A=1.00 ± 0.05 Vp-p</p>	

8-3-13. STD Mode Y FM Carrier Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: no signal • Use a P5-MP series tape. • E-E mode 	TP401/HK-5 (D-3) 4.37 ± 0.02 MHz	● RV402/HK-5 (D-2)

Note: This adjustment is not required for the player.

8-3-14. STD Mode Y FM Deviation Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: color-bar signal • Perform the self-recording/play back with a P5-MP series tape. 	TP302/HK-5 (D-3)  <p>A=0.50 ± 0.02 Vp-p</p> <ul style="list-style-type: none"> • Repeat recording and play back several times until the level meets the specification. Adjust the RV403 during recording. 	● RV403/HK-5 (E-2) When turning in the clockwise direction, the level decreases.

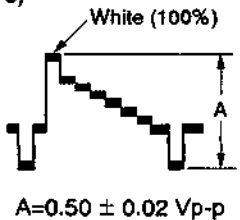
Note: This adjustment is not required for the player.

8-3-15. Hi8 Mode Y FM Carrier Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: no signal • Use Hi8 ME tape. • E-E mode 	TP401/HK-5 (D-3) 5.95 ± 0.02 MHz	● RV401/HK-5 (D-2)

Note: This adjustment is not required for the player.

8-3-16. Hi8 Mode Y FM Deviation Adjustment


Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: color-bar signal • Perform the self-recording/play back with a Hi8 ME tape. 	<p>TP302/HK-5 (D-3)</p>  <p>$A=0.50 \pm 0.02 \text{ Vp-p}$</p> <ul style="list-style-type: none"> • Repeat recording and play back several times until the level meets the specification. Adjust RV404 during recording. 	<p>RV404/HK-5 (D-2)</p> <p>When turning in the clockwise direction, the level decreases.</p>

Note: This adjustment is not required for the player.


8-3-17. 375fH VCO Adjustment

Machine condition for adjustment	Specifications	Adjustments
<p>At recorder adjustment:</p> <ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • E-E mode 	<p>IC602-26/HK-5 (B-4)</p> <p>$3.0 \pm 0.1 \text{ Vdc}$</p>	<p>RV601/HK-5 (A-4)</p>
<p>At player adjustment:</p> <ul style="list-style-type: none"> • Play back the alignment tape WR5-5CSP or WR5-8CSE 		

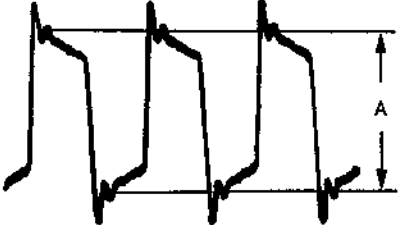
8-3-18. Chroma Emphasis fo Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect pin 47 of IC602 to Pin 7 of CN102/HK-5 (F-6) via 10 k ohm resistor. • Connect pin 47 of IC602 to ground via 10 k ohm resistor. • VIDEO IN: color-bar signal • E-E mode • After adjustment, remove the resistor. <p>Note: When adjusting the player, input the composite color-bar signal ($Y=0.5 \text{ Vp-p}$, burst=0.15 Vp-p) into CN911-4/HK-5 (H-2), then connect a capacitor of $0.01 \mu\text{F}$ between CN911-2/HK-5 (H-2) and IC601-16/HK-5 (A-5). After adjustment, disconnect them.</p>	<p>IC601-11/HK-5 (A-5)</p>  <p>C (chroma component)=minimum</p>	<p>T602/HK-5 (B-6)</p>

8-3-19. Carrier Balance Adjustment

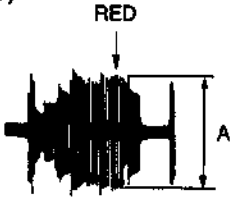
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • E-E mode <p>Note: When adjusting the player, input the composite color-bar signal ($Y=0.5$ Vp-p, burst=0.15 Vp-p) into CN911-4/HK-5 (H-2), then connect a capacitor of 0.01 μF between CN911-2/HK-5 (H-2) and IC601-16/HK-5 (A-5). After adjustment, disconnect them.</p>	<p>IC602-40/HK-5 (B-4)</p>  <p>A (5.17 MHz component)=minimum</p>	<p>RV602/HK-5 (A-5)</p>

8-3-20. REC Y RF Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: no signal • Use a P5-MP tape • E-E mode 	<p>TP201/HK-5 (D-6)</p>  <p>A=0.50 \pm 0.02 Vp-p</p>	<p>RV202/HK-5 (D-5)</p>

Note: This adjustment is not required for the player.

8-3-21. REC C RF Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Perform following connections. <ul style="list-style-type: none"> Q211-emitter (F-5) \leftrightarrow Pin 7 of CN102/HK-5 (F-6) CN101-3 (C-6) \leftrightarrow ground Q608-emitter (D-5) \leftrightarrow ground • VIDEO IN: color-bar signal • Use a Hi8 ME tape • E-E mode • After adjustment, remove the jumper wires. 	<p>TP201/HK-5 (F-5)</p> <p>RED</p>  <p>A=100 \pm 10m Vp-p</p>	<p>RV201/HK-5 (C-5)</p>

Note: This adjustment is not required for the player.

8-3-22. SP REC Current Adjustment

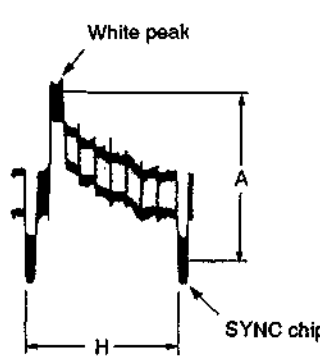
Machine condition for adjustment	Specifications	Adjustments
STEP 1 <ul style="list-style-type: none"> • VIDEO IN: No signal • Use Hi8 ME tape • REC mode 	CH1: TP001/FR-43 (A-1) CH2: CN004-2/FR-43 (A-2) A (VIDEO CH1)= 220 ± 10 mV B (PCM)= 220 ± 10 mV	VIDEO CH1 ● RV002/FR-43 (C-2) PCM ● RV002/RP103 TRIG: CN004-2/FR-43 (A-2)
STEP 2 <ul style="list-style-type: none"> • VIDEO IN: No signal • Use Hi8 ME tape • REC mode 	CH1: Pin 20 of PR-103 CH2: CN004-2/FR-43 (A-2) C(VIDEO CH2)= 220 ± 10 mV	VIDEO CH2 ● RV001/FR-43 (D-2) TRIG: CN004-2/FR-43 (A-2)

Note: 1) Adjust only RV002/RP-103 for the player. At this time, video input signal is not required.
 2) LP recording current adjustment (RV001, RV002/RP-73) is not required.


8-3-23. DOC Level Adjustmnt

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the alignment tape WR5-8CLE. 	Q182-3 (base)/HK-5 (H-3) $+1.85 \pm 0.01$ Vdc	● RV101/HK-5 (H-4)

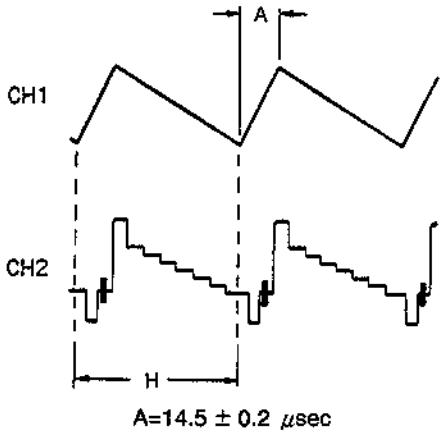
8-3-24. Comb AGC Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • E-E mode <p>Note: Be sure to connect a 22 kΩ of resistor in series between TP501 and 10:1 probe. When adjusting the player, input Y signal at 0.5 Vp-p to CN911-4/HK-5 (H-2).</p>	<p>TP501/HK-5 (C-2)</p>  <p>A=0 ± 100 mVp-p</p>	<p>RV501/HK-5 (B-2)</p>

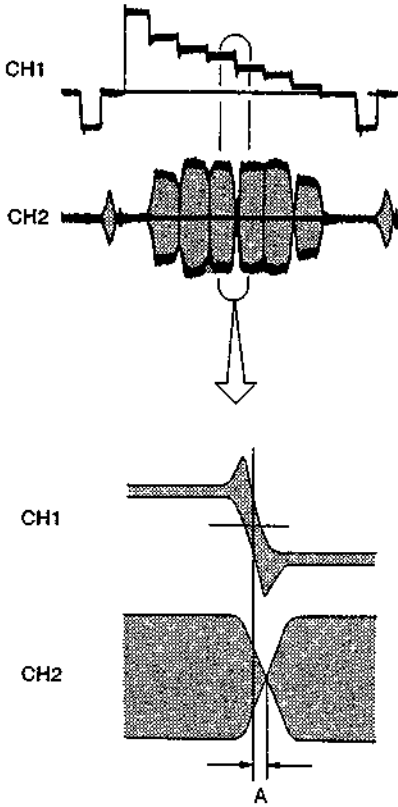
8-3-25. GCA GAIN Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the alignment tape WR5-8CSE. 	<p>IC801-22/HK-5 (A-3)</p>  <p>A=500 ± 25 mV</p>	<p>RV801/HK-5 (A-3)</p>

8-3-26. fh VCO Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • E-E mode <p>Note: Confirm that CH1 and CH2 waveform is stable.</p>	<p>CH1: IC801-13/HK-5 (A-3) CH2: TP303/HK-5 (E-1)</p>  <p style="text-align: center;">$A = 14.5 \pm 0.2 \mu\text{sec}$</p>	<p>RV802/HK-5 (A-3)</p>

8-3-27. Y/C DELAY Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color bar portion of the alignment tape WR5-8CSE. 	<p>CH1: TP303/HK-5 (E-1) CH2: TP801/HK-5 (A-1)</p>  <p style="text-align: center;">Minimize the A</p>	<p>RV700/HK-5 (H-5)</p>

8-4. VIDEO INPUT/OUTPUT CIRCUIT ADJUSTMENT

8-4-1. Instruments to be Used for Video Input/output Circuit Adjustment

- Pattern generator (with S VIDEO output terminal)
- Oscilloscope
- Monitor TV
- Digital voltmeter
- Alignment tapes

Name (Part No.)	REC mode	Tape Type	Tape Speed	Contents	
				Video Area	PCM Area
SP operation check WR5-8CSE (8-967-995-48)	Hi8	ME	SP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) 400 Hz: 20 min.

8-4-2. Switch Setting

Recorder input select video switch.....LINE

Recorder input select line switch


At video signal inputVIDEO

At S video signal input.....S VIDEO


8-4-3. Fsc Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal • Recorder: STOP mode 	TP201/YC-106 4.433618 ± 0.00002 MHz	<input checked="" type="radio"/> CV201/YC-106


8-4-4. Y Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • Recorder: STOP mode 	TP204/YC-106 White (100%)  $A=1.00 \pm 0.05$ Vp-p	<input checked="" type="radio"/> RV601/YC-106

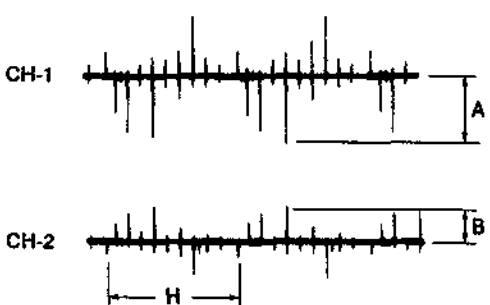
8-4-5. Chroma Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • Recorder: STOP mode 	<p>TP205/YC-106</p>  <p>$A=300 \pm 10 \text{ mVp-p}$</p>	<ul style="list-style-type: none"> • RV602/YC-106

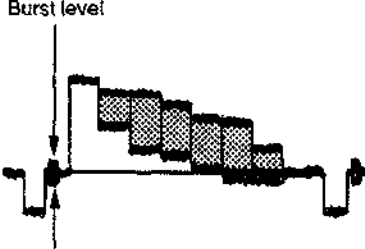
8-4-6. Y/C MIX Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • S VIDEO IN: Color-bar signal • VIDEO/S VIDEO select switch is set to S VIDEO position. • Recorder: STOP mode 	<p>TP005/AN-2P (A-3) White (100%)</p>  <p>$A=2.00 \pm 0.05 \text{ Vp-p}$ $B=600 \pm 30 \text{ mVp-p}$</p>	<p>Y level adjustment</p> <ul style="list-style-type: none"> • RV003/AN-2P (A-3) <p>Chroma level adjustment</p> <ul style="list-style-type: none"> • RV002/AN-2P (A-3)


8-4-7. Noise Cancel +6 dB Amplifier Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar section of alignment tape WR5-8CSE. • When adjusting the YX-2P (PB) board; play it back with player. • When adjusting the YX-2P (REC) board, play it back with recorder. 	<p>CH-1: IC002-1/YX-2P (E-3) CH-2: IC001-1/YX-2P (E-1)</p>  <p>Peak level $B \times 2 = \text{Peak level } A$</p>	<ul style="list-style-type: none"> • RV003/YX-2P (E-2)

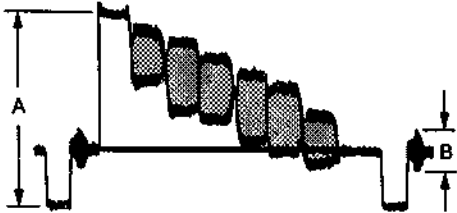
8-4-11. YX Filter Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> Disconnect CN001/YX-2P (C-1) and input the composite video signal at 30 mVp-p burst level to CN001/YX-2P (C-1). Connect CN002-1/YX-2P (B-1) and GND with a jumper wire. Play back the alignment tape WR5-8CSE. Turn RV206/YX-2P fully clockwise (○) seeing from component side. After adjustment, connect the CN001 and remove the jumper wire. 	<p>TP203/YX-2P (C-3)</p> 	<ul style="list-style-type: none"> RV202/YX-2P (C-3) RV203/YX-2P (B-3)
	<p>STEP 1 Set RV202 to the mechanical center position to minimize the burst level with RV203.</p>	
	<p>STEP 2 Turn RV202 fully clockwise (○) seeing from component side and measure the burst level at this time.</p>	
	<p>STEP 3 Slowly turn RV202 counterclockwise (○) and stop at the position where the burst level becomes 1/4.</p>	

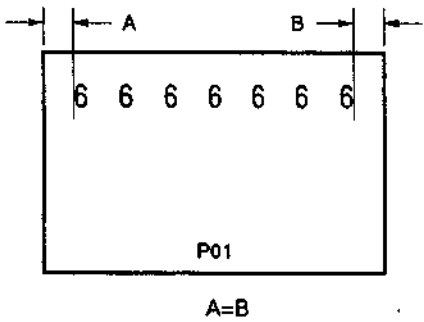
8-4-12. YX Filter Chroma Control Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> Play back the color-bar section of the alignment tape WR5-8CSE. When adjusting the YX-2P (PB) board, play it back with player. When adjusting the YX-2P (REC) board, play it back with recorder. 	<p>STEP 1 CH-1: TP207/YX-2P (A-2) (DC range) CH-2: TP207/YX-2P (A-2) (DC range)</p> <p>Overlap the waveforms of CH-1 and CH-2 with the position knob of oscilloscope.</p>	<ul style="list-style-type: none"> RV206/YX-2P (A-1)
	<p>STEP 2 CH-1: TP207/YX-2P (A-2) (DC range) CH-2: TP206/YX-2P (A-1) (DC range)</p>  <p>Adjust RV206 to be A=B. Level difference: 20% below</p>	

8-4-13. Y/C Mix Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar section of the alignment tape WR5-8CSE. • When adjusting YX-2P (PB) board, play it back with player. • When adjusting YX-2P (REC) board, play it back with recorder. 	<p>TP208/YX-2P (A-1)</p>  <p>A=2.05 ± 0.05 Vp-p B=600 ± 30 mVp-p</p>	<p>Y level ● RV204/YX-2P (B-3)</p> <p>Chroma level ● RV205/YX-2P (B-3)</p>

8-4-14. Title Letter Position Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect the title keyboard and press the TITLE key. • Press the [6] key on the title keyboard, and display "6" one line on the monitor screen. 	 <p>P01 A=B</p>	<p>● CV001/MC-81 (A-2)</p>

8-5. DIGITAL PICTURE CIRCUIT ADJUSTMENT

8-5-1. Instruments to be Used for Digital Picture Circuit Adjustment

- Pattern generator
- Oscilloscope
- Frequency counter
- Digital voltmeter

8-5-2. Setting for Switch and Operation Mode

Recorder input select video switchLINE
 Recorder input select line switchVIDEO
 RecorderSTOP mode
 PlayerSTOP mode

8-5-3. AFC Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal • Connect pin 5 (G-3) of IC704 and pin 1 (B-1) of CN002 with 10 kΩ resistance. • Connect pins 10 (G-3) and 11 of IC704 with 1 MΩ resistance. • After the adjustment, remove the resistances of 10 kΩ and 1 MΩ. 	TP603 <u>YWCK</u> /MM-25 (G-2) 14.21875 \pm 0.05 MHz	Ⓒ CV701/MM-25 (G-2)

8-5-4. APC Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal 	TP606 <u>CWCK</u> /MM-25 (F-3) 17.734475 \pm 0.0005 MHz	Ⓒ CV705/MM-25 (F-2)

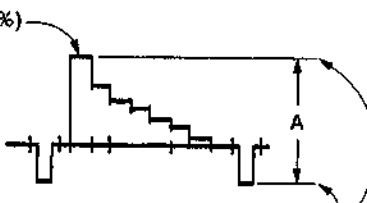
8-5-5. V-PLL Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal 	TP609 <u>YRCK</u> /MM-25 (C-2) 14.21875 \pm 0.0002 MHz	Ⓒ CV704/MM-25 (D-2)

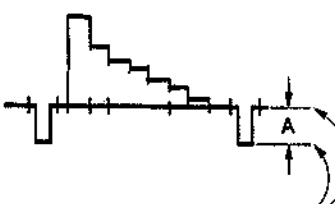
8-5-6. Chroma Encoder Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal 	TP607 <u>CRCK</u> /MM-25 (A-2) 17.734475 \pm 0.00025 MHz	Ⓒ CV703/MM-25 (B-2)

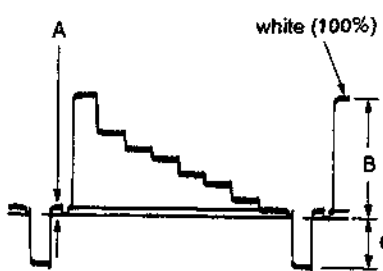
8-5-7. Y Input Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
• VIDEO IN: Color-bar signal	Q903 emitter/MM-25 (G-2)  White (100%) Center of the brightness section of luminance line. $A = 1.35 \pm 0.02V$	Ⓐ RV602/MM-25 (G-2)


8-5-8. Y Output Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
• VIDEO IN: Color-bar signal	CN003-5/MM-25 (A-1)  Center of the brightness section of luminance line. $A = 0.30 \pm 0.01V$	Ⓐ RV603/MM-25 (C-1)


8-5-9. Y Clamp Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
• VIDEO IN: Color-bar signal	CN003-5/MM-25 (A-1)  A=minimum B : C = 7 : 3 white (100%)	Ⓐ RV902/MM-25 (G-1)

8-5-10. Burst Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	<p>CN003-7/MM-25 (A-1)</p>  <p>A=300 ± 10 mVp-p</p>	<ul style="list-style-type: none"> • RV604/MM-25 (A-2)

8-5-11. C Output Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	<p>CN003-7/MM-25 (A-1)</p>  <p>A : B=1 : (2.2 ± 0.1)</p>	<ul style="list-style-type: none"> • RV601/MM-25 (F-1)

8-6. PICTURE IN PICTURE CIRCUIT ADJUSTMENT

8-6-1. Instruments to be Used for Picture in Picture Circuit Adjustment

- Oscilloscope
- Frequency counter
- Vectorscope

8-6-2. Setting for Switches and Operation Modes

Recorder input select video switchLINE
 Recorder input select line switchVIDEO
 Mode select switch (rear panel)B
 RecorderSTOP mode
 PlayerSTOP mode

8-6-3. Decoder Free-running Frequency Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal • Connect pin 27/PM-11P (E-1) of IC110 and pin 1/PM-11P (D-4) of CN103 with jumper wire. • After the adjustment, remove the jumper wire. 	IC110-18/PM-11P (E-1) $4433619 \pm 20 \text{ Hz}$	<input checked="" type="checkbox"/> CV103/PM-11P (D-1)

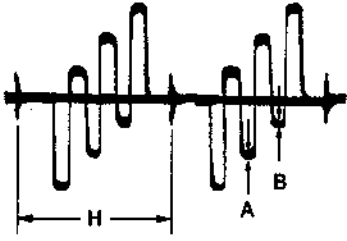
8-6-4. Encoder Free-running Frequency Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: No signal • Connect pin 18/PM-11P (E-3) of IC101 and pin 1/PM-11P (D-4) of CN103 with jumper wire. • After the adjustment, remove the jumper wire. 	IC101-19/PM-11P (E-3) $17734475 \pm 50 \text{ Hz}$	<input checked="" type="checkbox"/> CV101/PM-11P (F-3)

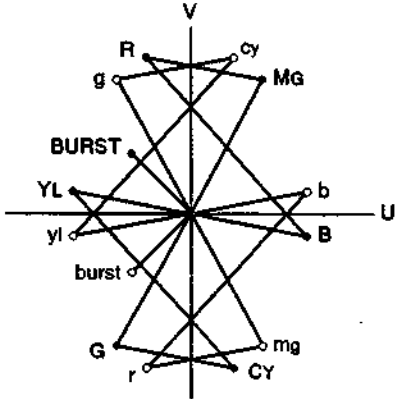
8-6-5. Write Clock Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • Connect pin 6/PM-11P (G-4) of IC105 to ground with jumper wire. • Remove the jumper wire after the adjustment. 	IC105-1/PM-11P (G-3) $4.80 \pm 0.03 \text{ MHz}$	<input checked="" type="checkbox"/> CV102/PM-11P (G-3)

8-6-6. Tint Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	<p>IC112-5/PM-11P (E-1)</p>  <p>A=minimum B=minimum</p>	<ul style="list-style-type: none"> ● RV103/PM-11P (D-2)

8-6-7. Hue and Chroma Level Adjustments

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	<p>Video monitor out/rear panel</p> <p>Phase difference=$0 \pm 5^\circ$ Gain difference=$0 \pm 5\%$</p>  <ul style="list-style-type: none"> • Adjust RV101 and RV102 alternately to match the color luminance points of main and sub pictures. 	<p>Hue adjustment</p> <ul style="list-style-type: none"> ● RV101/PM-11P (E-2) <p>Chroma level adjustment</p> <ul style="list-style-type: none"> ● RV102/PM-11P (E-2)

8-7. AUDIO SIGNAL SYSTEM ADJUSTMENT

8-7-1. Equipment Required

- Oscilloscope
- Frequency counter
- Audio signal generator
- Audio level meter
- Pattern generator (for video input)
- Alignment tape

Name (Part No.)	REC mode	Tape Type	Tape Speed	Contents	
				Video Area	PCM Area
SP operation check WR5-8CSE (8-967-995-48)	Hi8	ME	SP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) 400 Hz: 20 min.
LP operation check WR5-8CLE (8-967-995-57)	Hi8	ME	LP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) 400 Hz: 20 min.

8-7-2. PCM Master Clock Adjustment

Note: Before adjustment, remove the PA-27 board.

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect pin 14 of IC853/PD-19P (A-1) and pin 11 of CN852/PD-19P (B-3) with jumper wire. • E-E mode • After the adjustment, remove jumper wire. 	IC853-8/PD-19P (A-1) 11.45 ± 0.01 MHz	Ⓐ RV851/PD-19P (A-2)

8-7-3. PCM Playback VCO Free-Frequency Adjustment

Note: Before adjustment, remove the PA-27 board.

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect pin 9 of CN851/PD-19P (B-1) and pin 11 of CN852/PD-19P (C-3) with jumper wire. • Connect pins 7 and 8 of CN852/PD-19P (C-3) with jumper wire. • E-E mode • After the adjustment, remove jumper wires. 	IC854-8/PD-19P (A-2) 11.58 ± 0.05 MHz	Ⓐ RV854/PD-19P (A-2)

8-7-4. D/A Converter Level Adjustment

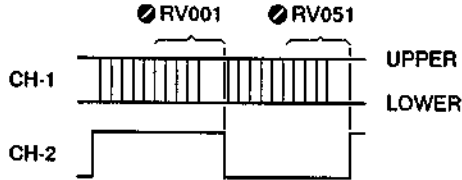
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> Play back the Audio 400 Hz portion of the alignment tape WR5-8CSE. 	CN001-16/PA-27 (A-2) -10.0 ± 0.2 dBs	Ⓐ RV032/PA-27 (A-1)

8-7-5. NR Decode Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> Play back the Audio 400 Hz portion of the alignment tape WR5-8CSE. 	CN001-20/PA-27 (A-3) -14.0 ± 0.5 dBs <ul style="list-style-type: none"> If adjustment value doesn't meet the specification, change the value of resistors as follows and perform adjustment again. R062 12k → 13k R012 12k → 13k <p>Note: Connect the level meter to pin 20 of CN001 through 100Ω resistance.</p>	Ⓐ RV031/PA-27 (C-1)

8-7-6. A/D Converter Offset Adjustment

Note: This adjustment is not required for the player.

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> Connect pin 8 of CN001/PA-27 (A-2) to pin 17 of CN001/PA-27 (A-2) with jumper wire. Connect pins 15 and 18 of CN001 with jumper wire. Connect pins 4 and 3 of CN001 with jumper wire. REC mode (no signal input) After adjustment, remove jumper wires. 	CH-1: CN001-11/PA-27 (A-2) CH-2: CN001-9/PA-27 (A-2)  <p>Adjust upper and lower brightnesses for the same.</p>	L-CH Ⓐ RV001/PA-27 (B-2) R-CH Ⓐ RV051/PA-27 (B-1)

8-7-7. PCM REC Level Adjustment

Note: 1) This adjustment should be performed after completion of "8-7-5. NR Decoded Level Adjustment".

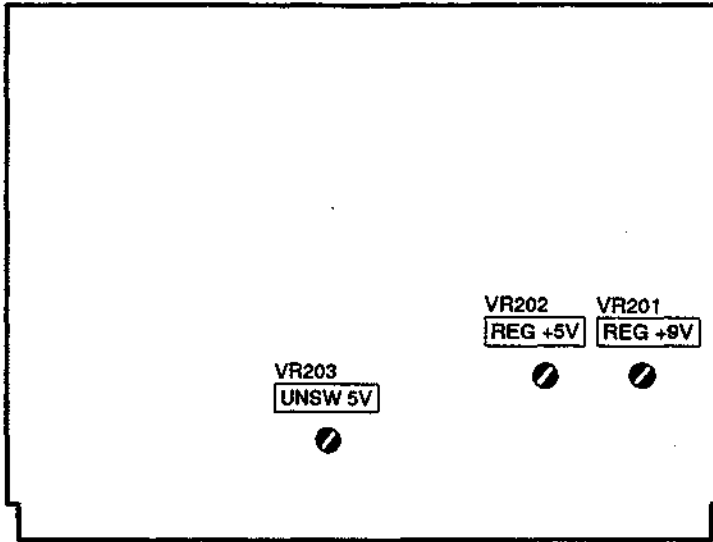
2) This adjustment is not required for the player.

3) Connect the level meter to pin 20 of CN001 or pin 1 of CN001 through 100Ω resistance.

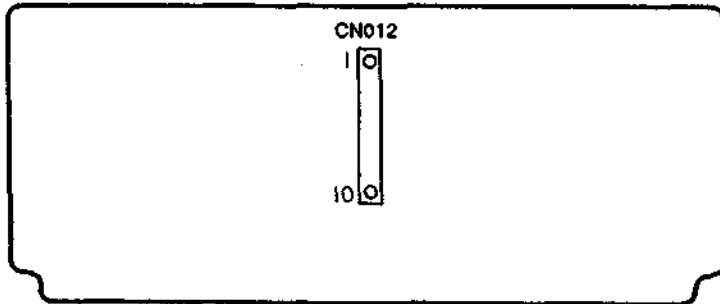
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • AUDIO LINE IN: 400 Hz/-7.5 dB • Set the recorder input select audio switch to LINE position. 	L-CH: CN001-20/PA-27 (A-3) -14.0 ± 0.1 dBs	L-CH ● RV002/PA-27 (B-3)
<ul style="list-style-type: none"> • Adjust the PCMREC level so that the signal levels of CN001-20/PA-27 (A-3) and CN001-1/PA-27 (A-1) become -18 dBs in the E-E mode. • Perform the self-recording/play back with a Hi8 ME tape. 	R-CH: CN001-1/PA-27 (A-1) -14.0 ± 0.1 dBs	R-CH ● RV052/PA-27 (B-1)

8-8. ADJUSTMENT RELATED PARTS ARRANGEMENT DIAGRAMS

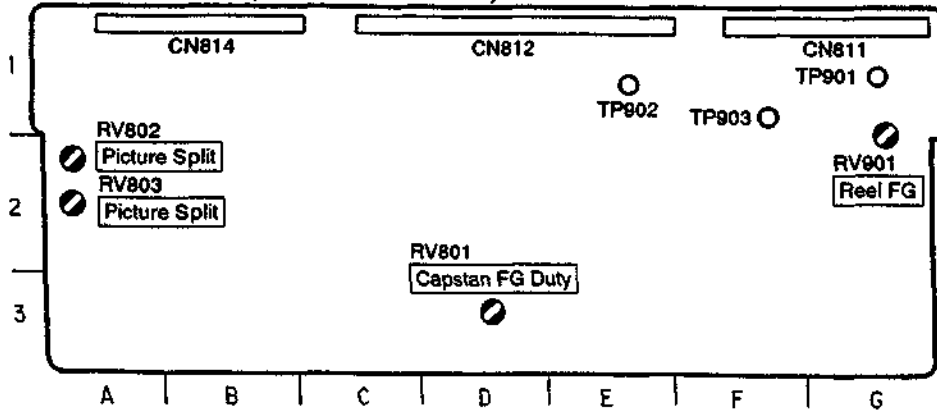
POWER BLOCK (COMPONENT SIDE)



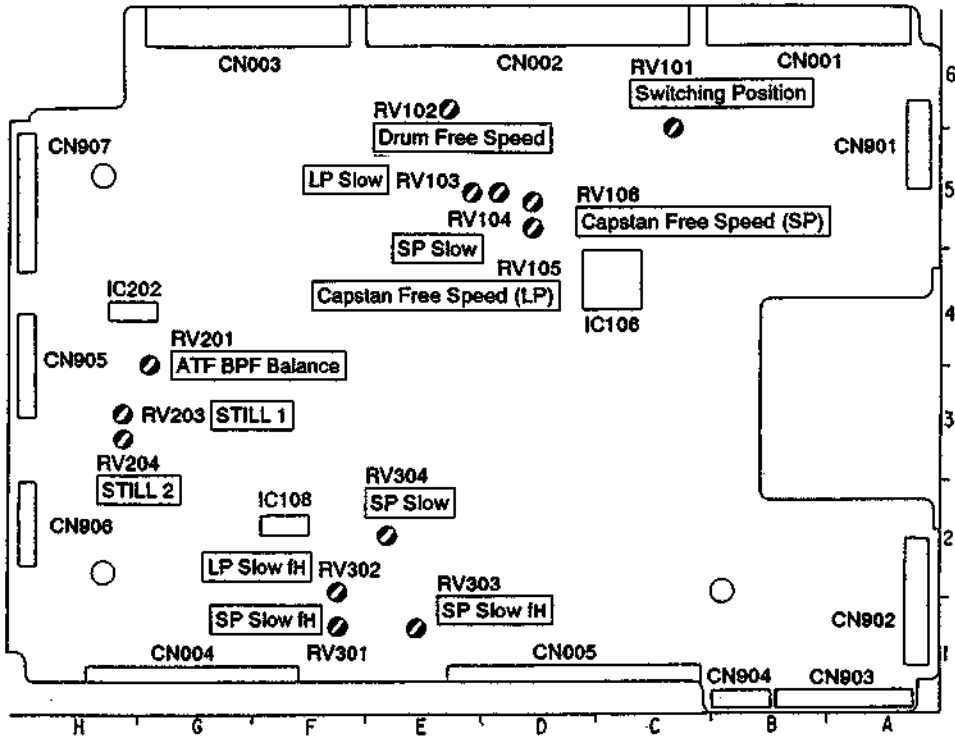
IG-14 BOARD



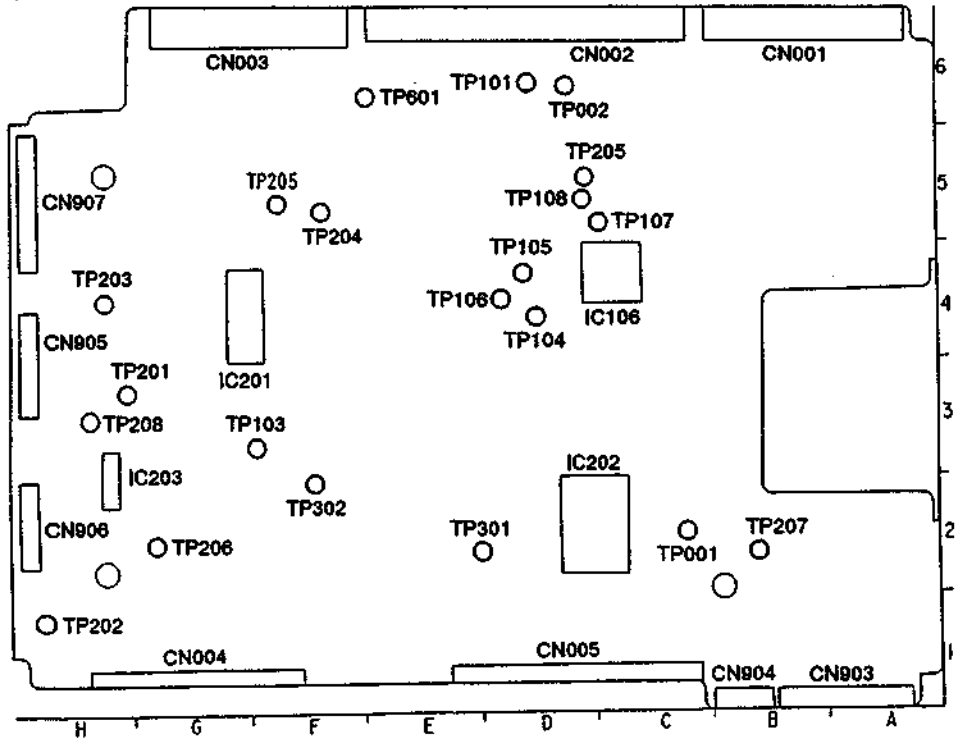
MD-23P BOARD (COMPONENT SIDE)



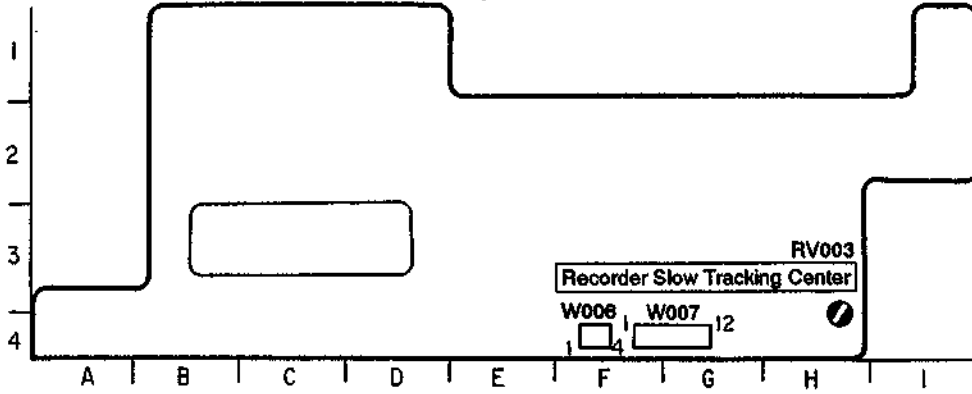
**RV's on the SE-10P Board Location
(Component Side)**



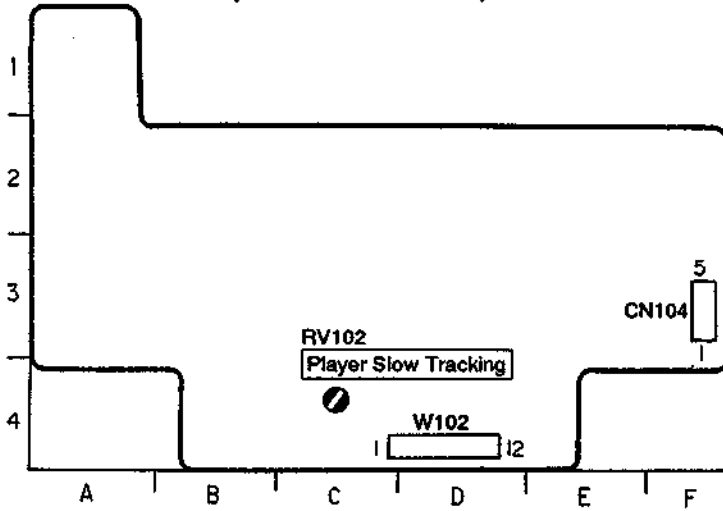
**TP's on the SE-10P Board Location
(Component Side)**



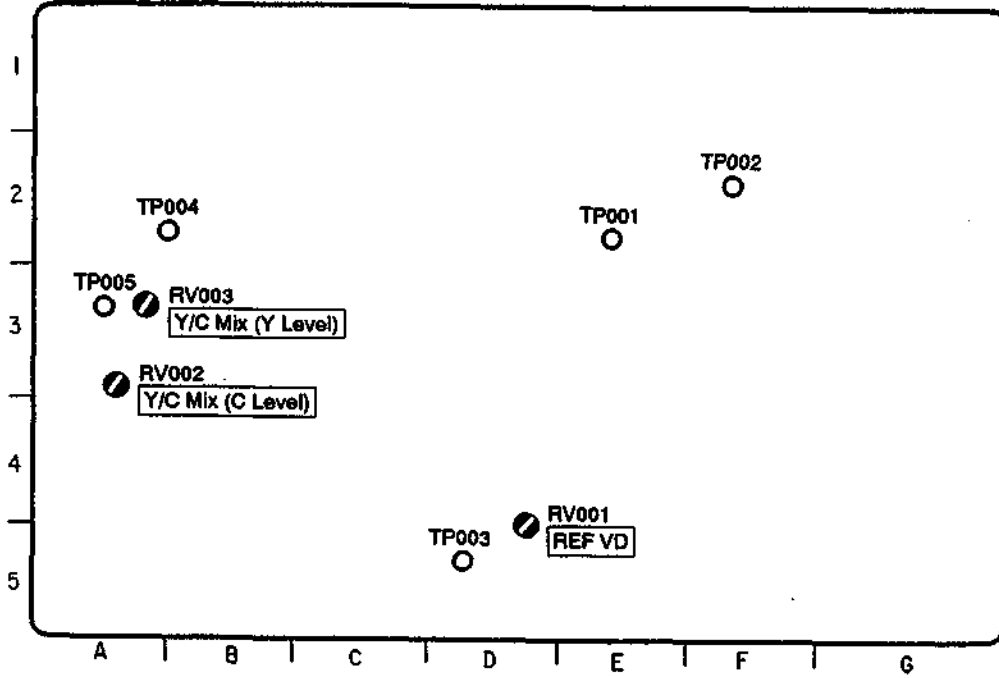
FB-170 BOARD (COMPONENT SIDE)



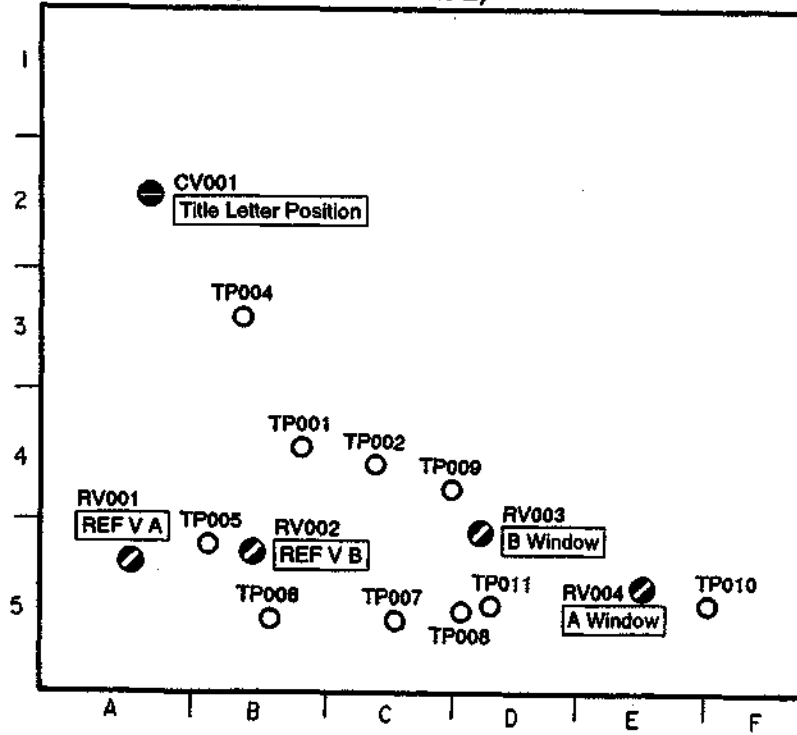
FB-171 BOARD (COMPONENT SIDE)



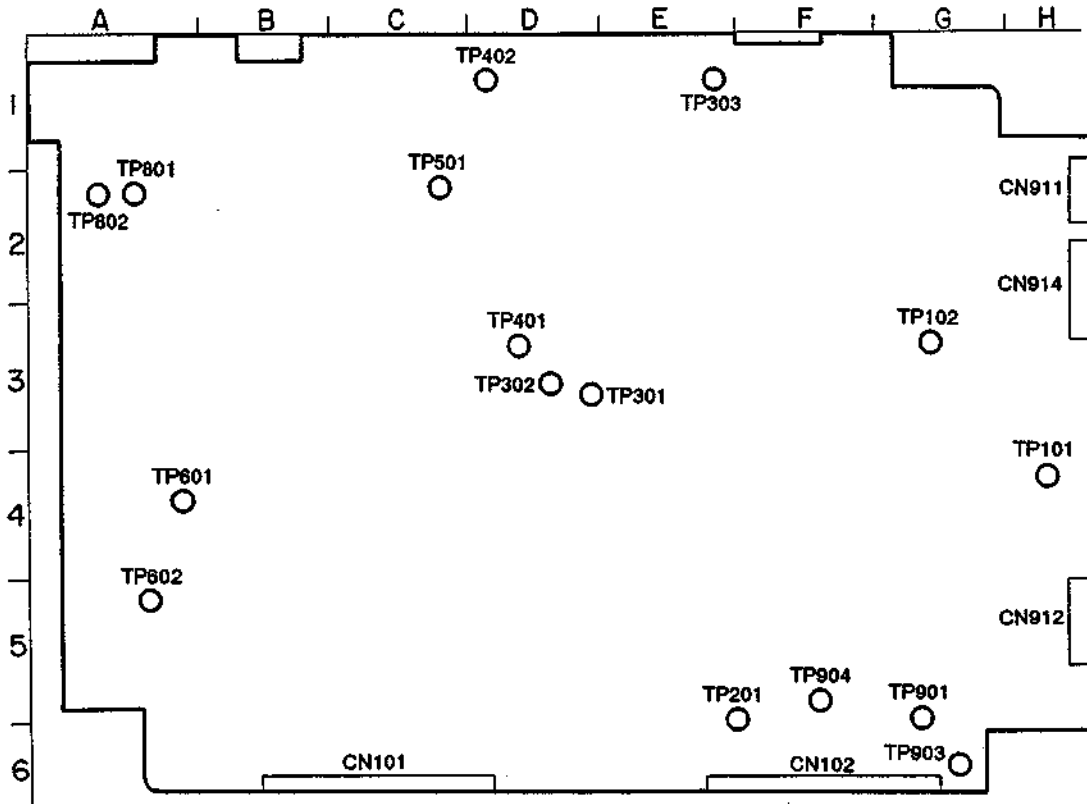
AN-2P BOARD (COMPONENT SIDE)



MC-81 BOARD (COMPONENT SIDE)

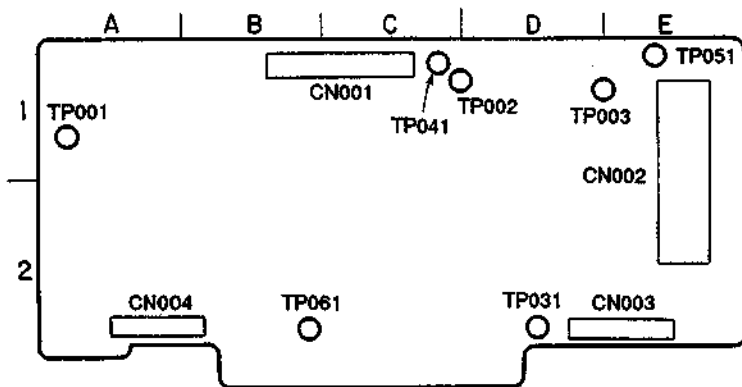


TP's on the HK-5 Board Location



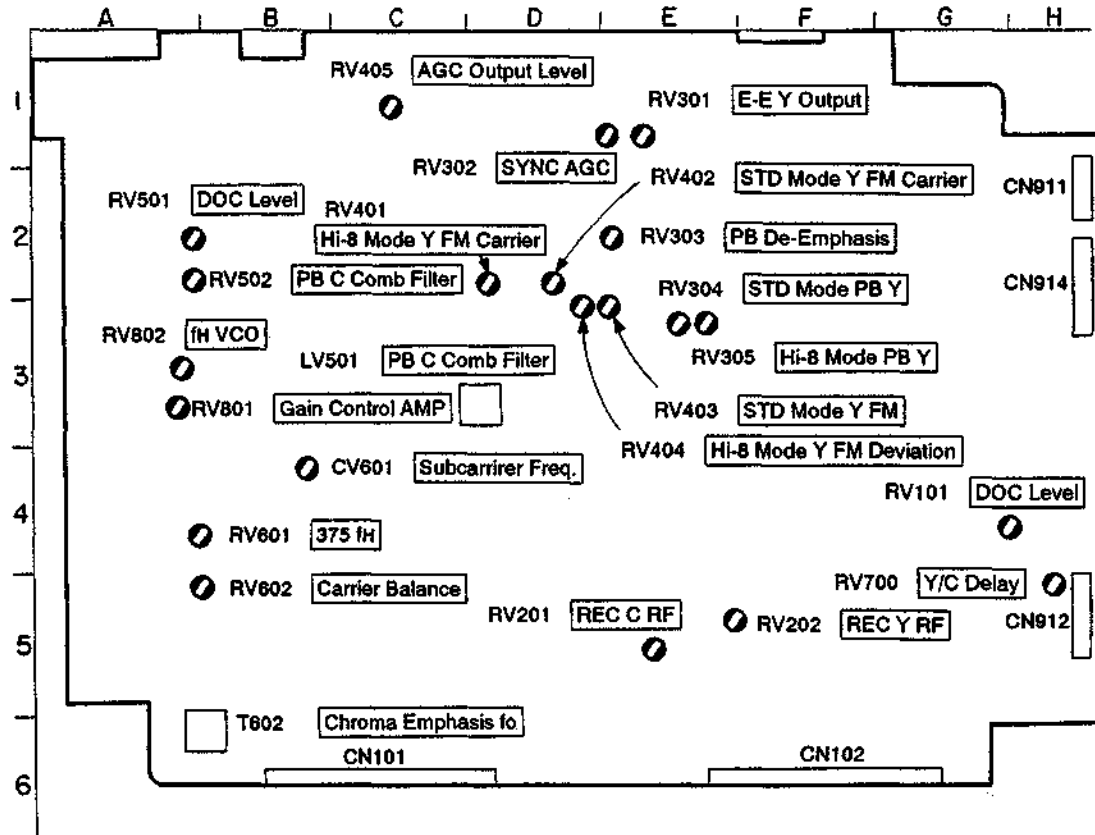
Place the unit on its right side down. Remove the Bottom Plate and Core Shield Plate. Open the HK-5 Board.

TP's on the FR-43 Board Location



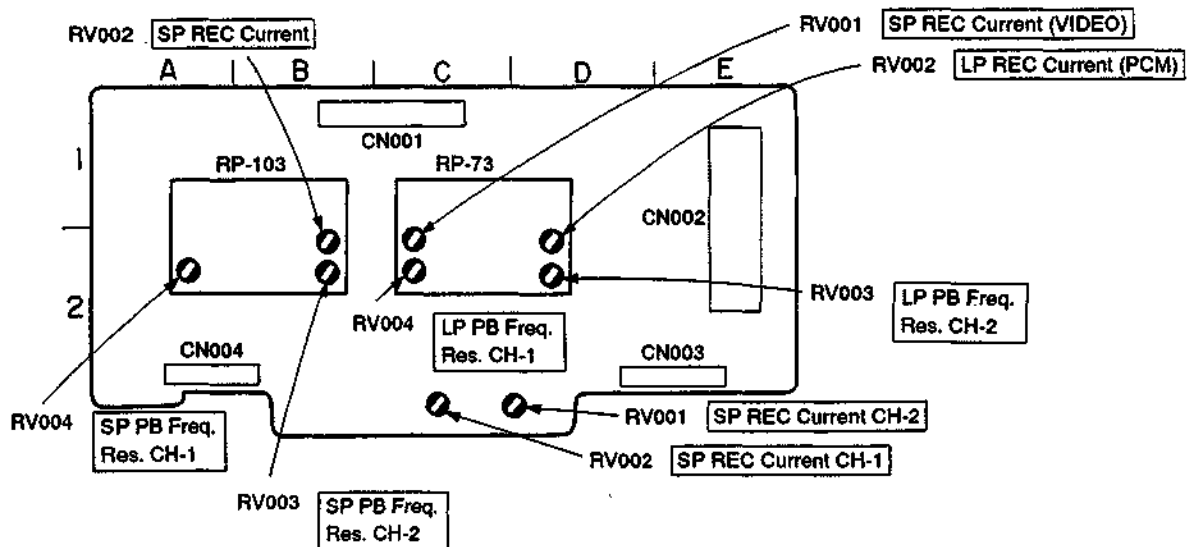
Remove the Top Plate and Open the MB-19P Board.

RV's on the HK-5 Board Location



Place the unit on its right side down. Remove the Bottom Plate and Core Shield Plate. Open the HK-5 Board.

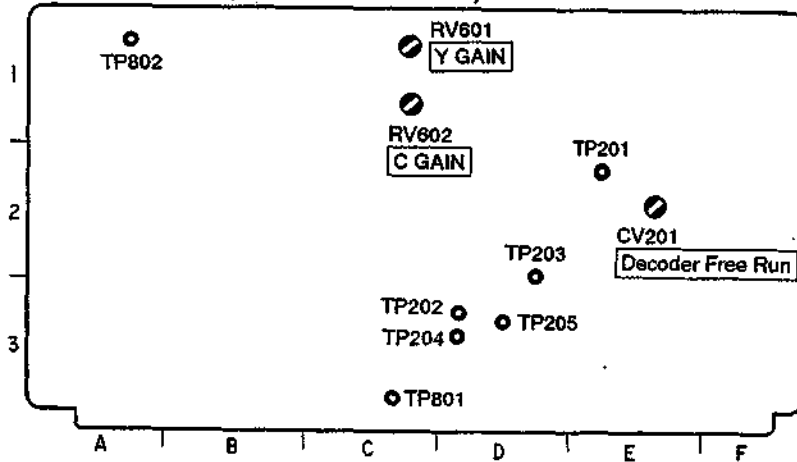
RV's on the FR-43, and RP-73, RP-103 Board Location



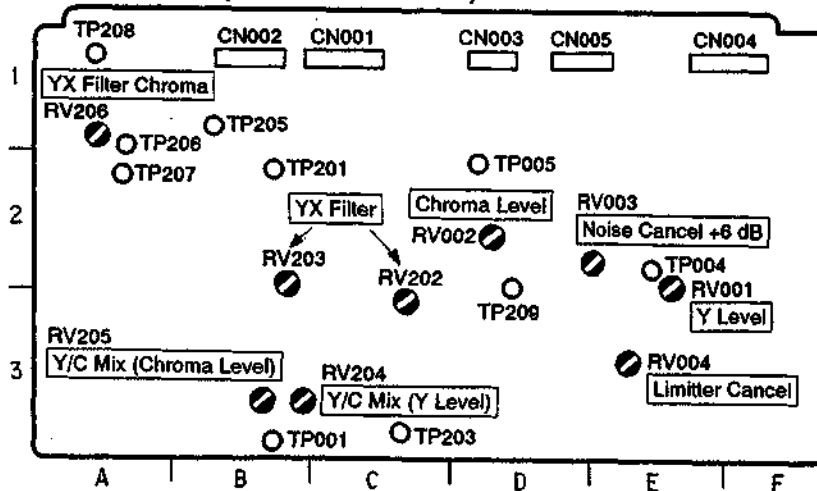
Remove the Top Plate and Open the MB-19P Board.



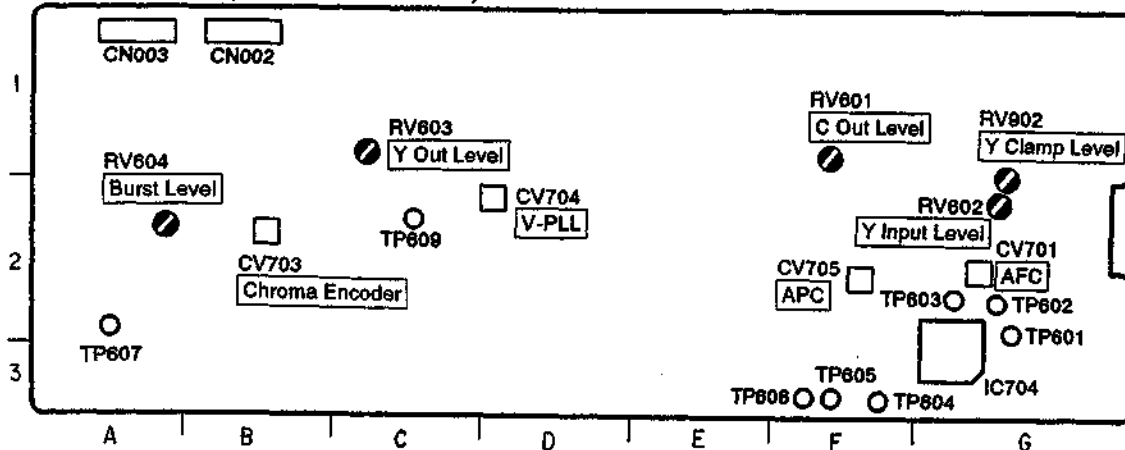
YC-106 BOARD (COMPONENT SIDE)



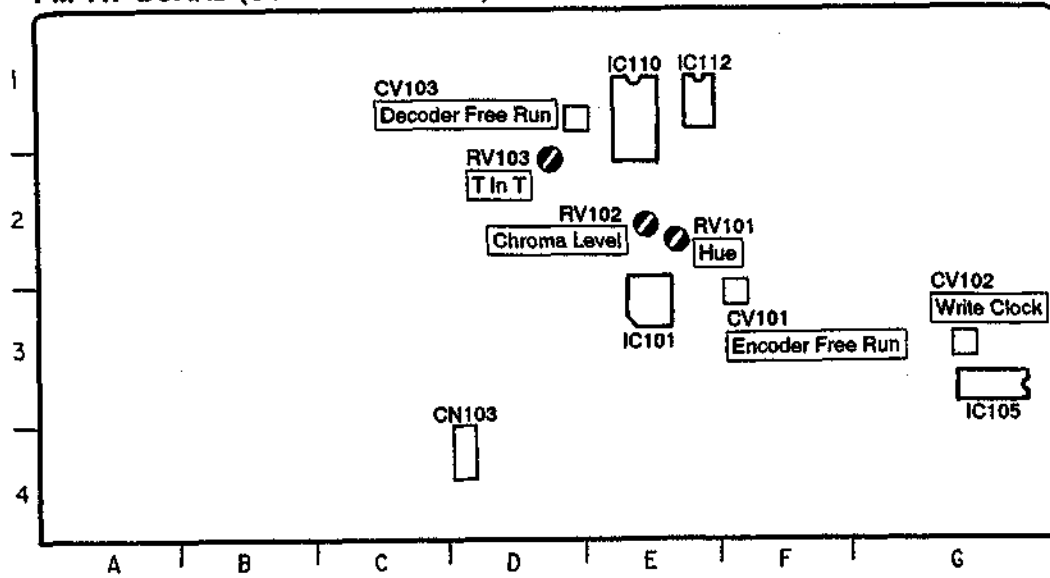
YX-2P BOARD (COMPONENT SIDE)



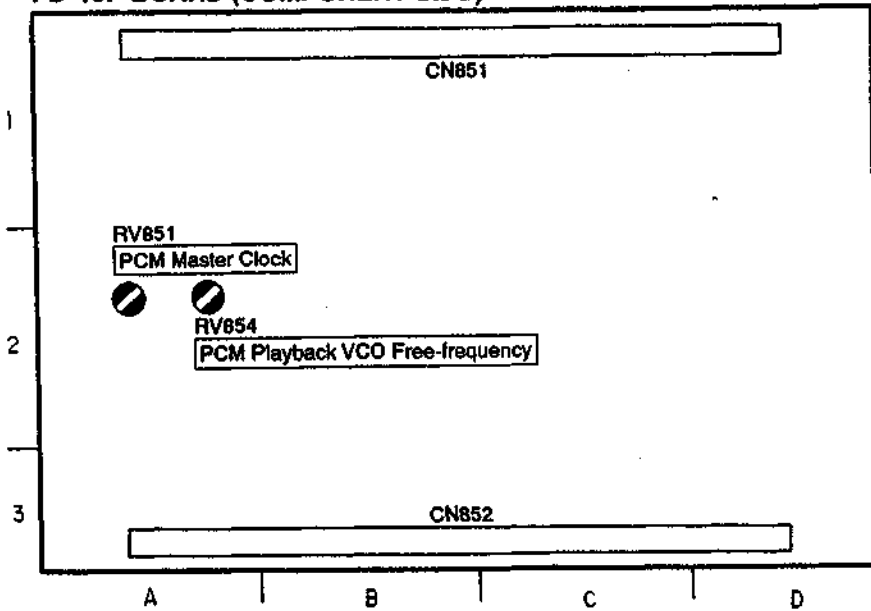
MM-25 BOARD (COMPONENT SIDE)



PM-11P BOARD (COMPONENT SIDE)



PD-19P BOARD (COMPONENT SIDE)



PA-27 BOARD (COMPONENT SIDE)

