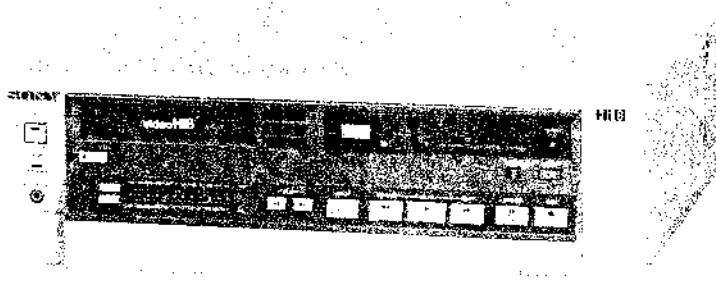


EVO-9500P

SERVICE MANUAL

AEP Model



SPECIFICATIONS

System

Video recording system	Rotary two-head flying erase head
Audio recording system	Helical scanning FM system Standard: Rotary head FM system (monaural) PCM: PCM system (2 channels)
Video signal	CCIR standards, PAL colour
Usable cassettes	8 mm format video cassettes
Tape speed	Approx. 20.051 mm/sec. (SP mode)
Maximum recording/playback time	1.5 hours (SP mode) (with Sony P5-90MP 8mm video cassette)
Fast-forward and rewind time	Approx. 3 min. (with Sony P5-90MP 8mm video cassette)

Inputs and Outputs

Video input	VIDEO IN (1) BNC connector Input signal: 1 Vp-p, 75 ohms, unbalanced, sync negative
S VIDEO input	S VIDEO IN (1) 4-pin mini-DIN Luminance signal: 1 Vp-p, 75 ohms, unbalanced, sync negative Chrominance signal: 0.30 Vp-p, 75 ohms, unbalanced

Video output	VIDEO OUT, BNC connector (1), phono jack (1) Output signal: 1 Vp-p, 75 ohms, unbalanced, sync negative
S VIDEO output	S VIDEO OUT (1) 4-pin mini-DIN Luminance signal: 1 Vp-p, 75 ohms, unbalanced, sync negative Chrominance signal: 0.30 Vp-p, 75 ohms, unbalanced
Horizontal resolution	Standard system: 240 lines (SP colour mode) Hi8 system: 400 lines
Video S/N	More than 45 dB (Colour mode)
Audio input	AUDIO IN (2) phono jack Input level: -7.5 dBs (0dBs = 0.775 Vrms) Input impedance: more than 47 kilohms
Audio output	AUDIO OUT Stereo output: phono jack (2) Standard impedance: -7.5 dBs at load impedance 47 kilohms monaural output: phono jack (1) Standard impedance: -5 dBs at load impedance 47 kilohms Output impedance: less than 2.2 kilohms

— Continued on next page —



Hi8 VIDEO CASSETTE RECORDER
SONY

Frequency response	Standard track: 30Hz–15kHz PCM track: 20Hz–15kHz
Audio S/N	More than 60 dB (SP mode)
Microphone input (monaural)	MIC (1) minijack –65 dBs, for low-impedance microphone
Headphones output	HEADPHONES (1) stereo minijack for headphones
External sync input	VIDEO IN (BNC connector, used also as a video input) Input signal: 1 Vp-p, video signal
CONTROL P input	Phono jack (1) Input impedance: 47 kilohms
CONTROL P output	Phono jack (1)

General

Power requirement	220–240V AC, 50/60Hz
Power consumption	21 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	Approx. 355 × 116 × 387 mm (w/h/d) (14 × 4 ⁵ / ₈ × 15 ¹ / ₄ inches)
Weight	Approx. 6.5 kg (14 lb 5 oz)
Supplied accessories	Cleaning cassette (1) AC power cord (1)

Optional Accessories

Remote Commander RM-S52 (wireless)
Remote control unit RM-S18 (wired)
Connecting cables

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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!


LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHEMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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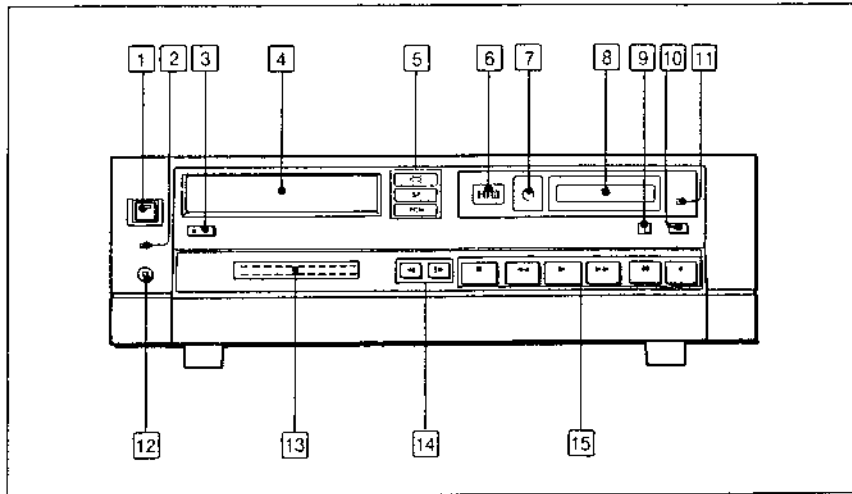
SECTION 1 GENERAL

This section is extracted from instruction manual.

Location and Function of Parts and Controls

Refer to the pages indicated in () for details.

Front Panel



1 POWER ON/OFF switch and indicator
Press to turn on the power. The indicator lights up when the power is on.

2 STANDBY indicator
Lights up when the power cord is connected to a wall outlet, and goes out when the power of the VTR is on.

3 EJECT button
Press to remove the cassette.

4 Cassette compartment

5 Indicators

	Lights up when a cassette is in the cassette compartment.
	Lights up when the power is on, and goes out when the tape speed is in the LP (long play) mode or no signal is recorded on the tape.
	Lights up when PCM sound is recorded on the tape or during PCM audio recording.

6 Hi8 indicator
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.

7 Remote sensor
Point the RM-S52 Remote Commander (not supplied) here.

8 Time counter display
Displays the item selected by the TC COUNTER selector.

9 TC (time code) COUNTER (reel counter) selector

TC	Displays 8mm time code. "....." will be displayed when no time code is recorded on the tape.
COUNTER	Displays the reel counter which increases as the tape advances. The display is reset to "0000" when you newly insert a cassette or when you unplug and plug in the power cord.

10 RESET (counter reset) button
Press to reset the reel counter to "0000".

11 TIMER REC indicator
Lights up when the TIMER switch is set to REC with the power cord connected to a wall outlet and shows that the recording/playback cannot be operated. It goes out when you unplug the power cord from a wall outlet.

12 HEADPHONES jack (stereo minijack)

13 Audio level meters

Recording	Audio recording level of the sound which is selected with the AUDIO OUTPUT SELECT switch (inside the front panel) is shown. When AUDIO OUTPUT SELECT is set to STD or MIX The monaural sound being recorded is displayed on both channels even when one of the REC LEVEL controls (L or R) is set to "0".
Playback	Audio playback level of the sound which is selected with the AUDIO OUTPUT SELECT switch is shown.

14 SLOW button
Press for a slow-motion playback.

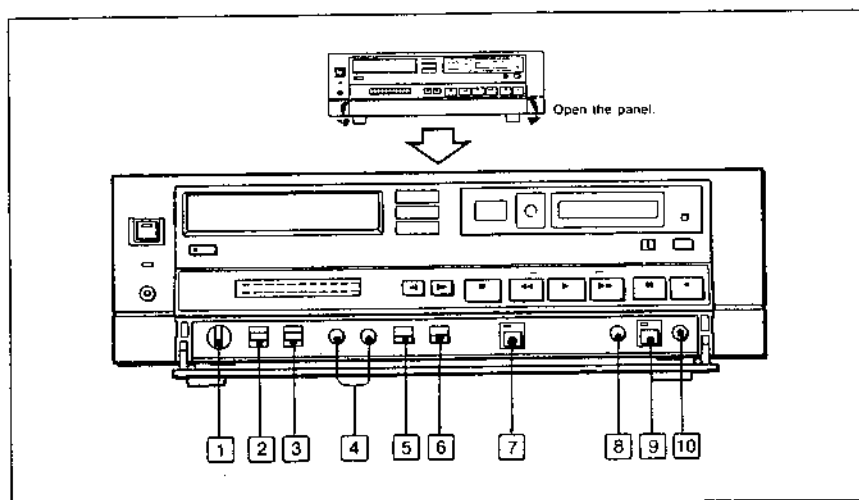
	Rewinds the picture at 1/5 normal speed. (Enters the stop mode approx. 40 seconds after to prevent damage to the tape.)
	Advances the picture at 1/5 normal speed.

15 Tape transport buttons and indicators
The indicator lights up during the corresponding operation.

	STOP (no indicator)
	REW (rewind)
	PLAY (playback)
	FF (fast-forward)
	PAUSE
	REC (recording)

Location and Function of Parts and Controls

Inside the Front Panel



1 PHONE LEVEL (headphone level) control

2 AUDIO OUTPUT SELECT switch
Select the sound to be monitored through headphones or the speaker of a video monitor.
PCM: To hear the PCM sound only.
MIX: To hear the PCM and standard sound mixed.
STD: To hear the standard sound only. (monaural)

3 TIMER switch

Set to REC or PLAY to start/stop recording or playback at a specified time when an external timer is connected.
Normally set to OFF.

4 REC LEVEL controls

5 AUTO REPEAT switch

Set to ON to repeat playback automatically from the beginning of the tape to the end of a recording.
Normally set to OFF.

6 INPUT SELECT switch

Select the ordinary video input signal or the S video input signal.

7 8 mm TIME CODE WRITE button and indicator

Press to record the time code on the tape in the cassette compartment. The indicator blinks during pre-roll prior to time code recording. During time code recording, the indicator on the button lights.

8 SLOW ADJ (slow adjust) control

Turn to adjust the picture if streaks appear during the slow-motion playback.

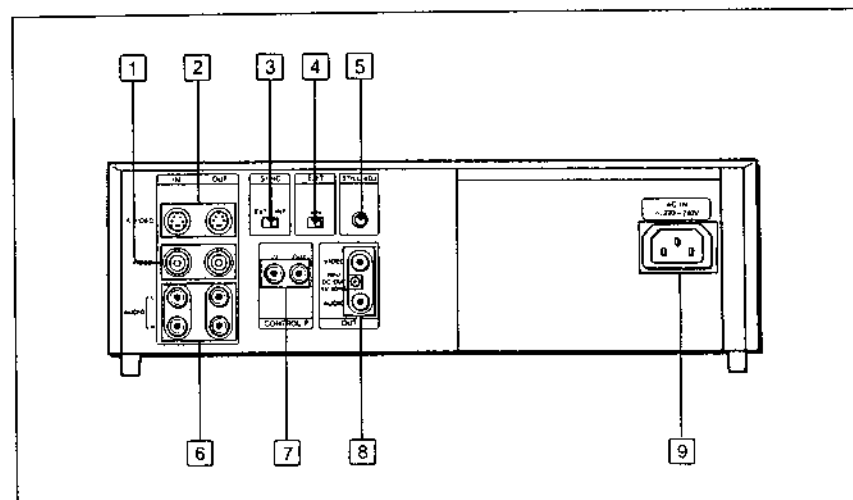
9 AUDIO DUB (audio dubbing) button and indicator

Press to record additional music or narration.

10 MIC (microphone) jack (mini-jack)

Connect a microphone with a miniplug.

Rear Panel



1 VIDEO IN/OUT (input/output) connectors (BNC type)

2 S VIDEO IN/OUT (input/output) connectors (4-pin mini-DIN)

Accept or supply S video signals. Use a commercially available S VIDEO connecting cable.

3 SYNC INT/EXT (sync signal internal/external) selector

Set to EXT to play back in synchronization with the external device. Normally set to INT.

4 EDIT switch

5 STILL ADJ (still adjust) control

Turn to adjust a still picture.

6 AUDIO IN/OUT (input/output) jacks (phono type, stereo)

7 CONTROL P IN/OUT (input/output) jacks (phono type)

Connect the RM-S18 wired remote control unit (not supplied). Also using the CONTROL P connection, you can operate a number of EVO-9500P units simultaneously.

8 VIDEO/AUDIO OUT (output) jacks (phono type)

Supply the video and audio (monaural) output signals. To connect a TV without video and audio inputs, use the commercially available RFU-89EA RFU adaptor.



9 AC IN (AC inlet)

Connect the supplied power cord.

Playing Back a Tape

Using the Tape Counter

You can switch the 8mm time code display and the reel counter display using the TC COUNTER selector as follows:

Item to be displayed	TC COUNTER
8mm time code recorded on the tape	TC COUNTER 
Counter for tape travel	TC COUNTER 

To reset the reel counter display to "0000"

Press the RESET button. It is useful to reset the reel counter at the beginning of the tape, and write down the content and the counter reading.

What is the "-----" indication?

It will be displayed when you set the TC COUNTER selector to TC in the stop, fast-forward, or rewind mode, or while playing back a tape without the 8mm time code.

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 on a tape during recording with this VTR, or it can be recorded separately by using the 8 mm TIME CODE WRITE button.

You can use the recorded time code to locate the playback start/end points. You can also use it to carry out programme editing and insert editing on the EVO-9800P.

Important

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

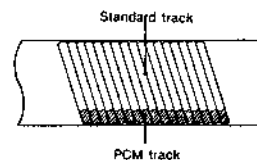
To record the 8 mm time code
See the pages 24 and 25.

Playing Back an Audio Dubbed Tape

You can select the monitor sound recorded on the PCM track of the tape, such as narration or music, with the AUDIO OUTPUT SELECT switch.

For recording, see "Audio Dubbing" on page 32.




Audio recording pattern on a video tape



Playing back a stereo-recorded tape

Set the AUDIO OUTPUT SELECT switch to PCM. You can monitor the stereo sound recorded on the PCM track of the tape. When monitoring the monaural sound, set the switch to STD.

To select the monitor sound

Track to be played back	AUDIO OUTPUT SELECT
PCM only	PCM • MIX • STD • 
PCM and standard, mixed	PCM • MIX • STD • 
Standard only	PCM • MIX • STD • 

Monitoring the Picture of a Video Camera

Connect a video camera to the VIDEO (or S VIDEO) IN connector of the VTR and make the appropriate settings for the picture of the camera.

The picture is automatically switched to that of the camera when the VTR enters the rewind or stop mode. This is useful together with the AUTO REPEAT function (page 20) when showing a "how to" tape in a public place, for example.

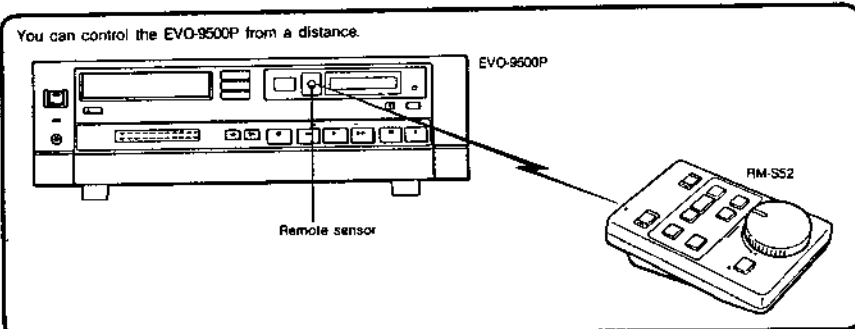
When a TV without video/audio inputs is connected
Connect your stereo system to this VTR to monitor the stereo sound.

If the sound is not heard or the PCM indicator blinks
When you set the AUDIO OUTPUT SELECT switch to PCM while playing back a tape recorded on a video camera recorder or a video cassette deck without the PCM function, the sound may not be heard or heard only intermittently, or the PCM indicator may blink. If this happens, set the AUDIO OUTPUT SELECT switch to STD. The PCM indicator may still blink, but it does not affect the sound.

Remote Control Operation

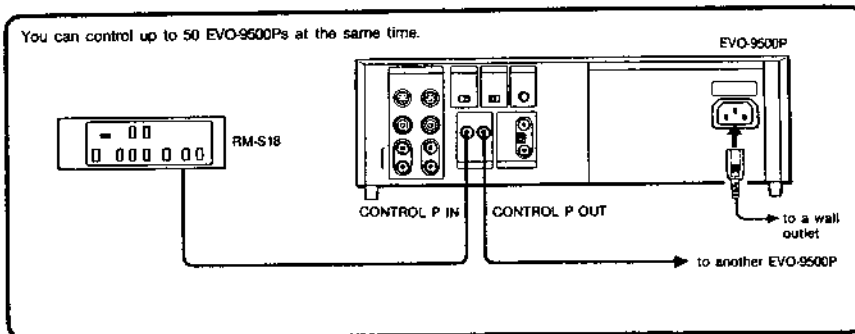
Tape Duplication System

Using the RM-S52 wireless Remote Commander (not supplied)



For details, refer to the instruction manual of the RM-S52.

Using the RM-S18 wired remote control unit (not supplied)

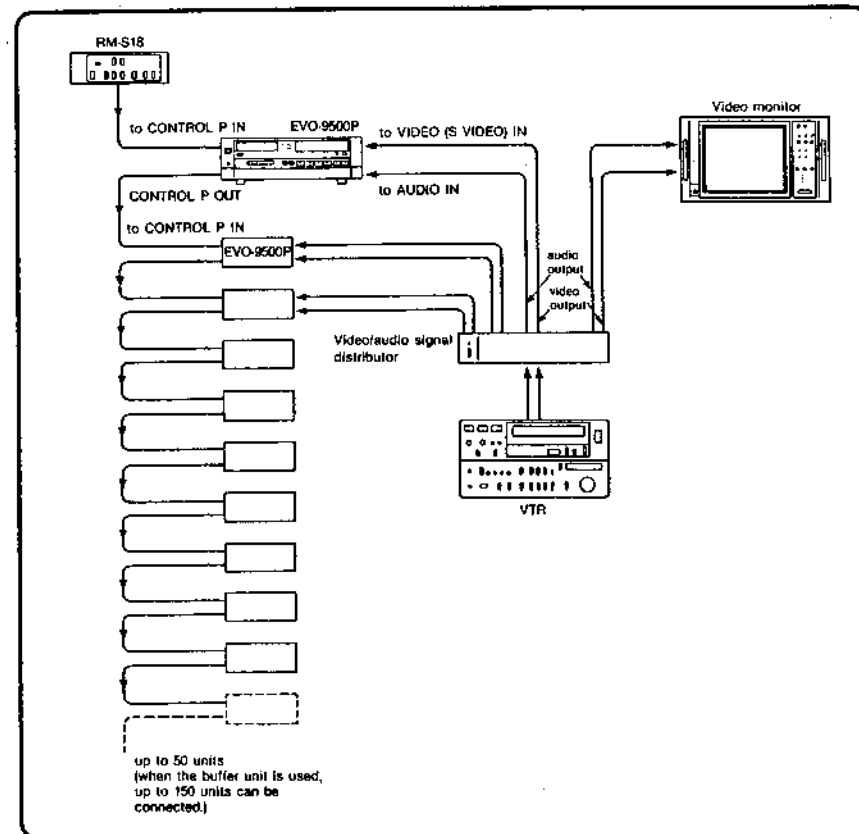


For details, refer to the instruction manual of the RM-S18.

Note

When the RM-S18 is connected to the CONTROL P IN jack of the VTR, you can no longer control the VTR with the RM-S52.

You can make a tape duplication system by connecting a number of EVO-9500Ps with the RM-S18 wired remote control unit (not supplied) as illustrated. Using this system, you can produce a number of recorded tapes at a time.



For detailed connection and operation, consult your Sony dealer.

Hi8 (High Eight) Video System

Features of the Hi8 Video System

The 8 mm video system employs a high-grade metal powder tape which allows the video cassette recorder to record a large amount of information and enhance picture quality. The Hi8 video system has been developed, taking advantage of the 8 mm video system. The main characteristics of the Hi8 are as follows:

Super High Quality Picture

The information capacity is a key element for picture improvement. It can be increased by shifting up the FM carrier frequency range. In the Hi8 video system, the FM carrier frequency range of the luminance signal is shifted up to 5.7—7.7 MHz. This is higher than the 4.2—5.4 MHz range of the standard 8 mm video system. Thanks to this, the horizontal resolution is improved to more than 400 lines.

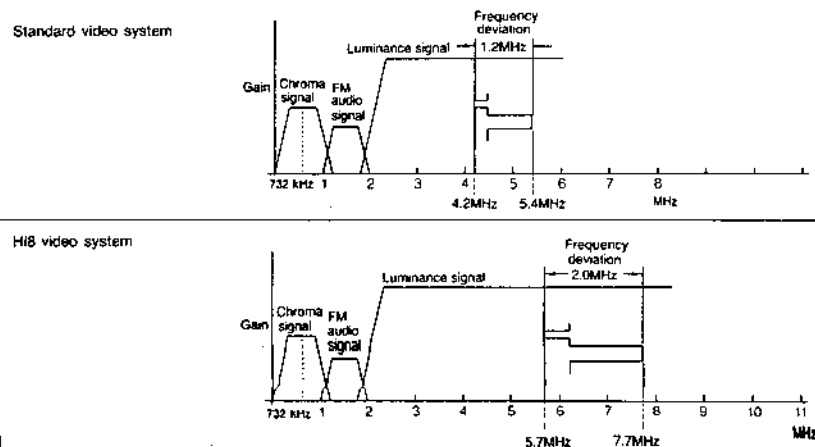
Use of High-Grade Tape Corresponding to the Hi8 Video System

Metal evaporated tape is ideal for video systems because it has large magnetic energy that allows for high-density recording. The Hi8 video cassette recorder uses such high-grade tape for the Hi8 video system, covering a wide frequency range, to achieve a high-quality video signal for recording/playback.

S VIDEO (Separated Luminance/Chrominance Signal) Input/Output Connectors

Conventionally, video equipment uses the composite video signal containing the luminance (Y) signal and the chrominance (C) signal mixed. The composite video signal is liable to produce interference resulting in picture quality loss. On the contrary, the S VIDEO connector transmits or receives the video signal separated into the luminance signal and the chrominance signal. Flickers and color blur in the picture are minimized with the separated video signal, and sharpness is enhanced to such an extent that hair-fine stripes are clearly visible. The S VIDEO connector also assures an excellent editing quality with minimum picture quality loss.

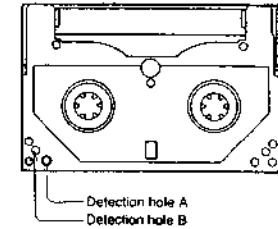
Difference in Frequency Allocation



Hi8 Cassette Tape

The newly developed Hi8 ME and Hi8 MP cassette tapes with high durability feature characteristics best suiting Hi8 video system recording/playback. Hi8 cassettes have a detection hole on the bottom of the cassette shell to automatically set Hi8 VTRs in the Hi8 video system mode for recording.

Cassette	Detection hole A	Detection hole B
Hi8ME	open	closed
Hi8MP	closed	open
Standard MP	closed	closed



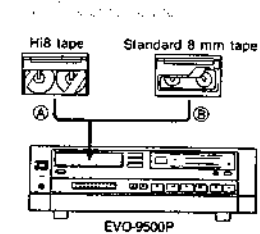
Automatic Switching of the System According to the Cassette Tape

The VTR switches the recording/playback system (Hi8 system or standard system) automatically according to the cassette tape being used.

Recording

When using a Hi8 cassette tape for recording, the VTR senses the detection holes on the cassette shell (see above), and automatically performs the recording in the SP (standard play) mode of the Hi8 video system. When using a standard 8 mm tape, the recording is performed using the standard 8 mm video system.

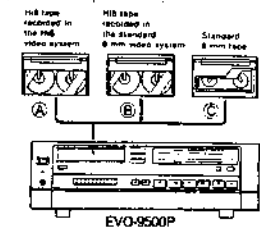
- Ⓐ Recording in the Hi8 video system
- Ⓑ Recording in the standard 8 mm video system



Playback

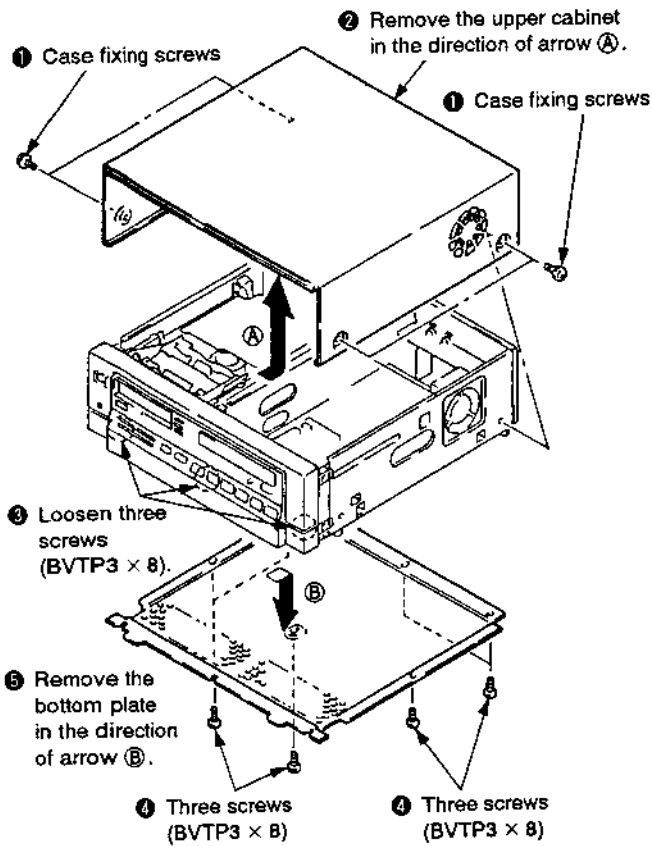
In playback, the VTR can detect the system mode used in recording by verifying the recorded signal, and plays back the tape in the appropriate mode.

- Ⓐ Playback in the Hi8 video system
- Ⓑ Playback in the standard 8 mm video system
- Ⓒ Playback in the standard 8 mm video system

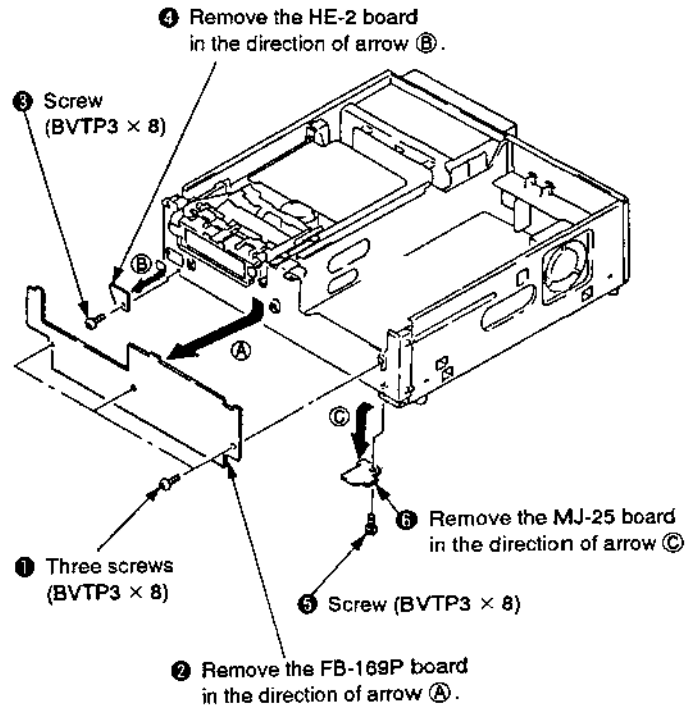


**SECTION 2
DISASSEMBLY**

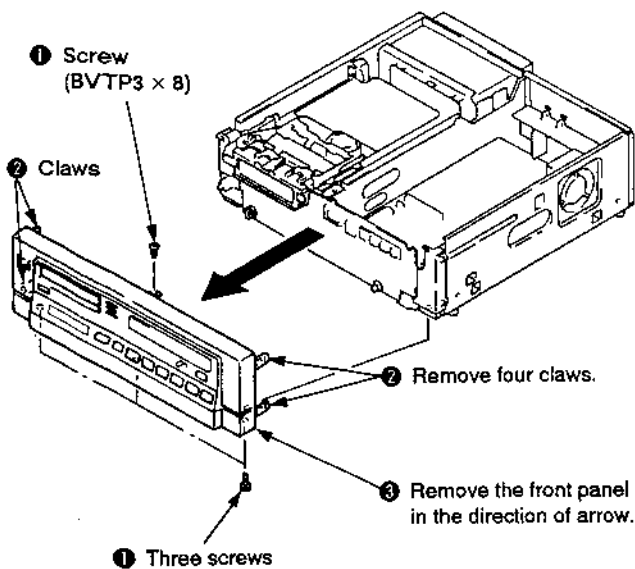
2-1. REMOVAL OF CABINET



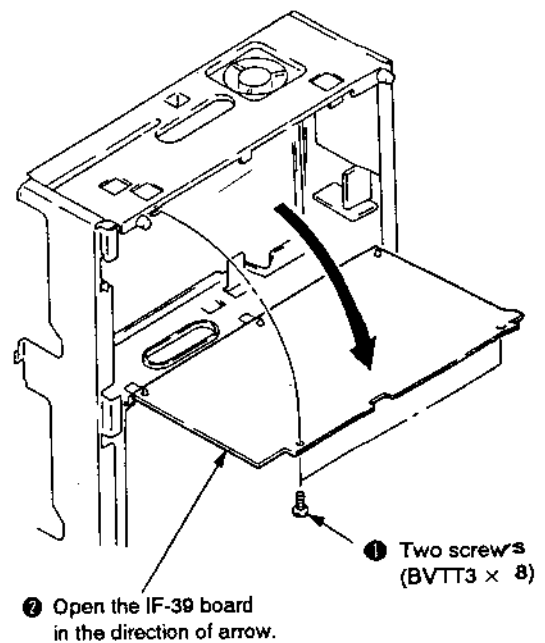
2-3. REMOVAL OF FB-169P, HE-2, MJ-25 BOARDS



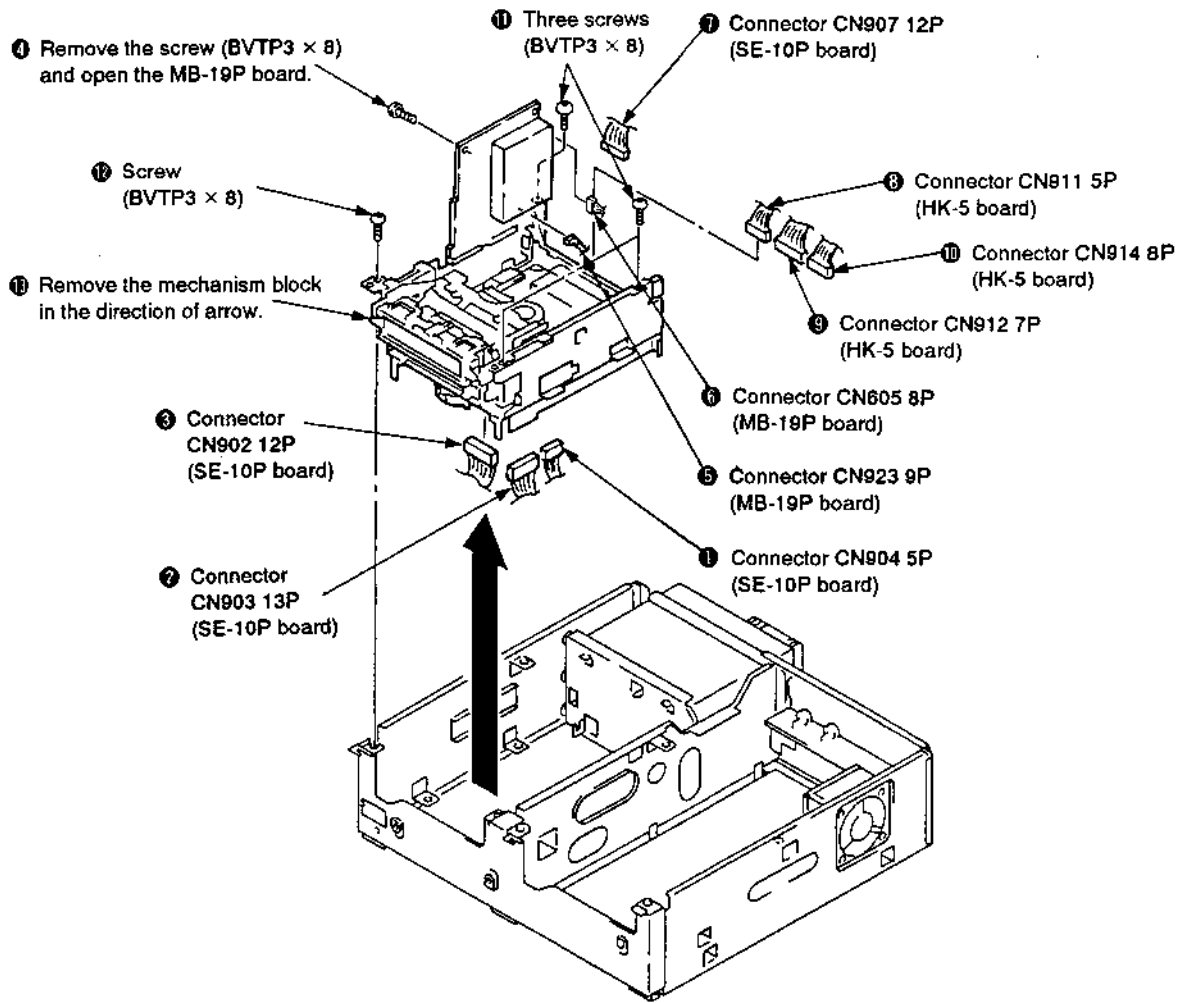
2-2. REMOVAL OF FRONT PANEL



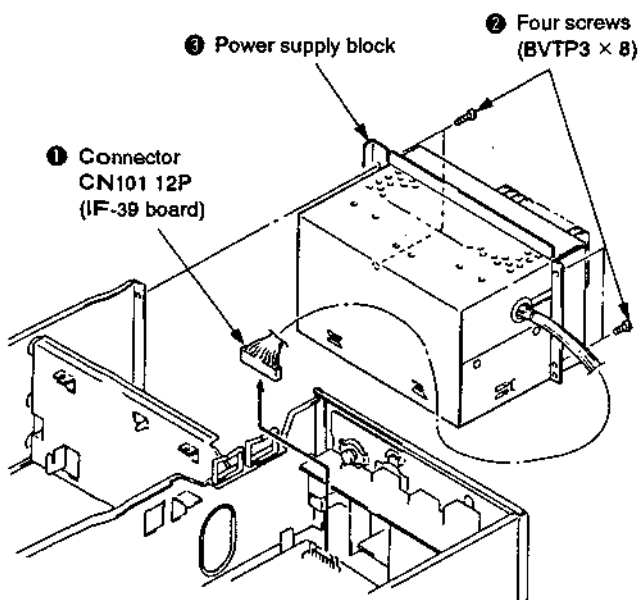
2-4. OPENING OF IF-39 BOARD



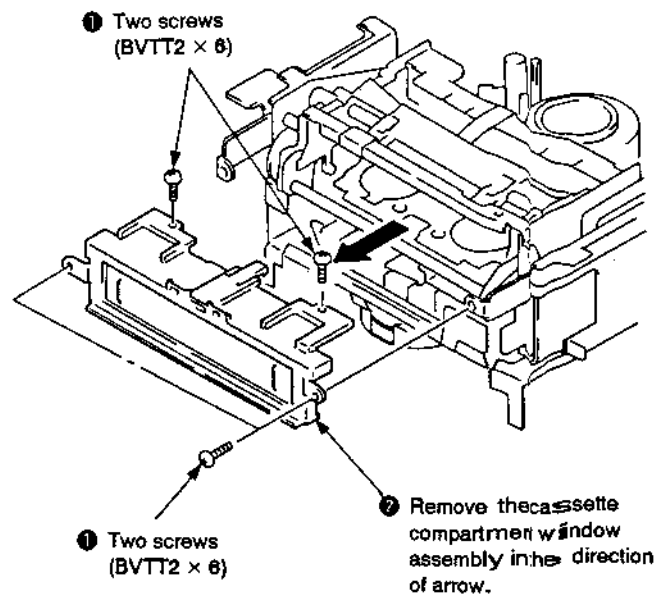
2-5. REMOVAL OF MECHANISM BLOCK



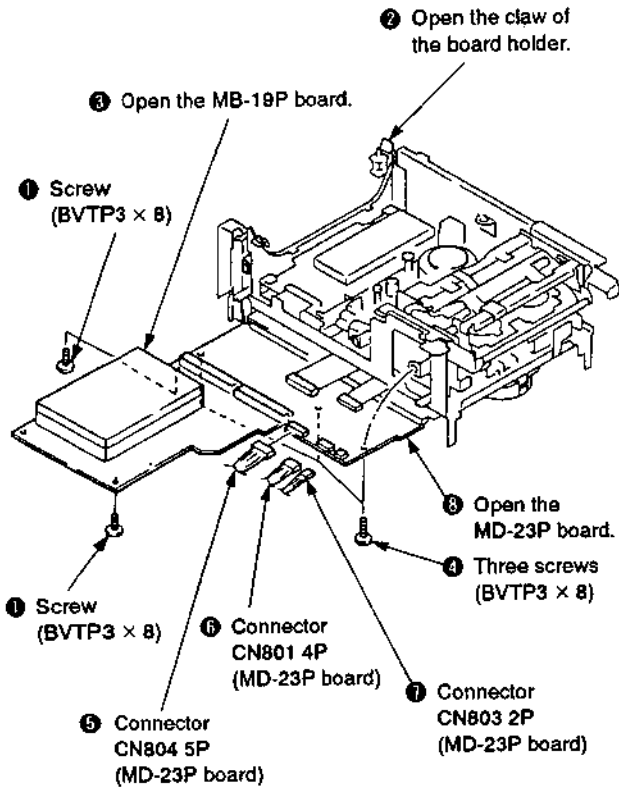
2-6. REMOVAL OF POWER SUPPLY BLOCK



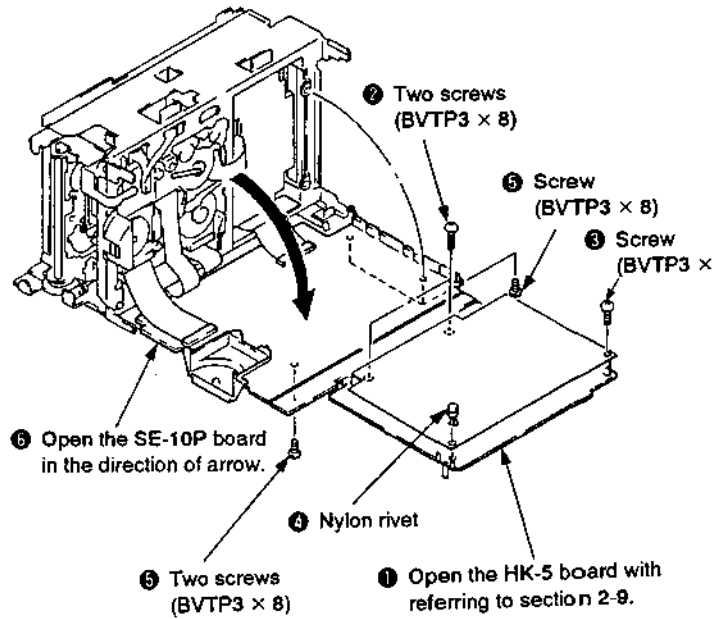
2-7. REMOVAL OF CASSETTE COMPARTMENT WINDOW ASSEMBLY



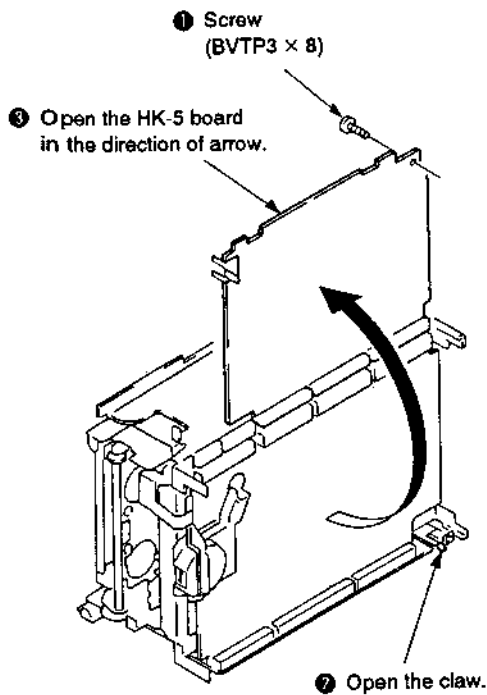
2-8. OPENING OF MB-19P, MD-23P BOARDS



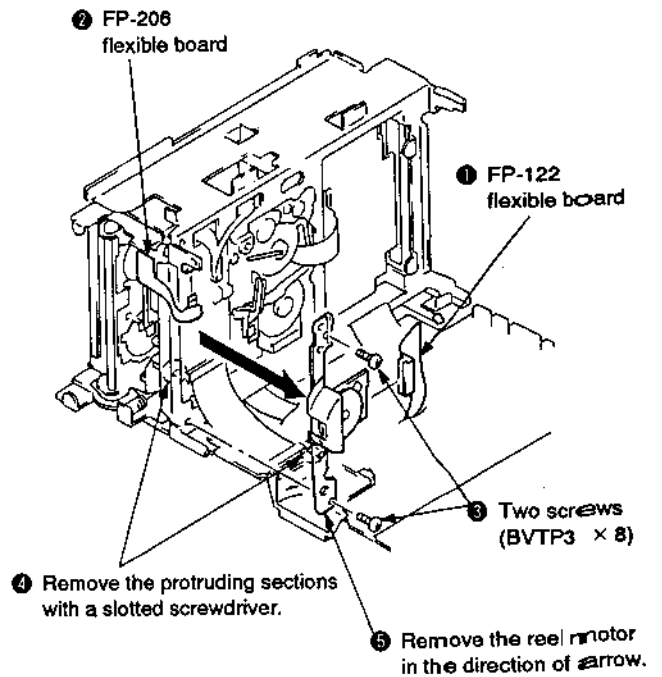
2-10. OPENING OF SE-10P BOARD



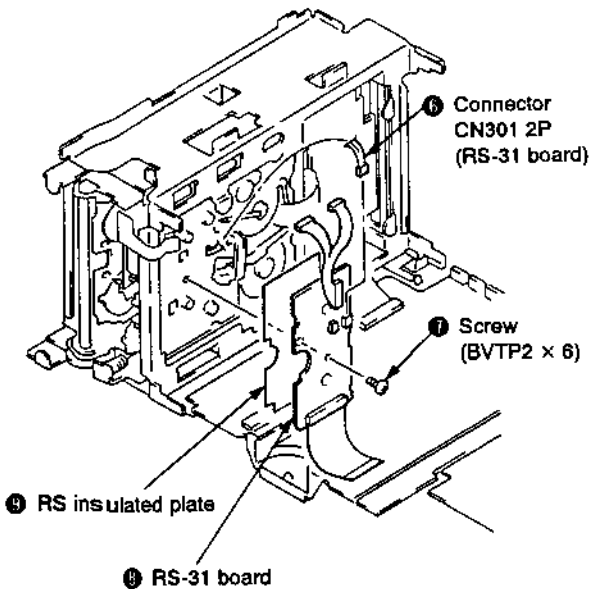
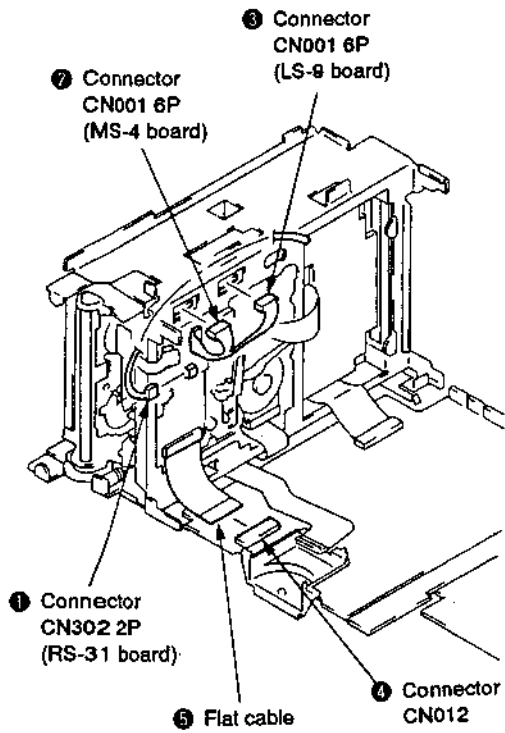
2-9. OPENING OF HK-5 BOARD



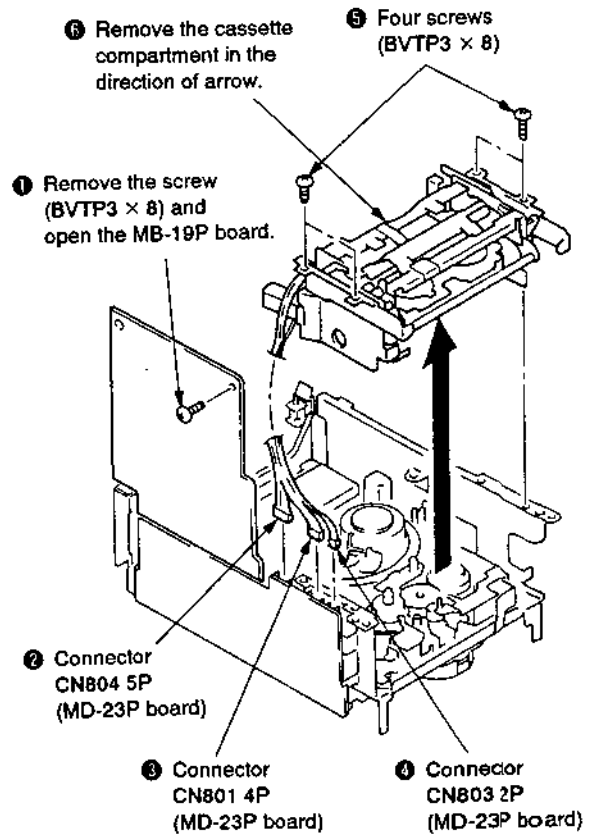
2-11. REMOVAL OF REEL MOTOR



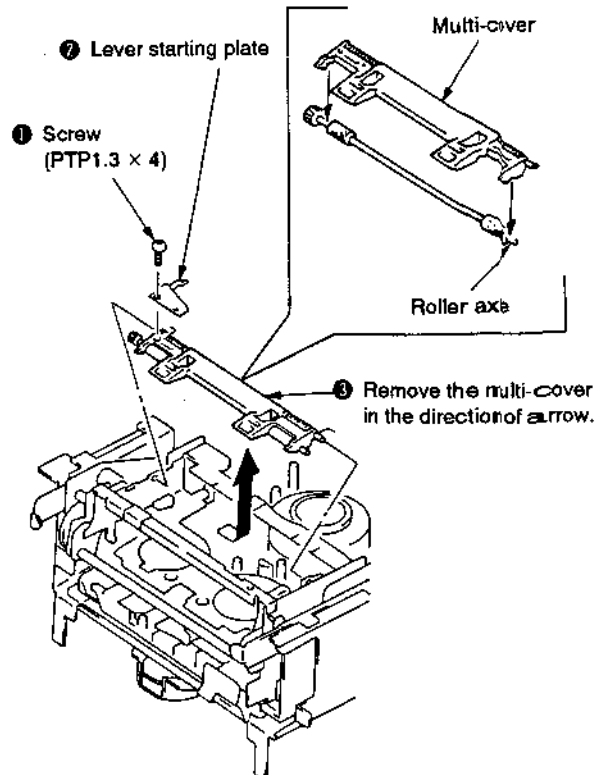
2-12. REMOVAL OF RS-31 BOARD



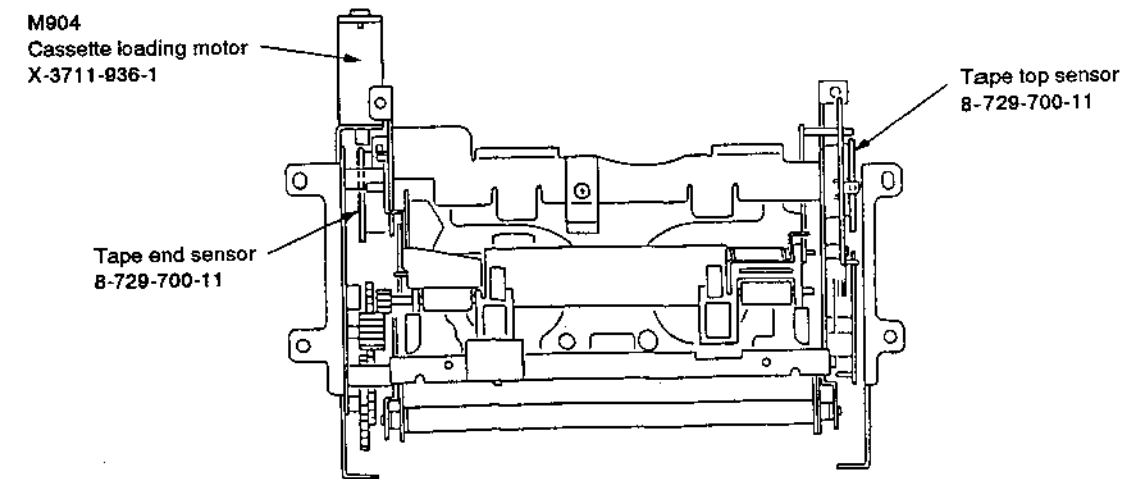
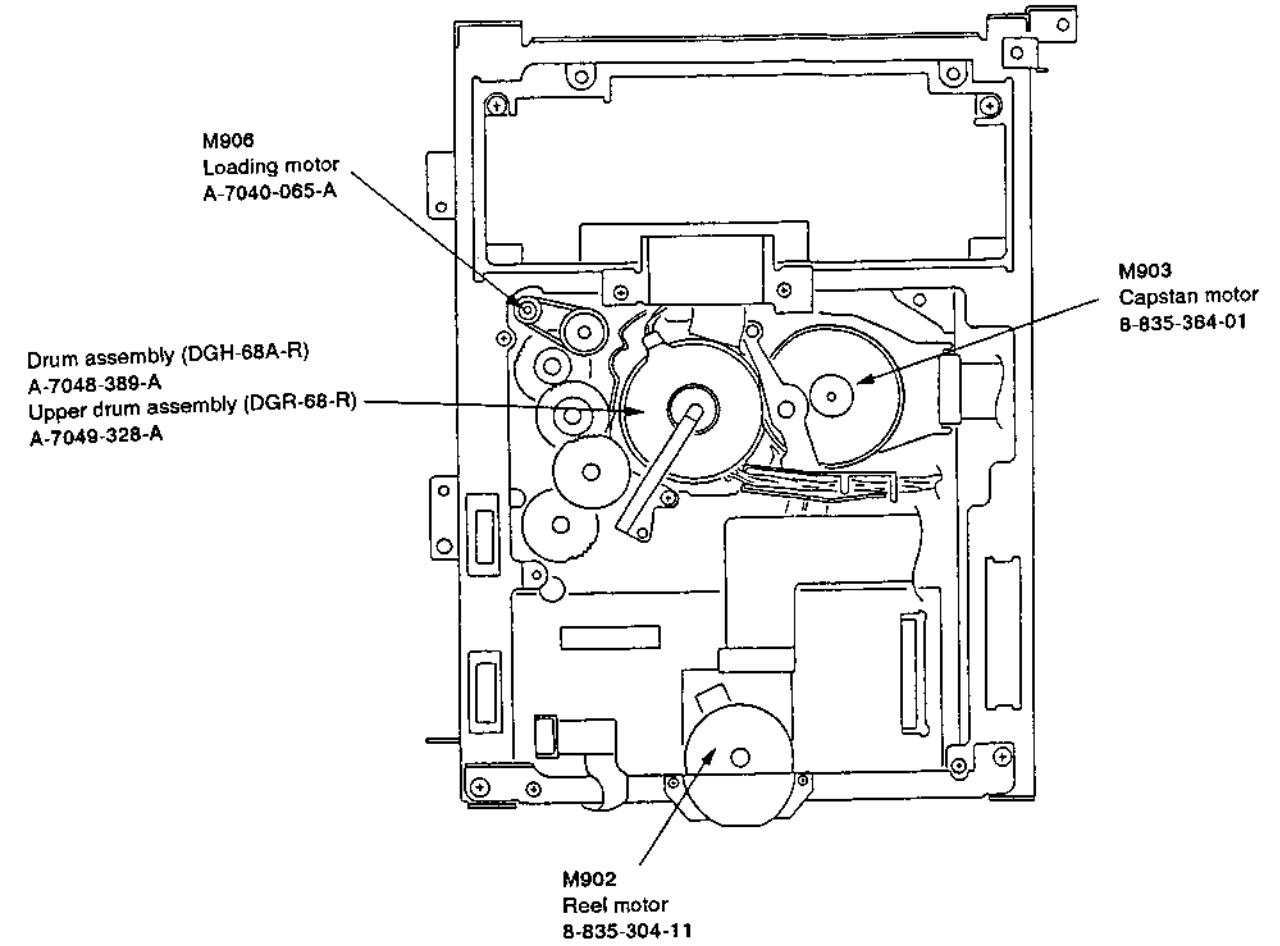
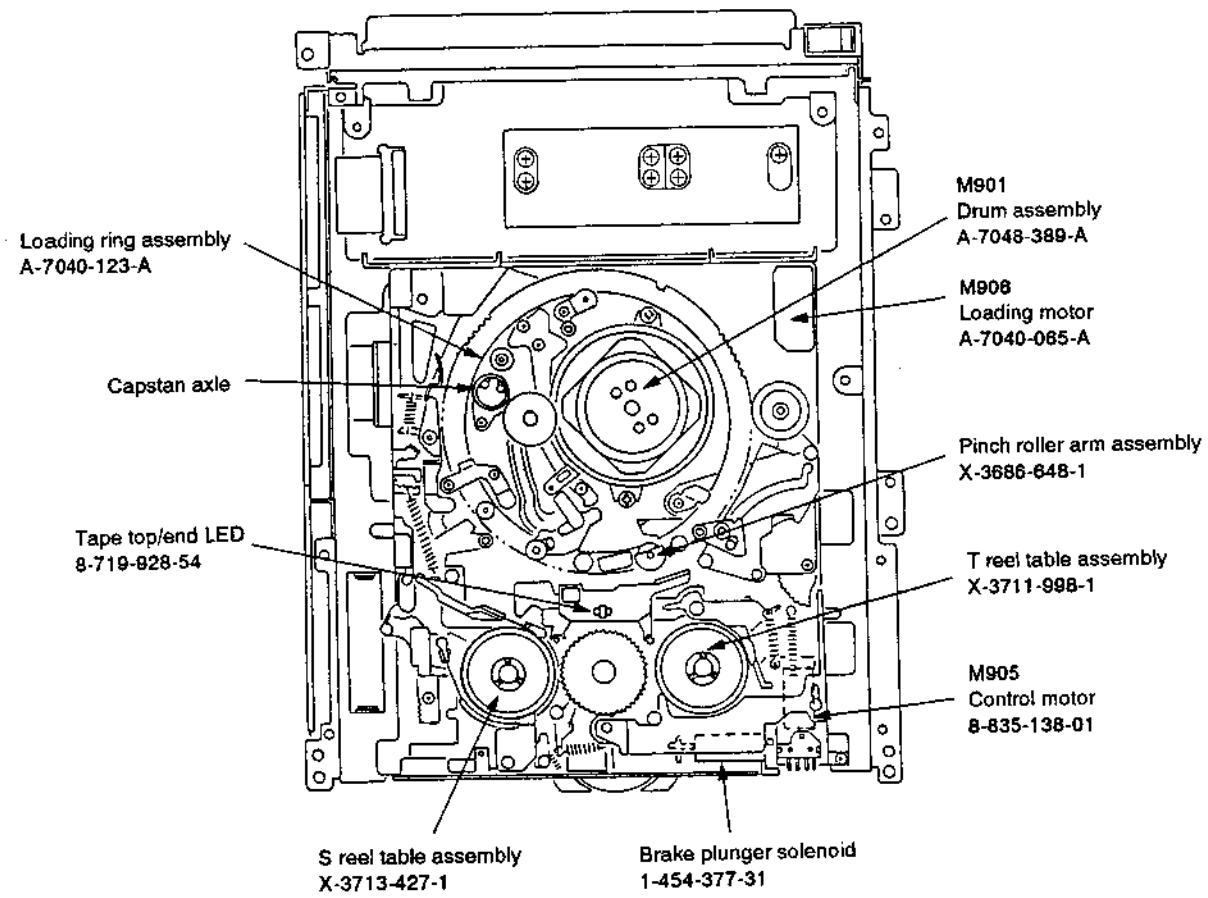
2-13. REMOVAL OF CASSETTE COMPARTMENT



2-14. REMOVAL OF MULTI-COVER, ROLLER AXLE

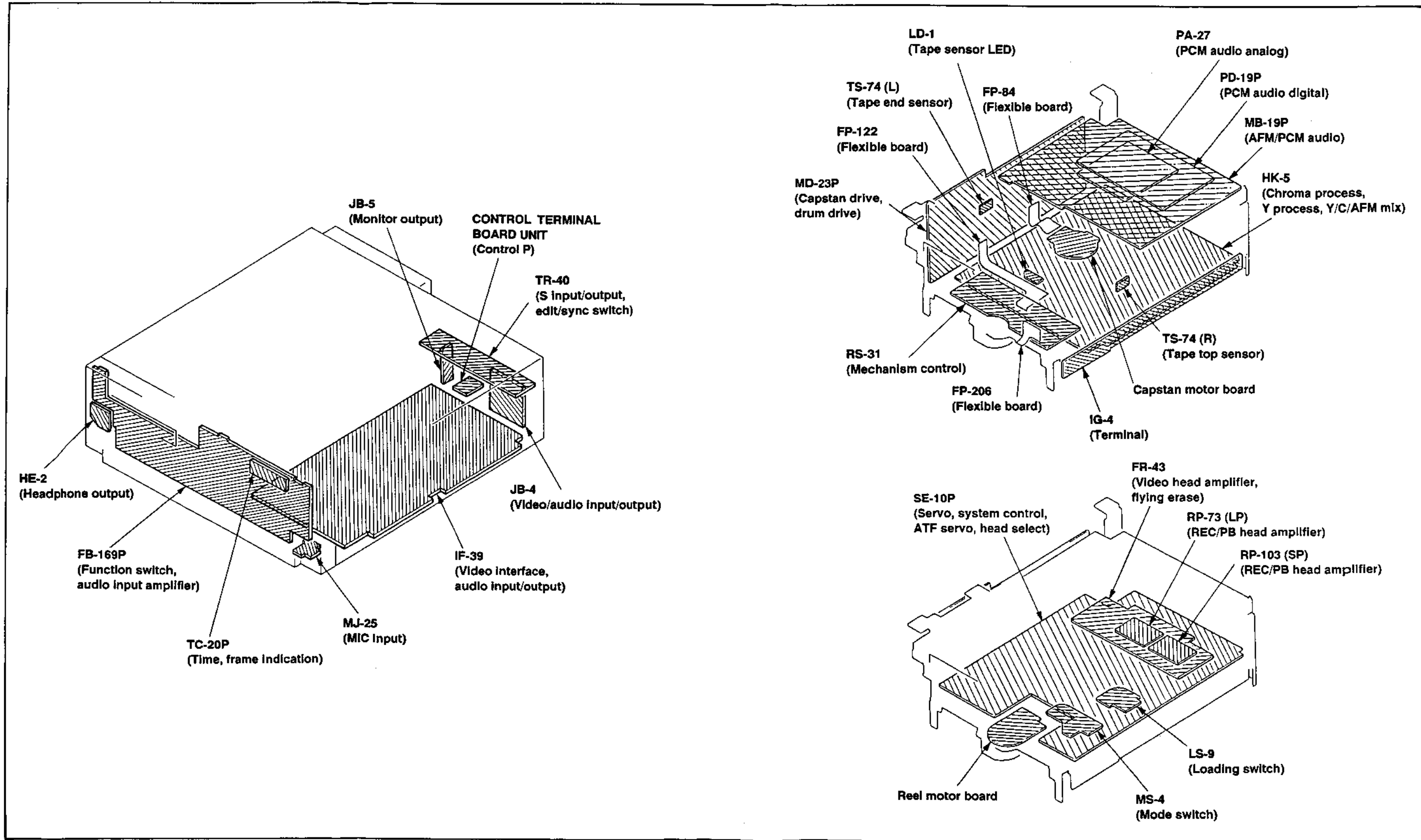


2-15. INTERNAL VIEW

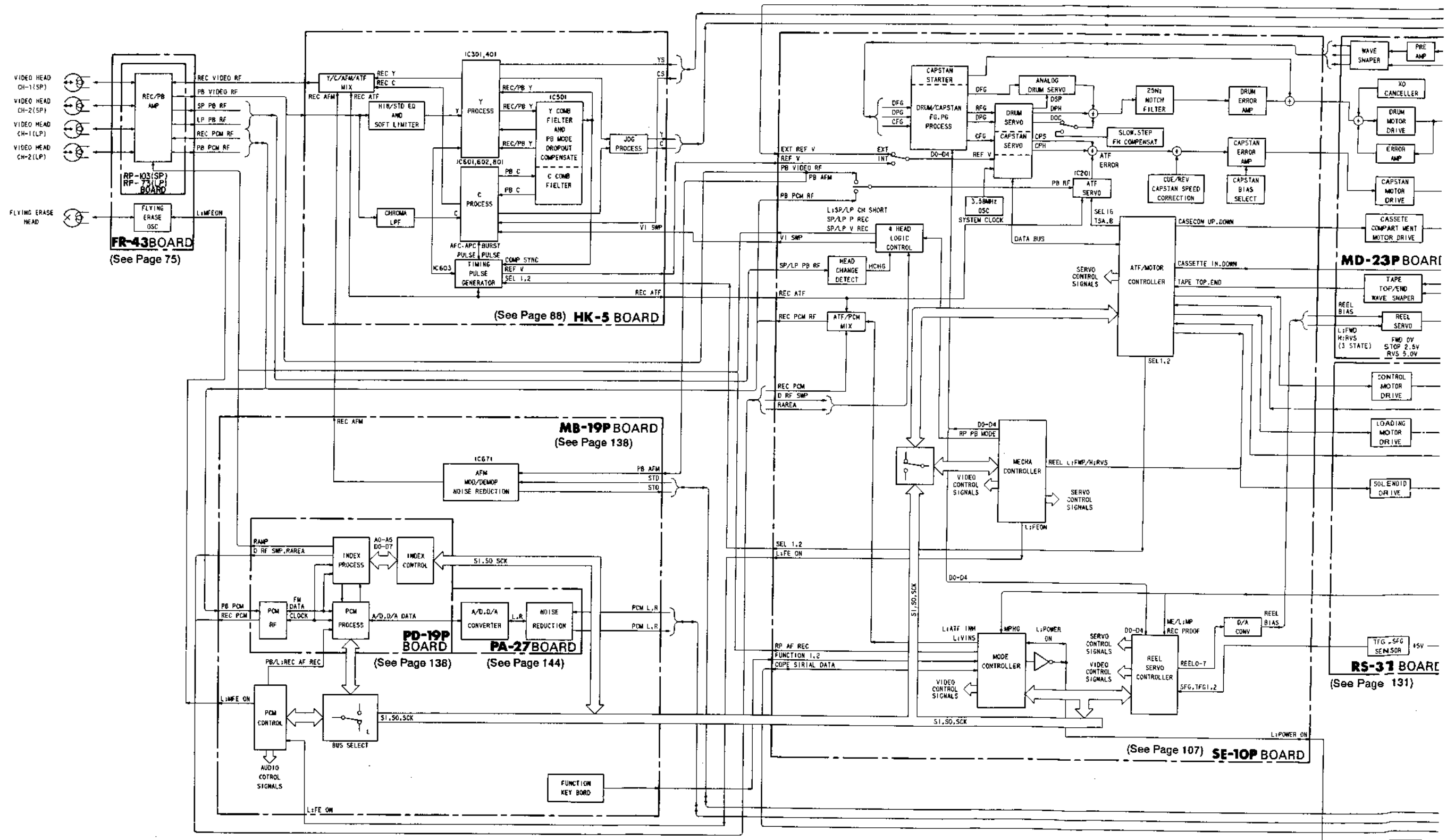


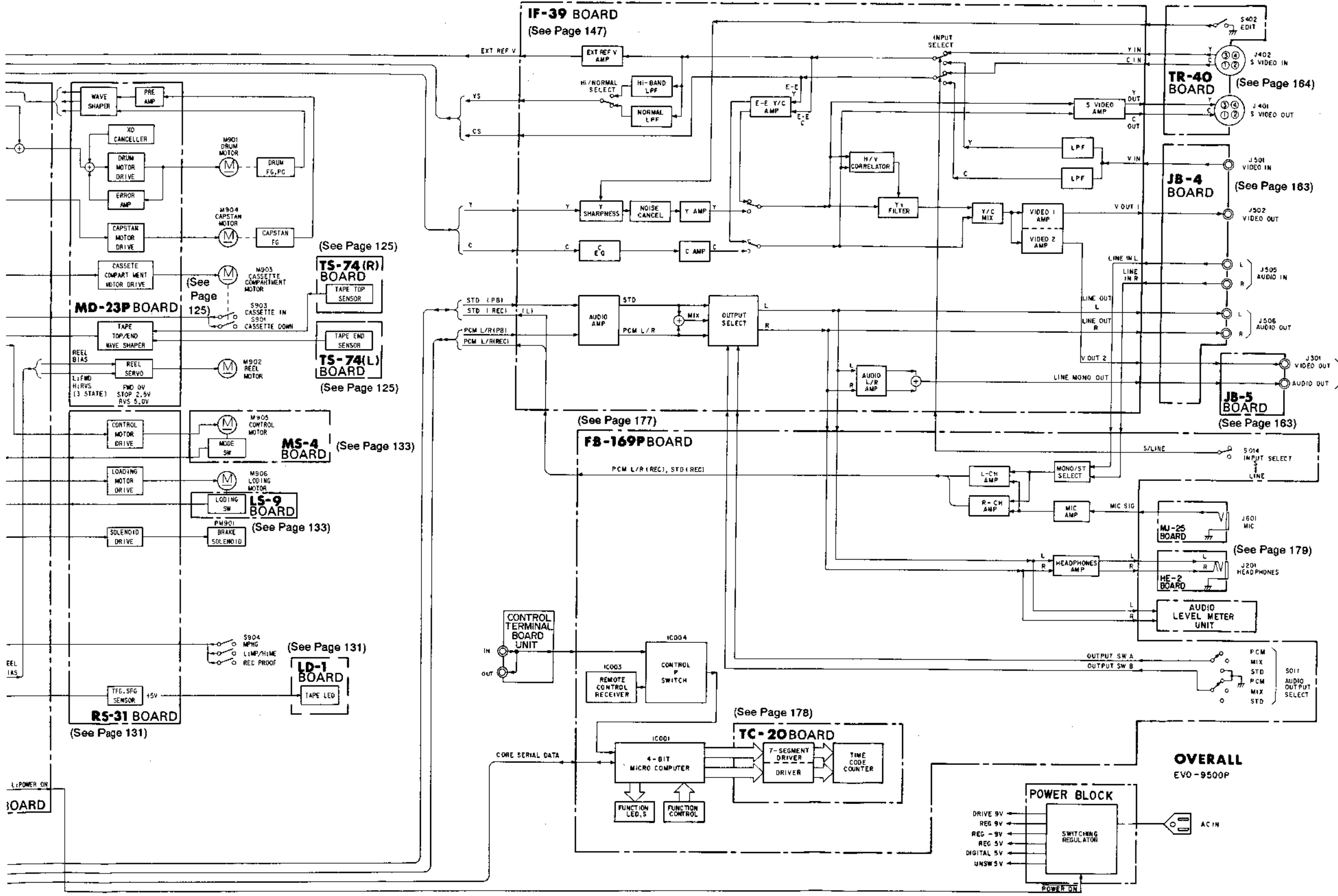
**SECTION 3
DIAGRAM**

3-1. BOARD LOCATION

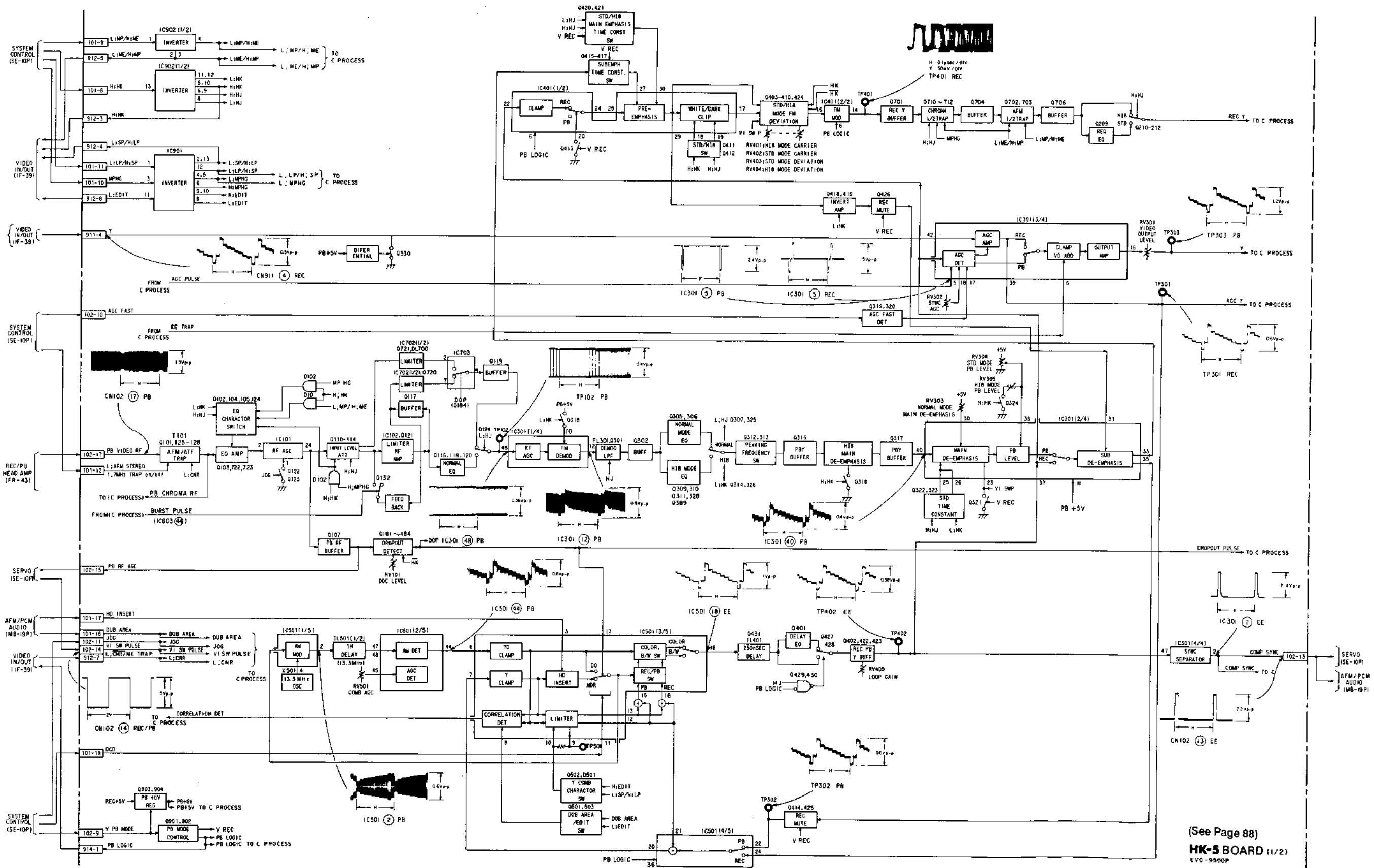


3-2. OVERALL BLOCK DIAGRAM



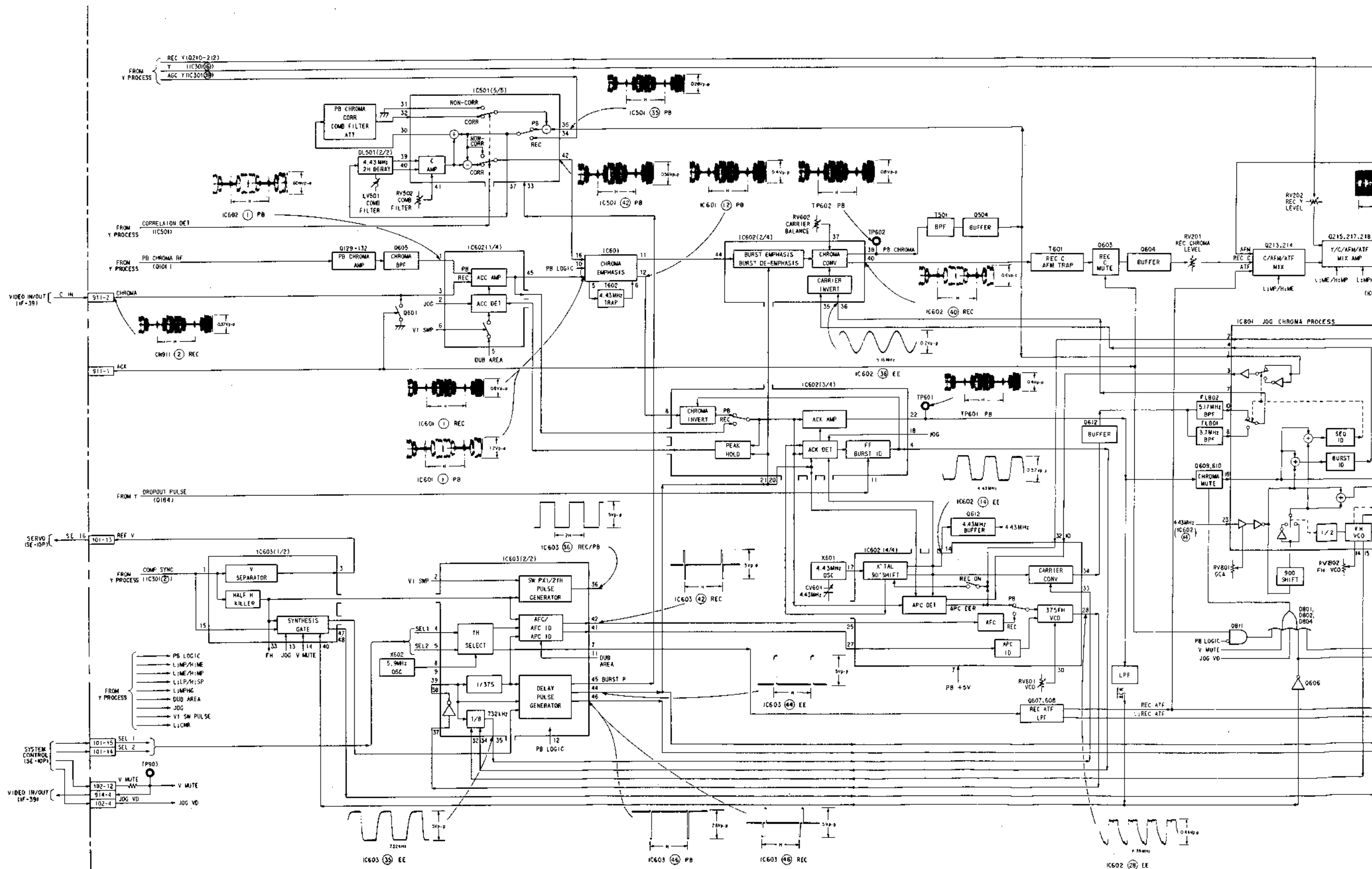


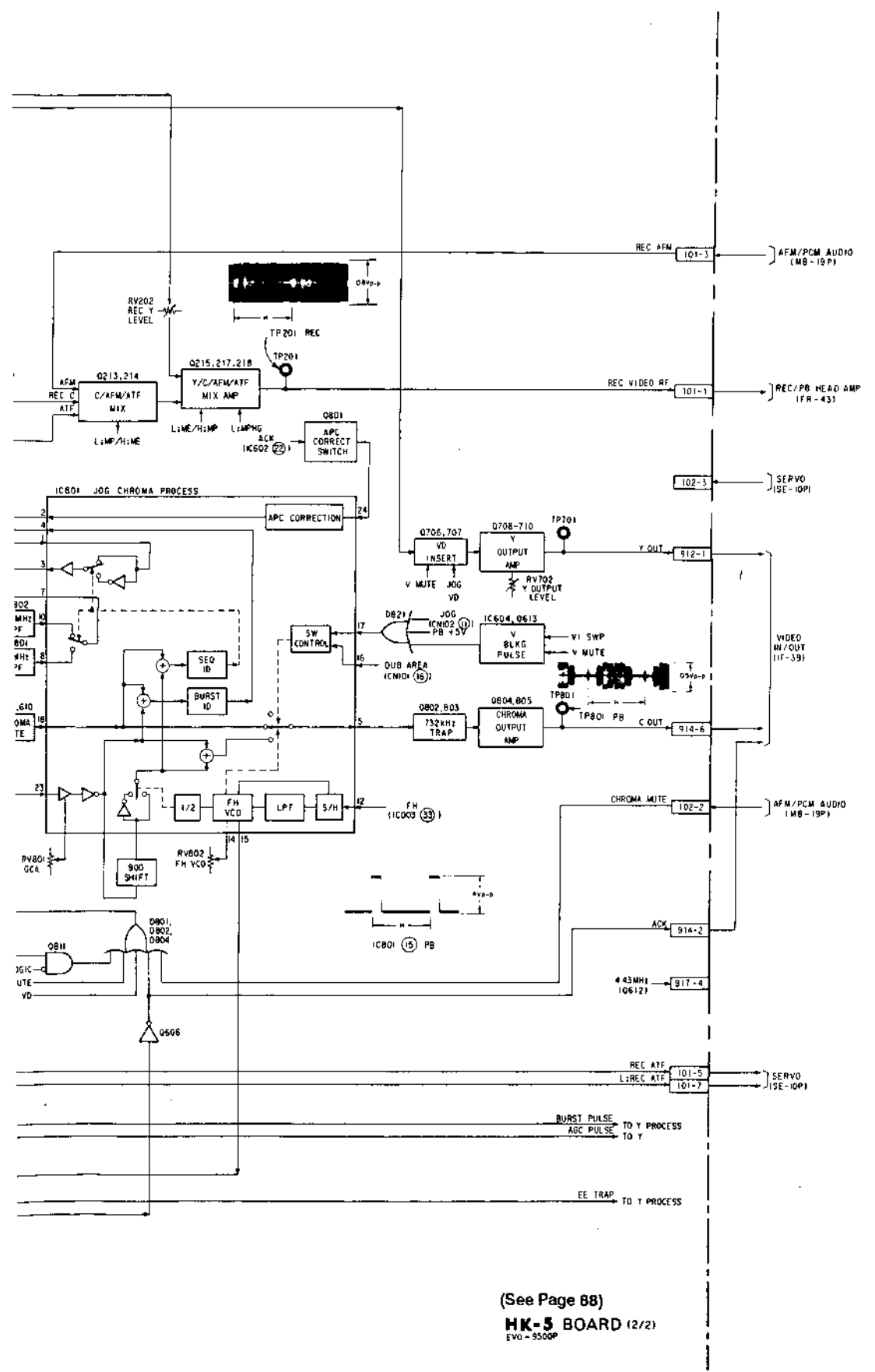
3-4. Y PROCESS BLOCK DIAGRAM



(See Page 88)
HK-5 BOARD (1/2)
 EV0-9900P

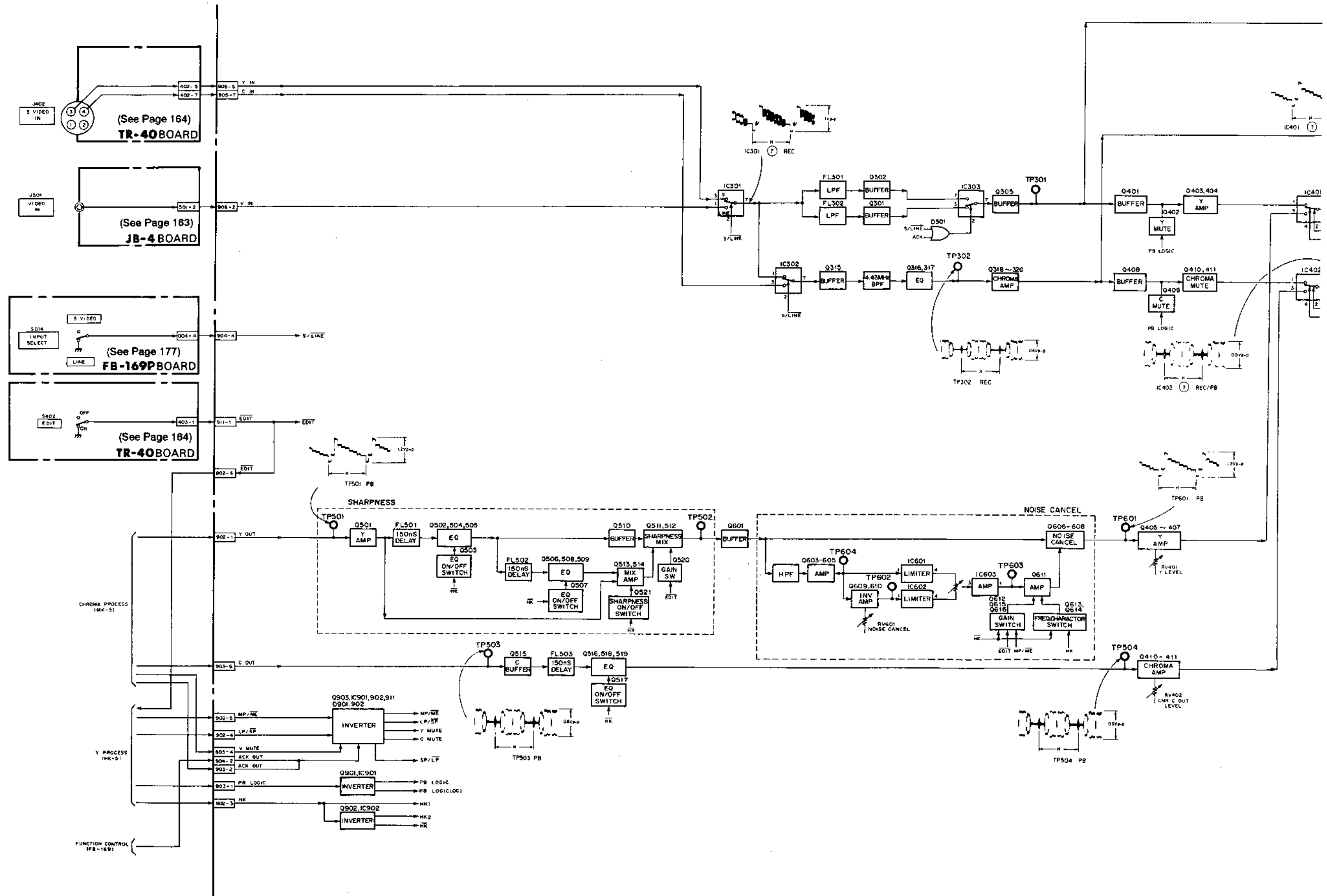
3-5. CHROMA PROCESS BLOCK DIAGRAM

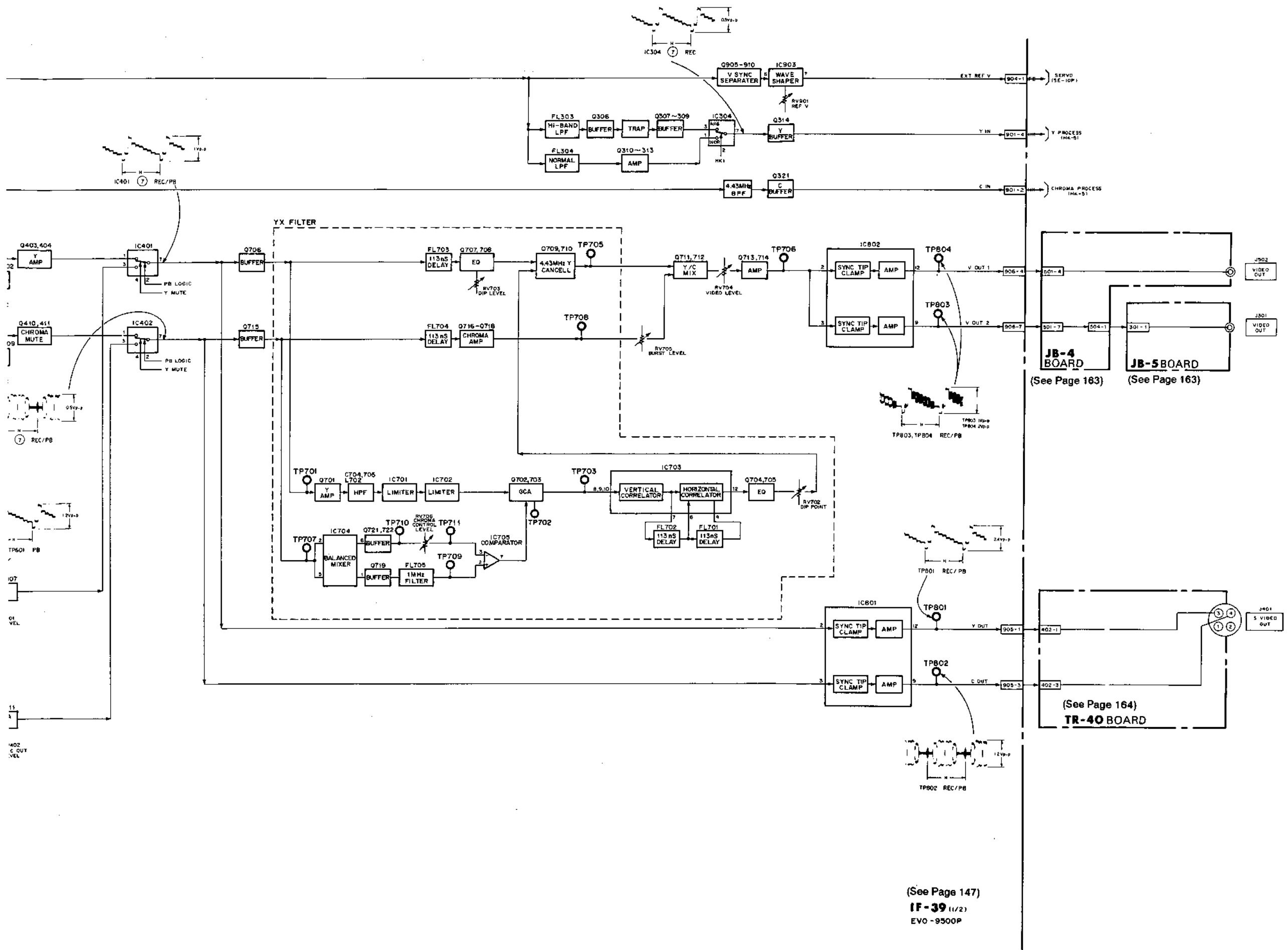




(See Page 68)
HK-5 BOARD (2/2)
 EVO-9500P

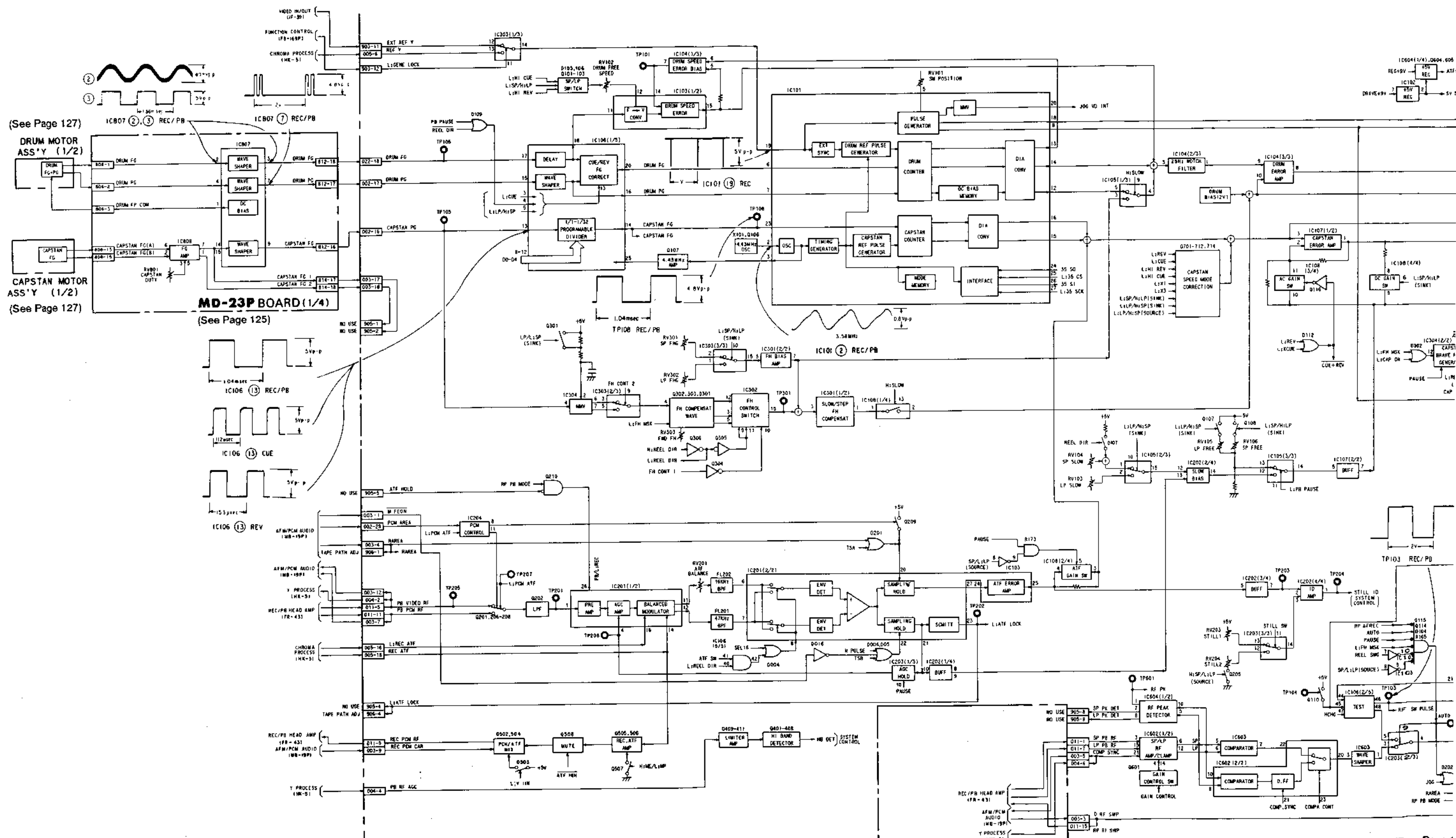
3-6. VIDEO IN/OUT BLOCK DIAGRAM



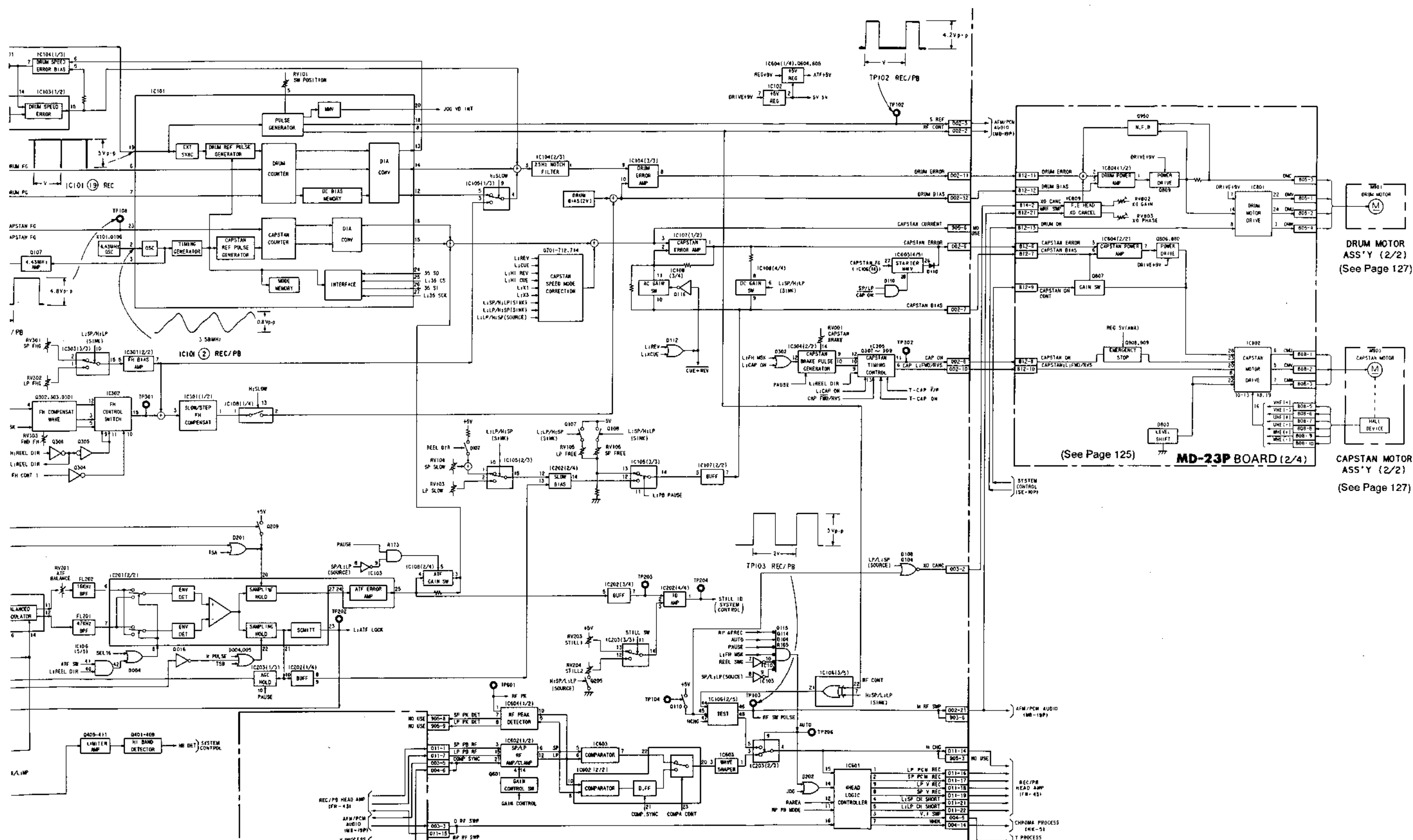


(See Page 147)
IF-39 (1/2)
 EVO-9500P

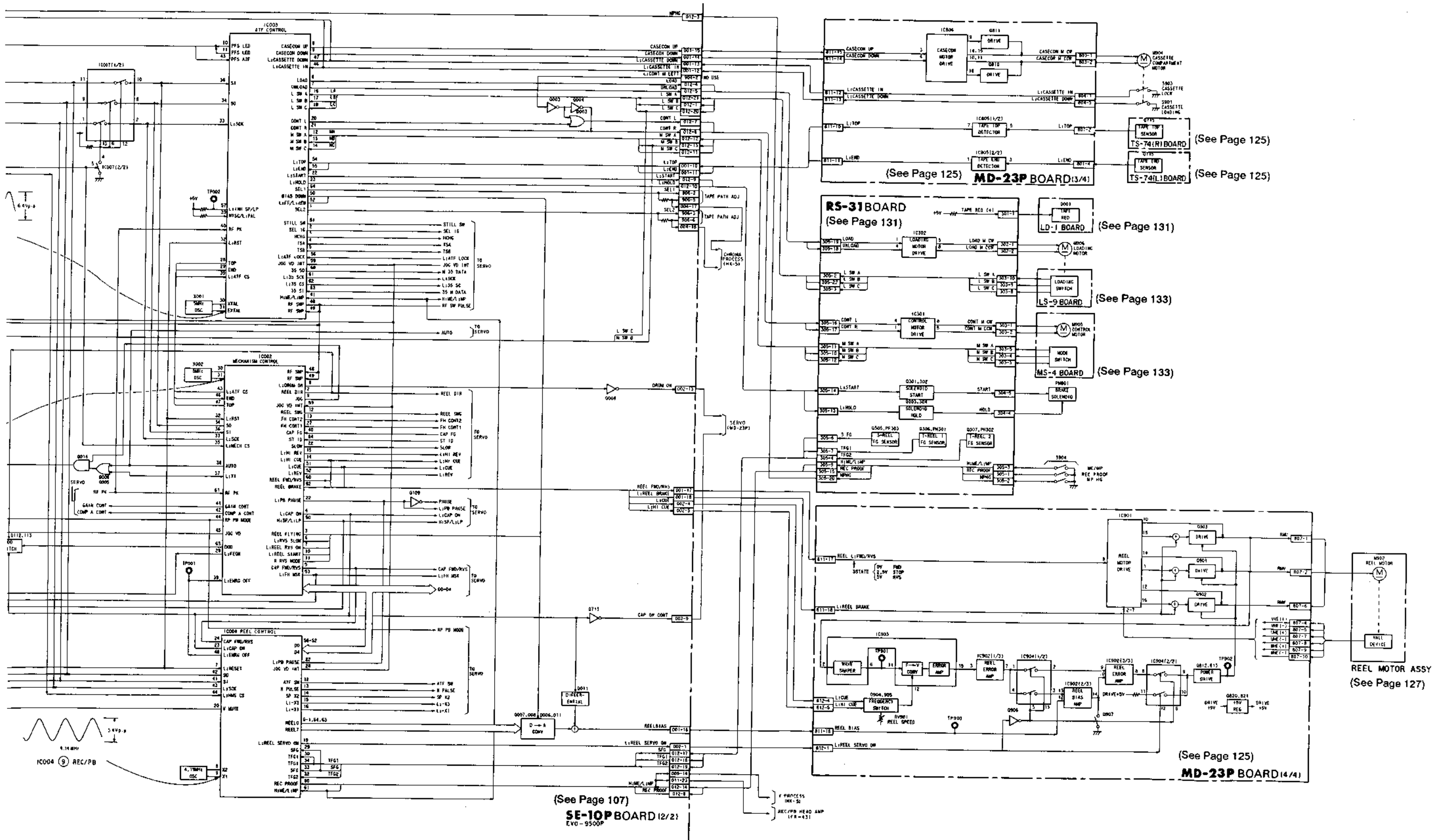
3-7. SERVO BLOCK DIAGRAM



(See Page 1)



(See Page 107) SE-10P BOARD (1/2) EVO-9500P



3-9. SYSTEM CONTROL — VIDEO BLOCK INTERFACE

SIGNAL	MODE		STOP	FF	REW	REC	REC PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB PAUSE	x 1	- x 1	x 2	- x 3	CUE (x 9)	REV (- x 7)	SLOW (1/5)	SLOW (- 1/5)	
	I/O	PIN No.																		
JOG	O	Pin ⑨ of IC002	L	L	L	L	L	H	H	L	H	H	H	H	H	H	H	H	H	H
$\overline{x1}$	O	Pin ⑩ of IC002	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H	H
GAIN CONT	O	Pin ⑪ of IC002	H	H	H	H	H	H	H	H*1	H*1	H*1	H*1	H*1	H*1	H*1	H*1	H*1	H*1	H*1
COMPA CONT	O	Pin ⑫ of IC002	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L
JOG VD	O	Pin ⑬ of IC002	H					VD pulse		H	VD pulse									
SP/LP	O	Pin ⑭ of IC002	It is "H" when recording or playback 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	
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
ME/MP	O	Pin ⑰ of CN012	It is "L" when using MP tape or MPHG tape.																	

*1. It is "L" when LP mode.

3-10. SYSTEM CONTROL — SERVO (CAPSTAN MOTOR) BLOCK INTERFACE

SIGNAL	MODE		STOP	FF	REW	REC	REC PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB PAUSE	x 1	- x 1	x 2	- x 3	CUE (x 9)	REV (- x 7)	SLOW (1/5)	SLOW (- 1/5)
	I/O	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
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
D0 - D4	O	Pin ⑬-⑰ of IC002	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"2"	"2"	"9"	"7"	"1"	"1"
PB PAUSE	O	Pin ⑱ of IC002	H	H	H	H	H	H	L	H	L	H	H	H	H	H	H	L	L
CUE	O	Pin ⑲ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H
REV	O	Pin ⑳ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H
$\overline{-x1}$	O	Pin ⑲ of IC004	H	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H
$\overline{-x3}$	O	Pin ⑳ of IC004	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H	H

D4 MSB
D0 LSB
Decimal

*1. Pulse output

3-11. 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)	
	I/O	PIN No.																		
DRUM ON	O	Pin ⑧ of IC002	H	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	
SLOW	O	Pin ⑭ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	H	H	
FH CONT1	O	Pin ⑰ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	* 1	* 1	
FH MASK	O	Pin ⑱ of IC002	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	* 1	* 1	

*1. Pulse output

3-12. 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)	
	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	
REEL FLYING	O	Pin ③ of IC002	Normally "L". "H" pulse when change from STOP to 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	H	L
REEL RVS ON	O	Pin ⑦ of IC002	Normally "H". "L" pulse when change from FORWARD to REVERSE (over -×1 speed).																	
REEL START	O	Pin ⑩ of IC002	Normally "H". "L" pulse when change from STOP to 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
REEL SWG	O	Pin ⑫ of IC002	Normally "L". "H" pulse when change the direction from FORWARD to REVERSE, and vice versa.																	
REEL FWD/RVS	O	Pin ⑰ 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	
REEL BRK	O	Pin ⑱ of IC002	Normally "H". "L" pulse when change from REC to REC-PAUSE mode.																	
REEL 0-7	O	Pin ①-⑥, ⑧, ⑨ of IC004	"70"	"98"	"98"	"54"	"54"	"54"	"54"	"54"	"70"	"54"	* 2	"70"	* 2	* 3	* 3	"70"	"63"	
REEL SERVO ON	O	Pin ⑱ of IC004	H	H	H	H	H	H	H	H	H	L	H	L	H	L	H	H	H	

REEL 7 MSB
REEL 0 LSB
BCD code

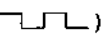
- *1. Pulse output
- *2. Changes according to the period of SFG
- *3. Changes according to the tape speed (SP/LP)

3-13. SYSTEM CONTROL — SERVO (ATF SERVO) 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)	
	I/O	PIN No.																		
RP PB MODE	O	Pin ④ of IC002	H	H	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	
JOG VD INT	I	Pin ⑤ of IC002, 003	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	
SEL1B	O	Pin ② of IC003	L	L	L	* 2	L	* 2	L	* 2	L	* 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	
TSB	O	Pin ⑤ of IC003	L	L	L	L	L	* 2	L	* 2	L	* 2	* 2	* 2	* 2	L	L	L	L	
M RF SW PULSE	I	Pin ④, ⑤ of IC003	H/L	FIELD sync pulse																
SEL 1	O	Pin ③ of IC003	H	H	H	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	* 2	
ATF SW	O	Pin ⑩ of IC004	L	L	L	L	L	L	* 1	L	* 1	L	L	L	L	L	L	* 1	* 1	
N PULSE	O	Pin ⑪ of IC004	L	L	L	L	L	L	* 1	L	* 1	L	L	L	L	L	L	* 1	* 1	

*1. Pulse output
*2. Pulse output with ATF sequence

3-14. SYSTEM CONTROL — SERVO (STILL) 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)
	I/O	PIN No.																	
RF PK	I	Pin ⑥ of IC002	Pulse input in PB PAUSE mode.																
STID	I	Pin ⑦ of IC002	Pulse input in PB PAUSE mode.																
STILL SW	O	Pin ⑤ of IC003	V duration pulse input ()																

3-15. SYSTEM CONTROL — SERVO (HEAD SELECTING) 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)
	I/O	PIN No.																	
AUTO	O	Pin ③ of IC002	L	L	L	L	L	L	L	L	L	L	L	L	L	H	H	* 1	* 1
SP/LP	O	Pin ④ of IC002	*H* when record or play back in SP mode.																
HCHG	O	Pin ③ of IC003	* 1	* 1	* 1	* 1	* 1	* 1	* 2	* 1	* 2	* 1	* 2	* 2	* 2	* 2	* 2	* 2	* 2

*1. Depending upon a tape speed (SP/LP).
*2. Pulse output

3-16. SYSTEM CONTROL — SERVO (OTHERS) 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)	
	I/O	PIN No.																		
JOG	O	Pin ⑥ of IC002	L	L	L	L	L	H	H	L	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
M ATF LOCK	I	Pin ⑫ of IC003		* 1	* 1					* 2		* 2	* 2	* 2	* 2	* 1	* 1			

*1. Pulse output
 *2. "L" when ATF servo is phase locked.


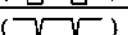
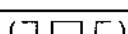
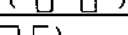
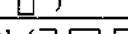

3-17. SYSTEM CONTROL — MD BLOCK INTERFACE


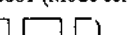
SIGNAL	MODE		STOP	FF	REW	REC	REC-PAUSE	AUDIO DUB	AUDIO DUB PAUSE	PB	PB-PAUSE	× 1	- × 1	× 2	- × 3	CUE (× 9)	REV (- × 7)	SLOW (1/5)	SLOW (- 1/5)	
	I/O	PIN No.																		
LOAD	O	Pin ⑥ of IC003	Normally "L". "H" in tape threading.																	
UNLOAD	O	Pin ⑦ of IC003	Normally "L". "H" in tape unthreading.																	
CASECON UP	O	Pin ⑧ of IC003	Normally "L". "H" in cassette unloading.																	
CASECON DOWN	O	Pin ⑨ of IC003	Normally "L". "H" in cassette loading.																	
MA-MC	I	Pin ⑬⑭ of IC003	"3"	"6"	"8"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"	"1"
LA-LC	I	Pin ⑰⑱ of IC003	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"	"3"
CONTL	O	Pin ⑲ of IC003	Normally "L". "H" when change to mechanism mode.																	
CONTR	O	Pin ⑳ of IC003	Normally "L". "H" when change to mechanism mode.																	
START	O	Pin ㉑ of IC003	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
HOLD	O	Pin ㉒ of IC003	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
CST IN	I	Pin ㉓ of IC003	Normally "L". "H" when cassette is ejected.																	
CC DOWN	I	Pin ㉔ of IC003	"H" in eject condition. "L" when cassette compartment comes down.																	
TOP	I	Pin ㉕ of IC003	Normally "H". "L" at tape top.																	
END	I	Pin ㉖ of IC003	Normally "H". "L" at tape end.																	
			When both signals are "H", it is judged that the cassette is loaded. When "L", it is judged that the cassette is unloaded.																	
SFG	I	Pin ㉗ of IC004	Undefined	* 1	* 1	* 1	Undefined	* 1	Undefined	* 1	Undefined	* 1	* 1	* 1	* 1	* 1	* 1	* 1	* 1	
TFG1	I	Pin ㉘ of IC004	Undefined	* 1	* 1	* 1	Undefined	* 1	Undefined	* 1	Undefined	* 1	* 1	* 1	* 1	* 1	* 1	* 1	* 1	
TFG2	I	Pin ㉙ of IC004	Undefined	* 1	* 1	* 1	Undefined	* 1	Undefined	* 1	Undefined	* 1	* 1	* 1	* 1	* 1	* 1	* 1	* 1	
REC PROOF	I	Pin ㉚ of IC004	"L" when recording enable cassette tape is inserted.																	
ME/MP	I	Pin ㉛ of IC004	"L" when MP tape or MPHG tape is used.																	

MA MSB
 MC LSB
 Decimal
 LA MSB
 LC LSB
 Decimal

*1. Pulse according to reel rotation

3-18. MODE CONTROL MICROCOMPUTER — PERIPHERAL CIRCUIT INTERFACE
(IC001 (CXP80116) on SE-10P board)

Signal	I/O	PIN No.	Input/Output level
—		1	
—		2	
LCD CS	O	3	Connect to check pin. Pulse train of V interval. ()
COM/DATA	O	4	Connect to check pin. Pulse train of V interval. ()
MECH CS	O	5	Chip select signal for mechanism control. Pulse train of V interval. ()
REEL CS	O	6	Chip select signal for reel control. Pulse train of V interval. ()
PCC CS	O	7	Chip select signal for PCM microcomputer. Pulse train of V interval. ()
IDM CS	O	8	Chip select signal for PCM microcomputer. Pulse train of V interval. ()
RP AFREC	O	9	"H" in AUDIO DUB Mode.
VINS	O	10	Normally "H". Video insert signal.
LCD BSUY	I	11	Connect to check pin.
T.C./REEL	O	12	Connect to check pin.
SP/LP SW	I	13	Connect to check pin.
CASETE IN	I	14	"L" when cassette is inserted.
CCDOWN	I	15	"L" when cassette compartment comes down.
L SW C	I	16	"H" Loading switch input.
HG SW	I	17	MPHG tape detection input. "L" when MP or ME cassette is inserted.
POWER ON(I)	I	18	"L" when power is on.
POWER ON(O)	O	19	"H" when power is on.
V PB MODE	O	20	"H" when video circuit is in playback mode.
AGC FAST	O	21	Normally "L".
HK	O	22	"H" when Hi8 cassette is inserted.
MPHG	O	23	"H" when MPHG cassette is inserted.
LPHK		24	Not used.
MUTE(I)	I	25	Normally "L". "H" when change the mode from STOP to PB.
HB DET	I	26	"L" when playback the cassette other than for Hi8.
PCMATF	O	27	Normally "H".
ATF INH	O	28	Normally "H".
AFM STEREO V CONT	O	29	"H" in normal playback. "L" in record.
RESET	O	30	Reset output. "L" in reset.
MP	I	31	Microprocessor mode select terminal-not select. Connect to GND.
RESET(I)	I	32	Reset output. "L" in reset.
Vss		33	Connect to GND.
XTAL	O	34	Crystal oscillator for system clock connection terminal. Oscillating at 16MHz.
EXTAL	I	35	
—		36	
MSI	I	37	Serial data input terminal.
MSO	O	38	Not used.
SCK	I	39	Not used.
MODE CS	I	40	Chip select signal to IC001 on the FB-169board. Pulse train of V interval.

Signal	I/O	PIN No.	Input/Output level
MSI2	I	41	Communication signal between IC001 (Mode controller) on the FB-169. Pulse train of V interval.
MSO2	O	42	Communication signal between IC001 (Mode controller) on the FB-169. Pulse train of V interval.
SCK2	O	43	Communication signal between IC001 (Mode controller) on the FB-169. Pulse train of V interval.
FEEDER	I	44	Not used.
TEST	I	45	Not used. Fix to "H" level.
FUNC KEY4	I	46	Not used.
FUNC KEY3	I	47	Not used.
FUNC KEY2	I	48	Not used.
FUNC KEY1	I	49	Not used.
SLOW TR	I	50	SLOW ADJ input. Voltage according to SLOW ADJ control position. (0-5Vdc)
STILL ADJ	I	51	STILL ADJ input. Voltage according to STILL ADJ control position. (0-5Vdc)
AVss		52	Connect to GND.
AVREF	I	53	Connect to UNSW5V.
AVDD	I	54	Connect to UNSW5V.
SW PLS	I	55	RF SW PULSE input. Pulse train of 2V interval. ()
JOG VD INT	I	56	JOG VD input for digital servo IC (IC101 20035). Interrupt signal for microcomputer. Pulse train of V interval.
AFM STEREO CONT(I)	I	57	Not used. Fix to "H" level.
—		58	
—		59	
—		60	
—		61	
—		62	
—		63	
—		64	
ENABLE	I	65	Communication signal to IC001 (Mode controller) on the FB-169 board. Pulse train of V interval. ()
SP STB	O	66	Not used.
—		67	
—		68	
NT/PAL	I	69	Fix to "H" level.
INTD	I	70	Fix to "H" level.
NMI	I	71	Fix to "H" level.
VDD		72	Connect to UNSW5V.
Vss		73	Connect to GND.
Vpp		74	Connect to UNSW5V.
—		75	
—		76	
—		77	
—		78	
—		79	
—		80	

3-19. SYSTEM CONTROL — PCM AUDIO BLOCK INTERFACE

Signal	I/O	PIN No.	Input/Output level
FE ON	O	Pin ② of IC002	Normally "H". "L" in recording or AUDIO DUB.
FH MASK	O	Pin ③ of IC002	"L" pulse during slow playback. "H" in other playback modes.

3-20. SERVO — VIDEO BLOCK INTERFACE

Signal	I/O	PIN No.	Input/Output level
LP PCM REC	O	Pin ① of IC601	Normally "L". "H" pulse of V period in LP mode recording (including AUDIO DUB).
SP PCM REC	O	Pin ② of IC601	Normally "L". "H" pulse of V period in SP mode recording (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" in LP recording/playback mode.
LP CH SHORT	O	Pin ⑤ of IC601	Normally "L". "H" in LP recording/playback mode.
HH DL	O	Pin ⑦ of IC601	Normally "H". Pulse of variable speed playback.
SP VIDEO REC	O	Pin ⑧ of IC601	Normally "L". "H" in SP recording mode.
LP VIDEO REC	O	Pin ⑨ of IC601	Normally "L". "H" in LP recording mode.
COMP SYNC	I	Pin ⑥ of CN004	Positive composite sync signal.
REF V	I	Pin ⑥ of CN005	"L" pulse of V interval.
H CHG	O	Pin ⑭ of CN001	"H" in SP recording/playback mode. "L" in LP recording/playback mode. Variable speed playback pulse.

3-21. PCM AUDIO — VIDEO BLOCK INTERFACE

Signal	I/O	PIN No.	Input/Output level
M FE ON	O	Pin ① of IC601	Normally "H". "L" in recording. "L" pulse of 2V period in AUDIO DUB.
RP AFTER REC	O	Pin ⑩ of IC601	Normally "L". "H" in AUDIO DUB.
D RF SWP (RP RF SWP)	O	Pin ⑫ of PD-19 board	2V period 50% duty pulse.
RAMP	O	Pin ⑬ of PD-19 board	Normally "L". "H" in AUDIO DUB. ("H" pulse of V interval)
C MUTE	O	Pin ⑭ of PD-19 board	Normally "L". "H" in AUDIO DUB. ("H" pulse of V interval)
HD INSERT	O	Pin ⑮ of PD-19 board	Normally "L". "H" pulse of H period in AUDIO DUB. ("H" Pulse of H interval)
AFTER REC MASC	O	Pin ⑯ of PD-19 board	Normally "L". "H" in AUDIO DUB. ("H" pulse of V interval)

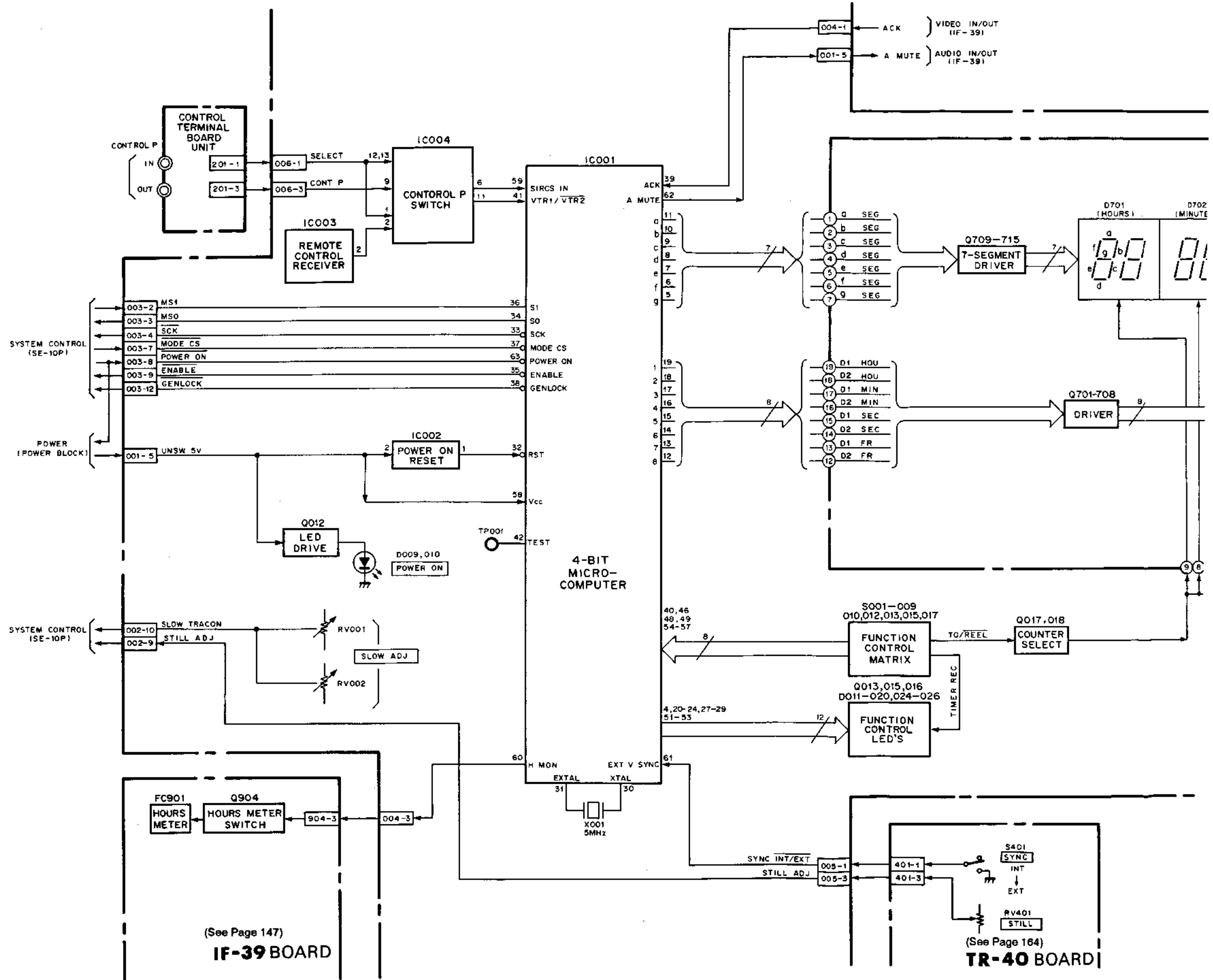
3-22. PCM AUDIO — SERVO BLOCK INTERFACE

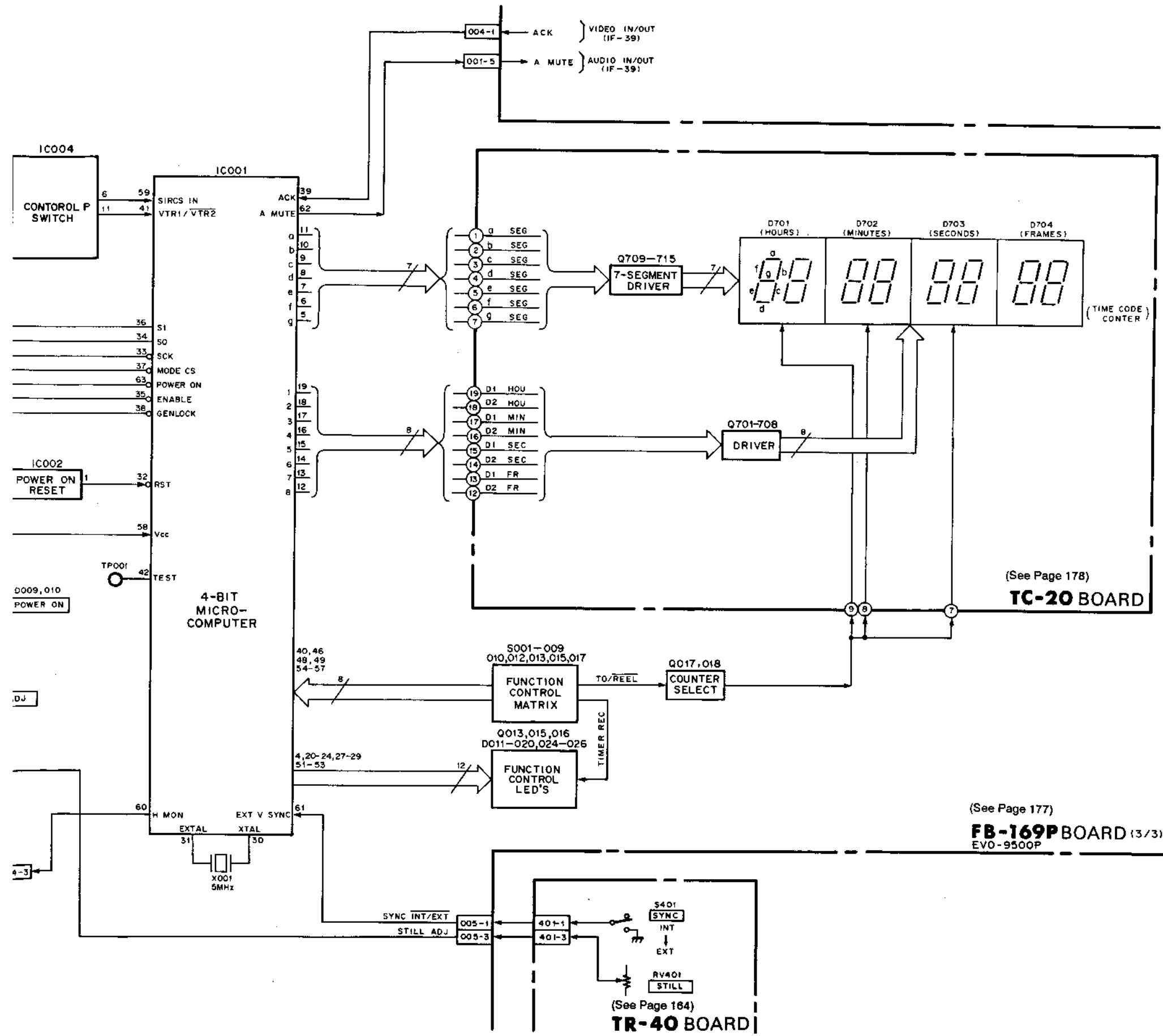
Signal	I/O	PIN No.	Input/Output level
RF CONT	I	Pin ⑳ of IC601	2V period 50% duty pulse.
MS REF	I	Pin ⑲ of RD-19 board	"H" pulse of V period.
R AREA	O	Pin ⑱ of RD-19 board	Normally "L". "H" pulse of V period in record (including AUDIO DUB).
D RF SWP	O	Pin ⑳ of RD-19 board	2V period 50% duty pulse.
RF AREA	O	Pin ㉑ of RD-19 board	Normally "L". "H" pulse of V period in record (including AUDIO DUB).
RF CONT SWP	I	Pin ㉒ of RD-19 board	2V period 50% duty pulse.

3-23. PCM AUDIO — AUDIO BLOCK INTERFACE

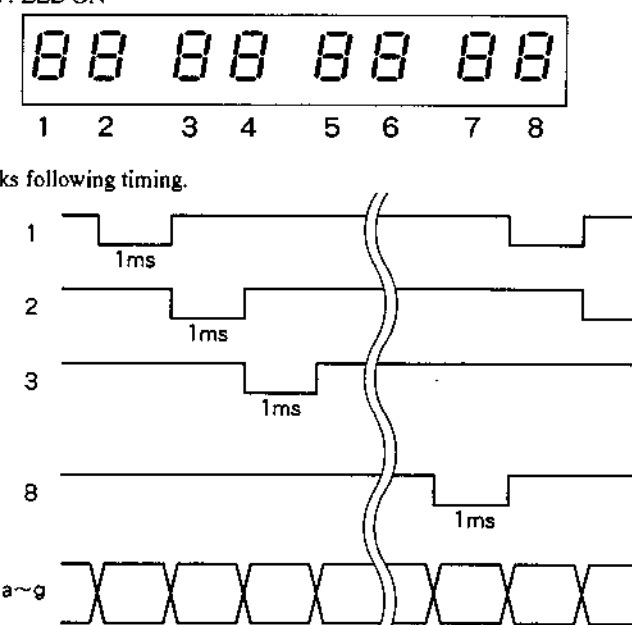
Signal	I/O	PIN No.	Input/Output level
MONO/STE OUT	O	Pin ① of IC601	Normally "L". "H" when monaural PCM audio signal is played back.
MONO/STE IN	I	Pin ② of IC601	Normally "L". Goes to "H" in microphone input or monaural PCM audio signal is played back by player.
PCM MUTE	O	Pin ④ of IC601	"H" when PCM audio signal can not be played back or at the mode transition.
AFM REC/PB	O	Pin ⑤ of IC601	Normally "H". "L" in playback (including variable speed playback).
AFM MUTE	O	Pin ⑥ of IC601	Normally "L". "H" in the mode transition.
AUEE PORT	O	Pin ⑦ of IC601	Normally "L". "H" in playback (including variable speed playback).
MODE	O	Pin ⑧ of RD-19 board	Normally "L". "H" in playback (including variable speed playback).

3-24. FUNCTION CONTROL BLOCK DIAGRAM





3-25. TIMER MICROCOMPUTER (IC001 (CXP5046) on FB-169P board) INTERFACE

Signal name	I/O	PIN No.	Function
—	O	1	Not used.
—	O	2	
—	O	3	
AU DUB	O	4	DUB LED Control signal. H : LED ON L : LED OFF
g	O	5	Control signal for each segment of 7-segment LED. H : LED ON L : LED OFF
f	O	6	
e	O	7	
d	O	8	
c	O	9	
b	O	10	
a	O	11	
8	O	12	ON/OFF control signal for each segment of 7-segment LED. H : LED OFF L : LED ON
7	O	13	 <p>It works following timing.</p>
6	O	14	
5	O	15	
4	O	16	
3	O	17	
2	O	18	
1	O	19	
LP LED	O	20	
SP LED	O	21	SP LED control signal. L : LED ON H : LED OFF
PCM LED	O	22	PCM LED control signal. L : LED ON H : LED OFF
CIN LED	O	23	CASSETTE-IN LED control signal. L : LED ON H : LED OFF
PAUSE LED	O	24	PAUSE LED control signal.GND. L : LED ON H : LED OFF
GND	O	25	GND

Signal name	I/O	PIN No.	Function
Vcc	O	26	UNSW5V.
FF LED	O	27	FF LED control signal. L : LED ON H : LED OFF
PLAY LED	O	28	PLAY LED control signal. L : LED ON H : LED OFF
REW LED	O	29	REW LED control signal. L : LED ON H : LED OFF
		30	5MHz Oscillation.
		31	5MHz Oscillation.
RESET	I	32	System reset input terminal.
SCK	O	33	Communication line to a mode control microcomputer (IC001/SE-10board) inside the Core-deck. Full-duplex serial data of 24-byte can be transmitted by 5-bit data. (See Fig.3-1)
SO	O	34	
ENABLE	I	35	
SI	I	36	
MODE CS	O	37	
GENLOCK	I	38	Sync control signal of core-deck. When it is "L", phase is locked to V SYNC input from external device, forcibly. Actually, Pin 61 is "L" level and sync is locked with external device when the mode is playback or ×1 mode.
ACK	I	39	Burst existence signal. This signal is used for detecting the video signal existence. H : Blank L : Video signal exist
TC/REEL	I	40	Selection signal to display the time code or reel counter on the 8-digit 7-segment LED. H : Time code L : Reel counter
VTRI/II	I	41	Sires category code selection signal input to pin 59. H : Receive VTR I L : Receive VTR II
TEST	I	42	"L" in TEST mode.
PRINTER	I	43	"L" in Printer. Not used.
PRGINC	I	44	Control signal to increment a chapter number, when the printer has been used. Not used.
—	—	45	Not used.
AUTO REPEAT	I	46	Switching signal to AUTO REPEAT mode. AUTO REPEAT is carried out when the ACK at pin 39 is "L".
AUTO PB	I	47	Not used.
TIMER PB	I	48	Switching signal for automatic playback when the power is turned ON. Automatic playback is carried out when it is "L".
TIMER REC	I	49	Switching signal for automatic recording when the power is turned ON. When it is set to "L", unit is set into the record mode by turning the power ON.
I/S LED	O	50	Not used.
EJECT LED	O	51	EJECT LED control signal. L : LED ON H : LED OFF

Signal name	I/O	PIN No.	Function
Vcc	O	26	UNSW5V.
FF LED	O	27	FF LED control signal. L : LED ON H : LED OFF
PLAY LED	O	28	PLAY LED control signal. L : LED ON H : LED OFF
REW LED	O	29	REW LED control signal. L : LED ON H : LED OFF
		30	5MHz Oscillation.
		31	5MHz Oscillation.
RESET	I	32	System reset input terminal.
SCK	O	33	Communication line to a mode control microcomputer (IC001/SE-10board) inside the Core-deck. Full-duplex serial data of 24-byte can be transmitted by 5-bit data. (See Fig.3-1)
SO	O	34	
ENABLE	I	35	
SI	I	36	
MODE CS	O	37	
GENLOCK	I	38	Sync control signal of core-deck. When it is "L", phase is locked to V SYNC input from external device, forcibly. Actually, Pin 61 is "L" level and sync is locked with external device when the mode is playback or $\times 1$ mode.
ACK	I	39	Burst existence signal. This signal is used for detecting the video signal existence. H : Blank L : Video signal exist
TC/REEL	I	40	Selection signal to display the time code or reel counter on the 8-digit 7-segment LED. H : Time code L : Reel counter
VTRI/II	I	41	Sircs category code selection signal input to pin 59. H : Receive VTR I L : Receive VTR II
TEST	I	42	"L" in TEST mode.
PRINTER	I	43	"L" in Printer. Not used.
PRG INC	I	44	Control signal to increment a chapter number, when the printer has been used. Not used.
		45	Not used.
AUTO REPEAT	I	46	Switching signal to AUTO REPEAT mode. AUTO REPEAT is carried out when the ACK at pin 39 is "L".
AUTO PB	I	47	Not used.
TIMER PB	I	48	Switching signal for automatic playback when the power is turned ON. Automatic playback is carried out when it is "L".
TIMER REC	I	49	Switching signal for automatic recording when the power is turned ON. When it is set to "L", unit is set into the record mode by turning the power ON.
J/S LED	O	50	Not used.
EJECT LED	O	51	EJECT LED control signal. L : LED ON H : LED OFF

Signal name	I/O	PIN No.	Function
HB LED	O	52	Hi8 LED control signal. L : LED ON H : LED OFF
REC LED	O	53	REC LED control signal. L : LED ON H : LED OFF
KEY1	I	54	A/D port for KEY Detection. DUB, +1/5, -1/5
KEY2	I	55	A/D port for KEY Detection. POWER, REW, RESET
KEY3	I	56	A/D port for KEY Detection. EJECT, PLAY, PAUSE
KEY4	I	57	A/D port for KEY Detection. STOP, REC, FF
Vcc		58	UNSW5V.
SIRCS IN	I	59	SIRCS Signal input terminal.
HMON	O	60	Control signal for the hours meter. It goes to "L" during rotating the drum based on the data transmitted from the core-deck.
INT/EXT	I	61	Switching signal for EXT/INT Sync. L : External sync mode
A MUTE	O	62	Audio muting control signal. Mute by "H".
POWER ON	I	63	Power on detection signal. L : Power on
	O	64	Not used.

External Bus Timing chart

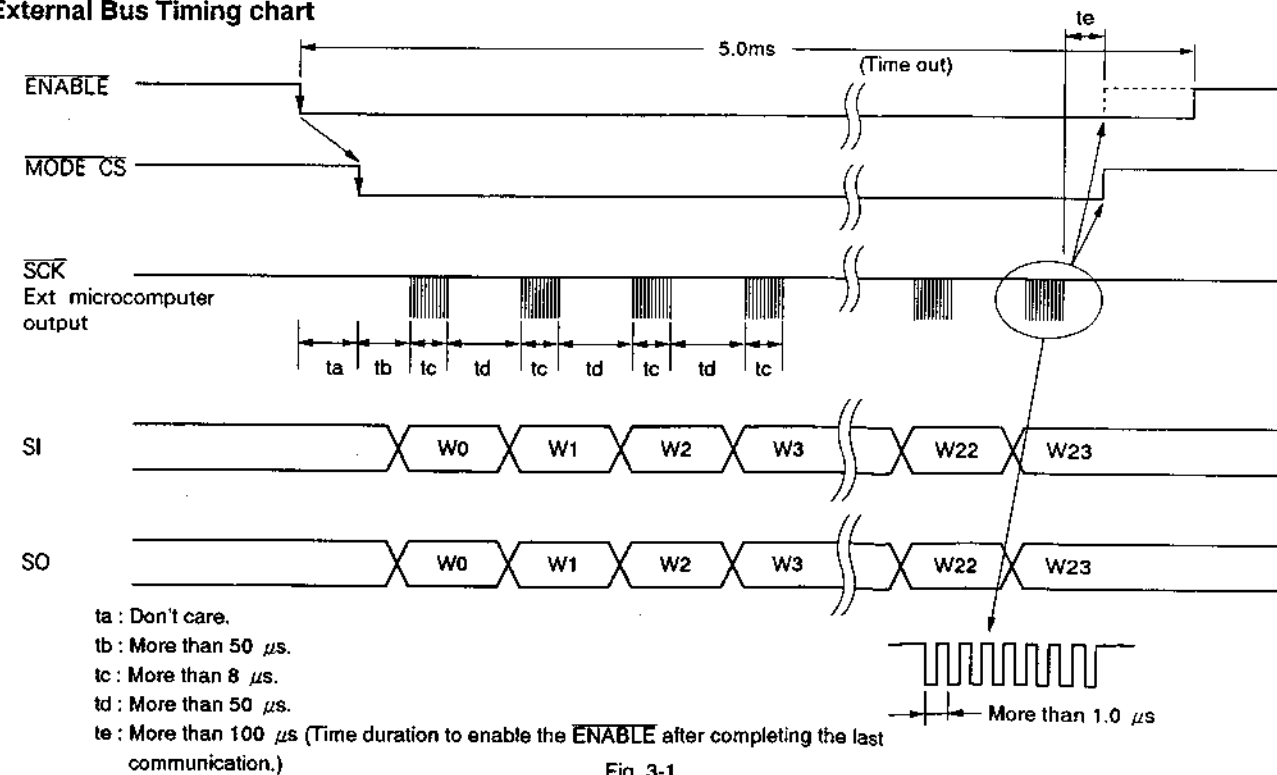
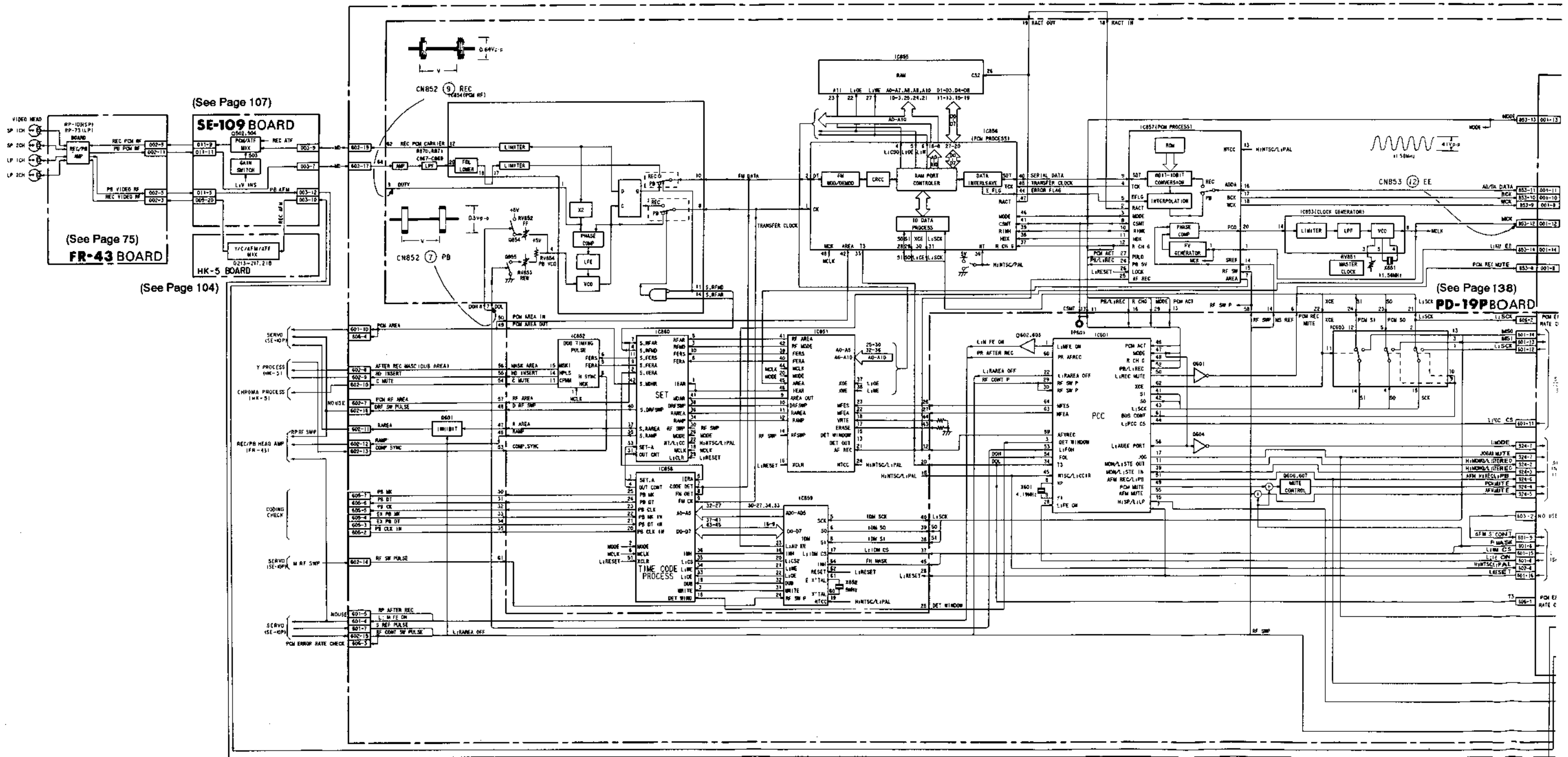
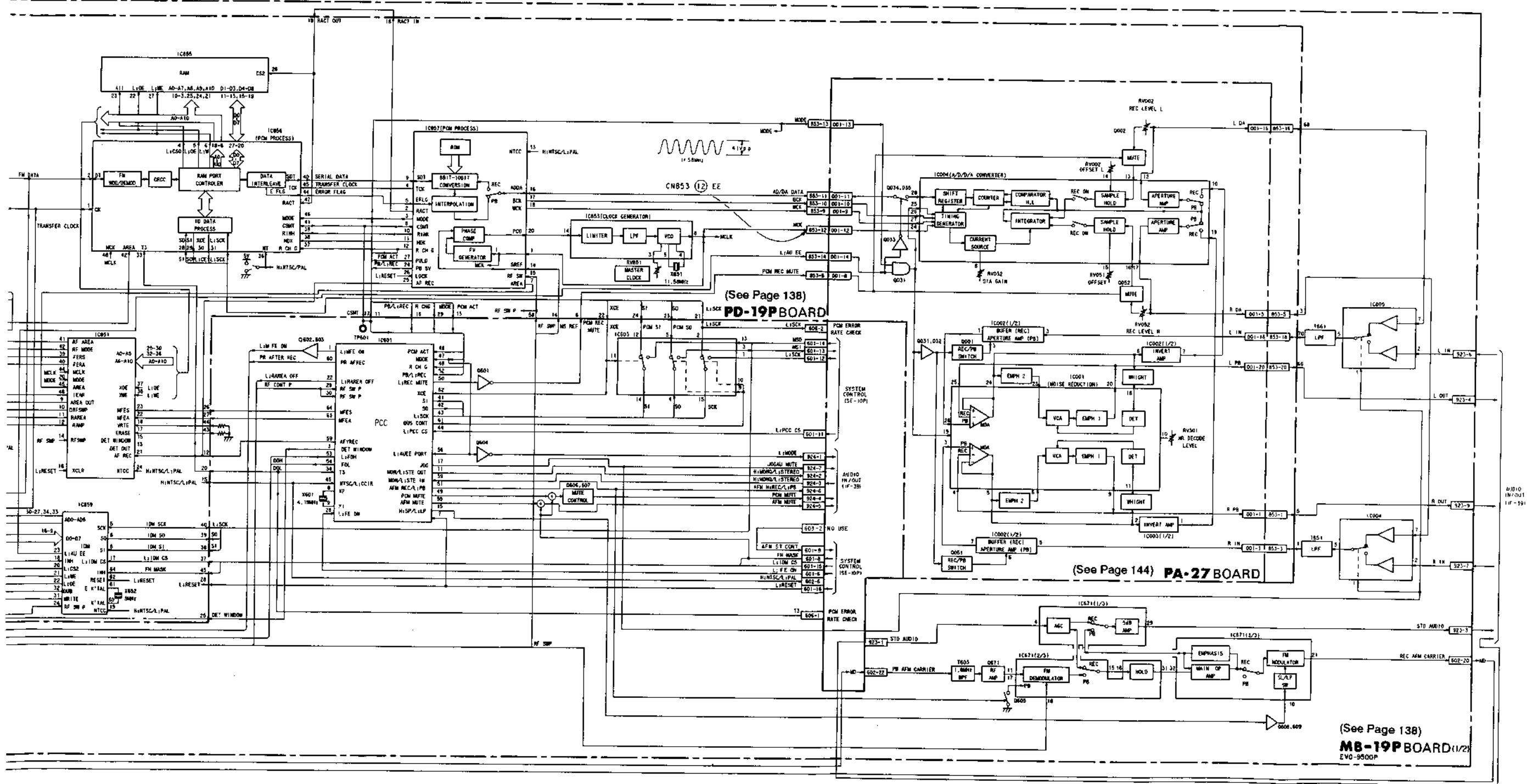


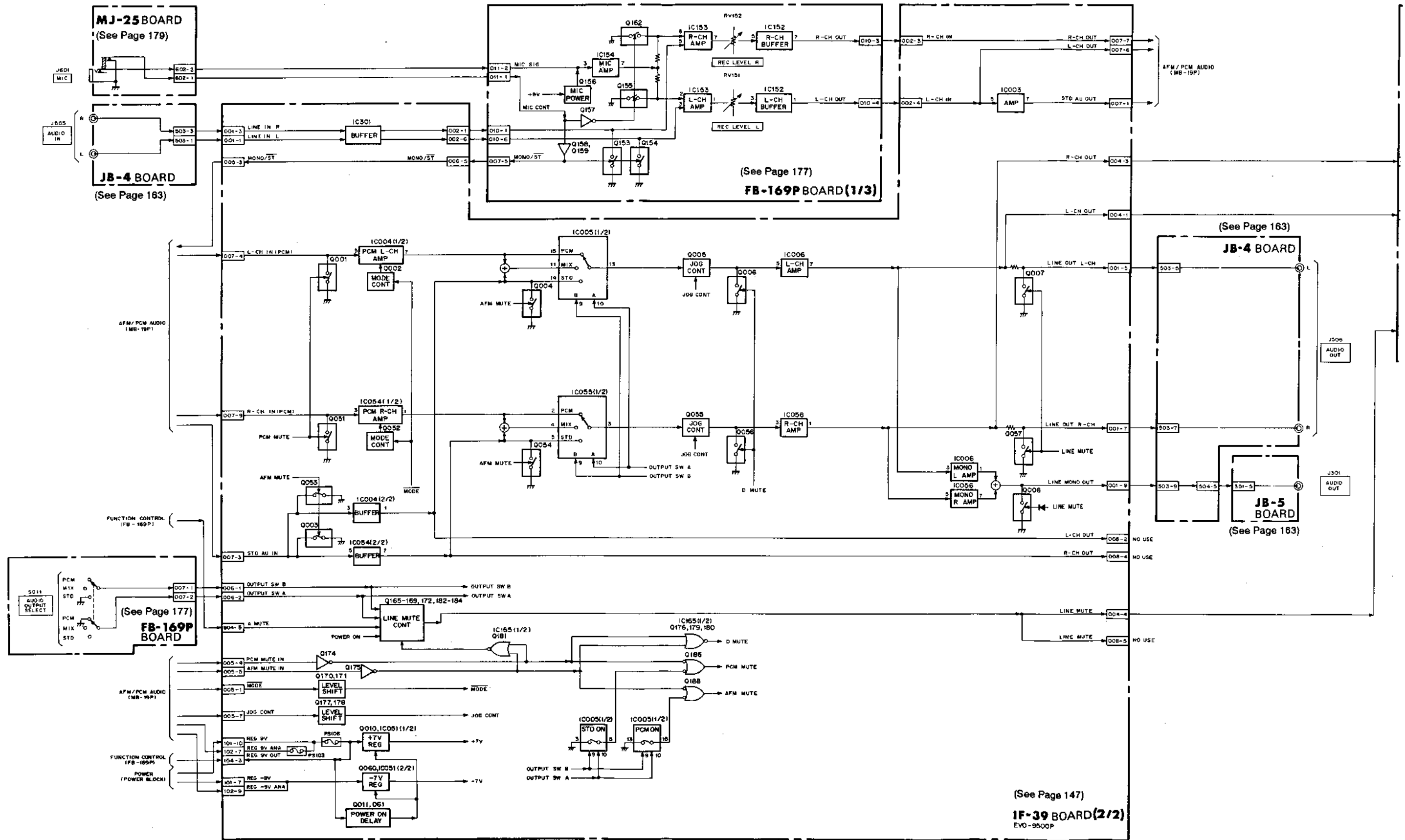
Fig. 3-1

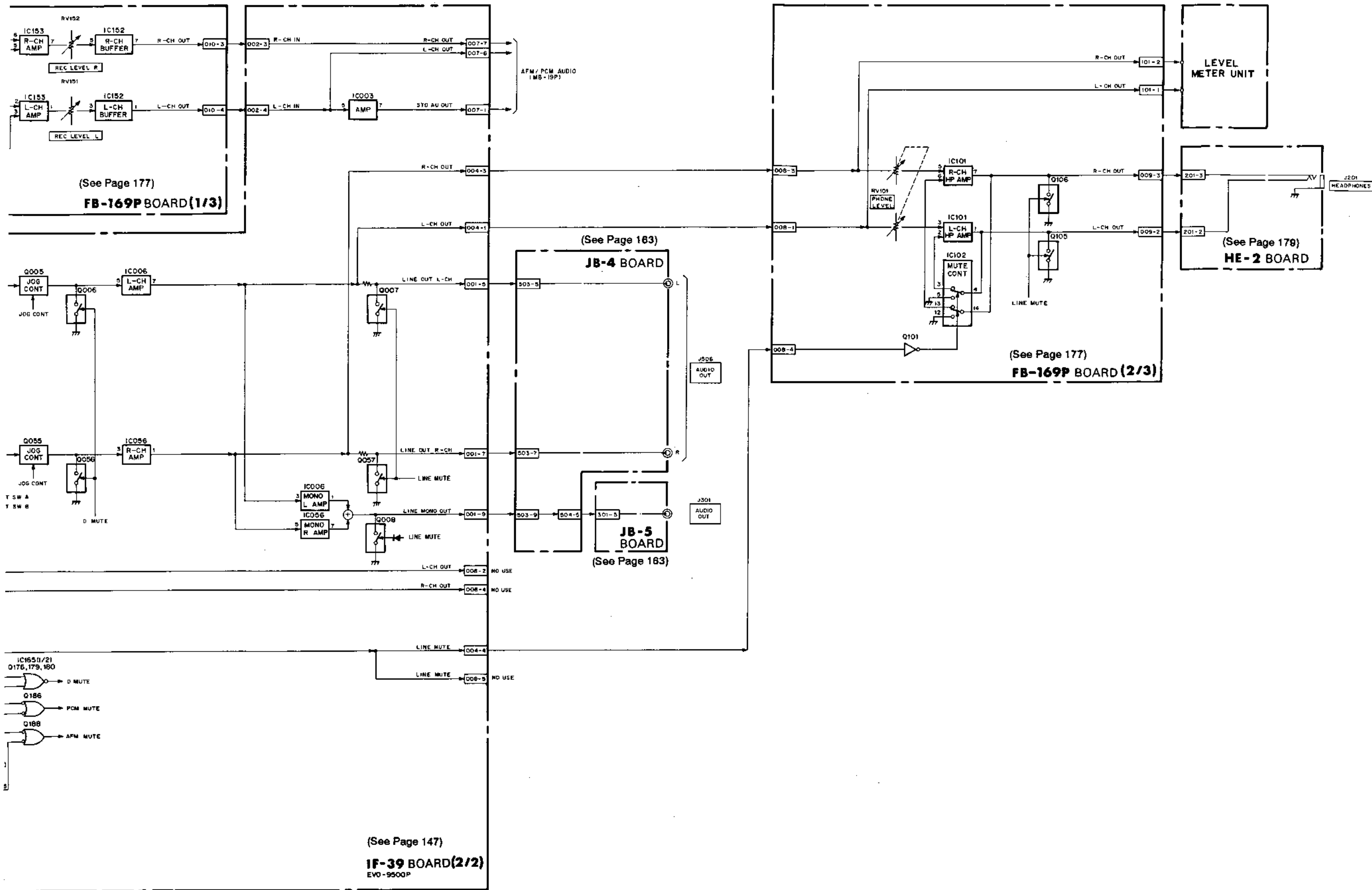
3-26. AFM/PCM AUDIO BLOCK DIAGRAM



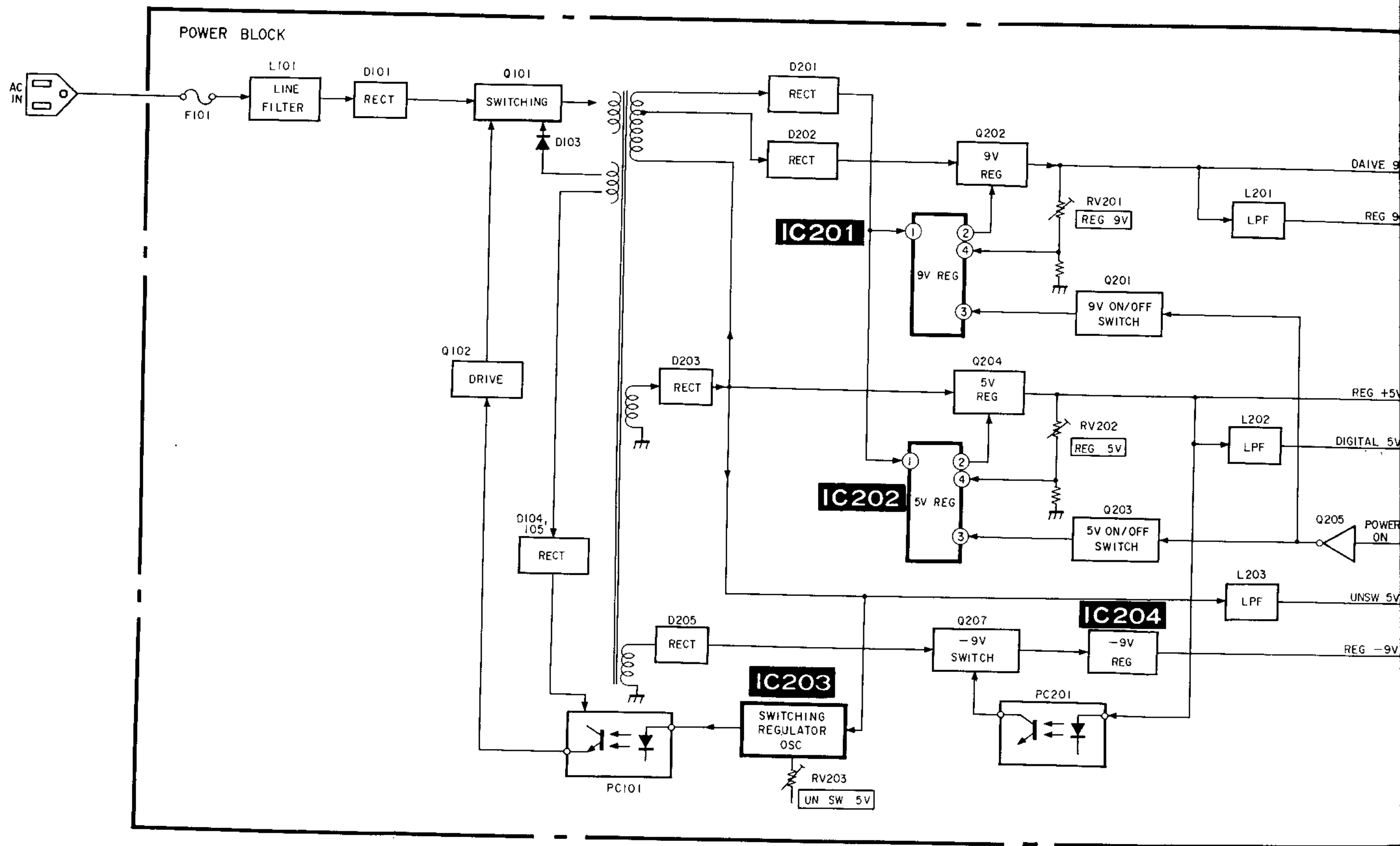


3-27. AUDIO IN/OUT BLOCK DIAGRAM

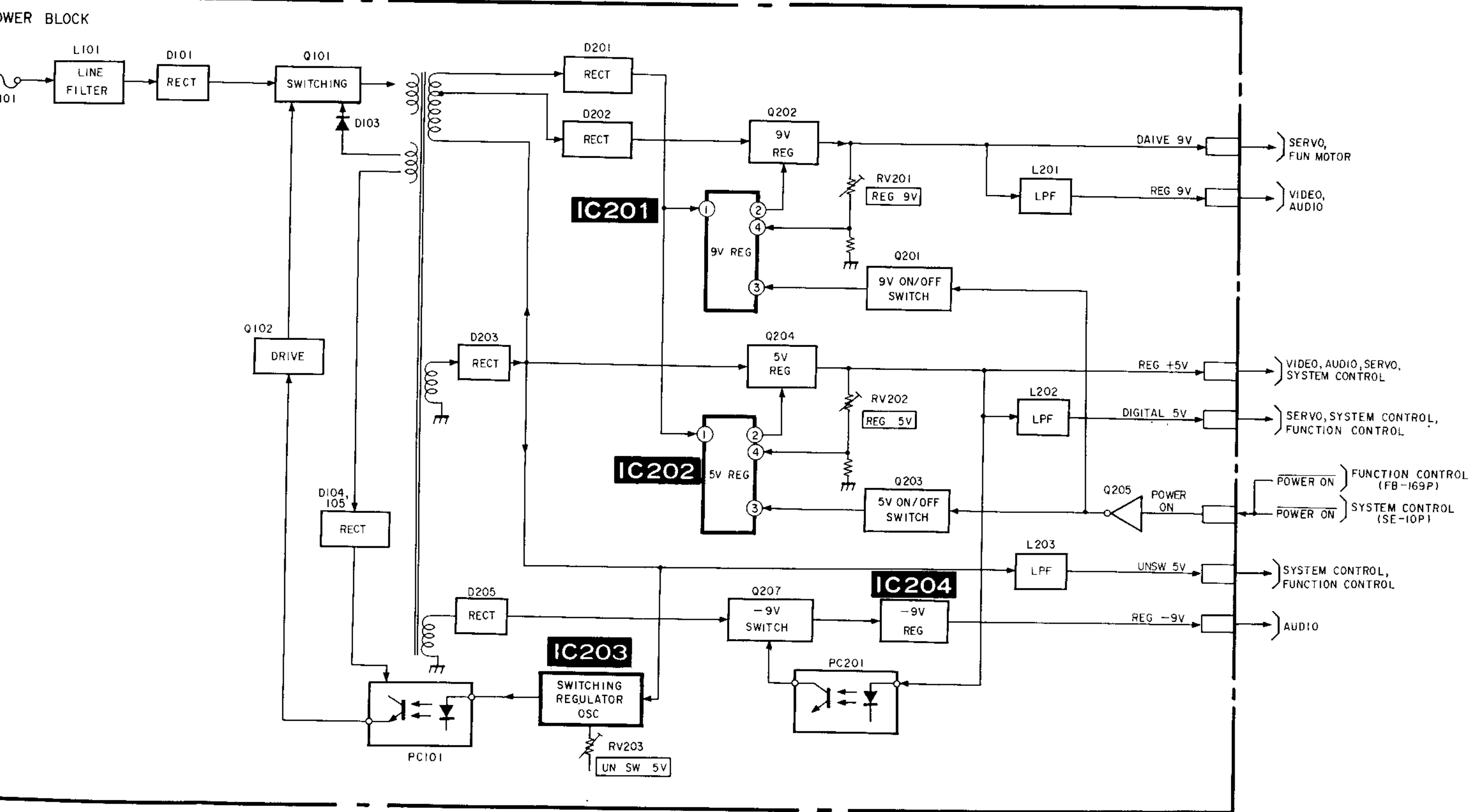




3-28. POWER BLOCK DIAGRAM



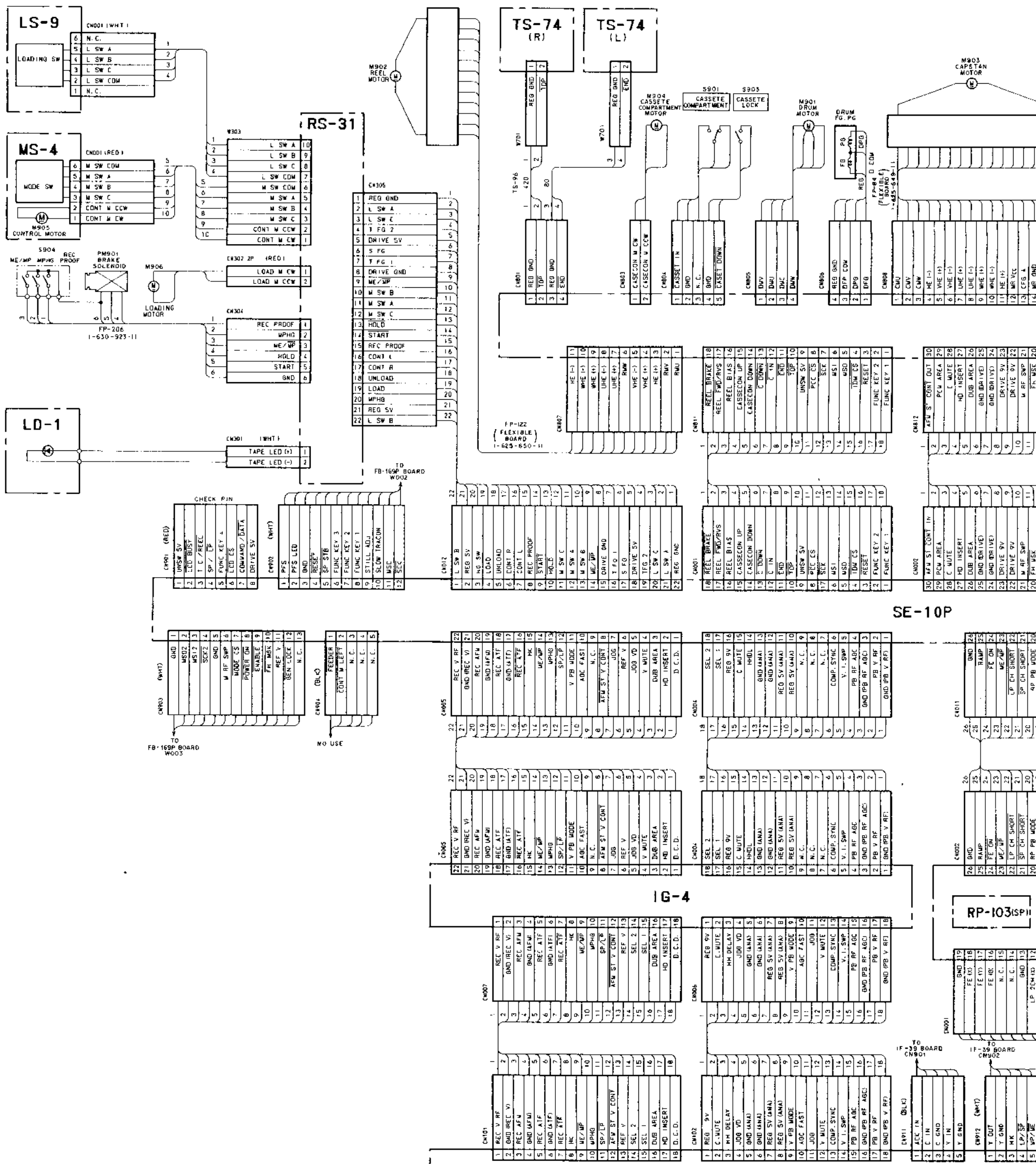
POWER BLOCK

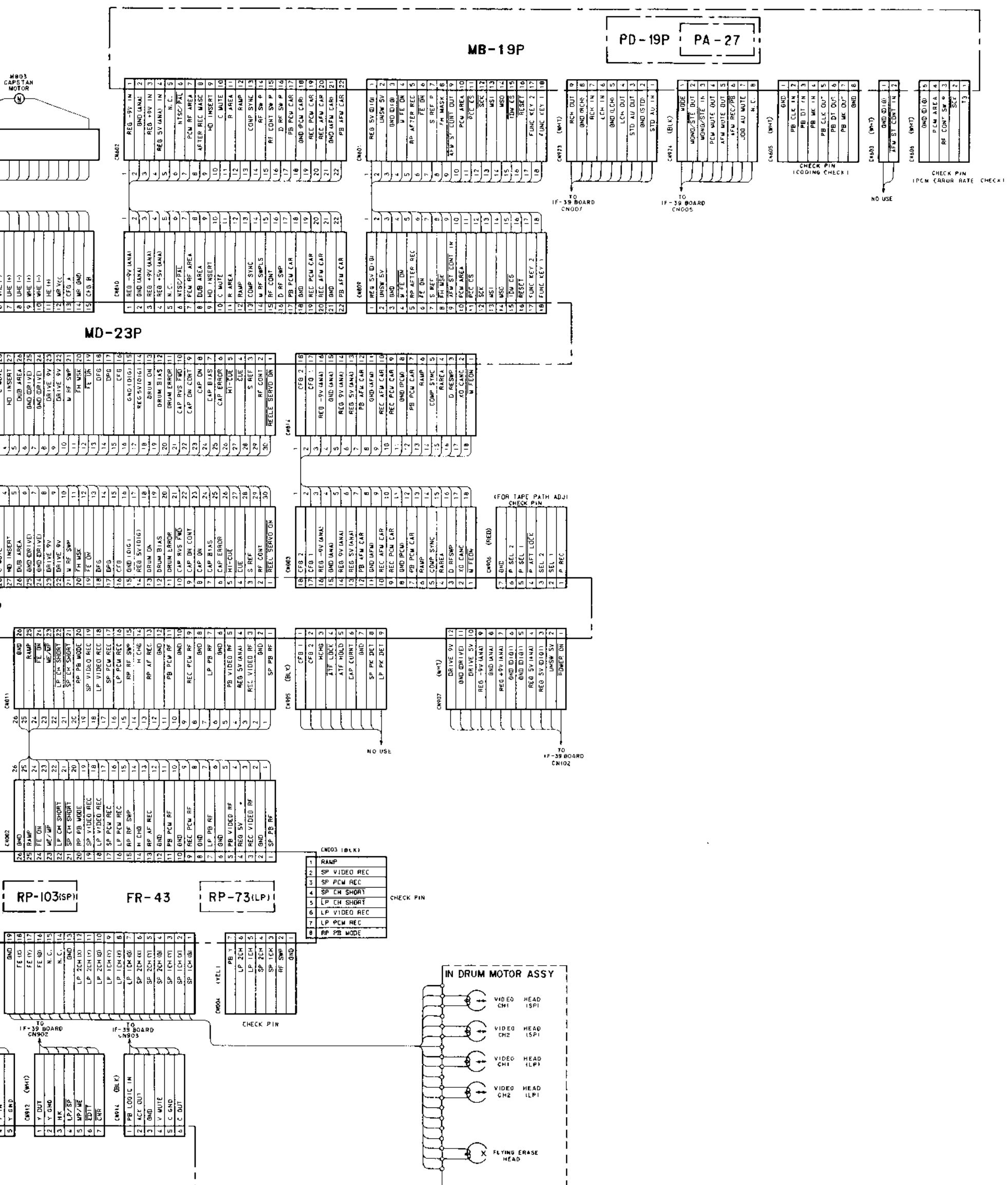


SECTION 4
PRINTED WIRING AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM

CORE BLOCK





MB-19P

PD-19P PA-27

MD-23P

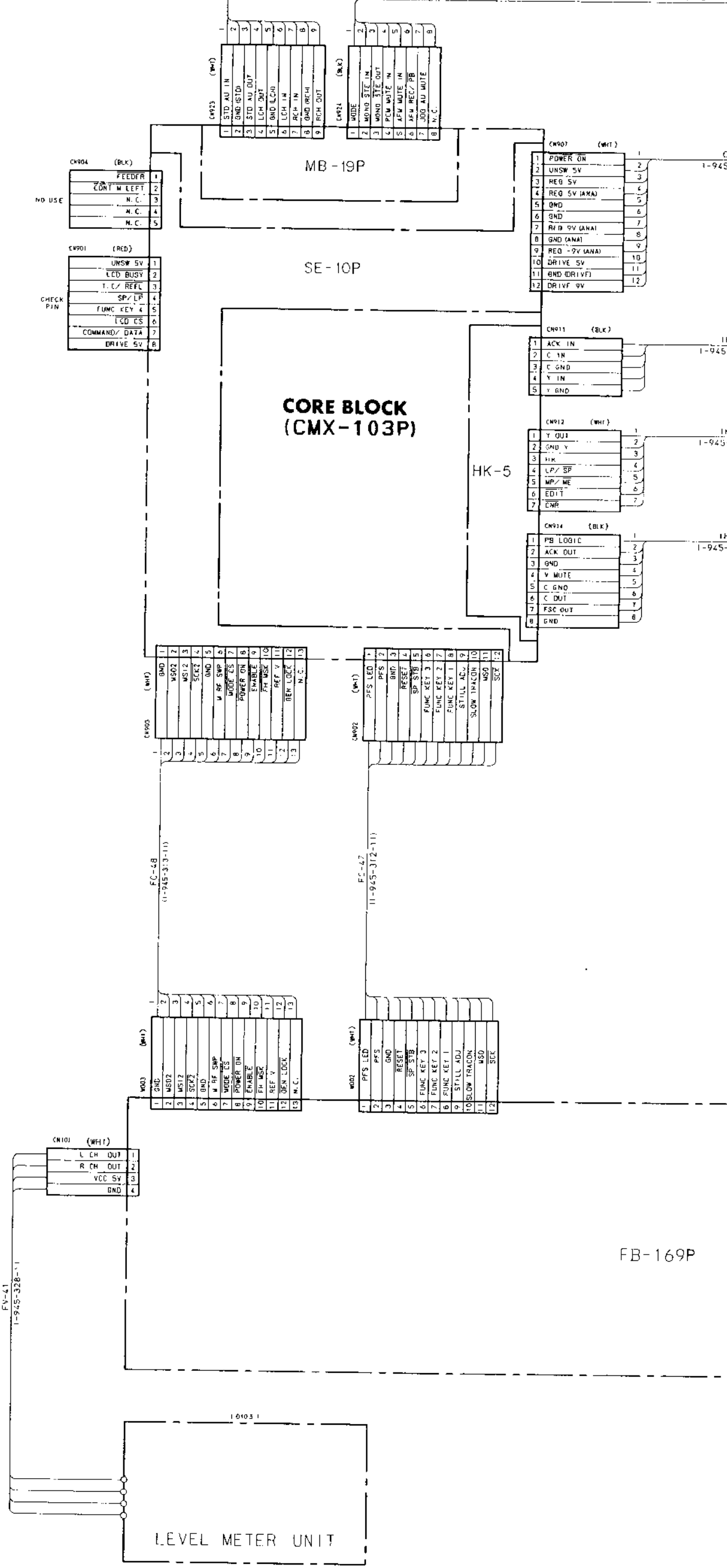
RP-103(SP) FR-43 RP-73(LP)

IN DRUM MOTOR ASSY

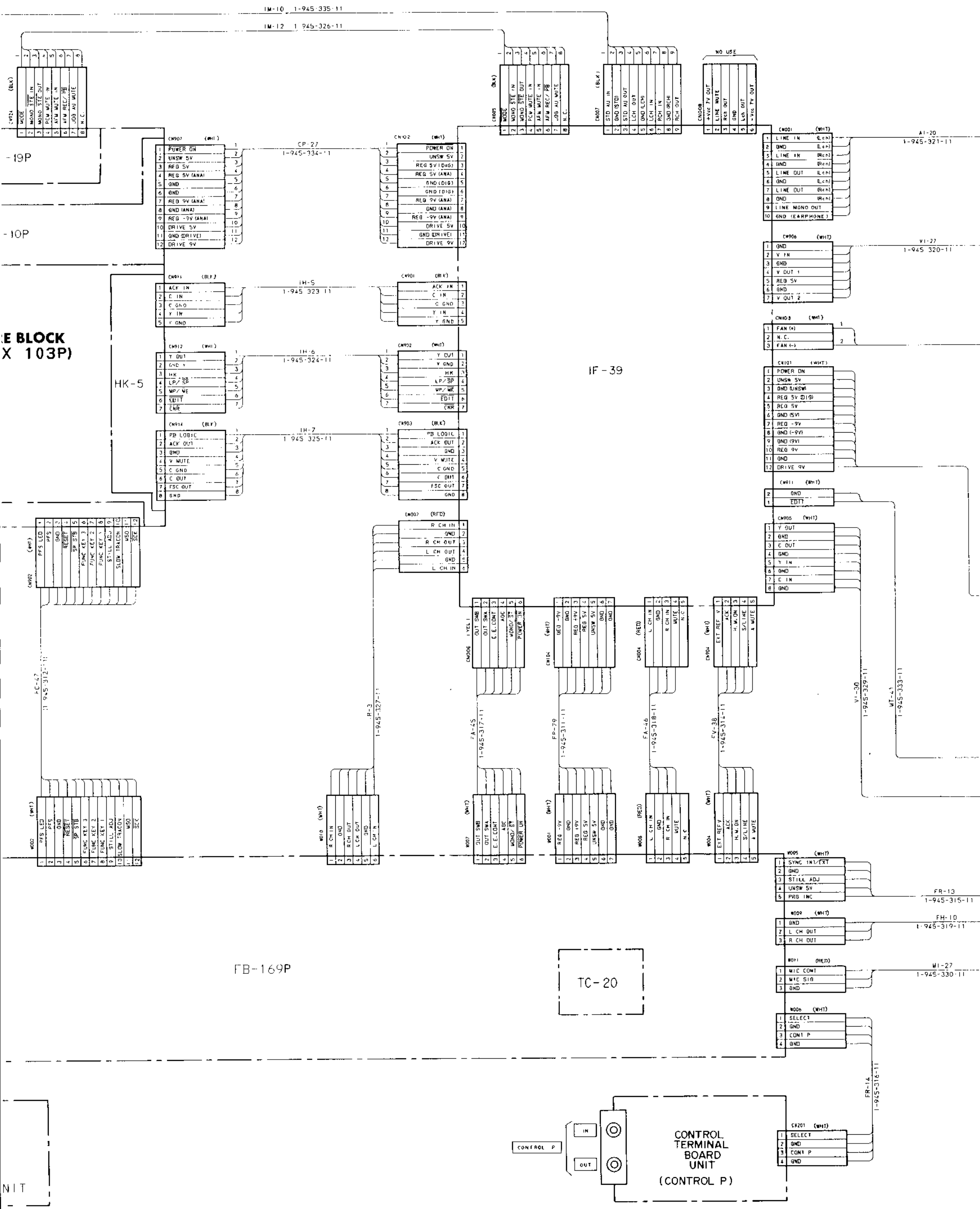
FRAME FRAME

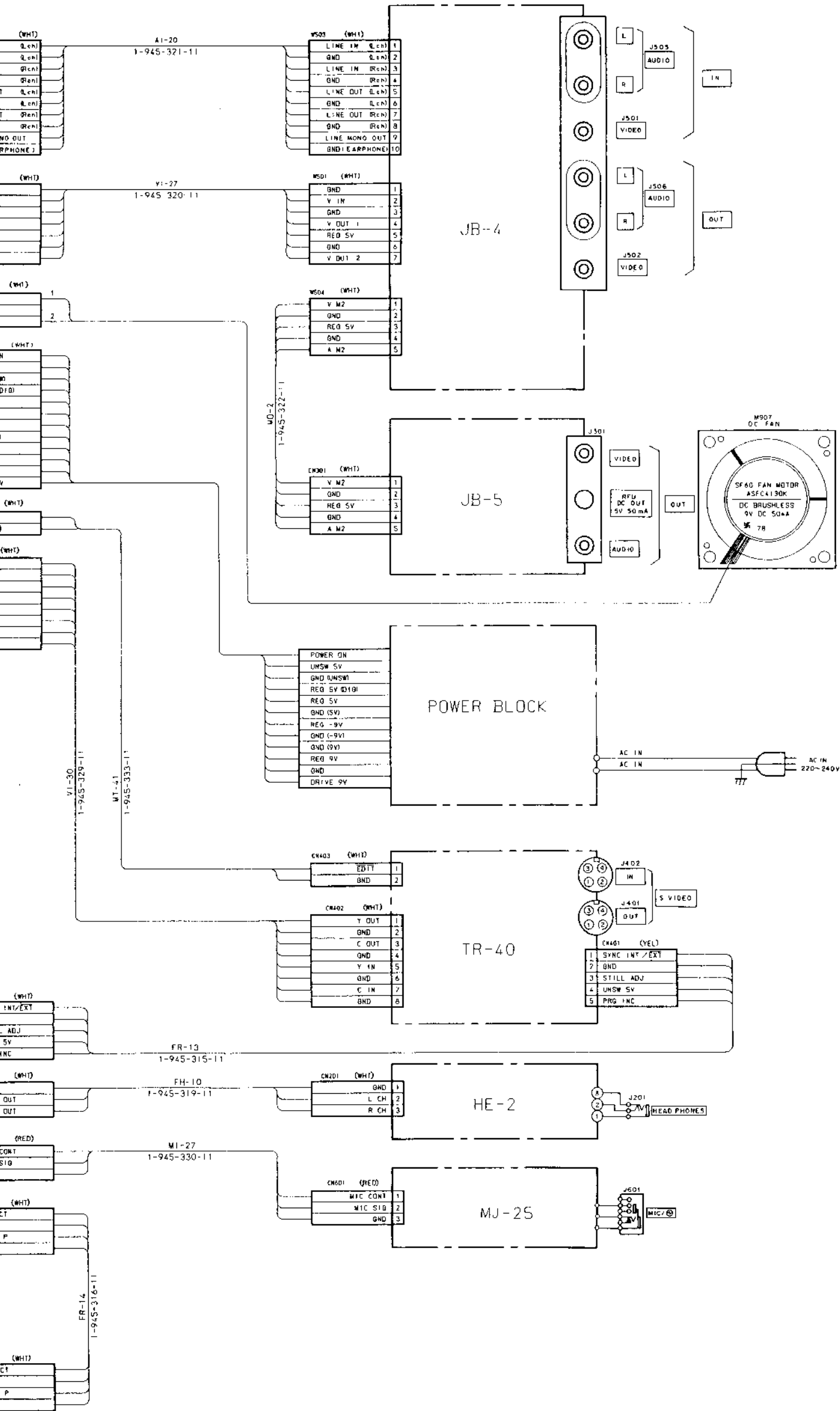
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

EDITOR BLOCK



FB-169P





4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
 (In addition to this, the necessary note is printed in each block.)

• For printed wiring boards.

- : indicated a lead wire mounted on the component side.
- : indicated a lead wire mounted on the conductor side.
- : Through hole is omitted.
- : Parts mounted on the conductor side.
- : Pattern from the side which enables seeing.
- : Pattern of the rear side
- : Circled numbers refer to waveforms.

Caution:

Pattern face side: Parts on the pattern face side seen from the pattern face are indicated (Conductor Side)
 Parts face side: Parts on the parts face side seen from the pattern face are indicated. (Component side)

• For schematic diagrams.

- Caution when replacing chip parts.
 New parts must be attached after removal of chip.
 Be careful not to heat the minuts side of tantalum capacitor, because it is damaged by the heat.
- All resistors are in ohms, 1/4W unless otherwise noted.
 Chip resistor are 1/10W unless otherwise noted.
 kΩ : 1000Ω, MΩ : 1000kΩ
- All capacitors are in μF unless otherwise noted. pF: μμF.
 50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.
- : internal component.
- : adjustment for repair.
- — : B+ Line
- - - - : B- Line
- : IN/OUT direction of (+, -) B LINE.
- Circled numbers refer to waveforms.
- Voltages are de between ground and measurement points.
- Readings are taken with a color-bar signal input
- Readings are taken with a digital multimeter (DC10MΩ).
- Voltages are taken with a VOM (Input impedance 10MΩ)
- Voltage variations may be noted due to normal production tolerances

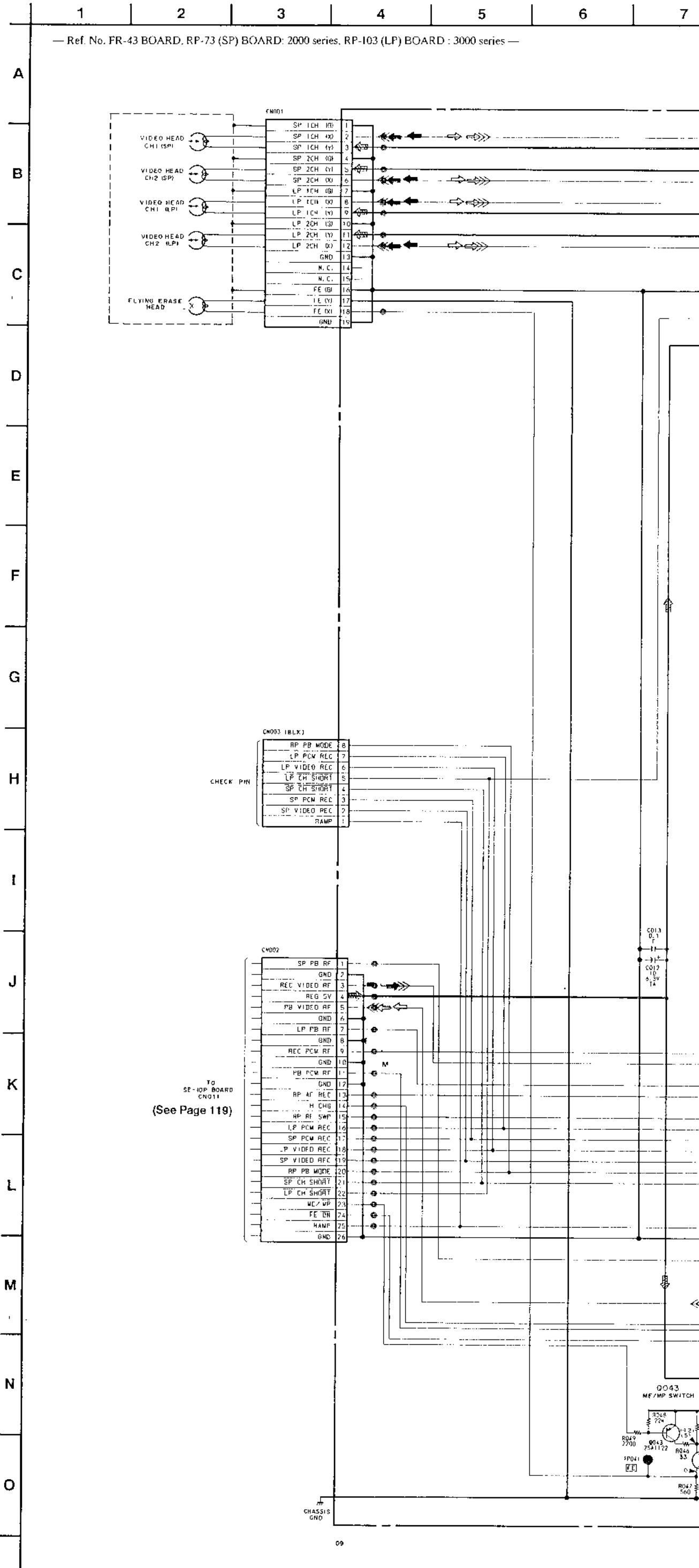
Note:
 The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:
 Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

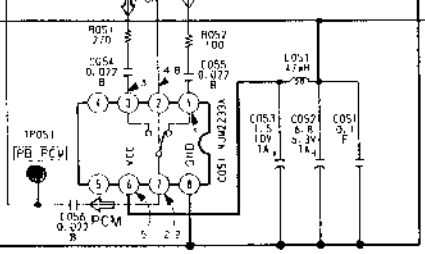
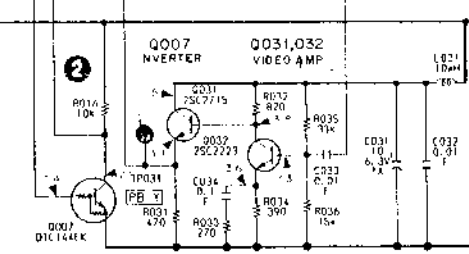
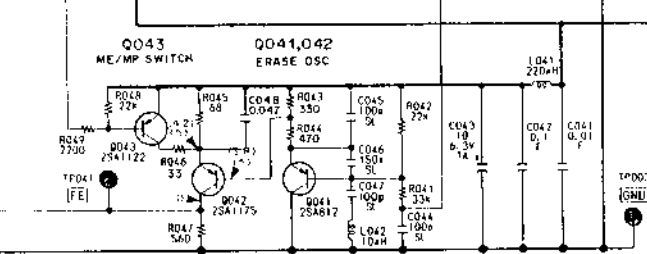
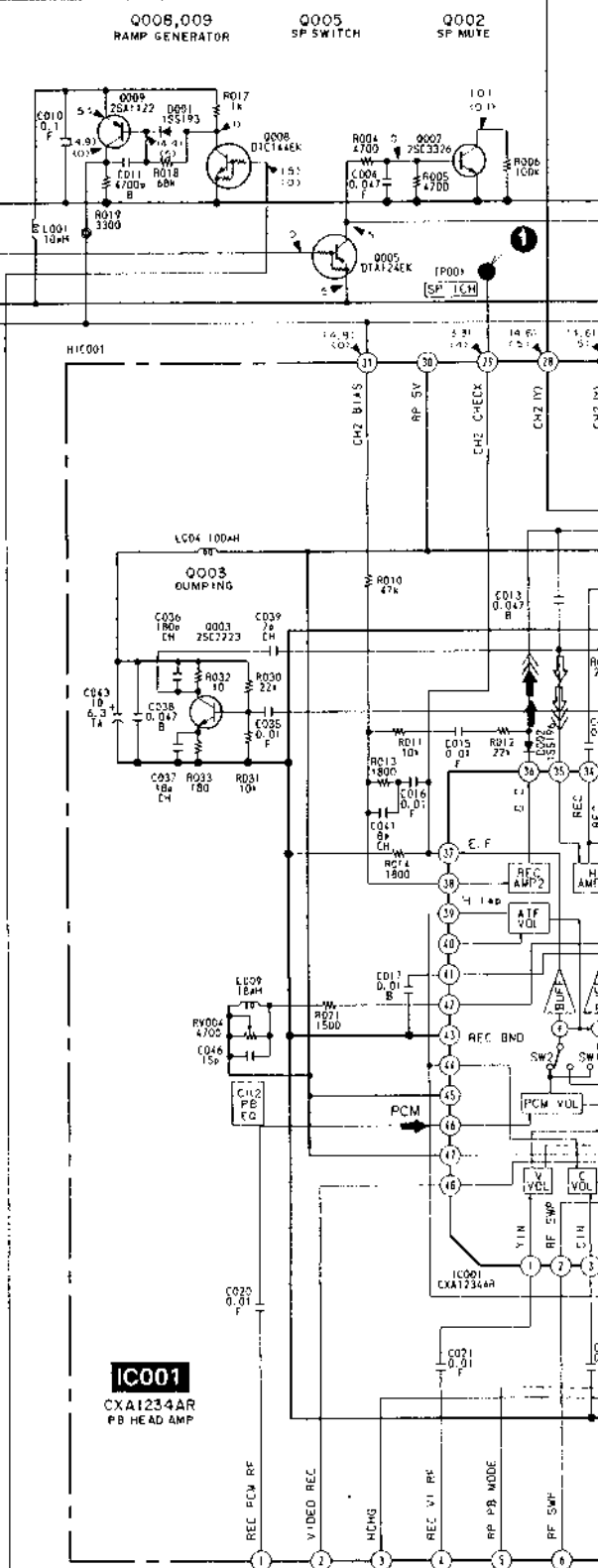
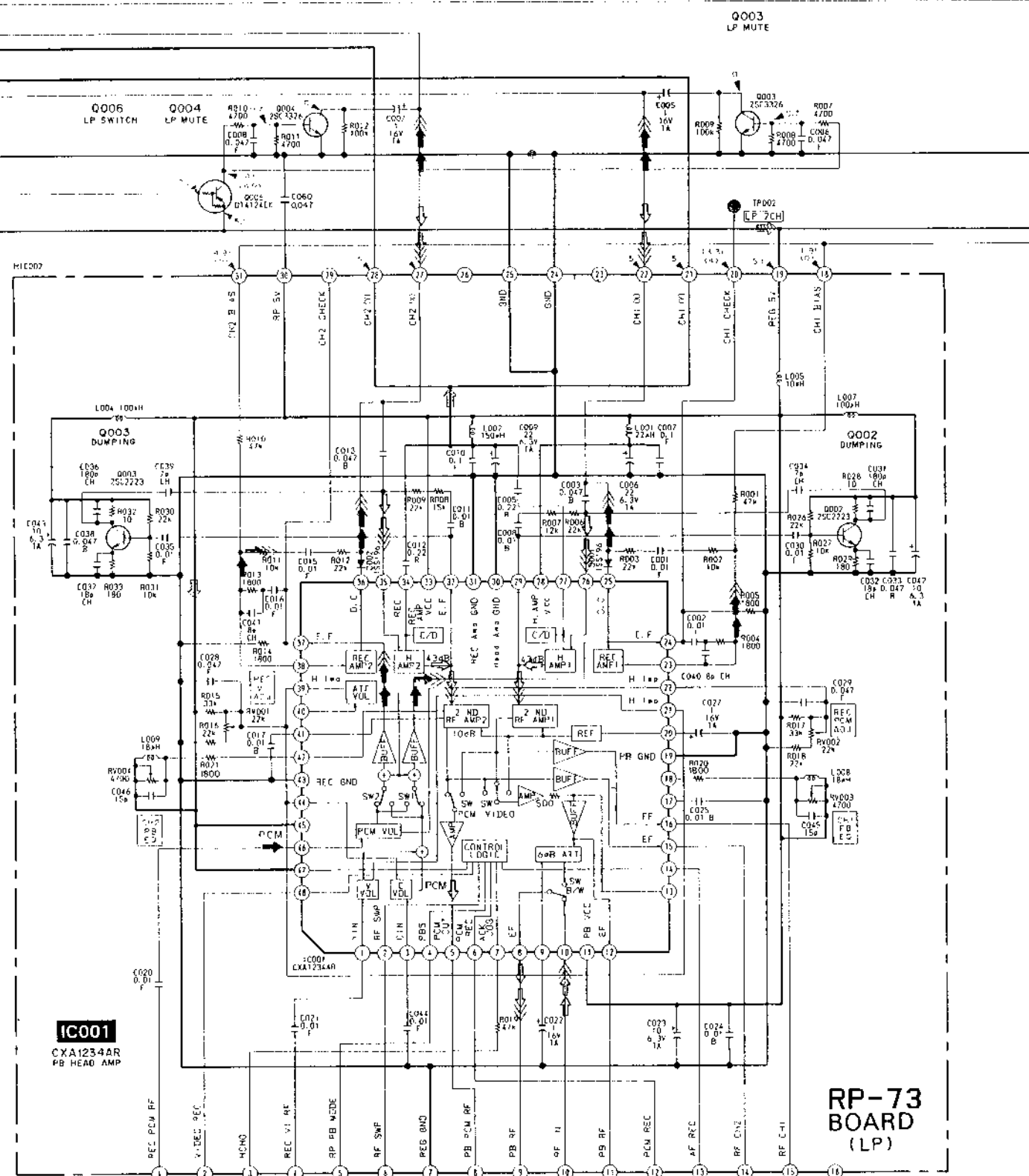
When indicating parts by reference number, please include the board name.

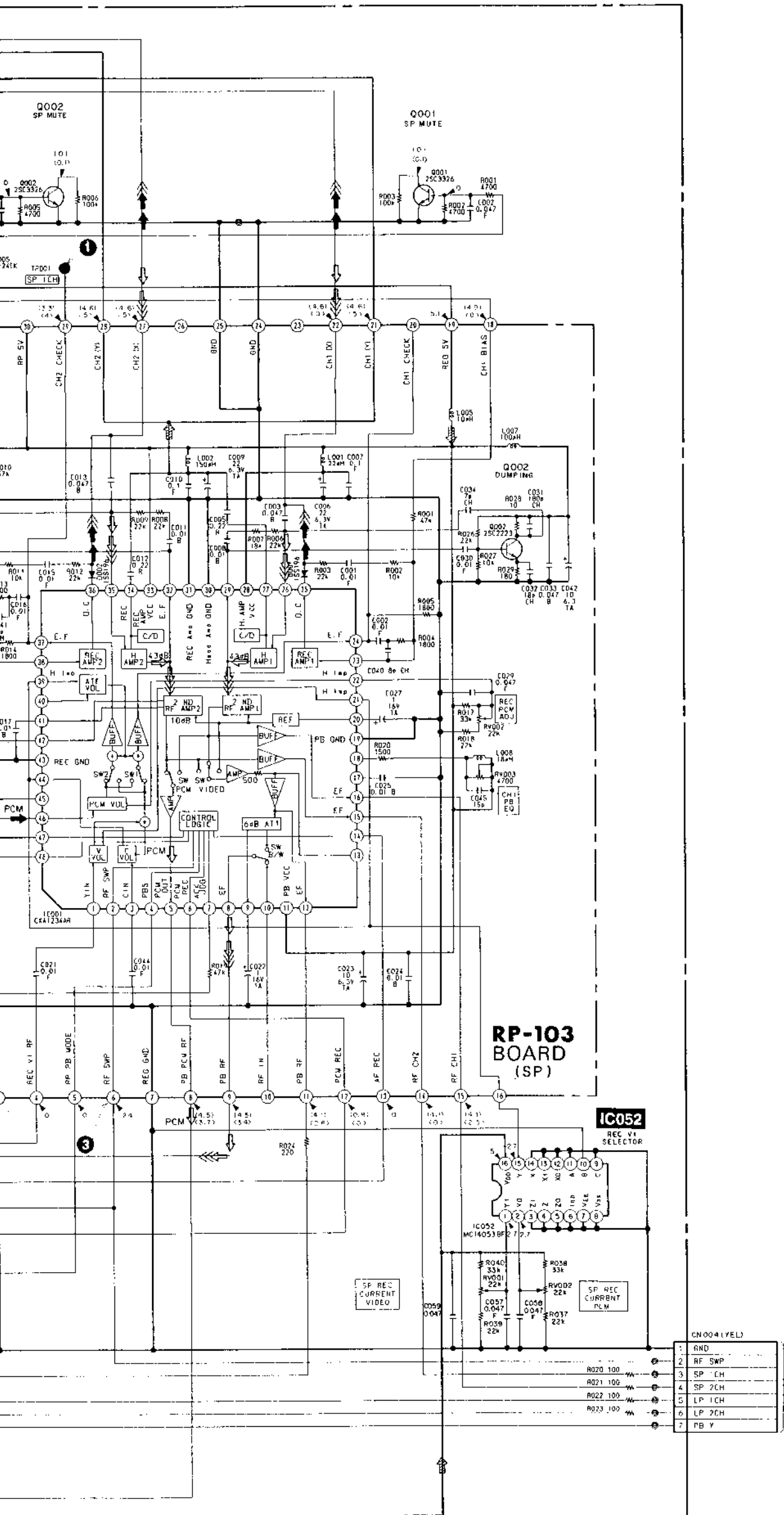
FR-43 (HEAD AMP), RP-73 (LP) (HEAD AMP (LP)), RP-103 (SP) (HEAD AMP (SP)) SCHEMATIC DIAGRAM

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

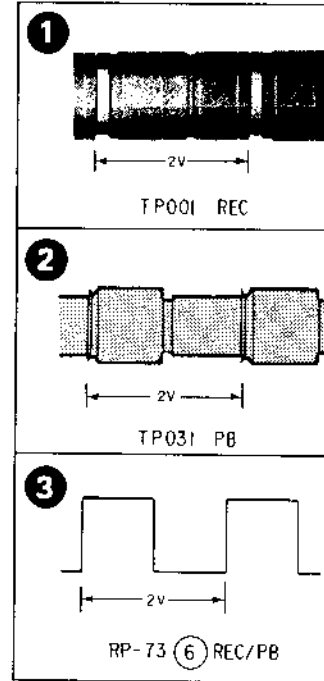


HEAD AMP HEAD AMP





FR-43 BOARD



• SIGNAL PATH

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

FR-43 (HEAD AMP), RP-73 (LP) (HEAD AMP (LP)), RP-103 (SP) (HEAD AMP (SP)) PRINTED WIRING BOARDS

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

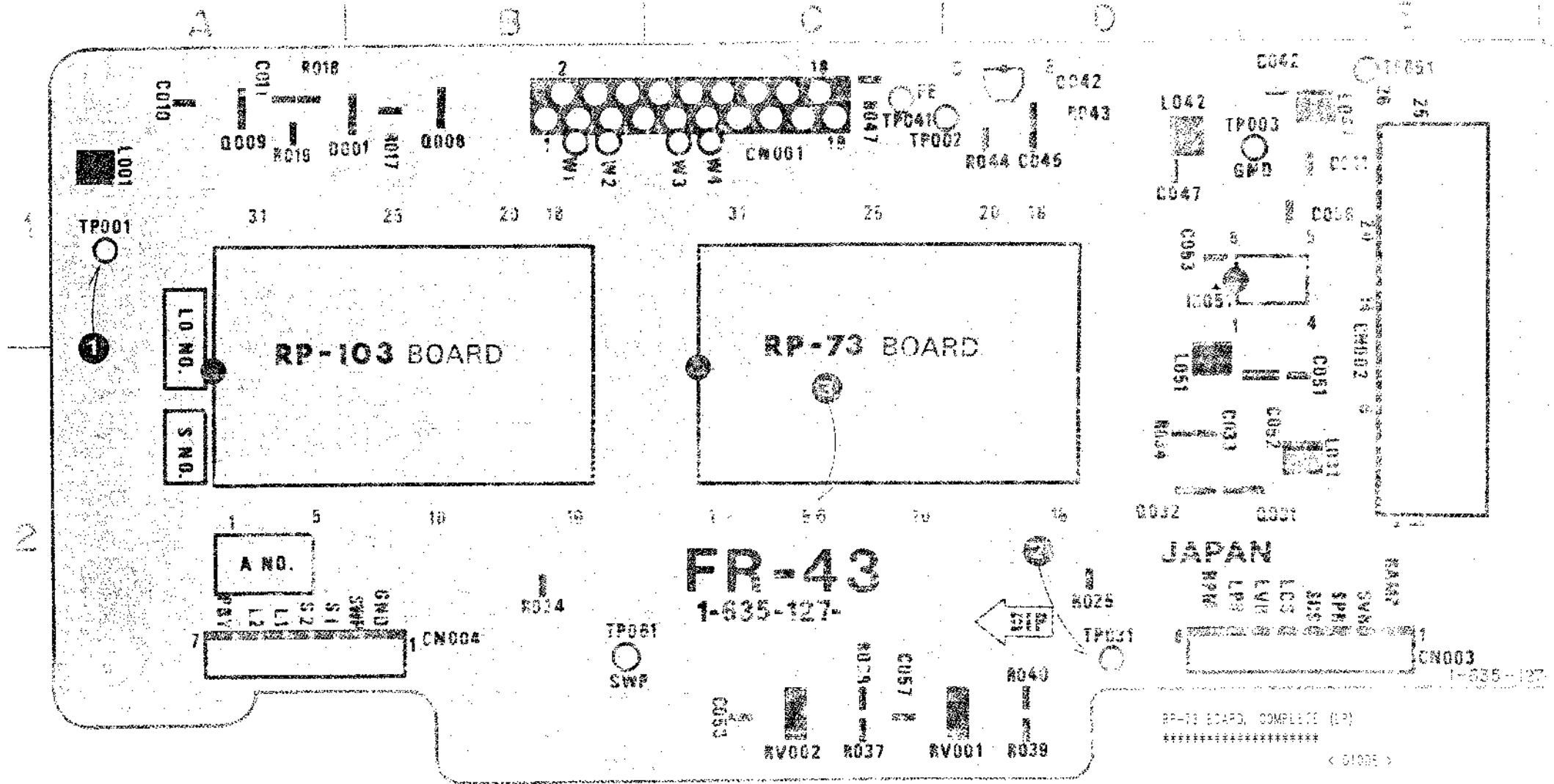
FR-43 BOARD
(COMPONENT
SIDE)

D001 A-1
C0051 E-1
C0028 S-1
C0029 A-1
C0031 E-2
C0032 D-2
C0042 D-1

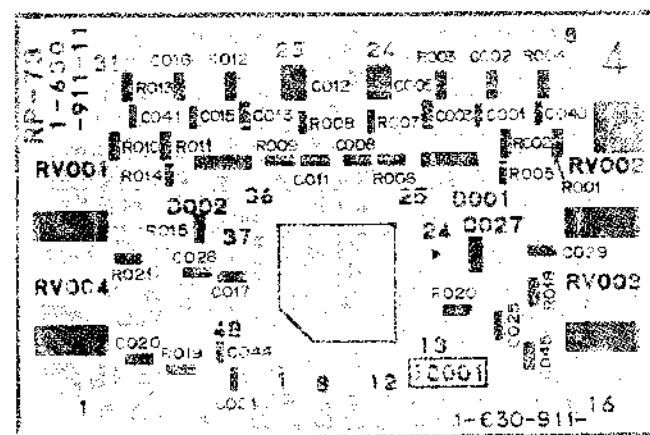
FR-43 BOARD
(CONDUCTOR
SIDE)

C001 B-2
C002 A-2
C003 C-2
C004 C-2
C005 B-2
C006 D-2
C007 D-2
C021 D-1
C043 D-1

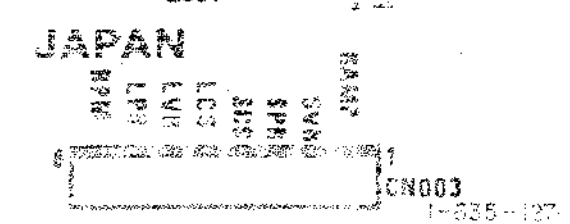
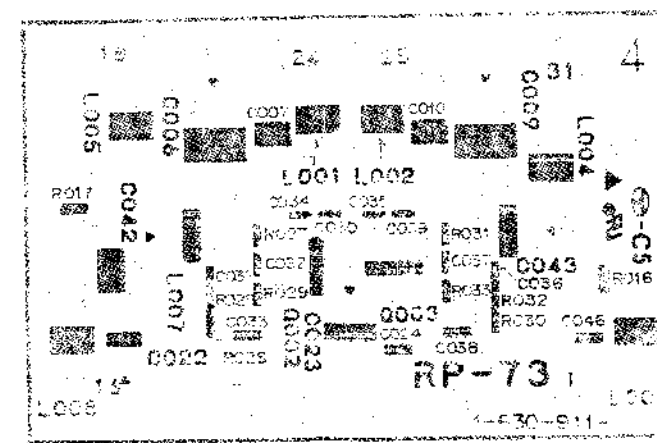
FR-43 BOARD (COMPONENT SIDE)



RP-73 BOARD (COMPONENT SIDE)



RP-73 BOARD (CONDUCTOR SIDE)



RP-73 BOARD, COMPLETE (LP)

< CODE >

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D002	8-719-801-41	D	C05	100196

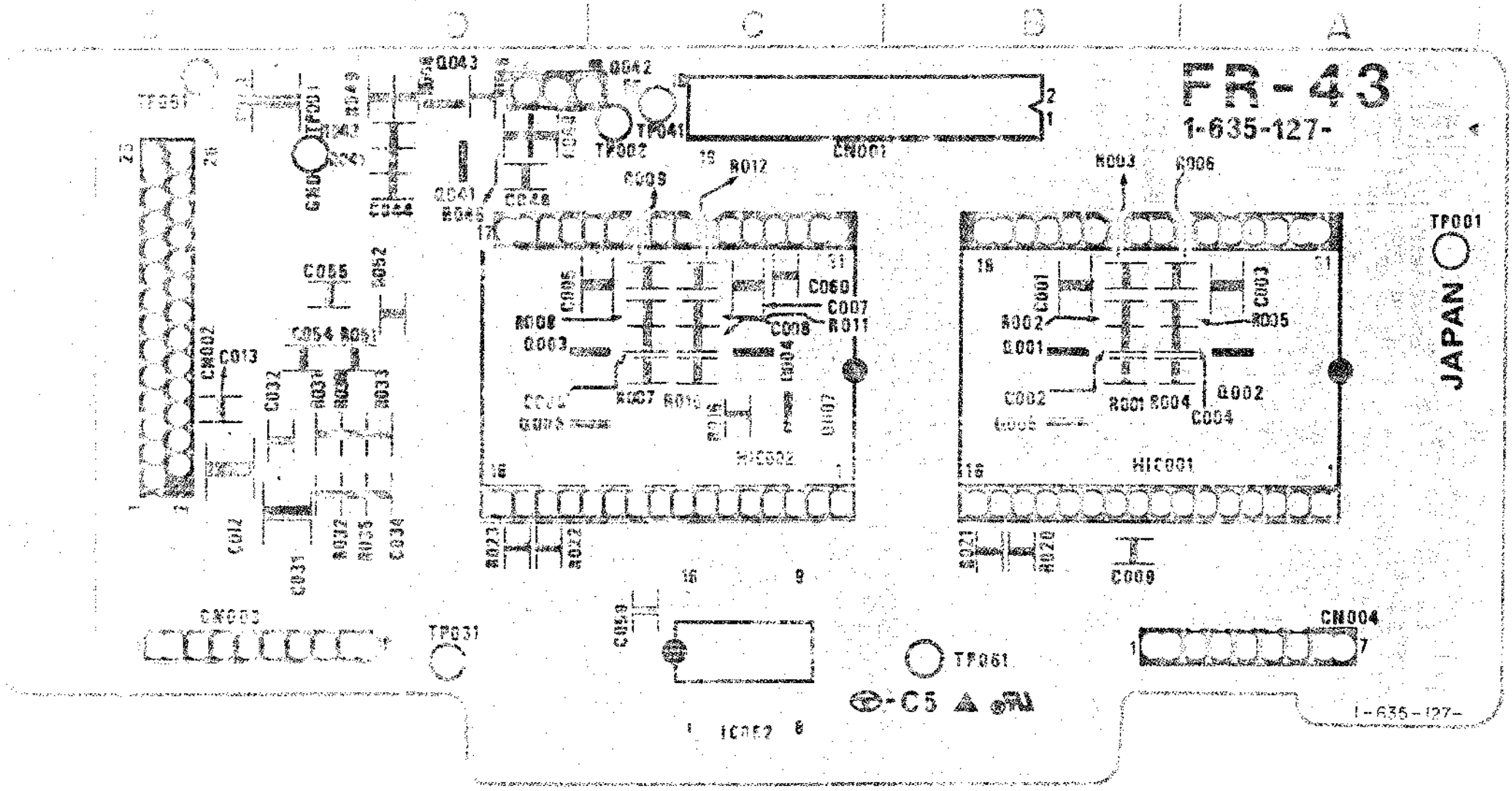
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C001	8-750-000-00	IC	OXALIDEAR
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< TRANSISTOR >

C002	8-729-102-07	TRANSISTOR	20C2223-113
C003	8-729-102-07	TRANSISTOR	20C2223-113

FR-43 BOARD (CONVERTER SIDE)



FR-43 BOARD, COMPLETE

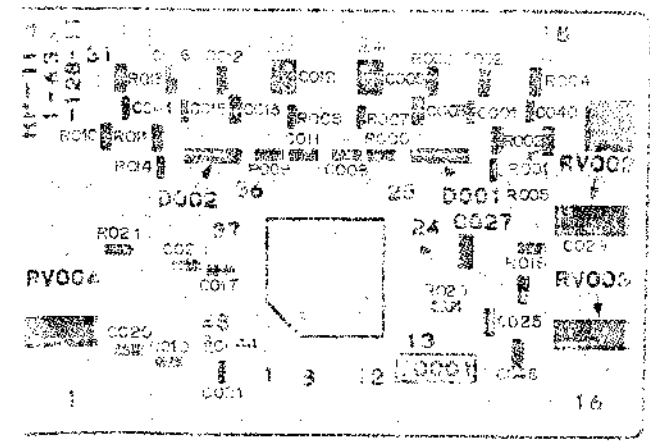
< DIODE >

- Q001 8-719-400-18 DIODE MA150WK
- < IC >
- IC001 8-759-710-09 IC NM2200AM
 - IC002 8-759-029-07 IC HD14003BFP

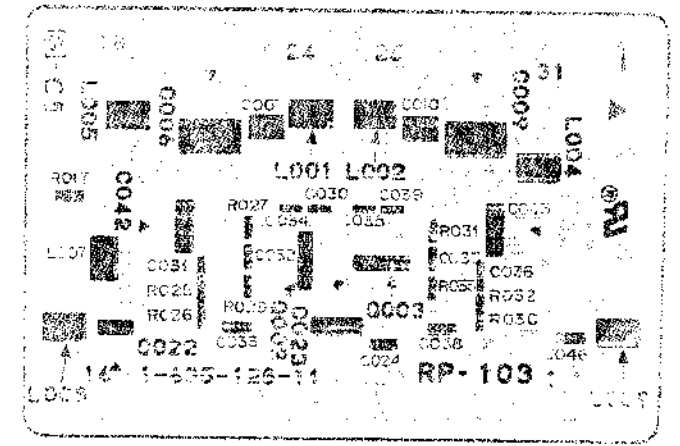
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- Q003 8-729-202-08 TRANSISTOR 2SC2222N
- Q006 8-729-202-08 TRANSISTOR 2SC2222N
- Q008 8-729-202-25 TRANS STOR 2SC2222N
- Q004 8-729-202-05 TRANS STOR 2SC2222N
- Q005 8-729-931-05 TRANSISTOR DTA124EK
- Q001 8-729-901-05 TRANSISTOR DTA124EK
- Q007 8-729-901-01 TRANSISTOR DTA124EK
- Q008 8-729-901-01 TRANSISTOR DTA124EK
- Q006 8-729-929-17 TRANS STOR 2SA1101-C1
- Q001 8-729-201-27 TRANS STOR 2SC2222-Y
- Q002 8-729-102-07 TRANSISTOR 2SC2223-F13
- Q041 8-729-216-22 TRANSISTOR 2SA1162
- Q043 8-729-118-75 TRANSISTOR 2SA1175-HFE
- Q045 8-729-929-17 TRANSISTOR 2SA1172-CD

RP-103 BOARD (COMPONENT SIDE)



RP-103 BOARD (CONDUCTOR SIDE)



RP-103 BOARD, COMPLETE (SP)

< DIODE >

- Q001 8-719-801-41 DIODE 1SS196
- Q002 8-719-801-41 DIODE 1SS196

< IC >

- IC001 8-752-000-00 IC CXA1234AR

< TRANSISTOR >

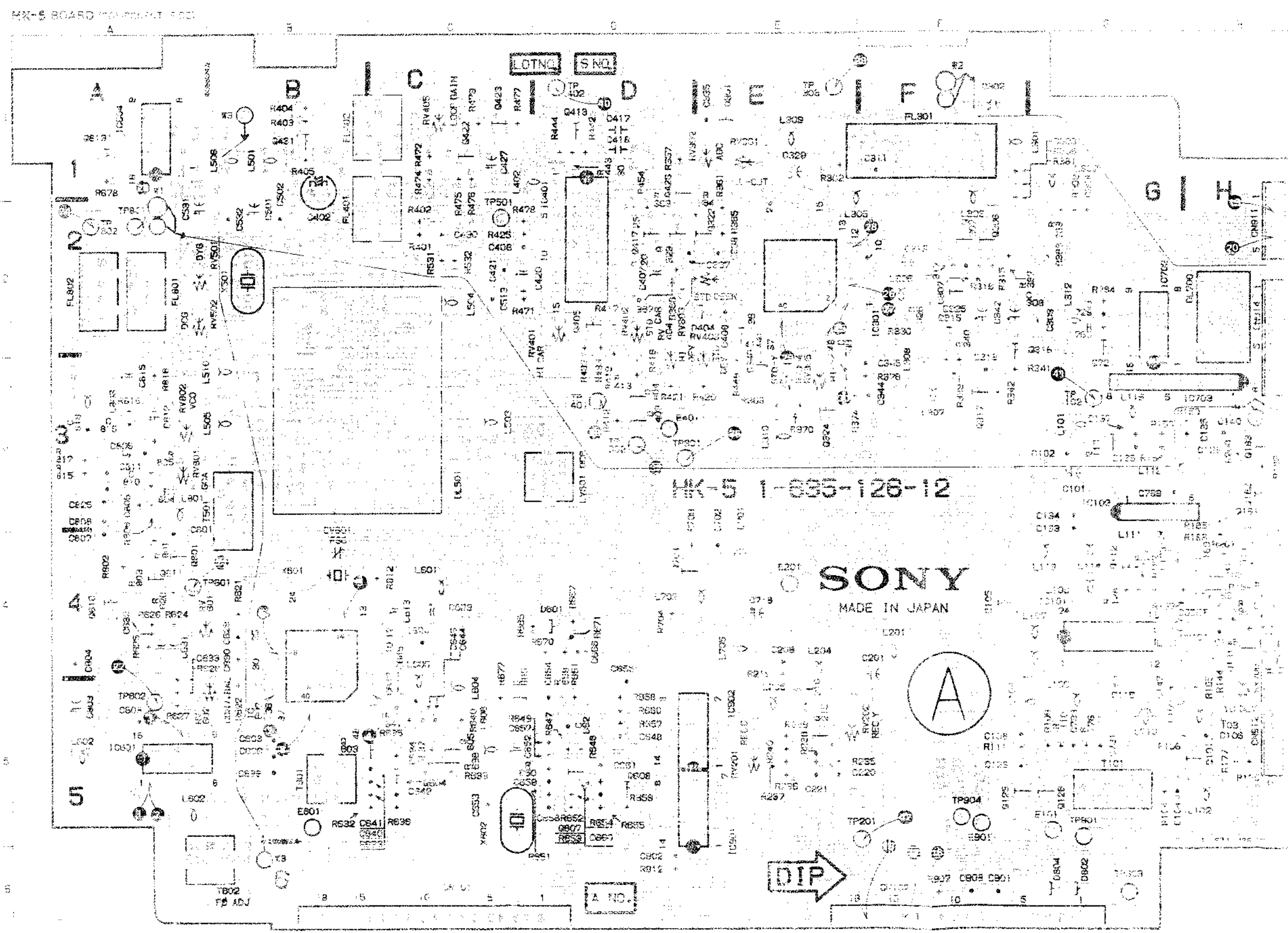
- Q002 8-729-102-07 TRANSISTOR 2SC2223-F13
- Q003 8-729-102-07 TRANSISTOR 2SC2223-F13

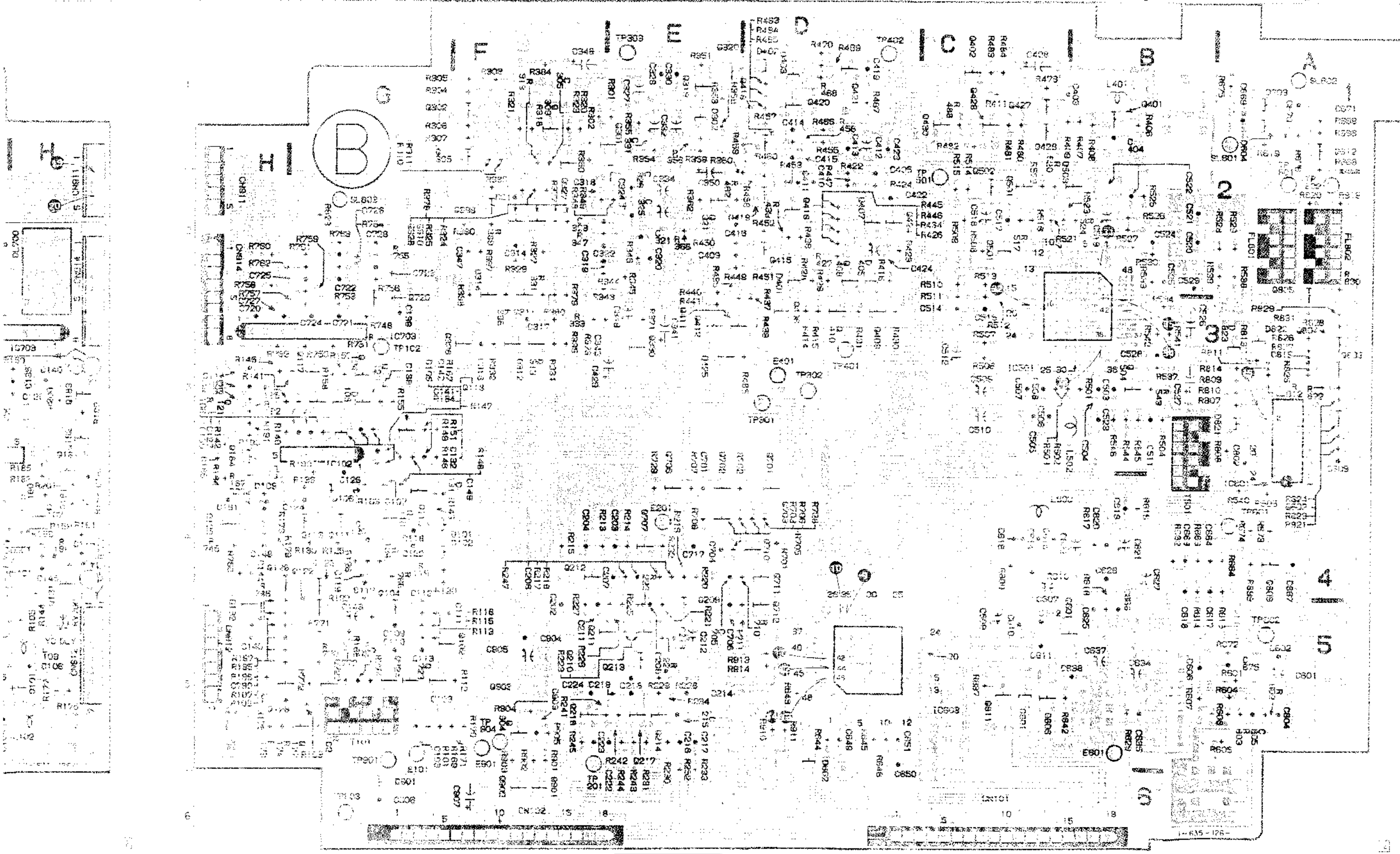
HK-5 (CHROMA SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX) PRINTED WIRING BOARD

— Ref. No. HK-5 BOARD: 4000 series —

HK-5 BOARD (COMPONENT SIDE)	HK-5 BOARD (CONDUCTOR SIDE)
D301	F-1
D404	F-2
D801	D-4
D805	C-5
D802	C-6
D804	C-8
IC101	G-4
IC102	G-3
IC301	F-2
IC401	D-1
IC501	A-5
IC502	B-5
IC702	H-3
IC703	H-3
IC901	F-5
IC902	F-5
O101	H-5
O105	F-4
O107	H-4
O112	C-4
O119	C-4
O125	C-6
O126	C-6
O131	F-4
O181	C-4
O182	C-4
O215	C-4
O303	C-4
O307	C-4
O315	C-4
O322	C-4
O324	C-4
O325	C-4
O326	C-4
O327	C-4
O328	C-4
O330	C-4
O389	C-4
O401	C-4
O402	C-4
O407	C-4
O408	C-4
O409	C-4
O410	C-4
O411	C-4
O412	C-4
O415	C-4
O416	C-4
O418	C-4
O420	C-4
O421	C-4
O424	C-4
O425	C-4
O427	C-4
O428	C-4
O429	C-4
O430	C-4

O501	C-2
O502	C-1
O503	C-2
O504	C-3
O601	C-5
O606	C-8
O609	A-4
O612	A-1
O615	A-1
O701	C-3
O702	C-3
O703	C-3
O706	E-3
O707	E-4
O710	D-4
O711	D-4
O712	D-5
O723	D-4
O724	D-5
O725	D-5
O726	D-5
O727	D-5
O728	D-5
O729	D-5
O730	D-5
O731	D-5
O732	D-5
O733	D-5
O734	D-5
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O793	D-5
O794	D-5
O795	D-5
O796	D-5
O797	D-5
O798	D-5
O799	D-5
O800	D-5





HK-5 (CHROMA SIGNAL PROCESS) SCHEMATIC DIAGRAM

Q301	8-729-201-27	TRANSISTOR	2SC2715-Y
Q302	8-729-201-27	TRANSISTOR	2SC2715-Y
Q305	8-729-201-27	TRANSISTOR	2SC2715-Y
Q306	8-729-201-27	TRANSISTOR	2SC2715-Y
Q307	8-729-201-27	TRANSISTOR	2SC2715-Y
Q309	8-729-201-27	TRANSISTOR	2SC2715-Y
Q310	8-729-201-27	TRANSISTOR	2SC2715-Y
Q311	8-729-201-27	TRANSISTOR	2SC2715-Y
Q312	8-729-901-06	TRANSISTOR	DTA144EK
Q313	8-729-216-22	TRANSISTOR	2SA1162
Q314	8-729-201-27	TRANSISTOR	2SC2715-Y
Q315	8-729-201-27	TRANSISTOR	2SC2715-Y
Q316	8-729-901-01	TRANSISTOR	DTC144EK
Q317	8-729-201-27	TRANSISTOR	2SC2715-Y
Q318	8-729-901-06	TRANSISTOR	DTA144EK
Q319	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
Q328	8-729-201-27	TRANSISTOR	2SC2715-Y
Q330	8-729-901-06	TRANSISTOR	DTA144EK
Q339	8-729-201-27	TRANSISTOR	2SC2715-Y
Q401	8-729-201-27	TRANSISTOR	2SC2715-Y
Q402	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
Q407	8-729-216-22	TRANSISTOR	2SA1162
Q408	8-729-216-22	TRANSISTOR	2SA1162
Q409	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
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-Y
Q419	8-729-201-27	TRANSISTOR	2SC2715-Y
Q420	8-729-202-38	TRANSISTOR	2SC3326N
Q421	8-729-202-38	TRANSISTOR	2SC3326N
Q422	8-729-201-27	TRANSISTOR	2SC2715-Y
Q423	8-729-201-27	TRANSISTOR	2SC2715-Y
Q424	8-729-901-01	TRANSISTOR	DTC144EK
Q425	8-729-201-27	TRANSISTOR	2SC2715-Y
Q426	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
Q601	8-729-901-01	TRANSISTOR	DTC144EK
Q603	8-729-901-01	TRANSISTOR	DTC144EK
Q604	8-729-201-27	TRANSISTOR	2SC2715-Y
Q605	8-729-201-27	TRANSISTOR	2SC2715-Y
Q606	8-729-901-01	TRANSISTOR	DTC144EK
Q607	8-729-201-27	TRANSISTOR	2SC2715-Y
Q608	8-729-216-22	TRANSISTOR	2SA1162
Q609	8-729-901-00	TRANSISTOR	DTC124EK
Q610	8-729-904-04	TRANSISTOR	FMS2-T-149
Q611	8-729-201-27	TRANSISTOR	2SC2715-Y
Q612	8-729-201-27	TRANSISTOR	2SC2715-Y
Q613	8-729-901-01	TRANSISTOR	DTC144EK
Q701	8-729-201-27	TRANSISTOR	2SC2715-Y
Q702	8-729-202-38	TRANSISTOR	2SC3326N
Q703	8-729-202-38	TRANSISTOR	2SC3326N
Q704	8-729-216-22	TRANSISTOR	2SA1162
Q706	8-729-201-27	TRANSISTOR	2SC2715-Y
Q707	8-729-201-27	TRANSISTOR	2SC2715-Y
Q710	8-729-901-01	TRANSISTOR	DTC144EK
Q711	8-729-901-01	TRANSISTOR	DTC144EK
Q712	8-729-901-01	TRANSISTOR	DTC144EK
Q720	8-729-200-86	TRANSISTOR	2SC2714-0
Q721	8-729-200-86	TRANSISTOR	2SC2714-0
Q722	8-729-200-86	TRANSISTOR	2SC2714-0
Q723	8-729-201-27	TRANSISTOR	2SC2715-Y
Q724	8-729-901-01	TRANSISTOR	DTC144EK
Q801	8-729-901-01	TRANSISTOR	DTC144EK
Q802	8-729-201-27	TRANSISTOR	2SC2715-Y
Q803	8-729-201-27	TRANSISTOR	2SC2715-Y
Q804	8-729-201-27	TRANSISTOR	2SC2715-Y
Q805	8-729-216-22	TRANSISTOR	2SA1162
Q811	8-729-901-01	TRANSISTOR	DTC144EK
Q901	8-729-901-01	TRANSISTOR	DTC144EK
Q902	8-729-901-01	TRANSISTOR	DTC144EK
Q903	8-729-104-25	TRANSISTOR	2S8804-AV
Q904	8-729-201-27	TRANSISTOR	2SC2715-Y

HK-5 BOARD, COMPLETE

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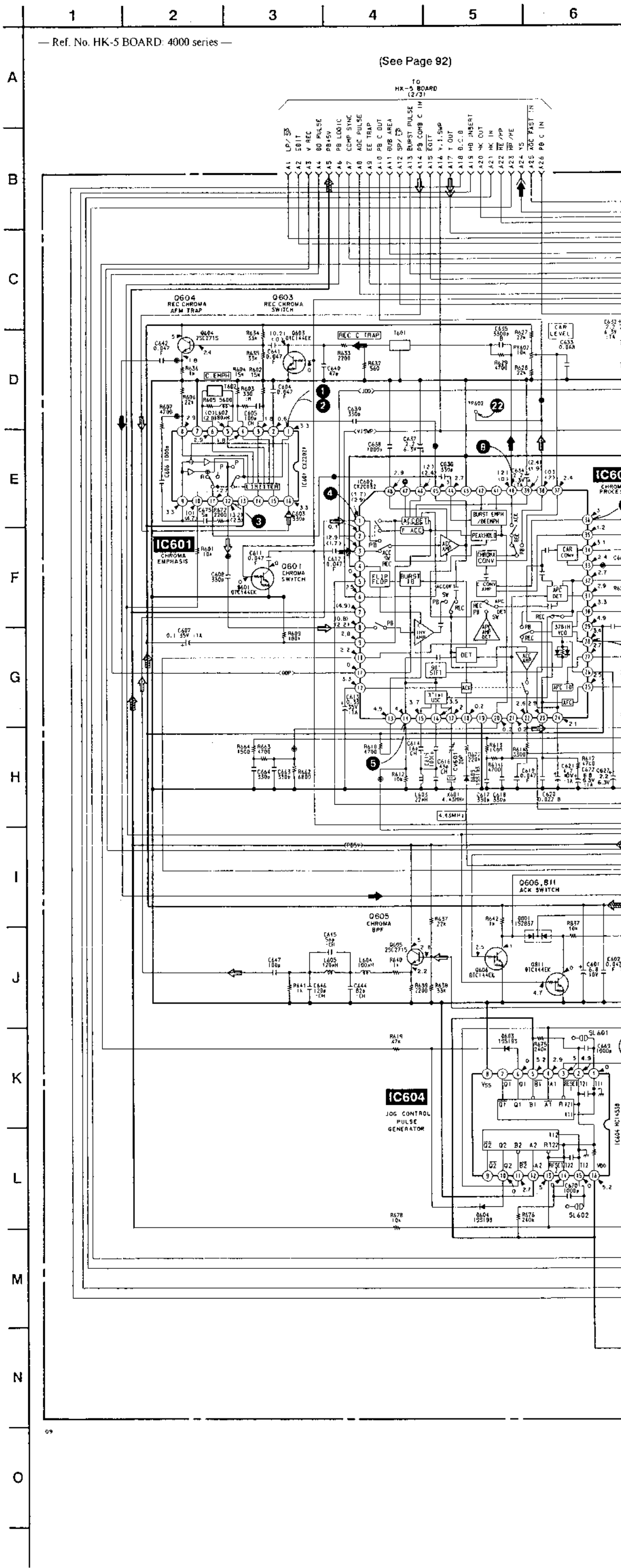
D101	8-719-400-18	DIODE	MA152WK
D102	8-719-400-18	DIODE	MA152WK
D105	8-719-800-76	DIODE	1SS226
D106	8-719-400-18	DIODE	MA152WK
D107	8-719-400-18	DIODE	MA152WK
D108	8-719-400-18	DIODE	MA152WK
D109	8-719-400-18	DIODE	MA152WK
D301	8-719-400-18	DIODE	MA152WK
D302	8-719-400-18	DIODE	MA152WK
D401	8-719-400-18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

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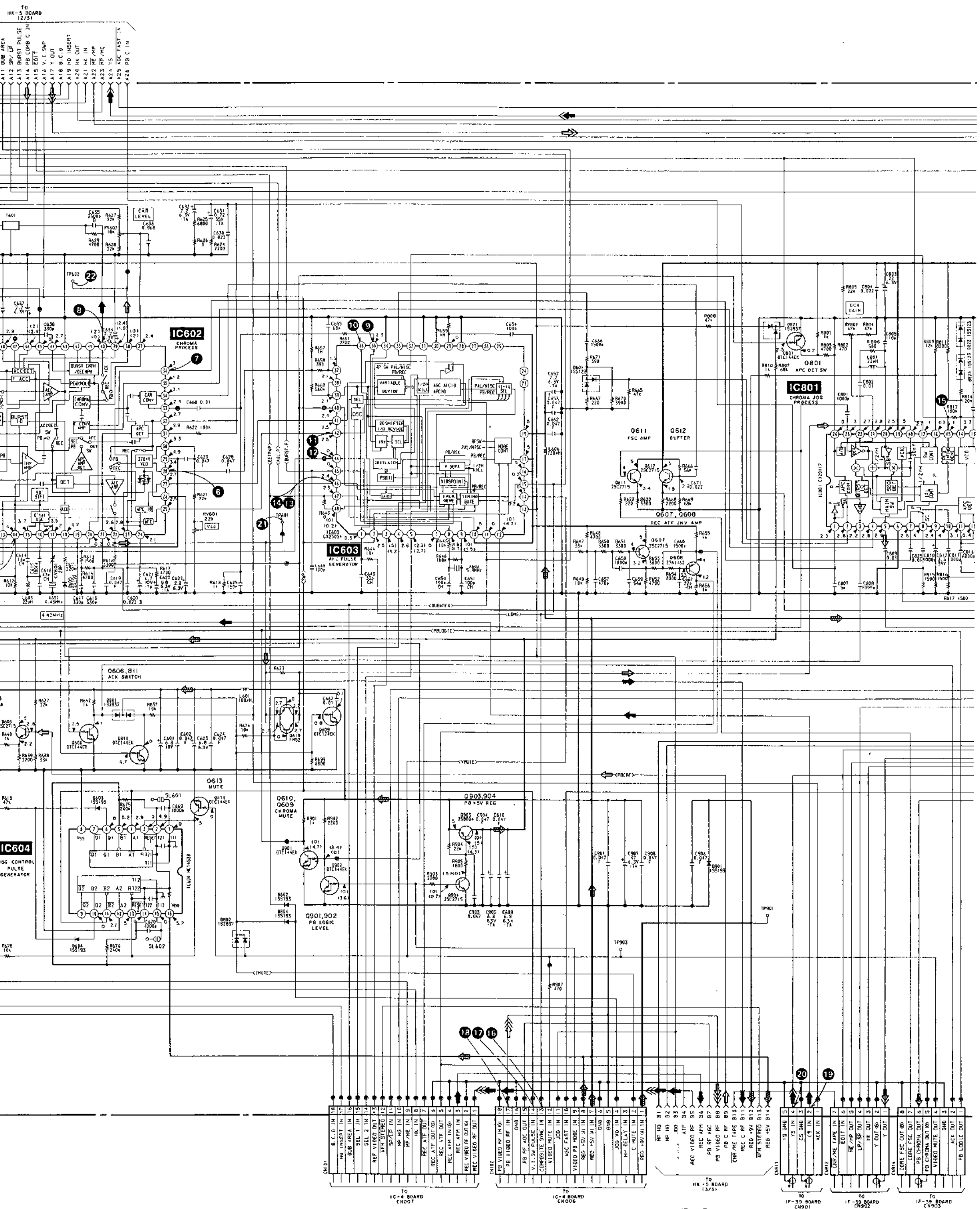
IC101	8-759-233-94	IC TA8607F
IC102	8-759-925-60	IC BA401
IC301	8-752-002-99	IC CX20030
IC401	8-752-031-01	IC CXA1047M
IC501	8-752-003-12	IC CX20031
IC601	8-759-924-94	IC CX22021
IC602	8-752-003-22	IC CX20032
IC603	8-752-305-47	IC CX23054
IC604	8-759-009-51	IC MC14538BF
IC702	8-759-012-00	IC MC10H116M
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

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Q101	8-729-200-86	TRANSISTOR	2SC2714-0
Q102	8-729-901-04	TRANSISTOR	DTA1144EK
Q103	8-729-200-86	TRANSISTOR	2SC2714-0
Q104	8-729-901-01	TRANSISTOR	DTC144EK
Q105	8-729-904-07	TRANSISTOR	FMG2-T-148
Q107	8-729-201-27	TRANSISTOR	2SC2715-Y
Q110	8-729-901-01	TRANSISTOR	DTC144EK
Q111	8-729-200-86	TRANSISTOR	2SC2714-0
Q112	8-729-901-01	TRANSISTOR	DTC144EK
Q113	8-729-200-86	TRANSISTOR	2SC2714-0
Q116	8-729-201-27	TRANSISTOR	2SC2715-Y
Q117	8-729-200-86	TRANSISTOR	2SC2714-0
Q118	8-729-200-86	TRANSISTOR	2SC2714-0
Q119	8-729-200-86	TRANSISTOR	2SC2714-0
Q120	8-729-200-86	TRANSISTOR	2SC2714-0
Q121	8-729-201-27	TRANSISTOR	2SC2715-Y
Q122	8-729-901-01	TRANSISTOR	DTC144EK
Q123	8-729-901-01	TRANSISTOR	DTC144EK
Q124	8-729-901-06	TRANSISTOR	DTA144EK
Q125	8-729-901-01	TRANSISTOR	DTC144EK
Q126	8-729-201-27	TRANSISTOR	2SC2715-Y
Q127	8-729-201-27	TRANSISTOR	2SC2715-Y
Q128	8-729-202-38	TRANSISTOR	2SC3326N
Q129	8-729-201-27	TRANSISTOR	2SC2715-Y
Q130	8-729-201-27	TRANSISTOR	2SC2715-Y
Q131	8-729-216-22	TRANSISTOR	2SA1162
Q132	8-729-201-27	TRANSISTOR	2SC2715-Y
Q181	8-729-907-46	TRANSISTOR	IMZ1
Q182	8-729-903-10	TRANSISTOR	FNM1
Q183	8-729-200-86	TRANSISTOR	2SC2714-0
Q184	8-729-216-22	TRANSISTOR	2SA1162
Q209	8-729-200-86	TRANSISTOR	2SC2714-0
Q210	8-729-200-86	TRANSISTOR	2SC2714-0
Q211	8-729-200-86	TRANSISTOR	2SC2714-0
Q212	8-729-901-01	TRANSISTOR	DTC144EK
Q213	8-729-901-06	TRANSISTOR	DTA144EK
Q214	8-729-200-86	TRANSISTOR	2SC2714-0
Q215	8-729-902-96	TRANSISTOR	FMS1
Q217	8-729-200-86	TRANSISTOR	2SC2714-0
Q218	8-729-200-86	TRANSISTOR	2SC2714-0



See Page 92)



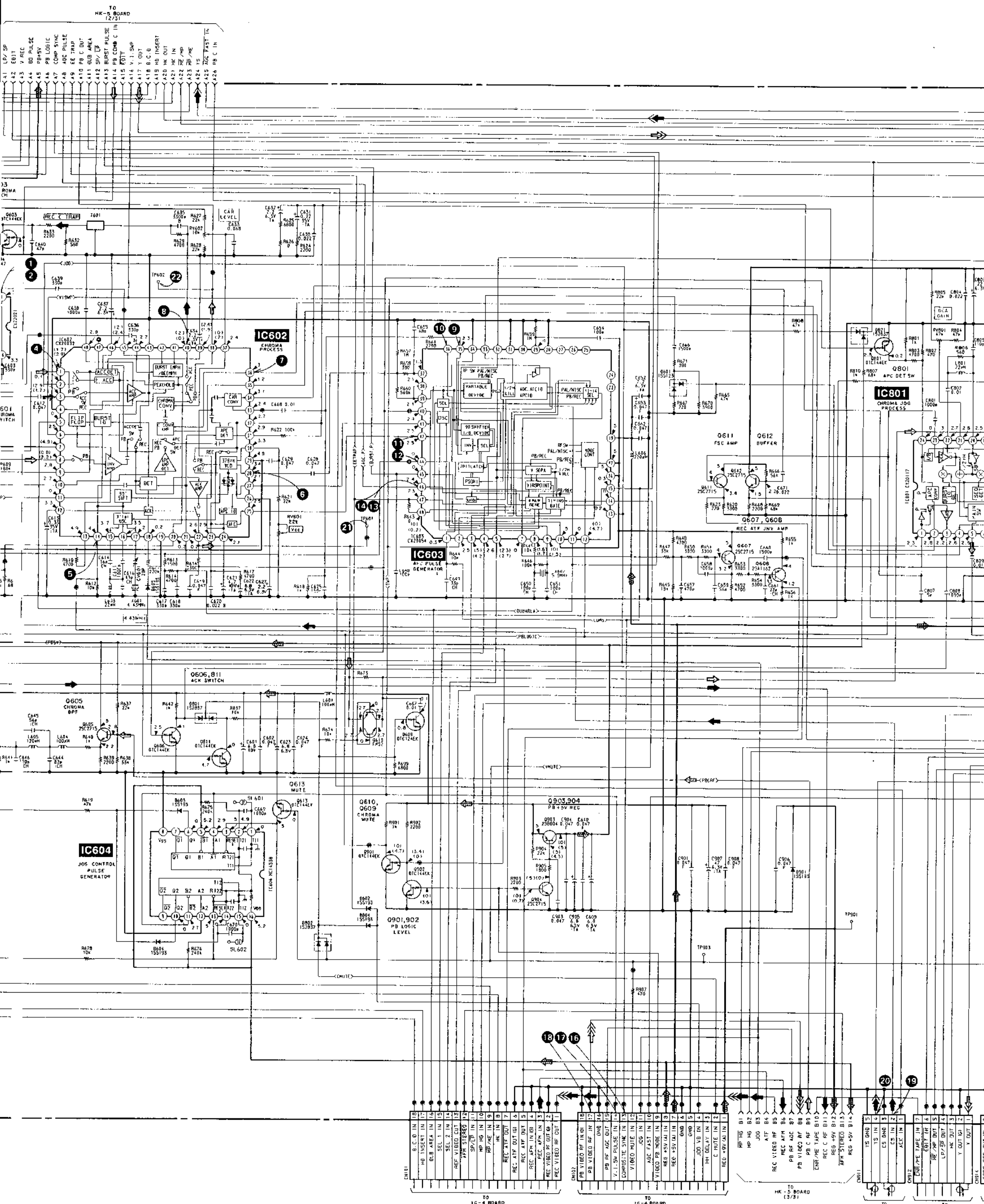
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(See Page 120)

(See Page 105)

(See Page 149) (See Page 147) (See Page 147)

(See Page 92)

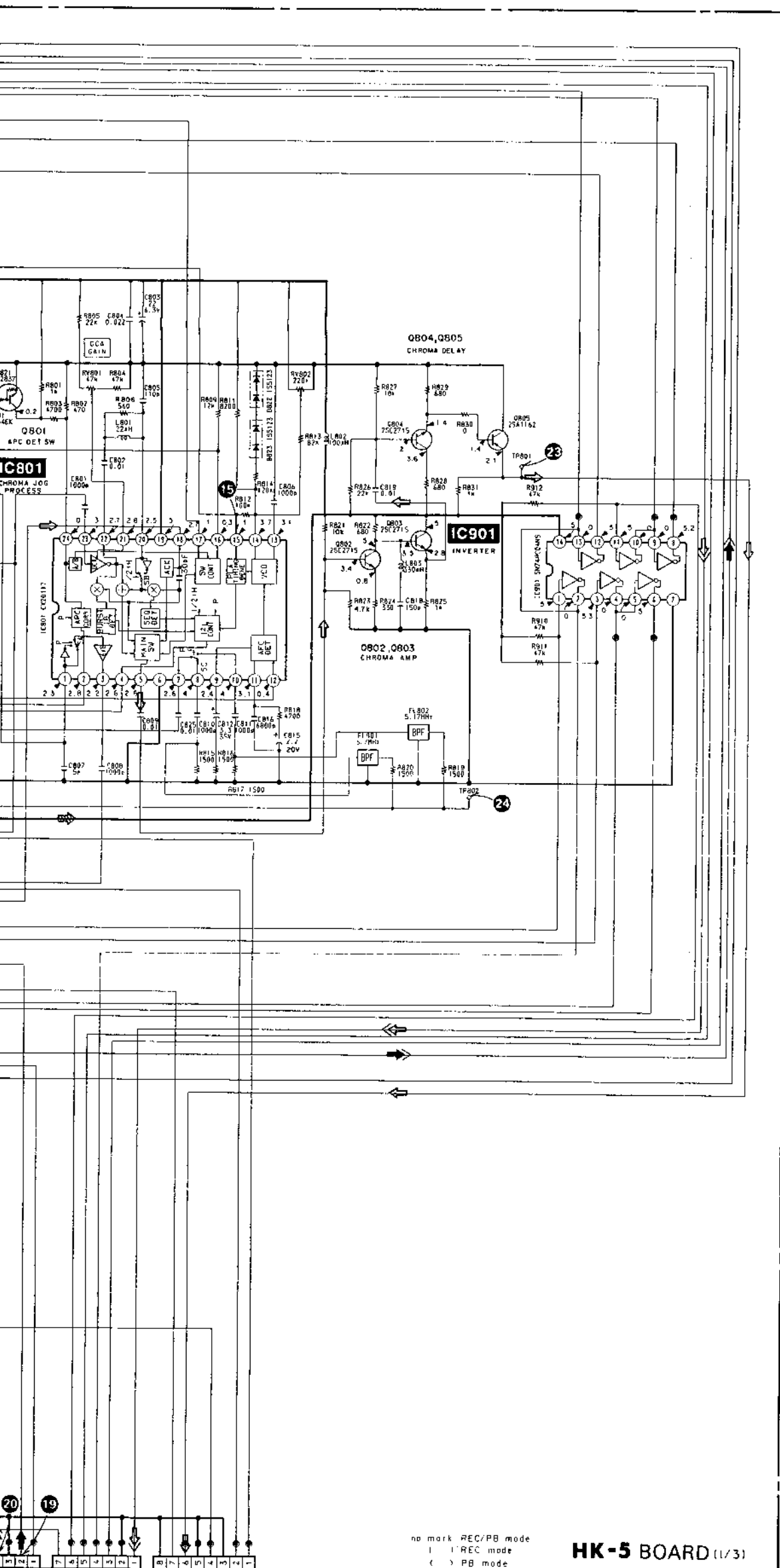


(See Page 120)

(See Page 120)

(See Page 105)

(See Page 148) (See Page 147)



HK-5 BOARD (1/3)

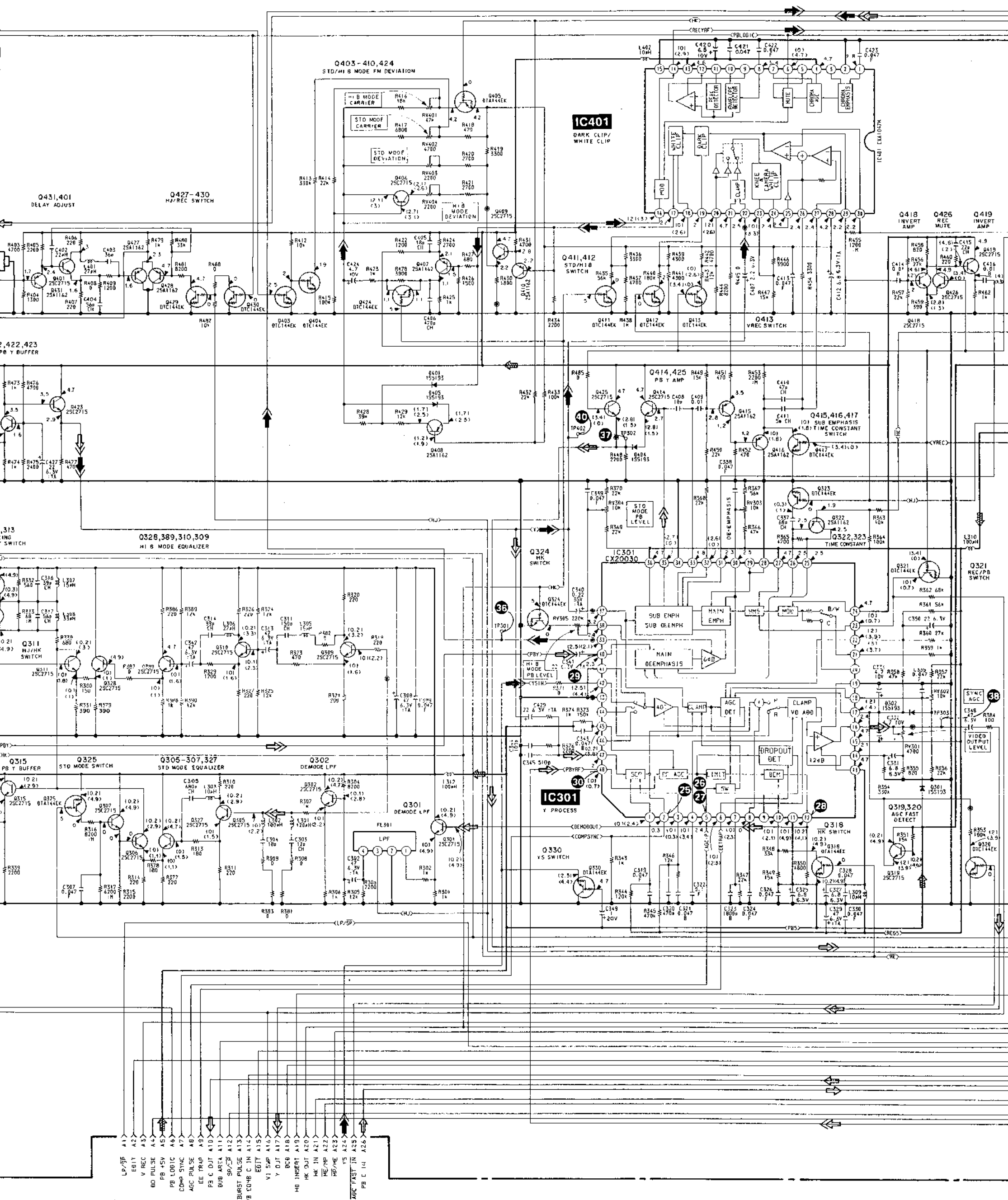
<p>1</p> <p>IC601 (1) REC</p>	<p>13</p> <p>IC603 (46) REC</p>
<p>2</p> <p>IC601 (1) PB</p>	<p>14</p> <p>IC603 (46) PB</p>
<p>3</p> <p>IC601 (12) PB</p>	<p>15</p> <p>IC800 (15) PB</p>
<p>4</p> <p>IC602 (1) PB</p>	<p>16</p> <p>CN102 (13) EE</p>
<p>5</p> <p>IC602 (14) EE</p>	<p>17</p> <p>CN102 (14) REC/PB</p>
<p>6</p> <p>IC602 (28) EE</p>	<p>18</p> <p>CN102 (17) PB</p>
<p>7</p> <p>IC602 (36) EE</p>	<p>19</p> <p>CN911 (2) REC</p>
<p>8</p> <p>IC602 (40) REC</p>	<p>20</p> <p>CN911 (4) REC</p>
<p>9</p> <p>IC603 (35) EE</p>	<p>21</p> <p>TP601 PB</p>
<p>10</p> <p>IC603 (36) REC/PB</p>	<p>22</p> <p>TP602 PB</p>
<p>11</p> <p>IC603 (42) REC</p>	<p>23</p> <p>TP801 PB</p>
<p>12</p> <p>IC603 (44) EE</p>	<p>24</p> <p>TP802 PB</p>

• SIGNAL PATH

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

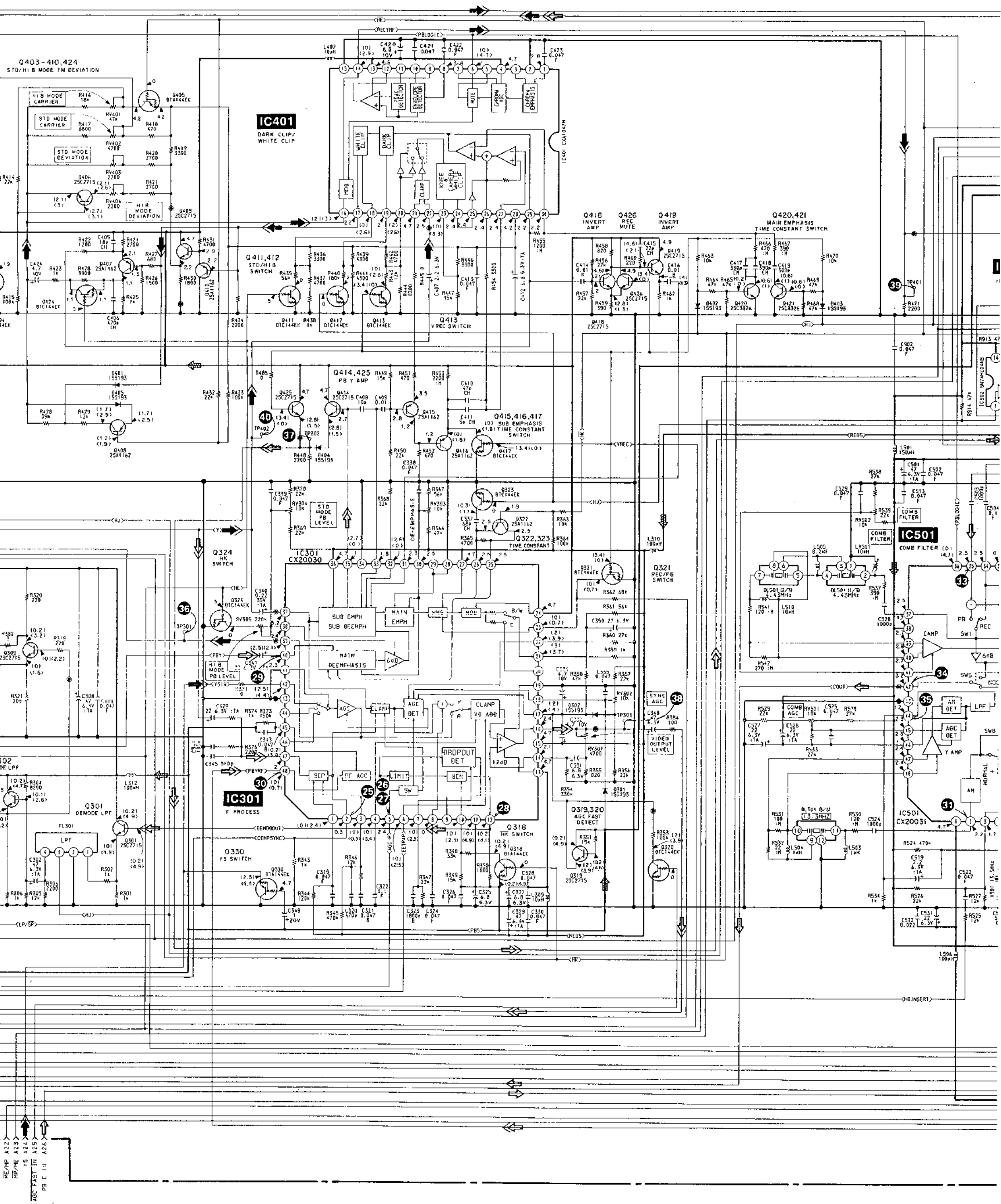
no mark REC/PB mode
 1 REC mode
 () PB mode

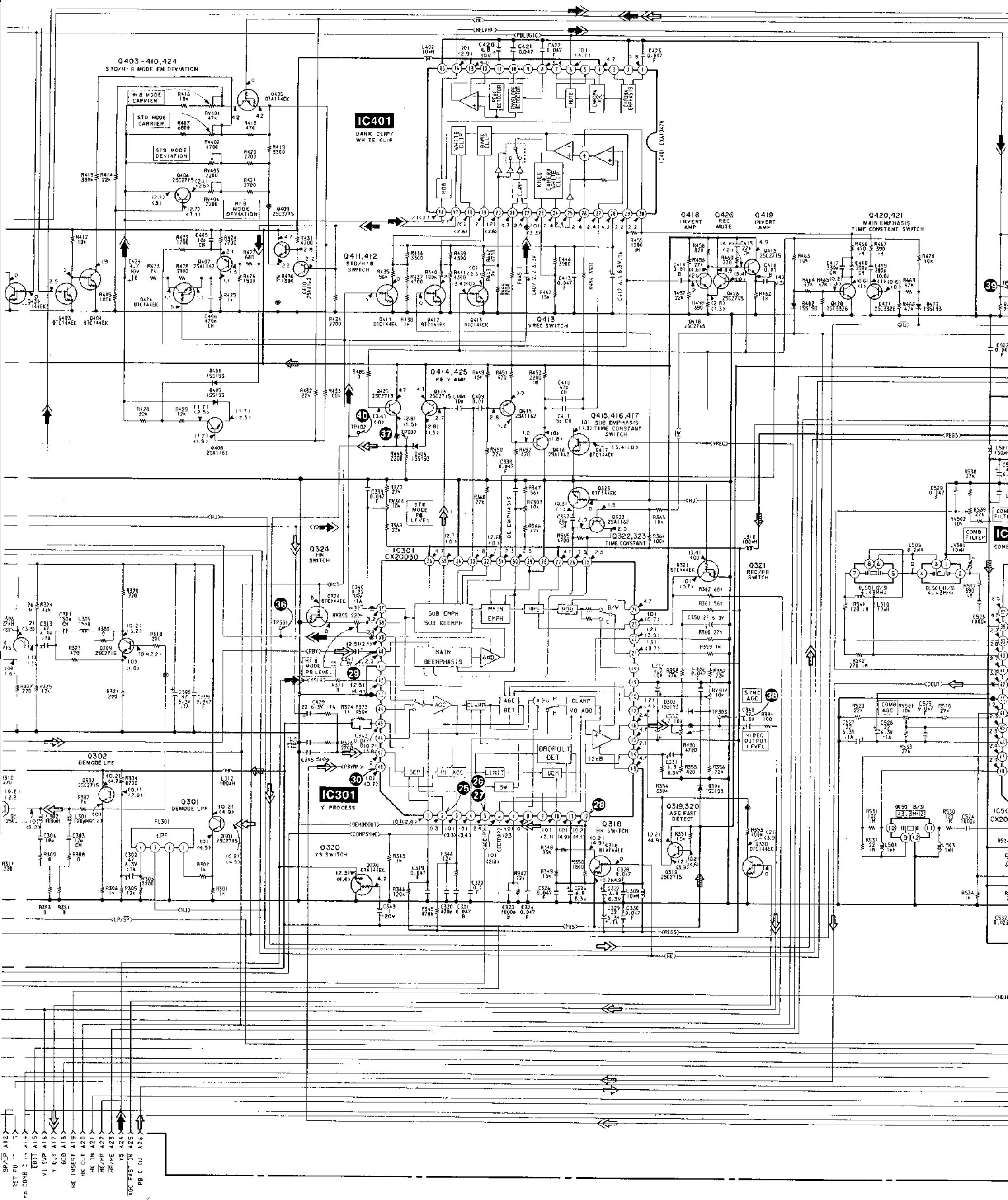
HK-5 BOARD (1/3)

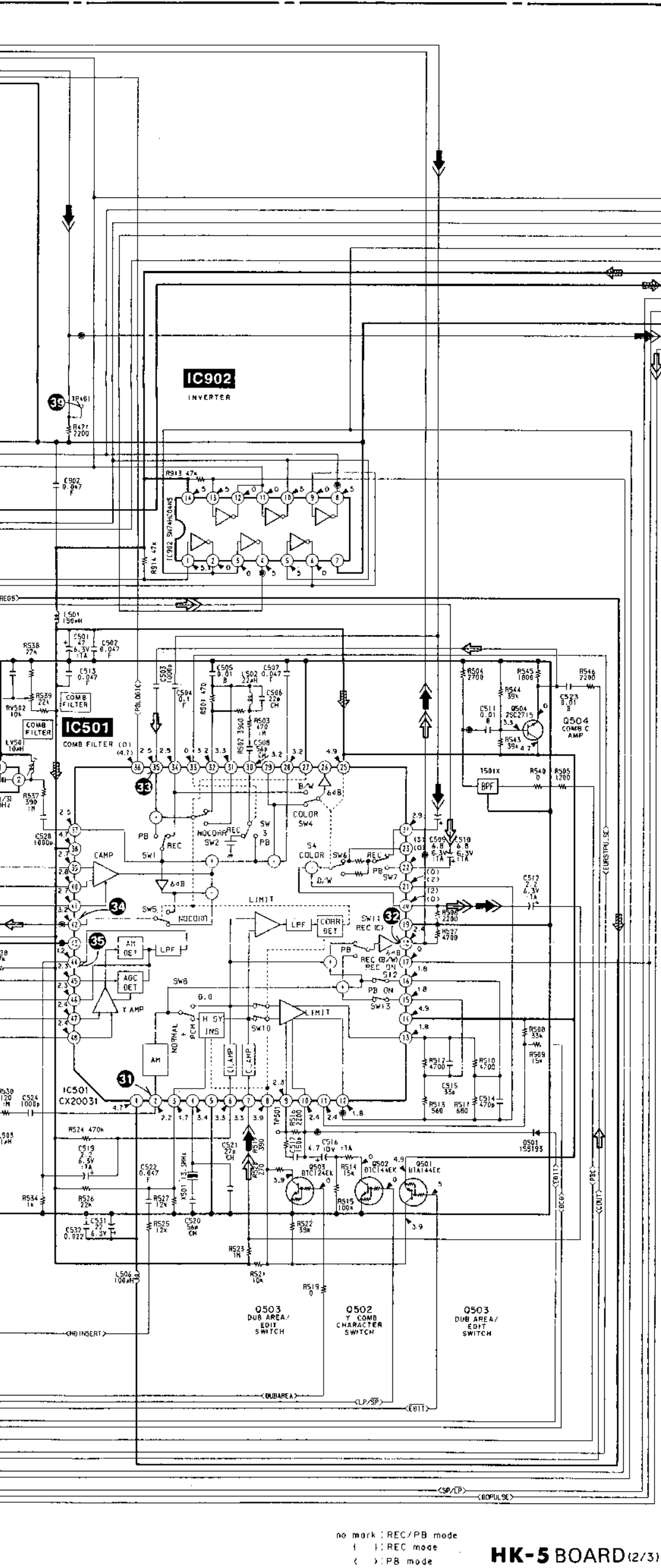


10 HK-5 BOARD (1/31)

(See Page 88)







- C1 RE
- C2 HJ
- A20 HK
- C4 RE/MP
- A22 RE/MP
- C6 HJ
- B14 REG +5V
- A5 PB +5V
- A12 SP/LP
- A4 BOP
- C11 GNB
- C12 REC Y RF
- C13 PB Y RF

(See Page 105)

HK-5 BOARD, COMPLETE

< DIODE >

TO HK-5 BOARD (2/3)	Part No.	Description	Value
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	8-752-002-99	IC CX20030
IC401	8-752-031-01	IC CXA1047M
IC501	8-752-003-12	IC CX20031
IC601	8-759-924-94	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

< TRANSISTOR >

Q101	8-729-200-86	TRANSISTOR	2SC2711
Q102	8-729-901-04	TRANSISTOR	DTA1141
Q103	8-729-200-86	TRANSISTOR	2SC2711
Q104	8-729-901-01	TRANSISTOR	DTC1441
Q105	8-729-904-07	TRANSISTOR	FMG2-1
Q107	8-729-201-27	TRANSISTOR	2SC2711
Q110	8-729-901-01	TRANSISTOR	DTC1441
Q111	8-729-200-86	TRANSISTOR	2SC2711
Q112	8-729-901-01	TRANSISTOR	DTC1441
Q113	8-729-200-86	TRANSISTOR	2SC2711
Q116	8-729-201-27	TRANSISTOR	2SC2711
Q117	8-729-200-86	TRANSISTOR	2SC2711
Q118	8-729-200-86	TRANSISTOR	2SC2711
Q119	8-729-200-86	TRANSISTOR	2SC2711
Q120	8-729-200-86	TRANSISTOR	2SC2711
Q121	8-729-201-27	TRANSISTOR	2SC2711
Q122	8-729-901-01	TRANSISTOR	DTC1441
Q123	8-729-901-01	TRANSISTOR	DTC1441
Q124	8-729-901-06	TRANSISTOR	DTA1441
Q125	8-729-901-01	TRANSISTOR	DTC1441
Q126	8-729-201-27	TRANSISTOR	2SC2711
Q127	8-729-201-27	TRANSISTOR	2SC2711
Q128	8-729-202-38	TRANSISTOR	2SC3321
Q129	8-729-201-27	TRANSISTOR	2SC2711
Q130	8-729-201-27	TRANSISTOR	2SC2711

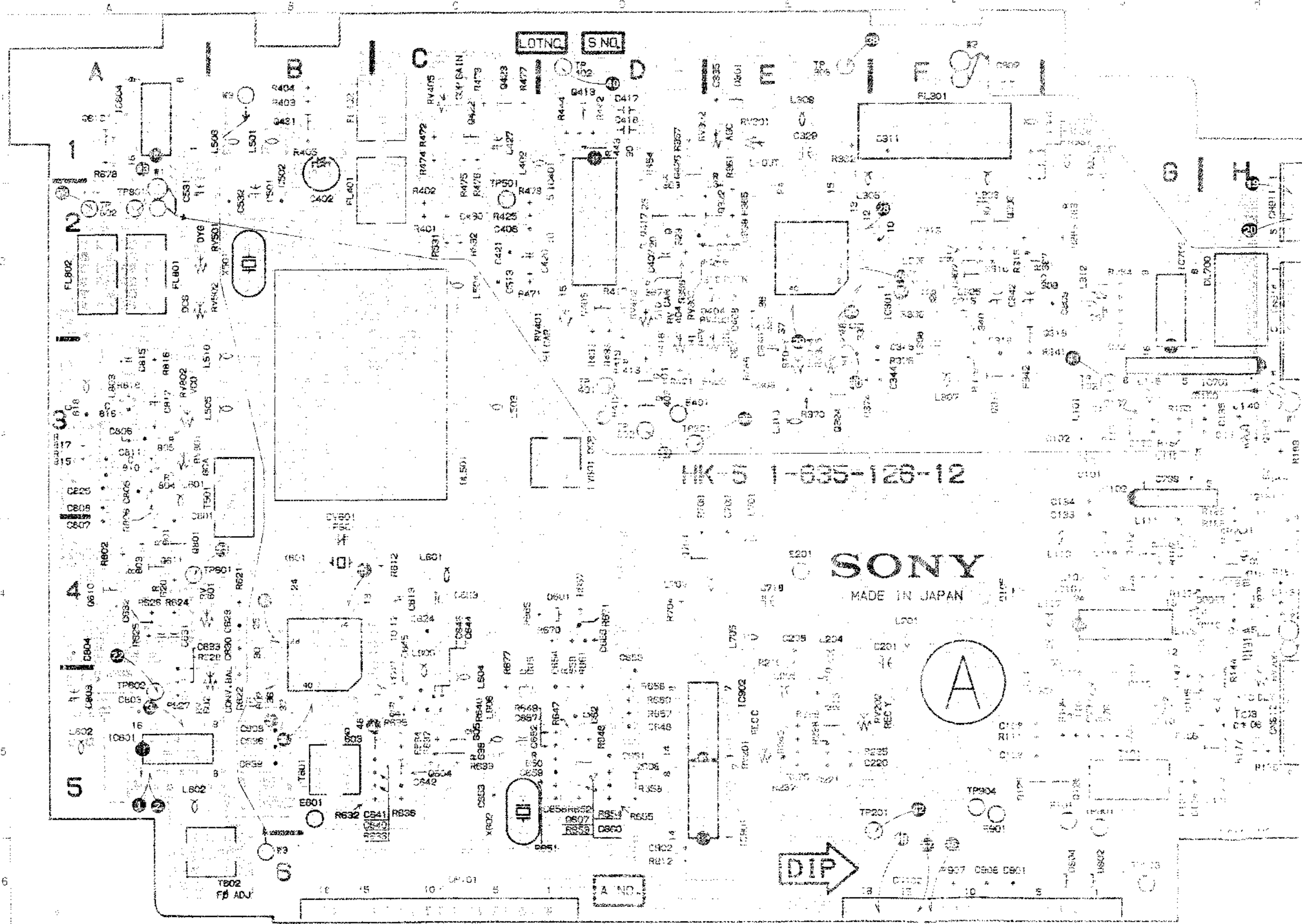
Q131	8-729-216-22	TRANSISTOR	2SA1161
Q132	8-729-201-27	TRANSISTOR	2SC2711
Q181	8-729-907-46	TRANSISTOR	1M21
Q182	8-729-903-10	TRANSISTOR	FMW1
Q183	8-729-200-86	TRANSISTOR	2SC2711

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)	HK-5 BOARD (CONDUCTOR SIDE)
D301	D101	F-4
D404	D102	F-4
D601	D103	F-4
D605	D104	F-4
D606	D105	F-4
D607	D106	F-4
D608	D107	F-4
D609	D108	F-4
D610	D109	F-4
D611	D110	F-4
D612	D111	F-4
D613	D112	F-4
D614	D113	F-4
D615	D114	F-4
D616	D115	F-4
D617	D116	F-4
D618	D117	F-4
D619	D118	F-4
D620	D119	F-4
D621	D120	F-4
D622	D121	F-4
D623	D122	F-4
D624	D123	F-4
D625	D124	F-4
D626	D125	F-4
D627	D126	F-4
D628	D127	F-4
D629	D128	F-4
D630	D129	F-4
D631	D130	F-4
D632	D131	F-4
D633	D132	F-4
D634	D133	F-4
D635	D134	F-4
D636	D135	F-4
D637	D136	F-4
D638	D137	F-4
D639	D138	F-4
D640	D139	F-4
D641	D140	F-4
D642	D141	F-4
D643	D142	F-4
D644	D143	F-4
D645	D144	F-4
D646	D145	F-4
D647	D146	F-4
D648	D147	F-4
D649	D148	F-4
D650	D149	F-4
D651	D150	F-4
D652	D151	F-4
D653	D152	F-4
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D785	D284	F-4
D786	D285	F-4
D787	D286	F-4
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D790	D289	F-4
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D810	D309	F-4
D811	D310	F-4
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D823	D322	F-4
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D825	D324	F-4
D826	D325	F-4
D827	D326	F-4
D828	D327	F-4
D829	D328	F-4
D830	D329	F-4
D831	D330	F-4
D832	D331	F-4
D833	D332	F-4
D834	D333	F-4
D835	D334	F-4
D836	D335	F-4
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D838	D337	F-4
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D841	D340	F-4
D842	D341	F-4
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D847	D346	F-4
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D896	D395	F-4
D897	D396	F-4
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D900	D399	F-4
D901	D400	F-4

HK-5 BOARD CONDUCTOR SIDE

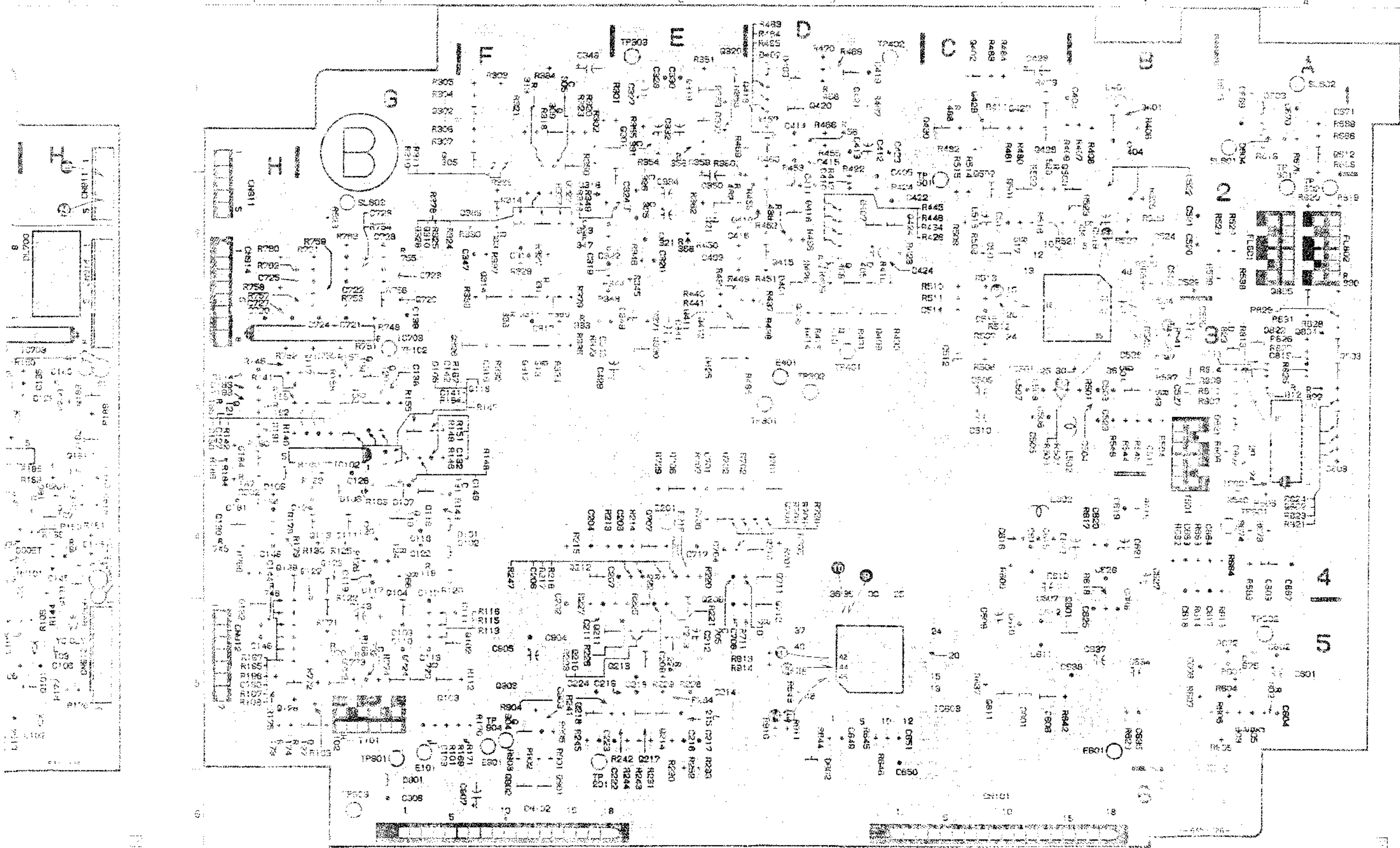


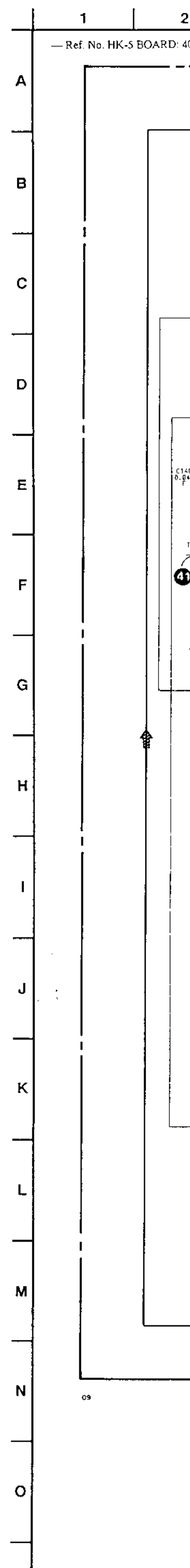
HK-5 (CHROMA SIGNAL PROCESS, Y SIGNAL PROCESS, Y/C/AFM MIX) PRINTED WIRING BOARD

— Ref. No. HK-5 BOARD: 4000 series —

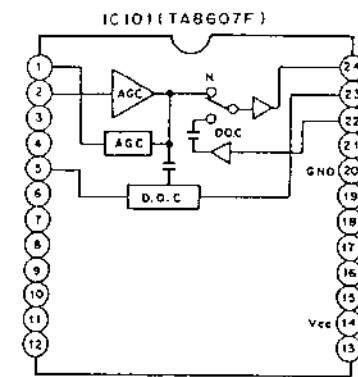
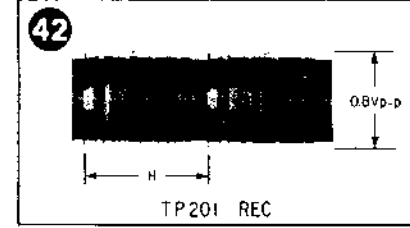
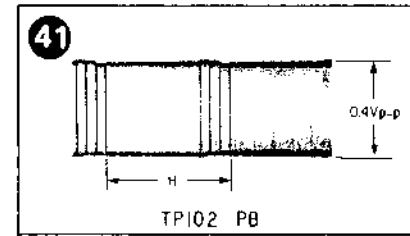
HK-5 BOARD (COMPONENT SIDE)
HK-5 BOARD (CONDUCTOR SIDE)

D301	E-1	D:01	F-4	Q501	C-2
D404	E-2	D:02	F-4	Q502	C-1
D601	D-4	D:05	G-3	Q503	C-2
D605	C-5	D:06	G-4	Q504	B-3
D802	G-6	D:07	F-4	Q501	B-5
D804	G-6	D:08	G-3	Q506	C-5
		D:09	H-4	Q509	A-4
		Q302	F-1	Q512	A-1
IC101	G-4	Q401	D-2	Q513	C-1
IC102	G-3	Q402	D-1	Q514	C-2
IC301	F-2	Q403	D-1	Q515	C-3
IC401	D-1	Q404	D-1	Q516	C-4
IC501	A-5	Q405	D-2	Q517	C-5
IC502	B-5	Q501	D-2	Q518	C-6
IC702	C-5	Q502	D-2	Q519	C-7
IC703	H-5	Q503	D-2	Q520	C-8
IC801	F-6	D604	A-1	Q521	D-4
IC902	F-5	D801	C-6	Q522	D-5
		D802	A-3	Q523	D-6
		D803	A-3	Q524	D-7
		D804	C-5	Q525	D-8
		D805	C-5	Q526	D-9
		D806	C-5	Q527	D-10
		D807	C-5	Q528	D-11
		D808	C-5	Q529	D-12
		D809	C-5	Q530	D-13
		D810	C-5	Q531	D-14
		D811	C-5	Q532	D-15
		D812	C-5	Q533	D-16
		D813	C-5	Q534	D-17
		D814	C-5	Q535	D-18
		D815	C-5	Q536	D-19
		D816	C-5	Q537	D-20
		D817	C-5	Q538	D-21
		D818	C-5	Q539	D-22
		D819	C-5	Q540	D-23
		D820	C-5	Q541	D-24
		D821	C-5	Q542	D-25
		D822	C-5	Q543	D-26
		D823	C-5	Q544	D-27
		D824	C-5	Q545	D-28
		D825	C-5	Q546	D-29
		D826	C-5	Q547	D-30
		D827	C-5	Q548	D-31
		D828	C-5	Q549	D-32
		D829	C-5	Q550	D-33
		D830	C-5	Q551	D-34
		D831	C-5	Q552	D-35
		D832	C-5	Q553	D-36
		D833	C-5	Q554	D-37
		D834	C-5	Q555	D-38
		D835	C-5	Q556	D-39
		D836	C-5	Q557	D-40
		D837	C-5	Q558	D-41
		D838	C-5	Q559	D-42
		D839	C-5	Q560	D-43
		D840	C-5	Q561	D-44
		D841	C-5	Q562	D-45
		D842	C-5	Q563	D-46
		D843	C-5	Q564	D-47
		D844	C-5	Q565	D-48
		D845	C-5	Q566	D-49
		D846	C-5	Q567	D-50
		D847	C-5	Q568	D-51
		D848	C-5	Q569	D-52
		D849	C-5	Q570	D-53
		D850	C-5	Q571	D-54
		D851	C-5	Q572	D-55
		D852	C-5	Q573	D-56
		D853	C-5	Q574	D-57
		D854	C-5	Q575	D-58
		D855	C-5	Q576	D-59
		D856	C-5	Q577	D-60
		D857	C-5	Q578	D-61
		D858	C-5	Q579	D-62
		D859	C-5	Q580	D-63
		D860	C-5	Q581	D-64
		D861	C-5	Q582	D-65
		D862	C-5	Q583	D-66
		D863	C-5	Q584	D-67
		D864	C-5	Q585	D-68
		D865	C-5	Q586	D-69
		D866	C-5	Q587	D-70
		D867	C-5	Q588	D-71
		D868	C-5	Q589	D-72
		D869	C-5	Q590	D-73
		D870	C-5	Q591	D-74
		D871	C-5	Q592	D-75
		D872	C-5	Q593	D-76
		D873	C-5	Q594	D-77
		D874	C-5	Q595	D-78
		D875	C-5	Q596	D-79
		D876	C-5	Q597	D-80
		D877	C-5	Q598	D-81
		D878	C-5	Q599	D-82
		D879	C-5	Q600	D-83
		D880	C-5	Q601	D-84
		D881	C-5	Q602	D-85
		D882	C-5	Q603	D-86
		D883	C-5	Q604	D-87
		D884	C-5	Q605	D-88
		D885	C-5	Q606	D-89
		D886	C-5	Q607	D-90
		D887	C-5	Q608	D-91
		D888	C-5	Q609	D-92
		D889	C-5	Q610	D-93
		D890	C-5	Q611	D-94
		D891	C-5	Q612	D-95
		D892	C-5	Q613	D-96
		D893	C-5	Q614	D-97
		D894	C-5	Q615	D-98
		D895	C-5	Q616	D-99
		D896	C-5	Q617	D-100
		D897	C-5	Q618	D-101
		D898	C-5	Q619	D-102
		D899	C-5	Q620	D-103
		D900	C-5	Q621	D-104
		D901	C-5	Q622	D-105
		D902	C-5	Q623	D-106
		D903	C-5	Q624	D-107
		D904	C-5	Q625	D-108
		D905	C-5	Q626	D-109
		D906	C-5	Q627	D-110
		D907	C-5	Q628	D-111
		D908	C-5	Q629	D-112
		D909	C-5	Q630	D-113
		D910	C-5	Q631	D-114
		D911	C-5	Q632	D-115
		D912	C-5	Q633	D-116
		D913	C-5	Q634	D-117
		D914	C-5	Q635	D-118
		D915	C-5	Q636	D-119
		D916	C-5	Q637	D-120
		D917	C-5	Q638	D-121
		D918	C-5	Q639	D-122
		D919	C-5	Q640	D-123
		D920	C-5	Q641	D-124
		D921	C-5	Q642	D-125
		D922	C-5	Q643	D-126
		D923	C-5	Q644	D-127
		D924	C-5	Q645	D-128
		D925	C-5	Q646	D-129
		D926	C-5	Q647	D-130
		D927	C-5	Q648	D-131
		D928	C-5	Q649	D-132
		D929	C-5	Q650	D-133
		D930	C-5	Q651	D-134
		D931	C-5	Q652	D-135
		D932	C-5	Q653	D-136
		D933	C-5	Q654	D-137
		D934	C-5	Q655	D-138
		D935	C-5	Q656	D-139
		D936	C-5	Q657	D-140
		D937	C-5	Q658	D-141
		D938	C-5	Q659	D-142
		D939	C-5	Q660	D-143
		D940	C-5	Q661	D-144
		D941	C-5	Q662	D-145
		D942	C-5	Q663	D-146
		D943	C-5	Q664	D-147
		D944	C-5	Q665	D-148
		D945	C-5	Q666	D-149
		D946	C-5	Q667	D-150
		D947	C-5	Q668	D-151
		D948	C-5	Q669	D-152
		D949	C-5	Q670	D-153
		D950	C-5	Q671	D-154
		D951	C-5	Q672	D-155
		D952	C-5	Q673	D-156
		D953	C-5	Q674	D-157
		D954	C-5	Q675	D-158
		D955	C-5	Q676	D-159
		D956	C-5	Q677	D-160
		D957	C-5	Q678	D-161
		D958	C-5	Q679	D-162
		D959	C-5	Q680	D-163
		D960	C-5	Q681	D-164
		D961	C-5	Q682	D-165
		D962	C-5	Q683	D-166
		D963	C-5	Q684	D-167
		D964	C-5	Q685	D-168
		D965	C-5	Q686	D-169
		D966	C-5	Q687	D-170
		D967	C-5	Q688	D-171
		D968	C-5	Q689	D-172
		D969	C-5	Q690	D-173
		D970	C-5	Q691	D-174
		D971	C-5	Q692	D-175
		D972	C-5	Q693	D-176
		D973	C-5	Q694	D-177
		D974	C-5	Q695	D-178
		D975	C-5	Q696	D-179
		D976	C-5	Q697	D-180
		D977	C-5	Q698	D-181
		D978	C-5	Q699	D-182
		D979	C-5	Q700	D-183
		D980	C-5	Q701	D-184
		D981	C-5	Q702	D-185
		D982	C-5	Q703	D-186
		D983	C-5	Q704	D-187
		D984	C-5	Q705	D-188
		D985	C-5	Q706	D-189
		D986	C-5	Q707	D-190
		D987	C-5	Q708	D-191
		D988	C-5	Q709	D-192
		D989	C-5	Q710	D-193
		D990	C-5	Q711	D-194
		D991	C-5	Q712	D-195
		D992	C-5	Q713	D-196
		D993	C-5	Q714	D-197
		D994	C-5	Q715	D-198
		D995	C-5	Q716	D-199
		D996	C-5	Q717	D-200
		D997	C-5	Q718	D-201
		D998	C-5	Q719	D-202
		D999	C-5	Q720	D-203
		D1000	C-5	Q721	D-204
		D1001	C-5	Q722	D-205
		D1002	C-5	Q723	D-206
		D1003	C-5	Q724	D-207
		D1004	C-5	Q725	D-208
		D1005	C-5	Q726	D-209
		D1006	C-5	Q727	D-210
		D1007	C-5	Q728	D-211
		D1008	C-5	Q729	D-212
		D1009	C-5	Q730	D-213
		D1010	C-5	Q731	D-214
		D1011	C-5	Q732	D-215
		D1012	C-5	Q733	D-216
		D1013	C-5	Q734	D-217
		D1014	C-5	Q735	D-218
		D1015	C-5	Q736	D-219
		D1016	C-5	Q737	D-220
		D1017	C-5	Q738	D-221
		D1018	C-5	Q739	D-222
		D1019	C-5	Q740	D-223
		D1020	C-5	Q741	D-224
		D1021	C-5	Q742	D-225
		D1022	C-5	Q743	D-226
		D1023	C-5	Q744	D-227
		D1024	C-5	Q745	D-228
		D1025	C-5	Q746	D-229
		D1026	C-5	Q747	D-230
		D1027	C-5	Q748	D-231
		D1028	C-5	Q749	D-232
		D1029	C-5	Q750	D-233
		D1030	C-5	Q751	D-234
		D1031	C-5	Q752	D-235
		D1032	C-5	Q753	D-236
		D1033	C-5	Q754	D-237
		D1034	C-5	Q755	D-238
		D1035	C-5	Q756	D-239
		D1036	C-5	Q757	D-240
		D1037	C-5	Q758	D-241
		D1038	C-5	Q759	D-242
		D1039	C-5	Q760	D-243
		D1040	C-5	Q761	D-244
		D1041	C-5	Q762	D-245
		D1042	C-5	Q763	D-246
		D1043	C-5	Q764	D-247
		D1044	C-5	Q765	D-248
		D1045	C-5	Q766	D-249
		D1046	C-5	Q767	D-250





HK-5 BOARD (3/3)



Q122	8-729-901-01	TRANSISTOR	DTC144EK
Q123	8-729-901-01	TRANSISTOR	DTC144EK
Q124	8-729-901-06	TRANSISTOR	DTA144EK
Q125	8-729-901-01	TRANSISTOR	DTC144EK
Q126	8-729-201-27	TRANSISTOR	2SC2715-Y
Q127	8-729-201-27	TRANSISTOR	2SC2715-Y
Q128	8-729-202-38	TRANSISTOR	2SC3326N
Q129	8-729-201-27	TRANSISTOR	2SC2715-Y
Q130	8-729-201-27	TRANSISTOR	2SC2715-Y
Q131	8-729-216-22	TRANSISTOR	2SA1162
Q132	8-729-201-27	TRANSISTOR	2SC2715-Y
Q181	8-729-907-46	TRANSISTOR	1M21
Q182	8-729-903-10	TRANSISTOR	FMW1
Q183	8-729-200-86	TRANSISTOR	2SC2714-0
Q184	8-729-216-22	TRANSISTOR	2SA1162
Q209	8-729-200-86	TRANSISTOR	2SC2714-0
Q210	8-729-200-86	TRANSISTOR	2SC2714-0
Q211	8-729-200-86	TRANSISTOR	2SC2714-0
Q212	8-729-901-01	TRANSISTOR	DTC144EK
Q213	8-729-901-06	TRANSISTOR	DTA144EK
Q214	8-729-200-86	TRANSISTOR	2SC2714-0
Q215	8-729-902-96	TRANSISTOR	FMS1
Q217	8-729-200-86	TRANSISTOR	2SC2714-0
Q218	8-729-200-86	TRANSISTOR	2SC2714-0
Q301	8-729-201-27	TRANSISTOR	2SC2715-Y
Q302	8-729-201-27	TRANSISTOR	2SC2715-Y
Q305	8-729-201-27	TRANSISTOR	2SC2715-Y
Q306	8-729-201-27	TRANSISTOR	2SC2715-Y
Q307	8-729-201-27	TRANSISTOR	2SC2715-Y
Q309	8-729-201-27	TRANSISTOR	2SC2715-Y
Q310	8-729-201-27	TRANSISTOR	2SC2715-Y
Q311	8-729-201-27	TRANSISTOR	2SC2715-Y
Q312	8-729-901-06	TRANSISTOR	DTA144EK
Q313	8-729-216-22	TRANSISTOR	2SA1162
Q314	8-729-201-27	TRANSISTOR	2SC2715-Y
Q315	8-729-201-27	TRANSISTOR	2SC2715-Y
Q316	8-729-901-01	TRANSISTOR	DTC144EK
Q317	8-729-201-27	TRANSISTOR	2SC2715-Y
Q318	8-729-901-06	TRANSISTOR	DTA144EK
Q319	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
Q328	8-729-201-27	TRANSISTOR	2SC2715-Y
Q330	8-729-901-06	TRANSISTOR	DTA144EK
Q389	8-729-201-27	TRANSISTOR	2SC2715-Y
Q401	8-729-201-27	TRANSISTOR	2SC2715-Y
Q402	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
Q407	8-729-216-22	TRANSISTOR	2SA1162
Q408	8-729-216-22	TRANSISTOR	2SA1162
Q409	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
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-Y
Q419	8-729-201-27	TRANSISTOR	2SC2715-Y
Q420	8-729-202-38	TRANSISTOR	2SC3326N
Q421	8-729-202-38	TRANSISTOR	2SC3326N
Q422	8-729-201-27	TRANSISTOR	2SC2715-Y
Q423	8-729-201-27	TRANSISTOR	2SC2715-Y
Q424	8-729-901-01	TRANSISTOR	DTC144EK
Q425	8-729-201-27	TRANSISTOR	2SC2715-Y
Q426	8-729-201-27	TRANSISTOR	2SC2715-Y
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-Y
Q601	8-729-901-01	TRANSISTOR	DTC144EK
Q603	8-729-901-01	TRANSISTOR	DTC144EK
Q604	8-729-201-27	TRANSISTOR	2SC2715-Y
Q605	8-729-201-27	TRANSISTOR	2SC2715-Y
Q606	8-729-901-01	TRANSISTOR	DTC144EK
Q607	8-729-201-27	TRANSISTOR	2SC2715-Y
Q608	8-729-216-22	TRANSISTOR	2SA1162
Q609	8-729-901-00	TRANSISTOR	DTC124EK

HK-5 BOARD, COMPLETE

< 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

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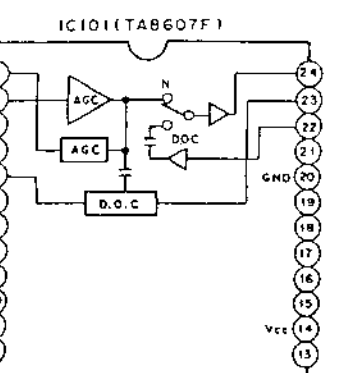
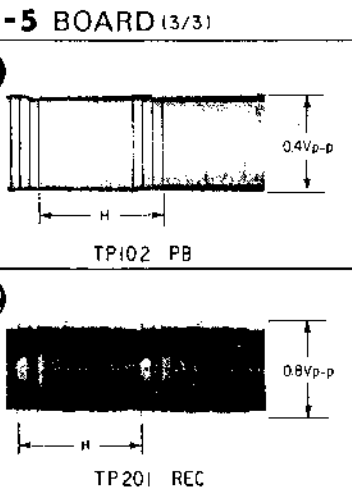
IC101	8-759-233-94	IC TA8607F
IC102	8-759-925-60	IC BA401
IC301	8-752-002-99	IC CX20030
IC401	8-752-031-01	IC CXA1047M
IC501	8-752-003-12	IC CX20031
IC601	8-759-924-94	IC CX22021
IC602	8-752-003-22	IC CX20032
IC603	8-752-305-47	IC CX23054
IC604	8-759-009-51	IC MC14538BF
IC702	8-759-012-00	IC MC10H116M
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

< TRANSISTOR >

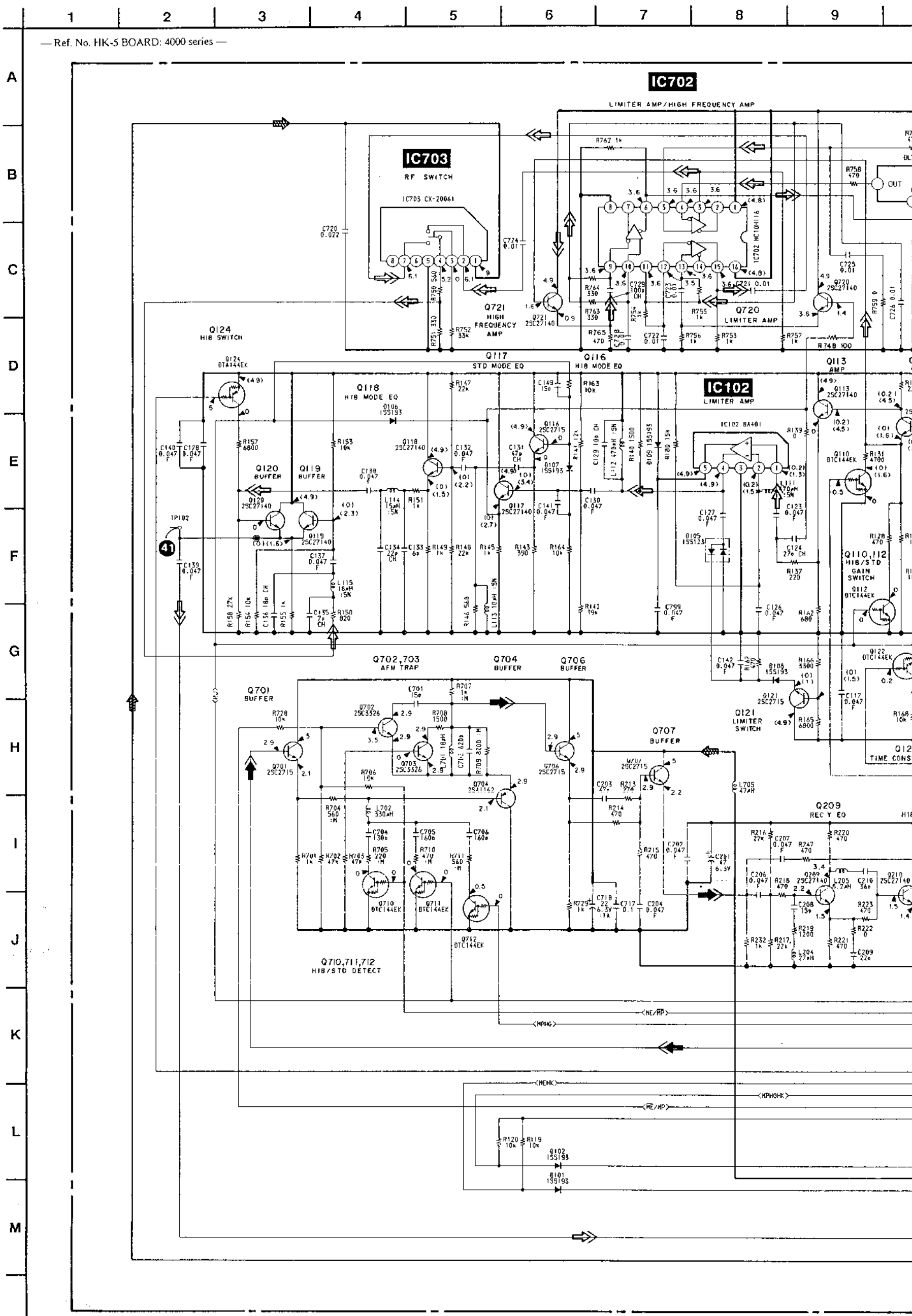
Q101	8-729-200-86	TRANSISTOR	2SC2714-0
Q102	8-729-901-04	TRANSISTOR	DTA114EK
Q103	8-729-200-86	TRANSISTOR	2SC2714-0
Q104	8-729-901-01	TRANSISTOR	DTC144EK
Q105	8-729-904-07	TRANSISTOR	FMG2-T-148
Q107	8-729-201-27	TRANSISTOR	2SC2715-Y
Q110	8-729-901-01	TRANSISTOR	DTC144EK
Q111	8-729-200-86	TRANSISTOR	2SC2714-0
Q112	8-729-901-01	TRANSISTOR	DTC144EK
Q113	8-729-200-86	TRANSISTOR	2SC2714-0
Q116	8-729-201-27	TRANSISTOR	2SC2715-Y
Q117	8-729-200-86	TRANSISTOR	2SC2714-0
Q118	8-729-200-86	TRANSISTOR	2SC2714-0
Q119	8-729-200-86	TRANSISTOR	2SC2714-0
Q120	8-729-200-86	TRANSISTOR	2SC2714-0
Q121	8-729-201-27	TRANSISTOR	2SC2715-Y

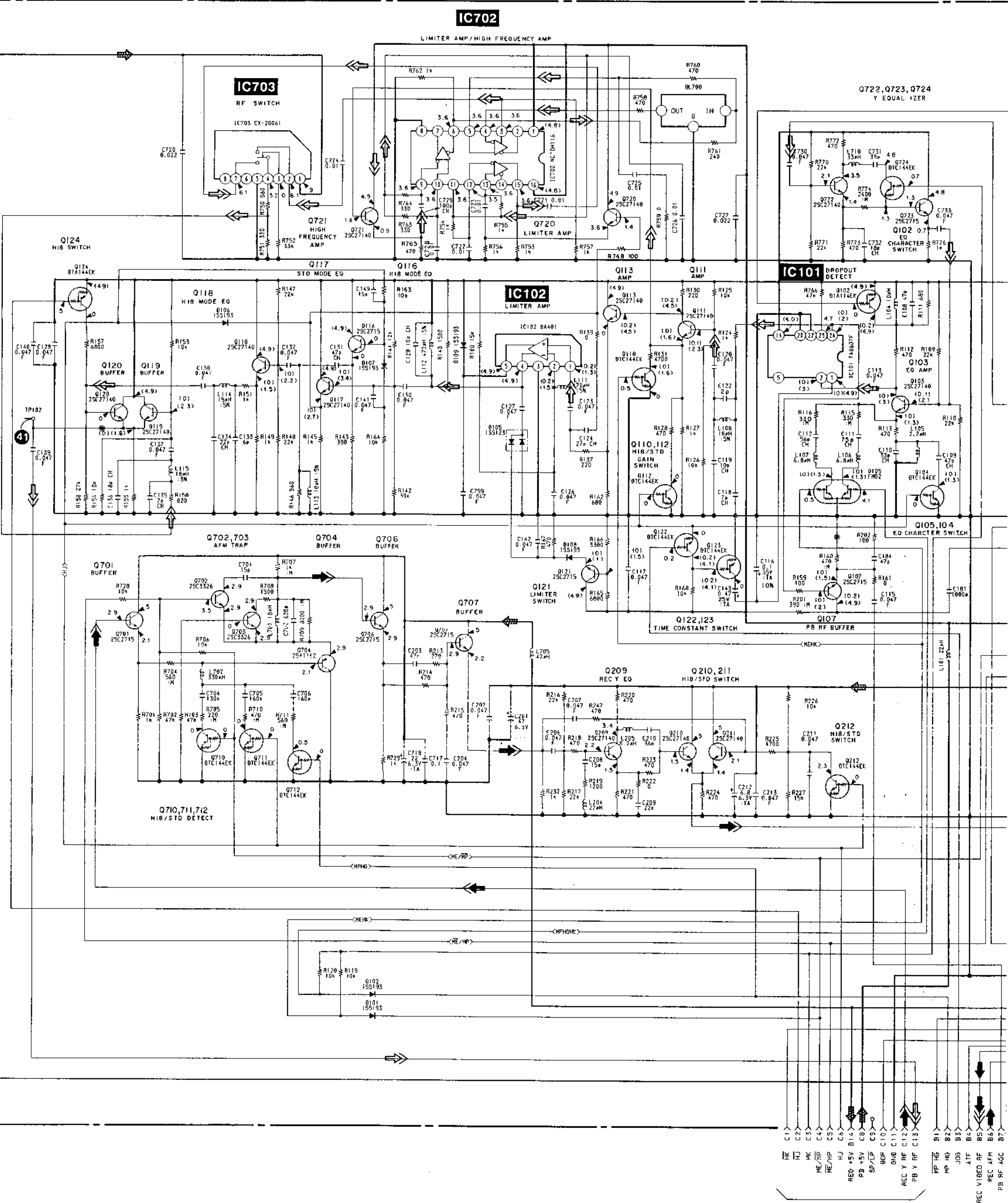
HK-5 (Y/C/AFM MIX) SCHEMATIC DIAGRAM

— Ref. No. HK-5 BOARD: 4000 series —



- RANSISTOR FMS2-T-149
- RANSISTOR 2SC2715-Y
- RANSISTOR 2SC2715-Y
- RANSISTOR DTC144EK
- RANSISTOR 2SC2715-Y
- RANSISTOR 2SC3326N
- RANSISTOR 2SC3326N
- RANSISTOR 2SA1162
- RANSISTOR 2SC2715-Y
- RANSISTOR 2SC2715-Y
- RANSISTOR DTC144EK
- RANSISTOR DTC144EK
- RANSISTOR DTC144EK
- RANSISTOR 2SC2714-0
- RANSISTOR 2SC2714-0
- RANSISTOR 2SC2715-Y
- RANSISTOR DTC144EK
- RANSISTOR DTC144EK
- RANSISTOR 2SC2715-Y
- RANSISTOR 2SC2715-Y
- RANSISTOR 2SA1162
- RANSISTOR DTC144EK
- RANSISTOR DTC144EK
- RANSISTOR DTC144EK
- RANSISTOR DTC144EK
- RANSISTOR 2SB804-AV
- RANSISTOR 2SC2715-Y

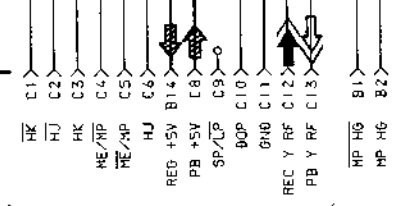
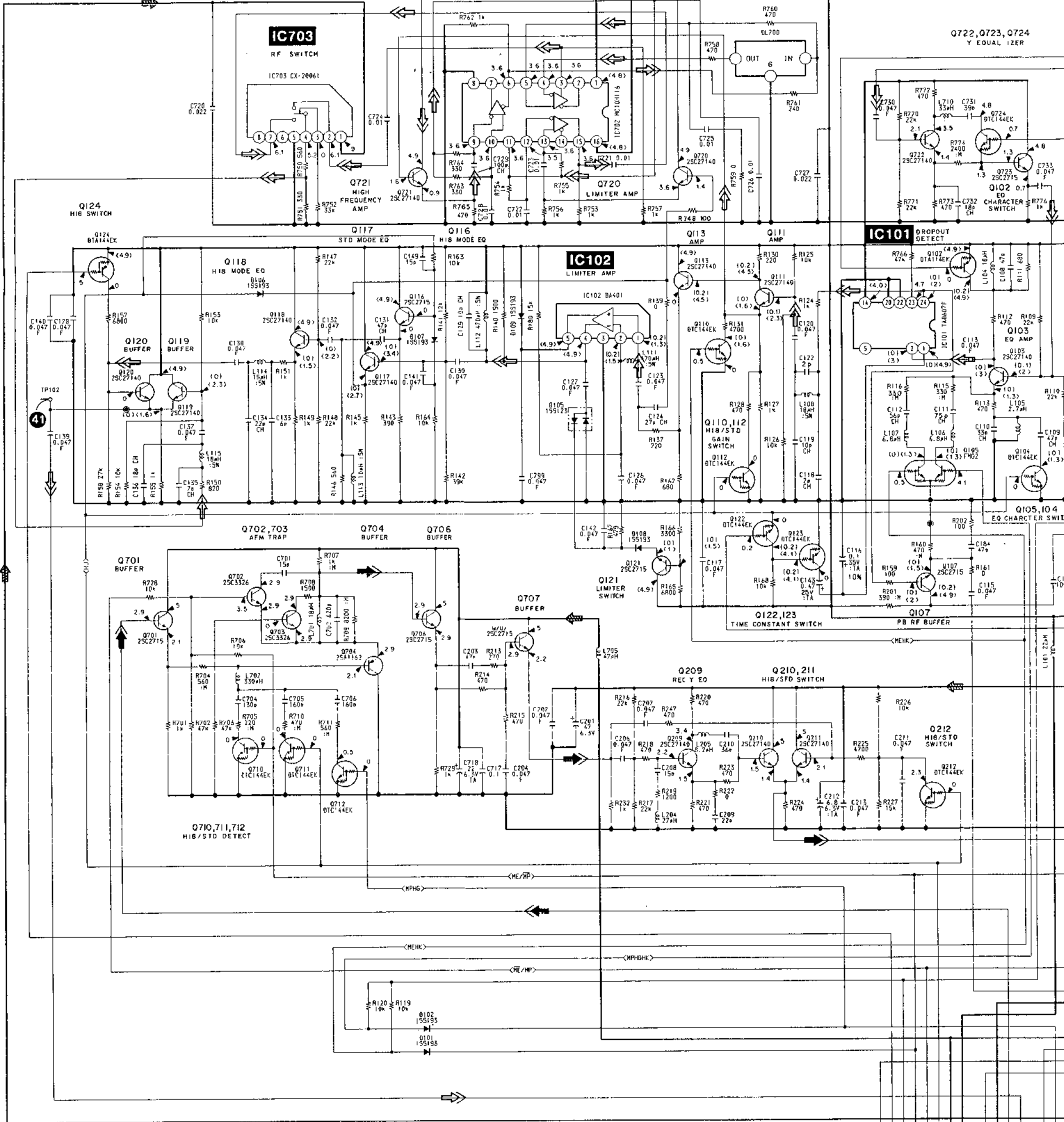




(See Page 94)

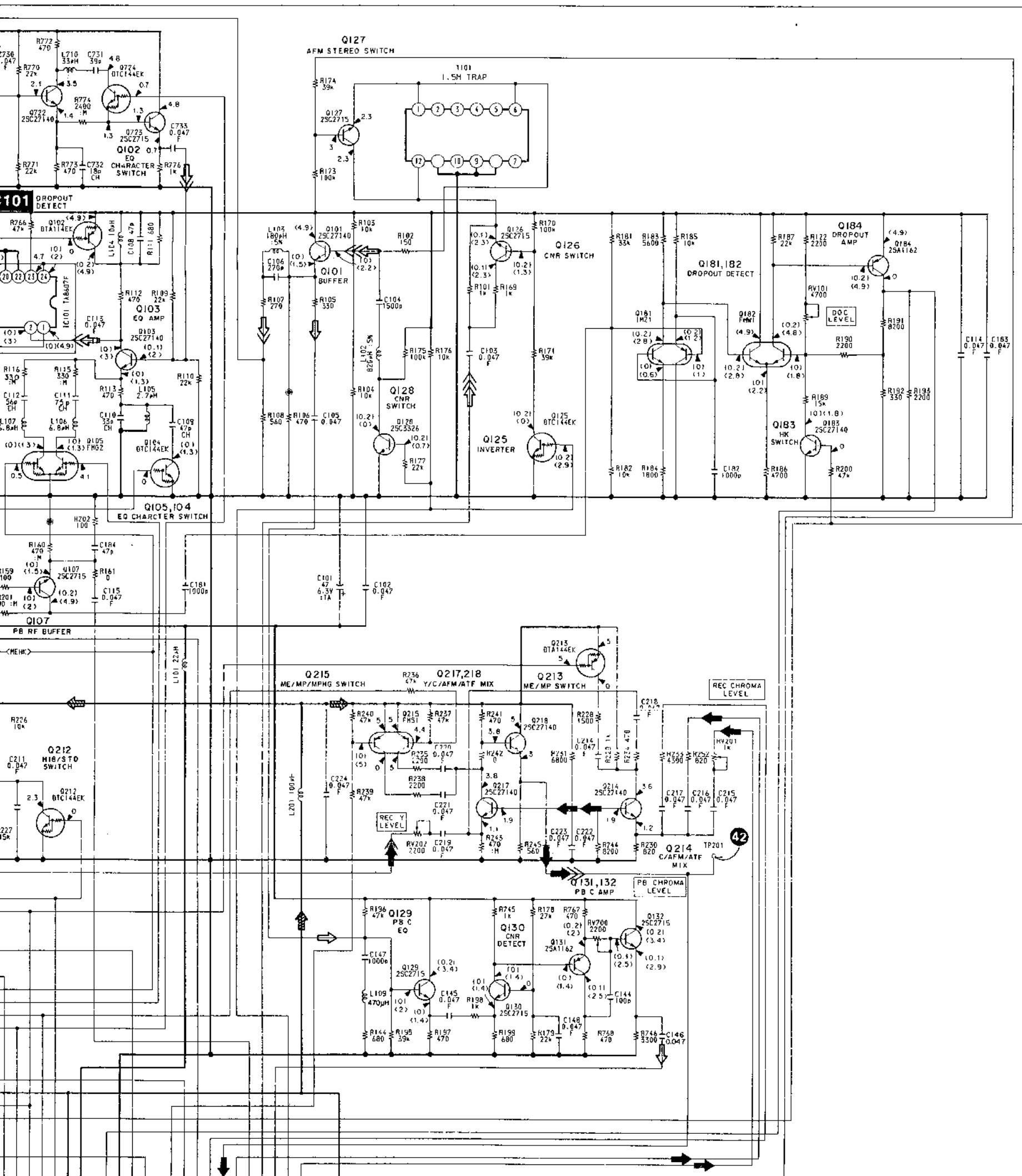
IC702

LIMITER AMP/HIGH FREQUENCY AMP



TO
HK-5 BOARD
(2/3)
(See Page 94)

Q722, Q723, Q724
Y EQUALIZER



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

HK-5 BOARD (3/3)

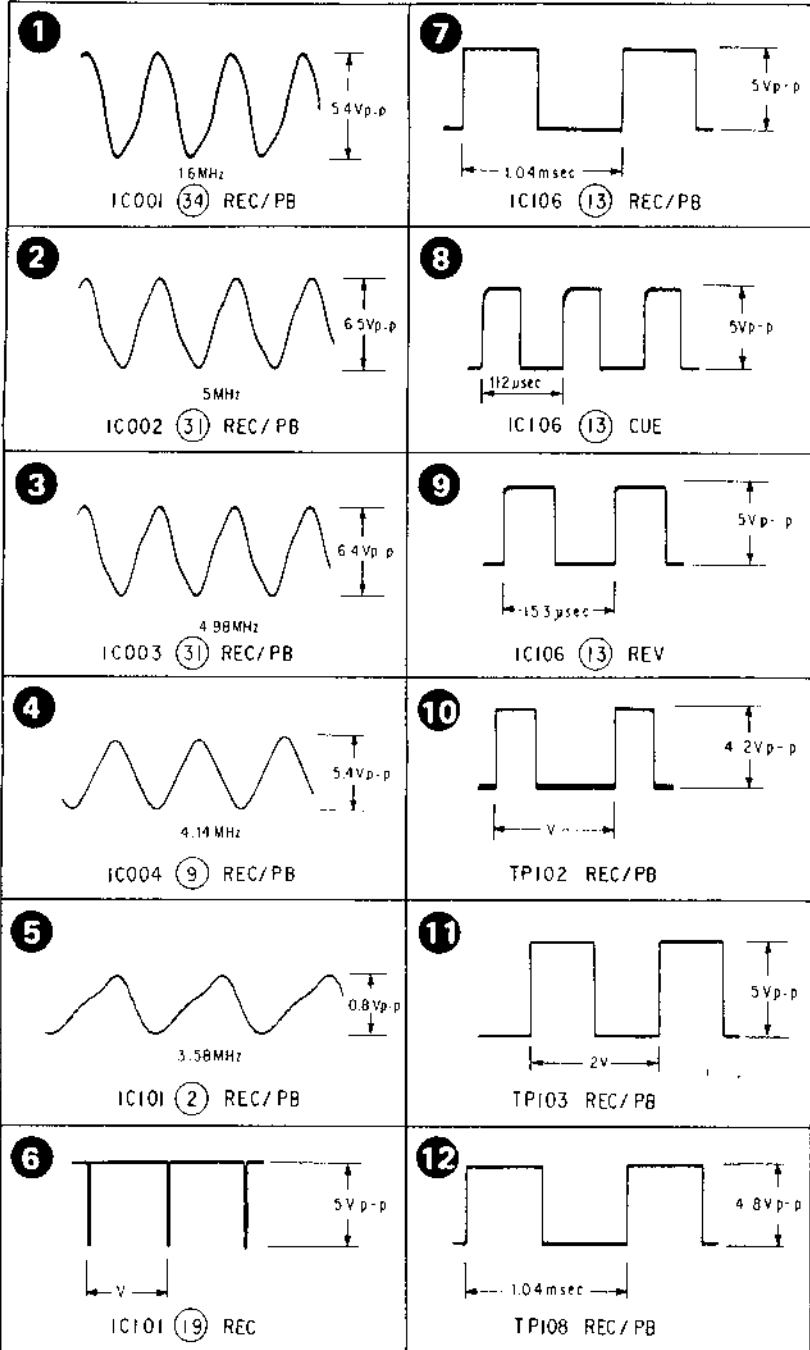
SIGNAL PATH

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

TO HK-5 BOARD (2/3) (See Page 94)
TO HK-5 BOARD (1/3) (See Page 89)

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

SE-10P BOARD (1/2)

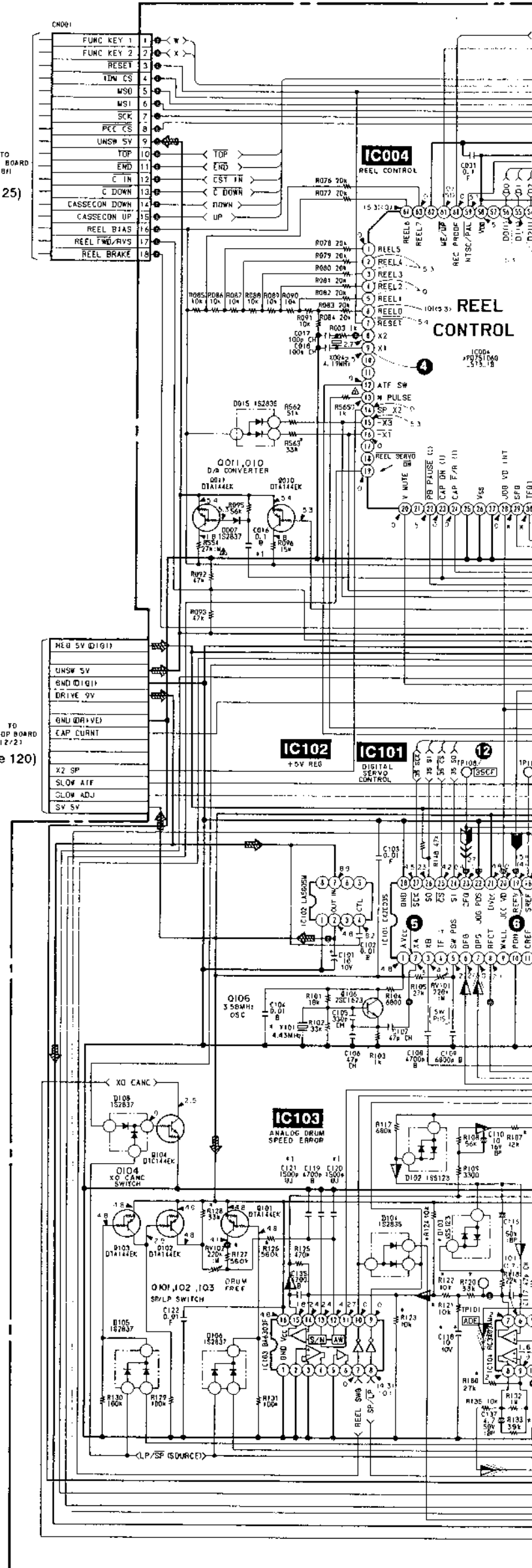


— Ref. No. SE-10P BOARD: 5000 series —

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

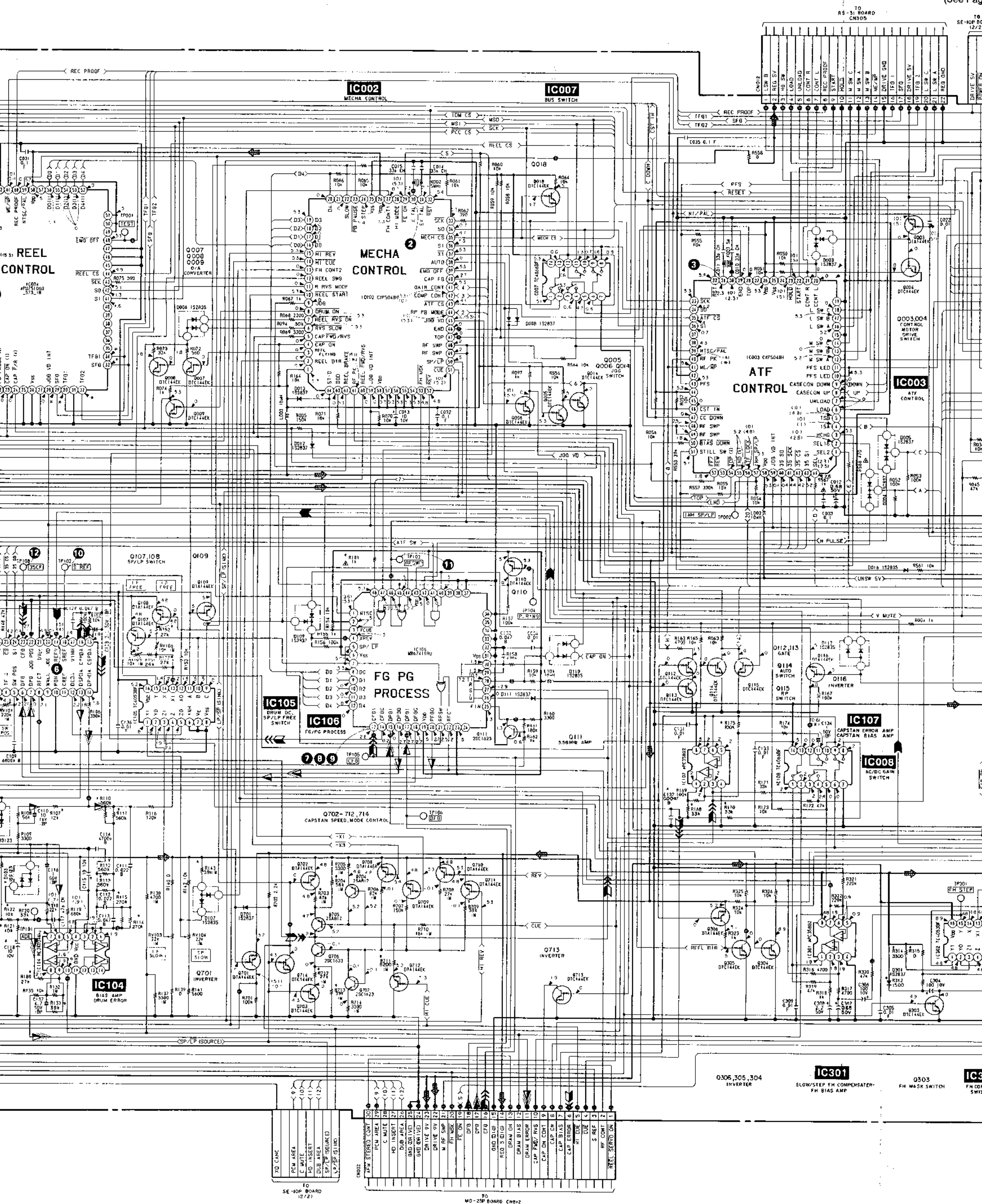
(See Page 125)

(See Page 120)



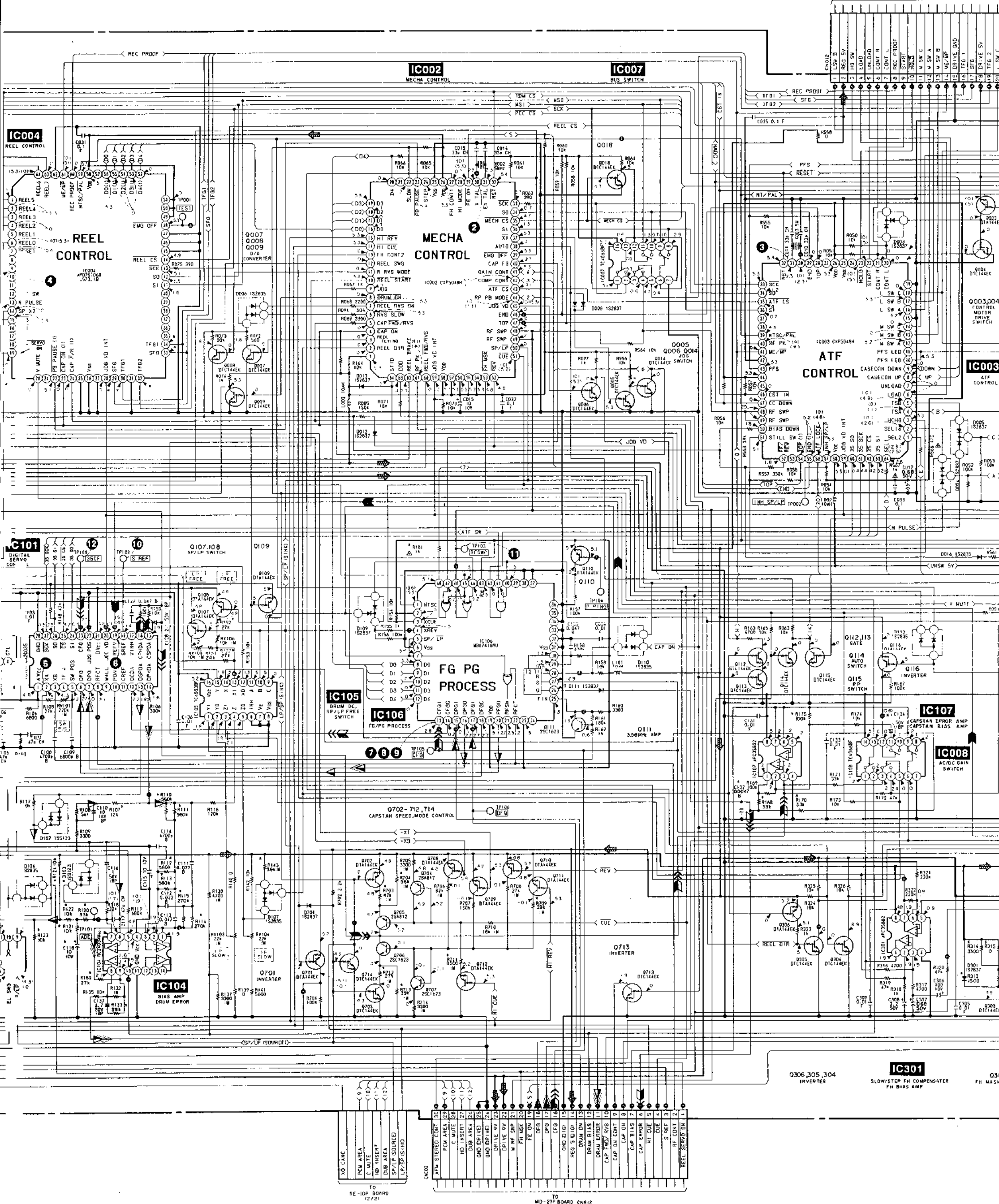
(See Page 132)

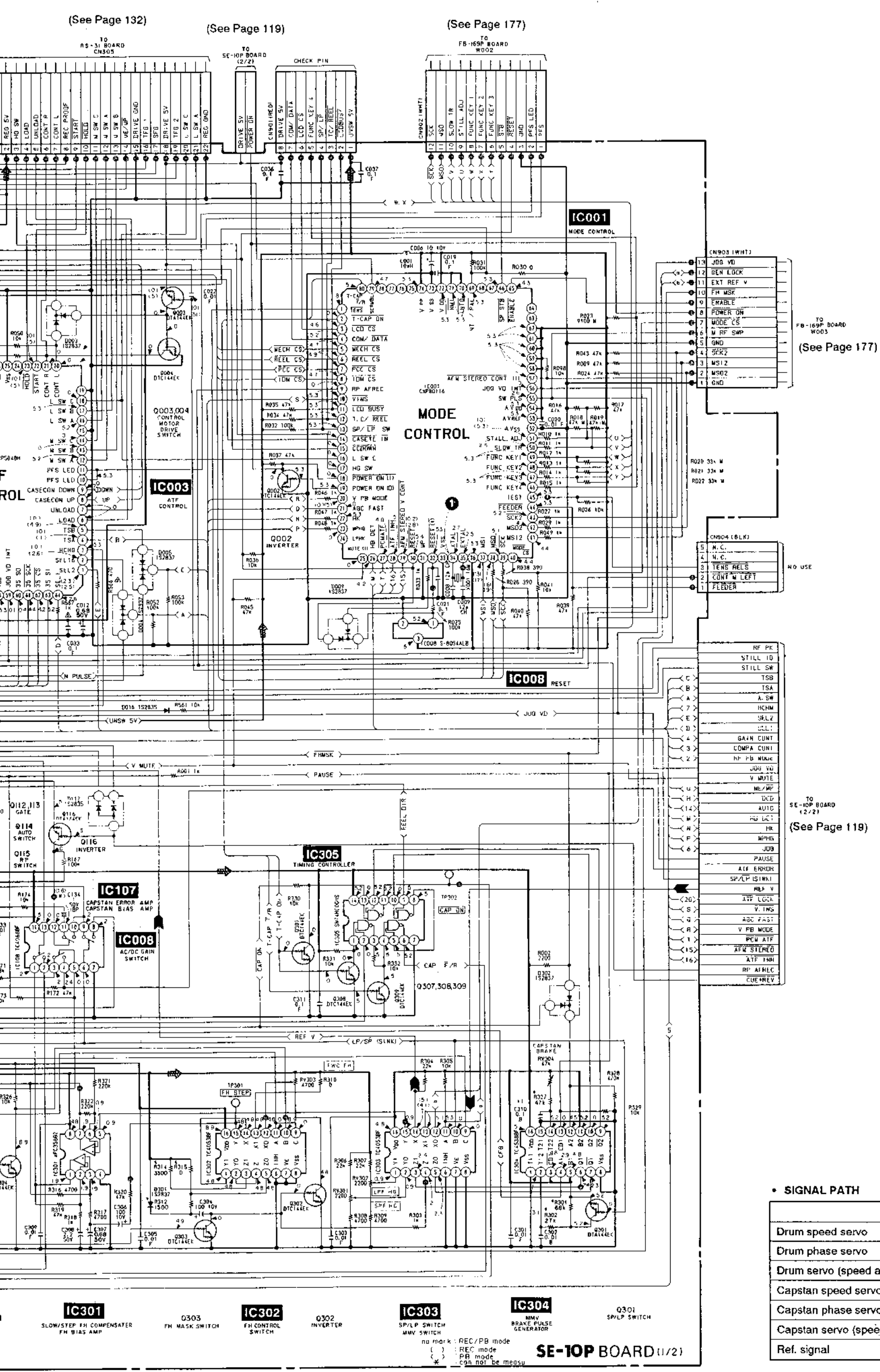
(See Page 127)



(See Page 120)

(See Page 126)





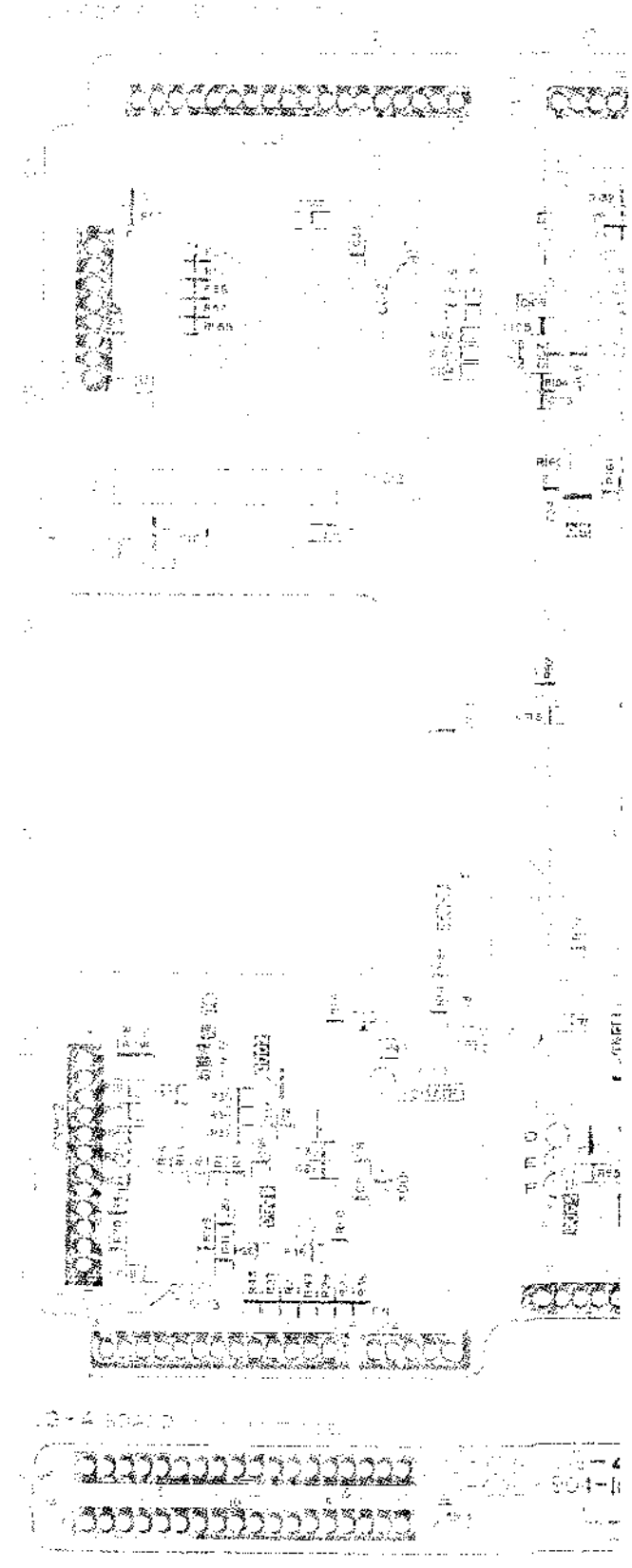
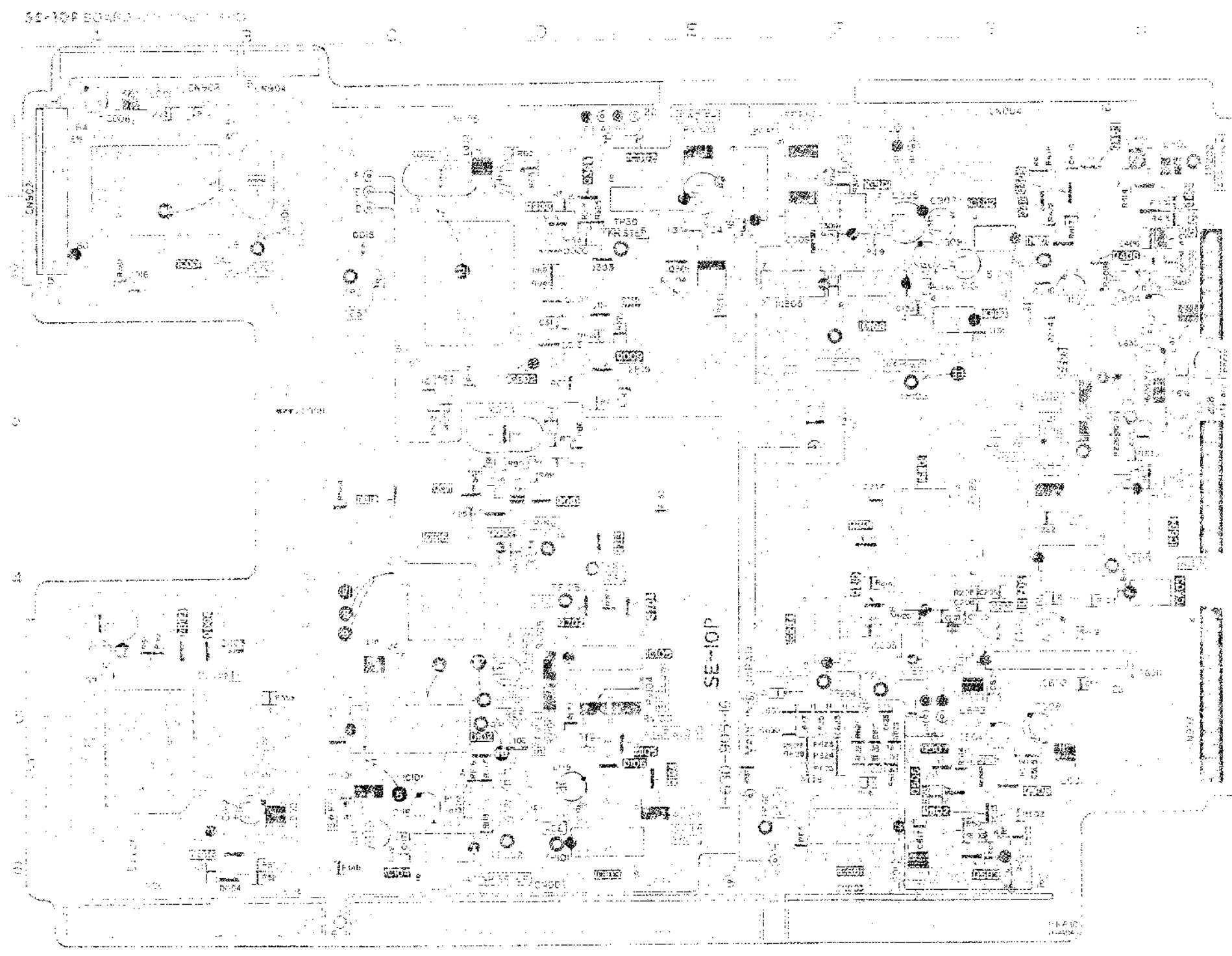
• SIGNAL PATH

	REC	REC/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), IG-4 (LINK) PRINTED WIRING BOARDS

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

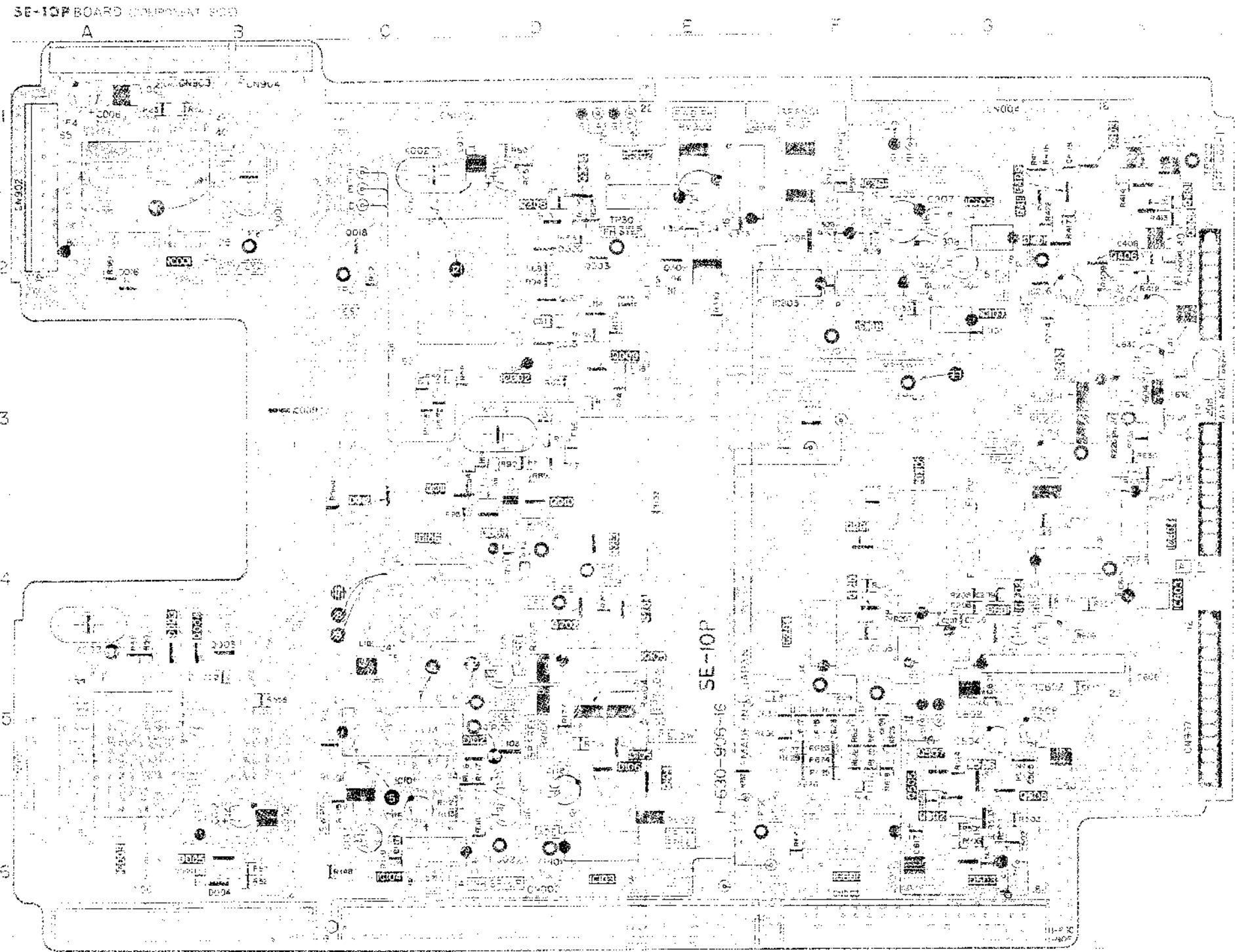
SE-10P BOARD (COMPONENT SIDE)	SE-10P BOARD (CONDUCTOR SIDE)
D003	5.5
D004	8.9
D005	8.9
D006	8.9
D007	8.9
D008	8.9
D009	8.9
D010	8.9
D011	8.9
D012	8.9
D013	8.9
D014	8.9
D015	8.9
D016	8.9
D017	8.9
D018	8.9
D019	8.9
D020	8.9
D021	8.9
D022	8.9
D023	8.9
D024	8.9
D025	8.9
D026	8.9
D027	8.9
D028	8.9
D029	8.9
D030	8.9
D031	8.9
D032	8.9
D033	8.9
D034	8.9
D035	8.9
D036	8.9
D037	8.9
D038	8.9
D039	8.9
D040	8.9
D041	8.9
D042	8.9
D043	8.9
D044	8.9
D045	8.9
D046	8.9
D047	8.9
D048	8.9
D049	8.9
D050	8.9
D051	8.9
D052	8.9
D053	8.9
D054	8.9
D055	8.9
D056	8.9
D057	8.9
D058	8.9
D059	8.9
D060	8.9
D061	8.9
D062	8.9
D063	8.9
D064	8.9
D065	8.9
D066	8.9
D067	8.9
D068	8.9
D069	8.9
D070	8.9
D071	8.9
D072	8.9
D073	8.9
D074	8.9
D075	8.9
D076	8.9
D077	8.9
D078	8.9
D079	8.9
D080	8.9
D081	8.9
D082	8.9
D083	8.9
D084	8.9
D085	8.9
D086	8.9
D087	8.9
D088	8.9
D089	8.9
D090	8.9
D091	8.9
D092	8.9
D093	8.9
D094	8.9
D095	8.9
D096	8.9
D097	8.9
D098	8.9
D099	8.9
D100	8.9



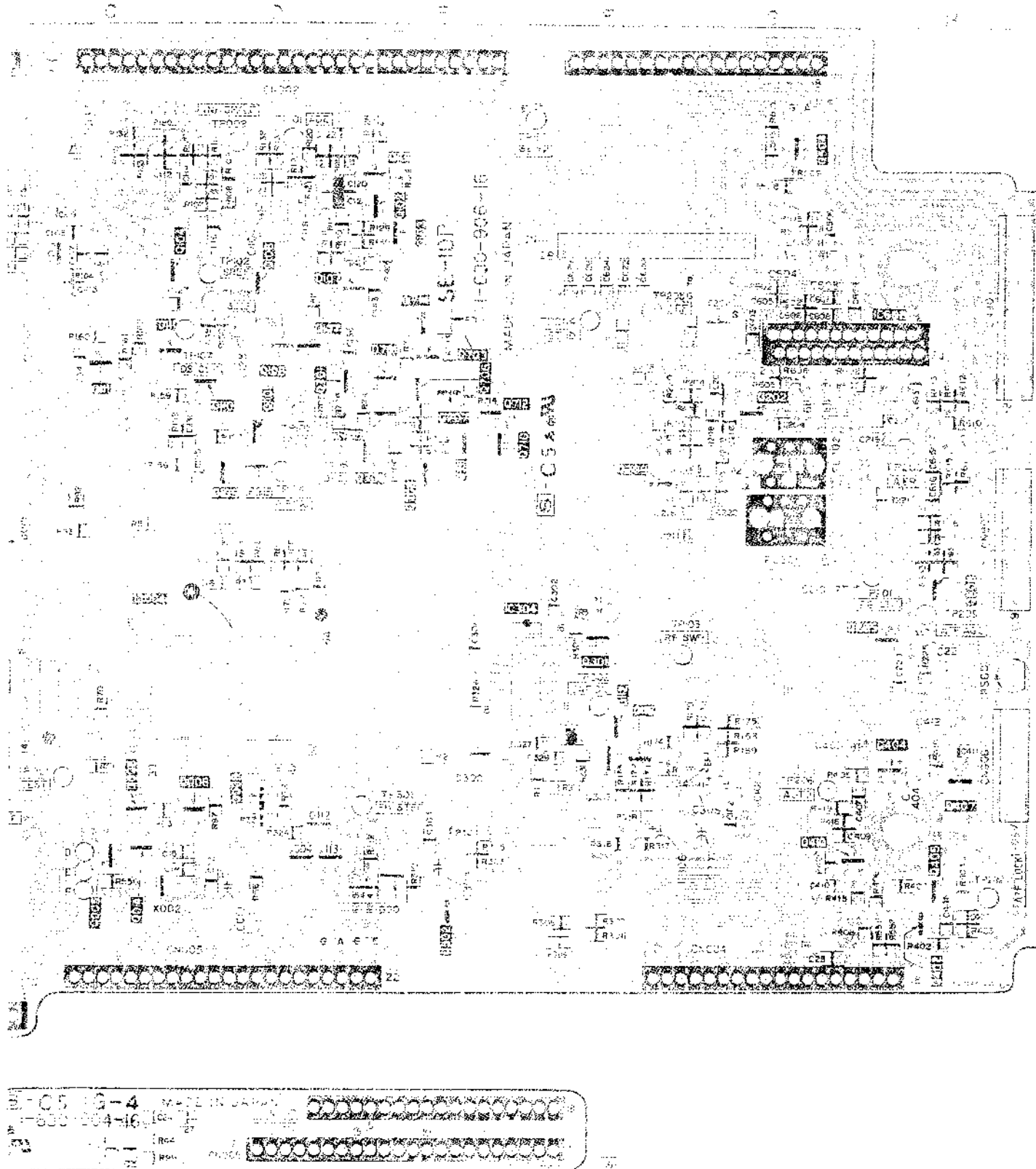
SE-10P (SERVO, SYSTEM CONTROL), IG-4 (LINK) PRINTED WIRING BOARDS

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

SE-10P BOARD (COMPONENT SIDE)	SE-10P BOARD (CONDUCTOR SIDE)	SE-10P BOARD (COMPONENT SIDE)	SE-10P BOARD (CONDUCTOR SIDE)
D003	B-5	D009	C-2
D004	B-6	D009	B-1
D005	B-8	D015	B-4
D006	D-2	D107	C-5
D007	D-4	D108	D-5
D012	C-4	D109	C-4
D013	D-3	D110	C-4
D016	A-2	D111	C-5
D101	A-2	D112	F-3
D102	D-5	D203	H-3
C103	D-5	J301	E-1
C104	F-5	J302	E-2
C105	F-6	D701	E-5
C106	F-4	IC304	C-3
D201	G-2	IC007	C-3
D401	G-2	IC008	A-2
		IC304	F-3
IC001	B-5	IC002	B-2
IC002	D-2	IC005	D-1
IC003	D-2	IC006	D-2
IC102	D-2	IC008	C-1
IC104	D-2	IC101	E-5
IC105	D-2	IC102	E-5
IC108	D-2	IC104	C-5
IC107	D-2	IC106	B-5
IC108	D-2	IC107	D-5
IC201	C-4	IC108	D-4
IC202	C-4	IC109	D-4
IC203	F-3	IC110	D-4
IC204	F-4	IC111	C-4
IC205	F-4	IC112	C-2
IC301	F-2	IC113	C-2
IC302	F-2	IC115	E-2
IC303	F-2	IC116	F-2
IC305	F-2	IC202	G-4
IC601	F-4	IC205	H-3
IC602	F-4	IC209	F-4
IC603	F-4	IC301	F-3
IC604	F-4	IC302	E-1
		IC304	D-2
O003	H-1	IC307	F-2
O004	H-1	IC402	H-1
O007	H-1	IC404	F-2
O009	H-1	IC405	F-1
O010	H-1	IC407	H-2
O011	H-1	IC410	G-2
O018	H-1	IC504	B-6
O114	H-1	IC505	H-3
O210	H-1	IC701	C-4
O303	H-1	IC703	B-5
O305	H-1	IC705	E-4
O306	H-1	IC706	E-4
O308	H-1	IC707	E-4
O401	H-1	IC708	E-4
O403	H-1	IC709	E-4
O405	H-1	IC710	E-4
O408	H-1	IC711	E-4
O409	H-1	IC712	E-4
O411	H-1	IC714	E-4
O502	H-1	IC715	E-4
O503	H-1		
O505	H-1		
O506	H-1		
O507	H-1		
O508	H-1		
O509	H-1		
O604	H-1		
O606	H-1		
O702	H-1		
O704	H-1		
O713	H-1		



SE-10 (P) BOARD, COMPLETE



< 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
D102	8-719-800-76	DIODE	1S3226
D103	8-719-800-76	DIODE	1S3226
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, TM-B2
D204	8-719-400-18	DIODE	MA152WK
D205	8-719-400-18	DIODE	MA152WK
D206	8-719-400-18	DIODE	MA152WK
D207	8-719-400-18	DIODE	MA152WK

< IC >

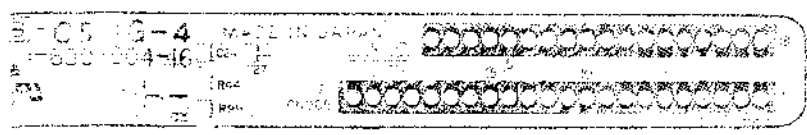
IC001	8-752-816-72	IC	CXP80116-6370
IC002	8-752-816-14	IC	CXP8049H-2550
IC003	8-752-815-13	IC	CXP8049H-2220
IC004	8-759-144-21	IC	LPC781060-573-1B
IC007	8-759-005-57	IC	MC140288F
IC008	8-759-937-56	IC	S-3084ALB-EM-T1
IC101	8-752-003-50	IC	CX20035
IC102	8-752-817-64	IC	CXP8049H-2440
IC103	8-753-925-55	IC	BA5003F
IC104	8-755-981-75	IC	RC3403AM
IC105	8-759-208-11	IC	MC140338F
IC106	8-759-571-25	IC	WS741590
IC107	8-759-100-34	IC	UPC85302
IC108	8-759-008-67	IC	MC140368F
IC201	8-759-325-56	IC	CXA1042M
IC202	8-759-150-05	IC	UPC82402-E1
IC203	8-759-208-11	IC	MC140338F
IC204	8-759-927-46	IC	SN74HC00ANS
IC205	8-759-710-35	IC	NUM2232BM
IC206	8-759-005-90	IC	SC7902F
IC301	8-759-100-94	IC	UPC85302
IC302	8-759-208-11	IC	MC140338F
IC303	8-759-208-11	IC	MC140338F
IC304	8-759-200-90	IC	TC45386F
IC305	8-759-927-46	IC	SN74HC00ANS

IC601	8-759-927-94	IC	8U3707F
IC602	8-759-927-52	IC	BA7035.5
IC603	8-759-100-93	IC	UPC85302
IC604	8-759-150-05	IC	UPC82402

< TRANSISTOR >

Q002	8-729-901-01	TRANSISTOR	DTA144EK
Q003	8-729-901-01	TRANSISTOR	DTA144EK
Q004	8-729-901-01	TRANSISTOR	DTA144EK
Q005	8-729-901-01	TRANSISTOR	DTA144EK
Q006	8-729-901-01	TRANSISTOR	DTA144EK
Q007	8-729-901-01	TRANSISTOR	DTA144EK
Q008	8-729-901-01	TRANSISTOR	DTA144EK
Q009	8-729-901-01	TRANSISTOR	DTA144EK
Q010	8-729-901-06	TRANSISTOR	DTA144EK
Q011	8-729-901-06	TRANSISTOR	DTA144EK
Q014	8-729-901-01	TRANSISTOR	DTA144EK
Q015	8-729-901-01	TRANSISTOR	DTA144EK
Q016	8-729-901-01	TRANSISTOR	DTA144EK
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	DTA144EK
Q113	8-729-901-01	TRANSISTOR	DTA144EK
Q114	8-729-901-01	TRANSISTOR	DTA144EK
Q115	8-729-901-01	TRANSISTOR	DTA144EK
Q116	8-729-901-06	TRANSISTOR	DTA144EK
Q202	8-729-215-22	TRANSISTOR	2SA1152
Q205	8-729-901-01	TRANSISTOR	DTA144EK
Q209	8-729-901-06	TRANSISTOR	DTA144EK
Q210	8-729-901-01	TRANSISTOR	DTA144EK
Q301	8-729-901-06	TRANSISTOR	DTA144EK
Q302	8-729-901-01	TRANSISTOR	DTA144EK
Q303	8-729-901-01	TRANSISTOR	DTA144EK
Q304	8-729-901-01	TRANSISTOR	DTA144EK
Q305	8-729-901-01	TRANSISTOR	DTA144EK
Q306	8-729-901-06	TRANSISTOR	DTA144EK
Q307	8-729-901-01	TRANSISTOR	DTA144EK
Q308	8-729-901-01	TRANSISTOR	DTA144EK
Q309	8-729-901-01	TRANSISTOR	DTA144EK
Q401	8-729-215-22	TRANSISTOR	2SA1152
Q402	8-729-100-66	TRANSISTOR	2SC1623
Q403	8-729-100-66	TRANSISTOR	2SC1623
Q404	8-729-215-22	TRANSISTOR	2SA1152
Q405	8-729-100-66	TRANSISTOR	2SC1623
Q406	8-729-215-22	TRANSISTOR	2SA1152

Q407	8-729-100-66	TRANSISTOR	2SC1623
Q408	8-729-215-22	TRANSISTOR	2SA1152
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	DTA144EK
Q704	8-729-215-22	TRANSISTOR	2SA1152
Q705	8-729-215-22	TRANSISTOR	2SA1152
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	DTA144EK
Q714	8-729-901-01	TRANSISTOR	DTA144EK

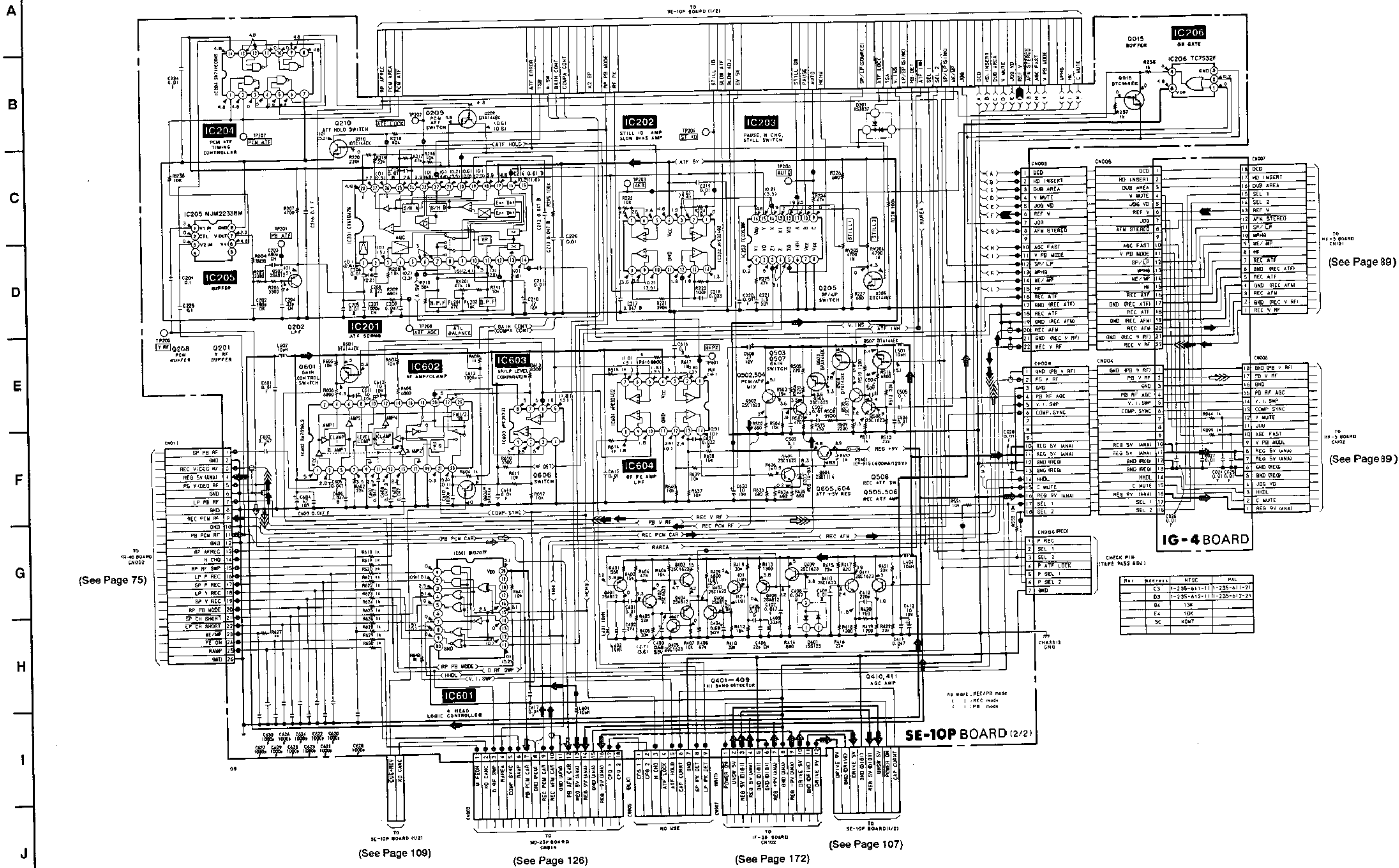


SE-10P (SERVO, SYSTEM CONTROL), IG-4 (LINK) SCHEMATIC DIAGRAMS

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

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

(See Page 108)
(See Page 110)



(See Page 75)

(See Page 89)

(See Page 89)

(See Page 109)

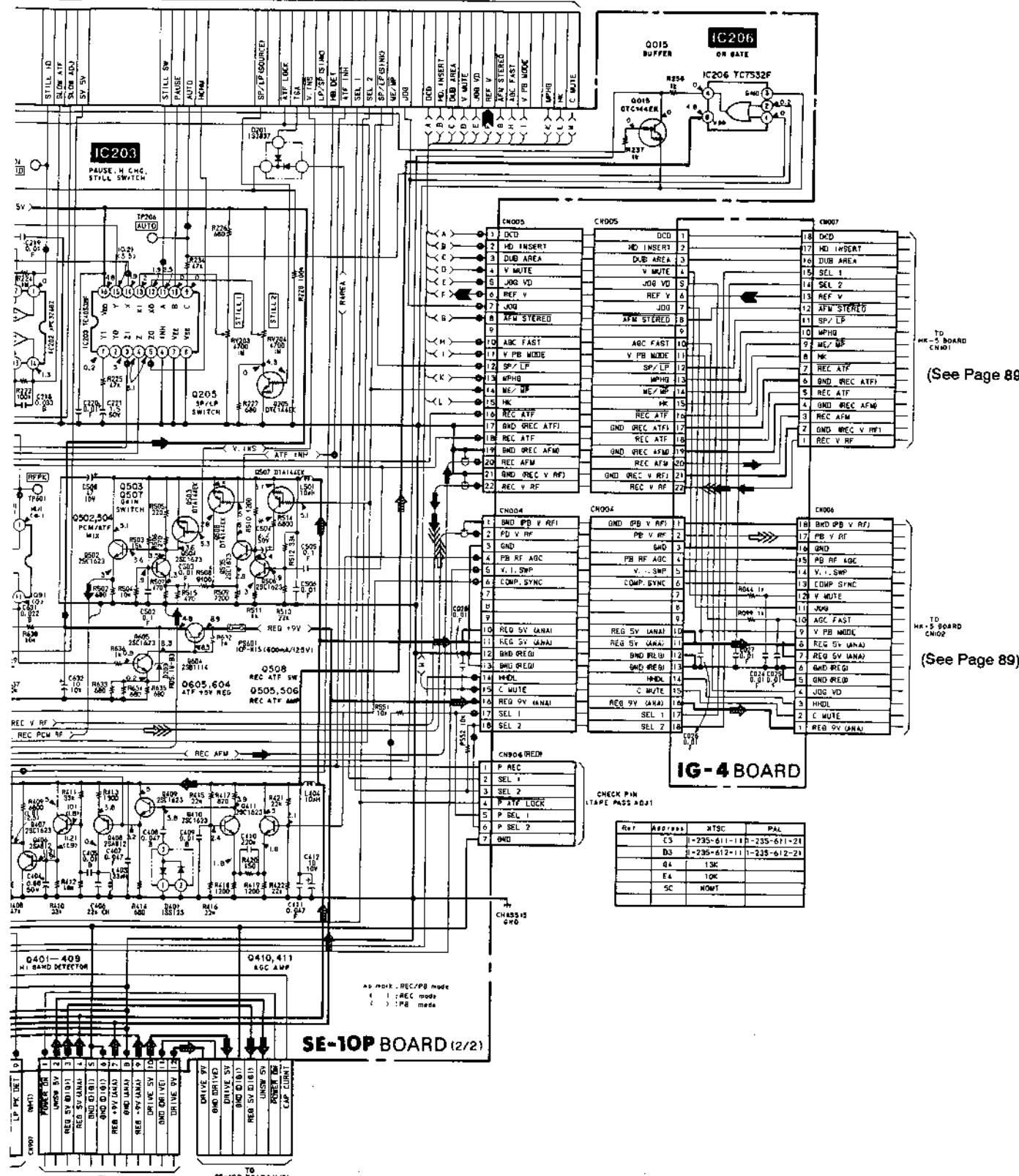
(See Page 126)

(See Page 172)

(See Page 107)

age 108)
age 110)

TO BOARD 11/21



• 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 89)

(See Page 89)

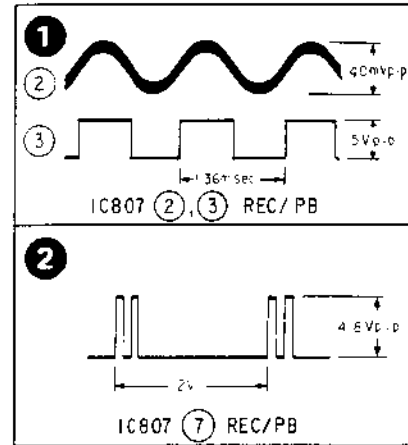
TO BOARD 11/21 (See Page 107)

TO BOARD 11/21 (See Page 172)

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

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

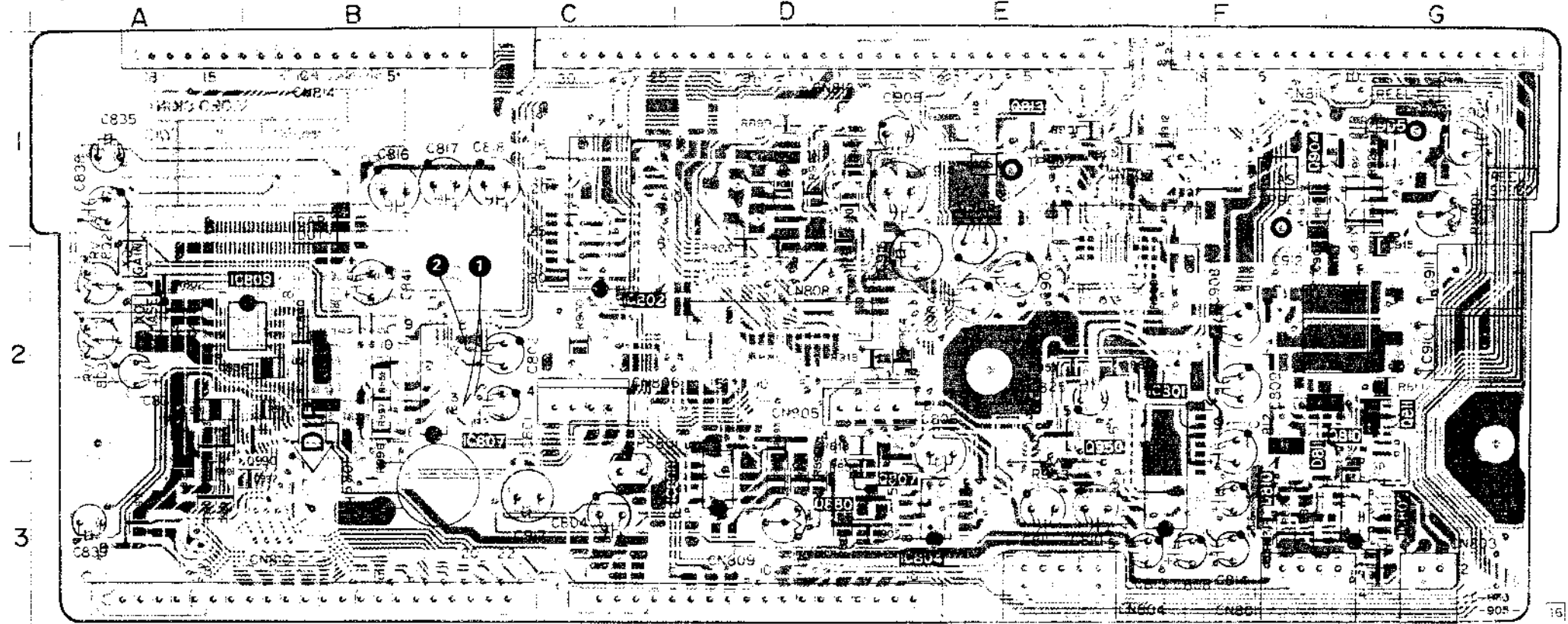
MD-23P BOARD



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 | E-1 |
| Q880 | D-3 |
| Q904 | F-1 |
| Q905 | G-1 |
| Q950 | E-2 |
| Q990 | B-2 |

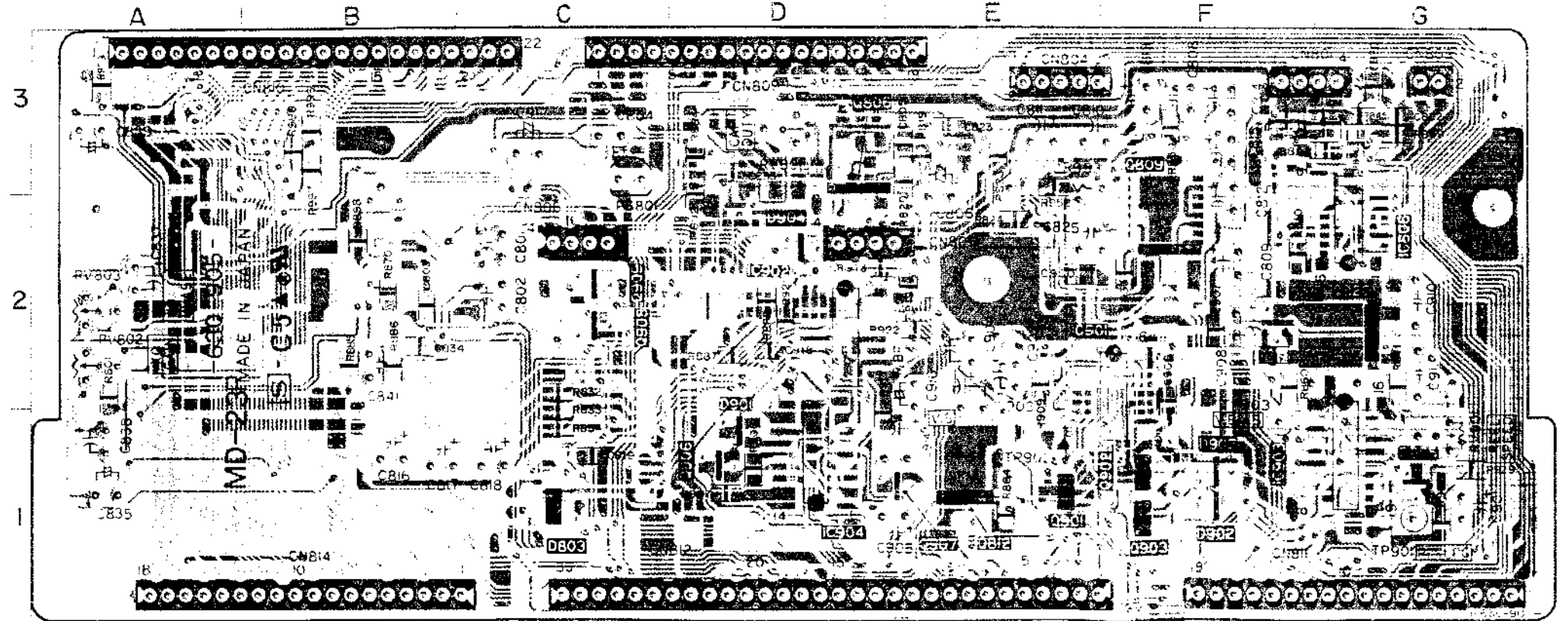
MD-23P BOARD (COMPONENT SIDE)



MD-23P BOARD (CONDUCTOR SIDE)

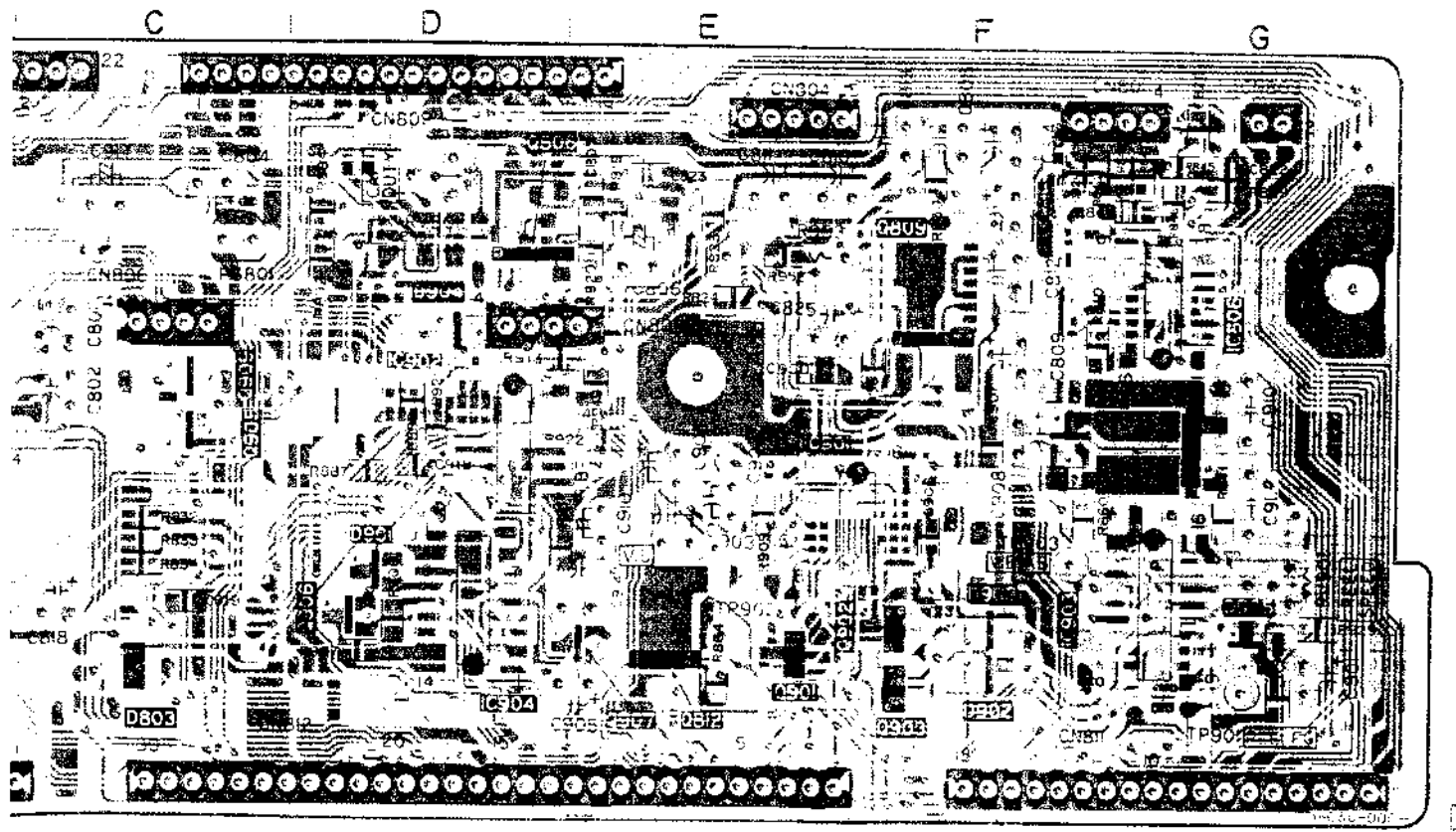
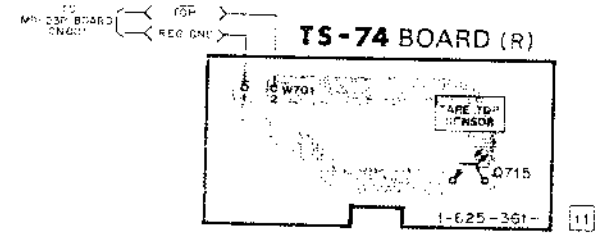
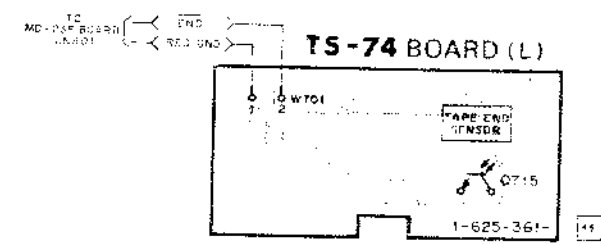
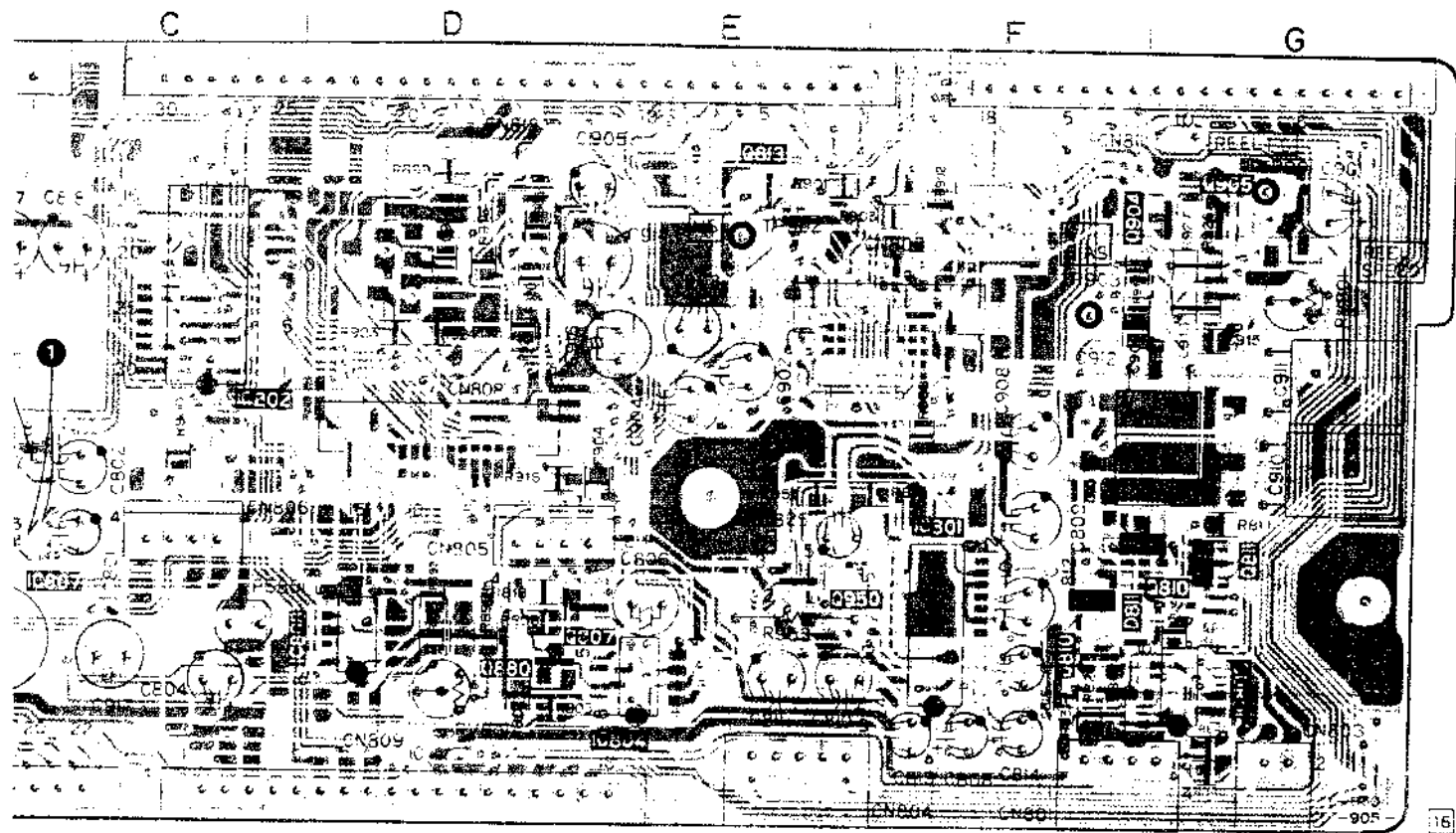
- | | |
|-------|-----|
| D803 | C-1 |
| D901 | D-1 |
| D902 | F-1 |
| D903 | F-1 |
| D904 | D-2 |
| D905 | G-1 |
| IC806 | G-2 |
| IC901 | F-2 |
| IC902 | D-2 |
| IC903 | F-1 |
| IC904 | D-1 |
| Q806 | D-3 |
| Q809 | F-3 |
| Q812 | E-1 |
| Q820 | G-2 |
| Q821 | F-2 |
| Q901 | E-1 |
| Q902 | F-1 |
|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

MD-23P BOARD (CONDUCTOR SIDE)



(TAPE TOP SENSOR) PRINTED WIRING BOARDS

10 series —



MD-23 (P) BOARD, COMPLETE

< DIODE >

D803	8-719-200-27	DIODE	E10DS2
D803	8-719-200-27	DIODE	MA152WK
D810	8-719-400-18	DIODE	E10DS2
D811	8-719-200-27	DIODE	MA152WK
D901	8-719-400-18	DIODE	MA152WK
D902	8-719-400-18	DIODE	MA152WK
D903	8-719-400-18	DIODE	1SS226
D904	8-719-800-76	DIODE	MA152WK
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	uPC333G2
IC806	8-759-207-00	IC	TA7733F
IC807	8-759-107-68	IC	CX20115A
IC808	8-759-700-62	IC	WJM4562D
IC809	8-759-100-94	IC	uPC358G2
IC901	8-759-207-50	IC	TA7745F
IC902	8-759-150-05	IC	uPC324G2
IC903	8-759-925-66	IC	BA6303F
IC904	8-759-008-67	IC	MC14066BF

< TRANSISTOR >

Q806	8-729-111-14	TRANSISTOR	2SA1385-Z-L
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-Z-L
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-QR
Q902	8-729-920-82	TRANSISTOR	2SB1188-QR
Q903	8-729-920-82	TRANSISTOR	2SB1188-QR
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 (MOTOR DRIVE), TS-74 (L) (TAPE END SENSOR), TS-74 (R) (TAPE TOP SENSOR) SCHEMATIC DIAGRAMS

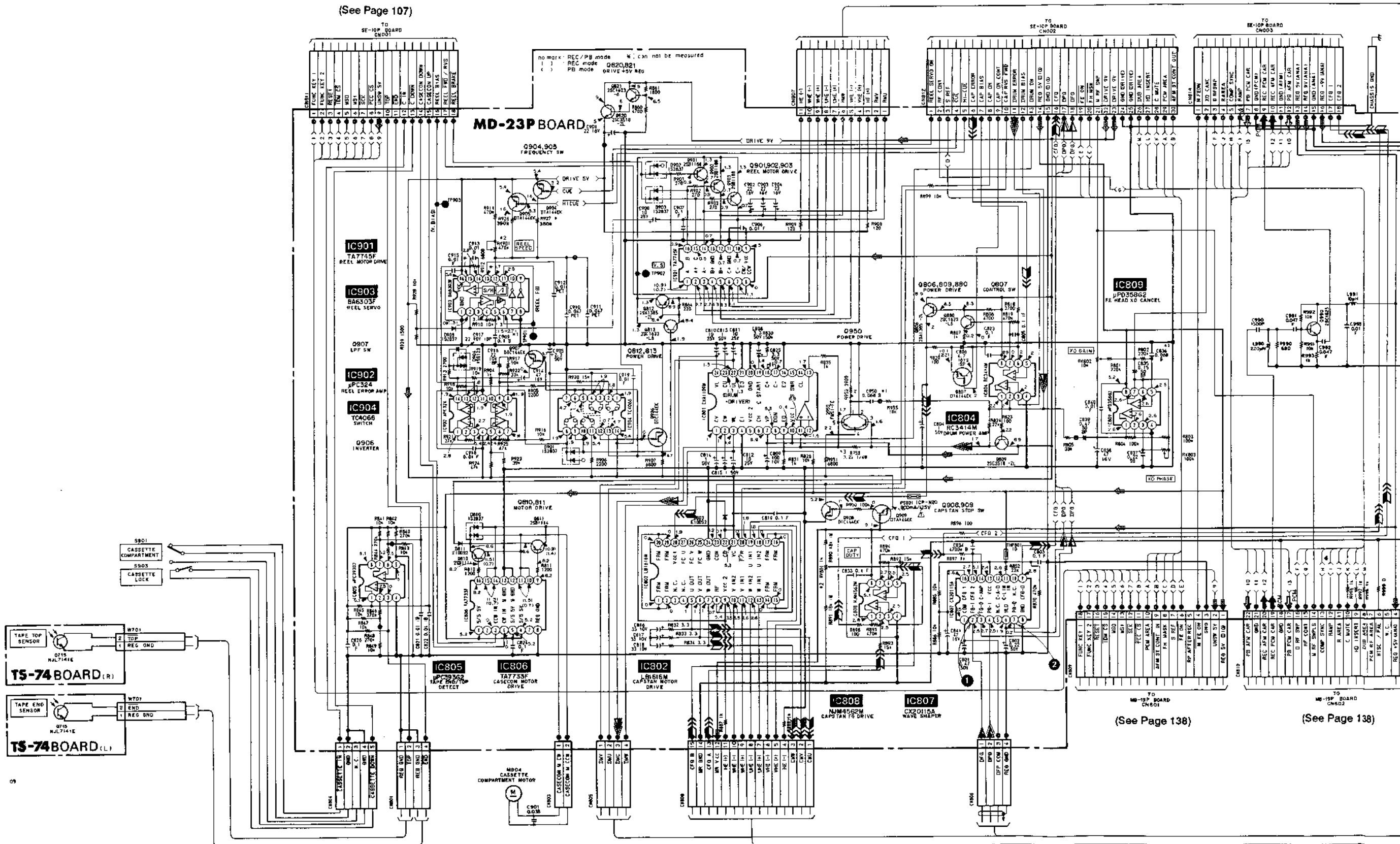
— Ref. No. MD-23P BOARD: 1000 series, TS-74(L) BOARD: 1000 series, TS-74(R) BOARD: 2000 series —

(See Page 108)

(See Page 119)

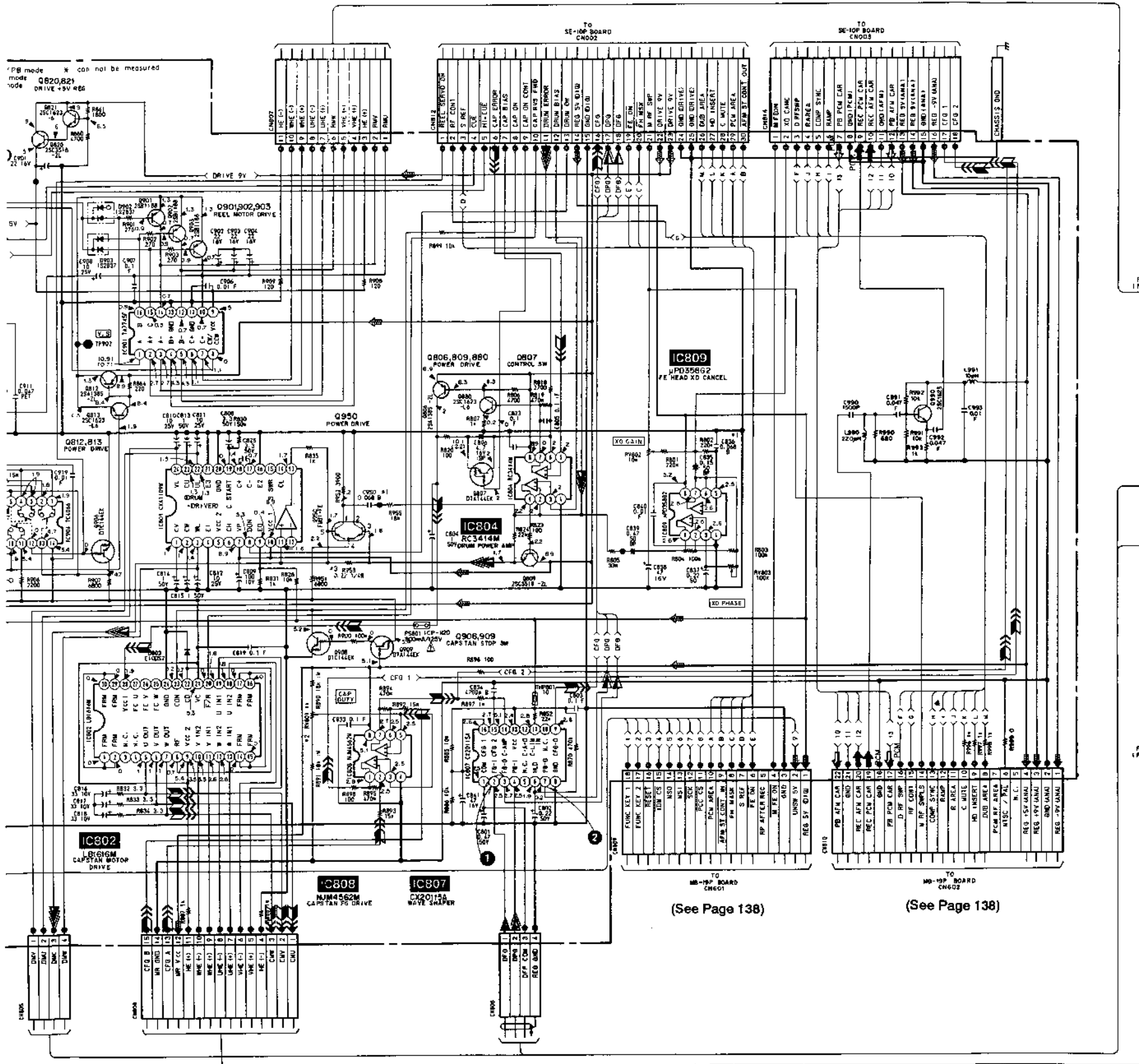
(See Page 107)

MD-23P BOARD



(See Page 108)

(See Page 118)



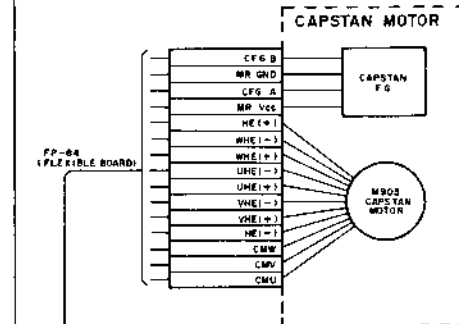
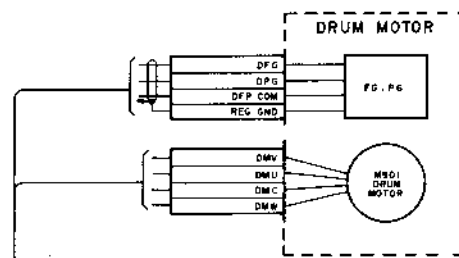
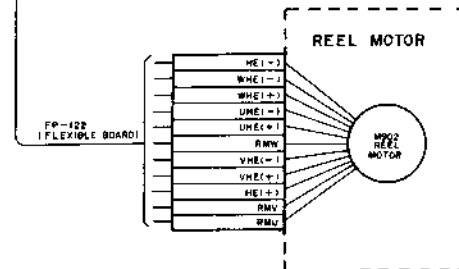
(See Page 138)

(See Page 138)

• 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 REEL SENSOR), LD-1 (TAPE SENSOR) PRINTED WIRING BOARDS

— Ref. No. RS-31 BOARD: 6000 series, LD-1 BOARD: 6000 series —

- MS-4 and LS-9 boards are replaced as blocks, so that there PRINTED WIRING BOARDS are omitted.

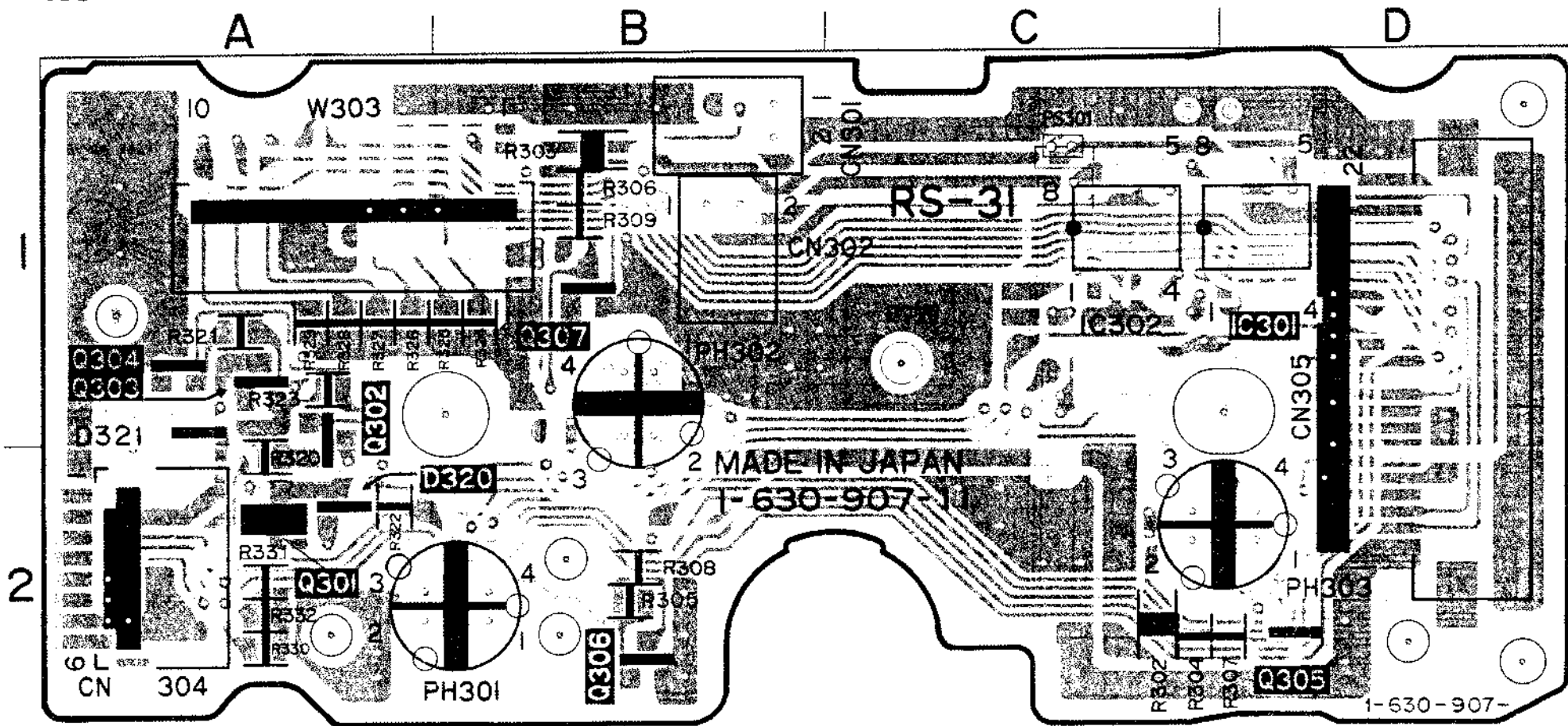
RS-31 BOARD (COMPONENT SIDE)

RS-31 BOARD
(COMPONENT
SIDE)

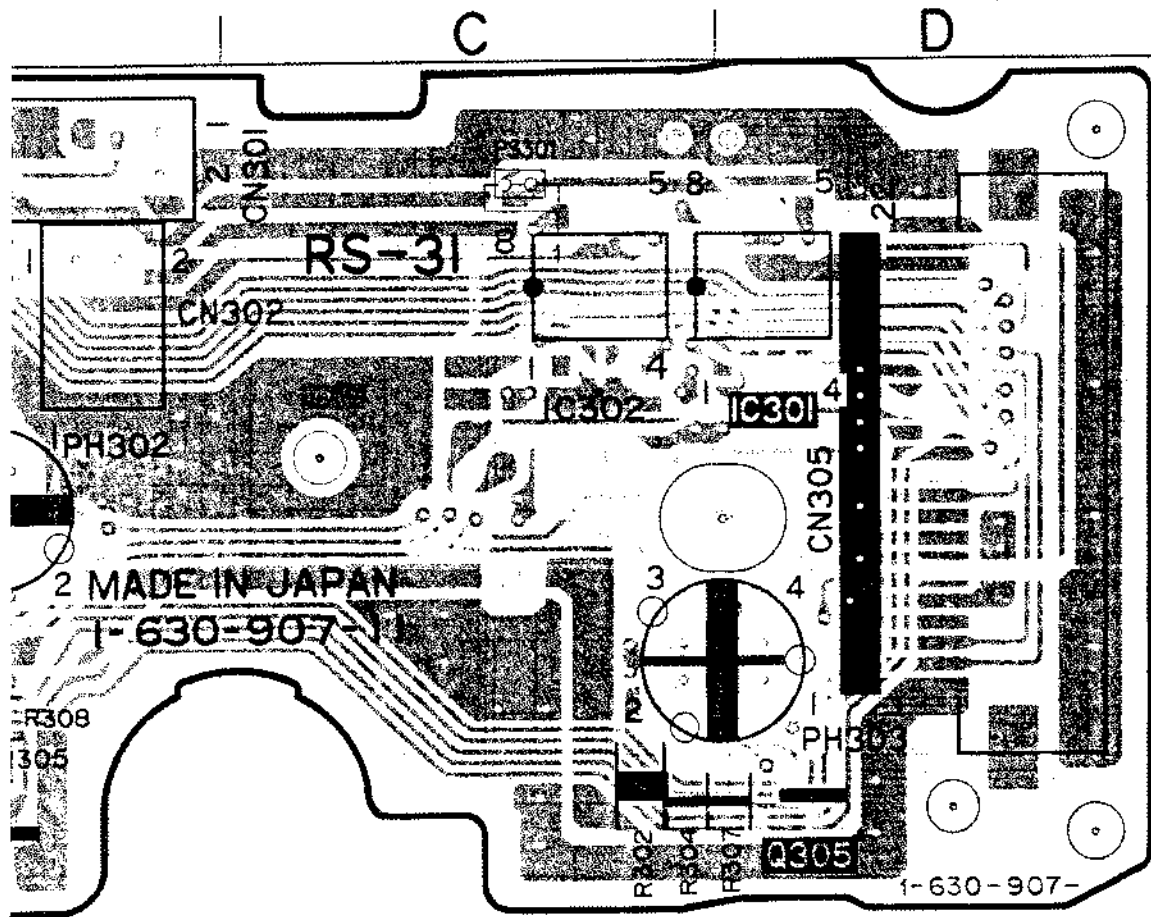
D320	B-2
D321	A-1
IC301	D-1
IC302	C-1
Q301	A-2
Q302	A-1
Q303	A-1
Q304	A-1
Q305	D-2
Q306	B-2
Q307	B-1

RS-31 BOARD, COMPLETE

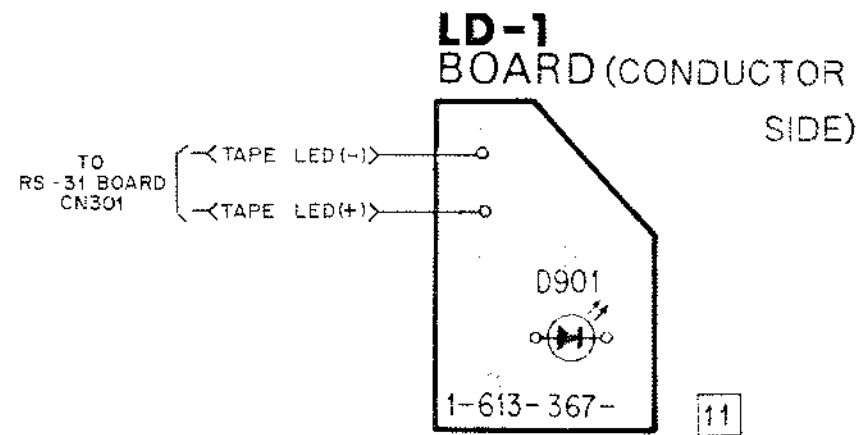
< DIODE >		
D320	8-719-800-76	DIODE 1SS226
D321	8-719-800-76	DIODE 1SS226
< IC >		
IC301	8-759-908-81	IC MB3753PF
IC302	8-759-908-81	IC MB3753PF
< TRANSISTOR >		
Q301	8-729-805-25	TRANSISTOR 2SB1121
Q302	8-729-216-22	TRANSISTOR 2SA1162
Q303	8-729-216-22	TRANSISTOR 2SA1162
Q304	8-729-216-22	TRANSISTOR 2SA1162
Q305	8-729-901-01	TRANSISTOR DTC144EK
Q306	8-729-901-01	TRANSISTOR DTC144EK
Q307	8-729-901-01	TRANSISTOR DTC144EK



TO
RS-31 BOARD
CN301



11



11

LD-1 BOARD, COMPLETE

< DIODE >

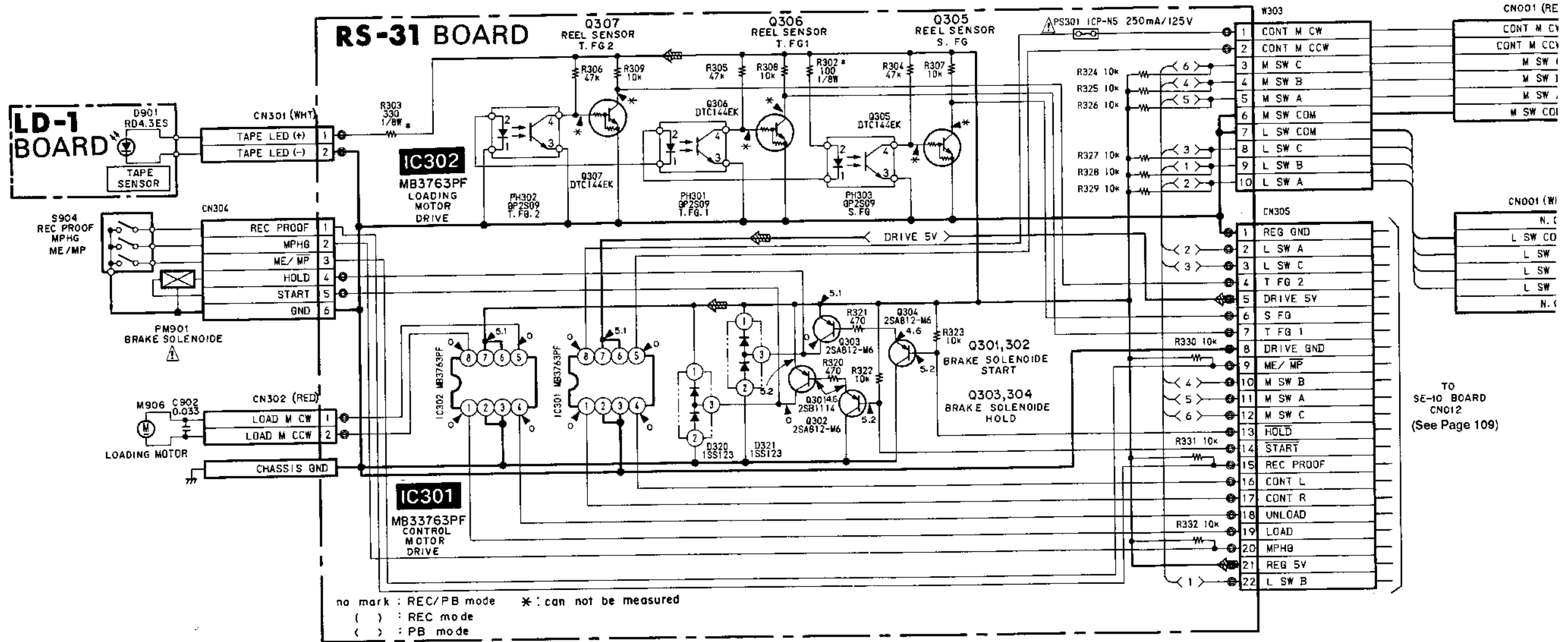
D901 8-719-928-54 DIODE GL-450S

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

— Ref. No. RS-31 BOARD: 6000 series, LD-1 BOARD: 6000 series —

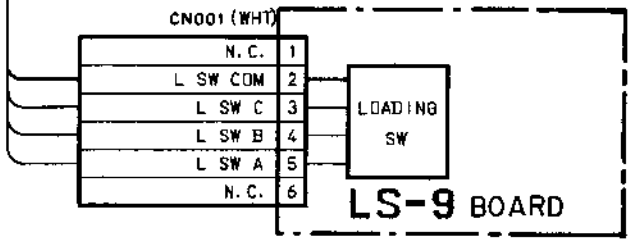
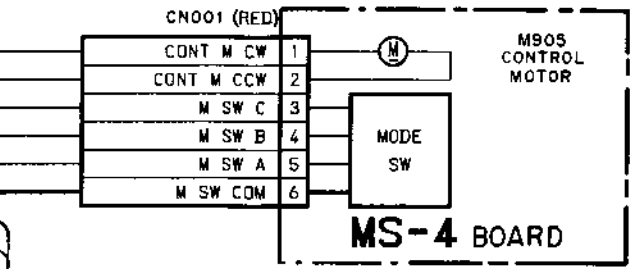
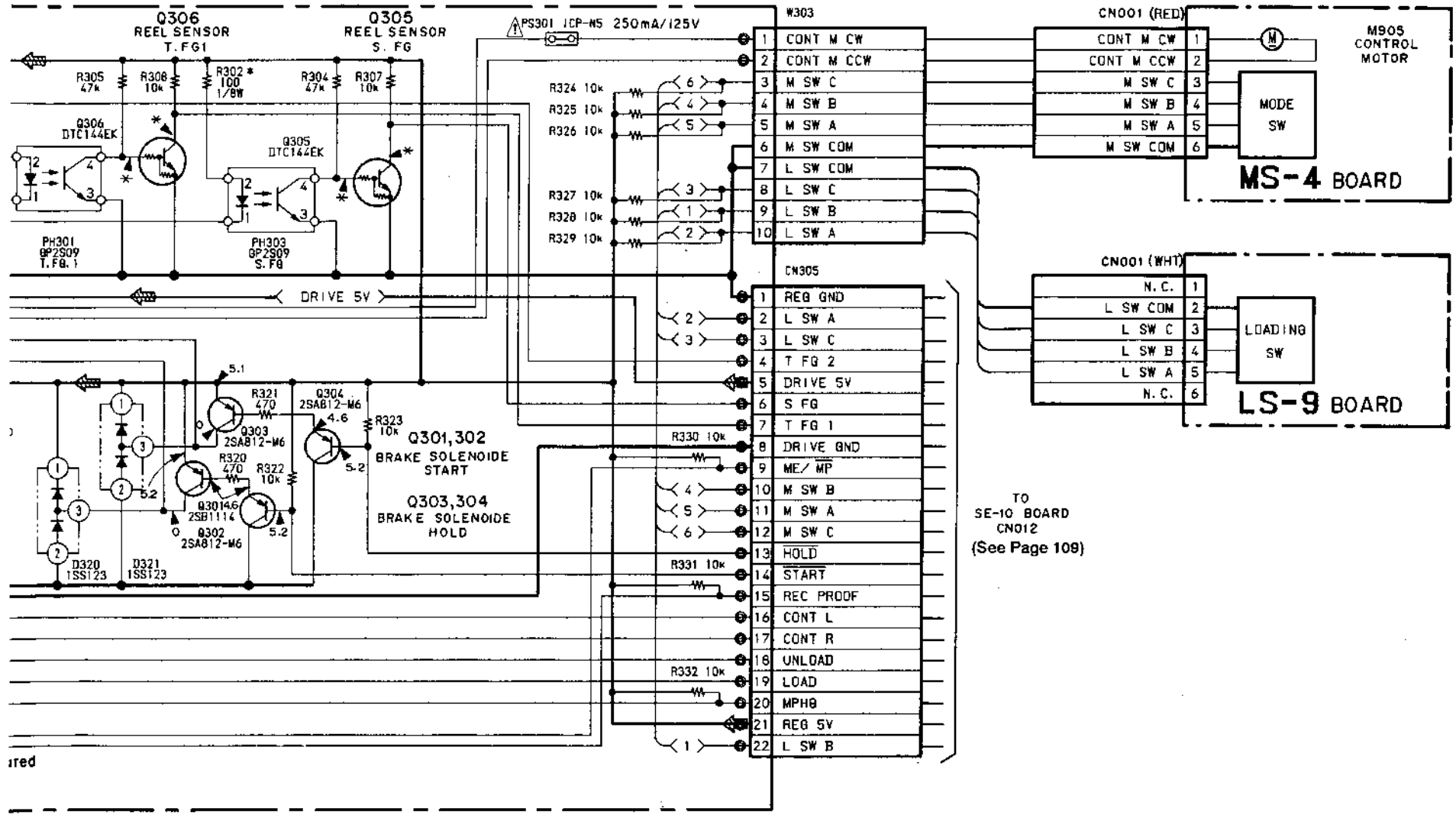
A
B
C
D
E
F
G
H
I
J

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

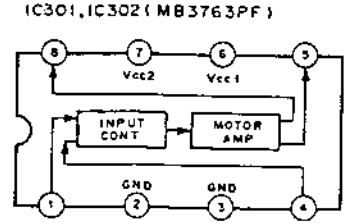


VITCH), LS-9 (LOADING SWITCH) SCHEMATIC DIAGRAMS

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
---	---	----	----	----	----	----	----	----	----	----	----	----	----	----



TO SE-10 BOARD CN012 (See Page 109)



MB-19P (VTR FUNCTION SWITCH/AUDIO PROCESS) PRINTED WIRING BOARD

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

MB-19P BOARD
(COMPONENT
SIDE)

IC602 C-3
IC671 F-4

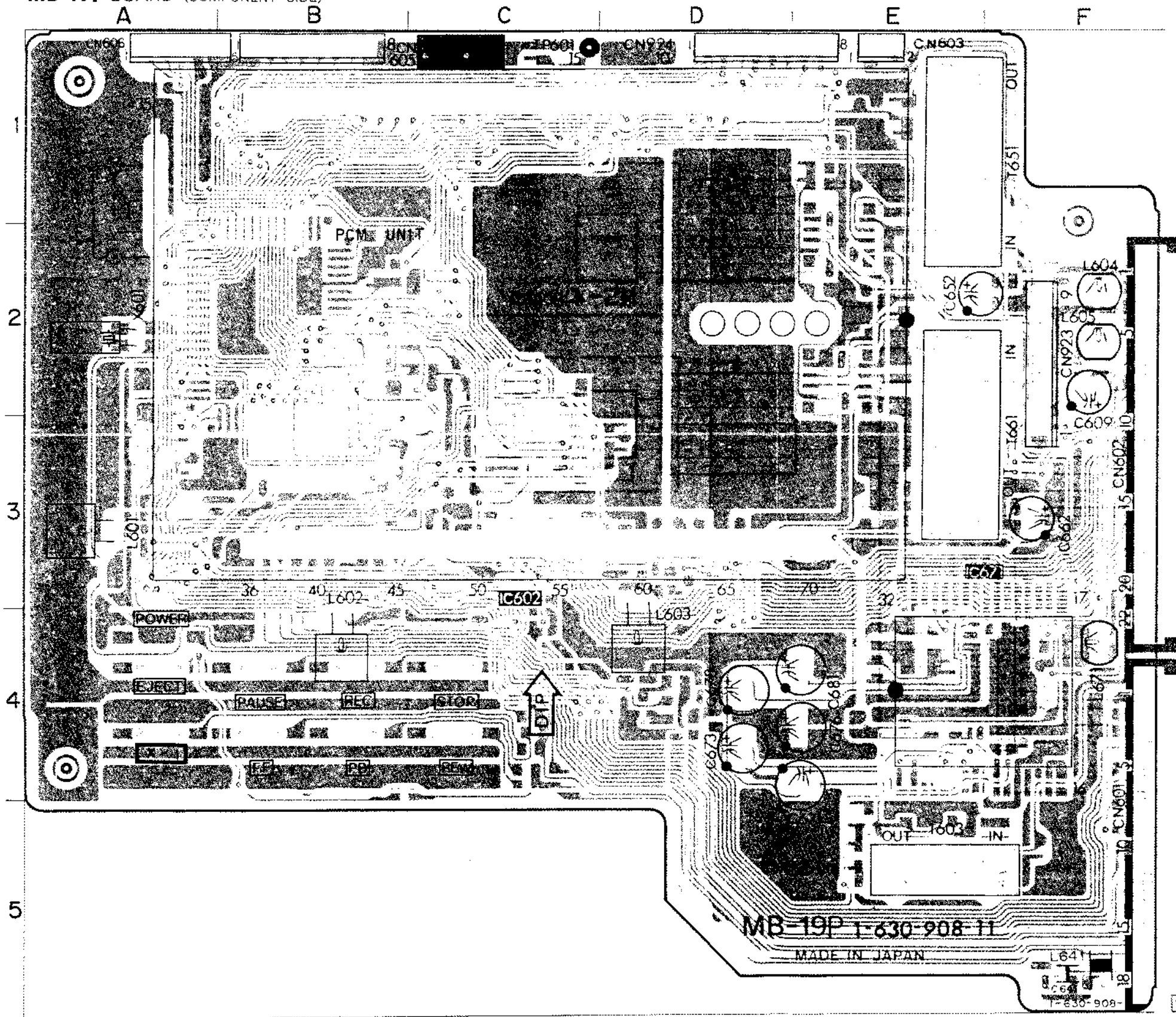
MB-19P BOARD
(CONDUCTOR
SIDE)

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

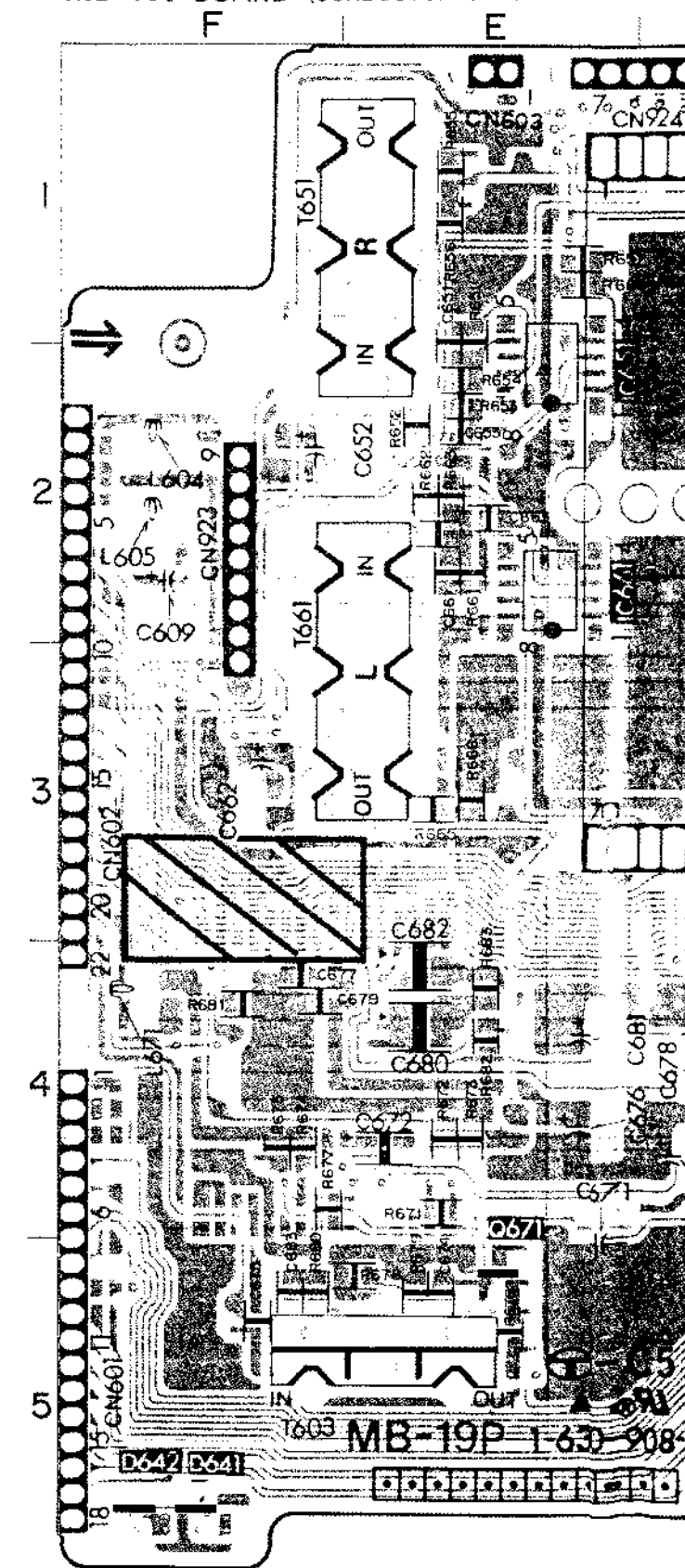
IC601 B-2
IC603 C-2
IC651 E-2
IC661 E-2

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

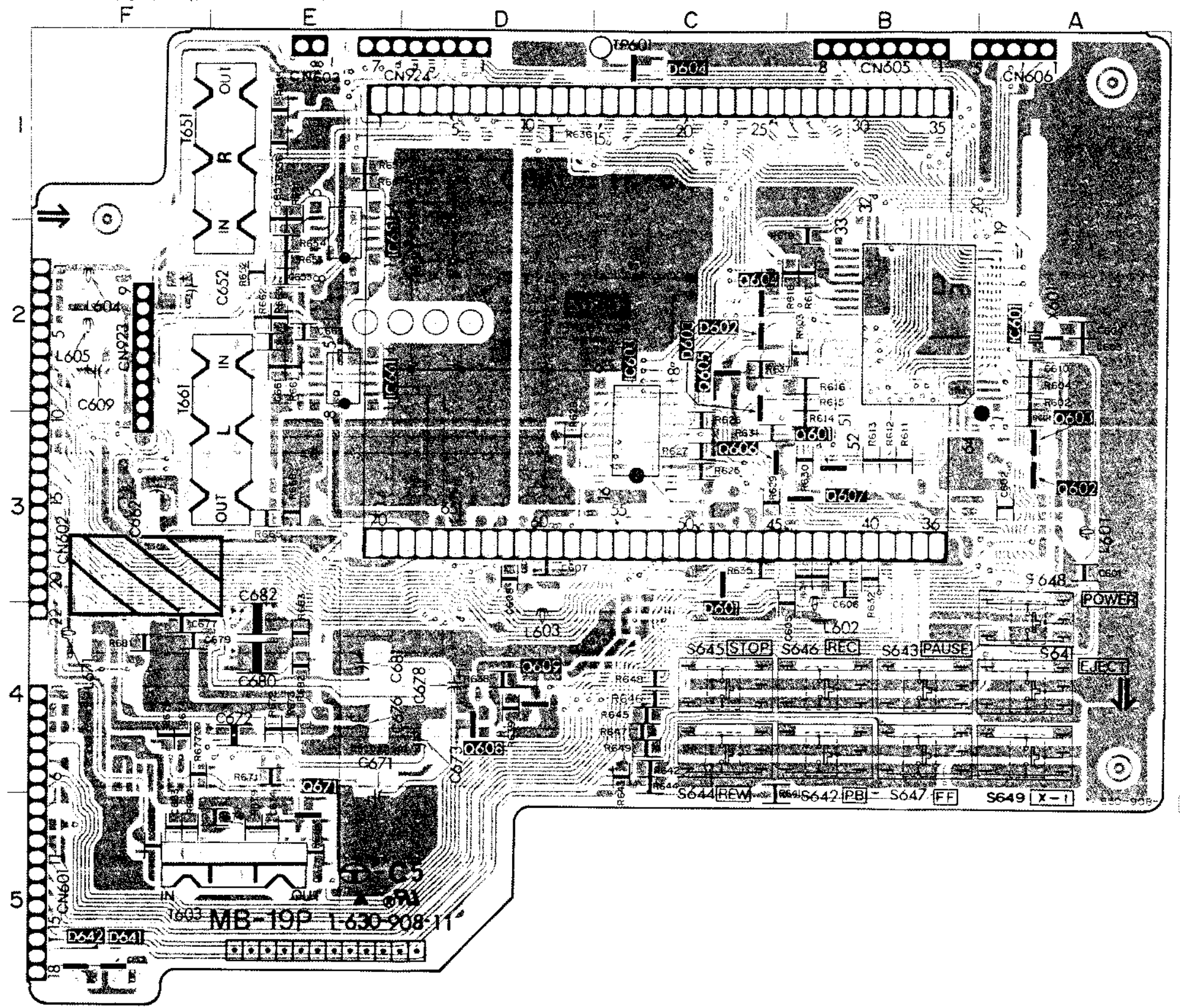
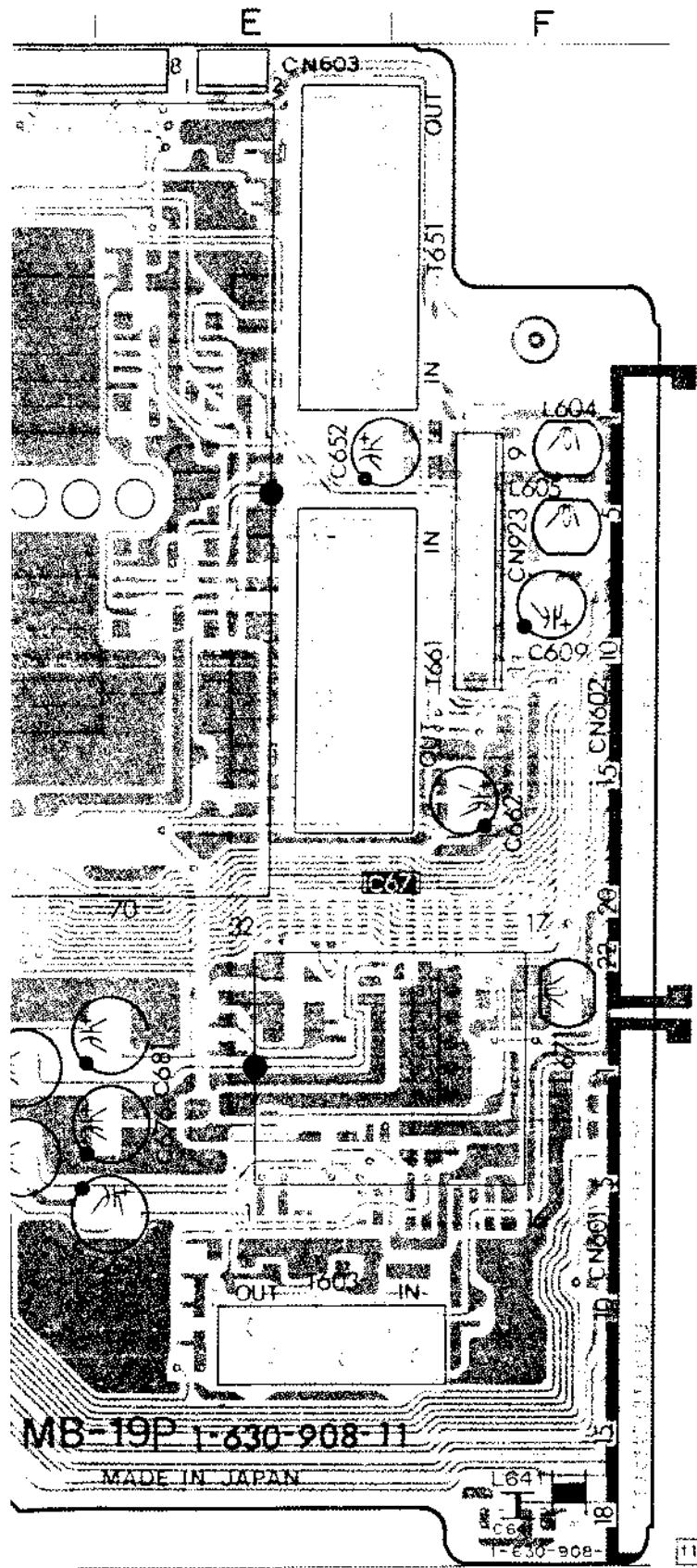
MB-19P BOARD (COMPONENT SIDE)



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

MB-19 (P) BOARD, COMPLETE

< DIODE >

- D601 8-719-104-34 DIODE 1S2836
- D602 8-719-104-34 DIODE 1S2836
- D603 8-719-104-34 DIODE 1S2836
- D604 8-719-400-18 DIODE MA152WK
- D641 8-719-800-76 DIODE 1SS226

- D642 8-719-800-76 DIODE 1SS226

< IC >

- IC601 8-759-149-34 IC WPD75105G-591-1B
- IC603 8-759-208-11 IC TC4053BFHB
- IC651 8-759-603-27 IC M5201FP
- IC661 8-759-603-27 IC M5201FP
- IC671 8-741-150-50 IC SBX1505-01

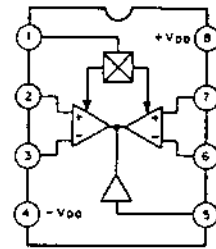
< TRANSISTOR >

- 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

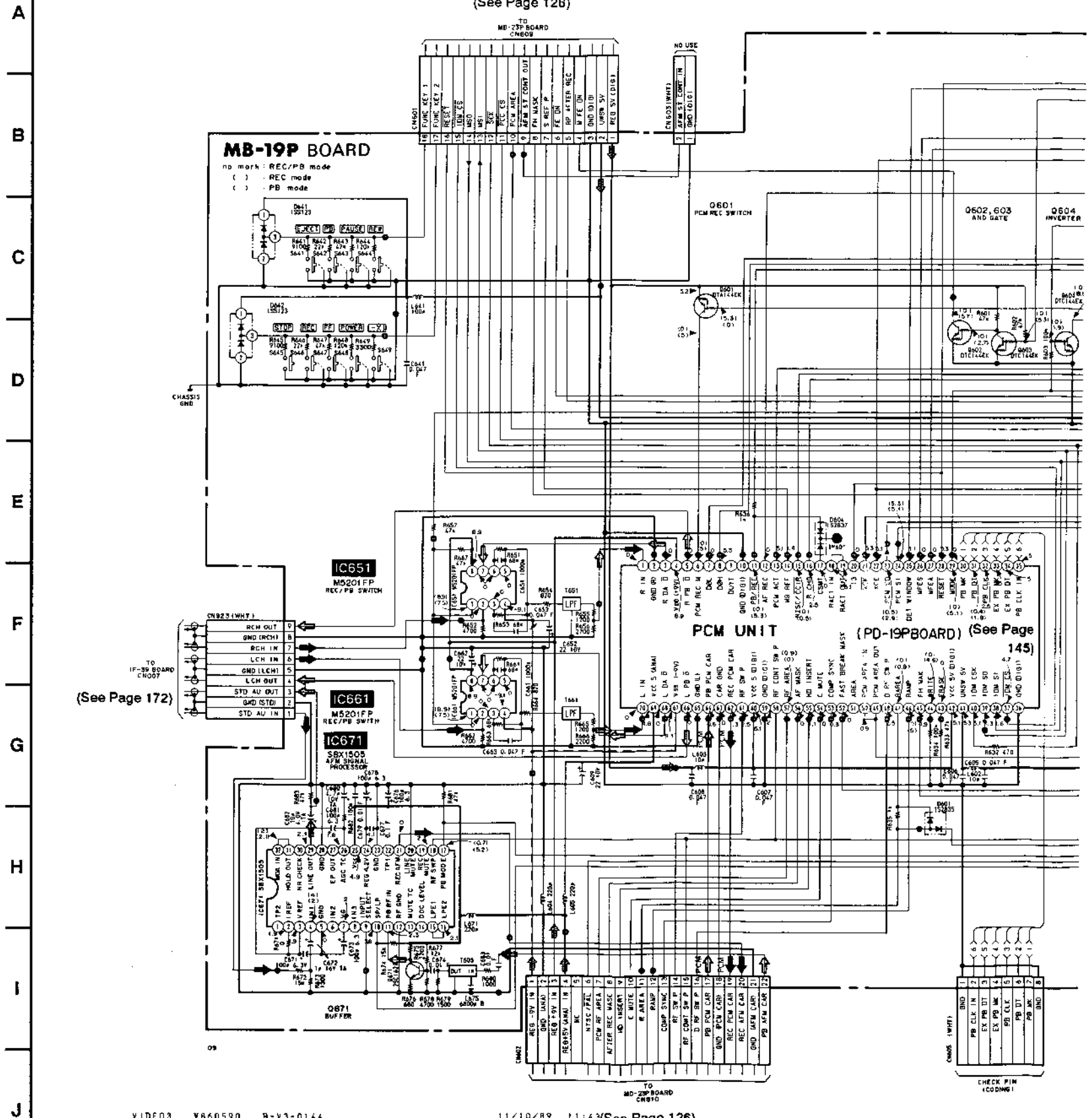
- Q653 8-729-102-07 TRANSISTOR 2SC2223-F13

IC651, IC661 (M5201FP)



• SIGNAL PATH

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



VIDE03 V860590 B-V3-0144

11/10/89 11:43 (See Page 126)

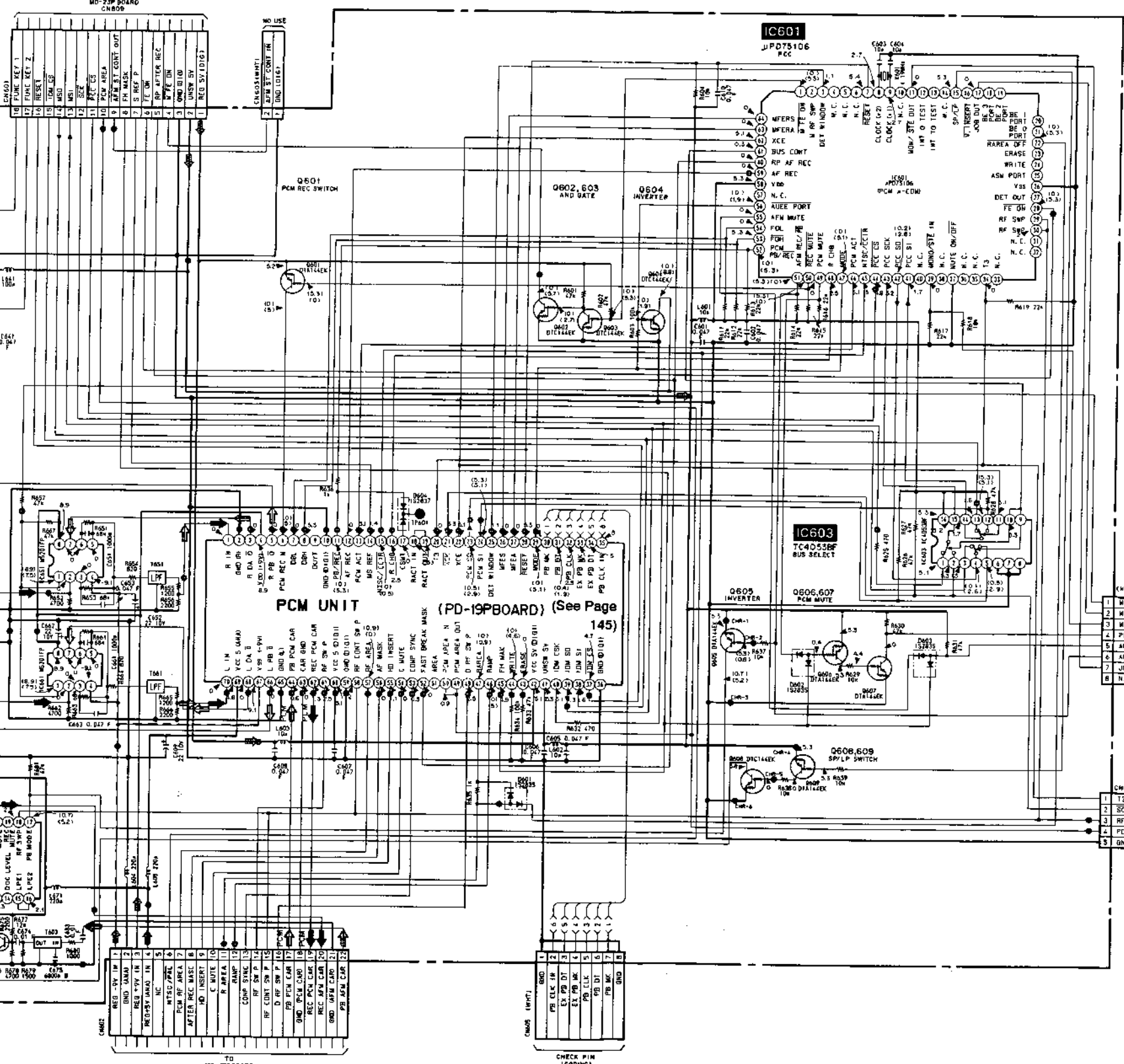
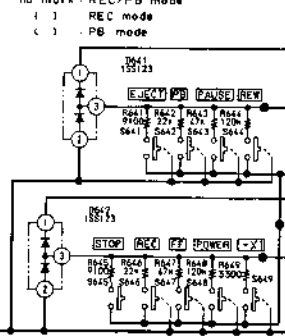
MB-19P (VTR FUNCTION SWITCH/AUDIO PROCESS) SCHEMATIC DIAGRAM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
— Ref. No. MB-19P BOARD: 7000 series, PA-27 BOARD: 7000 series —

A
B
C
D
E
F
G
H
I
J

(See Page 126)

MB-19P BOARD
no mark: REC/PB mode
() REC mode
() PB mode



(See Page 172)

(See Page 172)

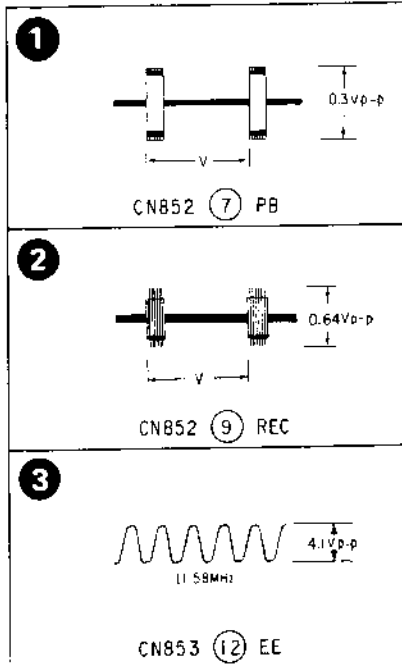
CHECK PIN (PCM ERROR RATE)

CHECK PIN (CODING)

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

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

PD-19P BOARD



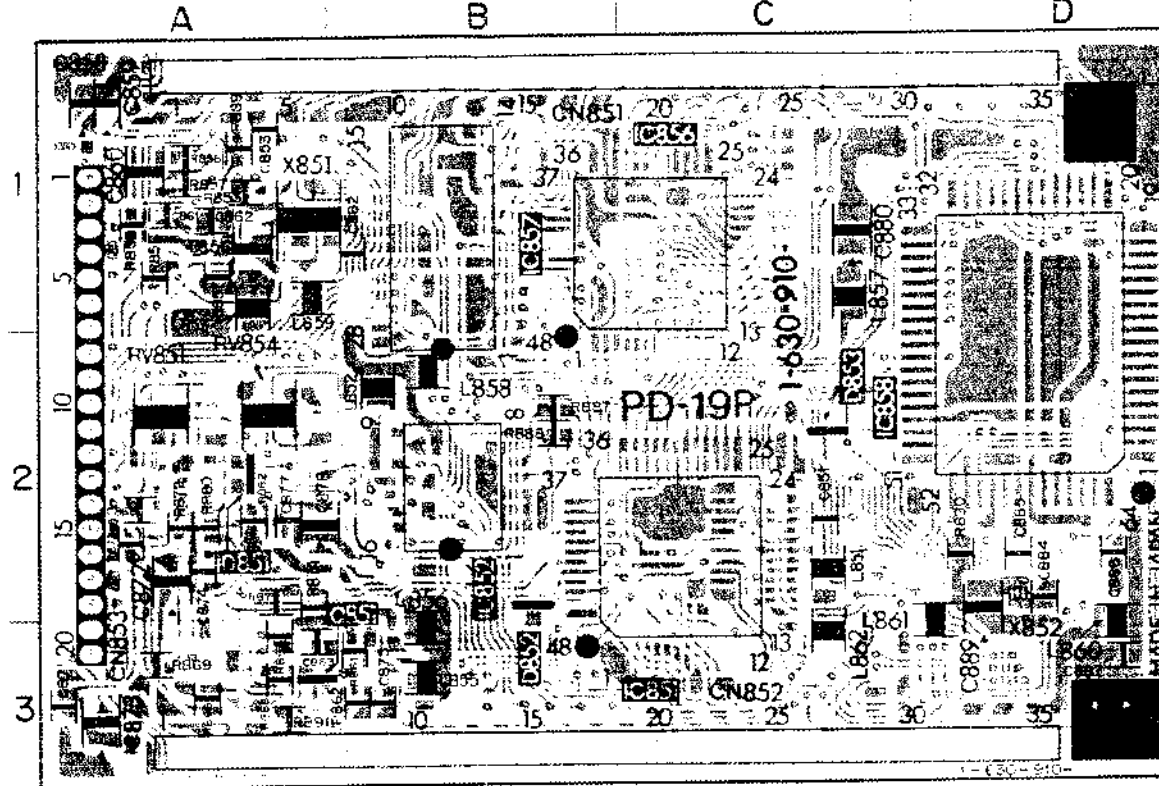
PD-19P BOARD (COMPONENT SIDE)

- 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

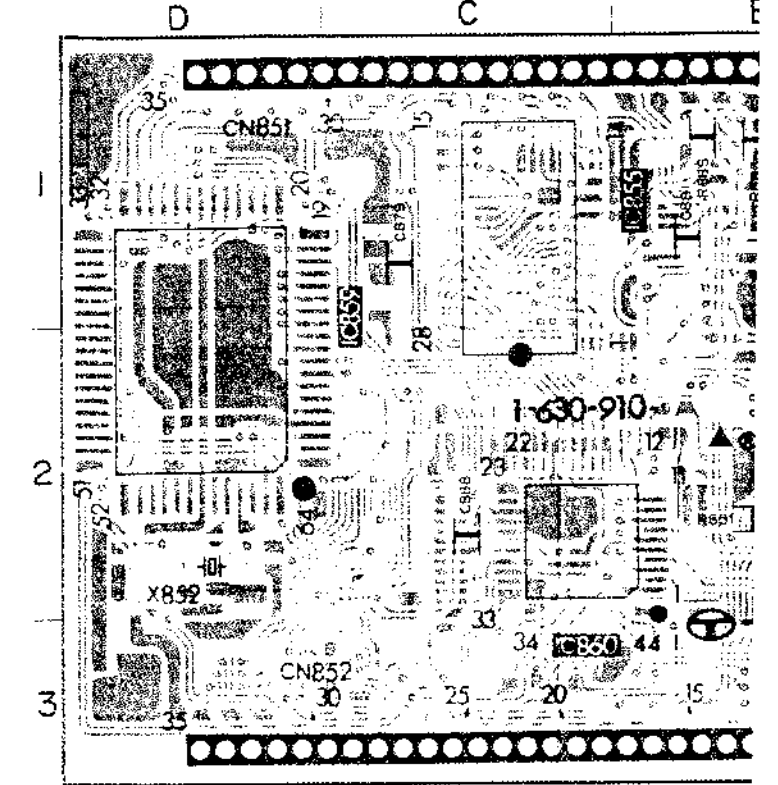
PD-19P BOARD (CONDUCTOR SIDE)

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

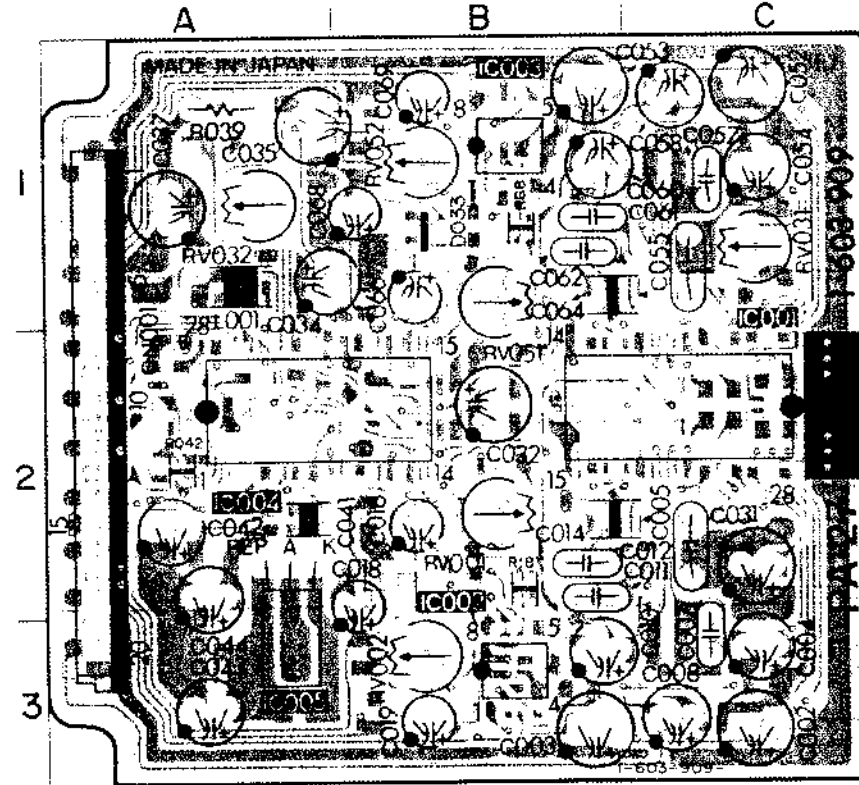
PD-19P BOARD (COMPONENT SIDE)



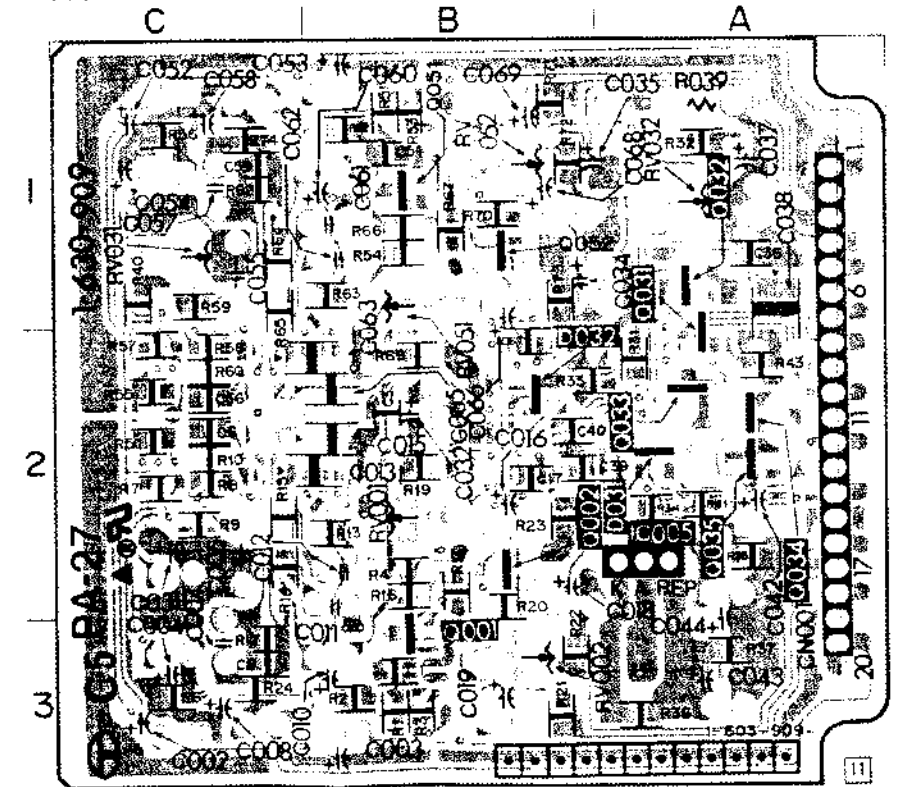
PD-19P BOARD (CONDUCTOR SIDE)



PA-27 BOARD (COMPONENT SIDE)



PA-27 BOARD (CONDUCTOR SIDE)



PA-27 BOARD (COMPONENT SIDE)

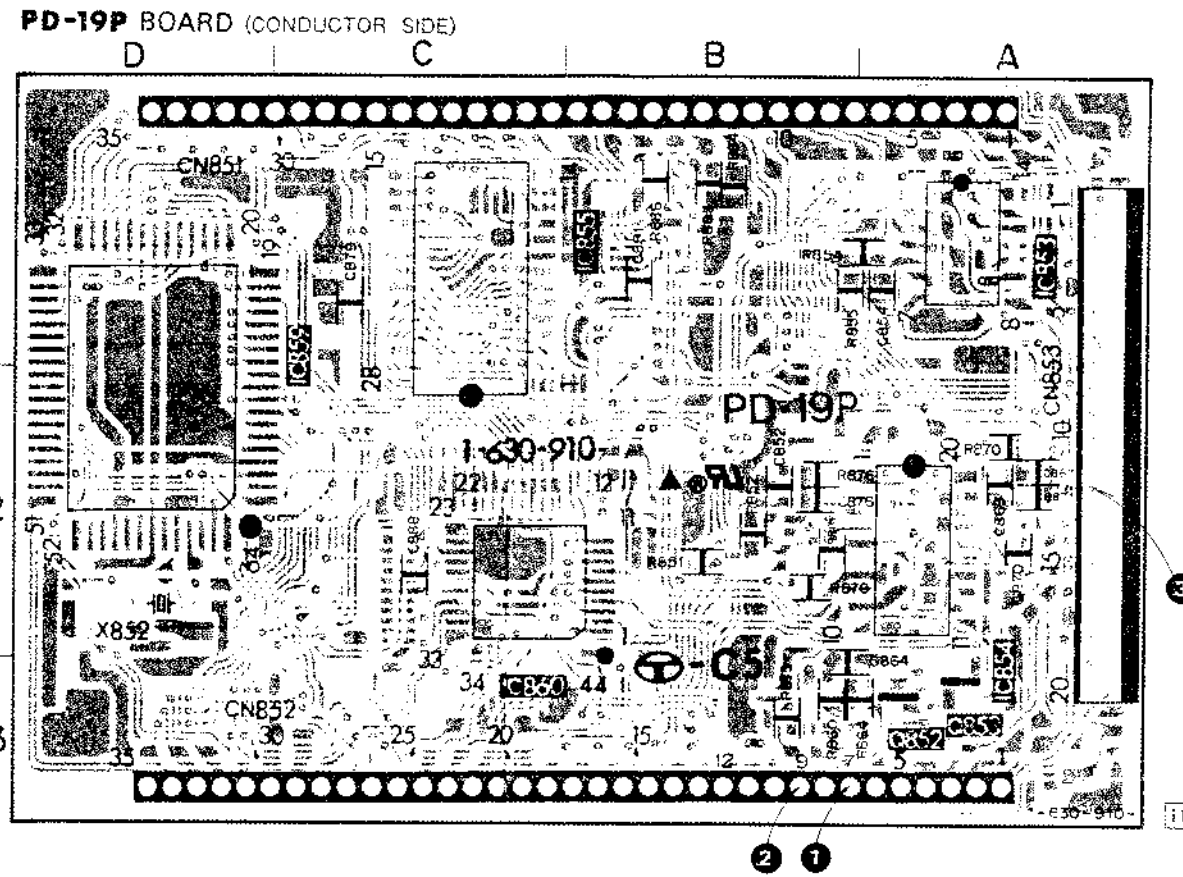
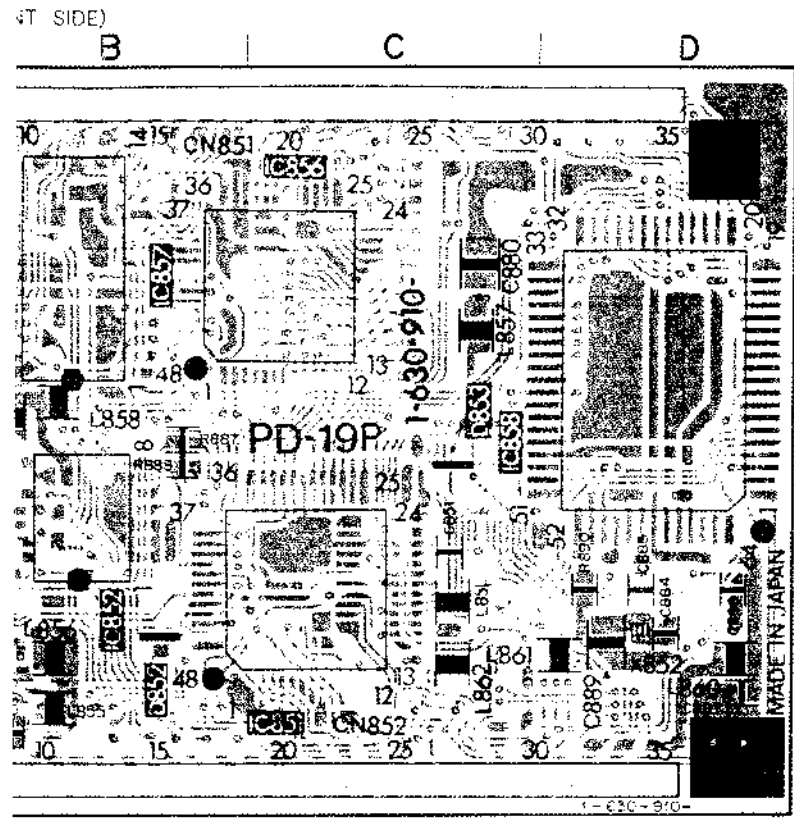
- D033 B-1
- IC001 C-2
- IC002 B-3
- IC003 B-1
- IC004 A-2
- IC005 A-3

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)

- *****
- Q031
- Q032
- Q033
- IC001
- IC002
- IC003
- IC004
- IC005
- Q001
- Q002
- Q031
- Q032
- Q033
- Q034
- Q035
- Q051
- Q052



PD-19 (P) BOARD, COMPLETE

< DIODE >

D851	8-719-104-34	DIODE	1S2836
D852	8-719-400-18	DIODE	MA152WK
D853	8-719-400-18	DIODE	MA152WK

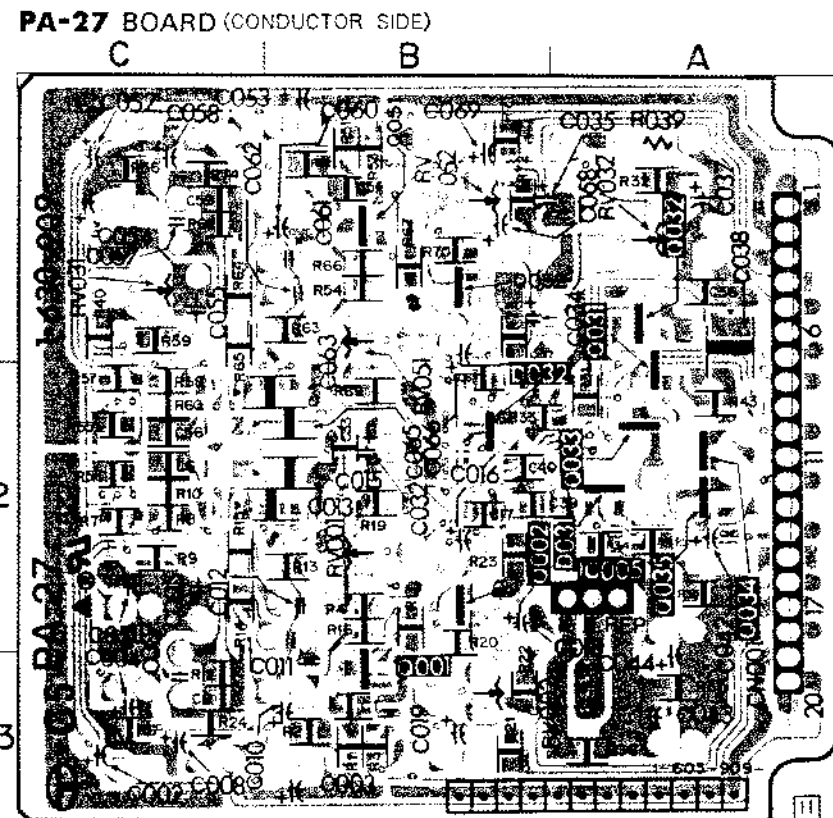
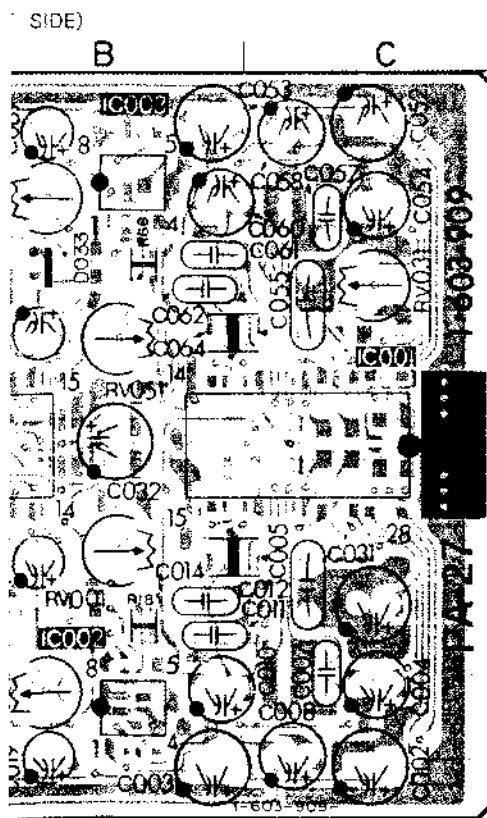
< IC >

IC851	8-752-324-45	IC	CXD105Q-Z
IC852	8-759-929-17	IC	CXD1051M
IC853	8-752-010-30	IC	CX20103
IC854	8-752-010-20	IC	CX201G2
IC855	8-752-331-00	IC	CXK53543M-12L-T6

IC856	8-759-948-61	IC	CX23011-C
IC857	8-759-911-19	IC	CX23012
IC858	8-759-972-12	IC	CF77305FT
IC859	8-759-809-68	IC	CXP5024H-0790
IC860	8-759-972-13	IC	CF77309FR

< TRANSISTOR >

Q851	8-729-102-07	TRANSISTOR	2SC2223-F13
Q852	8-729-122-63	TRANSISTOR	2SA1226



PA-27 BOARD, COMPLETE

< DIODE >

D031	8-719-104-34	DIODE	1S2836
D032	8-719-104-34	DIODE	1S2836
D033	8-719-104-34	DIODE	1S2836

< IC >

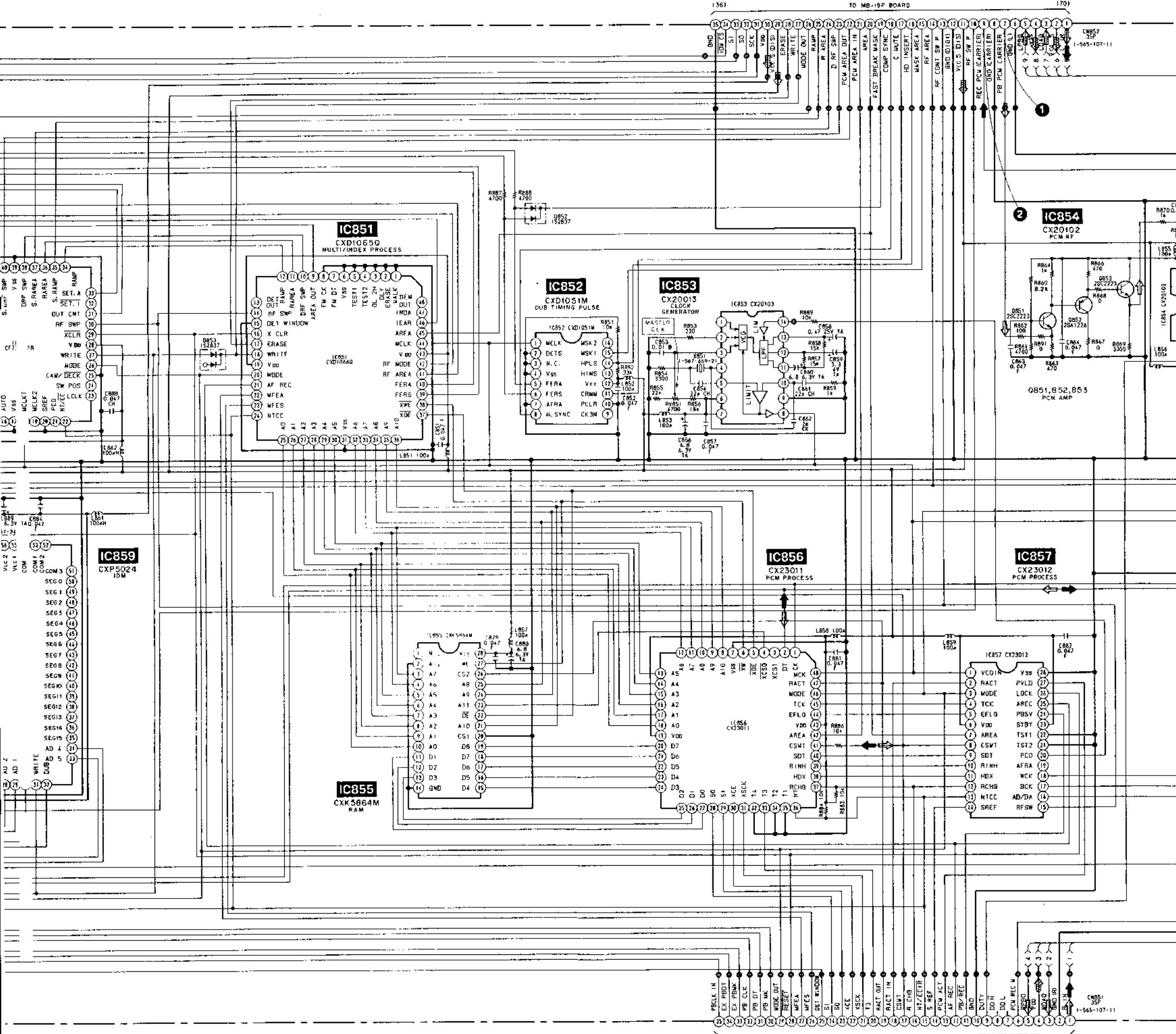
IC001	8-752-009-90	IC	CX20099
IC002	8-759-981-92	IC	RC4558M
IC003	8-759-981-92	IC	RC4558M
IC004	8-752-322-57	IC	CXD1077M
IC004	8-752-322-57	IC	CXD1077M

IC005	8-759-908-15	IC	TL431CLP
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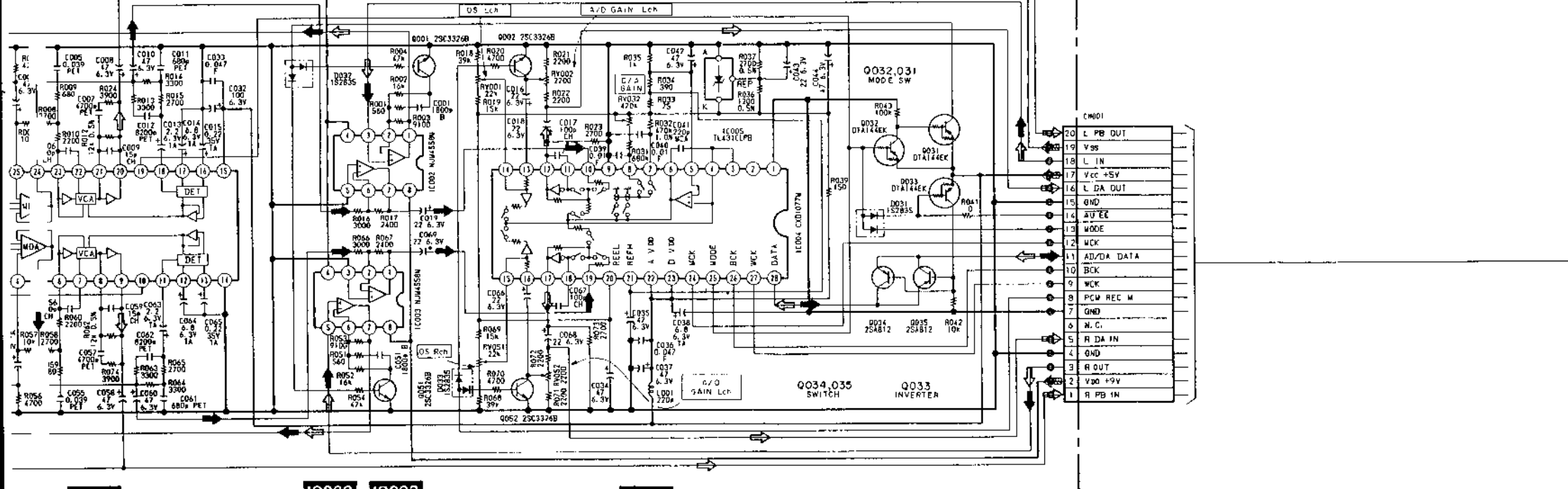
< TRANSISTOR >

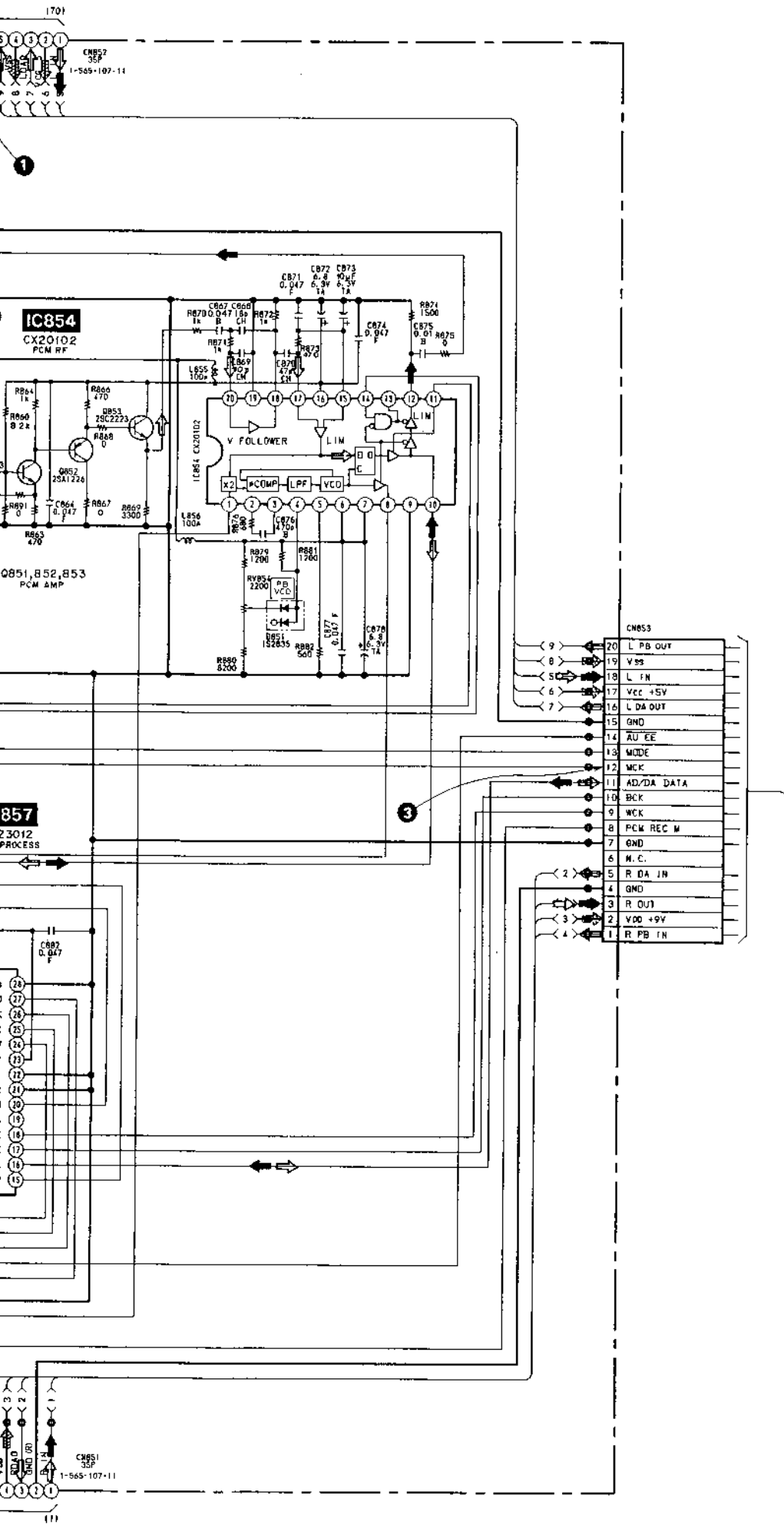
Q001	8-729-202-38	TRANSISTOR	2SC3326N
Q002	8-729-202-38	TRANSISTOR	2SC3326N
Q031	8-729-901-06	TRANSISTOR	DTA144EK
Q032	8-729-901-06	TRANSISTOR	DTA144EK
Q033	8-729-901-06	TRANSISTOR	DTA144EK
Q034	8-729-216-22	TRANSISTOR	2SA1162
Q035	8-729-216-22	TRANSISTOR	2SA1162
Q051	8-729-202-38	TRANSISTOR	2SC3326N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

(See Page 138)



(See Page 138)



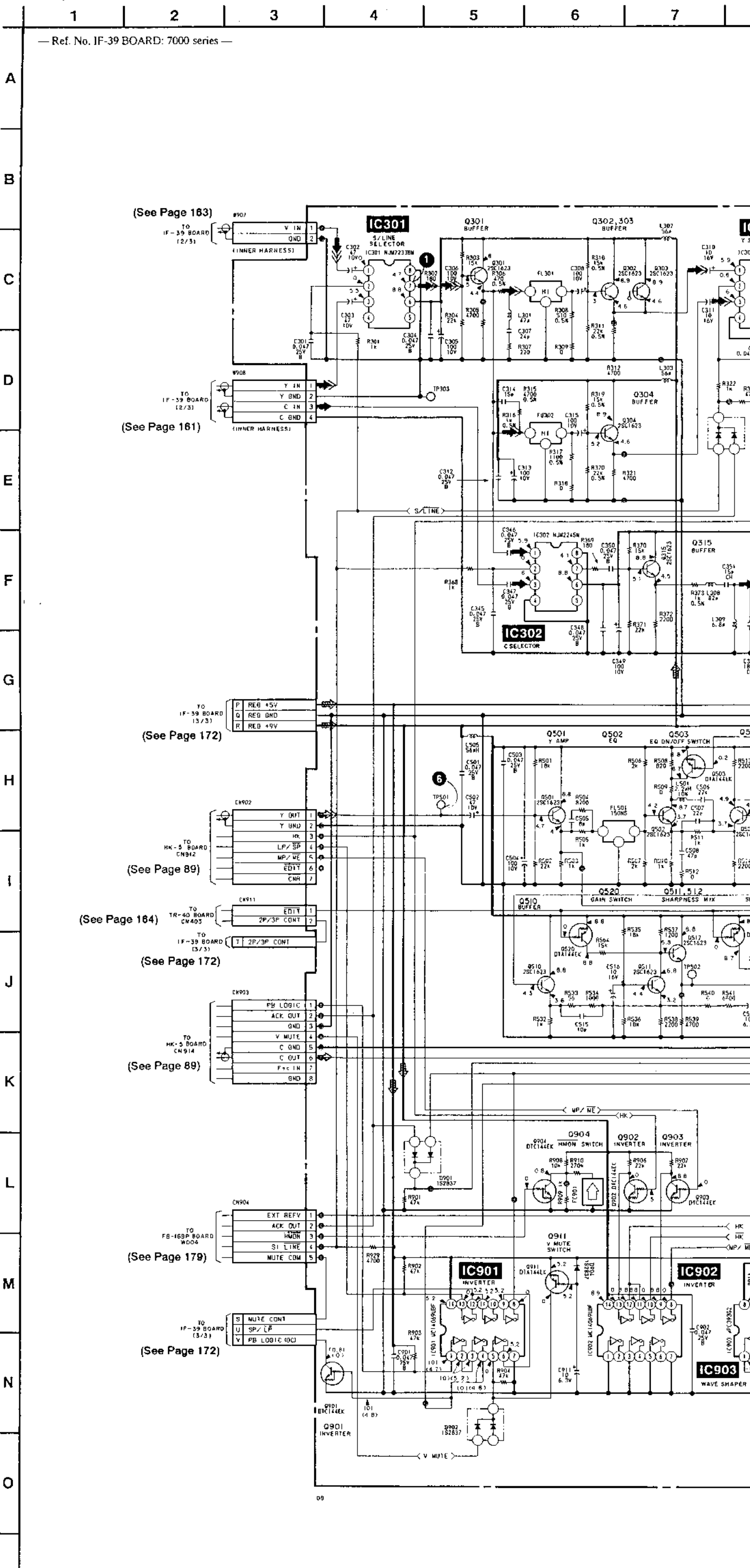
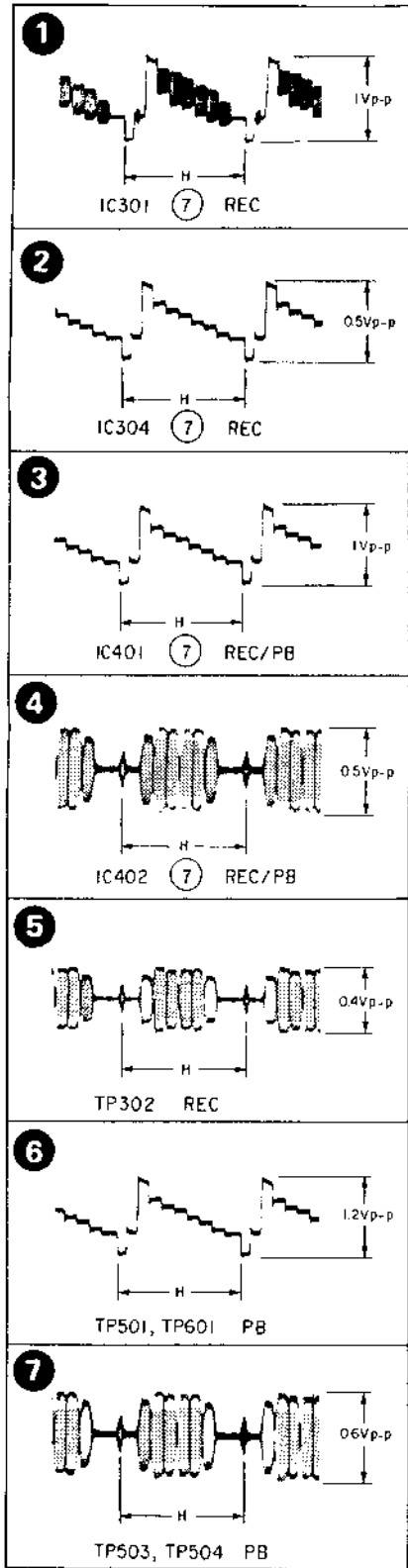


• SIGNAL PATH

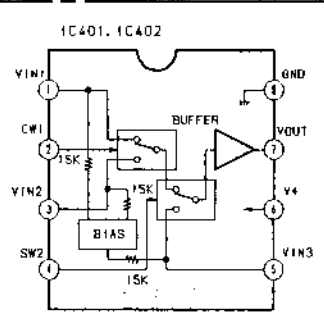
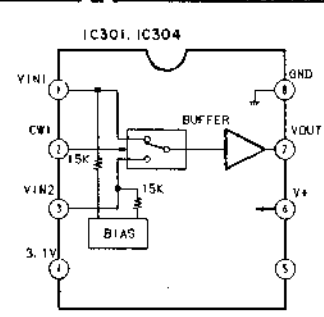
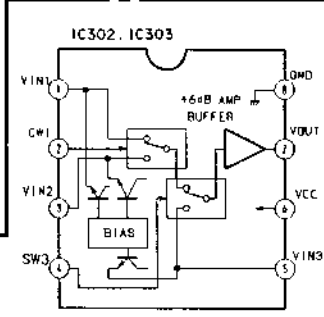
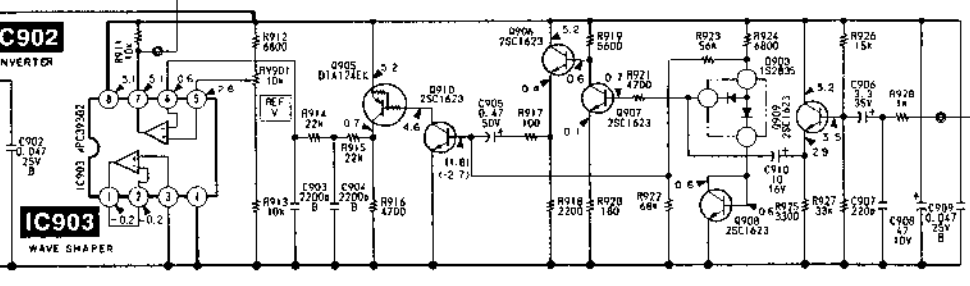
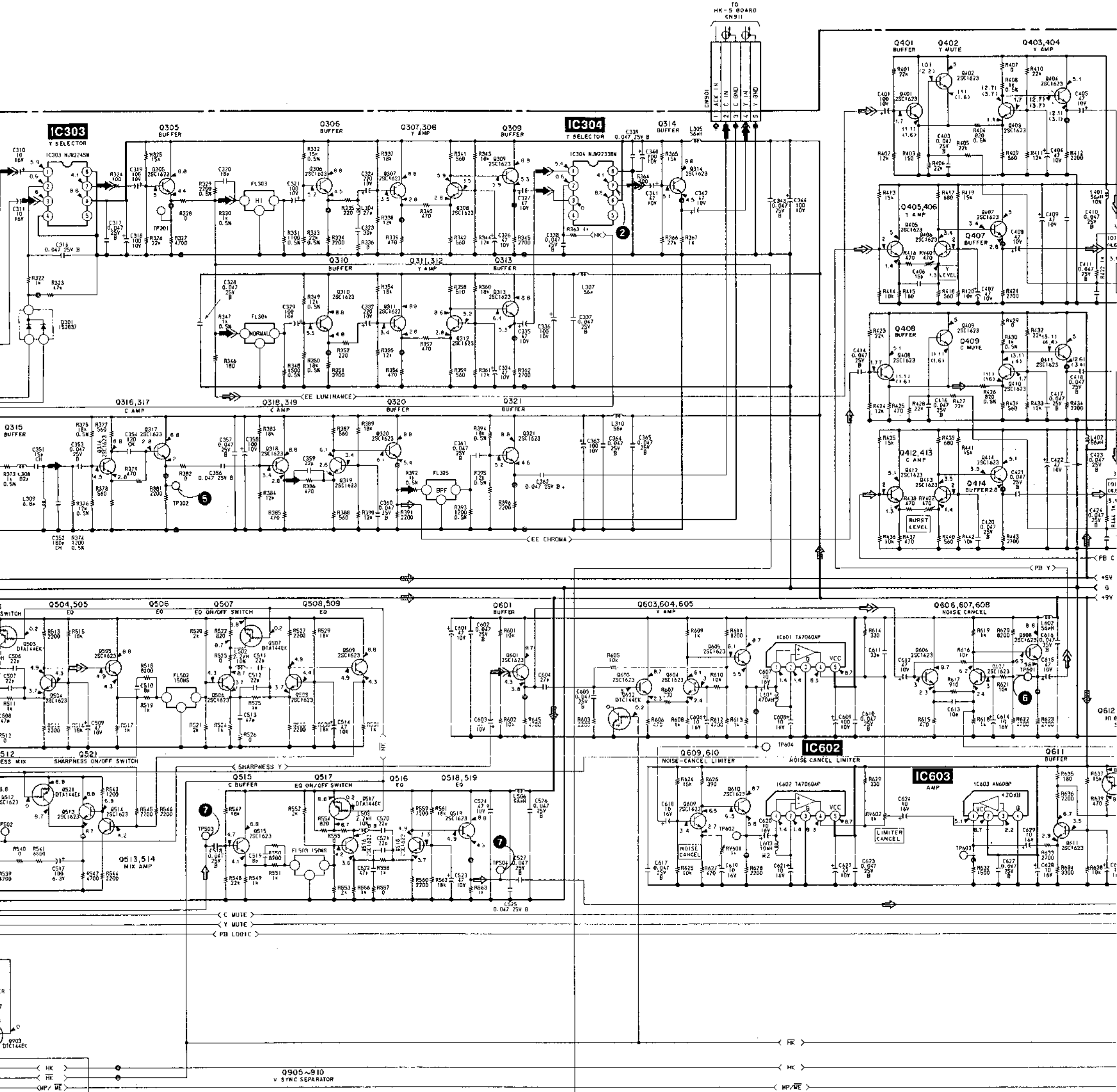
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				→
PB				⇌

IF-39 (Y/C SIGNAL SELECT, SHARPNESS, NOISE CANCEL) SCHEMATIC DIAGRAM

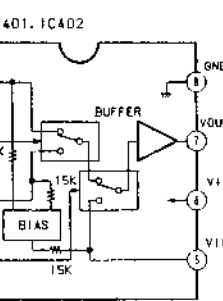
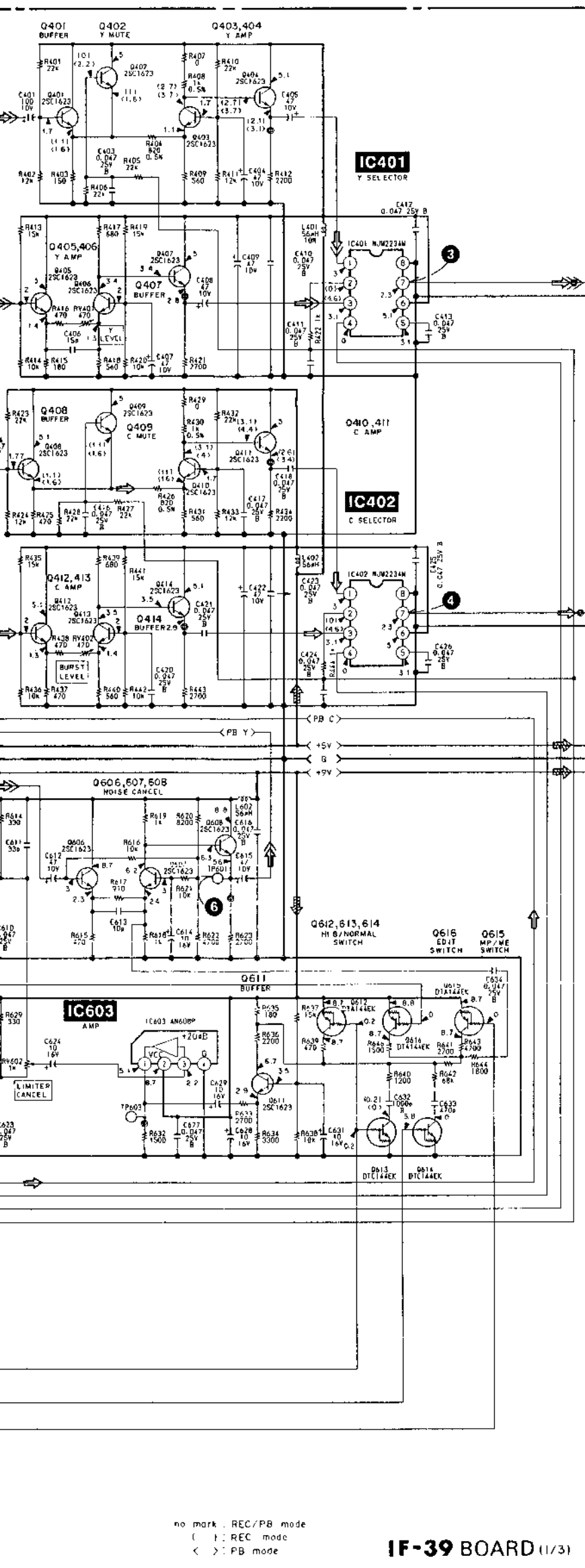
IF-39 BOARD (1/3)



(See Page 89)



no mark: REC/PB mode
 (): REC mode
 < >: PB mode



• SIGNAL PATH

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

(See Page 161)

(See Page 161)

(See Page 161)

IF-39 BOARD (CONDUCTOR SIDE)

D002	G-2	Q701	K-6	D00
D003	G-1	Q706	K-7	D00
D010	K-3	Q712	M-7	D06
D051	G-2	Q713	L-6	D16
D052	I-2	Q714	M-6	D16
D053	H-2	Q715	K-7	D16
D054	I-2	Q719	I-6	D16
D167	K-1	Q720	I-7	D17
D301	A-4	Q802	E-2	D17
D901	E-3	Q803	E-2	D90
D902	E-3	Q804	D-7	
D903	A-7	Q805	B-7	IC00
		Q806	A-7	IC00
		Q809	A-7	IC00
		Q910	B-7	IC00
		Q911	E-4	IC00

IC801	L-6			
IC802	M-6			
Q002	G-1			IC00
Q003	G-1			IC00
Q004	H-2			IC00
Q005	H-2			IC00
Q007	I-2			IC00
Q051	G-2			IC16
Q052	G-2			IC30
Q053	G-3			IC30
Q054	H-3			IC30
Q055	H-2			IC30
Q056	I-3			IC30
Q061	K-3			IC40
Q165	K-2			IC60
Q167	J-3			IC60
Q168	K-3			IC60
Q169	J-3			IC70
Q170	K-1			IC70
Q171	K-1			IC70
Q172	J-1			IC70
Q174	K-1			IC70
Q175	J-1			IC80
Q177	J-1			IC80
Q178	J-1			IC80
Q181	J-1			
Q183	K-2			Q00
Q186	K-2			Q00
Q301	A-2			Q00
Q302	B-3			Q01
Q303	B-3			Q01
Q304	A-4			Q05
Q305	A-4			Q06
Q307	B-6			Q16
Q308	B-6			Q17
Q311	A-6			Q17
Q312	A-6			Q18
Q314	A-7			Q18
Q315	C-3			Q18
Q317	C-4			Q18
Q318	B-4			Q19
Q319	B-5			Q30
Q320	B-5			Q30
Q321	B-6			Q31
Q401	G-6			Q31
Q402	H-6			Q31
Q403	H-7			Q40
Q404	H-7			Q40
Q405	G-7			Q41
Q406	H-7			Q41
Q407	H-7			Q41
Q412	J-5			Q50
Q413	K-5			Q50
Q501	D-5			Q50
Q502	D-6			Q50
Q505	D-7			Q51
Q506	D-7			Q51
Q509	D-7			Q51
Q511	D-7			Q51
Q512	E-6			Q60
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Q514	D-5			Q70
Q515	H-5			Q70
Q516	H-6			Q70
Q519	H-6			Q70
Q520	E-7			Q70
Q601	E-6			Q70
Q602	E-6			Q71
Q603	E-6			Q71
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Q606	E-6			Q71
Q608	E-7			Q71
Q609	E-6			Q72
Q610	E-6			Q72
Q611	G-7			Q90
Q612	F-7			Q90
Q613	G-7			Q90
Q615	F-7			Q90
Q616	E-7			Q90

IF-39 (Y/C SIGNAL SELECT, SHARPNESS, NOISE CANCEL, YX FILTER Y/C SIGNAL OUT, AUDIO SIGNAL SELECT POWER SUPPLY DISTRIBUTE), TR-40 (S VIDEO IN/OUT), JB-4 (LINE IN/OUT), JB-5 (MONITOR OUT) PRINTED WIRING BOARD

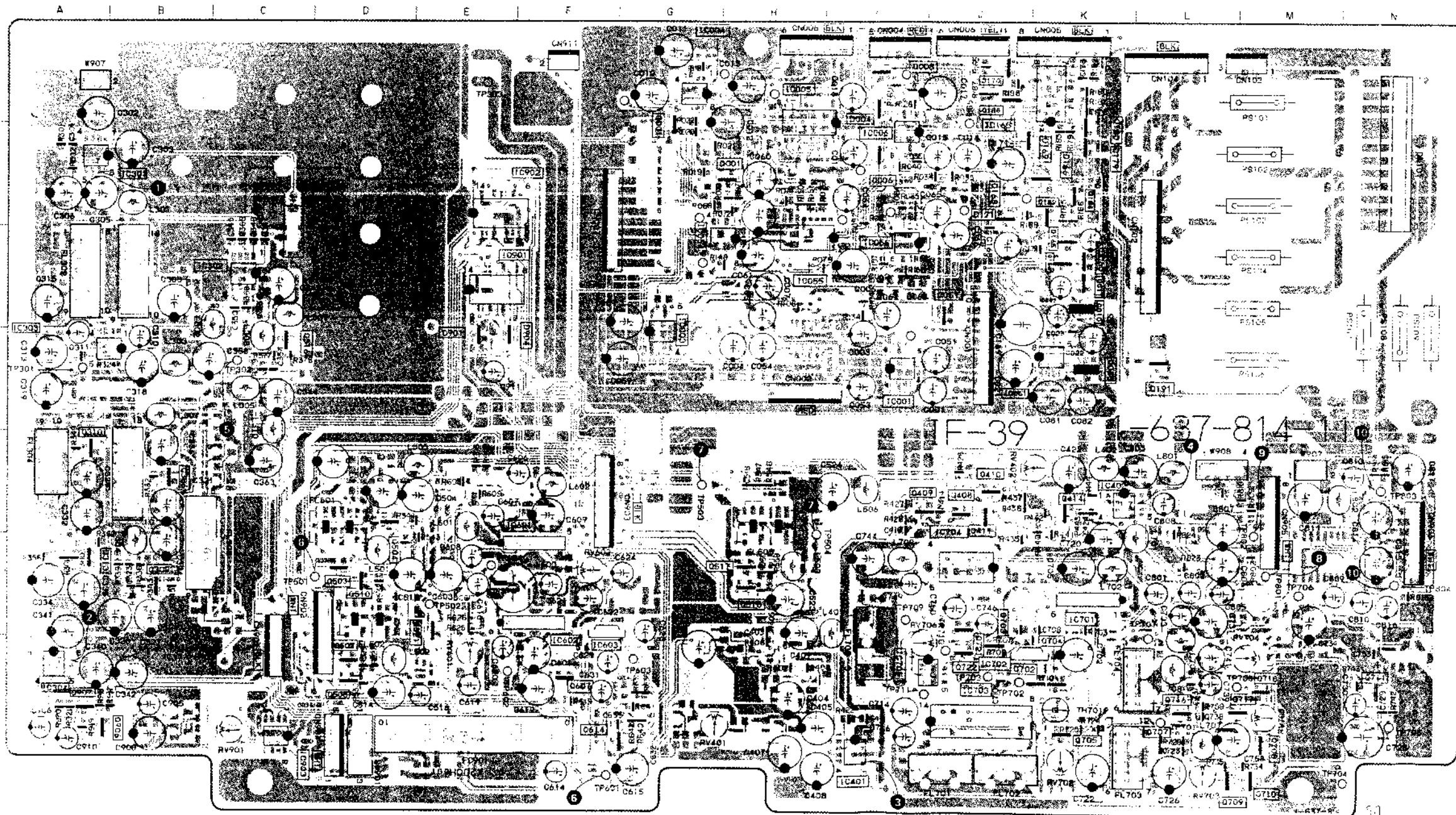
— Ref. No. IF-39 BOARD: 7000 series, TR-40 BOARD: 3000 series, JB-4 BOARD: 3000 series, JB-5 BOARD: 3000 series —

IF-39 BOARD, COMPLETE

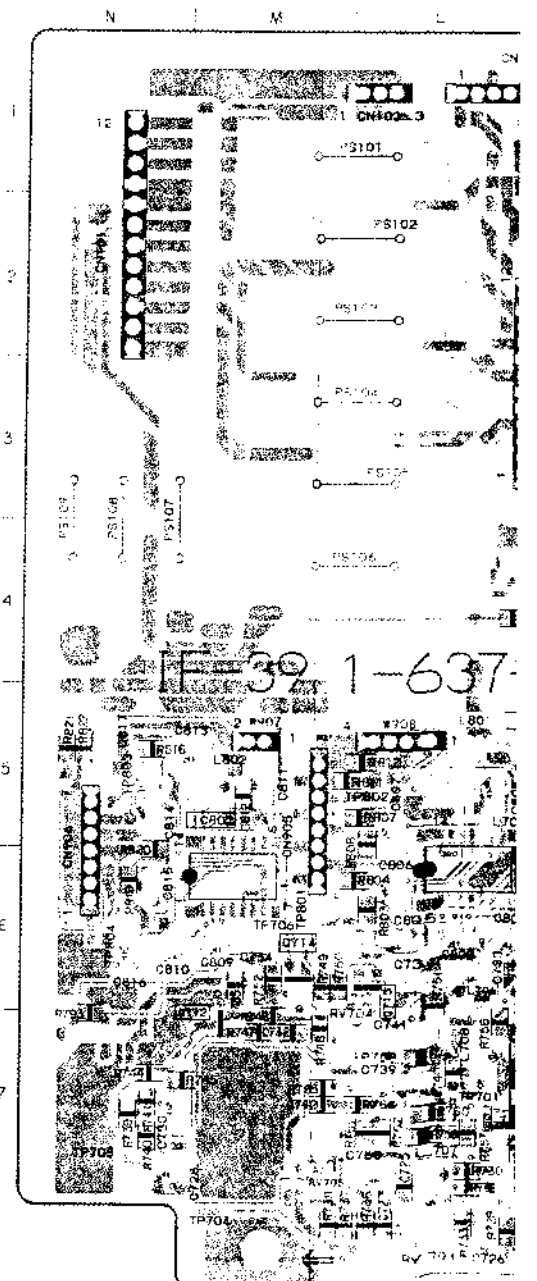
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D001	8-719-104-34	DIODE	1S2836	D165	8-719-400-18	DIODE	MA152WK
D002	8-719-104-34	DIODE	1S2836	D166	8-719-400-18	DIODE	MA152WK
D003	8-719-104-34	DIODE	1S2836	D167	8-719-800-76	DIODE	1SS226
D004	8-719-104-34	DIODE	1S2836	D168	8-719-800-76	DIODE	1SS226
D010	8-719-800-76	DIODE	1SS226	D169	8-719-800-76	DIODE	1SS226
D051	8-719-104-34	DIODE	1S2836	D170	8-719-800-76	DIODE	1SS226
D052	8-719-104-34	DIODE	1S2836	D171	8-719-104-34	DIODE	1S2836
D053	8-719-104-34	DIODE	1S2836	D301	8-719-400-18	DIODE	MA152WK
D054	8-719-104-34	DIODE	1S2836	D901	8-719-400-18	DIODE	MA152WK
D060	8-719-800-76	DIODE	1SS226	D902	8-719-400-18	DIODE	MA152WK
				D903	8-719-104-34	DIODE	1S2836
				D904	8-719-400-18	DIODE	MA152WK

		< IC >				< TRANSISTOR >	
IC301	8-759-710-86	IC	NJM2233BM	IC704	8-759-969-13	IC	SN16913P
IC302	8-759-711-32	IC	NJM2245M	IC705	8-759-101-12	IC	UPC311G2
IC303	8-759-711-32	IC	NJM2245M	IC801	8-752-009-51	IC	CX20095A
IC304	8-759-710-86	IC	NJM2233BM	IC802	8-752-009-51	IC	CX20095A
IC401	8-759-710-07	IC	NJM2234M	IC901	8-759-009-10	IC	MC140690BF
IC402	8-759-710-07	IC	NJM2234M	IC901	8-759-009-10	IC	MC140690BF
IC601	8-759-200-60	IC	TA7060AP	IC902	8-759-009-10	IC	MC140690BF
IC602	8-759-200-60	IC	TA7060AP	IC902	8-759-009-10	IC	MC140690BF
IC603	8-759-400-06	IC	AN608P	IC903	8-759-100-93	IC	UPC393G2
IC701	8-759-200-60	IC	TA7060AP	IC903	8-759-100-93	IC	UPC393G2
IC702	8-759-402-33	IC	AN607P				
IC703	8-752-201-30	IC	CX22013				
				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
				Q006	8-729-202-38	TRANSISTOR	2SC3326N
				Q007	8-729-202-38	TRANSISTOR	2SC3326N
				Q008	8-729-202-38	TRANSISTOR	2SC3326N
				Q010	8-729-140-75	TRANSISTOR	2SD999
				Q011	8-729-901-06	TRANSISTOR	DTA144EX
				Q051	8-729-202-38	TRANSISTOR	2SC3326N
				Q052	8-729-202-38	TRANSISTOR	2SC3326N
				Q053	8-729-202-38	TRANSISTOR	2SC3326N
				Q054	8-729-202-38	TRANSISTOR	2SC3326N
				Q055	8-729-202-38	TRANSISTOR	2SC3326N
				Q056	8-729-202-38	TRANSISTOR	2SC3326N
				Q057	8-729-202-38	TRANSISTOR	2SC3326N
				Q060	8-729-101-07	TRANSISTOR	2SC3326N
				Q061	8-729-901-01	TRANSISTOR	DTA144EX
				Q165	8-729-901-06	TRANSISTOR	DTA144EX

IF-39 BOARD (COMPONENT SIDE)



IF-39 BOARD (MONITOR SIDE)

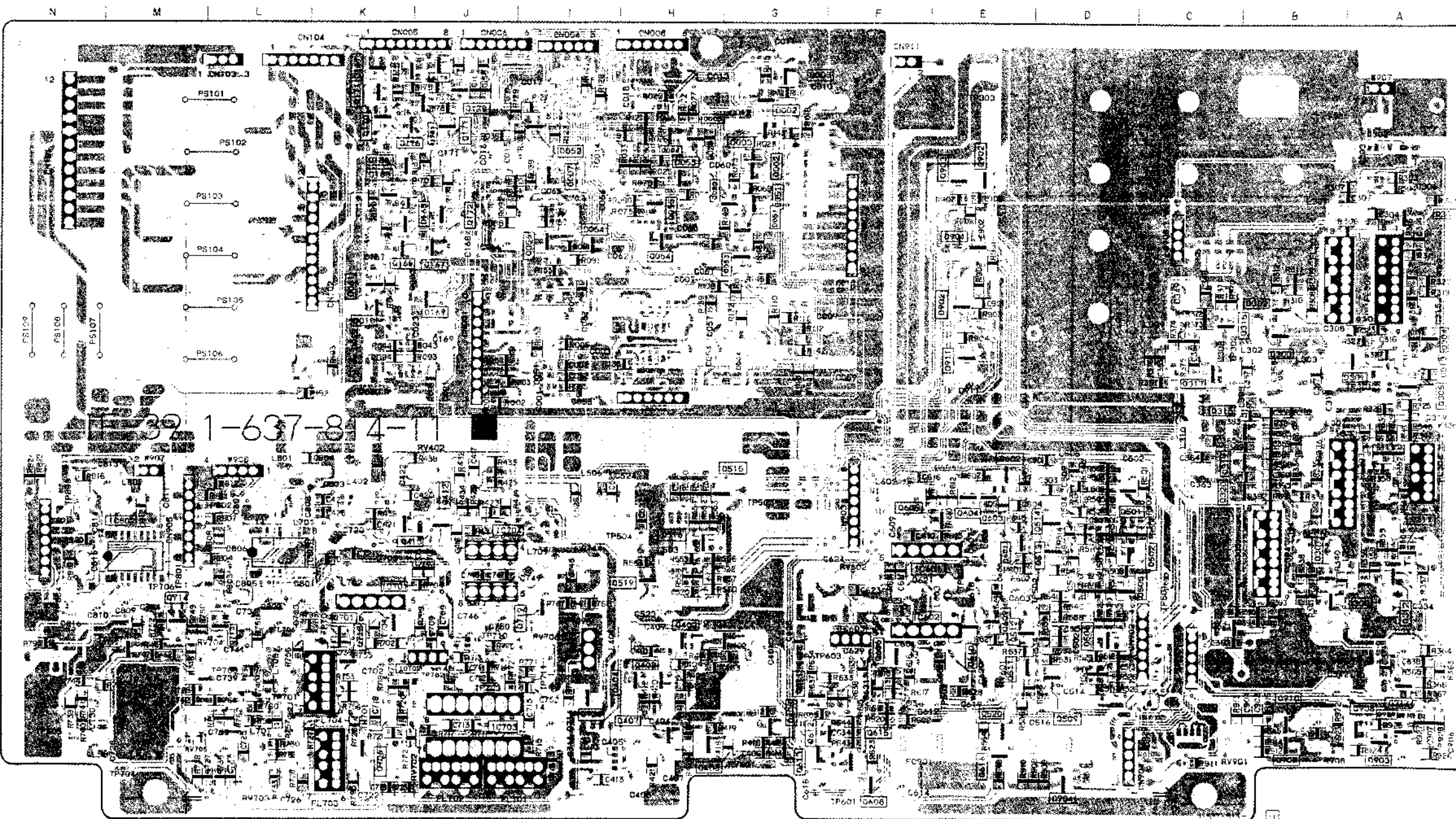


JB-5 (MONITOR OUT) PRINTED WIRING BOARDS

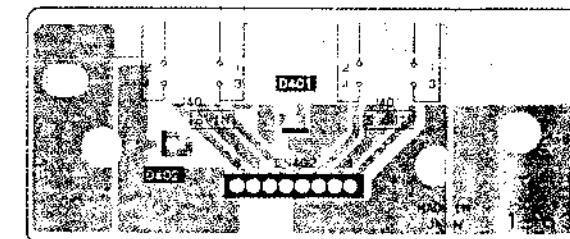
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2SC3326N	Q051	8-729-202-38	TRANSISTOR	2SC3326M	Q166	8-729-901-01	TRANSISTOR	DTC144EK	Q182	8-729-216-22	TRANSISTOR	2SA1162	Q315	8-729-100-66	TRANSISTOR	2SC1623	Q414	8-729-100-66	TRANSISTOR	2SC1623	Q520	8-729-901-06	TRANSISTOR	DTA144EK	Q703
2SC3326N	Q052	8-729-202-38	TRANSISTOR	2SC3326M	Q167	8-729-100-66	TRANSISTOR	2SC1623	Q183	8-729-901-01	TRANSISTOR	DTC144EK	Q316	8-729-100-66	TRANSISTOR	2SC1623	Q501	8-729-100-66	TRANSISTOR	2SC1623	Q521	8-729-901-06	TRANSISTOR	DTA144EK	Q704
2SC3326N	Q053	8-729-202-38	TRANSISTOR	2SC3326M	Q168	8-729-901-06	TRANSISTOR	DTA144EK	Q184	8-729-901-01	TRANSISTOR	DTC144EK	Q317	8-729-100-66	TRANSISTOR	2SC1623	Q502	8-729-100-66	TRANSISTOR	2SC1623	Q601	8-729-100-66	TRANSISTOR	2SC1623	Q705
2SC3326N	Q054	8-729-202-38	TRANSISTOR	2SC3326M	Q169	8-729-901-06	TRANSISTOR	DTA144EK	Q186	8-729-901-06	TRANSISTOR	DTA144EK	Q318	8-729-100-66	TRANSISTOR	2SC1623	Q503	8-729-901-06	TRANSISTOR	DTA144EK	Q602	8-729-901-01	TRANSISTOR	DTC144EK	Q706
2SC3326N	Q055	8-729-202-38	TRANSISTOR	2SC3326M	Q170	8-729-901-06	TRANSISTOR	DTA144EK	Q188	8-729-901-06	TRANSISTOR	DTA144EK	Q319	8-729-100-66	TRANSISTOR	2SC1623	Q504	8-729-100-66	TRANSISTOR	2SC1623	Q603	8-729-100-66	TRANSISTOR	2SC1623	Q707
2SC3326N	Q056	8-729-202-38	TRANSISTOR	2SC3326M	Q171	8-729-901-06	TRANSISTOR	DTA144EK	Q191	8-729-216-22	TRANSISTOR	2SA1162	Q320	8-729-100-66	TRANSISTOR	2SC1623	Q505	8-729-100-66	TRANSISTOR	2SC1623	Q604	8-729-100-66	TRANSISTOR	2SC1623	Q708
2SC3326N	Q057	8-729-202-38	TRANSISTOR	2SC3326M	Q172	8-729-100-66	TRANSISTOR	2SC1623	Q301	8-729-100-66	TRANSISTOR	2SC1623	Q321	8-729-100-66	TRANSISTOR	2SC1623	Q506	8-729-100-66	TRANSISTOR	2SC1623	Q605	8-729-100-66	TRANSISTOR	2SC1623	Q709
2SC3326N	Q060	8-729-101-07	TRANSISTOR	2S3798-DL	Q174	8-729-901-06	TRANSISTOR	DTA144EK	Q302	8-729-100-66	TRANSISTOR	2SC1623	Q401	8-729-100-66	TRANSISTOR	2SC1623	Q507	8-729-901-06	TRANSISTOR	DTA144EK	Q606	8-729-100-66	TRANSISTOR	2SC1623	Q710
2SD999	Q061	8-729-901-01	TRANSISTOR	DTC144EK	Q175	8-729-901-06	TRANSISTOR	DTA144EK	Q303	8-729-100-66	TRANSISTOR	2SC1623	Q402	8-729-100-66	TRANSISTOR	2SC1623	Q508	8-729-100-66	TRANSISTOR	2SC1623	Q607	8-729-100-66	TRANSISTOR	2SC1623	Q711
DTA144EK	Q165	8-729-901-06	TRANSISTOR	DTA144EK				DTA144EK	Q304	8-729-100-66	TRANSISTOR	2SC1623	Q403	8-729-100-66	TRANSISTOR	2SC1623	Q509	8-729-100-66	TRANSISTOR	2SC1623	Q608	8-729-100-66	TRANSISTOR	2SC1623	Q712
									Q305	8-729-100-66	TRANSISTOR	2SC1623	Q404	8-729-100-66	TRANSISTOR	2SC1623	Q510	8-729-100-66	TRANSISTOR	2SC1623	Q609	8-729-100-66	TRANSISTOR	2SC1623	Q713
									Q306	8-729-100-66	TRANSISTOR	2SC1623	Q405	8-729-100-66	TRANSISTOR	2SC1623	Q511	8-729-100-66	TRANSISTOR	2SC1623	Q610	8-729-100-66	TRANSISTOR	2SC1623	Q714
									Q307	8-729-100-66	TRANSISTOR	2SC1623	Q406	8-729-100-66	TRANSISTOR	2SC1623	Q512	8-729-100-66	TRANSISTOR	2SC1623	Q611	8-729-100-66	TRANSISTOR	2SC1623	Q715
									Q308	8-729-100-66	TRANSISTOR	2SC1623	Q407	8-729-100-66	TRANSISTOR	2SC1623	Q513	8-729-100-66	TRANSISTOR	2SC1623	Q612	8-729-901-06	TRANSISTOR	DTA144EK	Q716
									Q309	8-729-100-66	TRANSISTOR	2SC1623	Q408	8-729-100-66	TRANSISTOR	2SC1623	Q514	8-729-100-66	TRANSISTOR	2SC1623	Q613	8-729-901-01	TRANSISTOR	DTC144EK	Q717

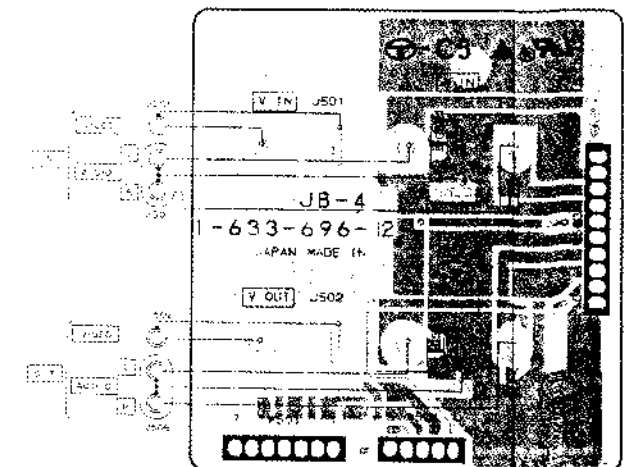
IF-39 BOARD (CONDUCTOR SIDE)



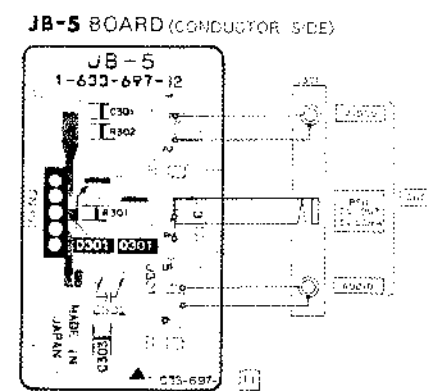
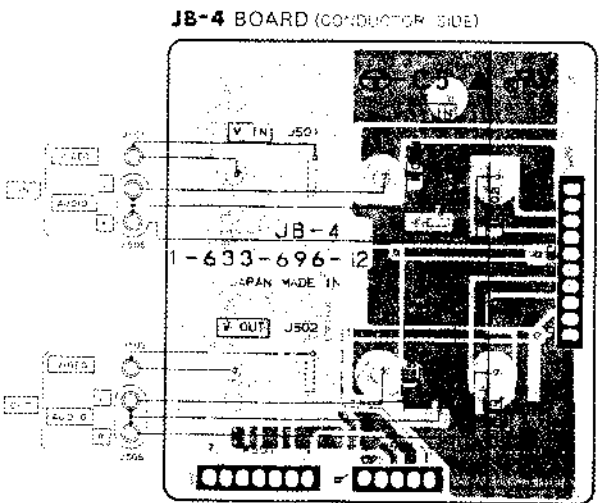
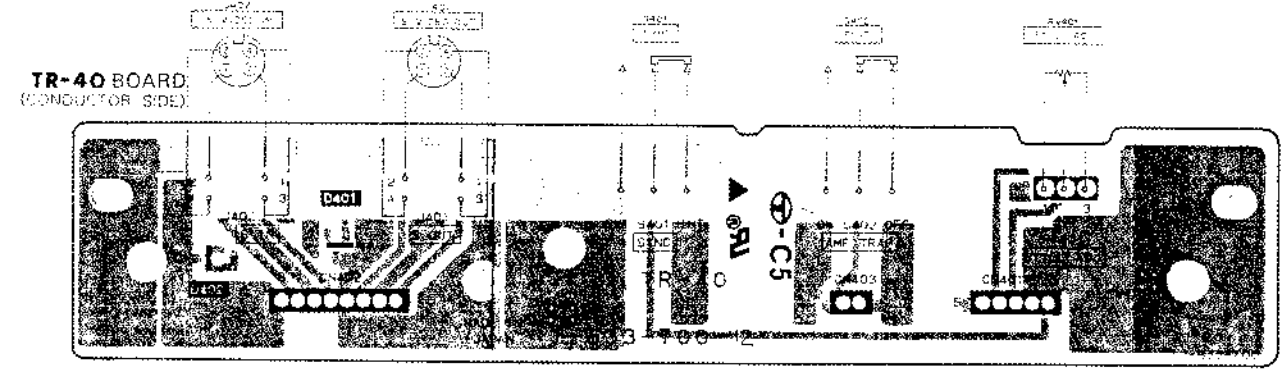
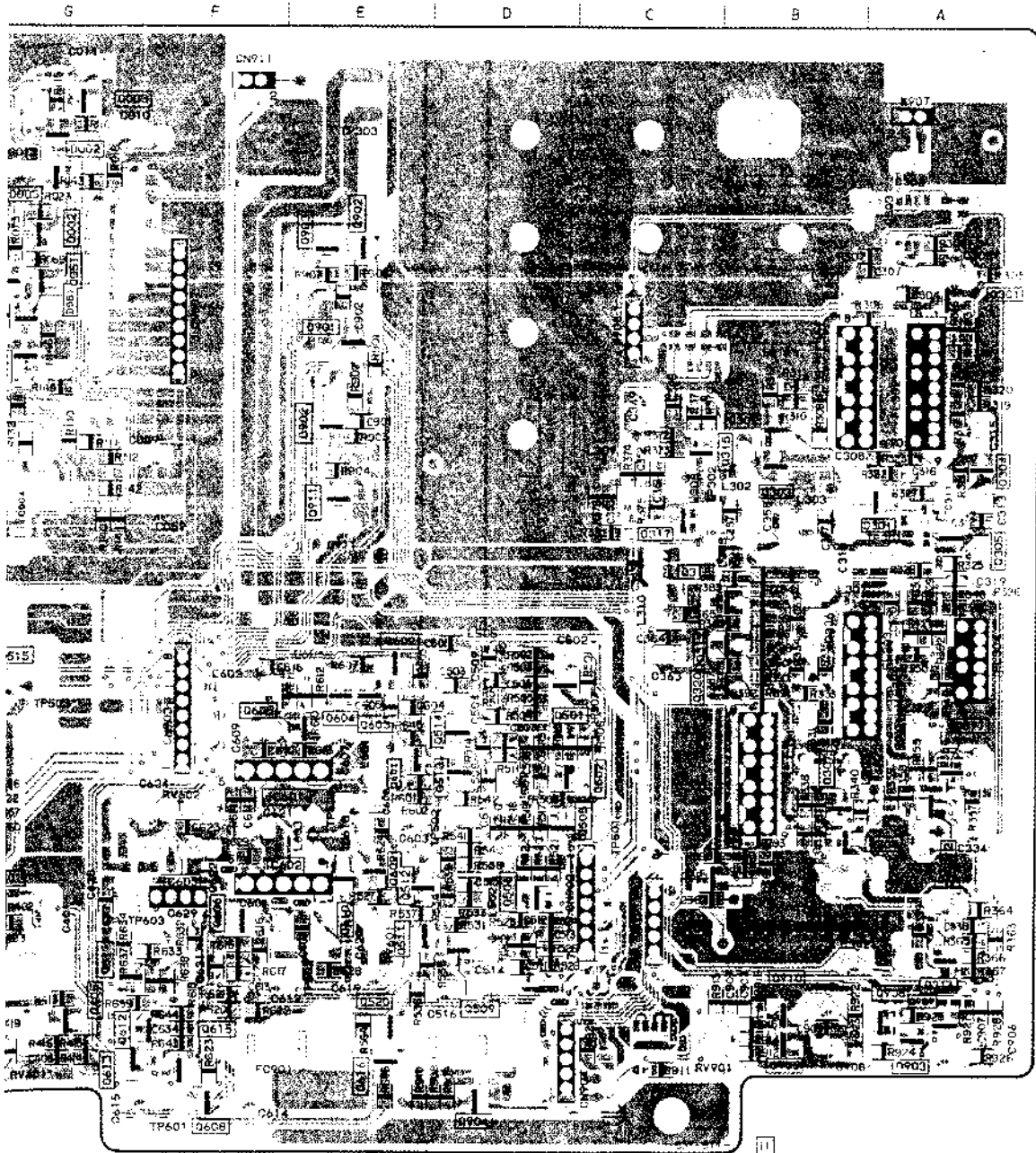
TR-40 BOARD (CONDUCTOR SIDE)



JB-4 BOARD (CONDUCTOR SIDE)



1-729-901-06 TRANSISTOR	DTA144EK	Q310	8-729-100-66 TRANSISTOR	2SC1623	Q409	8-729-100-66 TRANSISTOR	2SC1623	Q515	8-729-100-66 TRANSISTOR	2SC1623	Q614	8-729-901-01 TRANSISTOR	DTC144EK	Q718	8-729-100-66 TRANSISTOR	2SC1623
1-729-901-06 TRANSISTOR	DTA144EK	Q311	8-729-100-66 TRANSISTOR	2SC1623	Q410	8-729-100-66 TRANSISTOR	2SC1623	Q516	8-729-100-66 TRANSISTOR	2SC1623	Q615	8-729-901-06 TRANSISTOR	DTA144EK	Q719	8-729-100-66 TRANSISTOR	2SC1623
1-729-901-01 TRANSISTOR	DTC144EK	Q312	8-729-100-66 TRANSISTOR	2SC1623	Q411	8-729-100-66 TRANSISTOR	2SC1623	Q517	8-729-901-06 TRANSISTOR	DTA144EK	Q616	8-729-901-06 TRANSISTOR	DTA144EK	Q720	8-729-100-66 TRANSISTOR	2SC1623
1-729-901-06 TRANSISTOR	DTA144EK	Q313	8-729-100-66 TRANSISTOR	2SC1623	Q412	8-729-100-66 TRANSISTOR	2SC1623	Q518	8-729-100-66 TRANSISTOR	2SC1623	Q701	8-729-100-66 TRANSISTOR	2SC1623	Q721	8-729-320-17 TRANSISTOR	2SA1122-CD
1-729-901-01 TRANSISTOR	DTC144EK	Q314	8-729-100-66 TRANSISTOR	2SC1623	Q413	8-729-100-66 TRANSISTOR	2SC1623	Q519	8-729-100-66 TRANSISTOR	2SC1623	Q702	8-729-100-66 TRANSISTOR	2SC1623	Q722	8-729-100-66 TRANSISTOR	2SC1623
8-729-216-22 TRANSISTOR	2SA1162	Q315	8-729-100-66 TRANSISTOR	2SC1623	Q414	8-729-100-66 TRANSISTOR	2SC1623	Q520	8-729-901-06 TRANSISTOR	DTA144EK	Q703	8-729-202-38 TRANSISTOR	2SC3326W	Q901	8-729-901-01 TRANSISTOR	DTC144EK
8-729-901-01 TRANSISTOR	DTC144EK	Q316	8-729-100-66 TRANSISTOR	2SC1623	Q501	8-729-100-66 TRANSISTOR	2SC1623	Q521	8-729-901-06 TRANSISTOR	DTA144EK	Q704	8-729-100-66 TRANSISTOR	2SC1623	Q902	8-729-901-01 TRANSISTOR	DTC144EK
8-729-901-01 TRANSISTOR	DTC144EK	Q317	8-729-100-66 TRANSISTOR	2SC1623	Q502	8-729-100-66 TRANSISTOR	2SC1623	Q601	8-729-100-66 TRANSISTOR	2SC1623	Q705	8-729-100-66 TRANSISTOR	2SC1623	Q903	8-729-901-01 TRANSISTOR	DTC144EK
8-729-901-06 TRANSISTOR	DTA144EK	Q318	8-729-100-66 TRANSISTOR	2SC1623	Q503	8-729-901-06 TRANSISTOR	DTA144EK	Q602	8-729-901-01 TRANSISTOR	DTC144EK	Q706	8-729-100-66 TRANSISTOR	2SC1623	Q904	8-729-901-01 TRANSISTOR	DTC144EK
8-729-901-06 TRANSISTOR	DTA144EK	Q319	8-729-100-66 TRANSISTOR	2SC1623	Q504	8-729-100-66 TRANSISTOR	2SC1623	Q603	8-729-100-66 TRANSISTOR	2SC1623	Q707	8-729-100-66 TRANSISTOR	2SC1623	Q905	8-729-901-05 TRANSISTOR	DTA124EK
8-729-216-22 TRANSISTOR	2SA1162	Q320	8-729-100-66 TRANSISTOR	2SC1623	Q505	8-729-100-66 TRANSISTOR	2SC1623	Q604	8-729-100-66 TRANSISTOR	2SC1623	Q708	8-729-100-66 TRANSISTOR	2SC1623	Q906	8-729-100-66 TRANSISTOR	2SC1623
8-729-100-66 TRANSISTOR	2SC1623	Q321	8-729-100-66 TRANSISTOR	2SC1623	Q506	8-729-100-66 TRANSISTOR	2SC1623	Q605	8-729-100-66 TRANSISTOR	2SC1623	Q709	8-729-100-66 TRANSISTOR	2SC1623	Q907	8-729-100-66 TRANSISTOR	2SC1623
8-729-100-66 TRANSISTOR	2SC1623	Q401	8-729-100-66 TRANSISTOR	2SC1623	Q507	8-729-901-06 TRANSISTOR	DTA144EK	Q606	8-729-100-66 TRANSISTOR	2SC1623	Q710	8-729-100-66 TRANSISTOR	2SC1623	Q908	8-729-100-66 TRANSISTOR	2SC1623
8-729-100-66 TRANSISTOR	2SC1623	Q402	8-729-100-66 TRANSISTOR	2SC1623	Q508	8-729-100-66 TRANSISTOR	2SC1623	Q607	8-729-100-66 TRANSISTOR	2SC1623	Q711	8-729-100-66 TRANSISTOR	2SC1623	Q909	8-729-100-66 TRANSISTOR	2SC1623
8-729-100-66 TRANSISTOR	2SC1623	Q403	8-729-100-66 TRANSISTOR	2SC1623	Q509	8-729-100-66 TRANSISTOR	2SC1623	Q608	8-729-100-66 TRANSISTOR	2SC1623	Q712	8-729-100-66 TRANSISTOR	2SC1623	Q910	8-729-100-66 TRANSISTOR	2SC1623
8-729-100-66 TRANSISTOR	2SC1623	Q404	8-729-100-66 TRANSISTOR	2SC1623	Q510	8-729-100-66 TRANSISTOR	2SC1623	Q609	8-729-100-66 TRANSISTOR	2SC1623	Q713	8-729-100-66 TRANSISTOR	2SC1623	Q911	8-729-901-06 TRANSISTOR	DTA144EK
8-729-100-66 TRANSISTOR	2SC1623	Q405	8-729-100-66 TRANSISTOR	2SC1623	Q511	8-729-100-66 TRANSISTOR	2SC1623	Q610	8-729-100-66 TRANSISTOR	2SC1623	Q714	8-729-100-66 TRANSISTOR	2SC1623			
8-729-100-66 TRANSISTOR	2SC1623	Q406	8-729-100-66 TRANSISTOR	2SC1623	Q512	8-729-100-66 TRANSISTOR	2SC1623	Q611	8-729-100-66 TRANSISTOR	2SC1623	Q715	8-729-100-66 TRANSISTOR	2SC1623			
8-729-100-66 TRANSISTOR	2SC1623	Q407	8-729-100-66 TRANSISTOR	2SC1623	Q513	8-729-100-66 TRANSISTOR	2SC1623	Q612	8-729-901-06 TRANSISTOR	DTA144EK	Q716	8-729-100-66 TRANSISTOR	2SC1623			
8-729-100-66 TRANSISTOR	2SC1623	Q408	8-729-100-66 TRANSISTOR	2SC1623	Q514	8-729-100-66 TRANSISTOR	2SC1623	Q613	8-729-901-01 TRANSISTOR	DTC144EK	Q717	8-729-100-66 TRANSISTOR	2SC1623			



- JB-5 BOARD

- < DIODE >
- D301 8-719-800-76 DIODE 1SS226
- < TRANSISTOR >
- Q301 8-729-216-22 TRANSISTOR 2SA1162

IF-39 (Y/C SIGNAL SELECT, SHARPNESS, NOISE CANCEL, YX FILTER Y/C SIGNAL OUT, AUDIO SIGNAL SELECT POWER SUPPLY DISTRIBUTE), TR-40 (S VIDEO IN/OUT), JB-4 (LINE IN/OUT), JB-5 (MONITOR OUT) PRINTED WIRING BOARDS

— Ref. No. IF-39 BOARD: 7000 series, TR-40 BOARD: 3000 series, JB-4 BOARD: 3000 series, JB-5 BOARD: 3000 series —

IF-39 BOARD, COMPLETE

< DIODE >

D001	8-719-104-34	DIODE	1S2836
D002	8-719-104-34	DIODE	1S2836
D003	8-719-104-34	DIODE	1S2836
D004	8-719-104-34	DIODE	1S2836
D010	8-719-800-76	DIODE	1SS226
D051	8-719-104-34	DIODE	1S2836
D052	8-719-104-34	DIODE	1S2836
D053	8-719-104-34	DIODE	1S2836
D054	8-719-104-34	DIODE	1S2836
D060	8-719-800-76	DIODE	1SS226

D165	8-719-400-18	DIODE	MA152WX
D166	8-719-400-18	DIODE	MA152WK
D167	8-719-800-76	DIODE	1SS226
D168	8-719-800-76	DIODE	1SS226
D169	8-719-800-76	DIODE	1SS226
D170	8-719-800-76	DIODE	1SS226
D171	8-719-104-34	DIODE	1S2836
D301	8-719-400-18	DIODE	MA152WK
D901	8-719-400-18	DIODE	MA152WK
D902	8-719-400-18	DIODE	MA152WK
D903	8-719-104-34	DIODE	1S2836
D904	8-719-400-18	DIODE	MA152WK

< IC >

IC001	8-759-981-92	IC	RC4558M
IC003	8-759-981-92	IC	RC4558M
IC004	8-759-981-92	IC	RC4558M
IC005	8-759-932-64	IC	BU4052BF
IC006	8-759-981-92	IC	RC4558M
IC051	8-759-981-92	IC	RC4558M
IC054	8-759-981-92	IC	RC4558M
IC055	8-759-932-64	IC	BU4052BF
IC056	8-759-981-92	IC	RC4558M
IC165	8-759-200-67	IC	TC4001BF

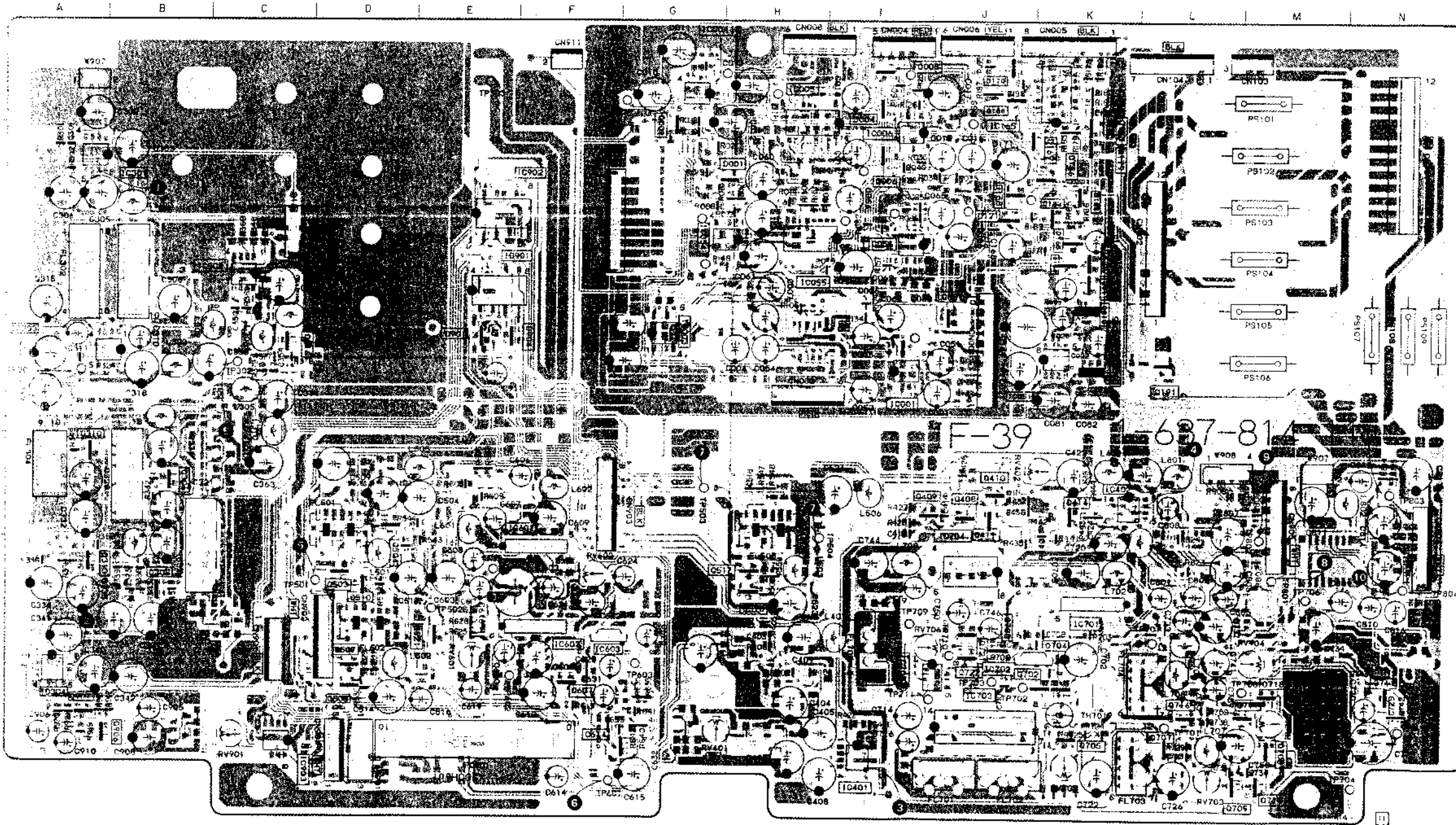
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IC303	8-759-711-32	IC	NJM2245M
IC304	8-759-710-86	IC	NJM2238M
IC401	8-759-710-07	IC	NJM2234M
IC402	8-759-710-07	IC	NJM2234M
IC601	8-759-200-60	IC	TA7060AP
IC602	8-759-200-60	IC	TA7060AP
IC603	8-759-400-06	IC	AN608P
IC701	8-759-200-60	IC	TA7060AP
IC702	8-759-402-33	IC	AN607P
IC703	8-752-201-30	IC	CX22013

IC704	8-759-969-13	IC	SN16913P
IC705	8-759-101-12	IC	uPC31102
IC801	8-752-009-51	IC	CX20095A
IC802	8-752-009-51	IC	CX20095A
IC901	8-759-009-10	IC	MC14069UBF
IC901	8-759-009-10	IC	MC14069UBF
IC902	8-759-009-10	IC	MC14069UBF
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IC903	8-759-100-93	IC	uPC39302

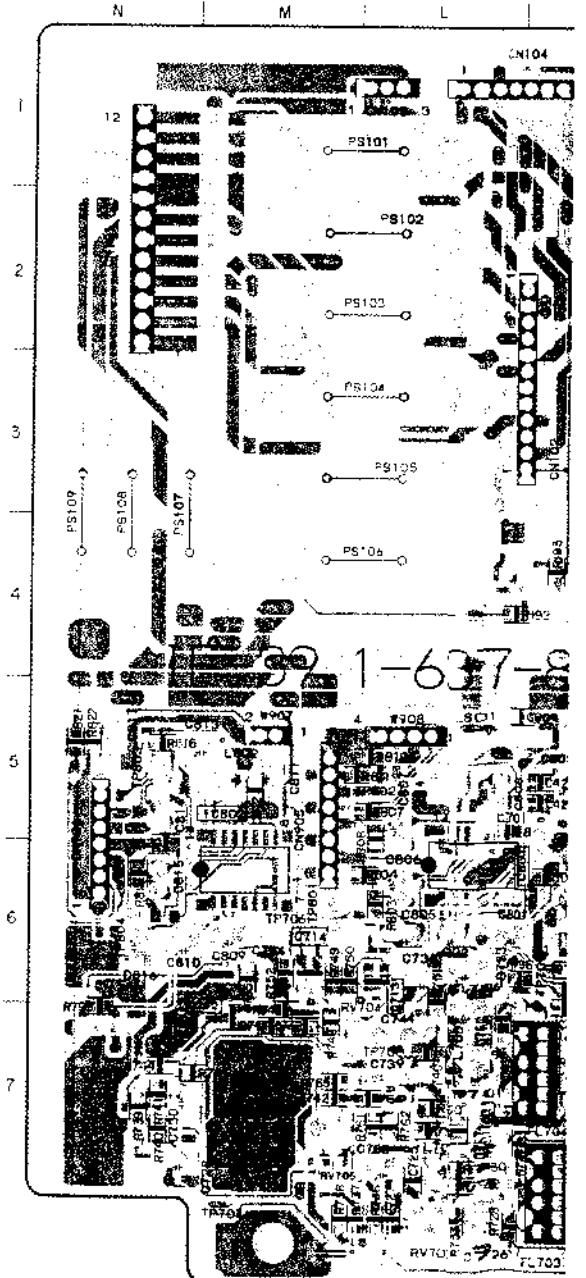
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Q003	8-729-202-38	TRANSISTOR	2SC3326N	Q053	8-729-202-38	TRANSISTOR	2SC3326N
Q004	8-729-202-38	TRANSISTOR	2SC3326N	Q054	8-729-202-38	TRANSISTOR	2SC3326N
Q005	8-729-202-38	TRANSISTOR	2SC3326N	Q055	8-729-202-38	TRANSISTOR	2SC3326N
Q006	8-729-202-38	TRANSISTOR	2SC3326N	Q056	8-729-202-38	TRANSISTOR	2SC3326N
Q007	8-729-202-38	TRANSISTOR	2SC3326N	Q057	8-729-202-38	TRANSISTOR	2SC3326N
Q008	8-729-202-38	TRANSISTOR	2SC3326N	Q060	8-729-101-07	TRANSISTOR	2SB798-DE
Q010	8-729-140-75	TRANSISTOR	2SD999	Q061	8-729-901-01	TRANSISTOR	DTA144EK
Q011	8-729-901-06	TRANSISTOR	DTA144EK	Q165	8-729-501-06	TRANSISTOR	DTA144EK

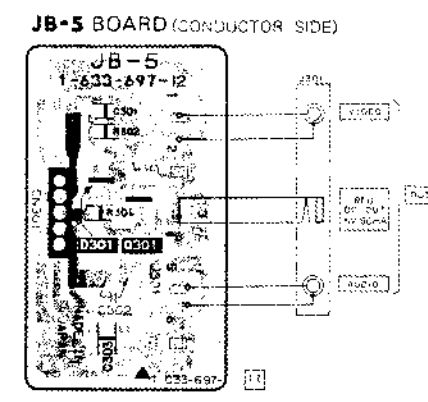
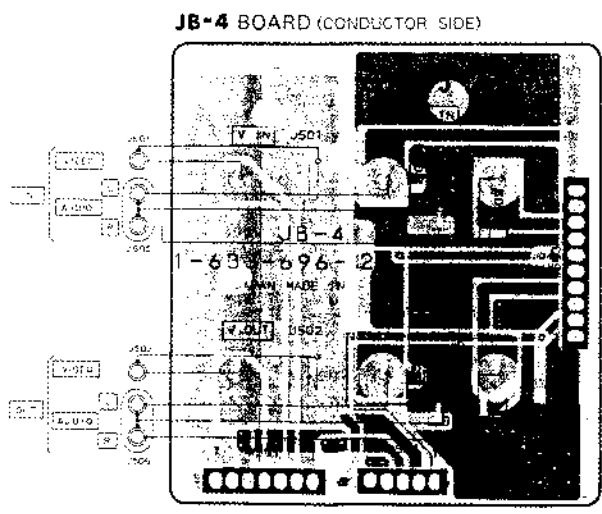
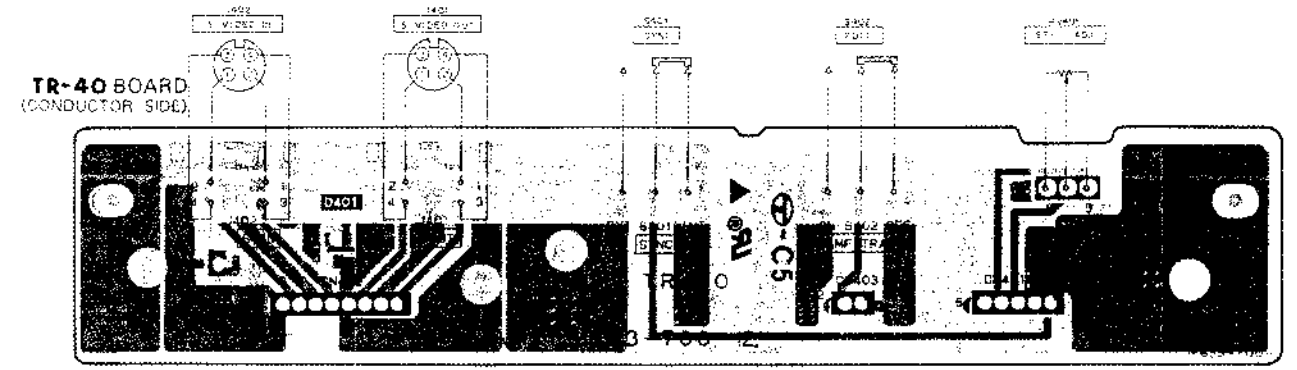
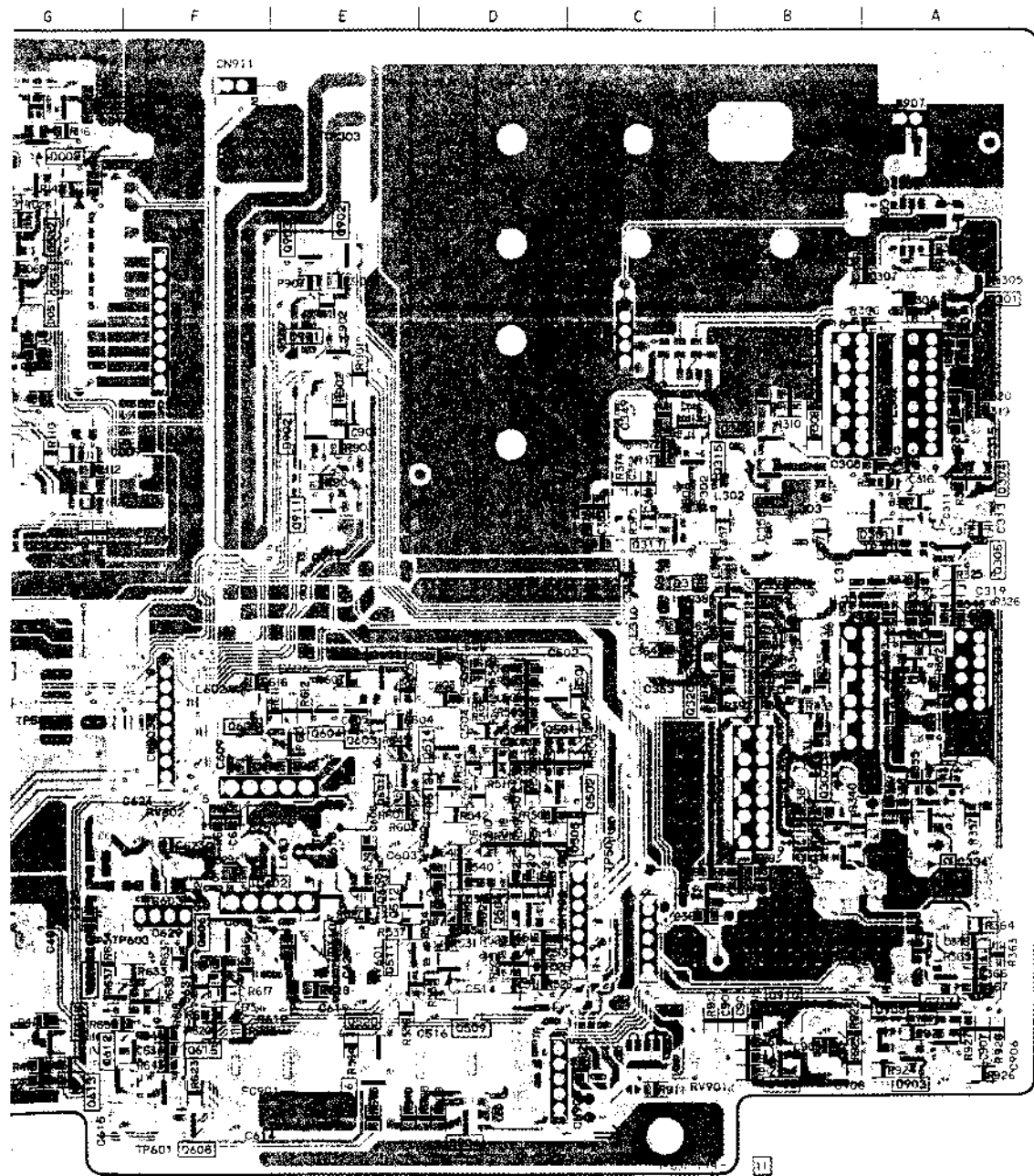
IF-39 BOARD (COMPONENT SIDE)



IF-39 BOARD (CONDUCTOR SIDE)



901-06 TRANSISTOR	DTA144EK	Q310	8-729-100-66 TRANSISTOR	2SC1623	Q409	8-729-100-66 TRANSISTOR	2SC1623	Q515	8-729-100-66 TRANSISTOR	2SC1623	Q614	8-729-901-01 TRANSISTOR	DTC144EK	Q718	8-729-100-66 TRANSISTOR	2SC1623
901-06 TRANSISTOR	DTA144EK	Q311	8-729-100-66 TRANSISTOR	2SC1623	Q410	8-729-100-66 TRANSISTOR	2SC1623	Q516	8-729-100-66 TRANSISTOR	2SC1623	Q615	8-729-901-06 TRANSISTOR	DTA144EK	Q719	8-729-100-66 TRANSISTOR	2SC1623
901-01 TRANSISTOR	DTC144EK	Q312	8-729-100-66 TRANSISTOR	2SC1623	Q411	8-729-100-66 TRANSISTOR	2SC1623	Q517	8-729-901-06 TRANSISTOR	DTA144EK	Q616	8-729-901-06 TRANSISTOR	DTA144EK	Q720	8-729-100-66 TRANSISTOR	2SC1623
901-06 TRANSISTOR	DTA144EK	Q313	8-729-100-66 TRANSISTOR	2SC1623	Q412	8-729-100-66 TRANSISTOR	2SC1623	Q518	8-729-100-66 TRANSISTOR	2SC1623	Q617	8-729-100-66 TRANSISTOR	2SC1623	Q721	8-729-320-17 TRANSISTOR	2SA1122-CO
901-01 TRANSISTOR	DTC144EK	Q314	8-729-100-66 TRANSISTOR	2SC1623	Q413	8-729-100-66 TRANSISTOR	2SC1623	Q519	8-729-100-66 TRANSISTOR	2SC1623	Q702	8-729-100-66 TRANSISTOR	2SC1623	Q722	8-729-100-66 TRANSISTOR	2SC1623
901-01 TRANSISTOR	DTC144EK															
216-22 TRANSISTOR	2SA1162	Q315	8-729-100-66 TRANSISTOR	2SC1623	Q414	8-729-100-66 TRANSISTOR	2SC1623	Q520	8-729-901-06 TRANSISTOR	DTA144EK	Q703	8-729-202-38 TRANSISTOR	2SC3326N	Q901	8-729-901-01 TRANSISTOR	DTC144EK
901-06 TRANSISTOR	DTC144EK	Q316	8-729-100-66 TRANSISTOR	2SC1623	Q501	8-729-100-66 TRANSISTOR	2SC1623	Q521	8-729-901-06 TRANSISTOR	DTA144EK	Q704	8-729-100-66 TRANSISTOR	2SC1623	Q902	8-729-901-01 TRANSISTOR	DTC144EK
901-01 TRANSISTOR	DTC144EK	Q317	8-729-100-66 TRANSISTOR	2SC1623	Q502	8-729-100-66 TRANSISTOR	2SC1623	Q601	8-729-100-66 TRANSISTOR	2SC1623	Q705	8-729-100-66 TRANSISTOR	2SC1623	Q903	8-729-901-01 TRANSISTOR	DTC144EK
901-01 TRANSISTOR	DTC144EK	Q318	8-729-100-66 TRANSISTOR	2SC1623	Q503	8-729-901-06 TRANSISTOR	DTA144EK	Q602	8-729-901-01 TRANSISTOR	DTC144EK	Q706	8-729-100-66 TRANSISTOR	2SC1623	Q904	8-729-901-01 TRANSISTOR	DTC144EK
901-06 TRANSISTOR	DTA144EK	Q319	8-729-100-66 TRANSISTOR	2SC1623	Q504	8-729-100-66 TRANSISTOR	2SC1623	Q603	8-729-100-66 TRANSISTOR	2SC1623	Q707	8-729-100-66 TRANSISTOR	2SC1623	Q905	8-729-901-05 TRANSISTOR	DTA124EK
301-06 TRANSISTOR	DTA144EK															
216-22 TRANSISTOR	2SA1162	Q320	8-729-100-66 TRANSISTOR	2SC1623	Q505	8-729-100-66 TRANSISTOR	2SC1623	Q604	8-729-100-66 TRANSISTOR	2SC1623	Q708	8-729-100-66 TRANSISTOR	2SC1623	Q906	8-729-100-66 TRANSISTOR	2SC1623
100-66 TRANSISTOR	2SC1623	Q321	8-729-100-66 TRANSISTOR	2SC1623	Q506	8-729-100-66 TRANSISTOR	2SC1623	Q605	8-729-100-66 TRANSISTOR	2SC1623	Q709	8-729-100-66 TRANSISTOR	2SC1623	Q907	8-729-100-66 TRANSISTOR	2SC1623
100-66 TRANSISTOR	2SC1623	Q401	8-729-100-66 TRANSISTOR	2SC1623	Q507	8-729-901-06 TRANSISTOR	DTA144EK	Q606	8-729-100-66 TRANSISTOR	2SC1623	Q710	8-729-100-66 TRANSISTOR	2SC1623	Q908	8-729-100-66 TRANSISTOR	2SC1623
100-66 TRANSISTOR	2SC1623	Q402	8-729-100-66 TRANSISTOR	2SC1623	Q508	8-729-100-66 TRANSISTOR	2SC1623	Q607	8-729-100-66 TRANSISTOR	2SC1623	Q711	8-729-100-66 TRANSISTOR	2SC1623	Q909	8-729-100-66 TRANSISTOR	2SC1623
100-66 TRANSISTOR	2SC1623	Q403	8-729-100-66 TRANSISTOR	2SC1623	Q509	8-729-100-66 TRANSISTOR	2SC1623	Q608	8-729-100-66 TRANSISTOR	2SC1623	Q712	8-729-100-66 TRANSISTOR	2SC1623	Q910	8-729-100-66 TRANSISTOR	2SC1623
100-66 TRANSISTOR	2SC1623															
100-66 TRANSISTOR	2SC1623	Q404	8-729-100-66 TRANSISTOR	2SC1623	Q510	8-729-100-66 TRANSISTOR	2SC1623	Q609	8-729-100-66 TRANSISTOR	2SC1623	Q713	8-729-100-66 TRANSISTOR	2SC1623	Q911	8-729-901-06 TRANSISTOR	DTA144EK
100-66 TRANSISTOR	2SC1623	Q405	8-729-100-66 TRANSISTOR	2SC1623	Q511	8-729-100-66 TRANSISTOR	2SC1623	Q610	8-729-100-66 TRANSISTOR	2SC1623	Q714	8-729-100-66 TRANSISTOR	2SC1623			
100-66 TRANSISTOR	2SC1623	Q406	8-729-100-66 TRANSISTOR	2SC1623	Q512	8-729-100-66 TRANSISTOR	2SC1623	Q611	8-729-100-66 TRANSISTOR	2SC1623	Q715	8-729-100-66 TRANSISTOR	2SC1623			
100-66 TRANSISTOR	2SC1623	Q407	8-729-100-66 TRANSISTOR	2SC1623	Q513	8-729-100-66 TRANSISTOR	2SC1623	Q612	8-729-901-06 TRANSISTOR	DTA144EK	Q716	8-729-100-66 TRANSISTOR	2SC1623			
100-66 TRANSISTOR	2SC1623	Q408	8-729-100-66 TRANSISTOR	2SC1623	Q514	8-729-100-66 TRANSISTOR	2SC1623	Q613	8-729-901-01 TRANSISTOR	DTC144EK	Q717	8-729-100-66 TRANSISTOR	2SC1623			
100-66 TRANSISTOR	2SC1623															



JB-5 BOARD

	< DIODE >
D301	8-719-800-76 DIODE 1SS226
	< TRANSISTOR >
Q301	8-729-216-22 TRANSISTOR 2SA1162

IF-39 (YX FILTER Y/C SIGNAL OUT), TR-40 (S VIDEO IN/OUT), JB-4 (LINE IN/OUT), JB-5 (MONITOR OUT) SCHEMATIC DIAGRAMS

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

— Ref. No. IF-39 BOARD: 7000 series, TR-40 BOARD: 3000 series, JB-4 BOARD: 3000 series, JB-5 BOARD: 3000 series —

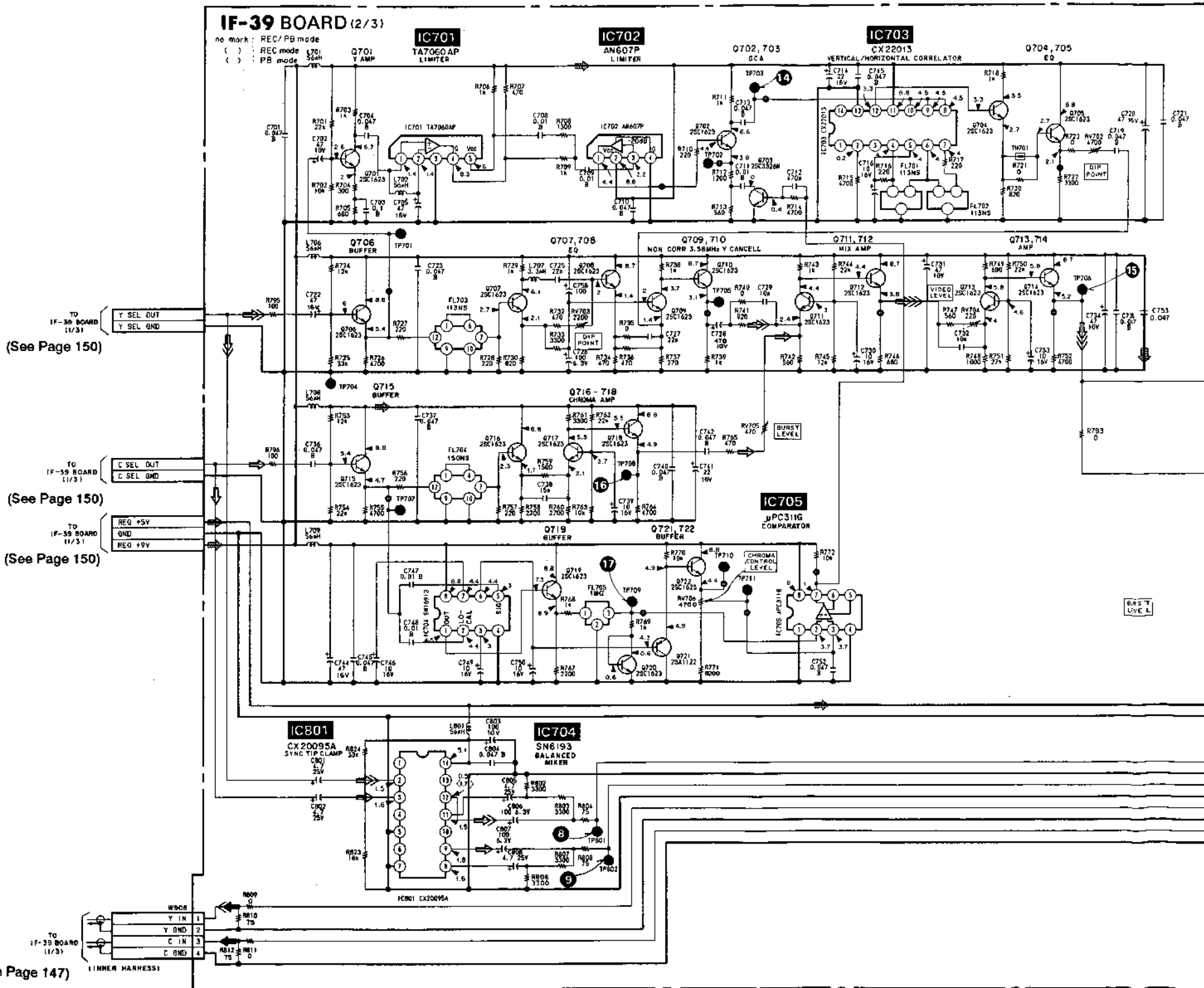
IF-39 BOARD
(CONDUCTOR
SIDE)

- D002 G-2
- D003 G-1
- D010 K-3
- D051 G-2
- D052 I-2
- D053 H-2
- D054 I-2
- D167 K-1
- D301 A-4
- D901 E-3
- D902 E-3
- D903 A-7
- IC801 L-6
- IC802 M-6
- Q002 G-1
- Q003 G-1
- Q004 H-2
- Q005 H-2
- Q007 I-2
- Q051 G-2
- Q052 G-2
- Q053 G-3
- Q054 H-3
- Q055 H-2
- Q056 I-3
- Q061 K-3
- Q165 K-2
- Q167 J-3
- Q168 K-3
- Q169 J-3
- Q170 K-1
- Q171 K-1
- Q172 J-1
- Q174 K-1
- Q175 J-1
- Q177 J-1
- Q178 J-1
- Q181 J-1
- Q183 K-2
- Q186 K-2
- Q301 A-2
- Q302 B-3
- Q303 B-3
- Q304 A-4
- Q305 A-4
- Q307 B-6
- Q308 B-6
- Q311 A-6
- Q312 A-6
- Q314 A-7
- Q315 C-3
- Q317 C-4
- Q318 B-4
- Q319 B-5
- Q320 B-5
- Q321 B-6
- Q401 G-6
- Q402 H-6
- Q403 H-7
- Q404 H-7
- Q405 G-7
- Q406 H-7
- Q407 H-7
- Q412 J-5
- Q413 K-5
- Q501 D-5
- Q502 D-6
- Q505 D-7
- Q506 D-7
- Q509 D-7
- Q511 D-7
- Q512 E-6
- Q513 D-6
- Q514 D-5
- Q515 H-5
- Q516 H-6
- Q519 H-8
- Q520 E-7
- Q601 E-6
- Q602 E-5
- Q603 E-5
- Q604 E-5
- Q605 E-5
- Q606 E-6
- Q608 F-7
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- Q612 F-7
- Q613 G-7
- Q615 F-7
- Q616 E-7

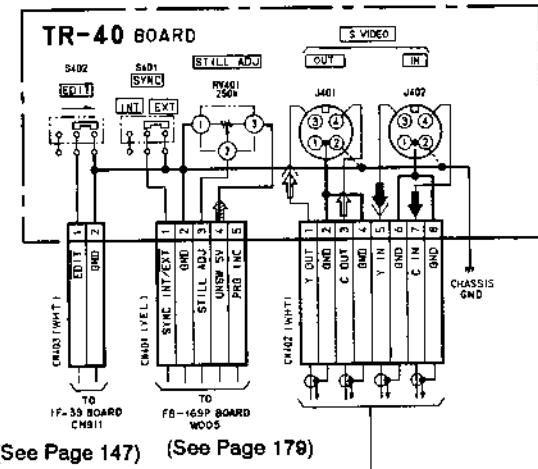
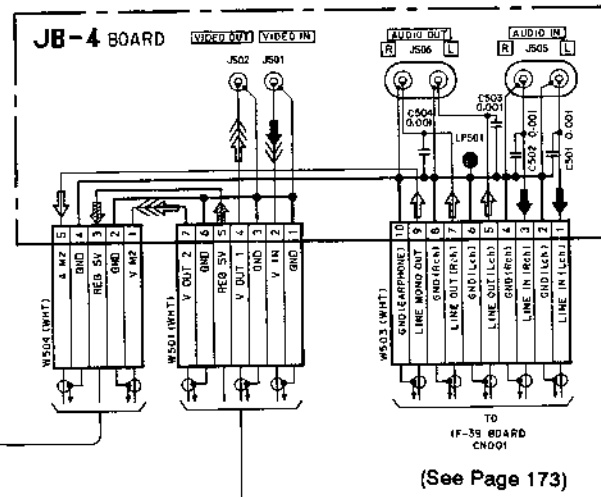
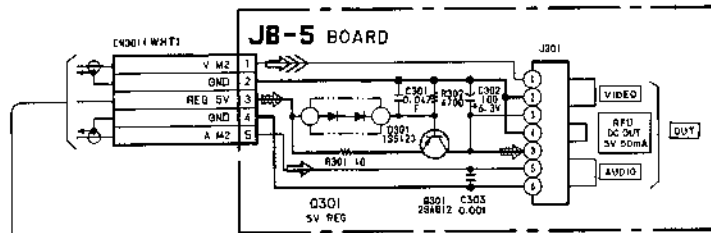
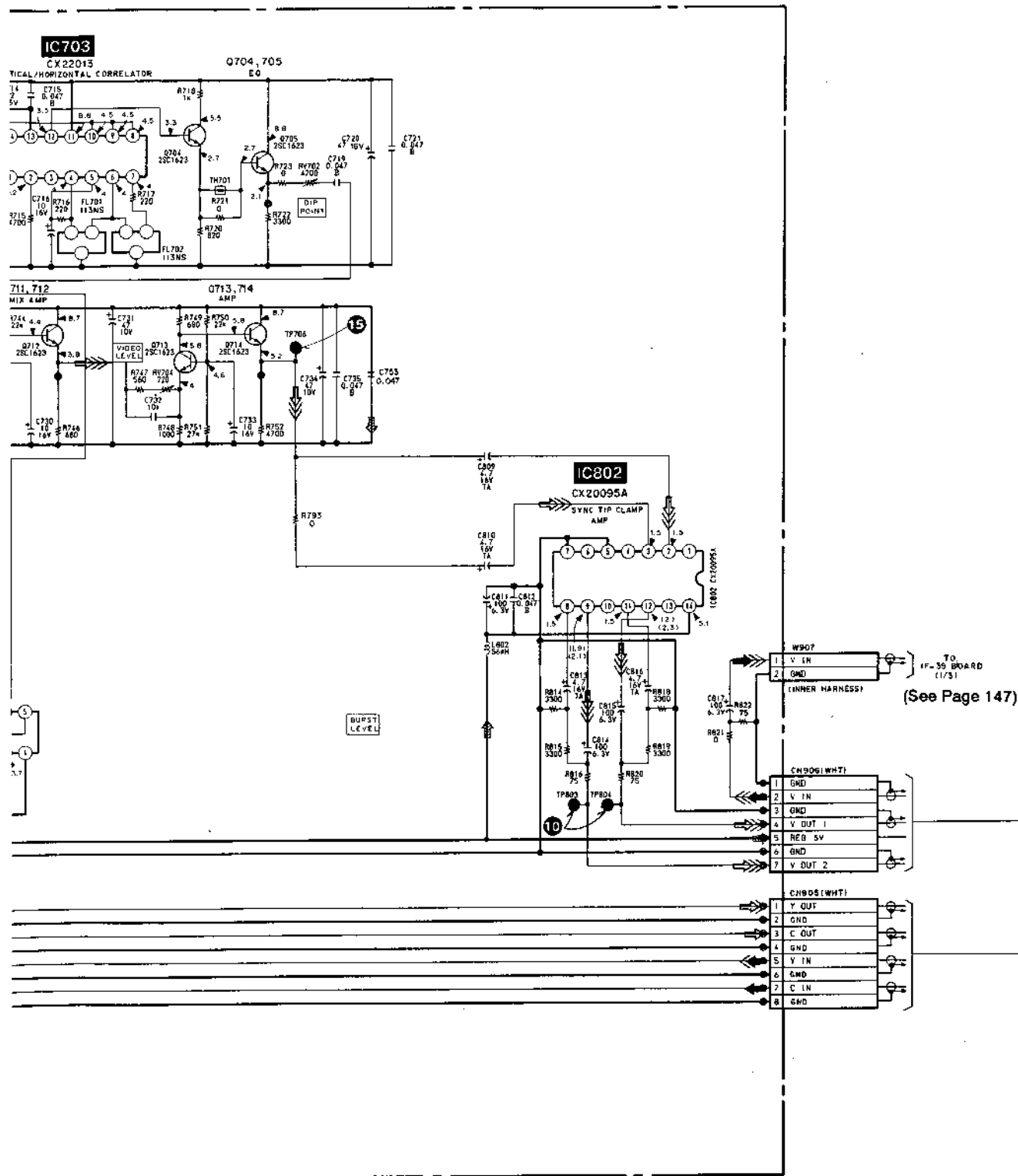
IF-39 BOARD
(COMPONENT
SIDE)

- Q701 K-6
- Q708 K-7
- Q712 M-7
- Q713 L-6
- Q714 M-6
- Q715 K-7
- Q719 I-6
- Q720 I-7
- Q902 E-2
- Q903 E-2
- Q904 D-7
- Q905 B-7
- Q908 A-7
- Q909 A-7
- Q910 B-7
- Q911 E-4
- IC001 I-4
- IC002 H-4
- IC003 G-3
- IC004 G-1
- IC005 H-1
- IC006 I-2
- IC051 K-4
- IC054 H-3
- IC055 H-3
- IC056 I-3
- IC155 K-1
- IC301 A-2
- IC302 C-3
- IC303 A-4
- IC304 A-7
- IC401 I-7
- IC402 K-5
- IC601 F-6
- IC602 F-6
- IC603 F-7
- IC701 K-6
- IC702 J-7
- IC703 J-7
- IC704 J-6
- IC705 J-7
- IC901 E-3
- IC902 E-2
- IC903 C-7
- Q001 G-2
- Q006 I-2
- Q008 I-1
- Q010 K-3
- Q011 K-3
- Q057 J-3
- Q060 K-4
- Q166 K-3
- Q176 K-1
- Q179 K-2
- Q180 K-2
- Q182 K-2
- Q184 K-2
- Q188 J-1
- Q191 L-4
- Q306 B-5
- Q309 B-6
- Q310 A-5
- Q313 A-6
- Q316 C-4
- Q408 J-5
- Q409 J-5
- Q410 J-5
- Q411 J-5
- Q414 K-5
- Q503 D-6
- Q504 D-5
- Q507 D-7
- Q508 D-7
- Q510 D-6
- Q517 H-6
- Q518 H-6
- Q521 E-6
- Q607 F-7
- Q702 K-7
- Q703 J-6
- Q704 K-7
- Q705 K-7
- Q707 L-7
- Q708 M-7
- Q709 L-7
- Q710 M-7
- Q711 N-7
- Q716 L-7
- Q717 M-7
- Q718 M-7
- Q721 J-7
- Q722 J-7
- Q901 E-4
- Q906 A-7
- Q907 A-7

A
B
C
D
E
F
G
H
I
J

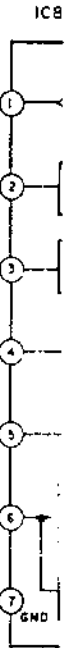
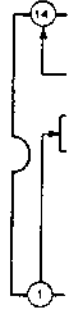


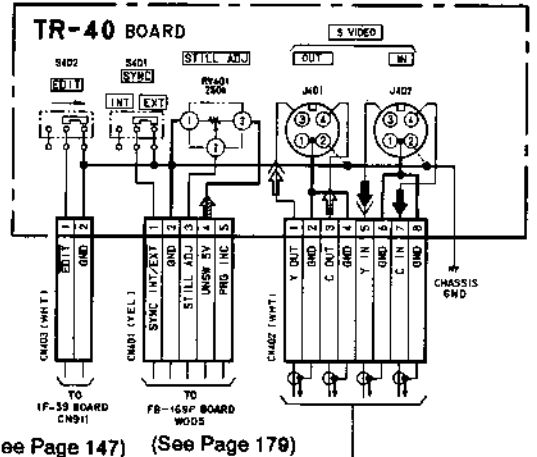
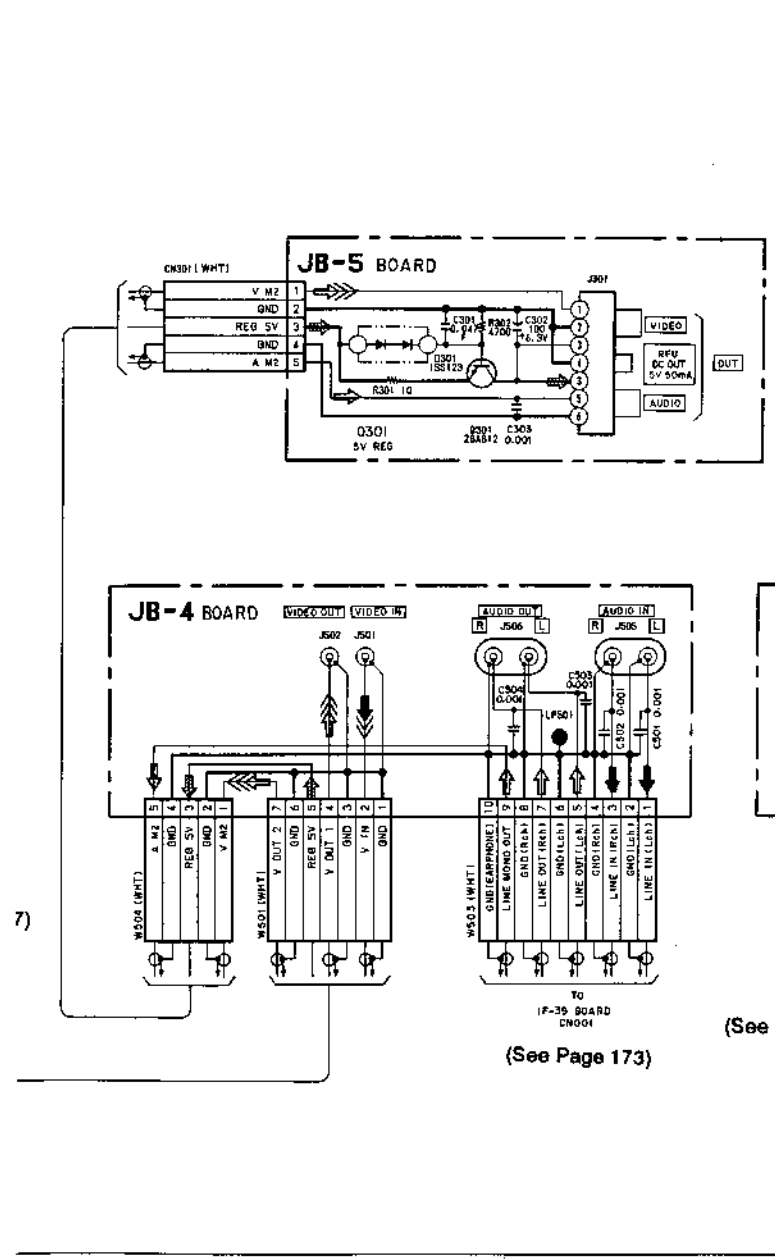
(See Page 147)



• SIGNAL PATH

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



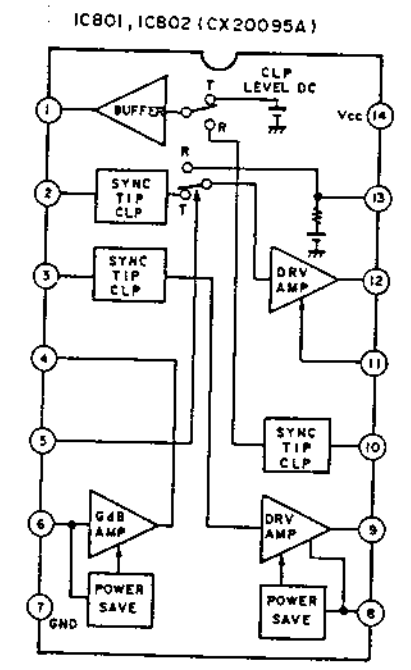
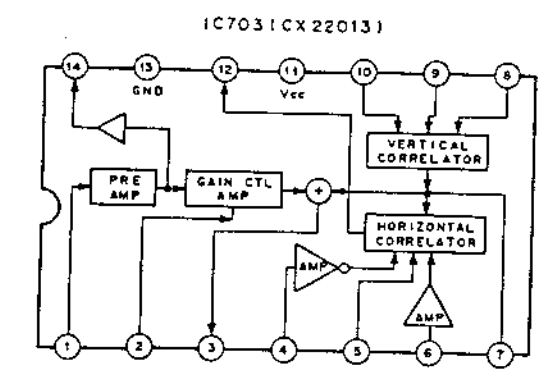


(See Page 173)

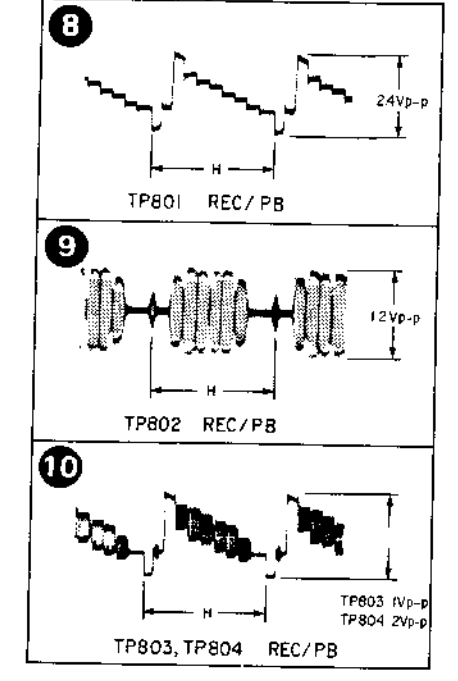
(See Page 147) (See Page 179)

• SIGNAL PATH

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



IF-39 BOARD (2/3)



IF-39 (Y/C SIGNAL SELECT, SHARPNESS, NOISE CANCEL, YX FILTER Y/C SIGNAL OUT, AUDIO SIGNAL SELECT POWER SUPPLY DISTRIBUTE), TR-40 (S VIDEO IN/OUT), JB-4 (LINE IN/OUT), JB-5 (MONITOR OUT) PRINTED WIRING BOARDS

— Ref. No. IF-39 BOARD: 7000 series, TR-40 BOARD: 3000 series, JB-4 BOARD: 3000 series, JB-5 BOARD: 3000 series —

IF-39 BOARD, COMPLETE

< DIODE >		
D001	8-719-104-34	DIODE 1S2836
D002	8-719-104-34	DIODE 1S2836
D003	8-719-104-34	DIODE 1S2836
D004	8-719-104-34	DIODE 1S2836
D010	8-719-800-76	DIODE 1S2226
D051	8-719-104-34	DIODE 1S2836
D052	8-719-104-34	DIODE 1S2836
D053	8-719-104-34	DIODE 1S2836
D054	8-719-104-34	DIODE 1S2836
D060	8-719-800-76	DIODE 1S2226

D165	8-719-400-18	DIODE MA152WK
D166	8-719-400-18	DIODE MA152WK
D167	8-719-800-76	DIODE 1S2226
D168	8-719-800-76	DIODE 1S2226
D169	8-719-800-76	DIODE 1S2226
D170	8-719-800-76	DIODE 1S2226
D171	8-719-104-34	DIODE 1S2836
D301	8-719-400-18	DIODE MA152WK
D901	8-719-400-18	DIODE MA152WK
D902	8-719-400-18	DIODE MA152WK
D903	8-719-104-34	DIODE 1S2836
D904	8-719-400-18	DIODE MA152WK

< IC >

IC001	8-759-981-92	IC RC4558M
IC003	8-759-981-92	IC RC4558M
IC004	8-759-981-92	IC RC4558M
IC005	8-759-932-64	IC BU40528F
IC006	8-759-981-92	IC RC4558M
IC051	8-759-981-92	IC RC4558M
IC054	8-759-981-92	IC RC4558M
IC055	8-759-932-64	IC BU40528F
IC056	8-759-981-92	IC RC4558M
IC165	8-759-200-67	IC TC4001BF

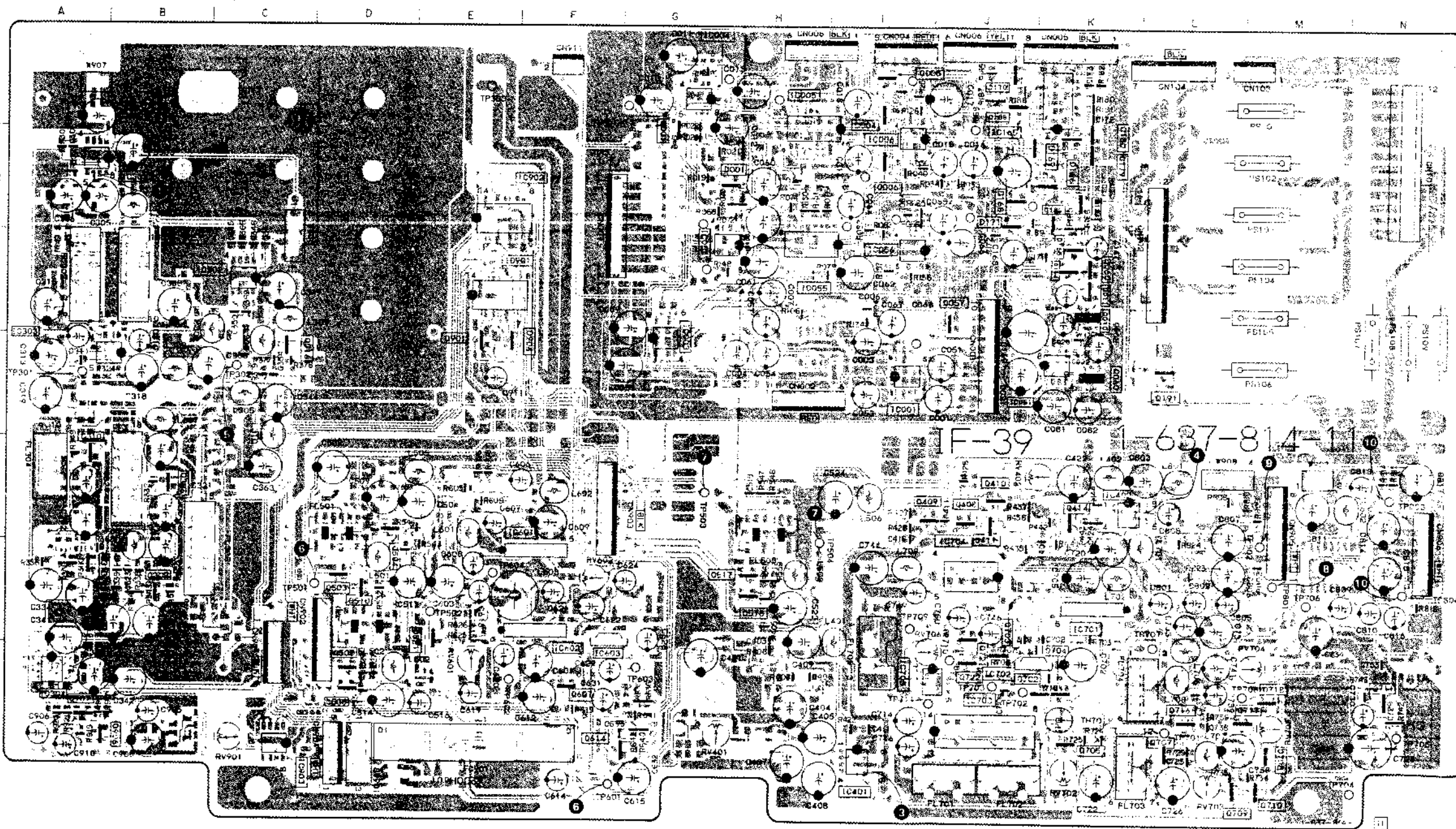
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IC302	8-759-711-32	IC NJM2245M
IC303	8-759-711-32	IC NJM2245M
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IC401	8-759-710-07	IC NJM2234M
IC402	8-759-710-07	IC NJM2234M
IC601	8-759-200-60	IC TA7060AP
IC602	8-759-200-60	IC TA7060AP
IC603	8-759-400-06	IC AN608P
IC701	8-759-200-60	IC TA7060AP
IC702	8-759-402-33	IC AN607P
IC703	8-752-201-30	IC CX22013

IC704	8-759-969-13	IC SN16913P
IC705	8-759-101-12	IC uPC31102
IC801	8-752-009-51	IC CX20095A
IC802	8-752-009-51	IC CX20095A
IC901	8-759-009-10	IC MC14069UBF
IC902	8-759-009-10	IC MC14069UBF
IC902	8-759-009-10	IC MC14069UBF
IC903	8-759-100-93	IC uPC39302

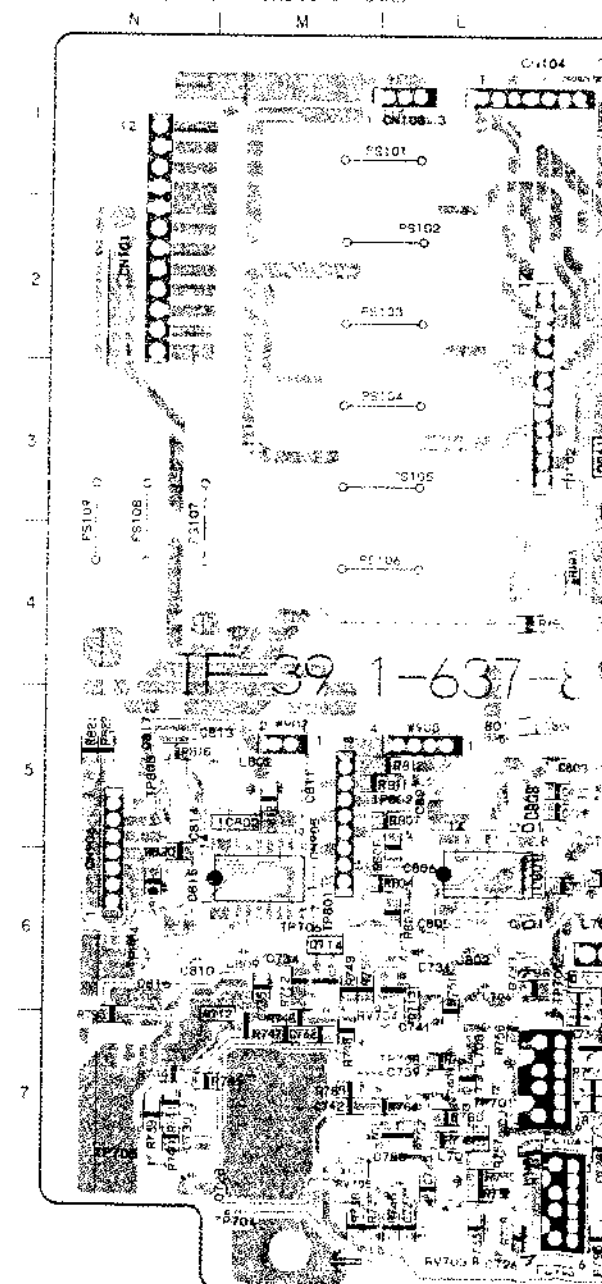
< TRANSISTOR >

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
Q006	8-729-202-38	TRANSISTOR 2SC3326N
Q007	8-729-202-38	TRANSISTOR 2SC3326N
Q008	8-729-202-38	TRANSISTOR 2SC3326N
Q010	8-729-140-75	TRANSISTOR 2SD959
Q011	8-729-901-06	TRANSISTOR DTA144EK
Q051	8-729-202-38	TRANSISTOR 2SC3326N
Q052	8-729-202-38	TRANSISTOR 2SC3326N
Q053	8-729-202-38	TRANSISTOR 2SC3326N
Q054	8-729-202-38	TRANSISTOR 2SC3326N
Q055	8-729-202-38	TRANSISTOR 2SC3326N
Q056	8-729-202-38	TRANSISTOR 2SC3326N
Q057	8-729-202-38	TRANSISTOR 2SC3326N
Q060	8-729-101-07	TRANSISTOR 2SB798-DL
Q061	8-729-901-01	TRANSISTOR DFC144EK
Q165	8-729-901-06	TRANSISTOR DTA144EX

IF-39 BOARD (COMPONENT SIDE)



IF-39 BOARD (CONDUCTOR SIDE)

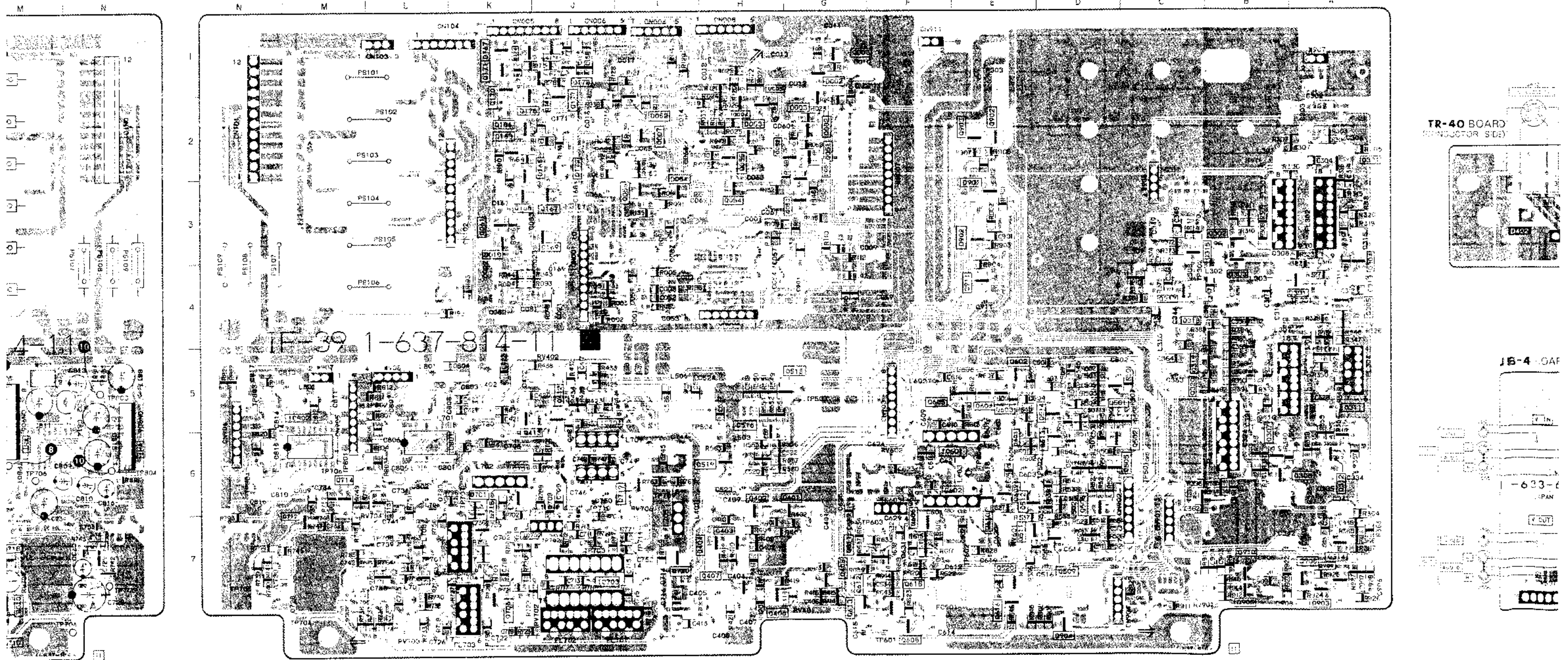


V/OUT), JB-4 (LINE IN/OUT), JB-5 (MONITOR OUT) PRINTED WIRING BOARDS

< TRANSISTOR >

Q001	8-729-202-38	TRANSISTOR	2SC3326N	Q051	8-729-202-38	TRANSISTOR	2SC3326N	Q166	8-729-901-01	TRANSISTOR	DTC144EK	Q182	8-729-216-22	TRANSISTOR	2SA1162	Q315	8-729-100-66	TRANSISTOR	2SC1623	Q414	8-729-100-66	TRANSISTOR	2SC1623	Q520	8-729-901-
Q002	8-729-202-38	TRANSISTOR	2SC3326N	Q052	8-729-202-38	TRANSISTOR	2SC3326N	Q167	8-729-106-66	TRANSISTOR	2SC1623	Q183	8-729-901-01	TRANSISTOR	DTC144EK	Q316	8-729-100-66	TRANSISTOR	2SC1623	Q501	8-729-100-66	TRANSISTOR	2SC1623	Q521	8-729-901-
Q003	8-729-202-38	TRANSISTOR	2SC3326N	Q053	8-729-202-38	TRANSISTOR	2SC3326N	Q168	8-729-901-06	TRANSISTOR	DTA144EK	Q184	8-729-901-01	TRANSISTOR	DTC144EK	Q317	8-729-100-66	TRANSISTOR	2SC1623	Q502	8-729-100-66	TRANSISTOR	2SC1623	Q601	8-729-100-
Q004	8-729-202-38	TRANSISTOR	2SC3326N	Q054	8-729-202-38	TRANSISTOR	2SC3326N	Q169	8-729-901-06	TRANSISTOR	DTA144EK	Q185	8-729-901-06	TRANSISTOR	DTA144EK	Q318	8-729-100-66	TRANSISTOR	2SC1623	Q503	8-729-901-06	TRANSISTOR	DTA144EK	Q602	8-729-901-
Q005	8-729-202-38	TRANSISTOR	2SC3326N	Q055	8-729-202-38	TRANSISTOR	2SC3326N	Q170	8-729-901-06	TRANSISTOR	DTA144EK	Q188	8-729-901-06	TRANSISTOR	DTA144EK	Q319	8-729-100-66	TRANSISTOR	2SC1623	Q504	8-729-100-66	TRANSISTOR	2SC1623	Q603	8-729-100-
Q006	8-729-202-38	TRANSISTOR	2SC3326N	Q056	8-729-202-38	TRANSISTOR	2SC3326N	Q171	8-729-901-06	TRANSISTOR	DTA144EK	Q191	8-729-216-22	TRANSISTOR	2SA1162	Q321	8-729-100-66	TRANSISTOR	2SC1623	Q506	8-729-100-66	TRANSISTOR	2SC1623	Q605	8-729-100-
Q007	8-729-202-38	TRANSISTOR	2SC3326N	Q057	8-729-202-38	TRANSISTOR	2SC3326N	Q172	8-729-100-66	TRANSISTOR	2SC1623	Q301	8-729-100-66	TRANSISTOR	2SC1623	Q401	8-729-100-66	TRANSISTOR	2SC1623	Q507	8-729-901-06	TRANSISTOR	DTA144EK	Q606	8-729-100-
Q008	8-729-202-38	TRANSISTOR	2SC3326N	Q060	8-729-101-07	TRANSISTOR	2SB798-DL	Q174	8-729-901-06	TRANSISTOR	DTA144EK	Q302	8-729-100-66	TRANSISTOR	2SC1623	Q402	8-729-100-66	TRANSISTOR	2SC1623	Q508	8-729-100-66	TRANSISTOR	2SC1623	Q607	8-729-100-
Q010	8-729-140-75	TRANSISTOR	2SD999	Q051	8-729-901-01	TRANSISTOR	DTC144EK	Q175	8-729-901-06	TRANSISTOR	DTA144EK	Q303	8-729-100-66	TRANSISTOR	2SC1623	Q403	8-729-100-66	TRANSISTOR	2SC1623	Q509	8-729-100-66	TRANSISTOR	2SC1623	Q608	8-729-100-
Q011	8-729-901-06	TRANSISTOR	DTA144EK	Q165	8-729-901-06	TRANSISTOR	DTA144EK					Q304	8-729-100-66	TRANSISTOR	2SC1623										
												Q305	8-729-100-66	TRANSISTOR	2SC1623	Q404	8-729-100-66	TRANSISTOR	2SC1623	Q510	8-729-100-66	TRANSISTOR	2SC1623	Q609	8-729-100-
												Q306	8-729-100-66	TRANSISTOR	2SC1623	Q405	8-729-100-66	TRANSISTOR	2SC1623	Q511	8-729-100-66	TRANSISTOR	2SC1623	Q610	8-729-100-
												Q307	8-729-100-66	TRANSISTOR	2SC1623	Q406	8-729-100-66	TRANSISTOR	2SC1623	Q512	8-729-100-66	TRANSISTOR	2SC1623	Q611	8-729-100-
												Q308	8-729-100-66	TRANSISTOR	2SC1623	Q407	8-729-100-66	TRANSISTOR	2SC1623	Q513	8-729-100-66	TRANSISTOR	2SC1623	Q612	8-729-901-
												Q309	8-729-100-66	TRANSISTOR	2SC1623	Q408	8-729-100-66	TRANSISTOR	2SC1623	Q514	8-729-100-66	TRANSISTOR	2SC1623	Q613	8-729-901-

IF-39 BOARD (CONDUCTOR SIDE)

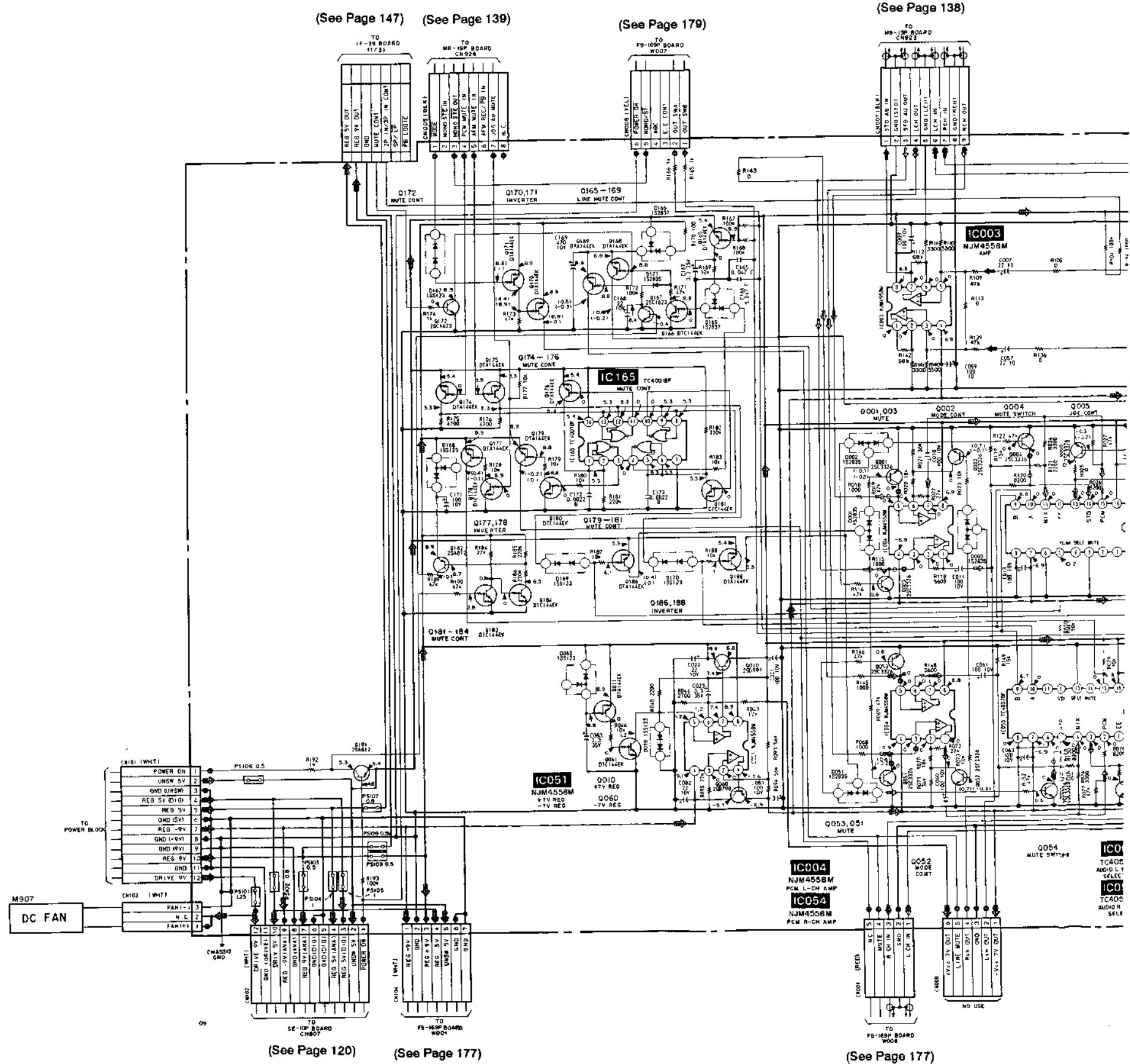


IF-39 (AUDIO SIGNAL SELECT POWER SUPPLY DISTRIBUTE) SCHEMATIC DIAGRAM

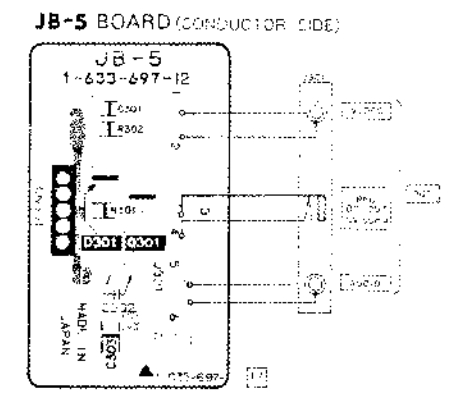
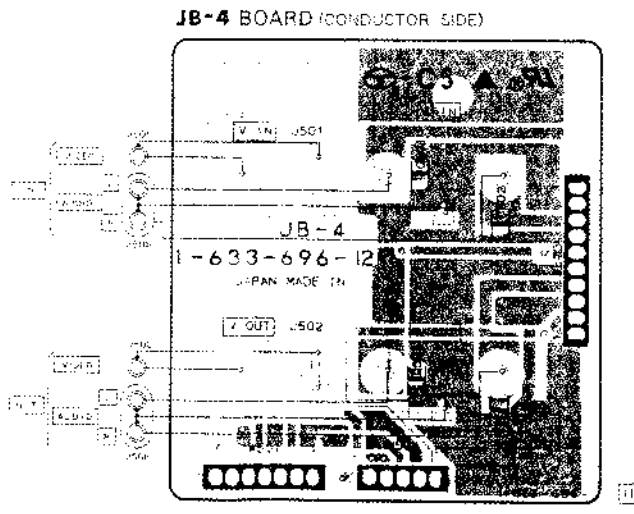
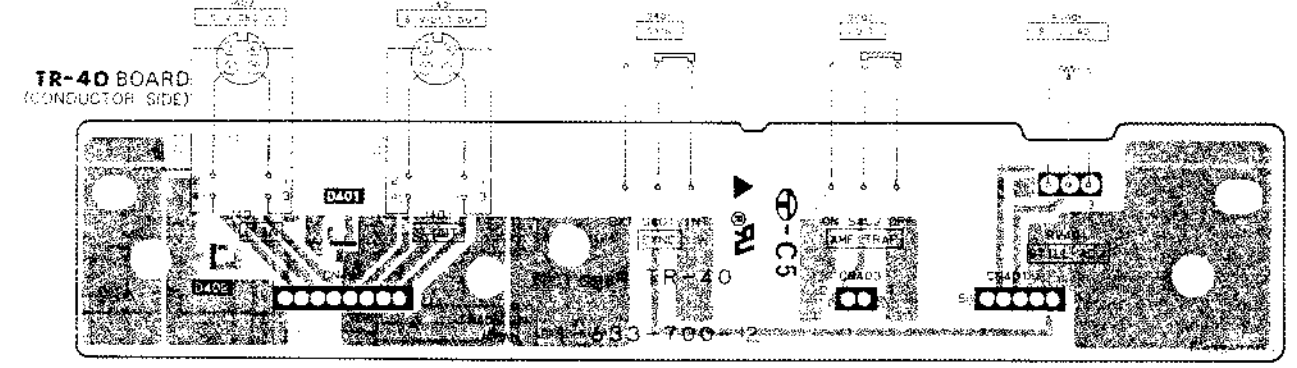
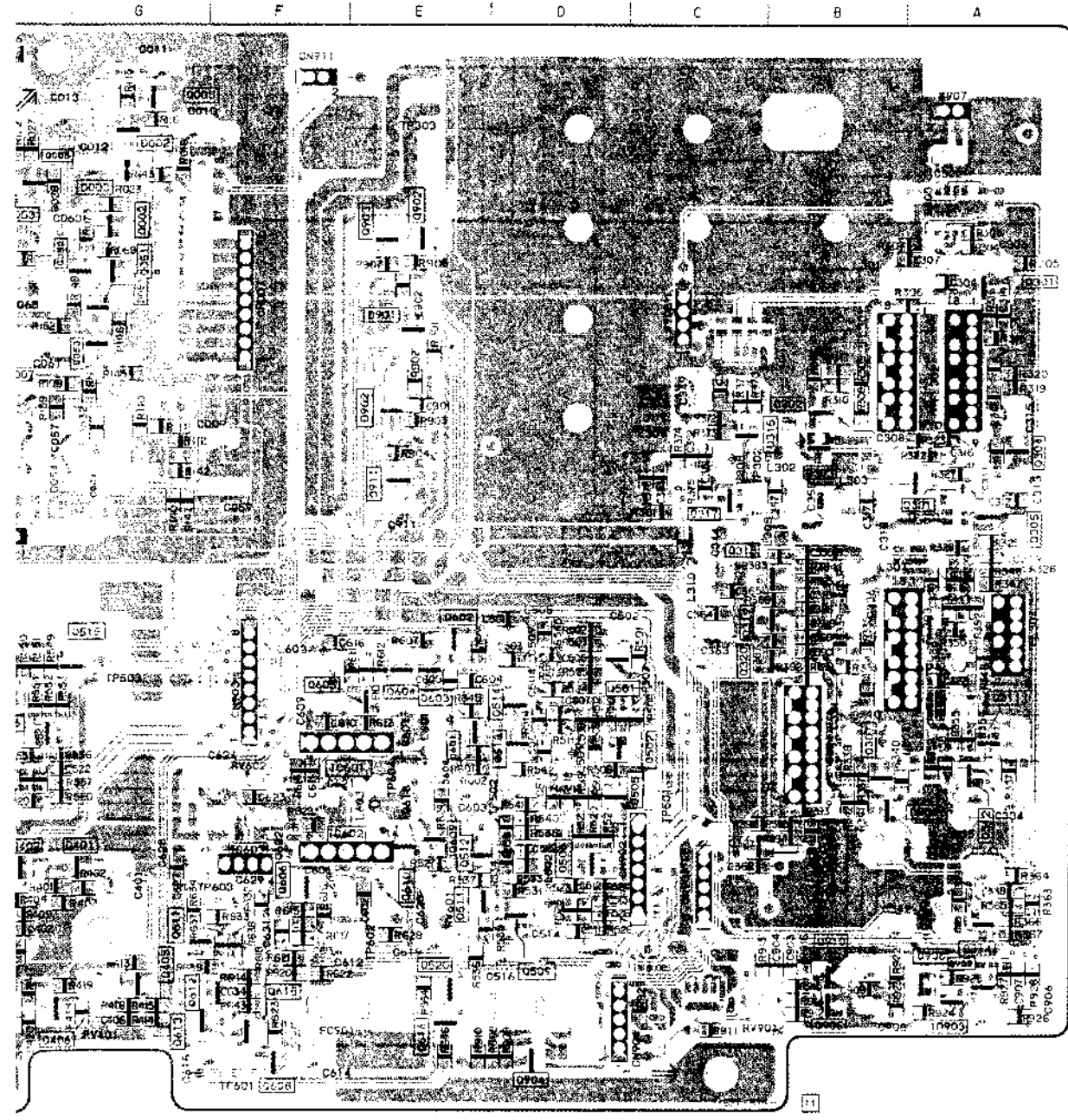
— Ref. No. IF-39 BOARD: 7000 series —

IF-39 BOARD (CONDUCTOR SIDE)		IF-39 BOARD (COMPONENT SIDE)			
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D003	G-1	Q706	K-7	D004	I-1
D010	K-3	Q712	M-7	D060	K-3
D051	G-2	Q713	L-6	D165	K-3
D052	I-2	Q714	M-6	D166	K-2
D053	H-2	Q715	K-7	D168	J-2
D054	I-2	Q719	I-6	D169	K-2
D167	K-1	Q720	I-7	D170	J-1
D301	A-4	Q802	E-2	D171	J-2
D901	E-3	Q803	E-2	D904	E-2
D902	F-3	Q904	D-7		
D903	A-7	Q905	B-7	IC001	I-4
		Q908	A-7	IC002	H-4
IC801	L-6	Q909	A-7	IC003	G-3
IC802	M-6	Q910	B-7	IC004	G-1
		Q911	E-4	IC005	H-1
				IC006	I-2
Q002	G-1			IC051	K-4
Q003	G-1			IC054	H-3
Q004	H-2			IC055	H-3
Q005	H-2			IC056	I-3
Q007	I-2			IC165	K-1
Q051	G-2			IC301	A-2
Q052	G-2			IC302	C-3
Q053	G-3			IC303	A-4
Q054	H-3			IC304	A-7
Q055	H-2			IC401	I-7
Q056	I-3			IC402	K-5
Q081	K-3			IC601	F-8
Q165	K-2			IC602	F-7
Q167	J-3			IC701	K-6
Q168	K-3			IC702	J-7
Q169	J-3			IC703	J-7
Q170	K-1			IC704	J-6
Q171	K-1			IC705	J-7
Q172	J-1			IC901	E-3
Q174	J-1			IC902	E-2
Q175	J-1			IC903	C-7
Q177	J-1				
Q178	J-1			Q001	G-2
Q181	J-1			Q006	I-2
Q183	K-2			Q008	I-1
Q186	K-2			Q010	K-3
Q301	A-2			Q011	K-3
Q302	B-3			Q057	J-3
Q303	B-3			Q060	K-4
Q304	A-4			Q166	K-3
Q305	A-4			Q176	K-1
Q307	B-6			Q179	K-2
Q308	B-6			Q180	K-2
Q311	A-6			Q182	K-2
Q312	A-6			Q184	K-2
Q314	A-7			Q188	J-1
Q315	C-3			Q191	L-4
Q317	C-4			Q306	B-5
Q318	B-4			Q309	B-6
Q319	B-5			Q310	A-6
Q320	B-5			Q313	A-6
Q321	B-6			Q316	C-4
Q401	G-6			Q408	J-5
Q402	H-6			Q408	J-5
Q403	H-7			Q408	J-5
Q404	H-7			Q410	J-5
Q405	G-7			Q411	J-5
Q406	H-7			Q414	K-5
Q407	H-7			Q503	D-6
Q412	J-5			Q504	D-5
Q413	K-5			Q507	D-7
Q501	D-5			Q508	D-7
Q502	D-5			Q510	D-6
Q505	D-7			Q517	H-6
Q506	D-7			Q518	H-6
Q509	D-7			Q521	E-6
Q511	D-7			Q607	F-7
Q512	E-6			Q702	K-7
Q513	D-6			Q703	J-6
Q514	D-5			Q704	K-7
Q515	H-5			Q705	K-7
Q516	H-6			Q707	L-7
Q519	H-6			Q708	M-7
Q520	E-7			Q709	L-7
Q601	E-6			Q710	M-7
Q602	E-5			Q711	N-7
Q603	E-5			Q716	L-7
Q604	E-5			Q717	M-7
Q605	E-5			Q718	M-7
Q606	F-6			Q721	J-7
Q608	F-7			Q722	J-7
Q609	E-6			Q901	E-4
Q610	E-6			Q906	A-7
Q611	G-7			Q907	A-7
Q612	F-7				
Q613	G-7				
Q615	F-7				
Q616	E-7				

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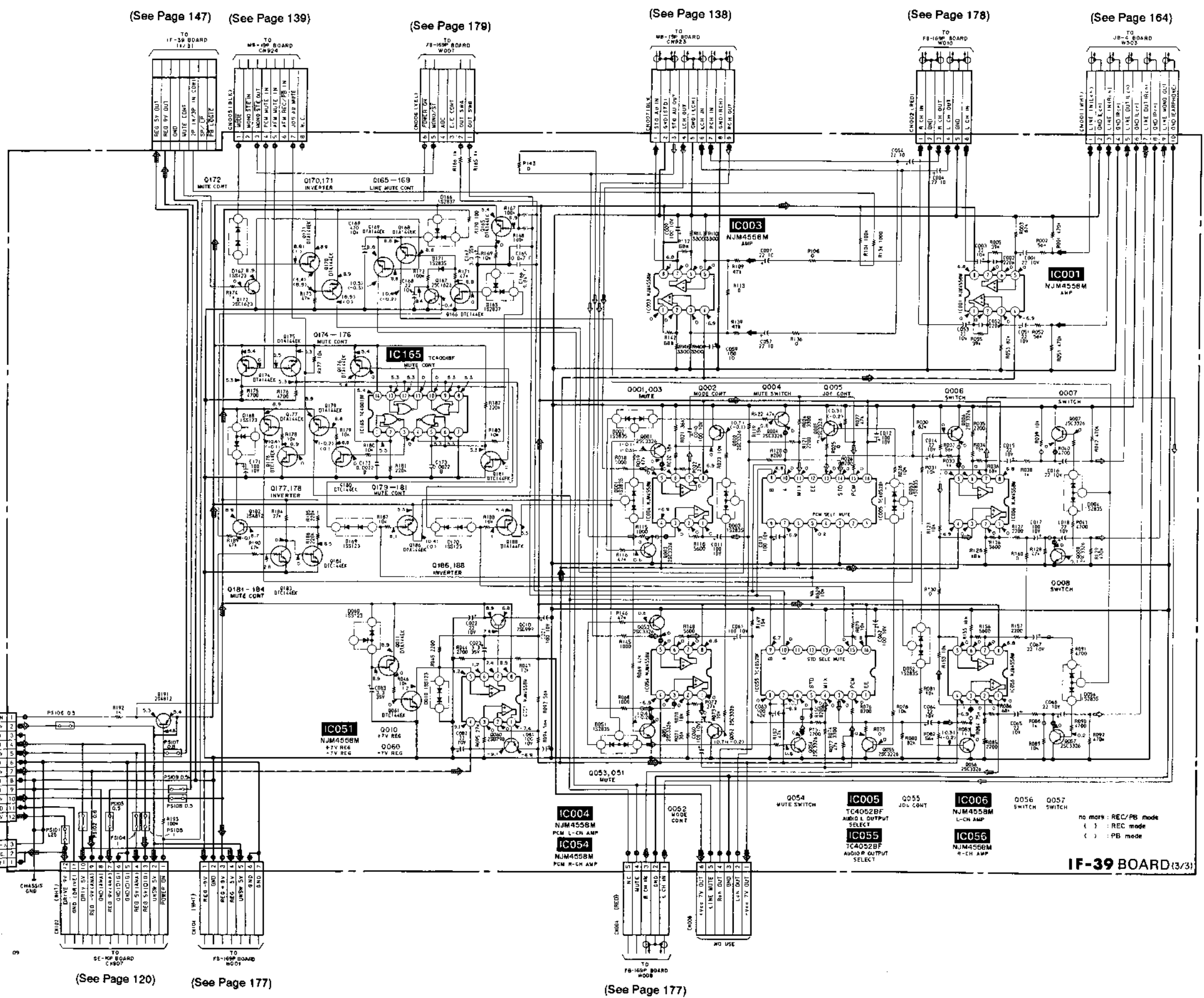
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- < DIODE >
- 8-719-800-76 DIODE 1SS226
- < TRANSISTOR >
- Q301 8-729-216-22 TRANSISTOR 2SA1162

DISTRIBUTE) SCHEMATIC DIAGRAM

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19



• SIGNAL PATH

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

no mark: REC/PB mode
 () : REC mode
 () : PB mode

FB-169P (FUNCTION CONTROL), MJ-25 (MIC IN), HE-2 (HEADPHONE OUT), TC-20P (CONTROL P IN/OUT) PRINTED WIRING BOARDS

— Ref. No. FB-169P BOARD: 7000 series, MJ-25 BOARD: 9000 series, HE-2 BOARD: 6000 series, TC-20P BOARD: 9000 series —

TC-20 BOARD

< DIODE >

D701	8-719-918-70	DIODE LB-202DB	Q701	8-729-140-88	TRANSISTOR FP1A3M	Q706	8-729-140-88	TRANSISTOR
D702	8-719-918-70	DIODE LB-202DB	Q702	8-729-140-88	TRANSISTOR FP1A3M	Q707	8-729-140-88	TRANSISTOR
D703	8-719-918-70	DIODE LB-202DB	Q703	8-729-140-88	TRANSISTOR FP1A3M	Q708	8-729-140-88	TRANSISTOR
D704	8-719-918-70	DIODE LB-202DB	Q704	8-729-140-88	TRANSISTOR FP1A3M	Q709	8-729-900-53	TRANSISTOR
			Q705	8-729-140-88	TRANSISTOR FP1A3M	Q710	8-729-900-53	TRANSISTOR

< TRANSISTOR >

FB-169P BOARD (COMPONENT SIDE)

FB-169 BOARD
(COMPONENT
SIDE)

- D001 I-2
- D008 G-3
- D009 A-2
- D010 A-1
- D011 F-1
- D012 F-1
- D013 F-1
- D014 K-2
- D015 J-3
- D016 I-2
- D017 H-2
- D018 B-2
- D019 K-2
- D020 G-2
- D024 K-1
- D025 J-3
- D026 H-3
- D101 B-3
- D102 C-2
- D151 D-3
- D153 D-3
- D154 D-2

IC001 I-2
IC003 I-1

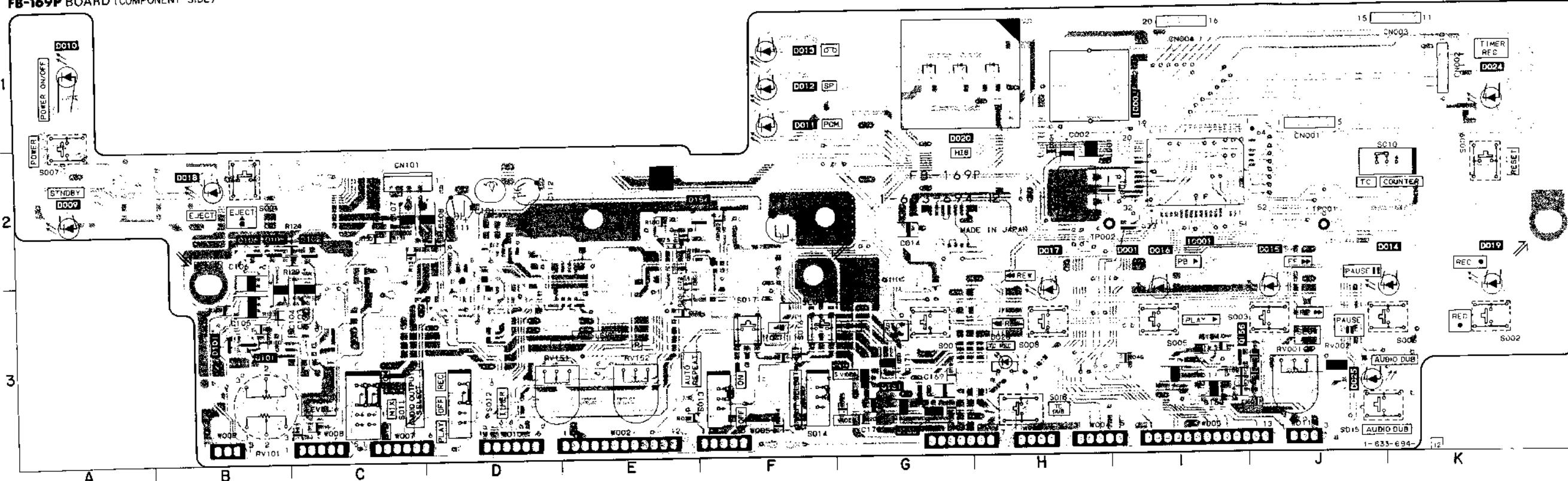
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- Q105 B-2
- Q106 B-2
- Q151 D-3
- Q154 F-2
- Q156 I-3
- Q160 G-3
- Q161 G-3

FB-169 BOARD
(CONDUCTOR
SIDE)

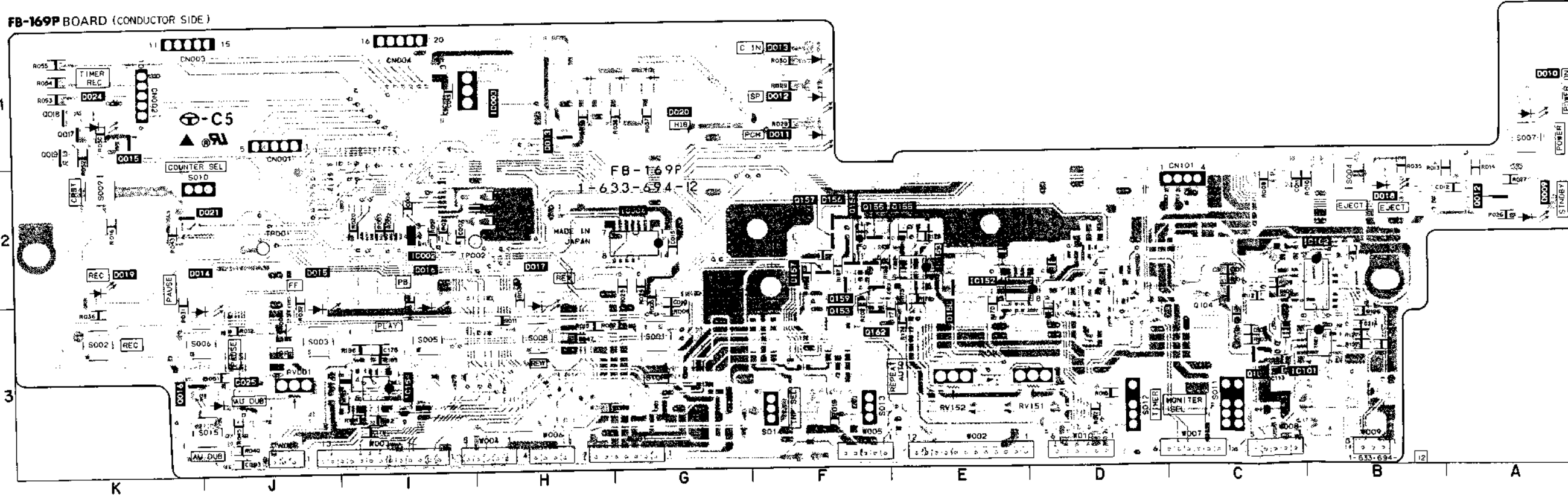
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- D003 C-2
- D004 A-2
- D005 D-3
- D006 D-3
- D007 F-3
- D021 J-2
- D023 J-3
- D152 D-2
- D155 F-2
- D156 F-2
- D157 F-2
- D158 F-3

IC002 I-2
IC004 G-2
IC101 B-3
IC102 B-2
IC152 E-2
IC153 E-2
IC154 I-3

- Q012 A-2
- Q013 H-1
- Q015 K-1
- Q016 K-3
- Q017 K-3
- Q018 K-3
- Q019 K-3
- Q103 C-3
- Q104 C-3
- Q152 D-3
- Q153 F-3
- Q155 F-2
- Q157 F-2
- Q158 F-2
- Q159 F-3
- Q162 F-3



FB-169P BOARD (CONDUCTOR SIDE)



WIRING BOARDS

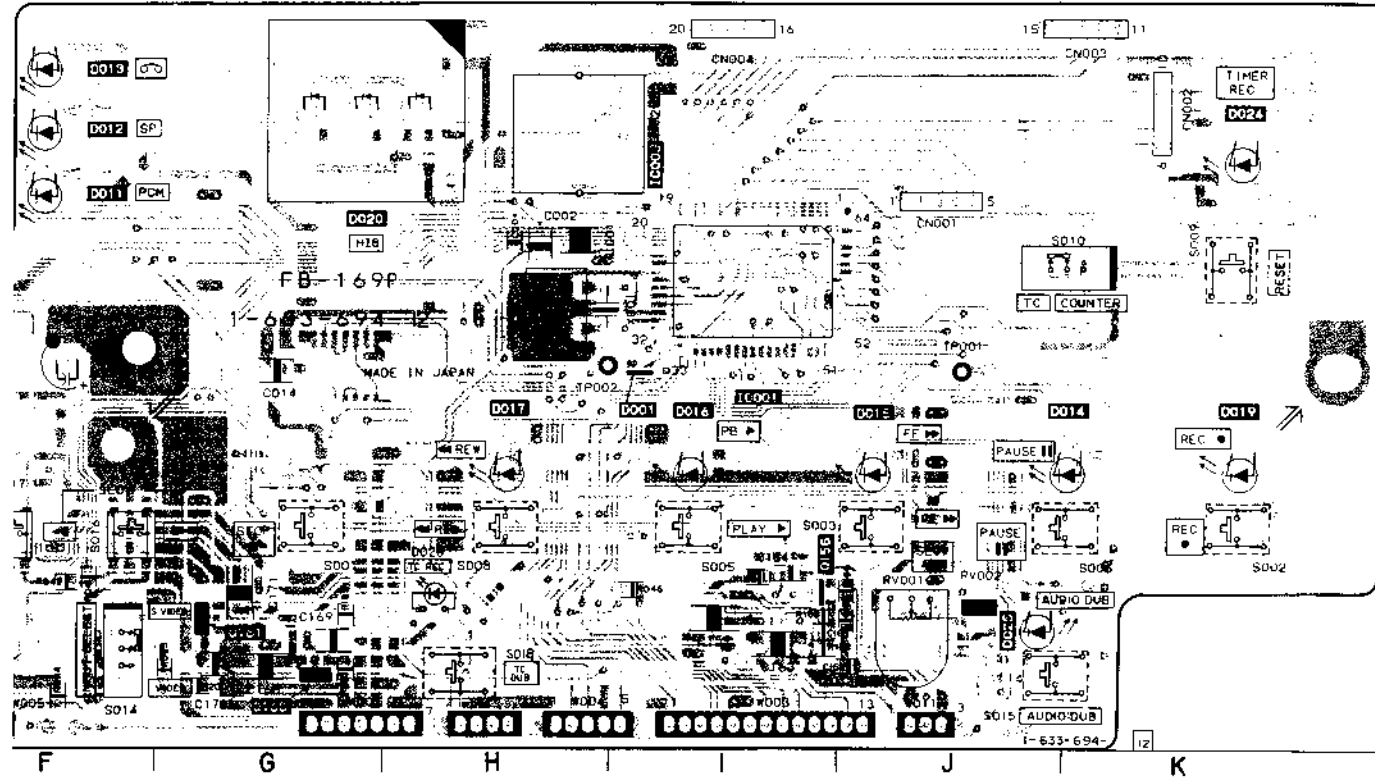
D701	8-719-918-70	DIODE	LB-202DB	Q701	8-729-140-88	TRANSISTOR	FP1A3M	Q706	8-729-140-88	TRANSISTOR	FP1A3M	Q711	8-729-900-53	TRANSISTOR	DTC114EK
D702	8-719-918-70	DIODE	LB-202DB	Q702	8-729-140-88	TRANSISTOR	FP1A3M	Q707	8-729-140-88	TRANSISTOR	FP1A3M	Q712	8-729-900-53	TRANSISTOR	DTC114EK
D703	8-719-918-70	DIODE	LB-202DB	Q703	8-729-140-88	TRANSISTOR	FP1A3M	Q708	8-729-140-88	TRANSISTOR	FP1A3M	Q713	8-729-900-53	TRANSISTOR	DTC114EK
D704	8-719-918-70	DIODE	LB-202DB	Q704	8-729-140-88	TRANSISTOR	FP1A3M	Q709	8-729-900-53	TRANSISTOR	DTC114EK	Q714	8-729-900-53	TRANSISTOR	DTC114EK
				Q705	8-729-140-88	TRANSISTOR	FP1A3M	Q710	8-729-900-53	TRANSISTOR	DTC114EK	Q715	8-729-900-53	TRANSISTOR	DTC114EK

FB-169 (P) BOARD, COMPLETE

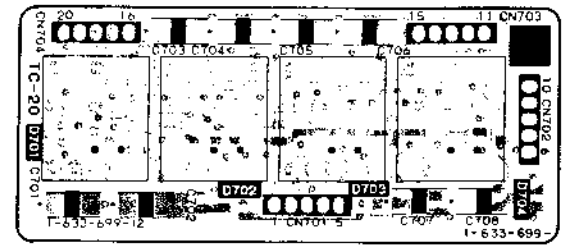
D001	8-719-800-76	DIODE	1SS226
D009	8-719-945-82	DIODE	GL5HS42 (STANDBY)
D010	8-719-920-05	DIODE	SLP281C-50 (POWER)
D011	8-719-907-92	DIODE	GL-5EG521-B (PCM)
D012	8-719-941-46	DIODE	GL-5HY41 (SP)
D013	8-719-941-46	DIODE	GL-5HY41
D014	8-719-918-96	DIODE	AA3422S
D015	8-719-812-32	DIODE	TLY123
D016	8-719-920-05	DIODE	SLP281C-50
D017	8-719-812-32	DIODE	TLY123
D018	8-719-939-36	DIODE	GL-5HY42
D019	8-719-812-31	DIODE	TLR123
D020	8-719-913-59	DIODE	LT-92300 (HI 8)
D024	8-719-906-58	DIODE	GL-5HD42 (TIMER REC)
D025	8-719-812-31	DIODE	TLR123 (AUDIO DUB)
D026	8-719-812-31	DIODE	TLR123 (TC DUB)
D101	8-719-104-34	DIODE	1S2836
D102	8-719-104-34	DIODE	1S2836
D103	1-520-503-11	METER UNIT, LED LEVEL	
D155	8-719-104-34	DIODE	1S2836
D156	8-719-104-34	DIODE	1S2836
D157	8-719-400-18	DIODE	MA152WK
D158	8-719-104-34	DIODE	1S2836

IC001	8-752-818-14	IC	CXP5045H-2550
IC002	8-759-937-56	IC	S-8054ALB-LM-S
IC003	8-741-100-48	IC	SBX1610-59
IC004	8-759-927-46	IC	SN74HC00NS
IC101	8-759-981-XX	IC	RC4560M
IC102	8-759-208-11	IC	MC140538F
IC152	8-759-981-92	IC	RC4558M
IC153	8-759-981-92	IC	RC4558M
IC154	8-759-700-62	IC	NJM4562D

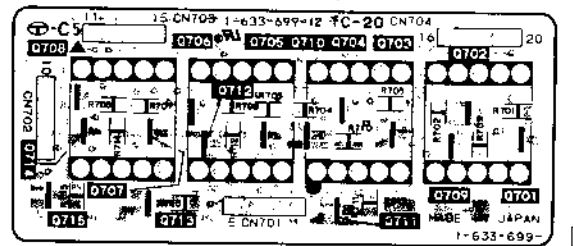
Q012	8-729-901-06	TRANSISTOR	DTA144EK
Q013	8-729-140-88	TRANSISTOR	FP1A3M
Q015	8-729-216-22	TRANSISTOR	2SA1162
Q016	8-729-900-53	TRANSISTOR	DTC114EK
Q017	8-729-901-06	TRANSISTOR	DTA144EK
Q018	8-729-901-06	TRANSISTOR	DTA144EK
Q019	8-729-901-01	TRANSISTOR	DTC144EK
Q101	8-729-901-01	TRANSISTOR	DTC144EK
Q103	8-729-216-22	TRANSISTOR	2SA1162
Q104	8-729-100-66	TRANSISTOR	2SC1623
Q105	8-729-202-38	TRANSISTOR	2SC3326N
Q106	8-729-202-38	TRANSISTOR	2SC3326N
Q153	8-729-202-38	TRANSISTOR	2SC3326N
Q154	8-729-202-38	TRANSISTOR	2SC3326N
Q155	8-729-202-38	TRANSISTOR	2SC3326N
Q156	8-729-100-66	TRANSISTOR	2SC1623
Q157	8-729-901-06	TRANSISTOR	DTA144EK
Q158	8-729-901-06	TRANSISTOR	DTA144EK
Q159	8-729-901-01	TRANSISTOR	DTC144EK
Q160	8-729-140-75	TRANSISTOR	2SD999-CLCK
Q161	8-729-101-07	TRANSISTOR	2SB798-DLCK
Q162	8-729-202-38	TRANSISTOR	2SC3326N



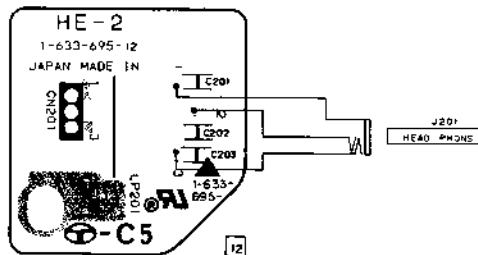
TC-20 BOARD (COMPONENT SIDE)



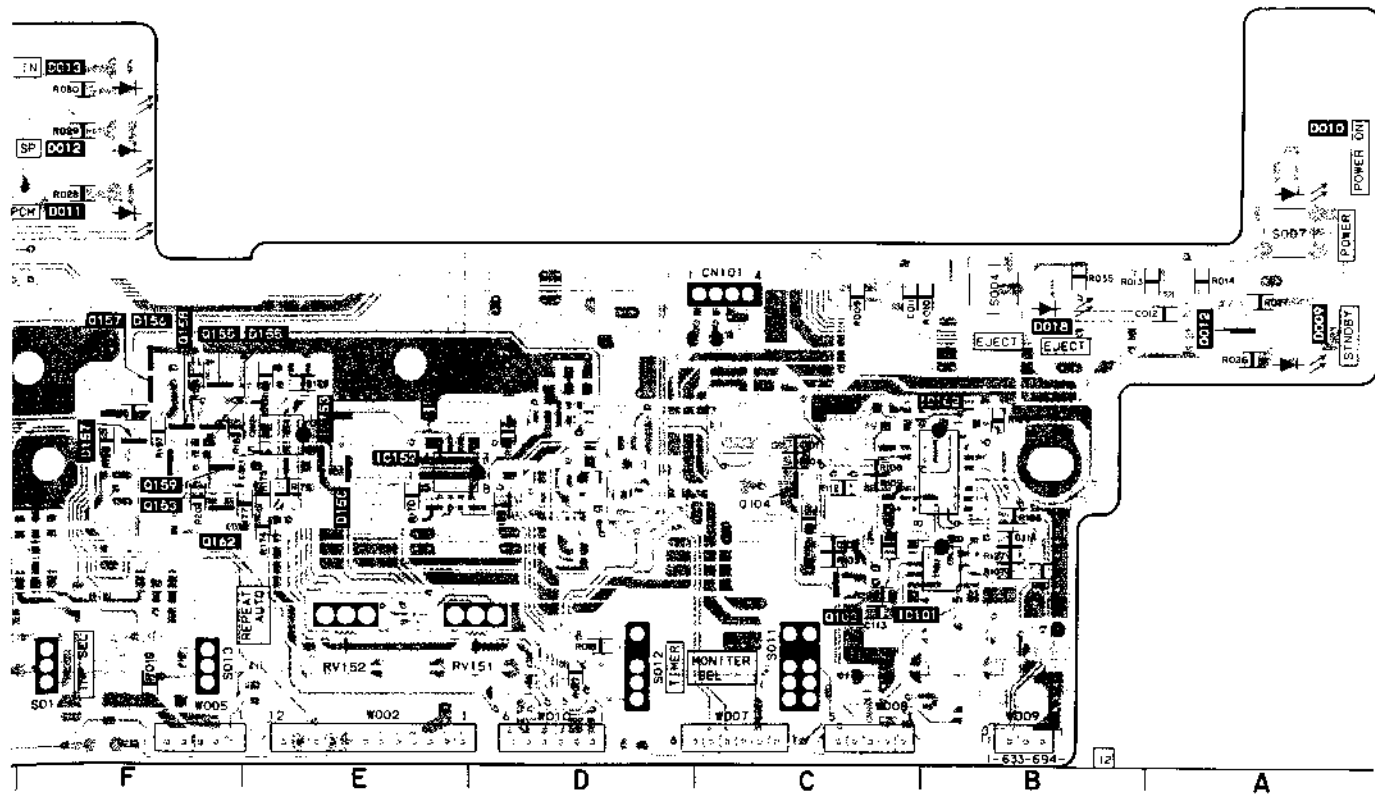
TC-20 BOARD (CONDUCTOR SIDE)



HE-2 BOARD (CONDUCTOR SIDE)

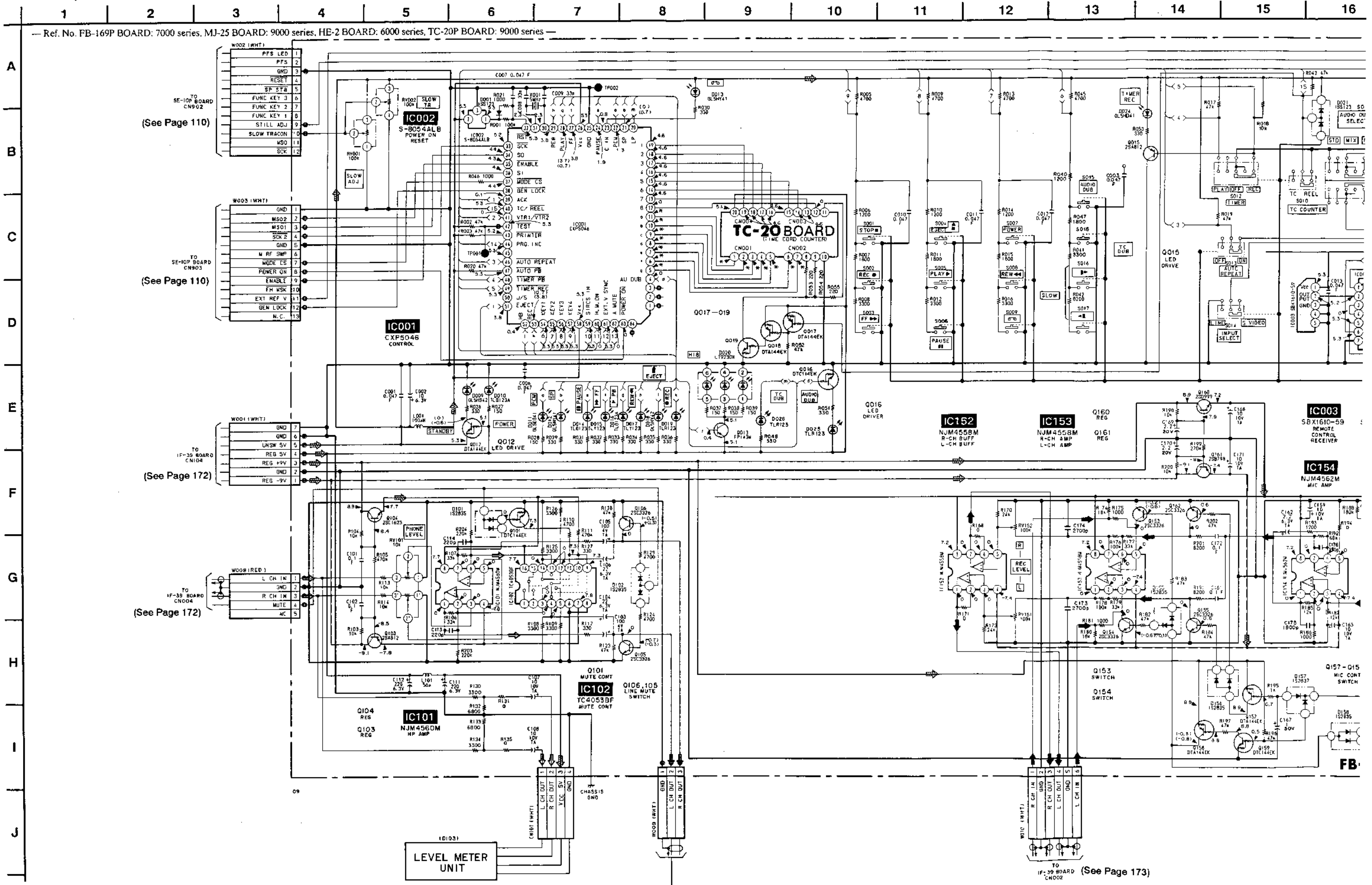


MJ-25 BOARD (CONDUCTOR SIDE)



FB-169P (FUNCTION CONTROL), MJ-25 (MIC IN), HE-2 (HEADPHONE OUT), TC-20P (CONTROL P IN/OUT) SCHEMATIC DIAGRAMS

— Ref. No. FB-169P BOARD: 7000 series, MJ-25 BOARD: 9000 series, HE-2 BOARD: 6000 series, TC-20P BOARD: 9000 series —



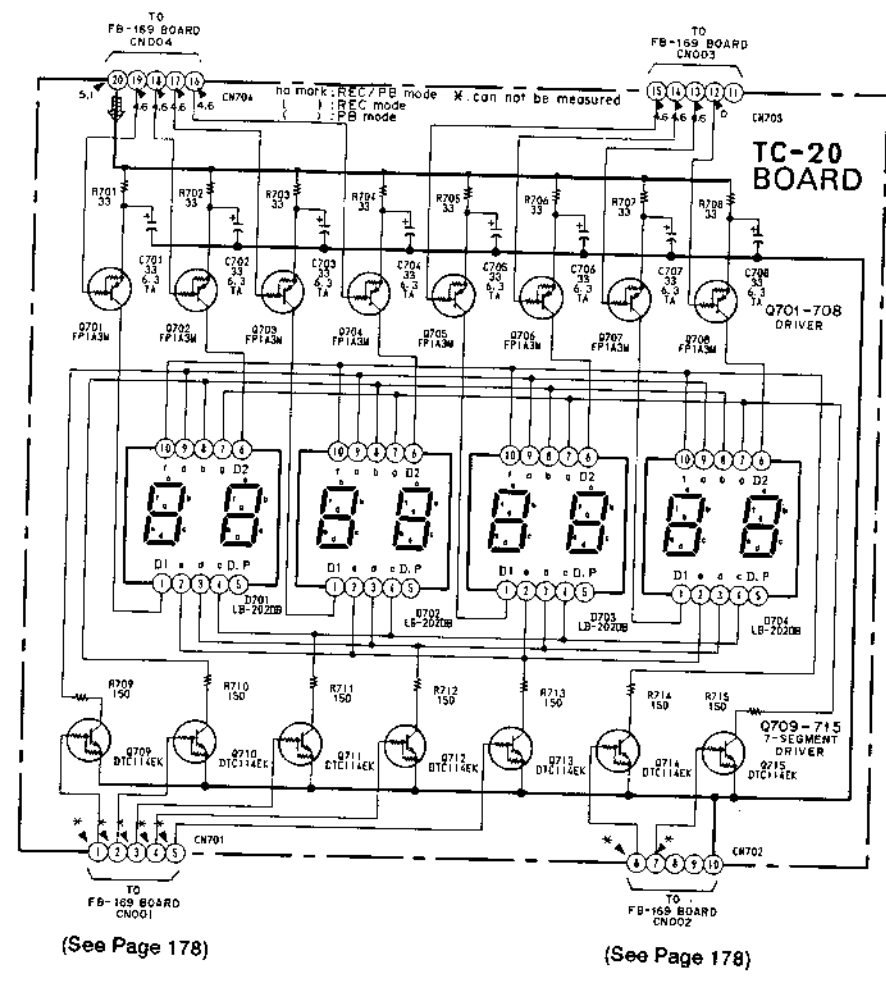
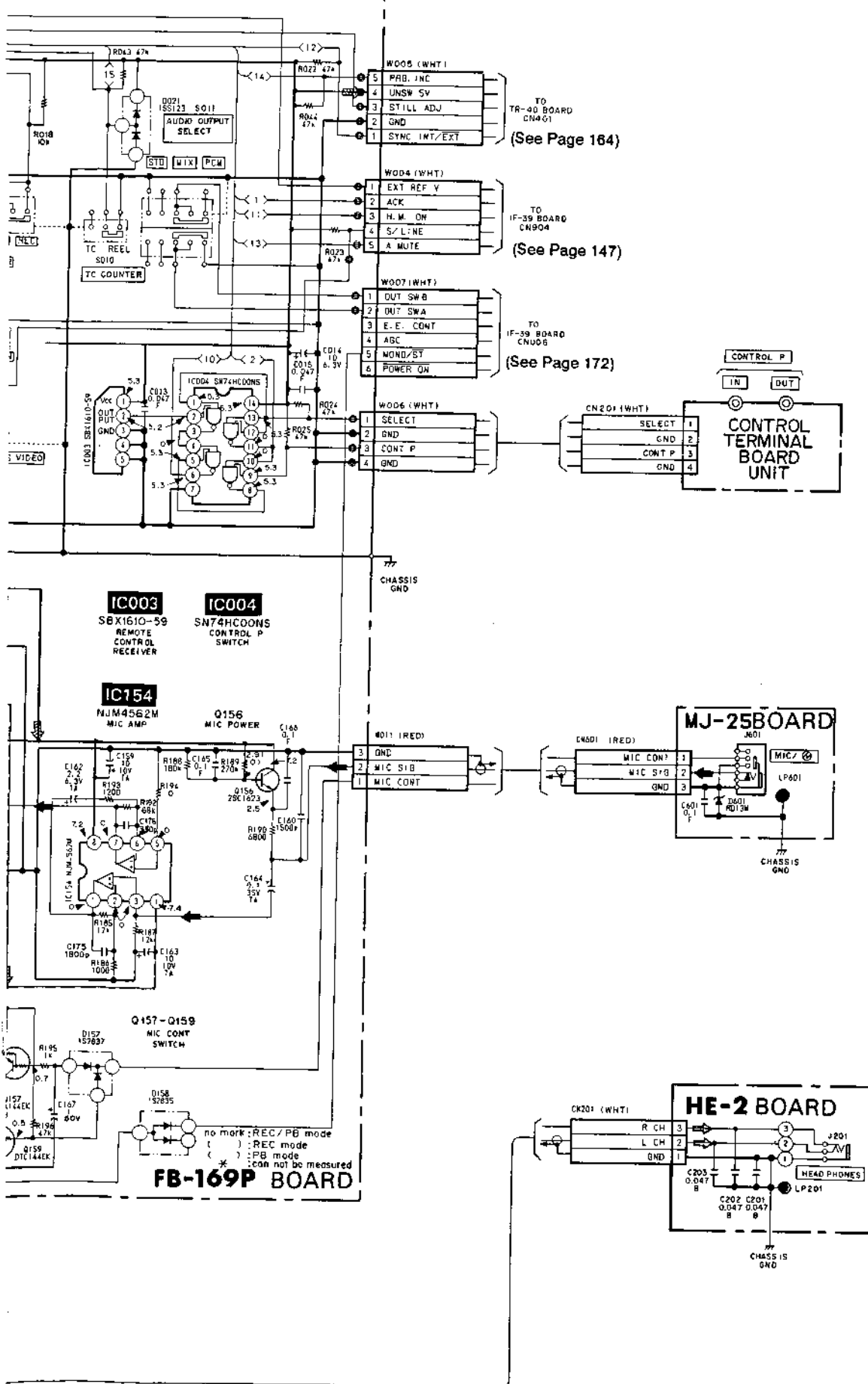
(See Page 110)

(See Page 110)

(See Page 172)

(See Page 172)

(See Page 173)



• SIGNAL PATH

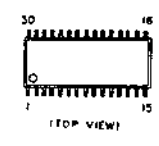
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA/DATA	
REC				→
PB				→

4-3. SEMICONDUCTORS

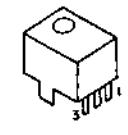
AN607P
AN608P



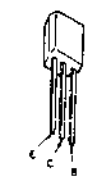
CXA1047M
LB1616M



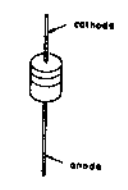
SBX1595-01



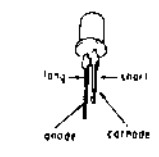
2SC3327-B
DTA144ES



1SS119
RD5.1ESB2
RD5.1ESB3

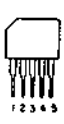


GL-5HD21
GL-5HY41

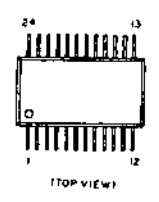


NOTE:
• -XX, -X r
they may
the origin
• The co
assemble
collation
column.

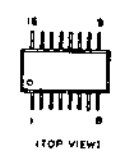
BA401
TA7060AP



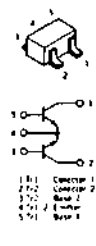
CXA1109M
TA8607F



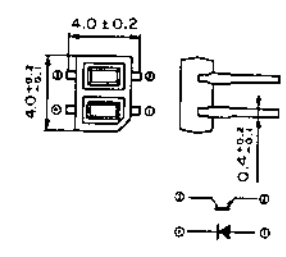
TA7745F



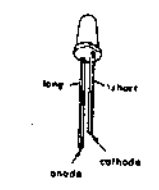
FMG2



GP2509-B



GL-5HS42
GL-5HY42

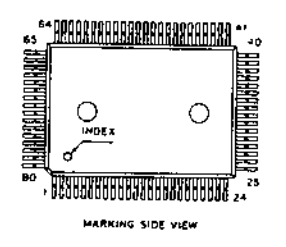


5-1. FR

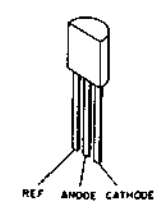
BA7036LS



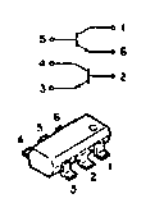
CXP80116-638Q



TL431CLP



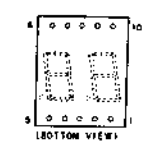
IMX1



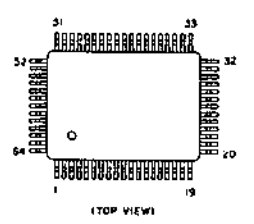
AA3422S



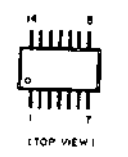
LB-202DB



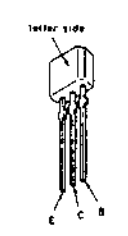
CF77305FT
CXP5024H
CXP5048H-204Q
CXP5048H-205Q
CXP5048H-210Q
μPD75106G-573-1B
μPD75106G-589-1B



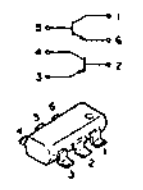
MC14069UBF
MC1496MR
RC3403AM



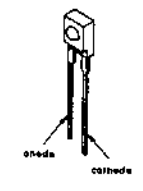
2SA1175-HFE



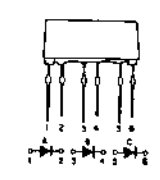
IMZ1



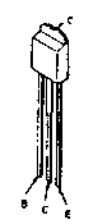
GL-450S



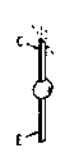
LT-9230D



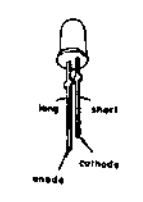
2SA1385-ZL
2SC3518



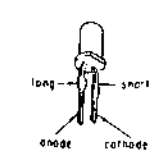
NJL7141E



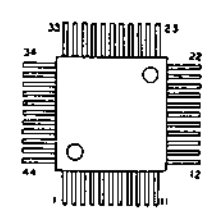
GL-5EG521-B



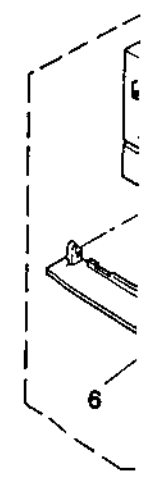
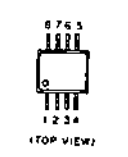
SLP281C-50
TLR123
TLY123



CF77309FR



NJM2234M
NJM2238M
NJM2246M
RC3414M



Ref. No.	1	2	3	4
	*	*	*	*

SECTION 5 EXPLODED VIEWS

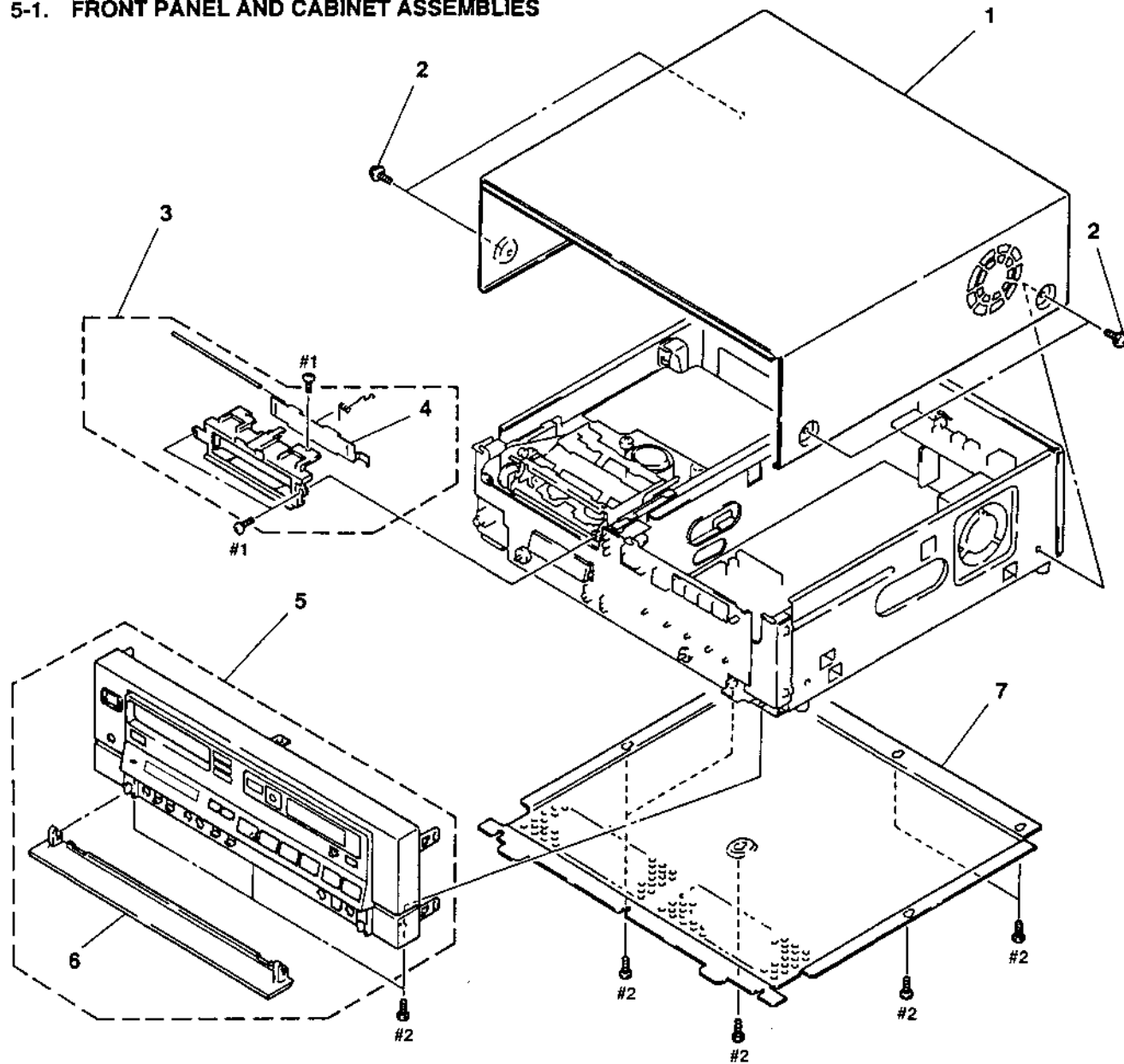
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

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



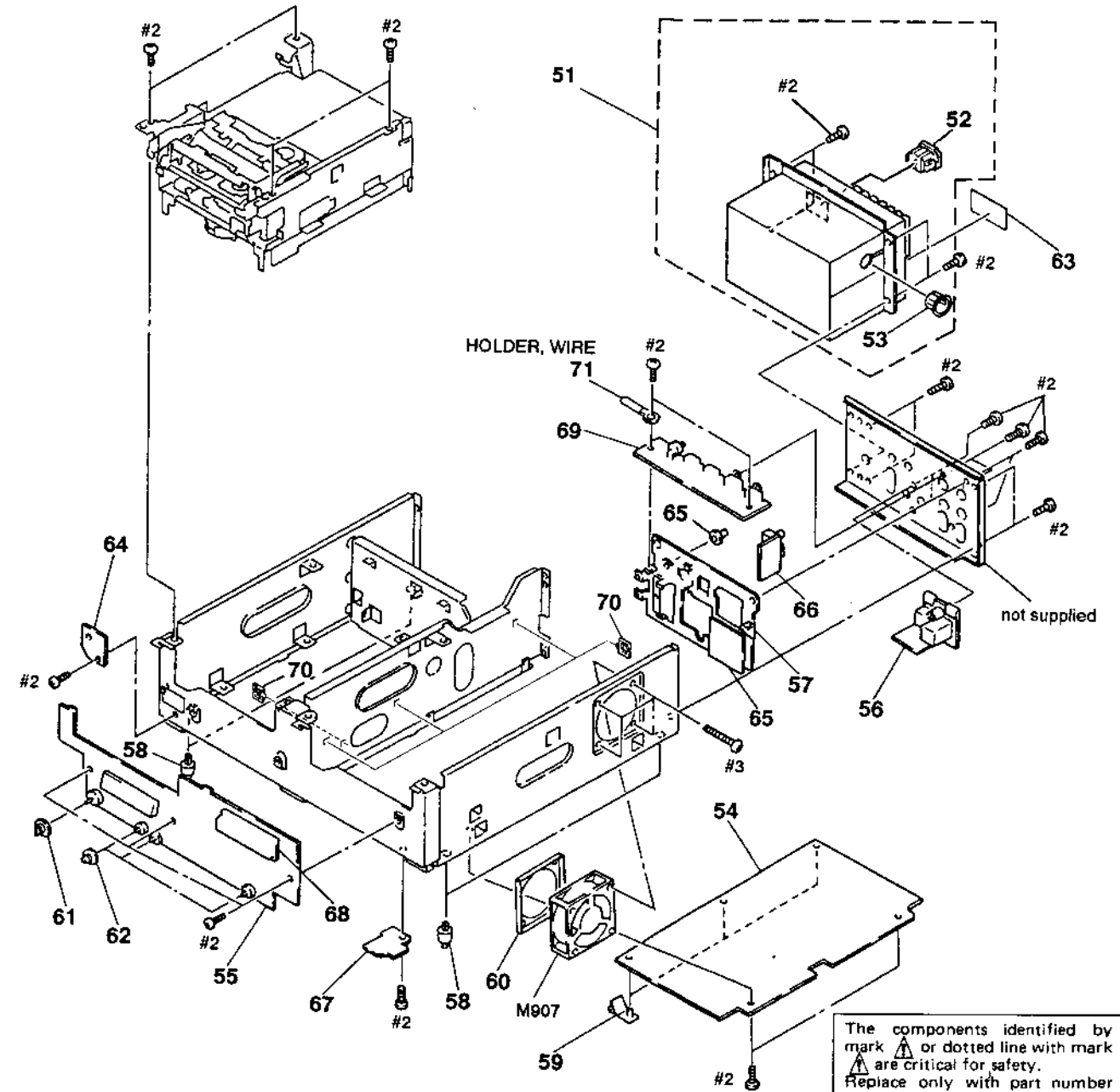
Ref. No.	Part No.	Description
1	* 3-724-167-01	CASE, UPPER
2	4-886-821-11	SCREW, M3 CASE
3	* X-3738-905-1	WINDOW ASSY
4	* 3-721-101-71	DOOR

Remark

Ref. No.	Part No.	Description
5	X-3940-403-1	PANEL ASSY, FRONT
6	X-3940-402-1	DOOR ASSY
7	* 3-724-158-01	PLATE, BOTTOM

Remark

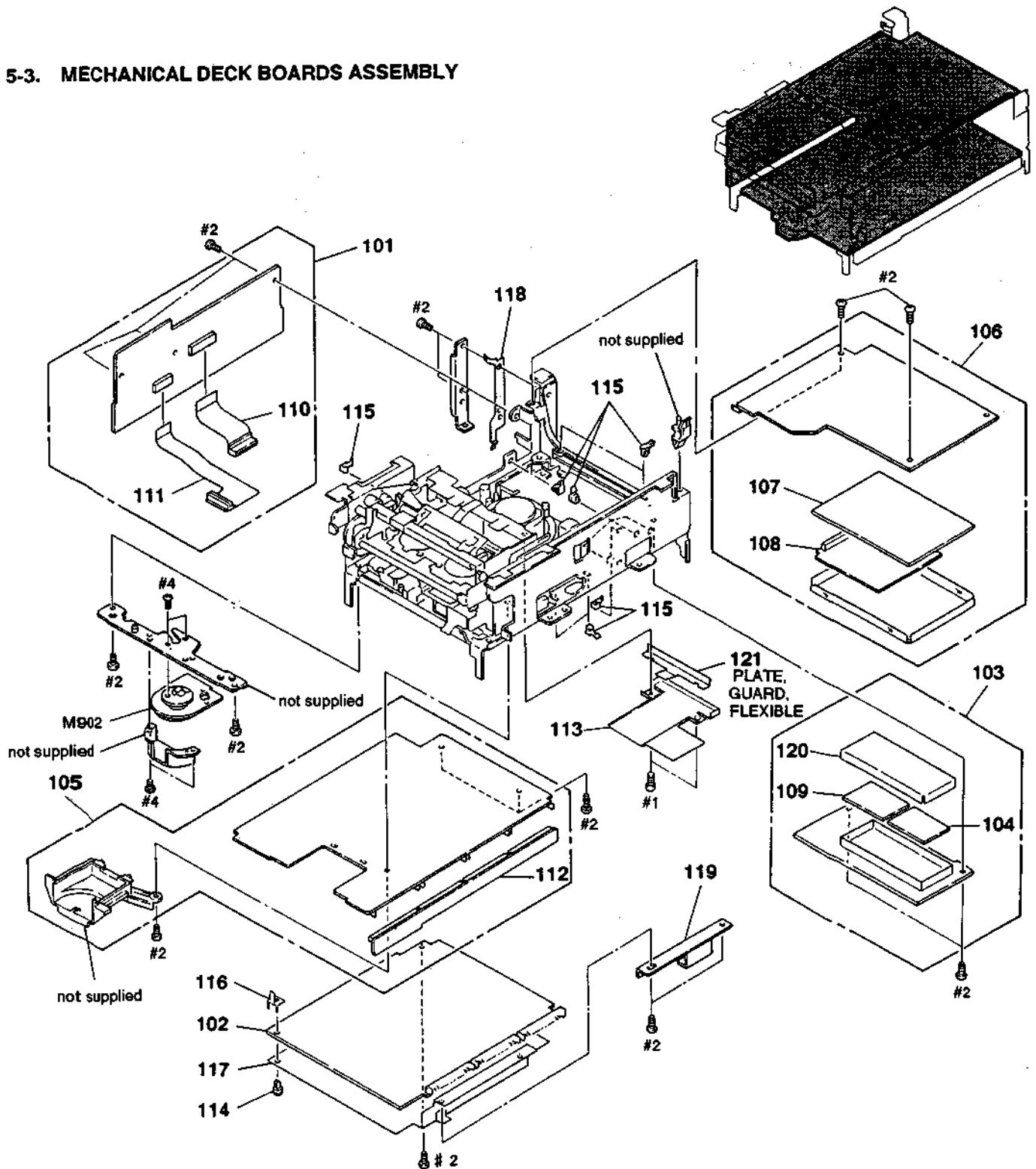
5-2. PC BOARDS AND POWER SUPPLY ASSEMBLIES



Ref. No.	Part No.	Description	Remark
51	Δ 1-413-629-11	POWER BLOCK	
52	Δ - - -	INLET, AC	
53	- - -	BUSHING	
54	* A-7062-630-A	1F-39 BOARD, COMPLETE	
55	* A-7062-654-A	FB-169 (P) BOARD, COMPLETE	
56	* 1-536-977-11	TERMINAL BOARD UNIT, CONTROL (CONTROL P IN/OUT)	
57	1-537-137-41	TERMINAL BOARD	
58	3-694-479-01	FOOT	
59	* 3-696-448-01	HINGE, SS	
60	* 3-697-996-01	BRACKET, FAN	
61	3-724-112-01	KNOB, PHONE	

Ref. No.	Part No.	Description	Remark
62	3-724-113-01	KNOB, ADJUST	
63	* 3-941-657-01	LABEL, MODEL NUMBER	
64	* 1-633-695-11	HE-2 BOARD	
65	* 1-633-696-11	JB-4 BOARD	
66	* 1-633-697-11	JB-5 BOARD	
67	* 1-633-698-11	MJ-25 BOARD	
68	* 1-633-699-11	TC-20 BOARD	
69	* 1-633-700-11	TR-40 BOARD	
70	* 4-314-320-00	HOLDER, WIRE	
71	* 3-701-822-00	HOLDER, WIRE	
M907	1-541-360-21	MOTOR, DC BLUSHLESS FAN	

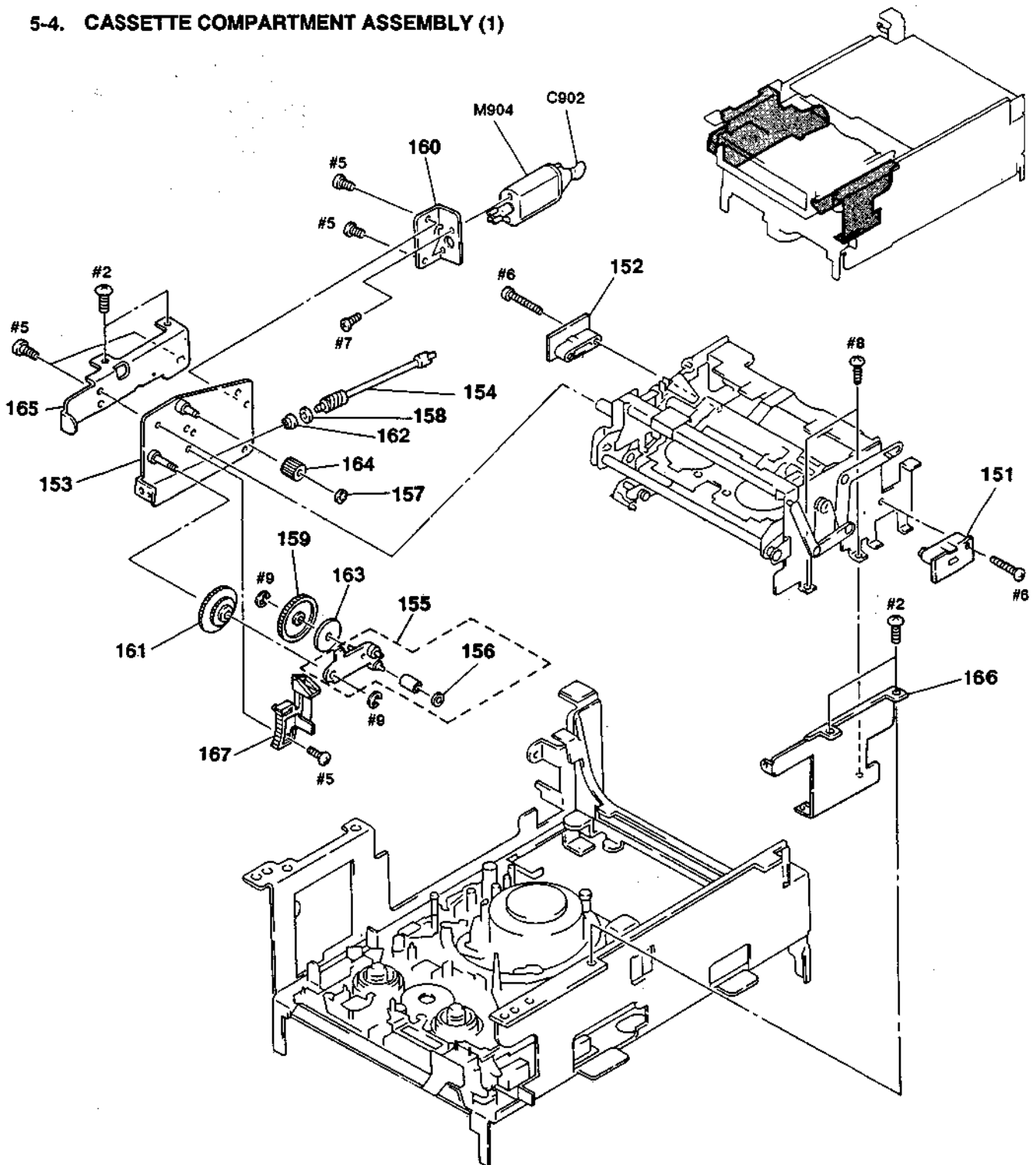
5-3. MECHANICAL DECK BOARDS ASSEMBLY



Ref. No.	Part No.	Description	Remark
101	* A-7062-168-A	MD-23 (P) BOARD, COMPLETE	
102	* A-7062-164-A	HK-5 BOARD, COMPLETE	
103	* A-7062-165-A	FR-43 BOARD, COMPLETE	
104	* A-7062-166-A	RP-103 BOARD, COMPLETE	
105	* A-7062-167-A	SE-10 (P) BOARD, COMPLETE	
106	* A-7061-824-A	MB-19 (P) BOARD, COMPLETE	
107	* A-7061-825-A	PD-19 (P) BOARD, COMPLETE	
108	* A-7061-826-A	PA-27 BOARD, COMPLETE	
109	* A-7061-827-A	RP-73 (LP) BOARD, COMPLETE	
110	* A-7070-624-A	FP-84 BOARD, COMPLETE	
111	* A-7070-625-A	FP-122 BOARD, COMPLETE	

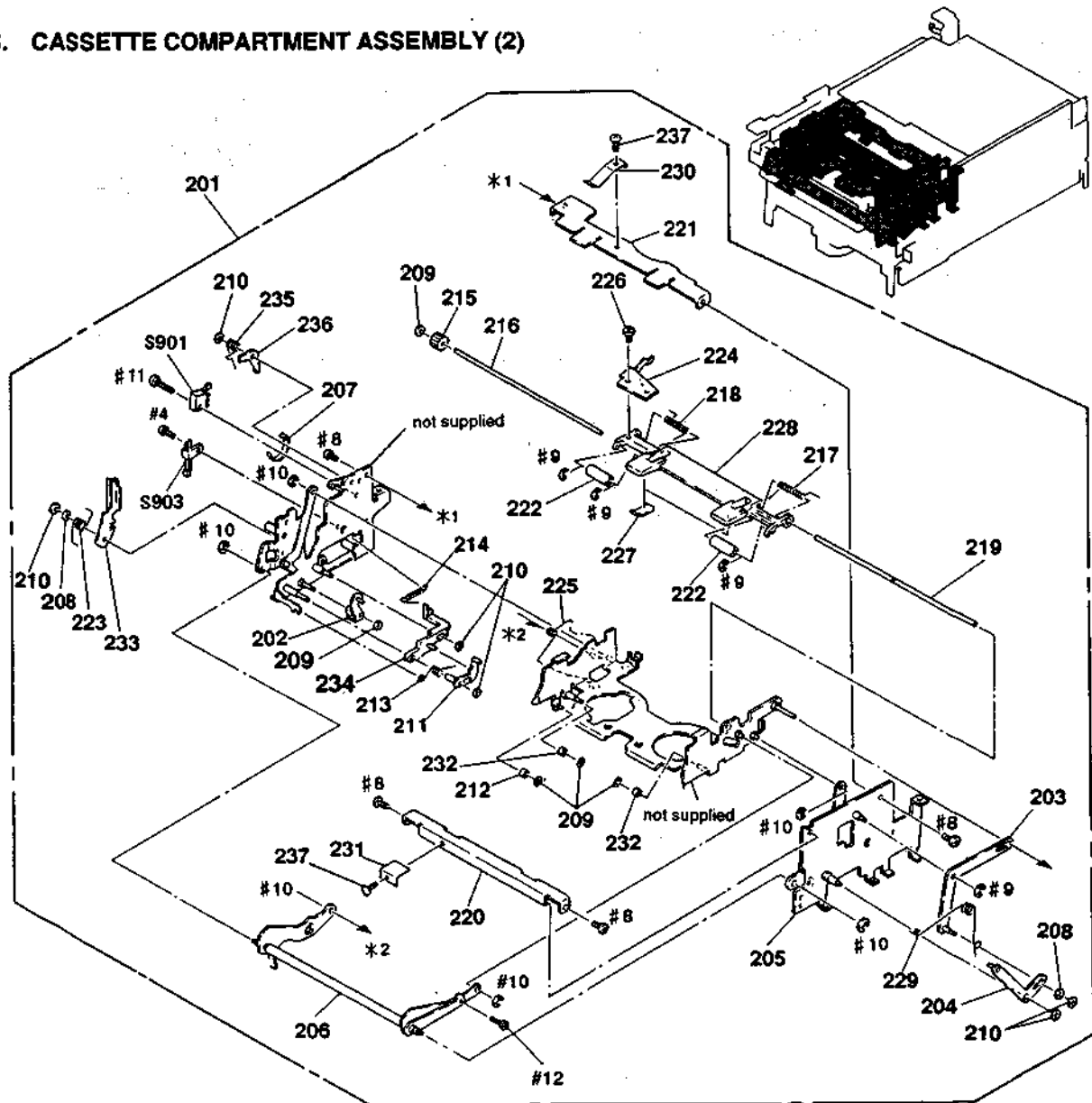
Ref. No.	Part No.	Description	Remark
112	* A-7070-955-A	IG-4 BOARD, COMPLETE	
113	* X-3749-135-1	COVER BLOCK ASSY, FLEXIBLE	
114	3-531-576-01	RIVET	
115	* 3-671-150-11	CLAMP	
116	3-724-107-01	RETAINER, PC BOARD	
117	* 3-940-849-01	PLATE, SHIELD, CORE	
118	* 3-724-199-01	PLATE, SUPPORT, MB	
119	* 3-738-954-01	STOPPER, HK	
120	* 3-739-102-01	LID (H), UPPER, FR SHIELD CASE B	
121	3-724-106-01	PLATE, GUARD, FLEXIBLE	
M902	8-835-304-11	MOTOR, DC U-118 (REEL)	

5-4. CASSETTE COMPARTMENT ASSEMBLY (1)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	* A-7070-627-A	TS-74 (RIGHT) BOARD, COMPLETE		161	3-713-433-01	GEAR (A)	
152	* A-7070-628-A	TS-74 (LEFT) BOARD, COMPLETE		162	3-713-439-01	BEARING	
153	* X-3711-934-1	PLATE SUB ASSY, BLOCK		163	* 3-713-441-01	SPRING, LEAF	
154	X-3711-935-3	SHAFT ASSY, WORM		164	3-713-452-01	GEAR (C)	
155	X-3714-193-1	LEVER ASSY (B), GEAR		165	* 3-724-140-01	BRACKET (LEFT)	
156	3-315-414-31	WASHER		166	* 3-724-141-01	BRACKET (RIGHT)	
157	3-669-465-00	WASHER (1.5), STOPPER		167	3-724-913-02	RACK	
158	3-701-437-11	WASHER		C902	1-161-057-00	CERAMIC 0.033uF 10% 50V	
159	3-713-430-01	GEAR (B)		M904	X-3711-936-1	MOTOR ASSY, FL (CASSETTE COMPARTMENT)	
160	* 3-713-431-01	BRACKET, MOTOR					

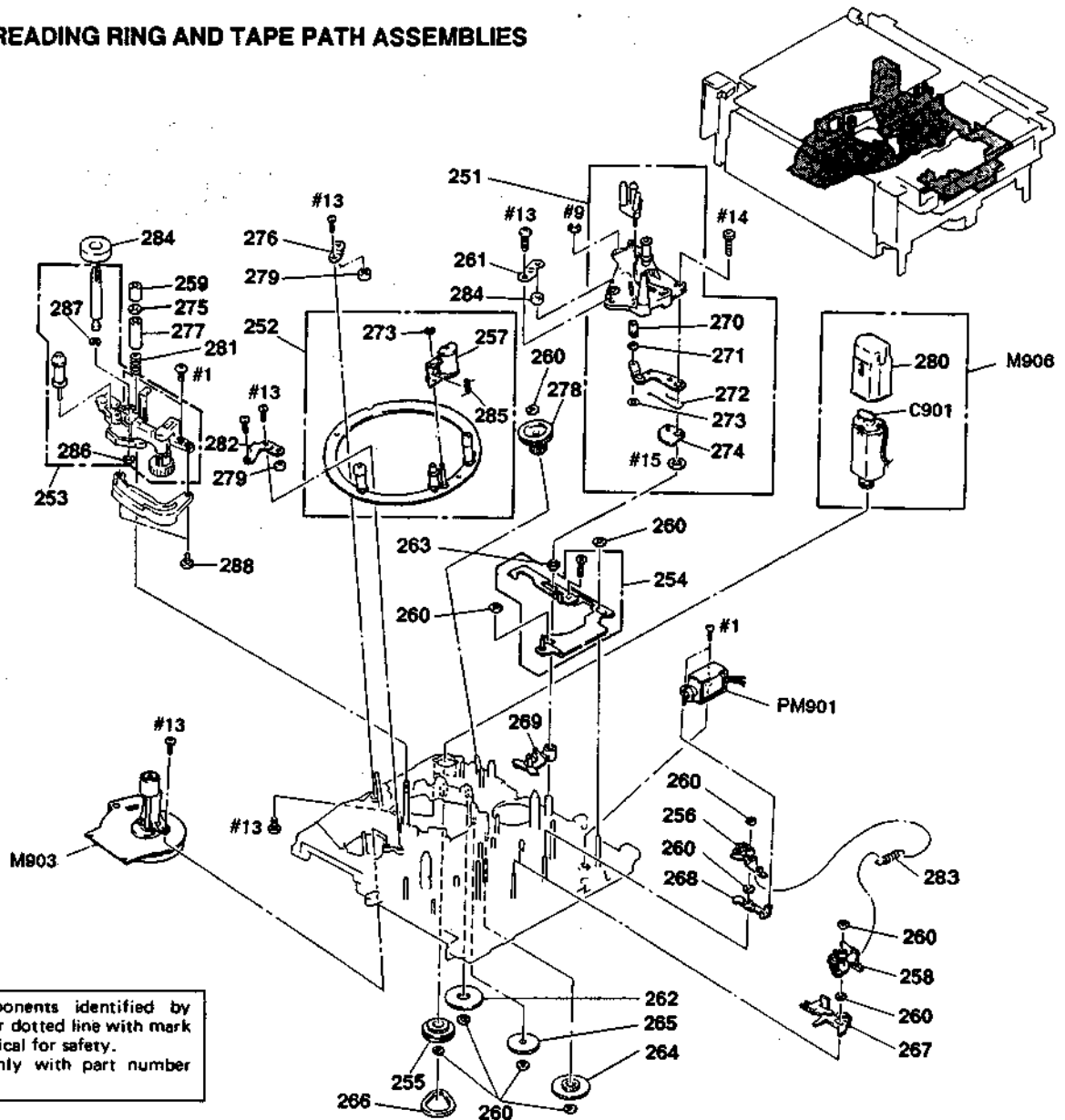
5-5. CASSETTE COMPARTMENT ASSEMBLY (2)



Ref. No.	Part No.	Description	Remark
201	A-7090-645-A	CASSETTE COMPARTMENT BLOCKASSY	
202	* X-3686-541-1	CLAW ASSY, LOCK	
203	X-3711-930-1	LEVER ASSY, HOLDER	
204	X-3711-931-4	LEVER ASSY, DOOR	
205	* X-3711-932-1	PLATE (R) ASSY, SIDE	
206	* X-3711-937-1	JOINT ASSY	
207	* 3-337-402-01	BAND, BINDING	
208	3-533-073-01	WASHER	
209	3-578-265-11	WASHER, STOPPER	
210	3-669-465-00	WASHER (1.5), STOPPER	
211	3-686-692-01	PREVENTION, SLIDER	
212	* 3-686-693-01	ROLLER, LOCK	
213	3-686-694-01	SPRING, TORSION	
214	3-696-047-01	SPRING, TENSION	
215	3-713-429-01	GEAR (D)	
216	* 3-713-440-01	SHAFT, ROLLER	
217	3-713-442-01	SPRING (RIGHT)	
218	3-713-445-01	SPRING (LEFT)	
219	* 3-713-457-01	SHAFT, JOINT	
220	* 3-713-458-01	REINFORCEMENT	

Ref. No.	Part No.	Description	Remark
221	* 3-713-462-03	STOPPER, HOLDER	
222	3-713-466-01	ROLLER	
223	3-713-488-01	SPRING (2), TORSION	
224	3-724-912-01	PLATE, FUNCTION, LEVER	
225	3-713-620-01	SPRING (1), TORSION	
226	3-713-622-01	SCREW (M1.3X4), TAPPING, 0	
227	3-713-625-01	SHOE, BRAKE	
228	3-713-626-01	COVER, MULTI	
229	3-713-628-01	SPRING, TORSION	
230	3-713-658-01	SPRING	
231	3-716-921-01	SPRING, LEAF	
232	3-719-590-01	ROLLER, ASSIST	
233	3-721-125-01	LEVER, LOCK	
234	3-721-136-01	SLIDER, LOCK	
235	3-721-163-01	SPRING	
236	3-721-166-01	LEVER, SWITCH	
237	3-739-116-01	SCREW (2X3), +PS	
S901	1-570-407-11	SWITCH, SLIDE (CASSETTE COMPARTMENT)	
S903	1-553-226-00	SWITCH, LEAF (CASSETTE LOCK)	

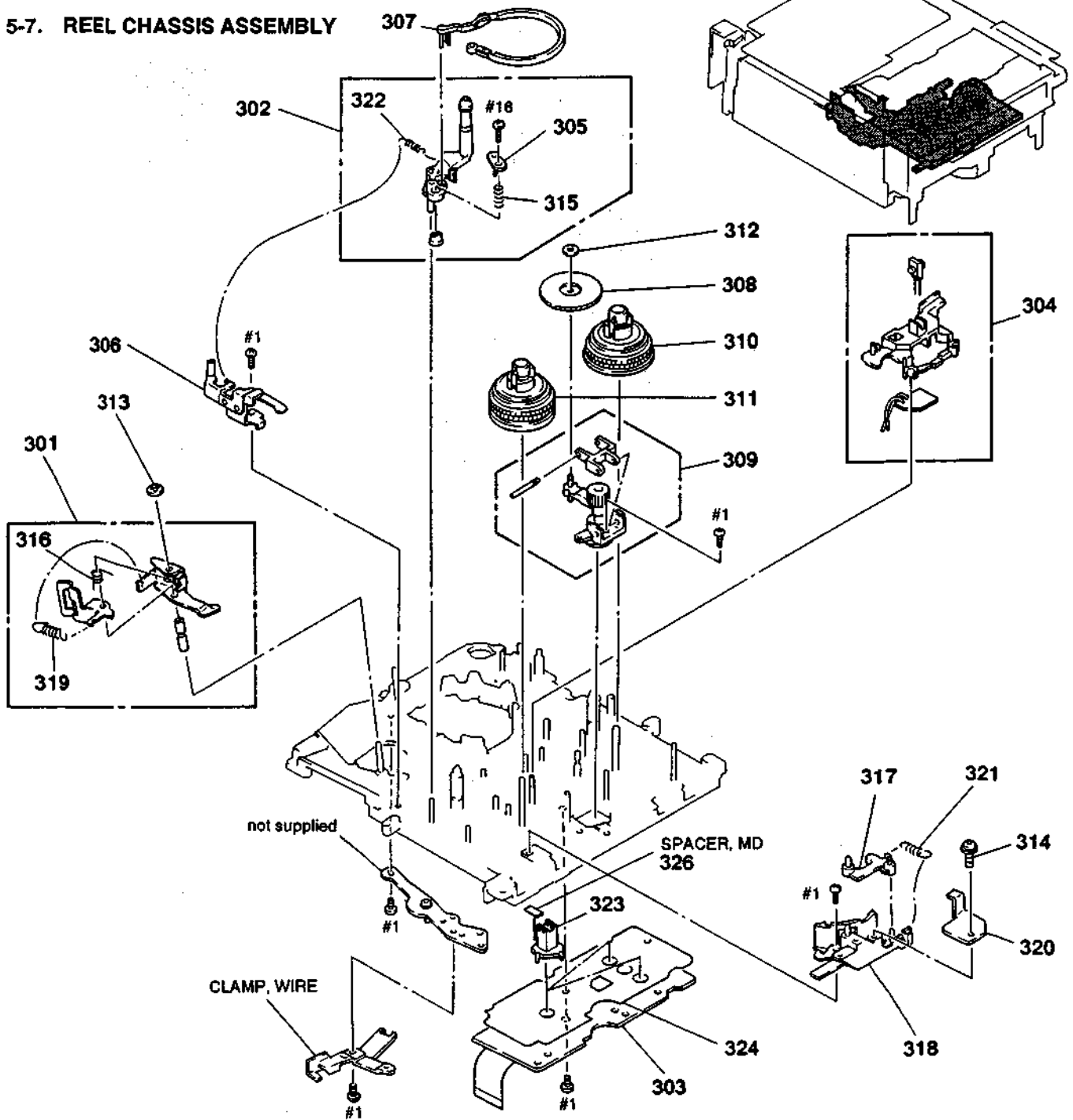
5-6. THREADING RING AND TAPE PATH ASSEMBLIES



Ref. No.	Part No.	Description	Remark
251	A-7040-001-A	GUIDE BLOCK ASSY, SLANT	
252	A-7040-123-A	RING ASSY, THREADING	
253	A-7040-169-D	GUIDE (P) ASSY, ENTRANCE	
254	A-7040-199-A	SLIDER (M) BLOCK ASSY, LOCK	
255	X-3686-514-1	GEAR ASSY, NO. 1	
256	X-3686-574-1	BRAKE ASSY, MAIN, TAKE-UP	
257	X-3686-648-1	ARM ASSY, PINCH ROLLER	
258	X-3713-429-1	BRAKE ASSY, MAIN, S	
259	3-686-724-01	NUT, GUIDE	
260	3-669-465-00	WASHER (1.5), STOPPER	
261	* 3-686-503-01	RETAINER, ROLLER	
262	3-686-508-01	GEAR, NO. 2	
263	3-686-537-01	RETAINER, LOCK SLIDER	
264	3-686-544-01	GEAR, NO. 4	
265	3-686-545-01	GEAR, NO. 3	
266	3-686-546-01	BELT, L-MOTOR	
267	* 3-686-629-01	SLIDER, SELECTION, UPPER & LOWER	
268	* 3-686-635-01	ARM, P	
269	* 3-686-636-04	ARM, T.S RELEASE	
270	3-686-663-01	WASHER, STOPPER, 2 GANG	
271	3-701-436-21	WASHER, POLYETHYLENE	

Ref. No.	Part No.	Description	Remark
272	3-686-701-01	SPRING	
273	3-315-384-31	WASHER, STOPPER	
274	3-699-509-01	GEAR, SECTOR	
275	* 3-686-894-01	FLANGE, #3 #4 GUIDE	
276	* 3-686-911-01	PLATE, TOP, ROLLER	
277	3-686-912-01	GUIDE, #3 #4	
278	3-697-518-01	GEAR, NO. 10	
279	3-697-538-01	ROLLER, RING	
280	* 3-686-757-01	CAP, SHIELD, L-MOTOR	
281	3-699-609-01	SPRING, COMPRESSION	
282	* 3-686-675-01	STOPPER, RING	
283	3-713-560-01	SPRING, TENSION	
284	3-722-153-01	FLYWHEEL	
285	* 3-726-704-01	SPRING, TORSION	
286	3-315-414-00	WASHER	
287	3-578-254-00	RING, RETAINING, E1.2	
288	3-316-938-31	SCREW (81.4X4), TAPPING	
C901	1-161-057-00	CERAMIC 0.033uF 10% 50V	
M903	8-835-364-01	MOTOR, DC BHF-2802B (CAPSTAN)	
M906	A-7040-065-A	MOTOR ASSY, L (CASSETTE LOADING)	
PM901	⚠ 1-454-377-31	SOLENOID, PLUNGER	

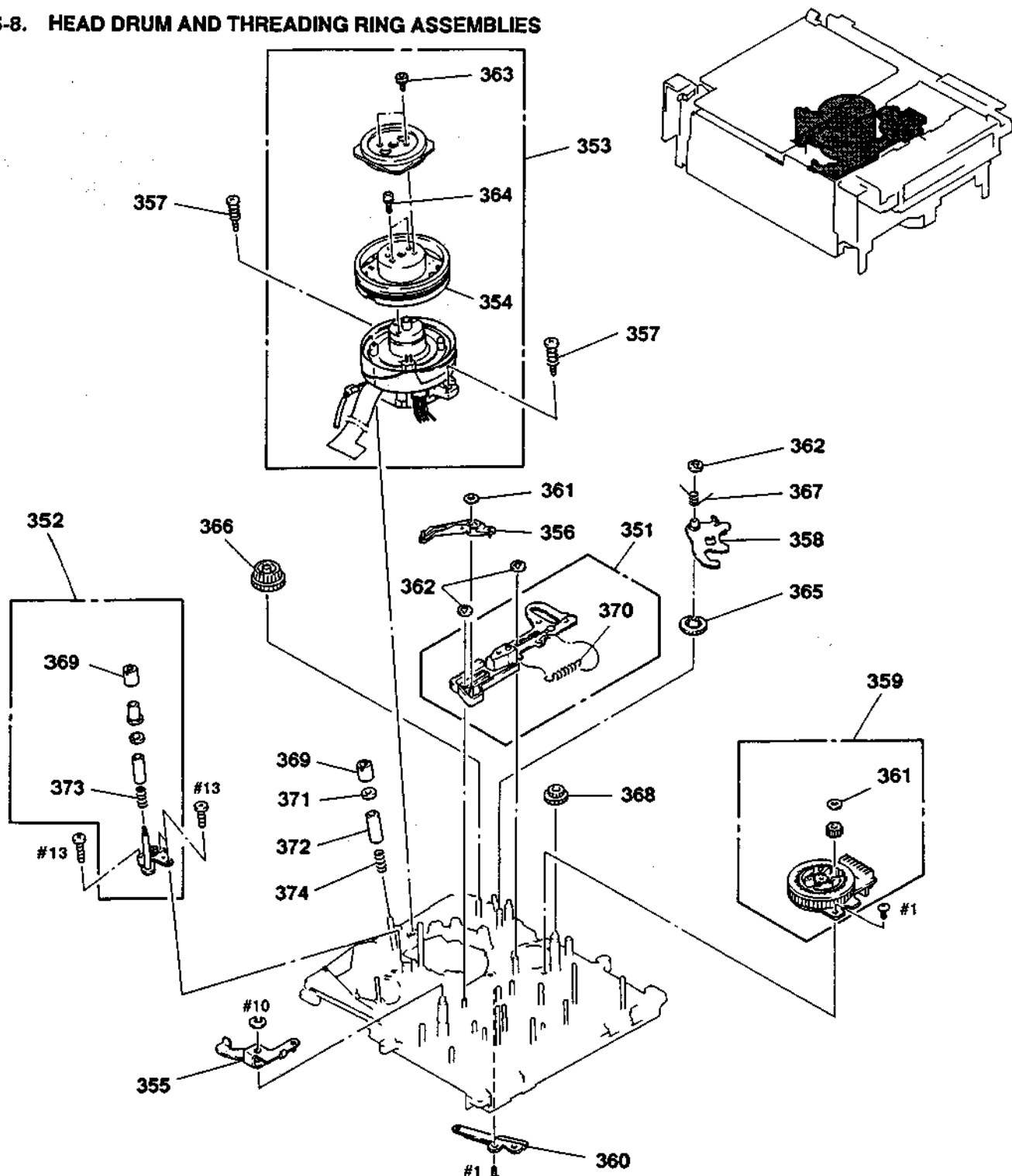
5-7. REEL CHASSIS ASSEMBLY



Ref. No.	Part No.	Description	Remark
301	A-7040-908-A	ARM ASSY, PINCH PRESS	
302	A-7040-071-A	ARM ASSY, TENSION REGULATOR	
303	* A-7061-818-A	RS-31 BOARD, COMPLETE	
304	* A-7070-024-A	LD-1 BOARD, COMPLETE	
305	* X-3686-523-1	PLATE ASSY, TENSION REGULATOR	
306	* X-3686-525-1	HOOK ASSY, SPRING	
307	X-3686-531-1	BAND ASSY, TENSION REGULATOR	
308	X-3686-763-1	GEAR (B) ASSY, DRIVING	
309	X-3711-963-1	DRIVING COMPLETE ASSY	
310	X-3711-998-1	TABLE ASSY, REEL, TAKE-UP	
311	X-3713-427-1	TABLE ASSY, REEL, S	
312	3-315-384-31	WASHER, STOPPER	
313	3-669-465-00	WASHER (1.5), STOPPER	

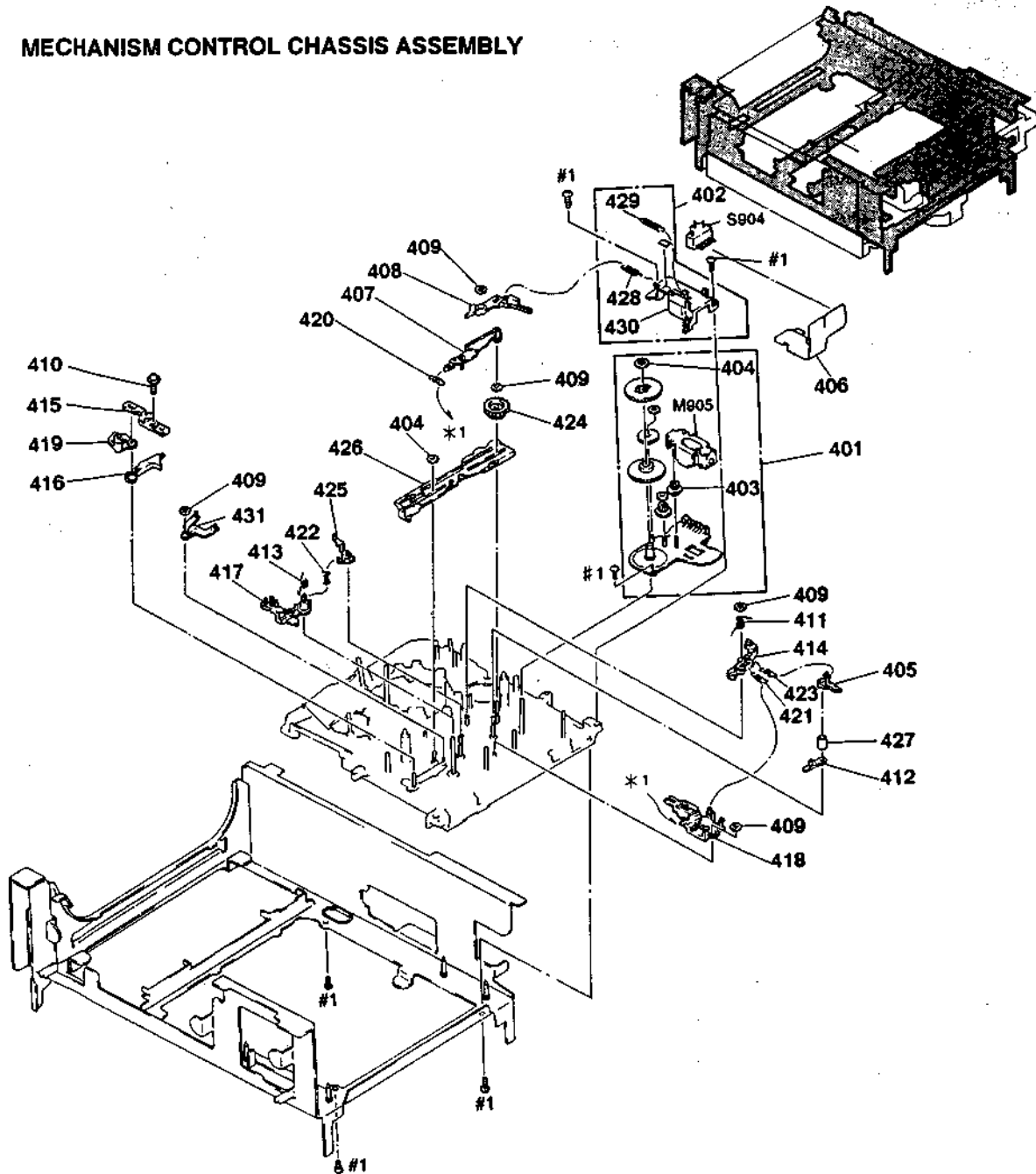
Ref. No.	Part No.	Description	Remark
314	3-569-480-11 + PTPWH 2		
315	3-669-666-00	SPRING, COMPRESSION	
316	3-686-568-01	SPRING, TORSION	
317	* 3-686-637-01	BRAKE (S), SOFT	
318	* 3-686-760-01	GUIDE, BAND	
319	3-686-885-01	SPRING, TENSION	
320	* 3-686-991-01	STOPPER, REEL TABLE	
321	3-714-014-01	SPRING, TENSION	
322	3-699-519-01	SPRING, TENSION	
323	3-712-410-01	HOLDER, RS	
324	3-712-411-01	INSULATOR, RS	
325	3-712-406-01	CLAMP, WIRE	
326	3-722-175-01	SPACER, MD	

5-8. HEAD DRUM AND THREADING RING ASSEMBLIES



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	* A-7040-010-A	SLIDER ASSY, L		363	3-686-422-01	WASHER (2X2.7), BOLT HOLE	
352	A-7040-058-A	GUIDE BLOCK COMPLETE ASSY, #5		364	3-686-493-01	SCREW (M2X5) P1	
353	A-7048-389-A	DRUM ASSY (DGH-68A-R)		365	3-686-535-01	GEAR, NO. 8	
354	A-7049-328-A	DRUM ASSY, ROTARY UPPER (DGR-68-R)		366	3-686-539-01	GEAR, NO. 9	
355	* X-3686-509-1	LEVER ASSY, PINCH PRESS		367	3-686-540-01	SPRING, TORSION	
356	* X-3686-518-3	ARM ASSY		368	3-686-702-01	GEAR, DRIVING, GUIDE, SLANT	
357	X-3686-569-1	SCREW ASSY, FITTING		369	3-686-724-01	NUT, GUIDE	
358	X-3686-579-1	CHANGE ASSY, DRIVE		370	3-686-886-01	SPRING, TENSION	
359	X-3712-403-1	L-SW ASSY (LS-9 BOARD)		371	* 3-686-894-01	FLANGE, #3 #4 GUIDE	
360	1-535-535-11	TERMINAL, SHAFT GROUND		372	3-686-912-01	GUIDE, #3 #4	
361	3-315-384-31	WASHER, STOPPER		373	3-699-514-01	SPRING, COMPRESSION	
362	3-669-465-00	WASHER (1.5), STOPPER		374	3-699-609-01	SPRING, COMPRESSION	

5-9. MECHANISM CONTROL CHASSIS ASSEMBLY



Ref. No.	Part No.	Description	Remark
401	A-7040-159-A	M-SW ASSY	
402	A-7040-198-A	COVER (M) ASSY, C MOTOR	
403	3-308-502-00	WHEEL, WORM	
404	3-315-384-31	WASHER, STOPPER	
405	X-3711-993-1	BRAKE ASSY, REW	
406	* 1-630-923-11	FP-206 FLEXIBLE BOARD	
407	* X-3686-528-4	ARM ASSY, B RELEASE	
408	X-3711-987-2	BRAKE ASSY, T. S	
409	3-669-465-00	WASHER (1.5), STOPPER	
410	3-686-528-01	SCREW (2X6), +PSW	
411	3-686-579-01	SPRING	
412	* 3-686-580-01	ARM, SET UP	
413	3-686-603-04	SPRING	
414	* 3-686-634-01	ARM, RL	
415	* 3-686-642-01	PLATE, ADJUSTMENT, BAND	
416	* 3-686-643-01	ARM, MODE	
417	* 3-686-644-01	ARM, BAND	

Ref. No.	Part No.	Description	Remark
418	* 3-686-656-01	SLIDER, B RELEASE	
419	* 3-686-755-01	DISK, EJECT	
420	3-686-903-01	SPRING, TENSION	
421	3-686-904-01	SPRING, TENSION	
422	3-686-905-02	SPRING, TENSION	
423	3-686-906-01	SPRING, TENSION	
424	3-686-909-01	GEAR, MODE OUTPUT	
425	3-686-996-01	BRAKE (S), HARD	
426	3-716-935-01	SLIDER, M	
427	3-716-933-01	SPACER, REW BRAKE	
428	3-714-035-01	SPRING, TENSION	
429	3-722-110-01	SPRING, TENSION	
430	3-739-107-01	COVER (M), C MOTOR	
431	* X-3686-530-1	ARM (A) ASSY, SELECTION	
M905	8-835-138-01	MOTOR, DC (DNR-5301B) (CONTROL)	
S904	1-572-298-21	SWITCH, PUSH (REC PROOF, MPHG, ME/NP)	

SECTION 6**ELECTRICAL PARTS LIST****FB-169 (P)****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-7062-654-A	FB-169 (P) BOARD, COMPLETE *****		C114	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
	1-809-338-11	INDICATOR, LED		C159	1-135-159-21	TANTALUM CHIP 10uF 10% 16V	
	* 3-689-521-01	HOLDER, LED, ROUND		C160	1-163-145-00	CERAMIC CHIP 0.0015uF 5% 50V	
	* 3-697-607-01	HOLDER (SU), LED		C161	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
	* 3-739-130-01	HOLDER, LEVEL METER		C162	1-135-149-21	TANTALUM CHIP 2.2uF 20% 10V	
	* 3-739-131-01	HOLDER (H), LED		C163	1-135-159-21	TANTALUM CHIP 10uF 10% 16V	
	< CAPACITOR >			C164	1-135-070-00	TANTALUM CHIP 0.1uF 10% 35V	
C001	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C165	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C002	1-135-157-21	TANTALUM CHIP 10uF 20% 6.3V		C166	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C003	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C167	1-126-160-11	ELECT 1uF 20% 50V	
C005	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C168	1-135-159-21	TANTALUM CHIP 10uF 10% 16V	
C007	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C169	1-135-153-21	TANTALUM CHIP 2.2uF 10% 20V	
C008	1-163-105-00	CERAMIC CHIP 33PF 5% 50V		C170	1-135-153-21	TANTALUM CHIP 2.2uF 10% 20V	
C009	1-163-105-00	CERAMIC CHIP 33PF 5% 50V		C171	1-135-159-21	TANTALUM CHIP 10uF 10% 16V	
C010	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C172	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C011	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C173	1-164-697-91	CERAMIC CHIP 0.0027uF 5% 50V	
C012	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C174	1-164-697-91	CERAMIC CHIP 0.0027uF 5% 50V	
C013	1-163-035-00	CERAMIC CHIP 0.047uF 50V		C175	1-163-012-00	CERAMIC CHIP 0.0018uF 10% 50V	
C014	1-135-157-21	TANTALUM CHIP 10uF 20% 6.3V		C176	1-163-129-00	CERAMIC CHIP 330PF 5% 50V	
C015	1-163-035-00	CERAMIC CHIP 0.047uF 50V		< CONNECTOR >			
C101	1-163-038-00	CERAMIC CHIP 0.1uF 25V		CN001	1-569-301-11	PIN, CONNECTOR (PC BOARD) 5P	
C102	1-163-038-00	CERAMIC CHIP 0.1uF 25V		CN002	1-569-301-11	PIN, CONNECTOR (PC BOARD) 5P	
C103	1-135-168-21	TANTALUM CHIP 100uF 20% 4V		CN003	1-569-301-11	PIN, CONNECTOR (PC BOARD) 5P	
C104	1-135-161-21	TANTALUM CHIP 22uF 10% 6.3V		CN004	1-569-301-11	PIN, CONNECTOR (PC BOARD) 5P	
C105	1-135-168-21	TANTALUM CHIP 100uF 20% 4V		CN101	1-506-469-11	CONNECTOR 4P, MALE	
C106	1-135-161-21	TANTALUM CHIP 22uF 10% 6.3V		< DIODE >			
C107	1-135-159-21	TANTALUM CHIP 10uF 10% 16V		D001	8-719-800-76	DIODE 1SS226	
C108	1-135-159-21	TANTALUM CHIP 10uF 10% 16V		D009	8-719-945-82	DIODE GL5HS42 (STANDBY)	
C111	1-126-369-11	ELECT 220uF 20% 6.3V		D010	8-719-920-05	DIODE SLP281C-50 (POWER)	
C112	1-126-369-11	ELECT 220uF 20% 6.3V		D011	8-719-907-92	DIODE GL-5EG521-B (PCM)	
C113	1-163-125-00	CERAMIC CHIP 220PF 5% 50V		D012	8-719-941-46	DIODE GL-5HY41 (SP)	
				D013	8-719-941-46	DIODE GL-5HY41 (S)	
				D014	8-719-918-96	DIODE AA3422S (II)	

Ref. No.	Part No.	Description	Remark
D015	8-719-812-32	DIODE TLY123 (▶▶)	
D016	8-719-920-05	DIODE SLP281C-50 (▷)	
D017	8-719-812-32	DIODE TLY123 (◀◀)	
D018	8-719-939-36	DIODE GL-5HY42 (▲)	
D019	8-719-812-31	DIODE TLR123 (●)	
D020	8-719-913-59	DIODE LT-9230D (HI 8)	
D024	8-719-906-58	DIODE GL-5HD42 (TIMER REC)	
D025	8-719-812-31	DIODE TLR123 (AUDIO DUB)	
D026	8-719-812-31	DIODE TLR123 (TC DUB)	
D101	8-719-104-34	DIODE 1S2836	
D102	8-719-104-34	DIODE 1S2836	
D103	1-520-503-11	METER UNIT, LED LEVEL	
D155	8-719-104-34	DIODE 1S2836	
D156	8-719-104-34	DIODE 1S2836	
D157	8-719-400-18	DIODE MA152WK	
D158	8-719-104-34	DIODE 1S2836	
< IC >			
IC001	8-752-818-14	IC CXP5046H-2550	
IC002	8-759-937-56	IC S-8054ALB-LM-S	
IC003	8-741-100-48	IC SBX1610-59	
IC004	8-759-927-46	IC SNT4HC00NS	
IC101	8-759-981-XX	IC RC4560M	
IC102	8-759-208-11	IC MC14053BF	
IC152	8-759-981-92	IC RC4558M	
IC153	8-759-981-92	IC RC4558M	
IC154	8-759-700-62	IC NJM4562D	
< COIL >			
L001	1-408-789-21	INDUCTOR, CHIP 100uH	
L101	1-408-979-21	INDUCTOR 56uH	
< TRANSISTOR >			
Q012	8-729-901-06	TRANSISTOR DTA144EK	
Q013	8-729-140-88	TRANSISTOR FP1A3M	
Q015	8-729-216-22	TRANSISTOR 2SA1162	
Q016	8-729-900-53	TRANSISTOR DTC114EK	
Q017	8-729-901-06	TRANSISTOR DTA144EK	
Q018	8-729-901-06	TRANSISTOR DTA144EK	
Q019	8-729-901-01	TRANSISTOR DTC144EK	
Q101	8-729-901-01	TRANSISTOR DTC144EK	
Q103	8-729-216-22	TRANSISTOR 2SA1162	
Q104	8-729-100-66	TRANSISTOR 2SC1623	
Q105	8-729-202-38	TRANSISTOR 2SC3326N	
Q106	8-729-202-38	TRANSISTOR 2SC3326N	
Q153	8-729-202-38	TRANSISTOR 2SC3326N	
Q154	8-729-202-38	TRANSISTOR 2SC3326N	
Q155	8-729-202-38	TRANSISTOR 2SC3326N	
Q156	8-729-100-66	TRANSISTOR 2SC1623	

Ref. No.	Part No.	Description	Remark
Q157	8-729-901-06	TRANSISTOR DTA144EK	
Q158	8-729-901-06	TRANSISTOR DTA144EK	
Q159	8-729-901-01	TRANSISTOR DTC144EK	
Q160	8-729-140-75	TRANSISTOR 2SD999-CLCK	
Q161	8-729-101-07	TRANSISTOR 2SB798-DLCK	
Q162	8-729-202-38	TRANSISTOR 2SC3326N	
< RESISTOR >			
R001	1-216-097-00	METAL CHIP 100K	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
R005	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R006	1-216-051-00	METAL CHIP 1.2K	5% 1/10W
R007	1-216-055-00	METAL CHIP 1.8K	5% 1/10W
R008	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R009	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R010	1-216-051-00	METAL CHIP 1.2K	5% 1/10W
R011	1-216-055-00	METAL CHIP 1.8K	5% 1/10W
R012	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R013	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R014	1-216-051-00	METAL CHIP 1.2K	5% 1/10W
R015	1-216-055-00	METAL CHIP 1.8K	5% 1/10W
R016	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R017	1-216-089-00	METAL CHIP 47K	5% 1/10W
R018	1-216-073-00	METAL CHIP 10K	5% 1/10W
R019	1-216-089-00	METAL CHIP 47K	5% 1/10W
R020	1-216-089-00	METAL CHIP 47K	5% 1/10W
R021	1-216-049-00	METAL CHIP 1K	5% 1/10W
R022	1-216-089-00	METAL CHIP 47K	5% 1/10W
R023	1-216-089-00	METAL CHIP 47K	5% 1/10W
R024	1-216-089-00	METAL CHIP 47K	5% 1/10W
R025	1-216-089-00	METAL CHIP 47K	5% 1/10W
R026	1-216-037-00	METAL CHIP 330	5% 1/10W
R027	1-216-029-00	METAL CHIP 150	5% 1/10W
R028	1-216-029-00	METAL CHIP 150	5% 1/10W
R029	1-216-037-00	METAL CHIP 330	5% 1/10W
R030	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	1-216-037-00	METAL CHIP 330	5% 1/10W
R034	1-216-037-00	METAL CHIP 330	5% 1/10W
R035	1-216-037-00	METAL CHIP 330	5% 1/10W
R036	1-216-037-00	METAL CHIP 330	5% 1/10W
R037	1-216-029-00	METAL CHIP 150	5% 1/10W
R038	1-216-029-00	METAL CHIP 150	5% 1/10W
R039	1-216-029-00	METAL CHIP 150	5% 1/10W
R040	1-216-051-00	METAL CHIP 1.2K	5% 1/10W
R041	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R042	1-216-071-00	METAL CHIP 8.2K	5% 1/10W

FB-169 (P)

Ref. No.	Part No.	Description	Remark
R043	1-216-089-00	METAL CHIP 47K 5%	1/10W
R044	1-216-089-00	METAL CHIP 47K 5%	1/10W
R045	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R046	1-216-049-00	METAL CHIP 1K 5%	1/10W
R047	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R048	1-216-037-00	METAL CHIP 330 5%	1/10W
R050	1-216-037-00	METAL CHIP 330 5%	1/10W
R051	1-216-037-00	METAL CHIP 330 5%	1/10W
R052	1-216-089-00	METAL CHIP 47K 5%	1/10W
R053	1-216-033-00	METAL CHIP 220 5%	1/10W
R054	1-216-033-00	METAL CHIP 220 5%	1/10W
R055	1-216-033-00	METAL CHIP 220 5%	1/10W
R103	1-216-073-00	METAL CHIP 10K 5%	1/10W
R104	1-216-073-00	METAL CHIP 10K 5%	1/10W
R105	1-216-113-00	METAL CHIP 470K 5%	1/10W
R106	1-216-085-00	METAL CHIP 33K 5%	1/10W
R107	1-216-085-00	METAL CHIP 33K 5%	1/10W
R108	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R109	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R110	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R111	1-216-113-00	METAL CHIP 470K 5%	1/10W
R112	1-216-037-00	METAL CHIP 330 5%	1/10W
R113	1-216-073-00	METAL CHIP 10K 5%	1/10W
R114	1-216-073-00	METAL CHIP 10K 5%	1/10W
R123	1-216-089-00	METAL CHIP 47K 5%	1/10W
R124	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R125	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R126	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R127	1-216-037-00	METAL CHIP 330 5%	1/10W
R128	1-216-089-00	METAL CHIP 47K 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	1-216-295-00	METAL CHIP 0 5%	1/10W
R132	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R133	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R134	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R135	1-216-295-00	METAL CHIP 0 5%	1/10W
R168	1-216-295-00	METAL CHIP 0 5%	1/10W
R170	1-216-082-00	METAL GLAZE 24K 5%	1/10W
R171	1-216-295-00	METAL CHIP 0 5%	1/10W
R173	1-216-082-00	METAL GLAZE 24K 5%	1/10W
R174	1-216-079-00	METAL CHIP 18K 5%	1/10W
R175	1-216-049-00	METAL CHIP 1K 5%	1/10W
R176	1-216-097-00	METAL CHIP 100K 5%	1/10W
R177	1-216-085-00	METAL CHIP 33K 5%	1/10W
R178	1-216-097-00	METAL CHIP 100K 5%	1/10W
R179	1-216-085-00	METAL CHIP 33K 5%	1/10W
R180	1-216-079-00	METAL CHIP 18K 5%	1/10W
R181	1-216-049-00	METAL CHIP 1K 5%	1/10W

Ref. No.	Part No.	Description	Remark
R182	1-216-089-00	METAL CHIP 47K 5%	1/10W
R183	1-216-089-00	METAL CHIP 47K 5%	1/10W
R184	1-216-089-00	METAL CHIP 47K 5%	1/10W
R185	1-216-075-00	METAL CHIP 12K 5%	1/10W
R186	1-216-049-00	METAL CHIP 1K 5%	1/10W
R187	1-216-075-00	METAL CHIP 12K 5%	1/10W
R188	1-216-103-00	METAL CHIP 180K 5%	1/10W
R189	1-216-107-00	METAL CHIP 270K 5%	1/10W
R190	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R191	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
R192	1-216-093-00	METAL CHIP 68K 5%	1/10W
R193	1-216-051-00	METAL CHIP 1.2K 5%	1/10W
R194	1-216-295-00	METAL CHIP 0 5%	1/10W
R195	1-216-049-00	METAL CHIP 1K 5%	1/10W
R196	1-216-089-00	METAL CHIP 47K 5%	1/10W
R197	1-216-089-00	METAL CHIP 47K 5%	1/10W
R198	1-216-073-00	METAL CHIP 10K 5%	1/10W
R199	1-216-107-00	METAL CHIP 270K 5%	1/10W
R200	1-216-073-00	METAL CHIP 10K 5%	1/10W
R201	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
R202	1-216-089-00	METAL CHIP 47K 5%	1/10W
R203	1-216-105-00	METAL CHIP 220K 5%	1/10W
R204	1-216-105-00	METAL CHIP 220K 5%	1/10W

< VARIABLE RESISTOR >

RV001	1-230-122-00	RES. VAR. CARBON 100K (SLOW ADJ)
RV002	1-230-874-11	RES. ADJ. METAL 100K
RV101	1-228-988-00	RES. VAR. CARBON 10K/10K (PHONE LEVEL)
RV151	1-230-122-00	RES. VAR. CARBON 100K (REC LEVEL L)
RV152	1-230-122-00	RES. VAR. CARBON 100K (REC LEVEL R)

< SWITCH >

S001	1-554-174-00	SWITCH, KEY BOARD (■ STOP)
S002	1-554-174-00	SWITCH, KEY BOARD (● REC)
S003	1-554-174-00	SWITCH, KEY BOARD (▶▶ FF)
S004	1-554-174-00	SWITCH, KEY BOARD (▲ EJECT)
S005	1-554-174-00	SWITCH, KEY BOARD (▷ PLAY)
S006	1-554-174-00	SWITCH, KEY BOARD (■ PAUSE)
S007	1-554-174-00	SWITCH, KEY BOARD (POWER)
S008	1-554-174-00	SWITCH, KEY BOARD (◀◀ REW)
S009	1-554-174-00	SWITCH, KEY BOARD (RESET)
S010	1-570-864-11	SWITCH, SLIDE (TC COUNTER)
S011	1-570-836-11	SWITCH, SLIDE (AUDIO OUTPUT)
S012	1-570-854-11	SWITCH, SLIDE (TIMER)
S013	1-570-864-11	SWITCH, SLIDE (AUTO REPEAT)
S014	1-570-864-11	SWITCH, SLIDE (INPUT SELECT)
S015	1-554-174-00	SWITCH, KEY BOARD (AUDIO DUB)
S016	1-571-787-11	SWITCH, TACTILE (▶)
S017	1-571-787-11	SWITCH, TACTILE (◀)

Ref. No.	Part No.	Description	Remark
S018	1-554-174-00	SWITCH, KEY BOARD (TC DUB)	
		< CRYSTAL >	
X001	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)	

	* A-7062-165-A	FR-43 BOARD, COMPLETE	*****
	* 3-739-102-01	LID (H), UPPER, FR SHIELD CASE	
		< FLAT TYPE 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	TANTAL. CHIP 1uF 20% 15V	
C006	1-163-035-00	CERAMIC CHIP 0.047uF 50V	
C007	1-135-091-00	TANTAL. CHIP 1uF 20% 16V	
C008	1-163-035-00	CERAMIC CHIP 0.047uF 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	
C043	1-135-157-21	TANTALUM CHIP 10uF 20% 6.3V	
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	8-759-009-07	IC HD140538FP	
		< COIL >	
L001	1-408-777-00	INDUCTOR CHIP 10uH	
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 2SA1122-CD	
Q031	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q032	8-729-102-07	TRANSISTOR 2SC2223-F13	
Q041	8-729-216-22	TRANSISTOR 2SA1162	
Q042	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q043	8-729-320-17	TRANSISTOR 2SA1122-CD	
		< 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	

Ref. No.	Part No.	Description	Remark
R016	1-216-073-00	METAL CHIP	10K 5% 1/10W
R017	1-216-049-00	METAL CHIP	1K 5% 1/10W
R018	1-216-695-11	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	1-216-025-00	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

* 1-533-695-11 HE-2 BOARD

< CAPACITOR >

C201	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V
C202	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V
C203	1-163-809-11	CERAMIC CHIP	0.047uF	10% 25V

< CONNECTOR >

CN201	1-506-468-11	CONNECTOR 3P. MALE
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Ref. No.	Part No.	Description	Remark
		< JACK >	

J201	1-507-792-00	JACK (HEADPHONES)
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* A-7062-164-A HK-5 BOARD, COMPLETE

3-531-576-01 RIVET.

* 3-724-107-01 RETAINER. PC BOARD

< 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	6PF	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

Ref. No.	Part No.	Description	Remark
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
C144	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C145	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C146	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C147	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C148	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C149	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C181	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C182	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C183	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C184	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C201	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C202	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C203	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C204	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C206	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C207	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C208	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C209	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C210	1-163-106-00	CERAMIC CHIP 36PF	5% 50V
C211	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C212	1-135-211-11	TANTAL. CHIP 6.8uF	20% 6.3V
C213	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C214	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C215	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C216	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C217	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C218	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C219	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C220	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C221	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C222	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C223	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C224	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C302	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C303	1-163-095-00	CERAMIC CHIP 12PF	5% 50V
C304	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
C305	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
C307	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C308	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C309	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C311	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C313	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C314	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
C316	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
C317	1-163-245-11	CERAMIC CHIP 56PF	5% 50V

Ref. No.	Part No.	Description	Remark
C318	1-164-491-11	CERAMIC CHIP 0.0003uF	5% 50V
C319	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C320	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C321	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C322	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C323	1-163-012-00	CERAMIC CHIP 0.0018uF	10% 50V
C324	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C325	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C326	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C327	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C328	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C329	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C330	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C331	1-135-211-11	TANTAL. CHIP 6.8uF	20% 6.3V
C332	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V
C334	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V
C335	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C337	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C338	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C339	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C340	1-135-072-21	TANTALUM CHIP 0.22uF	10% 35V
C341	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C342	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C343	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C344	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C345	1-163-134-00	CERAMIC CHIP 510PF	5% 50V
C347	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C348	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C349	1-135-177-21	TANTALUM CHIP 1uF	20% 20V
C350	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C402	1-124-968-11	ELECT 22uF	20% 6.3V
C403	1-163-106-00	CERAMIC CHIP 36PF	5% 50V
C404	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C405	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
C406	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C407	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C408	1-163-227-11	CERAMIC CHIP 10PF	5% 50V
C409	1-164-232-11	CERAMIC CHIP 0.01uF	5V
C410	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C411	1-163-088-00	CERAMIC CHIP 5PF	50V
C412	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C413	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C414	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C415	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C416	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C417	1-162-722-11	CERAMIC 330PF	1% 50V
C418	1-162-724-11	CERAMIC 390PF	1% 50V
C419	1-164-491-11	CERAMIC CHIP 0.0003uF	5% 50V
C420	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V

Ref. No.	Part No.	Description	Remark
C421	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C422	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C423	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C424	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V
C427	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C428	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C429	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C430	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C501	1-135-166-21	TANTALUM CHIP 47uF	10% 10V
C502	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C503	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C504	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C505	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C506	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C507	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C508	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C509	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C510	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C511	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C512	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C513	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C514	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C515	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C516	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V
C517	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C519	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C520	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C521	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
C522	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C523	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C524	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C525	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C526	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C527	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C528	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C529	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C531	1-135-161-21	TANTALUM CHIP 22uF	10% 6.3V
C532	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C601	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C602	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C603	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C604	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C605	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C606	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C607	1-135-070-00	TANTALUM CHIP 0.1uF	10% 35V
C608	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C609	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C610	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C611	1-163-035-00	CERAMIC CHIP 0.047uF	50V

Ref. No.	Part No.	Description	Remark
C612	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C613	1-135-073-00	TANTALUM CHIP 0.33uF	10% 35V
C614	1-163-098-00	CERAMIC CHIP 15PF	5% 50V
C615	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C616	1-163-108-00	CERAMIC CHIP 43PF	5% 50V
C617	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C618	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C619	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C620	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C621	1-135-155-21	TANTALUM CHIP 4.7uF	10% 10V
C622	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C623	1-135-156-21	TANTALUM CHIP 6.8uF	10% 6.3V
C624	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C625	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C627	1-163-075-00	CERAMIC CHIP 0.047uF	50V
C628	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C629	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C630	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C631	1-135-072-21	TANTALUM CHIP 0.22uF	10% 35V
C632	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C633	1-163-833-00	CERAMIC CHIP 0.068uF	25V
C634	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C635	1-164-182-11	CERAMIC CHIP 0.0033uF	10% 50V
C636	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C637	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C638	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C639	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C640	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C641	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C642	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C644	1-163-115-00	CERAMIC CHIP 82PF	5% 50V
C645	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C646	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
C647	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C648	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C649	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C650	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C651	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C652	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V
C653	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C654	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C655	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C657	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C658	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C659	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C660	1-163-011-11	CERAMIC CHIP 0.0015uF	10% 50V
C661	1-163-235-11	CERAMIC CHIP 22PF	5% 50V

Ref. No.	Part No.	Description	Value	Remark
C662	1-163-035-00	CERAMIC CHIP	0.047uF	50V
C663	1-163-263-11	CERAMIC CHIP	330PF	5% 50V
C664	1-163-263-11	CERAMIC CHIP	330PF	5% 50V
C666	1-163-011-11	CERAMIC CHIP	0.0015uF	10% 50V
C667	1-164-232-11	CERAMIC CHIP	0.01uF	50V
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

Ref. No.	Part No.	Description	Value	Remark
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
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	

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Ref. No.	Part No.	Description	Remark
< DELAY LINE >			
DL501	1-415-517-21	DELAY LINE. DUAL 1H-2H	
DL700	1-415-154-00	DELAY LINE 35nS	
< FILTER >			
FL301	1-235-370-11	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 (3.7MHz)	
FL802	1-235-633-11	BPF (5.17MHz)	
< IC >			
IC101	8-759-233-94	IC TA8607F	
IC102	8-759-925-60	IC BA401	
IC301	8-752-002-99	IC CX20030	
IC401	8-752-031-01	IC CXA1047M	
IC501	8-752-003-12	IC CX20031	
IC601	8-759-924-94	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	

Ref. No.	Part No.	Description	Remark
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	
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 2SC2714-0	
Q102	8-729-901-04	TRANSISTOR DTA114EK	
Q103	8-729-200-86	TRANSISTOR 2SC2714-0	
Q104	8-729-901-01	TRANSISTOR DTC144EK	
Q105	8-729-904-07	TRANSISTOR FMG2-T-148	
Q107	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q110	8-729-901-01	TRANSISTOR DTC144EK	
Q111	8-729-200-86	TRANSISTOR 2SC2714-0	
Q112	8-729-901-01	TRANSISTOR DTC144EK	
Q113	8-729-200-86	TRANSISTOR 2SC2714-0	
Q116	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q117	8-729-200-86	TRANSISTOR 2SC2714-0	
Q118	8-729-200-86	TRANSISTOR 2SC2714-0	
Q119	8-729-200-86	TRANSISTOR 2SC2714-0	
Q120	8-729-200-86	TRANSISTOR 2SC2714-0	
Q121	8-729-201-27	TRANSISTOR 2SC2715-Y	

Ref. No.	Part No.	Description	Remark
Q122	8-729-901-01	TRANSISTOR DTC144EK	
Q123	8-729-901-01	TRANSISTOR DTC144EK	
Q124	8-729-901-06	TRANSISTOR DTA144EK	
Q125	8-729-901-01	TRANSISTOR DTC144EK	
Q126	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q127	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q128	8-729-202-38	TRANSISTOR 2SC3326M	
Q129	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q130	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q131	8-729-216-22	TRANSISTOR 2SA1162	
Q132	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q181	8-729-907-46	TRANSISTOR 1M21	
Q182	8-729-903-10	TRANSISTOR FMW1	
Q183	8-729-200-86	TRANSISTOR 2SC2714-0	
Q184	8-729-216-22	TRANSISTOR 2SA1162	
Q209	8-729-200-86	TRANSISTOR 2SC2714-0	
Q210	8-729-200-86	TRANSISTOR 2SC2714-0	
Q211	8-729-200-86	TRANSISTOR 2SC2714-0	
Q212	8-729-901-01	TRANSISTOR DTC144EK	
Q213	8-729-901-06	TRANSISTOR DTA144EK	
Q214	8-729-200-86	TRANSISTOR 2SC2714-0	
Q215	8-729-902-96	TRANSISTOR FMS1	
Q217	8-729-200-86	TRANSISTOR 2SC2714-0	
Q218	8-729-200-86	TRANSISTOR 2SC2714-0	
Q301	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q302	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q305	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q306	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q307	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q309	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q310	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q311	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q312	8-729-901-06	TRANSISTOR DTA144EK	
Q313	8-729-216-22	TRANSISTOR 2SA1162	
Q314	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q315	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q316	8-729-901-01	TRANSISTOR DTC144EK	
Q317	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q318	8-729-901-06	TRANSISTOR DTA144EK	
Q319	8-729-201-27	TRANSISTOR 2SC2715-Y	
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-Y	
Q328	8-729-201-27	TRANSISTOR 2SC2715-Y	

Ref. No.	Part No.	Description	Remark
Q330	8-729-901-06	TRANSISTOR DTA144EK	
Q389	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q401	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q402	8-729-201-27	TRANSISTOR 2SC2715-Y	
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-Y	
Q407	8-729-216-22	TRANSISTOR 2SA1162	
Q408	8-729-216-22	TRANSISTOR 2SA1162	
Q409	8-729-201-27	TRANSISTOR 2SC2715-Y	
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-Y	
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-Y	
Q419	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q420	8-729-202-38	TRANSISTOR 2SC3326M	
Q421	8-729-202-38	TRANSISTOR 2SC3326M	
Q422	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q423	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q424	8-729-901-01	TRANSISTOR DTC144EK	
Q425	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q426	8-729-201-27	TRANSISTOR 2SC2715-Y	
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-Y	
Q601	8-729-901-01	TRANSISTOR DTC144EK	
Q603	8-729-901-01	TRANSISTOR DTC144EK	
Q604	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q605	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q606	8-729-901-01	TRANSISTOR DTC144EK	
Q607	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q608	8-729-216-22	TRANSISTOR 2SA1162	
Q609	8-729-901-00	TRANSISTOR DTC124EK	
Q610	8-729-904-04	TRANSISTOR FMS2-T-149	
Q611	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q612	8-729-201-27	TRANSISTOR 2SC2715-Y	
Q613	8-729-901-01	TRANSISTOR DTC144EK	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q701	8-729-201-27	TRANSISTOR 2SC2715-Y		R130	1-216-033-00	METAL CHIP 220 5% 1/10W	
Q702	8-729-202-38	TRANSISTOR 2SC3326N		R137	1-216-033-00	METAL CHIP 220 5% 1/10W	
Q703	8-729-202-38	TRANSISTOR 2SC3326N		R139	1-216-295-00	METAL CHIP 0 5% 1/10W	
Q704	8-729-216-22	TRANSISTOR 2SA1162		R140	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
Q706	8-729-201-27	TRANSISTOR 2SC2715-Y		R141	1-216-075-00	METAL CHIP 12K 5% 1/10W	
Q707	8-729-201-27	TRANSISTOR 2SC2715-Y		R142	1-216-748-11	METAL CHIP 39K 5% 1/10W	
Q710	8-729-901-01	TRANSISTOR DTC144EK		R143	1-216-039-00	METAL CHIP 390 5% 1/10W	
Q711	8-729-901-01	TRANSISTOR DTC144EK		R144	1-216-045-00	METAL CHIP 680 5% 1/10W	
Q712	8-729-901-01	TRANSISTOR DTC144EK		R145	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q720	8-729-200-86	TRANSISTOR 2SC2714-0		R146	1-216-645-11	METAL CHIP 560 0.5% 1/10W	
Q721	8-729-200-86	TRANSISTOR 2SC2714-0		R147	1-216-081-00	METAL CHIP 22K 5% 1/10W	
Q722	8-729-200-86	TRANSISTOR 2SC2714-0		R148	1-216-081-00	METAL CHIP 22K 5% 1/10W	
Q723	8-729-201-27	TRANSISTOR 2SC2715-Y		R149	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q724	8-729-901-01	TRANSISTOR DTC144EK		R150	1-216-047-00	METAL CHIP 820 5% 1/10W	
Q801	8-729-901-01	TRANSISTOR DTC144EK		R151	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q802	8-729-201-27	TRANSISTOR 2SC2715-Y		R153	1-216-073-00	METAL CHIP 10K 5% 1/10W	
Q803	8-729-201-27	TRANSISTOR 2SC2715-Y		R154	1-216-073-00	METAL CHIP 10K 5% 1/10W	
Q804	8-729-201-27	TRANSISTOR 2SC2715-Y		R155	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q805	8-729-216-22	TRANSISTOR 2SA1162		R157	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
Q811	8-729-901-01	TRANSISTOR DTC144EK		R158	1-216-083-00	METAL CHIP 27K 5% 1/10W	
Q901	8-729-901-01	TRANSISTOR DTC144EK		R159	1-216-025-00	METAL CHIP 100 5% 1/10W	
Q902	8-729-901-01	TRANSISTOR DTC144EK		R160	1-216-643-11	METAL CHIP 470 0.5% 1/10W	
Q903	8-729-104-25	TRANSISTOR 2SB804-AV		R161	1-216-295-00	METAL CHIP 0 5% 1/10W	
Q904	8-729-201-27	TRANSISTOR 2SC2715-Y		R162	1-216-045-00	METAL CHIP 680 5% 1/10W	
< RESISTOR >				R163	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R101	1-216-049-00	METAL CHIP 1K 5% 1/10W		R164	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R102	1-216-029-00	METAL CHIP 150 5% 1/10W		R165	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R103	1-216-073-00	METAL CHIP 10K 5% 1/10W		R166	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R104	1-216-073-00	METAL CHIP 10K 5% 1/10W		R167	1-216-041-00	METAL CHIP 470 5% 1/10W	
R105	1-216-037-00	METAL CHIP 330 5% 1/10W		R168	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R106	1-216-041-00	METAL CHIP 470 5% 1/10W		R169	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R107	1-216-035-00	METAL CHIP 270 5% 1/10W		R170	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R108	1-216-043-00	METAL CHIP 560 5% 1/10W		R171	1-216-748-11	METAL CHIP 39K 5% 1/10W	
R109	1-216-081-00	METAL CHIP 22K 5% 1/10W		R173	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R110	1-216-081-00	METAL CHIP 22K 5% 1/10W		R174	1-216-748-11	METAL CHIP 39K 5% 1/10W	
R111	1-216-045-00	METAL CHIP 680 5% 1/10W		R175	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R112	1-216-041-00	METAL CHIP 470 5% 1/10W		R176	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R113	1-216-041-00	METAL CHIP 470 5% 1/10W		R177	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R115	1-216-639-11	METAL CHIP 330 0.5% 1/10W		R178	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R116	1-216-639-11	METAL CHIP 330 0.5% 1/10W		R179	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R119	1-216-073-00	METAL CHIP 10K 5% 1/10W		R180	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R120	1-216-073-00	METAL CHIP 10K 5% 1/10W		R181	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R122	1-216-057-00	METAL CHIP 2.2K 5% 1/10W		R182	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R124	1-216-049-00	METAL CHIP 1K 5% 1/10W		R183	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R125	1-216-073-00	METAL CHIP 10K 5% 1/10W		R184	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R126	1-216-073-00	METAL CHIP 10K 5% 1/10W		R185	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R127	1-216-049-00	METAL CHIP 1K 5% 1/10W		R186	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R128	1-216-041-00	METAL CHIP 470 5% 1/10W		R187	1-216-081-00	METAL CHIP 22K 5% 1/10W	
				R189	1-216-077-00	METAL CHIP 15K 5% 1/10W	

Ref. No.	Part No.	Description	Remark		
R190	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R191	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
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

Ref. No.	Part No.	Description	Remark		
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
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

Ref. No.	Part No.	Description	Remark		
R357	1-216-081-00	METAL CHIP	22K	5%	1/10W
R358	1-216-089-00	METAL CHIP	47K	5%	1/10W
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	1-216-076-00	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

Ref. No.	Part No.	Description	Remark		
R420	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
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	1.8K	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

Ref. No.	Part No.	Description	Remark	
R470	1-216-073-00	METAL CHIP	10K	5% 1/10W
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	1-216-085-00	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	1-216-659-11	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

Ref. No.	Part No.	Description	Remark	
R534	1-216-049-00	METAL CHIP	1K	5% 1/10W
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
R605	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	1-216-061-00	METAL CHIP	3.3K	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	1-216-049-00	METAL CHIP	1K	5% 1/10W
R643	1-216-295-00	METAL CHIP	0	5% 1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R644	1-216-073-00	METAL CHIP	10K	5%	1/10W	R745	1-216-049-00	METAL CHIP	1K	5%	1/10W
R645	1-216-073-00	METAL CHIP	10K	5%	1/10W	R746	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R646	1-216-097-00	METAL CHIP	100K	5%	1/10W	R748	1-216-025-00	METAL CHIP	100	5%	1/10W
R647	1-216-085-00	METAL CHIP	33K	5%	1/10W	R750	1-216-043-00	METAL CHIP	560	5%	1/10W
R648	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R751	1-216-037-00	METAL CHIP	330	5%	1/10W
R649	1-216-079-00	METAL CHIP	18K	5%	1/10W	R752	1-216-085-00	METAL CHIP	33K	5%	1/10W
R650	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R753	1-216-049-00	METAL CHIP	1K	5%	1/10W
R651	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R754	1-216-049-00	METAL CHIP	1K	5%	1/10W
R652	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R755	1-216-049-00	METAL CHIP	1K	5%	1/10W
R653	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R756	1-216-049-00	METAL CHIP	1K	5%	1/10W
R654	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R757	1-216-049-00	METAL CHIP	1K	5%	1/10W
R655	1-216-049-00	METAL CHIP	1K	5%	1/10W	R758	1-216-041-00	METAL CHIP	470	5%	1/10W
R656	1-216-049-00	METAL CHIP	1K	5%	1/10W	R759	1-216-295-00	METAL CHIP	0	5%	1/10W
R657	1-216-121-00	METAL CHIP	1M	5%	1/10W	R760	1-216-041-00	METAL CHIP	470	5%	1/10W
R658	1-216-039-00	METAL CHIP	390	5%	1/10W	R761	1-216-034-00	METAL CHIP	240	5%	1/10W
R659	1-216-121-00	METAL CHIP	1M	5%	1/10W	R762	1-216-049-00	METAL CHIP	1K	5%	1/10W
R660	1-216-115-00	METAL CHIP	560K	5%	1/10W	R763	1-216-037-00	METAL CHIP	330	5%	1/10W
R661	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	R764	1-216-037-00	METAL CHIP	330	5%	1/10W
R662	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	R765	1-216-041-00	METAL CHIP	470	5%	1/10W
R663	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W	R766	1-216-089-00	METAL CHIP	47K	5%	1/10W
R664	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W	R767	1-216-041-00	METAL CHIP	470	5%	1/10W
R665	1-216-089-00	METAL CHIP	47K	5%	1/10W	R768	1-216-041-00	METAL CHIP	470	5%	1/10W
R666	1-216-091-00	METAL CHIP	56K	5%	1/10W	R770	1-216-081-00	METAL CHIP	22K	5%	1/10W
R667	1-216-033-00	METAL CHIP	220	5%	1/10W	R771	1-216-081-00	METAL CHIP	22K	5%	1/10W
R668	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R772	1-216-041-00	METAL CHIP	470	5%	1/10W
R669	1-216-093-00	METAL CHIP	68K	5%	1/10W	R773	1-216-041-00	METAL CHIP	470	5%	1/10W
R670	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	R774	1-216-660-11	METAL CHIP	2.4K	0.5%	1/10W
R671	1-216-039-00	METAL CHIP	390	5%	1/10W	R776	1-216-049-00	METAL CHIP	1K	5%	1/10W
R672	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R801	1-216-049-00	METAL CHIP	1K	5%	1/10W
R673	1-216-073-00	METAL CHIP	10K	5%	1/10W	R802	1-216-041-00	METAL CHIP	470	5%	1/10W
R674	1-216-073-00	METAL CHIP	10K	5%	1/10W	R803	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R675	1-216-106-00	METAL CHIP	240K	5%	1/10W	R804	1-216-089-00	METAL CHIP	47K	5%	1/10W
R676	1-216-106-00	METAL CHIP	240K	5%	1/10W	R805	1-216-081-00	METAL CHIP	22K	5%	1/10W
R677	1-216-105-00	METAL CHIP	220K	5%	1/10W	R806	1-216-043-00	METAL CHIP	560	5%	1/10W
R678	1-216-073-00	METAL CHIP	10K	5%	1/10W	R807	1-216-093-00	METAL CHIP	68K	5%	1/10W
R699	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	R808	1-216-089-00	METAL CHIP	47K	5%	1/10W
R701	1-216-049-00	METAL CHIP	1K	5%	1/10W	R809	1-216-075-00	METAL CHIP	12K	5%	1/10W
R702	1-216-089-00	METAL CHIP	47K	5%	1/10W	R810	1-216-049-00	METAL CHIP	1K	5%	1/10W
R703	1-216-089-00	METAL CHIP	47K	5%	1/10W	R811	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R704	1-216-645-11	METAL CHIP	560	0.5%	1/10W	R812	1-216-097-00	METAL CHIP	100K	5%	1/10W
R705	1-216-635-11	METAL CHIP	220	0.5%	1/10W	R813	1-216-095-00	METAL CHIP	82K	5%	1/10W
R706	1-216-073-00	METAL CHIP	10K	5%	1/10W	R814	1-216-099-00	METAL CHIP	120K	5%	1/10W
R707	1-216-651-11	METAL CHIP	1K	0.5%	1/10W	R815	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R708	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	R816	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R709	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W	R817	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R710	1-216-643-11	METAL CHIP	470	0.5%	1/10W	R818	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R711	1-216-645-11	METAL CHIP	560	0.5%	1/10W	R819	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R728	1-216-073-00	METAL CHIP	10K	5%	1/10W	R820	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R729	1-216-049-00	METAL CHIP	1K	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	8PF, 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)	
< CRYSTAL >			
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-7062-630-A IF-39 BOARD, COMPLETE			

* 1-533-189-11 HOLDER, FUSE			
3-671-893-00 CLAMP (LOW TYPE)			
< CAPACITOR >			
C001	1-124-234-00	ELECT 22uF	20% 16V
C002	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C003	1-124-234-00	ELECT 22uF	20% 16V
C004	1-124-234-00	ELECT 22uF	20% 16V
C007	1-124-234-00	ELECT 22uF	20% 16V
C009	1-124-584-00	ELECT 100uF	20% 10V
C010	1-124-584-00	ELECT 100uF	20% 10V
C011	1-124-584-00	ELECT 100uF	20% 10V
C012	1-124-584-00	ELECT 100uF	20% 10V
C013	1-124-584-00	ELECT 100uF	20% 10V
C014	1-124-234-00	ELECT 22uF	20% 16V
C015	1-124-234-00	ELECT 22uF	20% 16V
C016	1-124-234-00	ELECT 22uF	20% 16V
C017	1-124-584-00	ELECT 100uF	20% 10V
C018	1-124-234-00	ELECT 22uF	20% 16V
C021	1-124-584-00	ELECT 100uF	20% 10V
C022	1-124-234-00	ELECT 22uF	20% 16V
C023	1-126-162-11	ELECT 3.3uF	20% 50V
C051	1-124-234-00	ELECT 22uF	20% 16V
C052	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C053	1-124-234-00	ELECT 22uF	20% 16V
C054	1-124-234-00	ELECT 22uF	20% 16V
C057	1-124-234-00	ELECT 22uF	20% 16V
C059	1-124-584-00	ELECT 100uF	20% 10V
C060	1-124-584-00	ELECT 100uF	20% 10V
C061	1-124-584-00	ELECT 100uF	20% 10V
C062	1-124-584-00	ELECT 100uF	20% 10V
C063	1-124-584-00	ELECT 100uF	20% 10V
C064	1-124-234-00	ELECT 22uF	20% 16V
C065	1-124-234-00	ELECT 22uF	20% 16V
C066	1-124-234-00	ELECT 22uF	20% 16V
C067	1-124-234-00	ELECT 22uF	20% 16V
C081	1-124-584-00	ELECT 100uF	20% 10V
C082	1-124-234-00	ELECT 22uF	20% 16V

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C083	1-126-162-11	ELECT	3.3uF	20%	50V	C347	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C165	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C348	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C166	1-163-035-00	CERAMIC CHIP	0.047uF		50V	C349	1-124-584-00	ELECT	100uF	20%	10V
C167	1-126-162-11	ELECT	3.3uF	20%	50V	C350	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C168	1-124-234-00	ELECT	22uF	20%	16V	C351	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C169	1-124-472-11	ELECT	470uF	20%	10V	C352	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C171	1-124-584-00	ELECT	100uF	20%	10V	C353	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C172	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	C354	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C173	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	C356	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C301	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C357	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C302	1-124-589-11	ELECT	47uF	20%	16V	C358	1-124-584-00	ELECT	100uF	20%	10V
C303	1-124-589-11	ELECT	47uF	20%	16V	C359	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C304	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C360	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C305	1-124-584-00	ELECT	100uF	20%	10V	C361	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C306	1-124-584-00	ELECT	100uF	20%	10V	C362	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C307	1-163-102-00	CERAMIC CHIP	24PF	5%	50V	C363	1-124-584-00	ELECT	100uF	20%	10V
C308	1-124-584-00	ELECT	100uF	20%	10V	C364	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C310	1-126-157-11	ELECT	10uF	20%	16V	C365	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C311	1-126-157-11	ELECT	10uF	20%	16V	C401	1-124-584-00	ELECT	100uF	20%	10V
C312	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C403	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C313	1-124-584-00	ELECT	100uF	20%	10V	C404	1-124-589-11	ELECT	47uF	20%	16V
C314	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	C405	1-124-589-11	ELECT	47uF	20%	16V
C315	1-124-584-00	ELECT	100uF	20%	10V	C406	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C316	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C407	1-124-589-11	ELECT	47uF	20%	16V
C317	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C408	1-124-589-11	ELECT	47uF	20%	16V
C318	1-124-584-00	ELECT	100uF	20%	10V	C409	1-124-589-11	ELECT	47uF	20%	16V
C319	1-124-584-00	ELECT	100uF	20%	10V	C410	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C320	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	C411	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C321	1-124-584-00	ELECT	100uF	20%	10V	C412	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C323	1-163-104-00	CERAMIC CHIP	30PF	5%	50V	C413	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C324	1-126-176-11	ELECT	220uF	20%	10V	C414	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C326	1-124-589-11	ELECT	47uF	20%	16V	C416	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C327	1-124-589-11	ELECT	47uF	20%	16V	C417	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C328	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C418	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C329	1-124-584-00	ELECT	100uF	20%	10V	C420	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C332	1-126-176-11	ELECT	220uF	20%	10V	C421	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C334	1-124-589-11	ELECT	47uF	20%	16V	C422	1-124-589-11	ELECT	47uF	20%	16V
C335	1-124-589-11	ELECT	47uF	20%	16V	C423	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C336	1-124-584-00	ELECT	100uF	20%	10V	C424	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C337	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C425	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C338	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C426	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C339	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C501	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C340	1-124-584-00	ELECT	100uF	20%	10V	C502	1-124-589-11	ELECT	47uF	20%	16V
C341	1-124-589-11	ELECT	47uF	20%	16V	C503	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C342	1-124-589-11	ELECT	47uF	20%	16V	C504	1-124-584-00	ELECT	100uF	20%	10V
C343	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C505	1-163-091-00	CERAMIC CHIP	8PF		50V
C344	1-124-584-00	ELECT	100uF	20%	10V	C506	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C345	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C507	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C346	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V						

Ref. No.	Part No.	Description	Remark		
C508	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C509	1-124-589-11	ELECT	47uF	20%	16V
C510	1-163-091-00	CERAMIC CHIP	8PF		50V
C511	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C512	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C513	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C514	1-124-589-11	ELECT	47uF	20%	16V
C515	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C516	1-126-157-11	ELECT	10uF	20%	16V
C517	1-124-584-00	ELECT	100uF	20%	10V
C518	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C519	1-163-091-00	CERAMIC CHIP	8PF		50V
C520	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C521	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C522	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C523	1-124-589-11	ELECT	47uF	20%	16V
C524	1-124-589-11	ELECT	47uF	20%	16V
C525	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C526	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C527	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C601	1-124-589-11	ELECT	47uF	20%	16V
C602	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C603	1-124-589-11	ELECT	47uF	20%	16V
C604	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C605	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C606	1-126-157-11	ELECT	10uF	20%	16V
C607	1-126-157-11	ELECT	10uF	20%	16V
C608	1-126-157-11	ELECT	10uF	20%	16V
C609	1-124-584-00	ELECT	100uF	20%	10V
C610	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C611	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C612	1-124-589-11	ELECT	47uF	20%	16V
C613	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C614	1-126-157-11	ELECT	10uF	20%	16V
C615	1-124-589-11	ELECT	47uF	20%	16V
C616	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C617	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C618	1-126-157-11	ELECT	10uF	20%	16V
C619	1-126-157-11	ELECT	10uF	20%	16V
C620	1-126-157-11	ELECT	10uF	20%	16V
C621	1-126-157-11	ELECT	10uF	20%	16V
C622	1-124-234-00	ELECT	22uF	20%	16V
C623	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C624	1-126-157-11	ELECT	10uF	20%	16V
C627	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C628	1-126-157-11	ELECT	10uF	20%	16V
C629	1-126-157-11	ELECT	10uF	20%	16V
C631	1-126-157-11	ELECT	10uF	20%	16V
C632	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description	Remark		
C633	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C634	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C701	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C702	1-124-589-11	ELECT	47uF	20%	16V
C703	1-164-633-11	CERAMIC CHIP	0.1uF	10%	25V
C704	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C705	1-124-589-11	ELECT	47uF	20%	16V
C708	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C709	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C710	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C711	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C712	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C713	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C714	1-124-234-00	ELECT	22uF	20%	16V
C715	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C716	1-126-157-11	ELECT	10uF	20%	16V
C719	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C720	1-124-589-11	ELECT	47uF	20%	16V
C721	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C722	1-124-589-11	ELECT	47uF	20%	16V
C723	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C725	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C726	1-124-584-00	ELECT	100uF	20%	10V
C727	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C728	1-124-472-11	ELECT	470uF	20%	10V
C729	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C730	1-126-157-11	ELECT	10uF	20%	16V
C731	1-124-589-11	ELECT	47uF	20%	16V
C732	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C733	1-126-157-11	ELECT	10uF	20%	16V
C734	1-124-589-11	ELECT	47uF	20%	16V
C735	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C736	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C737	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C738	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C739	1-126-157-11	ELECT	10uF	20%	16V
C740	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C741	1-124-234-00	ELECT	22uF	20%	16V
C742	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C744	1-124-589-11	ELECT	47uF	20%	16V
C745	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C746	1-126-157-11	ELECT	10uF	20%	16V
C747	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C748	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C749	1-126-157-11	ELECT	10uF	20%	16V
C750	1-126-157-11	ELECT	10uF	20%	16V
C752	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C753	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C758	1-124-584-00	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C801	1-126-163-11	ELECT	0.68uF 20% 50V			< DIODE >	
C802	1-126-163-11	ELECT	0.68uF 20% 50V				
C803	1-124-584-00	ELECT	100uF 20% 10V	D001	8-719-104-34	DIODE 1S2836	
C804	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V	D002	8-719-104-34	DIODE 1S2836	
C805	1-126-163-11	ELECT	0.68uF 20% 50V	D003	8-719-104-34	DIODE 1S2836	
C806	1-124-584-00	ELECT	100uF 20% 10V	D004	8-719-104-34	DIODE 1S2836	
				D010	8-719-800-76	DIODE 1SS226	
C807	1-124-584-00	ELECT	100uF 20% 10V				
C808	1-126-163-11	ELECT	0.68uF 20% 50V	D051	8-719-104-34	DIODE 1S2836	
C809	1-126-163-11	ELECT	0.68uF 20% 50V	D052	8-719-104-34	DIODE 1S2836	
C810	1-126-163-11	ELECT	0.68uF 20% 50V	D053	8-719-104-34	DIODE 1S2836	
C811	1-124-584-00	ELECT	100uF 20% 10V	D054	8-719-104-34	DIODE 1S2836	
				D060	8-719-800-76	DIODE 1SS226	
C812	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V				
C813	1-126-163-11	ELECT	0.68uF 20% 50V	D165	8-719-400-18	DIODE MA152WK	
C814	1-124-584-00	ELECT	100uF 20% 10V	D166	8-719-400-18	DIODE MA152WK	
C815	1-124-584-00	ELECT	100uF 20% 10V	D167	8-719-800-76	DIODE 1SS226	
C816	1-126-163-11	ELECT	0.68uF 20% 50V	D168	8-719-800-76	DIODE 1SS226	
				D169	8-719-800-76	DIODE 1SS226	
C817	1-124-584-00	ELECT	100uF 20% 10V				
C901	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V	D170	8-719-800-76	DIODE 1SS226	
C902	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V	D171	8-719-104-34	DIODE 1S2836	
C903	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V	D301	8-719-400-18	DIODE MA152WK	
C904	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V	D901	8-719-400-18	DIODE MA152WK	
				D902	8-719-400-18	DIODE MA152WK	
C905	1-124-465-00	ELECT	0.47uF 20% 50V				
C906	1-126-162-11	ELECT	3.3uF 20% 50V	D903	8-719-104-34	DIODE 1S2836	
C907	1-163-125-00	CERAMIC CHIP	220PF 5% 50V	D904	8-719-400-18	DIODE MA152WK	
C908	1-124-589-11	ELECT	47uF 20% 16V			< HOURS METER >	
C909	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V	FC901	1-548-119-21	HOURS METER	
C910	1-126-157-11	ELECT	10uF 20% 16V			< FILTER >	
C911	1-126-157-11	ELECT	10uF 20% 16V				
		< CONNECTOR >		FL301	1-409-470-11	FILTER, TRAP	
CN001	1-506-475-11	CONNECTOR 10P, MALE		FL302	1-415-719-11	DELAY LINE	
CN002	1-506-471-11	CONNECTOR 6P, MALE		FL303	1-236-564-11	FILTER, LOW PASS	
CN004	1-506-470-11	CONNECTOR 5P, MALE		FL304	1-235-779-11	LPF	
CN005	1-506-473-11	CONNECTOR 8P, MALE		FL305	1-236-835-11	FILTER, BAND PASS	
CN006	1-506-471-11	CONNECTOR 6P, MALE					
				FL501	1-415-637-11	DL (LC) (150NS)	
CN007	1-506-474-11	CONNECTOR 9P, MALE		FL502	1-415-637-11	DL (LC) (150NS)	
CN008	1-506-471-11	CONNECTOR 6P, MALE		FL503	1-415-637-11	DL (LC) (150NS)	
CN101	* 1-560-900-00	PIN, CONNECTOR 12P		FL701	1-415-821-11	DELAY LINE, LC (113NS)	
CN102	1-506-477-11	CONNECTOR 12P, MALE		FL702	1-415-821-11	DELAY LINE, LC (113NS)	
CN103	1-506-468-11	CONNECTOR 3P, MALE					
				FL703	1-415-821-11	DELAY LINE, LC (113NS)	
CN104	1-506-472-11	CONNECTOR 7P, MALE		FL704	1-415-551-11	DELAY LINE (140NS)	
CN901	1-506-470-11	CONNECTOR 5P, MALE		FL705	1-235-617-11	FILTER, LOW-PASS (1MHZ)	
CN902	1-506-472-11	CONNECTOR 7P, MALE				< IC >	
CN903	1-506-473-11	CONNECTOR 8P, MALE		IC001	8-759-981-92	IC RC4558M	
CN904	1-506-470-11	CONNECTOR 5P, MALE		IC003	8-759-981-92	IC RC4558M	
				IC004	8-759-981-92	IC RC4558M	
CN905	1-506-473-11	CONNECTOR 8P, MALE		IC005	8-759-932-64	IC BU4052BF	
CN906	1-506-472-11	CONNECTOR 7P, MALE		IC006	8-759-981-92	IC RC4558M	
CN911	1-506-467-11	CONNECTOR 2P, MALE					

Ref. No.	Part No.	Description	Remark
IC051	8-759-981-92	IC RC4558M	
IC054	8-759-981-92	IC RC4558M	
IC055	8-759-932-64	IC BU4052BF	
IC056	8-759-981-92	IC RC4558M	
IC165	8-759-200-67	IC TC4001BF	
IC301	8-759-710-86	IC NJM2233BM	
IC302	8-759-711-32	IC NJM2245M	
IC303	8-759-711-32	IC NJM2245M	
IC304	8-759-710-86	IC NJM2233BM	
IC401	8-759-710-07	IC NJM2234M	
IC402	8-759-710-07	IC NJM2234M	
IC601	8-759-200-60	IC TA7060AP	
IC602	8-759-200-60	IC TA7060AP	
IC603	8-759-400-06	IC AN608P	
IC701	8-759-200-60	IC TA7060AP	
IC702	8-759-402-33	IC AN607P	
IC703	8-752-201-30	IC CX22013	
IC704	8-759-969-13	IC SN16913P	
IC705	8-759-101-12	IC uPC311G2	
IC801	8-752-009-51	IC CX20095A	
IC802	8-752-009-51	IC CX20095A	
IC901	8-759-009-10	IC MC14069UBF	
IC902	8-759-009-10	IC MC14069UBF	
IC903	8-759-100-93	IC uPC393G2	
< COIL >			
L301	1-408-978-21	INDUCTOR 47uH	
L302	1-408-979-21	INDUCTOR 56uH	
L303	1-408-979-21	INDUCTOR 56uH	
L304	1-408-975-21	INDUCTOR 27uH	
L305	1-408-979-21	INDUCTOR 56uH	
L307	1-408-979-21	INDUCTOR 56uH	
L308	1-408-981-21	INDUCTOR 82uH	
L309	1-408-968-21	INDUCTOR 6.8uH	
L310	1-408-979-21	INDUCTOR 56uH	
L401	1-408-979-21	INDUCTOR 56uH	
L402	1-408-979-21	INDUCTOR 56uH	
L501	1-408-962-21	INDUCTOR 2.2uH	
L502	1-408-962-21	INDUCTOR 2.2uH	
L503	1-408-962-21	INDUCTOR 2.2uH	
L505	1-408-979-21	INDUCTOR 56uH	
L506	1-408-979-21	INDUCTOR 56uH	
L601	1-408-989-21	INDUCTOR 470uH	
L602	1-408-979-21	INDUCTOR 56uH	
L603	1-410-071-11	INDUCTOR 10mH	
L701	1-408-979-21	INDUCTOR 56uH	

Ref. No.	Part No.	Description	Remark
L702	1-408-979-21	INDUCTOR 56uH	
L706	1-408-979-21	INDUCTOR 56uH	
L707	1-408-964-21	INDUCTOR 3.3uH	
L708	1-408-979-21	INDUCTOR 56uH	
L709	1-408-979-21	INDUCTOR 56uH	
L801	1-408-979-21	INDUCTOR 56uH	
L802	1-408-979-21	INDUCTOR 56uH	
< IC LINK >			
PS101	△ 1-532-840-21	LINK. IC	
PS102	△ 1-532-838-21	LINK. IC	
PS103	△ 1-532-836-21	LINK. IC	
PS104	△ 1-532-839-11	LINK. IC	
PS105	△ 1-532-839-11	LINK. IC	
PS106	△ 1-532-836-21	LINK. IC	
PS107	△ 1-532-838-21	LINK. IC	
PS108	△ 1-532-836-21	LINK. IC	
PS109	△ 1-532-836-21	LINK. IC	
< TRANSISTOR >			
Q001	8-729-202-38	TRANSISTOR 2SC3326M	
Q002	8-729-202-38	TRANSISTOR 2SC3326M	
Q003	8-729-202-38	TRANSISTOR 2SC3326M	
Q004	8-729-202-38	TRANSISTOR 2SC3326M	
Q005	8-729-202-38	TRANSISTOR 2SC3326M	
Q006	8-729-202-38	TRANSISTOR 2SC3326M	
Q007	8-729-202-38	TRANSISTOR 2SC3326M	
Q008	8-729-202-38	TRANSISTOR 2SC3326M	
Q010	8-729-140-75	TRANSISTOR 2SD999	
Q011	8-729-901-06	TRANSISTOR DTA144EK	
Q051	8-729-202-38	TRANSISTOR 2SC3326M	
Q052	8-729-202-38	TRANSISTOR 2SC3326M	
Q053	8-729-202-38	TRANSISTOR 2SC3326M	
Q054	8-729-202-38	TRANSISTOR 2SC3326M	
Q055	8-729-202-38	TRANSISTOR 2SC3326M	
Q056	8-729-202-38	TRANSISTOR 2SC3326M	
Q057	8-729-202-38	TRANSISTOR 2SC3326M	
Q060	8-729-101-07	TRANSISTOR 2SB798-DL	
Q061	8-729-901-01	TRANSISTOR DTC144EK	
Q165	8-729-901-06	TRANSISTOR DTA144EK	
Q166	8-729-901-01	TRANSISTOR DTC144EK	
Q167	8-729-100-66	TRANSISTOR 2SC1623	
Q168	8-729-901-06	TRANSISTOR DTA144EK	
Q169	8-729-901-06	TRANSISTOR DTA144EK	
Q170	8-729-901-06	TRANSISTOR DTA144EK	
Q171	8-729-901-06	TRANSISTOR DTA144EK	
Q172	8-729-100-66	TRANSISTOR 2SC1623	
Q174	8-729-901-06	TRANSISTOR DTA144EK	
Q175	8-729-901-06	TRANSISTOR DTA144EK	

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	Ref. No.	Part No.	Description	Remark
Q176	8-729-901-06	TRANSISTOR	DTA144EK	Q503	8-729-901-06	TRANSISTOR	DTA144EK
Q177	8-729-901-06	TRANSISTOR	DTA144EK	Q504	8-729-100-66	TRANSISTOR	2SC1623
Q178	8-729-901-01	TRANSISTOR	DTC144EK	Q505	8-729-100-66	TRANSISTOR	2SC1623
Q179	8-729-901-06	TRANSISTOR	DTA144EK	Q506	8-729-100-66	TRANSISTOR	2SC1623
Q180	8-729-901-01	TRANSISTOR	DTC144EK	Q507	8-729-901-06	TRANSISTOR	DTA144EK
Q181	8-729-901-01	TRANSISTOR	DTC144EK	Q508	8-729-100-66	TRANSISTOR	2SC1623
Q182	8-729-216-22	TRANSISTOR	2SA1162	Q509	8-729-100-66	TRANSISTOR	2SC1623
Q183	8-729-901-01	TRANSISTOR	DTC144EK	Q510	8-729-100-66	TRANSISTOR	2SC1623
Q184	8-729-901-01	TRANSISTOR	DTC144EK	Q511	8-729-100-66	TRANSISTOR	2SC1623
Q186	8-729-901-06	TRANSISTOR	DTA144EK	Q512	8-729-100-66	TRANSISTOR	2SC1623
Q188	8-729-901-06	TRANSISTOR	DTA144EK	Q513	8-729-100-66	TRANSISTOR	2SC1623
Q191	8-729-216-22	TRANSISTOR	2SA1162	Q514	8-729-100-66	TRANSISTOR	2SC1623
Q301	8-729-100-66	TRANSISTOR	2SC1623	Q515	8-729-100-66	TRANSISTOR	2SC1623
Q302	8-729-100-66	TRANSISTOR	2SC1623	Q516	8-729-100-66	TRANSISTOR	2SC1623
Q303	8-729-100-66	TRANSISTOR	2SC1623	Q517	8-729-901-06	TRANSISTOR	DTA144EK
Q304	8-729-100-66	TRANSISTOR	2SC1623	Q518	8-729-100-66	TRANSISTOR	2SC1623
Q305	8-729-100-66	TRANSISTOR	2SC1623	Q519	8-729-100-66	TRANSISTOR	2SC1623
Q306	8-729-100-66	TRANSISTOR	2SC1623	Q520	8-729-901-06	TRANSISTOR	DTA144EK
Q307	8-729-100-66	TRANSISTOR	2SC1623	Q521	8-729-901-06	TRANSISTOR	DTA144EK
Q308	8-729-100-66	TRANSISTOR	2SC1623	Q601	8-729-100-66	TRANSISTOR	2SC1623
Q309	8-729-100-66	TRANSISTOR	2SC1623	Q602	8-729-901-01	TRANSISTOR	DTC144EK
Q310	8-729-100-66	TRANSISTOR	2SC1623	Q603	8-729-100-66	TRANSISTOR	2SC1623
Q311	8-729-100-66	TRANSISTOR	2SC1623	Q604	8-729-100-66	TRANSISTOR	2SC1623
Q312	8-729-100-66	TRANSISTOR	2SC1623	Q605	8-729-100-66	TRANSISTOR	2SC1623
Q313	8-729-100-66	TRANSISTOR	2SC1623	Q606	8-729-100-66	TRANSISTOR	2SC1623
Q314	8-729-100-66	TRANSISTOR	2SC1623	Q607	8-729-100-66	TRANSISTOR	2SC1623
Q315	8-729-100-66	TRANSISTOR	2SC1623	Q608	8-729-100-66	TRANSISTOR	2SC1623
Q316	8-729-100-66	TRANSISTOR	2SC1623	Q609	8-729-100-66	TRANSISTOR	2SC1623
Q317	8-729-100-66	TRANSISTOR	2SC1623	Q610	8-729-100-66	TRANSISTOR	2SC1623
Q318	8-729-100-66	TRANSISTOR	2SC1623	Q611	8-729-100-66	TRANSISTOR	2SC1623
Q319	8-729-100-66	TRANSISTOR	2SC1623	Q612	8-729-901-06	TRANSISTOR	DTA144EK
Q320	8-729-100-66	TRANSISTOR	2SC1623	Q613	8-729-901-01	TRANSISTOR	DTC144EK
Q321	8-729-100-66	TRANSISTOR	2SC1623	Q614	8-729-901-01	TRANSISTOR	DTC144EK
Q401	8-729-100-66	TRANSISTOR	2SC1623	Q615	8-729-901-06	TRANSISTOR	DTA144EK
Q402	8-729-100-66	TRANSISTOR	2SC1623	Q616	8-729-901-06	TRANSISTOR	DTA144EK
Q403	8-729-100-66	TRANSISTOR	2SC1623	Q701	8-729-100-66	TRANSISTOR	2SC1623
Q404	8-729-100-66	TRANSISTOR	2SC1623	Q702	8-729-100-66	TRANSISTOR	2SC1623
Q405	8-729-100-66	TRANSISTOR	2SC1623	Q703	8-729-202-38	TRANSISTOR	2SC3326N
Q406	8-729-100-66	TRANSISTOR	2SC1623	Q704	8-729-100-66	TRANSISTOR	2SC1623
Q407	8-729-100-66	TRANSISTOR	2SC1623	Q705	8-729-100-66	TRANSISTOR	2SC1623
Q408	8-729-100-66	TRANSISTOR	2SC1623	Q706	8-729-100-66	TRANSISTOR	2SC1623
Q409	8-729-100-66	TRANSISTOR	2SC1623	Q707	8-729-100-66	TRANSISTOR	2SC1623
Q410	8-729-100-66	TRANSISTOR	2SC1623	Q708	8-729-100-66	TRANSISTOR	2SC1623
Q411	8-729-100-66	TRANSISTOR	2SC1623	Q709	8-729-100-66	TRANSISTOR	2SC1623
Q412	8-729-100-66	TRANSISTOR	2SC1623	Q710	8-729-100-66	TRANSISTOR	2SC1623
Q413	8-729-100-66	TRANSISTOR	2SC1623	Q711	8-729-100-66	TRANSISTOR	2SC1623
Q414	8-729-100-66	TRANSISTOR	2SC1623	Q712	8-729-100-66	TRANSISTOR	2SC1623
Q501	8-729-100-66	TRANSISTOR	2SC1623	Q713	8-729-100-66	TRANSISTOR	2SC1623
Q502	8-729-100-66	TRANSISTOR	2SC1623				

Ref. No.	Part No.	Description	Remark
Q714	8-729-100-66	TRANSISTOR 2SC1623	
Q715	8-729-100-66	TRANSISTOR 2SC1623	
Q716	8-729-100-66	TRANSISTOR 2SC1623	
Q717	8-729-100-66	TRANSISTOR 2SC1623	
Q718	8-729-100-66	TRANSISTOR 2SC1623	
Q719	8-729-100-66	TRANSISTOR 2SC1623	
Q720	8-729-100-66	TRANSISTOR 2SC1623	
Q721	8-729-320-17	TRANSISTOR 2SA1122-CD	
Q722	8-729-100-66	TRANSISTOR 2SC1623	
Q901	8-729-901-01	TRANSISTOR DTC144EK	
Q902	8-729-901-01	TRANSISTOR DTC144EK	
Q903	8-729-901-01	TRANSISTOR DTC144EK	
Q904	8-729-901-01	TRANSISTOR DTC144EK	
Q905	8-729-901-05	TRANSISTOR DTA124EK	
Q906	8-729-100-66	TRANSISTOR 2SC1623	
Q907	8-729-100-66	TRANSISTOR 2SC1623	
Q908	8-729-100-66	TRANSISTOR 2SC1623	
Q909	8-729-100-66	TRANSISTOR 2SC1623	
Q910	8-729-100-66	TRANSISTOR 2SC1623	
Q911	8-729-901-06	TRANSISTOR DTA144EK	
< RESISTOR >			
R001	1-216-113-00	METAL CHIP 470K	5% 1/10W
R002	1-216-091-00	METAL CHIP 56K	5% 1/10W
R003	1-216-095-00	METAL CHIP 82K	5% 1/10W
R005	1-216-748-11	METAL CHIP 39K	5% 1/10W
R018	1-216-049-00	METAL CHIP 1K	5% 1/10W
R019	1-216-089-00	METAL CHIP 47K	5% 1/10W
R020	1-216-079-00	METAL CHIP 18K	5% 1/10W
R021	1-216-086-00	METAL GLAZE 36K	5% 1/10W
R022	1-216-083-00	METAL CHIP 27K	5% 1/10W
R023	1-216-073-00	METAL CHIP 10K	5% 1/10W
R024	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R025	1-216-295-00	METAL CHIP 0	5% 1/10W
R026	1-216-071-00	METAL CHIP 8.2K	5% 1/10W
R027	1-216-089-00	METAL CHIP 47K	5% 1/10W
R028	1-216-073-00	METAL CHIP 10K	5% 1/10W
R029	1-216-073-00	METAL CHIP 10K	5% 1/10W
R030	1-216-095-00	METAL CHIP 82K	5% 1/10W
R031	1-216-073-00	METAL CHIP 10K	5% 1/10W
R032	1-216-091-00	METAL CHIP 56K	5% 1/10W
R033	1-216-049-00	METAL CHIP 1K	5% 1/10W
R034	1-216-094-00	METAL GLAZE 75K	5% 1/10W
R035	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R036	1-216-093-00	METAL CHIP 68K	5% 1/10W
R038	1-216-049-00	METAL CHIP 1K	5% 1/10W
R039	1-216-073-00	METAL CHIP 10K	5% 1/10W
R040	1-216-065-00	METAL CHIP 4.7K	5% 1/10W

Ref. No.	Part No.	Description	Remark
R041	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R042	1-216-113-00	METAL CHIP 470K	5% 1/10W
R043	1-216-075-00	METAL CHIP 12K	5% 1/10W
R044	1-216-059-00	METAL CHIP 2.7K	5% 1/10W
R045	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R046	1-216-073-00	METAL CHIP 10K	5% 1/10W
R051	1-216-113-00	METAL CHIP 470K	5% 1/10W
R052	1-216-091-00	METAL CHIP 56K	5% 1/10W
R053	1-216-095-00	METAL CHIP 82K	5% 1/10W
R055	1-216-748-11	METAL CHIP 39K	5% 1/10W
R068	1-216-049-00	METAL CHIP 1K	5% 1/10W
R069	1-216-089-00	METAL CHIP 47K	5% 1/10W
R070	1-216-079-00	METAL CHIP 18K	5% 1/10W
R071	1-216-086-00	METAL GLAZE 36K	5% 1/10W
R072	1-216-083-00	METAL CHIP 27K	5% 1/10W
R073	1-216-073-00	METAL CHIP 10K	5% 1/10W
R074	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R075	1-216-295-00	METAL CHIP 0	5% 1/10W
R076	1-216-071-00	METAL CHIP 8.2K	5% 1/10W
R077	1-216-089-00	METAL CHIP 47K	5% 1/10W
R078	1-216-073-00	METAL CHIP 10K	5% 1/10W
R079	1-216-073-00	METAL CHIP 10K	5% 1/10W
R080	1-216-095-00	METAL CHIP 82K	5% 1/10W
R081	1-216-073-00	METAL CHIP 10K	5% 1/10W
R082	1-216-091-00	METAL CHIP 56K	5% 1/10W
R083	1-216-049-00	METAL CHIP 1K	5% 1/10W
R084	1-216-094-00	METAL GLAZE 75K	5% 1/10W
R085	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R086	1-216-093-00	METAL CHIP 68K	5% 1/10W
R088	1-216-049-00	METAL CHIP 1K	5% 1/10W
R089	1-216-073-00	METAL CHIP 10K	5% 1/10W
R090	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R091	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R092	1-216-113-00	METAL CHIP 470K	5% 1/10W
R093	1-216-091-00	METAL CHIP 56K	5% 1/10W
R094	1-216-091-00	METAL CHIP 56K	5% 1/10W
R095	1-216-083-00	METAL CHIP 27K	5% 1/10W
R104	1-216-097-00	METAL CHIP 100K	5% 1/10W
R106	1-216-295-00	METAL CHIP 0	5% 1/10W
R109	1-216-089-00	METAL CHIP 47K	5% 1/10W
R110	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R111	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R112	1-216-093-00	METAL CHIP 68K	5% 1/10W
R113	1-216-295-00	METAL CHIP 0	5% 1/10W
R115	1-216-049-00	METAL CHIP 1K	5% 1/10W
R116	1-216-089-00	METAL CHIP 47K	5% 1/10W
R118	1-216-067-00	METAL CHIP 5.6K	5% 1/10W
R119	1-216-077-00	METAL CHIP 15K	5% 1/10W
R120	1-216-071-00	METAL CHIP 8.2K	5% 1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R121	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R186	1-216-105-00	METAL CHIP	220K	5%	1/10W
R122	1-216-089-00	METAL CHIP	47K	5%	1/10W	R187	1-216-073-00	METAL CHIP	10K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W	R188	1-216-073-00	METAL CHIP	10K	5%	1/10W
R125	1-216-079-00	METAL CHIP	18K	5%	1/10W	R189	1-216-089-00	METAL CHIP	47K	5%	1/10W
R126	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R190	1-216-089-00	METAL CHIP	47K	5%	1/10W
R127	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R192	1-216-049-00	METAL CHIP	1K	5%	1/10W
R128	1-216-089-00	METAL CHIP	47K	5%	1/10W	R193	1-216-097-00	METAL CHIP	100K	5%	1/10W
R129	1-216-113-00	METAL CHIP	470K	5%	1/10W	R301	1-216-049-00	METAL CHIP	1K	5%	1/10W
R130	1-216-295-00	METAL CHIP	0	5%	1/10W	R302	1-216-031-00	METAL CHIP	180	5%	1/10W
R134	1-216-049-00	METAL CHIP	1K	5%	1/10W	R303	1-216-077-00	METAL CHIP	15K	5%	1/10W
R136	1-216-295-00	METAL CHIP	0	5%	1/10W	R304	1-216-081-00	METAL CHIP	22K	5%	1/10W
R139	1-216-089-00	METAL CHIP	47K	5%	1/10W	R305	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R140	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R306	1-216-643-11	METAL CHIP	470	0.5%	1/10W
R141	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R307	1-216-033-00	METAL CHIP	220	5%	1/10W
R142	1-216-093-00	METAL CHIP	58K	5%	1/10W	R308	1-216-644-11	METAL CHIP	510	0.5%	1/10W
R143	1-216-295-00	METAL CHIP	0	5%	1/10W	R309	1-216-295-00	METAL CHIP	0	5%	1/10W
R145	1-216-049-00	METAL CHIP	1K	5%	1/10W	R310	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R146	1-216-089-00	METAL CHIP	47K	5%	1/10W	R311	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R148	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R312	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R149	1-216-077-00	METAL CHIP	15K	5%	1/10W	R315	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R150	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	R316	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R151	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R317	1-216-652-11	METAL CHIP	1.1K	0.5%	1/10W
R152	1-216-089-00	METAL CHIP	47K	5%	1/10W	R318	1-216-295-00	METAL CHIP	0	5%	1/10W
R153	1-216-073-00	METAL CHIP	10K	5%	1/10W	R319	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R155	1-216-079-00	METAL CHIP	18K	5%	1/10W	R320	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R156	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R321	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R157	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R322	1-216-049-00	METAL CHIP	1K	5%	1/10W
R160	1-216-295-00	METAL CHIP	0	5%	1/10W	R323	1-216-089-00	METAL CHIP	47K	5%	1/10W
R165	1-216-049-00	METAL CHIP	1K	5%	1/10W	R324	1-216-025-00	METAL CHIP	100	5%	1/10W
R166	1-216-049-00	METAL CHIP	1K	5%	1/10W	R325	1-216-077-00	METAL CHIP	15K	5%	1/10W
R167	1-216-097-00	METAL CHIP	100K	5%	1/10W	R326	1-216-081-00	METAL CHIP	22K	5%	1/10W
R168	1-216-097-00	METAL CHIP	100K	5%	1/10W	R327	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R169	1-216-073-00	METAL CHIP	10K	5%	1/10W	R328	1-216-295-00	METAL CHIP	0	5%	1/10W
R170	1-216-025-00	METAL CHIP	100	5%	1/10W	R329	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R171	1-216-089-00	METAL CHIP	47K	5%	1/10W	R330	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R172	1-216-097-00	METAL CHIP	100K	5%	1/10W	R331	1-216-652-11	METAL CHIP	1.1K	0.5%	1/10W
R173	1-216-089-00	METAL CHIP	47K	5%	1/10W	R332	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R174	1-216-049-00	METAL CHIP	1K	5%	1/10W	R333	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R175	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R334	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R176	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R335	1-216-033-00	METAL CHIP	220	5%	1/10W
R177	1-216-073-00	METAL CHIP	10K	5%	1/10W	R336	1-216-295-00	METAL CHIP	0	5%	1/10W
R178	1-216-073-00	METAL CHIP	10K	5%	1/10W	R337	1-216-079-00	METAL CHIP	18K	5%	1/10W
R179	1-216-073-00	METAL CHIP	10K	5%	1/10W	R338	1-216-075-00	METAL CHIP	12K	5%	1/10W
R180	1-216-073-00	METAL CHIP	10K	5%	1/10W	R339	1-216-041-00	METAL CHIP	470	5%	1/10W
R181	1-216-105-00	METAL CHIP	220K	5%	1/10W	R340	1-216-041-00	METAL CHIP	470	5%	1/10W
R182	1-216-105-00	METAL CHIP	220K	5%	1/10W	R341	1-216-043-00	METAL CHIP	560	5%	1/10W
R183	1-216-073-00	METAL CHIP	10K	5%	1/10W	R342	1-216-043-00	METAL CHIP	560	5%	1/10W
R184	1-216-083-00	METAL CHIP	27K	5%	1/10W	R343	1-216-079-00	METAL CHIP	18K	5%	1/10W
R185	1-216-105-00	METAL CHIP	220K	5%	1/10W	R344	1-216-075-00	METAL CHIP	12K	5%	1/10W

Ref. No.	Part No.	Description	Remark
R345	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R346	1-216-031-00	METAL CHIP	180 5% 1/10W
R347	1-216-651-11	METAL CHIP	1K 0.5% 1/10W
R348	1-216-655-11	METAL CHIP	1.5K 0.5% 1/10W
R349	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R350	1-216-681-11	METAL CHIP	18K 0.5% 1/10W
R351	1-216-063-00	METAL CHIP	3.9K 5% 1/10W
R352	1-216-033-00	METAL CHIP	220 5% 1/10W
R354	1-216-079-00	METAL CHIP	18K 5% 1/10W
R355	1-216-075-00	METAL CHIP	12K 5% 1/10W
R356	1-216-041-00	METAL CHIP	470 5% 1/10W
R357	1-216-041-00	METAL CHIP	470 5% 1/10W
R358	1-216-042-00	METAL CHIP	510 5% 1/10W
R359	1-216-043-00	METAL CHIP	560 5% 1/10W
R360	1-216-079-00	METAL CHIP	18K 5% 1/10W
R361	1-216-075-00	METAL CHIP	12K 5% 1/10W
R362	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R363	1-216-049-00	METAL CHIP	1K 5% 1/10W
R364	1-216-025-00	METAL CHIP	100 5% 1/10W
R365	1-216-077-00	METAL CHIP	15K 5% 1/10W
R366	1-216-081-00	METAL CHIP	22K 5% 1/10W
R367	1-216-049-00	METAL CHIP	1K 5% 1/10W
R368	1-216-049-00	METAL CHIP	1K 5% 1/10W
R369	1-216-031-00	METAL CHIP	180 5% 1/10W
R370	1-216-077-00	METAL CHIP	15K 5% 1/10W
R371	1-216-081-00	METAL CHIP	22K 5% 1/10W
R372	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R373	1-216-651-11	METAL CHIP	1K 0.5% 1/10W
R374	1-216-653-11	METAL CHIP	1.2K 0.5% 1/10W
R375	1-216-681-11	METAL CHIP	18K 0.5% 1/10W
R376	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R377	1-216-043-00	METAL CHIP	560 5% 1/10W
R378	1-216-043-00	METAL CHIP	560 5% 1/10W
R379	1-216-041-00	METAL CHIP	470 5% 1/10W
R381	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R382	1-216-295-00	METAL CHIP	0 5% 1/10W
R383	1-216-079-00	METAL CHIP	18K 5% 1/10W
R384	1-216-075-00	METAL CHIP	12K 5% 1/10W
R385	1-216-041-00	METAL CHIP	470 5% 1/10W
R386	1-216-041-00	METAL CHIP	470 5% 1/10W
R387	1-216-043-00	METAL CHIP	560 5% 1/10W
R388	1-216-043-00	METAL CHIP	560 5% 1/10W
R389	1-216-079-00	METAL CHIP	18K 5% 1/10W
R390	1-216-075-00	METAL CHIP	12K 5% 1/10W
R391	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R392	1-216-651-11	METAL CHIP	1K 0.5% 1/10W
R393	1-216-653-11	METAL CHIP	1.2K 0.5% 1/10W
R394	1-216-681-11	METAL CHIP	18K 0.5% 1/10W

Ref. No.	Part No.	Description	Remark
R395	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R396	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R401	1-216-081-00	METAL CHIP	22K 5% 1/10W
R402	1-216-075-00	METAL CHIP	12K 5% 1/10W
R403	1-216-029-00	METAL CHIP	150 5% 1/10W
R404	1-216-649-11	METAL CHIP	820 0.5% 1/10W
R405	1-216-081-00	METAL CHIP	22K 5% 1/10W
R406	1-216-081-00	METAL CHIP	22K 5% 1/10W
R407	1-216-295-00	METAL CHIP	0 5% 1/10W
R408	1-216-651-11	METAL CHIP	1K 0.5% 1/10W
R409	1-216-043-00	METAL CHIP	560 5% 1/10W
R410	1-216-081-00	METAL CHIP	22K 5% 1/10W
R411	1-216-075-00	METAL CHIP	12K 5% 1/10W
R412	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R413	1-216-077-00	METAL CHIP	15K 5% 1/10W
R414	1-216-073-00	METAL CHIP	10K 5% 1/10W
R415	1-216-031-00	METAL CHIP	180 5% 1/10W
R416	1-216-041-00	METAL CHIP	470 5% 1/10W
R417	1-216-045-00	METAL CHIP	680 5% 1/10W
R418	1-216-043-00	METAL CHIP	560 5% 1/10W
R419	1-216-077-00	METAL CHIP	15K 5% 1/10W
R420	1-216-073-00	METAL CHIP	10K 5% 1/10W
R421	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R422	1-216-049-00	METAL CHIP	1K 5% 1/10W
R423	1-216-081-00	METAL CHIP	22K 5% 1/10W
R424	1-216-075-00	METAL CHIP	12K 5% 1/10W
R425	1-216-041-00	METAL CHIP	470 5% 1/10W
R426	1-216-649-11	METAL CHIP	820 0.5% 1/10W
R427	1-216-081-00	METAL CHIP	22K 5% 1/10W
R428	1-216-081-00	METAL CHIP	22K 5% 1/10W
R429	1-216-295-00	METAL CHIP	0 5% 1/10W
R430	1-216-651-11	METAL CHIP	1K 0.5% 1/10W
R431	1-216-043-00	METAL CHIP	560 5% 1/10W
R432	1-216-081-00	METAL CHIP	22K 5% 1/10W
R433	1-216-075-00	METAL CHIP	12K 5% 1/10W
R434	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R435	1-216-077-00	METAL CHIP	15K 5% 1/10W
R436	1-216-073-00	METAL CHIP	10K 5% 1/10W
R437	1-216-041-00	METAL CHIP	470 5% 1/10W
R438	1-216-041-00	METAL CHIP	470 5% 1/10W
R439	1-216-045-00	METAL CHIP	680 5% 1/10W
R440	1-216-043-00	METAL CHIP	560 5% 1/10W
R441	1-216-077-00	METAL CHIP	15K 5% 1/10W
R442	1-216-073-00	METAL CHIP	10K 5% 1/10W
R443	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R444	1-216-049-00	METAL CHIP	1K 5% 1/10W
R501	1-216-079-00	METAL CHIP	18K 5% 1/10W
R502	1-216-081-00	METAL CHIP	22K 5% 1/10W
R503	1-216-049-00	METAL CHIP	1K 5% 1/10W

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R504	1-218-156-11	METAL GLAZE	8. 2K	1%	1/10W	R553	1-216-327-11	METAL GLAZE	2K	1%	1/10W
R505	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W	R554	1-216-047-00	METAL CHIP	820	5%	1/10W
R506	1-216-327-11	METAL GLAZE	2K	1%	1/10W	R555	1-216-295-00	METAL CHIP	0	5%	1/10W
R507	1-216-327-11	METAL GLAZE	2K	1%	1/10W	R556	1-216-049-00	METAL CHIP	1K	5%	1/10W
R508	1-216-047-00	METAL CHIP	820	5%	1/10W	R557	1-216-295-00	METAL CHIP	0	5%	1/10W
R509	1-216-295-00	METAL CHIP	0	5%	1/10W	R558	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W
R510	1-216-049-00	METAL CHIP	1K	5%	1/10W	R559	1-216-518-00	METAL GLAZE	2. 2K	1%	1/10W
R511	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W	R560	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R512	1-216-295-00	METAL CHIP	0	5%	1/10W	R561	1-216-079-00	METAL CHIP	18K	5%	1/10W
R513	1-216-518-00	METAL GLAZE	2. 2K	1%	1/10W	R562	1-216-079-00	METAL CHIP	18K	5%	1/10W
R514	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R563	1-216-049-00	METAL CHIP	1K	5%	1/10W
R515	1-216-079-00	METAL CHIP	18K	5%	1/10W	R564	1-216-333-11	METAL CHIP	15K	1%	1/10W
R516	1-216-079-00	METAL CHIP	18K	5%	1/10W	R601	1-216-073-00	METAL CHIP	10K	5%	1/10W
R517	1-216-049-00	METAL CHIP	1K	5%	1/10W	R602	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-218-156-11	METAL GLAZE	8. 2K	1%	1/10W	R603	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R519	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W	R605	1-216-073-00	METAL CHIP	10K	5%	1/10W
R520	1-216-327-11	METAL GLAZE	2K	1%	1/10W	R606	1-216-041-00	METAL CHIP	470	5%	1/10W
R521	1-216-327-11	METAL GLAZE	2K	1%	1/10W	R607	1-216-037-00	METAL CHIP	330	5%	1/10W
R522	1-216-047-00	METAL CHIP	820	5%	1/10W	R608	1-216-049-00	METAL CHIP	1K	5%	1/10W
R523	1-216-295-00	METAL CHIP	0	5%	1/10W	R609	1-216-049-00	METAL CHIP	1K	5%	1/10W
R524	1-216-049-00	METAL CHIP	1K	5%	1/10W	R610	1-216-073-00	METAL CHIP	10K	5%	1/10W
R525	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W	R611	1-216-071-00	METAL CHIP	8. 2K	5%	1/10W
R526	1-216-295-00	METAL CHIP	0	5%	1/10W	R612	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W
R527	1-216-518-00	METAL GLAZE	2. 2K	1%	1/10W	R613	1-216-049-00	METAL CHIP	1K	5%	1/10W
R528	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R614	1-216-037-00	METAL CHIP	330	5%	1/10W
R529	1-216-079-00	METAL CHIP	18K	5%	1/10W	R615	1-216-041-00	METAL CHIP	470	5%	1/10W
R530	1-216-079-00	METAL CHIP	18K	5%	1/10W	R616	1-216-073-00	METAL CHIP	10K	5%	1/10W
R531	1-216-049-00	METAL CHIP	1K	5%	1/10W	R617	1-216-048-00	METAL CHIP	910	5%	1/10W
R532	1-216-049-00	METAL CHIP	1K	5%	1/10W	R618	1-216-049-00	METAL CHIP	1K	5%	1/10W
R533	1-216-621-11	METAL CHIP	56	0. 50%	1/10W	R619	1-216-049-00	METAL CHIP	1K	5%	1/10W
R534	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W	R620	1-216-071-00	METAL CHIP	8. 2K	5%	1/10W
R535	1-216-079-00	METAL CHIP	18K	5%	1/10W	R621	1-216-073-00	METAL CHIP	10K	5%	1/10W
R536	1-216-079-00	METAL CHIP	18K	5%	1/10W	R622	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W
R537	1-216-051-00	METAL CHIP	1. 2K	5%	1/10W	R623	1-216-059-00	METAL CHIP	2. 7K	5%	1/10W
R538	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R624	1-216-077-00	METAL CHIP	15K	5%	1/10W
R539	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R625	1-216-073-00	METAL CHIP	10K	5%	1/10W
R540	1-216-295-00	METAL CHIP	0	5%	1/10W	R626	1-216-039-00	METAL CHIP	390	5%	1/10W
R541	1-216-069-00	METAL CHIP	6. 8K	5%	1/10W	R627	1-216-041-00	METAL CHIP	470	5%	1/10W
R542	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R628	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R543	1-216-051-00	METAL CHIP	1. 2K	5%	1/10W	R629	1-216-037-00	METAL CHIP	330	5%	1/10W
R544	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R632	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W
R545	1-216-518-00	METAL GLAZE	2. 2K	1%	1/10W	R633	1-216-059-00	METAL CHIP	2. 7K	5%	1/10W
R546	1-216-518-00	METAL GLAZE	2. 2K	1%	1/10W	R634	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W
R547	1-216-079-00	METAL CHIP	18K	5%	1/10W	R635	1-216-031-00	METAL CHIP	180	5%	1/10W
R548	1-216-081-00	METAL CHIP	22K	5%	1/10W	R636	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R549	1-216-049-00	METAL CHIP	1K	5%	1/10W	R637	1-216-077-00	METAL CHIP	15K	5%	1/10W
R550	1-218-156-11	METAL GLAZE	8. 2K	1%	1/10W	R638	1-216-073-00	METAL CHIP	10K	5%	1/10W
R551	1-216-651-11	METAL CHIP	1K	0. 5%	1/10W	R639	1-216-041-00	METAL CHIP	470	5%	1/10W
R552	1-216-327-11	METAL GLAZE	2K	1%	1/10W	R640	1-216-051-00	METAL CHIP	1. 2K	5%	1/10W

Ref. No.	Part No.	Description	Quantity	Unit Price	Remark
R641	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R642	1-216-093-00	METAL CHIP	68K	5%	1/10W
R643	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R644	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R645	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R646	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R701	1-216-081-00	METAL CHIP	22K	5%	1/10W
R702	1-216-073-00	METAL CHIP	10K	5%	1/10W
R703	1-216-049-00	METAL CHIP	1K	5%	1/10W
R704	1-216-036-00	METAL CHIP	300	5%	1/10W
R705	1-216-045-00	METAL CHIP	680	5%	1/10W
R706	1-216-049-00	METAL CHIP	1K	5%	1/10W
R707	1-216-041-00	METAL CHIP	470	5%	1/10W
R708	1-216-052-00	METAL CHIP	1.3K	5%	1/10W
R709	1-216-049-00	METAL CHIP	1K	5%	1/10W
R710	1-216-033-00	METAL CHIP	220	5%	1/10W
R711	1-216-049-00	METAL CHIP	1K	5%	1/10W
R712	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R713	1-216-043-00	METAL CHIP	560	5%	1/10W
R714	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R715	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R716	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R717	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R718	1-216-049-00	METAL CHIP	1K	5%	1/10W
R720	1-216-047-00	METAL CHIP	820	5%	1/10W
R721	1-216-295-00	METAL CHIP	0	5%	1/10W
R722	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R723	1-216-295-00	METAL CHIP	0	5%	1/10W
R724	1-216-075-00	METAL CHIP	12K	5%	1/10W
R725	1-216-085-00	METAL CHIP	33K	5%	1/10W
R726	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R727	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R728	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R729	1-216-049-00	METAL CHIP	1K	5%	1/10W
R730	1-216-047-00	METAL CHIP	820	5%	1/10W
R732	1-216-041-00	METAL CHIP	470	5%	1/10W
R733	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R734	1-216-041-00	METAL CHIP	470	5%	1/10W
R735	1-216-295-00	METAL CHIP	0	5%	1/10W
R736	1-216-041-00	METAL CHIP	470	5%	1/10W
R737	1-216-035-00	METAL CHIP	270	5%	1/10W
R738	1-216-049-00	METAL CHIP	1K	5%	1/10W
R739	1-216-049-00	METAL CHIP	1K	5%	1/10W
R740	1-216-295-00	METAL CHIP	0	5%	1/10W
R741	1-216-047-00	METAL CHIP	820	5%	1/10W
R742	1-216-043-00	METAL CHIP	560	5%	1/10W
R743	1-216-049-00	METAL CHIP	1K	5%	1/10W
R744	1-216-081-00	METAL CHIP	22K	5%	1/10W

Ref. No.	Part No.	Description	Quantity	Unit Price	Remark
R745	1-216-075-00	METAL CHIP	12K	5%	1/10W
R746	1-216-045-00	METAL CHIP	680	5%	1/10W
R747	1-216-043-00	METAL CHIP	560	5%	1/10W
R748	1-216-049-00	METAL CHIP	1K	5%	1/10W
R749	1-216-045-00	METAL CHIP	680	5%	1/10W
R750	1-216-081-00	METAL CHIP	22K	5%	1/10W
R751	1-216-083-00	METAL CHIP	27K	5%	1/10W
R752	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R753	1-216-075-00	METAL CHIP	12K	5%	1/10W
R754	1-216-081-00	METAL CHIP	22K	5%	1/10W
R755	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R756	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R757	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R758	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R759	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R760	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R761	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R762	1-216-081-00	METAL CHIP	22K	5%	1/10W
R763	1-216-073-00	METAL CHIP	10K	5%	1/10W
R764	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R765	1-216-041-00	METAL CHIP	470	5%	1/10W
R767	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R768	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R769	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R770	1-216-073-00	METAL CHIP	10K	5%	1/10W
R771	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R772	1-216-073-00	METAL CHIP	10K	5%	1/10W
R793	1-216-295-00	METAL CHIP	0	5%	1/10W
R795	1-216-025-00	METAL CHIP	100	5%	1/10W
R796	1-216-025-00	METAL CHIP	100	5%	1/10W
R802	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R803	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R804	1-216-022-00	METAL CHIP	75	5%	1/10W
R806	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R807	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R808	1-216-022-00	METAL CHIP	75	5%	1/10W
R809	1-216-295-00	METAL CHIP	0	5%	1/10W
R810	1-216-022-00	METAL CHIP	75	5%	1/10W
R811	1-216-295-00	METAL CHIP	0	5%	1/10W
R812	1-216-022-00	METAL CHIP	75	5%	1/10W
R814	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R815	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R816	1-216-022-00	METAL CHIP	75	5%	1/10W
R818	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R819	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R820	1-216-022-00	METAL CHIP	75	5%	1/10W
R821	1-216-295-00	METAL CHIP	0	5%	1/10W
R822	1-216-022-00	METAL CHIP	75	5%	1/10W
R823	1-216-079-00	METAL CHIP	18K	5%	1/10W

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Ref. No.	Part No.	Description	Remark
R824	1-216-085-00	METAL CHIP 33K 5%	1/10W
R901	1-216-089-00	METAL CHIP 47K 5%	1/10W
R902	1-216-089-00	METAL CHIP 47K 5%	1/10W
R903	1-216-089-00	METAL CHIP 47K 5%	1/10W
R904	1-216-089-00	METAL CHIP 47K 5%	1/10W
R906	1-216-081-00	METAL CHIP 22K 5%	1/10W
R907	1-216-081-00	METAL CHIP 22K 5%	1/10W
R908	1-216-073-00	METAL CHIP 10K 5%	1/10W
R909	1-216-049-00	METAL CHIP 1K 5%	1/10W
R910	1-216-107-00	METAL CHIP 270K 5%	1/10W
R911	1-216-073-00	METAL CHIP 10K 5%	1/10W
R912	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R913	1-216-073-00	METAL CHIP 10K 5%	1/10W
R914	1-216-081-00	METAL CHIP 22K 5%	1/10W
R915	1-216-081-00	METAL CHIP 22K 5%	1/10W
R916	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R917	1-216-025-00	METAL CHIP 100 5%	1/10W
R918	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
R919	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R920	1-216-031-00	METAL CHIP 180 5%	1/10W
R921	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R922	1-216-093-00	METAL CHIP 58K 5%	1/10W
R923	1-216-091-00	METAL CHIP 56K 5%	1/10W
R924	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R925	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R926	1-216-077-00	METAL CHIP 15K 5%	1/10W
R927	1-216-085-00	METAL CHIP 33K 5%	1/10W
R928	1-216-049-00	METAL CHIP 1K 5%	1/10W
R929	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
< VARIABLE RESISTOR >			
RV401	1-230-519-11	RES. ADJ. METAL 470	
RV402	1-230-519-11	RES. ADJ. METAL 470	
RV601	1-230-520-11	RES. ADJ. METAL 1K	
RV602	1-230-520-11	RES. ADJ. METAL 1K	
RV702	1-230-522-11	RES. ADJ. METAL 4.7K	
RV703	1-230-521-11	RES. ADJ. METAL 2.2K	
RV704	1-230-531-11	RES. ADJ. METAL GLAZE 220	
RV705	1-230-519-11	RES. ADJ. METAL 470	
RV706	1-230-522-11	RES. ADJ. METAL 4.7K	
RV901	1-230-523-11	RES. ADJ. METAL 10K	

Ref. No.	Part No.	Description	Remark
* A-7070-955-A 1G-4 BOARD, COMPLETE *****			
< 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

* 1-633-696-11 JB-4 BOARD *****			
< CAPACITOR >			
C501	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C502	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C503	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C504	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
< JACK >			
1-537-137-41 TERMINAL BOARD (VIDEO IN)			

* 1-633-697-11 JB-5 BOARD *****			
< CAPACITOR >			
C301	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C302	1-124-584-00	ELECT 100uF	20% 10V
C303	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
< CONNECTOR >			
CN301	1-506-470-11	CONNECTOR 5P, MALE	

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D301	8-719-800-76	DIODE 1SS226	
		< JACK >	
J301	1-537-005-21	JACK BOARD (VIDEO, AUDIO, RFU DC OUT)	
		< TRANSISTOR >	
Q301	8-729-216-22	TRANSISTOR 2SA1162	
		< RESISTOR >	
R301	1-216-001-00	METAL CHIP 10 5% 1/10W	
R302	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	

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

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

	LS-9 BOARD, COMPLETE		

	1-506-485-11	CONNECTOR 6P, MALE	

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

	* 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	

Ref. No.	Part No.	Description	Remark
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	TANTAL. 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	
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 1S2336	
D602	8-719-104-34	DIODE 1S2336	
D603	8-719-104-34	DIODE 1S2336	
D604	8-719-400-18	DIODE MA152WK	
D641	8-719-800-76	DIODE 1SS226	
D642	8-719-800-76	DIODE 1SS226	
		< IC >	
IC601	8-759-149-34	IC uPD75196G-591-1B	
IC603	8-759-208-11	IC TC4053BFB	
IC651	8-759-603-27	IC M5201F?	
IC661	8-759-603-27	IC M5201F?	
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	

MB-19 (P)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< TRANSISTOR >							
Q601	8-729-901-06	TRANSISTOR DTA144EK		R647	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q602	8-729-901-01	TRANSISTOR DTC144EK		R648	1-216-099-00	METAL CHIP 120K 5% 1/10W	
Q603	8-729-901-01	TRANSISTOR DTC144EK		R649	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
Q604	8-729-901-01	TRANSISTOR DTC144EK		R651	1-216-093-00	METAL CHIP 68K 5% 1/10W	
Q605	8-729-901-06	TRANSISTOR DTA144EK		R652	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
				R653	1-216-093-00	METAL CHIP 68K 5% 1/10W	
Q606	8-729-901-06	TRANSISTOR DTA144EK		R654	1-216-047-00	METAL CHIP 820 5% 1/10W	
Q607	8-729-901-01	TRANSISTOR DTC144EK		R655	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
Q608	8-729-901-01	TRANSISTOR DTC144EK		R656	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q609	8-729-901-06	TRANSISTOR DTA144EK		R657	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q671	8-729-100-66	TRANSISTOR 2SC1623		R661	1-216-093-00	METAL CHIP 68K 5% 1/10W	
< RESISTOR >							
R601	1-216-089-00	METAL CHIP 47K 5% 1/10W		R662	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R602	1-216-089-00	METAL CHIP 47K 5% 1/10W		R663	1-216-093-00	METAL CHIP 68K 5% 1/10W	
R603	1-216-097-00	METAL CHIP 100K 5% 1/10W		R664	1-216-047-00	METAL CHIP 820 5% 1/10W	
R604	1-216-073-00	METAL CHIP 10K 5% 1/10W		R665	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R611	1-216-081-00	METAL CHIP 22K 5% 1/10W		R666	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R612	1-216-081-00	METAL CHIP 22K 5% 1/10W		R667	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R613	1-216-081-00	METAL CHIP 22K 5% 1/10W		R671	1-216-295-00	METAL CHIP 0 5% 1/10W	
R614	1-216-081-00	METAL CHIP 22K 5% 1/10W		R672	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R615	1-216-081-00	METAL CHIP 22K 5% 1/10W		R673	1-216-052-00	METAL CHIP 1.3K 5% 1/10W	
R616	1-216-081-00	METAL CHIP 22K 5% 1/10W		R674	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R617	1-216-081-00	METAL CHIP 22K 5% 1/10W		R675	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R618	1-216-079-00	METAL CHIP 18K 5% 1/10W		R676	1-216-045-00	METAL CHIP 680 5% 1/10W	
R619	1-216-081-00	METAL CHIP 22K 5% 1/10W		R677	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R625	1-216-041-00	METAL CHIP 470 5% 1/10W		R678	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R626	1-216-089-00	METAL CHIP 47K 5% 1/10W		R679	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R627	1-216-089-00	METAL CHIP 47K 5% 1/10W		R680	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R628	1-216-089-00	METAL CHIP 47K 5% 1/10W		R681	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R629	1-216-073-00	METAL CHIP 10K 5% 1/10W		R682	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R630	1-216-089-00	METAL CHIP 47K 5% 1/10W		R683	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R631	1-216-089-00	METAL CHIP 47K 5% 1/10W		< SWITCH >			
R632	1-216-041-00	METAL CHIP 470 5% 1/10W		S641	1-554-371-51	SWITCH, TACT (EJECT)	
R633	1-216-089-00	METAL CHIP 47K 5% 1/10W		S642	1-554-371-51	SWITCH, TACT (PB)	
R634	1-216-097-00	METAL CHIP 100K 5% 1/10W		S643	1-554-371-51	SWITCH, TACT (PAUSE)	
R635	1-216-049-00	METAL CHIP 1K 5% 1/10W		S644	1-554-371-51	SWITCH, TACT (REW)	
R636	1-216-049-00	METAL CHIP 1K 5% 1/10W		S645	1-554-371-51	SWITCH, TACT (STOP)	
R637	1-216-073-00	METAL CHIP 10K 5% 1/10W		S646	1-554-371-51	SWITCH, TACT (REC)	
R638	1-216-073-00	METAL CHIP 10K 5% 1/10W		S647	1-554-371-51	SWITCH, TACT (FE)	
R639	1-216-073-00	METAL CHIP 10K 5% 1/10W		S648	1-570-909-21	SWITCH, TACTIL (REFLOW TYPE) (POWER)	
R641	1-216-072-00	METAL CHIP 9.1K 5% 1/10W		S649	1-554-371-51	SWITCH, TACT (X-1)	
R642	1-216-081-00	METAL CHIP 22K 5% 1/10W		< FILTER >			
R643	1-216-089-00	METAL CHIP 47K 5% 1/10W		T603	1-235-398-11	BPF	
R644	1-216-099-00	METAL CHIP 120K 5% 1/10W		T651	1-235-900-11	FILTER, LOW PASS	
R645	1-216-072-00	METAL CHIP 9.1K 5% 1/10W		T661	1-235-900-11	FILTER, LOW PASS	
R646	1-216-081-00	METAL CHIP 22K 5% 1/10W		< CRYSTAL >			
				X601	1-567-121-00	VIBRATOR, CRYSTAL (4.194304MHz)	

Ref. No.	Part No.	Description	Remark
* A-7062-158-A MD-23 (P) BOARD, COMPLETE *****			
	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
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

Ref. No.	Part No.	Description	Remark
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	1-566-527-11	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) 31P	
CN814	* 1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
< DIODE >			
D803	8-719-200-27	DIODE E10DS2	
D803	8-719-200-27	DIODE MA152WK	
D810	8-719-400-18	DIODE E10DS2	
D811	8-719-200-27	DIODE MA152WK	
D901	8-719-400-18	DIODE MA152WK	
D902	8-719-400-18	DIODE MA152WK	
D903	8-719-400-18	DIODE 1SS226	
D904	8-719-800-76	DIODE MA152WK	
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	

MD-23 (P)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC808	8-759-700-62	IC NJM4562D		R819	1-216-113-00	METAL CHIP 470K	5% 1/10W
IC809	8-759-100-94	IC uPC358G2		R820	1-216-025-00	METAL CHIP 100	5% 1/10W
IC901	8-759-207-50	IC TA7745F		R823	1-216-025-00	METAL CHIP 100	5% 1/10W
IC902	8-759-150-05	IC uPC324G2		R824	1-216-081-00	METAL CHIP 22K	5% 1/10W
IC903	8-759-925-66	IC BA6303F		R826	1-216-073-00	METAL CHIP 10K	5% 1/10W
IC904	8-759-008-67	IC MC14066BF		R830	1-216-101-00	METAL CHIP 150K	5% 1/10W
		< COIL >		R831	1-216-049-00	METAL CHIP 1K	5% 1/10W
L990	1-408-793-21	INDUCTOR, CHIP 220uH		R832	1-216-304-11	METAL CHIP 3.3	5% 1/10W
L991	1-408-777-00	INDUCTOR, CHIP 10uH		R833	1-216-304-11	METAL CHIP 3.3	5% 1/10W
		< IC LINK >		R834	1-216-304-11	METAL CHIP 3.3	5% 1/10W
PS801 Δ	1-532-685-00	LINK, IC		R835	1-216-049-00	METAL CHIP 1K	5% 1/10W
		< TRANSISTOR >		R840	1-216-107-00	METAL CHIP 270K	5% 1/10W
Q806	8-729-111-14	TRANSISTOR 2SA1385-Z-L		R841	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q807	8-729-901-06	TRANSISTOR DTA144EK		R842	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q809	8-729-111-95	TRANSISTOR 2SC3518		R843	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q810	8-729-805-25	TRANSISTOR 2SB1121		R844	1-216-107-00	METAL CHIP 270K	5% 1/10W
Q811	8-729-805-25	TRANSISTOR 2SB1121		R845	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q812	8-729-111-14	TRANSISTOR 2SA1385-Z-L		R846	1-216-107-00	METAL CHIP 270K	5% 1/10W
Q813	8-729-100-66	TRANSISTOR 2SC1623		R847	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q820	8-729-111-95	TRANSISTOR 2SC3518		R848	1-216-107-00	METAL CHIP 270K	5% 1/10W
Q821	8-729-100-66	TRANSISTOR 2SC1623		R849	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q880	8-729-100-66	TRANSISTOR 2SC1623		R852	1-216-081-00	METAL CHIP 22K	5% 1/10W
Q901	8-729-920-82	TRANSISTOR 2SB1188-OR		R860	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
Q902	8-729-920-82	TRANSISTOR 2SB1188-OR		R861	1-216-055-00	METAL CHIP 1.8K	5% 1/10W
Q903	8-729-920-82	TRANSISTOR 2SB1188-OR		R864	1-216-033-00	METAL CHIP 220	5% 1/10W
Q904	8-729-901-06	TRANSISTOR DTA144EK		R870	1-216-113-00	METAL CHIP 470K	5% 1/10W
Q905	8-729-901-06	TRANSISTOR DTA144EK		R885	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q906	8-729-901-01	TRANSISTOR DTC144EK		R886	1-216-073-00	METAL CHIP 10K	5% 1/10W
Q907	8-729-901-01	TRANSISTOR DTC144EK		R887	1-216-049-00	METAL CHIP 1K	5% 1/10W
Q908	8-729-901-01	TRANSISTOR DTC144EK		R888	1-216-049-00	METAL CHIP 1K	5% 1/10W
Q909	8-729-901-06	TRANSISTOR DTA144EK		R890	1-216-681-11	METAL CHIP 18K	0.5% 1/10W
Q950	8-729-903-97	TRANSISTOR FMS1FE		R891	1-216-681-11	METAL CHIP 18K	0.5% 1/10W
Q990	8-729-100-66	TRANSISTOR 2SC1623		R892	1-216-077-00	METAL CHIP 15K	5% 1/10W
		< RESISTOR >		R893	1-216-077-00	METAL CHIP 15K	5% 1/10W
R801	1-216-105-00	METAL CHIP 220K	5% 1/10W	R894	1-216-113-00	METAL CHIP 470K	5% 1/10W
R802	1-216-105-00	METAL CHIP 220K	5% 1/10W	R895	1-216-113-00	METAL CHIP 470K	5% 1/10W
R803	1-216-097-00	METAL CHIP 100K	5% 1/10W	R896	1-216-025-00	METAL CHIP 100	5% 1/10W
R804	1-216-097-00	METAL CHIP 100K	5% 1/10W	R897	1-216-049-00	METAL CHIP 1K	5% 1/10W
R805	1-216-085-00	METAL CHIP 33K	5% 1/10W	R898	1-216-025-00	METAL CHIP 100	5% 1/10W
R806	1-216-065-00	METAL CHIP 4.7K	5% 1/10W	R899	1-216-073-00	METAL CHIP 10K	5% 1/10W
R807	1-216-049-00	METAL CHIP 1K	5% 1/10W	R900	1-216-097-00	METAL CHIP 100K	5% 1/10W
R810	1-216-051-00	METAL CHIP 1.2K	5% 1/10W	R901	1-216-035-00	METAL CHIP 270	5% 1/10W
R811	1-216-051-00	METAL CHIP 1.2K	5% 1/10W	R902	1-216-035-00	METAL CHIP 270	5% 1/10W
R818	1-216-059-00	METAL CHIP 2.7K	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

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
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	1-216-069-00	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 5% 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. METAL1K	
RV802	1-230-523-11	RES. ADJ. METAL10K	
RV803	1-230-527-11	RES. ADJ. METAL100K	
RV901	1-230-529-11	RES. ADJ. METAL470K	
< THERMISTOR >			
THP801	1-202-854-00	THERMISTOR (POSITIVE)	
< CONNECTOR >			
W801	1-562-880-11	CONNECTOR, CARD EDGE 15P	
W901	1-562-880-11	CONNECTOR, CARD EDGE 15P	

Ref. No.	Part No.	Description	Remark
* 1-633-698-11 MJ-25 BOARD			

< CAPACITOR >			
C601	1-163-038-00	CERAMIC CHIP	0.1uF 25V
< CONNECTOR >			
CN601	1-506-468-11	CONNECTOR 3P. MALE	
< DIODE >			
D601	8-719-106-80	DIODE RD13M-B1	
< JACK >			
J601	1-507-995-21	JACK, MICROPHONE (MIC/Ⓜ)	

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

1-163-038-00 CERAMIC CHIP 0.1uF 25V			
1-506-485-11 CONNECTOR 6P. MALE			

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

< 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

Ref. No.	Part No.	Description	Remark
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
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 1S2836	
D032	8-719-104-34	DIODE 1S2836	
D033	8-719-104-34	DIODE 1S2836	
< IC >			
IC001	8-752-009-90	IC CX20099	
IC002	8-759-981-92	IC RC4558M	
IC003	8-759-981-92	IC RC4558M	
IC004	8-752-322-57	IC CXD1077M	
IC004	8-752-322-57	IC CXD1077M	
IC005	8-759-908-15	IC TL431CLP	

Ref. No.	Part No.	Description	Remark
< COIL >			
L001	1-408-793-21	INDUCTOR, CHIP 220uH	
< TRANSISTOR >			
Q001	8-729-202-38	TRANSISTOR 2SC3326M	
Q002	8-729-202-38	TRANSISTOR 2SC3326M	
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 2SC3326M	
Q052	8-729-202-38	TRANSISTOR 2SC3326M	
< 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	1-216-066-00	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

Ref. No.	Part No.	Description	Value	Tolerance	Power	Remark
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	
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	

< VARIABLE RESISTOR >

RV001	1-230-524-11	RES. ADJ. METAL 22K			
RV002	1-230-521-11	RES. ADJ. METAL 2.2K			
RV031	1-230-521-11	RES. ADJ. METAL 2.2K			
RV032	1-230-529-11	RES. ADJ. METAL 470K			
RV051	1-230-524-11	RES. ADJ. METAL 22K			

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

< 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	

Ref. No.	Part No.	Description	Value	Tolerance	Power	Remark
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
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 1S2336			
D852	8-719-400-18	DIODE MA152WK			
D853	8-719-400-18	DIODE MA152WK			

< IC >

IC851	8-752-324-45	IC CXD10550-Z			
IC852	8-759-929-17	IC CXD1051M			
IC853	8-752-010-30	IC CX20133			
IC854	8-752-010-20	IC CX20132			
IC855	8-752-331-00	IC CXK58545M-12L-T6			
IC856	8-759-948-61	IC CX23011-C			
IC857	8-759-911-19	IC CX23012			
IC858	8-759-972-12	IC CF77305FT			
IC859	8-759-809-68	IC CKP5024R-079Q			
IC860	8-759-972-13	IC CF77309FR			

PD-19 (P) RP-73

Ref. No.	Part No.	Description	Remark
< 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	8-729-102-07	TRANSISTOR 2SC2223-F13	
Q852	8-729-122-63	TRANSISTOR 2SA1226	
Q853	8-729-102-07	TRANSISTOR 2SC2223-F13	
< 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	

Ref. No.	Part No.	Description	Remark
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 >			
RV052	1-230-521-11	RES. ADJ. METAL 2.2K	
RV851	1-230-869-11	RES. ADJ. METAL 4.7K	
RV854	1-230-868-11	RES. ADJ. METAL 2.2K	
< CRYSTAL >			
X851	1-567-669-91	VIBRATOR, LITHIUM TANTALATE	
X852	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)	

* A-7061-827-A RP-73 BOARD, COMPLETE (LP)			

< 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	1-164-232-11	CERAMIC CHIP 0.01uF 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	TANTAL. 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	TANTAL. 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	

Ref. No.	Part No.	Description	Remark		
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
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			
D002	8-719-801-41	DIODE 1SS196			
		< IC >			
IC001	8-752-033-00	IC CXA1234AR			
		< COIL >			
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-F13			
Q003	8-729-102-07	TRANSISTOR 2SC2223-F13			
		< 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

Ref. No.	Part No.	Description	Remark		
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
R015	1-216-085-00	METAL CHIP	33K	5%	1/10W
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
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 (SP)					

		< 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	1-164-232-11	CERAMIC CHIP	0.01uF		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	TANTAL. CHIP	1uF	20%	16V
C023	1-135-157-21	TANTALUM CHIP	10uF	20%	6.3V

Ref. No.	Part No.	Description	Remark
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	TANTAL. CHIP 1uF	20% 16V
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
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	
D002	8-719-801-41	DIODE 1SS196	
< IC >			
IC001	8-752-033-00	IC CXA1234AR	
< COIL >			
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-F13	
Q003	8-729-102-07	TRANSISTOR 2SC2223-F13	
< 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

Ref. No.	Part No.	Description	Remark
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
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 >			
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 *****			
* 1-559-762-11 WIRE, FLAT TYPE 22P 3-712-410-01 HOLDER, RS			
< 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 (ZIF) 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	

Ref. No.	Part No.	Description	Remark
< PHOTO INTERRUPTER >			
PH301	8-719-939-11	PHOTO INTERRUPTER GP-2S09-B	
PH302	8-719-939-11	PHOTO INTERRUPTER GP-2S09-B	
PH303	8-719-939-11	PHOTO INTERRUPTER GP-2S09-B	
< IC LINK >			
PS301	▲ 1-532-727-11	LINK, IC (0.25A 125V)	
< 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	

Ref. No.	Part No.	Description	Remark
* A-7062-167-A SE-10 (P) BOARD, COMPLETE *****			
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 0.68uF 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	
C119	1-163-017-00	CERAMIC CHIP 0.0047uF 5% 50V	

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

SE-10 (P)

Ref. No.	Part No.	Description	Value	Tolerance	Remark
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	0.68uF	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
C311	1-163-038-00	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description	Value	Tolerance	Remark
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	0.68uF	20%	50V
C404	1-126-163-11	ELECT	0.68uF	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	1-164-633-11	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
< 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	
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-B2	
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	
< FILTER >			
FL201	1-235-611-21	BPF	

Ref. No.	Part No.	Description	Remark
FL202	1-235-612-21	BPF	
< IC >			
IC001	8-752-816-72	IC CXP80116-692Q	
IC002	8-752-818-14	IC CXP5046H-255Q	
IC003	8-752-815-13	IC CXP5048H-222Q	
IC004	8-759-144-21	IC uPD75106G-573-1B	
IC007	8-759-008-67	IC MC14066BF	
IC008	8-759-937-56	IC S-8054ALB-LM-T1	
IC101	8-752-003-50	IC CX20035	
IC102	8-752-817-64	IC CXP5048H-244Q	
IC103	8-759-925-66	IC BA6303F	
IC104	8-759-981-75	IC RC3403AM	
IC105	8-759-208-11	IC MC14053BF	
IC106	8-759-971-25	IC MB674169U	
IC107	8-759-100-94	IC uPC353G2	
IC108	8-759-008-67	IC MC14066BF	
IC201	8-759-928-56	IC CXA1042M	
IC202	8-759-150-05	IC uPC324G2-E1	
IC203	8-759-208-11	IC MC14053BF	
IC204	8-759-927-46	IC SN74HC00ANS	
IC205	8-759-710-86	IC NJM2233BM	
IC206	8-759-035-93	IC SCT532F	
IC301	8-759-100-94	IC uPC353G2	
IC302	8-759-208-11	IC MC14053BF	
IC303	8-759-208-11	IC MC14053BF	
IC304	8-759-200-90	IC TC4533BF	
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 uPC333G2	
IC604	8-759-150-05	IC uPC324G2	
< 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	
< IC LINK >			
PS501	△ 1-532-679-00	LINK, IC	

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

SE-10 (P)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< TRANSISTOR >							
Q002	8-729-901-01	TRANSISTOR DTC144EK		Q407	8-729-100-66	TRANSISTOR 2SC1623	
Q003	8-729-901-06	TRANSISTOR DTA144EK		Q408	8-729-216-22	TRANSISTOR 2SA1162	
Q004	8-729-901-01	TRANSISTOR DTC144EK		Q409	8-729-100-66	TRANSISTOR 2SC1623	
Q005	8-729-901-01	TRANSISTOR DTC144EK		Q410	8-729-100-66	TRANSISTOR 2SC1623	
Q006	8-729-901-01	TRANSISTOR DTC144EK		Q411	8-729-100-66	TRANSISTOR 2SC1623	
Q007	8-729-901-01	TRANSISTOR DTC144EK		Q502	8-729-100-66	TRANSISTOR 2SC1623	
Q008	8-729-901-01	TRANSISTOR DTC144EK		Q503	8-729-901-06	TRANSISTOR DTA144EK	
Q009	8-729-901-01	TRANSISTOR DTC144EK		Q504	8-729-100-66	TRANSISTOR 2SC1623	
Q010	8-729-901-06	TRANSISTOR DTA144EK		Q505	8-729-100-66	TRANSISTOR 2SC1623	
Q011	8-729-901-06	TRANSISTOR DTA144EK		Q506	8-729-100-66	TRANSISTOR 2SC1623	
Q014	8-729-901-01	TRANSISTOR DTC144EK		Q507	8-729-901-06	TRANSISTOR DTA144EK	
Q015	8-729-901-01	TRANSISTOR DTC144EK		Q508	8-729-901-06	TRANSISTOR DTA144EK	
Q018	8-729-901-01	TRANSISTOR DTC144EK		Q601	8-729-901-06	TRANSISTOR DTA144EK	
Q101	8-729-901-06	TRANSISTOR DTA144EK		Q604	8-729-805-25	TRANSISTOR 2SB1121	
Q102	8-729-901-06	TRANSISTOR DTA144EK		Q605	8-729-100-66	TRANSISTOR 2SC1623	
Q103	8-729-901-06	TRANSISTOR DTA144EK		Q606	8-729-901-06	TRANSISTOR DTA144EK	
Q104	8-729-901-01	TRANSISTOR DTC144EK		Q701	8-729-901-06	TRANSISTOR DTA144EK	
Q106	8-729-100-66	TRANSISTOR 2SC1623		Q702	8-729-901-06	TRANSISTOR DTA144EK	
Q107	8-729-901-06	TRANSISTOR DTA144EK		Q703	8-729-901-01	TRANSISTOR DTC144EK	
Q108	8-729-901-06	TRANSISTOR DTA144EK		Q704	8-729-216-22	TRANSISTOR 2SA1162	
Q109	8-729-901-06	TRANSISTOR DTA144EK		Q705	8-729-216-22	TRANSISTOR 2SA1162	
Q110	8-729-901-06	TRANSISTOR DTA144EK		Q706	8-729-100-66	TRANSISTOR 2SC1623	
Q111	8-729-100-66	TRANSISTOR 2SC1623		Q707	8-729-100-66	TRANSISTOR 2SC1623	
Q112	8-729-901-01	TRANSISTOR DTC144EK		Q708	8-729-901-06	TRANSISTOR DTA144EK	
Q113	8-729-901-01	TRANSISTOR DTC144EK		Q709	8-729-901-06	TRANSISTOR DTA144EK	
Q114	8-729-901-01	TRANSISTOR DTC144EK		Q710	8-729-901-06	TRANSISTOR DTA144EK	
Q115	8-729-901-01	TRANSISTOR DTC144EK		Q711	8-729-901-06	TRANSISTOR DTA144EK	
Q116	8-729-901-06	TRANSISTOR DTA144EK		Q712	8-729-901-06	TRANSISTOR DTA144EK	
Q202	8-729-216-22	TRANSISTOR 2SA1162		Q713	8-729-901-01	TRANSISTOR DTC144EK	
Q205	8-729-901-01	TRANSISTOR DTC144EK		Q714	8-729-901-01	TRANSISTOR DTC144EK	
Q209	8-729-901-06	TRANSISTOR DTA144EK		< RESISTOR >			
Q210	8-729-901-01	TRANSISTOR DTC144EK		R001	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q301	8-729-901-06	TRANSISTOR DTA144EK		R002	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q302	8-729-901-01	TRANSISTOR DTC144EK		R003	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q303	8-729-901-01	TRANSISTOR DTC144EK		R005	1-216-101-00	METAL CHIP 150K 5% 1/10W	
Q304	8-729-901-01	TRANSISTOR DTC144EK		R009	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q305	8-729-901-01	TRANSISTOR DTC144EK		R010	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q306	8-729-901-06	TRANSISTOR DTA144EK		R011	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q307	8-729-901-01	TRANSISTOR DTC144EK		R012	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q308	8-729-901-01	TRANSISTOR DTC144EK		R013	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q309	8-729-901-01	TRANSISTOR DTC144EK		R014	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q401	8-729-216-22	TRANSISTOR 2SA1162		R015	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q402	8-729-100-66	TRANSISTOR 2SC1623		R016	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q403	8-729-100-66	TRANSISTOR 2SC1623		R017	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q404	8-729-216-22	TRANSISTOR 2SA1162		R018	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
Q405	8-729-100-66	TRANSISTOR 2SC1623		R019	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
Q406	8-729-216-22	TRANSISTOR 2SA1162		R020	1-216-687-11	METAL CHIP 33K 0.5% 1/10W	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R021	1-216-687-11	METAL CHIP	33K	0.5%	1/10W	R072	1-216-043-00	METAL CHIP	560	5%	1/10W
R022	1-216-687-11	METAL CHIP	33K	0.5%	1/10W	R073	1-216-085-00	METAL CHIP	33K	5%	1/10W
R023	1-216-674-11	METAL CHIP	9.1K	0.5%	1/10W	R074	1-216-049-00	METAL CHIP	1K	5%	1/10W
R024	1-216-089-00	METAL CHIP	47K	5%	1/10W	R075	1-216-039-00	METAL CHIP	390	5%	1/10W
R025	1-216-097-00	METAL CHIP	100K	5%	1/10W	R076	1-216-080-00	METAL CHIP	20K	5%	1/10W
R026	1-216-073-00	METAL CHIP	10K	5%	1/10W	R077	1-216-080-00	METAL CHIP	20K	5%	1/10W
R027	1-216-049-00	METAL CHIP	1K	5%	1/10W	R078	1-216-080-00	METAL CHIP	20K	5%	1/10W
R028	1-216-039-00	METAL CHIP	390	5%	1/10W	R079	1-216-080-00	METAL CHIP	20K	5%	1/10W
R029	1-216-049-00	METAL CHIP	1K	5%	1/10W	R080	1-216-080-00	METAL CHIP	20K	5%	1/10W
R030	1-216-295-00	METAL CHIP	0	5%	1/10W	R081	1-216-080-00	METAL CHIP	20K	5%	1/10W
R031	1-216-097-00	METAL CHIP	100K	5%	1/10W	R082	1-216-080-00	METAL CHIP	20K	5%	1/10W
R032	1-216-097-00	METAL CHIP	100K	5%	1/10W	R083	1-216-080-00	METAL CHIP	20K	5%	1/10W
R033	1-216-049-00	METAL CHIP	1K	5%	1/10W	R084	1-216-080-00	METAL CHIP	20K	5%	1/10W
R034	1-216-089-00	METAL CHIP	47K	5%	1/10W	R085	1-216-073-00	METAL CHIP	10K	5%	1/10W
R035	1-216-089-00	METAL CHIP	47K	5%	1/10W	R086	1-216-073-00	METAL CHIP	10K	5%	1/10W
R036	1-216-073-00	METAL CHIP	10K	5%	1/10W	R087	1-216-073-00	METAL CHIP	10K	5%	1/10W
R037	1-216-089-00	METAL CHIP	47K	5%	1/10W	R088	1-216-073-00	METAL CHIP	10K	5%	1/10W
R038	1-216-039-00	METAL CHIP	390	5%	1/10W	R089	1-216-073-00	METAL CHIP	10K	5%	1/10W
R039	1-216-089-00	METAL CHIP	47K	5%	1/10W	R090	1-216-073-00	METAL CHIP	10K	5%	1/10W
R040	1-216-089-00	METAL CHIP	47K	5%	1/10W	R091	1-216-073-00	METAL CHIP	10K	5%	1/10W
R041	1-216-073-00	METAL CHIP	10K	5%	1/10W	R092	1-216-089-00	METAL CHIP	47K	5%	1/10W
R043	1-216-089-00	METAL CHIP	47K	5%	1/10W	R093	1-216-089-00	METAL CHIP	47K	5%	1/10W
R045	1-216-089-00	METAL CHIP	47K	5%	1/10W	R094	1-216-686-11	METAL CHIP	30K	0.5%	1/10W
R046	1-216-049-00	METAL CHIP	1K	5%	1/10W	R095	1-216-091-00	METAL CHIP	56K	5%	1/10W
R047	1-216-049-00	METAL CHIP	1K	5%	1/10W	R096	1-216-077-00	METAL CHIP	15K	5%	1/10W
R048	1-216-049-00	METAL CHIP	1K	5%	1/10W	R097	1-216-049-00	METAL CHIP	1K	5%	1/10W
R049	1-216-049-00	METAL CHIP	1K	5%	1/10W	R098	1-216-073-00	METAL CHIP	10K	5%	1/10W
R050	1-216-073-00	METAL CHIP	10K	5%	1/10W	R101	1-216-079-00	METAL CHIP	18K	5%	1/10W
R051	1-216-073-00	METAL CHIP	10K	5%	1/10W	R102	1-216-085-00	METAL CHIP	33K	5%	1/10W
R052	1-216-097-00	METAL CHIP	100K	5%	1/10W	R103	1-216-049-00	METAL CHIP	1K	5%	1/10W
R053	1-216-097-00	METAL CHIP	100K	5%	1/10W	R104	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R054	1-216-073-00	METAL CHIP	10K	5%	1/10W	R105	1-216-083-00	METAL CHIP	27K	5%	1/10W
R055	1-216-073-00	METAL CHIP	10K	5%	1/10W	R106	1-216-109-00	METAL CHIP	330K	5%	1/10W
R056	1-216-073-00	METAL CHIP	10K	5%	1/10W	R107	1-216-075-00	METAL CHIP	12K	5%	1/10W
R057	1-216-073-00	METAL CHIP	10K	5%	1/10W	R108	1-216-091-00	METAL CHIP	56K	5%	1/10W
R058	1-216-073-00	METAL CHIP	10K	5%	1/10W	R109	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R059	1-216-073-00	METAL CHIP	10K	5%	1/10W	R110	1-216-115-00	METAL CHIP	560K	5%	1/10W
R060	1-216-073-00	METAL CHIP	10K	5%	1/10W	R111	1-216-115-00	METAL CHIP	560K	5%	1/10W
R061	1-216-073-00	METAL CHIP	10K	5%	1/10W	R112	1-216-115-00	METAL CHIP	560K	5%	1/10W
R062	1-216-039-00	METAL CHIP	390	5%	1/10W	R113	1-216-115-00	METAL CHIP	560K	5%	1/10W
R063	1-216-073-00	METAL CHIP	10K	5%	1/10W	R114	1-216-107-00	METAL CHIP	270K	5%	1/10W
R064	1-216-073-00	METAL CHIP	10K	5%	1/10W	R115	1-216-107-00	METAL CHIP	270K	5%	1/10W
R065	1-216-073-00	METAL CHIP	10K	5%	1/10W	R116	1-216-099-00	METAL CHIP	120K	5%	1/10W
R066	1-216-073-00	METAL CHIP	10K	5%	1/10W	R117	1-216-117-00	METAL CHIP	680K	5%	1/10W
R067	1-216-049-00	METAL CHIP	1K	5%	1/10W	R118	1-216-081-00	METAL CHIP	22K	5%	1/10W
R068	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R119	1-216-117-00	METAL CHIP	680K	5%	1/10W
R069	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R120	1-216-085-00	METAL CHIP	33K	5%	1/10W
R070	1-216-073-00	METAL CHIP	10K	5%	1/10W	R121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R071	1-216-079-00	METAL CHIP	18K	5%	1/10W	R122	1-216-073-00	METAL CHIP	10K	5%	1/10W

SE-10 (P)

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark	
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W	R204	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R124	1-216-073-00	METAL CHIP	10K	5%	1/10W	R205	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R125	1-216-113-00	METAL CHIP	470K	5%	1/10W	R206	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R126	1-216-115-00	METAL CHIP	560K	5%	1/10W	R207	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R127	1-216-115-00	METAL CHIP	560K	5%	1/10W	R208	1-216-079-00	METAL CHIP	18K 5% 1/10W
R128	1-216-085-00	METAL CHIP	33K	5%	1/10W	R209	1-216-117-00	METAL CHIP	680K 5% 1/10W
R129	1-216-097-00	METAL CHIP	100K	5%	1/10W	R210	1-216-091-00	METAL CHIP	56K 5% 1/10W
R130	1-216-097-00	METAL CHIP	100K	5%	1/10W	R211	1-216-073-00	METAL CHIP	10K 5% 1/10W
R131	1-216-097-00	METAL CHIP	100K	5%	1/10W	R215	1-216-097-00	METAL CHIP	100K 5% 1/10W
R132	1-216-121-00	METAL CHIP	1M	5%	1/10W	R216	1-216-073-00	METAL CHIP	10K 5% 1/10W
R133	1-216-748-11	METAL CHIP	39K	5%	1/10W	R217	1-216-089-00	METAL CHIP	47K 5% 1/10W
R135	1-216-073-00	METAL CHIP	10K	5%	1/10W	R218	1-216-073-00	METAL CHIP	10K 5% 1/10W
R137	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W	R219	1-216-081-00	METAL CHIP	22K 5% 1/10W
R138	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W	R220	1-216-105-00	METAL CHIP	220K 5% 1/10W
R139	1-216-295-00	METAL CHIP	0	5%	1/10W	R221	1-216-111-00	METAL CHIP	390K 5% 1/10W
R140	1-216-295-00	METAL CHIP	0	5%	1/10W	R222	1-216-097-00	METAL CHIP	100K 5% 1/10W
R141	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R223	1-216-073-00	METAL CHIP	10K 5% 1/10W
R142	1-216-073-00	METAL CHIP	10K	5%	1/10W	R224	1-216-121-00	METAL CHIP	1M 5% 1/10W
R143	1-216-689-11	METAL CHIP	39K	0.5%	1/10W	R225	1-216-089-00	METAL CHIP	47K 5% 1/10W
R148	1-216-089-00	METAL CHIP	47K	5%	1/10W	R226	1-216-045-00	METAL CHIP	680 5% 1/10W
R149	1-216-097-00	METAL CHIP	100K	5%	1/10W	R227	1-216-045-00	METAL CHIP	680 5% 1/10W
R150	1-216-073-00	METAL CHIP	10K	5%	1/10W	R228	1-216-097-00	METAL CHIP	100K 5% 1/10W
R151	1-216-082-00	METAL GLAZE	24K	5%	1/10W	R234	1-216-089-00	METAL CHIP	47K 5% 1/10W
R152	1-216-083-00	METAL CHIP	27K	5%	1/10W	R235	1-216-073-00	METAL CHIP	10K 5% 1/10W
R153	1-216-073-00	METAL CHIP	10K	5%	1/10W	R236	1-216-049-00	METAL CHIP	1K 5% 1/10W
R154	1-216-073-00	METAL CHIP	10K	5%	1/10W	R237	1-216-295-00	METAL CHIP	0 5% 1/10W
R155	1-216-049-00	METAL CHIP	1K	5%	1/10W	R301	1-216-093-00	METAL CHIP	68K 5% 1/10W
R156	1-216-097-00	METAL CHIP	100K	5%	1/10W	R302	1-216-083-00	METAL CHIP	27K 5% 1/10W
R157	1-216-097-00	METAL CHIP	100K	5%	1/10W	R303	1-216-049-00	METAL CHIP	1K 5% 1/10W
R158	1-216-113-00	METAL CHIP	470K	5%	1/10W	R304	1-216-081-00	METAL CHIP	22K 5% 1/10W
R159	1-216-073-00	METAL CHIP	10K	5%	1/10W	R305	1-216-073-00	METAL CHIP	10K 5% 1/10W
R160	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R306	1-216-081-00	METAL CHIP	22K 5% 1/10W
R161	1-216-103-00	METAL CHIP	180K	5%	1/10W	R307	1-216-081-00	METAL CHIP	22K 5% 1/10W
R162	1-216-049-00	METAL CHIP	1K	5%	1/10W	R308	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R163	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R309	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R164	1-216-073-00	METAL CHIP	10K	5%	1/10W	R310	1-216-295-00	METAL CHIP	0 5% 1/10W
R165	1-216-073-00	METAL CHIP	10K	5%	1/10W	R312	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R167	1-216-097-00	METAL CHIP	100K	5%	1/10W	R314	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R168	1-216-065-00	METAL CHIP	33K	5%	1/10W	R315	1-216-295-00	METAL CHIP	0 5% 1/10W
R169	1-216-097-00	METAL CHIP	100K	5%	1/10W	R316	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R170	1-216-085-00	METAL CHIP	33K	5%	1/10W	R317	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R171	1-216-085-00	METAL CHIP	33K	5%	1/10W	R318	1-216-049-00	METAL CHIP	1K 5% 1/10W
R172	1-216-089-00	METAL CHIP	47K	5%	1/10W	R319	1-216-089-00	METAL CHIP	47K 5% 1/10W
R173	1-216-073-00	METAL CHIP	10K	5%	1/10W	R320	1-216-089-00	METAL CHIP	47K 5% 1/10W
R174	1-216-073-00	METAL CHIP	10K	5%	1/10W	R321	1-216-105-00	METAL CHIP	220K 5% 1/10W
R175	1-216-097-00	METAL CHIP	100K	5%	1/10W	R322	1-216-105-00	METAL CHIP	220K 5% 1/10W
R177	1-216-083-00	METAL CHIP	27K	5%	1/10W	R323	1-216-049-00	METAL CHIP	1K 5% 1/10W
R180	1-216-083-00	METAL CHIP	27K	5%	1/10W	R324	1-216-073-00	METAL CHIP	10K 5% 1/10W
R181	1-216-049-00	METAL CHIP	1K	5%	1/10W				

Ref. No.	Part No.	Description	Remark
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 5% 1/10W
R554	1-216-685-11	METAL CHIP	27K 0.5% 1/10W
R555	1-216-073-00	METAL CHIP	10K 5% 1/10W

Ref. No.	Part No.	Description	Remark
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
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

SE-10 (P)

TC-20

TR-40

Ref. No.	Part No.	Description	Remark		
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	CRYSTAL (16MHz)			
X002	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)			
X003	1-567-346-11	OSCILLATOR, CERAMIC (5MHz)			
X004	1-567-160-21	RESONATOR, CERAMIC (4.19MHz)			
X101	1-567-504-81	OSCILLATOR, CRYSTAL (4.433619MHz)			

* 1-633-699-11 TC-20 BOARD

< CAPACITOR >

C701	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C702	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C703	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C704	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C705	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C706	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C707	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V

Ref. No.	Part No.	Description	Remark	
C708	1-135-162-21	TANTALUM CHIP	33uF	20% 6.3V

< DIODE >

D701	8-719-918-70	DIODE LB-202DB		
D702	8-719-918-70	DIODE LB-202DB		
D703	8-719-918-70	DIODE LB-202DB		
D704	8-719-918-70	DIODE LB-202DB		

< TRANSISTOR >

Q701	8-729-140-88	TRANSISTOR FP1A3M		
Q702	8-729-140-88	TRANSISTOR FP1A3M		
Q703	8-729-140-88	TRANSISTOR FP1A3M		
Q704	8-729-140-88	TRANSISTOR FP1A3M		
Q705	8-729-140-88	TRANSISTOR FP1A3M		
Q706	8-729-140-88	TRANSISTOR FP1A3M		
Q707	8-729-140-88	TRANSISTOR FP1A3M		
Q708	8-729-140-88	TRANSISTOR FP1A3M		
Q709	8-729-900-53	TRANSISTOR DTC114EK		
Q710	8-729-900-53	TRANSISTOR DTC114EK		
Q711	8-729-900-53	TRANSISTOR DTC114EK		
Q712	8-729-900-53	TRANSISTOR DTC114EK		
Q713	8-729-900-53	TRANSISTOR DTC114EK		
Q714	8-729-900-53	TRANSISTOR DTC114EK		
Q715	8-729-900-53	TRANSISTOR DTC114EK		

< RESISTOR >

R701	1-216-013-00	METAL CHIP	33	5%	1/10W
R702	1-216-013-00	METAL CHIP	33	5%	1/10W
R703	1-216-013-00	METAL CHIP	33	5%	1/10W
R704	1-216-013-00	METAL CHIP	33	5%	1/10W
R705	1-216-013-00	METAL CHIP	33	5%	1/10W
R706	1-216-013-00	METAL CHIP	33	5%	1/10W
R707	1-216-013-00	METAL CHIP	33	5%	1/10W
R708	1-216-013-00	METAL CHIP	33	5%	1/10W
R709	1-216-029-00	METAL CHIP	150	5%	1/10W
R710	1-216-029-00	METAL CHIP	150	5%	1/10W
R711	1-216-029-00	METAL CHIP	150	5%	1/10W
R712	1-216-029-00	METAL CHIP	150	5%	1/10W
R713	1-216-029-00	METAL CHIP	150	5%	1/10W
R714	1-216-029-00	METAL CHIP	150	5%	1/10W
R715	1-216-029-00	METAL CHIP	150	5%	1/10W

* 1-633-700-11 TR-40 BOARD

< CONNECTOR >

CN401	1-506-484-11	CONNECTOR 5P, MALE		
CN402	1-506-487-11	CONNECTOR 3P, MALE		

Ref. No.	Part No.	Description	Remark
CN403	1-506-481-11	CONNECTOR 2P. MALE < JACK >	
J401	1-566-847-41	CONNECTOR, (S) TERMINAL 4P (S VIDEO OUT)	
J402	1-566-847-41	CONNECTOR, (S) TERMINAL 4P (S VIDEO IN) < VARIABLE RESISTOR >	
RV401	1-230-694-11	RES. VAR. CARBON 250K < SWITCH >	
S401	1-553-725-21	SWITCH, SLIDE (SYNC INT/EXT)	
S402	1-553-725-21	SWITCH, SLIDE (EDIT)	

	* A-7070-628-A TS-74 (LEFT) BOARD, COMPLETE *****		
	< TRANSISTOR >		
Q715	8-729-700-11	TRANSISTOR NJL7141E	

	* A-7070-627-A TS-74 (RIGHT) BOARD, COMPLETE *****		
	< TRANSISTOR >		
Q715	8-729-700-11	TRANSISTOR NJL7141E	

	MISCELLANEOUS *****		
51	△	1-413-629-11	POWER BLOCK
56	*	1-536-977-11	TERMINAL BOARD UNIT, CONTROL
360		1-535-535-11	TERMINAL, SHAFT GROUND
C901		1-161-057-00	CERAMIC 0.033uF 10% 50V
C902		1-161-057-00	CERAMIC 0.033uF 10% 50V
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 (CASSETE COMPARTMENT)
M905		8-835-138-01	MOTOR, DC (DNR-5301B) (CONTROL)
M906		A-7040-065-A	MOTOR ASSY, L (CASSETE LOADING)
M907		1-541-360-21	MOTOR, DC BLUSHLESS FAN
PM901	△	1-454-377-31	SOLENOID, PLUNGER
S901		1-570-407-11	SWITCH, SLIDE (CASSETE COMPARTMENT)
S903		1-553-226-00	SWITCH, LEAF (CASSETE LOCK)
S904		1-572-298-21	SWITCH, PUSH (REC PROOF, MPHG, ME/MP)

Ref. No.	Part No.	Description	Remark
ACCESSORY & PACKING MATERIAL *****			
△	1-590-278-11	CORD SET, POWER	
*	3-697-977-31	INDIVIDUAL CARTON	
*	3-697-978-01	CUSHION (UPPER)	
*	3-697-979-01	CUSHION (LOWER)	
	3-701-630-00	BAG, POLYETHYLENE	
*	3-704-350-01	SHEET (STANDARD), PROTECTION	
	3-751-298-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN)	
	3-751-298-41	MANUAL, INSTRUCTION (ENGLISH)	
	3-751-298-51	MANUAL, INSTRUCTION (FRENCH)	

HARDWARE LIST

#	Part No.	Description
# 1	7-621-255-45	SCREW +BVT 2X6 (S)
# 2	7-685-646-79	SCREW +BVT 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 2X6
#12	7-628-253-00	+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

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

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.

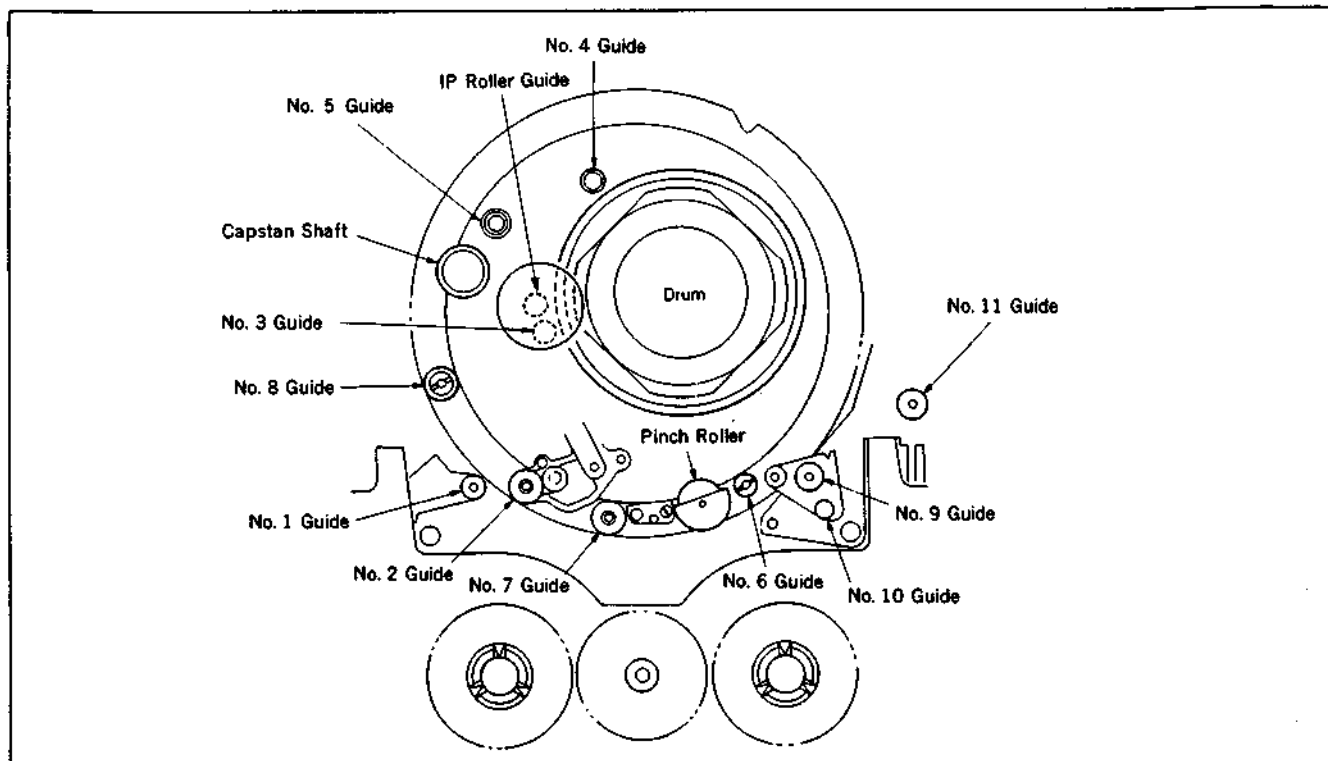
Note: Never turn the Upper Drum by the electric power and never turn the Upper Drum clockwise with a hand. Never move the cleaning piece in the vertical direction of head tips in the cleaning. It tends to damage the video head tips. Please follow the instruction above for cleaning.

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 clearing the 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


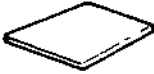

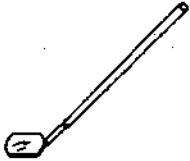
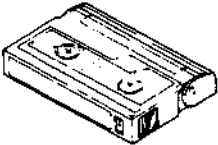
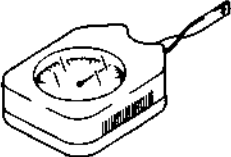





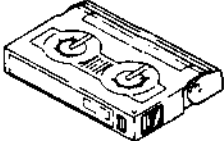
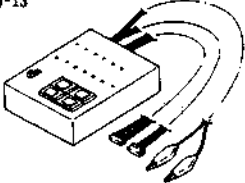

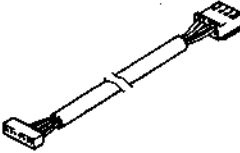
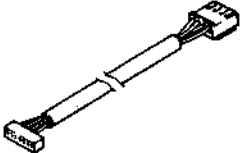
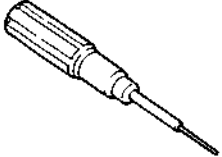
Note 3: Be sure to clean the tape path surface in repairing.

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	Servo, 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 3-1 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

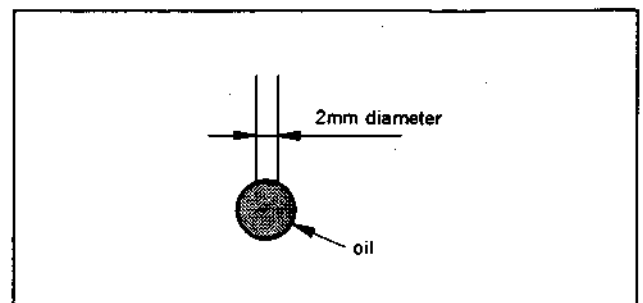
. Be sure to use the Sony grease as the lubrication grease.

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.

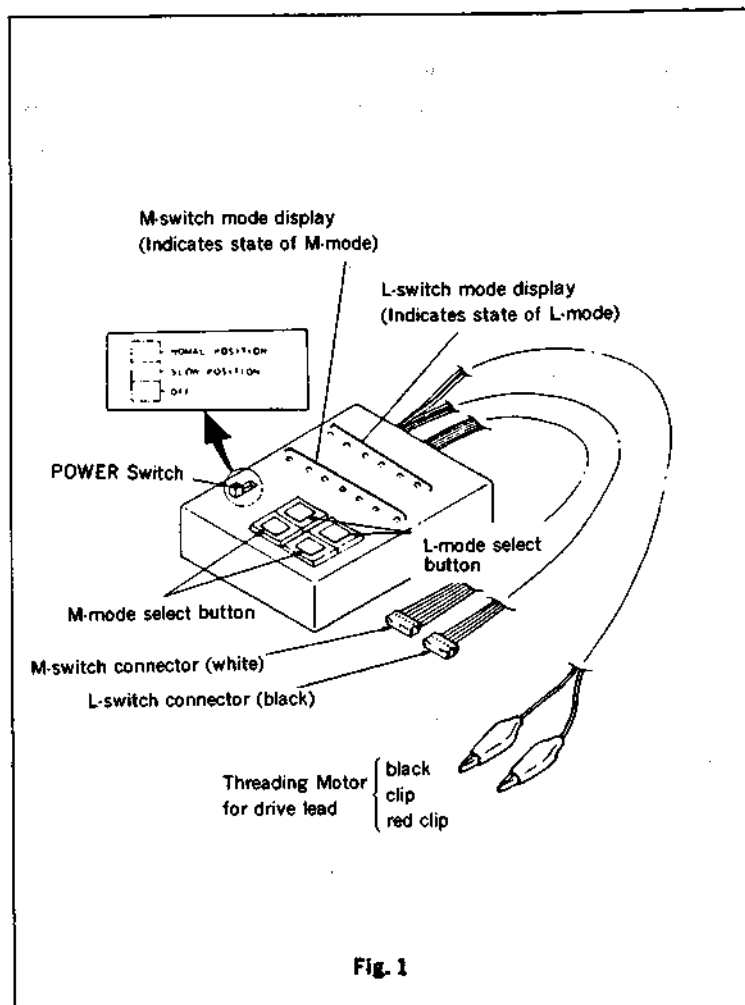
Part No. : J-6080-825-A

. 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-19, MD-23, HK-5 and SE-10 Boards from the unit referring to Sections 2-8, 2-9 and 2-10.
- (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.



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.

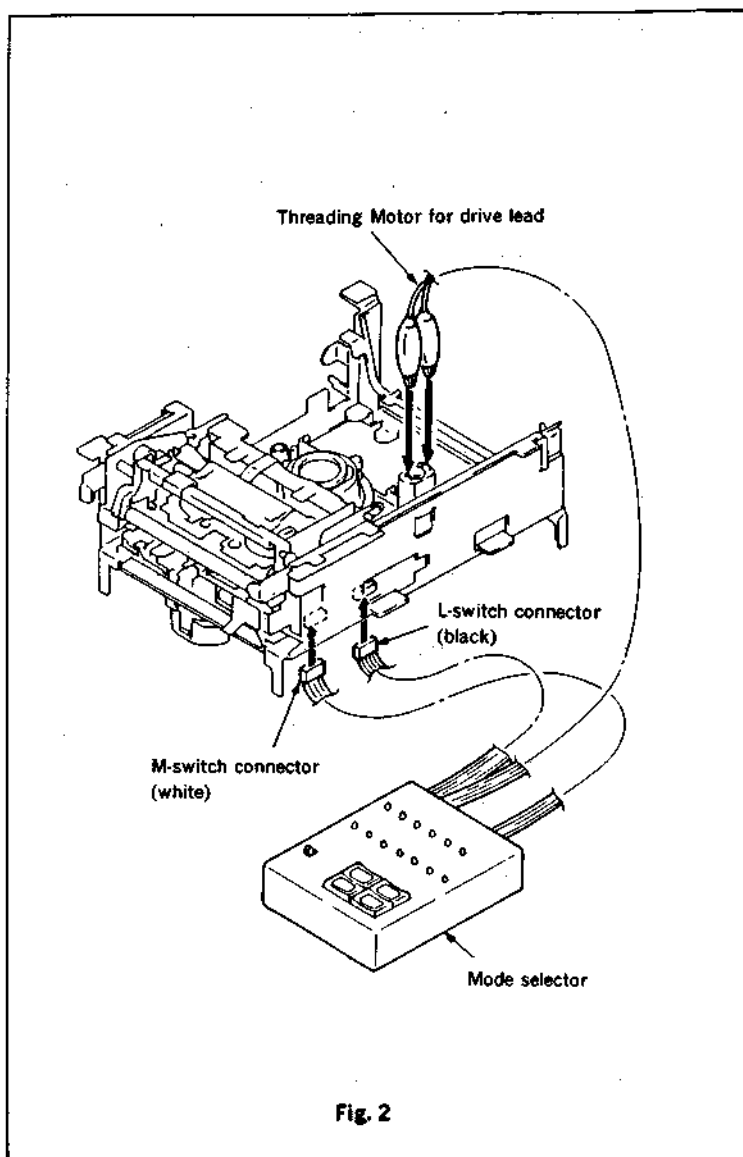


Fig. 2

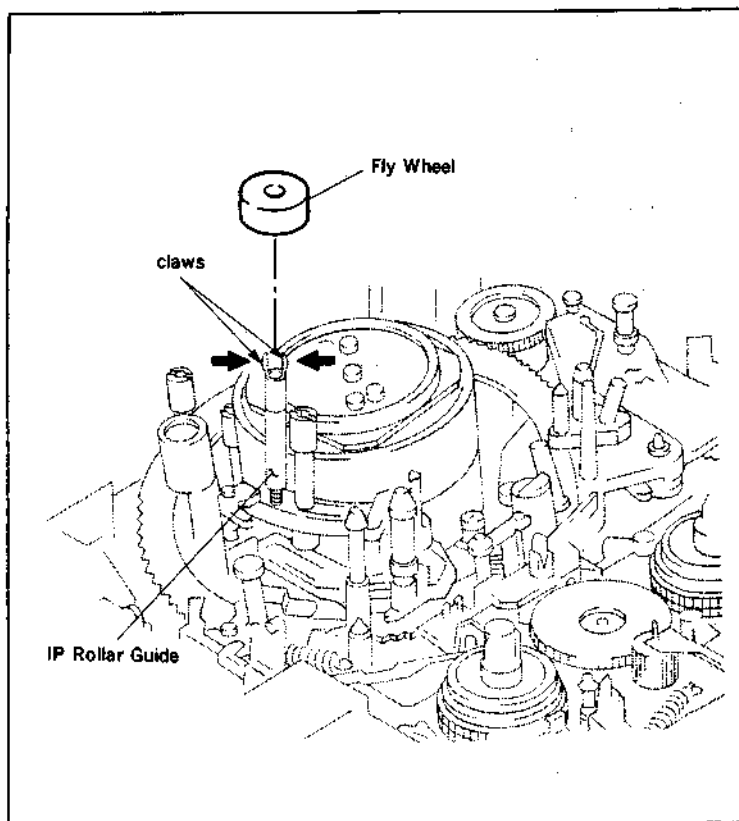
7-2-1. REPLACEMENT OF THE FLY WHEEL

Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (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 Roller 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)

Removals:

- (1) Open the MB-19 Board referring to Section 2-8.
- (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)

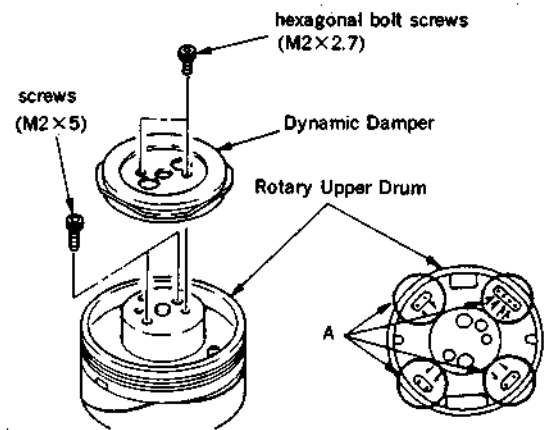


Fig. 1

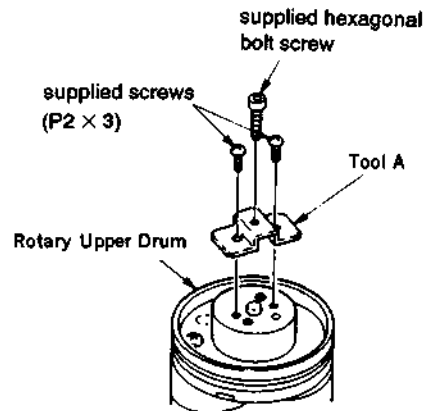


Fig. 2

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 bottom, 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.

Notes: . 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.

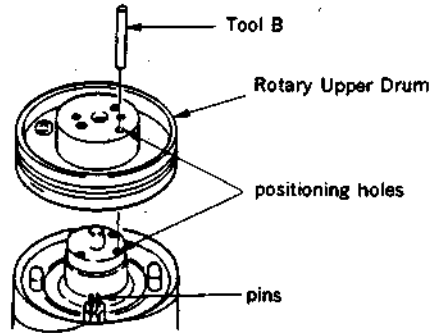


Fig. 3

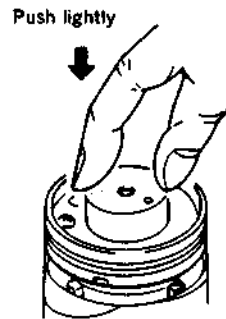


Fig. 4

7-2-3. REPLACEMENT OF THE DRUM ASSEMBLY

Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (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 HK-5 and SE-10 Boards referring to Sections 2-9 and 2-10.
- (5) Remove the two fixing screws and remove the Flexible Cover. (fig. 1)
- (6) Disconnect the connectors (CN805, 806) on the MD-23 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..

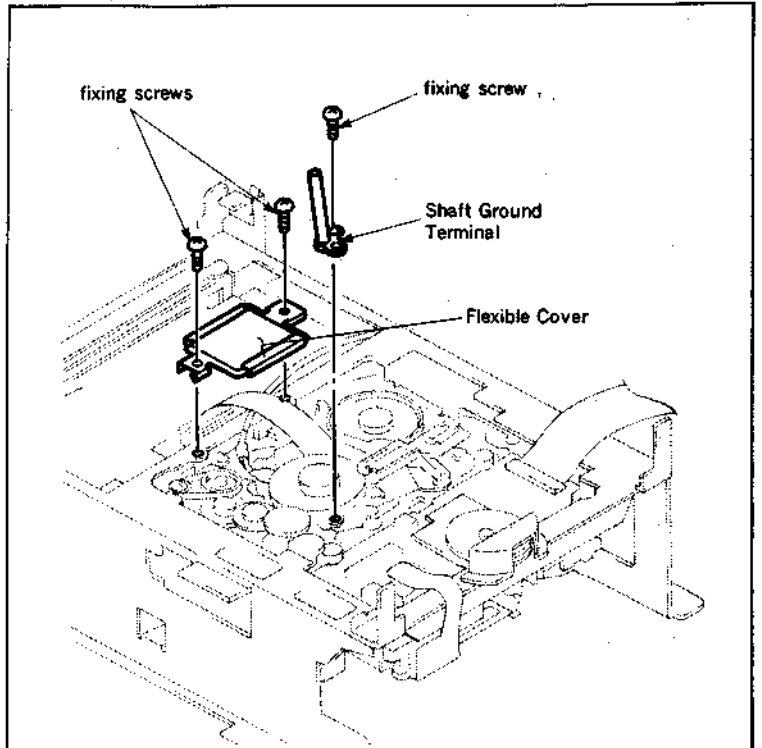


Fig. 1

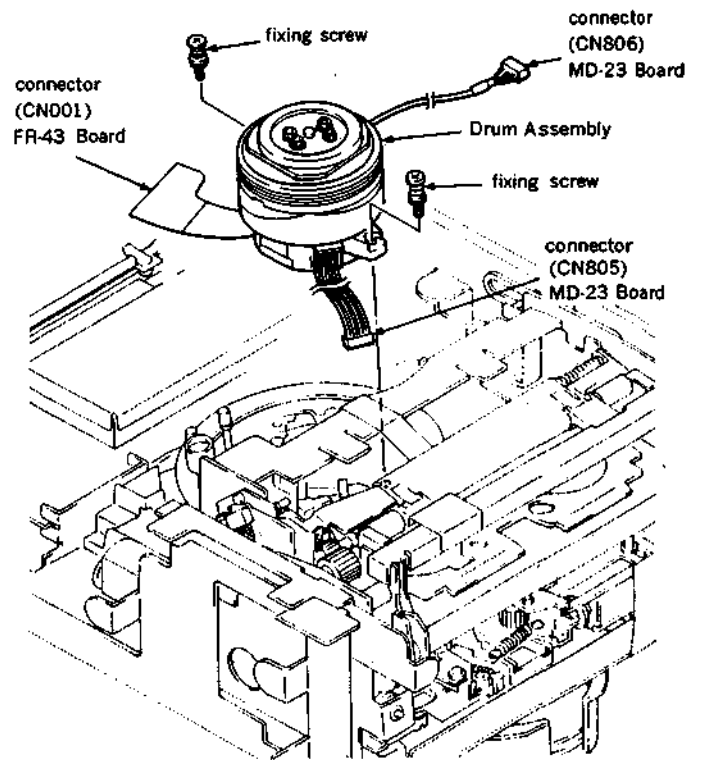


Fig. 2

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.

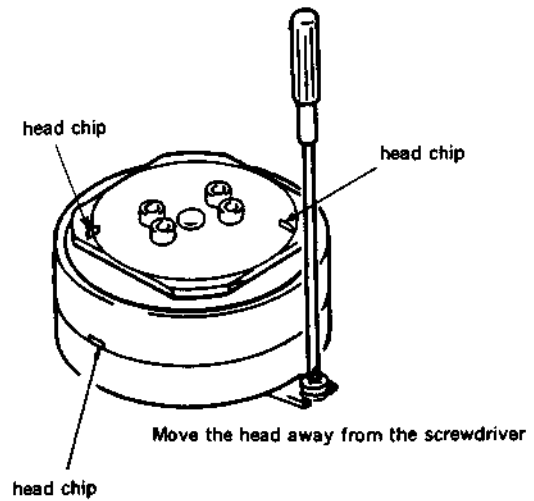


Fig. 3

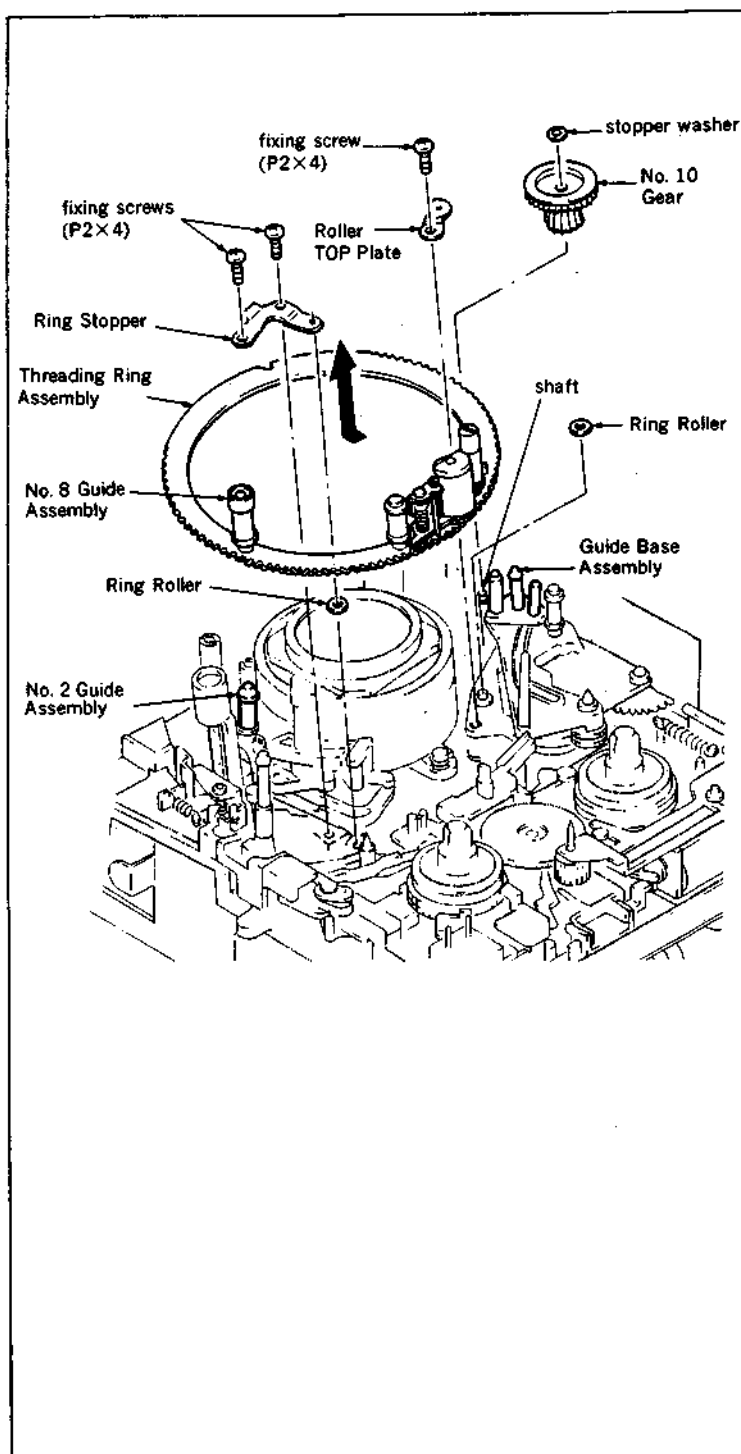
7-2-4. REPLACEMENT OF THE THREADING RING ASSEMBLY

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 2-13.
- (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.

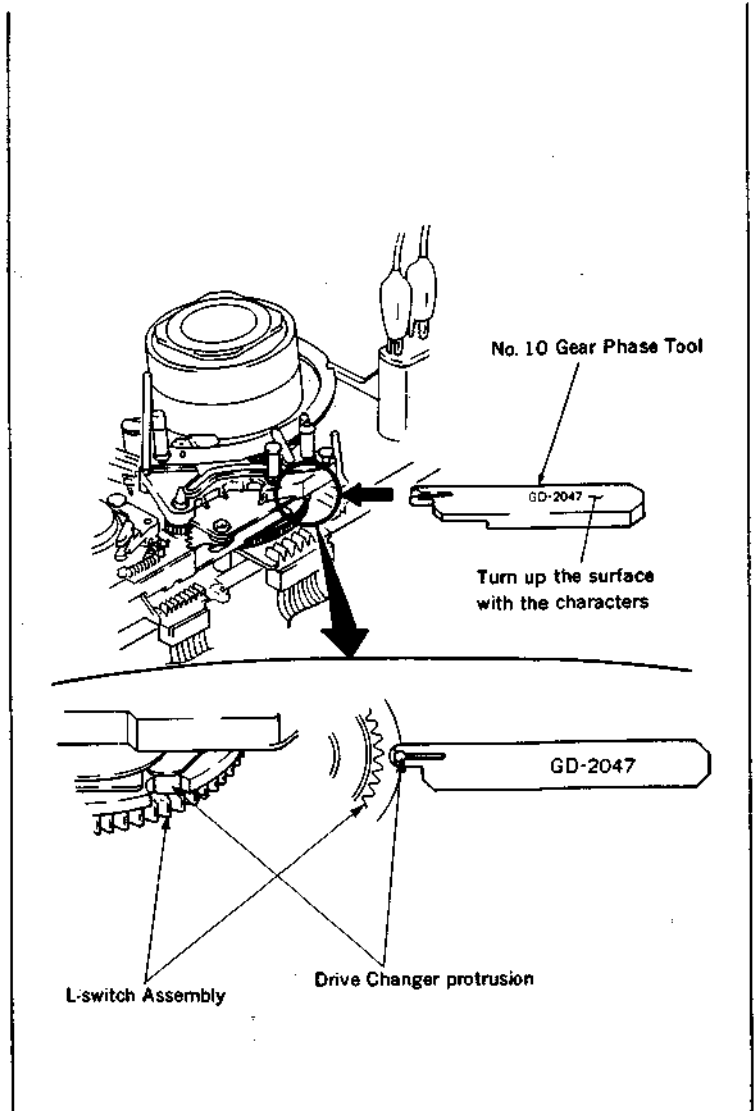
Note: When removing the Threading Ring Assembly, be careful that the Threading Ring Assembly does not touch the Drum and Capstan Shaft.



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 2-13.

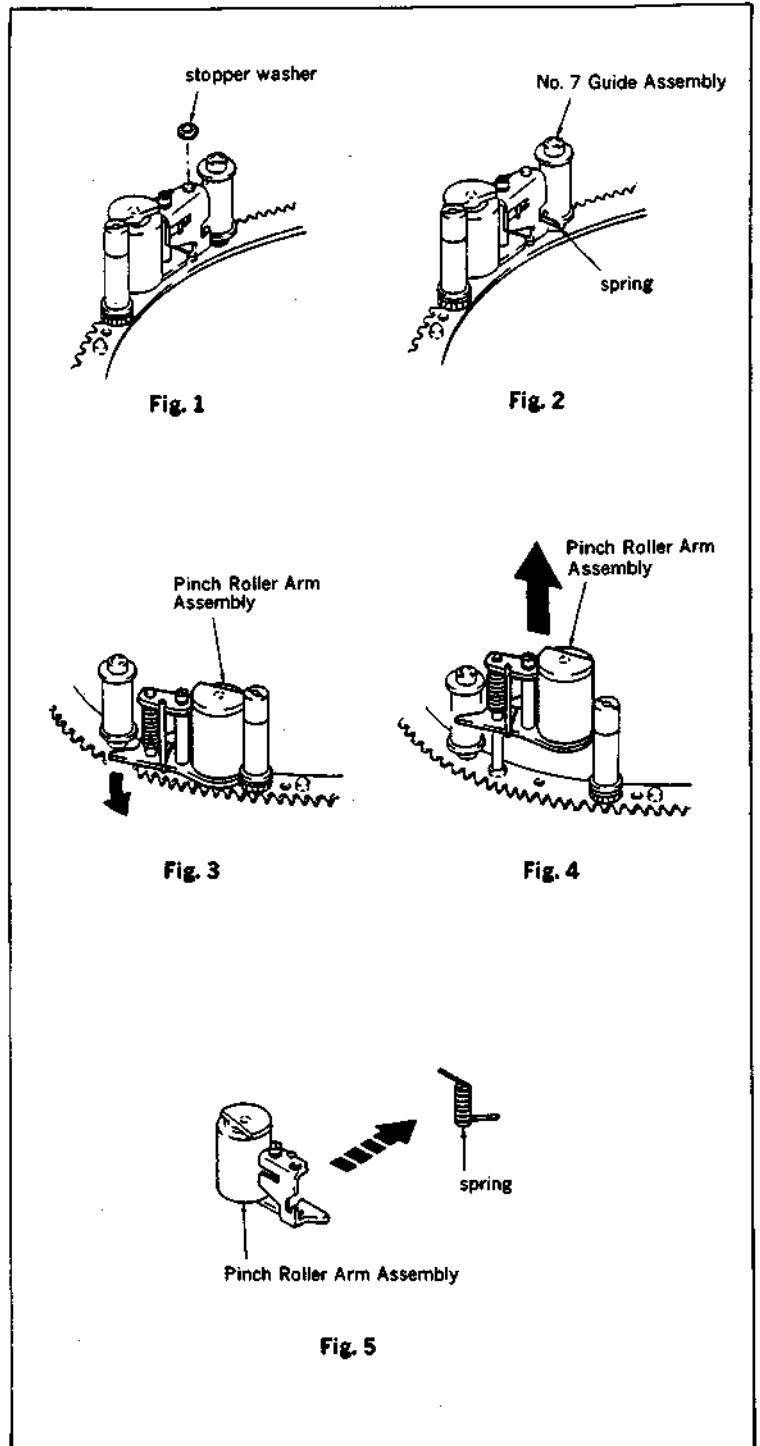
After replacement, perform the Tape Path Adjustment referring to Section 7-4.



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

Removal:

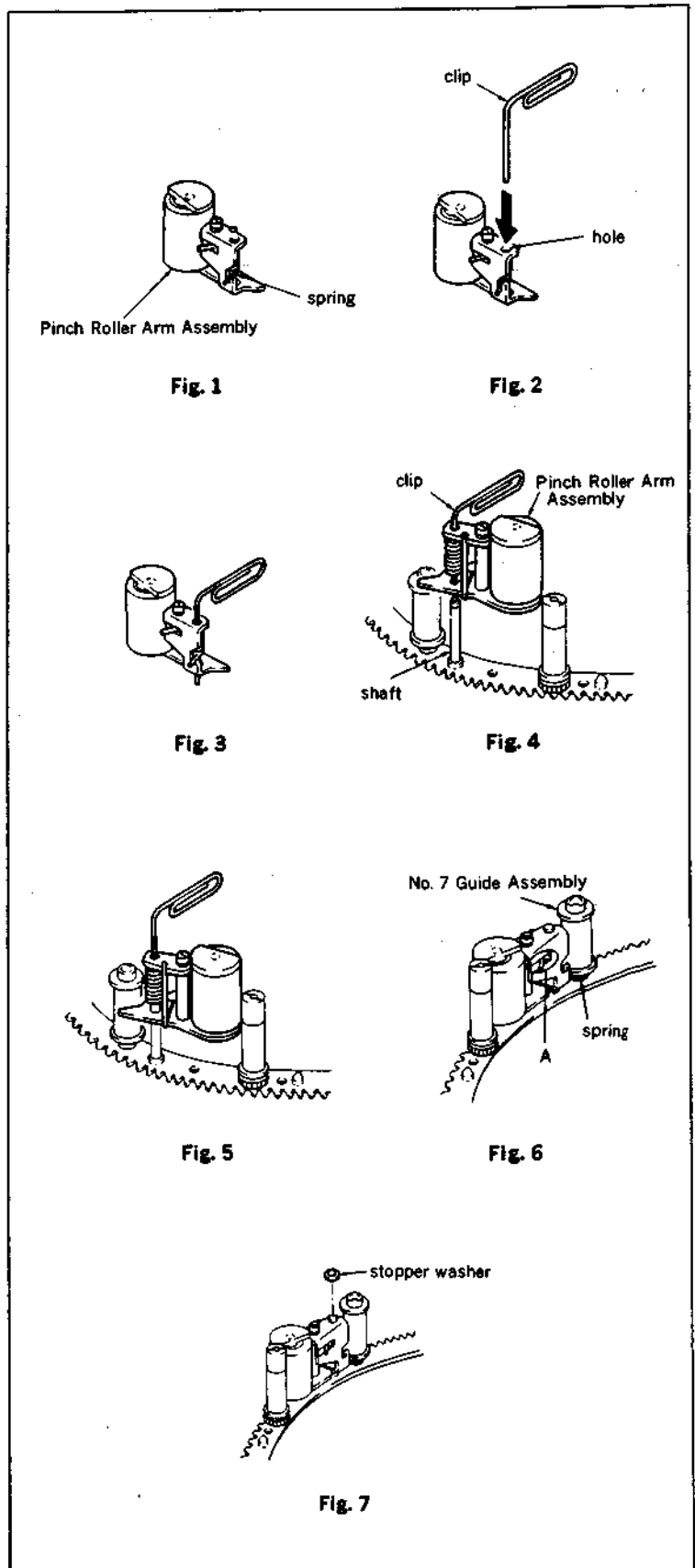
- (1) Open the MB-19 Board referring to Section 2-8.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (3) Remove the stopper washer. (fig. 1)
- (4) Hook the spring which is hooked to the No. 7 Guide Assembly to the groove of the Pinch Roller Arm (fig. 2)
- (5) Turn the Pinch 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.



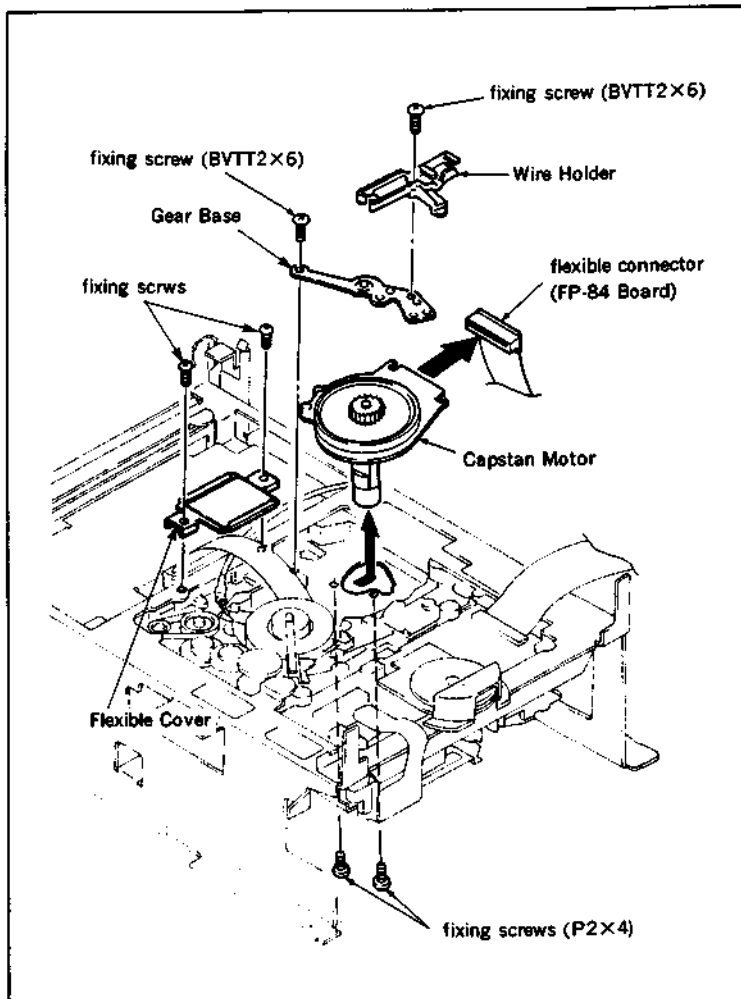
7-2-6. REPLACEMENT OF THE CAPSTAN MOTOR

Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (3) Remove the Threading Ring Assembly referring to Section 7-2-4.
- (4) Open the HK-5 and SE-10 Boards referring to Sections 2-9 and 2-10.
- (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

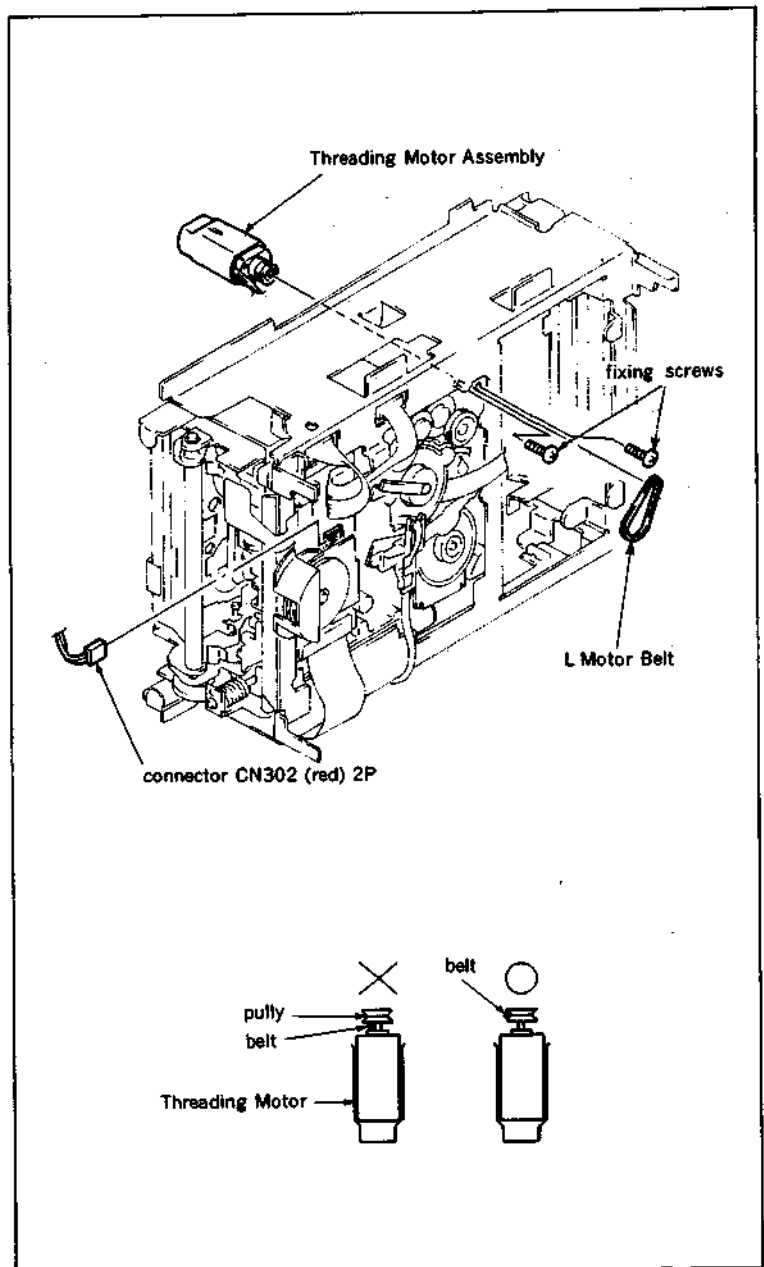
Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (2) Open the HK-5 and SE-10 Boards referring to Section 2-9 and 2-10.
- (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.



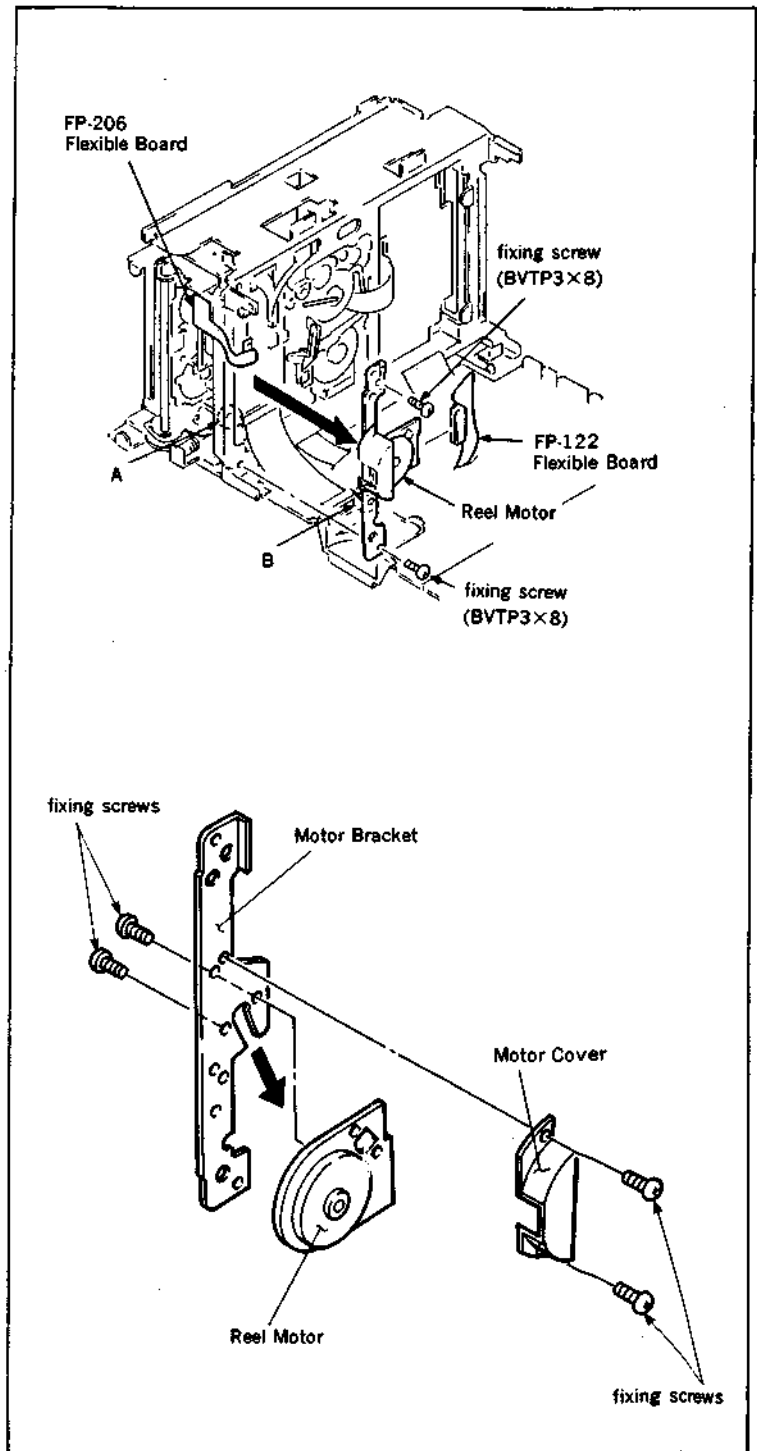
7-2-8. REPLACEMENT OF THE REEL MOTOR

Removal:

- (1) Open the HK-5 and SE-10 Boards referring to Section 2-9 and 2-10.
- (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

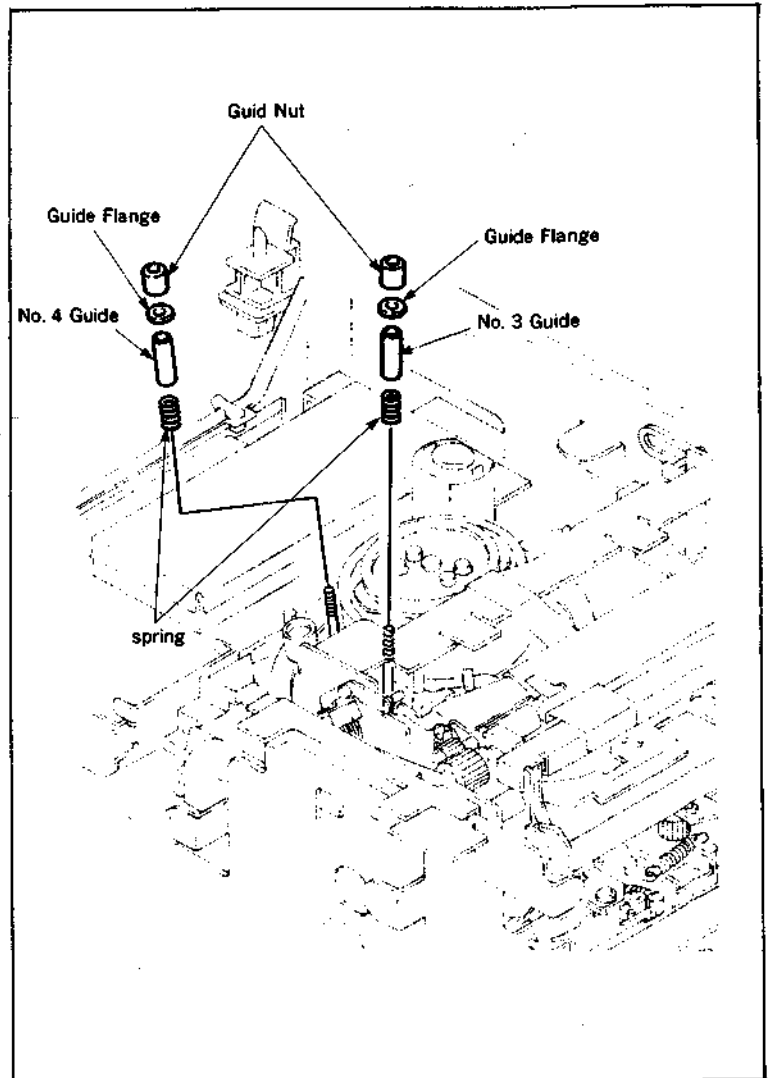
Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (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)

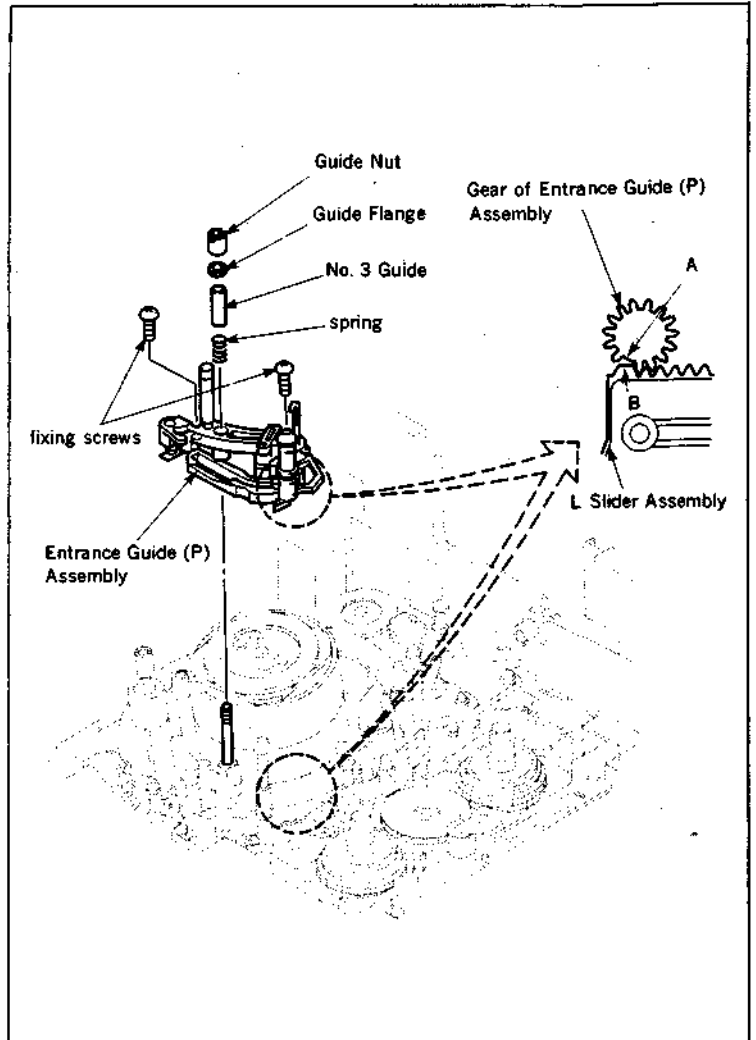
Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (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 2-13.
- (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)

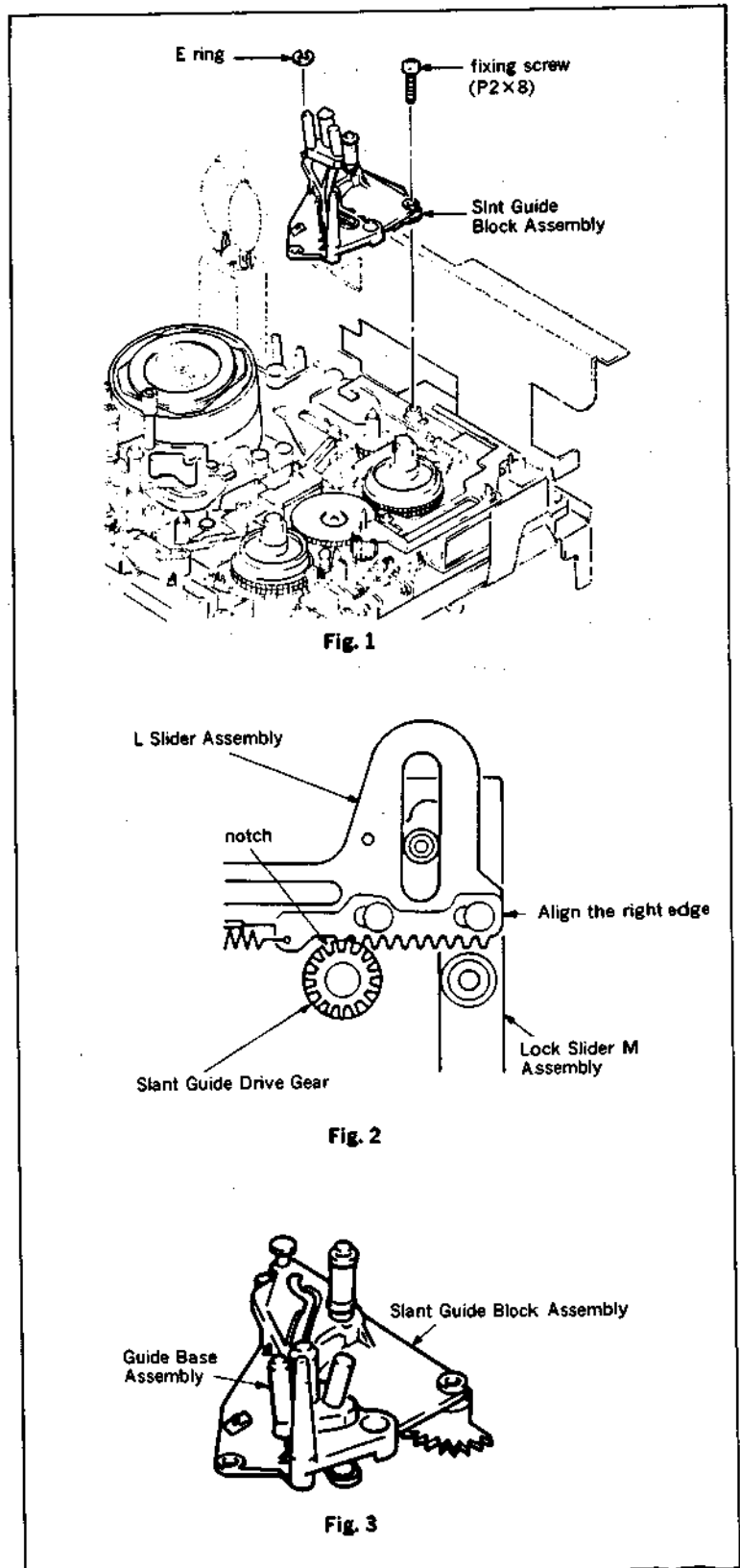
Note: At this time, check that the position of the notch on the Slant Guide Drive Gear is placed as shown in figure 2.

- (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.



7-2-12. REPLACEMENT OF THE No. 5 GUIDE BLOCK COMPLETE ASSEMBLY

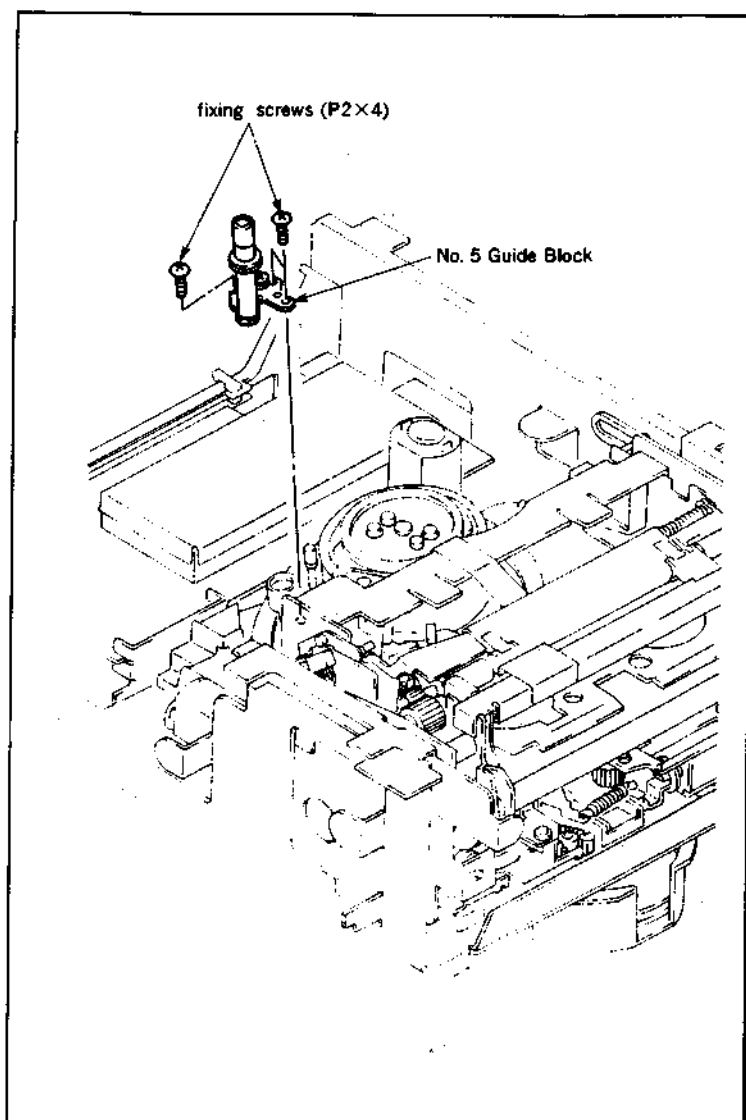
Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (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

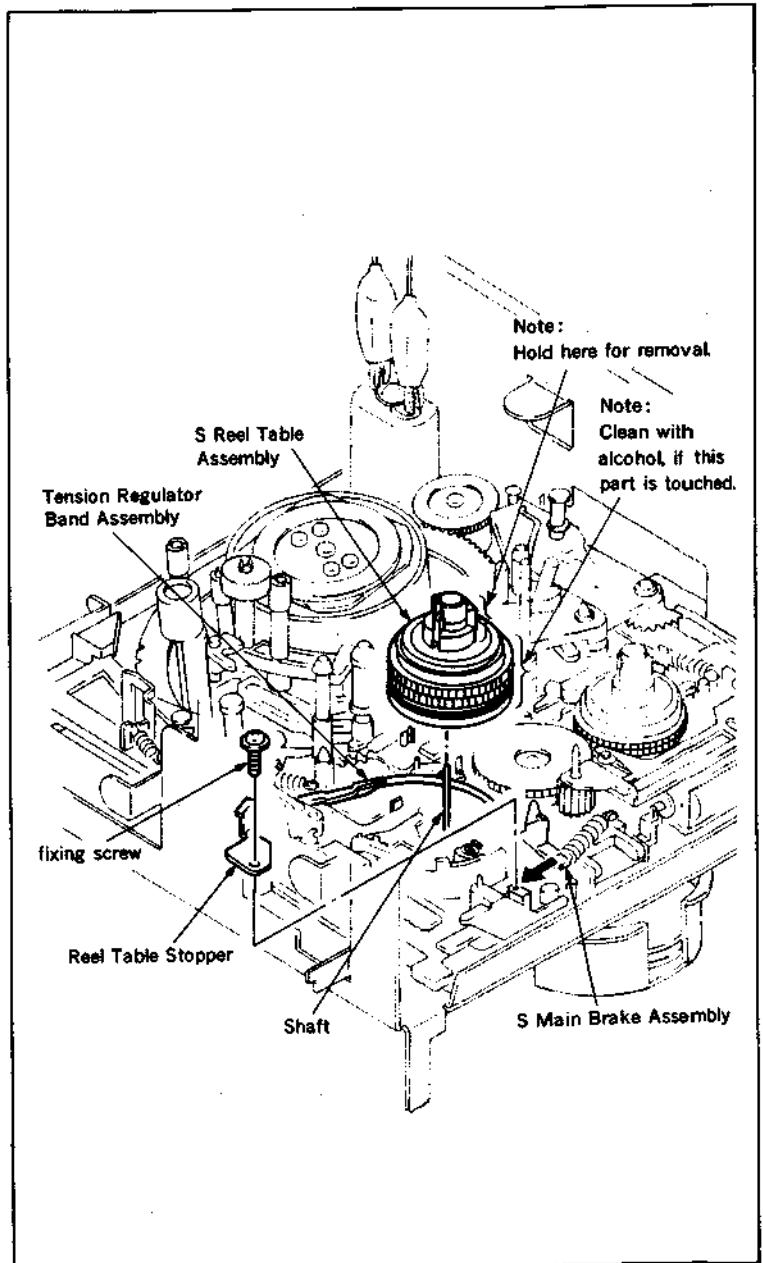
Tools: Mode Selector (Ref. No. J-14)
Cassette Tape
Dial Tension Gauge (Ref. No. J-6)
Tension Measurement Reel (30 mm dia.)
(Ref. No. J-7)
Sony Oil

Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (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 2-13.



7-2-14. REPLACEMENT OF THE T REEL TABLE ASSEMBLY

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

Sony Oil

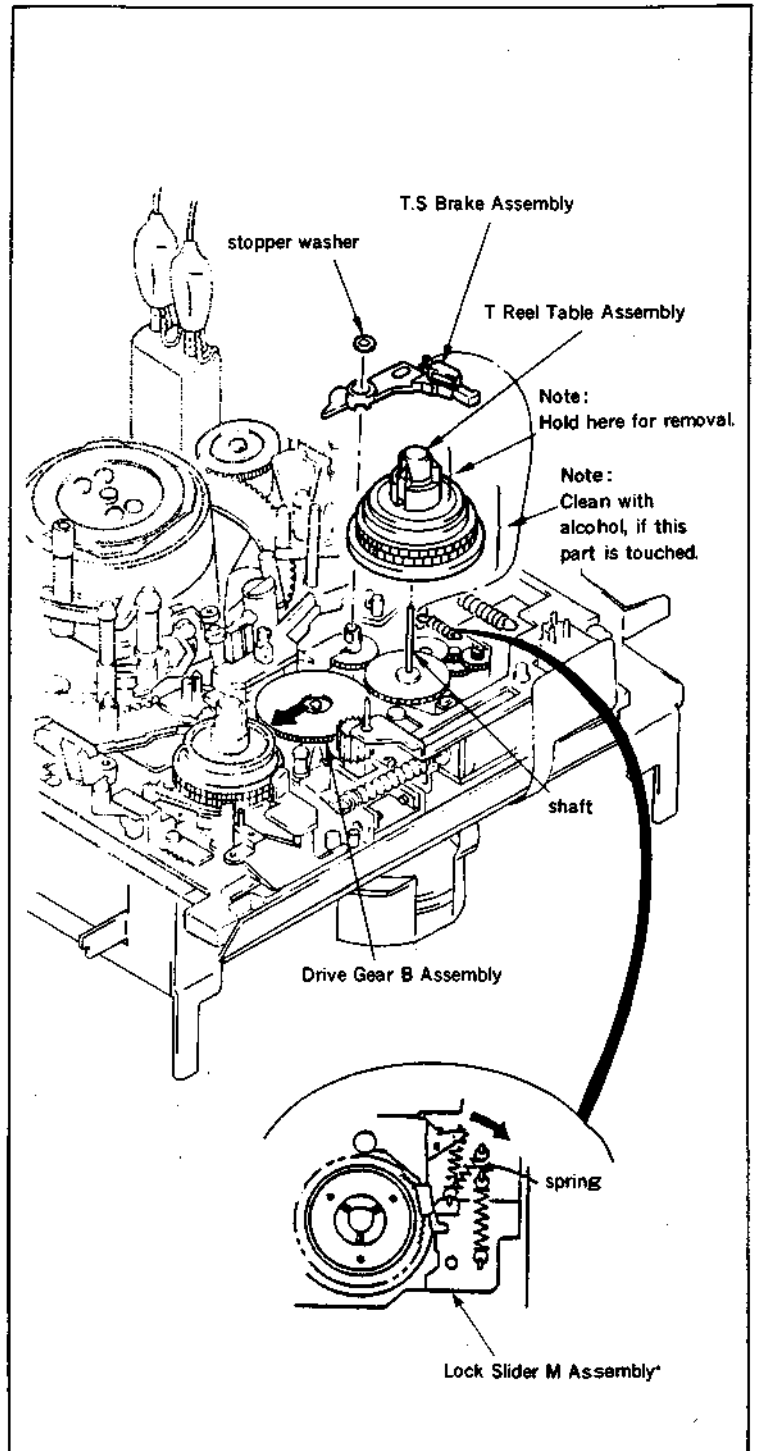
Removal:

- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (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 2-13.



7-2-15. REPLACEMENT OF THE PINCH PRESS ARM ASSEMBLY

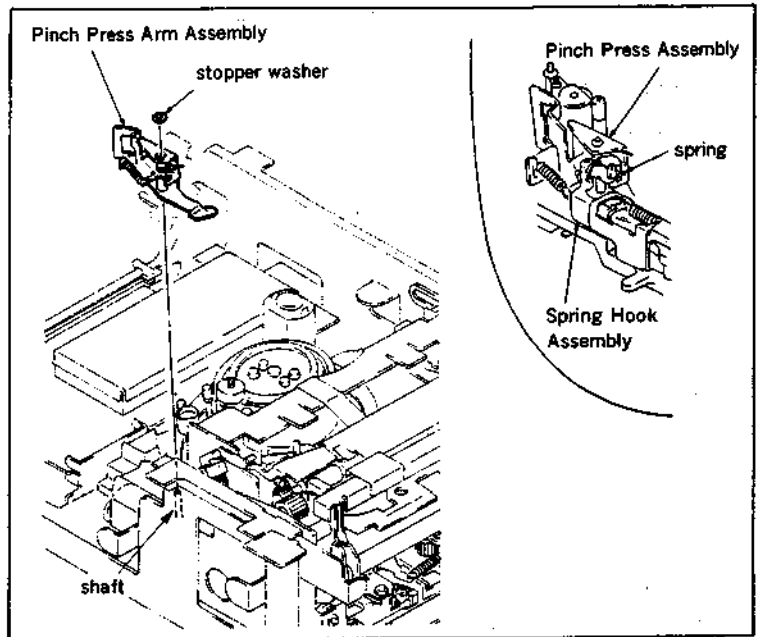
Tool: Sony Oil

Removals

- (1) Open the MB-19 Board referring to Section 2-8.
- (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

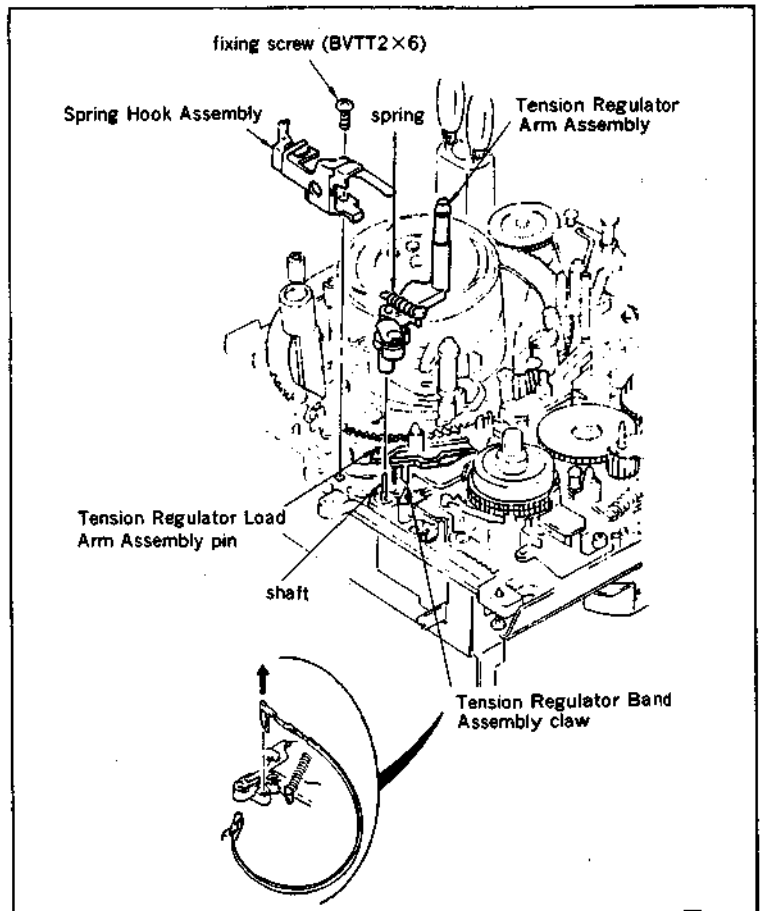
Tools: Mode Selector (Ref. No. J-13)

Sony Oil

Locking Compound

Removals

- (1) Remove the Cassette-up Assembly referring to Section 2-13.
- (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:

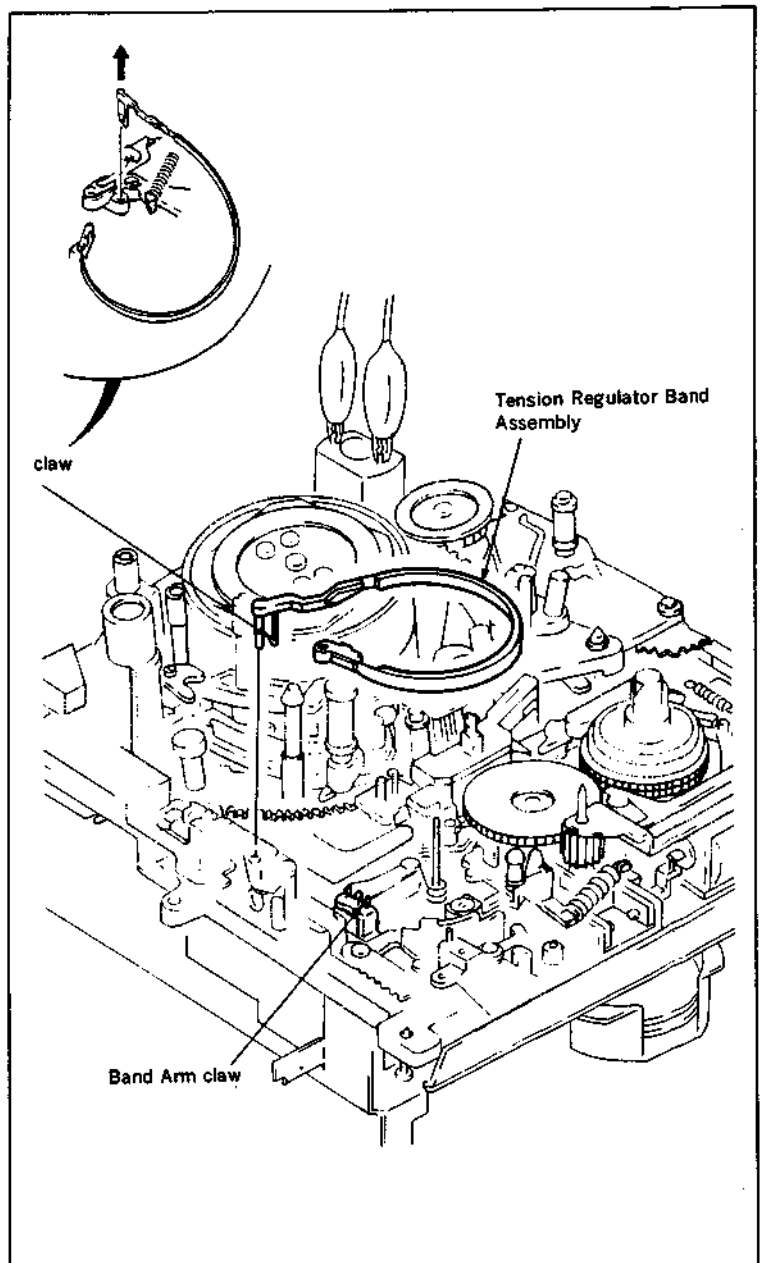
- (1) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (2) Remove the S Reel Table Assembly referring to Removal of Section 7-2-13.
- (3) Release the claw of the Band Arm and remove one side of the Tension Regulator Band Assembly.
- (4) Release the claw from the Tension Regulator 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 2-13.



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 2-13.
- (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.

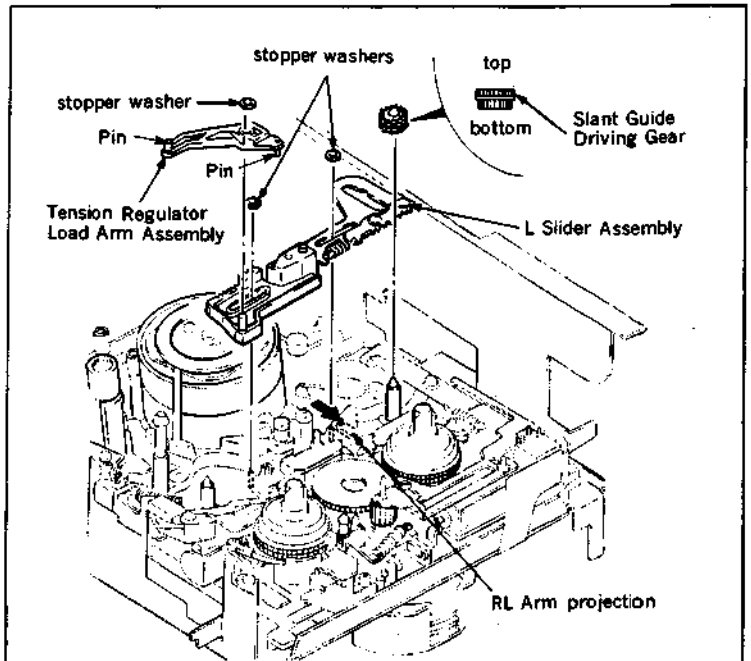


Fig. 1

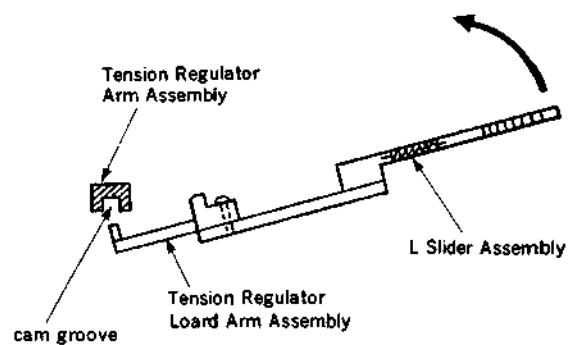


Fig. 2

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.

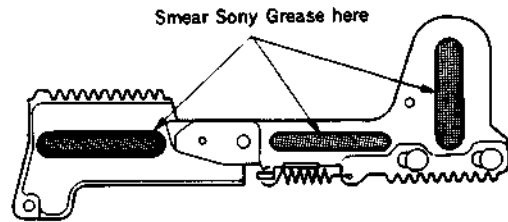


Fig. 3

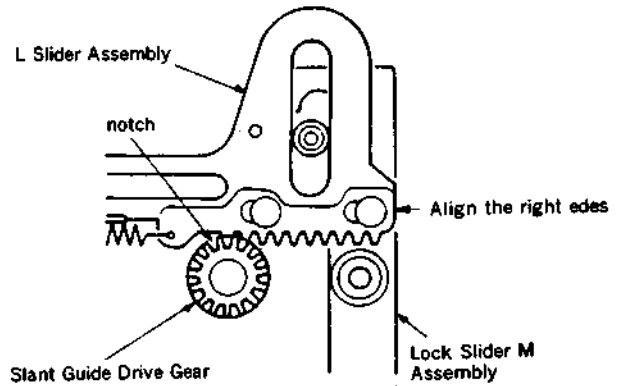


Fig. 4

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 2-13.
- (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.

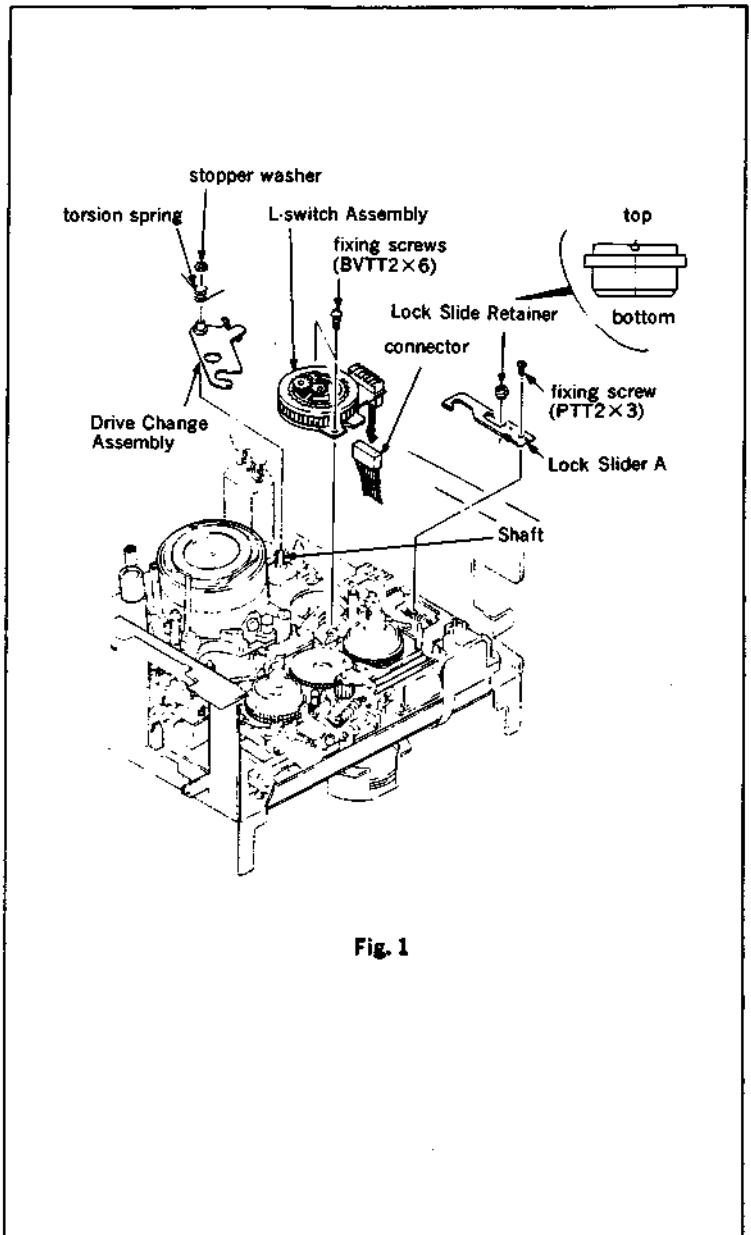


Fig. 1

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.

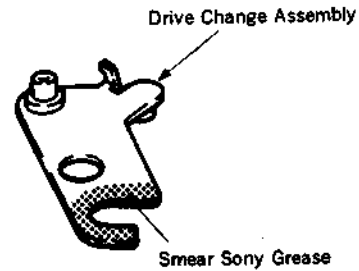


Fig. 2

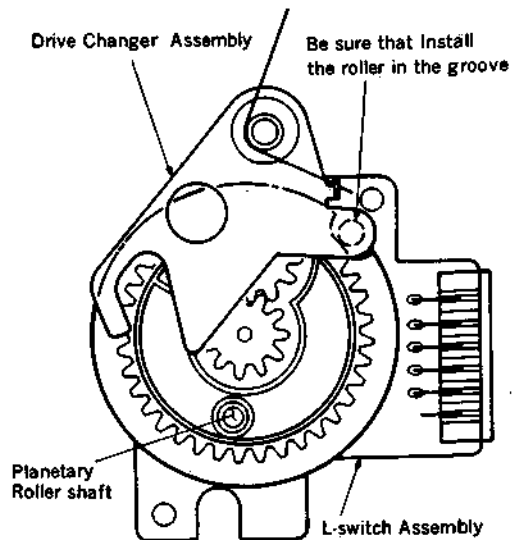


Fig. 3

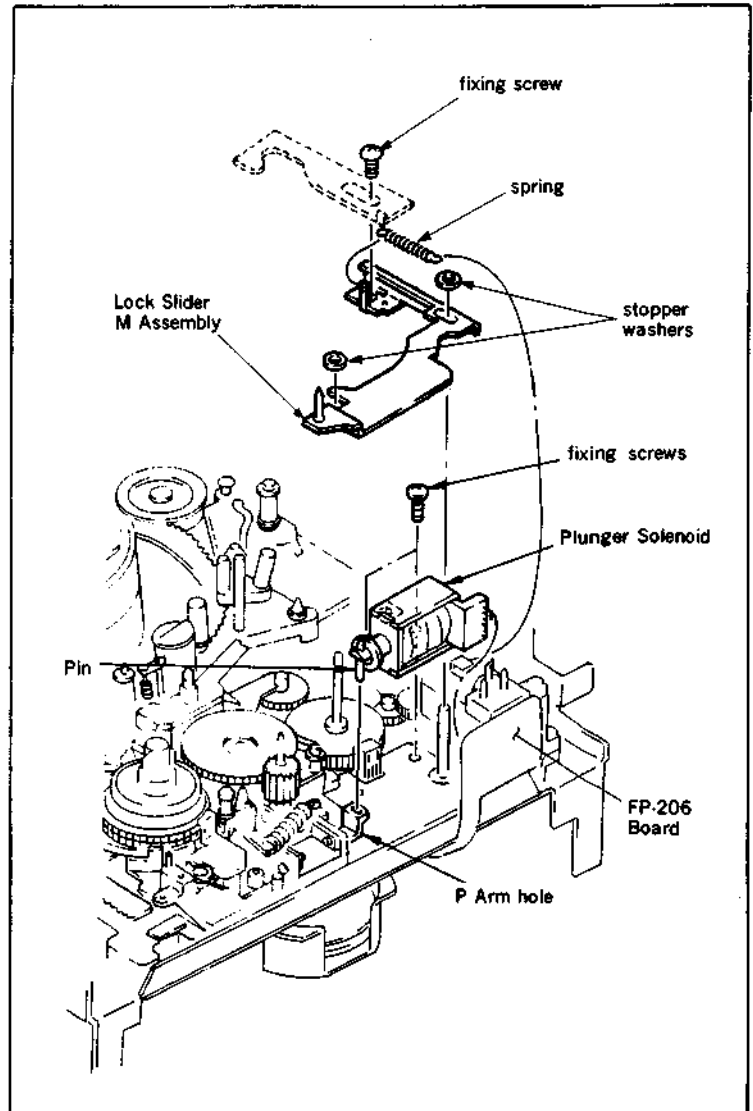
7-2-20. REPLACEMENT OF THE PLUNGER SOLENOID

Removal:

- (1) Open the MB-19 Board referring to Section 2-8.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (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 2-13.
- (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.

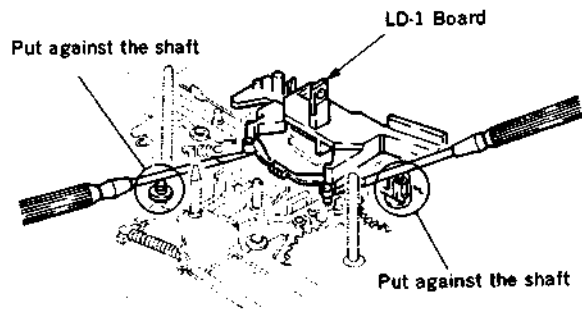


Fig. 1

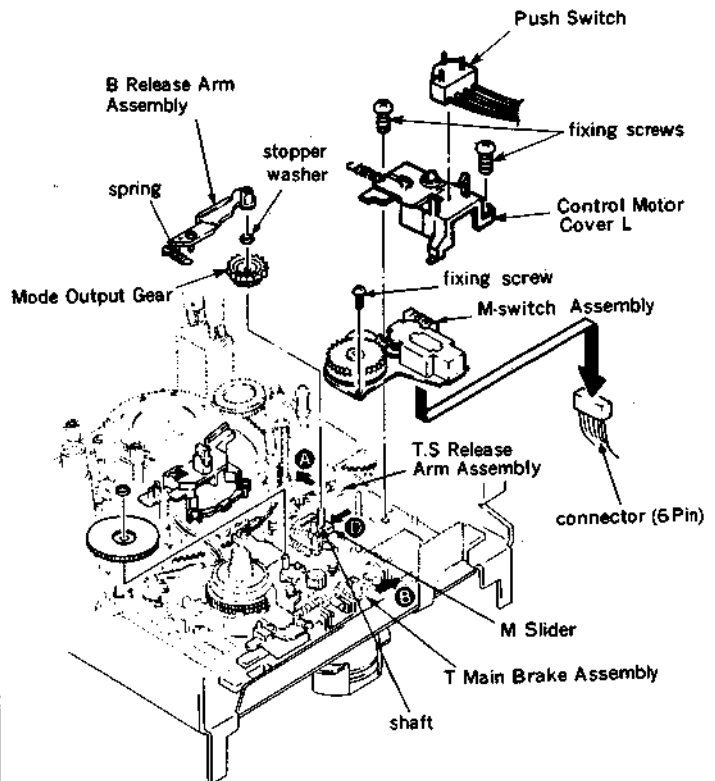


Fig. 2

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.

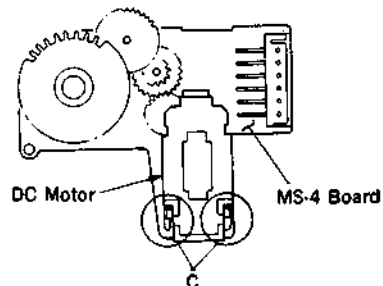


Fig. 3

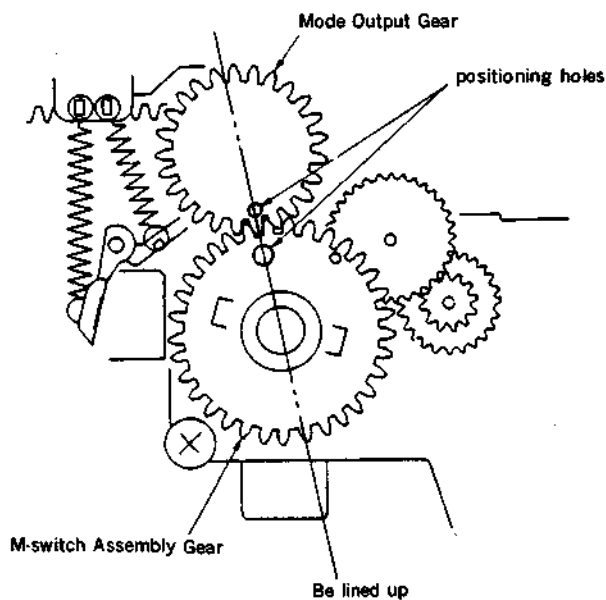


Fig. 4

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 2-13.
- (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 4-21.
- (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.

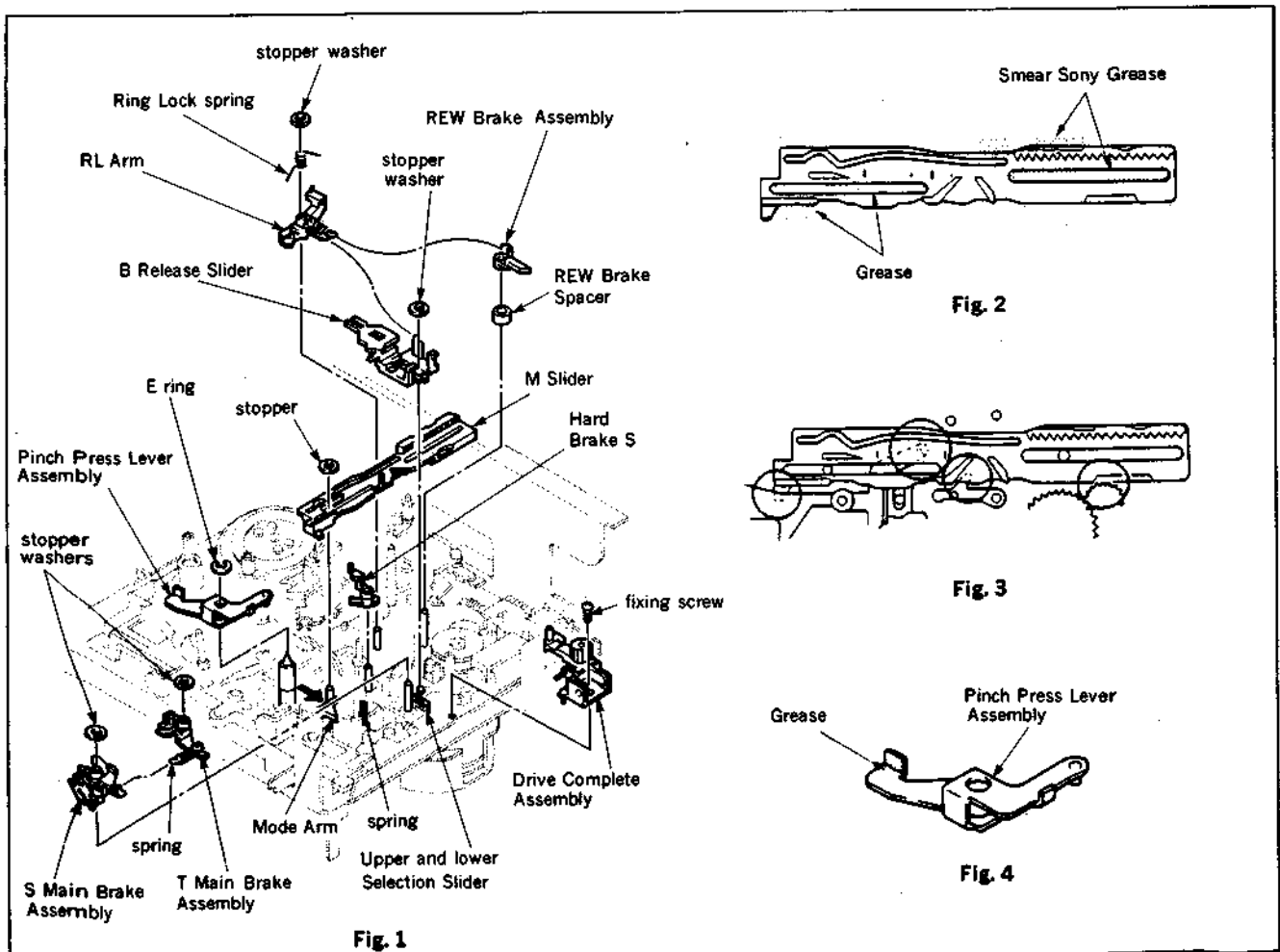
- . B Release Slider Spring:
diameter 2 mm, wire diameter 0.18mm
- . REW Brake Assembly Spring:
diameter 1.6 mm, wire diameter 0.12mm

- (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.

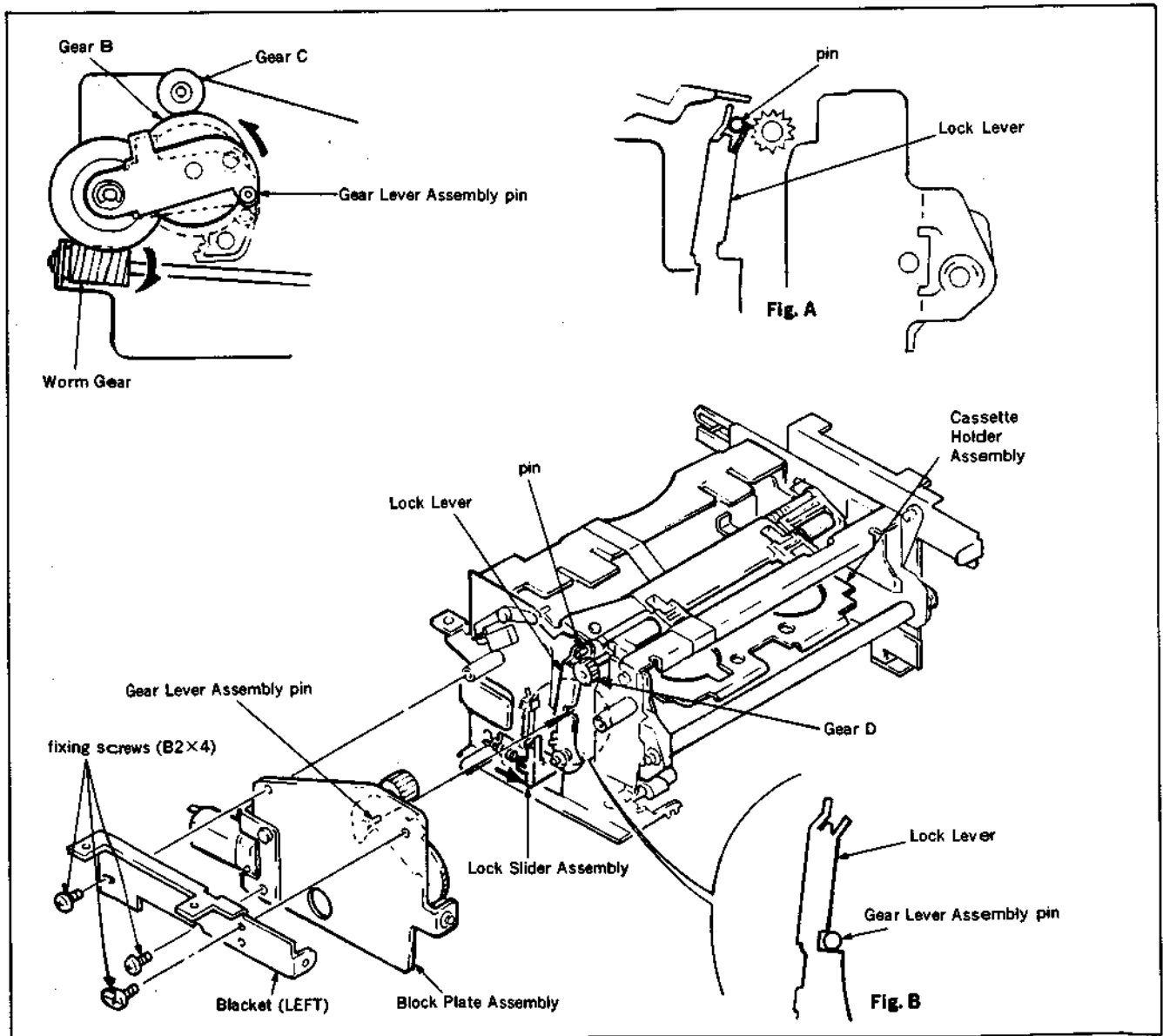
After replacement, perform the Tape Path Check referring to Section 7-4-6.



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.

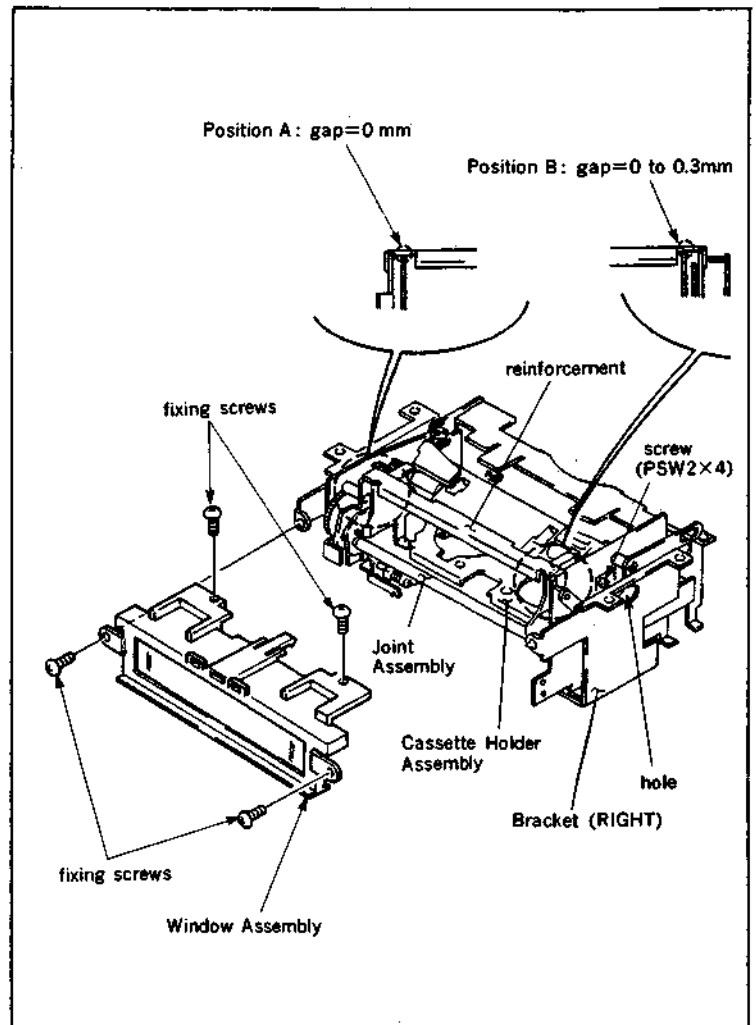


7-2-24. PARALLELISM ADJUSTMENT OF THE CASSETTE HOLDER BLOCK

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-19 Board referring to Section 2-8.
- (2) Remove the Cassette-up Compartment Assembly referring to Section 2-13.
- (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 2-13, 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.

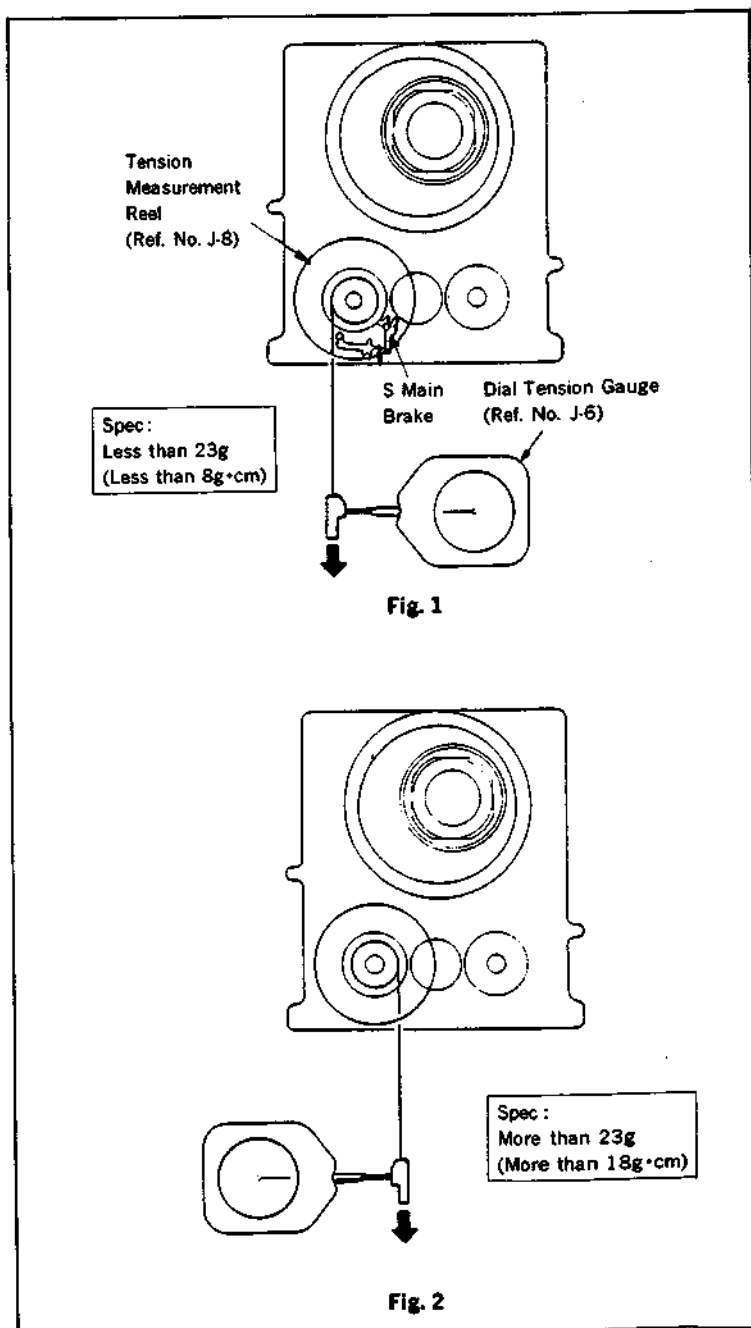
Check Procedure:

- (1) Set the Tension Measurement Reel on the S Reel Table and put the Dial Tension Gauge at the end of the string.
- (2) 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.

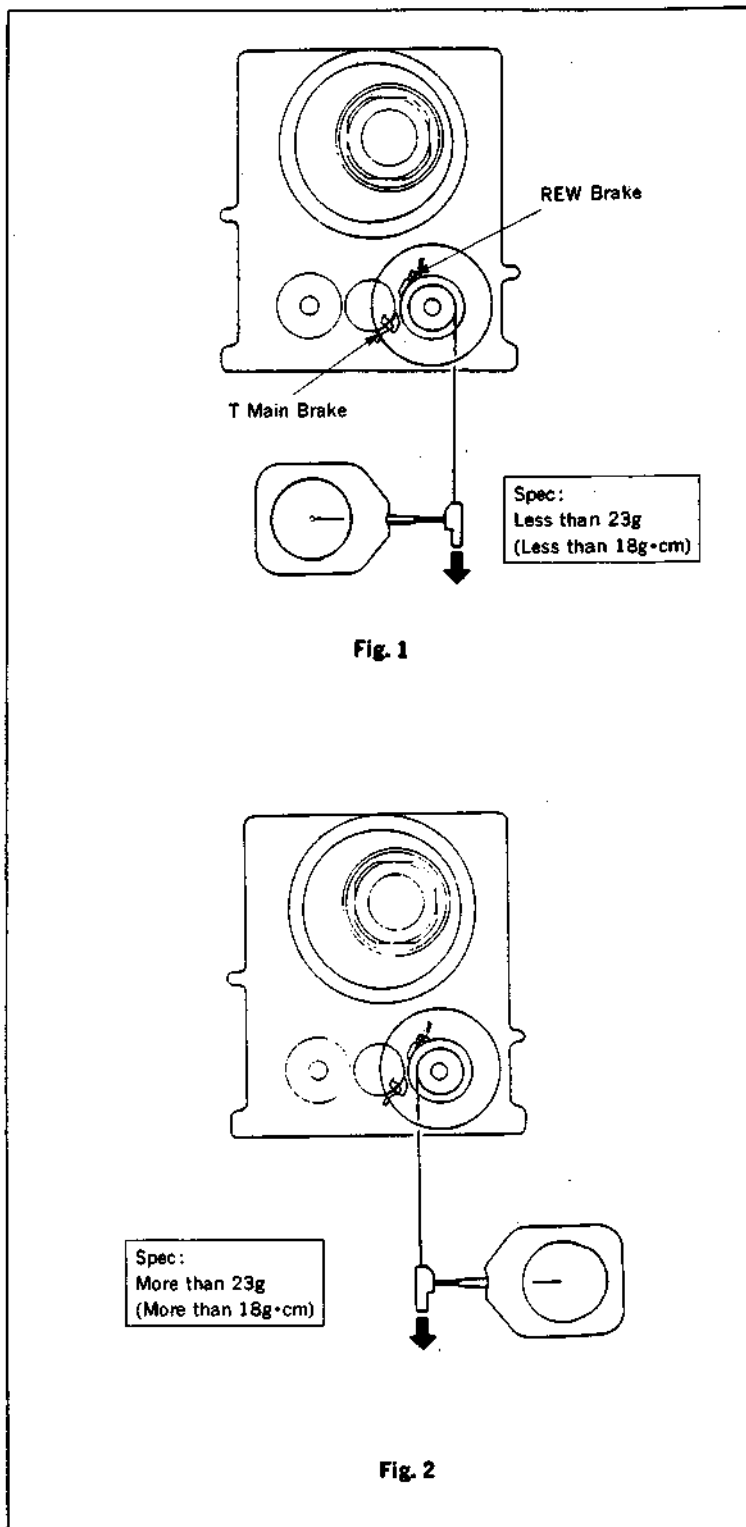
Check Procedure:

- (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)

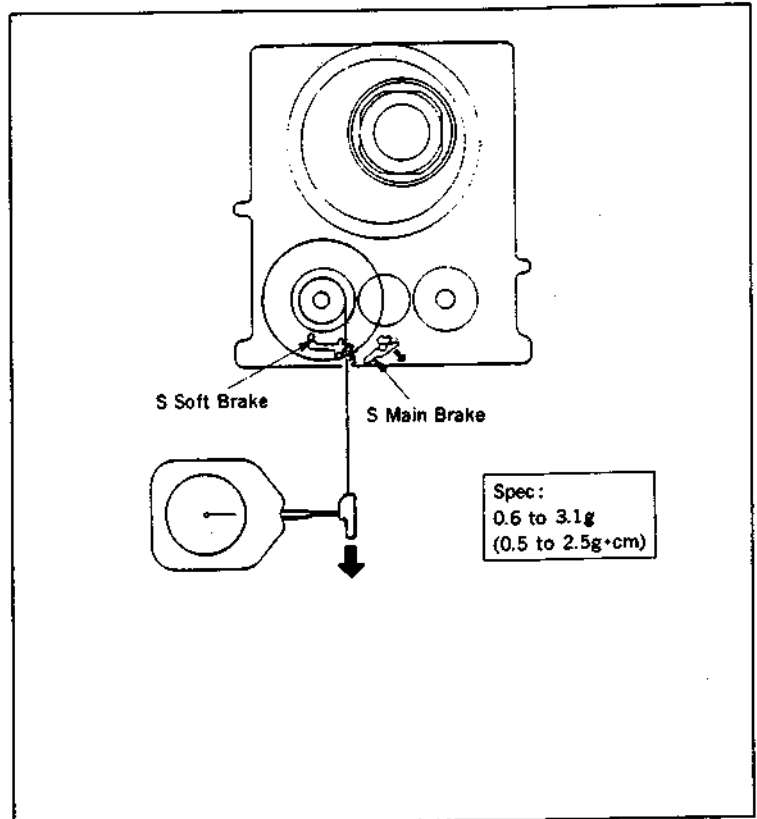
Mode: Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.

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)

Modes: Press the M-mode button of the Mode Selector and set to the **RVS** mode.

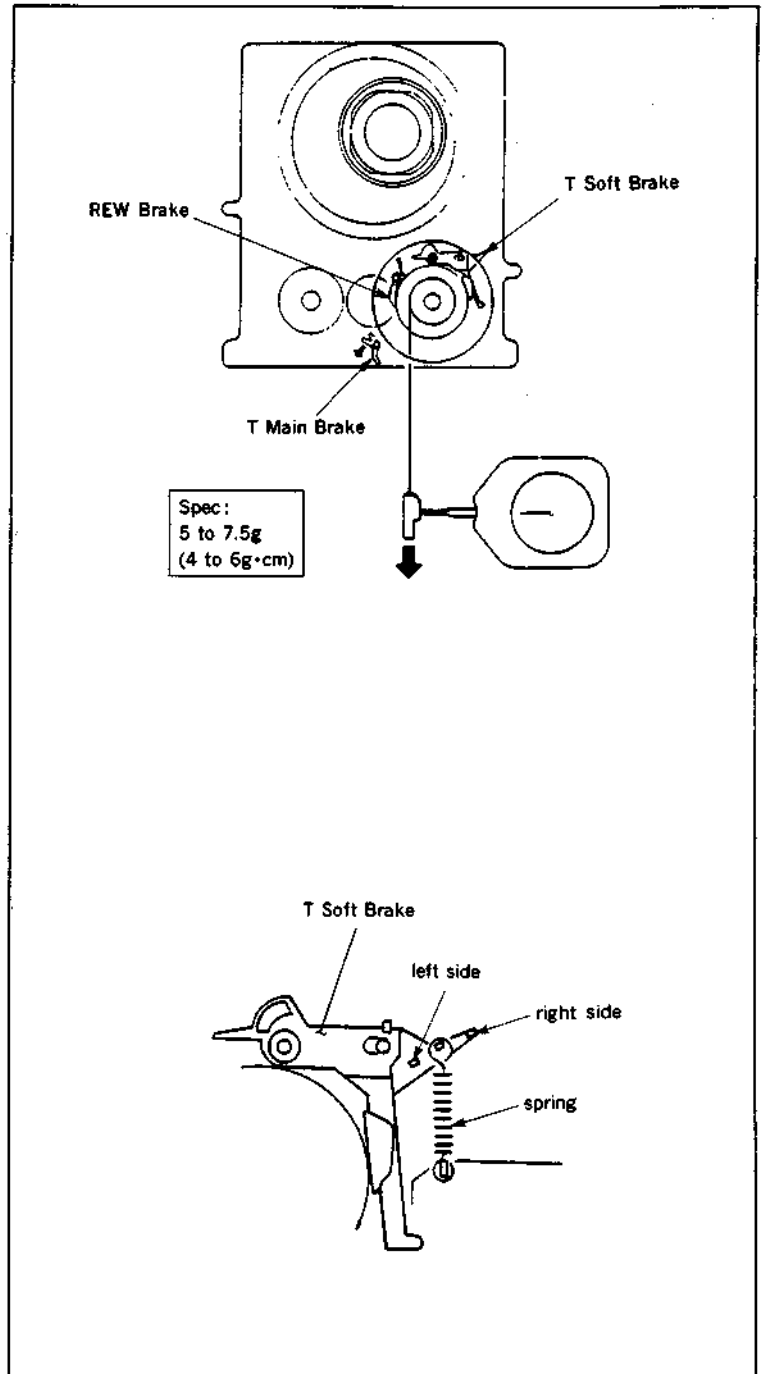
Check Procedure:

- (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)

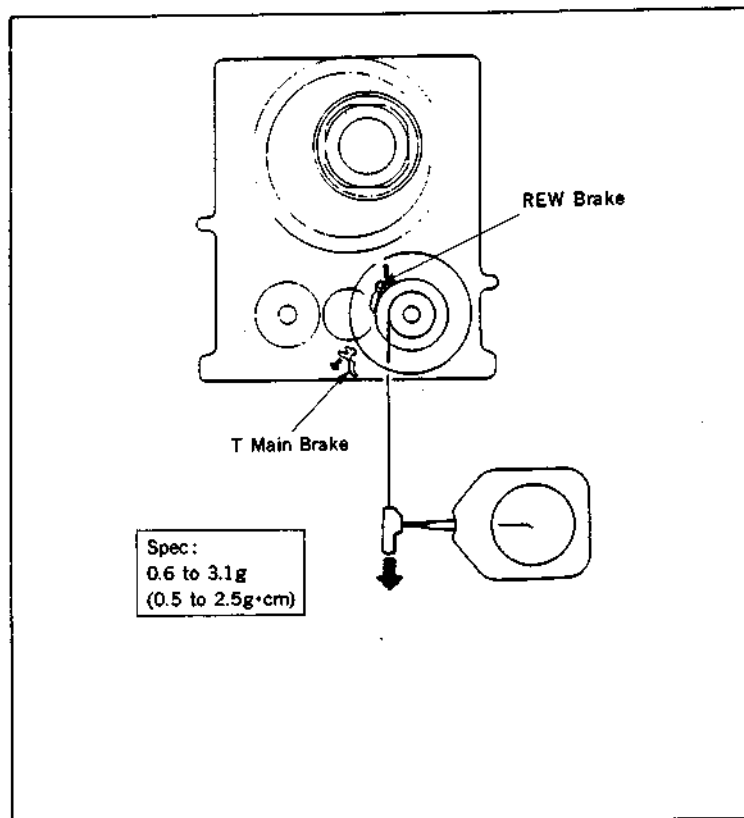
Mode: Press the M-mode select button of the Mode Selector and set to the **FF/REW** mode.

Check procedures:

- (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 2-13.
- (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:

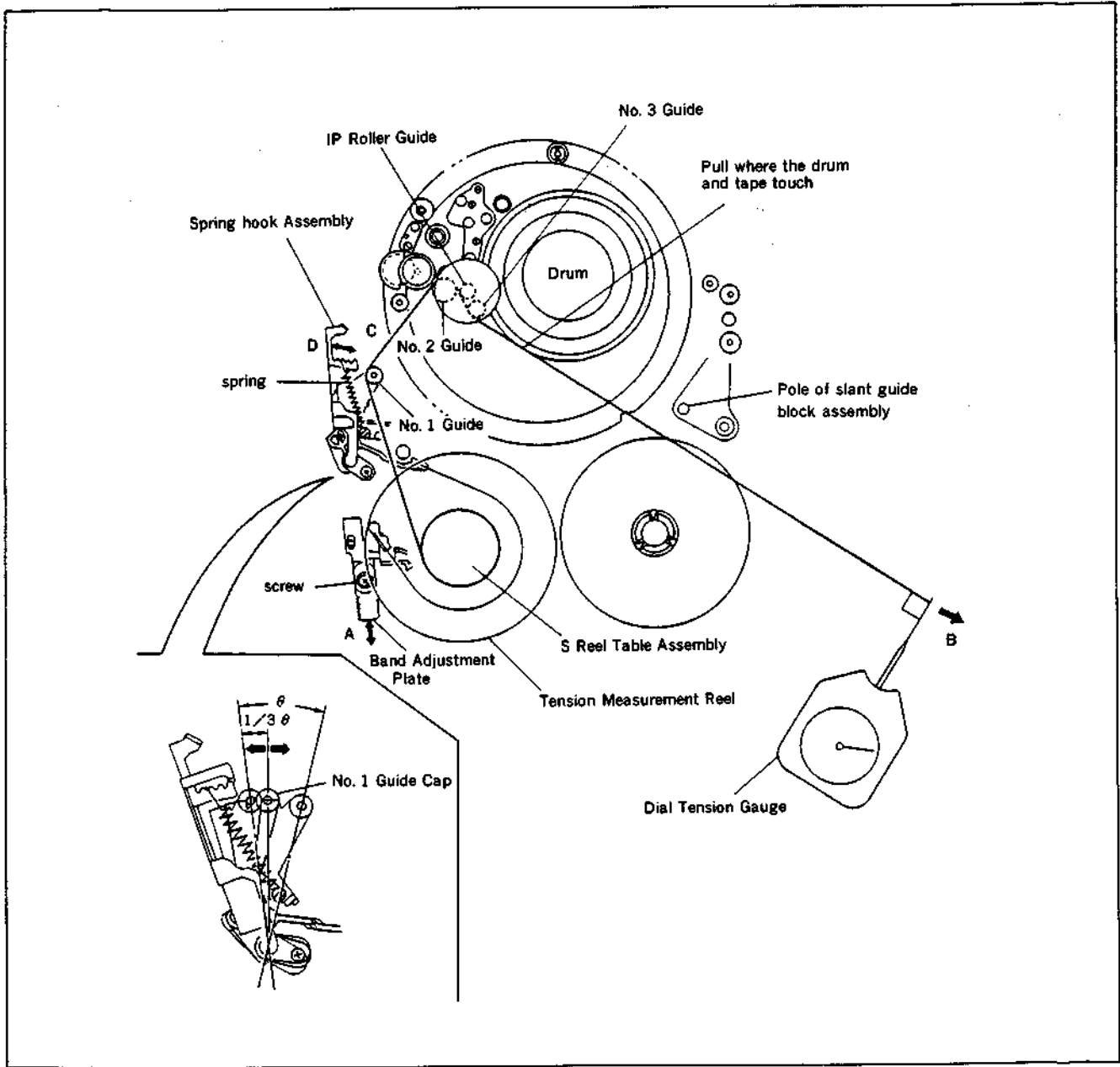
When replacing the parts as follows, perform the FWD Back Tension Adjustment.

- . 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 2-13 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.

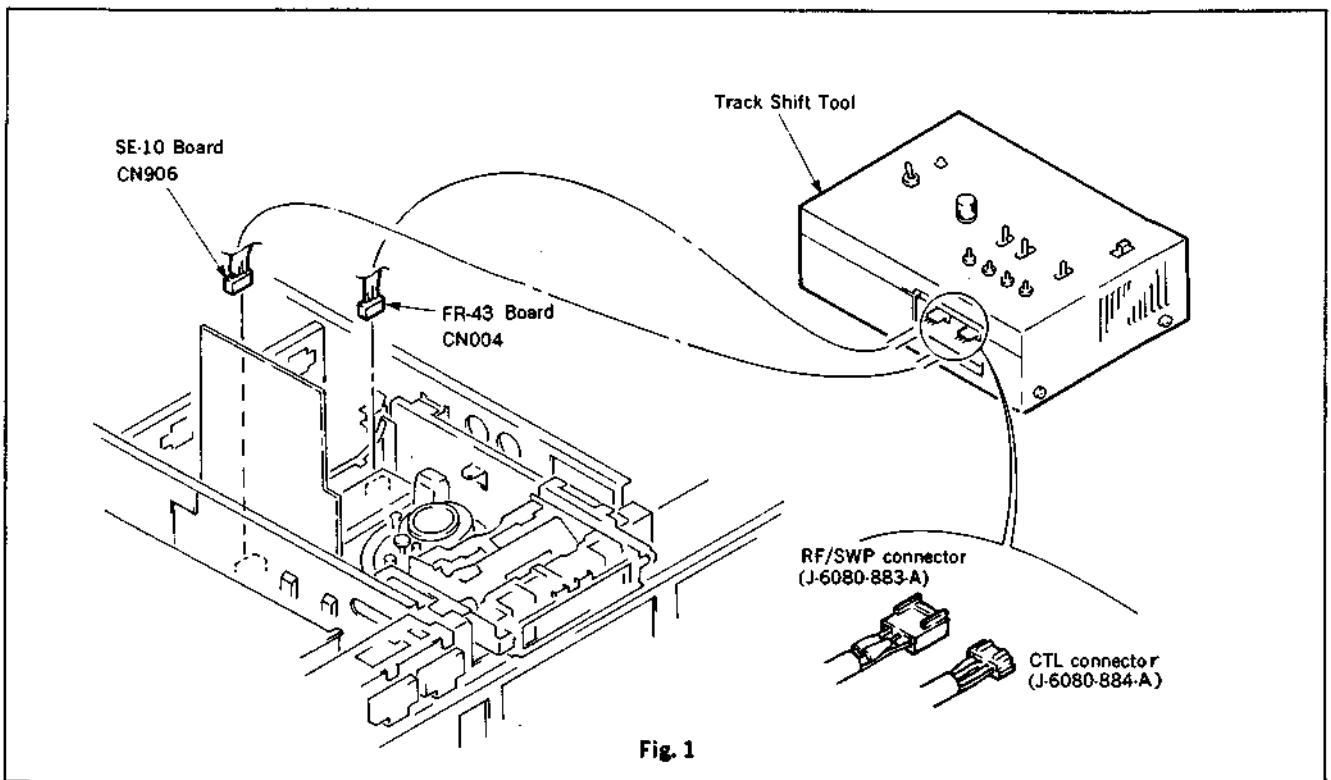
. RF/SWP connector ...

to CN004 on the FR-43 Board

. CTL connector ...

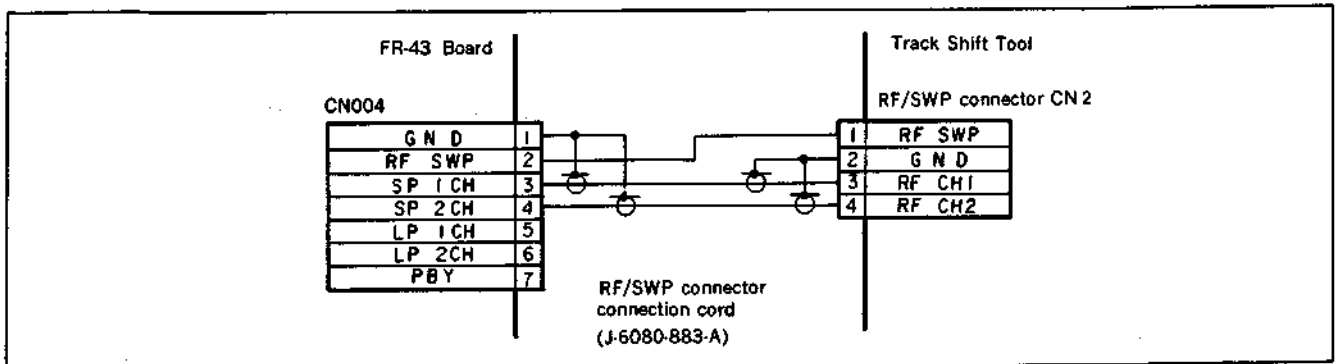
to CN906 on the SE-10 Board

(Please refer to operation manual of the Track Shift Tool for details.)

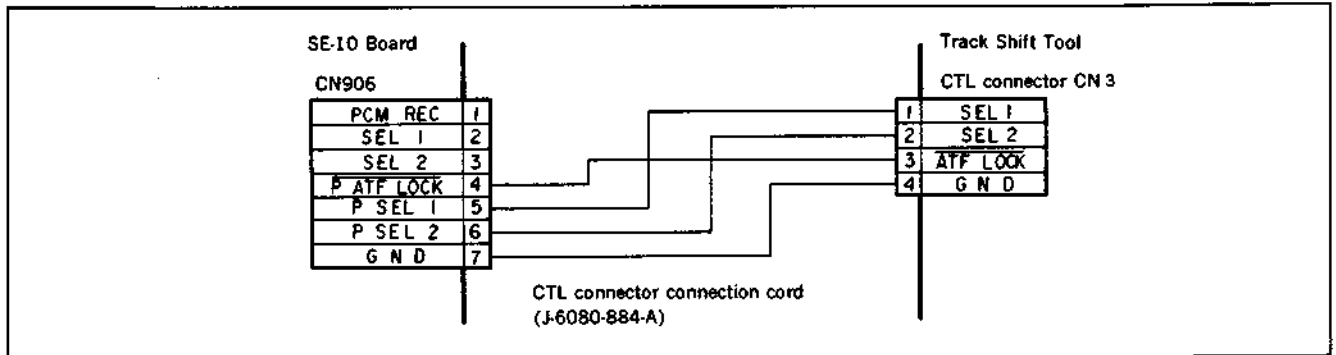


[Designated Connecting Cord]

- . 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 switch

Set to EV side.

ATF ADJ

Set to OFF side.

When adjusting EVO-9500P, 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
(WR5-1CP) (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 (WR5-1CP). 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))
 - (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))
 - (c) ... Perform Exit Side Adjustment referring to Section 7-4-5.

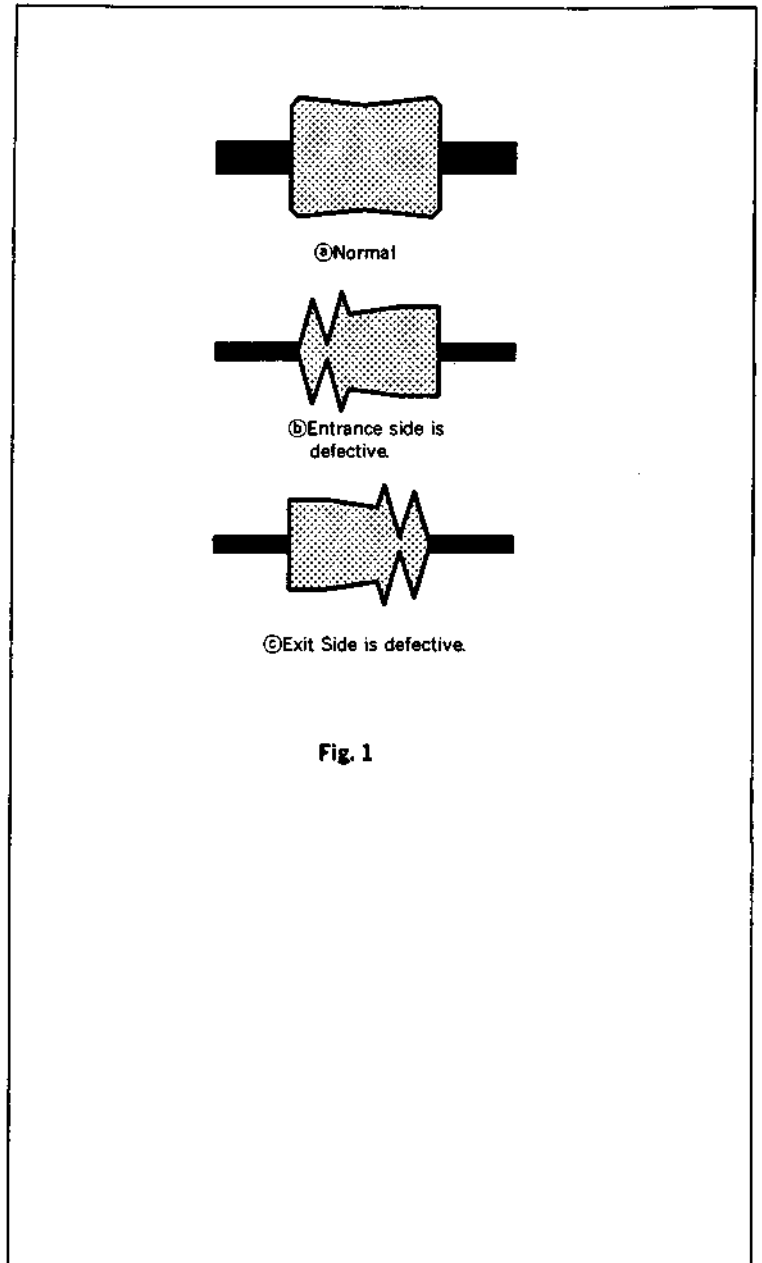


Fig. 1

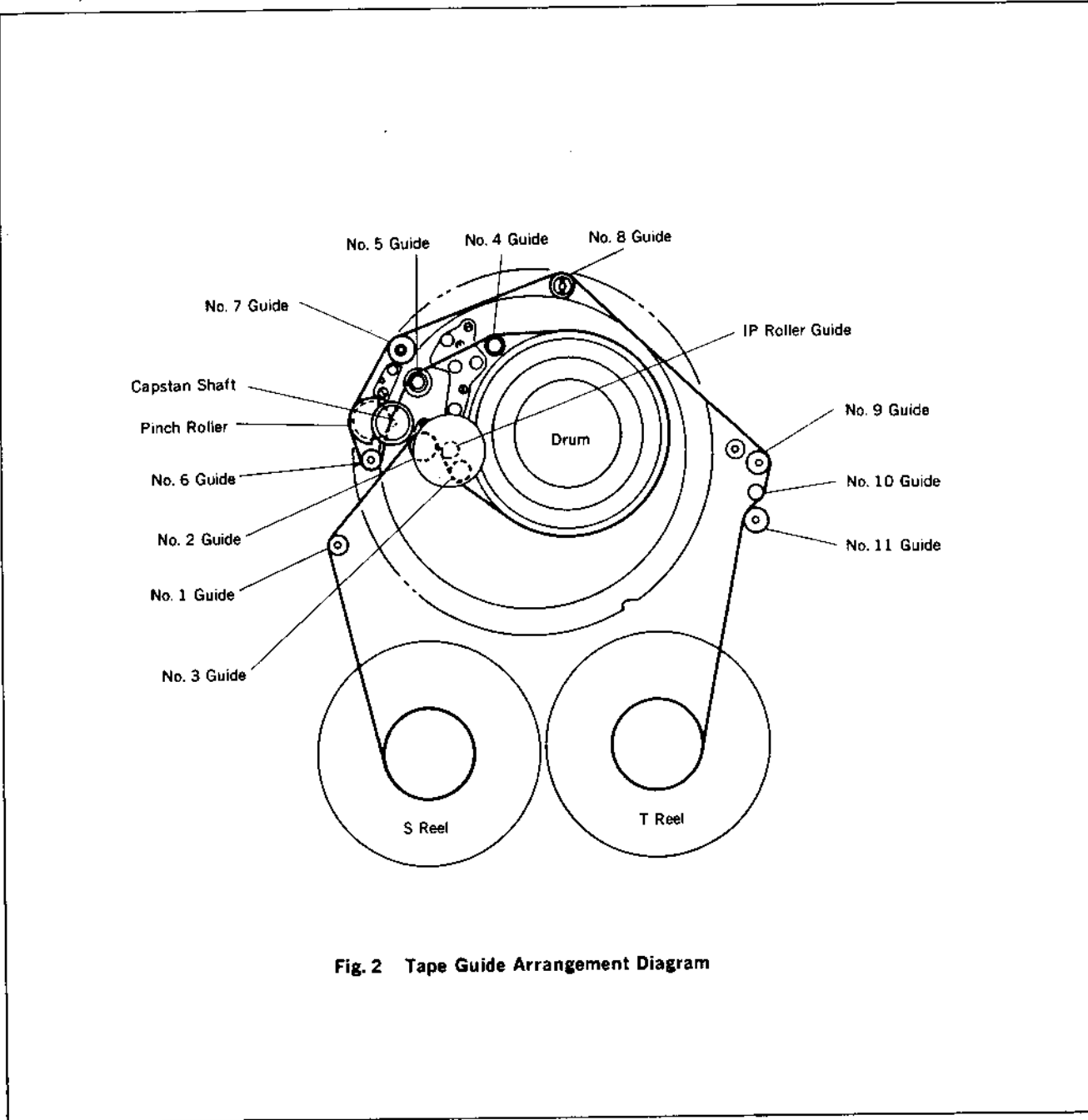
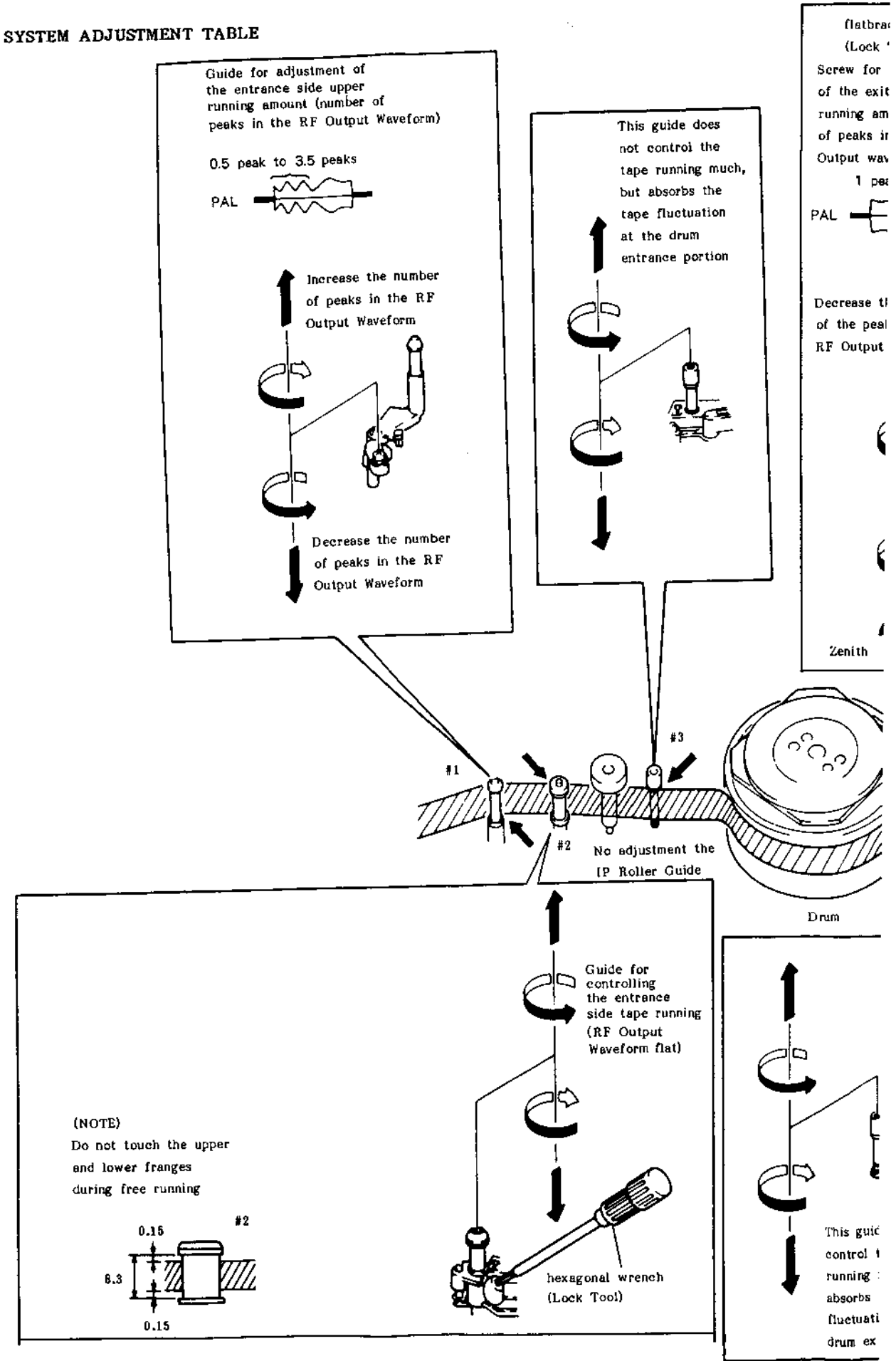
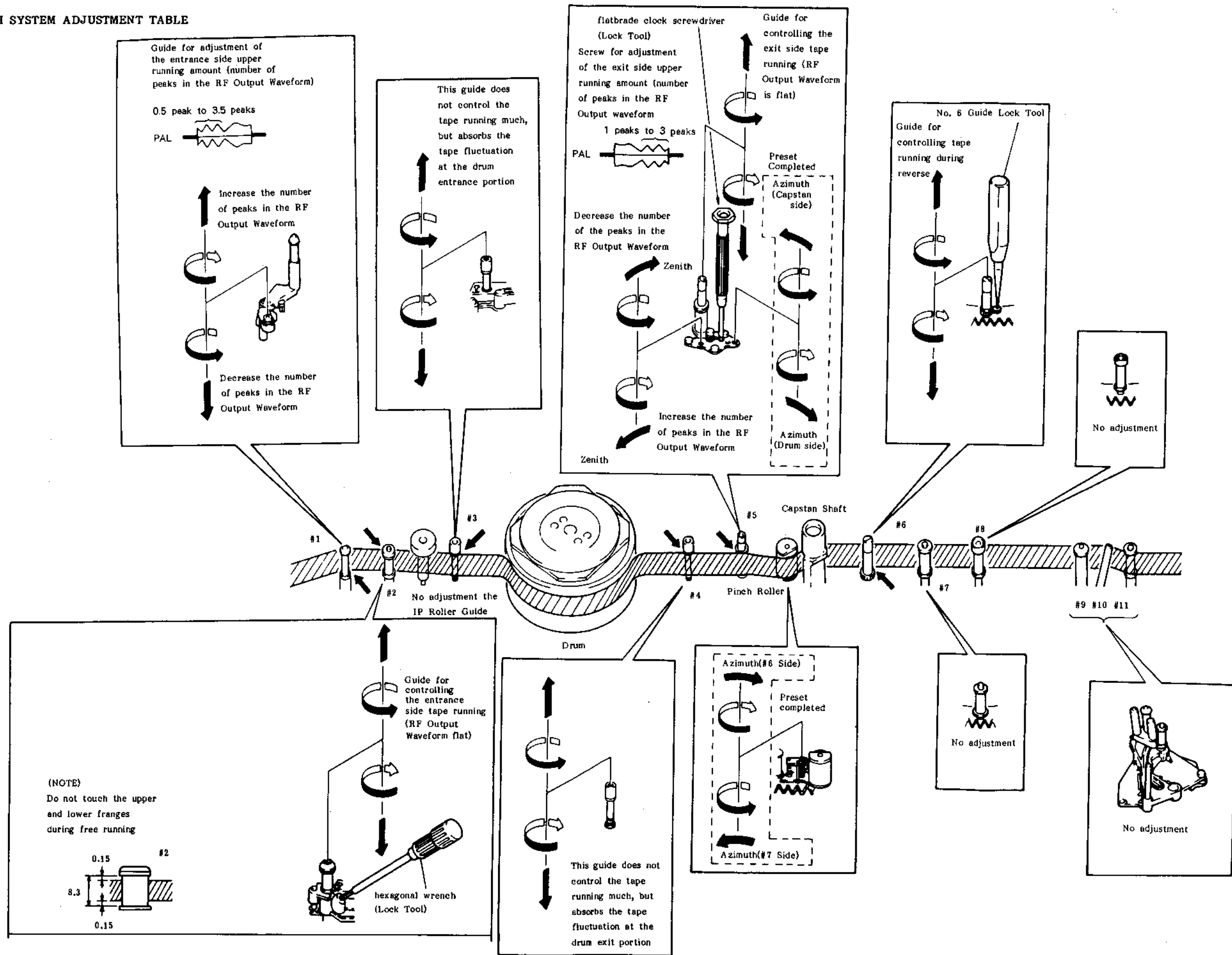


Fig. 2 Tape Guide Arrangement Diagram

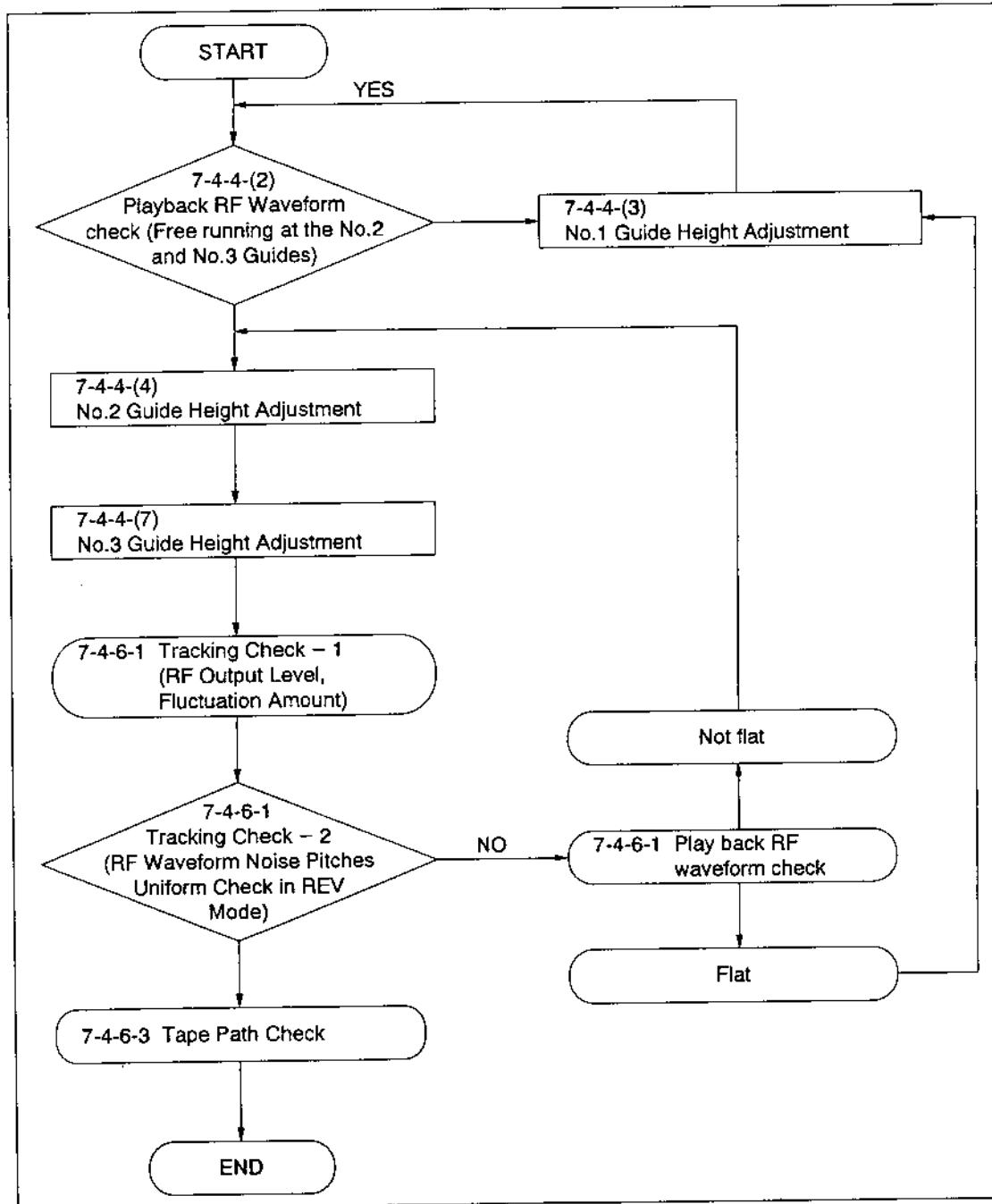
7-4-3. TAPE PATH SYSTEM ADJUSTMENT TABLE



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 (WR5-1CP) (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)

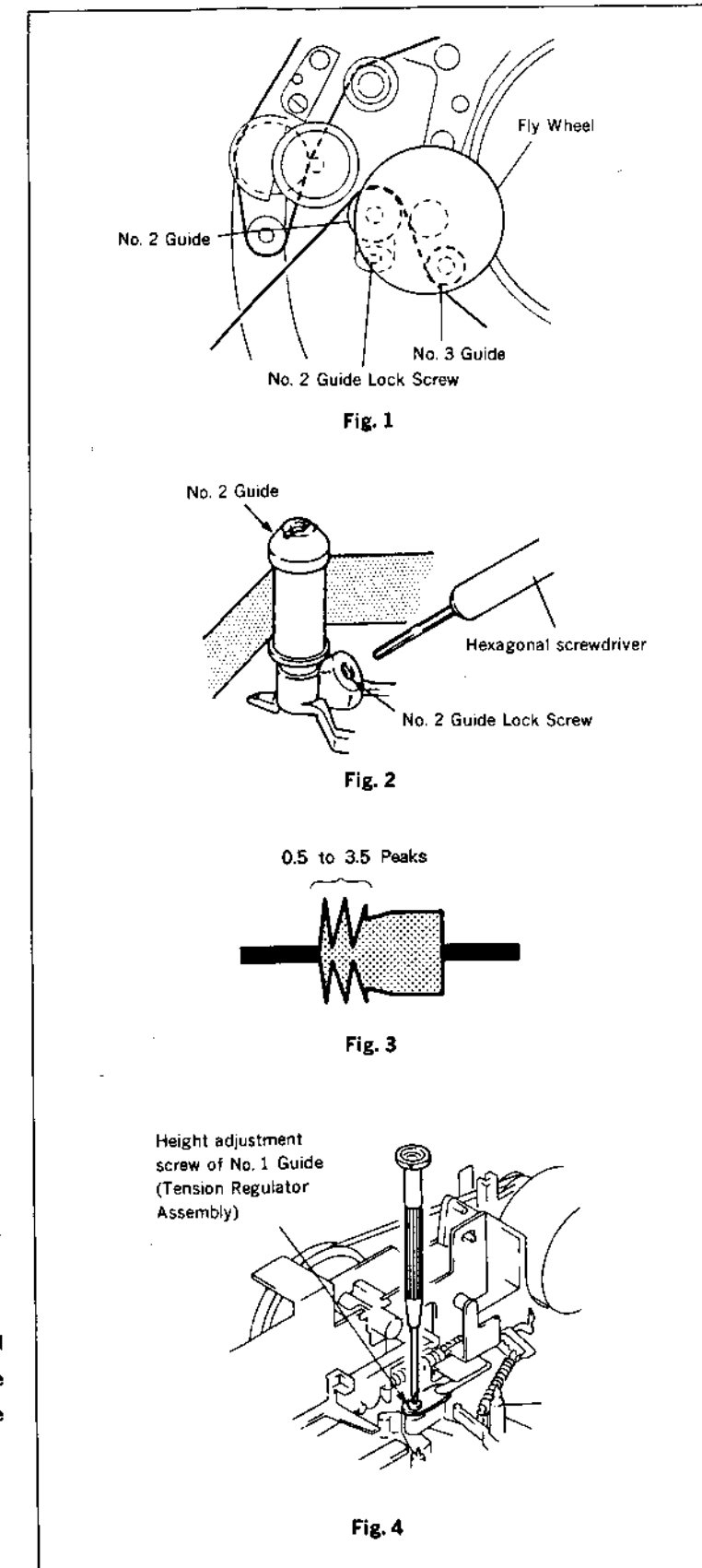
Preparation:

- (i) Remove the Top Plate referring to Section 2-1.
- (ii) Open the MB-19 Board referring to Section 2-8.
- (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.



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Note:

Mode: Play back the alignment tape

Tools: Alignment tape for tracking (WR5-1CP) (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)

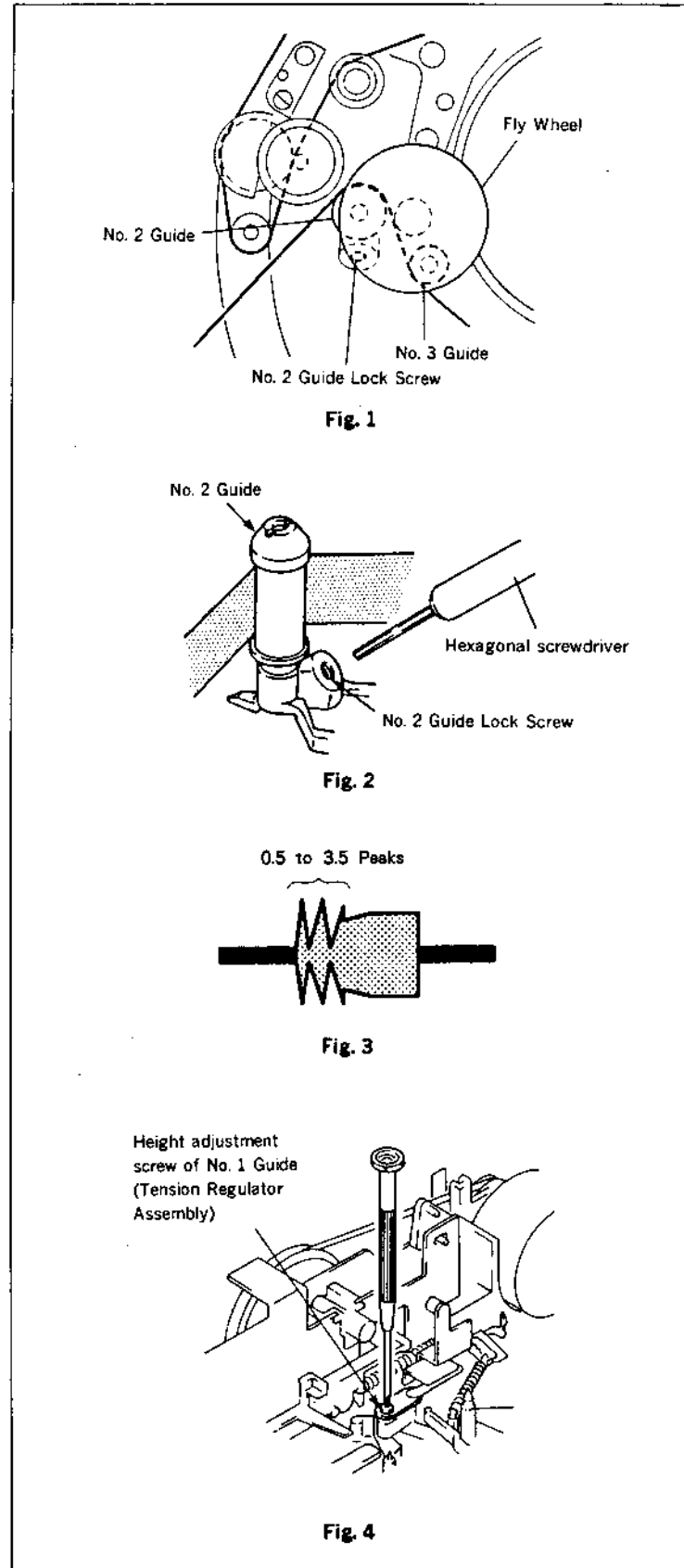
Preparation:

- (i) Remove the Top Plate referring to Section 2-1.
- (ii) Open the MB-19 Board referring to Section 2-8.
- (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.

Procedures:

- (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 0.5 to 3.5 peaks in this condition. If not, adjust as follows. (fig. 3)

. less than 0.5 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 3.5 peaks

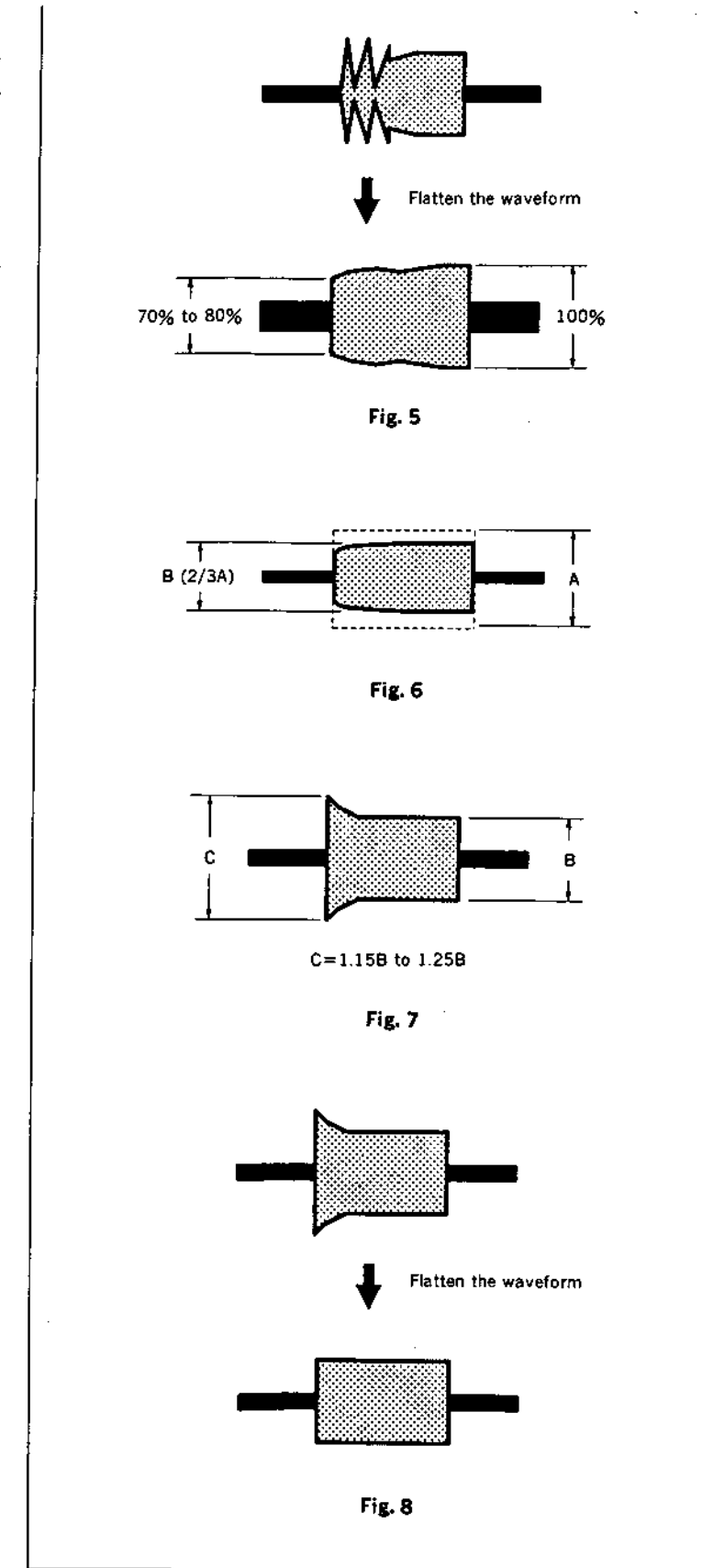
Turn and adjust the height adjustment screw counterclockwise 90 degrees step. (fig. 4)

- (4) Turn slowly the No. 2 Guide clockwise so that flatten the waveform at the entrance side. (fig. 5)

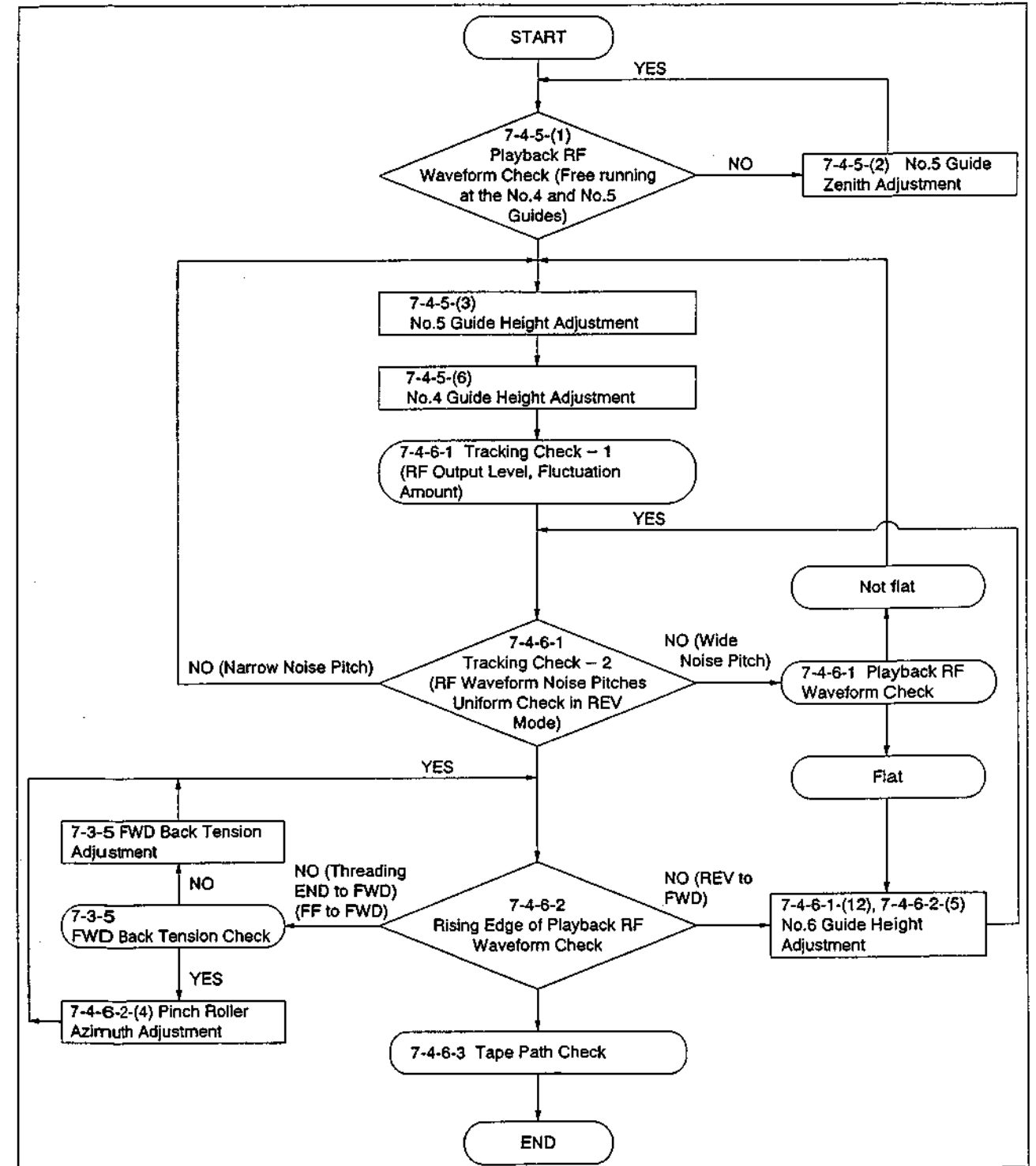
Note: At this time, do not turn the No. 2 Guide too much.

- (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
(WR5-1CP) (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-19 board referring to Section 2-8.
- (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.

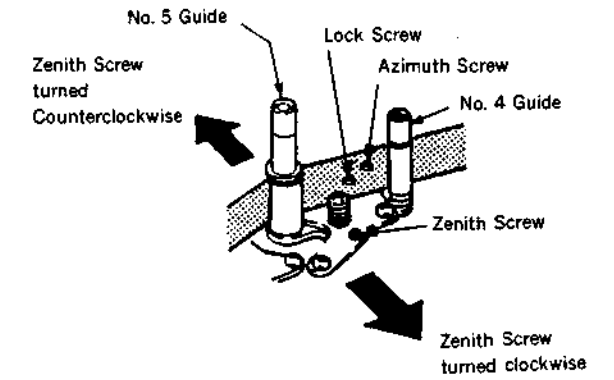


Fig. 1

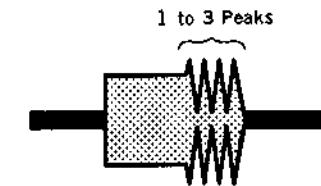


Fig. 2

(2) Check that the RF waveform at the exit side has 1 to 3 peaks in this condition. If not, adjust as follows. (fig. 2)

. Turn and loosen the lock screw counterclockwise.

. less than 1 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.

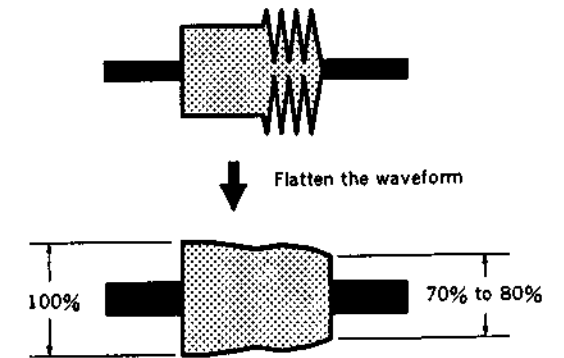


Fig. 3

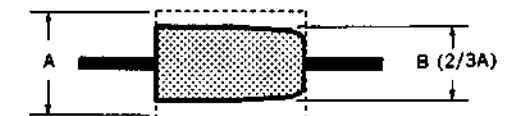
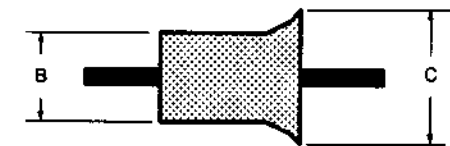


Fig. 4



$$C = 1.15B \text{ to } 1.25B$$

Fig. 5

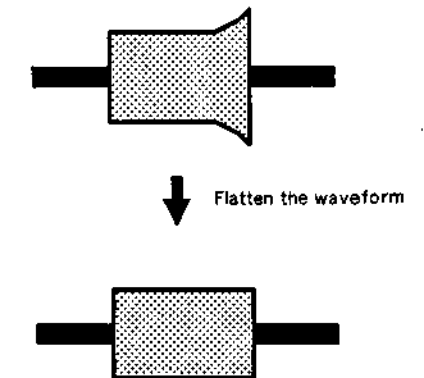


Fig. 6

7-4-6. CHECK AFTER ADJUSTMENT

Tool: No. 6 Guide Lock Screwdriver (Ref. No. J-10)

Alignment tape for tracking (WRS-1CP) (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.

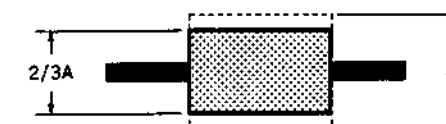


Fig. 1



Fig. 2

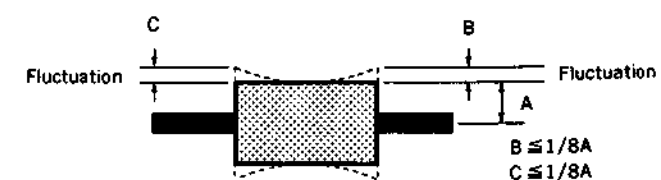


Fig. 3

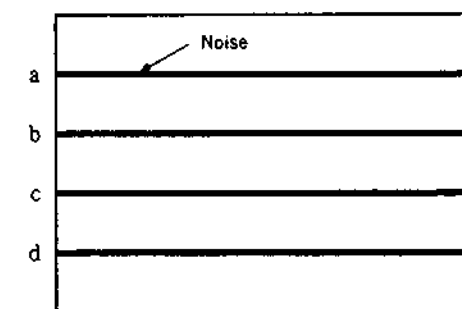
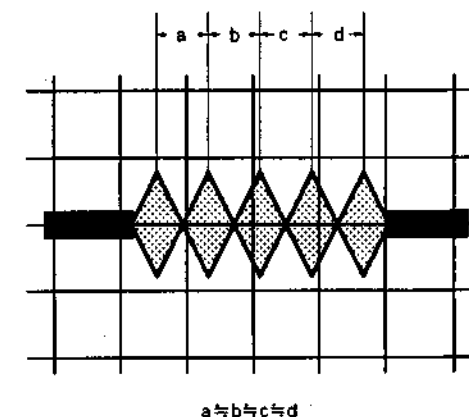


Fig. 4

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.

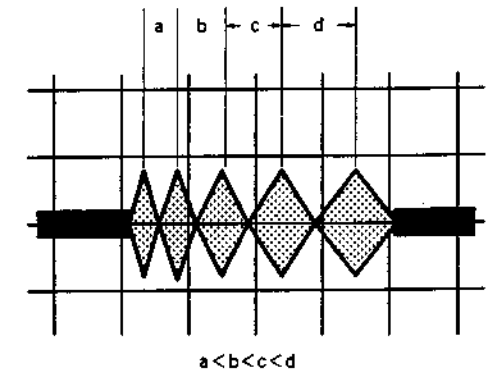


Fig. 5

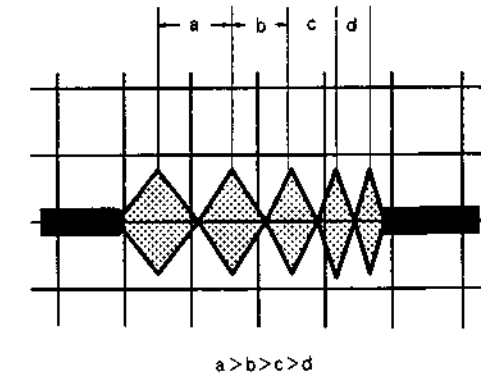


Fig. 6

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.

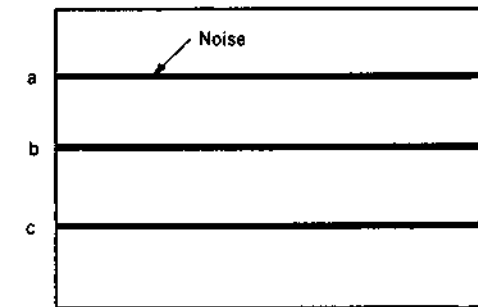
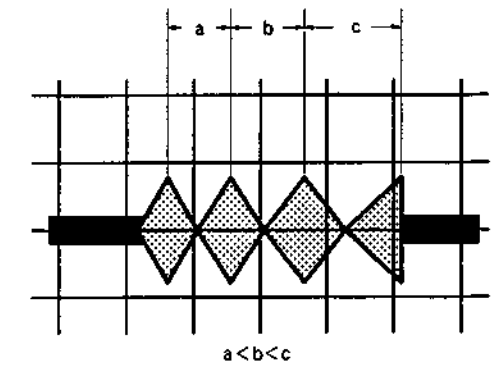
*Touch the Guide Lower Gear against the lower flange of the No. 6 Guide and turn it more about 10 degrees.

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

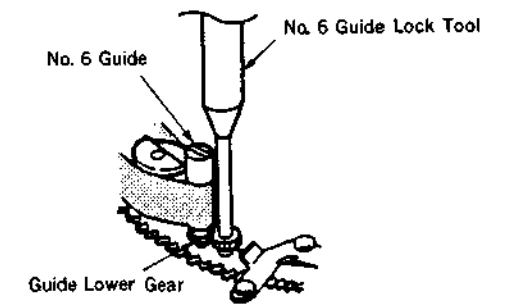


Fig. 8

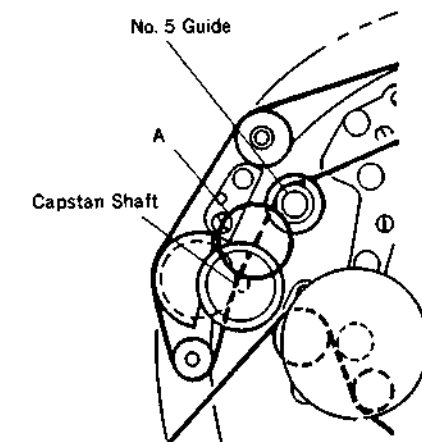


Fig. 9

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)

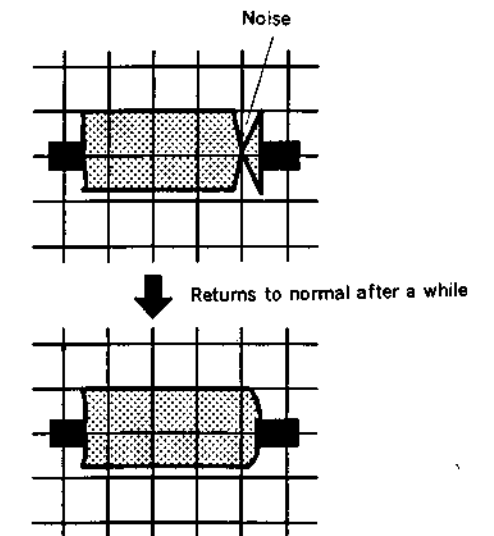


Fig. 11

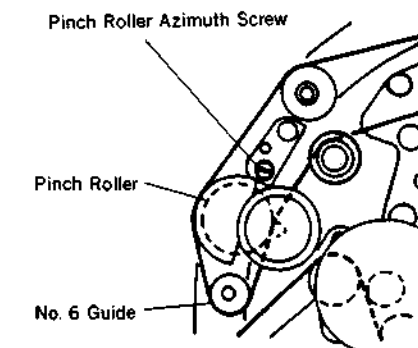


Fig. 12

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.

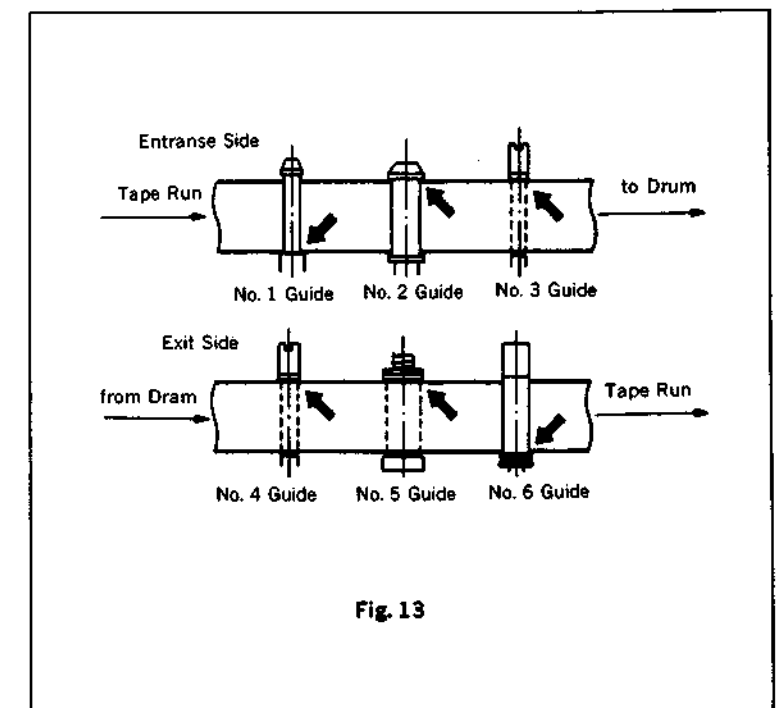
3. Tape Running Check

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. 3 Guide ... Tape runs in contact with upper flange. If tape curl exists, less than 0.5mm of tape curl is acceptable.



**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	CN101-2/IF-39 5.4 ± 0.1Vdc	⊗ VR203/ POWER BLOCK

8-1-3. REG +5V Adjustment

Machine condition for adjustment	Specifications	Adjustments
• E-E mode	CN101-5/IF-39 5.2 ± 0.1Vdc	⊗ VR202/ POWER BLOCK

8-1-4. REG +9V Adjustment

Machine condition for adjustment	Specifications	Adjustments
• E-E mode	CN101-10/IF-39 9.0 ± 0.1Vdc	⊗ VR201/ POWER BLOCK

8-2. SERVO SYSTEM ADJUSTMENT

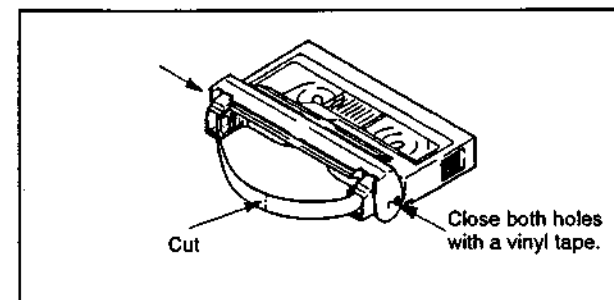
8-2-1. Equipment Required

- Oscilloscope
- Frequency counter
- Digital voltmeter
- Alignment tape

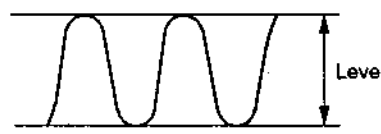
Name (Part No.)	REC mode	Tape Type	Tape Speed	Contents	
				Video Area	PCM Area
SP operation check WR5-8CSE (8-967-995-48)	HI8	ME	SP	VIDEO SIGNAL Color-bar: 4 min. Monoscope: 4 min. AUDIO SIGNAL (AFM) 400 Hz, 60% modulation	AUDIO SIGNAL (PCM) 400 Hz: 20 min.
LP operation check WR5-8CLE (8-967-995-57)	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.

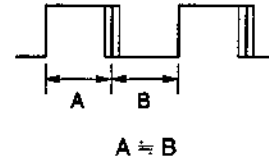


8-2-2. DS Clock Check

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: color-bar signal • STOP mode 	TP107/SE-10P (C-5)  Level=more than 2.5 Vp-p Frequency=4433619 ± 300 Hz	

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)  $A = B$	Ⓐ RV801/MD-23P (D-3)

8-2-4. Reel FG Adjustment

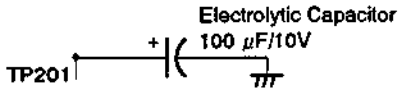
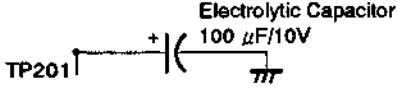
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the alignment tape WR5-8CLE. 	TP901/MD-23P (G-1) $21 \pm 1 \text{ Hz}$	Ⓐ RV901/MD-23P (G-1)
<ul style="list-style-type: none"> • Perform confirmation while playing back the alignment tape WR5-8CLE. 	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.

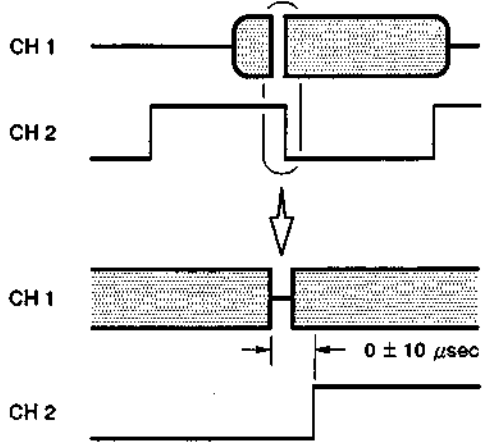
8-2-5. Drum Free Speed Adjustment

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)

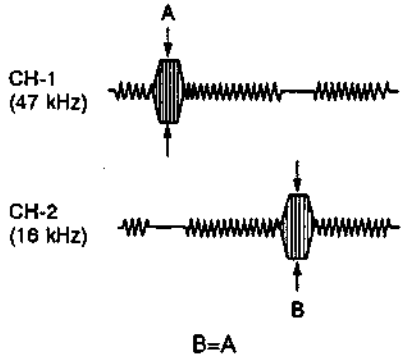
8-2-6. Capstan Free Speed Adjustment

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>

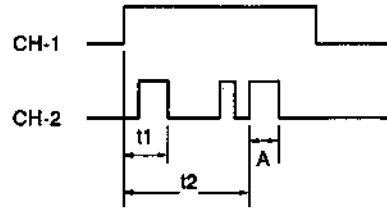
8-2-7. Switching Position Adjustment

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>

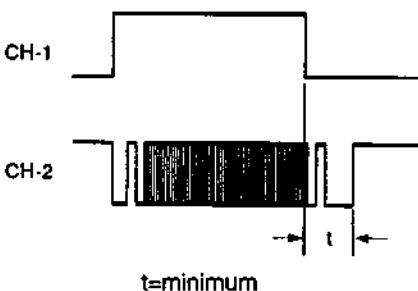
8-2-9. STILL Adjustment

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. Slow Tracking Center Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Set the slow adjustment control (RV001/FB-169P) to the center click position. 	Step 1 Measure DC voltage (A) of W001-5/FB-169 (G-3). Step 2 Decrease the DC voltage (B) of W002-10/FB-169 (E-3) to the half of DC voltage (A) with RV002. $B = \frac{A}{2} \pm 0.01 \text{ (Vdc)}$	Ⓞ RV002/FB-169P

8-2-11. SP Slow Adjustment

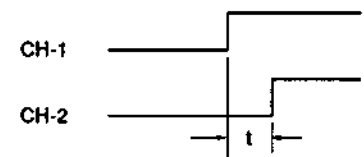
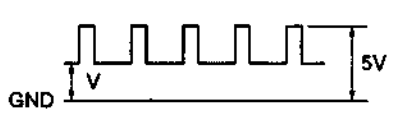
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN : color-bar signal • Using P5-MP series tape, perform the short recording of the color-bar signal at the end of tape. • Connect TP001/SE-10P (C-2) to ground with jumper wire. • Playback the recorded 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. 	CH-1: TP302/SE-10P (F-3) CH-2: TP105/SE-10P (D-4)  $t = \text{minimum}$	Ⓞ RV304/SE-10P (E-2) Ⓞ RV104/SE-10P (D-5) TRIG: TP302/SE-10P (F-3)

8-2-12. LP Slow Adjustment

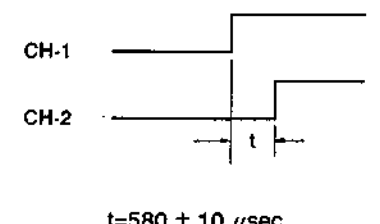
Note: This adjustment should be performed after completion of "8-2-11. SP Slow Adjustment".

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. 	Adjust RV103 so that the noise at the bottom of the screen disappears.	RV103/SE-10P (E-5)

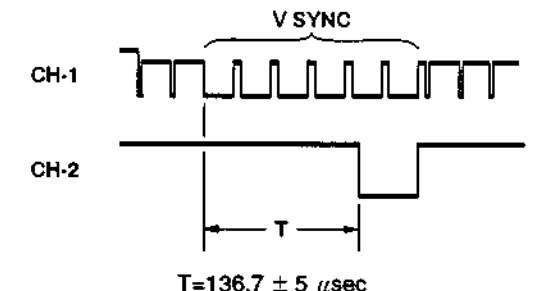
8-2-13. SP Slow fh Adjustment

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>	RV301/SE-10P (F-1)
<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>	RV303/SE-10P (E-1)

8-2-14. LP Slow fr 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). 	CH-1: TP103/SE-10P (F-3) CH-2: TP102/SE-10P (D-5)  $t=580 \pm 10 \mu\text{sec}$	● RV302/SE-10P (F-2)

8-2-15. REF VD Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal 	CH-1: CN906-2/IF-39 CH-2: CN904-1/IF-39  $T=136.7 \pm 5 \mu\text{sec}$	● RV901/IF-39

8-2-16. 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)

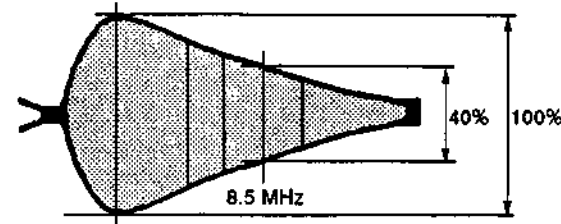
8-3. VIDEO SIGNAL SYSTEM ADJUSTMENT

8-3-1. Equipment Required

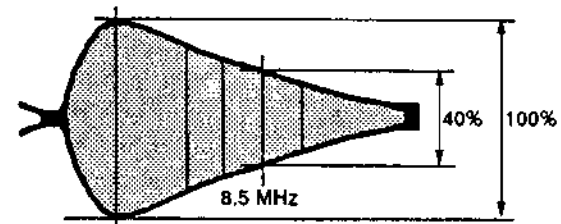
- Oscilloscope
- Frequency counter
- Pattern generator
- Digital voltmeter

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. 	CN004-3/FR-43 (A-2)  2 MHz 8.5 MHz = $32 \pm \frac{1}{2}\%$ (in reference to 2 MHz)	● RV004/RP-103 (SP) TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: -
	CN004-4/FR-43 (A-2) 8.5 MHz = $32 \pm \frac{1}{2}\%$ (in reference to 2 MHz)	● RV003/RP-103 (SP) TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: +

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. 	CN004-5/FR-43 (A-2)  2 MHz 8.5 MHz = $30 \pm \frac{1}{2}\%$ (in reference to 2 MHz)	● RV004/RP-73 (LP) TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: +
	CN004-6/FR-43 (A-2) 8.5 MHz = $30 \pm \frac{1}{2}\%$ (in reference to 2 MHz)	● RV003/RP-73 (LP) TRIG: CN004-2/FR-43 (A-2) TRIG. SLOPE: -

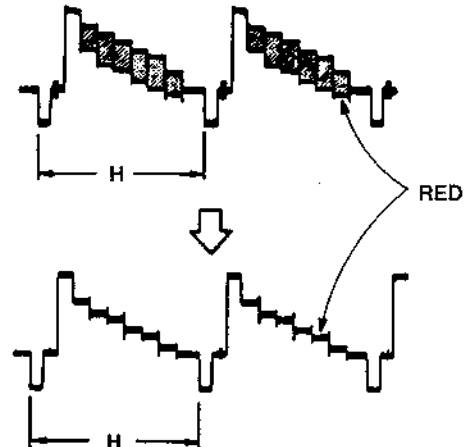
8-3-4. Flying Erase Confirmation

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN : color-bar signal • Use a Hi8 ME tape. • REC mode 	TP041/FR-43 (C-1) 8.0 ± 0.5 MHz	

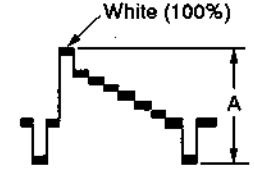
8-3-5. SubCarrier Frequency Adjustment

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)

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)

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)

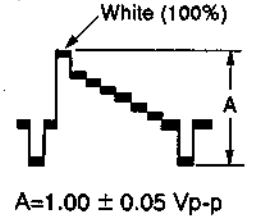
8-3-10. PB De-emphasis Adjustment

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)

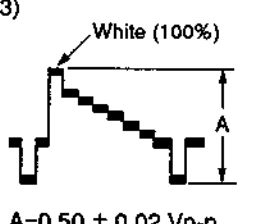
8-3-12. E-E Y Output Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
At recorder adjustment: <ul style="list-style-type: none"> • VIDEO IN: color-bar signal • E-E mode 	TP303/HK-5 (E-1)  $A=1.00 \pm 0.05 \text{ Vp-p}$	Ⓐ RV301/HK-5 (E-1)

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) $4.37 \pm 0.02 \text{ MHz}$	Ⓐ RV402/HK-5 (D-2)

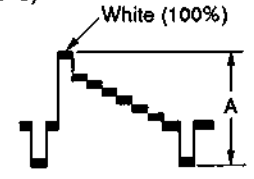
8-3-14. STD Mode Y FM Deviation Adjustment

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)  $A=0.50 \pm 0.02 \text{ Vp-p}$ <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.

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) $5.95 \pm 0.02 \text{ MHz}$	Ⓐ RV401/HK-5 (D-2)


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 ± 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 RV404 during recording. 	<p>RV404/HK-5 (D-2)</p> <p>When turning in the clockwise direction, the level decreases.</p>


8-3-17. 375Hz 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 ± 0.1Vdc</p>	<p>RV601/HK-5 (A-4)</p>

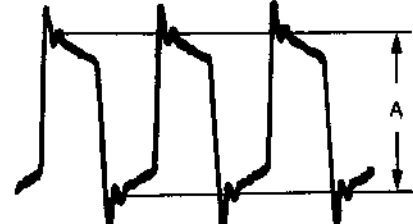
8-3-18. Chroma Emphasis f_c Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Connect pin 47 of IC602 to TP902/HK-5 (F-5) 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>IC601-11/HK-5 (A-5)</p>  <p>C (chroma component)=minimum</p>	<p>T602/HK-5 (B-6)</p>

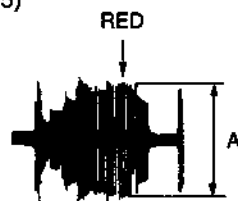
8-3-19. Carrier Balance Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: Color-bar signal • E-E mode 	IC602-40/HK-5 (B-4)  A (5.17 MHz component)=minimum	Ⓞ RV602/HK-5 (A-5)

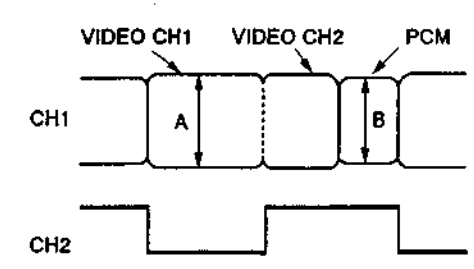
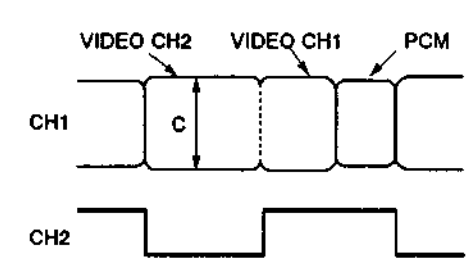
8-3-20. REC Y RF Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • VIDEO IN: no signal • Use a P5-MP tape • E-E mode 	TP201/HK-5 (D-6)  A=0.50 ± 0.02 Vp-p	Ⓞ RV202/HK-5 (D-5)

8-3-21. REC C RF Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Perform following connections. Q211-emitter (F-5) ↔ TP904/HK-5 (F-5) CN101-3 (C-6) ↔ ground Q608-emitter (D-5) ↔ ground • VIDEO IN: color-bar signal • Use a Hi8 ME tape • E-E mode • After adjustment, remove the jumper wires. 	TP201/HK-5 (F-5) RED  A=100 ± 10m Vp-p	Ⓞ RV201/HK-5 (C-5)

8-3-22. SP REC Current Adjustment

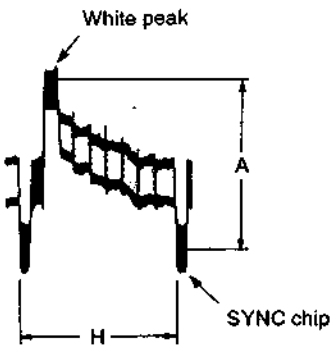
Machine condition for adjustment	Specifications	Adjustments
STEP 1 <ul style="list-style-type: none"> • VIDEO IN: No signal • Use Hi8 ME tape • REC mode 	CH1: TP001/FR-43 (A-1) CH2: CN004-2/FR-43 (A-2)  <p>A (VIDEO CH1)=220 ± 10 mV B (PCM)=220 ± 10 mV</p>	VIDEO CH1 ● RV002/FR-43 (C-2) PCM ● RV002/RP103 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 RP-103 CH2: CN004-2/FR-43 (A-2)  <p>C(VIDEO CH2)=220 ± 10 mV</p>	VIDEO CH2 ● RV001/FR-43 (D-2) TRIG: CN004-2/FR-43 (A-2)

Note: 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)

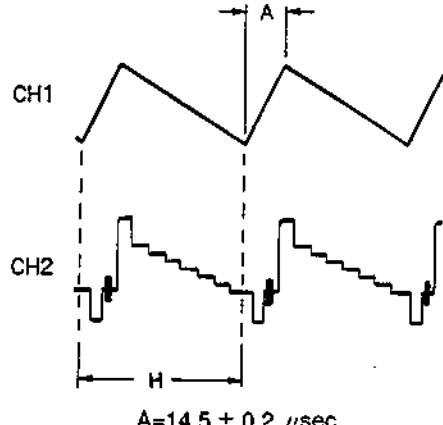
8-3-24. Comb AGC Adjustment

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.</p>	<p>TP501/HK-5 (C-2)</p>  <p>A=0 ± 100 mVp-p</p>	<p>RV501/HK-5 (B-2)</p>

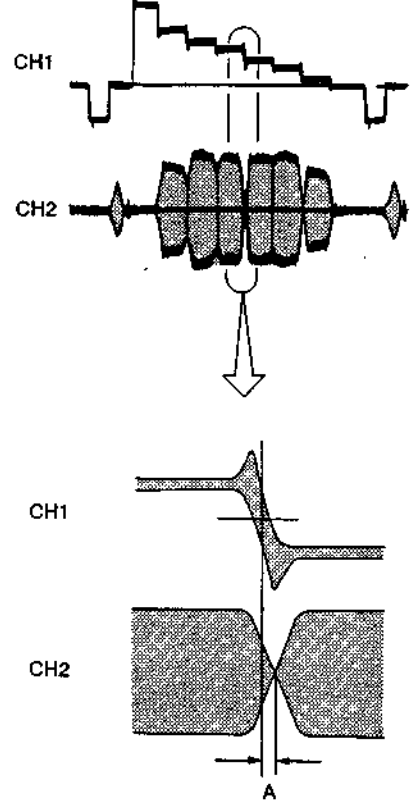
8-3-25. GCA GAIN Adjustment

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: IC801-14/HK-5 (A-3) CH2: TP303/HK-5 (E-1)</p>  <p>A=14.5 ± 0.2 μsec</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>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


Input select switch

- At video signal inputVIDEO
- At S video signal input.....S VIDEO

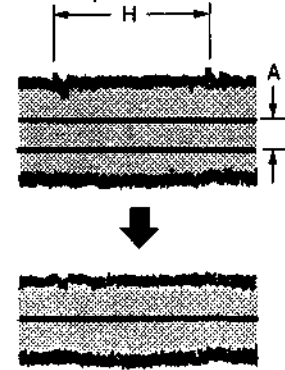
8-4-3. Y/C MIX Level Adjustment

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. • E-E mode 	<p>TP804/IF-39</p> <p>White (100%)</p> <p>A=1.00 ± 0.05 Vp-p B=300 ± 20 mVp-p</p>	<p>Y level adjustment RV704/IF-39</p> <p>Chroma level adjustment RV705/IF-39</p>

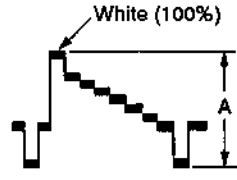
8-4-4. Noise Cancel +6 dB Amplifier Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar section of alignment tape WR5-8CSE. • EDIT switch: ON 	CH-1: TP602/IF-39 CH-2: TP604/IF-39  Peak level B x 2 = Peak level A	<ul style="list-style-type: none"> • RV601/IF-39


8-4-5. Limiter Cancel Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the monoscope section of the alignment tape WR5-8CSE. 	CH-1: TP603/IF-39  A=Minimum	<ul style="list-style-type: none"> • RV602/IF-39 TRIG: CN902-1/IF-39

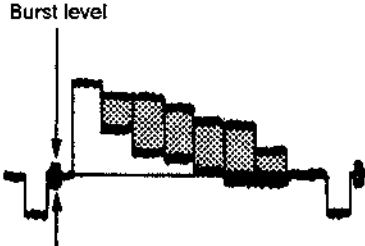
8-4-6. PB Y Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar section of the alignment tape WR5-8CSE. • Terminate the Y signal terminal (Pin ③) of S VIDEO OUT (J401/TR-40) at 75Ω. 	CN905-1/IF-39  A=1.00 ± 0.05 Vp-p	<ul style="list-style-type: none"> • RV401/IF-39

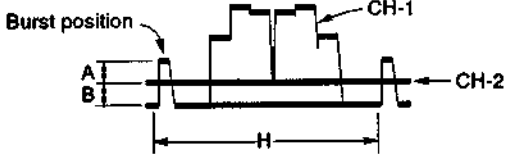
8-4-7. PB Chroma Level Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Play back the color-bar section of the alignment tape WR5-8CSE. • Terminate the chroma signal terminal (Pin ④) of S VIDEO OUT (J401/TR-40) at 75Ω. 	CN905-3/IF-39  $A=0.3 \pm 0.02 \text{ Vp-p}$	<ul style="list-style-type: none"> • RV402/IF-39

8-4-8. YX Filter Adjustment

Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> • Disconnect CN902/IF-39 and input the composite video signal at 30 mVp-p burst level to CN902-1/IF-39. • Set EDIT switch to ON. • Connect TP503 and GND with a jumper wire. • Play back the alignment tape WR5-8CSE. • Turn RV706/IF-39 fully counterclockwise (○) seeing from component side. • After adjustment, connect the CN902 and remove the jumper wire. 	TP705/IF-39 	<ul style="list-style-type: none"> • RV702/IF-39 • RV703/IF-39
	STEP 1 Set RV702 to the mechanical center position to minimize the burst level with RV703.	
	STEP 2 Turn RV702 fully counterclockwise (○) seeing from component side and measure the burst level at this time.	
	STEP 3 Slowly turn RV702 clockwise (○) and stop at the position where the burst level becomes 1/4.	

8-4-9. 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. • EDIT switch is set to ON position. 	<p>STEP 1 CH-1: TP709/IF-39 (DC range) CH-2: TP709/IF-39 (DC range)</p> <p>Overlap the waveforms of CH-1 and CH-2 with the position knob of oscilloscope.</p> <hr/> <p>STEP 2 CH-1: TP709/IF-39 (DC range) CH-2: TP711/IF-39 (DC range)</p>  <p>Adjust RV706 to be A=B. Level difference: 20% below</p>	<p>RV706/IF-39</p>

8-5. AUDIO SIGNAL SYSTEM ADJUSTMENT

8-5-1. 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.

8-5-2. 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)

8-5-3. 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)

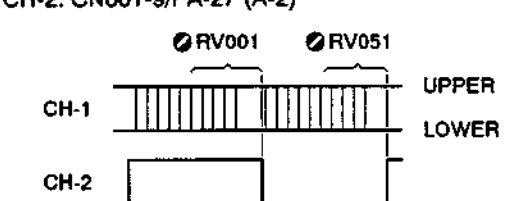
8-5-4. D/A Converter Level Adjustment

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)

8-5-5. 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 	Ⓞ RV031/PA-27 (C-1)

8-5-6. A/D Converter Offset Adjustment

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)  Adjust upper and lower brightnesses for the same.	L-CH Ⓞ RV001/PA-27 (B-2) R-CH Ⓞ RV051/PA-27 (B-1)

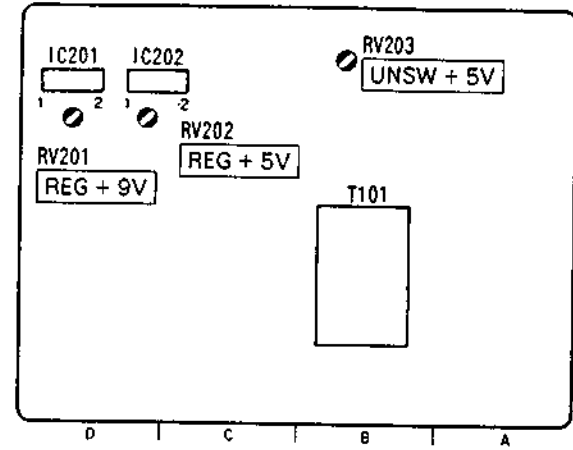
8-5-7. PCM REC Level Adjustment

Note: This adjustment should be performed after completion of "8-5-5. NR Decoded Level Adjustment".

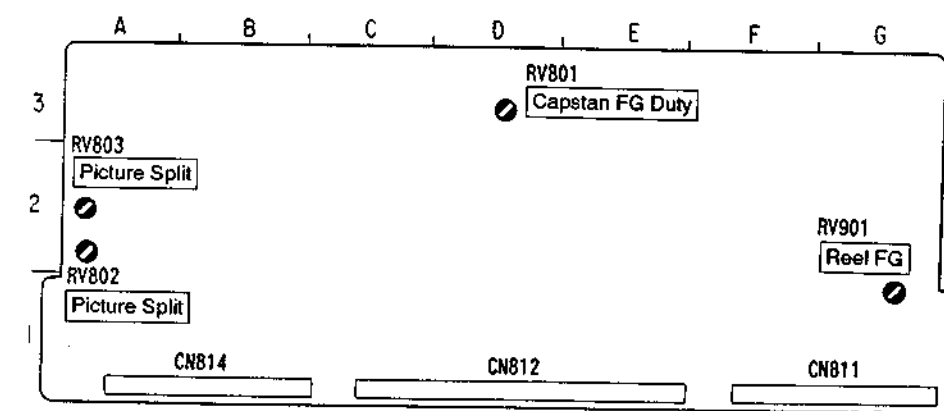
Machine condition for adjustment	Specifications	Adjustments
<ul style="list-style-type: none"> AUDIO LINE IN: 400 Hz/-7.5 dBs Set the REC LEVEL L and R knobs to the center click position. Confirm that the signal levels of CN001-20/PA-27 (A-3) and CN001-1/PA-27 (A-1) are -18 dBs in the E-E mode. Perform the self-recording/play back with a Hi8 ME tape. 	L-CH: CN001-20/PA-27 (A-3) -14.0 ± 0.1 dBs	L-CH Ⓞ RV002/PA-27 (B-3)
	R-CH: CN001-1/PA-27 (A-1) -14.0 ± 0.1 dBs	R-CH Ⓞ RV052/PA-27 (B-1)

8-6. ADJUSTMENT RELATED PARTS ARRANGEMENT DIAGRAMS

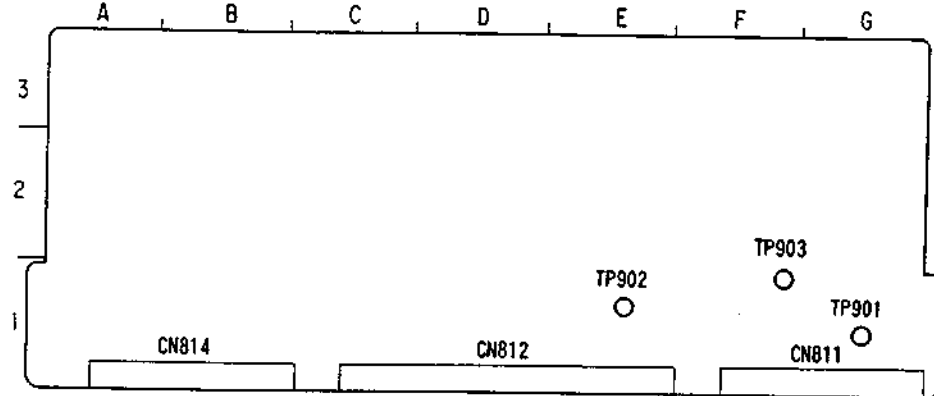
RV's on the Power Supply Block Location
(Component Side)



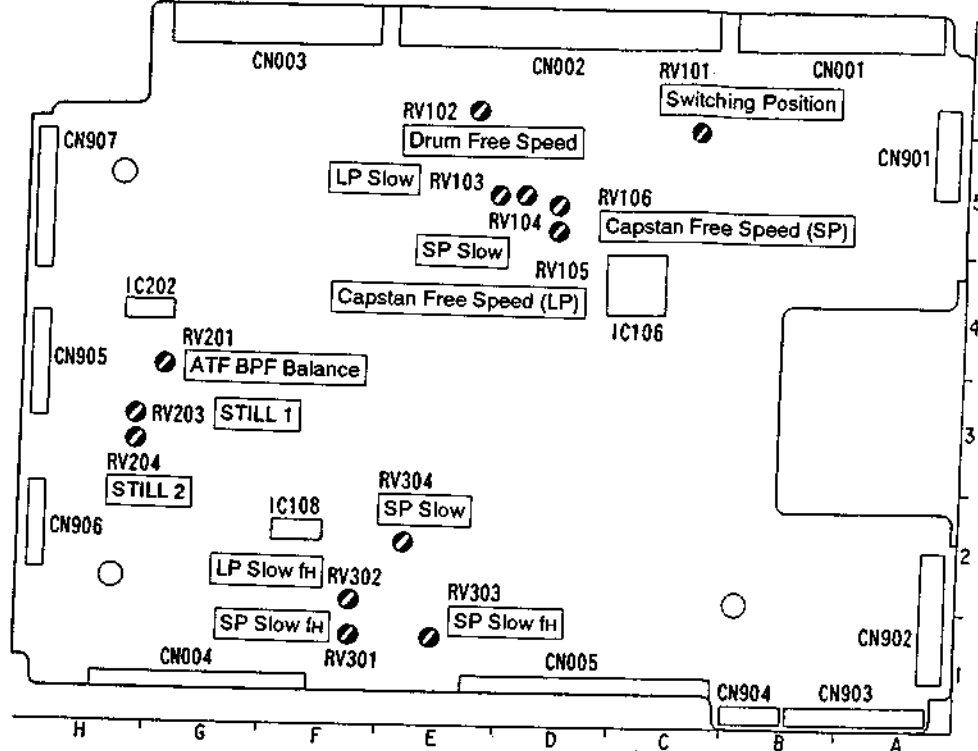
RV's on the MD-23P Board Location
(Component Side)



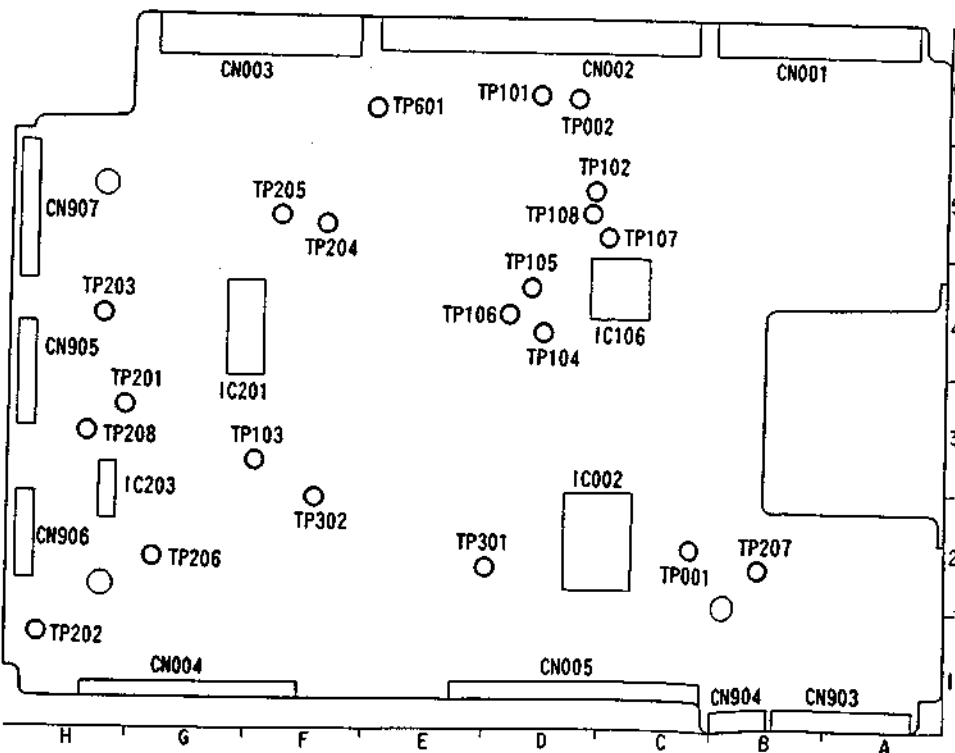
TP's on the MD-23P Board Location
(Component Side)



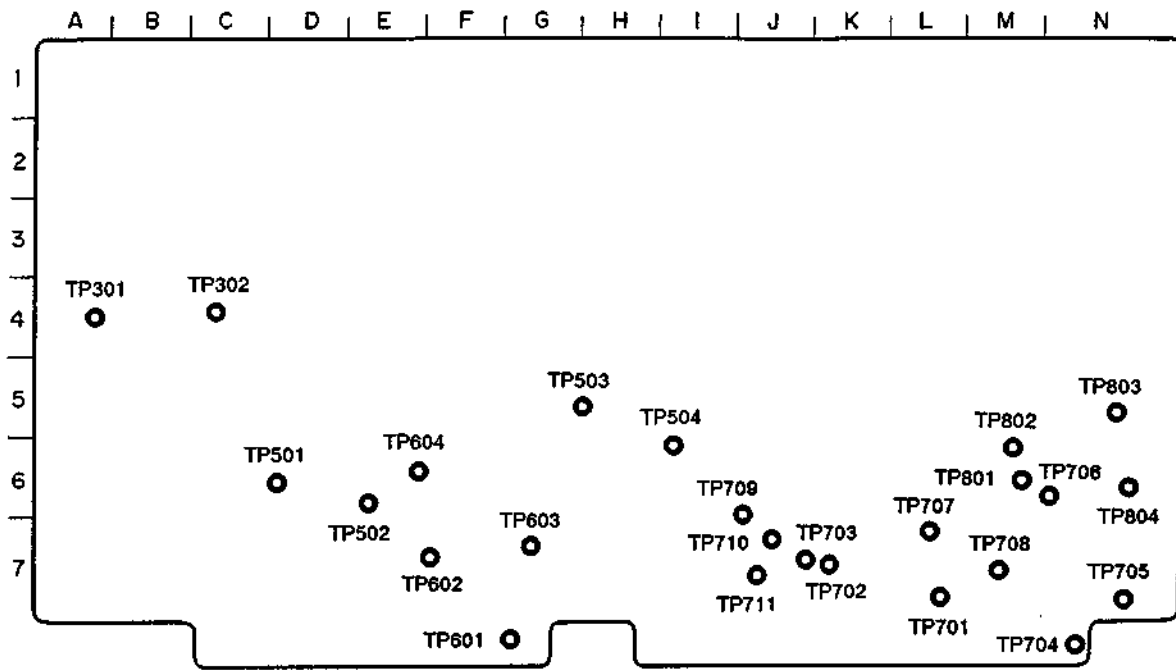
TP's on the SE-10P Board Location
(Component Side)



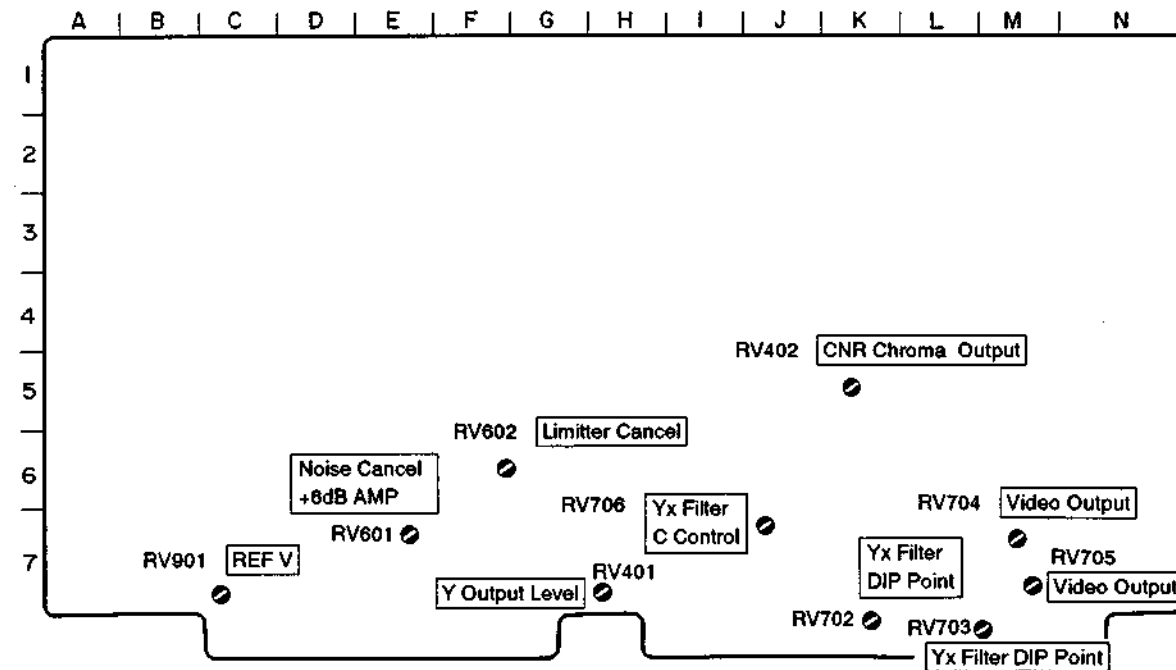
RV's on the SE-10P Board Location
(Component Side)



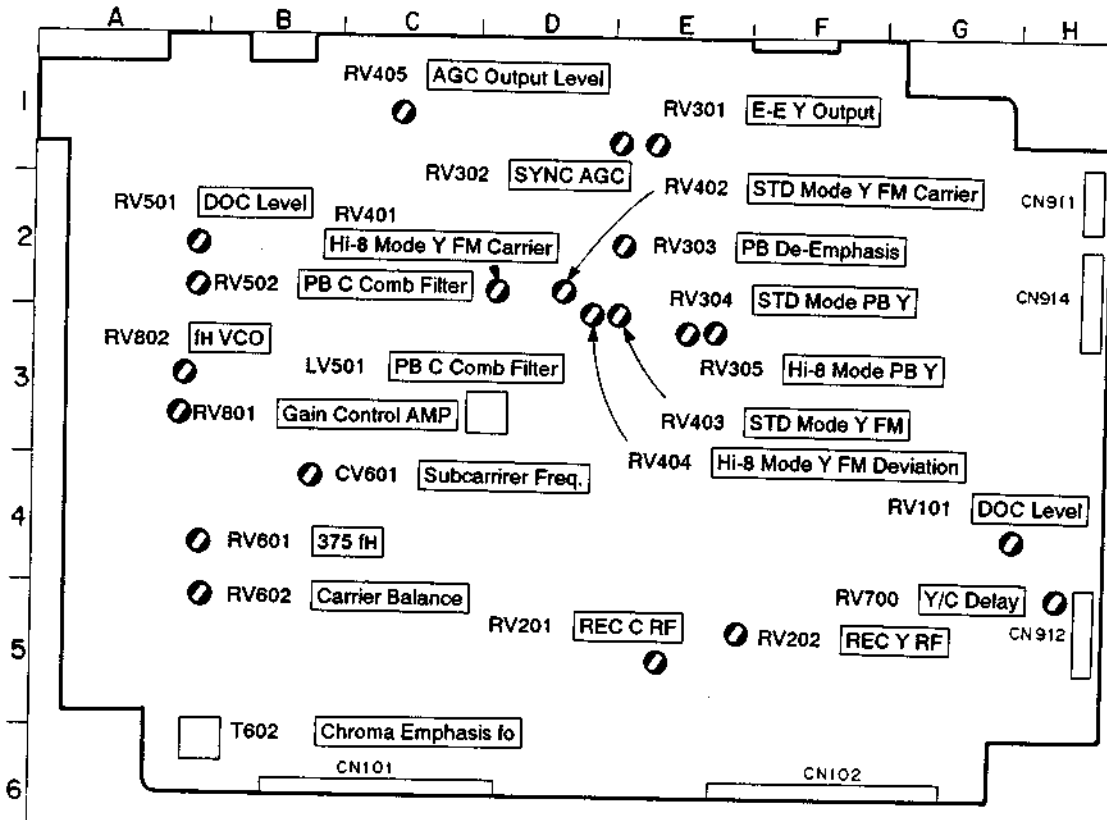
**TP's on the IF-39 Board Location
(Component Side)**



**RV's on the IF-39 Board Location
(Component Side)**

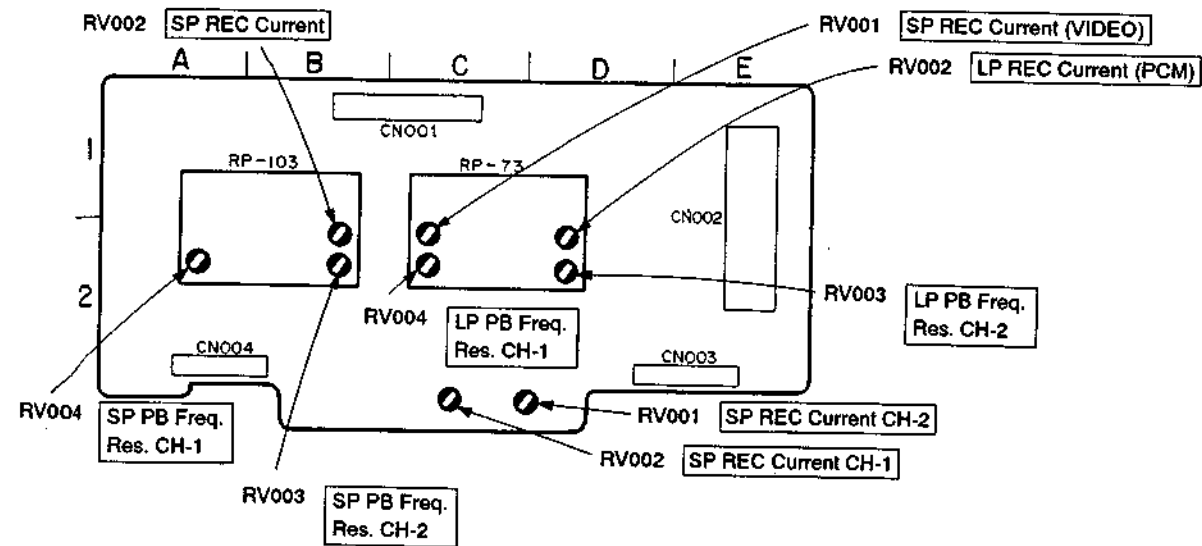


RV's on the HK-5 Board Location



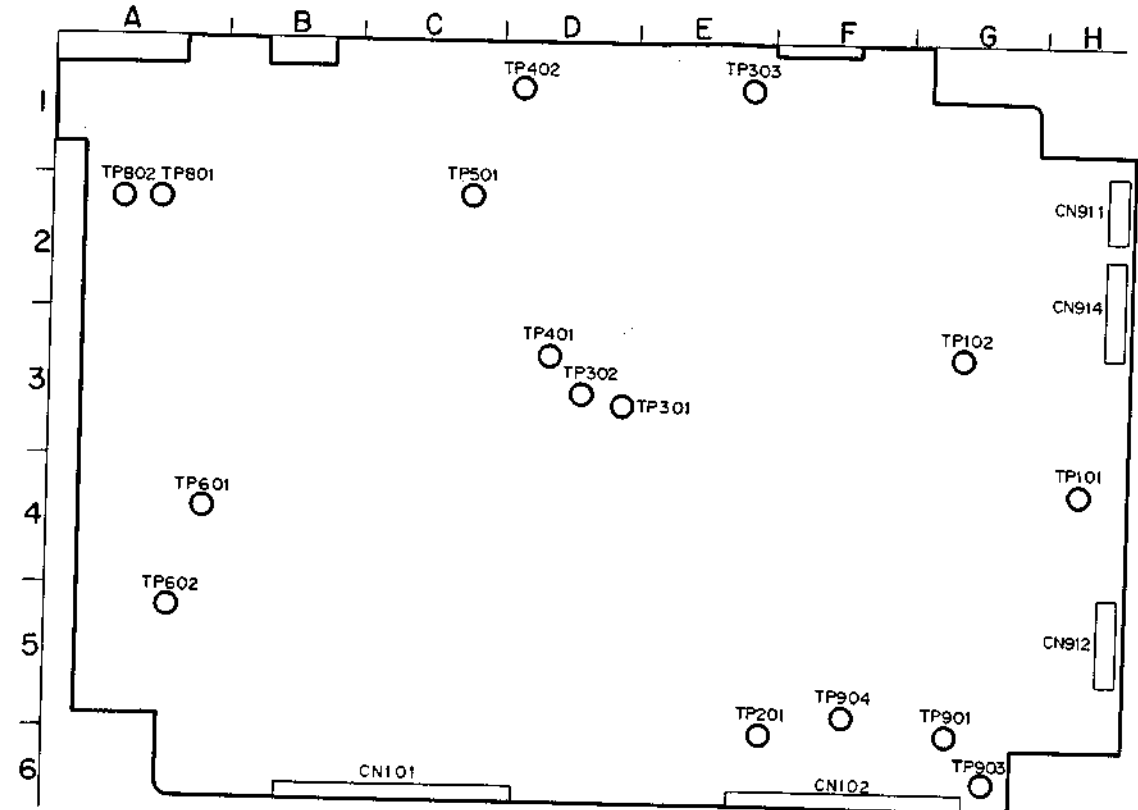
Place the unit on its right side down. Remove the Bottom Plate and Core Shield Plate. Open the HK-5 Board.

RV's on the FR-43, and RP-73, RP-103 Board Location



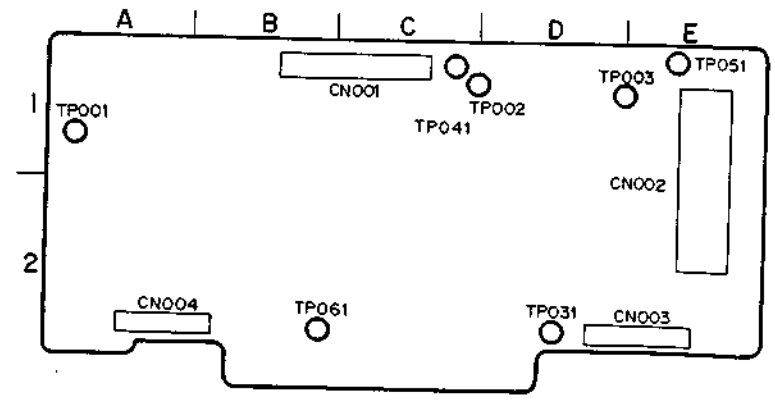
Remove the Top Plate and Open the MB-19 Board.

TP's on the HK-5 Board Location



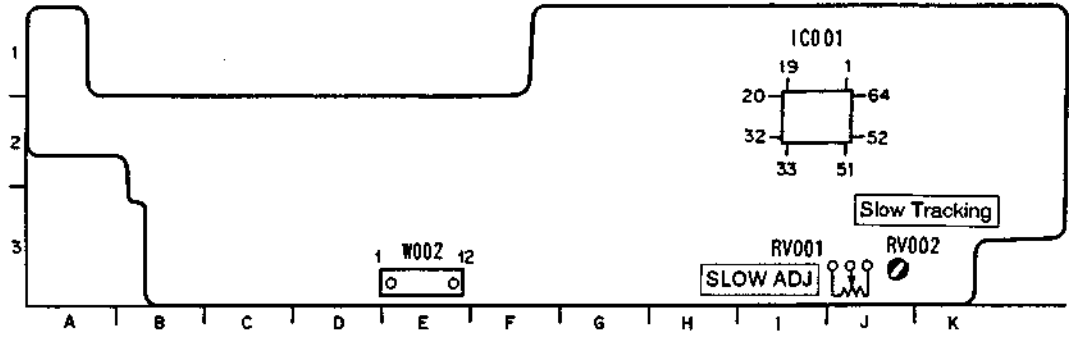
Place the unit on its right side down. Remove the Bottom Plate and Core Shield Plate. Open the HK-5 Board.

TP's on the FR-43 Board Location

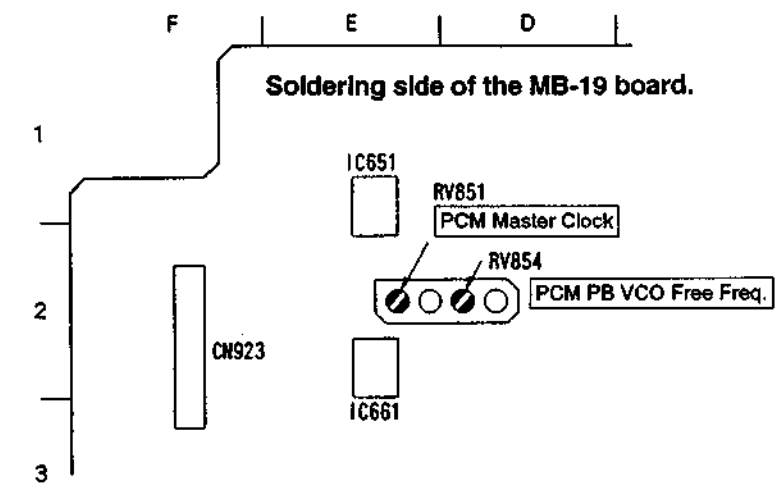


Remove the Top Plate and Open the MB-19 Board.

**RV's on the FB-169P Board Location
(Component Side)**



RV's on the PD-19P Board Location



**RV's on the PA-27 Board Location
(Component Side)**

