

SLV-E325EG/E475EG/E570EE/E570EG/E715B/E717VC/E720B/E720BZ/E720EE/
E720EG/E720EX/E720NC/E720NP/E720UX/E720VC/E720VP/E725NC
RMT-V197/V197A/V197B/V198/V198A/V198K/V198J/V199/V199A

SERVICE MANUAL



Photo : SLV-E720B

VHS

H MECHANISM

- Refer to the SERVICE MANUAL of VHS MECHANICAL ADJUSTMENTS IV for MECHANICAL ADJUSTMENTS. (9-973-623-11)

East European Model
Greek Model

SLV-E325EG/E475EG/E570EE/
E570EG/E720EE/E720EG

French Model

SLV-E715B/E720B/E720BZ

Irish Model

SLV-E720EX

North European Model

SLV-E720NC/E725NC

Spanish Model

SLV-E720NP

UK Model

SLV-E720UX

Germany Model

SLV-E717VC/E720VC

Austrian Model
Germany Model

SLV-E720VP

SPECIFICATIONS

System

Channel coverage

PAL (B/G)

VHF E2 to E12

VHF Italian channels A to H

UHF E21 to E69

CATV S01 to S05, S1 to S20

HYPER S21 to S41

RF output signal

UHF channels 21 to 69

Aerial out

75-ohm asymmetrical aerial socket

Inputs and outputs

LINE-1 (TV)

LIGNE-1 (TV)

21-pin

Video input: pin 20

Audio input: pins 2 and 6

Video output: pin 19

Audio output: pins 1 and 3

LINE-2 IN/ENTREE LIGNE-2 (SLV-E570EG/E720EX/
E720NC/E720UX/E720VP)

DECODER/LINE-2 IN

DECODER/ENTREE LIGNE-2 (SLV-E715B/E717VC/
E720B/E720BZ/E720NP/E720VC)

21-pin

Video input: pin 20

Audio input: pins 2 and 6

Video output: (C+) pin 19 (SLV-E715B/E717VC/
E720B/E720BZ/E720NP/E720VC)

Audio output: (C+) pins 1 and 3 (SLV-E715B/E717VC/
E720B/E720BZ/E720NP/E720VC)

AUDIO OUT

Phono jack (2)

Rated output level: 327 mVrms

Load impedance: 47 kilohms

Output impedance: less than 10 kilohms

General

Power requirements

220 - 240 V AC, 50 Hz

Power consumption

23 W

Operating temperature

5°C to 40°C

Storage temperature

-20°C to 60°C

Dimensions

Approx. 430 x 109 x 304 mm (w/h/d)
including projecting parts and controls

Mass

Approx. 4.8 kg

Supplied accessories

Remote commander (1)

R6 (size AA) batteries (2)

Aerial cable (1)

Design and specifications are subject to change
without notice.

VIDEO CASSETTE RECORDER

SONY®



[DIFFERENT SPECIFICATIONS]

SPECIFICATIONS	MODEL	SLV-E325EG	SLV-E475EG	SLV-E570EE	SLV-E570EG	SLV-E715B	SLV-E717VC
VIDEO SYSTEM	PAL	REC/PB	REC/PB	REC/PB	REC/PB	REC/PB	REC/PB
	SECAM	-	-	-	-	REC/PB	-
	MESECAM	REC/PB	REC/PB	REC/PB	REC/PB	PB	-
AUDIO		MONO	MONO	MONO	MONO	HIFI	HIFI
TUNER	SYSTEM 1	BG	BG	BG	BG	L-NICAM	BG-ZWEI
	SYSTEM 2	DK	DK	DK	DK	BG	
RF MOD. SYSTEM		K/G	K/G	K/G	K/G	L	G
IN/OUT	2nd SCART	-	-	-	IN	C+/IN	C+/IN
	REAR AUDIO OUT	-	-	-	-	O	O
	FRONT LINE IN	-	-	O	O	-	-
INDEX SEARCH		-	-	O	O	O	O
VPS/PDC		O	O	-	O	O	O
ShowView/Video Plus		ShowView	-	-	ShowView	ShowView	ShowView
APPEARANCE	FRONT	Direct key	Direct key	Dual Mode Shuttle	Dual Mode Shuttle	Direct key	Direct key
	BODY COLOR	BLACK	BLACK	BLACK	BLACK	TITAN	TITAN
REMOTE COMMANDER		RMT-V198A	RMT-V198	RMT-V199	RMT-V199A	RMT-V198K	RMT-V198J

SPECIFICATIONS	MODEL	SLV-E720B	SLV-E720BZ	SLV-E720EE	SLV-E720EG	SLV-E720EX	SLV-E720NC
VIDEO SYSTEM	PAL	REC/PB	REC/PB	REC/PB	REC/PB	REC/PB	REC/PB
	SECAM	REC/PB	REC/PB	-	-	-	-
	MESECAM	PB	PB	REC/PB	REC/PB	-	-
AUDIO		HIFI	HIFI	HIFI	HIFI	HIFI	HIFI
TUNER	SYSTEM 1	L-NICAM	L-NICAM	BG	BG-ZWEI	I-NICAM	BG-ZWEI/NICAM
	SYSTEM 2	BG	BG-ZWEI	DK	DK-ZWEI		
RF MOD. SYSTEM		L	L	K/G	K/G	I	G
IN/OUT	2nd SCART	C+/IN	C+/IN	-	-	IN	IN
	REAR AUDIO OUT	O	O	O	O	O	O
	FRONT LINE IN	-	-	-	-	-	-
INDEX SEARCH		O	O	O	O	O	O
VPS/PDC		O	O	-	O	O	O
ShowView/Video Plus		ShowView	ShowView	-	ShowView	Video Plus	ShowView
APPEARANCE	FRONT	Direct key	Direct key	Direct key	Direct key	Direct key	Direct key
	BODY COLOR	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
REMOTE COMMANDER		RMT-V197B	RMT-V197B	RMT-V198	RMT-V197	RMT-V197A	RMT-V197

SPECIFICATIONS	MODEL	SLV-E720NP	SLV-E720UX	SLV-E720VC	SLV-E720VP	SLV-E725NC
VIDEO SYSTEM	PAL	REC/PB	REC/PB	REC/PB	REC/PB	REC/PB
	SECAM	-	-	-	-	-
	MESECAM	-	-	-	-	-
AUDIO		HIFI	HIFI	HIFI	HIFI	HIFI
TUNER	SYSTEM 1	BG-ZWEI/NICAM	I-NICAM	BG-ZWEI	BG-ZWEI	BG-ZWEI/NICAM
	SYSTEM 2		(UHF only)			
RF MOD. SYSTEM		G	I	G	G	G
IN/OUT	2nd SCART	C+/IN	IN	C+/IN	IN	IN
	REAR AUDIO OUT	O	O	O	O	O
	FRONT LINE IN	-	-	-	-	-
INDEX SEARCH		O	O	O	O	O
VPS/PDC		O	O	O	O	O
ShowView/Video Plus		ShowView	Video Plus	ShowView	ShowView	ShowView
APPEARANCE	FRONT	Direct key	Direct key	Direct key	Direct key	Direct key
	BODY COLOR	BLACK	BLACK	BLACK	BLACK	TITAN
REMOTE COMMANDER		RMT-V197	RMT-V197A	RMT-V197	RMT-V197	RMT-V197

SAFETY CHECK-OUT

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

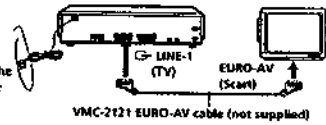
1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through 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.
6. Flexible Circuit Board Repairing
 - Keep the temperature of the soldering iron around 270°C during repairing.
 - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
 - Be careful not to apply force on the conductor when soldering

Step 3 : Connecting the VCR (continued)

Additional connections

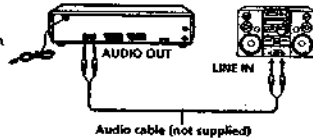
To a TV that has a EURO-AV (Scart) connector

This additional connection improves picture and sound quality. Connect the TV as shown on the right. Whenever you want to watch the VCR picture, press TV/VIDEO to display the VTR indicator in the display window.



To a stereo system

You can improve sound quality by connecting a stereo system as shown on the right.



Tip
 • If the TV is connected to the LINE-1 (TV) connector, setting the RF MODULATOR switch to OFF is recommended. In the OFF position, only the signal from the aerial is output through the AERIAL OUT connector.

Step 4 : Tuning your TV to the VCR (continued)

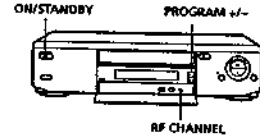
- 5 Press RF CHANNEL. You have now tuned your TV to the VCR. From now on, whenever you want to play a tape, set the TV to the video channel.

To check if the TV tuning is correct
 If a number on the TV screen changes each time you press PROGRAM+/- on the VCR, the TV tuning is correct.

To obtain a clear picture from the VCR
 If the picture does not appear clearly in step 4 above, press PROGRAM +/- in step 4, so that another RF channel appears. Then tune the TV to the new RF channel until a clear picture appears.

Step 4 Tuning your TV to the VCR

If you have connected your VCR to the TV using a EURO-AV cable, skip this step.



- 1 Press ON/STANDBY to turn on the VCR. Make sure that the RF MODULATOR switch on the rear panel is set to ON.
- 2 Press RF CHANNEL on the VCR. The factory-preset RF channel appears in the display window. The VCR signal is output through this channel to the TV.



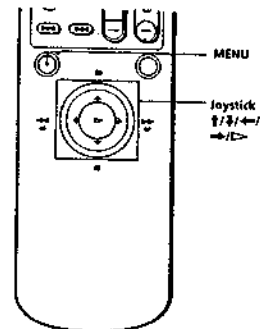
- 3 Turn on your TV and select a programme position for the VCR picture. This channel (32) will now be referred to as the video channel.
- 4 Tune the TV to the same channel as the one shown in the display window so that the picture on the right appears on the TV screen (background must be green). Refer to your TV manual for tuning instructions. If the picture does not appear clearly, see "To obtain a clear picture from the VCR" on the next page.



continued

Setups — Selecting a language

You can change the on-screen display language from the factory one.
 Before you start...
 • Turn on the VCR and the TV.
 • Set the TV to the video channel.

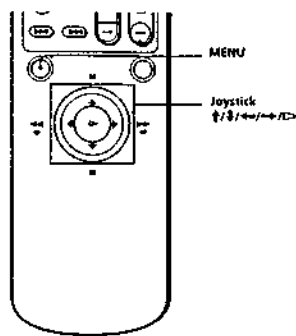



- 1 Press MENU.
- 2 Push Joystick ↑ / ↓ to move the cursor (▷) to LANGUAGE and press Joystick.
- 3 Push Joystick ↑ / ↓ to select the desired language with the dot (●), then press Joystick.


Setups — Presetting channels automatically

Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.



-  Press MENU, then push Joystick \uparrow/\downarrow to move the cursor (\blacktriangleright) to TUNER PRESET and press Joystick.

TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF
-  Push Joystick \uparrow/\downarrow to move the cursor (\blacktriangleright) to AUTO PRESET, then press Joystick. The AUTO TUNING PRESET starts searching and allocates the first channels found at the first positions. If you want to change the order or to disable some channels, you can do it in the SET UP CH AND SHOWVIEW menu (page 16).

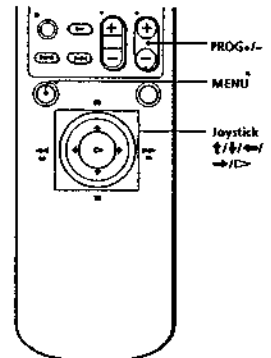
TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	25
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF
PLEASE WAIT	
■■■■■■■■	


Setups — Presetting channels manually


You can also preset one or several channels manually.


Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.



-  Press MENU, then push Joystick \uparrow/\downarrow to move the cursor (\blacktriangleright) to TUNER PRESET and press Joystick.


TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF
-  Push Joystick $\uparrow/\downarrow/\leftarrow/\rightarrow$ to move the cursor (\blacktriangleright) to NORMAL/CATV, then select NORM. To preset CATV channels, select CATV.


TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF
-  Push Joystick \uparrow/\downarrow to move the cursor (\blacktriangleright) to CHANNEL SET.

TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF

continued

Setups—Presetting channels manually (continued)

-  Press PROG +/- to select the programme position you want to set up.

TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF
-  Push Joystick \rightarrow to start tuning. The VCR starts searching for a channel and displays the first one it finds on the TV screen. Push Joystick \leftarrow/\rightarrow repeatedly until the channel you want is displayed. Channels are scanned in the following order:
 - VHF E2 - E12
 - VHF Italian channels A - H
 - UHF E21 - E69
 - CATV S1 - S20
 - HYPER S21 - S41
 - CATV S01 - S05
 If you know the number of the channel you want, press the programme number buttons. For example, for channel 5, first press "0" and then press "5."

TUNER PRESET	PROG 1
NORMAL/CATV	NORM CATV
AUTO PRESET	
CHANNEL SET	123 ON OFF
PAUSE/CANAL	ON OFF
AFT	ON OFF
FINE TUNING	ON OFF
- To allocate another channel to another programme position, repeat steps 4 and 5.
- Press Joystick.

Disabling unwanted programme positions

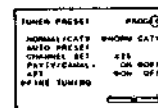
After tuning the TV channels, you can disable unused programme positions. The disabled positions will be skipped later when you press the PROG +/- buttons. You can also disable unwanted programme positions using the SET UP CH AND SHOWVIEW menu (page 22).

- In step 5 above, press programme number button "0" twice to display the number "00" beside CHANNEL SET.
- Press Joystick.

If the picture is not clear

Normally, the Auto Fine Tuning (AFT) function automatically tunes in channels clearly. However, if the picture is not clear, you may also use the manual tuning function.

- Press PROG +/- to select the programme number for which you cannot obtain a clear picture.
- Press MENU, then select TUNER PRESET and press Joystick.
- Select FINE TUNING. The fine tuning meter appears.

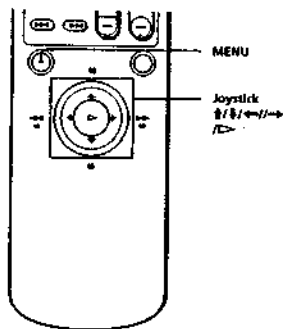


- Push Joystick \leftarrow/\rightarrow to get a clearer picture, then press Joystick. Note that the AFT (Auto Fine Tuning) setting switches to OFF.

Note
• The menu disappears automatically if you don't proceed for more than a few minutes.

Setups — Setting up ShowView

ShowView is a feature in Sony VCRs that simplifies timer recording setting. To use ShowView, each programme position needs to be matched with its ShowView guide channel. To get the guide channel numbers, look in the programme guide for your area that features ShowView numbers.



- If you want to record satellite broadcasts using ShowView, see page 18.

Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.

1 Press MENU, then push Joystick \uparrow/\downarrow to move the cursor (P) to SET UP CH AND SHOWVIEW and press Joystick.

The preset channels are displayed on the screen. "—" in the GUIDÉ CH column means that the guide channel has not been preset.

Push Joystick \uparrow/\downarrow to move the cursor (P) to the row on which you want to set the guide channel.

To display other pages for programme positions 6 to 60, push Joystick \uparrow/\downarrow repeatedly.

SET UP CH AND SHOWVIEW		
PROG	CH	GUIDÉ CH
1	492	---
2	421	---
3	421	---
4	488	---
5	488	---
6	---	---

SET UP CH AND SHOWVIEW		
PROG	CH	GUIDÉ CH
1	492	---
2	421	---
3	421	---
4	488	---
5	488	---
6	---	---

3 Push Joystick \Rightarrow twice to select the guide channel column (this is flashing).

SET UP CH AND SHOWVIEW		
PROG	CH	GUIDÉ CH
1	492	---
2	421	---
3	421	---
4	488	---
5	488	---
6	---	---

4 Push Joystick \uparrow/\downarrow to select the guide channel number in the programme guide.

SET UP CH AND SHOWVIEW		
PROG	CH	GUIDÉ CH
1	492	1 492
2	421	1 492
3	421	---
4	488	---
5	488	---
6	---	---

5 Push Joystick \Leftarrow/\Rightarrow to confirm the setting.

The cursor (P) appears in the leftmost column.

SET UP CH AND SHOWVIEW		
PROG	CH	GUIDÉ CH
1	492	1 492
2	421	1 492
3	421	---
4	488	---
5	488	---
6	---	---

6 To set the guide channel of another station, repeat steps 2 to 5.

If you want to change the programme positions of the stations, proceed to step 2 of "Setups — Changing/disabling programme positions" on page 20.

7 Press Joystick.

Getting Started

continued

Setups -Setting up ShowView (continued)

Setting up ShowView for satellite broadcasts

If your satellite tuner is connected via the AERIAL IN connector, first you have to set a programme position for each satellite channel using the TUNER PRESET menu. Then set the guide channel number for each satellite channel using the SET UP CH AND SHOWVIEW menu.

If your satellite tuner is connected via the LINE 2 (TV) connector, you don't have to set programme positions nor guide channel numbers for satellite channels. Skip the following operations.

- 1 Turn on the satellite tuner.
- 2 Press MENU, then select TUNER PRESET and press Joystick.
- 3 Press PROG +/- to select a programme position you want to use for recording or watching a satellite channel.
- 4 Select CHANNEL SET, then push Joystick \Rightarrow to tune the VCR to the satellite tuner.

The channel number displayed beside CHANNEL SET is used for receiving all satellite broadcasts from the satellite tuner.

Please remember this number for the following steps

TUNER PRESET	PROG 11
NORMAL/CATV	PHONE CALL
AUTO PRESET	---
PROGRAM SET	---
PATV/CANAL	ON 60FF
SET	---
FIRE TUNING	ON OFF

- 5 Press PROG +/- to select another programme position for another satellite channel, and press the programme number buttons to enter the same channel number as the one displayed in step 4. Otherwise the setting will not be memorized.
- 6 Repeat this step for all satellite channels, then press Joystick.
- 6 Set the guide channel number for each programme position assigned to the satellite channel, following the procedures in "Setups — Setting up ShowView" on page 16.

Notes

- The menu disappears automatically if you don't proceed for more than a few minutes.
- If you use a satellite tuner connected via the LINE 2 (TV) connector, you don't have to set up ShowView. Just record a satellite programme using ShowView, and the VCR automatically records the programme from the LINE 2 (TV) connector. For the SLV-E720NC/E720VP, use only the LINE 2 IN connector for recording with ShowView.

- If you inadvertently entered a guide channel number, push Joystick \uparrow/\downarrow repeatedly to reset the "GUIDÉ CH" column to "—". "—" appears between 1 and 255.
- The VCR does not allow entering the guide channel number, if the same number already has been set.
- When you record a satellite broadcast using ShowView, you need to select manually the desired channel on the satellite tuner.

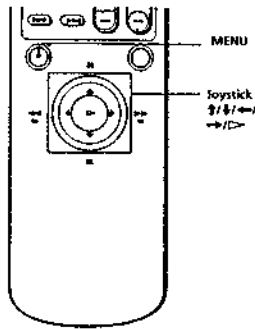
Getting Started

Setups — Changing/disabling programme positions

After setting programs and ShowView guide channels, you can change programme positions as you like. If any programme positions are unused or contain unwanted channels, you can disable them.

Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.



4 Push Joystick ← to confirm the setting.



5 To change the programme position of another station, repeat steps 2 to 4.

6 Press Joystick.



Changing programme positions

e.g. Moving the programme position from 4 to 2

- 1 Press MENU, then push Joystick ↑/↓ to move the cursor (P) to SET UP CH AND SHOWVIEW and press Joystick.

SET UP CH AND SHOWVIEW		
PRG#	CH	GUIDE CH
1	402	...
2	412	...
3	421	...
4	430	...
5	...	...
- 2 Push Joystick ↑/↓ to move the cursor (P) to the row on which you want to change the programme position, then push Joystick →.

(To display other pages for programme positions 6 to 60, push Joystick ↑/↓ repeatedly).

SET UP CH AND SHOWVIEW		
PRG#	CH	GUIDE CH
1	402	...
2	412	...
3	421	...
4	430	...
5	...	...
- 3 Push Joystick ↑/↓ until the selected channel and guide channel row moves to the desired programme position.

The selected channel and guide channel are inserted at the new programme position and the intermediate channels are displaced to fill the gap.

SET UP CH AND SHOWVIEW		
PRG#	CH	GUIDE CH
1	402	...
2	430	...
3	412	...
4	421	...
5

20 Getting Started

continued

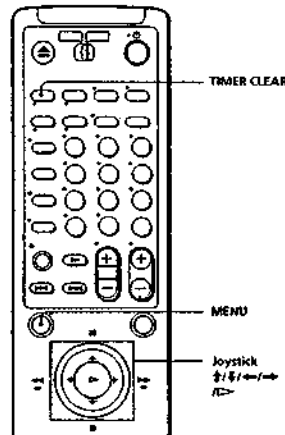
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Setups—Changing/disabling programme positions (continued)

Disabling unused programme positions

Note

- Be sure to select correctly the programme position you want to disable. If you disable a programme position by mistake, you need to reset that channel manually.



3 Press TIMER CLEAR.
The selected row will be cleaned as shown on the right.

SET UP CH AND SHOWVIEW		
PRG#	CH	GUIDE CH
1	402	...
2	430	...
3	412	...
4	421	...
5	...	...

4 Repeat steps 2 and 3 for any other programme positions you want to disable.

5 Press Joystick.



- 1 Press MENU, then push Joystick ↑/↓ to move the cursor (P) to SET UP CH AND SHOWVIEW and press Joystick.

SET UP CH AND SHOWVIEW		
PRG#	CH	GUIDE CH
1	402	...
2	412	...
3	421	...
4	430	...
5	...	...
- 2 Push Joystick ↑/↓ to move the cursor (P) to the row you want to disable.

SET UP CH AND SHOWVIEW		
PRG#	CH	GUIDE CH
1	402	...
2	412	...
3	421	...
4	430	...
5	...	...

22 Getting Started

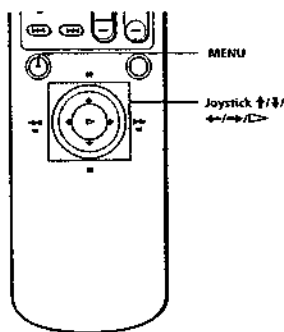
Getting Started 23

Setups — Setting the clock

You must set the time and date properly on the VCR to be able to use the timer recording features.

Before you start...

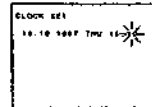
- Turn on the VCR and the TV.
- Set the TV to the video channel.



4



Set the year, hour and minutes in sequence, using Joystick \rightarrow to select the item to be set, and push Joystick \uparrow/\downarrow to select the digits.



5



Press Joystick to confirm and start the clock.

Tip

- To change the digits during setting, push Joystick \leftarrow to return to the item to be changed, and select the digits using Joystick \uparrow/\downarrow .

Note

- The menu disappears automatically if you don't proceed for more than a few minutes.

1



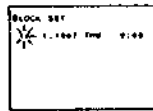
Press MENU, then push Joystick \uparrow/\downarrow to move the cursor (P) to CLOCK SET and press Joystick.



2



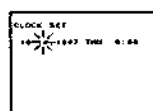
Push Joystick \uparrow/\downarrow to set the date. The day of the week is set automatically.



3



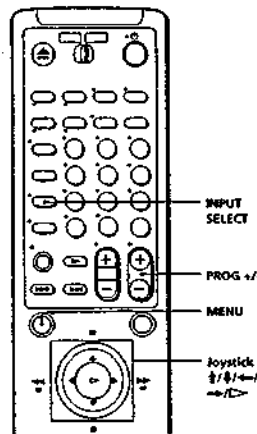
Push Joystick \rightarrow to select the month and set the month using Joystick \uparrow/\downarrow .



Setups — Setting the usage of 2nd Euroconnector

(SLV-E720NP/E725NP/
E720VC/E717VC only)

You can use the 2nd Euroconnector either as an Input (for ex. connect a satellite tuner) or to connect a decoder (Canal + / Pay-TV).



Operation

If you select L2:

When you press PROG +, the programme positions change as follows:

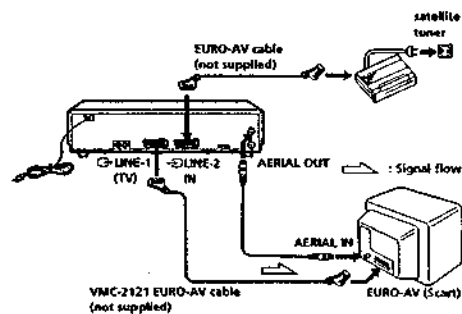
3→4→...59→L1→L2→1→2

or when you press PROG -:

3→2→1→L2→L1→59....

You may connect another VCR, satellite tuner or camcorder into LINE 2 connector

For ex.:



For using this kind of connection, you have to press INPUT SELECT or PROG +/- so that "L2" lights in the display window.

Note

- "L2" disappears after a few seconds.
- If DEC has been selected in SET UP MENU, the VCR will not function if it is connected to L2.

If you select DEC:

When you press PROG +/-, the programme positions change as follows:

1→2→...59→L1→1→2

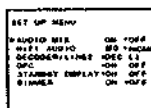
or 2→1→L1→59...2→1

Selection

1



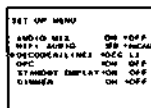
Press MENU, then push Joystick \uparrow/\downarrow to move the cursor (P) to SET UP MENU and press Joystick.



2



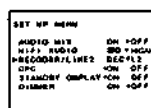
Push Joystick \uparrow/\downarrow to move the cursor (P) to DECODER/LINE 2.



3



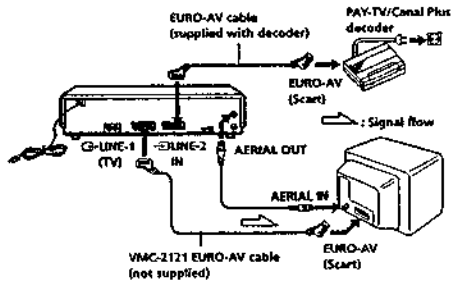
Push Joystick \leftarrow/\rightarrow to select DEC or L2 with the dot (●), then press Joystick.



Setting the PAY-TV/Canal Plus decoder (SLV-E720NP/E725NP/E720VC/E717VC only)

You can watch or record PAY-TV/Canal Plus programmes if you connect a decoder (not supplied) to the VCR.

Connecting a decoder

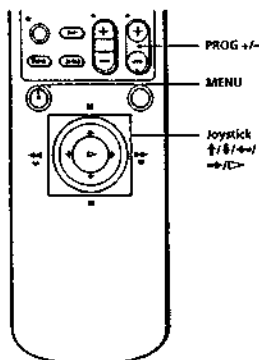


Setting PAY-TV/Canal Plus channels

To watch or record PAY-TV/Canal Plus programmes, proceed as follows:

Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.



1 Turn on your decoder.

2 Press MENU, then push Joystick \uparrow/\downarrow to move the cursor (P) to TUNER PRESET and press Joystick.

e.g. SLV-E720NP/E725NP

TUNER PRESET	PROG +/-
NORMAL/CATV	NORM CATV
AUTO PRESET	OFF
CHANNEL SET	#33
PAY-TV/CANAL PLUS	ON OFF
TIME TUNING	ON OFF

3 Press PROG +/- to select the desired programme position.

TUNER PRESET	PROG +/-
NORMAL/CATV	NORM CATV
AUTO PRESET	OFF
CHANNEL SET	#33
PAY-TV/CANAL PLUS	ON OFF
TIME TUNING	ON OFF

4 Push Joystick \uparrow/\downarrow to move the cursor (P) to CHANNEL SET, then tune in the PAY-TV/Canal Plus channels.

TUNER PRESET	PROG +/-
NORMAL/CATV	NORM CATV
AUTO PRESET	OFF
CHANNEL SET	#33
PAY-TV/CANAL PLUS	ON OFF
TIME TUNING	ON OFF

5 Push Joystick $\uparrow/\downarrow/\leftarrow/\rightarrow$ to move the cursor (P) to PAY-TV/CANAL PLUS (SLV-E720NP/E725NP/SLV-E720VC/E717VC), then select ON.

SLV-E720NP/E725NP/
E720VC/E717VC

TUNER PRESET	PROG +/-
NORMAL/CATV	NORM CATV
AUTO PRESET	OFF
CHANNEL SET	#33
PAY-TV/CANAL PLUS	ON OFF
TIME TUNING	ON OFF

6 Press Joystick.

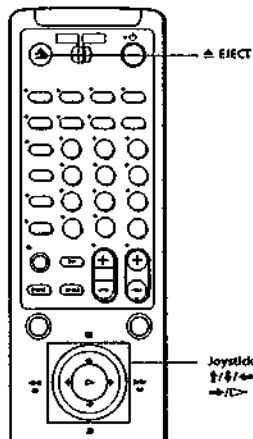
continued

28 | Getting Started

Getting Started | 29

Basic Operations

Playing a tape



1 Turn on your TV and set it to the video channel.

2 Insert a tape.

The VCR turns on and starts playing automatically if you insert a tape with its safety tab removed (page 34).



3 Press Joystick to \rightarrow PLAY.

When the tape reaches the end, it will rewind automatically.

continued

Basic Operations

Playing a tape (continued)

Additional tasks

To	Operation
Stop play	Push Joystick \downarrow to \blacksquare STOP
Pause play	Push Joystick \uparrow during playback to \blacksquare PAUSE
Resume play after pause	Press Joystick or push \uparrow to \blacksquare PAUSE
Search forward	Push Joystick \rightarrow to \odot during playback
Search backward	Push Joystick \leftarrow to \odot during playback
Fast-forward the tape	Push Joystick \rightarrow to \rightarrow FF during stop
Rewind the tape	Push Joystick \leftarrow to \leftarrow REW during stop
Eject the tape	Press Δ EJECT

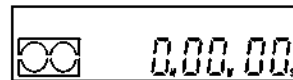
To play an NTSC-recorded tape

Set NTSC PB switch at the rear of the VCR according to the colour system of your TV.

When your TV is	Set NTSC PB to
PAL only	ON PAL TV
PAL and NTSC	NTSC 4.43

To use the time counter

At the point on the tape that you want to find later, press COUNTER RESET. The counter in the display window resets to "00:00:00". Search for the point afterwards by referring to the counter.



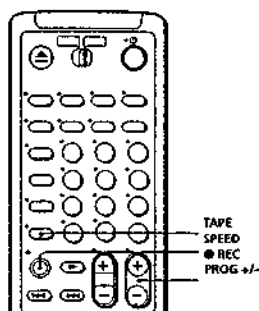
To display the counter on the TV screen, press DISPLAY.

Notes

- Depending on your TV, the following may occur while playing an NTSC-recorded tape:
 - The picture becomes black and white.
 - The picture shakes.
 - No picture appears on the TV screen.
 - Black streaks appear horizontally on the TV screen.
 - The colour density increases or decreases.
- If you play back a tape in LP or EP mode with NTSC system, the sound is heard in monaural.
- The counter resets to "00:00:00" whenever a tape is reinserted.
- The counter stops counting when it comes to a portion with no recording.

32 | Basic Operations

Recording TV programmes



- 1 Turn on your TV and set it to the video channel.
To record from a decoder, turn it on (SLV-E720NP/E725NP/E720VC/E717VC only).
- 2 Insert a tape with its safety tab in place.
- 3 Press PROC +/- to select the programme position you want to record.
- 4 Press TAPE SPEED to select the tape speed, SP or LP.
LP (Long Play) provides recording time twice as long as SP (Standard Play), however, SP produces better picture and audio quality.
- 5 Press REC to start recording.

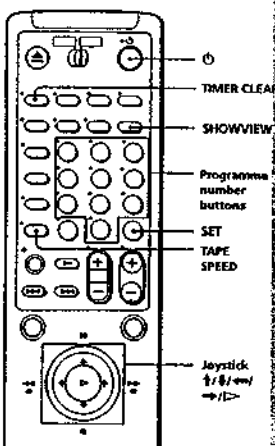
continued
Basic Operations 33

Recording TV programmes using ShowView

Just enter the programme's ShowView number listed in the TV programme guide. The date, times and programme position of that programme are set automatically. You can preset up to eight programmes at a time.

Before you start...

- Check that the VCR clock is set to the correct time.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- Turn on your TV and set it to the video channel.



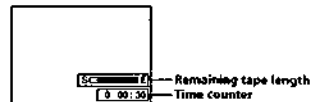
- 1 Press SHOWVIEW.
- 2 Press the programme number buttons to enter the programme's ShowView number.
If you make a mistake, press TIMER CLEAR and re-enter the correct number.

continued
Basic Operations 35

Recording TV programmes (continued)

To stop recording
Push Joystick to STOP.

To check the remaining tape length
Press DISPLAY. 30 seconds after, the white bar indicates the approximate length of tape remaining.



- 1 To watch another TV programme while recording
1 Press TV/VIDEO to turn off the VTR indicator in the display window.
- 2 Select another programme position on the TV.

To save a recording
To prevent accidental erasure, break off the safety tab as illustrated. To record on a tape again, cover the tab hole with adhesive tape.



- Tips
- To select a programme position, you can use the programme number buttons on the remote commander. For two-digit numbers, press the 7 (ten's digit) button followed by the programme number buttons.
 - You can select a video source from the LINE-1 (TV) connector or the LINE-2 IN connector using INPUT SELECT.
 - The display appears on the TV screen indicating information about the tape, but the information won't be recorded on the tape.
 - If you don't want to watch TV while recording, you can turn off the TV. When using a decoder, make sure to leave it on (SLV-E720NP/E725NP/E720VC/E717VC only).
- Notes
- The display does not appear during still (pause) mode or slow-motion playback.
 - You cannot watch a PAY-TV/Canal Plus programme while recording another PAY-TV/Canal Plus programme (SLV-E720NP/E725NP/E720VC/E717VC only).

34 Basic Operations

Recording TV programmes using ShowView (continued)

- 3 Press TAPE SPEED to select SP or LP.
- 4 Push the Joystick ←/→ to select ONCE, DAILY or WEEKLY:
To record: Select
Only once: ONCE
Everyday Monday to Friday: DAILY
Once a week: WEEKLY
- 5 Press SET button
The date, start and stop times, programme position, and tape speed appear on the TV screen.
For SLV-E720 VC, "V/P" appears automatically.
If you want to turn on/off the VPS/PDC function, see page 44 and change the TIMER SET/CHECK menu.
If the information is not correct, press TIMER CLEAR to cancel the setting.
- 6 To enter another setting, repeat steps 1 to 5.
- 7 Press to turn off the VCR.
The TIMER indicator appears in the display window and the VCR stands by for recording.

36 Basic Operations

- To stop recording
To stop the VCR while recording, push joystick to ■ STOP.
- To record satellite broadcasts
If you connect the satellite tuner and the VCR, you can record satellite programmes.
- 1 Turn on the satellite tuner.
 - 2 On the satellite tuner, select the satellite programme for which you wish to make a timer setting.
 - 3 Repeat the steps described above.
 - 4 Keep the satellite tuner turned on until the VCR finishes recording the satellite programme for which you have made a timer setting.

To use the VCR after setting the timer
To use the VCR before a timer recording begins, just press ⏻. The TIMER indicator turns off and the VCR switches on. Remember to press ⏻ to reset the VCR after using the VCR.

You can also do the following tasks while the VCR is recording:

- Reset the counter.
- Display tape information on the TV screen.
- Check the timer settings.
- Watch another TV programme.

Tip
• To cancel the Show View procedure, press SHOWVIEW before pressing SET.

Basic Operations

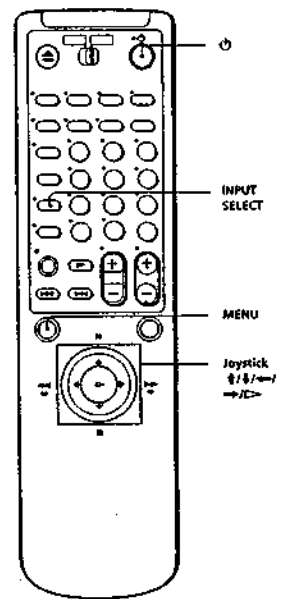
Basic Operations 37

Setting the timer manually

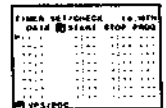
If Show/View is not available in your area, follow the instructions below to set the timer to record programmes.

Before you start...

- Check that the VCR clock is set to the correct time.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- Turn on your TV and set it to the video channel.
- To record from a decoder, turn it on (SLV-E720NP/E725NP/E720VC/E717VC only).



- 1 Press MENU and select TIMER SET/CHECK, then press joystick.



Basic Operations 38

Setting the timer manually (continued)

Daily/weekly recording

In step 2 above, push joystick ↓ to select the recording pattern. Each time you push joystick ↓, the indication changes as shown below.

- the current date → SU-SA → MO-SA → MO-FR → EVERY SA ...
- EVERY MO → EVERY SU → 1 month later → (cycles backward)
- the current date

Timer recording with VPS/PDC signals

Broadcast systems transmit VPS (Video Programme System) or PDC (Programme Delivery Control) signals with their TV programmes. These signals ensure that your timer recordings are made regardless of broadcast delay, early starts or broadcast interruptions.

In step 2 above, push joystick ↑/↓ to turn on the \sqrt{P} indicator after you set the recording date. If you do not want to set the VPS/PDC function, turn off the \sqrt{P} indicator. You can also use the VPS/PDC function for a source connected to the LINE-1 (TV) connector (and LINE-2 IN connector).

Tips

- To set the programme position, you can also use the PROC +/- or programme number buttons.
- To set the tape speed, you can also use TAPE SPEED.

Notes

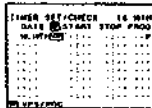
- When setting the timer with VPS/PDC signals, enter the start and stop times exactly as indicated in the TV programme guide, otherwise the VPS/PDC function won't work.
- If the VPS/PDC signal is too weak or the broadcasting station failed to transmit VPS/PDC signals, the VCR will start recording at the set time without using the VPS/PDC function.
- "TIMER" and tape indicator flash in the display window if you press ⏻ with no tape inserted.

- 2 Set the date, VPS/PDC function, start and stop times, programme position, and tape speed:
 - 1 Push Joystick → to select each item in turn. (flash)
 - 2 Push joystick ↑/↓ to set each item. To correct a setting, push joystick ← to return to that setting and reset.

To record the same programme every day or the same day every week, push joystick ↓ while the date is selected. For details, see "Daily/weekly recording" on page 40.

If you don't want to use the VPS/PDC function, push joystick ↑/↓ to turn off \sqrt{P} in the " \sqrt{P} " position. For details, see "Timer recording with VPS/PDC signals" on page 40.

To record from an other source connected to the LINE-1 (TV) connector (or the LINE-2 IN connector), press INPUT SELECT to display "LI" (or "L2") in the "PROC" position.
- 3 Push Joystick → to confirm the setting. The cursor (▸) appears at the top of the line. To enter another setting, move the cursor to the next line and repeat step 2.
- 4 Press joystick.
- 5 Press ⏻ to turn off the VCR. The TIMER indicator appears in the display window and the VCR stands by for recording. To record from an other source, leave the connected equipment switched on.



Basic Operations

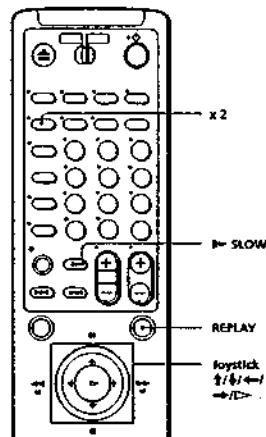
continued

Basic Operations 39

- To stop recording
To stop the VCR while recording, push joystick to ■ STOP.

Basic Operations 40

Playing/searching at various speeds



Playback options	Operation
Fast-forward/rewind	During stop, push joystick to FF or REW and release.
View the picture during fast-forward or rewind	During fast-forward, push and hold down joystick to FF . During rewind, push and hold down joystick to REW .
Play at twice the normal speed	During playback, press x 2 .
Play at non locked high speed	During playback, push joystick to FF or REW for more than 1 sec.. Release joystick to go back to playback mode.
Play at locked high speed	During playback, push joystick to FF or REW for less than 1 sec..
Play in slow motion	During playback or pause, press SLOW .
Play frame by frame	During pause, push joystick to FF or REW . To play one frame each second, hold the joystick down to FF or REW .
Rewind and start play	During stop, while pressing REW on the VCR, press PLAY on the VCR, then release both.
Replay what you just saw	During playback, press REPLAY one, two, three or four times for a replay during 10, 20, 30 or 40 seconds.

continued

Playing/searching at various speeds (continued)

To resume normal playback
Press joystick to **PLAY**.

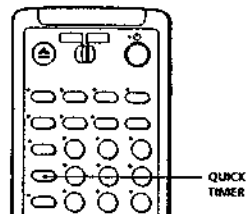
Tip

- Adjust the picture using **PROGRAM +/-** buttons on the VCR if:
 - Sreaks appear while playing in slow motion.
 - Bands appear at the top or bottom while pausing.
 - The picture shakes while pausing.

Notes

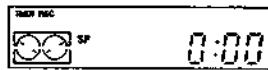
- The playback sound is muted during these operations.
- In the LP mode, noise may appear or there may be no colour.

Recording TV programmes using the quick timer



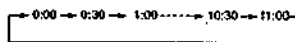
After starting recording in the normal way, you can have the VCR stop recording automatically after a specified duration.

- 1 While recording, press **QUICK TIMER** once.



- 2 Press **QUICK TIMER** repeatedly to set the duration.

Each press advances the time in increments of 30 minutes.



The duration decreases minute by minute to 0:00, then the VCR stops recording and turns off automatically.

To extend the duration

Press **QUICK TIMER** repeatedly to set to the new duration.

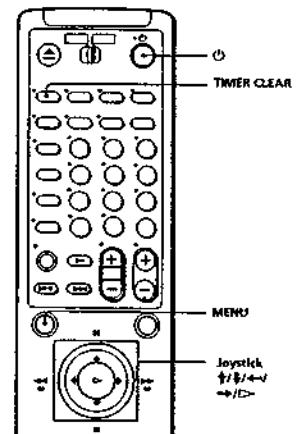
To stop recording

To stop the VCR while recording, push joystick to **STOP**.

Tip

- You can also set the quick timer and start recording during the stop mode.

Checking/ changing/ cancelling timer settings



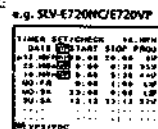
Before you start...

- Turn on your TV and set it to the video channel.

- 1 Press **ON** to turn on the VCR.

- 2 Press **MENU**, then select **TIMER SET/CHECK**:

- If you want to change a setting, go on to the next step.
- If you do not need to change the settings, press joystick, then turn off the VCR to return to recording standby.



- 3 Push joystick **UP/DOWN** to select the setting you want to change or cancel:

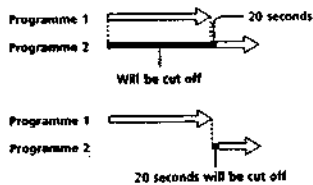
- To change the setting, push joystick **LEFT/RIGHT** to select the item you want to change, and push joystick **UP/DOWN** to reset it. To cancel the VPS/PDC function, turn off the **VPS/PDC** indicator. Then, push joystick **RIGHT** repeatedly until the cursor (**▶**) appears in the leftmost column.
- To cancel the setting, press **TIMER CLEAR**.

- 4 Press joystick.

If any settings remain, turn off the VCR to return to recording standby.

When the timer settings overlap

The programme that starts first has priority and the second programme starts recording only after the first programme has finished. If the programmes start at the same time, the programme listed first in the menu has priority.



Recording stereo and bilingual programmes

In ZWEITON (German stereo) system

This VCR automatically receives and records stereo and bilingual programmes based on the ZWEITON system. When a stereo or bilingual programme is received, the STEREO indicator appears in the display window.

To select bilingual sound while recording

Press AUDIO MONITOR to select the sound you want.

To listen to	On-screen display	Display window
Main	MAIN	STEREO
Sub	SUB	STEREO
Main and sub	MAIN/SUB	STEREO

In NICAM system (SLV-E720NC/E720NP/E725NP only)

This VCR receives and records stereo and bilingual programmes based on NICAM system (the NICAM indicator appears). When a stereo or bilingual programme is received, the STEREO indicator appears in the display window.

To record a NICAM programme, HI-FI AUDIO in the SET UP MENU should be set to NICAM (initial setting). To check the menu setting, see page 50 for details.

To select the sound while recording

Press AUDIO MONITOR to select the sound you want.

Stereo programme

To listen to	On-screen display	Display window
Stereo	STEREO	STEREO
Standard sound*	No indicator	No indicator

* Usually the mixed sound of left and right channels (monaural)

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Bilingual programme

To listen to	On-screen display	Display window
Main	MAIN	STEREO
Sub	SUB	STEREO
Main and sub	MAIN/SUB	STEREO
Standard sound*	No indicator	No indicator

* Usually the main sound (monaural)

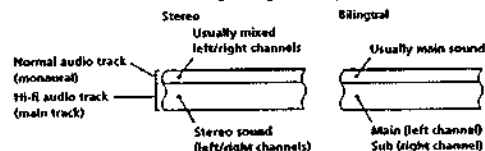
Selecting the sound during playback

Press AUDIO MONITOR to select the sound you want.

To listen to	On-screen display	Display window
Stereo/main and sub (left and right channels)	STEREO	STEREO
Left channel/main	LCH	STEREO
Right channel/sub	RCH	STEREO
Standard sound	No indicator	No indicator

How sound is recorded on a video tape

The VCR records sound onto two separate tracks. Hi-fi audio is recorded onto the main track along with the picture. Monaural sound is recorded onto the normal audio track along the edge of the tape.



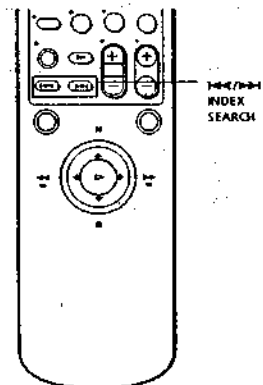
Notes

- To listen to playback sounds in stereo, you must use the EURO-AV or AUDIO OUT connections.
- When you play a tape recorded in monaural, the sound is heard in monaural regardless of the AUDIO MONITOR setting.
- If the AUDIO MONITOR button does not function, check that AUDIO MIX in the SET UP MENU is set to OFF.
- If HI-FI AUDIO is set to STD, the standard sound will be recorded on both the hi-fi and normal audio tracks. Pressing AUDIO MONITOR will not change the sound (SLV-E720NC/E720NP/E725NP only).

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Searching using the index function

The VCR marks the tape with an index signal at the point where each recording begins. You can use these signals as references to find a specific recording. The VCR can search up to 99 index signals ahead of or behind the current position.



- 1 Insert an indexed tape into the VCR.
- 2 Press **INDEX SEARCH** repeatedly to specify how many index signals ahead or backwards you want to search:
 - To search ahead, press **INDEX SEARCH**.
 - To search backwards, press **INDEX SEARCH**.

The VCR starts searching and the index number on the TV screen counts down to zero. Playback starts automatically from that point.

To stop searching

Push joystick to **STOP**.


Note


- No index signal will be added when recording starts from recording pause. However, an index signal will be marked if you change the channel during recording pause.

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Adjusting the picture

Adjusting the tracking

Although the VCR automatically adjusts the tracking when playing a tape (the  indicator flashes in the display window, then lights off), distortion may occur if the tape was recorded in poor condition. If so, adjust the tracking manually.

During playback, press PROGRAM +/- buttons on the VCR to display the tracking meter ( lights up). Distortion should disappear as you press one of the two buttons. If you cannot get a clear picture with manual adjustment, eject and reinsert the tape or press the buttons PROGRAM + and PROGRAM - at the same time so that the tracking meter comes back to the center.



About Optimum Picture Control (OPC)

Optimum Picture Control (OPC) automatically improves recording and playback quality by adjusting the VCR to the condition of the video heads and tape. To maintain better picture quality, we recommend that you set OPC to ON in the SET UP MENU (with the OPC indicator lit in the display window).

e.g. SLV-E720NP/E725MP

SET UP MENU	
AUDIO MIX	ON OFF
HIFI AUDIO	SP *NICAM
DECODER/LINE 2	REC L2
OPC	ON OFF
STANDBY DISPLAY	ON OFF
DIMMER	ON OFF

OPC playback

The OPC function automatically works on all types of tapes, including rental tapes and tapes that were not recorded with OPC.




OPC recording

Whenever you insert a tape and first start recording, the VCR adjusts to the tape using the OPC function (the OPC indicator flashes rapidly). This adjustment is retained until the tape is ejected.

To deactivate the OPC

Press MENU and select SET UP MENU, then set OPC to OFF. The OPC indicator in the display window goes off.

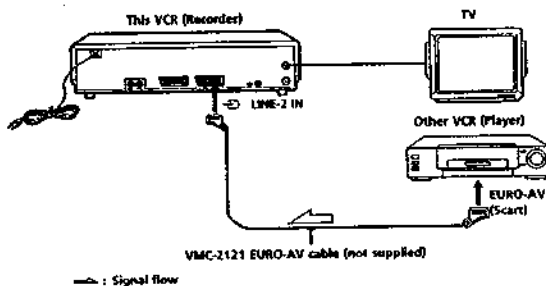
Note

* There is a delay of a few seconds before the VCR actually starts recording while the VCR analyzes the tape. To avoid the delay, first set the VCR to recording pause (the OPC indicator flashes slowly) and press  REC to have the VCR analyze the tape (the OPC indicator flashes rapidly). After the OPC indicator stops flashing, push joystick to  PAUSE to start recording immediately. If you want to start recording quickly without using the OPC function, first set the VCR to recording pause (the OPC indicator flashes slowly) and push joystick to  PAUSE to start recording.

Additional Operations | 49

Editing with another VCR

How to connect to record on this VCR



Tips

- If the other VCR doesn't have a EURO-AV (Scart) connector, use the VMC-2106 cable instead and connect the cable to the line out jacks of the other VCR.
- Be sure to select LINE-2 IN in 2nd EURO-AV in SET UP MENU (SLV-E720VC/E717VC/E720NP/E725NP only).

continued

Additional Operations | 51

Changing menu options

1 Press MENU, then select SET UP MENU.

SLV-E720NP/E725MP

SET UP MENU	
AUDIO MIX	ON OFF
HIFI AUDIO	SP *NICAM
DECODER/LINE 2	REC L2
OPC	ON OFF
STANDBY DISPLAY	ON OFF
DIMMER	ON OFF

SLV-E720VC/E717VC



SET UP MENU	
AUDIO MIX	ON OFF
DECODER/LINE 2	REC L2
OPC	ON OFF
STANDBY DISPLAY	ON OFF
DIMMER	ON OFF

SLV-E720VC

SET UP MENU	
AUDIO MIX	ON OFF
HIFI AUDIO	SP *NICAM
OPC	ON OFF
STANDBY DISPLAY	ON OFF
DIMMER	ON OFF

SLV-E720VP

SET UP MENU	
AUDIO MIX	ON OFF
OPC	ON OFF
STANDBY DISPLAY	ON OFF
DIMMER	ON OFF

- Push joystick  to select the option to change, then push joystick  to change the setting.
- Press joystick to return to the original screen.

Menu choices

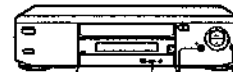
Initial settings are indicated in bold print.

Menu option	Set this option to
HIFI AUDIO	STD to record standard sound on the hi-fi audio track. NICAM to record NICAM broadcasts on the hi-fi audio track. For details, see page 46.
AUDIO MIX	ON to listen to the hi-fi and normal audio tracks at the same time. The AUDIO MONITOR button will not function. OFF to listen to the hi-fi and normal audio tracks separately. Select the sound using the AUDIO MONITOR button.
DECODER/LINE 2 (SLV-E720NP/E725NP/E720VC/E717VC)	DEC select PAY-TV DECODER (Canal Plus) for 2nd Euroconnector L2 select LINE-2 IN for 2nd Euroconnector only)
OPC	ON to switch on the OPC (Optimum Picture Control) function and improve picture quality. OFF to switch OPC off.
STANDBY DISPLAY	ON to light up the indicators in the display window while the VCR is standing by. OFF to turn off the indicators in the display window to conserve the VCR power.
DIMMER	ON to make the display window dim, OFF to make it brighter.


Additional Operations | 50




Editing with another VCR (continued)

Operation (when recording on this VCR)



Before you start editing




- Turn on your TV and set it to the video channel.
- Press INPUT SELECT to display "L2" in the display window.
- Press TAPE SPEED to select the tape speed, SP or LP.
- On this VCR, press  EDIT so that EDIT lights in the display. If the other VCR has a similar feature, set it to ON as well.

- Insert a source tape with its safety tab removed into the other (playback) VCR. Search for the point to start playback and set it to playback pause.
- Insert a tape with its safety tab in place into this (recording) VCR. Search for the point to start recording and press  PAUSE.
- Press  REC on this VCR to set it to recording pause.
- To start editing, press the  PAUSE buttons on both VCRs at the same time.




To stop editing

Press the  STOP buttons on both VCRs.

Tips

- To edit more precisely, press the  PAUSE buttons on the VCRs to release pause.
- To cut out unwanted scenes while editing, press  PAUSE on this VCR when an unwanted scene begins. When it ends, press  PAUSE again to resume recording (Assemble Editing).

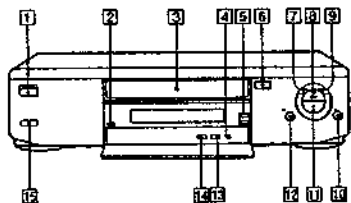
Note

- If you start recording following the procedure above, the VCR won't start recording with the OPC function. To record a tape with the OPC function, press  REC again during recording pause in step 3 so that the VCR analyzes the tape. Then when you start recording in step 4, press  PAUSE after the OPC indicator stops flashing. If you press  PAUSE before the OPC indicator stops flashing, the OPC function is cancelled.

Index to parts and controls

Refer to the pages indicated in parentheses () for details.

Front panel

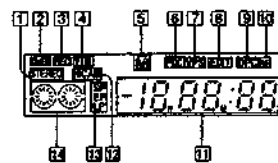


- | | |
|---|------------------------|
| 1 ON/STANDBY switch/indicator (9) | 6 ▷ PLAY button (41) |
| 2 TV/VTR button | 7 ►► FF button |
| 3 Tape compartment | 8 ● REC button (52) |
| 4 RF CHANNEL button (9) | 9 ■ STOP button (52) |
| 5 PROGRAM +/- buttons (10)
Tracking buttons (49) | 10 ■ PAUSE button (52) |
| 6 ▲ EJECT button (32) | 11 EDIT button (52) |
| 7 ◀◀ REW button (41) | 12 TAPE SPEED button |
| | 13 Remote sensor |

continued

Index to parts and controls (continued)

Display window

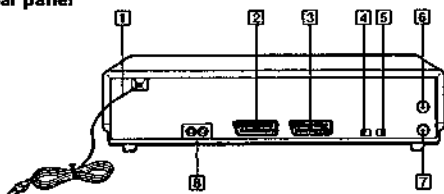


- | | |
|--------------------------------|---|
| 1 STEREO indicator (46) | 9 OPC indicator (49) |
| 2 TIMER indicator (36, 39) | 10 RF indicator (9) |
| 3 REC indicator | 11 Line/programme position indicator
(9, 33, 52) |
| 4 VTR indicator (8) | Time counter/clock (32) |
| 5 AUTO TRACKING indicator (49) | 12 NICAM indicator (SLV-E720NC/
E720NP/E725NP only) (46) |
| 6 PDC indicator (40) | 13 Tape speed indicator (33) |
| 7 VPS indicator (40) | 14 Tape indicator |
| 8 EDIT indicator (52) | |

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58 | Additional Information

Rear panel

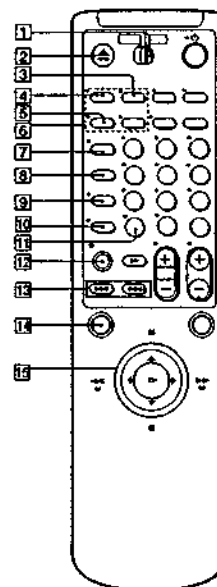


- | | |
|---|---|
| 1 Mains lead (7) | 4 NTSC 4.43 switch (32) |
| 2 G- LINE-1 TV/LIGNE -1 TV
connector (8, 27, 28) | 5 RF MODULATOR switch (7) |
| 3 ⇄ DECODER/DECODEUR/
LINE-2 IN/ENTREE LIGNE-2
connector (27, 28, 51) (SLV-
E720NP/E725NP/E720VC/E717VC
only) | 6 AERIAL OUT/ANTENNE SORTIE
connector (7) |
| 4 ⇄ LINE-2 IN/ENTREE LIGNE-2
connector (27, 28, 51) (SLV/E720NC/
E720VP) | 7 AERIAL IN/ANTENNE ENTREE
connector (7) |
| | 8 AUDIO OUT L/R/SORTIE AUDIO
D/G jacks (8) |

continued

Index to parts and control (continued)

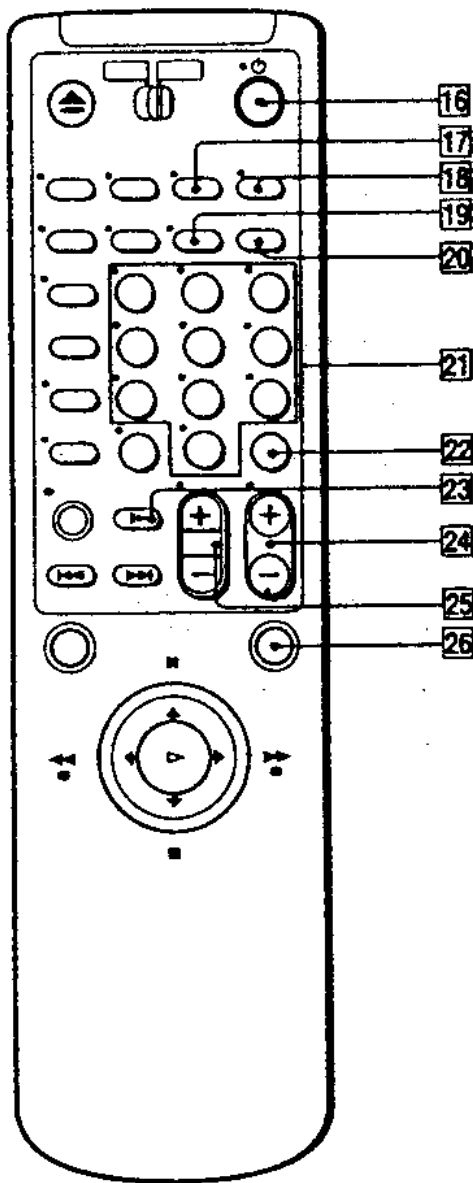
Remote commander



- | |
|---|
| 1 TV/VIDEO remote control switch
(5) |
| 2 ▲ EJECT button (32) |
| 3 COUNTER RESET button (32) |
| 4 TIMER CLEAR button (22, 36, 44) |
| 5 x 2 button (41) |
| 6 FASTTEXT buttons (for TV) (6) |
| 7 DISPLAY button (34) |
| 8 QUICK TIMER button (43) |
| 9 INPUT SELECT button (34, 39, 52) |
| Teletext button (for TV) (6) |
| 10 TAPE SPEED button (33) |
| TV power on/TV mode select
button (for TV) (6) |
| 11 -/- (ten's digit) button (34) |
| 12 ● REC button (33) |
| 13 ◀◀/▶▶ INDEX SEARCH
buttons (48) |
| 14 MENU button (11) |
| 15 Joy stick (11) |

Additional Information | 59

60 | Additional Information

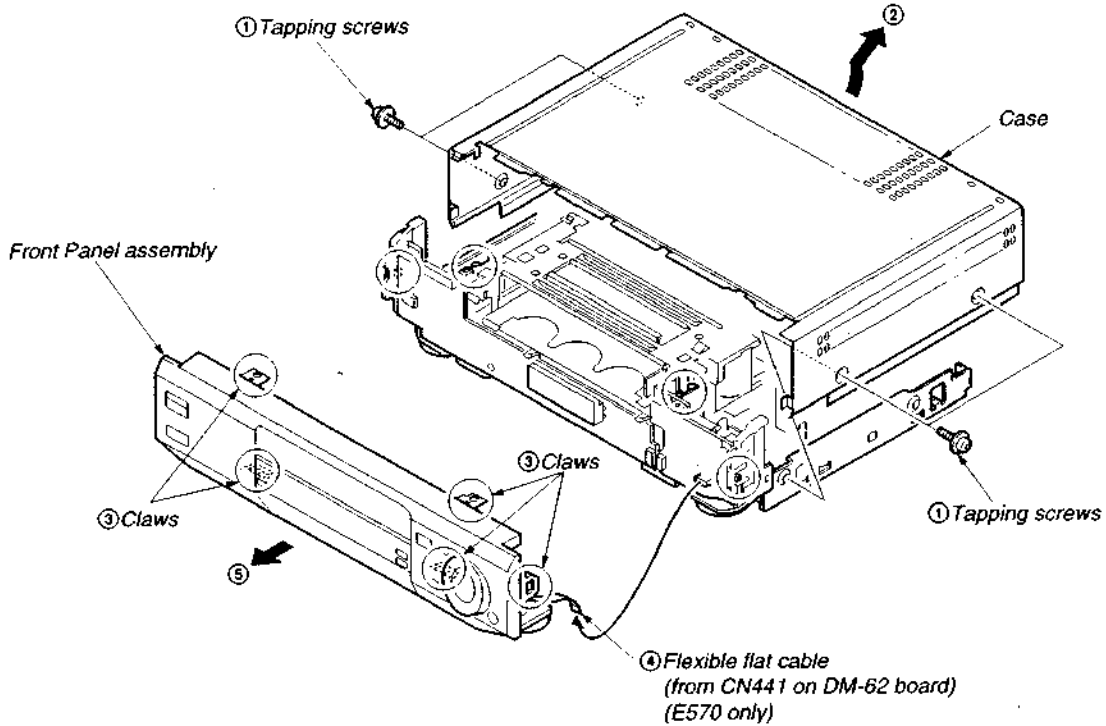


- 16 ⏻ (on/standby) switch (36)
- 17 WIDE button (for TV) (6)
- 18 AUDIO MONITOR button (46)
- 19 TV/VIDEO button (8)
- 20 SHOWVIEW button (35)
- 21 Programme number buttons (14, 34, 35)
- 22 SET button (36)
- 23 ⏪ SLOW button (41)
- 24 PROG +/- buttons (14, 29, 33)
√ / 0 Teletext page access buttons (for TV) (6)
- 25 VOL +/- buttons (for TV) (6)
- 26 REPLAY button (41)

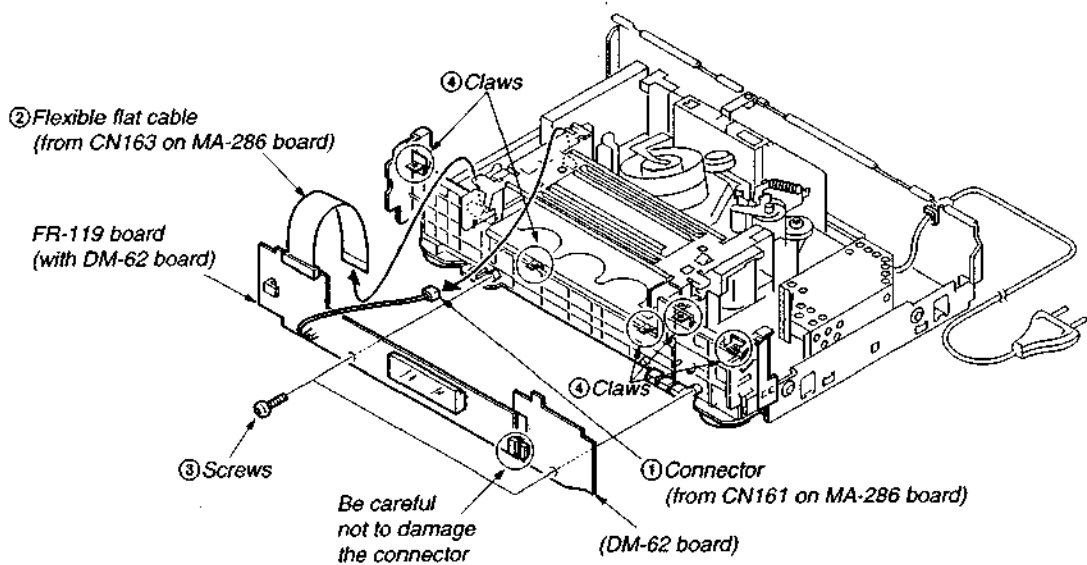
SECTION 2 DISASSEMBLY

NOTE : Follow the disassembly procedure in the numerical order given.

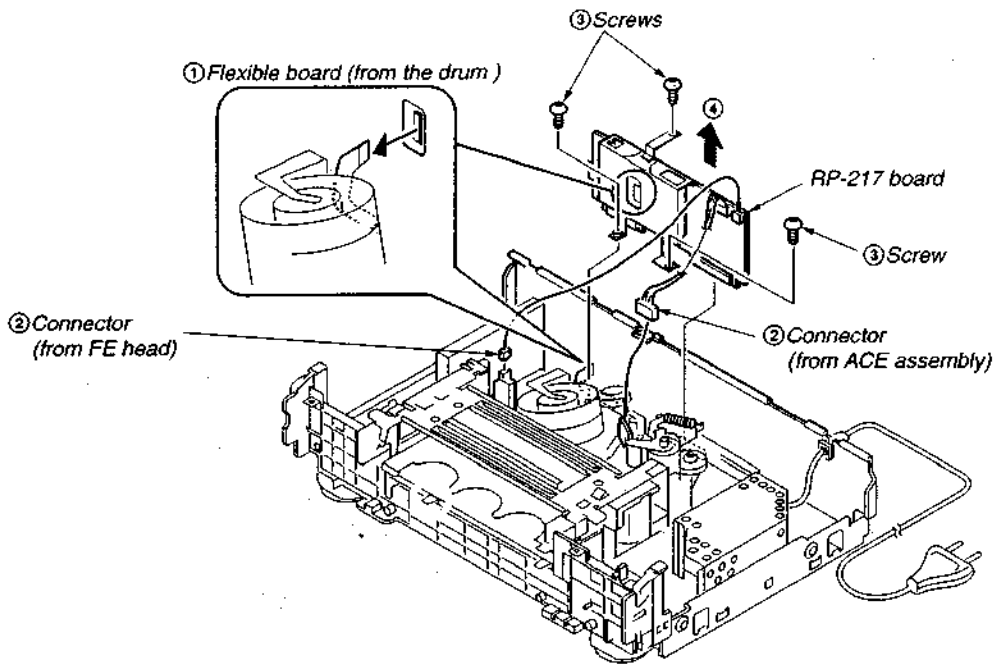
2-1. CASE AND FRONT ASSEMBLY



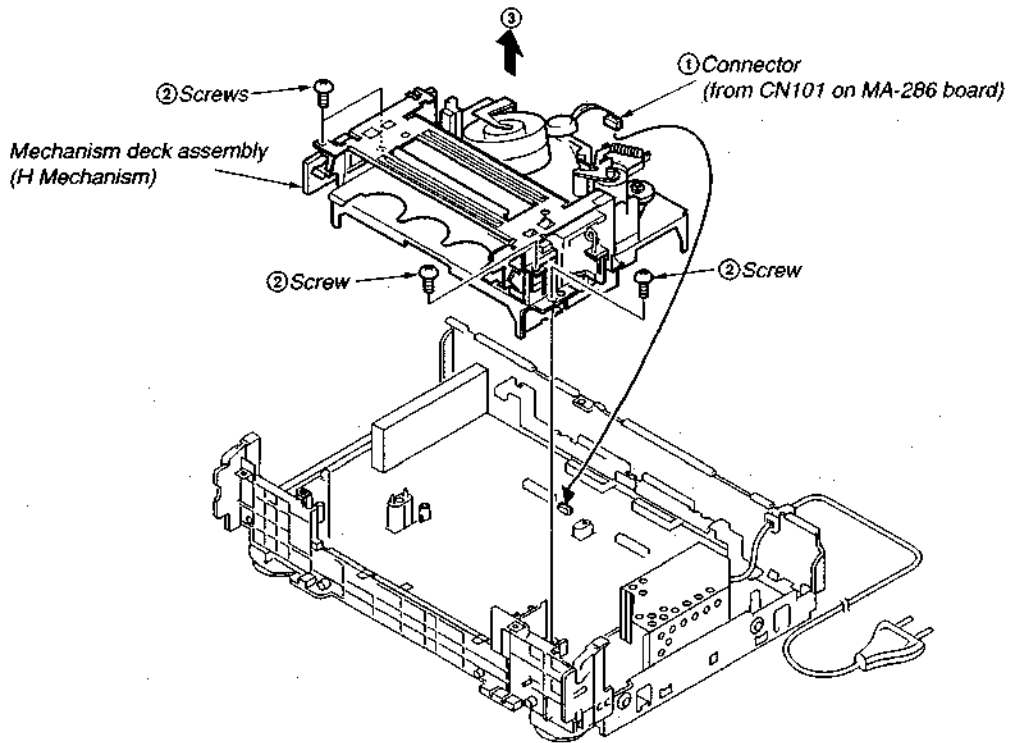
2-2. FR-119 BOARD (WITH DM-62 BOARD)



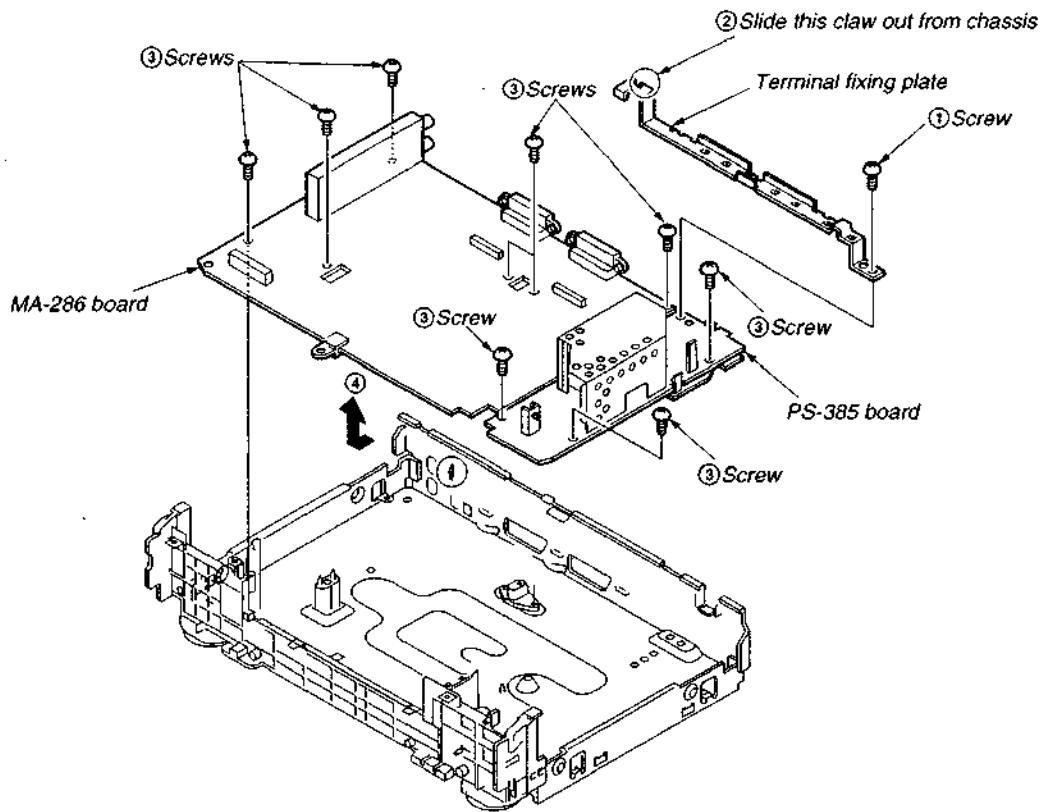
2-3. RP-217 BOARD



2-4. MECHANISM DECK ASSEMBLY (H MECHANISM)



2-5. MA-286 AND PS-385 BOARDS



2-6. CIRCUIT BOARDS LOCATION

MA-286
(VIDEO, AUDIO
SERVO/SYSTEM CONTROL,
TUNER)

FR-119
(MODE CONTROL)

DM-62
(OPERATION SWITCHES)

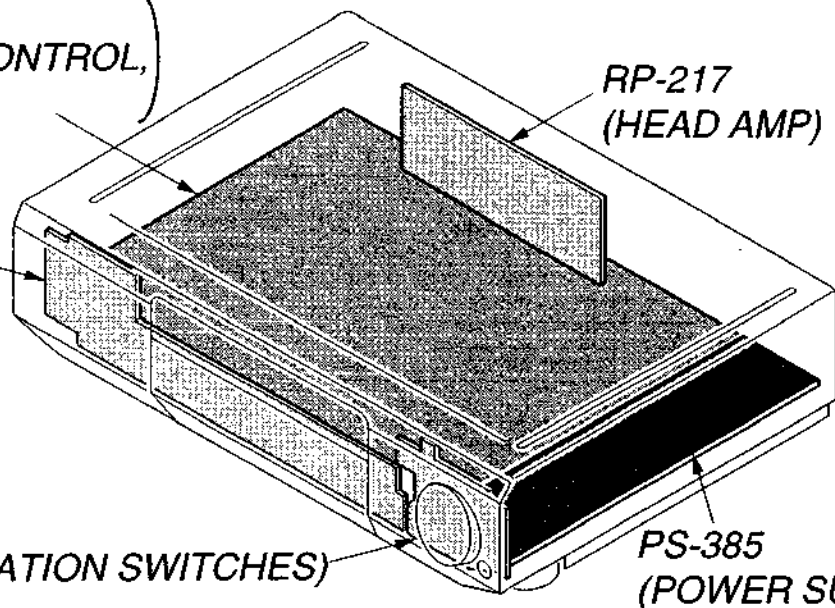


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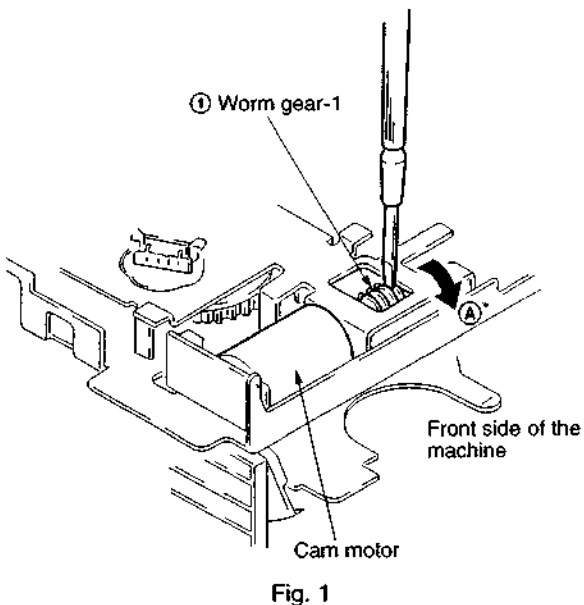
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SERVICE NOTE

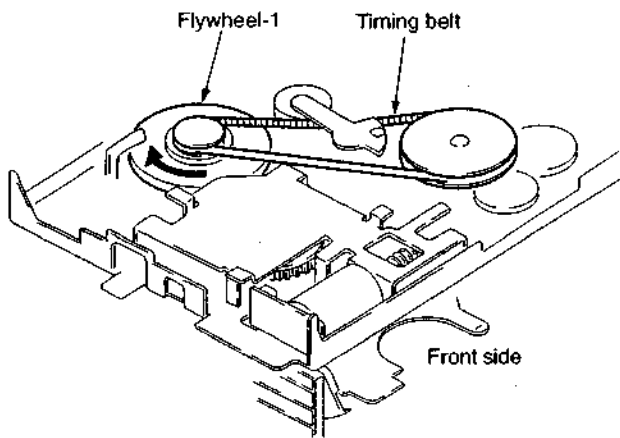
1. HOW TO RETURN THE PINCH ROLLER, GUIDE ROLLER AND ELEVATOR CAM TO STOP MODE

- 1) Remove the VHS MD assembly from the machine. (Refer to section 2-4. Removal.)
- 2) Rotate the worm gear-1 of the cam motor beneath the MD assembly in the direction arrow **A** using a screw driver tip.



2. HOW TO RETURN A TAPE INTO CASSETTE HALF

A tape can be rewound into a cassette half by rotating the flywheel-1 of the capstan motor in the direction of **A** with hand.

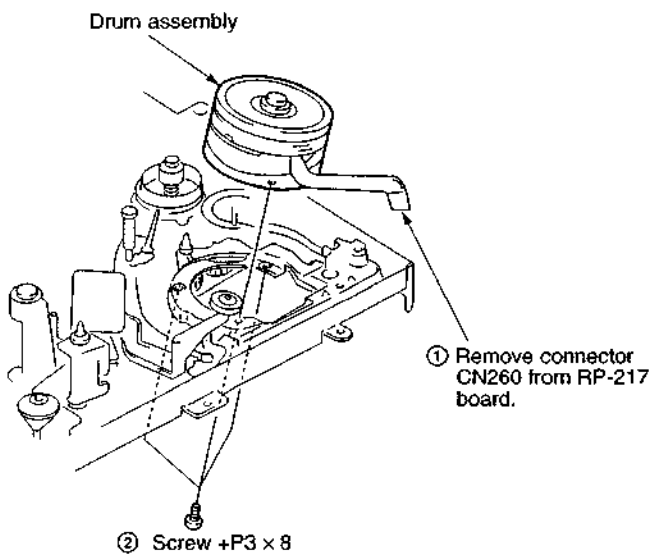


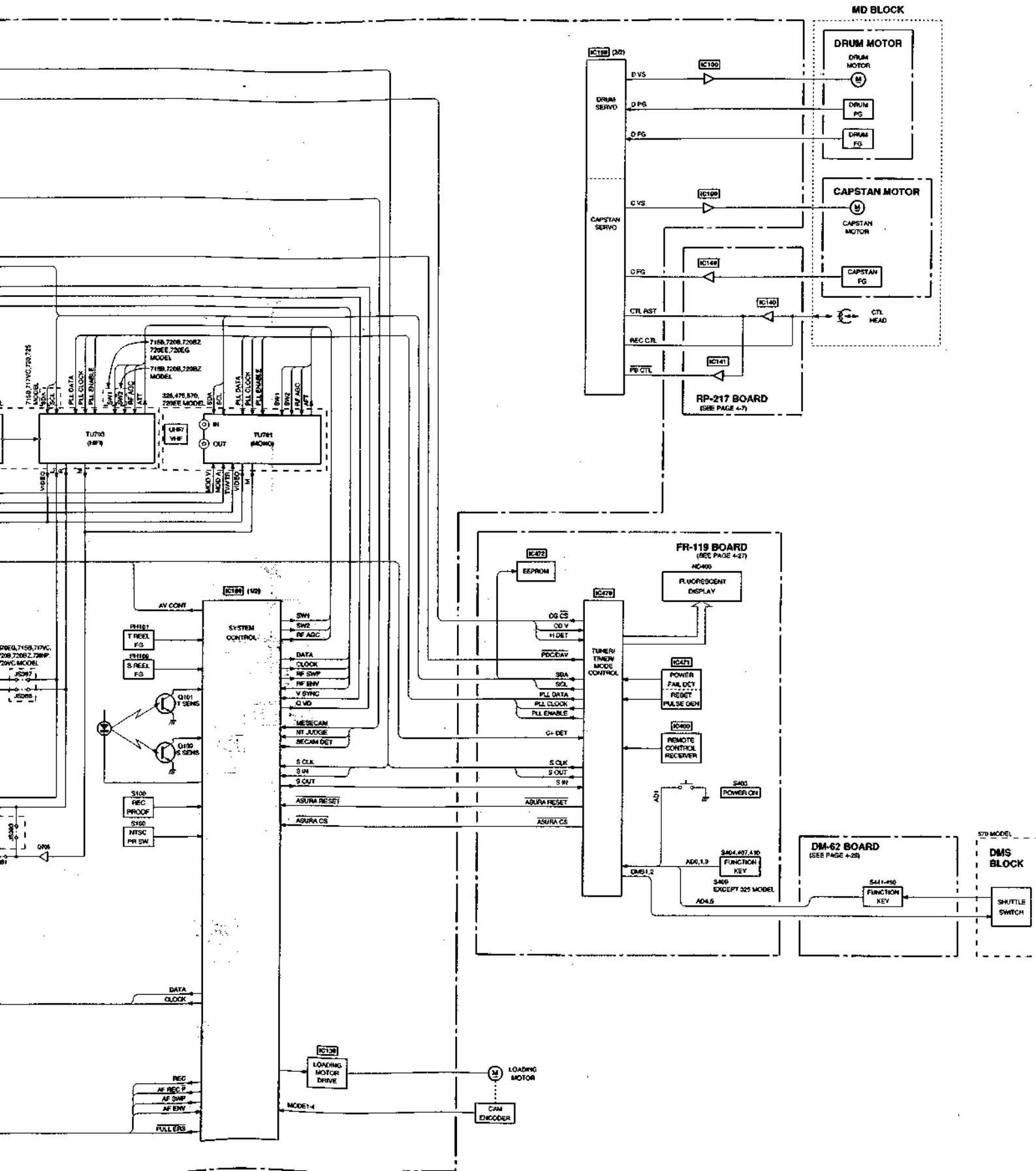
3. HOW TO REMOVE A CASSETTE FROM A MACHINE IF A CASSETTE IS LEFT IN A MACHINE IN TROUBLE

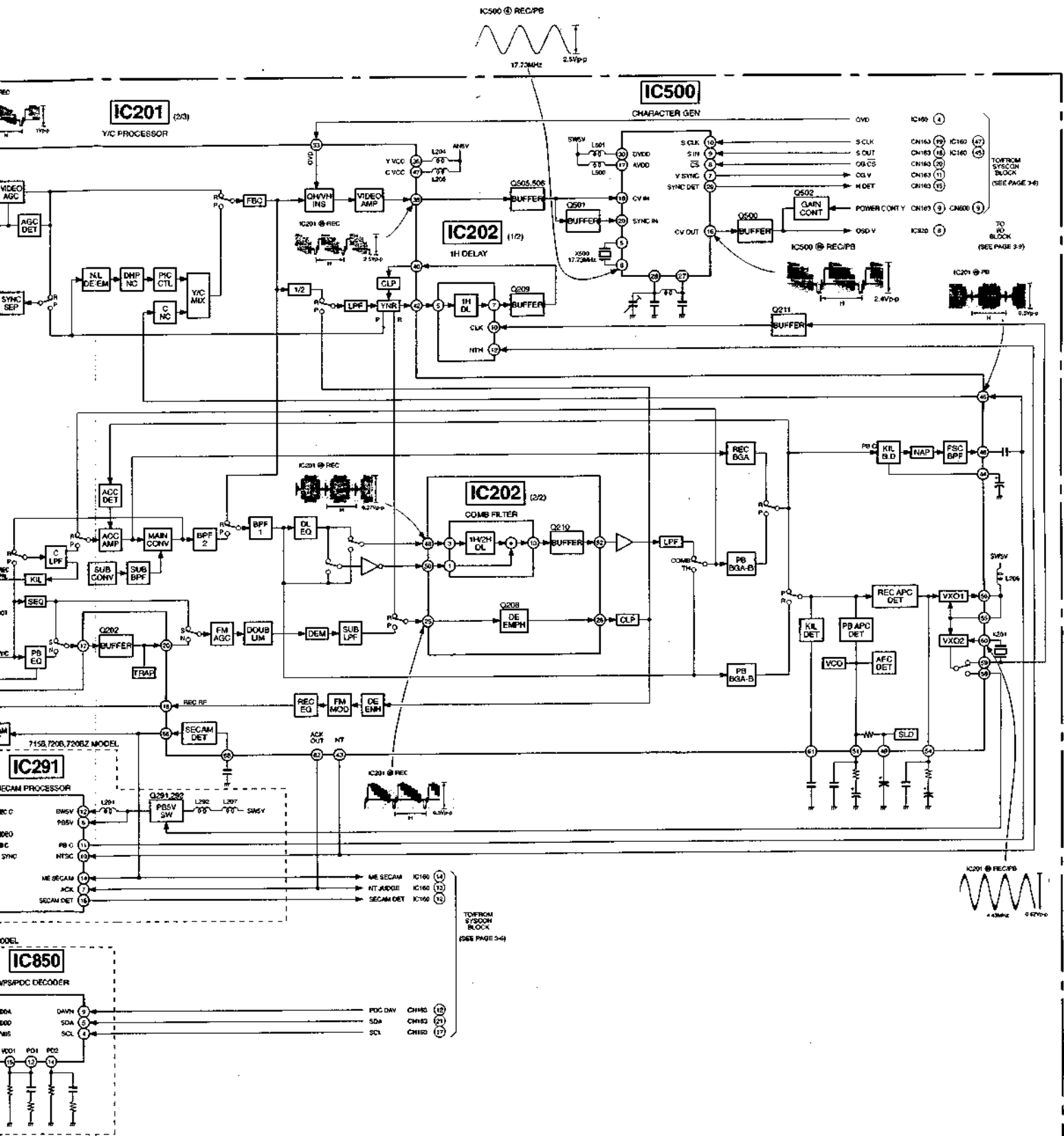
Execute the section 2, and keep rotating the flywheel-1.

When executing section 1 to 3, take care that a tape slack should not be caught by a mechanism or a tape should not be damaged.

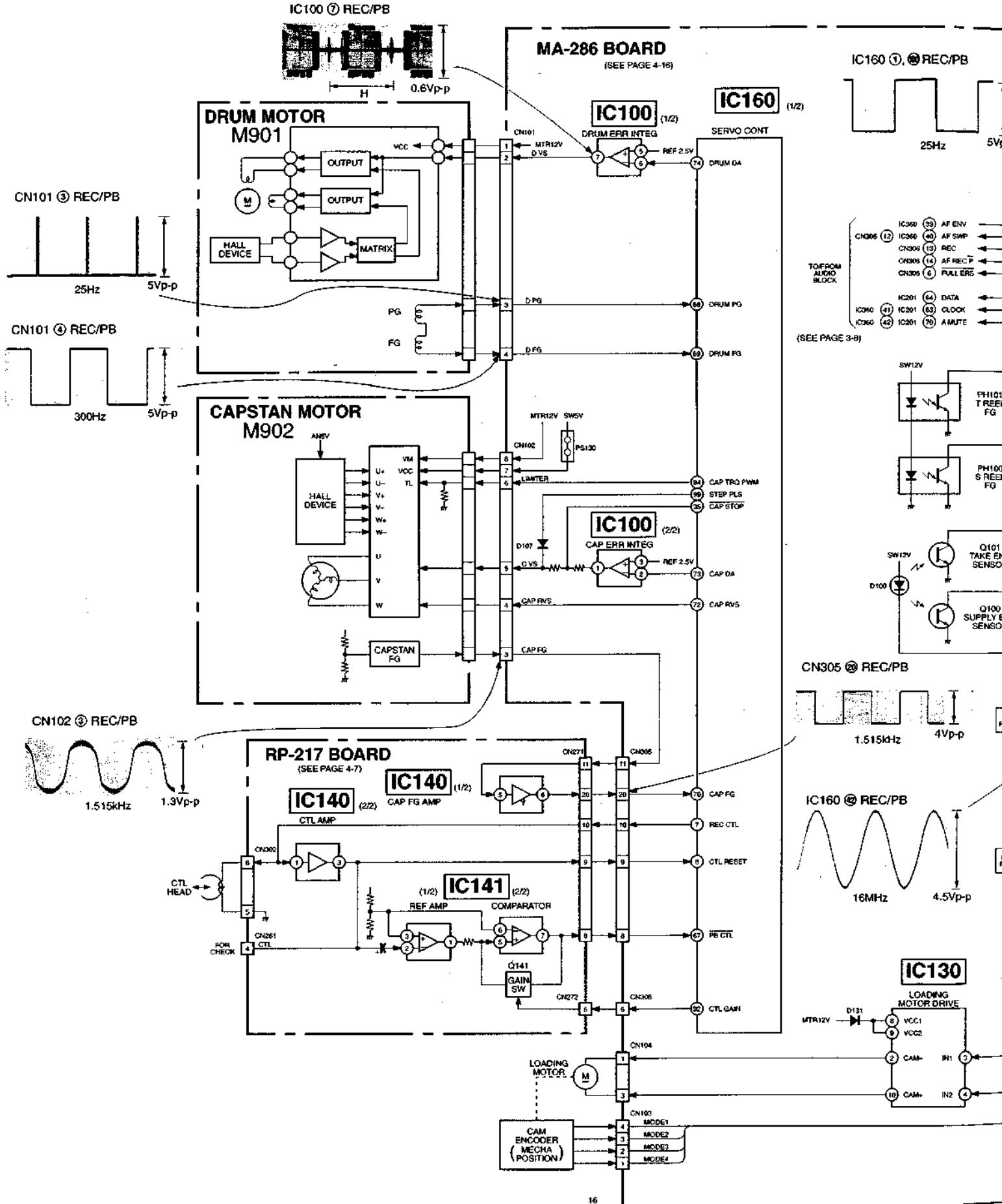
4. HOW TO REMOVE DRUM ASSEMBLY





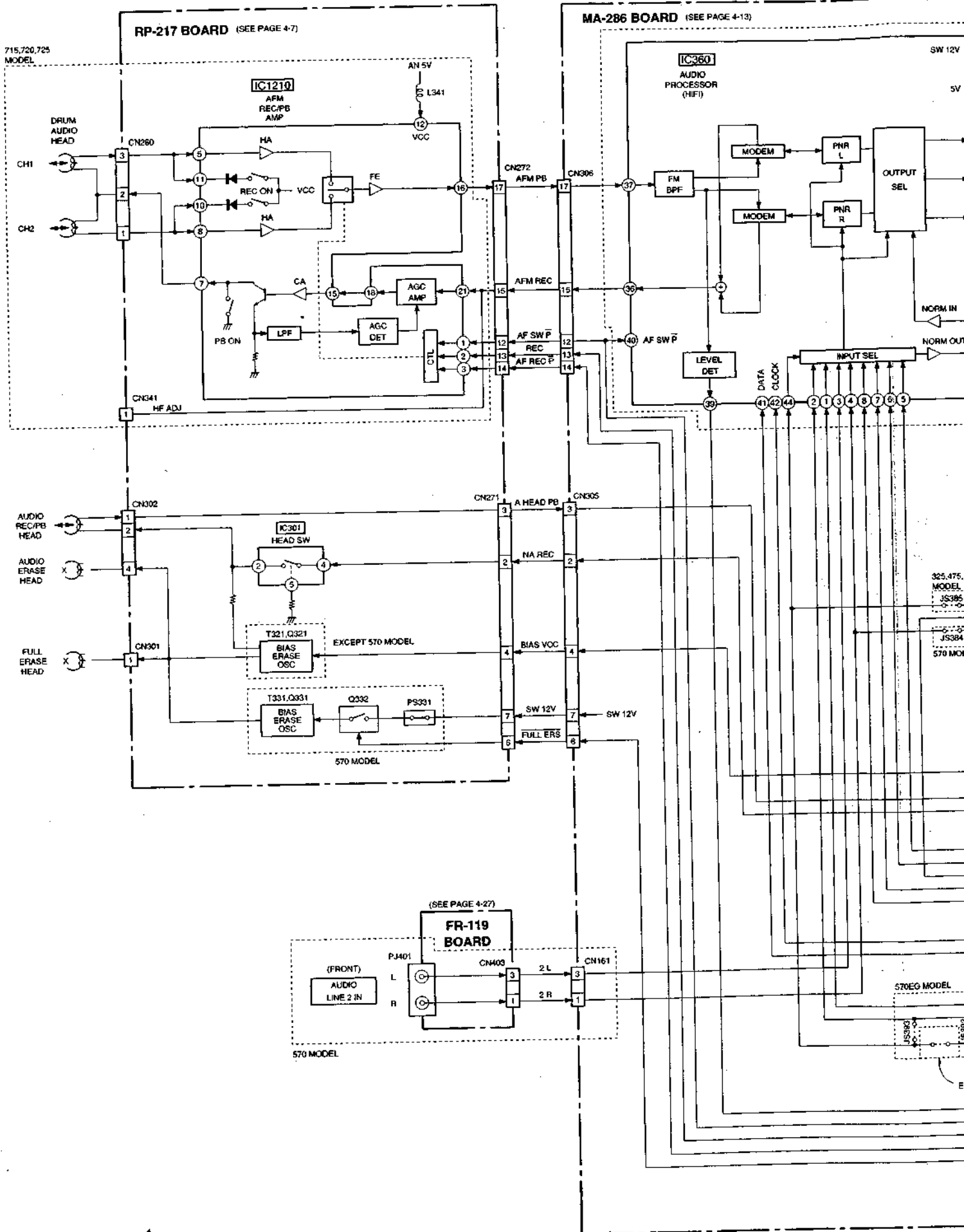


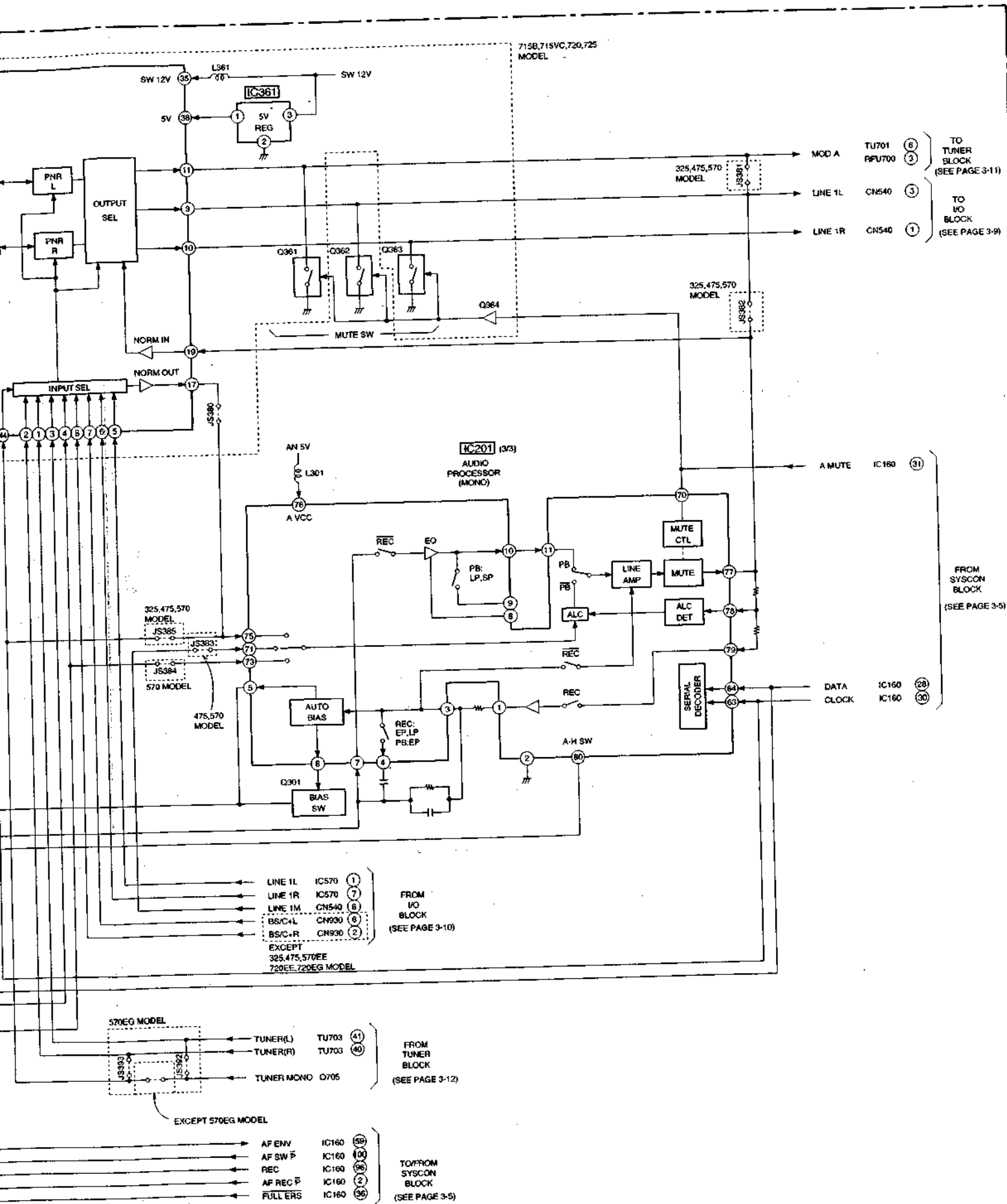
3-3. SERVO, SYSTEM CONTROL BLOCK DIAGRAM



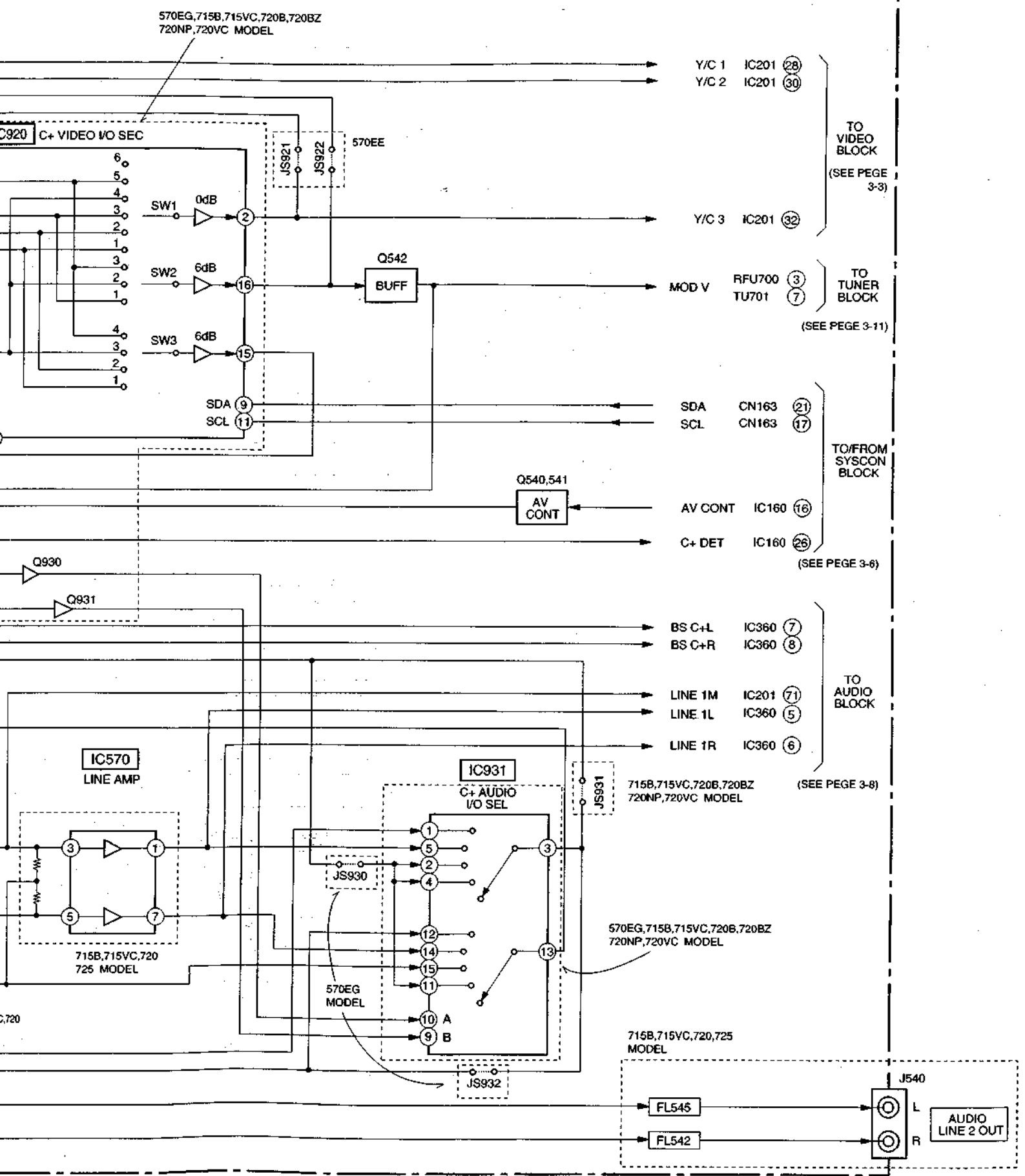
SLV-E325EG/E475EG/E570EE/E570EG/E715B/E717VC/E720B/E720BZ/E720EE/
E720EG/E720EX/E720NC/E720NP/E720UX/E720VC/E720VP/E725NC

3-4. AUDIO BLOCK DIAGRAM

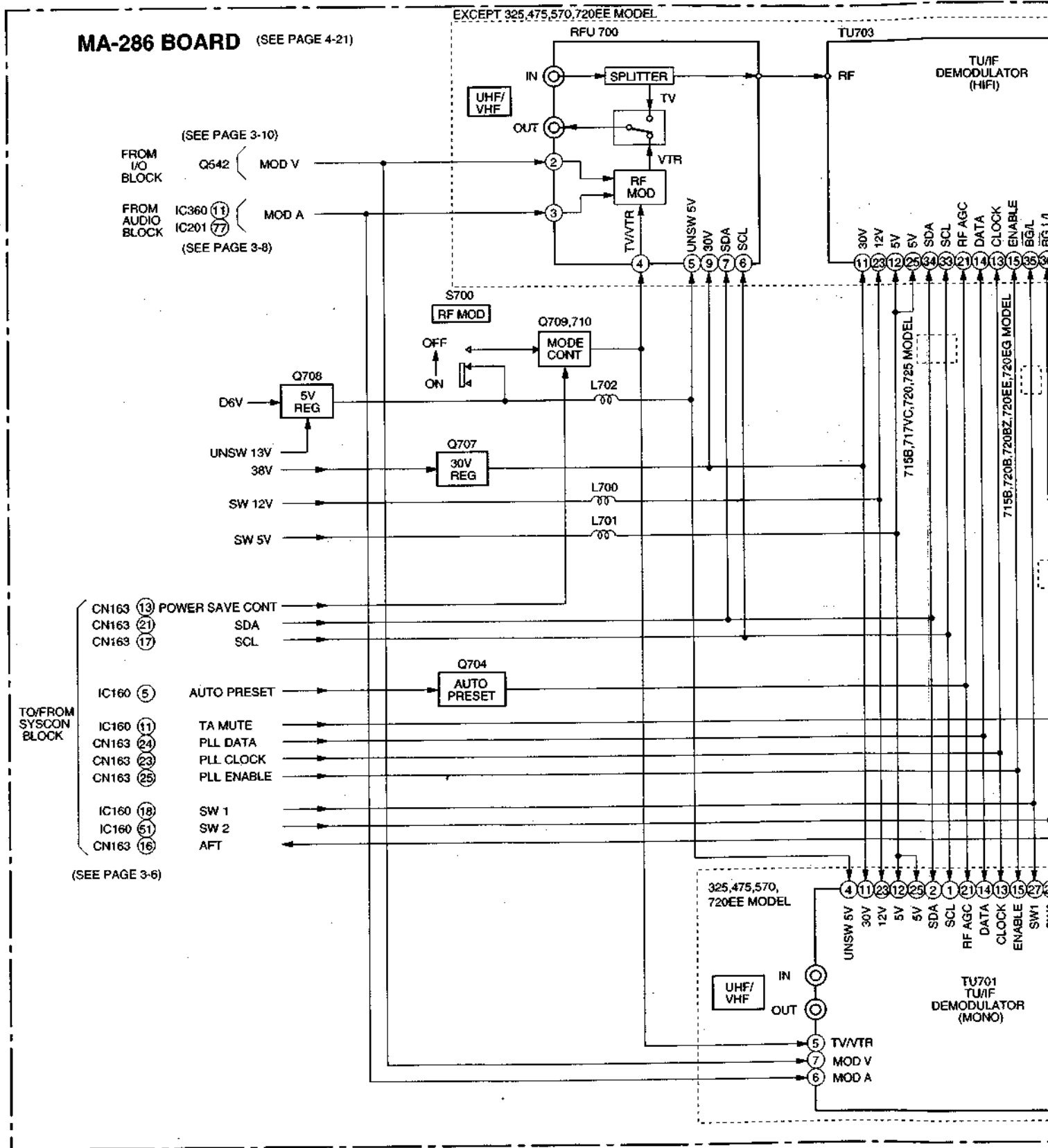


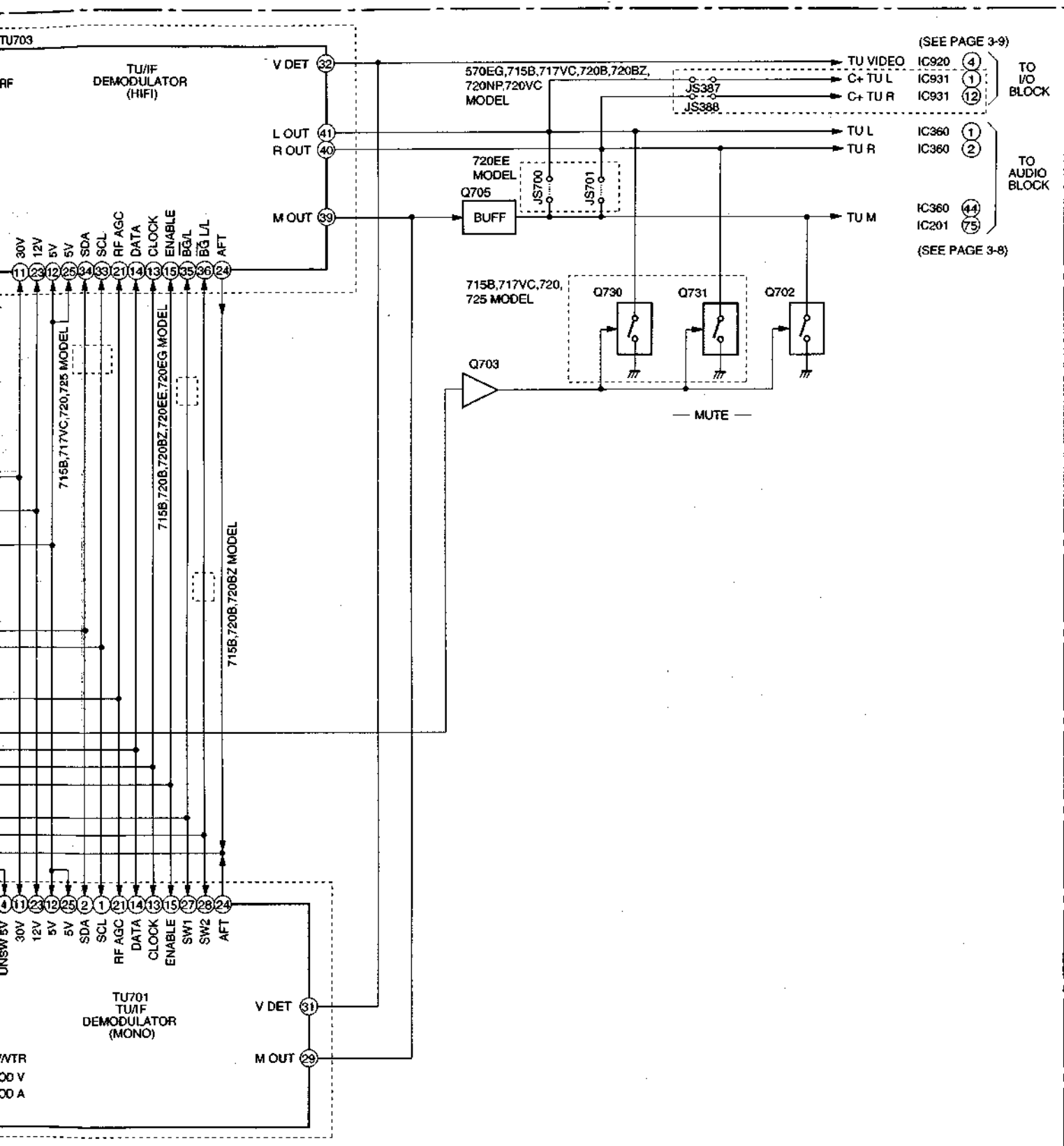


BOARD (SEE PAGE 4-23)

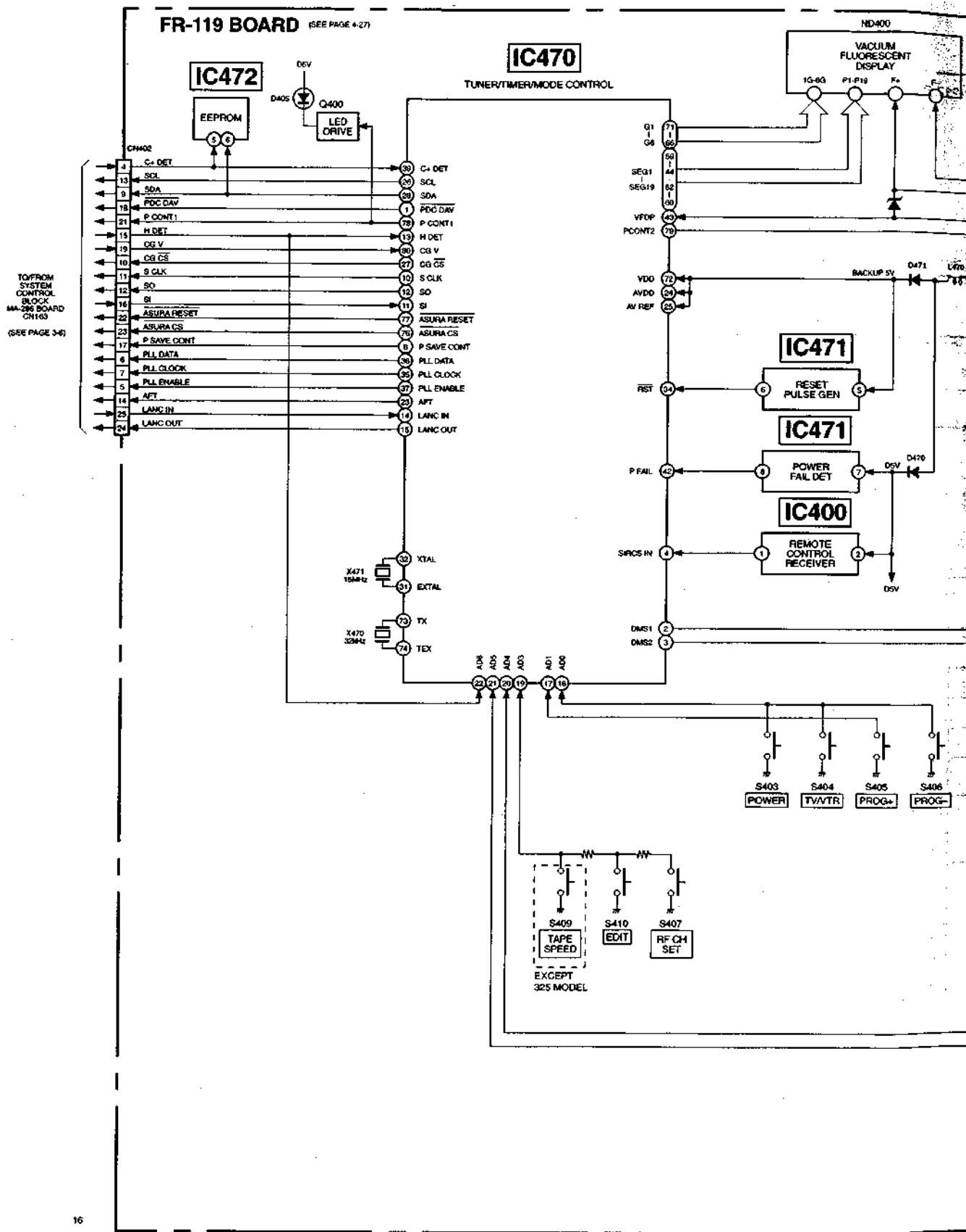


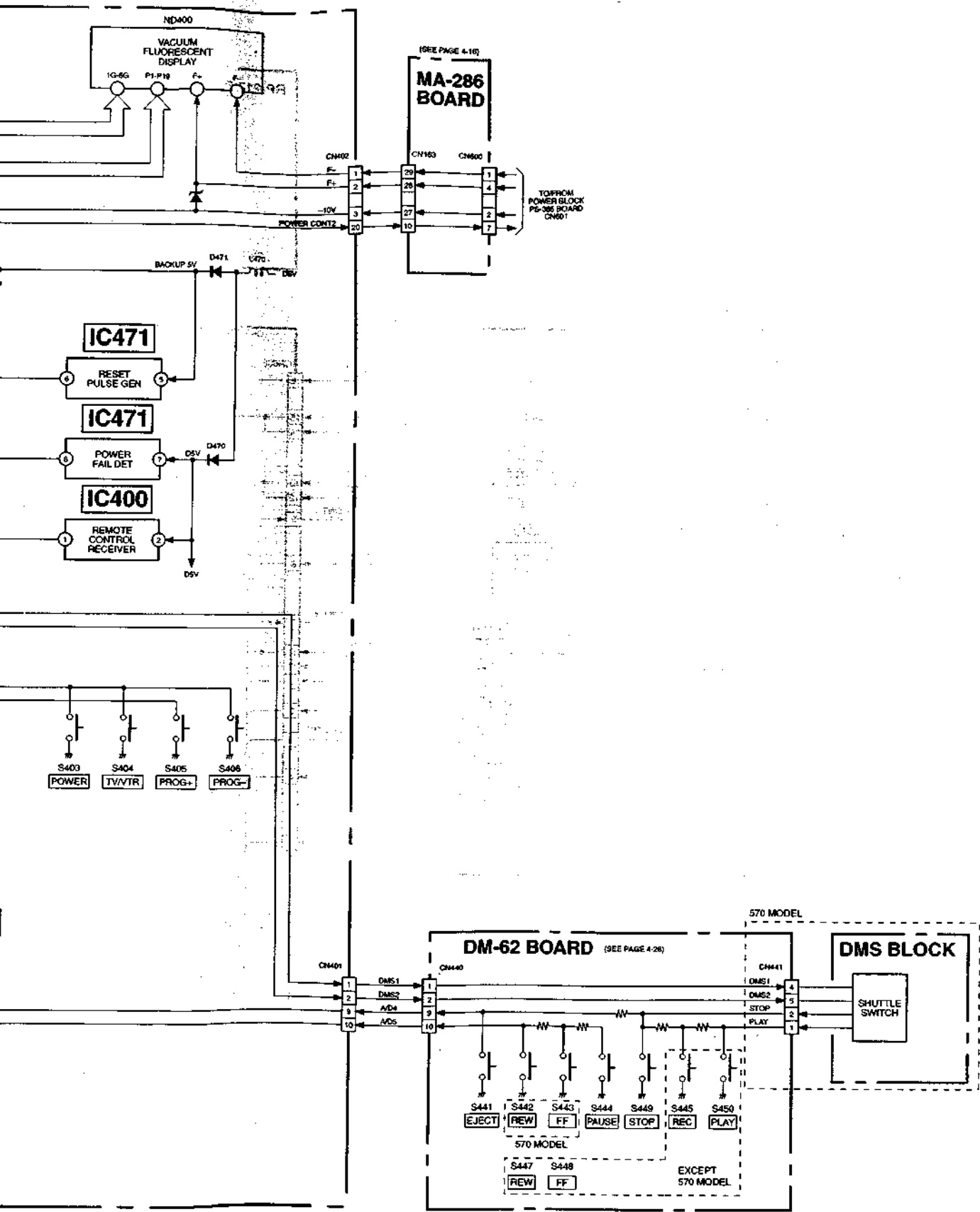
3-6. TUNER BLOCK DIAGRAM



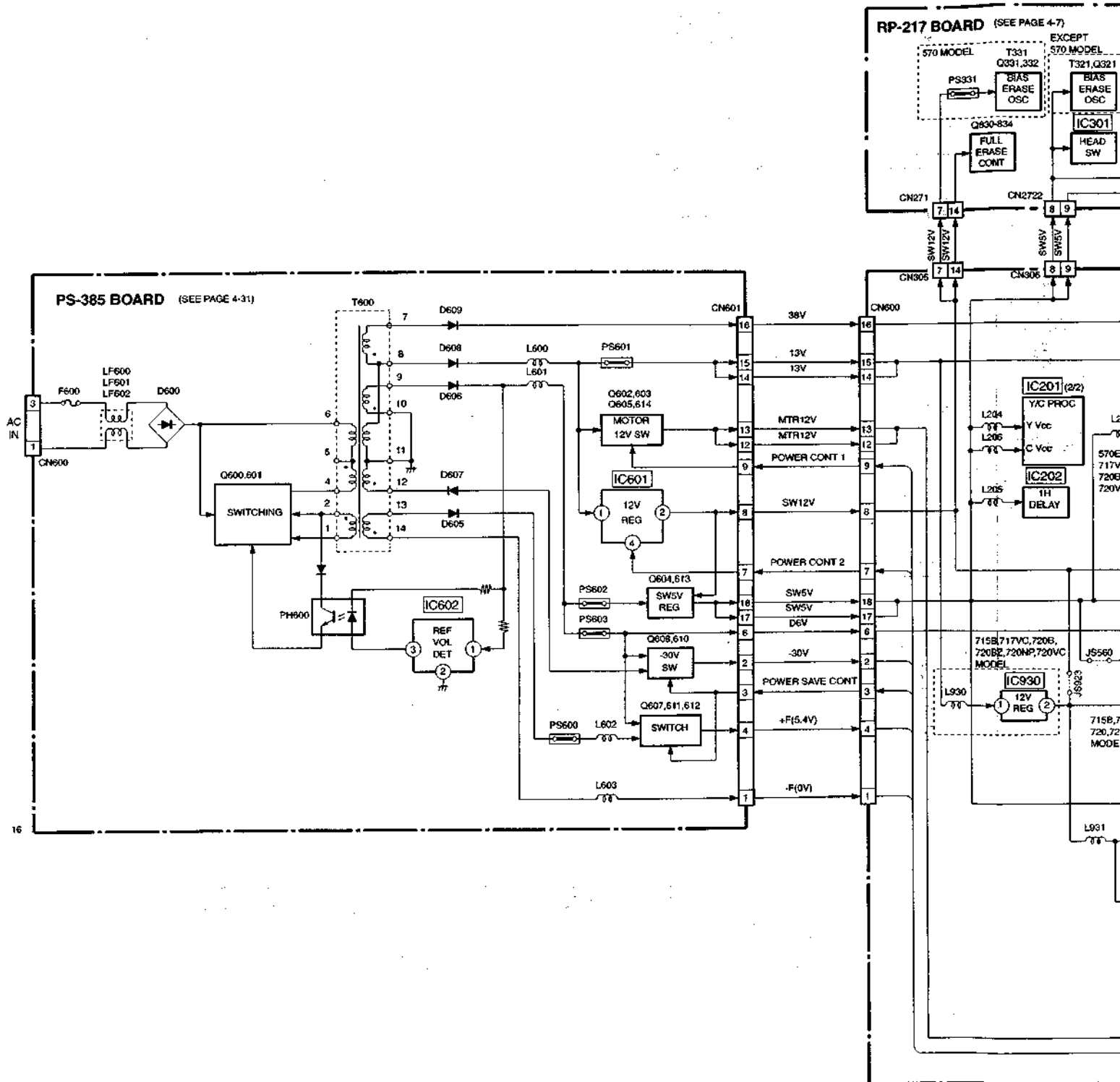


3-7. MODE CONTROL BLOCK DIAGRAM

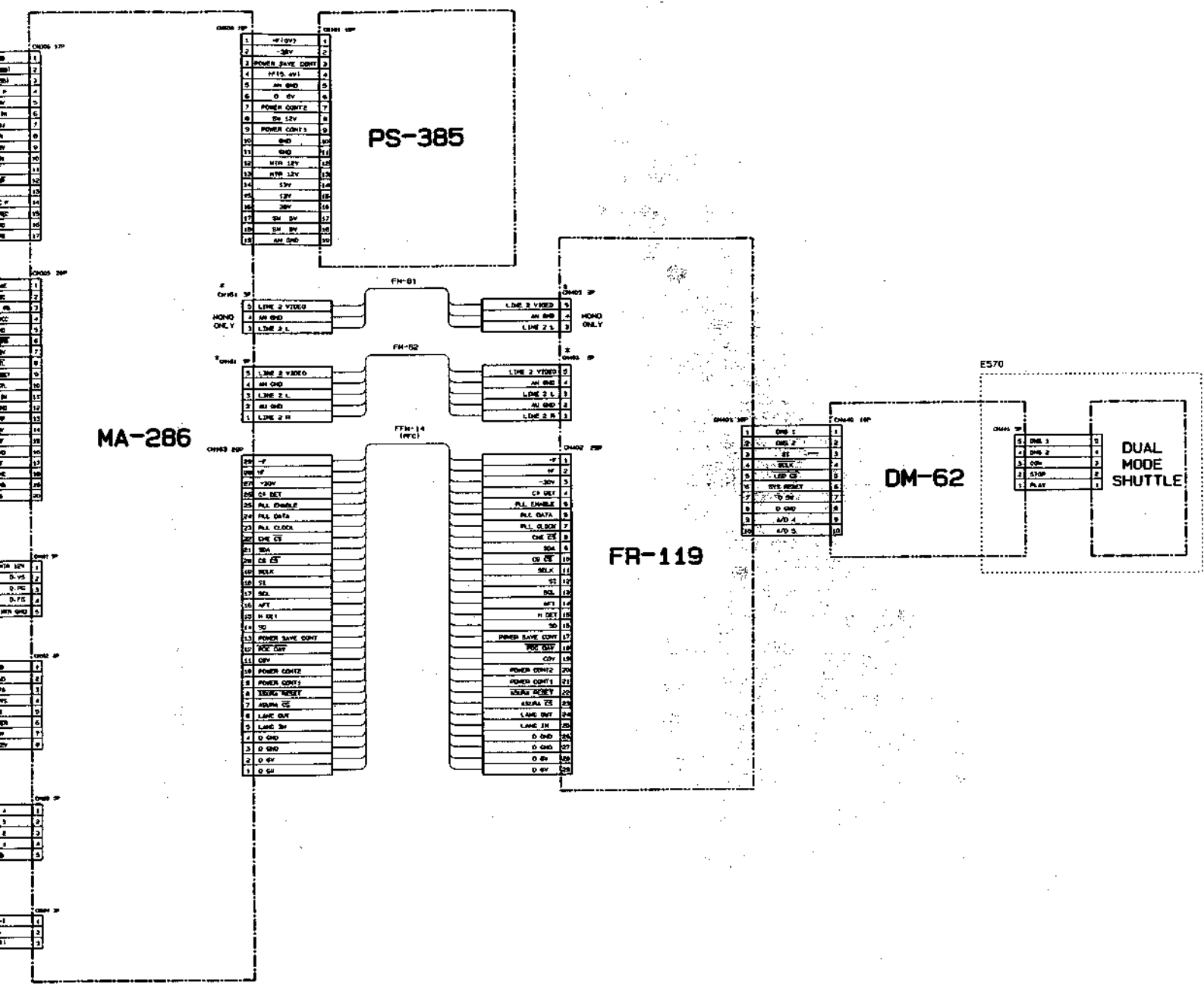




3-8. POWER SUPPLY BLOCK DIAGRAM



10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23




4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

RP-217
— Ref.

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.
-  : Pattern from the side which enables seeing.

Caution :

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

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

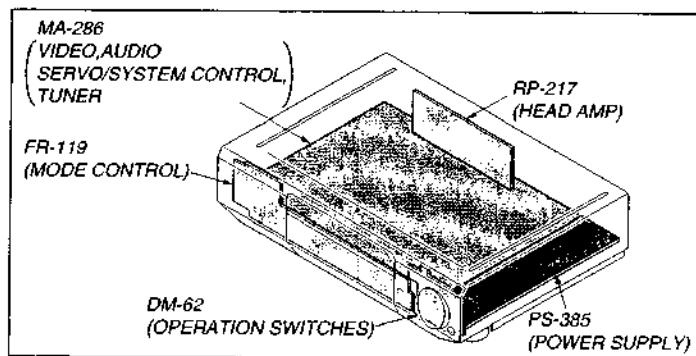
- For schematic diagrams.
- Caution when replacing chip parts. New parts must be attached after removal of chip. Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
- All resistor are in ohms, 1/4W unless otherwise noted. Chip resistor are 1/10W unless otherwise noted. kΩ: 1000Ω, MΩ, : 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF : μ μF. 50V or less are not indicated except for electrolytics and tantalums.
-  : panel designation.
-  : internal component.
-  : B+Line. *
-  : B+Line. *
-  : IN/OUT direction of (+,-) B LINE. *
- Circled numbers refer to waveforms. *
- Readings are taken with a PAL color-bar signal input.
- Voltage are dc between ground and measurement points.*
- Readings are taken with a dijital multimeter (DC10MΩ).*
- Voltage variations may be noted due to normal production tolerances.*

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

- * : indicated by the color red.

RP-217 BOARD

CN260	C-4
CN261	D-5
CN271	A-8
CN272	A-3
CN301	D-9
CN302	D-9
CN341	D-2
IC140	C-7
IC141	B-7
IC260	C-5
IC301	C-8
IC340	C-2
Q141	C-7
Q260	C-6
Q321	C-9
Q331	A-9
Q332	B-9



A

B

C

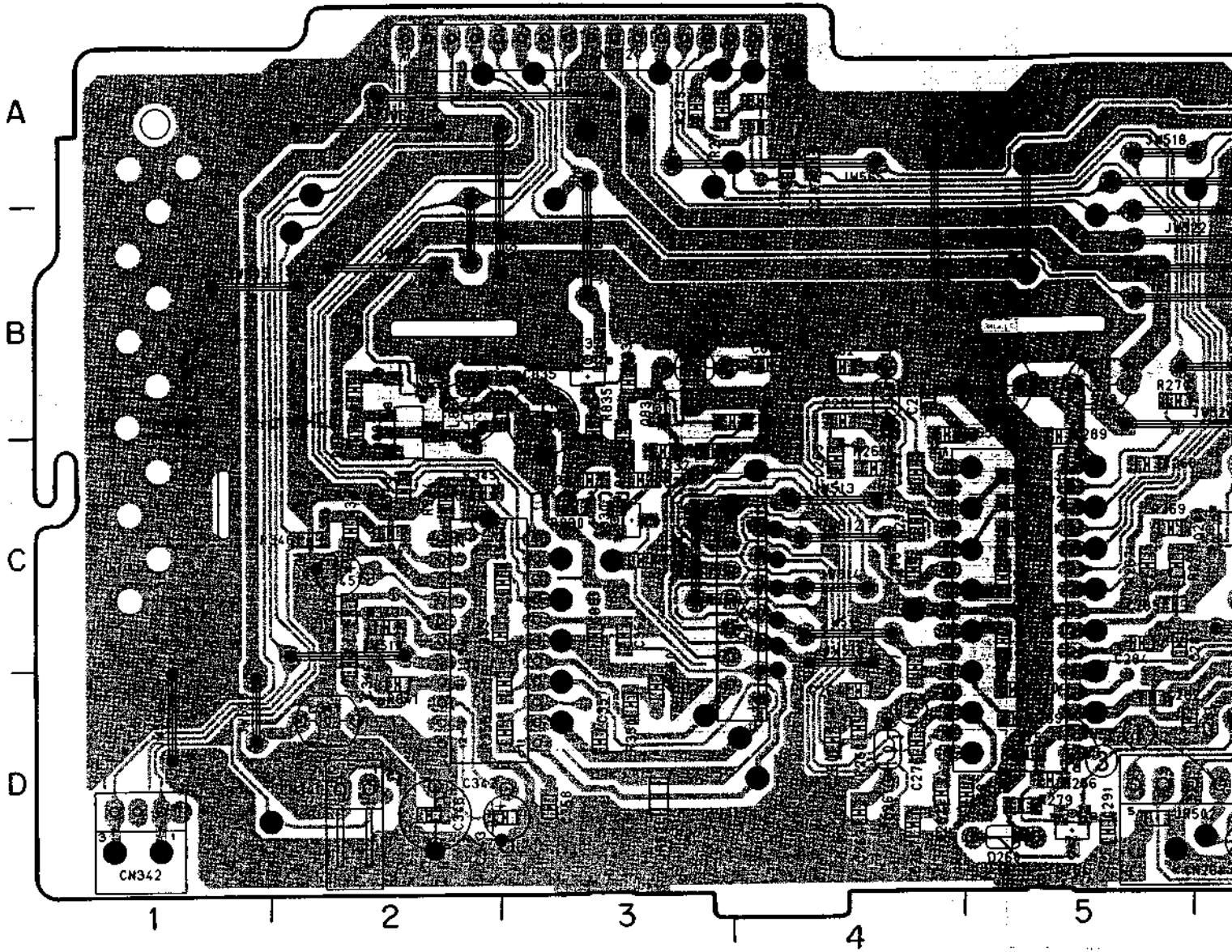
D

RP-217 (HEAD AMP) PRINTED WIRING BOARD

— Ref. No. RP-217 Board; 1,000 Series —

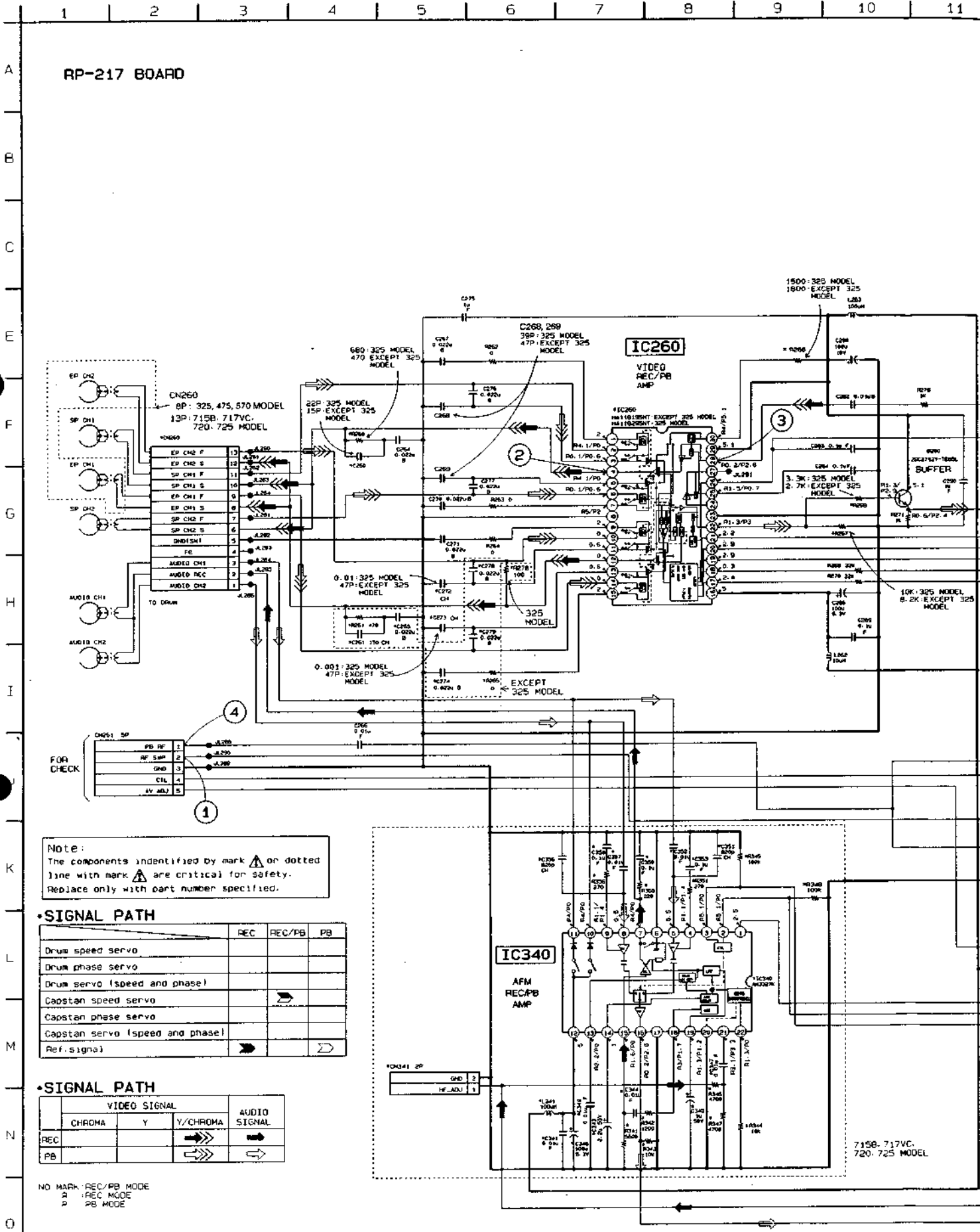
There are few cases that the part printed on this diagram isn't mounted in

RP-217 BOARD (CONDUCTOR SIDE)

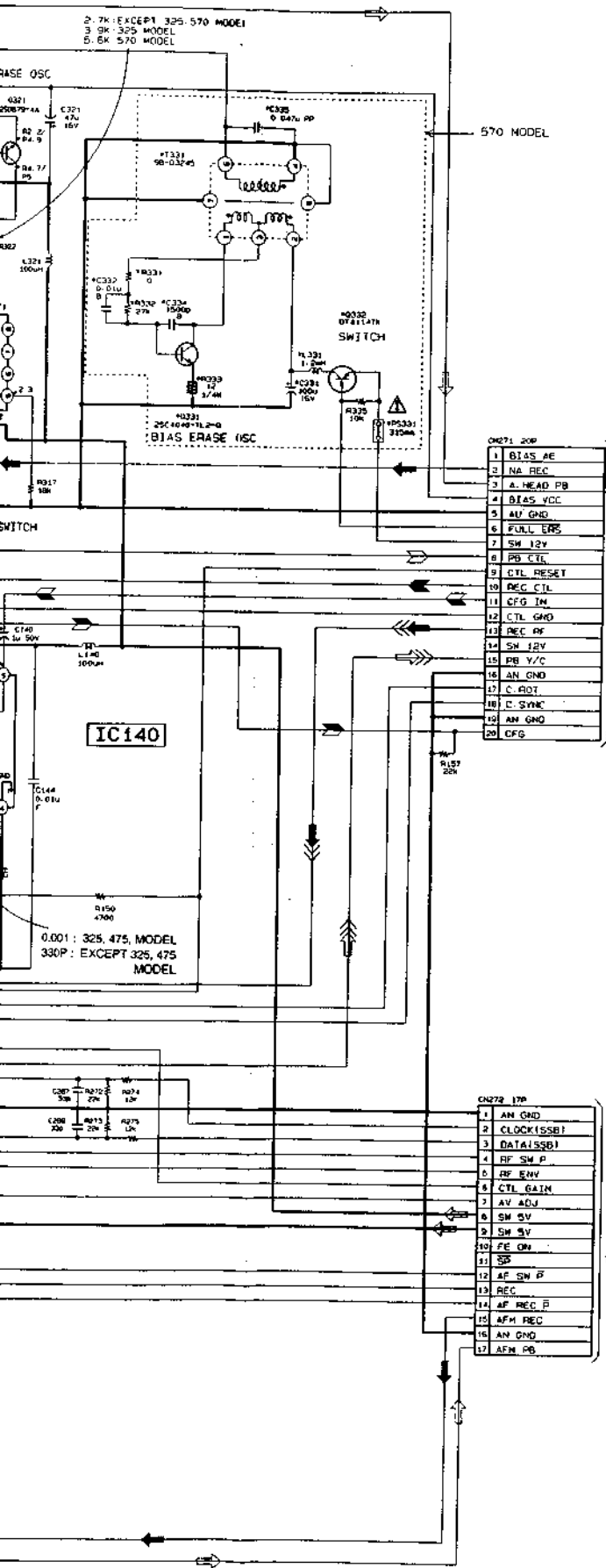


RP-217 (HEAD AMP) SCHEMATIC DIAGRAM

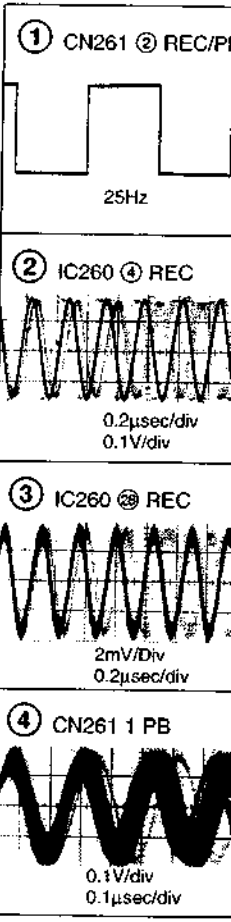
— Ref. No. RP-217 Board; 1,000 Series —



19 | 20 | 21 | 22 | 23 | 24 | 25



RP-217 BOARD



**SLV-E325EG/E475EG/E570EE/E570EG/E715B/E717VC/E720B/E720BZ/E720EE/
E720EG/E720EX/E720NC/E720NP/E720UX/E720VC/E720VP/E725NC**

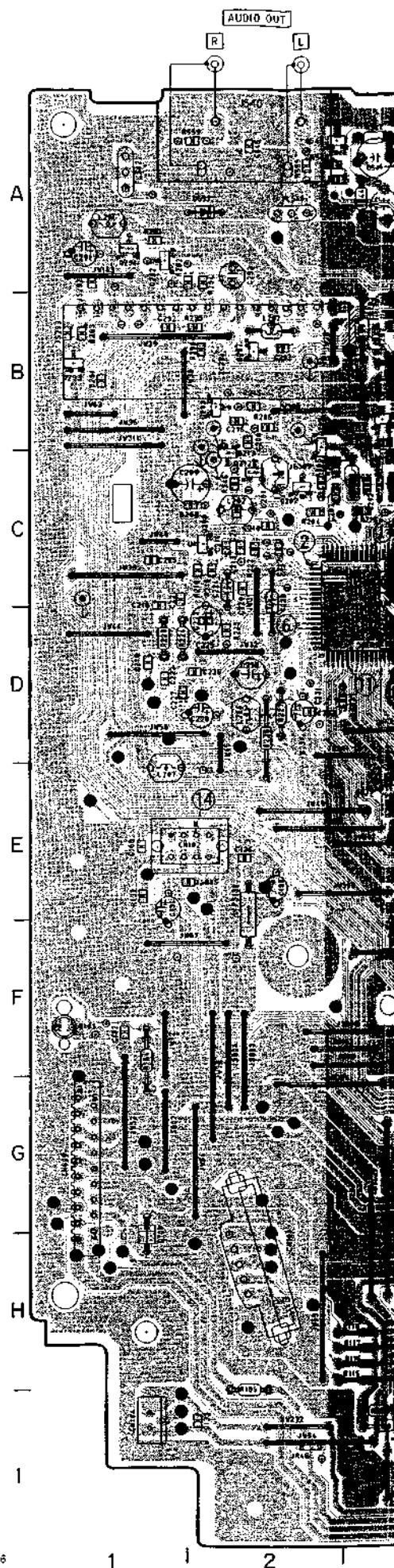
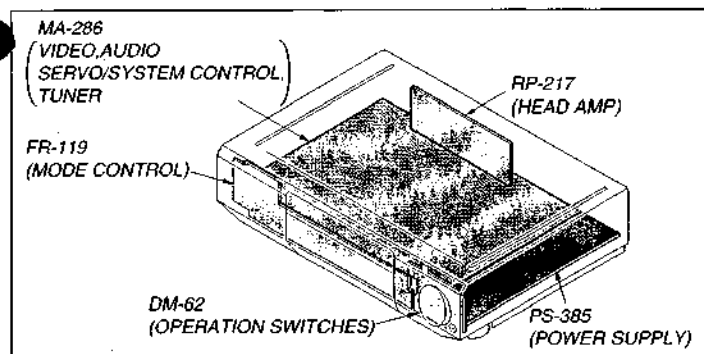
MA-286 (VIDEO, SERVO/SYSTEM CONTROL, AUDIO, TUNER) PRINTED WIRING BOARD

— Ref. No. MA-286 Board; 2,000 Series —

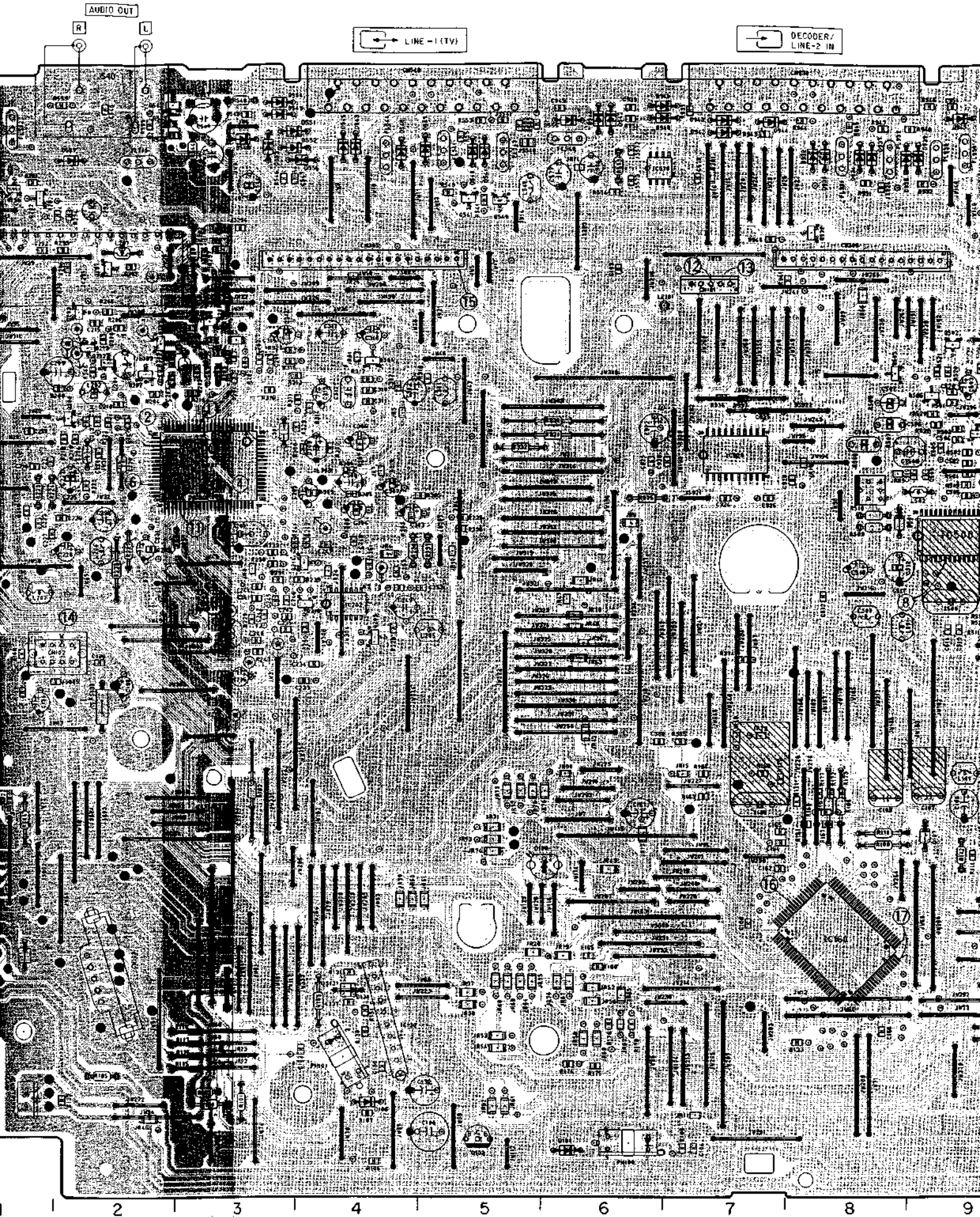
MA-286 BOARD (CONDUCTOR SIDE)

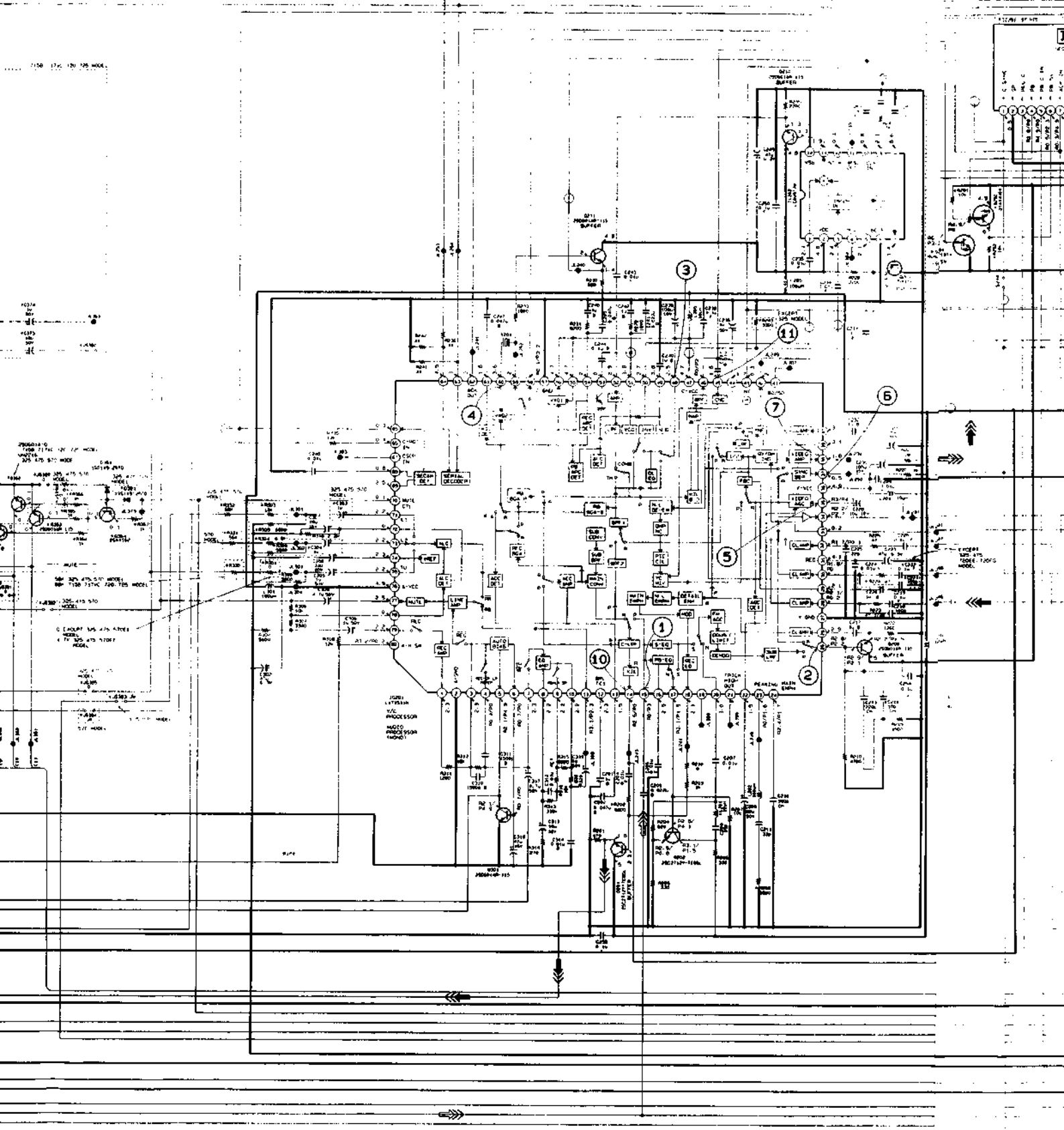
MA-286 BOARD

CN101	B-7	D703	B-12	Q202	C-2
CN102	E-2	D704	A-12	Q203	B-2
CN103	H-2	D930	F-10	Q205	B-2
CN104	I-1	D932	A-8	Q208	C-2
CN161	E-11	D933	A-9	Q209	E-4
CN163	I-12	D934	A-8	Q210	E-4
CN164	I-10	D935	A-8	Q211	D-4
CN305	B-4	D936	A-9	Q291	A-1
CN306	B-8	D937	A-8	Q292	A-1
CN540	A-4	D938	A-9	Q293	B-1
CN600	G-1	D939	A-9	Q301	C-4
CN930	A-8	D940	A-7	Q361	C-11
		D941	A-7	Q362	C-11
D100	G-6	D942	A-7	Q363	B-11
D107	G-9	D943	A-7	Q364	B-10
D108	H-1	D944	A-7	Q500	C-9
D131	H-4	D945	A-9	Q501	C-9
D160	I-11			Q502	B-7
D301	C-10	IC100	G-9	Q505	C-8
D361	C-10	IC130	H-4	Q506	C-9
D501	D-8	IC160	G-8	Q540	A-5
D502	E-9	IC201	C-3	Q541	A-5
D503	E-9	IC202	E-4	Q542	A-2
D540	A-5	IC291	B-2	Q571	A-11
D541	A-5	IC360	D-11	Q702	G-12
D542	A-6	IC361	E-10	Q703	G-11
D543	A-4	IC500	D-9	Q704	E-13
D544	A-6	IC570	A-6	Q705	G-13
D545	A-4	IC850	G-12	Q707	B-12
D546	A-4	IC920	C-7	Q708	A-12
D547	A-5	IC930	B-11	Q709	A-12
D548	A-3	IC931	A-10	Q710	A-12
D549	A-2			Q730	G-12
D551	A-3	PH100	I-6	Q731	G-12
D552	A-3	PH101	H-4	Q850	H-12
D553	A-3			Q930	A-11
D554	A-2	Q100	F-10	Q931	A-11
D700	G-11	Q101	F-1	Q932	B-8
D701	B-12	Q102	I-5		
D702	C-12	Q201	B-3		



86 BOARD (CONDUCTOR SIDE)



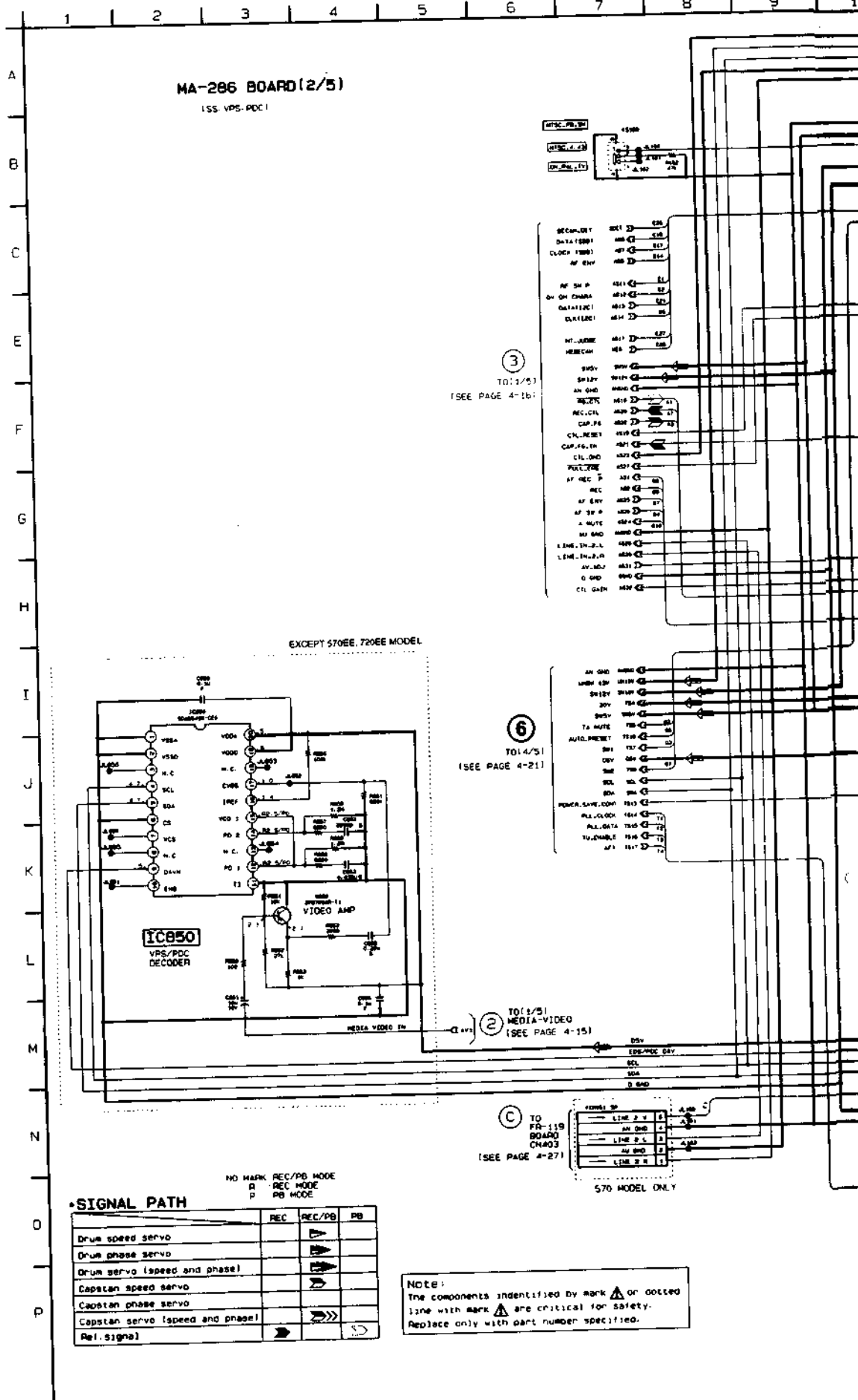
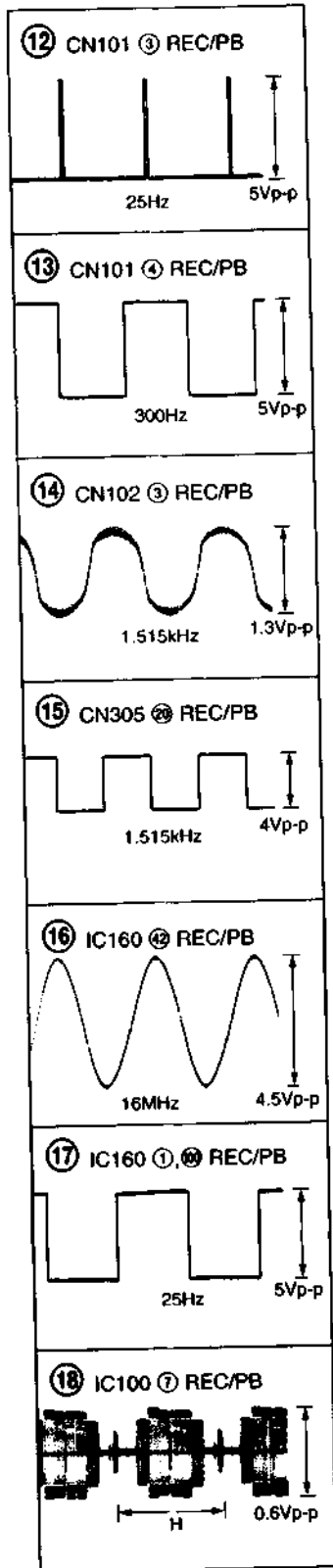


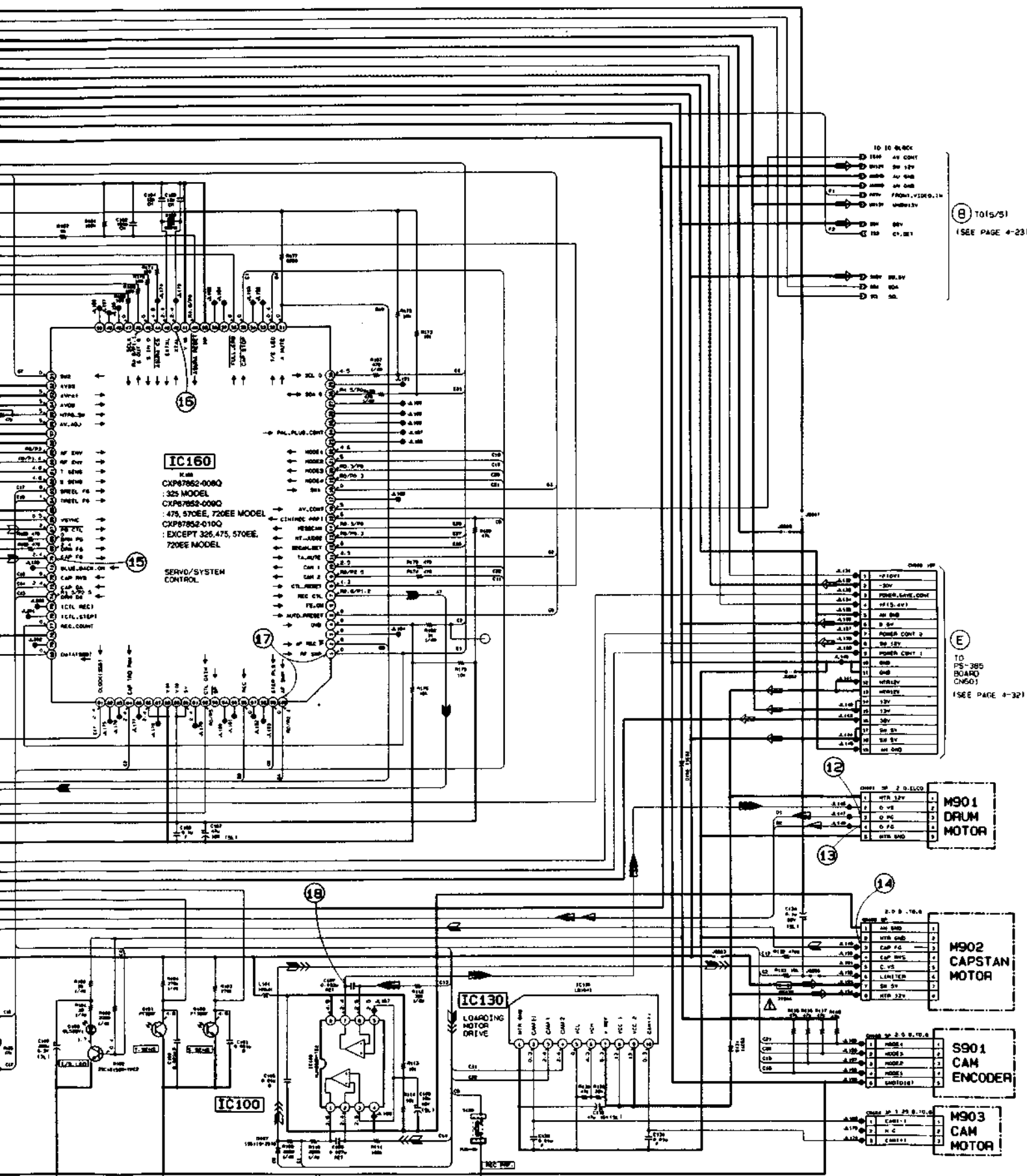
MA-286 (SERVO/SYSTEM CONTROL) SCHEMATIC DIAGRAM

• See page 4-10 for the MA-286 printed wiring board diagram.

— Ref. No. MA-286 Board: 2,000 Series —

MA-286 BOARD (2/3)





IC160
 KAM
 CXP87852-008Q
 : 325 MODEL
 CXP87852-009Q
 : 475, 570EE, 720EE MODEL
 CXP87852-010Q
 : EXCEPT 325, 475, 570EE,
 720EE MODEL

SERVO/SYSTEM CONTROL

IC130
 LOADING MOTOR DRIVE

IC100

- TO IO BLOCK
- 1566 AV CONT
 - 1567 SW 12V
 - 1568 SW 0V
 - 1569 SW 0V
 - 1570 SW 0V
 - 1571 SW 0V
 - 1572 SW 0V
 - 1573 SW 0V
 - 1574 SW 0V
 - 1575 SW 0V
 - 1576 SW 0V
 - 1577 SW 0V
 - 1578 SW 0V
 - 1579 SW 0V
 - 1580 SW 0V
 - 1581 SW 0V
 - 1582 SW 0V
 - 1583 SW 0V
 - 1584 SW 0V
 - 1585 SW 0V
 - 1586 SW 0V
 - 1587 SW 0V
 - 1588 SW 0V
 - 1589 SW 0V
 - 1590 SW 0V
 - 1591 SW 0V
 - 1592 SW 0V
 - 1593 SW 0V
 - 1594 SW 0V
 - 1595 SW 0V
 - 1596 SW 0V
 - 1597 SW 0V
 - 1598 SW 0V
 - 1599 SW 0V
 - 1600 SW 0V

(B) T015/51
 (SEE PAGE 4-23)

- TO PS-285 BOARD (CN50)
- 1 -P101
 - 2 -30V
 - 3 POWER.GATE.CONT
 - 4 -P13.4V
 - 5 SW 0V
 - 6 SW 0V
 - 7 POWER CONT 2
 - 8 SW 12V
 - 9 POWER CONT 1
 - 10 SW 0V
 - 11 SW 0V
 - 12 SW 12V
 - 13 SW 0V
 - 14 SW 0V
 - 15 SW 0V
 - 16 SW 0V
 - 17 SW 0V
 - 18 SW 0V
 - 19 SW 0V
 - 20 SW 0V
 - 21 SW 0V
 - 22 SW 0V
 - 23 SW 0V
 - 24 SW 0V
 - 25 SW 0V
 - 26 SW 0V
 - 27 SW 0V
 - 28 SW 0V
 - 29 SW 0V
 - 30 SW 0V
 - 31 SW 0V
 - 32 SW 0V

(E) TO PS-285 BOARD (CN50)
 (SEE PAGE 4-23)

M901
 DRUM MOTOR

M902
 CAPSTAN MOTOR

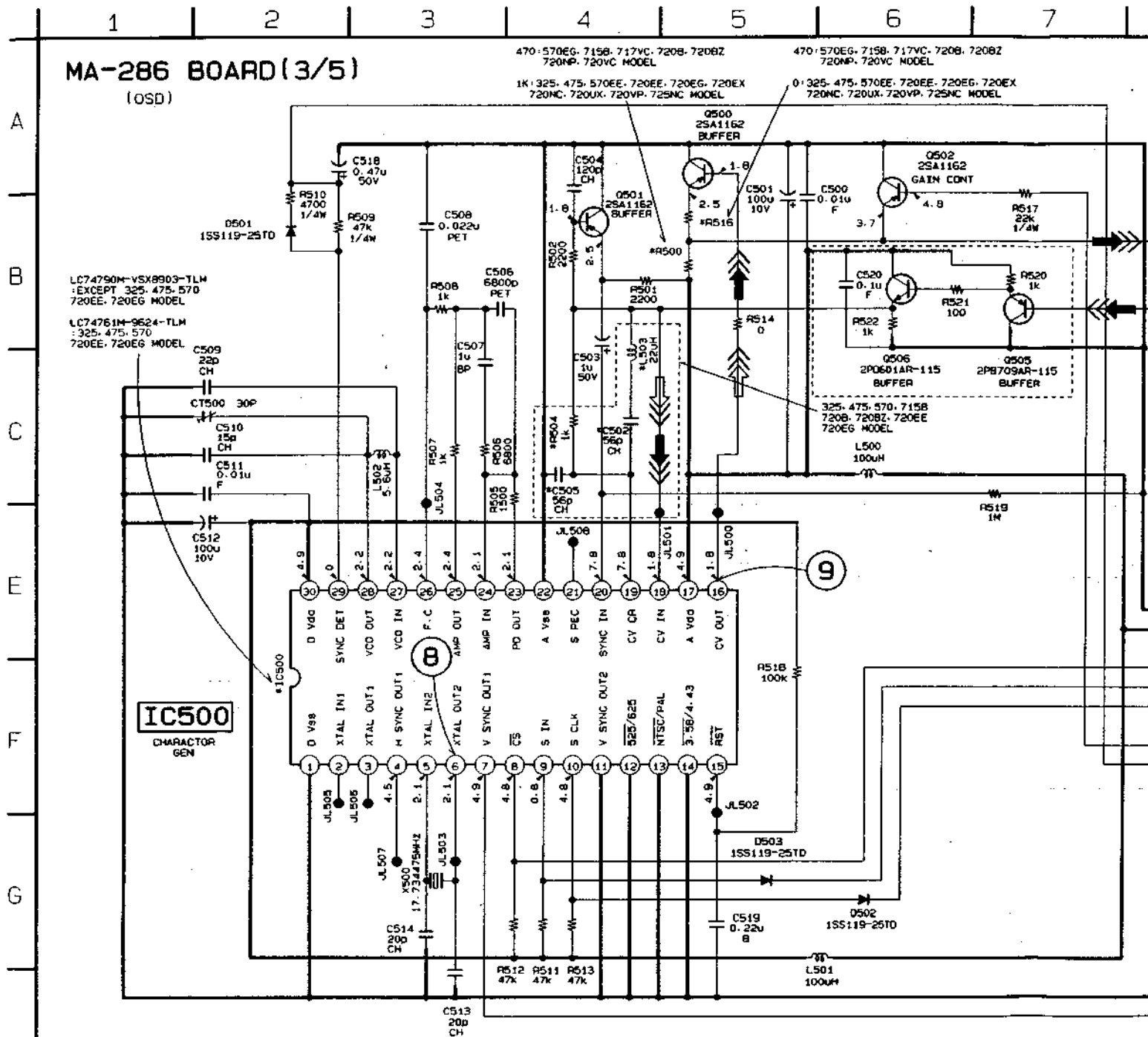
S901
 CAM ENCODER

M903
 CAM MOTOR

MA-286 (OSD) SCHEMATIC DIAGRAM

— Ref. No. MA-286 Board: 2,000 Series —

• See page 4-10 for the MA-286 printed wiring board diagram.



• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC			➡➡➡	
PB			➡➡➡	

NO MARK : REC/PB MODE
 P : REC MODE
 P : PB MODE

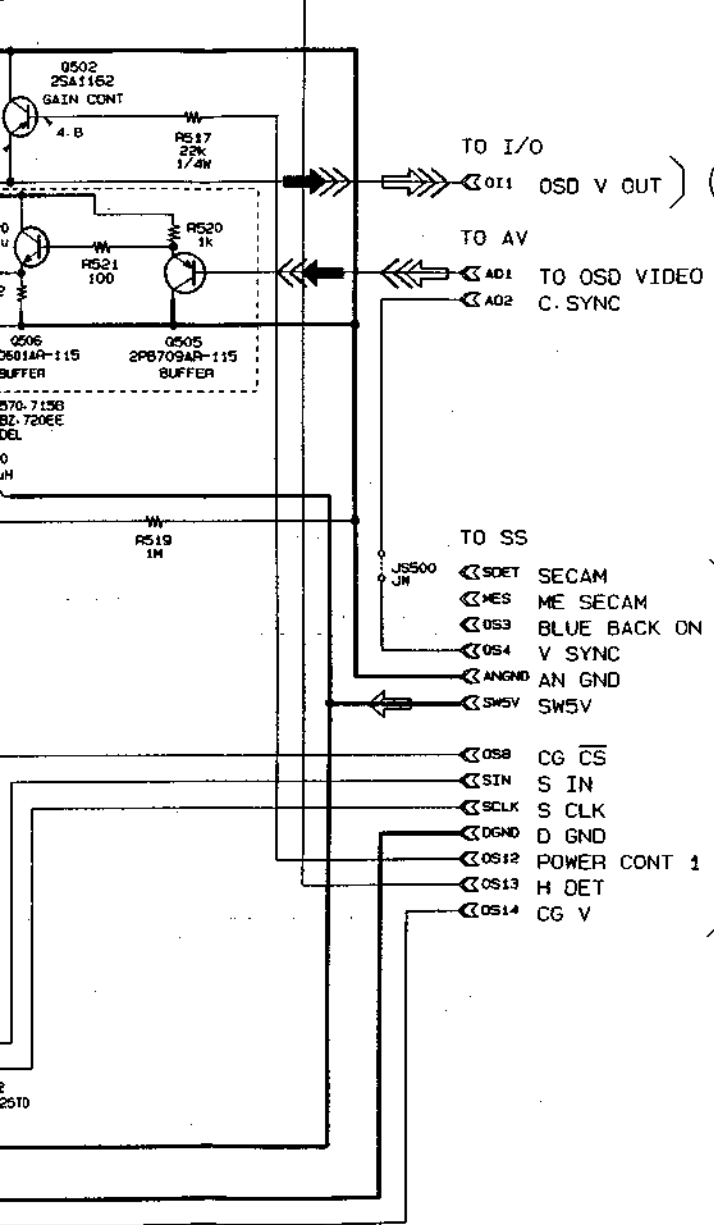
16

gram.

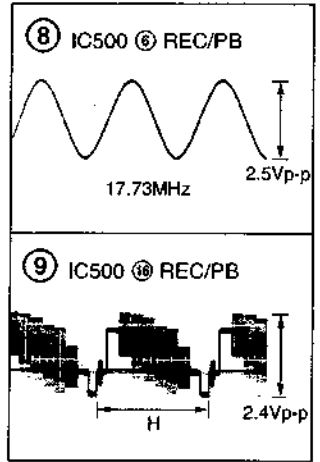


717VC, 720B, 720BZ
VC MODEL

720EE, 720EG, 720EX
720VP, 725NC MODEL



MA-286 BOARD (3/3)

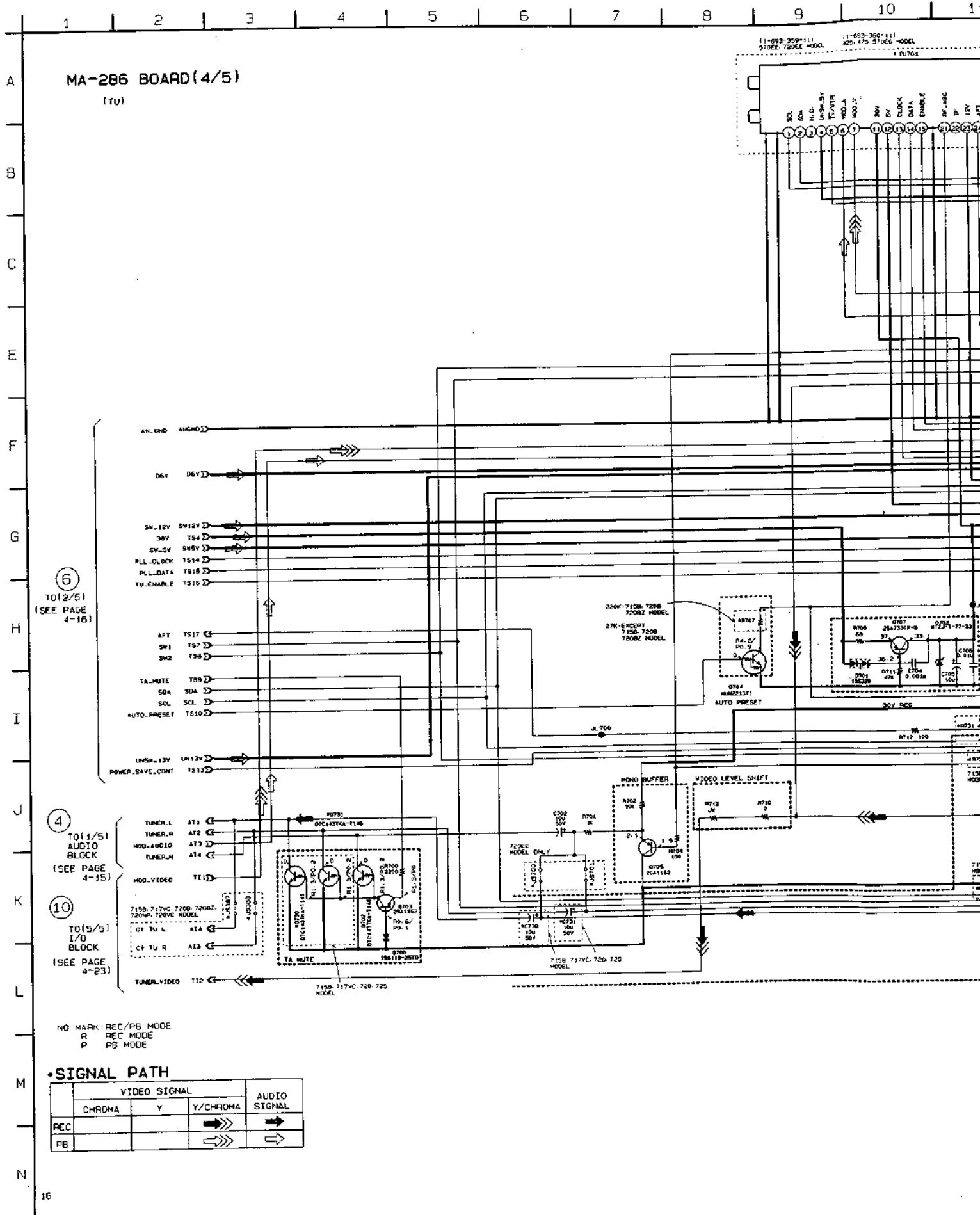


SLV-E325EG/E475EG/E570EE/E570EG/E715B/E717VC/E720B/E720BZ/E720EE/
E720EG/E720EX/E720NC/E720NP/E720UX/E720VC/E720VP/E725NC

MA-286 (TUNER) SCHEMATIC DIAGRAM

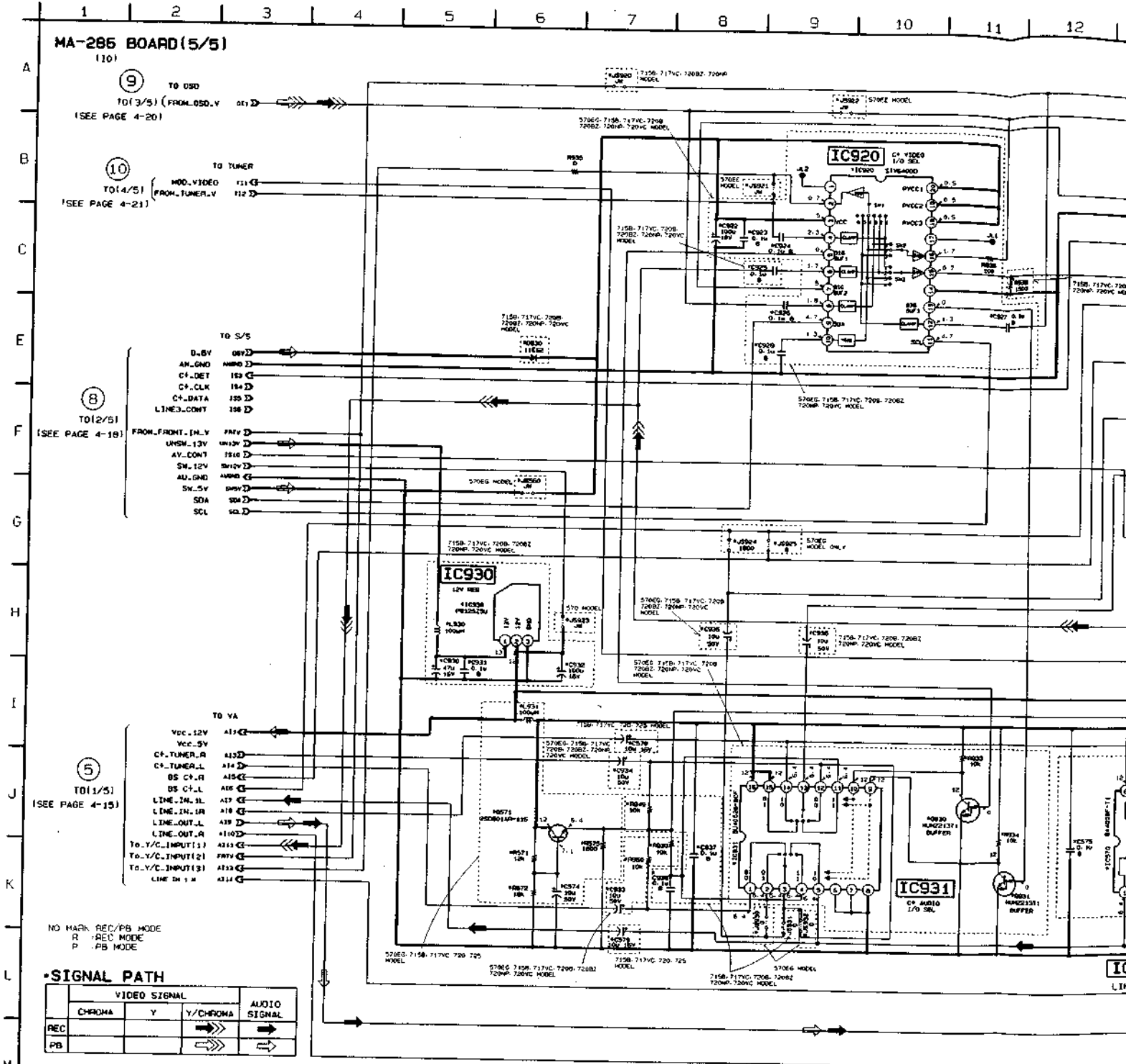
• See page 4-10 for the MA-286 printed wiring board diagram.

— Ref. No. MA-286 Board; 2,000 Series —



MA-286 (V/O) SCHEMATIC DIAGRAM
 — Ref. No. MA-286 Board; 2,000 Series —

• See page 4-10 for the MA-286 printed wiring board diagram.



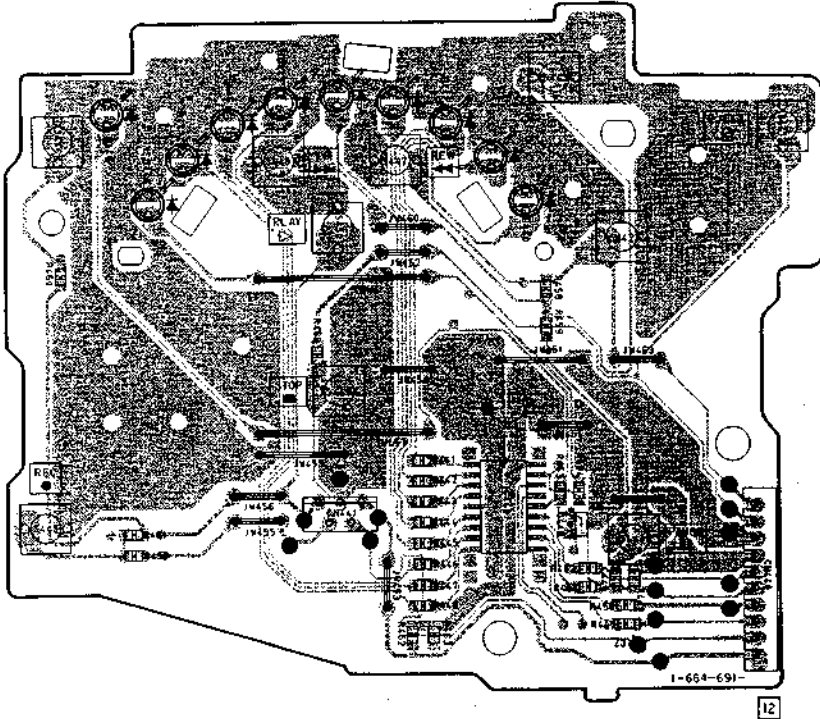
**SLV-E325EG/E475EG/E570EE/E570EG/E715B/E717VC/E720B/E720BZ/E720EE/
E720EG/E720EX/E720NC/E720NP/E720UX/E720VC/E720VP/E725NC**

DM-62 (OPERATION SWITCHES), FR-119 (MODE CONTROL) PRINTED WIRING BOARDS

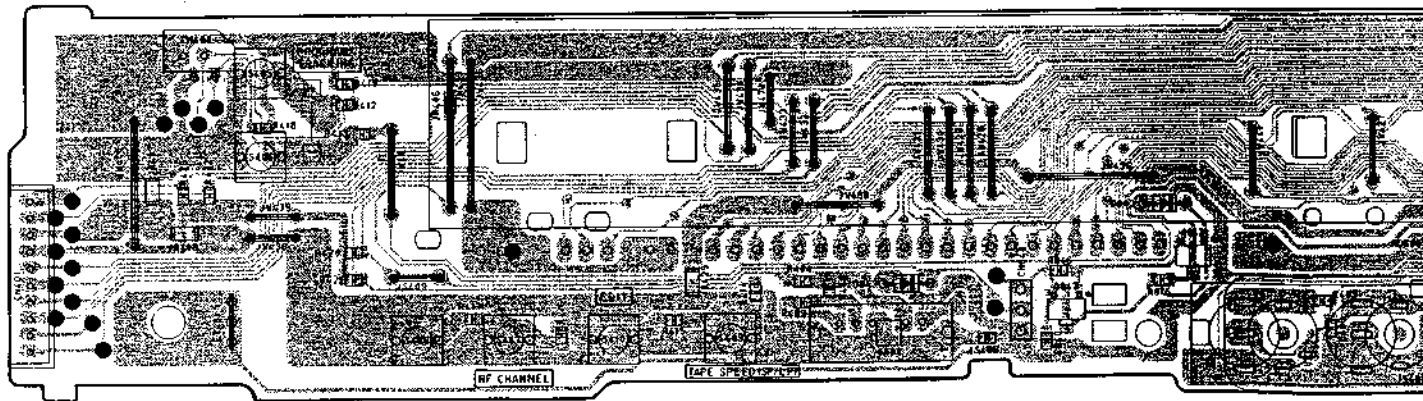
— Ref. No. DM-62 Board, FR-119 Board; 3,000 Series —

There are few cases that the p

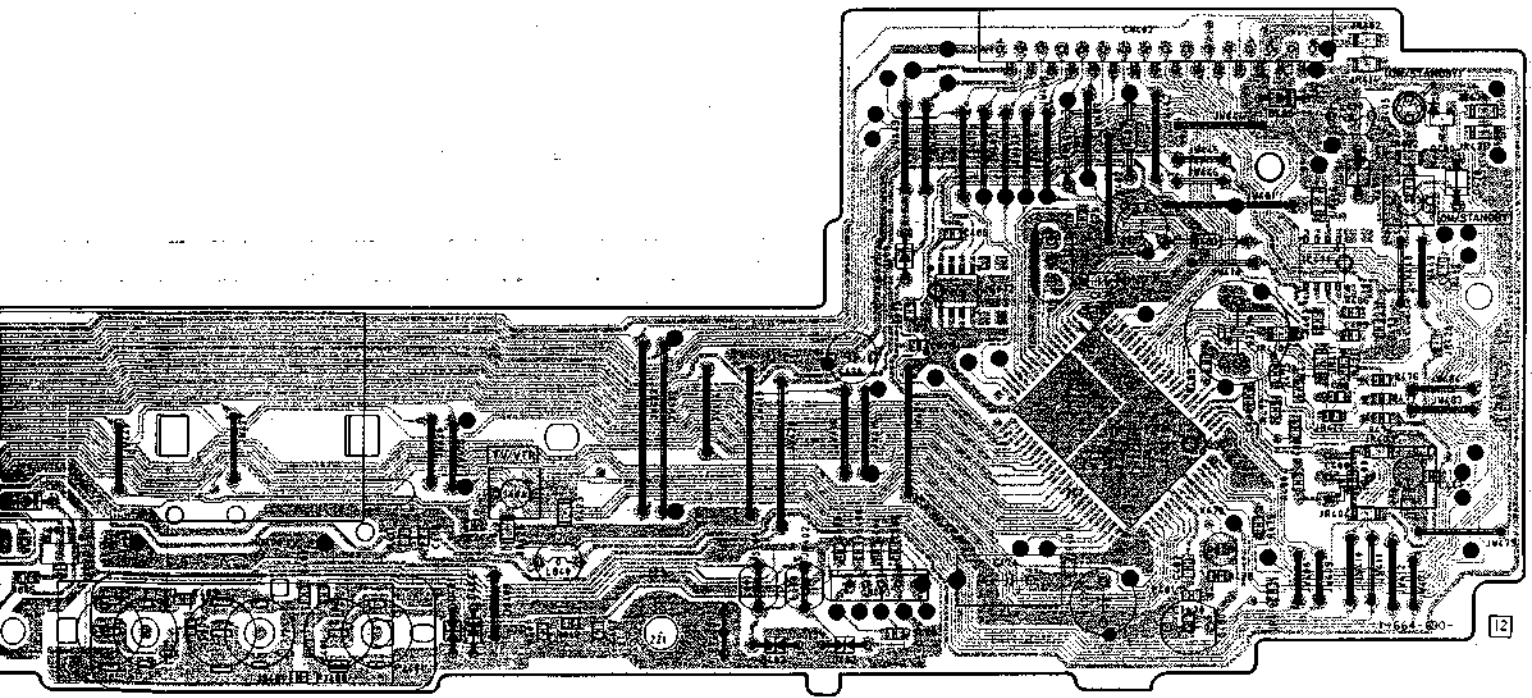
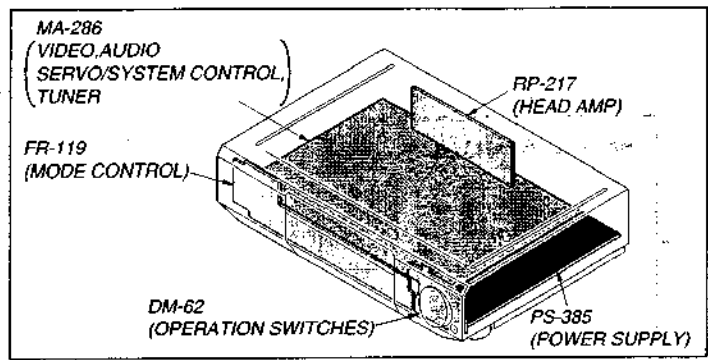
DM-62 BOARD (CONDUCTOR SIDE)



FR-119 BOARD (CONDUCTOR SIDE)

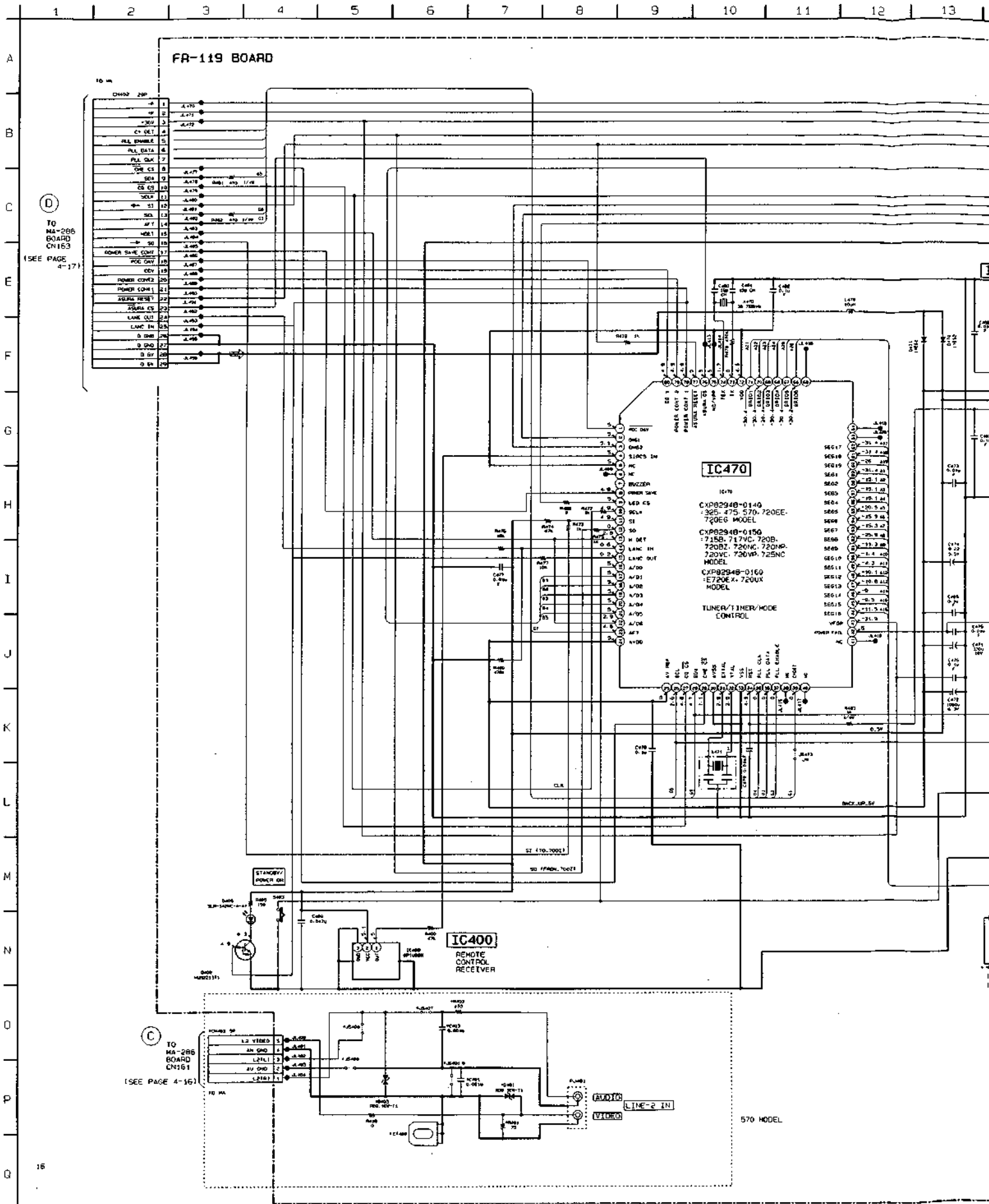


There are few cases that the part printed on this diagram isn't mounted in this model.

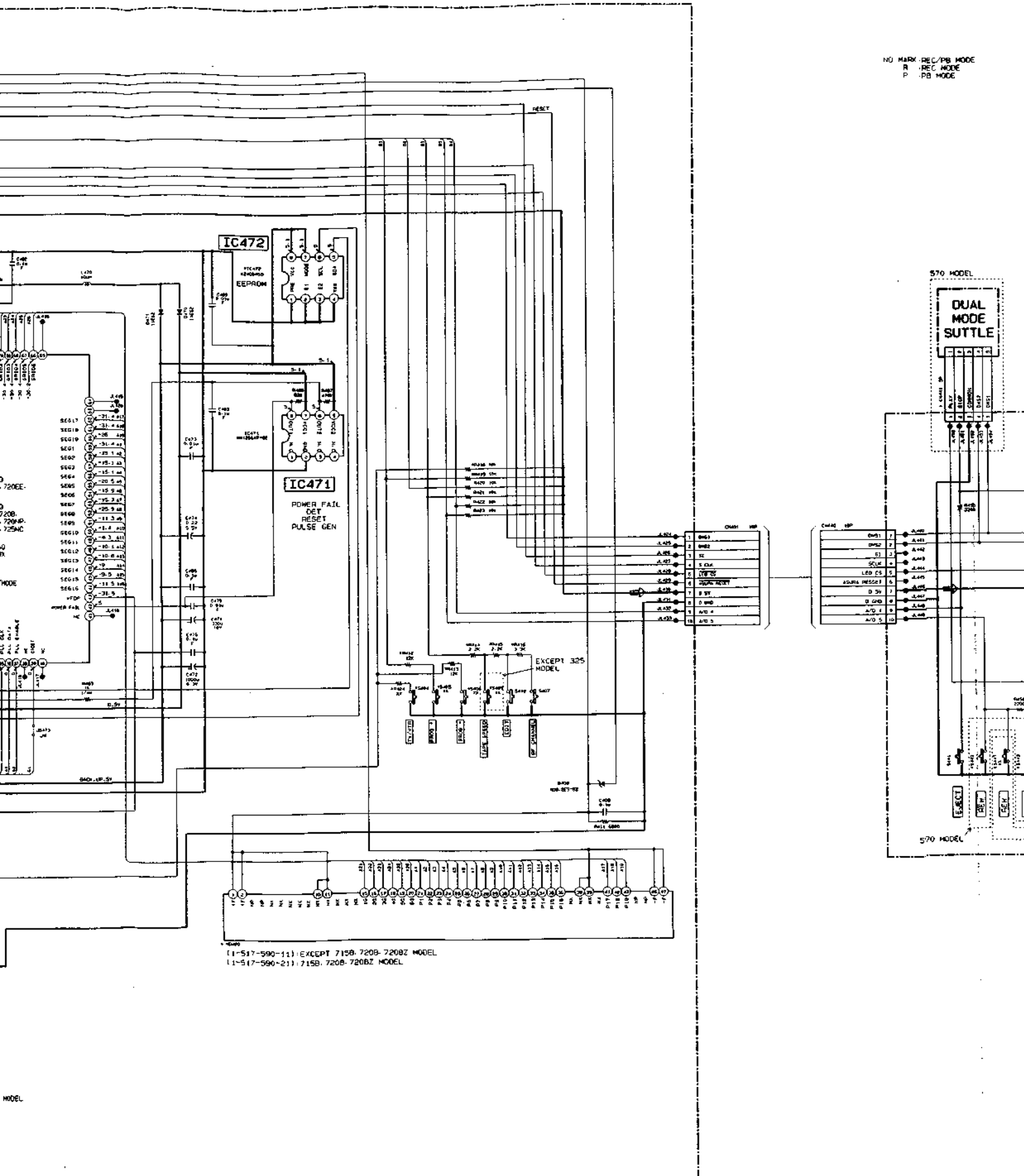


DM-62 (OPERATION SWITCHES), FR-119 (MODE CONTROL) SCHEMATIC DIAGRAMS

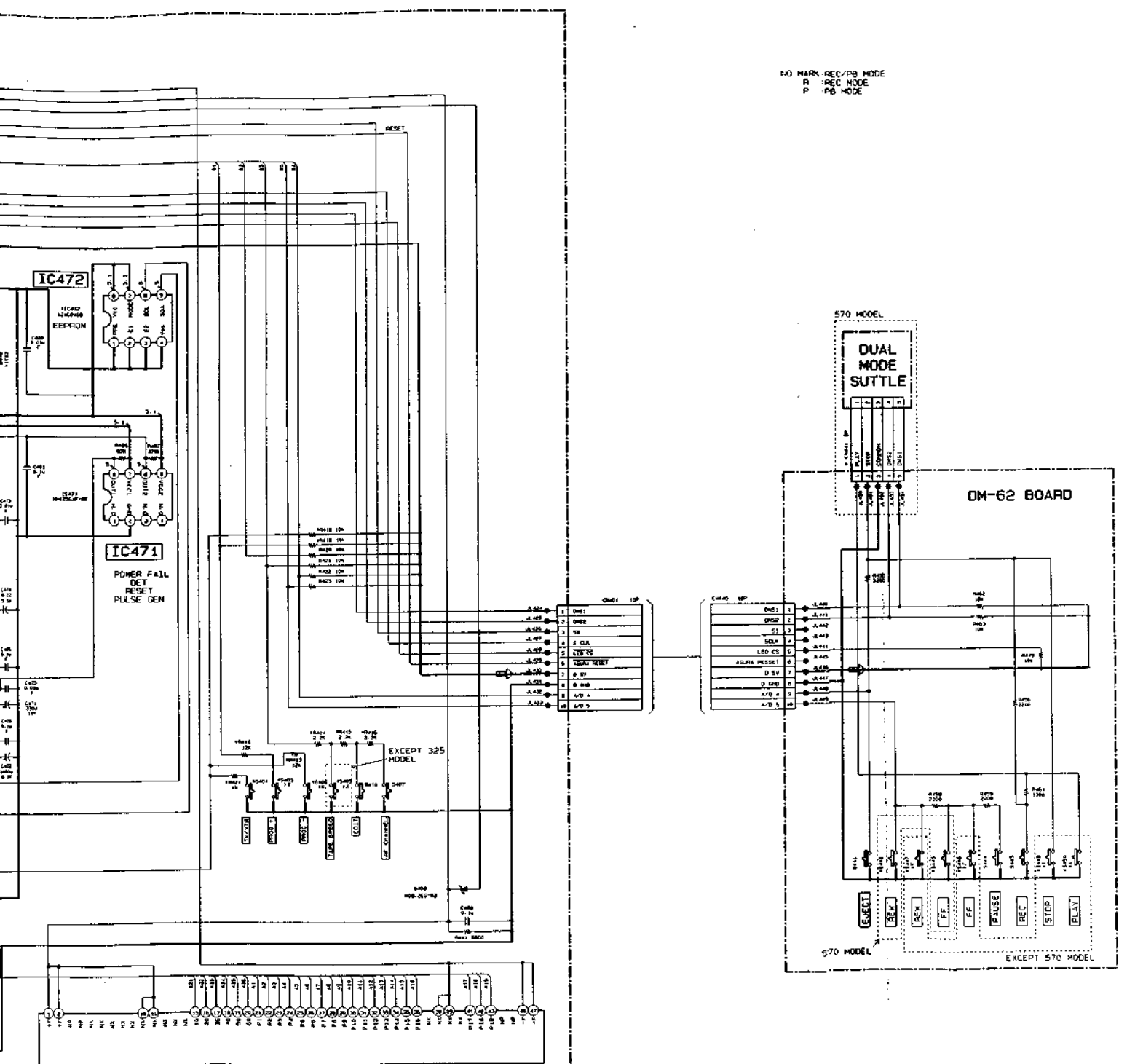
— Ref. No. DM-62 Board, FR-119 Board; 3,000 Series —



NO MARK REC/PB MODE
 R REC MODE
 P PB MODE



3 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26



(1)-517-590-1(1) EXCEPT 715B, 720B, 720B2 MODEL
 (1)-517-590-2(1)-715B, 720B, 720B2 MODEL

**SLV-E325EG/E475EG/E570EE/E570EG/E715B/E717VC/E720B/E720BZ/E720EE/
E720EG/E720EX/E720NC/E720NP/E720UX/E720VC/E720VP/E725NC**

**SECTION 5
REPAIR PARTS LIST**

5-1. EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

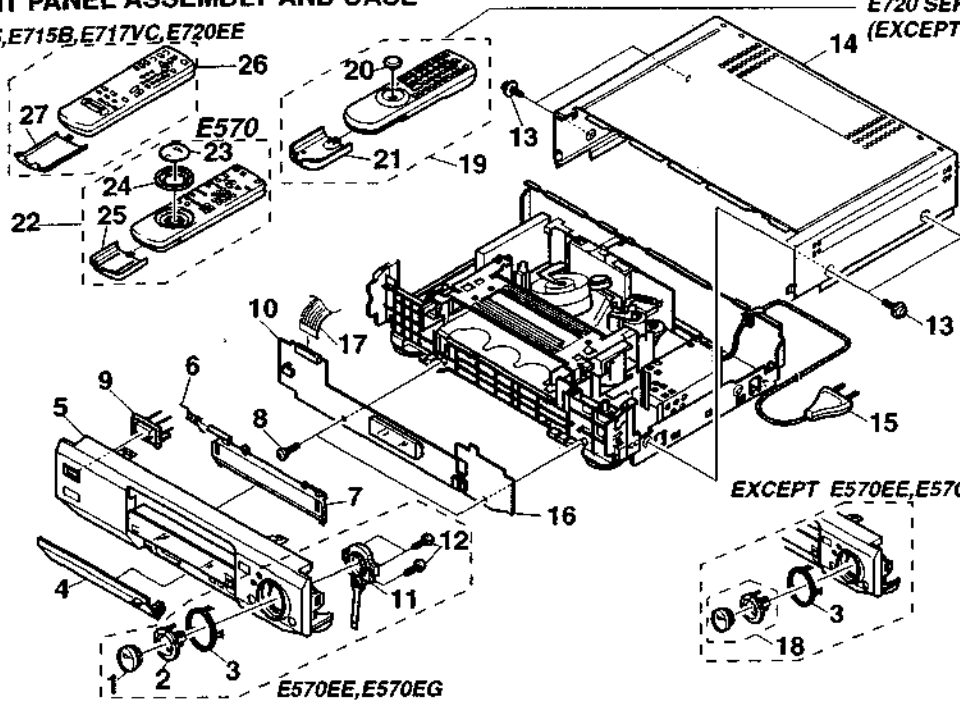
- The mechanical parts with no reference number in the exploded views are not supplied.

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

5-1-1. FRONT PANEL ASSEMBLY AND CASE

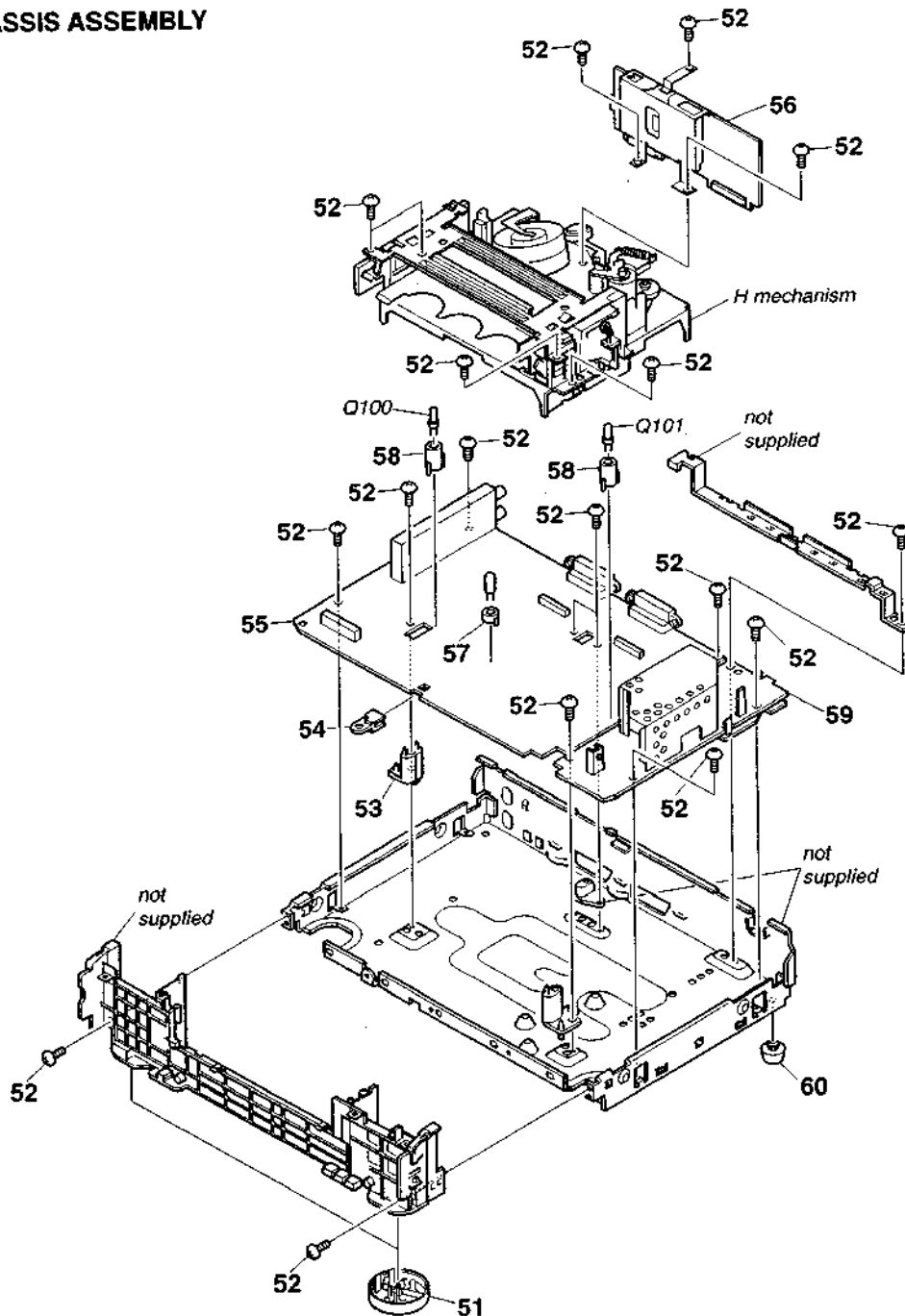
E325, E475, E715B, E717VC, E720EE

**E720 SERIES
(EXCEPT E720EE), E725NC**



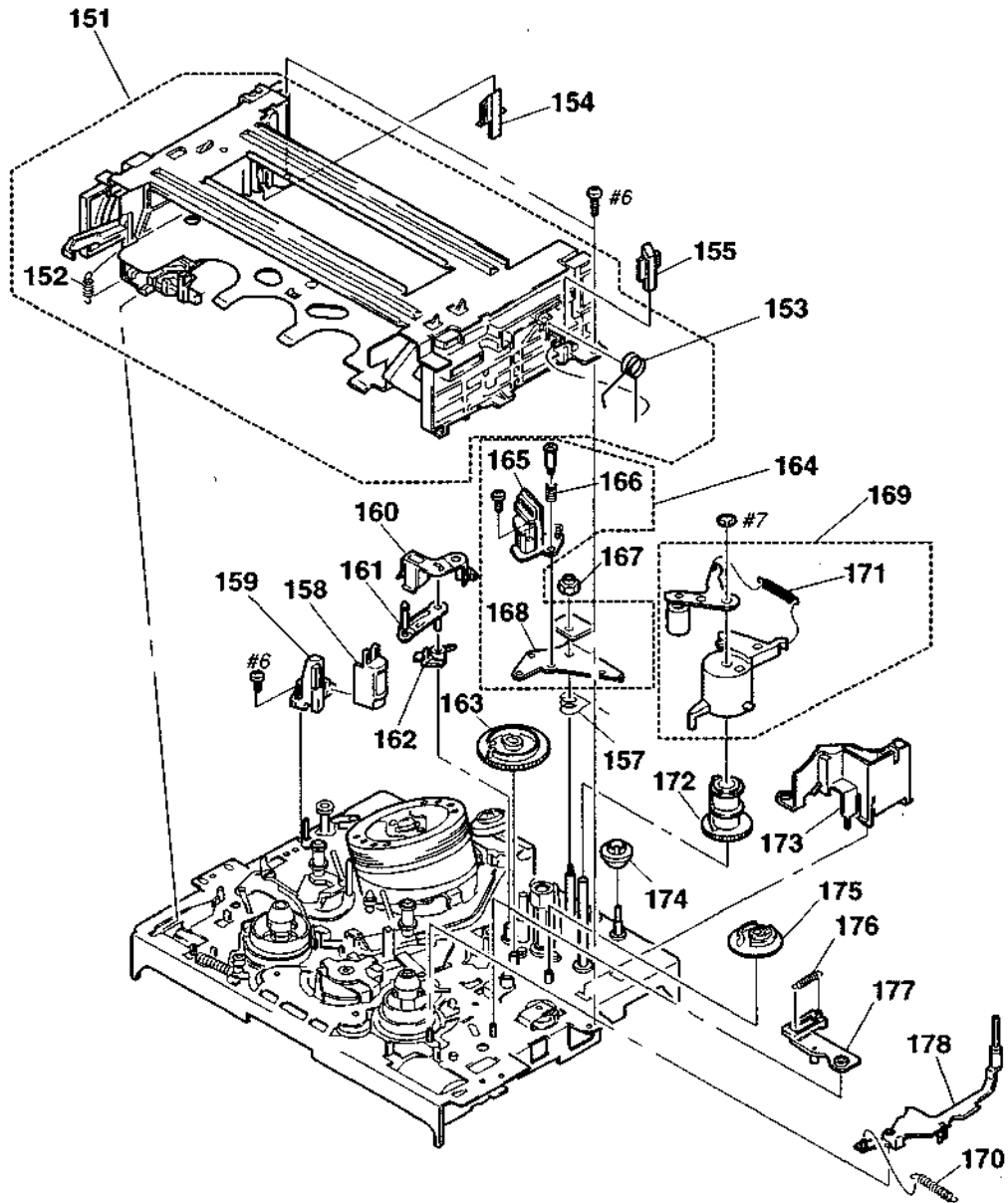
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	3-972-782-11	BUTTON, CENTER(570)		* 10	A-6791-209-A	FR-119 BOARD, COMPLETE(720BZ)	
2	3-973-077-11	RING, CHANGE SPEED(570)		* 10	A-6791-213-A	FR-119 BOARD, COMPLETE(325)	
* 3	3-972-781-21	PLATE, RING ORNAMENTAL(EXCEPT 570)		* 10	A-6791-216-A	FR-119 BOARD, COMPLETE(475)	
3	3-974-511-01	PLATE, RING ORNAMENTAL(570)		11	1-762-844-21	SWITCH, ROTARY (570)	
4	3-970-162-31	DOOR (A), JACK (EXCEPT 325, 570, 715B, 717VC, 720B, 720BZ)		12	3-968-554-01	SCREW (WN1411 D2.5 EJOT K25)(570)	
4	3-970-162-91	DOOR (A), JACK(720B, 720BZ)		13	3-363-099-01	SCREW (CASE 3 TP2)	
4	3-974-145-71	DOOR (A), JACK(570)		* 14	3-972-887-01	CASE (LS), UPPER (EXCEPT 715B, 717VC, 725)	
4	3-974-145-81	DOOR (A), JACK(325)		* 14	3-972-887-11	CASE (LS), UPPER (715B, 717VC, 725)	
4	3-974-145-91	DOOR (A), JACK(717VC, 725NC)		Δ 15	1-782-012-11	CORD, POWER	
4	3-975-692-01	DOOR (A), JACK(715B)		* 16	A-6790-203-A	DM-62 BOARD, COMPLETE	
5	X-3946-637-1	PANEL ASSY, FRONT(720VC, 720VP)		17	1-777-960-11	CABLE, FLAT (FFM-13) 29P	
5	X-3946-993-1	PANEL ASSY, FRONT(720B, 720BZ)		18	X-3946-983-1	BUTTON ASSY, FUNCTION(720B, 720BZ)	
5	X-3946-994-1	PANEL ASSY, FRONT(720NP)		18	X-3946-992-1	BUTTON ASSY, FUNCTION (EXCEPT 570, 715B, 717VC, 720B, 720BZ, 725)	
5	X-3946-995-1	PANEL ASSY, FRONT(720NC)		18	X-3947-231-1	BUTTON ASSY, FUNCTION(717VC, 725)	
5	X-3946-996-1	PANEL ASSY, FRONT(720EX, 720UX)		18	X-3947-232-1	BUTTON ASSY, FUNCTION(715B)	
5	X-3946-997-1	PANEL ASSY, FRONT(720EG)		19	1-475-024-11	REMOTE COMMANDER (RMT-V197) (720EG, 720NC, 720NP, 720VC, 720VP, 725)	
5	X-3946-998-1	PANEL ASSY, FRONT(720EE)		19	1-475-024-21	REMOTE COMMANDER (RMT-V197A) (720EX, 720UX)	
5	X-3946-999-1	PANEL ASSY, FRONT(570EG)		19	1-475-024-31	REMOTE COMMANDER (RMT-V197B) (720B, 720BZ)	
5	X-3947-000-1	PANEL ASSY, FRONT(570EE)		20	3-709-131-01	HEAD (ENGLISH), JOY STICK (720EG, 720EX, 720NC, 720NP, 720UX, 720VC, 720VP, 725)	
5	X-3947-001-1	PANEL ASSY, FRONT(475)		20	3-709-132-01	HEAD (FRENCH), JOY STICK (720B, 720BZ)	
5	X-3947-002-1	PANEL ASSY, FRONT(325)		21	3-709-129-01	COVER, BATTERY (720B, 720BZ, 720EG, 720EX, 720NC, 720NP, 720UX, 720VC, 720VP, 725)	
5	X-3947-233-1	PANEL ASSY, FRONT(717VC)		22	1-475-030-11	REMOTE COMMANDER (RMT-V199) (570EE)	
5	X-3947-234-1	PANEL ASSY, FRONT(715B)		22	1-475-030-21	REMOTE COMMANDER (RMT-V199A) (570EG)	
5	X-3947-235-1	PANEL ASSY, FRONT(725)		23	3-972-850-01	BUTTON, FUNCTION (570EG, 570EE)	
6	3-953-432-01	SPRING (6E), FL		24	3-973-077-31	RING, CHANGE SPEED(570EE, 570EG)	
7	3-972-883-01	DOOR, CASSETTE		25	3-709-126-01	COVER, BATTERY(570EG, 570EE)	
8	3-970-608-21	SUMITITE (B3), +8V		26	1-475-025-11	REMOTE COMMANDER (RMT-V198) (475, 720EE)	
9	3-966-213-01	BUTTON, POWER		26	1-475-025-21	REMOTE COMMANDER (RMT-V198A) (325)	
* 10	A-6791-182-A	FR-119 BOARD, COMPLETE(720VP)		26	1-475-067-21	REMOTE COMMANDER (RMT-V198K) (715B)	
* 10	A-6791-184-A	FR-119 BOARD, COMPLETE(720UX)		26	1-475-067-11	REMOTE COMMANDER (RMT-V198J) (717VC)	
* 10	A-6791-188-A	FR-119 BOARD, COMPLETE(717VC, 720VC)		27	3-709-128-01	COVER, BATTERY(325, 475, 715B, 717VC, 720EE)	
* 10	A-6791-191-A	FR-119 BOARD, COMPLETE(715B, 720B)					
* 10	A-6791-193-A	FR-119 BOARD, COMPLETE(720EE)					
* 10	A-6791-195-A	FR-119 BOARD, COMPLETE(720EX)					
* 10	A-6791-197-A	FR-119 BOARD, COMPLETE(720NP)					
* 10	A-6791-199-A	FR-119 BOARD, COMPLETE(720NC, 725)					
* 10	A-6791-202-A	FR-119 BOARD, COMPLETE(570EG)					
* 10	A-6791-205-A	FR-119 BOARD, COMPLETE(570EE)					
* 10	A-6791-208-A	FR-119 BOARD, COMPLETE(720EG)					

5-1-2. CHASSIS ASSEMBLY



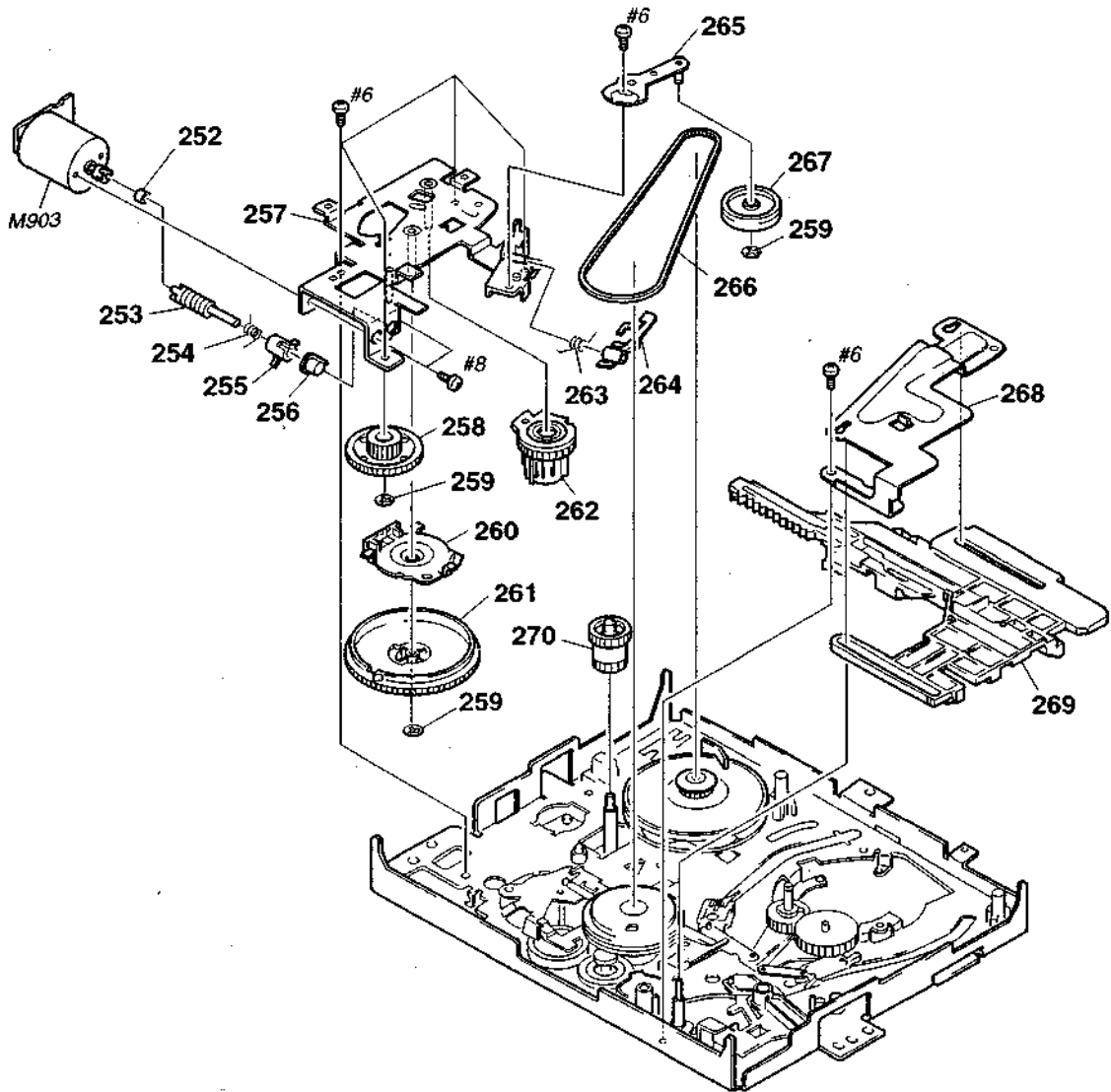
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	3-966-229-01	INSULATOR (ST)		* 56	A-6791-187-A	RP-217 BOARD, COMPLETE (EXCEPT 325,475,570)	
52	3-970-608-21	SUMITITE (B3), +BV		* 56	A-6791-201-A	RP-217 BOARD, COMPLETE(570)	
53	3-959-381-01	BASE (L), MD		* 56	A-6791-212-A	RP-217 BOARD, COMPLETE(325)	
54	3-966-237-01	HOLDER (ST), MA		* 56	A-6791-215-A	RP-217 BOARD, COMPLETE(475)	
* 55	A-6791-181-A	MA-286 BOARD, COMPLETE(720VP)		57	3-960-274-01	SPACER, LED	
* 55	A-6791-183-A	MA-286 BOARD, COMPLETE(720UX)		58	3-960-273-01	SPACER, TOP/END	
* 55	A-6791-185-A	MA-286 BOARD, COMPLETE(717VC,720VC)		* 59	A-6791-186-A	PS-385 BOARD, COMPLETE	
* 55	A-6791-190-A	MA-286 BOARD, COMPLETE(715B,720B)		60	3-957-819-01	FOOT	
* 55	A-6791-192-A	MA-286 BOARD, COMPLETE(720EE)		D100	8-719-048-26	DIODE GL528V1	
* 55	A-6791-194-A	MA-286 BOARD, COMPLETE(720EX)		Q100	8-729-025-92	PHOTOTRANSISTOR PT380F	
* 55	A-6791-196-A	MA-286 BOARD, COMPLETE(720NP)		Q101	8-729-025-92	PHOTOTRANSISTOR PT380F	
* 55	A-6791-198-A	MA-286 BOARD, COMPLETE(720NC,725)					
* 55	A-6791-200-A	MA-286 BOARD, COMPLETE(570EG)					
* 55	A-6791-204-A	MA-286 BOARD, COMPLETE(570EE)					
* 55	A-6791-206-A	MA-286 BOARD, COMPLETE(720BZ)					
* 55	A-6791-207-A	MA-286 BOARD, COMPLETE(720EG)					
* 55	A-6791-211-A	MA-286 BOARD, COMPLETE(325)					
* 55	A-6791-214-A	MA-286 BOARD, COMPLETE(475)					

5-1-3. MECHANISM DECK ASSEMBLY-1



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
151	A-6759-603-A	FL BLOCK ASSY		165	1-506-485-11	PIN, CONNECTOR 6P	
152	3-958-467-01	SPRING, TENSION COIL		166	3-960-439-02	SPRING (ACE), COMPRESSION	
153	3-970-471-01	SPRING, TORSION		167	3-942-867-01	NUT, AC HEIGHT ADJUSTMENT	
154	3-958-488-03	PLATE, LIGHT GUIDE, END SENSOR		168	3-958-491-01	BASE, ACE	
155	3-970-473-01	PLATE, LIGHT GUIDE, TOP SENSOR		169	A-6746-072-A	PRESS BLOCK ASSY, PINCH	
				170	3-958-505-01	SPRING (SOFT BRAKE T), TENSION	
157	3-958-487-01	SPRING, (ACE) TORSION COIL		171	3-958-455-01	SPRING (PINCH), TENSION	
158	1-500-144-11	HEAD, FE		172	3-958-151-01	GEAR, ELEVATOR	
159	X-3945-348-2	FEH ASSY		173	3-958-454-01	OPNER, LID	
160	3-962-298-01	BRACKET, TG7 TAPE		174	3-958-501-01	SCREW, ACE ADJUSTMENT	
161	X-3944-797-1	TG8 ASSY		175	3-958-153-01	GEAR, PRESS	
162	3-958-421-01	HOLDER, TG8		176	3-958-462-01	SPRING (RVS BRAKE), TENSION	
163	3-958-152-01	GEAR, TG8		177	X-3943-885-1	ARM ASSY, RVS BRAKE	
164	A-6736-105-A	ACE BLOCK ASSY		178	X-3943-882-1	BRAKE (T) ASSY, SOFT	

5-1-5. MECHANISM DECK ASSEMBLY-3



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
252	3-959-840-11	RUBBER, JOINT		262	3-958-156-03	GEAR, FL DRIVING	
253	3-958-159-01	WORM		263	3-958-445-01	SPRING, TORSION COIL (CAP BRAKE)	
254	3-958-460-01	SPRING, ONE-WAY		264	X-3943-888-1	BRAKE ASSY, CAP	
255	3-958-160-01	PROPELLOR		265	X-3943-889-1	ARM ASSY, TENSION VEHICLE	
256	3-958-155-01	BEARING, CAM MOTOR		266	3-958-361-01	BELT, TIMING	
* 257	X-3943-884-1	CHASSIS ASSY, CAM MOTOR		267	3-958-448-01	WHEEL, TENSION	
258	3-958-157-02	WHEEL, WORM		* 268	3-959-763-01	RETAINER	
259	3-669-595-00	WASHER (2), STOPPER		269	3-958-163-04	SLIDER, MAIN	
260	1-762-076-11	SWITCH, ROTARY		270	3-958-162-02	GEAR, UPPER/LOWER COMMUNICATION	
261	3-958-161-07	GEAR, CAM		M903	X-3943-883-1	MOTOR ASSY, CAM	

5-2. ELECTRICAL PARTS LIST

NOTE:

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

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

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

- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- COILS
uH: μ H
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-6790-203-A	DM-62 BOARD, COMPLETE ***** (Ref.No.: 3,000 Series)		*	A-6791-209-A	FR-119 BOARD, COMPLETE (720BZ) *****	
		< CONNECTOR >		*	A-6791-213-A	FR-119 BOARD, COMPLETE (325) *****	
CN440	1-695-947-11	CONNECTOR, BOARD TO BOARD 10P		*	A-6791-216-A	FR-119 BOARD, COMPLETE (475) *****	(Ref.No.: 3,000 Series)
CN441	1-774-471-41	CONNECTOR, FFC/FPC 5P(570)				< CAPACITOR >	
		< RESISTOR >			3-972-888-01	HOLDER (85), FL	
R440	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C400	1-163-809-11	CERAMIC CHIP 0.047uF 10% 25V	
R455	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		C401	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	(570)
R456	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		C403	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	(570)
R458	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		C408	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
R459	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		C471	1-126-924-11	ELECT 330uF 20% 10V	
R461	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W		C472	1-126-916-11	ELECT 1000uF 20% 6.3V	
R462	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C473	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
R463	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C474	1-125-705-11	CAPACITOR 0.22F 0 5.5V	
		< SWITCH >		C475	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
S441	1-571-977-11	SWITCH, TACTIL(EJECT)		C476	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
S442	1-571-977-11	SWITCH, TACTIL(REW)(570)		C477	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
S443	1-571-977-11	SWITCH, TACTIL(FF)(570)		C478	1-164-159-21	CERAMIC 0.1uF 50V	
S444	1-571-977-11	SWITCH, TACTIL(PAUSE)		C479	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
S445	1-571-977-11	SWITCH, TACTIL(REC)		C480	1-163-099-00	CERAMIC CHIP 18PF 5% 50V	
S447	1-571-977-11	SWITCH, TACTIL(REW)(EXCEPT 570)		C481	1-163-231-11	CERAMIC CHIP 15PF 5% 50V	
S448	1-571-977-11	SWITCH, TACTIL(FF)(EXCEPT 570)		C482	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
S449	1-571-977-11	SWITCH, TACTIL(STOP)(EXCEPT 570)		C483	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
S450	1-571-977-11	SWITCH, TACTIL(PLAY)(EXCEPT 570)		C485	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
				C489	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
*	A-6791-182-A	FR-119 BOARD, COMPLETE (720VP) *****				< CONNECTOR >	
*	A-6791-184-A	FR-119 BOARD, COMPLETE (720UX) *****		* CN401	1-691-407-11	CONNECTOR, BOARD TO BOARD 10P	
*	A-6791-188-A	FR-119 BOARD, COMPLETE (717VC,720VC) *****		CN402	1-695-390-31	PIN, CONNECTOR (PC BOARD) 29P	
*	A-6791-191-A	FR-119 BOARD, COMPLETE (715B,720B) *****		CN403	1-506-470-11	PIN, CONNECTOR 5P (570)	
*	A-6791-193-A	FR-119 BOARD, COMPLETE (720EE) *****				< DIODE >	
*	A-6791-195-A	FR-119 BOARD, COMPLETE (720EX) *****		D401	8-719-108-12	DIODE RD9.1E-W (570)	
*	A-6791-197-A	FR-119 BOARD, COMPLETE (720NP) *****		D403	8-719-108-12	DIODE RD9.1E-W (570)	
*	A-6791-199-A	FR-119 BOARD, COMPLETE (720NC,725NC) *****		D405	8-719-056-07	DIODE SLR-342MC-A-47	
*	A-6791-202-A	FR-119 BOARD, COMPLETE (570EG) *****		D408	8-719-110-08	DIODE RD8.2ES-B2	
*	A-6791-205-A	FR-119 BOARD, COMPLETE (570EE) *****		D470	8-719-200-82	DIODE 11ES2	
*	A-6791-208-A	FR-119 BOARD, COMPLETE (720EG) *****		D471	8-719-200-82	DIODE 11ES2	
						< TERMINAL BOARD >	
				ET400	1-537-770-21	TERMINAL BOARD, GROUND (570)	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< IC >		R405	1-216-029-00	METAL CHIP 150	5% 1/10W
IC400	8-749-011-05	IC GP1U28X		R410	1-216-295-91	CONDUCTOR, CHIP(2012)	(570)
IC470	8-752-880-60	IC CXP82948-014Q (325,475,570,720EE,720EG)		R411	1-216-069-00	METAL CHIP 6.8K	5% 1/10W
IC470	8-752-880-61	IC CXP82948-015Q (715B,717VC,720B,720BZ,720NC,720NP,720VC,720VP,725NC)		R412	1-216-075-00	METAL CHIP 12K	5% 1/10W
IC470	8-752-880-62	IC CXP82948-016Q(720EX,720UX)		R413	1-216-075-00	METAL CHIP 12K	5% 1/10W
IC471	8-759-248-87	IC MM1256XF-BE		R414	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
IC472	8-759-518-23	IC X24C04S8		R415	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
		< JUMPER RESISTOR >		R416	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
JR401	1-216-295-91	CONDUCTOR, CHIP(2012)		R418	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR402	1-216-296-91	CONDUCTOR, CHIP(3216)		R419	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR403	1-216-296-91	CONDUCTOR, CHIP(3216)		R420	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR404	1-216-296-91	CONDUCTOR, CHIP(3216)		R421	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR406	1-216-295-91	CONDUCTOR, CHIP(2012)		R422	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR407	1-216-296-91	CONDUCTOR, CHIP(3216)		R423	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR408	1-216-296-91	CONDUCTOR, CHIP(3216)		R424	1-216-089-91	METAL GLAZE 47K	5% 1/10W
JR410	1-216-296-91	CONDUCTOR, CHIP(3216)		R472	1-216-049-91	METAL GLAZE 1K	5% 1/10W
JR411	1-216-296-91	CONDUCTOR, CHIP(3216)		R473	1-216-049-91	METAL GLAZE 1K	5% 1/10W
JR412	1-216-295-91	CONDUCTOR, CHIP(2012)		R474	1-216-089-91	METAL GLAZE 47K	5% 1/10W
JR414	1-216-296-91	CONDUCTOR, CHIP(3216)		R475	1-216-049-91	METAL GLAZE 1K	5% 1/10W
JR416	1-216-296-91	CONDUCTOR, CHIP(3216)		R476	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR417	1-216-295-91	CONDUCTOR, CHIP(2012)		R477	1-216-073-00	METAL CHIP 10K	5% 1/10W
JR419	1-216-295-91	CONDUCTOR, CHIP(2012)		R478	1-216-113-00	METAL CHIP 470K	5% 1/10W
JR420	1-216-296-91	CONDUCTOR, CHIP(3216)		R479	1-216-049-91	METAL GLAZE 1K	5% 1/10W
JR421	1-216-295-91	CONDUCTOR, CHIP(2012)		R480	1-216-113-00	METAL CHIP 470K	5% 1/10W
JR422	1-216-296-91	CONDUCTOR, CHIP(3216)		R481	1-249-413-11	CARBON 470	5% 1/4W F
JR423	1-216-296-91	CONDUCTOR, CHIP(3216)		R482	1-249-413-11	CARBON 470	5% 1/4W F
JR425	1-216-295-91	CONDUCTOR, CHIP(2012)		R483	1-249-417-11	CARBON 1K	5% 1/4W F
JR429	1-216-296-91	CONDUCTOR, CHIP(3216)		R486	1-216-095-00	METAL CHIP 82K	5% 1/10W
JR430	1-216-296-91	CONDUCTOR, CHIP(3216)		R487	1-216-113-00	METAL CHIP 470K	5% 1/10W
JR431	1-216-296-91	CONDUCTOR, CHIP(3216)		R488	1-216-295-91	CONDUCTOR, CHIP(2012)	
		< JUMPER RESISTOR >				< SWITCH >	
JS400	1-216-295-91	CONDUCTOR, CHIP(2012)	(570)	S403	1-571-977-11	SWITCH, TACTIL(STANDBY/POWER ON)	
JS408	1-216-295-91	CONDUCTOR, CHIP(2012)	(570)	S404	1-571-977-11	SWITCH, TACTIL(TV/VTR)	
		< COIL >		S405	1-571-977-11	SWITCH, TACTIL(PROGRAM:+)	
L470	1-408-970-21	INDUCTOR 10uH		S406	1-571-977-11	SWITCH, TACTIL(PROGRAM:-)	
		< FLUORESCENT INDICATOR >		S407	1-571-977-11	SWITCH, TACTIL(RF CHANNEL)	
ND400	1-517-590-11	TUBE, FLUORESCENT INDICATOR (EXCEPT 715B,720B,720BZ)		S409	1-571-977-11	SWITCH, TACTIL(TAPE SPEED)(EXCEPT 325)	
ND400	1-517-590-21	TUBE, FLUORESCENT INDICATOR (715B,720B,720BZ)		S410	1-571-977-11	SWITCH, TACTIL(EDIT)	
		< JACK >				< VIBRATOR >	
PJ401	1-774-510-11	JACK, PIN 2P (LINE IN-2)	(570)	X470	1-579-463-11	VIBRATOR, CRYSTAL 32.768kHz	
		< TRANSISTOR >		X471	1-579-930-12	VIBRATOR, CERAMIC	
Q400	8-729-421-19	TRANSISTOR UN2213					
		< RESISTOR >					
R400	1-216-089-91	METAL GLAZE 47K	5% 1/10W				
R401	1-216-022-00	METAL CHIP 75	5% 1/10W (570)	*	A-6791-181-A	MA-286 BOARD, COMPLETE (720VP) *****	
R403	1-216-041-00	METAL CHIP 470	5% 1/10W (570)	*	A-6791-183-A	MA-286 BOARD, COMPLETE (720UX) *****	
				*	A-6791-185-A	MA-286 BOARD, COMPLETE (717VC,720VC) *****	
				*	A-6791-190-A	MA-286 BOARD, COMPLETE (715B,720B) *****	
				*	A-6791-192-A	MA-286 BOARD, COMPLETE (720EE) *****	
				*	A-6791-194-A	MA-286 BOARD, COMPLETE (720EX) *****	
				*	A-6791-196-A	MA-286 BOARD, COMPLETE (720NP) *****	
				*	A-6791-198-A	MA-286 BOARD, COMPLETE (720NC,725NC) *****	
				*	A-6791-200-A	MA-286 BOARD, COMPLETE (570EG) *****	

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-6791-204-A	MA-286 BOARD, COMPLETE (570EE)		C221	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	(EXCEPT 325,475,720EE,720EG)
*	A-6791-206-A	MA-286 BOARD, COMPLETE (720BZ)		C222	1-163-038-91	CERAMIC CHIP 0.1uF 25V	(EXCEPT 325,475,720EE,720EG)
*	A-6791-207-A	MA-286 BOARD, COMPLETE (720EG)		C223	1-126-154-11	ELECT 47uF 20% 6.3V	
*	A-6791-211-A	MA-286 BOARD, COMPLETE (325)		C224	1-162-306-11	CERAMIC 0.01uF 30% 16V	
*	A-6791-214-A	MA-286 BOARD, COMPLETE (475)		C225	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
			(Ref.No.: 2,000 Series)	C226	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
	1-555-110-00	CABLE, PIN		C228	1-126-157-11	ELECT 10uF 20% 16V	
*	3-960-273-01	SPACER, TOP END		C229	1-162-306-11	CERAMIC 0.01uF 30% 16V	
*	3-960-274-01	SPACER, LED		C230	1-124-584-00	ELECT 100uF 20% 10V	
	A-8312-814-A	PIN, LEAD, COATING		C231	1-126-157-11	ELECT 10uF 20% 16V	
		< CAPACITOR >		C232	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C100	1-124-635-00	ELECT 220uF 20% 6.3V		C233	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C101	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C234	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C102	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C235	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C103	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C236	1-126-160-11	ELECT 1uF 20% 50V	
C104	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C237	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C105	1-164-232-11	CERAMIC CHIP 0.01uF 50V		C238	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C107	1-130-489-00	MYLAR 0.033uF 5% 50V		C239	1-124-584-00	ELECT 100uF 20% 10V	
C108	1-137-441-11	FILM 0.027uF 5% 50V		C240	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C109	1-126-157-11	ELECT 10uF 20% 16V		C241	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C130	1-163-031-11	CERAMIC CHIP 0.01uF 50V		C242	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C131	1-163-031-11	CERAMIC CHIP 0.01uF 50V		C243	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C132	1-124-589-11	ELECT 47uF 20% 16V		C244	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C134	1-124-463-00	ELECT 0.1uF 20% 50V		C245	1-163-809-11	CERAMIC CHIP 0.047uF 10% 25V	
C160	1-163-038-91	CERAMIC CHIP 0.1uF 25V		C246	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C161	1-124-589-11	ELECT 47uF 20% 16V		C247	1-163-809-11	CERAMIC CHIP 0.047uF 10% 25V	
C162	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		C248	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C164	1-163-229-11	CERAMIC CHIP 12PF 5% 50V		C249	1-126-154-11	ELECT 47uF 20% 6.3V	
C165	1-163-229-11	CERAMIC CHIP 12PF 5% 50V		C250	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C166	1-163-038-91	CERAMIC CHIP 0.1uF 25V		C251	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C167	1-124-589-11	ELECT 47uF 20% 16V		C252	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C201	1-109-982-11	CERAMIC CHIP 1uF 10% 10V		C253	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C202	1-163-809-11	CERAMIC CHIP 0.047uF 10% 25V		C254	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C204	1-163-031-11	CERAMIC CHIP 0.01uF 50V		C255	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C205	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V		C291	1-126-157-11	ELECT 10uF 20% 16V	(715B,720B,720BZ)
C206	1-163-031-11	CERAMIC CHIP 0.01uF 50V		C302	1-126-154-11	ELECT 47uF 20% 6.3V	
C207	1-163-031-11	CERAMIC CHIP 0.01uF 50V		C303	1-126-160-11	ELECT 1uF 20% 50V	(325,475,570)
C208	1-163-241-11	CERAMIC CHIP 39PF 5% 50V		C304	1-126-160-11	ELECT 1uF 20% 50V	(570)
C209	1-128-131-11	ELECT 22uF 20% 50V		C305	1-126-160-11	ELECT 1uF 20% 50V	
C210	1-163-131-00	CERAMIC CHIP 390PF 5% 50V		C306	1-126-160-11	ELECT 1uF 20% 50V	
C211	1-163-239-11	CERAMIC CHIP 33PF 5% 50V		C307	1-126-157-11	ELECT 10uF 20% 16V	
C212	1-163-275-11	CERAMIC CHIP 0.001uF 5% 50V		C308	1-124-229-00	ELECT 33uF 20% 10V	
C213	1-163-125-00	CERAMIC CHIP 220PF 5% 50V		C309	1-126-163-11	ELECT 4.7uF 20% 50V	
C214	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V		C310	1-163-011-11	CERAMIC CHIP 0.0015uF 10% 50V	
C215	1-163-031-11	CERAMIC CHIP 0.01uF 50V	(EXCEPT 325)	C311	1-163-011-11	CERAMIC CHIP 0.0015uF 10% 50V	
C215	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	(325)	C312	1-137-370-11	FILM 0.01uF 5% 50V	
C217	1-109-982-11	CERAMIC CHIP 1uF 10% 10V		C313	1-126-157-11	ELECT 10uF 20% 16V	
C218	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		C314	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C219	1-163-038-91	CERAMIC CHIP 0.1uF 25V		C315	1-126-160-11	ELECT 1uF 20% 50V	
C220	1-109-982-11	CERAMIC CHIP 1uF 10% 10V		C317	1-126-163-11	ELECT 4.7uF 20% 50V	
				C318	1-124-589-11	ELECT 47uF 20% 16V	
				C361	1-126-960-11	ELECT 1uF 20% 50V	(715B,717VC,720,725)
				C362	1-126-960-11	ELECT 1uF 20% 50V	(715B,717VC,720,725)
				C363	1-126-960-11	ELECT 1uF 20% 50V	(715B,717VC,720,725)
				C364	1-126-960-11	ELECT 1uF 20% 50V	(715B,717VC,720,725)

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C367	1-126-960-11	ELECT	1uF 20% 50V (EXCEPT 325,475,570,720EE,720EG)	C512	1-124-584-00	ELECT	100uF 20% 10V
C368	1-126-960-11	ELECT	1uF 20% 50V (EXCEPT 325,475,570,720EE,720EG)	C513	1-163-234-11	CERAMIC CHIP	20PF 5% 50V
C369	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C514	1-163-234-11	CERAMIC CHIP	20PF 5% 50V
C370	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C518	1-124-465-00	ELECT	0.47uF 20% 50V
C371	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C519	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V
C372	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C520	1-163-038-91	CERAMIC CHIP	0.1uF 25V (325,475,570,715B,720B,720BZ,720EE,720EG)
C373	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C540	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C374	1-126-960-11	ELECT	1uF 20% 50V (715B,717VC,720,725)	C541	1-126-967-11	ELECT	47uF 20% 16V
C375	1-137-378-11	FILM	0.22uF 5% 50V (715B,717VC,720,725)	C542	1-126-967-11	ELECT	47uF 20% 16V
C376	1-137-437-11	FILM	0.0056uF 5% 50V (715B,717VC,720,725)	C544	1-126-935-11	ELECT	470uF 20% 6.3V
C377	1-126-967-11	ELECT	47uF 20% 50V (715B,717VC,720,725)	C574	1-126-964-11	ELECT	10uF 20% 50V (570EG,715B,717VC,720,725)
C378	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C575	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (715B,717VC,720,725)
C379	1-126-961-11	ELECT	2.2uF 20% 50V (715B,717VC,720,725)	C576	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)
C380	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)	C577	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)
C381	1-126-967-11	ELECT	47uF 20% 50V (715B,717VC,720,725)	C578	1-126-157-11	ELECT	10uF 20% 16V (715B,717VC,720,725)
C382	1-137-437-11	FILM	0.0056uF 5% 50V (715B,717VC,720,725)	C579	1-126-157-11	ELECT	10uF 20% 16V (715B,717VC,720,725)
C383	1-137-378-11	FILM	0.22uF 5% 50V (715B,717VC,720,725)	C702	1-126-964-11	ELECT	10uF 20% 50V
C384	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (715B,717VC,720,725)	C704	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C385	1-126-933-11	ELECT	100uF 20% 16V (715B,717VC,720,725)	C705	1-126-964-11	ELECT	10uF 20% 50V
C386	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (715B,717VC,720,725)	C706	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C387	1-126-933-11	ELECT	100uF 20% 16V (715B,717VC,720,725)	C707	1-126-933-11	ELECT	100uF 20% 16V
C389	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V (715B,717VC,720,725)	C708	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C390	1-126-160-11	ELECT	1uF 20% 50V (715B,717VC,720,725)	C709	1-126-933-11	ELECT	100uF 20% 16V
C391	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (715B,717VC,720,725)	C710	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C500	1-163-031-11	CERAMIC CHIP	0.01uF 50V	C711	1-126-967-11	ELECT	47uF 20% 16V
C501	1-124-584-00	ELECT	100uF 20% 10V	C712	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C502	1-163-245-11	CERAMIC CHIP	56PF 5% 50V (325,475,570,715B,720B,720BZ,720EE,720EG)	C713	1-126-933-11	ELECT	100uF 20% 16V
C503	1-126-160-11	ELECT	1uF 20% 50V	C714	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C504	1-163-253-11	CERAMIC CHIP	120PF 5% 50V	C715	1-126-965-11	ELECT	22uF 20% 50V
C505	1-163-245-11	CERAMIC CHIP	56PF 5% 50V (325,475,570,715B,720B,720BZ,720EE,720EG)	C730	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)
C506	1-130-481-00	MYLAR	0.0068uF 5% 50V	C731	1-126-964-11	ELECT	10uF 20% 50V (715B,717VC,720,725)
C507	1-124-499-11	ELECT, NONPOLAR	1uF 20% 50V	C850	1-163-038-91	CERAMIC CHIP	0.1uF 25V (EXCEPT 570EE,720EE)
C508	1-137-372-11	FILM	0.022uF 5% 50V	C851	1-126-157-11	ELECT	10uF 20% 16V (EXCEPT 570EE,720EE)
C509	1-163-235-11	CERAMIC CHIP	22PF 5% 50V	C852	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V (EXCEPT 570EE,720EE)
C510	1-163-231-11	CERAMIC CHIP	15PF 5% 50V	C853	1-163-989-11	CERAMIC CHIP	0.033uF 10% 25V (EXCEPT 570EE,720EE)
C511	1-163-031-11	CERAMIC CHIP	0.01uF 50V	C855	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V (EXCEPT 570EE,720EE)
				C856	1-163-038-91	CERAMIC CHIP	0.1uF 25V (EXCEPT 570EE,720EE)
				C922	1-124-584-00	ELECT	100uF 20% 10V (570EG,715B,717VC,720B,720BZ,720NP,720VC)
				C923	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (570EG,715B,717VC,720B,720BZ,720NP,720VC)
				C924	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (570EG,715B,717VC,720B,720BZ,720NP,720VC)

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C925	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (715B,717VC,720B,720BZ,720NP,720VC)		D545	8-719-109-97	DIODE RD6.8ES-B2	
C926	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (570EG,715B,717VC,720B,720BZ,720NP,720VC)		D546	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720,725)	
C927	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (570EG,715B,717VC,720B,720BZ,720NP,720VC)		D547	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720,725)	
C928	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (570EG,715B,717VC,720B,720BZ,720NP,720VC)		D548	8-719-109-97	DIODE RD6.8ES-B2	
C930	1-126-967-11	ELECT 47uF 20% 16V (715B,717VC,720B,720BZ,720NP,720VC)		D549	8-719-109-97	DIODE RD6.8ES-B2	
C931	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (715B,717VC,720B,720BZ,720NP,720VC)		D551	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720B,720BZ,720NP,720VC)	
C932	1-126-933-11	ELECT 100uF 20% 16V (715B,717VC,720B,720BZ,720NP,720VC)		D552	8-719-921-86	DIODE MTZJ-13	
C933	1-126-964-11	ELECT 10uF 20% 50V (570EG,715B,717VC,720B,720BZ,720NP,720VC)		D553	8-719-109-97	DIODE RD6.8ES-B2	
C934	1-126-964-11	ELECT 10uF 20% 50V (570EG,715B,717VC,720B,720BZ,720NP,720VC)		D554	8-719-109-97	DIODE RD6.8ES-B2	
C935	1-126-964-11	ELECT 10uF 20% 50V (570EG,715B,717VC,720B,720BZ,720NP,720VC)		D700	8-719-911-19	DIODE 1SS119	
C936	1-126-964-11	ELECT 10uF 20% 50V (715B,717VC,720B,720BZ,720NP,720VC)		D701	8-719-800-76	DIODE 1SS226	
C937	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (715B,717VC,720B,720BZ,720NP,720VC)		D702	8-719-982-26	DIODE MTZJ-33B	
C938	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V (715B,717VC,720B,720BZ,720NP,720VC)		D703	8-719-109-85	DIODE RD5.1ES-B2	
C951	1-163-017-00	CERAMIC CHIP 0.0047uF 5% 50V (EXCEPT 325,475,570EE,720EG,720EE)		D704	8-719-911-19	DIODE 1SS119	
< CONNECTOR >				D930	8-719-200-82	DIODE 11ES2 (715B,717VC,720B,720BZ,720NP,720VC)	
CN101	1-506-470-11	PIN, CONNECTOR 5P		D932	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
* CN102	1-766-538-11	CONNECTOR, BOARD TO BOARD 8P		D933	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
* CN103	1-766-537-11	CONNECTOR (HMD) 5P		D934	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720B,720BZ,720NP,720VC)	
* CN104	1-766-716-11	CONNECTOR, BOARD TO BOARD 3P		D935	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
CN161	1-506-470-11	PIN, CONNECTOR 5P (570)		D936	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
CN163	1-695-352-11	PIN, CONNECTOR (PC BOARD) 29P		D937	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720B,720BZ,720NP,720VC)	
CN164	1-506-469-11	PIN, CONNECTOR 4P		D938	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720B,720BZ,720NP,720VC)	
CN305	1-573-852-11	CONNECTOR, BOARD TO BOARD 20P		D939	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720B,720BZ,720NP,720VC)	
CN306	1-766-718-11	CONNECTOR, BOARD TO BOARD 17P		D940	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
CN540	1-568-016-21	SOCKET, PIN 21P(LINE-1(TV))		D941	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
CN600	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P		D942	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
CN930	1-568-016-21	SOCKET, PIN 21P(DECODER/LINE-2 IN) (EXCEPT 325,475,570EE,720EE,720EG)		D943	8-719-109-97	DIODE RD6.8ES-B2 (EXCEPT 325,475,570EE,720EE,720EG)	
< TRIMMER >				D944	8-719-109-97	DIODE RD6.8ES-B2	
CT500	1-141-334-11	CAP, TRIMMER 30PF		D945	8-719-982-09	DIODE MTZJ-T-77-4.3 (EXCEPT 325,475,570EE,720EE,720EG)	
< DIODE >				< FILTER >			
D100	8-719-048-26	DIODE GL528V1		FL540	1-236-163-11	ENCAPSULATED COMPONENT (715B,717VC,720,725)	
D107	8-719-911-19	DIODE 1SS119		FL541	1-236-163-11	ENCAPSULATED COMPONENT (715B,717VC,720,725)	
D108	8-719-200-82	DIODE 11ES2		FL542	1-236-163-11	ENCAPSULATED COMPONENT (715B,717VC,720,725)	
D131	8-719-200-82	DIODE 11ES2		FL543	1-236-163-11	ENCAPSULATED COMPONENT	
D160	8-719-200-82	DIODE 11ES2		FL544	1-236-163-11	ENCAPSULATED COMPONENT	
D301	8-719-911-19	DIODE 1SS119 (325,475,570)		FL545	1-236-163-11	ENCAPSULATED COMPONENT (715B,717VC,720,725)	
D361	8-719-911-19	DIODE 1SS119		FL930	1-236-163-11	ENCAPSULATED COMPONENT (EXCEPT 325,475,570EE,720EE,720EG)	
D501	8-719-911-19	DIODE 1SS119		FL931	1-236-163-11	ENCAPSULATED COMPONENT (EXCEPT 325,475,570EE,720EE,720EG)	
D502	8-719-911-19	DIODE 1SS119		FL932	1-236-163-11	ENCAPSULATED COMPONENT (715B,717VC,720B,720BZ,720NP,720VC)	
D503	8-719-911-19	DIODE 1SS119		FL933	1-236-163-11	ENCAPSULATED COMPONENT (715B,717VC,720B,720BZ,720NP,720VC)	
D540	8-719-109-97	DIODE RD6.8ES-B2					
D541	8-719-109-97	DIODE RD6.8ES-B2					
D542	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720,725)					
D543	8-719-109-97	DIODE RD6.8ES-B2					
D544	8-719-109-97	DIODE RD6.8ES-B2 (715B,717VC,720,725)					

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Ref. No.	Part No.	Description	Remarks
		< IC >	
IC100	8-759-702-02	IC NJM062M	
IC130	8-759-353-59	IC LB1643	
IC160	8-752-880-93	IC CXP87852-008Q	(325)
IC160	8-752-880-94	IC CXP87852-009Q	(475EG,570EE,720EE)
IC160	8-752-880-95	IC CXP87852-010Q	(EXCEPT 325,475,570EE,720EE)
IC201	8-759-439-48	IC LA71511M	
IC202	8-759-439-50	IC LC89977M-TE-L	
IC291	1-801-655-11	IC SECAM MODULE	(715B,720B,720BZ)
IC360	8-759-445-21	IC TDA9603H/M2,518	(715B,717VC,720,725)
IC361	8-759-708-05	IC NJM78L05A	(715B,717VC,720,725)
IC500	8-752-433-84	IC LC74790M-VSX8903-TLM	(EXCEPT 325,475,570,720EE,720EG)
IC500	8-759-433-86	IC LC74761M-9624-TLM	(325,475,570,720EE,720EG)
IC570	8-759-909-71	IC BA4558F	(715B,717VC,720,725)
IC850	8-759-289-73	IC SDA5649X-GEG	(EXCEPT 570EE,720EE)
IC920	8-759-438-16	IC STV6400D	(570EG,715B,717VC,720B,720BZ,720NP,720VC)
IC930	8-759-296-72	IC PQ12SZ5U	(715B,717VC,720B,720BZ,720NP,720VC)
IC931	8-759-932-64	IC BU4052BF	(570EG,715B,717VC,720B,720BZ,720NP,720VC)
		< JACK >	
J540	1-565-319-71	JACK, PIN 2P(AUDIO OUT)	(715B,717VC,720,725)
		< JUMPER RESISTOR >	
JR001	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR002	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR003	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR004	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR005	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR006	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR007	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR008	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR009	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR010	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR011	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR012	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR013	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR014	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR015	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR016	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR017	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR018	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR019	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR020	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR021	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR022	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR023	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR024	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR025	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR026	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR027	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR028	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR029	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR030	1-216-296-91	CONDUCTOR, CHIP(3216)	

Ref. No.	Part No.	Description	Remarks
JR031	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR032	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR033	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR034	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR035	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR036	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR037	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR038	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR039	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR040	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR041	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR042	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR043	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR044	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR045	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR046	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR047	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR048	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR049	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR050	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR051	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR052	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR053	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR054	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR055	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR056	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR057	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR058	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR059	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR060	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR061	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR062	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR063	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR064	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR065	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR066	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR067	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR068	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR069	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR070	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR071	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR072	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR073	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR074	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR075	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR076	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR077	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR078	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR079	1-216-296-91	CONDUCTOR, CHIP(3216)	
JR080	1-216-295-91	CONDUCTOR, CHIP(2012)	
JR084	1-216-295-91	CONDUCTOR, CHIP(2012)	
		< JUMPER RESISTOR >	
JS201	1-216-295-91	CONDUCTOR, CHIP(2012)	
JS291	1-216-295-91	CONDUCTOR, CHIP(2012)(715B,720B,720BZ)	
JS292	1-216-295-91	CONDUCTOR, CHIP(2012)	(EXCEPT 715B,720B,720BZ)
JS380	1-216-295-91	CONDUCTOR, CHIP(2012)	(715B,717VC,720,725)
JS381	1-216-295-91	CONDUCTOR, CHIP(2012)(325,475,570)	

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Ref. No.	Part No.	Description	Quantity	Unit	Material	Remarks	Ref. No.	Part No.	Description	Quantity	Unit	Material	Remarks
R105	1-249-413-11	CARBON	470	5%	1/4W	F	R225	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R106	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R228	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R107	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R229	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R108	1-216-295-91	CONDUCTOR, CHIP(2012)					R230	1-216-045-00	METAL CHIP	680	5%	1/10W	
R109	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R231	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R110	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R233	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R111	1-216-103-00	METAL CHIP	180K	5%	1/10W		R235	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R112	1-249-436-11	CARBON	39K	5%	1/4W		R236	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R113	1-216-073-00	METAL CHIP	10K	5%	1/10W		R239	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W		R240	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R115	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R243	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R116	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R291	1-216-073-00	METAL CHIP	10K	5%	1/10W	(EXCEPT 325)
R117	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R292	1-216-073-00	METAL CHIP	10K	5%	1/10W	(715B,720B,720BZ)
R118	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R293	1-216-073-00	METAL CHIP	10K	5%	1/10W	(715B,720B,720BZ)
R130	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R301	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	(715B,720B,720BZ)
R131	1-216-081-00	METAL CHIP	22K	5%	1/10W		R301	1-216-295-91	CONDUCTOR, CHIP(2012)				(325,475,570EE)
R132	1-216-065-00	METAL CHIP	4.7K	5%	1/10W							(EXCEPT 325,475,570EE)	
R133	1-216-073-00	METAL CHIP	10K	5%	1/10W		R302	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R160	1-216-065-00	METAL CHIP	4.7K	5%	1/10W		R303	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R161	1-216-065-00	METAL CHIP	4.7K	5%	1/10W							(325,475,570)	
R162	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R304	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R163	1-216-073-00	METAL CHIP	10K	5%	1/10W							(570)	
R164	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R305	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R165	1-216-041-00	METAL CHIP	470	5%	1/10W							(325,475,570)	
R166	1-216-041-00	METAL CHIP	470	5%	1/10W		R306	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R167	1-216-049-91	METAL GLAZE	1K	5%	1/10W		R307	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R168	1-216-025-91	METAL GLAZE	100	5%	1/10W		R308	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R169	1-216-025-91	METAL GLAZE	100	5%	1/10W							(570)	
R170	1-216-025-91	METAL GLAZE	100	5%	1/10W		R309	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R171	1-216-025-91	METAL GLAZE	100	5%	1/10W		R310	1-216-129-00	METAL CHIP	2.2M	5%	1/10W	
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W		R311	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R173	1-216-073-00	METAL CHIP	10K	5%	1/10W		R312	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R174	1-216-041-00	METAL CHIP	470	5%	1/10W		R313	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R175	1-216-041-00	METAL CHIP	470	5%	1/10W		R314	1-216-035-00	METAL CHIP	270	5%	1/10W	
R176	1-216-073-00	METAL CHIP	10K	5%	1/10W		R315	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R177	1-216-057-00	METAL CHIP	2.2K	5%	1/10W		R316	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R179	1-216-073-00	METAL CHIP	10K	5%	1/10W		R318	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R180	1-216-089-91	METAL GLAZE	47K	5%	1/10W		R320	1-216-047-91	METAL GLAZE	820	5%	1/10W	
R181	1-216-097-91	METAL GLAZE	100K	5%	1/10W		R330	1-249-438-11	CARBON	56K	5%	1/4W	
R182	1-249-417-11	CARBON	1K	5%	1/4W	F						(325,475,570)	
R183	1-249-388-11	CARBON	3.9	5%	1/6W	F	R330	1-249-439-11	CARBON	68K	5%	1/4W	
R184	1-249-388-11	CARBON	3.9	5%	1/6W	F						(715B,717VC,720,725)	
R185	1-249-388-11	CARBON	3.9	5%	1/6W	F	R331	1-249-438-11	CARBON	56K	5%	1/4W	
R186	1-249-413-11	CARBON	470	5%	1/4W	F						(570)	
R187	1-249-413-11	CARBON	470	5%	1/4W	F	R332	1-249-439-11	CARBON	68K	5%	1/4W	
R201	1-216-041-00	METAL CHIP	470	5%	1/10W							(325,475,570)	
R202	1-216-069-00	METAL CHIP	6.8K	5%	1/10W		R361	1-216-033-00	METAL CHIP	220	5%	1/10W	
R203	1-216-049-91	METAL GLAZE	1K	5%	1/10W		R362	1-216-033-00	METAL CHIP	220	5%	1/10W	
R204	1-216-047-91	METAL GLAZE	820	5%	1/10W							(715B,717VC,720,725)	
R205	1-216-037-00	METAL CHIP	330	5%	1/10W		R363	1-216-033-00	METAL CHIP	220	5%	1/10W	
R206	1-216-037-00	METAL CHIP	330	5%	1/10W							(715B,717VC,720,725)	
R207	1-216-073-00	METAL CHIP	10K	5%	1/10W		R364	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R208	1-216-069-00	METAL CHIP	6.8K	5%	1/10W							(715B,717VC,720,725)	
R210	1-216-295-91	CONDUCTOR, CHIP(2012)					R365	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R218	1-216-065-00	METAL CHIP	4.7K	5%	1/10W							(715B,717VC,720,725)	
R219	1-216-053-00	METAL CHIP	1.5K	5%	1/10W		R366	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R220	1-216-039-00	METAL CHIP	390	5%	1/10W							(715B,717VC,720,725)	
R222	1-216-051-00	METAL CHIP	1.2K	5%	1/10W		R367	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R223	1-249-401-11	CARBON	47	5%	1/4W	F						(715B,717VC,720,725)	
R224	1-249-401-11	CARBON	47	5%	1/4W	F	R368	1-216-133-00	METAL CHIP	3.3M	5%	1/10W	
						(EXCEPT 325,475,720EE,720EG)							(715B,717VC,720,725)

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R369	1-216-689-11	METAL CHIP	39K 0.5% 1/10W (715B,717VC,720,725)	R521	1-216-025-91	METAL GLAZE	100 5% 1/10W (325,475,570,715B,720B,720BZ,720EE,720EG)
R370	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (715B,717VC,720,725)	R522	1-216-049-91	METAL GLAZE	1K 5% 1/10W (325,475,570,715B,720B,720BZ,720EE,720EG)
R371	1-208-820-11	METAL GLAZE	39K 0.50% 1/10W (715B,717VC,720,725)	R540	1-249-403-11	CARBON	68 5% 1/4W F
R372	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (715B,717VC,720,725)	R541	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R373	1-216-689-11	METAL CHIP	39K 0.5% 1/10W (715B,717VC,720,725)	R542	1-216-037-00	METAL CHIP	330 5% 1/10W
R374	1-216-295-91	CONDUCTOR, CHIP(2012)	(715B,717VC,720,725)	R544	1-249-408-11	CARBON	180 5% 1/4W F
R375	1-216-049-91	METAL GLAZE	1K 5% 1/10W (715B,717VC,720,725)	R545	1-216-295-91	CONDUCTOR, CHIP(2012)	
R376	1-216-097-91	METAL GLAZE	100K 5% 1/10W (715B,717VC,720,725)	R547	1-249-407-11	CARBON	150 5% 1/4W F
R377	1-216-097-91	METAL GLAZE	100K 5% 1/10W (715B,717VC,720,725)	R548	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R378	1-216-083-00	METAL CHIP	27K 5% 1/10W (715B,717VC,720,725)	R549	1-216-022-00	METAL CHIP	75 5% 1/10W
R379	1-216-073-00	METAL CHIP	10K 5% 1/10W (715B,717VC,720,725)	R550	1-216-041-00	METAL CHIP	470 5% 1/10W
R382	1-216-081-00	METAL CHIP	22K 5% 1/10W (715B,717VC,720,725)	R551	1-216-041-00	METAL CHIP	470 5% 1/10W (715B,717VC,720,725)
R383	1-216-081-00	METAL CHIP	22K 5% 1/10W (715B,717VC,720,725)	R552	1-216-041-00	METAL CHIP	470 5% 1/10W
R384	1-216-081-00	METAL CHIP	22K 5% 1/10W (EXCEPT 325,475,570,720EE,720EG)	R553	1-216-041-00	METAL CHIP	470 5% 1/10W
R385	1-216-081-00	METAL CHIP	22K 5% 1/10W (EXCEPT 325,475,570,720EE,720EG)	R555	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (715B,717VC,720,725)
R386	1-216-295-91	CONDUCTOR, CHIP(2012)	(715B,717VC,720,725)	R559	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (715B,717VC,720,725)
R387	1-216-295-91	CONDUCTOR, CHIP(2012)	(715B,717VC,720,725)	R571	1-216-075-00	METAL CHIP	12K 5% 1/10W (570EG,715B,717VC,720,725)
R388	1-216-295-91	CONDUCTOR, CHIP(2012)	(715B,717VC,720,725)	R572	1-216-079-00	METAL CHIP	18K 5% 1/10W (570EG,715B,717VC,720,725)
R389	1-216-049-91	METAL GLAZE	1K 5% 1/10W (715B,717VC,720,725)	R573	1-249-438-11	CARBON	56K 5% 1/4W (715B,717VC,720,725)
R399	1-216-049-91	METAL GLAZE	1K 5% 1/10W (715B,717VC,720,725)	R574	1-216-091-00	METAL CHIP	56K 5% 1/10W (715B,717VC,720,725)
R500	1-216-041-00	METAL CHIP	470 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	R575	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (570EG,715B,717VC,720,725)
R500	1-216-049-91	METAL GLAZE	1K 5% 1/10W (325,475,570EE,720EE,720EG,720EX,720NC,720UX,720VP,725NC)	R700	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R501	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R701	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R502	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R702	1-216-073-00	METAL CHIP	10K 5% 1/10W
R504	1-216-049-91	METAL GLAZE	1K 5% 1/10W (325,475,570,715B,720B,720BZ,720EE,720EG)	R704	1-216-025-91	METAL GLAZE	100 5% 1/10W
R505	1-216-053-00	METAL CHIP	1.5K 5% 1/10W	R707	1-216-083-00	METAL CHIP	27K 5% 1/10W (EXCEPT 715B,720B,720BZ)
R506	1-216-069-00	METAL CHIP	6.8K 5% 1/10W	R707	1-216-105-91	METAL GLAZE	220K 5% 1/10W (715B,720B,720BZ)
R507	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R708	1-216-021-00	METAL CHIP	68 5% 1/10W
R508	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R710	1-216-295-91	CONDUCTOR, CHIP(2012)	
R509	1-249-437-11	CARBON	47K 5% 1/4W	R711	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R510	1-249-425-11	CARBON	4.7K 5% 1/4W F	R712	1-216-025-91	METAL GLAZE	100 5% 1/10W
R511	1-216-089-91	METAL GLAZE	47K 5% 1/10W	R717	1-216-081-00	METAL CHIP	22K 5% 1/10W
R512	1-216-089-91	METAL GLAZE	47K 5% 1/10W	R718	1-249-417-11	CARBON	1K 5% 1/4W F
R513	1-216-089-91	METAL GLAZE	47K 5% 1/10W	R720	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R514	1-216-295-91	CONDUCTOR, CHIP(2012)		R721	1-216-025-91	METAL GLAZE	100 5% 1/10W
R516	1-216-041-00	METAL CHIP	470 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	R722	1-216-025-91	METAL GLAZE	100 5% 1/10W
R516	1-216-295-91	CONDUCTOR, CHIP(2012)	(325,475,570EE,720EE,720EG,720EX,720NC,720UX,720VP,725NC)	R723	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R517	1-247-863-91	CARBON	22K 5% 1/4W	R724	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R518	1-216-097-91	METAL GLAZE	100K 5% 1/10W	R725	1-216-037-00	METAL CHIP	330 5% 1/10W
R520	1-216-049-91	METAL GLAZE	1K 5% 1/10W (325,475,570,715B,720B,720BZ,720EE,720EG)	R726	1-216-073-00	METAL CHIP	10K 5% 1/10W
				R727	1-249-417-11	CARBON	1K 5% 1/4W F
				R731	1-249-413-11	CARBON	470 5% 1/4W F (715B,717VC,720,725)
				R732	1-216-049-91	METAL GLAZE	1K 5% 1/10W (715B,720B,720BZ)
				R733	1-249-413-11	CARBON	470 5% 1/4W F (715B,717VC,720,725)

Ref. No.	Part No.	Description	Remarks
R734	1-216-049-91	METAL GLAZE 1K 5% 1/10W (715B,720B,720BZ,720EE,720EG)	
R850	1-216-025-91	METAL GLAZE 100 5% 1/10W (EXCEPT 570EE,720EE)	
R851	1-216-079-00	METAL CHIP 18K 5% 1/10W (EXCEPT 570EE,720EE)	
R852	1-216-083-00	METAL CHIP 27K 5% 1/10W (EXCEPT 570EE,720EE)	
R853	1-216-049-91	METAL GLAZE 1K 5% 1/10W (EXCEPT 570EE,720EE)	
R856	1-216-097-91	METAL GLAZE 100K 5% 1/10W (EXCEPT 570EE,720EE)	
R857	1-216-069-00	METAL CHIP 6.8K 5% 1/10W (EXCEPT 570EE,720EE)	
R858	1-216-069-00	METAL CHIP 6.8K 5% 1/10W (EXCEPT 570EE,720EE)	
R859	1-216-123-11	METAL CHIP 1.2M 5% 1/10W (EXCEPT 570EE,720EE)	
R860	1-216-123-11	METAL CHIP 1.2M 5% 1/10W (EXCEPT 570EE,720EE)	
R861	1-216-117-00	METAL CHIP 680K 5% 1/10W (EXCEPT 570EE,720EE)	
R862	1-216-057-00	METAL CHIP 2.2K 5% 1/10W (EXCEPT 570EE,720EE)	
R930	1-216-073-00	METAL CHIP 10K 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	
R931	1-216-097-91	METAL GLAZE 100K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R932	1-216-097-91	METAL GLAZE 100K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R933	1-216-073-00	METAL CHIP 10K 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	
R934	1-216-073-00	METAL CHIP 10K 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	
R936	1-216-025-91	METAL GLAZE 100 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	
R938	1-216-053-00	METAL CHIP 1.5K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R939	1-216-022-00	METAL CHIP 75 5% 1/10W (EXCEPT 325,475,570EE,720EE,720EG)	
R940	1-216-049-91	METAL GLAZE 1K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R941	1-216-022-00	METAL CHIP 75 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R943	1-216-085-00	METAL CHIP 33K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R944	1-216-089-91	METAL GLAZE 47K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R945	1-216-041-00	METAL CHIP 470 5% 1/10W (EXCEPT 325,475,570EE,720EE,720EG)	
R946	1-216-041-00	METAL CHIP 470 5% 1/10W (EXCEPT 325,475,570EE,720EE,720EG)	
R947	1-216-041-00	METAL CHIP 470 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R948	1-216-041-00	METAL CHIP 470 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R949	1-216-073-00	METAL CHIP 10K 5% 1/10W (715B,717VC,720B,720BZ,720NP,720VC)	
R950	1-216-073-00	METAL CHIP 10K 5% 1/10W (570EG,715B,717VC,720B,720BZ,720NP,720VC)	
R951	1-216-295-91	CONDUCTOR, CHIP(2012) (EXCEPT 325,475,570EE,720EE,720EG)	

Ref. No.	Part No.	Description	Remarks
		< MODULATOR >	
RFU700	1-475-058-11	MODULATOR, RF(RFU-2110) (715B,720B,720BZ)	
RFU700	1-475-059-11	MODULATOR, RF(RFU-2101) (717VC,720EG,720EX,720NC,720NP,720UX,720VC,720VP,725NC)	
		< SWITCH >	
S100	1-570-953-11	SWITCH, PUSH (1 KEY) (CASSETTE IN/REC PROOF)	
S160	1-571-588-11	SWITCH, SLIDE(NTSC PB)	
S700	1-571-588-11	SWITCH, SLIDE(RF MODULATOR ON/OFF)	
		< TUNER >	
TU701	1-693-359-11	TUNER, MODULATOR IF (570EE,720EE)	
TU701	1-693-360-11	TUNER, MODULATOR IF (325,475,570EG)	
TU703	1-693-361-11	TUNER, IF(BTF-3WC425)(720EG)	
TU703	1-693-362-11	TUNER, IF(BTF-3WC443)(720BZ)	
TU703	1-693-364-11	TUNER, IF(BTF-3WC444)(715B,720B)	
TU703	1-693-365-11	TUNER, IF(BTF-3WC433)(720EX)	
TU703	1-693-366-11	TUNER, IF(BTF-3WU602)(720UX)	
TU703	1-693-367-11	TUNER, IF(BTF-3WC412)(720NC,720NP,725NC)	
TU703	1-693-368-11	TUNER, IF(BTF-3WC402)(717VC,720VC,720VP)	
		< VIBRATOR >	
X160	1-760-494-11	VIBRATOR, CRYSTAL 16MHz	
X201	1-579-608-11	VIBRATOR, CRYSTAL 4.43MHz	
X500	1-577-289-11	VIBRATOR, CRYSTAL 17.734475MHz	
*	A-6791-186-A	PS-385 BOARD, COMPLETE ***** (Ref.No.: 5,000 Series)	
	3-970-608-21	SUMITITE (B3), +8V	
		< CAPACITOR >	
△C600	1-117-617-11	FILM 0.22uF 20% 275V	
△C601	1-117-616-11	FILM 0.1uF 20% 275V	
△C602	1-113-915-11	CERAMIC 0.001uF 20% 250V	
△C603	1-113-915-11	CERAMIC 0.001uF 20% 250V	
△C604	1-113-915-11	CERAMIC 0.001uF 20% 250V	
△C605	1-113-915-11	CERAMIC 0.001uF 20% 250V	
△C606	1-113-915-11	CERAMIC 0.001uF 20% 250V	
C607	1-117-615-11	ELECT 68uF 20% 400V	
C608	1-126-963-11	ELECT 4.7uF 20% 50V	
C609	1-130-491-00	MYLAR 0.047uF 5% 50V	
C612	1-130-491-00	MYLAR 0.047uF 5% 50V	
C613	1-115-741-11	ELECT 0.0022F 20% 10V	
C615	1-111-042-11	ELECT 0.0012F 20% 16V	
C616	1-136-165-00	MYLAR 0.1uF 10% 50V	
C617	1-126-935-11	ELECT 470uF 20% 16V	
C618	1-126-926-11	ELECT 1000uF 20% 10V	
C619	1-126-934-11	ELECT 220uF 20% 16V	
C621	1-126-967-11	ELECT 47uF 20% 16V	
C624	1-126-934-11	ELECT 220uF 20% 16V	
C625	1-128-551-11	ELECT 22uF 20% 25V	

Note : 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	Remarks	Ref. No.	Part No.	Description	Remarks
C626	1-126-933-11	ELECT	100uF 20%			< IC LINK >	
C627	1-126-967-11	ELECT	47uF 20%				
C628	1-128-551-11	ELECT	22uF 20%				
C629	1-126-924-11	ELECT	330uF 20%				
C630	1-126-924-11	ELECT	330uF 20%				
C633	1-111-084-11	ELECT	220uF 20%				
C634	1-126-949-11	ELECT	220uF 20%				
C636	1-126-968-11	ELECT	100uF 20%				
C637	1-162-134-11	CERAMIC	470PF 10%				
< CONNECTOR >							
CN600	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P					
CN601	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P					
< DIODE >							
D600	8-719-051-93	DIODE	DF06M-6031				
D602	8-719-975-89	DIODE	ERA15-02TP3				
D603	8-719-981-97	DIODE	MTZJ-3.0A				
D604	8-719-991-33	DIODE	1SS133T-77				
D605	8-719-043-76	DIODE	AK04V0				
D606	1-809-649-11	DIODE	RK44LF-L1				
D607	8-719-313-17	DIODE	AU02A-V0				
D608	8-719-510-73	DIODE	S3L20UF4				
D609	8-719-313-17	DIODE	AU02A-V0				
D610	8-719-059-64	DIODE	RD16F-T8B2				
D612	8-719-911-19	DIODE	1SS119				
D613	8-719-109-85	DIODE	RD5.1ES-B2				
D614	8-719-911-19	DIODE	1SS119				
< TERMINAL BOARD >							
ET600	1-537-770-21	TERMINAL BOARD, GROUND					
< FUSE >							
△F600	1-533-827-11	FUSE (HOLDER TO) T2A 250V					
< IC >							
IC601	8-759-438-18	IC	PQ12RD08				
IC602	8-759-035-35	IC	TL431CLPRA				
< JUMPER RESISTOR >							
JS612	1-216-295-91	CONDUCTOR, CHIP (2012)					
< COIL >							
L600	1-403-588-11	CIL, CHOKE	22uH				
L601	1-403-588-11	CIL, CHOKE	22uH				
L602	1-408-397-00	INDUCTOR	1uH				
L603	1-408-397-00	INDUCTOR	1uH				
L604	1-414-792-11	INDUCTOR	0uH				
< LINE FILTER >							
LF600	1-424-485-11	FILTER, LINE					
LF601	1-409-977-11	FILTER, LINE					
LF602	1-409-977-11	FILTER, LINE					
< PHOTOCOUPLER >							
△PH600	8-749-013-04	PHOTOCOUPLER MOC8104TV					
△PS600	1-532-841-21	LINK, IC 1.6A					
△PS601	1-532-841-21	LINK, IC 1.6A					
△PS602	1-533-593-11	LINK, IC 2A					
△PS603	1-532-841-21	LINK, IC 1.6A					
< TRANSISTOR >							
Q600	8-729-024-00	TRANSISTOR	2SC3377-T93Q				
Q601	8-729-032-85	TRANSISTOR	2SC4231LM				
Q602	8-729-140-93	TRANSISTOR	2SB733-34				
Q603	8-729-421-22	TRANSISTOR	UN2211				
Q604	8-729-018-99	TRANSISTOR	2SD2394-F				
Q605	8-729-119-77	TRANSISTOR	2SA1175-FEK				
Q607	8-729-140-96	TRANSISTOR	KSC1008				
Q608	8-729-901-06	TRANSISTOR	DTA144EK				
Q610	8-729-140-96	TRANSISTOR	KSC1008				
Q611	8-729-901-06	TRANSISTOR	DTA144EK				
Q612	8-729-421-19	TRANSISTOR	UN2213				
Q613	8-729-119-79	TRANSISTOR	2SC2785-FEK				
Q614	8-729-119-77	TRANSISTOR	2SA1175-FEK				
< RESISTOR >							
△R600	1-214-947-00	METAL	2.7M	1%		1/2W	
R601	1-247-887-00	CARBON	220K	5%		1/4W	
R602	1-247-887-00	CARBON	220K	5%		1/4W	
R603	1-215-429-11	CARBON	10K	5%		1/4W	
R604	1-215-885-00	METAL OXIDE	68	5%		2W	F
R606	1-215-416-00	METAL	620	1%		1/6W	
R607	1-247-807-31	CARBON	100	5%		1/4W	
R608	1-249-404-00	CARBON	82	5%		1/4W	F
R609	1-215-428-00	METAL	2K	1%		1/6W	
R610	1-249-406-11	CARBON	120	5%		1/4W	F
R611	1-215-425-00	METAL	1.5K	1%		1/6W	
R612	1-249-421-11	CARBON	2.2K	5%		1/4W	F
R613	1-249-421-11	CARBON	2.2K	5%		1/4W	F
R614	1-216-089-91	METAL GLAZE	47K	5%		1/10W	
R615	1-216-061-00	METAL CHIP	3.3K	5%		1/10W	
R616	1-216-061-00	METAL CHIP	3.3K	5%		1/10W	
R617	1-249-417-11	CARBON	1K	5%		1/4W	F
R618	1-247-815-91	CARBON	220	5%		1/4W	
R620	1-249-417-11	CARBON	1K	5%		1/4W	F
R621	1-216-363-00	METAL OXIDE	0.33	5%		2W	F
R622	1-216-089-91	METAL GLAZE	47K	5%		1/10W	
R623	1-216-073-00	METAL CHIP	10K	5%		1/10W	
R624	1-216-089-91	METAL GLAZE	47K	5%		1/10W	
R625	1-216-089-91	METAL GLAZE	47K	5%		1/10W	
R626	1-247-815-91	CARBON	220	5%		1/4W	
R627	1-249-421-11	CARBON	2.2K	5%		1/4W	F
< TRANSFORMER >							
T600	1-431-167-11	TRANSFORMER, RCC CONVERTER					

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

RP-217

Ref. No.	Part No.	Description	Remarks
*	A-6791-187-A	RP-217 BOARD, COMPLETE (715B,717VC,720,725) *****	
*	A-6791-201-A	RP-217 BOARD, COMPLETE(570) *****	
*	A-6791-212-A	RP-217 BOARD, COMPLETE(325) *****	
*	A-6791-215-A	RP-217 BOARD, COMPLETE(475) ***** (Ref.No.: 1,000 Series)	
< CAPACITOR >			
C140	1-126-960-11	ELECT	1uF 20% 50V
C141	1-163-263-11	CERAMIC CHIP	330PF 5% 50V (570,715B,717VC,720,725)
C141	1-163-275-11	CERAMIC CHIP	0.001uF 5% 50V (325,475)
C142	1-126-960-11	ELECT	1uF 20% 50V
C143	1-126-967-11	ELECT	47uF 20% 16V
C144	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C145	1-163-018-00	CERAMIC CHIP	0.0056uF 5% 50V
C146	1-126-933-11	ELECT	100uF 20% 16V
C147	1-126-960-11	ELECT	1uF 20% 50V
C260	1-163-231-11	CERAMIC CHIP	15PF 5% 50V (EXCEPT 325)
C260	1-163-235-11	CERAMIC CHIP	22PF 5% 50V (325)
C261	1-163-231-11	CERAMIC CHIP	15PF 5% 50V (EXCEPT 325)
C264	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C265	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (EXCEPT 325)
C266	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C267	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C268	1-163-241-11	CERAMIC CHIP	39PF 5% 50V (325)
C268	1-163-243-11	CERAMIC CHIP	47PF 5% 50V (EXCEPT 325)
C269	1-163-241-11	CERAMIC CHIP	39PF 5% 50V (325)
C269	1-163-243-11	CERAMIC CHIP	47PF 5% 50V (EXCEPT 325)
C270	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C271	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C272	1-163-031-11	CERAMIC CHIP	0.01uF 50V (325)
C272	1-163-243-11	CERAMIC CHIP	47PF 5% 50V (EXCEPT 325)
C273	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V(325)
C273	1-163-243-11	CERAMIC CHIP	47PF 5% 50V (EXCEPT 325)
C274	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (EXCEPT 325)
C275	1-164-346-11	CERAMIC CHIP	1uF 16V
C276	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C277	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C278	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (EXCEPT 325)
C279	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (EXCEPT 325)

Ref. No.	Part No.	Description	Remarks
C280	1-124-584-00	ELECT	100uF 20% 10V
C282	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C283	1-163-038-91	CERAMIC CHIP	0.1uF 25V
C284	1-163-038-91	CERAMIC CHIP	0.1uF 25V
C286	1-124-584-00	ELECT	100uF 20% 10V
C287	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
C288	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
C289	1-163-038-91	CERAMIC CHIP	0.1uF 25V
C290	1-164-346-11	CERAMIC CHIP	1uF 16V
C321	1-126-967-11	ELECT	47uF 20% 16V
C322	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C323	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C324	1-104-697-11	FILM	0.047uF 5% 100V (EXCEPT 570)
C324	1-137-462-11	FILM	0.018uF 5% 100V (570)
C331	1-126-933-11	ELECT	100uF 20% 16V (570)
C332	1-164-232-11	CERAMIC CHIP	0.01uF 50V (570)
C334	1-163-011-11	CERAMIC CHIP	0.0015uF 10% 50V (570)
C335	1-104-697-11	FILM	0.047uF 100V (570)
C341	1-163-031-11	CERAMIC CHIP	0.01uF 50V (715B,717VC,720,725)
C342	1-163-031-11	CERAMIC CHIP	0.01uF 50V (715B,717VC,720,725)
C343	1-124-257-00	ELECT	2.2uF 20% 50V (715B,717VC,720,725)
C344	1-163-031-11	CERAMIC CHIP	0.01uF 50V (715B,717VC,720,725)
C345	1-126-160-11	ELECT	1uF 20% 50V (715B,717VC,720,725)
C346	1-124-584-00	ELECT	100uF 20% 10V (715B,717VC,720,725)
C347	1-163-031-11	CERAMIC CHIP	0.01uF 50V (715B,717VC,720,725)
C350	1-163-038-91	CERAMIC CHIP	0.1uF 25V (715B,717VC,720,725)
C351	1-163-139-00	CERAMIC CHIP	820PF 5% 50V (715B,717VC,720,725)
C352	1-163-031-11	CERAMIC CHIP	0.01uF 50V (715B,717VC,720,725)
C353	1-163-038-91	CERAMIC CHIP	0.1uF 25V (715B,717VC,720,725)
C356	1-163-139-00	CERAMIC CHIP	820PF 5% 50V (715B,717VC,720,725)
C357	1-163-031-11	CERAMIC CHIP	0.01uF 50V (715B,717VC,720,725)
C358	1-163-038-91	CERAMIC CHIP	0.1uF 25V (715B,717VC,720,725)
< CONNECTOR >			
CN260	1-563-585-11	CONNECTOR, FLEXIBLE 8P	(325,475,570)
CN260	1-766-986-11	CONNECTOR, FFC/FPC 13P	(715B,717VC,720,725)
* CN261	1-564-030-00	PIN, CONNECTOR 5P	
CN271	1-573-834-11	CONNECTOR, BOARD TO BOARD 20P	
CN272	1-766-720-11	CONNECTOR, BOARD TO BOARD 17P	
CN301	1-506-481-11	PIN, CONNECTOR 2P	
CN302	1-506-485-11	PIN, CONNECTOR 6P	
* CN341	1-564-027-00	PIN, CONNECTOR 2P	(715B,717VC,720,725)

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< IC >					
IC140	8-759-438-83	IC BA6305F		R264	1-216-295-91	CONDUCTOR, CHIP(2012)	
IC141	8-759-510-73	IC BA10393F-E2		R265	1-216-295-91	CONDUCTOR, CHIP(2012)	(EXCEPT 325)
IC260	8-759-352-17	IC HA118195NT (EXCEPT 325)		R266	1-216-053-00	METAL CHIP 1.5K	5% 1/10W (325)
IC260	8-759-357-84	IC HA118295NT (325)		R266	1-216-055-00	METAL CHIP 1.8K	5% 1/10W (EXCEPT 325)
IC301	8-759-089-84	IC BA7755AF-T1		R267	1-216-071-00	METAL CHIP 8.2K	5% 1/10W (EXCEPT 325)
IC340	8-759-055-49	IC AN3327K (715B,717VC,720,725)		R267	1-216-073-00	METAL CHIP 10K	5% 1/10W (325)
		< JUMPER RESISTOR >		R268	1-216-081-00	METAL CHIP 22K	5% 1/10W
JR501	1-216-296-91	CONDUCTOR, CHIP(3216)		R269	1-216-059-00	METAL CHIP 2.7K	5% 1/10W (EXCEPT 325)
JR502	1-216-295-91	CONDUCTOR, CHIP(2012)		R269	1-216-061-00	METAL CHIP 3.3K	5% 1/10W (325)
		< JUMPER RESISTOR >		R270	1-216-081-00	METAL CHIP 22K	5% 1/10W
JS331	1-216-295-91	CONDUCTOR, CHIP(2012) (325,475,715B,717VC,720,725)		R271	1-216-049-91	METAL GLAZE 1K	5% 1/10W
		< COIL >		R272	1-216-081-00	METAL CHIP 22K	5% 1/10W
L140	1-408-982-11	INDUCTOR 100uH		R273	1-216-081-00	METAL CHIP 22K	5% 1/10W
L262	1-408-970-21	INDUCTOR 10uH		R274	1-216-075-00	METAL CHIP 12K	5% 1/10W
L263	1-408-982-11	INDUCTOR 100uH		R275	1-216-075-00	METAL CHIP 12K	5% 1/10W
L321	1-408-982-11	INDUCTOR 100uH		R276	1-216-049-91	METAL GLAZE 1K	5% 1/10W
L331	1-410-687-11	INDUCTOR 1.2mH (570)		R278	1-216-025-91	METAL GLAZE 100	5% 1/10W (325)
L341	1-408-982-11	INDUCTOR 100uH (715B,717VC,720,725)		R317	1-216-079-00	METAL CHIP 18K	5% 1/10W
		< IC LINK >		R321	1-249-401-11	CARBON 47	5% 1/4W F
△ PS331	1-533-586-31	LINK, IC 0.315A (570)		R322	1-216-059-00	METAL CHIP 2.7K	5% 1/10W (EXCEPT 325,570)
		< TRANSISTOR >		R322	1-216-063-91	METAL GLAZE 3.9K	5% 1/10W (325)
Q141	8-729-901-06	TRANSISTOR DTA144EK		R322	1-216-067-00	METAL CHIP 5.6K	5% 1/10W (570)
Q260	8-729-230-49	TRANSISTOR 2SC2712-YG		R323	1-217-671-11	METAL CHIP 1	5% 1/10W
Q321	8-729-802-91	TRANSISTOR 2SD879		R324	1-249-408-11	CARBON 180	5% 1/4W F
Q331	8-729-012-31	TRANSISTOR 2SC4040-TL2-Q (570)		R331	1-216-295-91	CONDUCTOR, CHIP(2012)	(570)
Q332	8-729-900-51	TRANSISTOR DTA114TK (570)		R332	1-216-083-00	METAL CHIP 27K	5% 1/10W (570)
		< RESISTOR >		R333	1-249-394-11	CARBON 12	5% 1/4W F (570)
R140	1-216-117-00	METAL CHIP 680K	5% 1/10W	R335	1-126-735-11	ELECT 10MF	20% 100V (570)
R141	1-216-037-00	METAL CHIP 330	5% 1/10W	R341	1-216-067-00	METAL CHIP 5.6K	5% 1/10W (715B,717VC,720,725)
R142	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R342	1-216-051-00	METAL CHIP 1.2K	5% 1/10W (715B,717VC,720,725)
R143	1-216-065-00	METAL CHIP 4.7K	5% 1/10W	R343	1-216-073-00	METAL CHIP 10K	5% 1/10W (715B,717VC,720,725)
R144	1-216-043-91	METAL GLAZE 560	5% 1/10W	R344	1-216-079-00	METAL CHIP 18K	5% 1/10W (715B,717VC,720,725)
R145	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R345	1-216-097-91	METAL GLAZE 100K	5% 1/10W (715B,717VC,720,725)
R147	1-208-830-11	METAL GLAZE 100K	0.50% 1/10W	R346	1-216-065-00	METAL CHIP 4.7K	5% 1/10W (715B,717VC,720,725)
R148	1-208-830-11	METAL GLAZE 100K	0.50% 1/10W	R347	1-216-065-00	METAL CHIP 4.7K	5% 1/10W (715B,717VC,720,725)
R149	1-208-830-11	METAL GLAZE 100K	0.50% 1/10W	R348	1-216-097-91	METAL GLAZE 100K	5% 1/10W (715B,717VC,720,725)
R150	1-216-065-00	METAL CHIP 4.7K	5% 1/10W	R350	1-216-033-00	METAL CHIP 220	5% 1/10W (715B,717VC,720,725)
R151	1-208-830-11	METAL GLAZE 100K	0.50% 1/10W	R351	1-216-035-00	METAL CHIP 270	5% 1/10W (715B,717VC,720,725)
R152	1-216-111-91	METAL GLAZE 390K	5% 1/10W	R356	1-216-035-00	METAL CHIP 270	5% 1/10W (715B,717VC,720,725)
R153	1-216-057-00	METAL CHIP 2.2K	5% 1/10W				
R155	1-216-065-00	METAL CHIP 4.7K	5% 1/10W				
R157	1-216-081-00	METAL CHIP 22K	5% 1/10W				
R260	1-216-041-00	METAL CHIP 470	5% 1/10W (EXCEPT 325)				
R260	1-216-045-00	METAL CHIP 680	5% 1/10W (325)				
R261	1-216-041-00	METAL CHIP 470	5% 1/10W (EXCEPT 325)				
R262	1-216-295-91	CONDUCTOR, CHIP(2012)					
R263	1-216-295-91	CONDUCTOR, CHIP(2012)					

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

RP-217

Ref. No.	Part No.	Description	Remarks
		< TRANSFORMER >	
T321	1-431-097-11	TRANSFORMER, BIAS OSCILLATION (EXCEPT 570)	
T321	1-431-100-11	TRANSFORMER, BIAS OSCILLATION	(570)
T331	1-423-415-11	TRANSFORMER, BIAS OSCILLATION	(570)

**MISCELLANEOUS

11	1-762-844-21	SWITCH, ROTARY	(570)
△15	1-782-012-11	CORD, POWER	
17	1-777-960-11	CABLE, FLAT (FFM-13) 29P	
158	1-500-144-11	HEAD, FE	
164	A-6736-105-A	ACE BLOCK ASSY	
165	1-506-485-11	PIN, CONNECTOR 6P	
203	1-759-183-11	DRUM ASSY, DZH-78A-R(M901)	(325)
203	1-759-371-11	DRUM ASSY, DZH-65A-R(M901)	(475,570)
203	1-759-373-11	DRUM ASSY, DZH-86A-R(M901)	(715B,717VC,720,725)
260	1-762-076-11	SWITCH, ROTARY	
M902	1-698-409-14	MOTOR, DC(CAPSTAN)	
M903	X-3943-883-1	MOTOR ASSY, CAM	

**ACCESSORIES & PACKING MATERIALS

1-696-593-11	CORD, CONNECTION (PAL)(FOR RF)1.5m	
1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (720EX,720UX)	
1-770-321-11	ADAPTOR, CONVERSION 6P (720EE)	
1-770-321-21	ADAPTOR, CONVERSION 4P (570EE)	
3-858-881-11	MANUAL, INSTRUCTION (ENGLISH) (720EX,720UX)	
3-858-881-21	MANUAL, INSTRUCTION (FRENCH) (720NC,720VP,725NC)	
3-858-881-31	MANUAL, INSTRUCTION (GERMAN) (717VC,720NC,720VC,720VP,725NC)	
3-858-881-41	MANUAL, INSTRUCTION (FRENCH) (720B,720BZ)	
3-858-881-51	MANUAL, INSTRUCTION (DUTCH) (720NC,720VP,725NC)	
3-858-881-61	MANUAL, INSTRUCTION (ITALIAN)(720VP)	
3-858-881-71	MANUAL, INSTRUCTION (SPANISH)(720NP)	
3-858-881-81	MANUAL, INSTRUCTION (PORTUGUESE) (720NP)	
3-858-882-11	MANUAL, INSTRUCTION (SWEDISH) (720NC,725NC)	
3-858-882-21	MANUAL, INSTRUCTION (FINISH) (720NC,725NC)	
3-858-882-31	MANUAL, INSTRUCTION (DANISH) (720NC,725NC)	
3-858-883-11	MANUAL, INSTRUCTION (ENGLISH)(720EG)	
3-858-883-21	MANUAL, INSTRUCTION (CZECH)(720EG)	
3-858-883-31	MANUAL, INSTRUCTION (POLISH)(720EG)	
3-858-883-41	MANUAL, INSTRUCTION (HUNGARIAN)(720EG)	
3-858-883-51	MANUAL, INSTRUCTION (ENGLISH)(720EE)	
3-858-883-61	MANUAL, INSTRUCTION (RUSSIAN)(720EE)	
3-858-884-11	MANUAL, INSTRUCTION (ENGLISH)(570EG)	
3-858-884-21	MANUAL, INSTRUCTION (CZECH)(570EG)	
3-858-884-31	MANUAL, INSTRUCTION (POLISH)(570EG)	
3-858-884-41	MANUAL, INSTRUCTION (HUNGARIAN)(570EG)	

Ref. No.	Part No.	Description	Remarks
	3-858-884-51	MANUAL, INSTRUCTION (ENGLISH)(570EE)	
	3-858-884-61	MANUAL, INSTRUCTION (RUSSIAN)(570EE)	
	3-858-885-11	MANUAL, INSTRUCTION (CZECH)(475)	
	3-858-885-21	MANUAL, INSTRUCTION (ENGLISH)(325)	
	3-858-885-31	MANUAL, INSTRUCTION (CZECH)(325)	
	3-858-885-41	MANUAL, INSTRUCTION (POLISH)(325)	
	3-858-885-51	MANUAL, INSTRUCTION (HUNGARIAN)(325)	
	3-859-420-21	MANUAL, INSTRUCTION (FRENCH)(715B)	
*	3-972-892-01	INDIVIDUAL CARTON (720NC,720NP,720VC,720VP)	
*	3-972-892-11	INDIVIDUAL CARTON(720B,720BZ)	
*	3-972-892-21	INDIVIDUAL CARTON(720EX,720UX)	
*	3-972-892-31	INDIVIDUAL CARTON(717VC)	
*	3-972-892-41	INDIVIDUAL CARTON(725NC)	
*	3-972-892-51	INDIVIDUAL CARTON(715B)	
*	3-972-893-01	CUSHION	
*	3-974-278-01	INDIVIDUAL CARTON(720EG)	
*	3-974-278-11	INDIVIDUAL CARTON(720EE)	
*	3-974-278-21	INDIVIDUAL CARTON(570EG)	
*	3-974-278-31	INDIVIDUAL CARTON(570EE)	
*	3-974-278-41	INDIVIDUAL CARTON(475)	
*	3-974-278-51	INDIVIDUAL CARTON(325)	
*	3-974-583-01	SPACER	

HARDWARE LIST

#1	7-682-547-04	SCREW +P 3X6
#2	7-685-646-79	SCREW (3X8)
#5	7-624-190-61	STOP RING 2.4,TYPE-CS
#6	7-628-254-10	SCREW +PS 2.6X6
#7	7-624-106-04	STOP RING 3.0,TYPE-E
#8	7-682-645-01	SCREW +PS 3X4

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

SECTION 6
 INTERFACE, IC PIN FUNCTION DESCRIPTION

6-1. SYSTEM CONTROL — SERVO PERIPHERAL CIRCUIT INTERFACE (MA-286 BOARD IC160)

Signal	Pin No.	I/O	STOP	FF	REW	TAPE THREADING	TAPE UNTHREADING	PB	PB PAUSE	SLOW	CUE	x 2	REVIEW	REC	REC PAUSE	PB INDEX WRITING
REC CTL	MA-286 IC160 ①	O	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	
CAP STOP	MA-286 IC160 ②	O (O.D.)	L	Hi-Z (O.D.)	Hi-Z (O.D.)	Hi-Z (O.D.)	Hi-Z (O.D.)	Hi-Z (O.D.)	L	*3	Hi-Z (O.D.)	Hi-Z (O.D.)	Hi-Z (O.D.)	Hi-Z (O.D.)	Hi-Z (O.D.)	
STEP PLS	MA-286 IC160 ③	O	L	L	L	L	L	L	L	*2	L	L	L	L	L	
CTL REC	MA-286 IC160 ④	O	L	L	L	L	L	L	L	L	L	L	L	H	L	H
CTL INDEX	MA-286 IC160 ⑤	O	L	L	L	L	L	L	L	L	L	L	L	L	L	H
PB CTL	MA-286 IC160 ⑥	I	H	*8	*8			*1	H/L	*2	*5	*6	*6	*1	H	
DRM PG	MA-286 IC160 ⑦	I	*1	*1	*1	*5	*5	*1	*1	*1	*1	*1	*1	*1	*1	
DRM FG	MA-286 IC160 ⑧	I	*1	*7	*7	*5	*5	*7	*7	*7	*7	*7	*7	*7	*7	
CAP FG	MA-286 IC160 ⑨	I	H/L	*6	*6	*5	*5	*8	H/L	*2	*6	*6	*6	*6	H/L	
CAP DA	MA-286 IC160 ⑩	O	*8	*8	*8	*8	*8	*9	*8	*8	*9	*9	*9	*9	*8	
DRM DA	MA-286 IC160 ⑪	O	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	
CTL STEP	MA-286 IC160 ⑫	O	L	L	L	L	L	L	L	*11	L	L	L	L	L	
CTL GAIN	MA-286 IC160 ⑬	O	H	H	H	H	H	H	*12	*12	H	H	H	H	L	L
CTL RESET	MA-286 IC160 ⑭	I/O	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	*13	Hi-Z	Hi-Z	Hi-Z
REC COUNT	MA-286 IC160 ⑮	I	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z

- *1. 25Hz pulse.
- *2. Pulse at tape running.
- *3. Reverse logic pulse of STEP PLS.
- *4. "L" when drum rotation stop.
- *5. Unstable period pulse.
- *6. Pulse of period in proportion to tape speed.
- *7. 300Hz pulse.
- *8. Approx. 2 msec period "H" or "L" pulse.
- *9. Approx. 1.5 msec period "H" or "L" pulse.
- *10. Approx. 3 msec period "H" or "L" pulse.
- *11. "H" when FWD directions STEP drive.

6-2. SYSTEM CONTROL — MECHANISM INTERFACE (MA-286 BOARD IC160)

Signal	Pin No.	I/O	EJECTED	CASSETTE LOADING	CASSETTE UNLOADING	TAPE THREADING	TAPE UNTHREADING	STOP	FF	REW	PB	PB PAUSE	SLOW	x 2	CUE	REVIEW	REC	REC PAUSE
CAM2 CW	MA-286 IC160 ⑨	I/O	Hi-Z	H	L	H	L	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z
CAM1 V	MA-286 IC160 ⑩	VO	Hi-Z	H	H	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z	Hi-Z
MODE 1	MA-286 IC160 ⑪	I	H	L	L	*1	*1	H	H	H	H	H	H	H	H	L	H	H
MODE 2	MA-286 IC160 ⑫	I	L	L	L	*1	*1	L	L	L	H	H	H	H	H	H	H	H
MODE 3	MA-286 IC160 ⑬	I	L	L	L	*1	*1	H	H	H	L	H	H	L	L	H	L	H
MODE 4	MA-286 IC160 ⑭	I	L	H	H	*1	*1	H	L	L	L	L	L	L	L	L	L	L
REC PRF	MA-286 IC160 ⑮	I	L	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
T REEL FG	MA-286 IC160 ⑯	I	H/L	H/L	H/L	H/L	H/L	H/L	*3	*3	*3	H/L	*3	*3	*3	*3	*3	H/L
S REEL FG	MA-286 IC160 ⑰	I	H/L	H/L	H/L	*3	*3	H/L	*3	*3	*3	H/L	*3	*3	*3	*3	*3	H/L
T/E LED	MA-286 IC160 ⑱	O (O.D.)	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4
CAP PWM	MA-286 IC160 ⑲	O (O.D.)	*8	*8	*8	*8	*8	*8	*9	*9	*8	*10	*8	*8	*9	*9	*8	*10
CAP STOP	MA-286 IC160 ⑳	O (O.D.)	L	L	L	H	H	L	H	H	H	L	*5	H	H	H	H	L
CAP RVS	MA-286 IC160 ㉑	O	H			L	H	H/L	L	H	L	L	L**5	L	H	L	L	
CAP DA	MA-286 IC160 ㉒	O																
T SENS	MA-286 IC160 ㉓	I	*4	*4	*4	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7
S SENS	MA-286 IC160 ㉔	I	*4	*4	*4	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7

*1. Uncertainly.

*2. "L" when erasing protection tab is bent. "H" when not bent.

*3. Pause of period in proportion to real rotating speed.

*4. Approx. 2 msec period "H" pulse.

*5. Pulse at tape running.

*6. "L" when tape running and CAP RVS is "H".

*7. Normally "L". 2 msec period "H" pulse when tape top or tape end is detected.

*8. Captra Normal Duty pulse becomes 1.6V by LPF.

*9. Captra FR Duty pulse becomes 3.189V by LPF.

*10. Captra Denji Duty pulse becomes 0.31V by LPF.

*11. Captra Mid Duty pulse becomes 1.426V by LPF.

Captra Low Duty pulse becomes 0.684V by LPF.

6-3. SYSTEM CONTROL — SYSTEM CONTROL PERIPHERAL CIRCUIT INTERFACE (MA-286 BOARD IC160)

Signal	Pin No.	I/O	I/O Level
ASURA RESET	MA-286 IC160 ㉕	I	Normally "H", "L" when service interruption is detected or restored.
ASURA CS	MA-286 IC160 ㉖	I	Chip select signal from timer microprocessor. V period "L" pulse.
S IN 0	MA-286 IC160 ㉗	I	Serial communication data from timer microprocessor. V period "L" pulse.
S OUT 0	MA-286 IC160 ㉘	O	Serial communication data to timer microprocessor. V period "L" pulse.
S CLK	MA-286 IC160 ㉙	I	Serial communication clock from timer microprocessor. V period "L" pulse.

6-4. SYSTEM CONTROL — Hi-Fi AUDIO BLOCK INTERFACE (MA-286 BOARD IC160)

Signal	Pin No.	I/O	TOP/FF/REW	TAPE LOADING	TAPE UNLOADING	PB	PB PAUSE	SLOW	x 2	CUE	REVIEW	REC	REC PAUSE
AF ENV	MA-286 IC160 ㉚	I	AF RF envelope signal input terminal for automatic tracking.										
A MUTEN	MA-286 IC160 ㉛	O (O.D.)	L	L	L	*1	H	H	H	H	H	L	L
AF REC P	MA-286 IC160 ㉜	O	L	L	L	L	L	L	L	L	L	H	L
AF SWP	MA-286 IC160 ㉝	O	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1
FULL ERS	MA-286 IC160 ㉞	O (O.D.)	H	H	H	H	H	H	H	H	H	L	H

*1. 25 Hz 50 % duty pulse approx. 5 msec delayed from RF SW P.

6-5. SERVO/SYSTEM CONTROL MICROPROCESSOR PIN FUNCTIONS (MA-286 BOARD IC160)

Pin No.	Pin Name	I/O	Function
1	RF SWP	O	RF switching pulse output.
2	AF REC P	O	"H" when HiFi audio REC.
3		—	Not used.
4	QVD	O	Quasi VD pulse output.
5	AUTO PRESET	O	"H" during auto preset.
6	FE ON	O	Not used.
7	REC CTL	O	REC CTL signal output.
8	CTL RESET	O	Capstan current control. "H" during slow mode.
9	CAM 2	O	Cam motor control.
10	CAM 1	O	Cam motor 9V, 12V switch.
11	TA MUTE	O	Tuner audio mute. H: Mute
12	SECAM DET	I	"H" when the SECAM signal is detected.
13	NT JUDGE	I	4.43/3.58 judge input.
14	MESECAM	I	"H" when the MESECAM signal is detected.
15	CIN (REC PRF)	I	Erasing protection tab, cassette in detection signal input.
16	AV CONT	O	On/Off control.
17	N. C.	—	Not used.
18	SW1	O	
19	MODE 4	I	Cam encoder signal input.
20	MODE 3	I	Cam encoder signal input.
21	MODE 2	I	Cam encoder signal input.
22	MODE 1	I	Cam encoder signal input.
23	N. C.	—	Not used.
24	PAL PLUS CONT	O	
25	N. C.	—	Not used.
26	N. C.	—	Not used.
27	N. C.	—	Not used.
28	SDA 0	I/O	IIC data.
29	N. C.	—	Not used.
30	SCL 0	I/O	IIC clock.
31	A MUTE	O	"H" when audio mute.
32	T/E LED	O	Tape top/end sensors driver.
33	N. C.	—	Not used.
34	N. C.	—	Not used.
35	CAP STOP	O	Capstan stop signal output.
36	FULL ERS	O	Full erase control.
37	N. C.	O	Not used.
38	N. C.	O	Not used.
39	MP	I	Fixed to "L".
40	ASURA RESET	I	System reset signal.
41	VSS	—	Ground.
42	XTAL	—	System clock 16MHz.
43	EXTAL	—	System clock 16MHz.
44	ASURA CS	I	Servo/system control microcomputer chip select signal.
45	S IN 0	I	Serial communication signal.
46	S OUT 0	O	Serial communication signal.
47	SCLK	O	Serial communication signal.
48	N. C.	—	Not used.
49	N. C.	—	Not used.
50	N. C.	—	Not used.

Pin No.	Pin Name	I/O	Function
51	SW2	O	Tuner select switch.
52	AVSS	—	Unswitched ground.
53	AVREF	—	AD port reference input UNSW 5V.
54	AVDD	—	UNSW 5V.
55	NTPB SW	I	NTSC playback switch.
56	AV ADJ	I	Adjustment mode.
57	N. C.	—	Not used.
58	N. C.	—	Not used.
59	AF ENV	I	HiFi audio playback signal envelope.
60	RF ENV	I	Video playback signal envelope.
61	T SENS	I	Take-up end sensor.
62	S SENS	I	Supply end sensor.
63	S REEL FG	I	Supply reel FG input.
64	T REEL FG	I	Take-up reel FG input.
65		—	Not used.
66	VSYNC	I	Composite sync. signal input.
67	PB CTL	I	Playback CTL input.
68	DRM PG	I	Drum PG input.
69	DRM FG	I	Drum FG input.
70	CAP FG	I	Capstan FG input.
71		—	Not used.
72	CAP RVS	O	Capstan reverse control "H" when reverse.
73	CAP DA	O	Capstan error D/A output.
74	DRM DA	O	Drum PG input.
75	CTL REC	O	"H" : CTL is recorded.
76	CTL STEP	O	CTL amp, STEP operation control.
77	REC COUNT	I	Counter signal input when recording.
78	N. C.	—	Not used.
79	N. C.	—	Not used.
80	DATA (SSB)	I/O	Serial communication data.
81	CLOCK (SSB)	I/O	Serial communication clock.
82	N. C.	—	Not used.
83	N. C.	—	Not used.
84	CAP TRQ PWM	O	PWM output for capstan torque control.
85	N. C.	I	Not used.
86	N. C.	—	Not used.
87	N. C.	—	Not used.
88	VSS	—	Ground.
89	VDD	—	5V.
90	5V	—	5V.
91	N. C.	—	Not used.
92	CTL GAIN	O	CTL amp gain control.
93	SP	O	Normal audio tape speed select.
94	N. C.	—	Not used.
95	N. C.	—	Not used.
96	REC	O	"H" output when recording.
97	N. C.	—	Not used.
98	N. C.	—	Not used.
99	STEP PLS	O	Step pulse "H" when capstan stops.
100	AF SWP	O	AF switching pulse output.

6-6. TUNER/TIMER MODE CONTROL PIN FUNCTION (FR-119 BOARD IC470)

Pin No.	Pin Name	I/O	Function
1	PDC DAV	I	Line 21H output pulse.
2	DMS1	I	DMS A/D input.
3	DMS2	I	DMS A/D input.
4	SIRCS IN	I	SIRCS signal input.
5	N.C.	—	Not used.
6	N.C.	—	Not used.
7	BUZZER	O	Buzzer output.
8	POWER SAVE	I	
9	LED CS	O	LED chip select. L : Active.
10	SCLK	O	Clock for serial communication.
11	SI	I	Serial data input.
12	SO	O	Serial data output.
13	H DET	O	
14	LANC IN	I	LANC input.
15	LANC OUT	O	LANC output.
16	A/D0	I	Key reading A/D input.
17	A/D1	I	Key reading A/D input.
18	A/D2	I	Key reading A/D input.
19	A/D3	I	Key reading A/D input.
20	A/D4	I	Key reading A/D input.
21	A/D5	I	Key reading A/D input.
22	A/D6	I	Key reading A/D input.
23	AFT	I	
24	AVDD	—	UNSWD 5V.
25	AV REF	—	A/D port reference input UNSW5V.
26	SCL	O	I2C bus (clock).
27	CG \overline{CS}	O	Character generator chip select signal.
28	SDA	O	I2C bus (data).
29	CME \overline{CS}	O	AV link microcomputer chip select.
30	AVSS	—	Unswitched ground.
31	EXTAL	—	System clock.
32	XTAL	—	System clock.
33	VSS	—	Ground.
34	RST	I	Reset signal in.
35	PLL CLK	O	Tuner clock signal.
36	PLL DATA	O	Tuner data signal.
37	PLL ENABLE	O	Tuner enable signal.
38	N.C.	—	Not used.
39	C+ DET	I	Canal + detection.
40	N.C.	—	Not used.
41	N.C.	—	Not used.
42	POWER FAIL	O	Power failure detect sigal input.
43	VFDP	—	-30V
44	SEG16	O	LCD segment output.
45	SEG15		LCD segment output.
46	SEG14		LCD segment output.
47	SEG13		LCD segment output.
48	SEG12		LCD segment output.
49	SEG11		LCD segment output.
50	SEG10		LCD segment output.

Pin No.	Pin Name	I/O	Function
51	SEG9		LCD segment output.
52	SEG8		LCD segment output.
53	SEG7		LCD segment output.
54	SEG6		LCD segment output.
55	SEG5		LCD segment output.
56	SEG4		LCD segment output.
57	SEG3		LCD segment output.
58	SEG2		LCD segment output.
59	SEG1		LCD segment output.
60	SEG19		LCD segment output.
61	SEG18		LCD segment output.
62	SEG17		LCD segment output.
63	N.C.	—	Not used.
64	N.C.	—	Not used.
65	N.C.	—	Not used.
66	GRID6	O	LCD grid signal.
67	GRID5		LCD grid signal.
68	GRID4		LCD grid signal.
69	GRID3		LCD grid signal.
70	GRID2		LCD grid signal.
71	GRID1		LCD grid signal.
72	TDD		UNSWD 5V.
73	TX	—	Connected to oscillator for clock.
74	TEX	—	Connected to oscillator for clock.
75	NC/VPP	—	Connected to +5V.
76	ASURA \overline{CS}	O	Servo/System control microcomputer chip select.
77	ASURA RESET	O	System reset signal output.
78	POWER CONT 1	O	Power supply control signal output.
79	POWER CONT 2	O	Power supply control signal output to EDS.
80	CG V	I	Vertical sync. signal input.

2-1-5. Input/Output Levels and Impedance

Video input: LINE IN
EURO
Input signal: 1Vp-p, 75ohms, unbalanced, sync negative

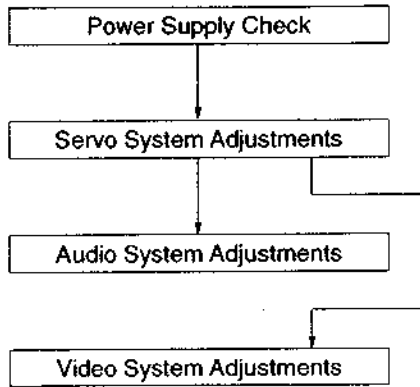
Video output: LINE OUT
EURO
Output signal: 1Vp-p, 75ohms, unbalanced, sync negative

Audio input: LINE IN
EURO
Input level: -7.5 dBs
(0dBs= 0.775Vrms)
Input impedance: more than 47 kilohms

Audio output: LINE OUT
EURO
Standard level: -7.5dBs at load impedance 47 kilohms
Output impedance: less than 10 kilohms

2-1-6. Adjustment Sequence

The adjustments should be performed in the following sequence.



2-2. POWER SUPPLY CHECK

2-2-1. Output Voltage Check (MA-286 Board)

Mode	E-E
Measuring Instrument	Digital voltmeter
SW 12V Check	
Measurement point	IC930 pin ②
Specified value	12.0 ± 0.3V
MTR12V Check	
Measurement point	CN600 Pin ⑫⑬
Specified value	12.4 ± 0.5V
SW5V Check	
Measurement point	CN600 Pin ⑰⑱
Specified value	5.0 ± 0.5V

[Check Method]

1) Each of these supply voltages must meet its specified value.

2-3. SERVO SYSTEM CHECK

Unless otherwise specified, set the switches to the following positions.

- CHANNEL switch LINE
- TAPE SPEED switch SP

2-3-1. RF Switching Position Adjustment (MA-286, RP-217 Boards)

[Adjustment Purpose]

To adjust the link of the A-ch and B-ch of the tape playback outputs. To make the unit compatible with other tapes and units. If this specification is not satisfied, the link will appear on the screen and the screen will be disrupted, etc.

Mode	Playback
Signal	Alignment tape: SP color bar portion
Measurement point	CH1: Video LINE OUT (EURO) CH2: CN261 pin ② (RF SWP)
Measuring instrument	Oscilloscope
Specified value	$6.5 \pm 0.5H$ ($416 \pm 32 \mu\text{sec}$)

[Adjustment Method]

- 1) Short-circuit between CN261 pin ⑤ and pin ③ on RP-217 board for about 1 second to activate the RF switching position adjustment mode.
- 2) Check that "ADJ-RF" is indicated on FL display.
- 3) Using the channel + and - buttons, adjust to $416 \pm 32 \mu\text{sec}$ ($6.5 \pm 0.5H$).
- 4) Press the PAUSE button.
- 5) Press the EJECT button.

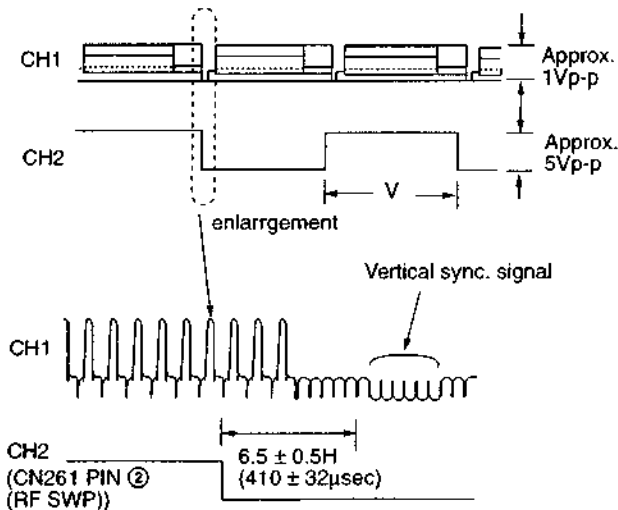


Fig. 7-2-3.

2-4. VIDEO SYSTEM CHECKS AND ADJUSTMENT

For the video system checks, follow the checking procedures given below as a rule. The color bar video signal supplied from the pattern generator is used as the video input signal for the video system adjustment of the recording mode. Check that the signal satisfies the specified value designated in the "Check of input signal" (Fig. 7-2-2)

Unless otherwise specified, set the switches to the following positions.

- CHANNEL switch LINE 1
- TAPE SPEED switch SP

[Checking Sequence]

- 1) X'tal OSC Check
- 2) SYNC AGC Check
- 3) White clip/Dark clip Check
- 4) Recording Y Level Check
- 5) Recording Chroma Level Check
- 6) Playback Level Check
- 7) VCO frequency adjustment

2-4-1. X'tal OSC Check (MA-286 Board)

Mode	Playback
Signal	Alignment tape: SP Color bar portion
Measurement point	IC201 pin ⑤
Measuring instrument	Oscilloscope and Frequency counter
Specified value	$4,433,619 \pm 96\text{Hz}$

Note: A frequency counter should be connected through a buffer amplifier (oscilloscope, etc.) having a high impedance and a low capacitance.

[Check Method]

- 1) Check that the oscillation frequency satisfies the specified value and that the oscillation voltage is $500 \pm 200\text{mVp-p}$.

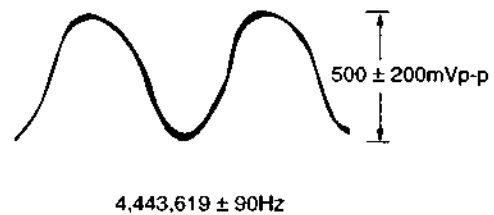


Fig. 7-2-4.

2-4-2. SYNC AGC Check (MA-286 Board)

Mode	E-E
Signal	Color bar
Measurement point	IC201 pin ⑳
Measuring instrument	Oscilloscope
Specified value	$A=2.10 \pm 0.14Vp-p$

[Check Method]

- 1) Check that the Video signal level (A) satisfies the specified value.

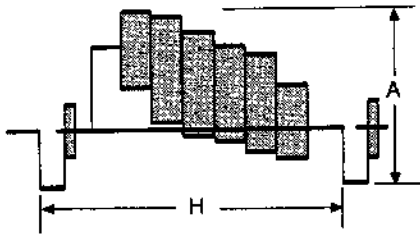


Fig. 7-2-5.

2-4-3. White Clip/Dark Clip Check (MA-286 Board)

Mode	E-E
Signal	Color bar
Measurement point	IC201 pin ㉑
Measuring instrument	Oscilloscope
Specified value	White clip : $190 \pm 15\%$ Dark clip : $52.5 \pm 5\%$

Connect a resistor of 3.3Ω between IC201 pin ㉒ and GND.

[Check Method]

- 1) Check that the white clip level is $190 \pm 15\%$ to the white (100%) level.
- 2) Check that the dark chip level is $52.5 \pm 5\%$ to the white (100%) level.

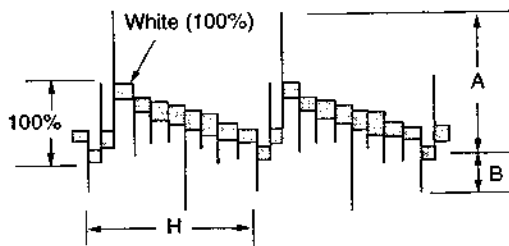


Fig. 7-2-6.

2-4-4. Recording Y Level Check (MA-286 Board)

Mode	E-E
Signal	No-signal
Measurement point	IC201 pin ㉓
Measuring instrument	Oscilloscope
Specified value	$A=250 \pm 50mVp-p$

[Check Method]

- 1) Check that the recording RF signal satisfies the specified value.

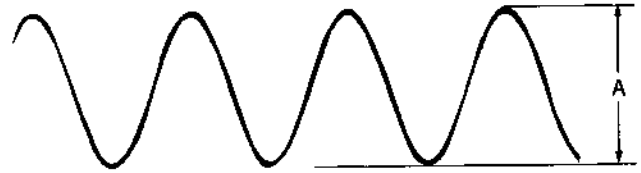


Fig. 7-2-7.

2-4-5. Recording Chroma Level Check (MA-286 Board)

Mode	Recording
Signal	Color bar
Measurement point	IC201 pin ㉔
Measuring instrument	Oscilloscope
Specified value	$A=380 \pm 40mV$

[Check Method]

- 1) Confirm the amplitude of recording chroma level becomes the specified value.

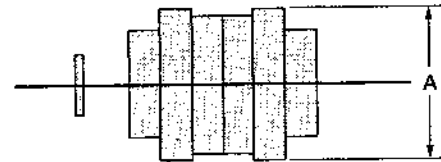


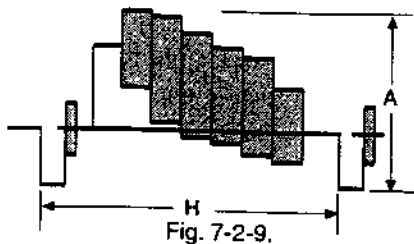
Fig. 7-2-8.

2-4-6. Playback Level Check (MA-286 Board)

Mode	Playback
Signal Alignment	Alignment tape : SP mode color bar portion
Measurement point	Video LINE OUT terminal
Measuring instrument	Oscilloscope
Specified value	$A=1.00 \pm 0.02V_{p-p}$

[Check Method]

- 1) Check that the playback level satisfies the specified value.

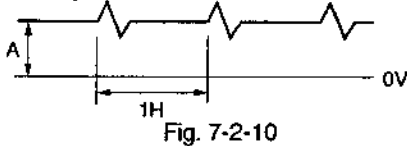


2-4-7. VCO Frequency Adjustment (MA-286 Board)

Mode	Playback
Signal	Alignment tape : SP mode color bar portion
Measurement point	IC500 pin ②
Measuring instrument	Digital voltmeter
Adjustment element	CT500
Specified value	$A=2.4 \pm 2.5V_{dc}$

[Check Method]

- 1) Adjust CT500 until DC output level at IC 500 pin ② (F. C) satisfies the specification.



2-5. AUDIO SYSTEM ADJUSTMENT

- For the adjustment of the audio system, perform in the SP mode if there is no special notes. Use the alignment tape.

[Connecting Instruments]

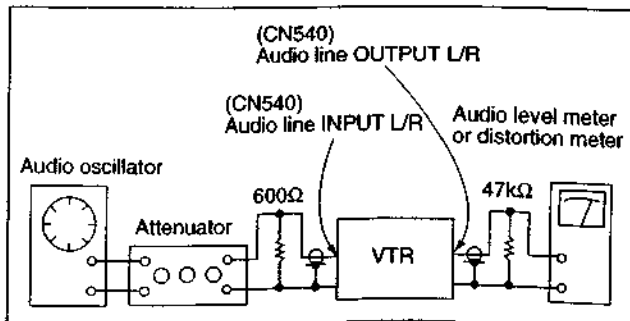


Fig. 7-2-10.

- Adjust in the SP mode if there is no special indications.
- Perform the adjustment setting the switch on the following positions.
- **CHANNEL** switch LINE 1

[Adjustment Method]

1. ACE head adjustment.....Refer to the VHS mechanical adjustment manual IV.
2. E-E output level check
3. Overall Output level and distortion factor check
4. Overall noise level check.

2-5-1. ACE Head Adjustment

Refer to the "VHS mechanical adjustment manual IV" (9-973-623-11).

2-5-2. E-E Output Level Check

Mode	E-E
Signal	400Hz, -7.5dBs : IC540 pin ⑤ (②)
Measurement point	CJ540 L/R
Measuring instrument	Audio level meter
Specified value	$-7.5 \pm 2dBs$

() : R-ch

[Check Method]

- 1) Input signal of 400Hz and -7.5dBs to the CN540 pin ⑤ (②).
- 2) Check that the audio output level is $-7.5 \pm 3dBs$.

2-5-3. Overall Output Level and Distortion Factor Check

Mode	Self-record playback
Signal	400Hz, -7.5dBs : IC540 pin ⑤ (②)
Measurement point	IC540 pin ③ (①)
Measuring instrument	Audio level meter and Distortion meter
Specified value	Playback Level: $-6.3 \pm 3dBs$ Distortion: 4.0% or less

() : R-ch

[Check Method]

- 1) Input signal of 400Hz and -7.5dBs to the audio input.
- 2) Record signal.
- 3) Playback the recorded portion.
- 4) Check that the output level is $-6.3 \pm 3dBs$.
- 5) Check that the distortion factor is 4.0% or less.

2-5-4. Overall Noise Level Check

Mode	Self-record playback
Signal	No signal (Insert a shorting plug into the Audio LINE IN terminal)
Measurement point	IC540 pin ③ (①)
Measuring instrument	Audio level meter (IHF-A weighing filter is used)
Specified value	$-45.5dBs$ or less

() : R-ch

[Check Method]

- 1) Record.
- 2) Playback recorded portion.
- 3) Check that noise level is $-45.5dBs$ or less.

2-6. A

RP-217 E

MA-286 E

CN600

19 18

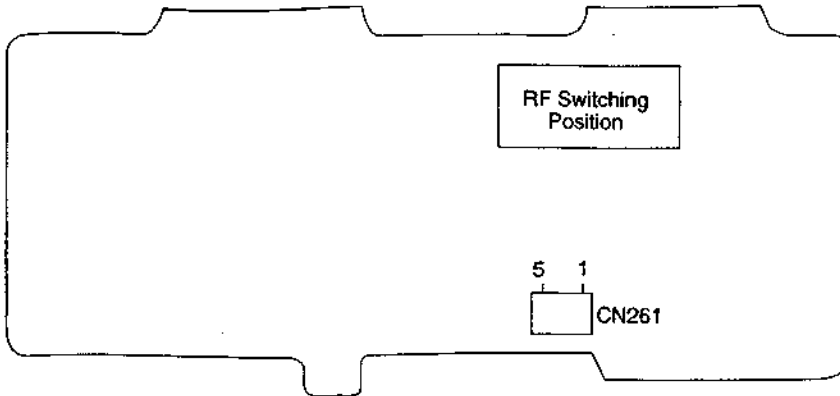
1 2

SW 5V

MTR 12V

2-6. ADJUSTMENT PARTS LOCATION DIAGRAM

RP-217 BOARD (Conductor side)



540 pin ⑤ (②)

() : R-ch

540 pin ⑤ (②)
3dBs.

on Factor

540 pin ⑤ (②)

d Distortion

± 3dBs
ess

() : R-ch

audio input.

ess.

orting plug into
terminal)

RF-A weighing

() : R-ch

MA-286 BOARD (Conductor side)

