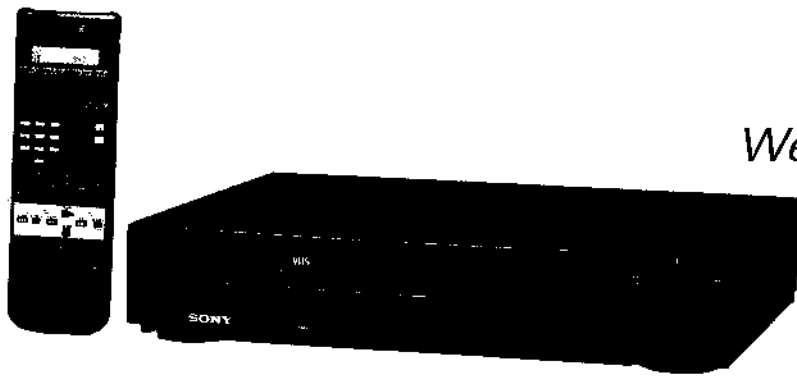
SERVICE MANUAL

AEP Model
SLV-373

UK Model
SLV-373UB

West Germany Model
SLV-373VP



Remote commander RMT-V373 is available as a unit, but as individual parts the battery case lid of commander is only available.

Photo: SLV-373VP

For MECHANICAL ADJUSTMENTS, refer to the "VHS MECHANICAL ADJUSTMENT MANUAL II" (9-972-816-11)

● See Supplement-1 for Adjustments.

SPECIFICATIONS

System

Format	VHS PAL standard
Video recording system	Rotary two-head helical scanning FM system
Video signal	PAL colour (System B and G: SLV-373/373VP, System I: SLV-373UB/373EI) DDR SECAM colour (SLV-373VP) CCIR monochrome signals 625 lines
Tape speed	SP: 23.39 mm/sec. LP: 11.70 mm/sec.
Maximum recording/playback time	SP: 4 hours (with E-240) LP: 8 hours (with E-240)
Fast-froward/rewind time	Approx. 3 min. 20 sec. (with E-180)
High speed rewind time	Approx. 2 min. 20 sec. (with E-180)

Tuner Section

Tuner system (audio)	Intercarrier system
Channel coverage	SLV-373/373VP VHF channels E2 — E12 (A to H only for Italy) CATV channels S01 — S03 CATV channels S1 — S20 HYPER S21 — S41 UHF channels E21 — E69 SLV-373UB UHF channels B21 — B68 SLV-373EI VHF channels A — J UHF channels E21 — E69
RF output signal	SLV-373/373VP/373EI UHF channels E30 — E39 (adjustable) SLV-373UB UHF channels B30 — B39 (adjustable)
Aerial out	75-ohms asymmetrical aerial socket

Continued on page 2 –

MICROFILM

VHS PAL VHS VIDEO CASSETTE RECORDER

SONY®

Inputs and Outputs

Video inputs	LINE 2: phono jacks EURO-AV: 21-pin (pin 20) 1 Vp-p, 75 ohms, unbalanced, sync negative
Audio inputs	LINE 2: phono jacks 47 kilohms, – 7.5 dBs (0 dBs = 0.775 V rms) EURO-AV: 21-pin (pins 2 and 6) More than 10 kilohms, – 4 dBs
Video output	EURO-AV: 21-pin (pin 19) 1 Vp-p, 75 ohms, unbalanced, sync negative
Audio output	EURO-AV: 21-pin (pins 1 and 3) Output impedance: less than 1 kilohm – 4 dBs with 10 kilohms load
CONTROL S IN	Minijack (1)

Timer Section

Clock	Quartz locked
Time indication	24-hour cycle
Timer setting	Only for recording 8 programmes in one month at max.
Timer back-up	Built-in self-charging capacitor Back-up duration: Up to an hour at one time

General

Power requirements	240 V AC, 50 Hz (SLV-373UB) 220 V AC, 50 Hz (SLV-373/373VP/373EI)
Power consumption	25 W
Operating temperature	5°C to 40°C (41°F to 104°F)
Storage temperature	– 20°C to 60°C (– 4°F to 140°F)
Dimensions	430 × 87 × 358 mm (w/h/d) (17 × 3 3/8 × 14 1/4 inches)
Weight	5.7 kg (12 lb 9 oz)

Wireless Commander RMT-V373

Remote control system	Infrared control
Command mode	VTR 1/2/3
Power requirements	3 V DC, two IEC designation R6 batteries
Dimensions	75 × 45 × 235 mm (w/h/d) (3 × 1 3/4 × 9 1/4 inches)
Weight	220 g (8 oz) excluding batteries

Accessories Supplied

Wireless Remote Commander RMT-V373 with two R6 batteries	(1)
75-ohm coaxial cable	(1)
Screwdriver	(1)
AC power cord	(1)

Design and specifications are subject to change without notice.

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

SAFETY CHECK-OUT

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

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

SAFETY-RELATED COMPONENT WARNING !!

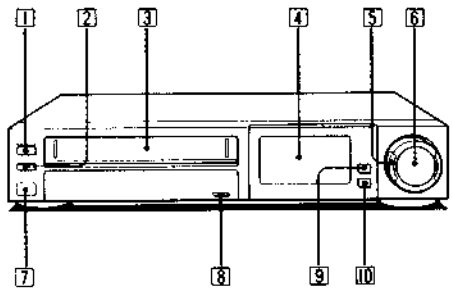
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

TABLE OF CONTENTS

SECTION 1
GENERAL

This section is extracted from instraction manual.

Identifying the Operational Parts



Front

1 **ON/STANDBY switch and indicator**

2 **▲ EJECT button**
Press to eject the cassette. This button does not function during recording.

3 **Cassette compartment**

4 **Display window and function mode display**
See "Indications in the Display Window." (page 58)

5 **DUAL MODE SHUTTLE ring**

In the stop mode	Turn the ring clockwise (▶▶) to advance the tape rapidly, and counterclockwise (◀◀) to rewind the tape.
In the playback mode	Turn the ring clockwise (FORWARD) to advance and counterclockwise (REVERSE) to reverse the picture in various speeds including a still picture when the ring is released.

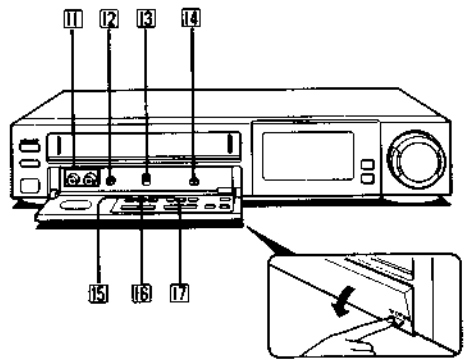
6 **▷ PLAY button**

7 **REMOTE Sensor**
Point the Commander here.

8 **▼ OPEN**
Press to open the front panel.

9 **II/▶▶I PAUSE/STILL button**
In the playback mode: Press to obtain a still picture.
In the recording mode: Press to pause.

10 **■ STOP button**



Front

11 **LINE IN 2 VIDEO/AUDIO jacks (phono type)**
Connect to the video/audio output jacks of another VTR or a video camera recorder.

12 **SHARPNESS SOFT/SHARP control**
Use to adjust the sharpness of the picture if necessary. Normally set this control at the center position.

13 **COMMAND MODE VTR 1/2/3 selector** (page 15)
Set to the same position as the COMMAND MODE switch on the Commander.

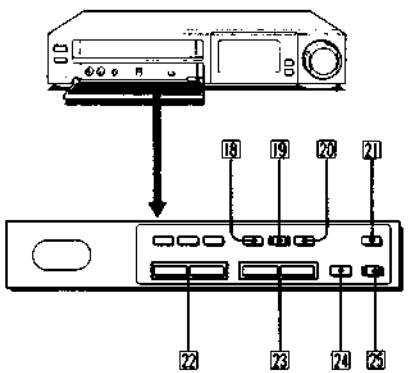
14 **VPS (Video Programme System) ON/OFF switch (SLV-373VP only)** (page 47)

15 **TV/VTR button**
Press and light the VTR indicator in the display window to view the playback of the VTR or a programme selected on the VTR. Press this button again to turn off the VTR indicator to view a programme selected on the TV. This button is effective only when the VTR is connected to the TV via EURO-AV.

16 **INPUT SELECT switch**
Press to select the signals to be recorded by the VTR. The selected mode will be indicated in the display window as follows:
TUNER: To record TV programmes
LINE L1: To record the signals from equipment connected to the EURO-AV.
LINE L2: To record the signals from equipment connected to the LINE IN 2 jacks.

17 **REC MODE (SP/LP) button**
Press to select the recording tape speed SP or LP.

Identifying the Operational Parts



Front

18 EDIT ON/OFF button (page 55)
Set to ON during editing to obtain a high quality picture.

19 TIMER REC ON/OFF button
Press this button to enter the timer recording standby mode. Press it again to release the timer recording standby mode before changing or cancelling a timer recording or to operate the unit before a timer recording starts.

20 QUICK TIMER button (page 49)
Press to activate the quick timer recording function.

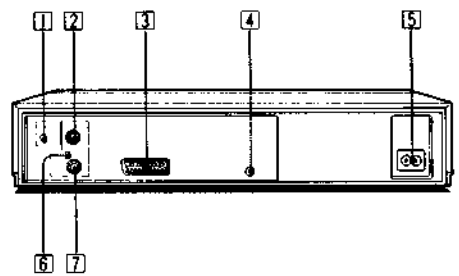
21 ◀◀◀ HIGH SPEED REWIND button

22 PROGRAM + / — buttons
Press to select the programme positions.

23 TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲ buttons (page 27)
Press to clear streaks if they appear on the screen in the normal and slow playback. (Manual tracking adjustment)
Press to reduce picture shaking in the still mode. (Still adjustment)

24 TRACKING AUTO/MANUAL button (page 27)
Press to reactivate the automatic tracking function after manual tracking adjustment.

25 ● REC (record) button (page 33)



Rear

1 RF CHANNEL screw (30 to 39) (page 18)

2 AERIAL OUT socket (page 13)

3 EURO-AV (21-pin) (page 13)

4 CONTROL S IN jack (mini type) (page 55)
Connect to the CONTROL S output jack of other SONY products for systematic operations such as synchronized editing.

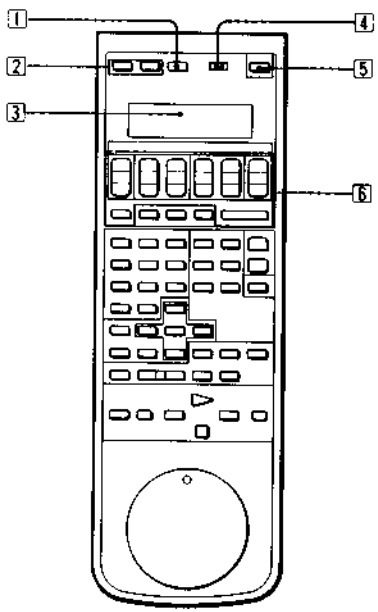
5 AC INPUT
Connect the supplied AC power cord

6 DX/LOCAL switch
Normally set to DX. If the TV signal is very strong, set it to LOCAL with the supplied screwdriver.

7 AERIAL IN socket (page 13)

GB

Identifying the Operational Parts



Remote Commander RMT-V373

- The buttons on the Commander with the same name or mark as those on the unit have the same function.
- The buttons with a red dot can be used to remotely control Sony TVs with the ■ mark when the TV/VTR remote control selector is set to TV. However, the TV/VTR button and/or the –/– – (10's digit) button cannot operate certain Sony's TVs.

1 **TIMER REC (ON/OFF) button**

2 **TIMER REC CHECK/CLEAR buttons** (page 43)
Press to check, correct, or clear the timer settings.

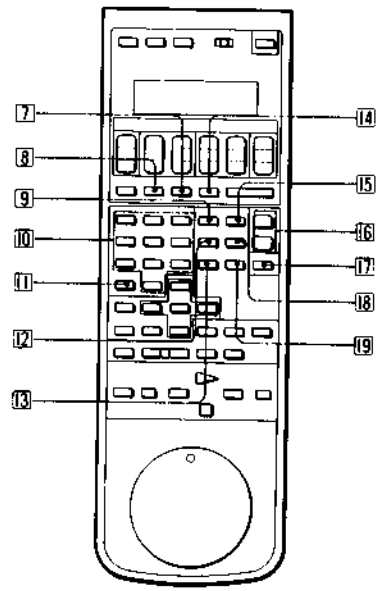
3 **Liquid-crystal display**

4 **TV / VTR remote control selector** (page 15)
Set to VTR to control this VTR and set to TV to control the TV.

5 **⏻ (on/standby) button**
To turn on the TV from the standby mode, press one of the programme position number buttons.

6 **Timer recording/clock set buttons** (page 16, 39)
- TIMER SET
- DAY
- TURN ON time
- TURN OFF time
- PROG (programme position) +/–
- TRANSMIT

* You can use the PROG +/– buttons to select the programme positions during VTR or TV operation as well as in the timer setting procedure.



7 **MEMORY button** (page 46)

8 **CLOCK SET (SET/START) button** (page 16)

9 **REC MODE select button** (page 33)

10 **Programme position number buttons**
Press to select the programme position directly.

11 **–/– – (10's digit) button**
Press to select a programme number over 9. To select 23, press –/– –, then 2 and 3.

12 **DATA SCREEN button** (page 30)

13 **TIMER ON SCREEN button**
Press to display the timer settings.

14 **COMMAND MODE button** (page 15)

15 **TV/VTR button** (page 35)

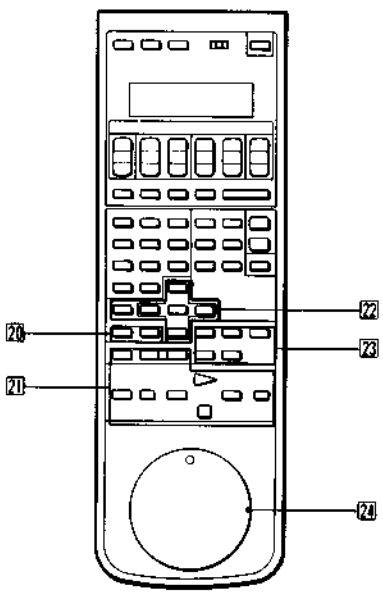
16 **VOL (TV volume) +/– buttons**
Press to control the volume of the TV. Effective only for Sony TVs with the ■ mark.

17 **INDEX button** (page 52, 53, 54)

18 **INPUT SELECT button**
Press to select the source to be recorded. The selected input mode indicator will appear in the display window.

19 **COUNTER RESET button** (page 36)

Identifying the Operational Parts



20 **INDEX MARK and ERASE buttons** (page 51, 54)

21 **Tape transport buttons** (page 26, 28)
- II PAUSE
- ● REC (recording) buttons
- ▷ PLAY
- ◀◀◀ HIGH SPEED REWIND
- ⏭/⏮ SEARCH (reverse/forward)
- ◀◀ REW (rewind)
- ▶▶ FF (fast-forward)
- ■ STOP

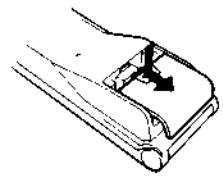
22 **Menu operation buttons**
Press MENU to display or erase the main MENU. Press EXECUTE to store the selected parameters. Press ▲/▼/◀/▶ to move the cursor.

23 **Playback direction set, frame-by-frame, still and SLOW + / – buttons** (page 28)
Press ⏭ for a still picture.
Press < ◀II/II▶ > to select the direction for frame-by-frame picture.
Press < ◀II/II▶ > to select the direction for any playback mode.
Press II▶ SLOW + / – for slow playback between 1/5 to 1/30 times normal speed. Press + or – to change the playback speed.

24 **SWING SHUTTLE dial** (page 29)
Turn and hold it at the position where the desired playback speed is obtained. You can select slow (1/5), normal (1), double (× 2) or continuous scan speed (⏭ or ⏮) from any playback mode. Turn the dial clockwise for forward playback, or counterclockwise for reverse playback.
When the dial is released, it will return to the still picture position automatically. To resume normal playback, press ▷.

Remote Control Operation

1



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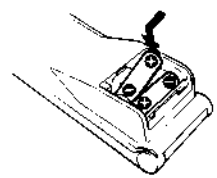


Preparing the Commander

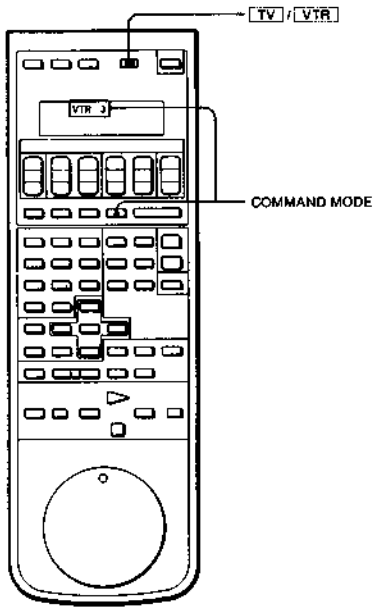
■Battery insertion

1 **Slide and remove the cover.**

2 **Insert two R6 (size AA) batteries with polarity positioned correctly.**

3 **Close the cover. Set the date and clock referring to the "Date and Clock Setting."**

Note on batteries
With normal operation, batteries will last for about six months. However, if the Commander will not be used for a long period, remove the batteries to avoid possible damage from battery leakage.



Command Mode Setting

Set the COMMAND MODE 1/2/3 selector on the unit to the same number displayed in the LCD display. To change the setting on the Commander, press COMMAND MODE repeatedly. Then, set the TV / VTR remote control selector to VTR.

Remotely Controlling Other Sony Equipment

■Controlling another VTR equipped with a command mode selector

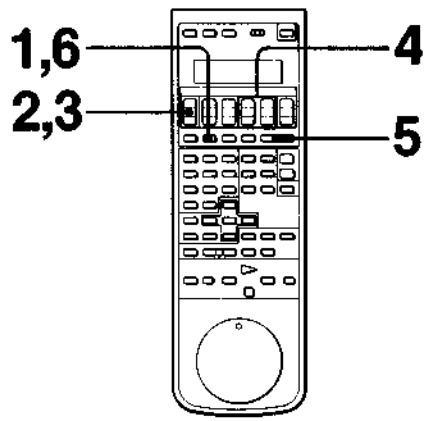
Set different command modes for this VTR (VTR 3, for instance) and the other VTR (VTR 1). Select VTR 1 on the Commander to control the other VTR and VTR 3 to control this VTR.

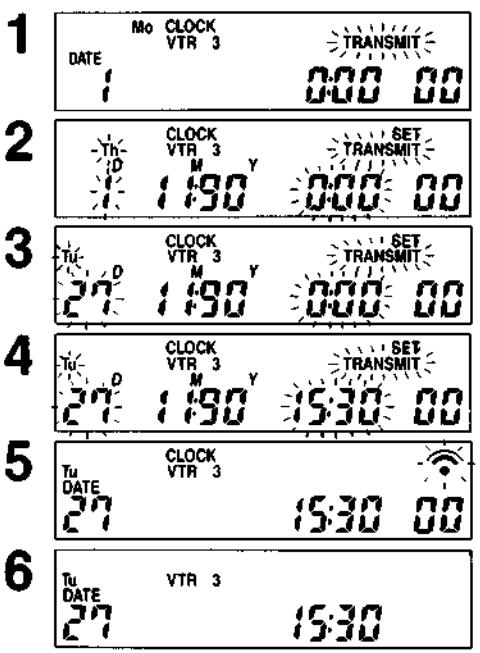
■Controlling equipment without a command mode selector

Change the setting on the Commander as follows to control each type of VTR.

VTR 1: Sony Betamax infrared remote control VTRs
VTR 2: Sony 8 mm format VTRs
VTR 3: Sony VHS format VTRs

Date and Clock Setting





Before You Begin

The time and date between the years 1990 and 2005 can be set with the Commander.

Operation

Example: To set to 15:30, Tuesday, November 27, 1990.

1 Press CLOCK SET.

2 **Keep pressing the D (date) button until 11 M 90 Y is displayed.**
The date will be incremented slowly up to 30 days ahead and then the month will be incremented.

3 **Press the + side or – side of the D (date) button until 27 D is displayed.**
The day of the week appears automatically.

4 **Press the H (hour) and M (minute) buttons under TURN OFF to set the current time.**

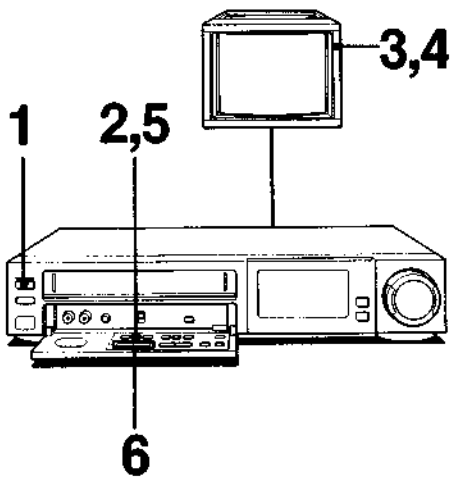
5 **Point the Commander at the VTR and press TRANSMIT.**
A beep sound confirms that the date and clock setting is registered in the VTR as well.

6 **Check the display window on the unit and press CLOCK SET.**

When 0:00 is blinking on the unit
Any time power is interrupted for more than an hour, you will see 0:00 blinking when power is restored. You will have to re-set the date and clock again.

When a short beep sounds repeatedly
The VTR is in the timer recording or quick timer recording modes or standby mode for timer recording and the setting cannot be transmitted.

Adjusting the TV



Before You Begin

If you have connected your VTR and TV using only the aerial sockets, one of the television programme positions must be adjusted to receive the VTR's playback signal. If TV/VTR connection is made via the EURO-AV, skip this step

Operation

1 **Make connections referring to "Connections" and press ON/STANDBY.**

2 **Press INPUT SELECT to light LINE L2 in the display window.**
Do not connect any equipment to the LINE IN 2 VIDEO jack.

3 **Turn on the TV and select a programme position that is not used to receive a TV station.**

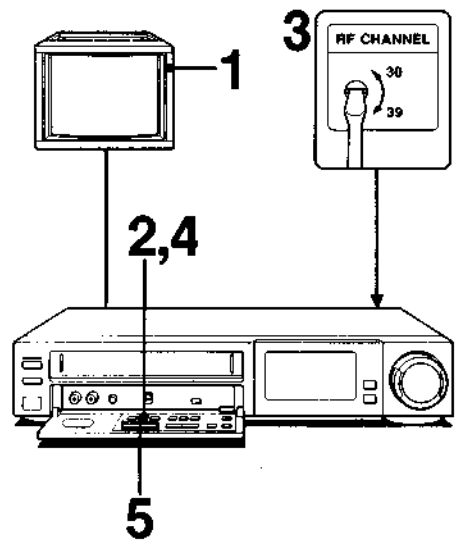
4 **Tune the TV so that a blue screen with tape counter and tape speed indication is clearly displayed on the TV screen.**

5 **Press INPUT SELECT to light TUNER in the display window.**

6 **Press the PROGRAM + / – on the VTR and check that the screen changes to a different programme.**

Now your TV is tuned to receive the VTR's playback picture. Whenever playing back a tape, select the programme position you chose in step 3.
If you are not sure how to tune your TV, refer to the TV's instruction manual or consult your dealer.

Adjusting the TV



When the Playback Picture is not Free of Disturbance

1 **Select a programme position on the TV between UHF channels 30 and 39, so that the TV shows no picture and a steady rustling sound or no sound is heard.**

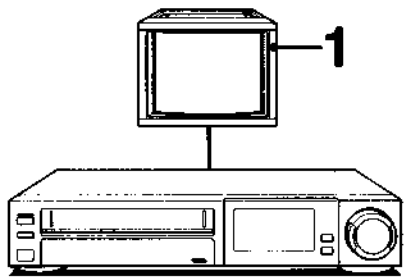
2 **Press INPUT SELECT to light LINE L2 in the display window.**
Do not connect any equipment to the LINE IN 2 VIDEO jack.

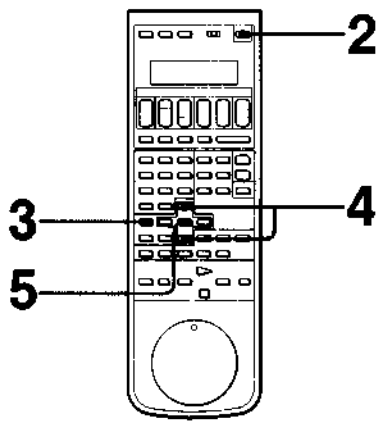
3 **Turn the RF CHANNEL screw with the supplied screwdriver so that a blue screen with tape counter and tape speed indication is clearly displayed on the TV screen.**

4 **Press INPUT SELECT to light TUNER in the display window.**

5 **Press the PROGRAM + / – on the VTR and check that the screen changes to a different programme.**

About the MENU Display





This VTR is equipped with a menu display function. Menu display enables you to perform certain operations which are displayed on the TV or the monitor.

First display the main MENU, and select the item to be operated or preset.

How to Display the main MENU

■Before you begin

Check the connections between the VTR and the TV.

■Operation

1 **Turn on the TV.**
Set to the programme position for the VTR if VTR-TV connection is made via the aerial sockets. Select VTR input if VTR-TV connection is made via the EURO-AV.

2 **Press ⏻.**

3 **Press MENU.**
The main MENU will appear on the screen.

4 **Move cursor to the desired menu by ▲ or ▼.**

5 **Press EXECUTE.**
The selected menu will appear on the screen.

To erase the main MENU display
Press MENU again.

To display other menu displays
1 Press MENU to erase the present display.
2 Press MENU again to display main MENU.
3 Move cursor to the desired menu.
4 Press EXECUTE.

About the MENU Display

Details of Each Menu

Here is a list of the menus in the main MENU. For details, refer to the sections indicated.

■AUTO MENU
Use to select an automatic tape operation. See "Assigning a Desired Operation Mode" (page 31).

■MODE SET
Use to select the following mode settings:

TIMER REC-REW ON/OFF
(See "Timer Activated recording" on page 44)

BUZZER ON/OFF
(See "Timer Activated Recording" on page 41)

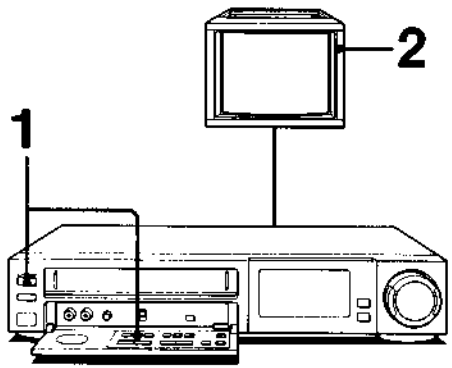
DIMMER ON/OFF
Select ON to dim out the indications in the display window.

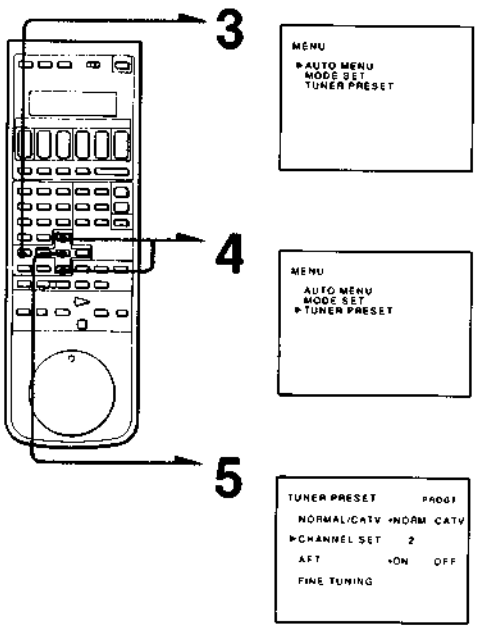
BACK COLOUR BL/GR/PK
Select your favourite back colour of the on-screen display from BL (blue), GR (green) and PK (pink).
Back colour is set to BL at the time of shipment.

■TUNER PRESET
Use to preset the active channels in your area. See "Presetting the Active Channels" (page 21).

Note
The position of the cursor is retained as long as the power cord is connected.

Presetting the Active Channels





Before You Begin

- This VTR is capable of receiving VHF channels E2-E12, UHF channels E21-E69, and cable TV channels S1-S41 and S01-S03.
- The receivable channels are governed by the TV broadcasting system in your area.
- Up to 60 channels can be allocated to any desired programme position.

To Call Up the TUNER PRESET Menu

1 Turn on the VTR and press INPUT SELECT to light the TUNER indicator and the programme position number in the display window.

2 Turn on the TV.
Set to the programme position for the VTR if VTR-TV connection is made via the aerial sockets. Select VTR input if VTR-TV connection is made via the EURO-AV.

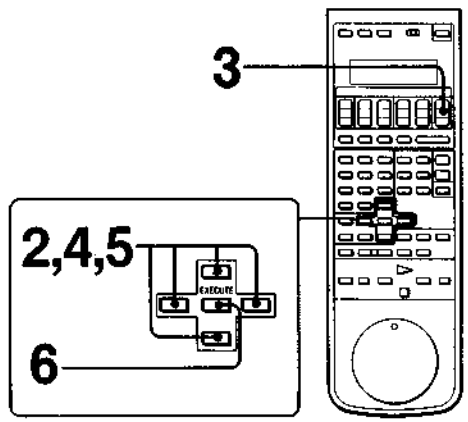
3 Press MENU with the VTR in the stop mode.
The main MENU appears.

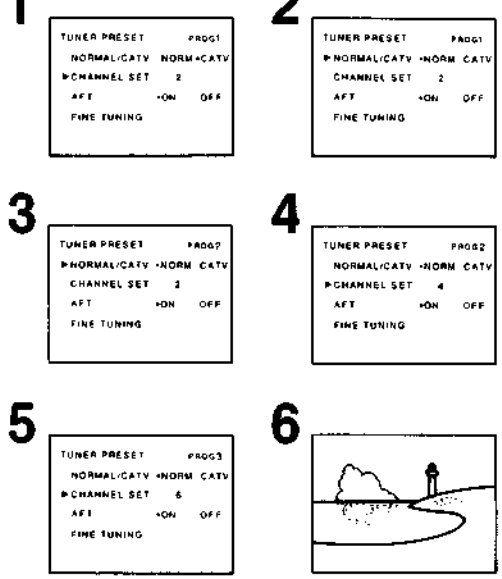
4 Move cursor with ▲ or ▼ to TUNER PRESET.

5 Press EXECUTE.
The TUNER PRESET menu appears.

Note for the users of SLV-373UB
The TUNER PRESET menu of the SLV-373UB does not have the NORMAL/CATV selection as illustrated

Presetting the Active Channels





Tuning a Desired Channel

1 Call up the TUNER PRESET menu.

2 Move cursor to NORMAL/CATV with ▲ and select NORM with ◀ or ▶.
(For SLV-373UB, skip this step.)
To tune-in CATV channels first, select CATV.

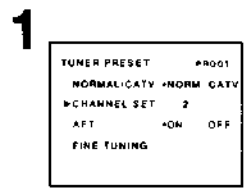
3 Select the desired programme position by pressing PROG +/− on the Commander or PROGRAM +/- on the unit.

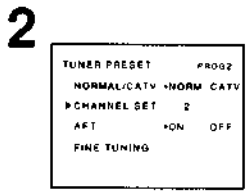
4 Move cursor to CHANNEL SET with ▲ or ▼ and press ◀ or ▶.
The channel number automatically increases with ▶ and decreases with ◀. The number stops changing when the first channel received in your area is detected and the screen returns to the blue background 5 seconds after.

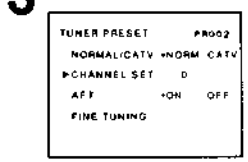
5 To allocate a channel to the next programme position, repeat steps 2 to 4.

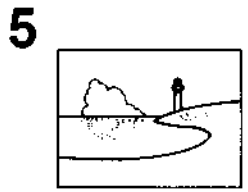
6 Press EXECUTE to store the allocated channels and return to original screen.

Channel scanning on your VTR
- When ▶ is pressed in steps 4 and 5, the channels are scanned in the following order. When ◀ is pressed the scanning order is reversed.
  VHF (E2-E12) → UHF (E21-E69) → CATV (S1-S20) → HYPER BAND (S21-S41) → CATV (S01-S03).
- The SLV-373UB only scans UHF channels B21 to B68.
- In Italy, channel numbers 13 to 20 correspond to channels A to H.









Erasing Unwanted Programme Positions

The VTR can be preset so that only the desired programme positions will appear when you press PROG + / – or PROGRAM + / –.

1 Call up the TUNER PRESET menu.

2 Press PROG + / – on the Commander or PROGRAM + / – on the unit to call up the unused programme position.

3 Press 0 twice or keep pressing ◀ or ▶ until 0 is displayed.

4 Repeat steps 2 and 3 to erase other programme positions.

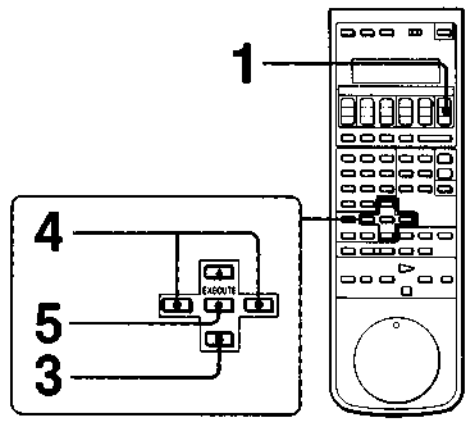
5 Press EXECUTE.

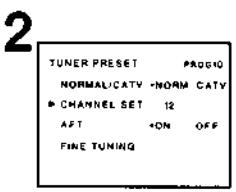
■ To enter the erased programme positions again
Follow the operations in "Tuning a Desired Channel."

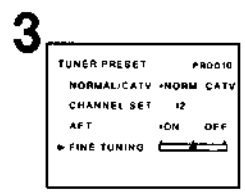
To Allocate the Channels Directly

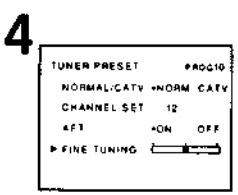
After step 3 in "Tuning a Desired Channel," move cursor to CHANNEL SET.
Enter the desired programme numbers using the programme position number buttons. To enter one's digits, press 0 and then the desired number. To enter two digit numbers, press the ten's digit number and then the one's digit number.

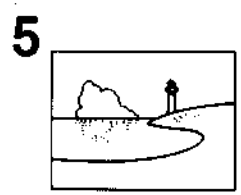
Presetting the Active Channels











Manually Fine-tuning a Weak Station

Normally the AFT (Automatic Fine Tuning) function fine-tunes the picture with the AFT in the TUNER PRESET menu set to ON. (The AFT indicator lights in the display window.) However, when the programme received on the VTR is distorted due to signal interference, manual fine tuning may solve the problem.

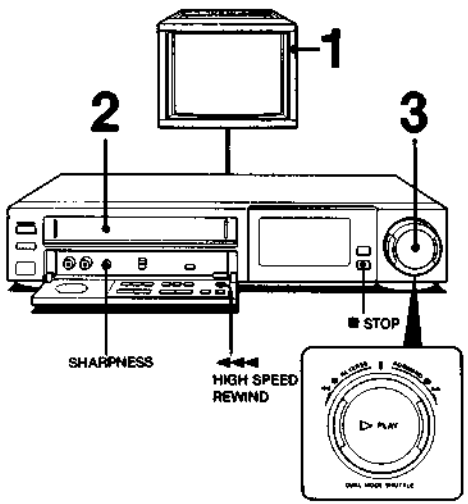
1 Select the distorted programme position by pressing PROG + / – on the Commander or PROGRAM + / – on the unit.

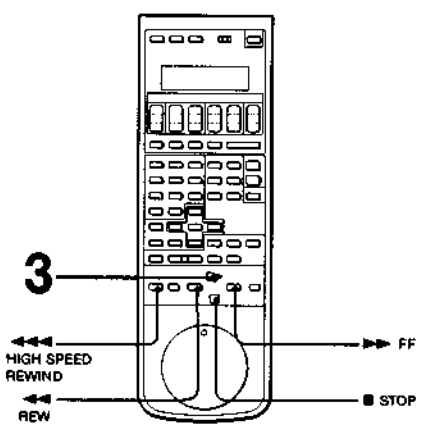
2 Call up the TUNER PRESET menu.

3 Move cursor to FINE TUNING.
The fine tuning meter appears.

4 Press ◀ or ▶ to obtain the best picture.
When ◀ or ▶ is pressed, the dot will move to AFT OFF automatically and the AFT indicator in the display window will be turned off.

5 Press EXECUTE to store that position and return to the original screen.





Playing a Tape

1 Turn on the TV and select the programme position for the VTR.
If VTR-TV connection is made via EURO-AV, select the input for the VTR.

2 Insert a cassette.
The VTR will be turned on. If your cassette has its safety tab removed, playback starts automatically.

3 Press ▷.
Playback starts.
The VTR automatically rewinds the tape when it reaches the end.

To stop playback
Press ■ STOP.

To advance the tape rapidly
Turn the DUAL MODE SHUTTLE ring clockwise (▶▶), or press ▶▶ FF on the Commander during stop mode.

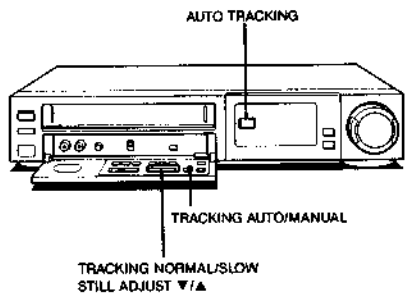
To rewind the tape
Turn the DUAL MODE SHUTTLE ring counterclockwise (◀◀), or press ◀◀ REW on the Commander during stop mode.

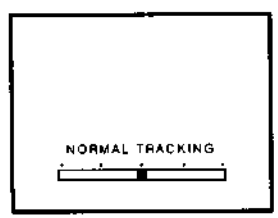
To rewind the tape at high speed
Press ◀◀◀ HIGH SPEED REWIND.

To get a sharper picture
Turn the SHARPNESS control toward SHARP.

To get a softer picture
Turn the SHARPNESS control toward SOFT.

When the tape is played back to the end
The tape will be automatically rewound to the beginning (auto rewind). The power will remain on.





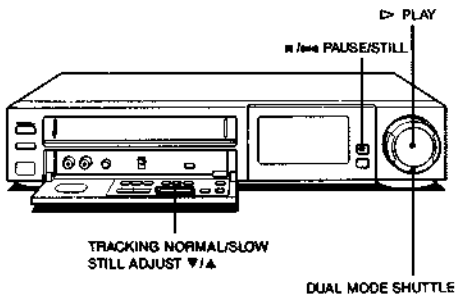
Picture Adjustments

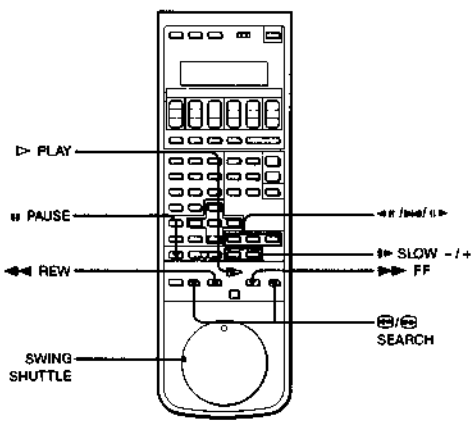
■ Auto tracking function
The tracking condition is automatically adjusted on this VTR. The AUTO TRACKING indicator blinks while the VTR is searching for the best tracking condition and lights when maximum playback picture is obtained. The automatic tracking control is activated in the following conditions.
— when the cassette is inserted and played back.
— when the recording mode on the playback tape is switched between SP and LP.
— when the picture is distorted by scratches etc. on the tape.
— when the AUTO TRACKING indicator is turned on by pressing TRACKING AUTO/MANUAL after the picture is adjusted manually. (See below.)

■ Manual adjustment during normal playback
If streaks or snow appear, adjust the picture using the TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲.

Press either ▼ or ▲ to obtain the best possible picture.
The tracking meter will appear on the TV screen and the AUTO TRACKING indicator will be turned off.

Notes on Automatic Tracking
- When the manual adjustment proves unsatisfactory, press both of the TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲. The tracking condition will return to the center position.
- Tracking adjustment may not be possible when the recording condition of the tape is very poor.





Various Playback Modes

■To obtain a still picture
During playback mode press II /■◂◂ PAUSE/STILL on the unit or II PAUSE or ■◂◂ on the Commander. To resume normal playback, press ▷ PLAY, II /■◂◂ PAUSE/STILL, or II PAUSE. When the pause mode lasts for more than 5 minutes, the unit will re-enter the playback mode automatically.

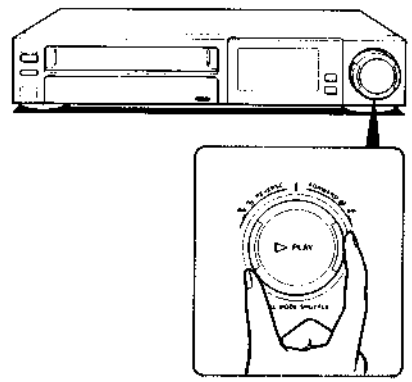
■To search for a particular scene — Picture search
During playback mode, press ◂◂ REW or ▸▸ FF.
While the button is pressed, a high speed picture without sound will appear on the TV screen. When the button is released, the unit will return to the previous mode.

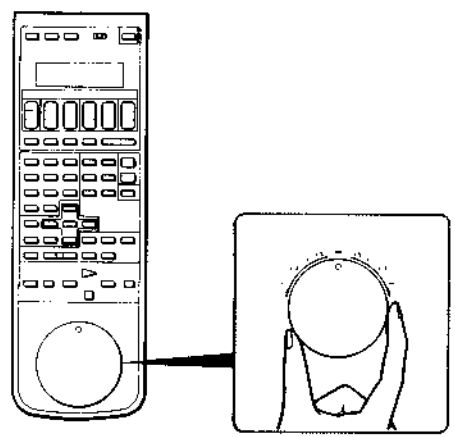
■To watch the picture during fast-forward or rewind mode — Locked picture search
During the playback mode, press ⏪ SEARCH or ⏩ SEARCH on the Commander. A high speed picture in forward or reverse will appear on the screen even when the button is released. To resume normal playback, press ▷ PLAY.

■To watch slow motion playback
During playback or still mode, press II▸ SLOW on the Commander. Change the slow motion speed with the + or – buttons. Press + to increase the playback speed, and – to decrease the playback speed.

■To see the picture momentarily while the unit is in the fast-forward or rewind mode without picture on the TV screen
During fast-forward, turn the DUAL MODE SHUTTLE ring clockwise (▸▸) or press ▸▸ FF on the Commander.
During rewind, turn the DUAL MODE SHUTTLE ring counterclockwise (◂◂) or press ◂◂ REW on the Commander.
The high speed playback picture can be seen as long as the ring is held in that position, or the button is pressed.
Release the ring or button to return to the previous mode.

■To watch a frame-by-frame picture
During still mode, press II▸ to advance the picture one frame. Press ◂II to reverse the picture one frame. Each press of ◂II / II▸ will move the picture one frame. Press ▷ PLAY to resume normal playback.





■To watch reverse direction playback, and slow picture
During forward playback of the desired mode, press < on the Commander. Press ▷ PLAY or > to resume forward playback.

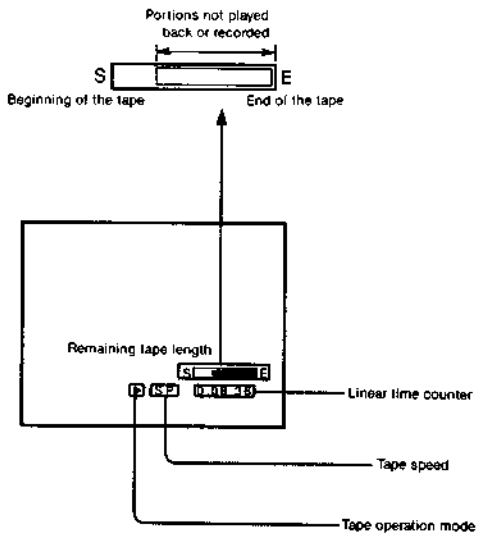
To eliminate streaks or noise bands during slow motion play
Adjust the picture with TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲ inside the front panel. The picture can be adjusted easily in faster speed playback.

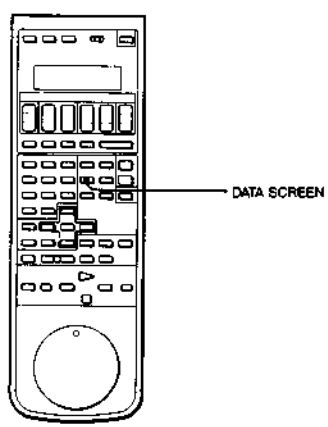
To eliminate the bands on the top or bottom of the screen in still mode
Change to the slow motion play mode and adjust the picture with TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲.

To eliminate picture shaking during still mode
Adjust the picture with TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲ inside the front panel.

Notes on picture search
The picture may turn to a monochrome picture during picture search when playing back tapes recorded in LP mode depending upon the condition of the connected TV.

■To enjoy various playback modes by the DUAL MODE SHUTTLE ring or the SWING SHUTTLE dial
Various playback modes as illustrated can be selected with DUAL MODE SHUTTLE ring on the unit or the SWING SHUTTLE dial on the Commander from any playback mode. The same speed is available in the reverse direction.
Turn the ring or the dial and hold it at the position where the desired playback speed is obtained.
When you release the ring or the dial, the picture will freeze.
To resume normal playback, press ▷ PLAY.





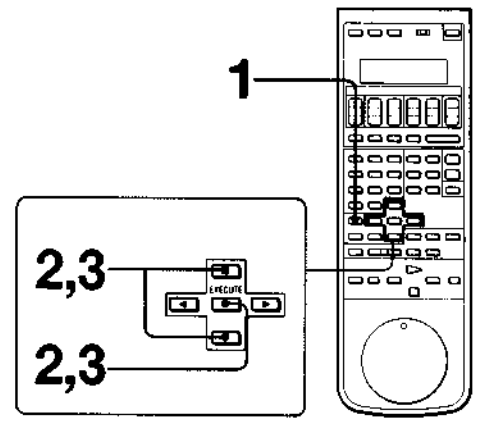
Data Screen

Data screen information illustrated on the left will automatically appear on the screen during playback or recording as a reference. Note, however, that the data screen will not be displayed when the VTR is in slow motion or playback pause mode.

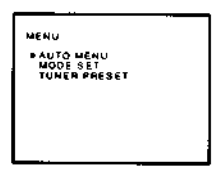
■To erase or display the data screen
Press DATA SCREEN.

Notes on the remaining tape length indicator

- The remaining tape length indicator only shows the approximate amount of tape left.
- The indication may shift vertically during the fast-forward or rewind mode.
- It may not operate properly when a short tape, such as the E-30 and VHS-C type cassette, or when a non-standardized tape is inserted.

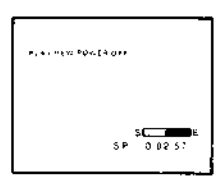


1



2

3



Assigning a Desired Operation Mode

Guided by the AUTO MENU, you can make the VTR enter the desired operational sequence automatically.

1 Press MENU while the VTR is in the stop mode.
The main MENU appears.

2 Move cursor with ▲ or ▼ to AUTO MENU and press EXECUTE.
The AUTO MENU appears.

3 Move cursor with ▲ or ▼ to the desired operational sequence and press EXECUTE.
The selected operation will begin.

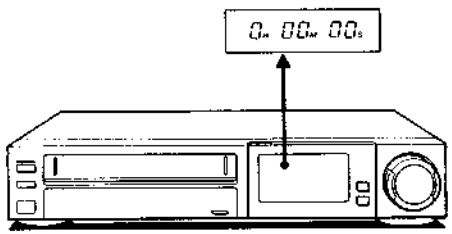
The selected operating mode will be superimposed on the TV screen for a few seconds. The AUTO indicator will light in the display window during AUTO MENU operation.

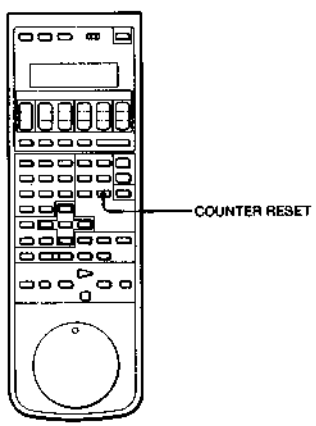
Notes on AUTO MENU operation
AUTO MENU cannot be operated if there is no cassette installed or if the VTR is in modes other than stop mode. A short beep alerts you if the AUTO MENU is not operable.

Note on "GO TO REC START-PLAY"
The recording start point data will be erased from the memory after the following operations and "GO TO REC START-PLAY" will not be operable.

- When COUNTER RESET is pressed
- When cassette is ejected and re-inserted.
- When HIGH SPEED REWIND is pressed

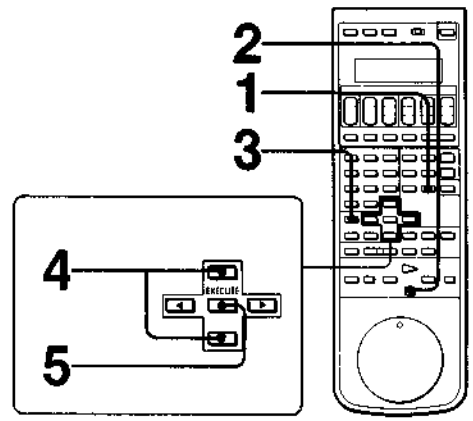
Use of the Tape Counter





Understanding Counter Zero Position

The tape counter on this VTR can be used as a reference when you wish to locate a certain scene after recording or playback. Press COUNTER RESET to set the counter to "0H00M00S" (counter zero position) before operation. The VTR will keep counting the length of tape being played back or recorded. Note, however, that the tape counter will not count the portions of tape with no signals recorded. This VTR automatically resets the counter to zero whenever a cassette is inserted. Two additional features using COUNTER RESET are available on this VTR.



AUTO MENU

PLAY-REW-POWER OFF
▸GO TO ZERO-STOP
GO TO ZERO-PLAY
GO TO REC START-PLAY
REW-POWER OFF
REW-EJECT-POWER OFF
REW-PLAY
REW-TIMER REC

AUTO MENU

PLAY-REW-POWER OFF
GO TO ZERO-STOP
▸GO TO ZERO-PLAY
GO TO REC START-PLAY
REW-POWER OFF
REW-EJECT-POWER OFF
REW-PLAY
REW-TIMER REC

Tape Return

The VTR can search for the counter zero position and stop. This function is useful for locating a particular scene after recording or playback.

1 **Press COUNTER RESET at the desired scene during recording or playback.**

2 **Press ■ to stop recording or playback.**

3 **Press MENU and select AUTO MENU.** See "Assigning a Desired Operation Mode" for operation.

4 **Move cursor to "GO TO ZERO-STOP."**

5 **Press EXECUTE.**

Tape Return Play

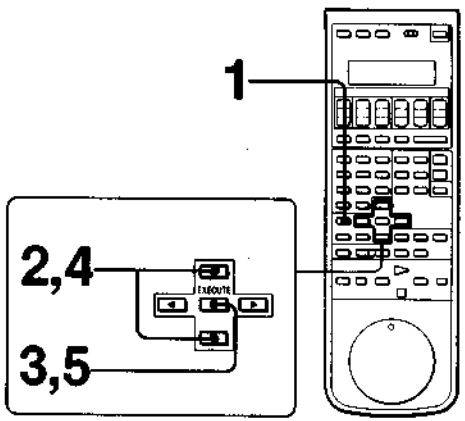
The VTR will even search and start playback from the counter zero position after recording or playback.

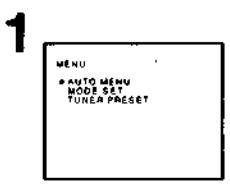
1 **Repeat steps 1 to 3 in the Tape Return operation.**

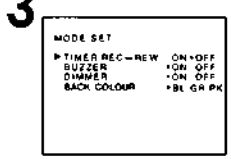
2 **Move cursor to "GO TO ZERO-PLAY"**

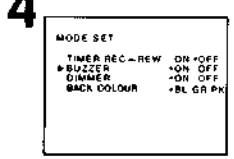
3 **Press EXECUTE.**

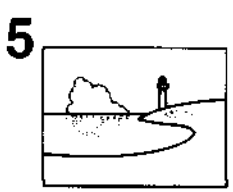
Timer Activated Recording











Timer Recording on this VTR

Up to eight preselected programmes, can be set on this unit, up to one month in advance.

Before You Begin

- Turn on the TV and adjust it to view the VTR output.
- Check to see that the clock on the Commander and the VTR shows the present time.
- To operate the SLV-373VP, read "VPS Function" first.

To Turn On/Off the Warning Buzzer

It is possible to turn on or off the beep sound which this VTR will give whenever an illogical operation command is sent from the Commander.

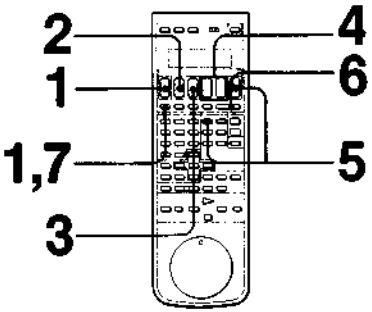
1 Press MENU in the stop mode.
The main MENU appears.

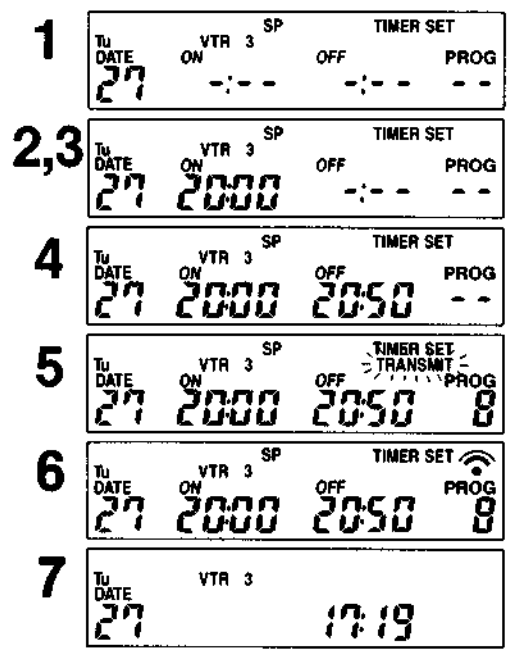
2 Move cursor with ▲ or ▼ to MODE SET.

3 Press EXECUTE.
The MODE SET menu appears.

4 Move cursor with ▲ or ▼ to BUZZER.
Select ON to activate and OFF to deactivate the buzzer by ◀ or ▶.

5 Press EXECUTE to store the setting and return to the original screen.





Operation

Example: To record a programme broadcast from 20:00 to 20:50 on Tuesday, November 27, 1990 on programme position 8.

1 Press TIMER SET first, then press D until 27 appears.
The day of the week, Tu (Tuesday), is automatically set.

2 Set the recording start hour with TURN ON H.

3 Set the recording start minute with TURN ON M.

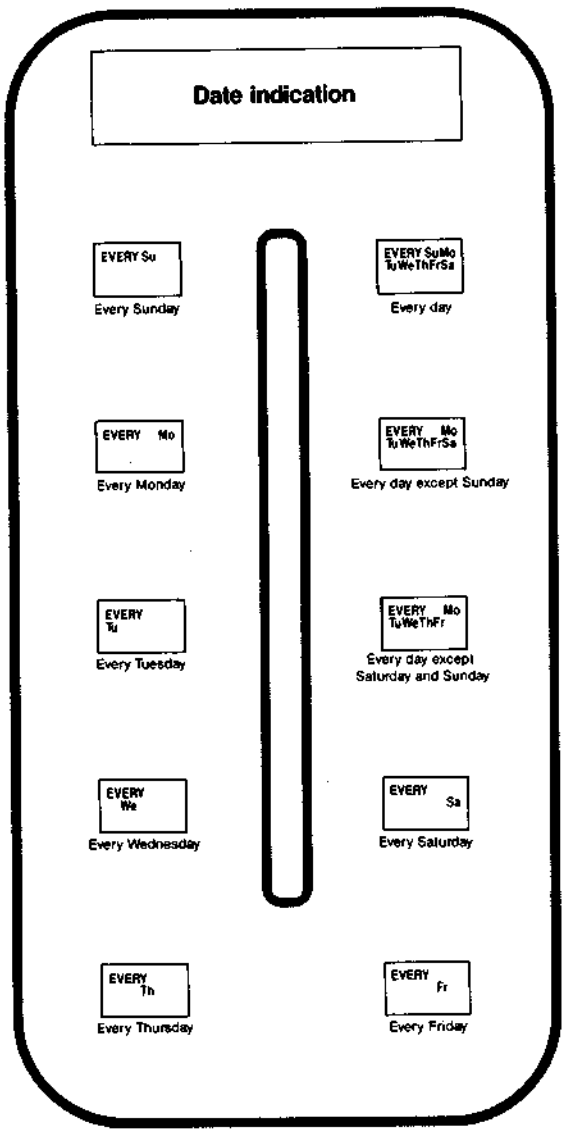
4 Set the recording end hour and minute with TURN OFF H and M referring to step 2 and 3.

5 Set the programme position with the PROG + / – button. To select the recording speed LP, press REC MODE so that the LP indicator appears in the display.
The TRANSMIT indicator blinks to indicate that all of the items are entered.

6 Point the Commander to the VTR and press TRANSMIT.
With a beep sound, the VTR enters the timer recording standby mode. The PROGRAM LIST appears on the screen for a few seconds.

7 Press TIMER SET so that the present time appears on the LCD display.
The VTR turns on, starts recording at the selected time, and turns off after recording ends.

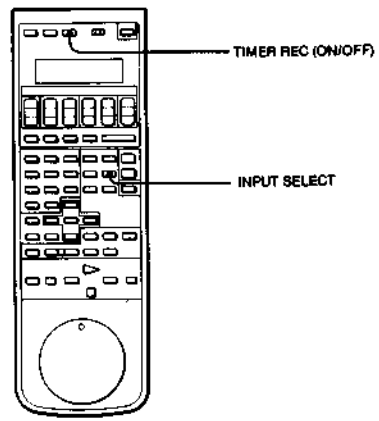
Timer Activated Recording



Daily/Weekly Recording

This VTR can be preset to record the same programme each day of the week (daily recording) or the same programme on a specific day of every week

Press D – on the Commander to change the LCD display in the order shown in the illustration instead of step 1 in the "Operation." When the desired recording mode is set and transmitted to the VTR, the corresponding indicator lights in the display window.



To Set Other Programmes

Repeat steps 1 to 6 in "Operation" before step 7

To Stop Timer Recording

Press TIMER REC ON/OFF.

To Record from Equipment Connected to EURO-AV or LINE IN 2 VIDEO/AUDIO Jacks

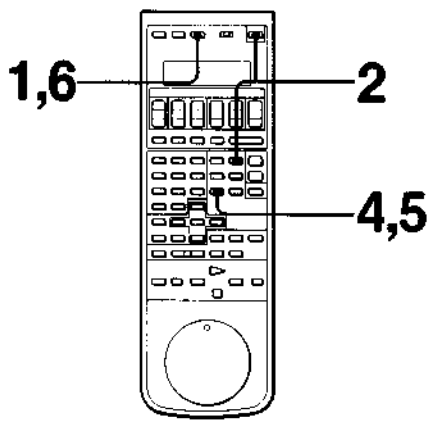
Press INPUT SELECT anytime in step 1 to 5 to change the indication from PROG – – to LINE L1 to LINE L2.

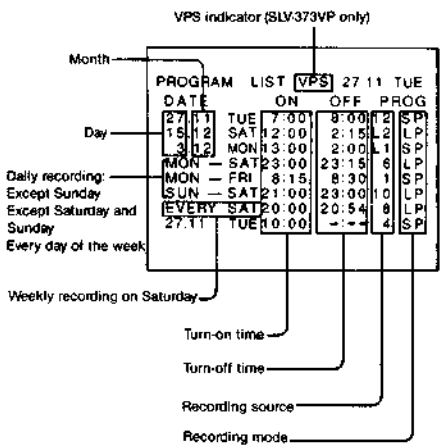
If a short beep sounds repeatedly when TRANSMIT is pressed
When BUZZER ON is selected in the MODE SET menu, the short beep indicates that the transmission is not received on the VTR. Press TRANSMIT again, then check the items below.
- No cassette is inserted.
- An illogical setting has been made.
- Timer setting can only be performed when the VTR is in turned off, stop, or timer recording mode
- Eight timer settings have already been made.
- The tape is at its end.

If the tape is ejected after pressing TRANSMIT
The safety tab of the inserted cassette is removed.

Understanding "one month"
This VTR sets the timer to record programmes to be broadcast between today and one day before the same date in the next month

Timer Activated Recording





Checking the Timer Settings

The timer settings can be checked while the VTR is in the timer standby mode by displaying the programme list on the screen.

1 **Press TIMER REC ON/OFF to turn off the TIMER REC ON/OFF indicator in the display window.**

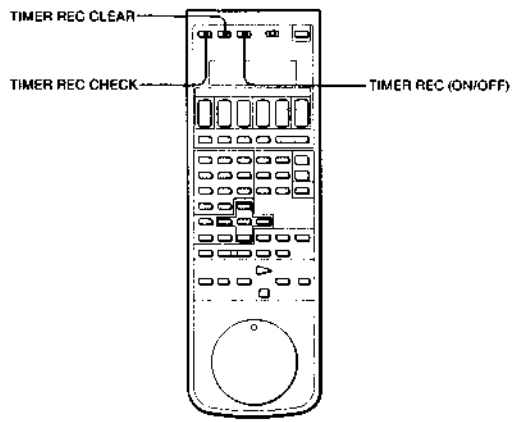
2 **Turn on the VTR and press TV/VTR to light the VTR indicator.**
(Only when connection is made via EURO-AV.)

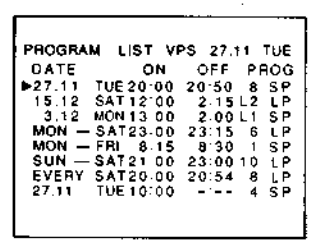
3 **Turn on the TV.**
Set to the programme position for VTR if VTR-TV connection is made via the aerial sockets. Select VTR input on the TV if VTR-TV connection is made via EURO-AV.

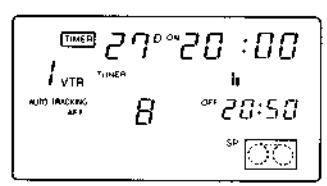
4 **Press TIMER ON SCREEN.**
The programme list appears

5 **Press TIMER ON SCREEN again to return to the original screen.**

6 **Press TIMER REC ON/OFF to return to the timer recording standby mode.**







Clearing/Correcting the Timer Setting

■Referring to the programme list

1 **Display the programme list referring to steps 1 to 4 in "Checking the Timer Settings."**

2 **Press TIMER REC CHECK to call up and move cursor to the setting you want to correct or clear.**

3 **To clear the setting, press TIMER REC CLEAR.**
If there are other timer settings on the list, press TIMER REC ON/OFF return to the timer recording standby mode.
To correct the setting, re-enter all of the items using the Commander. Refer to "Timer Activated Recording — Operation" steps 1 to 6.
The VTR automatically enters the timer recording standby mode.

■Clearing the setting without the programme list

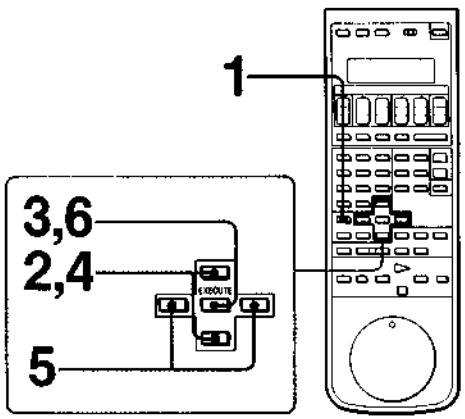
1 **Press TIMER REC ON/OFF.**

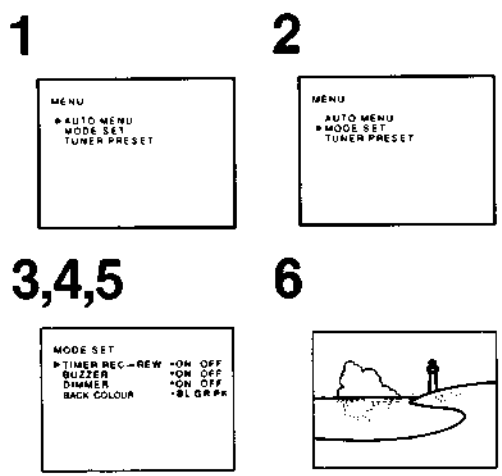
2 **Press TIMER REC CHECK repeatedly until the desired programme appears in the display window.**

3 **Press TIMER REC CLEAR.**

4 **Press TIMER REC ON/OFF to return to the timer recording standby mode if there are other programmes set for timer recording.**

Timer Activated Recording





To Automatically Rewind the Tape After Timer Recording

1 Before setting the timer, press MENU.

2 Move cursor with ▲ or ▼ to MODE SET in the main menu.

3 Press EXECUTE.

4 Move cursor with ▲ or ▼ to TIMER REC-REW.

5 Press ◀ or ▶ to move the dot to ON. To cancel this setting, move the dot to OFF.

6 Press EXECUTE to store this setting and return to the original screen.

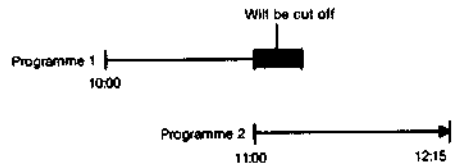
Using the VTR during Timer Recording Standby Mode

1 Press TIMER REC ON/OFF to turn off the TIMER REC indicator.

2 Turn on the power of the VTR. The VTR is ready to be used.

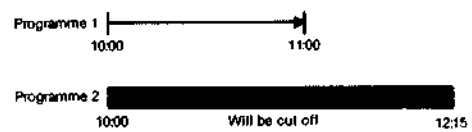
3 After using the VTR, press TIMER REC ON/OFF and light the TIMER indicator to re-enter the timer recording standby mode.

When the Timer Settings Overlap



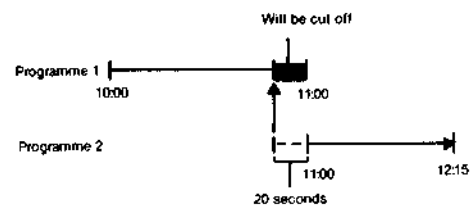
■If the setting of two programmes overlap

The recording of the following programme will begin automatically before the proceeding programme ends.



■If the turn on time of two programmes are the same

The VTR will record the programme with the smaller programme number or listed first on the programme list. The programme with the larger programme number or listed lower in the list will be erased.



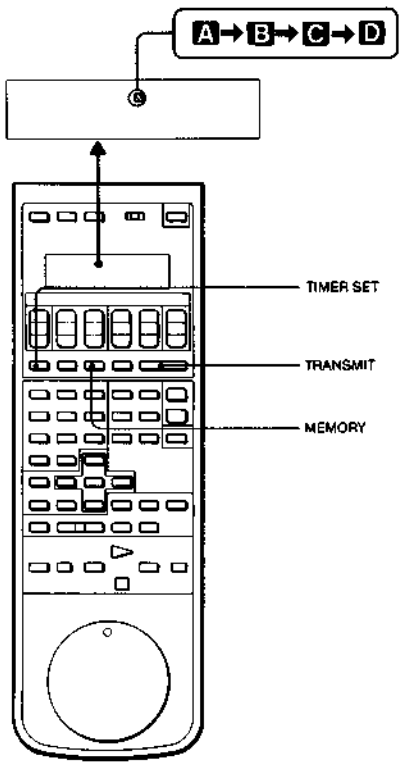
■If the recording end time of programme 1 and the recording start time of programme 2 are the same

The last 20 seconds of programme 1 will not be recorded because the VTR will enter the recording pause mode for programme 2 before programme 1 ends.

Power interruption during timer recording standby/timer recording mode

- If the power interruption lasts less than an hour, the VTR will enter the recording standby mode or resume timer recording when the power is recovered.
- If the power interruption exceeds an hour during the recording standby mode, the timer settings will be cleared.
  Reset the clock and re-enter the items for timer recording again. If the power interruption occurred during timer recording, the recording will stop and the VTR will be turned off.

Timer Activated Recording



To Store the Frequently Used Timer Settings in the Commander

The items selected for one timer recording programme will be erased from the LCD when TIMER SET is pressed, and cleared from the programme list as well when recording is over.
However, the turn-on/turn-off time and the programme position of up to four programmes can be stored in the Commander to be recalled later. This enables you to quickly access the most frequently used items, especially your favorite weekly programme, since the recording date will automatically be shifted to the next week after the recording is over.

■Storing the parameters

1 **Press TIMER SET and MEMORY to indicate MEMORY A.**

2 **Set all of the items for timer recording referring to "Timer Activated Recording — Operation."**

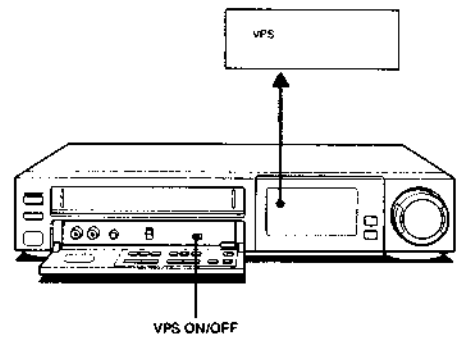
3 **Press MEMORY to change the indication to B, C, or D, and repeat step 2 for other programmes.**
The items set will be kept in the memory even when TIMER SET is pressed.

■Recalling and re-entering the items

1 **Press TIMER SET and MEMORY to call up the desired memory indication (A, B, C, or D).**

2 **Make whatever changes necessary.**

3 **Press TRANSMIT.**
The VTR enters the timer recording standby mode



VPS (Video Programme System) Function (SLV-373VP only)

The German broadcasting system transmits VPS signals with the TV programmes which assures that your timer recording will be performed without missing any portion of it regardless of any earliness, time delay, extension, or broadcast interruption which might occur during that programme.

■Operation

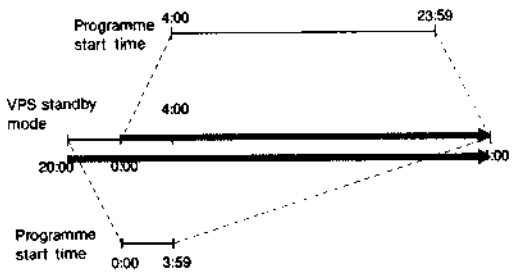
1 **Check whether VPS is transmitted with the programme to be recorded.**

2 **Press VPS ON/OFF so that the VPS indicator lights in the display window.**

3 **Set the timer referring to "Timer Activated Recording — Operation."**

Notes
- The VPS button is effective only when the TIMER REC ON/OFF indicator is turned off
- If the VPS signal was not received on the VTR because it was too weak or because the station failed to transmit, timer recording will be performed without the VPS function regardless of the VPS indication.
- The recording will stop when the VTR receives a VPS programme interruption code during recording, for example, when an urgent news bulletin was inserted. As soon as the interrupted programme resumes, recording will continue

Timer Activated Recording



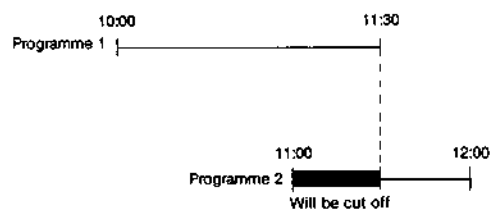
■VPS standby mode

The VTR will enter the standby mode for VPS recording far before the turn on time and remains in the standby mode passed the preset turn on time until the VPS signal is received to prepare for any change in the actual broadcast time.

When the VPS timer recording is set for a programme which is expected to start between 4:00 and 23:59, the VTR will enter the standby mode at 0:00 that day and will keep on waiting for the VPS signal until 4:00 of the next day

When the VPS timer recording is set for a programme which is expected to start between 0:00 and 3:59, the VTR will enter the standby mode at 20:00 the day before the recording day and will keep on waiting for the VPS signal until 4:00 on the recording day.

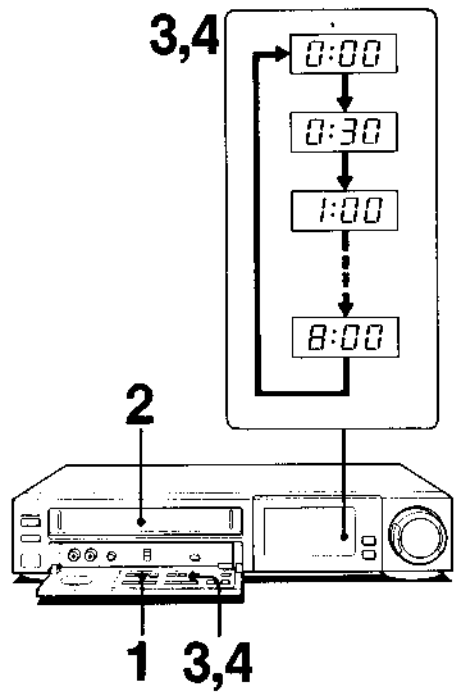
Note
When the VTR is in the VPS standby mode, programme position numbers set for timer recording appear in the display window sequentially by few seconds.



■If the actual recording time overlaps with the next timer recording programme

There may be cases when the actual broadcast time of two timer recording programmes overlap owing to the shift made by the VPS signal. In this case, the programme that was broadcast first always has priority. The recording of the second programme will begin only after the first programme is over.

Quick Timer Recording



What is Quick Timer Recording?

The quick timer recording function provides a short cut to enter the timer recording mode or to use the timer to turn off the VTR after recording is over. The timer can be set to operate within 8 hours in units of 30 minutes.

Operation

If you are recording, skip steps 1 to 3

1 Press INPUT SELECT so that TUNER indicator is turned on.

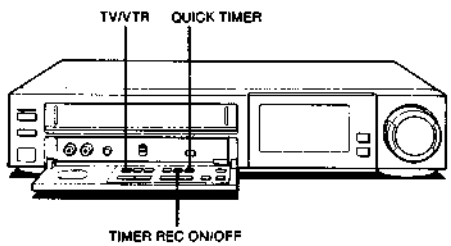
2 Insert a cassette.

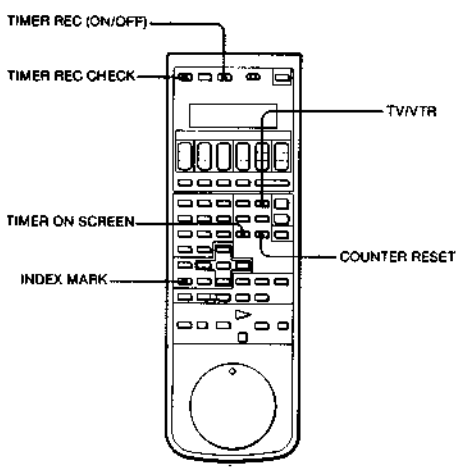
3 Press QUICK TIMER.
TIMER indicator lights in the display window. While 0:00 and programme position number is blinking in the display window, select the desired programme number with PROGRAM +/−.
A cassette with its safety tab removed will be ejected.

4 Press QUICK TIMER again to start recording.
Press QUICK TIMER again to set the recording duration within 30 seconds from step 3, otherwise the power will be turned off. Each press of QUICK TIMER changes the indication in the display window in units of 30 minutes.

5 The recording duration will decrease minute by minute until 0:00 when the VTR will be automatically turned off.

Quick Timer Recording





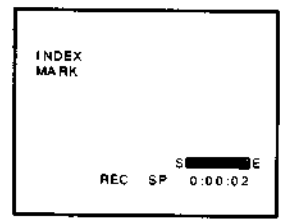
■ Buttons operable during quick timer recording

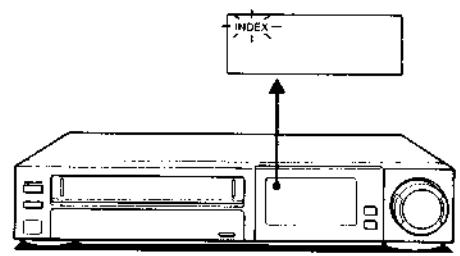
- **TIMER REC ON/OFF** stops quick timer recording.
- **QUICK TIMER** changes the recording duration.
- **TIMER ON SCREEN** displays the programme list.
- **TIMER REC CHECK** changes the programme number in the display window.
- **COUNTER RESET** resets the counter to zero.
- **INDEX MARK** marks an index signal.
- **TV/VTR** switches the screen to another programme received on the TV.

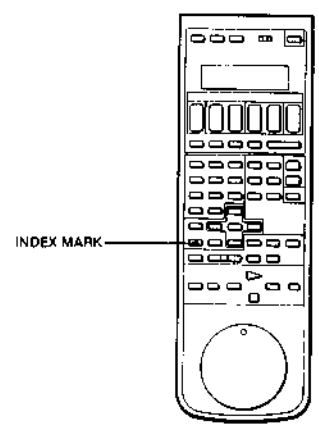
If power interruption occurs during quick timer recording
Recording will stop and the VTR will be turned off. If the power interruption lasted for less than one hour and if the power recovered within the quick timer duration, recording will resume from that instant.

If the unit is in timer recording standby mode
Press TIMER REC ON/OFF to turn off the indicator, then follow steps 4 and 5.

Index Function







Marking Index Signals

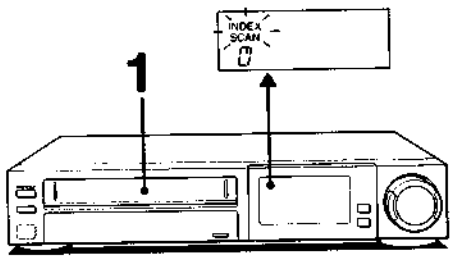
The desired position on a tape can be located easily by detecting the index signals. There are two ways in which to mark index signals: automatic and manual. When the index signal is being marked, INDEX flashes in the display window and the INDEX MARK display will appear on the screen.

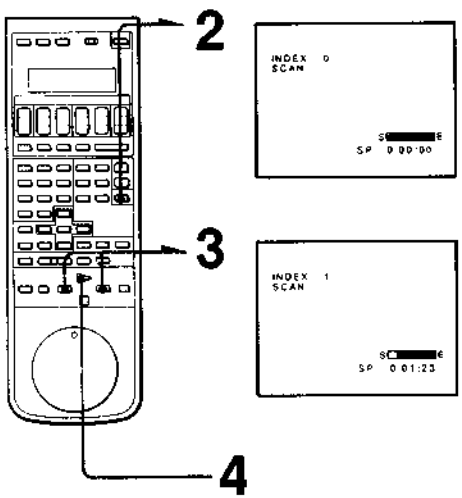
■ Automatic index mark
An index signal is automatically marked on the tape when the VTR starts recording.

■ Manual index mark
Index signals can be marked at desired scenes. Press INDEX MARK to mark an index.

Notes
- Leave an interval of more than 2-minute interval between two index points so that the VTR can detect each INDEX signal accurately.
- The recorded sound will not be heard while marking an index signal. But the signal will not be erased.
- Index signals cannot be marked on a tape whose safety tab is removed or on an unrecorded portion of the tape.

Index Function





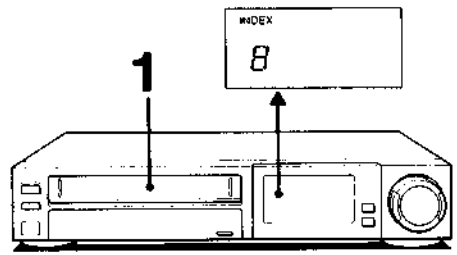
Playing Back from the Index Point — INDEX SCAN

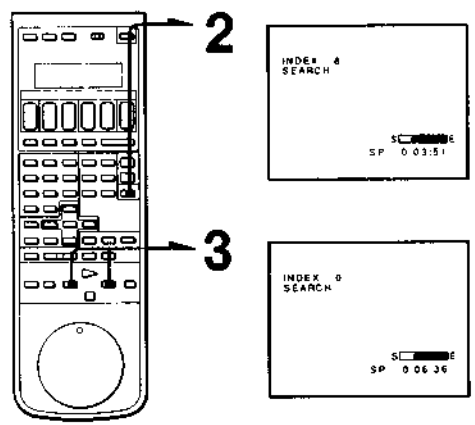
1 **Insert a cassette with index signals.**

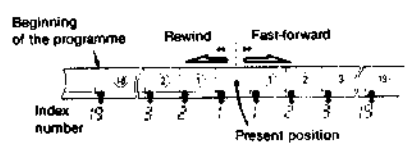
2 **Press INDEX once.**
INDEX or SCAN indicator blinks alternately and 0 (zero) lights in the display window.

3 **Press ◀◀ to playback from the previous programme.**
Press ▶▶ to playback from the programme ahead.
The VTR will advance to the next or previous index signal. Then the VTR will play the tape for approximately 10 seconds, and then move to the next index in the selected direction. The index number changes one by one.

4 **Press ▷ when the desired index signal is detected.**







Locating an Index — INDEX SEARCH

Direct search of the desired index point can be performed by entering the number of how many indexes ahead or behind it is from the current tape position. The VTR counts down how may more indexes should be searched for and displays the sequence in the display window. Up to 19 indexes from the present position can be searched.

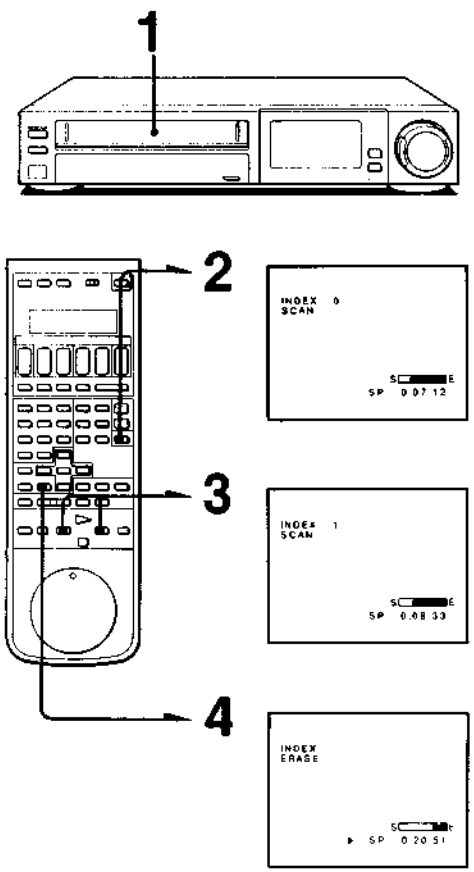
1 **Insert a cassette with index signals.**

2 **Press INDEX to show how many indexes should be counted to reach the desired scene.**

3 **Press ◀◀ if the index is behind or ▶▶ if the index is ahead of the current tape position.**
The VTR starts searching and the index number will be counted down to zero.

Playback from the desired point starts

Index Function



Erasing an Index

The index marked on the tape can be erased.

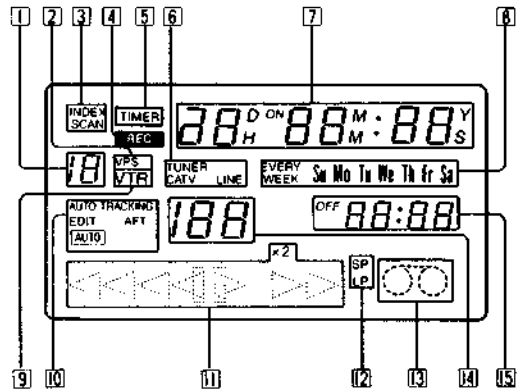
1 Insert a cassette with index signals.

2 Press INDEX once.

3 Press ◄◄ or ►► to search for the index signal.
When the VTR detects an index signal, the VTR will play the tape for approximately 10 seconds from the index. If that is the index you want to erase, go to step 4. If that is not the index you want to erase, wait until the desired index is searched.

4 Press INDEX ERASE while the VTR is in step 3.
That index signal will be erased. While the index signal is being erased, the recorded sound will not be heard, but it will not be erased. If INDEX ERASE is not pressed within the 10 seconds of playback, the VTR will return to step 3

Indications in the Display Window



1 **Index number indicator**

2 **VPS indicator (SLV-373VP only)**
Appears while timer recording is performed with VPS (Video Programme System) function.

3 **INDEX SCAN indicator**
Appears while the VTR is scanning the index point.

4 **REC (recording) indicator**
Appears while the VTR is performing normal recording, timer recording, or performing quick timer recording.

5 **TIMER recording indicator**
Appears while the VTR is performing timer-recording, waiting for the turn-on time of timer recording, or performing quick timer recording.

6 **Input mode indicators**

7 **Linear time counter and turn-on time of timer recording**

8 **Day of the week indicator**

9 **VTR indicator**
Appears while viewing the playback of the VTR or a programme selected on the VTR. As long as this indicator lights in the display window, the programme selected on the TV does not appear on the screen.

10 **Various function indicators**
AUTO TRACKING (Automatic tracking), EDIT, AFT (Automatic Fine Tuning) and AUTO (AUTO MENU display).

11 **Tape operation indicator**

12 **Tape speed indicator**

13 **Cassette indicator**

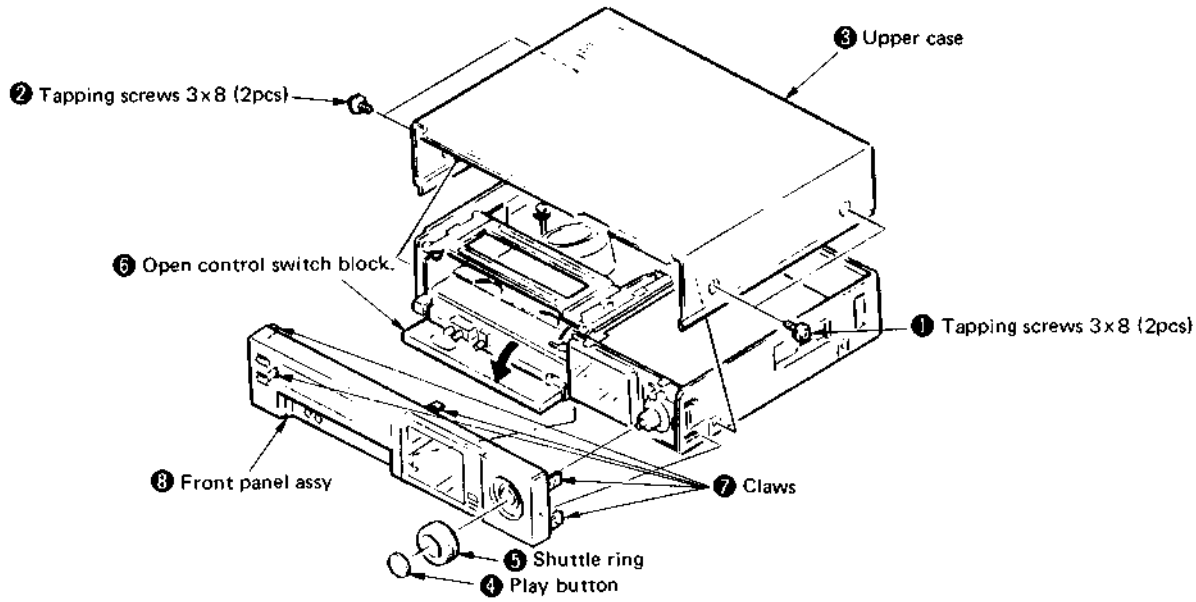
14 **Programme position/input mode indicators**

15 **Current time, turn-off time of timer recording, and quick timer recording time.**

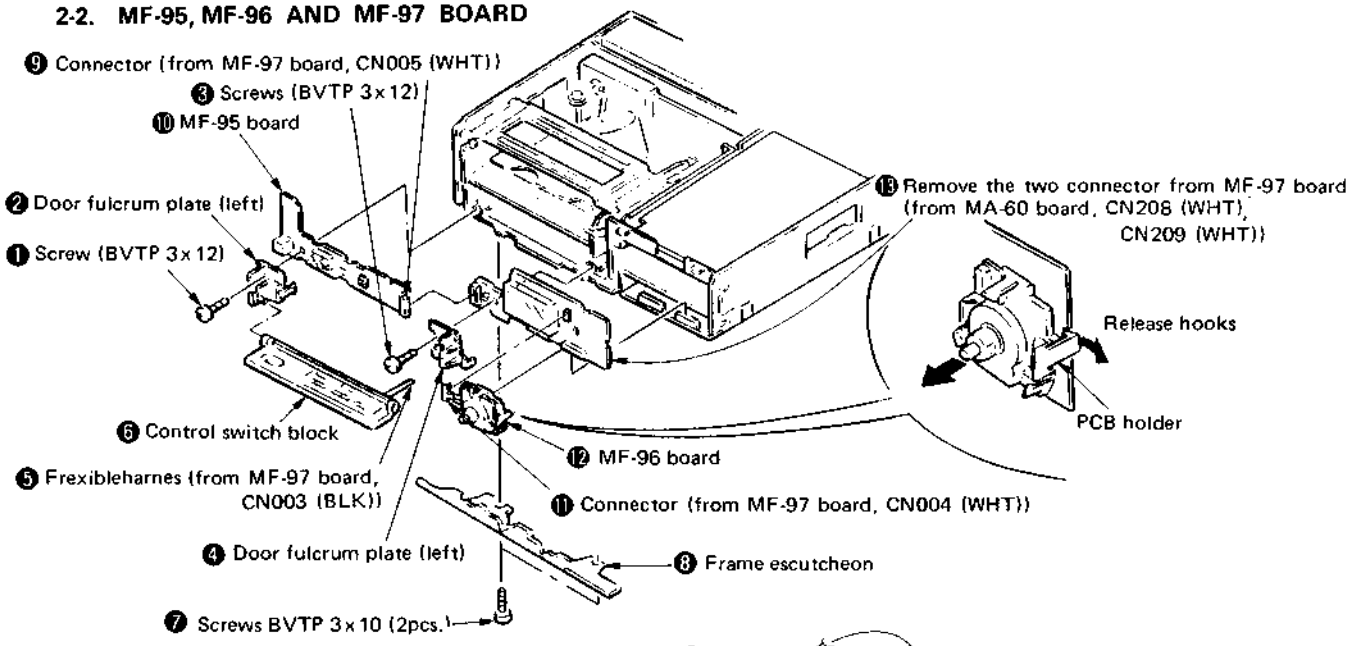
SECTION 2
DISASSEMBLY

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

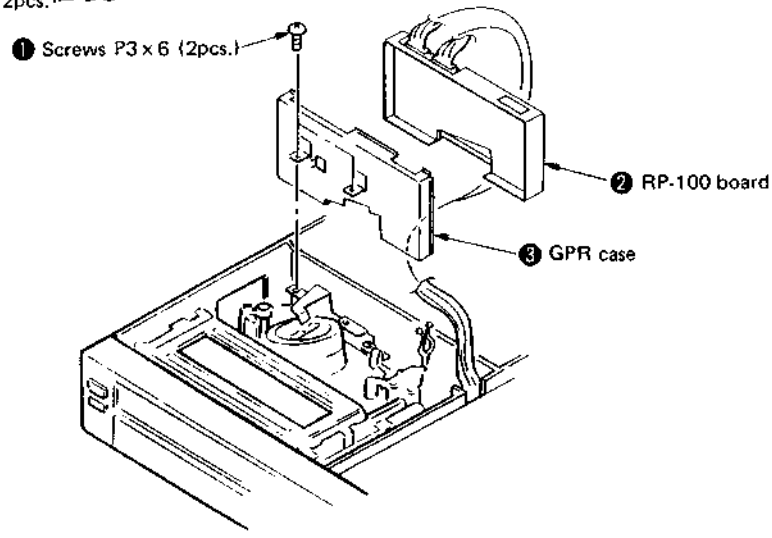
2-1. UPPER CASE, FRONT PANEL ASSY



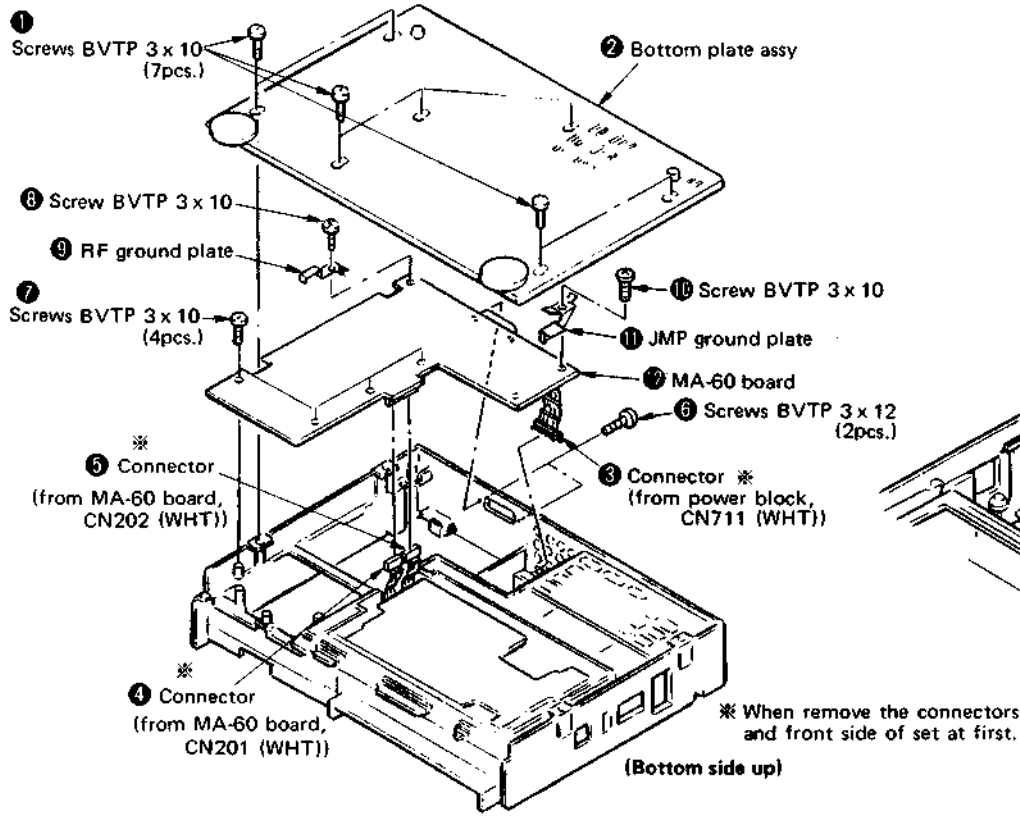
2-2. MF-95, MF-96 AND MF-97 BOARD



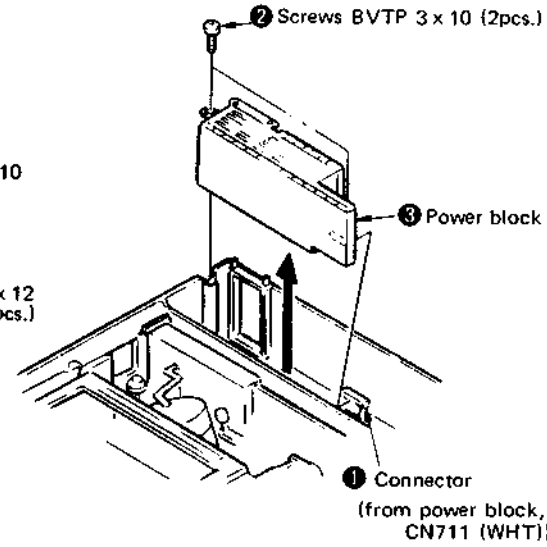
2-3. RP-100 BOARD



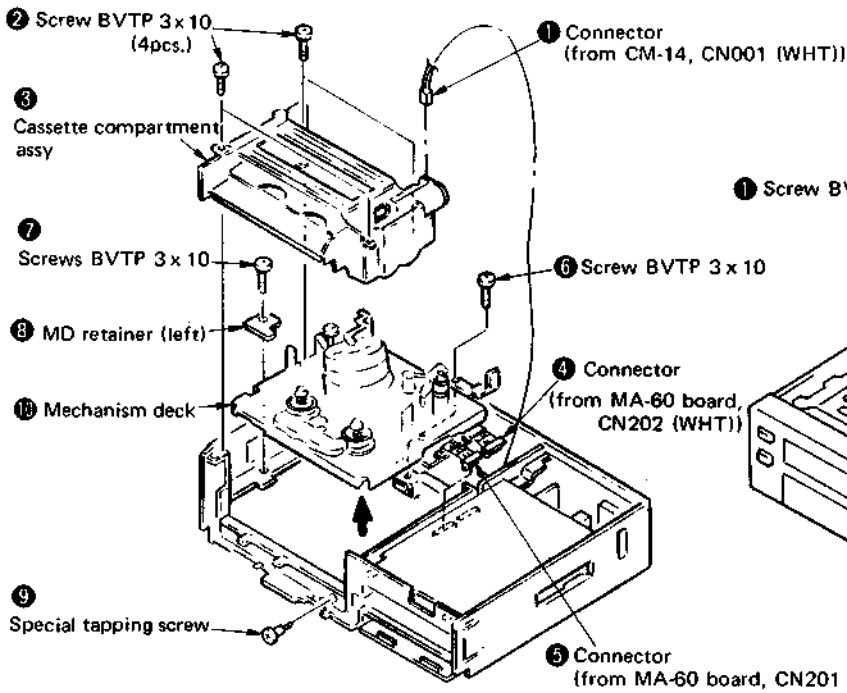
2-4. BOTTOM PLATE, MA-60 BOARD



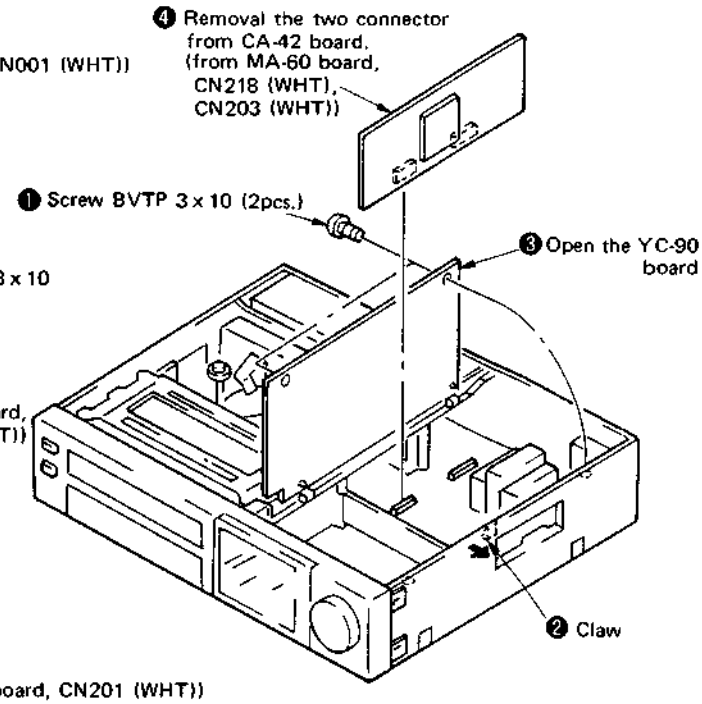
2-5. POWER BLOCK



2-6. CASSETTE COMPARTMENT ASSY AND MECHANISM DECK ASSY

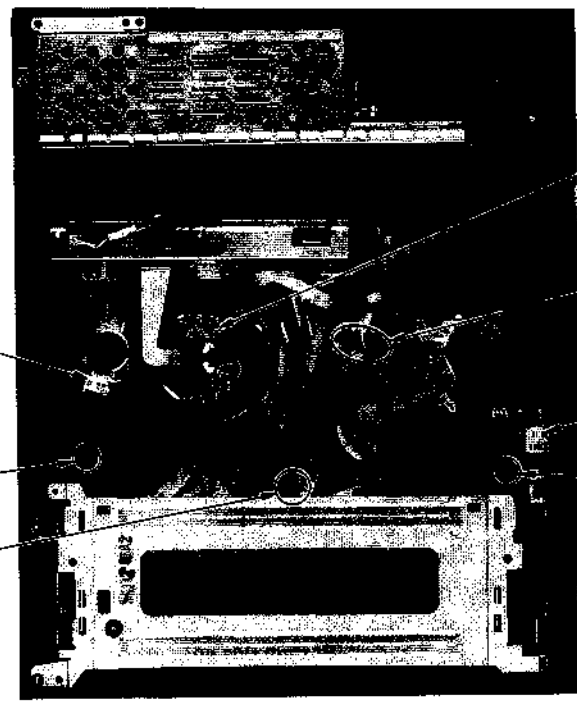


2-7. YC-90 AND CA-42 BOARD

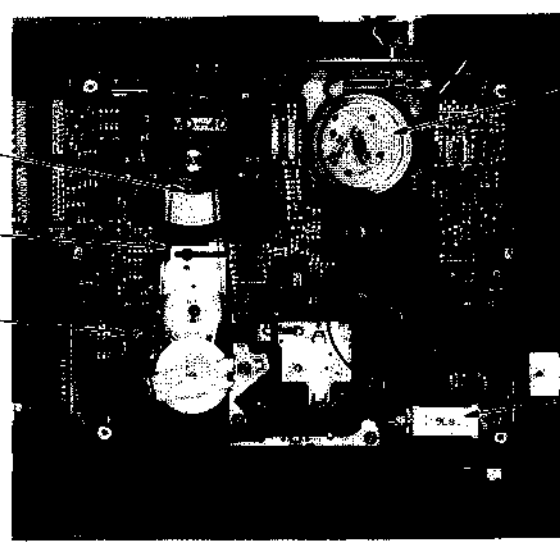


2-8. INTERNAL VIEWS

—Top Side—

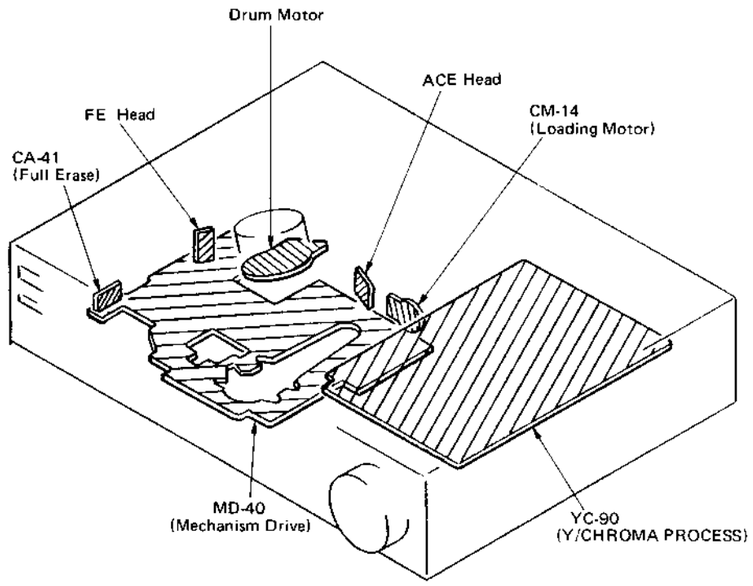


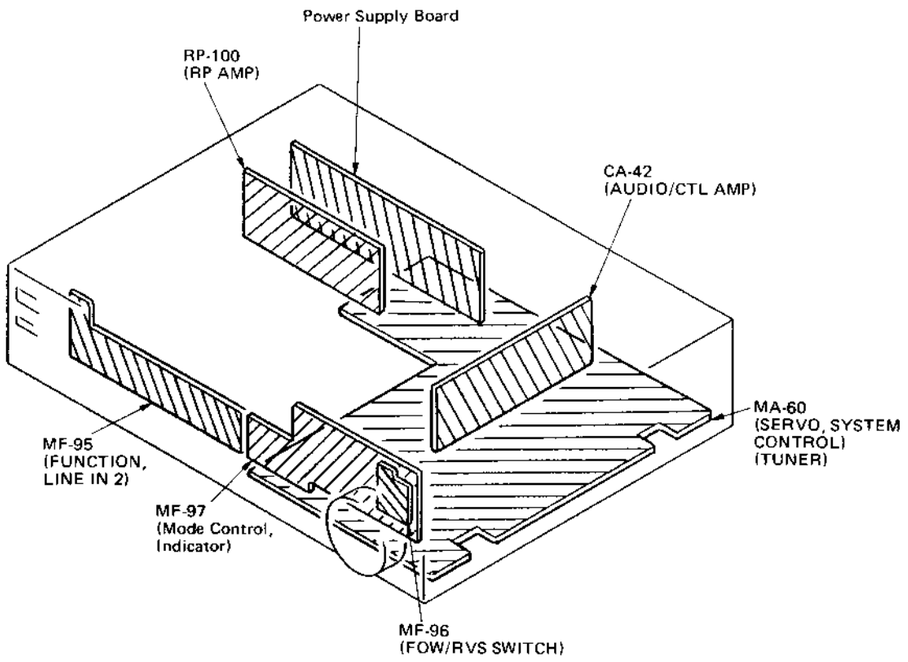
—Botoom Side—



SECTION 3
DIAGRAMS

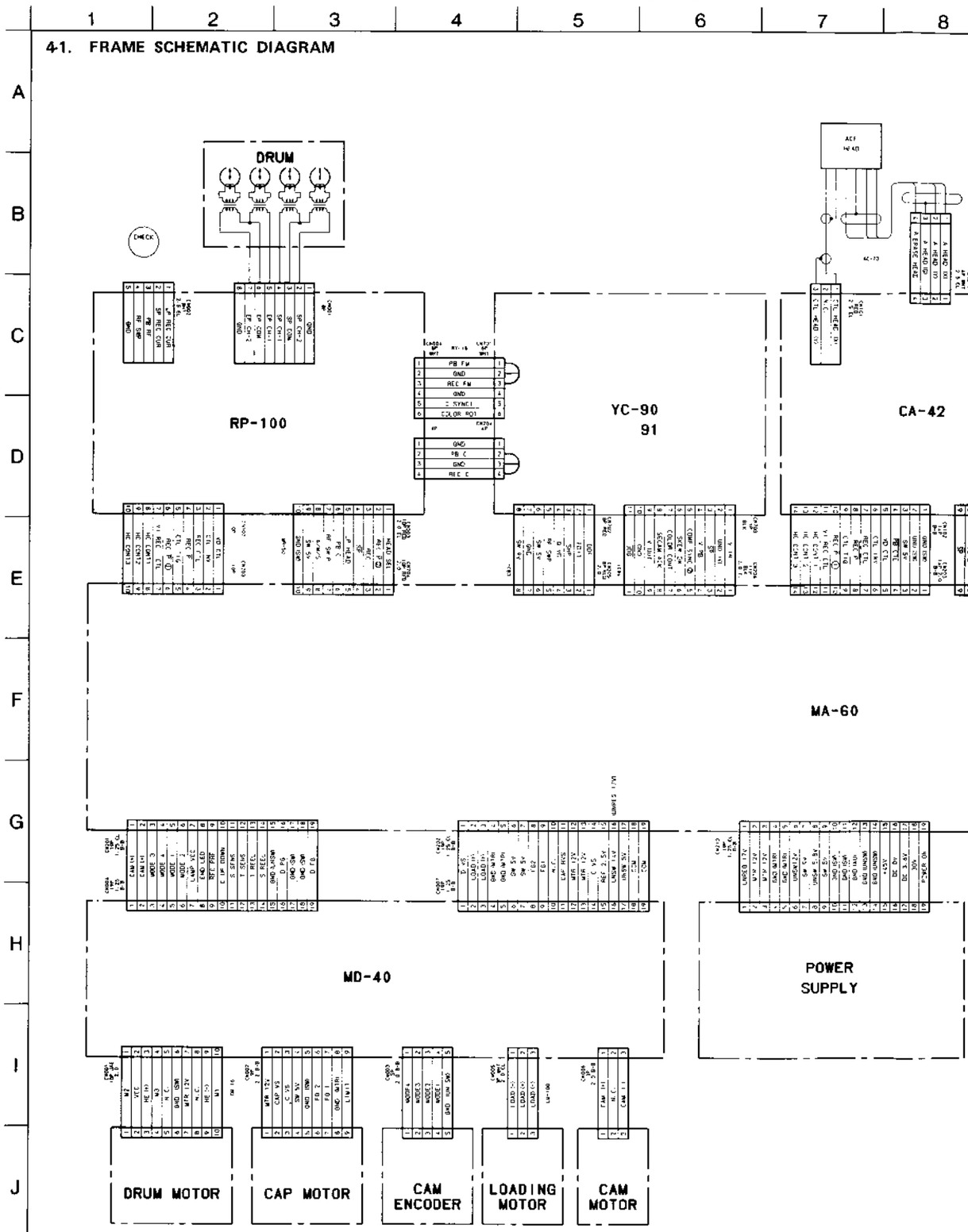
3-1. CIRCUIT BOARDS LOCATION



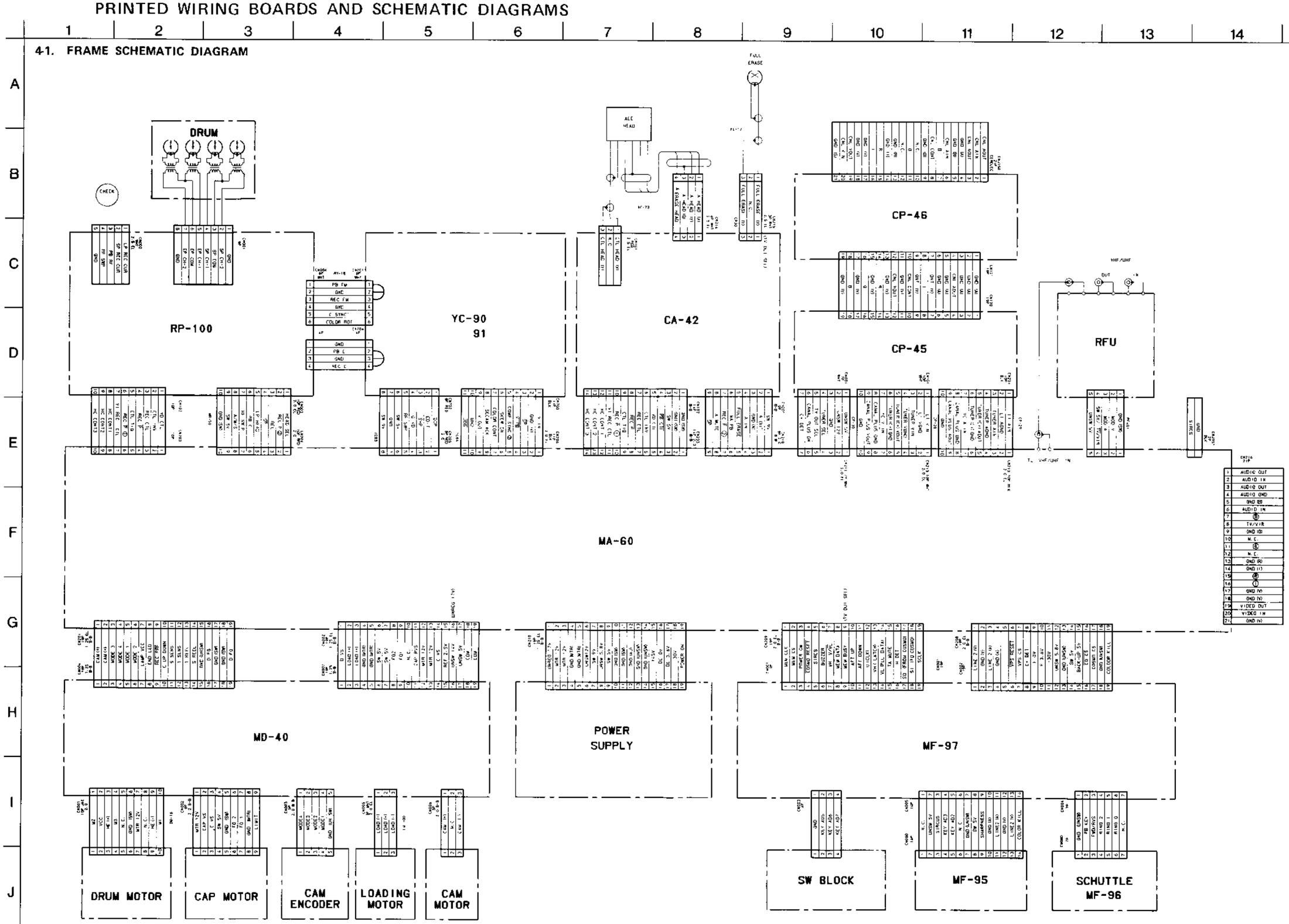


SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



41. FRAME SCHEMATIC DIAGRAM



4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

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

For printed wiring boards:

- o— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ⊗ or ● : Through hole.
- ▒▒ : Pattern from the side which enables seeing.
- ▒▒ : Pattern of the rear side.

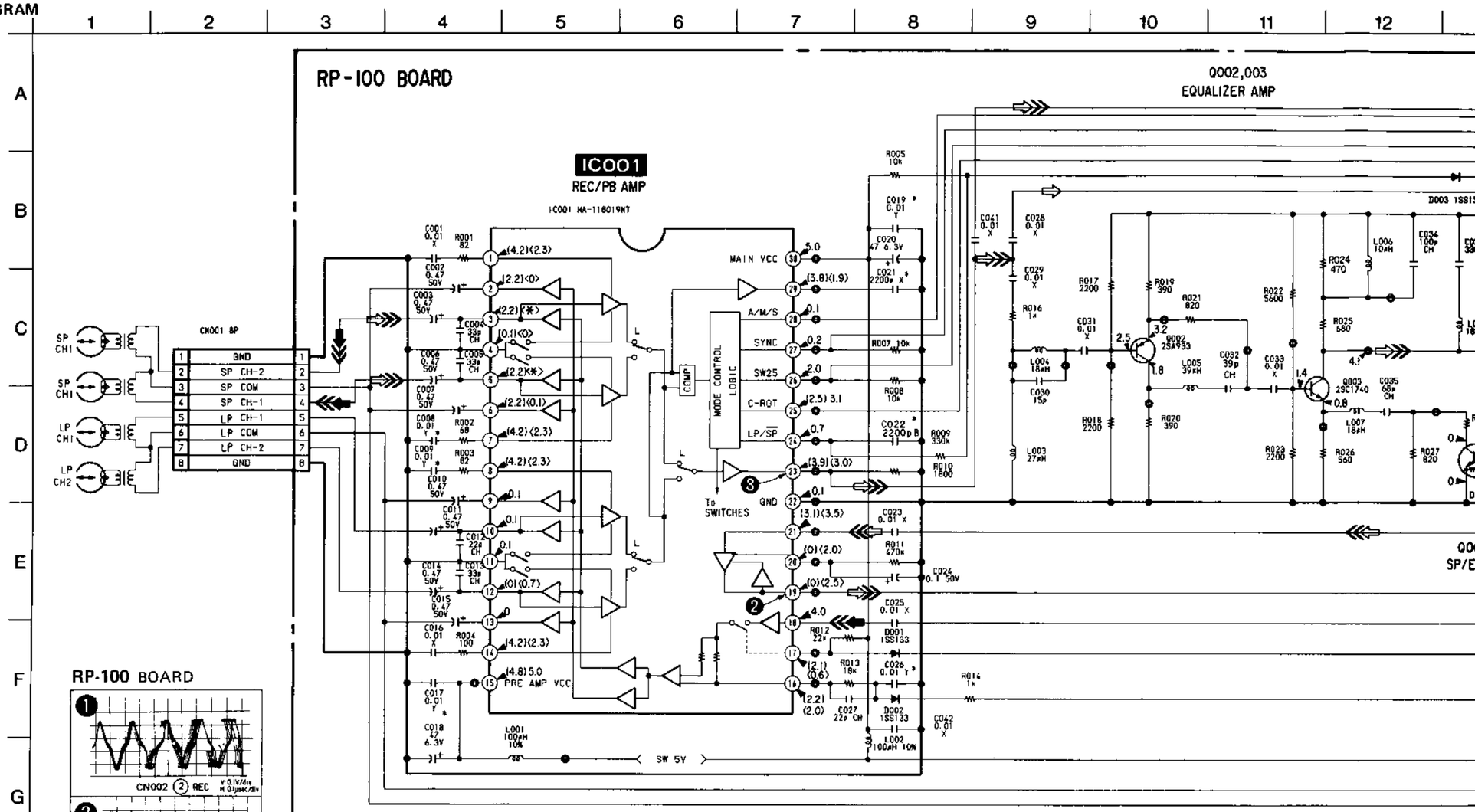
Caution:
Pattern face side: (Conductor Side) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) Parts on the parts face side seen from the parts face are indicated.

For schematic diagram:

- 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 resistors are in ohms, 1/4W (Chip resistors: 1/10W) unless otherwise noted.
  kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF: μμF 50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊣▭⊢ : nonflammable resistor.
- ⊣∿⊢ : fusible resistor.
- ▭ : panel designation.
- △ : internal component.
- ▭ : adjustment for repair.
- ——— : B+ line.
- — — — : B− line.
- Voltages are dc between measurement points and ground unless otherwise noted.
- Readings are taken with a color-bar signal input.
- Readings are taken with a digital multimeter (DC10MΩ).
- Voltage variations may be noted due to normal production tolerances.
- ⇒ : IN/OUT direction of B line (+, −).
- Circled numbers refer to waveforms.

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

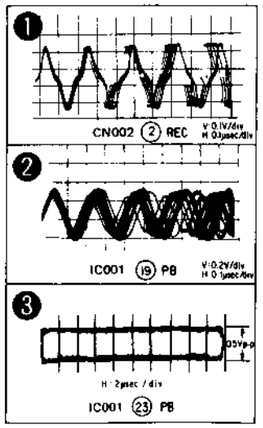
Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.



No mark: REC PB mode
( ): REC mode
〈 〉: PB mode
✱ : Can not be measured

	C
REC	
PB	

RP-100 BOARD



00 BOARD

Q002,003
EQUALIZER AMP

Q005
BUFFER

IC001
REC/PB AMP

IC001 HA-118019NT

Q006
REC MUTE

Q007
SP/EP
SWITCH

Q004
SP/EP SWITCH

A/M/S
COMP. SYNC
SW 5V

CN002 2.5 EL WHT

1	LP REC CUR
2	SP REC CUR
3	PB RF
4	RF SWP
5	GND

CHECK PIN

CN003 10P 2.0 EL RED

1	HEAD SEL
2	REC F ②
3	REC
4	SP
5	LP HEAD
6	PB C
7	RF SWP
8	A/M/S
9	SW 5V
10	GND (SW)

TO
MA-60 BOARD
CN204
(See page 43)

CN004 10P 2.0 EL WHT

1	PB FM
2	GND
3	REC FM
4	GND
5	C SYNC ↑
6	C ROT
7	GND
8	PB C
9	GND
10	REC C

TO
YC-90 BOARD
CN701
(See page 41)

TO
YC-90 BOARD
CN704
(See page 41)

No mark : REC PB mode
( ) : REC mode
〈 〉 : PB mode
✱ : Can not be measured

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

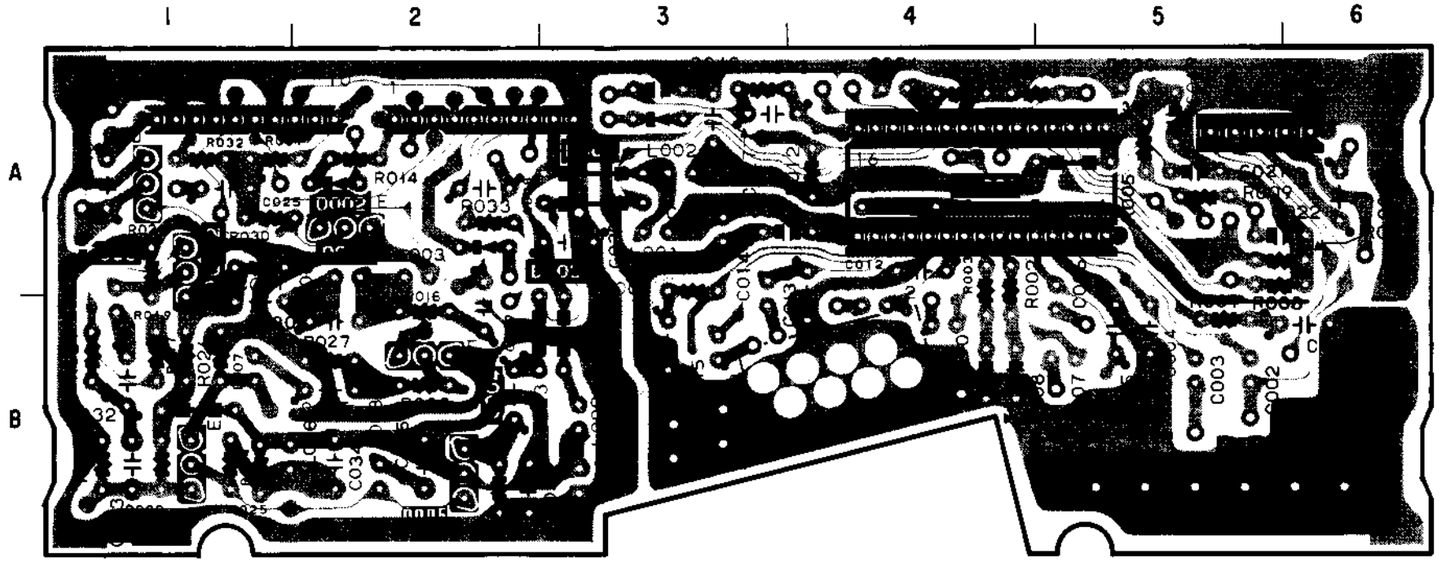
HEAD AMP HEAD AMP

RP-100 (HEAD AMP) PRINTED WIRING BOARD
–Ref. No. RP-100 Board: 1,000 series–

RP-100 BOARD

D001	A-3
D002	A-2
D003	B-3
IC001	A-4
Q002	A-1
Q003	B-1
Q004	B-2
Q005	B-2
Q006	A-1
Q007	A-2

RP-100 BOARD



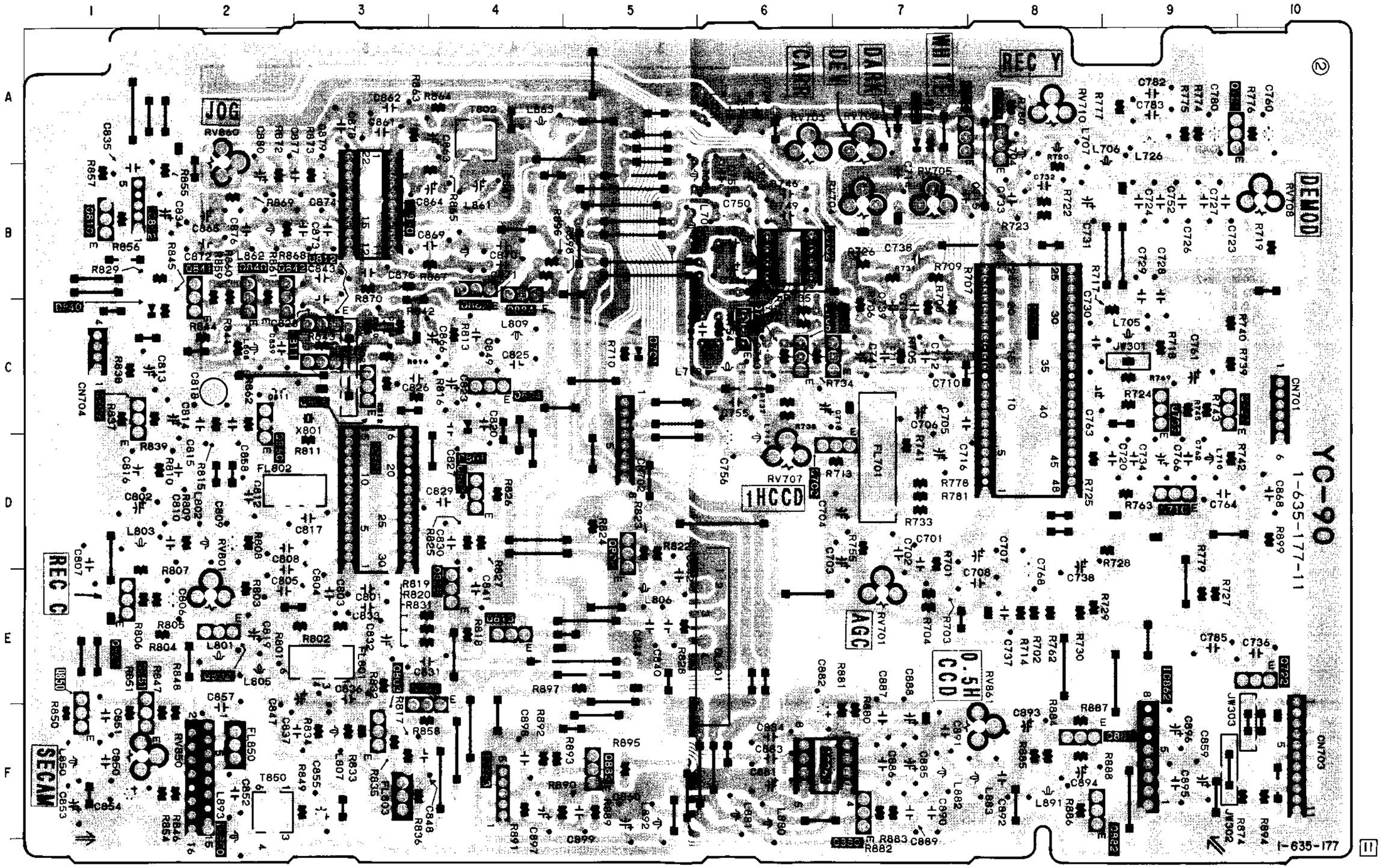
11

HEAD AMP HEAD AMP

YC-90 (VIDEO) PRINTED WIRING BOARD

–Ref. No. YC-90 Board: 2,000 series–

YC-90 BOARD



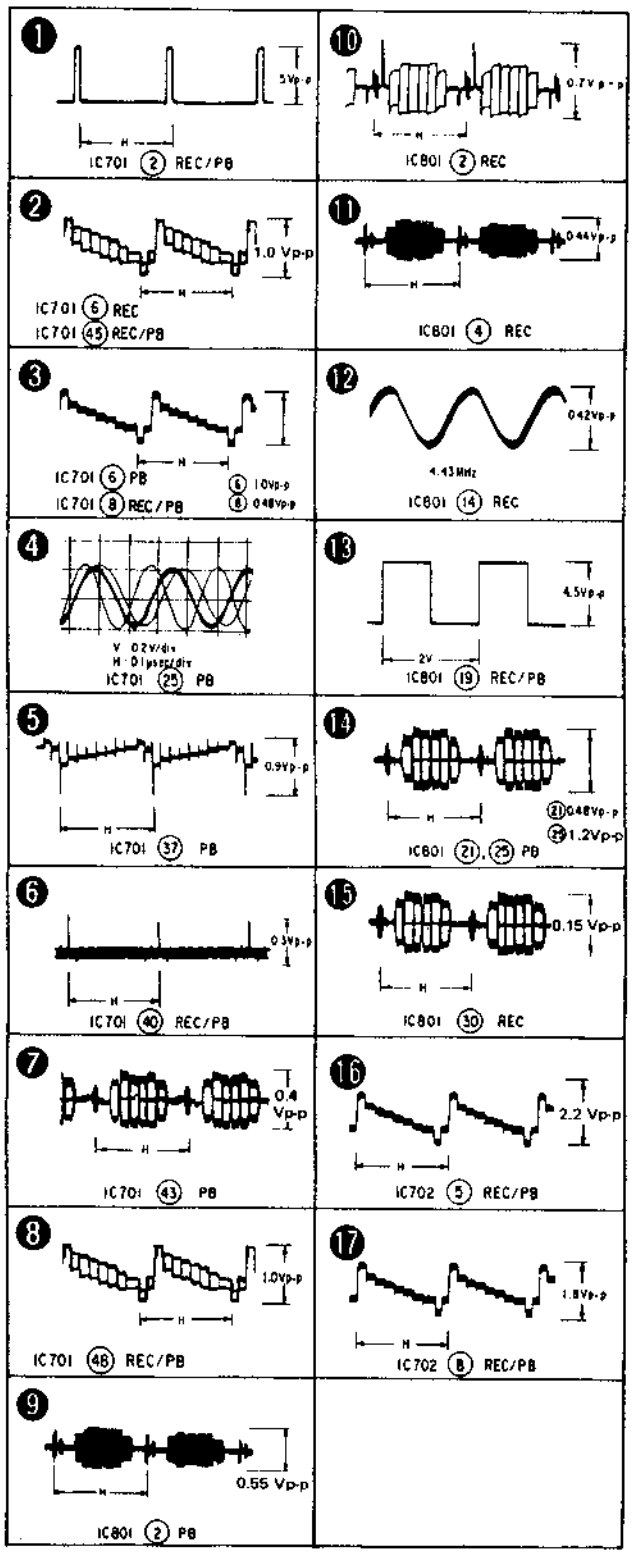
YC-90 (VIDEO) SCHEMATIC DIAGRAM

–Ref. No. YC-90 Board: 2,000 series–

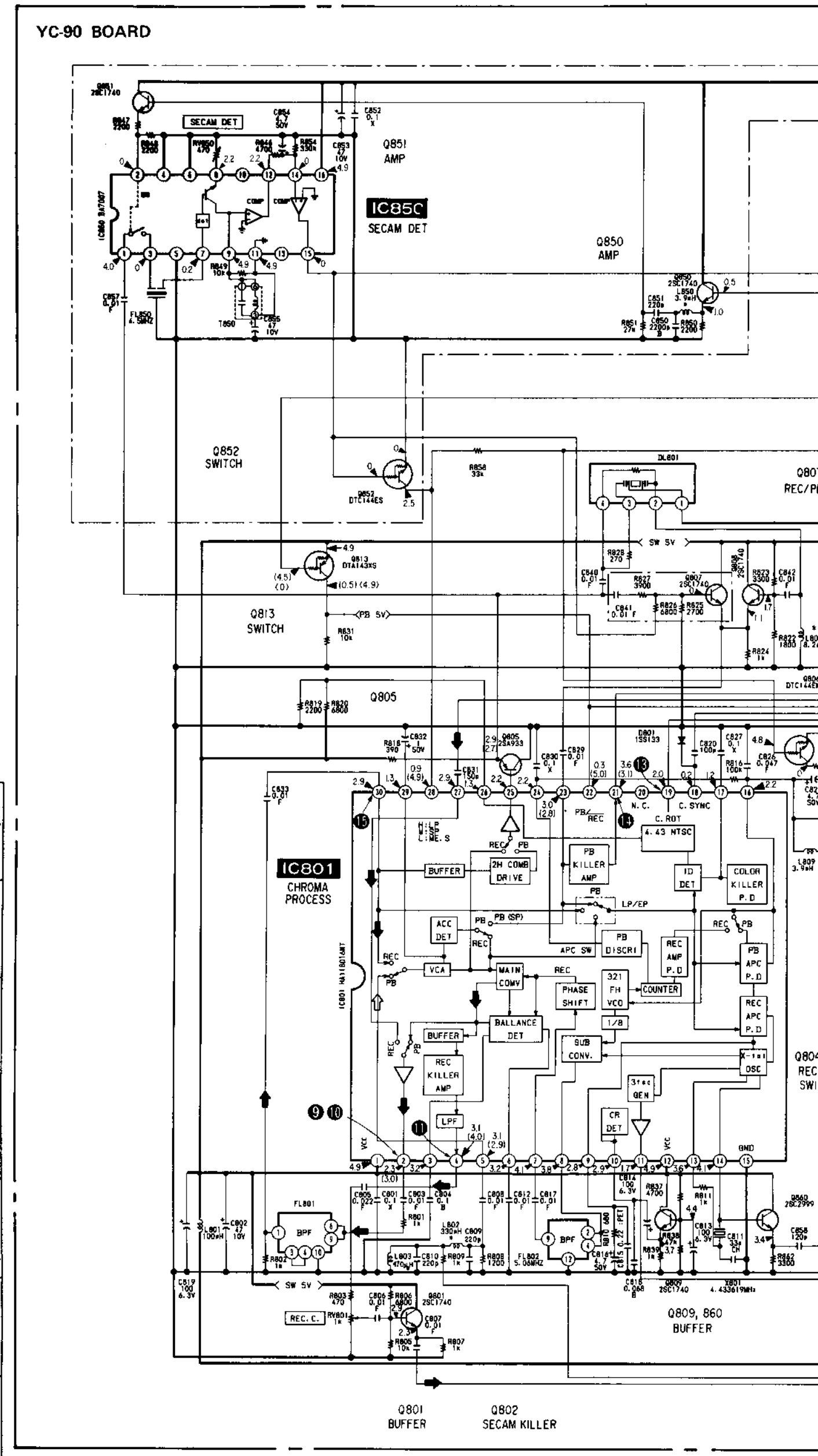
YC -90 BOARD

D701	C-5	Q723	A-7
D705	B-7	Q801	E-1
D801	D-4	Q803	E-3
		Q804	C-4
IC701	C-8	Q805	E-4
IC702	B-6	Q806	C-3
IC801	D-3	Q807	D-4
IC802	B-1	Q808	D-5
IC850	F-2	Q809	C-1
IC860	B-3	Q810	D-1
IC861	F-6	Q813	E-4
IC862	F-9	Q850	E-1
IC863	F-4	Q851	E-1
		Q852	E-4
Q702	D-6	Q860	D-2
Q704	A-8	Q862	B-4
Q705	C-7	Q880	F-7
Q706	C-6	Q881	F-9
Q710	D-9	Q882	F-9
Q711	C-6	Q883	F-5
Q721	A-9	Q884	B-4
Q722	E-10		

YC-90 BOARD



YC-90 BOARD



VIDEO VIDEO

Q807, 808
REC/PB SWITCH

Q880
BUFFER

IC861
0.5H CCD

IC862
SWITCH

Q881, 882
AMP

Q722
NOISE CANCEL
SWITCH

Q862

Q883
BUFFER

IC863
SYNC SEP

Q884
C CONT
SWITCH

IC860
0.5H SKEW
DET

Q803
3 fsc AMP

Q804, 806
REC/PB
SWITCH

IC802
SYNC SEP

Q810
INVERTER

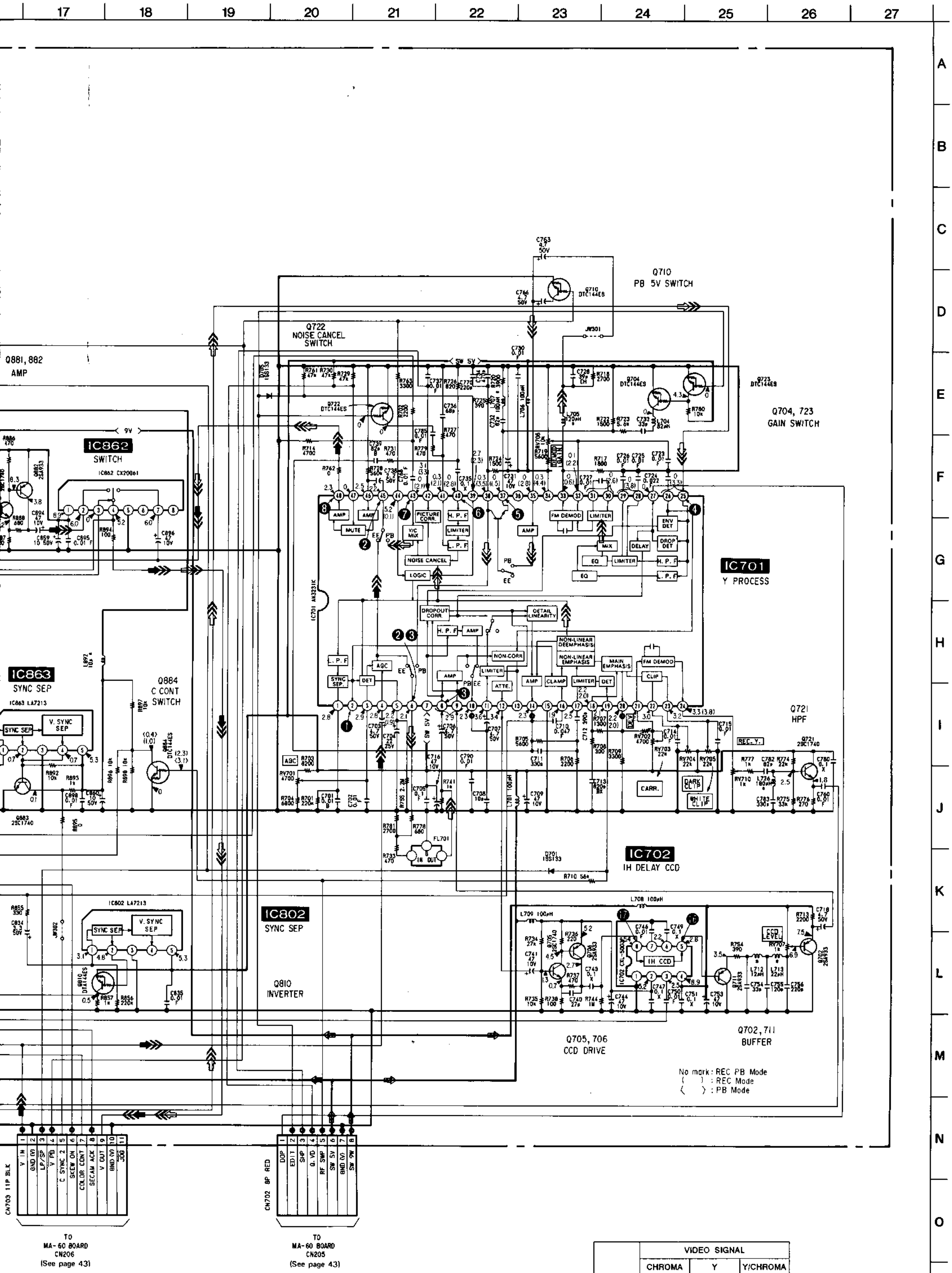
CN704 4P WHT	CN701 6P WHT	CN703 11P BLK	CN702 8P RED
1 GND	1 PB Fw	1 V IN	1 DOP
2 PB C	2 GND	2 GND (V)	2 EDIT
3 GND	3 REC Fw	3 LP/SP	3 SHP
4 REC C	4 GND	4 V PB	4 Q. VD
	5 C SYNC 1	5 C SYNC 2	6 RF SWP
	6 COLOR ROT	6 SKEW ON	7 SW 5V
		7 COLOR CONT	8 GND (V)
		8 SECAM ACK	9 SW 9W
		9 V OUT	
		10 GND (V)	
		11 JOG	

TO
RP-100 BOARD
CN004
(See page 34)

TO
RP-100 BOARD
CN004
(See page 34)

TO
MA-60 BOARD
CN206
(See page 43)

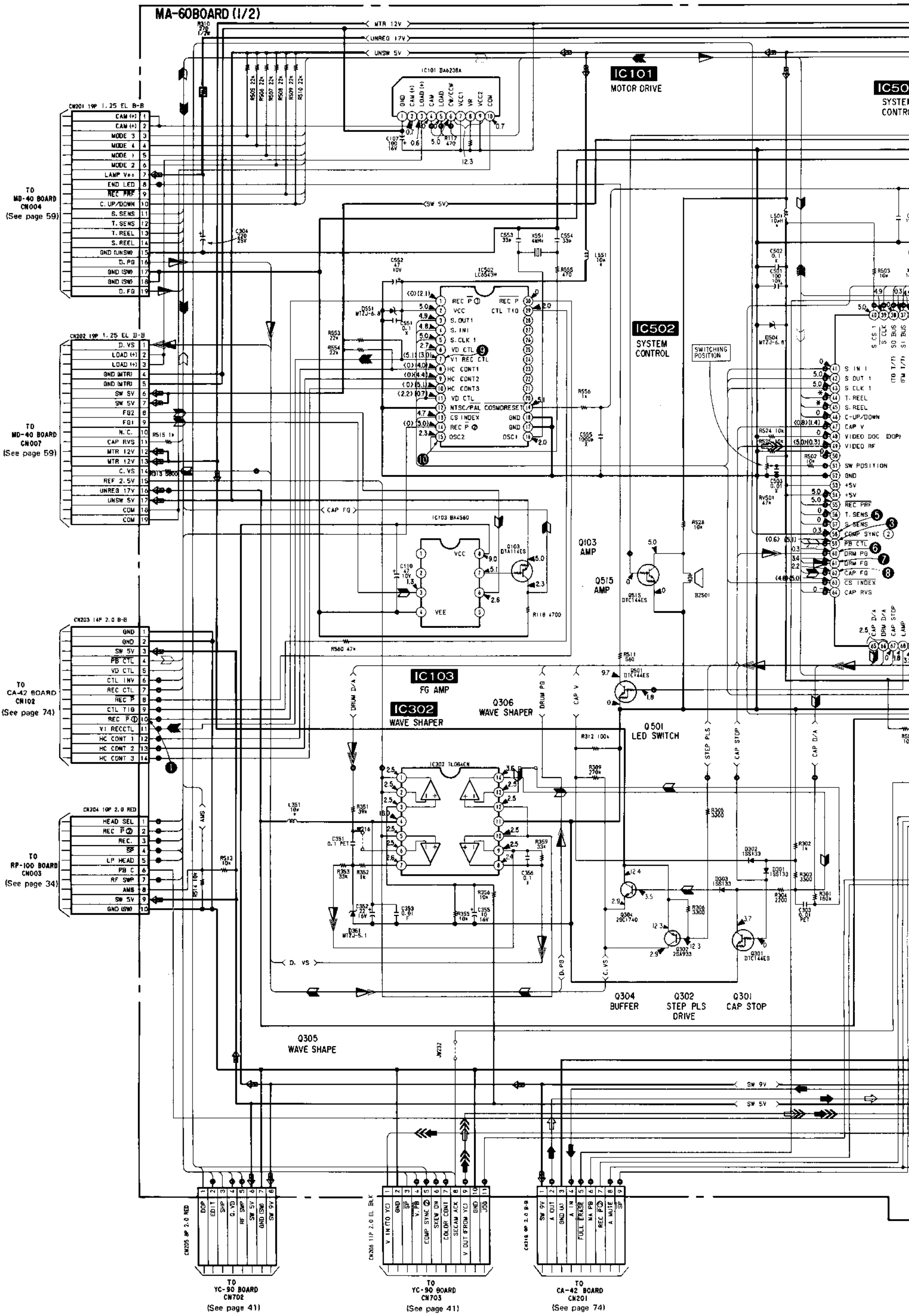
TO
MA-60 BOARD
CN205
(See page 43)



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

MA-60 (1/2) (SERVO, SYSTEM CONTROL) SCHEMATIC DIAGRAM

–Ref. No. MA-60 Board: 3,000 series–



SERVO, SYSTEM CONTROL

SERVO, SYSTEM CONTROL

IC501
SYSTEM CONTROL

IC401
CHARACTER GENERATOR

IC402
SYNC SEP

IC601
INPUT SELECTER

Q401, 402 BUFFER

Q403
Q404 VIDEO AMP

Q405

Q406, 407 H SYNC DET

Q951, 952 SIRCS SWITCH

Q901, 902

Q603 BUFFER

Q602 BUFFER

Q604 PB MUTE

Q608 BUFFER

Q601 BUFFER

Q201 - 204 VIDEO RF ENVELOP DET

Q451 BUFFER

Q670 AUDIO MUTE

CN212 10P 2.0 EL WHT

1	LINE1 VIN
2	LINE1 GND
3	TUNER VIN
4	TUNER GND
5	TUNER PLUS VOUT
6	TUNER PLUS GND
7	YC V IN
8	CANAL PLUS GND
9	CANAL PLUS VOUT
10	GND

TO CP-45 BOARD CN101

CN213 10P 2.0 EL BLK

1	LINE1 AIN
2	LINE1 GND
3	TUNER AIN
4	TUNER GND
5	TUNER PLUS AOUT
6	TUNER PLUS GND
7	YC A IN
8	CANAL PLUS GND
9	CANAL PLUS AOUT
10	GND

TO CP-45 BOARD CN201

CN211 7P 2.0 EL WHT

1	UNSW 5V
2	UNSW 12V
3	GND
4	TUNER SEL
5	TV OUT SEL
6	CANAL PLUS ON
7	C+ DET

TO CP-45BOARD CN101

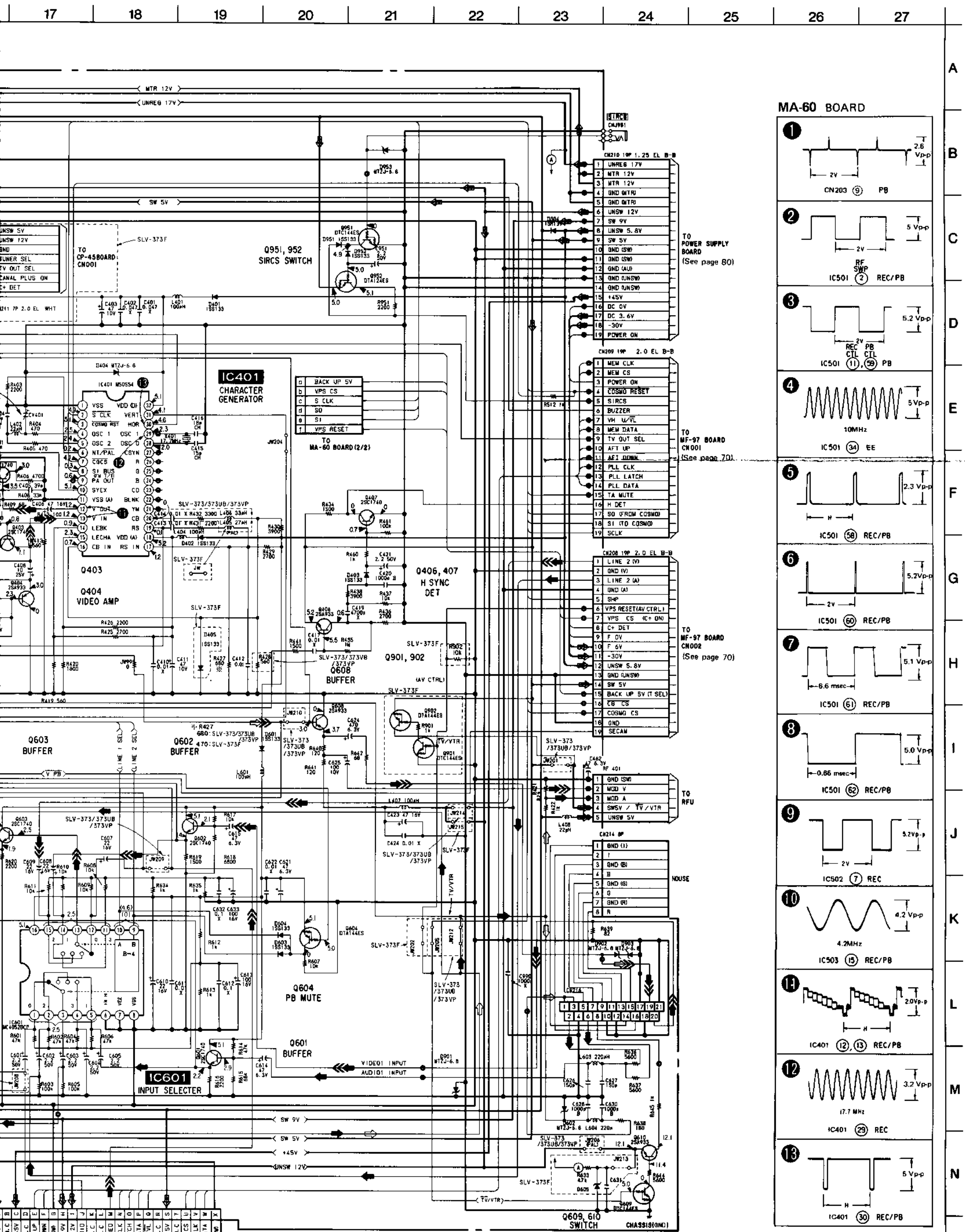
SLV-373F

a	BACK UP 5V
b	VPS CS
c	S CLK
d	SO
e	SI
f	VPS RESET

TO MA-60 BOARD (2/2)

	VIDEO
	CHROMA
REC	
PB	

TO MA-60 BOARD (2/2)
(See page 56)



MA-60 BOARD

• Signal path

	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC			➡⋙
PB			

	AUDIO Signal
REC	➡
PB	⇨

	REC	REC/PB	PB
Ref. signal	⋙		⋗

SERVO, SYSTEM CONTROL

SERVO, SYSTEM CONTROL

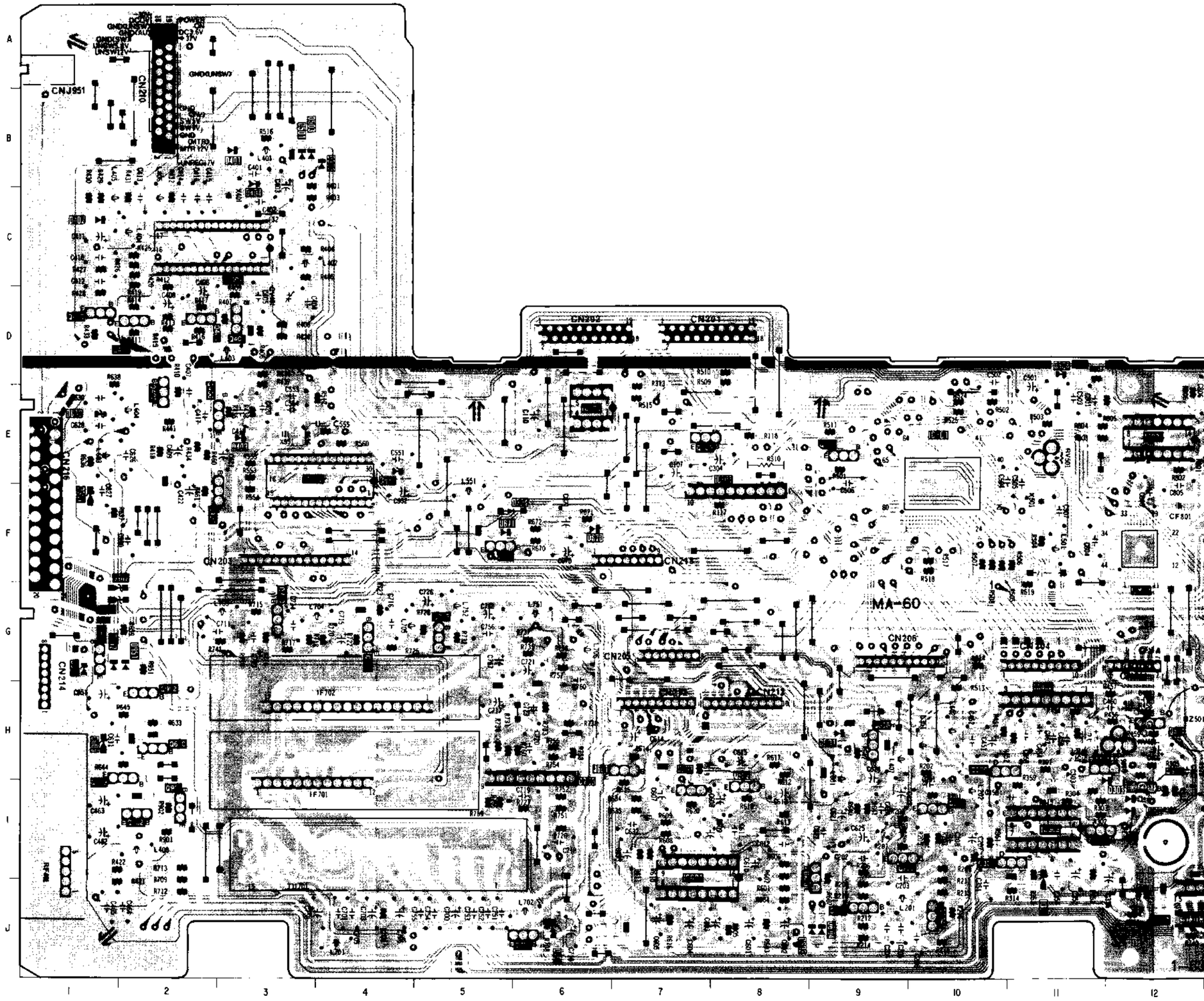
MA-60 (SERVO, SYSTEM CONTROL) PRINTED WIRING BOARD

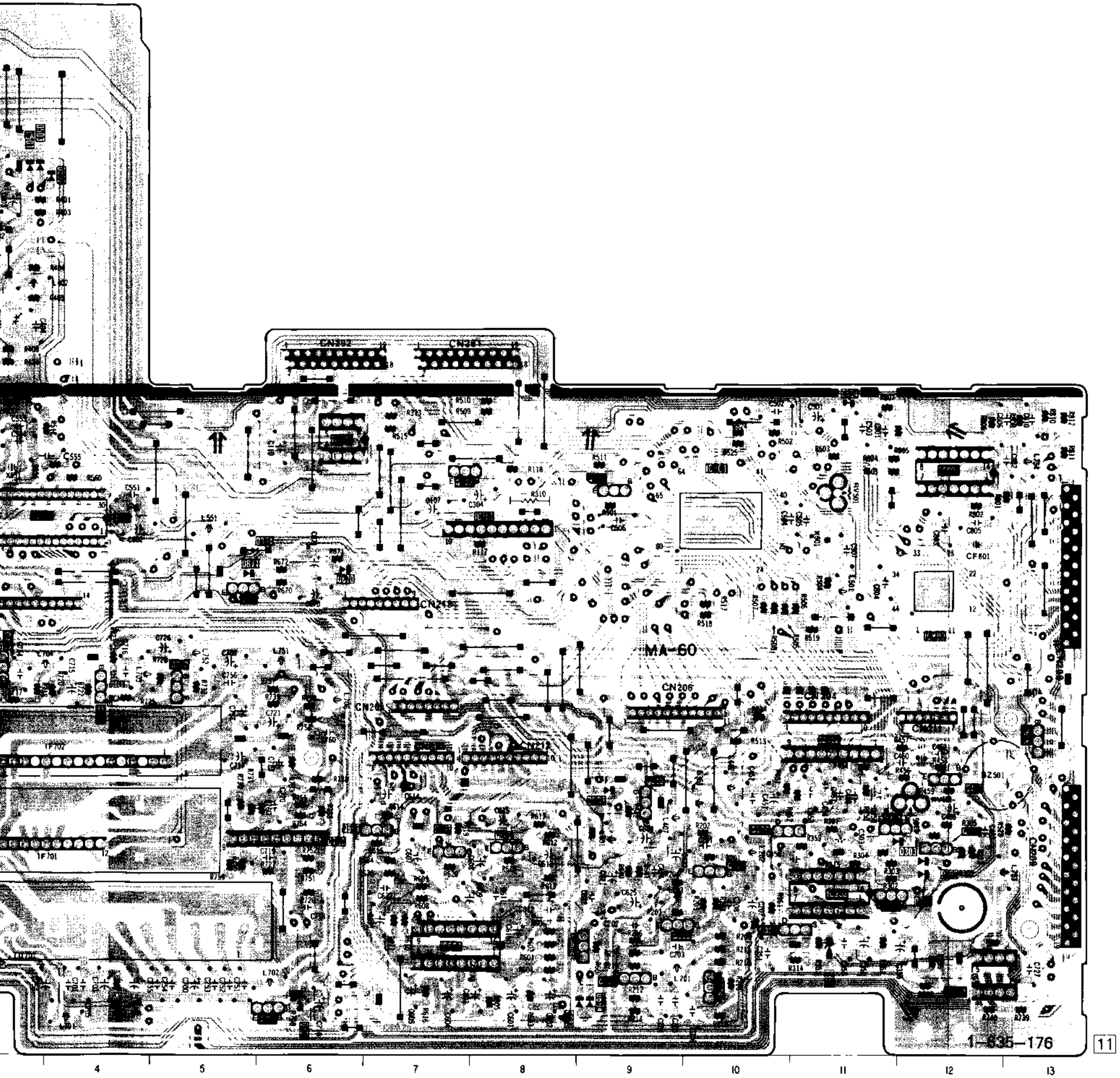
–Ref. No. MA-60 Board: 3,000 series–

MA-60 BOARD

D301	I-12	IC702	J-12
D302	I-12	IC801	E-12
D303	I-11	IC802	G-12
D304	F-5		
D351	J-11	Q103	E-7
D401	B-3	Q201	I-10
D402	C-1	Q202	I-10
D403	E-3	Q203	J-9
D404	C-3	Q204	J-10
D501	B-3	Q301	I-11
D502	B-3	Q302	I-12
D503	B-3	Q304	H-11
D504	E-11	Q401	D-3
D551	F-4	Q402	E-2
D601	H-9	Q403	D-1
D602	E-1	Q404	D-2
D603	J-8	Q405	D-1
D604	J-9	Q406	E-2
D670	F-6	Q407	F-2
D671	F-5	Q451	H-12
D701	J-6	Q501	E-9
D901	F-1	Q515	H-13
D902	G-1	Q601	H-7
D903	G-1	Q602	H-8
D951	G-2	Q603	H-7
D952	G-1	Q604	I-9
D953	G-1	Q608	H-9
		Q609	I-1
IC101	F-8	Q610	H-2
IC103	E-6	Q670	F-5
IC302	I-11	Q710	G-3
IC401	C-2	Q711	G-4
IC402	H-11	Q712	G-5
IC501	E-10	Q751	J-6
IC502	E-4	Q951	G-1
IC601	J-7	Q952	H-2

MA-60 BOARD




CN302
CN301
MA-60
CN206
1-635-176
11
4
5
6
7
8
9
10
11
12
13

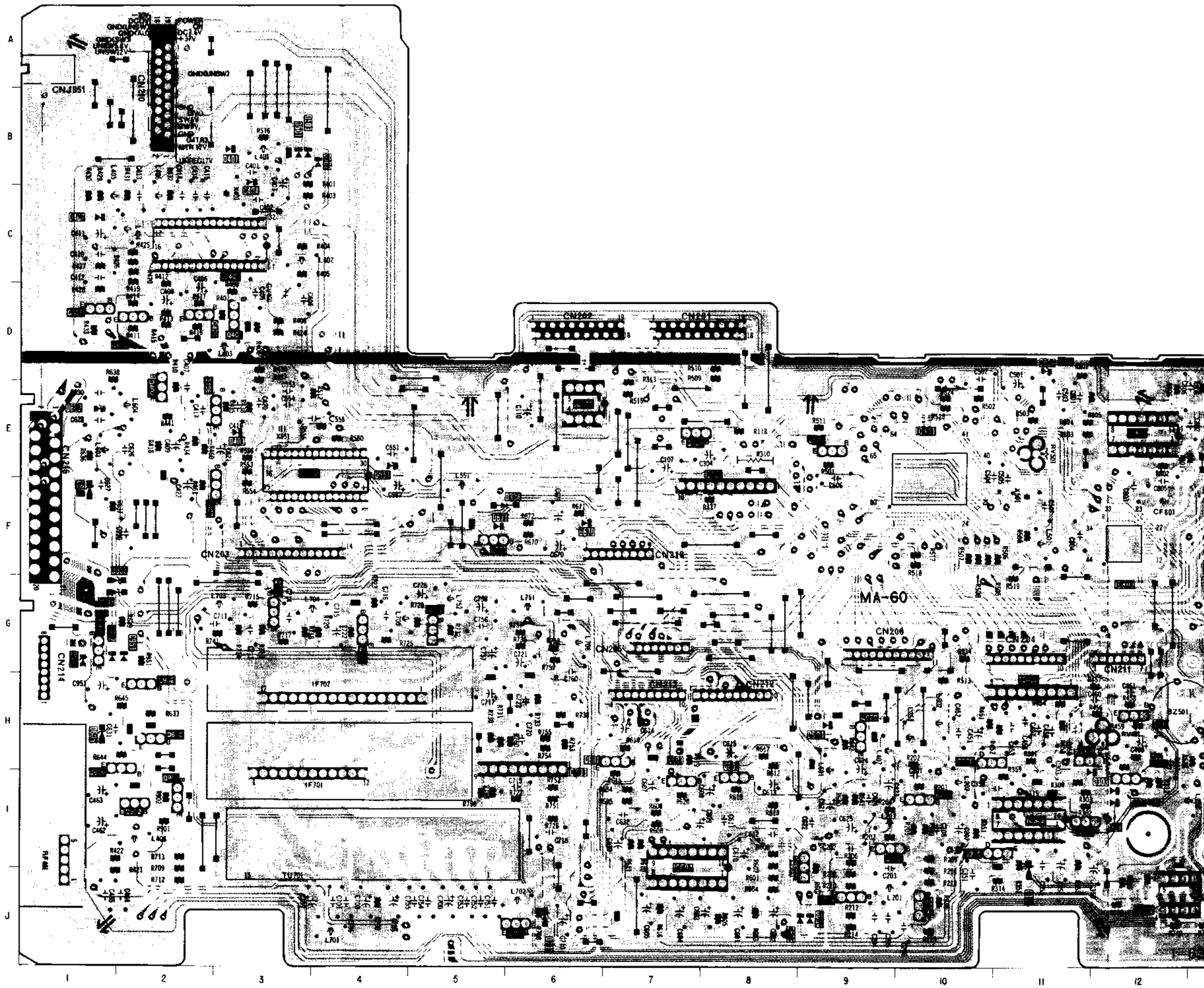
MA-60 (SERVO, SYSTEM CONTROL) PRINTED WIRING BOARD

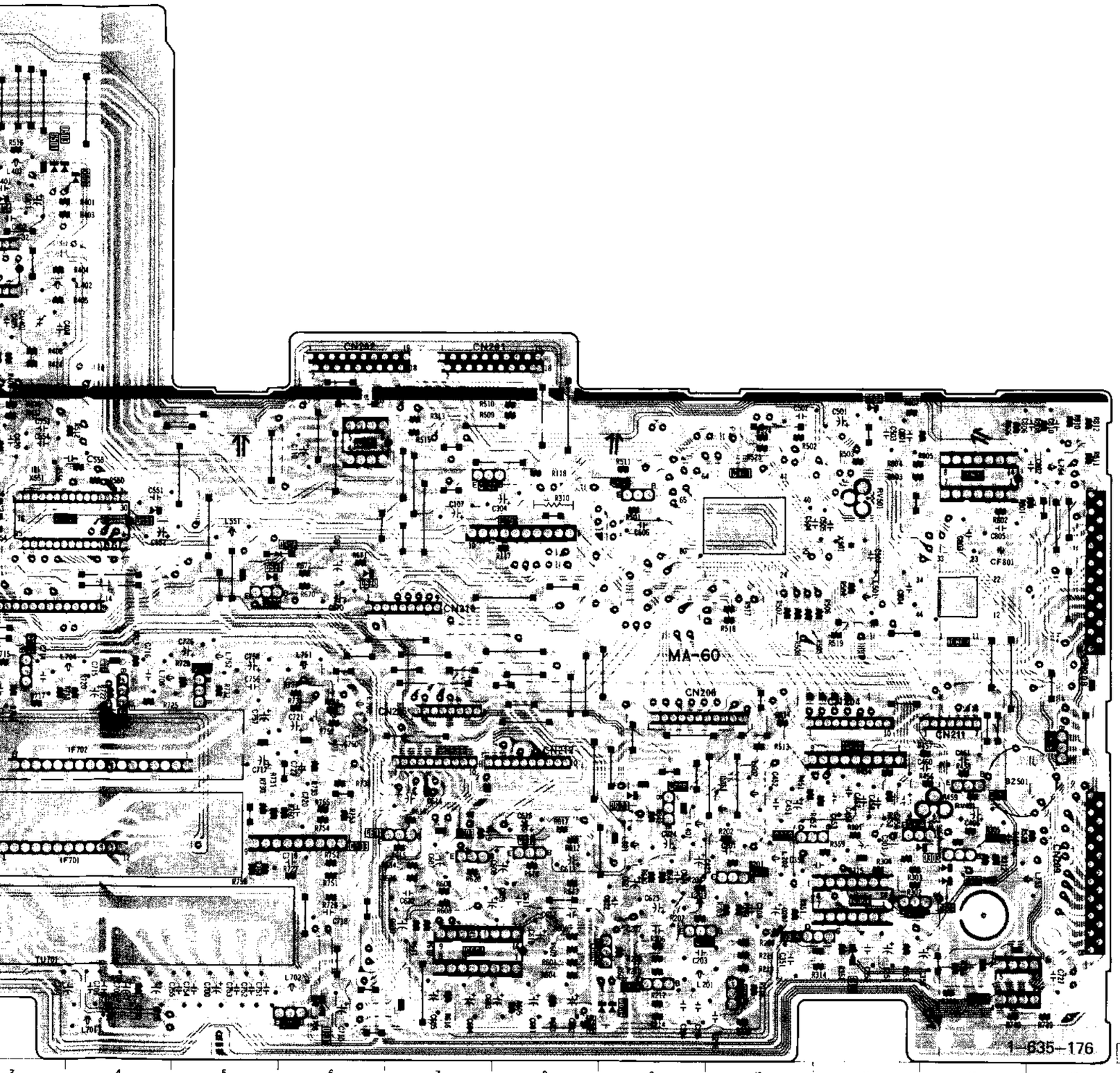
–Ref. No. MA-60 Board: 3,000 series–

MA-60 BOARD

D301	I-12	IC702	J-12
D302	I-12	IC801	E-12
D303	I-11	IC802	G-12
D304	F-5		
D351	J-11	Q103	E-7
D401	B-3	Q201	I-10
D402	C-1	Q202	I-10
D403	E-3	Q203	J-9
D404	C-3	Q204	J-10
D501	B-3	Q301	I-11
D502	B-3	Q302	I-12
D503	B-3	Q304	H-11
D504	E-11	Q401	D-3
D551	F-4	Q402	E-2
D601	H-9	Q403	D-1
D602	E-1	Q404	D-2
D603	J-8	Q405	D-1
D604	J-9	Q406	E-2
D670	F-6	Q407	F-2
D671	F-5	Q451	H-12
D701	J-6	Q501	E-9
D901	F-1	Q515	H-13
D902	G-1	Q601	H-7
D903	G-1	Q602	H-8
D951	G-2	Q603	H-7
D952	G-1	Q604	I-9
D953	G-1	Q608	H-9
		Q609	I-1
IC101	F-8	Q610	H-2
IC103	E-6	Q670	F-5
IC302	I-11	Q710	G-3
IC401	C-2	Q711	G-4
IC402	H-11	Q712	G-5
IC501	E-10	Q751	J-6
IC502	E-4	Q951	G-1
IC601	J-7	Q952	H-2

MA-60 BOARD





SERVO,SYSTEM CONTROL

SERVO,SYSTEM CONTROL

MA-60 (2/2) (SERVO, SYSTEM CONTROL) SCHEMATIC DIAGRAM

–Ref. No. MA60 Board: 3,000 series–

MA-60 BOARD (2/2)

SLV-373VP

IC801
VPS DATA
DECORDER

IC802
VPS CONTROL

VPS BACK UP

TV VIDEO IN

GND

TO MA-60 BOARD (1/2)

a	BACK UP 5V
b	VPS CS
c	S CLK
d	SO
e	SI
f	VPS RESET

UNSW 5V

※ TU701
BTP-2C401 : SLV-373/373VP
BTP-2U601 : SLV-373UB
BTP-2F301 : SLV-373F

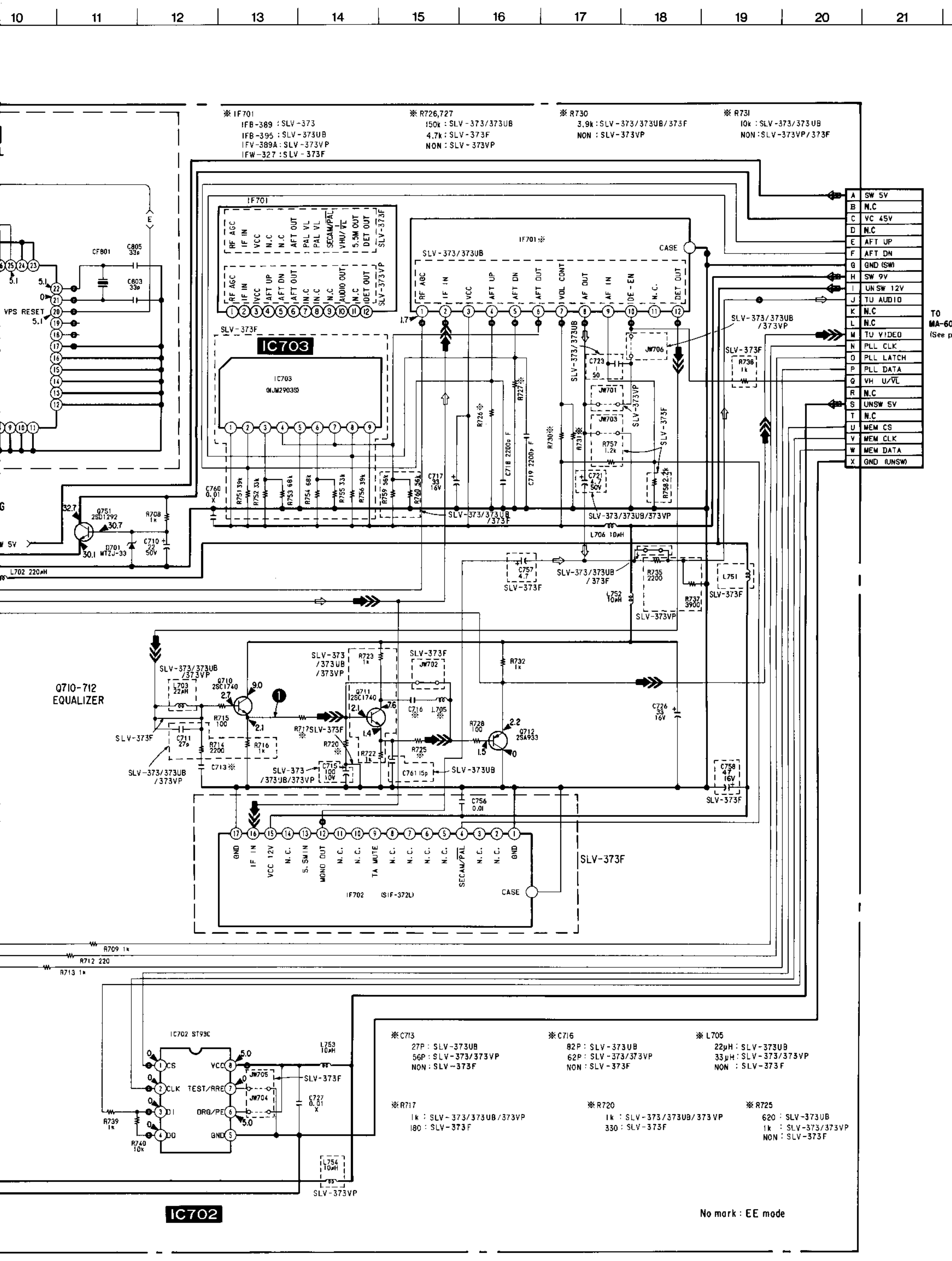
Q751
30V REG

SW 5V

Q710-712
EQUALIZER

SLV-373F

SLV-373VP



10 11 12 13 14 15 16 17 18 19 20 21
※ IF701
IFB-389 : SLV-373
IFB-395 : SLV-373UB
IFV-389A : SLV-373VP
IFW-327 : SLV-373F
※ R726,727
150k : SLV-373/373UB
4.7k : SLV-373F
NON : SLV-373VP
※ R730
3.9k : SLV-373/373UB/373F
NON : SLV-373VP
※ R731
10k : SLV-373/373UB
NON : SLV-373VP/373F
IF701
RF AGC
IF IN
VCC
N.C
AFT OUT
PAL VL
SECAM/PAL
VHU/VL
5.5M OUT
DET OUT
SLV-373F
AFT UP
AFT DN
AUDIO OUT
SLV-373VP
IF701※
SLV-373/373UB
VOL CONT
AF OUT
AF IN
DE-EN
N.C.
CASE
IC703
IC703 (NJM2903S)
CF801
C805 33p
C803 33p
VPS RESET
A SW 5V
B N.C
C VC 45V
D N.C
E AFT UP
F AFT DN
G GND (SW)
H SW 9V
I UNSW 12V
J TU AUDIO
K N.C
L N.C
M TU VIDEO
N PLL CLK
O PLL LATCH
P PLL DATA
Q VH U/VL
R N.C
S UNSW 5V
T N.C
U MEM CS
V MEM CLK
W MEM DATA
X GND (UNSW)
TO MA-60
(See p
JW706
C723 1 50
JW701
JW703
R757 1.2k
R738 1k
R758 2.2k
C721 4.7 50V
C717 33 16V
C718 2200p F
C719 2200p F
C760 0.01
R751 39k
R752 33k
R753 68k
R754 68k
R755 33k
R756 39k
R759 56k
R760 56k
Q751 2SD1292
R708 1k
D701 MTZJ-33
C710 22 50V
L702 220μH
L706 10μH
C757 4.7
R735 2200
R737 3900
L751
L752 10μH
Q710-712 EQUALIZER
L703 22μH
Q710 2SC1740
R715 100
C711 27p
R714 2200
R716 1k
C713※
R717※
R720※
R723 1k
JW702
Q711 2SC1740
C716※
L705※
R722 1k
C715 100 10V
C761 15p
R725※
R728 100
Q712 2SA933
R732 1k
C726 33 16V
C756 0.01
C758 47 16V
GND
IF IN
VCC 12V
N.C.
5.5M IN
MONO OUT
TA MUTE
SECAM/PAL
IF702 (SIF-372L)
SLV-373F
R709 1k
R712 220
R713 1k
IC702 ST93C
CS
CLK
DI
DO
VCC
TEST/RRE
ORG/PE
GND
JW705
JW704
C727 0.01
L753 10μH
L754 10μH
R739 1k
R740 10k
IC702
※C713
27P : SLV-373UB
56P : SLV-373/373VP
NON : SLV-373F
※C716
82P : SLV-373UB
62P : SLV-373/373VP
NON : SLV-373F
※ L705
22μH : SLV-373UB
33μH : SLV-373/373VP
NON : SLV-373F
※R717
1k : SLV-373/373UB/373VP
180 : SLV-373F
※R720
1k : SLV-373/373UB/373VP
330 : SLV-373F
※R725
620 : SLV-373UB
1k : SLV-373/373VP
NON : SLV-373F
No mark : EE mode

※ R730
3.9k : SLV-373/373UB/373F
NON : SLV-373VP

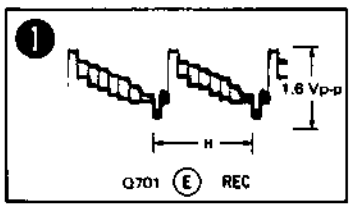
※ R731
10k : SLV-373/373UB
NON : SLV-373VP/373F

A	SW 5V
B	N.C
C	VC 45V
D	N.C
E	AFT UP
F	AFT DN
G	GND (SW)
H	SW 9V
I	UNSW 12V
J	TU AUDIO
K	N.C
L	N.C
M	TU VIDEO
N	PLL CLK
O	PLL DATA
P	PLL LATCH
Q	VH U/VL
R	N.C
S	UNSW 5V
T	N.C
U	MEM CS
V	MEM CLK
W	MEM DATA
X	GND (UNSW)

TO
MA-60 BOARD(I/2)
(See page 45)

IF701※
CASE
AFT DN
AFT OUT
VOL CONT
AF OUT
AF IN
DE-EM
N.C.
DET OUT
SLV-373/373UB
SLV-373/373UB /373VP
SLV-373F
JW706
C723 50
JW701
JW703
SLV-373VP
SLV-373F
R730※
R731※
R757 1.2k
R758 2.2k
C721 4.7 50V
SLV-373/373UB/373VP
L706 10μH
C719 2200p F
R727※
C757 4.7
SLV-373/373UB / 373F
R735 2200
L751
SLV-373F
L752 10μH
R737 3900
SLV-373VP
C726 33 16V
Q712 2SA933
C758 47 16V
SLV-373F
GND
SE
SLV-373F

MA-60 BOARD



	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC			➡
PB			

	AUDIO
PB	⇨

※C716
82P : SLV-373UB
62P : SLV-373/373VP
NON : SLV-373F

※L705
22μH : SLV-373UB
33μH : SLV-373/373VP
NON : SLV-373F

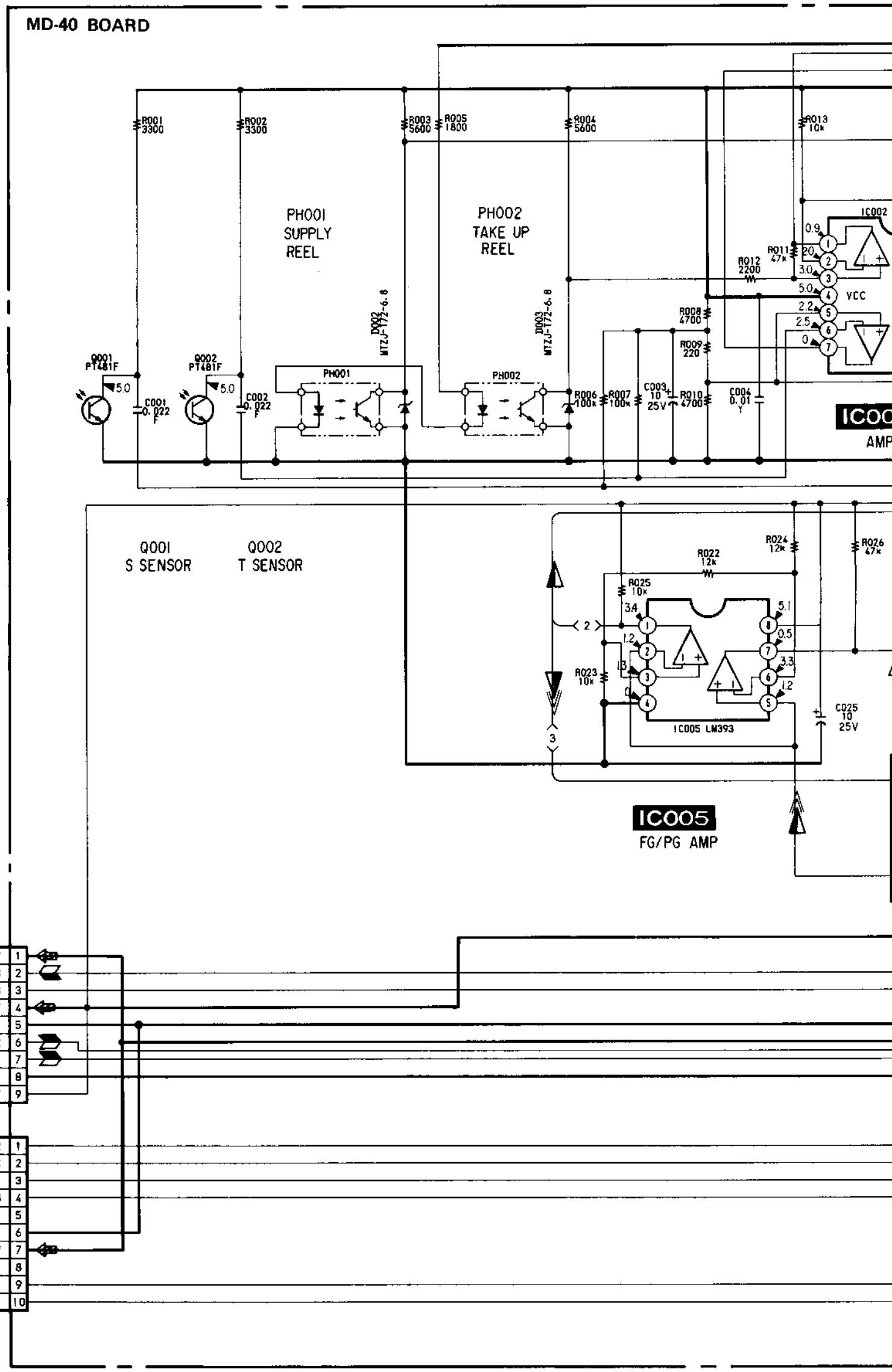
※R720
1k : SLV-373/373UB/373VP
330 : SLV-373F

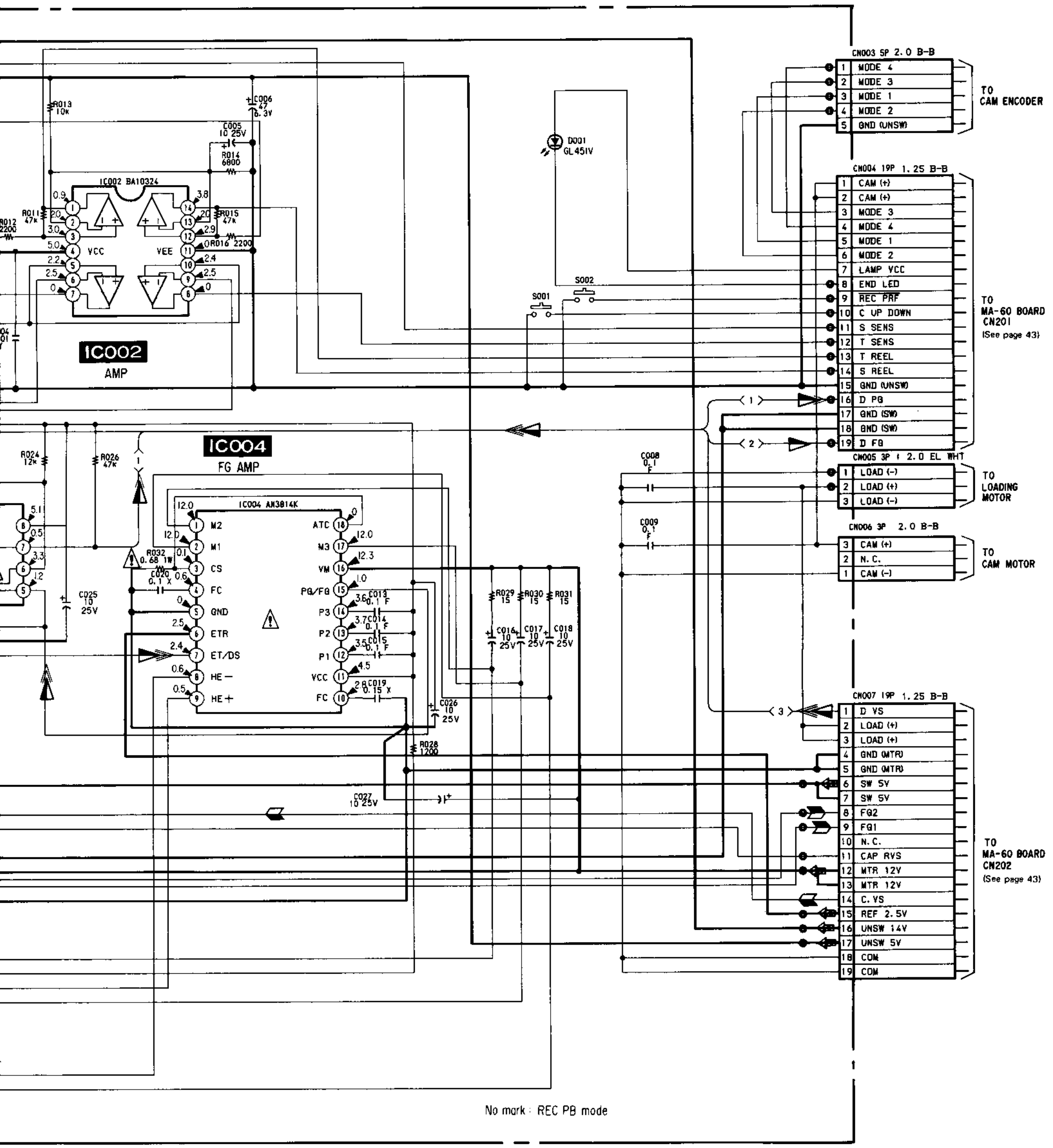
※R725
620 : SLV-373UB
1k : SLV-373/373VP
NON : SLV-373F

No mark : EE mode

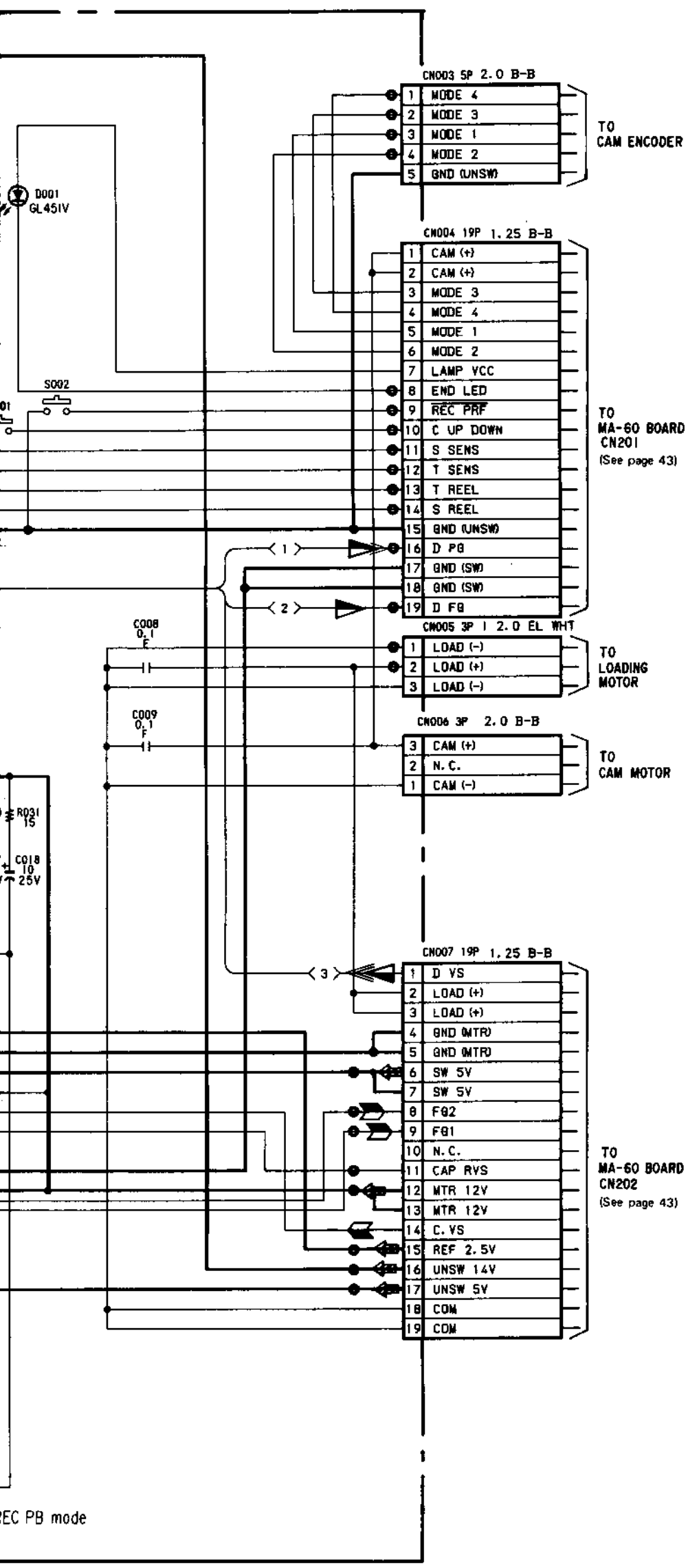
MD-40 (MECHANISM DRIVE) SCHEMATIC DIAGRAM

–Ref. No. MD-40 Board: 4,000 series–





No mark : REC PB mode



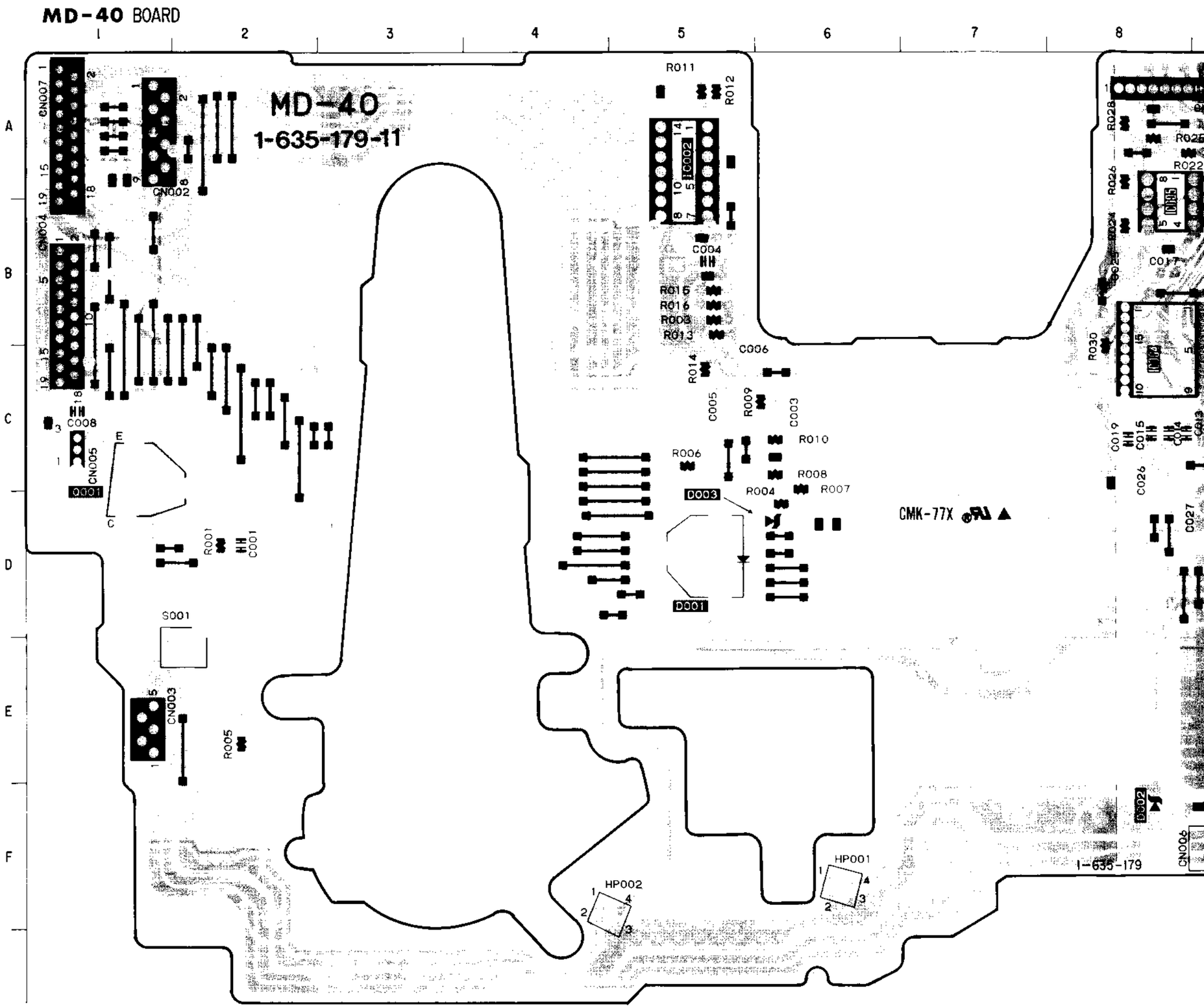
MECHANISM DRIVE MECHANISM DRIVE

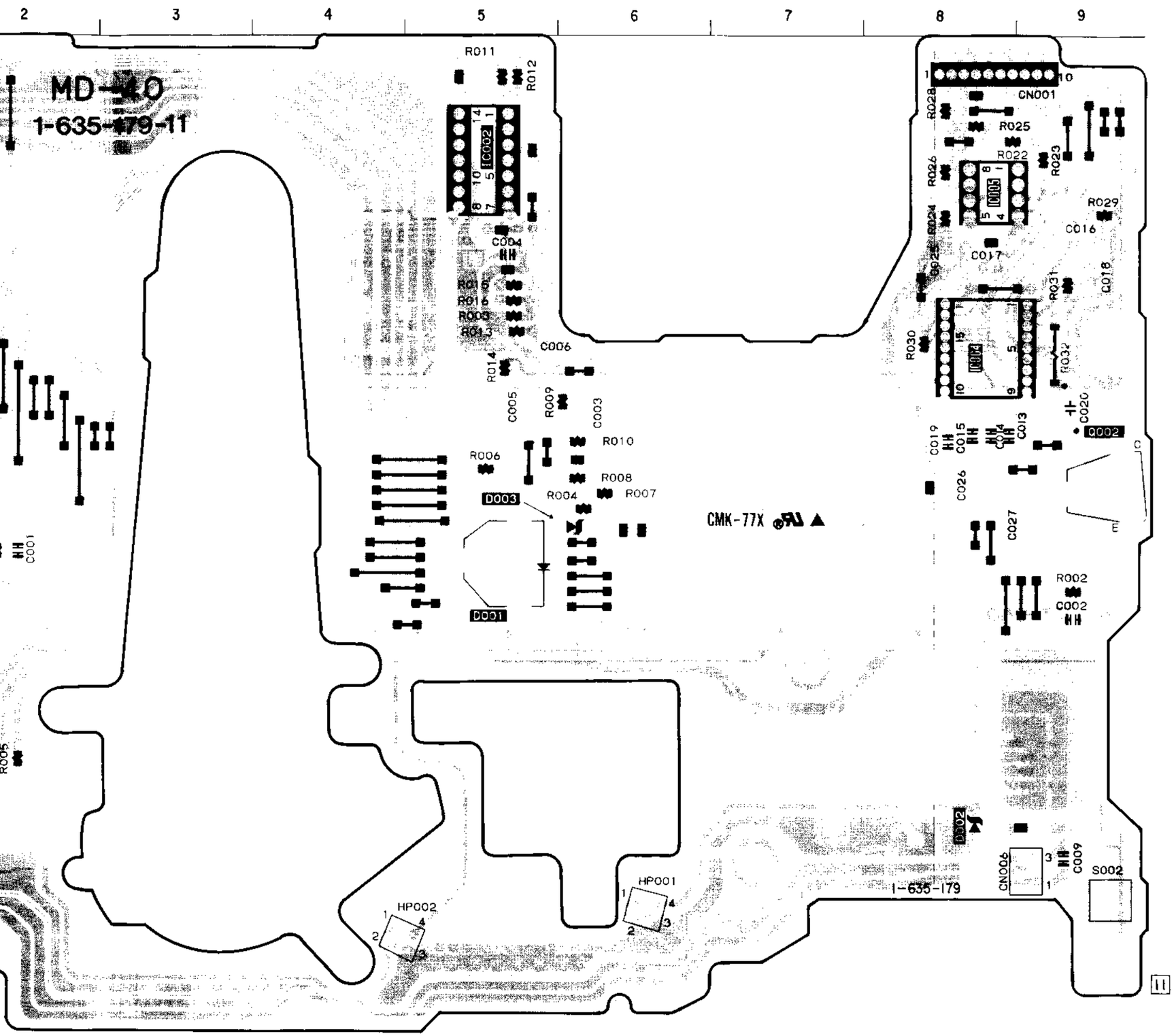
MD-40 (MECHANISM DRIVE) PRINTED WIRING BOARD

–Ref. No. MD-40 Board: 4,000 series–

MD-40 BOARD

D001	D-5
D002	F-8
D003	D-6
IC002	B-5
IC004	C-8
IC005	B-8
Q001	C-1
Q002	D-9



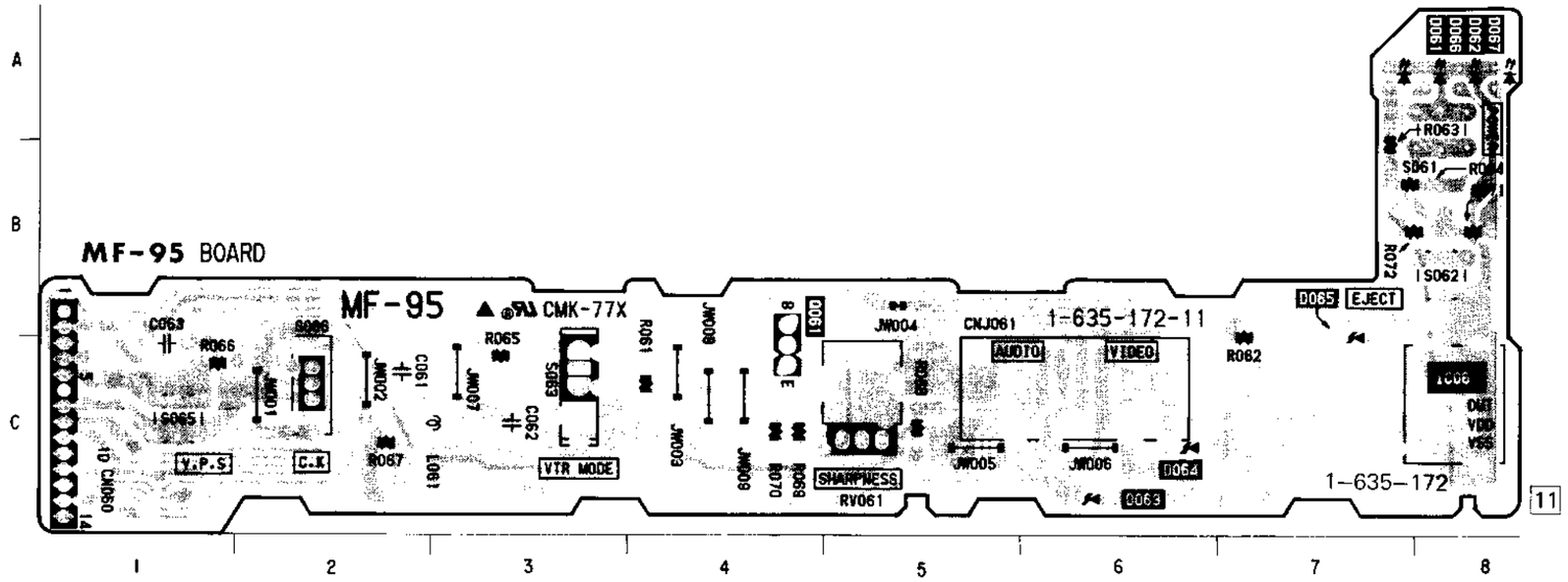

2
3
4
5
6
7
8
9
MD-440
1-635-179-11
R011
R012
IC002
C004
R015
R016
R003
R013
C006
R014
C005
R009
C003
R010
R006
R008
R004
R007
D003
D001
CMK-77X
CN001
R028
R025
R022
R023
R026
IC005
R029
C016
C017
R024
R027
R031
C018
R030
IC004
R032
C020
Q002
C019
C015
C014
C013
C026
C027
R002
C002
R005
C001
D002
CN006
C009
S002
HP002
HP001
1-635-179
11

MF-95 (FUNCTION, LINE IN 2), MF-96 (FOW/RVS SWITCH), MF-97 (MODE CONTROL, INDICATOR) PRINTED WIRING BOARDS

–Ref. No. MF-95, MF-96, MF-97 Boards: 6,000 series–

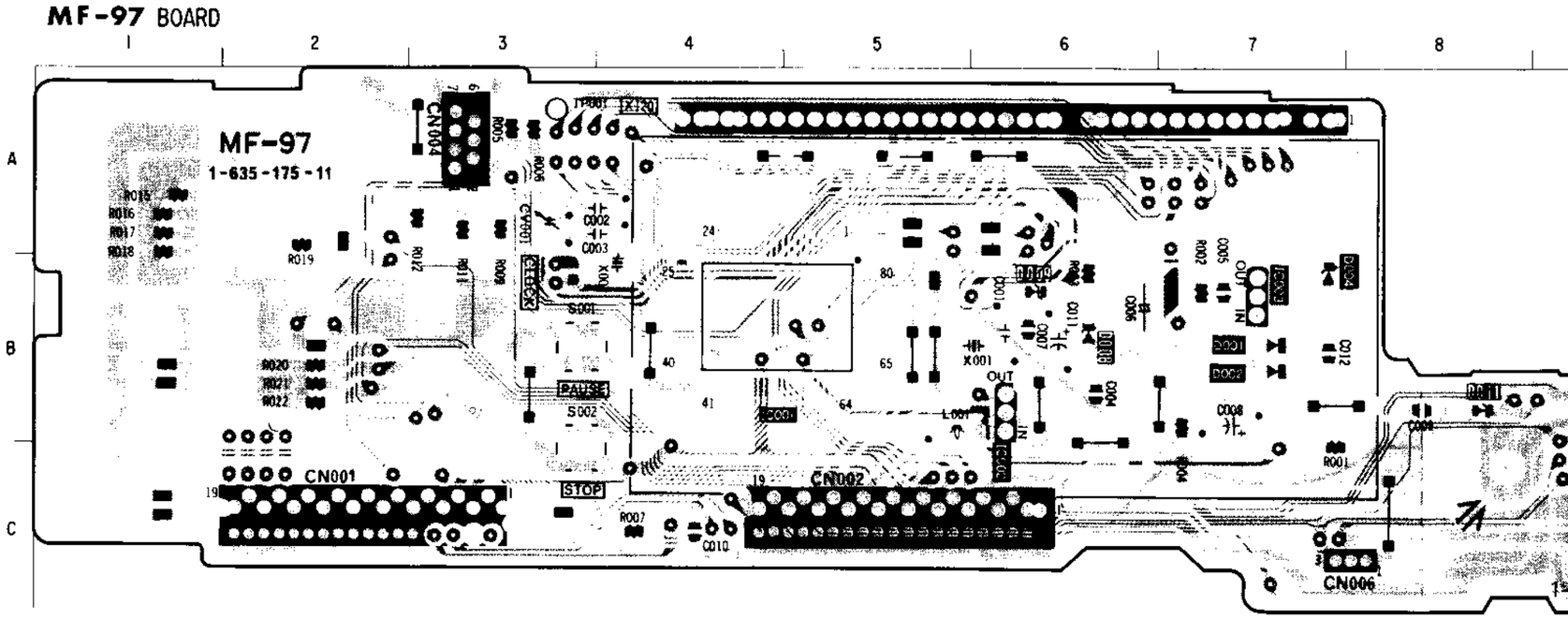
MF-95 BOARD

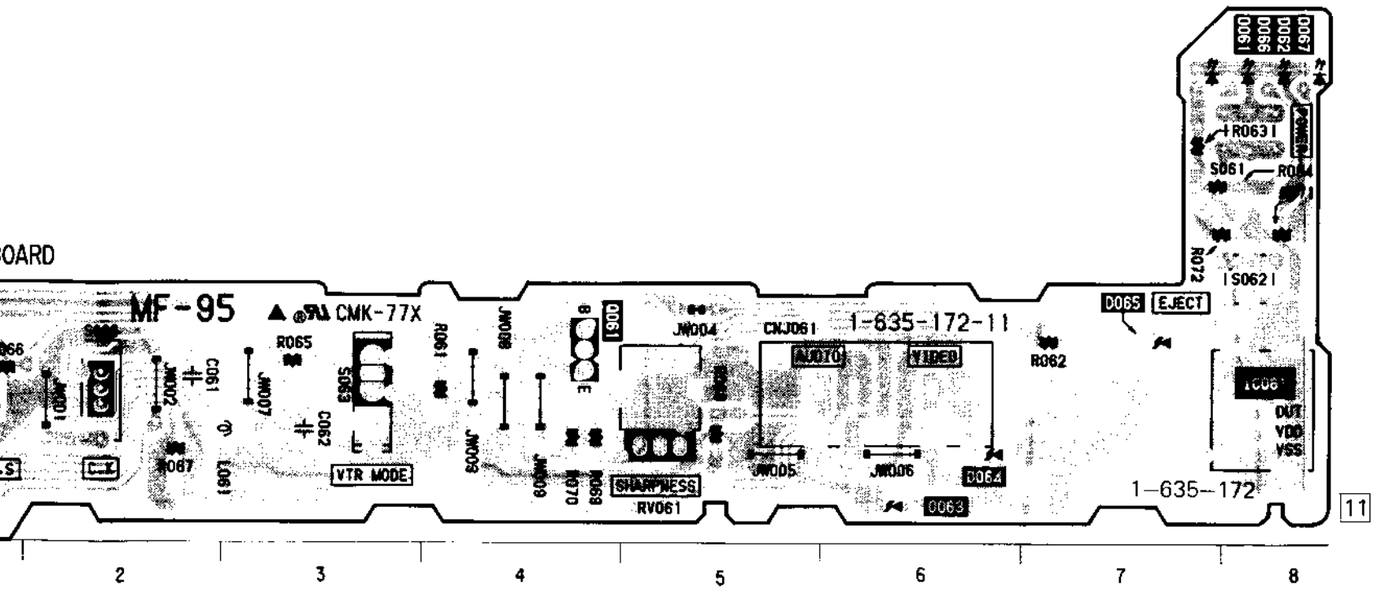
D061	A-8
D062	C-6
D063	C-6
D064	C-6
D065	C-7
D066	A-8
D067	A-8
IC061	C-8
Q061	C-4

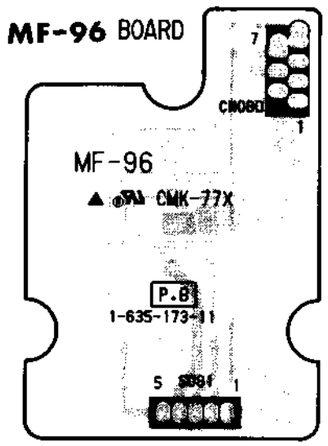


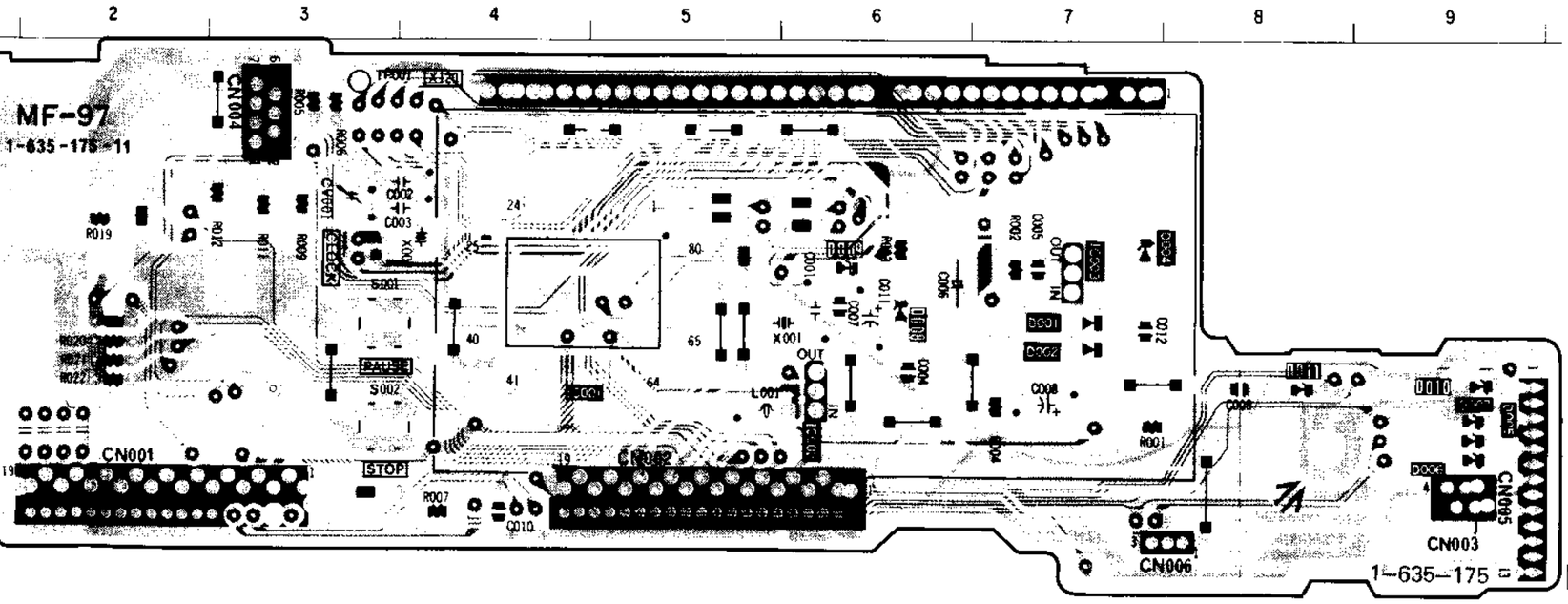
MF-97 BOARD

D001	B-7
D002	B-7
D004	B-8
D010	B-9
D011	B-8
IC001	B-4
IC002	B-6
IC003	B-7



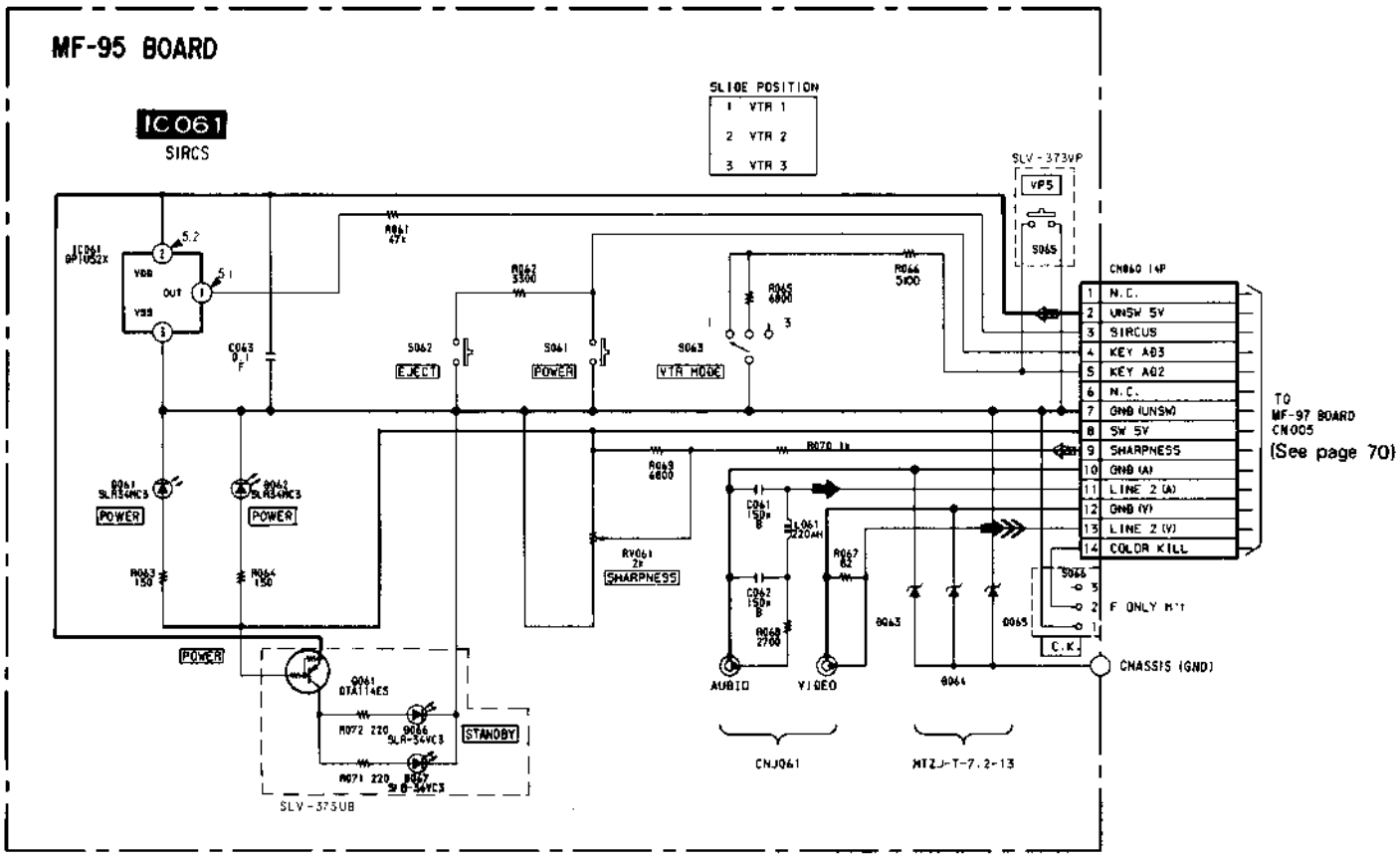




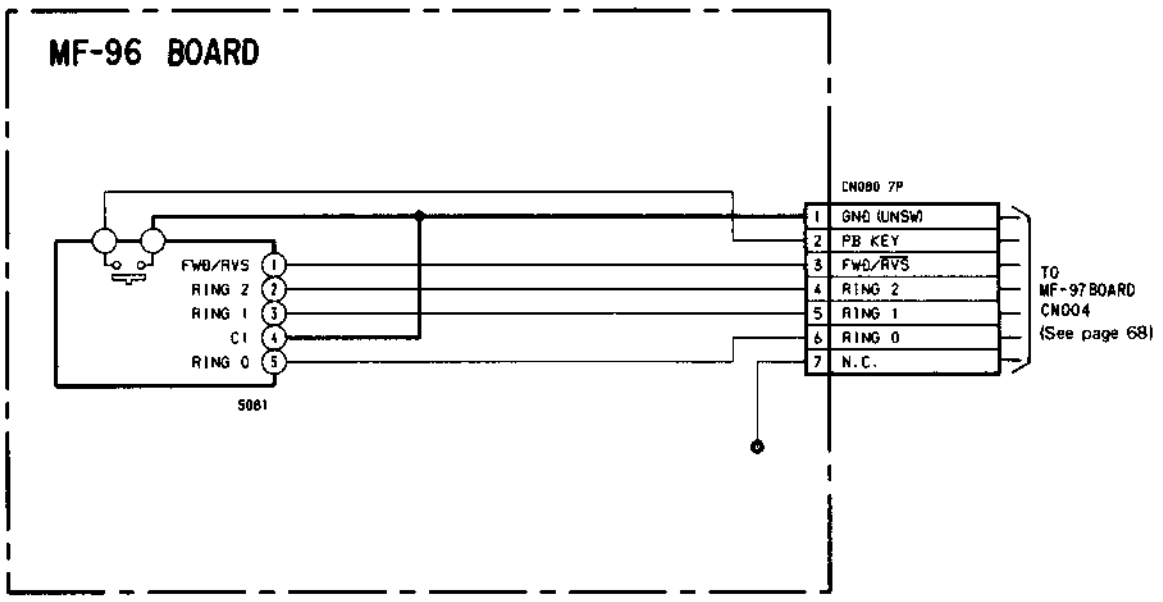


FUNCTION FUNCTION

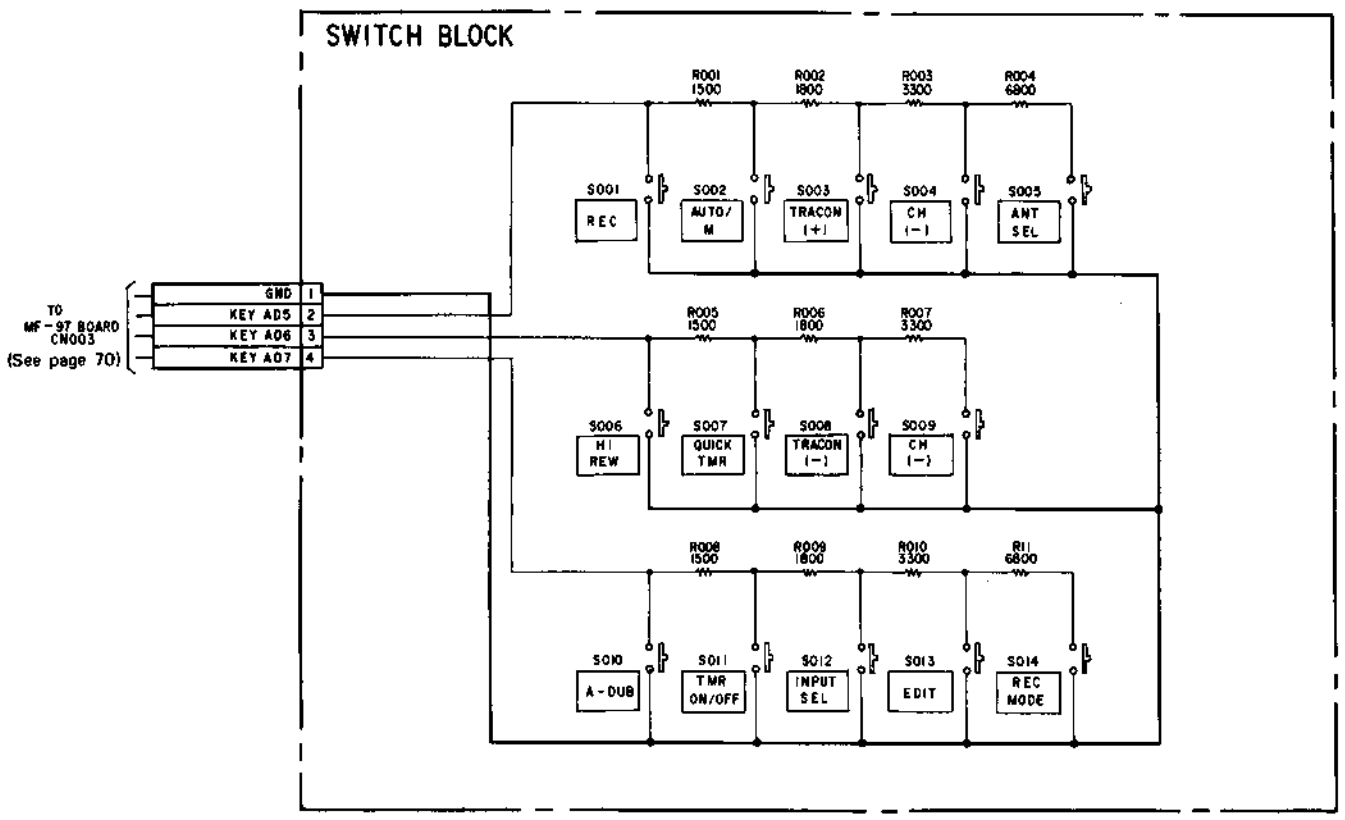
MF-95 BOARD



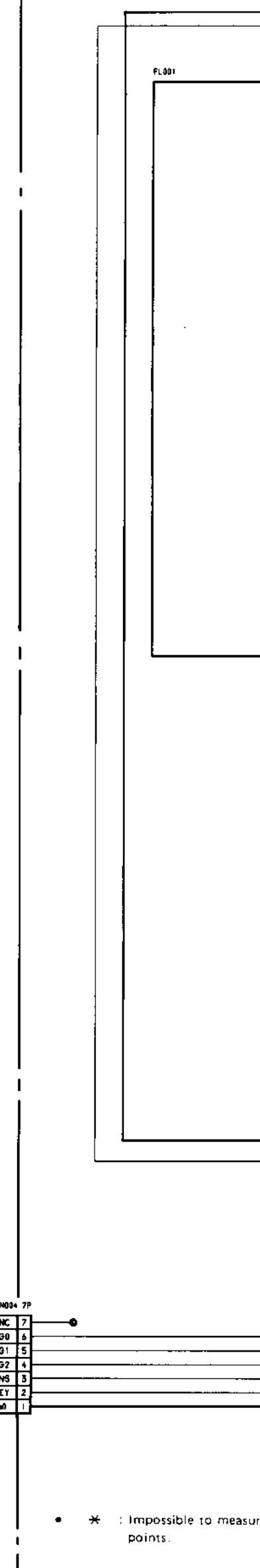
MF-96 BOARD



SWITCH BLOCK



MF-97 BOARD

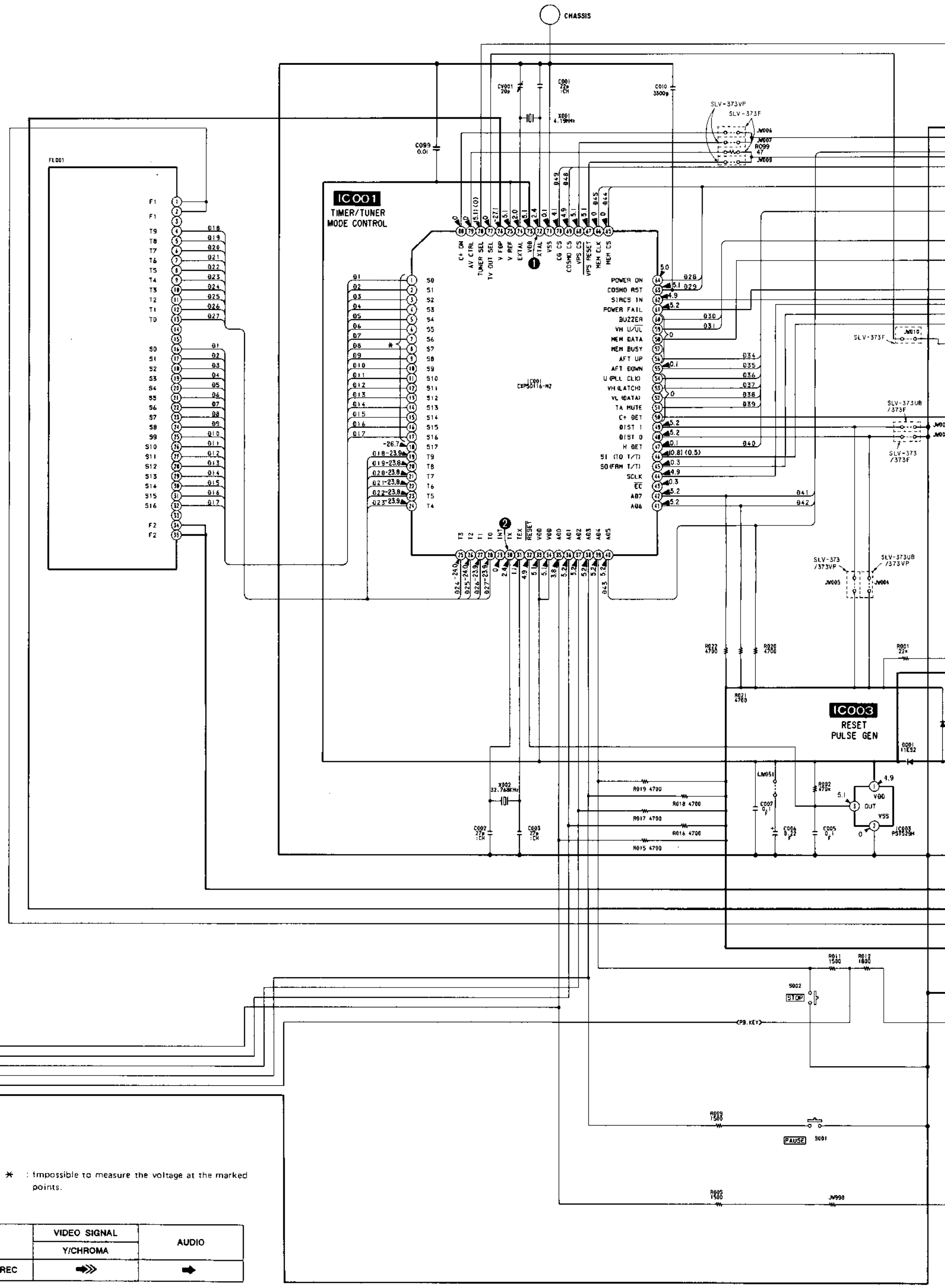


• ✱ : Impossible to measur
points.

	VIDEO SIGNAL
	Y/CHROMA
REC	➡

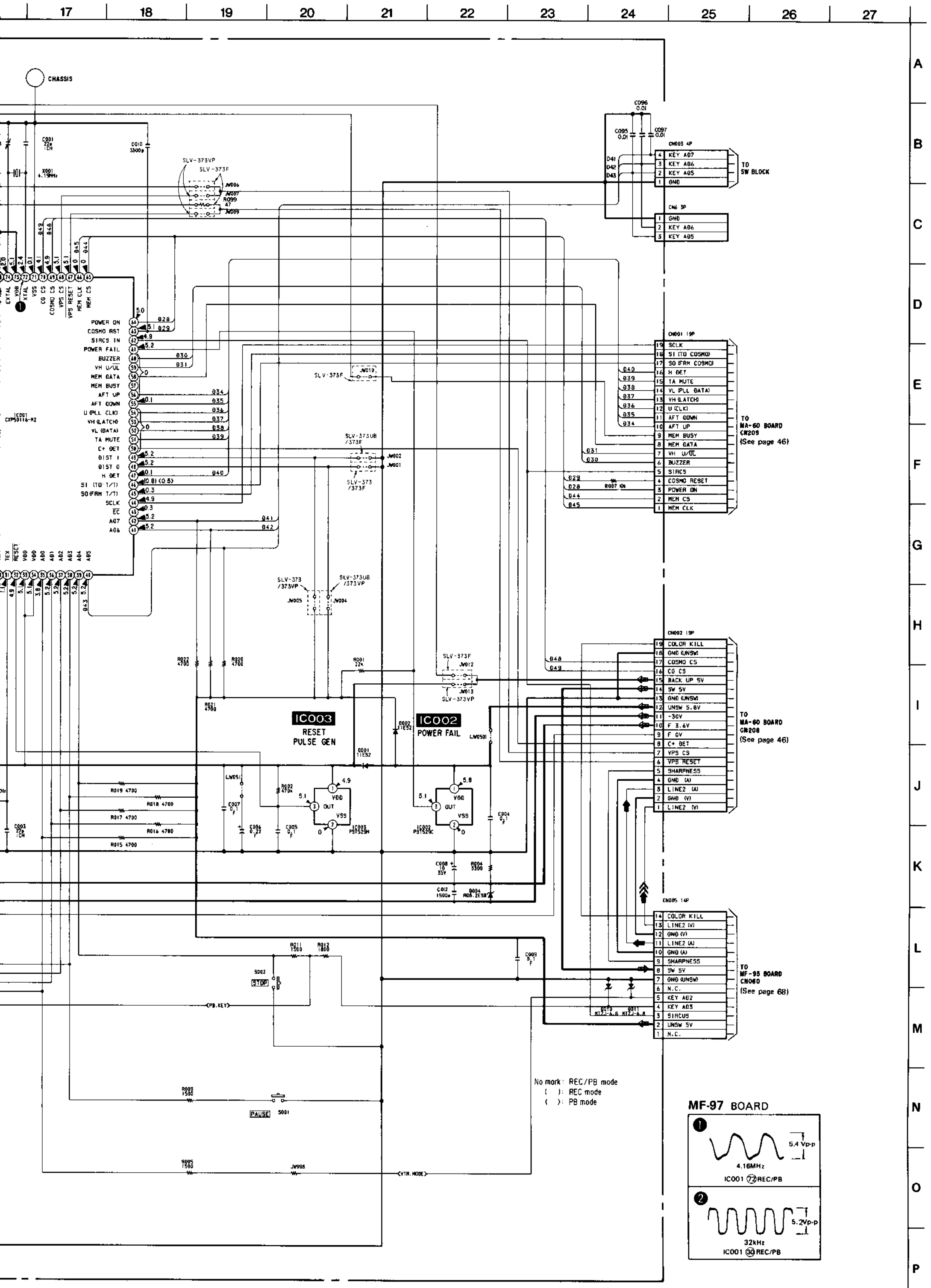
FUNCTION	FUNCTION

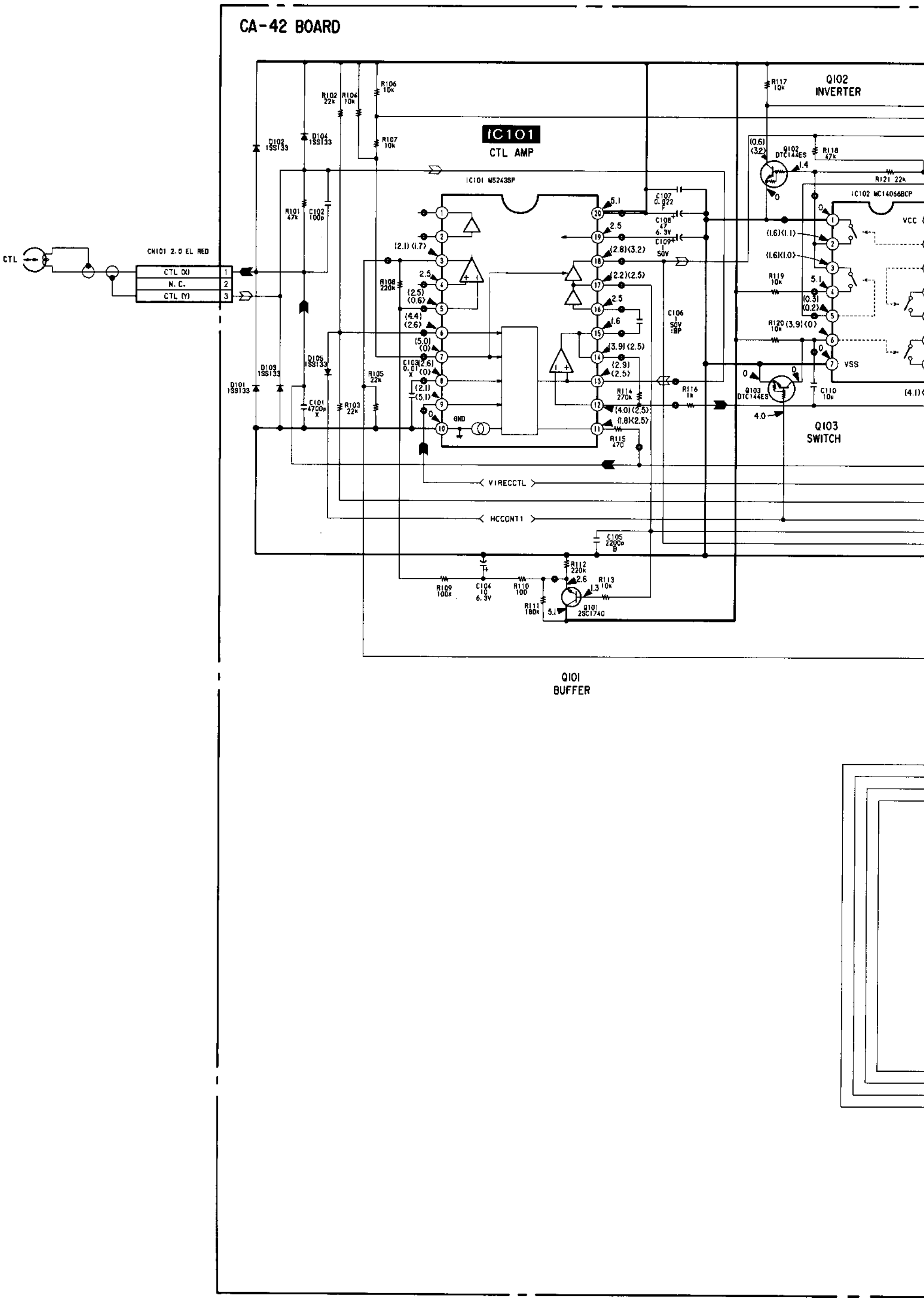
MF-97 BOARD



• ✳ : Impossible to measure the voltage at the marked points.

	VIDEO SIGNAL	AUDIO
	Y/CHROMA	
REC	➡⋙	➡


CHASSIS
SLV-373VP
SLV-373F
JW006
JW007
R099 47
JW009
C096 0.01
C095 0.01
C097 0.01
CN003 4P
KEY A07
KEY A06
KEY A05
GND
TO SW BLOCK
CN6 3P
GND
KEY A06
KEY A05
POWER ON
COSMO RST
SIRCS IN
POWER FAIL
BUZZER
VH U/VL
MEM DATA
MEM BUSY
AFT UP
AFT DOWN
U (PLL CLK)
VH (LATCH)
VL (DATA)
TA MUTE
C+ DET
DIST I
DIST Q
H DET
SI (TO T/T)
SO (FRM T/T)
SCLK
EC
A07
A06
SLV-373F JW010
SLV-373UB /373F JW002 JW001
SLV-373 /373F
SLV-373 /373VP JW005
SLV-373UB /373VP JW004
SLV-373F JW012
JW013 SLV-373VP
CN001 19P
SCLK
SI (TO COSMO)
SO (FRM COSMO)
H DET
TA MUTE
VL (PLL DATA)
VH (LATCH)
U (CLK)
AFT DOWN
AFT UP
MEM BUSY
MEM DATA
VH U/VL
BUZZER
SIRCS
COSMO RESET
POWER ON
MEM CS
MEM CLK
TO MA-60 BOARD CN209 (See page 46)
R007 10k
R027 4700
R020 4700
R021 4700
R001 22k
IC003 RESET PULSE GEN
IC002 POWER FAIL
D002 1ES2
D001 1ES2
CN002 19P
COLOR KILL
GND (UNSW)
COSMO CS
CG CS
BACK UP 5V
5W 5V
GND (UNSW)
UNSW 5.8V
-30V
F 3.6V
F 0V
C+ DET
VPS CS
VPS RESET
SHARPNESS
GND (A)
LINE2 (A)
GND (V)
LINE2 (V)
TO MA-60 BOARD CN208 (See page 46)
R019 4700
R018 4700
R017 4700
R016 4700
R015 4700
C007 0.1 F
C006 0.22 F
C005 0.1 F
R002 470k
IC003 PST529H
IC002 PST529C
C004 0.1 F
C008 10 35V
R004 3300
C012 1500p
D004 RD6.2ESB
CN005 14P
COLOR KILL
LINE2 (V)
GND (V)
LINE2 (A)
GND (A)
SHARPNESS
5W 5V
GND (UNSW)
N.C.
KEY A02
KEY A03
SIRCUS
UNSW 5V
N.C.
TO MF-95 BOARD CN060 (See page 68)
R011 1500
R012 1800
C009 0.1 F
S002 STOP
(PB.KEY)
D010 MTZJ-A.8
D011 MTZJ-A.8
R003 1500
PAUSE S001
R005 1500
JW998
(VTR.MODE)
No mark: REC/PB mode
( ): REC mode
( ): PB mode
MF-97 BOARD
5.4 Vp-p
4.16MHz
IC001 (72) REC/PB
5.2Vp-p
32kHz
IC001 (30) REC/PB


CA-42 BOARD
IC101
CTL AMP
IC101 M5243SP
Q102
INVERTER
IC102 MC14066BCP
Q103
SWITCH
Q101
BUFFER
CN101 2.0 EL RED
CTL (X)
N. C.
CTL (Y)
CTL
VIRECCTL
HCCONT1
GND
VCC
VSS
Q102 DTC144ES
Q103 DTC144ES
Q101 2SC1740

Q102
INVERTER

IC102
SWITCH

IC102 MC14066BCP

Q103
SWITCH

Q104

Q107
SWITCH

AU SHIELD CASE

IC257
NORMAL AUDIO
PROCESS

Q251
ERASE BIAS
OSC

No mark : REC / PB mode
( ) : REC mode
〈 〉 : PB mode

L101 22µH 10%

C112 0.01 F

C113 47 6.3V

JW103

TP104 TP105

CN102 14P B-B

1	GND (SW)
2	GND (SW)
3	SW 5V
4	PB CTL
5	VD CTL
6	CTL INV
7	REC CTL
8	REC P
9	CTL TIB
10	REC P ①
11	V1 REC CTL
12	HC CONT1
13	HC CONT2
14	HC CONT3

TO MA-60 BOARD CN203 (See page 43)

IC257 NORMAL AUDIO PROCESS

L255 10µH

SP

A MUTE

NA PB

JW252

C265 1 50V

C266 47 10V

C267 47 10V

C268 1 50V

C269 50V

R267 10k

C264 220p

R265 10k

R268 10k

R269 150

R270 2700

R273 8200

C271 0.027

R272 820

C274 4.7 16V

L251 8.2MH

C273 0.027

C270 1 50V

L252 22mH

R265 10k

C263 200p B

AU SHIELD CASE

REC BIAS

REC/EE CONT

RIPPLE FILTER

PB/EE CONT

MUTE CONT

EPSW CONT

LPSW CONT

MUTE

REC MUTE

EQ

ALC DET

P. ON P. OFF MUTE

BIAS OSC VCC

IC 257 LA7297

T251

L253 1.2MMH

R274 10k

Q251 2SD1292

C276 1500p B

C275 47 10V

C277 0.01

R275 3.3 1/4W

C252 680p B

JW251

C251 47 10V

R252 10

C254 3300p B

R253 390

C256 0.47 50V

R254 330

R255 180

C257 47 10V

C285 680p B

R256 12k

R257 47k

C258 0.01 PE 50V

C259

C260 C00p B

R258 39k

R259 3300

R260 1M

R262 100k

R263 18k

R264 10k

R291 39k

CN201 9P B-B

1	SW 9V
2	AUDIO OUT
3	GND
4	AUDIO IN
5	FULL ERASE
6	NA PB
7	REC P ②
8	A MUTE
9	SP

TO MA-60 BOARD CN218 (See page 44)

Q251 ERASE BIAS OSC

CN213 3P

1	A HEAD (X)
2	N.C.
3	GND

EC / PB mode
EC mode
B mode

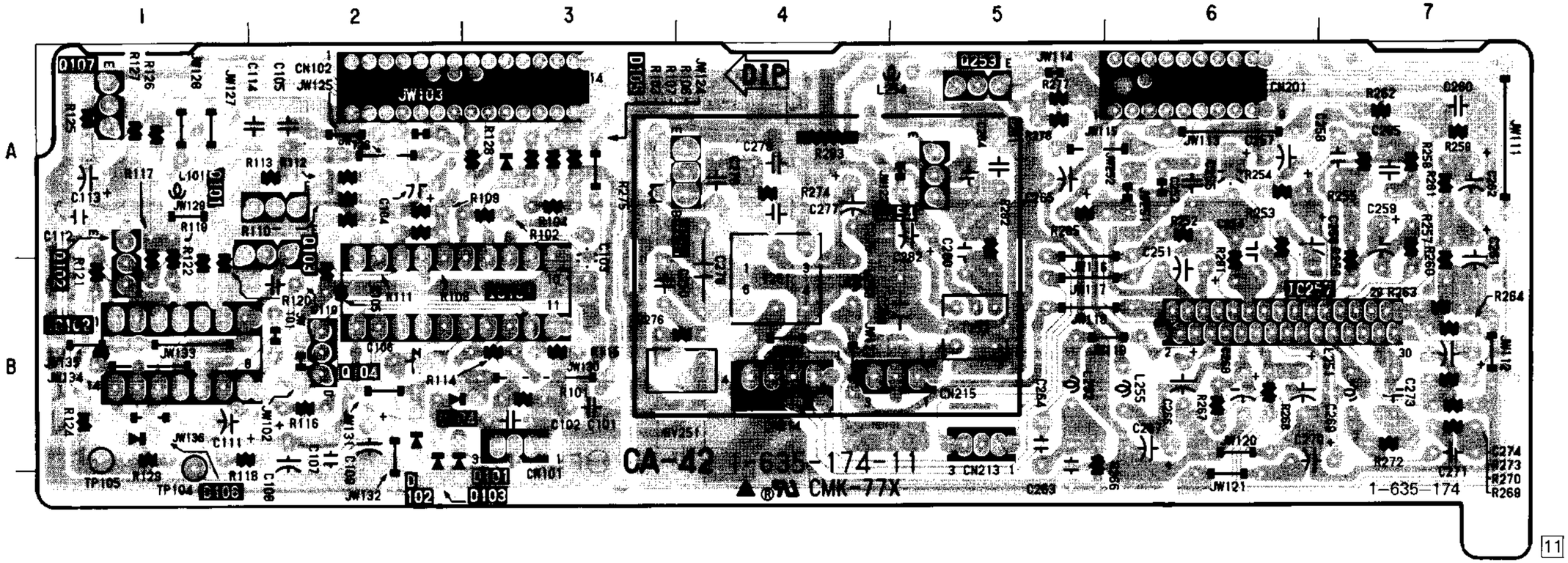
• Signal path

	AUDIO Signal
REC	➡
PB	⇨

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

CA-42 (CTL AMP/AUDIO) PRINTED WIRING BOARD
–Ref. No. CA-42 Board: 7,000 series–

CA-42 BOARD

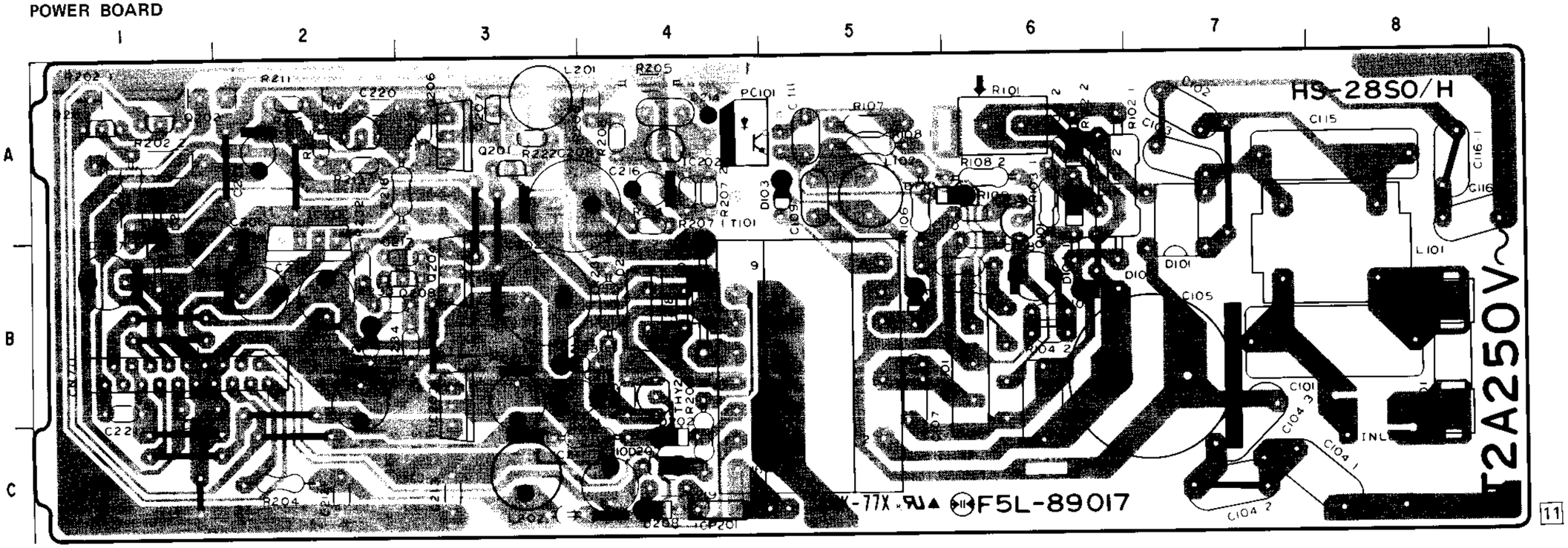


CA-42 BOARD

D101	B-2
D102	B-2
D103	B-2
D104	B-3
D105	A-3
D106	B-1
IC101	B-2
IC102	B-1
IC257	B-6
Q101	A-2
Q102	B-1
Q103	B-2
Q104	B-2
Q107	A-1
Q251	A-4

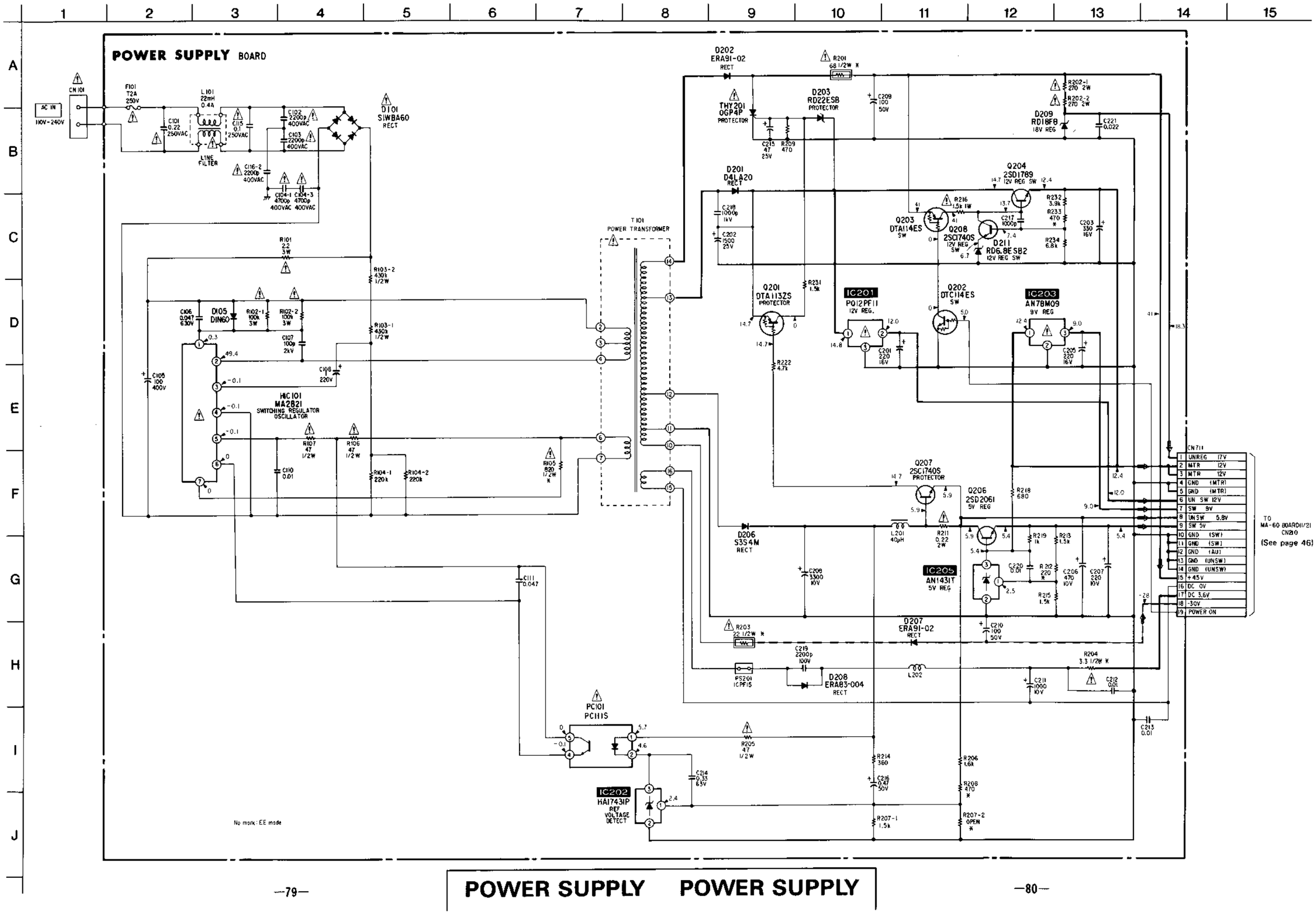
POWER SUPPLY PRINTED WIRING BOARD
–Ref. No. 9,000 series–

POWER BOARD



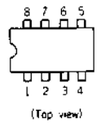
POWER SUPPLY SCHEMATIC DIAGRAM

– Ref. No. 9,000 series–

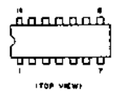


4-3. SEMICONDUCTOR LEAD LAYOUTS

BA4560
CXL5003P
LM393N
MSM6989RS
ST93C46AB1

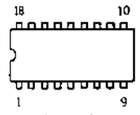


BA10324
LM324N
MC14066BCP
SDA5642

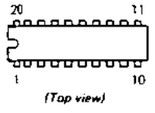


TC4052BPHB

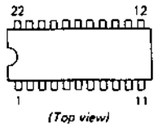
AN3814K



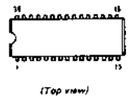
M52435P



AN3592K

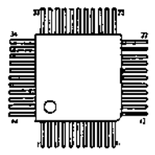


HA118016NT
HA118019NT
LC6543H-4374



AN3231K

UPD75004GB-VSX182



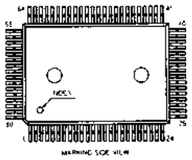
LA7213

CX20061

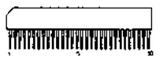
LVA519S

BA7007

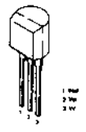
CXP50116-VSX350



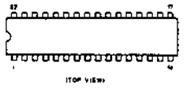
LA7297



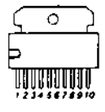
PST529C
PST529H



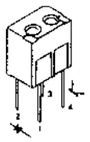
M50554-182SP



BA6238A



PS6002



2SK105A-10

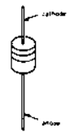
2SA922S-QR

DTA114ES
DTA124ES
DTA144ES
DTC114ES
DTC144ES
2SC1740S-QR
2SD1292

DTA143XS

PT483F1

RD5.1ES-B2
RD6.8ES-B2
RD8.2ES-B2
RD13ES-B2
RD33ES-B2
1SR139-100
1SS119



SLR-34MC3

GL451V

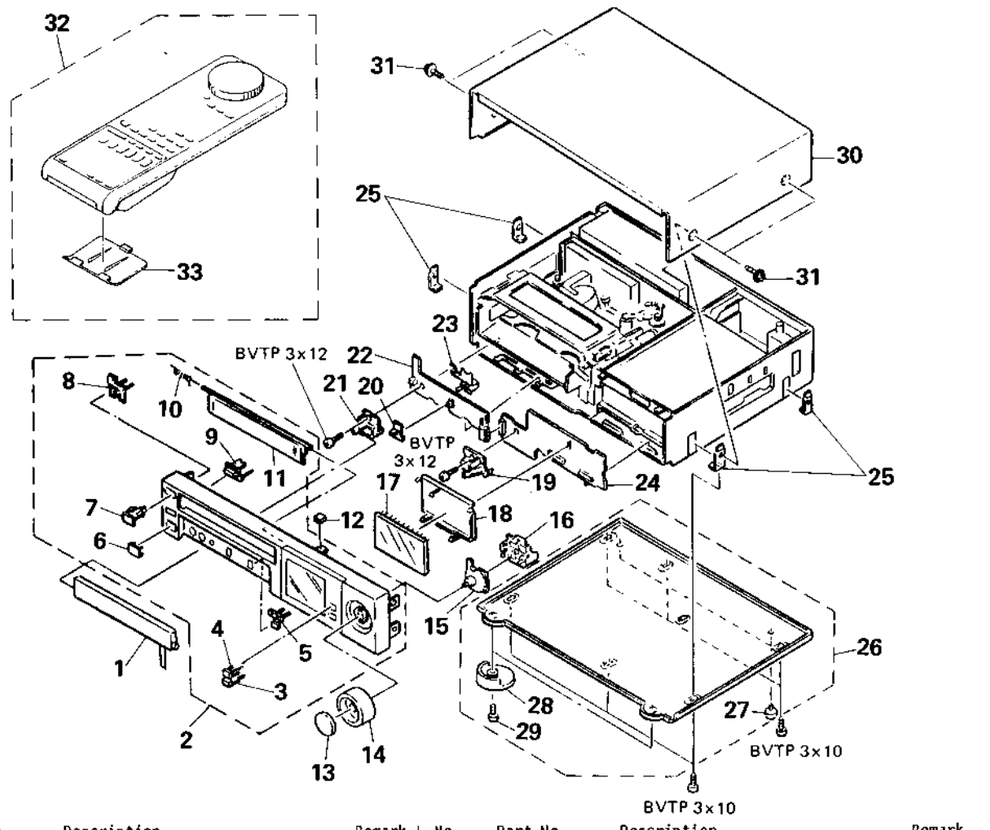
SECTION 5
EXPLODED VIEWS

NOTE:

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

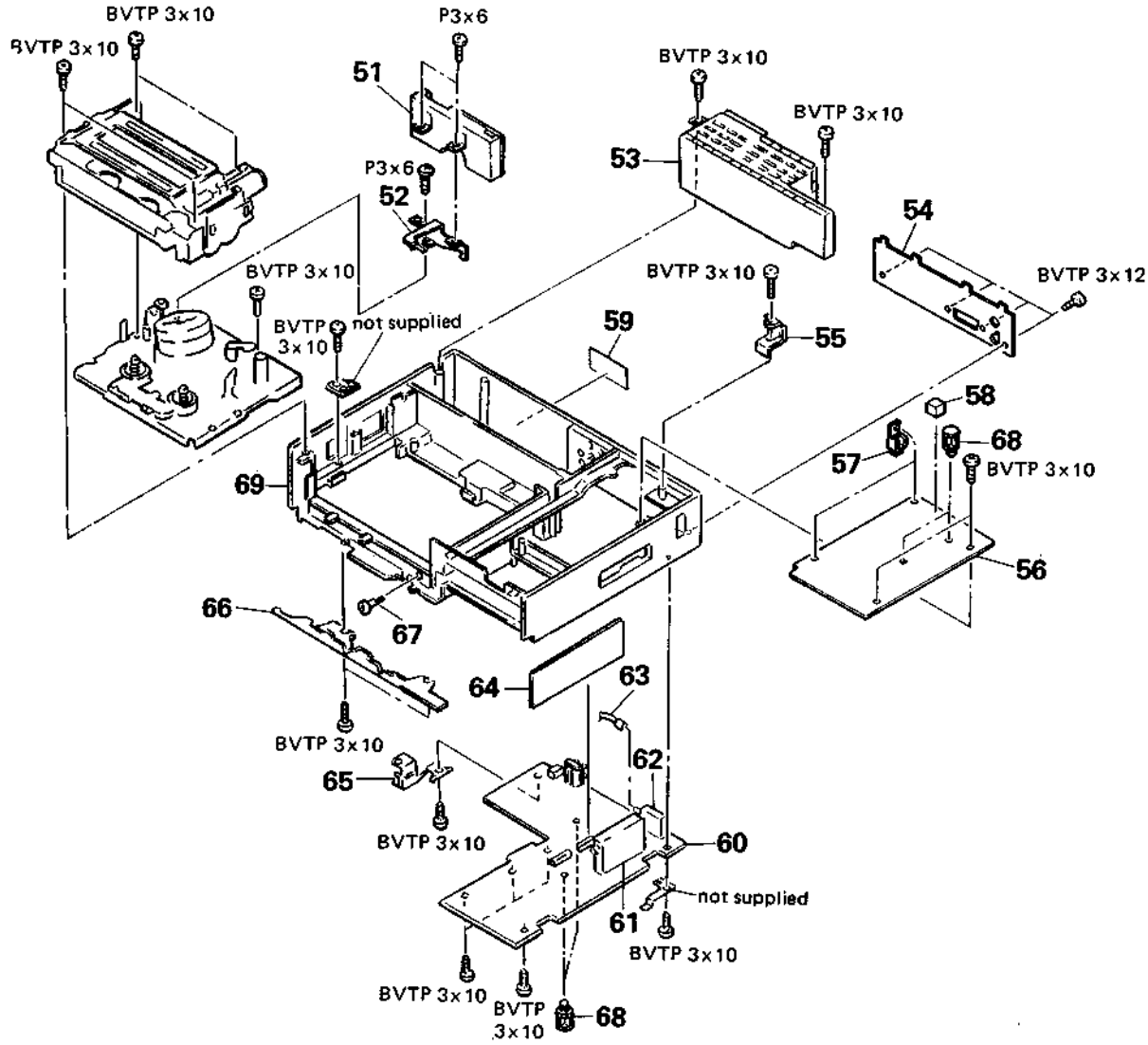
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

5-1. FRONT PANEL, CABINET ASSEMBLIES



No.	Part No.	Description	Remark
1	1-466-315-11	SWITCH BLOCK, CONTROL (SLV-373UB)	
	1-466-315-21	SWITCH BLOCK, CONTROL (SLV-373)	
	1-466-315-31	SWITCH BLOCK, CONTROL (SLV-373VP)	
2	X-3746-001-1	PANEL ASSY, FRONT (SLV-373VP)	3-11
	X-3746-002-1	PANEL ASSY, FRONT (SLV-373/373UB)	3-11
3	3-741-971-21	BUTTON, STOP (■)	
4	3-741-978-21	BUTTON, STOP (■/⏮⏭)	
5	3-746-010-01	BUTTON, VPS (SLV-373VP)	
6	3-741-981-31	WINDOW, LAY CATCHER BLOCK	
7	3-741-973-01	BUTTON, POWER (ON/STANDBY)	
8	3-741-975-01	TIP, POWER BUTTON	
9	3-741-974-01	BUTTON, EJECT (⏏ EJECT)	
10	3-741-977-01	SPRING (FL), TORSION	
11	3-746-028-01	DOOR (E), CASSETTE	
12	9-911-841-XX	CUSHION (B)	
13	3-741-951-21	BUTTON, PLAY (▷ PLAY)	
14	3-741-952-01	RING, SHUTTLE	
15	*1-635-173-11	MF-96 BOARD	
16	*3-741-965-01	HOLDER, PC BOARD	
17	1-519-580-11	INDICATOR TUBE, FLUORESCENT	
18	*3-744-220-01	HOLDER, FL	
19	3-741-967-01	PLATE (RIGHT), FULCRUM, DOOR	
20	3-744-217-01	KNOB, SELECTION (COMMAND MODE)	
21	3-741-966-01	PLATE (LEFT), FULCRUM, DOOR	
22	*A-6754-047-A	MF-95 BOARD, COMPLETE (SLV-373UB)	
22	*A-6754-052-A	MF-95 BOARD, COMPLETE (SLV-373VP)	
	*A-6754-053-A	MF-95 BOARD, COMPLETE (SLV-373)	
23	3-741-968-01	PLATE, GROUND, MF	
24	*A-6721-328-A	MF-97 BOARD, COMPLETE (SLV-373UB)	
	*A-6721-330-A	MF-97 BOARD, COMPLETE (SLV-373VP)	
24	*A-6721-331-A	MF-97 BOARD, COMPLETE (SLV-373)	
25	*3-741-992-01	STOPPER, UPPER CASE	
26	X-3733-346-2	PLATE ASSY, BOTTOM	27-29
27	3-670-155-11	LEG	
28	X-3733-345-1	INSULATOR ASSY	
29	3-721-343-01	SCREW, FIXED, M4X7	
30	3-746-051-01	CASE, UPPER	
31	3-710-901-11	SCREW (3X8), TAPPING	
32	1-465-514-11	REMOTE COMMANDER ASSY (RMT-V373)	33
33	3-746-029-01	COVER, BATTERY	

5-2. CHASSIS ASSEMBLY

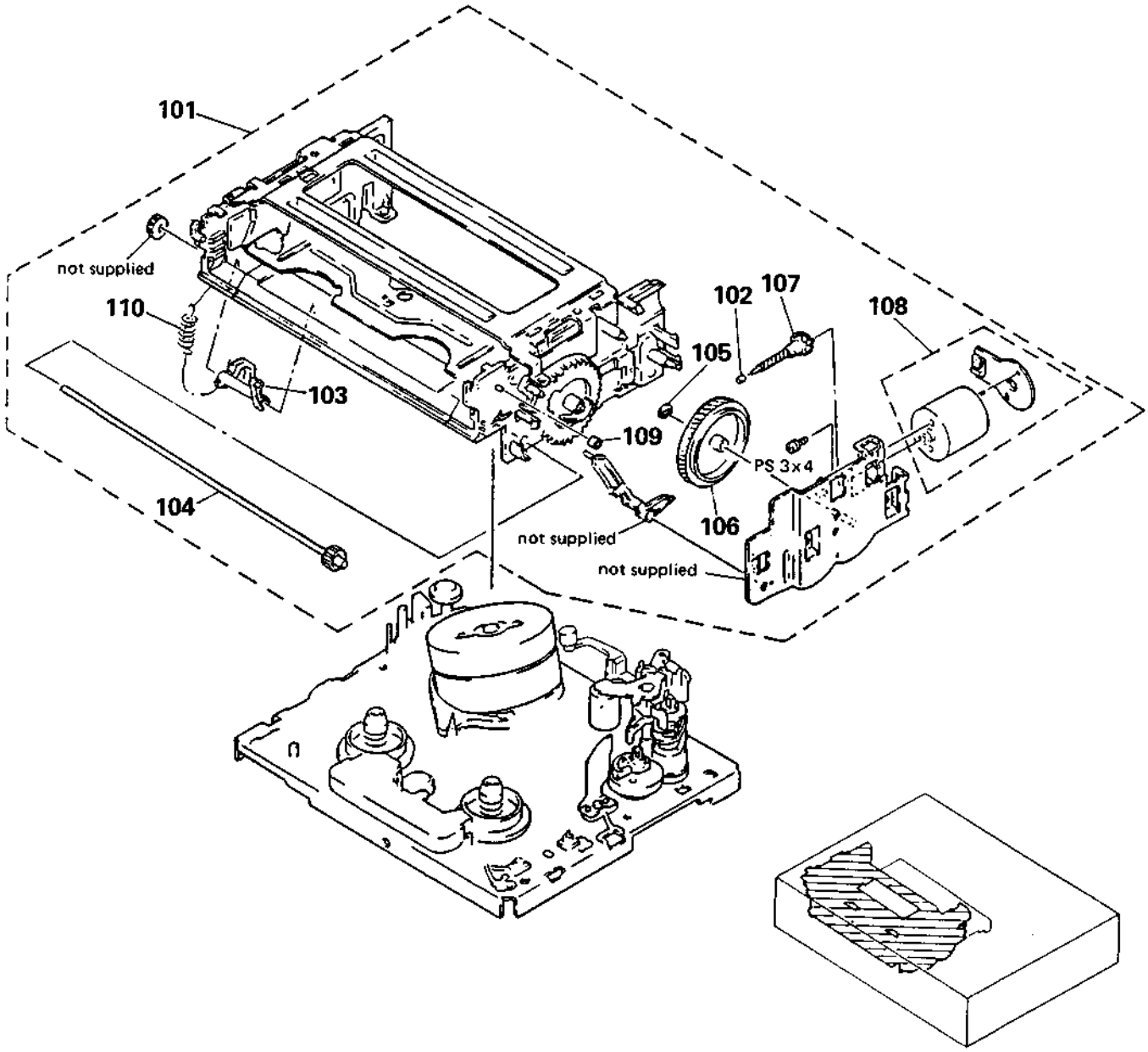


No.	Part No.	Description	Remark
51	*A-6727-189-A	RP-100 BOARD, COMPLETE	
52	X-3746-004-1	GROUND ASSY, SHAFT	
53	⚠1-413-535-11	BLOCK, POWER (SLV-373UB)	
	⚠1-413-537-11	BLOCK, POWER (SLV-373VP)	
	⚠1-413-538-11	BLOCK, POWER (SLV-373)	
54	3-746-011-01	PLATE, ORNAMENTAL, JACK	
55	*3-741-963-01	BRACKET, RF	
56	*A-6727-187-A	YC-90 BOARD, COMPLETE	
57	3-736-704-01	HINGE, PC BOARD	
58	9-911-843-XX	CUSHION	
59	*3-746-001-01	LABEL, MODEL NUMBER (NO.2) (SLV-373UB)	
	*3-746-002-01	LABEL, MODEL NUMBER (NO.2) (SLV-373)	
	*3-746-003-01	LABEL, MODEL NUMBER (NO.2) (SLV-373VP)	

No.	Part No.	Description	Remark
60	*A-6725-799-A	MA-60 BOARD, COMPLETE (SLV-373UB)	
	*A-6725-801-A	MA-60 BOARD, COMPLETE (SLV-373VP)	
	*A-6725-802-A	MA-60 BOARD, COMPLETE (SLV-373)	
61	1-465-260-11	TUNER, ET (BTP-2C401) (SLV-373/373VP)	
	1-465-262-11	TUNER, ET (SLV-373UB)	
62	⚠1-466-328-11	MODULATOR, RF (RFU-2017) (SLV-373/373VP)	
	⚠1-466-347-11	MODULATOR, RF (RFU-2024) (SLV-373UB)	
63	1-558-924-41	CABLE, PIN	
64	*A-6713-386-A	CA-42 BOARD, COMPLETE	
65	*3-741-962-01	PLATE, GROUND, JMP	
66	3-741-953-03	ESCUTCHEON, FRAME	
67	3-741-948-11	SCREW (3), SPECIAL (+) TAPPING	
68	3-682-057-11	SPACER (SMALL)	
69	*3-741-990-01	FRAME, MOLD	

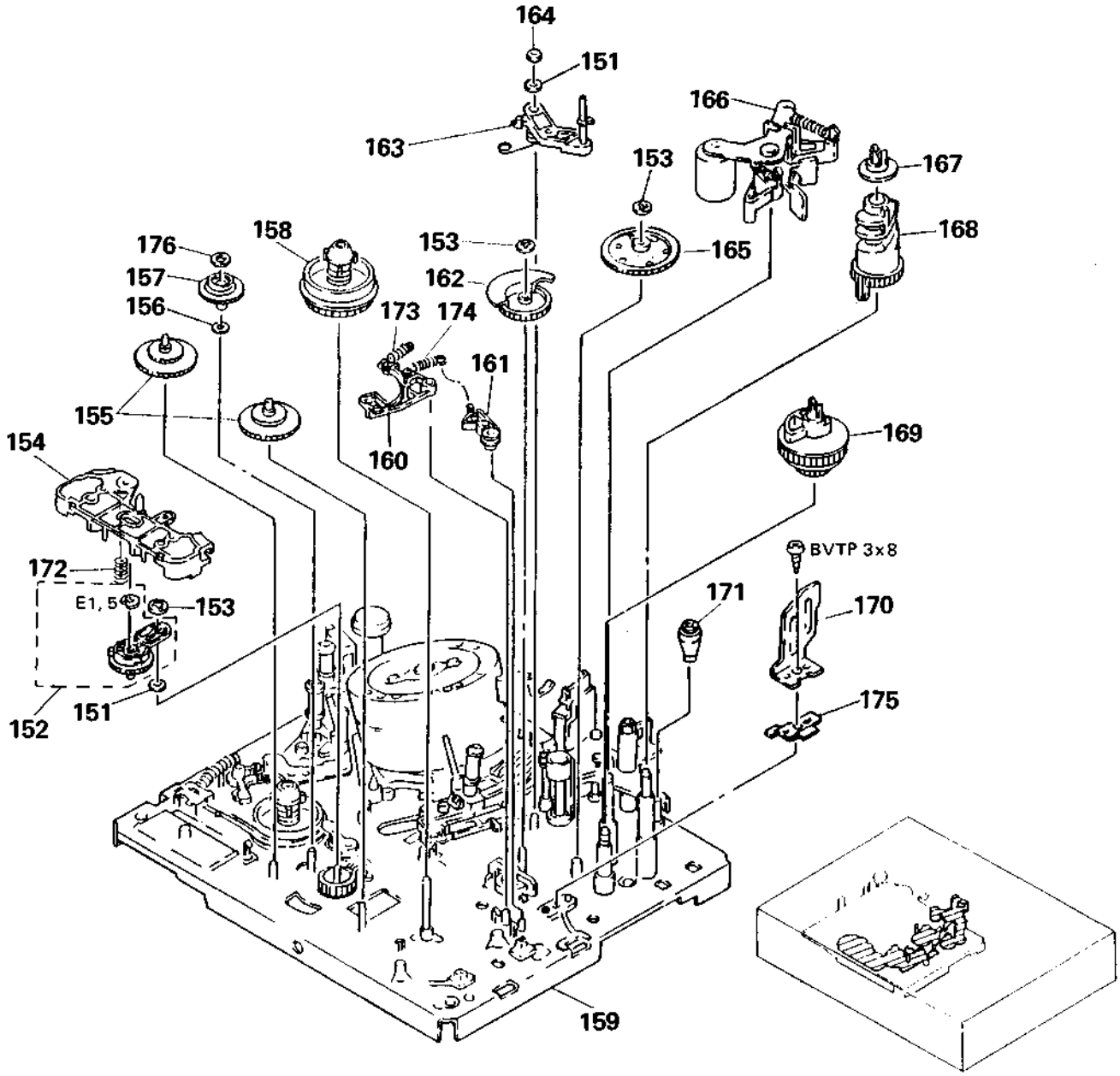
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

5-3. FL CASSETTE COMPARTMENT



No.	Part No.	Description	Remark
101	A-6751-421-A	FL BLOCK ASSY (M2)	102-110
102	3-716-144-02	RETAINER, WORM	
103	3-736-163-01	LEVER, ERASING PROTECTION	
104	X-3727-775-2	GEAR (RIGHT) ASSY, MIDWAY	
105	3-696-510-01	WASHER (3), STOPPER	
106	3-736-164-01	WHEEL (FL), WORM	
107	3-736-100-01	GEAR (FL), WORM	
108	X-3727-784-1	MOTOR ASSY (LOADING) (M904)	
109	3-696-388-01	RUBBER, JOINT	
110	3-739-687-01	SPRING, TENSION	

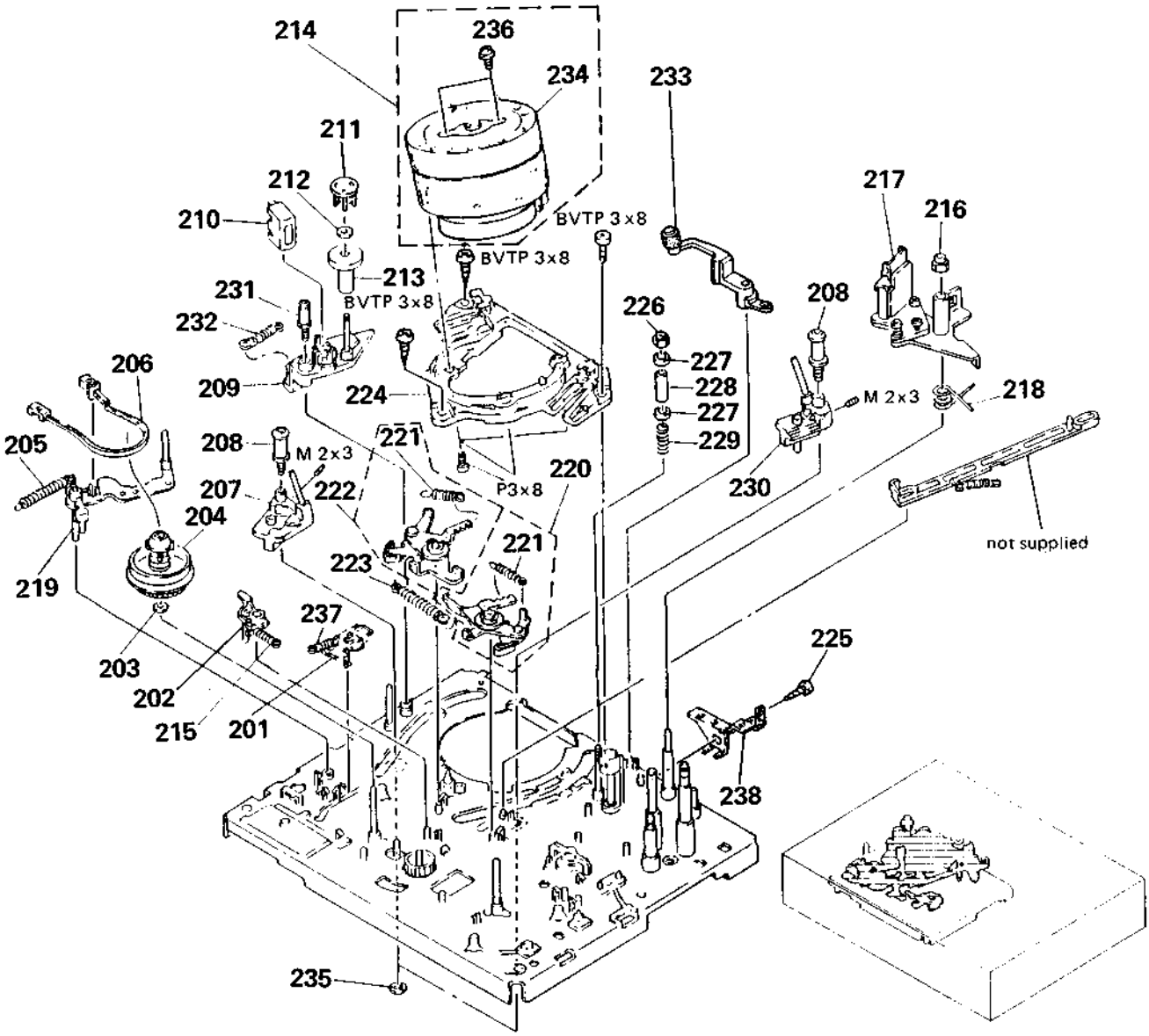
5-4. MECHANISM DECK 1



No.	Part No.	Description	Remark
151	3-701-438-11	WASHER, 2.5	
152	X-3727-776-1	ARM ASSY, PENDULUM	
153	3-669-595-00	WASHER (2), STOPPER	
154	3-736-172-02	RELEASE, LOCK, REEL	
155	X-3727-795-1	GEAR ASSY, RELAY	
156	3-736-074-01	RETAINER (SMALL), THRUST	
157	3-736-037-01	GEAR, REW	
158	X-3727-798-1	TABLE ASSY, REEL	
159	*A-6773-084-A	MD BLOCK ASSY 151-157,160-172,175,176 201-203,205-208,216,218,219,226-230 235,237,251-260,262,267-277,280-285 287-289,291,292,297	
160	X-3733-335-1	BRAKE ASSY (AT), T SOFT	
161	3-736-105-01	ARM, REV BRAKE	
162	3-736-143-01	GEAR, RVS CAM	

No.	Part No.	Description	Remark
163	X-3729-911-1	ARM ASSY, RVS	
164	3-736-740-01	NUT (M2X0.25), NYLON	
165	3-736-116-01	GEAR, COMMUNICATION	
166	X-3727-770-1	PINCH ROLLER BLOCK ASSY	
167	3-736-111-01	STOPPER	
168	3-736-136-01	CAM, ELEVATOR	
169	3-736-135-01	GEAR, PRESS CAM	
170	3-736-109-01	PLATE, OPEN, LID	
171	3-738-250-01	SCREW, AC ADJUSTMENT	
172	3-736-020-11	SPRING, COMPRESSION	
173	3-736-024-01	SPRING, TENSION	
174	3-736-025-01	SPRING (REV BRAKE), TENSION	
175	3-744-227-01	SPRING (ATOM), FL GROUND	
176	3-736-069-01	RETAINER, SPRING	

5-5. MECHANISM DECK 2

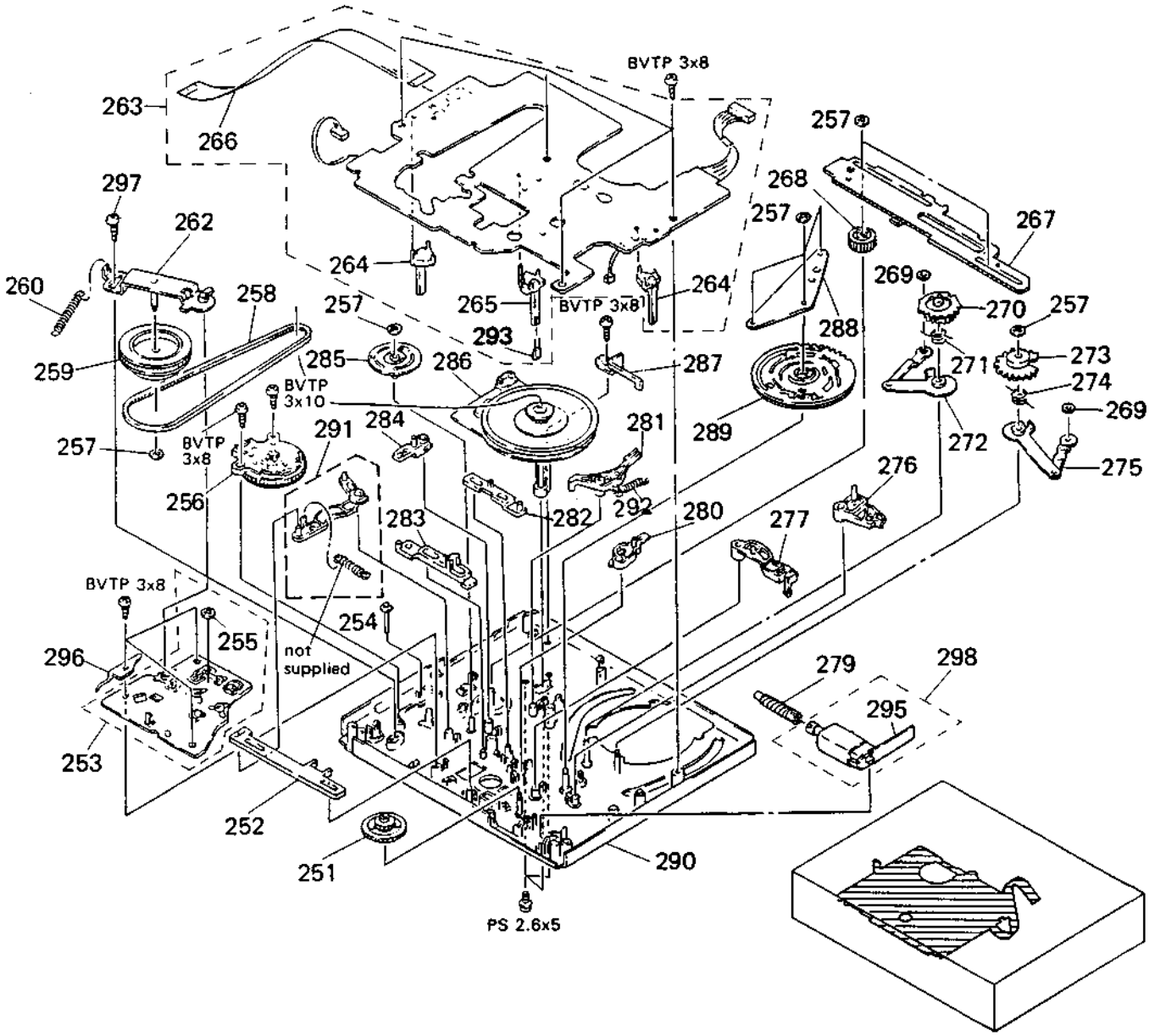


No.	Part No.	Description	Remark
201	A-6759-483-A	TAKE-UP BLOCK ASSY (AT), S	
202	3-736-075-01	BRAKE, S SOFT	
203	3-738-212-21	RETAINER, THRUST, REEL TABLE	
204	X-3729-935-3	TABLE ASSY, REEL, SUPPLY	
205	3-733-389-11	SPRING, TENSION	
206	X-3727-797-1	BAND ASSY, TENSION REGULATOR	
207	X-3727-786-1	SHUTTLE (LEFT) ASSY	
208	X-3733-301-1	ROLLER ASSY, GUIDE	
209	X-3727-767-1	BASE ASSY, STABILIZER	
210	1-543-647-11	HEAD, FE	
211	3-736-082-01	RETAINER, TS THRUST	
212	3-741-925-01	RING, RETAINING	
213	X-3727-771-1	STABILIZER ASSY, TAPE	
214	⚠8-848-537-11	DRUM ASSY (DZH-21A-R) (M901)	234, 236
215	3-736-047-01	SPRING (S SOFT), TENSION	
216	3-736-041-01	NUT (N3), NYLON	
217	A-6761-129-A	HEAD BLOCK ASSY, ACE	
218	3-736-042-01	SPRING, TORSION	
219	3-736-151-11	ARM (POM), TENSION REGULATOR	

No.	Part No.	Description	Remark
220	X-3729-926-1	BRAKE ASSY (2), T	221
221	3-738-220-01	SPRING (MAIN BRAKE 2), TENSION	
222	X-3733-336-2	BRAKE ASSY (2) (AT), S	221
223	3-738-221-01	SPRING (MAIN BRAKE 1), TENSION	
224	*X-3746-005-1	BASE ASSY (G), DRUM	
225	3-736-055-01	SCREW (3X8), TAPPING	
226	3-736-740-01	NUT (M2X0.25), NYLON	
227	3-736-733-01	FLANGE, 7 GUIDE	
228	3-736-730-01	SLEEVE, #7 GUIDE	
229	3-736-729-01	SPRING, COMPRESSION	
230	X-3727-787-1	SHUTTLE (RIGHT) ASSY	
231	X-3727-788-1	ROLLER ASSY, GUIDE, #2	
232	3-736-745-01	SPRING	
233	A-6747-267-C	ARM BLOCK ASSY (S), C ROLLER	
234	8-848-540-01	UPPER DRUM ASSY (DZR-21R)	
235	3-736-073-01	SLIDER, POLYETHYLENE	
236	2-643-205-01	SCREW, FITTING +PW 3X8, UPPER DRUM	
237	3-738-284-01	SPRING, TENSION	
238	*3-738-249-01	PLATE, FIXED, MD	

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

5-6. MECHANISM DECK 3



No.	Part No.	Description	Remark
251	3-736-015-01	WHEEL (CAM), WORM	
252	3-736-158-01	PLATE, SLIDE, PENDULUM	
253	A-6739-084-A	CHASSIS BLOCK ASSY, SUB	255
254	3-736-091-01	PIN, SWITCH	
255	3-669-465-00	WASHER (1.5), STOPPER	
256	1-571-920-11	SWITCH, ROTARY (S1)	
257	3-669-595-00	WASHER (2), STOPPER	
258	3-736-013-01	BELT, TIMING	
259	X-3727-782-1	PULLEY ASSY	
260	3-736-089-01	SPRING, TENSION	
262	X-3727-761-1	ARM ASSY, ADJUSTMENT	
263	*A-6754-055-A	MD-40 BOARD, COMPLETE	264, 265, 293
264	3-736-149-01	HOLDER, ST SENSOR	
265	*3-736-144-01	HOLDER, LED	
267	3-736-177-01	PLATE, SLIDE, MODE	
268	3-733-394-01	GEAR, RVS RELAY	
269	3-736-073-01	SLIDER, POLYETHYLENE	
270	3-736-148-01	GEAR (RIGHT), THREADING	
271	3-736-092-01	SPRING (RIGHT), TORSION	
272	X-3727-777-1	ARM (RIGHT) ASSY, THREADING	
273	3-736-147-01	GEAR (LEFT), THREADING	
274	3-736-040-01	SPRING (LEFT), TORSION	

No.	Part No.	Description	Remark
275	X-3727-778-1	ARM (LEFT) ASSY, THREADING	
276	3-736-142-01	ARM, TENSION REGULATOR FUNCTION	
277	3-736-140-03	ARM, S TAKE-UP	
278	X-3733-302-1	MOTOR ASSY, CAM (M903)	295
279	3-733-395-01	GEAR (CAM), WORM	
280	3-733-397-01	ARM, BRAKE FUNCTION	
281	X-3733-338-1	BRAKE ASSY (AT), CAP	
282	3-733-398-04	PLATE, SLIDE, BRAKE	
283	3-736-103-03	PLATE, SLIDE, LIMITER	
284	3-736-016-01	ARM, LIMITER FUNCTION	
285	3-736-170-01	GEAR, RKB CAM	
286	8-835-382-01	MOTOR, DC U-26B (CAPSTAN) (M902)	
287	3-736-744-01	RETAINER, ROTOR	
288	3-733-396-01	HOLDER, CAM GEAR	
289	3-736-176-01	GEAR, CAM	
291	3-736-139-03	ARM, PENDULUM FUNCTION	
292	3-738-237-01	SPRING (CAP BRAKE), TENSION	
293	8-719-974-65	DIODE GL451V (D001)	
295	*1-633-460-11	CA-41 BOARD	
296	3-741-950-01	SPRING (AT), LEAF, SC GROUND	
297	3-733-386-01	SCREW (3X8), WASHER	

CA-42

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

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

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

- 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.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- SEMICONDUCTORS
  In each case, U: μ, for example:
  UA...: μA..., UPA...: μPA...,
  UPB...: μPB..., UPC...: μPC...,
  UPD...: μPD...
- CAPACITORS
  MF: μF, PF: μμF
- COILS
  MMH: mH, UH: μH

Ref.No	Part No.	Description			Remark
	*A-6713-386-A	CA-42 BOARD, COMPLETE **********			
	*3-746-016-02	CASE (MAIN), AU			
	*3-746-017-01	CASE (LOWER), AU			
		CAPACITOR			
C101	1-161-047-00	CERAMIC	0.0047MF	10%	25V
C102	1-164-070-11	CERAMIC	100PF	5%	50V
C103	1-162-839-11	CERAMIC	0.01MF	10%	16V
C104	1-126-157-11	ELECT	10MF	20%	6.3V
C105	1-164-091-11	CERAMIC	0.0022MF	10%	50V
C106	1-124-499-11	ELECT	1MF	20%	50V
C107	1-164-097-11	CERAMIC	0.022MF		50V
C108	1-126-154-11	ELECT	47MF	20%	6.3V
C109	1-126-160-11	ELECT	1MF	20%	50V
C110	1-164-046-11	CERAMIC	10PF	0.5PF	50V
C111	1-126-154-11	ELECT	47MF	20%	6.3V
C112	1-164-096-11	CERAMIC	0.01MF		50V
C113	1-126-154-11	ELECT	47MF	20%	6.3V
C250	1-109-675-11	MICA	120PF	5%	500V
C251	1-124-589-11	ELECT	47MF	20%	10V
C252	1-164-083-11	CERAMIC	680PF	10%	50V
C254	1-164-092-11	CERAMIC	0.0033MF	10%	25V
C255	1-126-160-11	ELECT	1MF	20%	50V
C256	1-124-465-00	ELECT	0.47MF	20%	50V
C257	1-124-589-11	ELECT	47MF	20%	10V
C258	1-130-483-00	MYLAR	0.01MF	5%	50V
C259	1-126-160-11	ELECT	1MF	20%	50V
C260	1-164-085-11	CERAMIC	0.001MF	10%	50V
C261	1-124-234-00	ELECT	22MF	20%	10V
C263	1-164-086-11	CERAMIC	0.0012MF	10%	50V
C264	1-102-978-00	CERAMIC	220PF	5%	50V
C265	1-126-160-11	ELECT	1MF	20%	50V
C266	1-124-589-11	ELECT	47MF	20%	10V
C267	1-124-589-11	ELECT	47MF	20%	10V
C268	1-126-160-11	ELECT	1MF	20%	50V
C269	1-126-160-11	ELECT	1MF	20%	50V
C270	1-126-160-11	ELECT	1MF	20%	50V
C271	1-130-488-00	MYLAR	0.027MF	5%	50V
C273	1-130-488-00	MYLAR	0.027MF	5%	50V
C274	1-126-094-11	ELECT	4.7MF	20%	16V
C275	1-124-589-11	ELECT	47MF	20%	10V
C276	1-164-087-11	CERAMIC	0.0015MF	10%	50V
C277	1-162-839-11	CERAMIC	0.01MF	10%	16V
C278	1-136-558-11	FILM	0.0039MF	10%	630V
C285	1-164-083-11	CERAMIC	680PF	10%	50V
		CONNECTOR			
CN101	1-506-482-11	PIN, CONNECTOR 3P			
CN102	*1-563-465-11	SOCKET, CONNECTOR 14P			
CN201	*1-563-676-11	SOCKET, CONNECTOR 9P			
CN213	1-506-482-11	PIN, CONNECTOR 3P			
CN214	1-506-469-11	PIN, CONNECTOR 4P			
CN215	1-506-468-11	PIN, CONNECTOR 3P			
		DIODE			
D101	8-719-911-19	DIODE 1SS19			
D102	8-719-991-19	DIODE 1SS19			
D103	8-719-991-19	DIODE 1SS19			
D104	8-719-991-19	DIODE 1SS19			
D105	8-719-991-19	DIODE 1SS19			
D106	8-719-991-19	DIODE 1SS19			
		IC			
IC101	8-759-632-58	IC M52435P			
IC102	8-759-000-49	IC MC14066BCP			
IC257	8-759-805-20	IC LA7297			
		COIL			
L101	1-408-413-00	INDUCTOR	22UH		
L251	1-410-070-21	INDUCTOR	8.2MMH		
L252	1-412-092-11	INDUCTOR, SMALL TYPE	22MMH		
L253	1-410-687-11	INDUCTOR	1.2MMH		
L255	1-408-409-00	INDUCTOR	10UH		
		TRANSISTOR			
Q101	8-729-920-70	TRANSISTOR 2SC1740S-QR			
Q102	8-729-900-89	TRANSISTOR DTC144ES			
Q103	8-729-900-89	TRANSISTOR DTC144ES			
Q104	8-729-115-10	TRANSISTOR 2SK105A-10			
Q107	8-729-920-70	TRANSISTOR 2SC1740S-QR			
Q251	8-729-926-14	TRANSISTOR 2SD1292			
		RESISTOR			
R101	1-249-437-11	CARBON	47K	5%	1/4W
R102	1-249-433-11	CARBON	22K	5%	1/4W
R103	1-249-433-11	CARBON	22K	5%	1/4W
R104	1-249-429-11	CARBON	10K	5%	1/4W
R105	1-249-433-11	CARBON	22K	5%	1/4W
R106	1-249-429-11	CARBON	10K	5%	1/4W
R107	1-249-429-11	CARBON	10K	5%	1/4W
R108	1-247-887-00	CARBON	220K	5%	1/4W
R109	1-249-441-11	CARBON	100K	5%	1/4W
R110	1-249-405-11	CARBON	100	5%	1/4W
R111	1-247-885-00	CARBON	180K	5%	1/4W
R112	1-247-887-00	CARBON	220K	5%	1/4W
R113	1-249-429-11	CARBON	10K	5%	1/4W
R114	1-247-889-00	CARBON	270K	5%	1/4W
R115	1-249-413-11	CARBON	470	5%	1/4W
R116	1-249-417-11	CARBON	1K	5%	1/4W
R117	1-249-429-11	CARBON	10K	5%	1/4W
R118	1-249-437-11	CARBON	47K	5%	1/4W
R119	1-249-429-11	CARBON	10K	5%	1/4W
R120	1-249-429-11	CARBON	10K	5%	1/4W
R121	1-249-433-11	CARBON	22K	5%	1/4W

Ref.No	Part No.	Description				Remark
R122	1-249-427-11	CARBON	6.8K	5%	1/4W	
R124	1-249-433-11	CARBON	22K	5%	1/4W	
R125	1-249-437-11	CARBON	47K	5%	1/4W	
R126	1-249-437-11	CARBON	47K	5%	1/4W	
R127	1-249-429-11	CARBON	10K	5%	1/4W	
R128	1-249-433-11	CARBON	22K	5%	1/4W	
R129	1-249-437-11	CARBON	47K	5%	1/4W	
R252	1-249-393-11	CARBON	10	5%	1/4W	
R253	1-249-412-11	CARBON	390	5%	1/4W	
R254	1-249-411-11	CARBON	330	5%	1/4W	
R255	1-247-885-00	CARBON	180K	5%	1/4W	
R256	1-249-430-11	CARBON	12K	5%	1/4W	
R257	1-249-437-11	CARBON	47K	5%	1/4W	
R258	1-249-436-11	CARBON	39K	5%	1/4W	
R259	1-249-423-11	CARBON	3.3K	5%	1/4W	
R260	1-247-903-00	CARBON	1M	5%	1/4W	
R262	1-249-441-11	CARBON	100K	5%	1/4W	
R263	1-249-432-11	CARBON	18K	5%	1/4W	
R264	1-249-429-11	CARBON	10K	5%	1/4W	
R265	1-249-429-11	CARBON	10K	5%	1/4W	
R266	1-249-429-11	CARBON	10K	5%	1/4W	
R267	1-249-429-11	CARBON	10K	5%	1/4W	
R268	1-249-429-11	CARBON	10K	5%	1/4W	
R269	1-249-407-11	CARBON	150	5%	1/4W	
R270	1-249-422-11	CARBON	2.7K	5%	1/4W	
R272	1-249-416-11	CARBON	820	5%	1/4W	
R273	1-249-428-11	CARBON	8.2K	5%	1/4W	
R274	1-249-429-11	CARBON	10K	5%	1/4W	
R275	1-249-387-11	CARBON	3.3	5%	1/4W	F
R276	1-249-433-11	CARBON	22K	5%	1/4W	
R291	1-249-436-11	CARBON	39K	5%	1/4W	
		VARIABLE RESISTOR				
RV251	1-230-500-11	RES, ADJ, CARBON 220K				
		TRANSFORMER				
T251	1-433-330-11	TRANSFORMER, BIAS OSCILLATION				

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	*A-6721-330-A	MF-97 BOARD, COMPLETE			
		**********			
	*3-744-220-04	HOLDER, FL			
		CAPACITOR			
C001	1-164-027-11	CERAMIC	22PF	5%	50V
C002	1-164-056-11	CERAMIC	27PF	5%	50V
C003	1-164-056-11	CERAMIC	27PF	5%	50V
C004	1-164-159-11	CERAMIC	0.1MF		50V
C005	1-164-159-11	CERAMIC	0.1MF		50V
C006	1-125-486-11	DOUBLE LAYERS	0.22F		5.5V
C007	1-164-159-11	CERAMIC	0.1MF		50V

Ref.No	Part No.	Description				Remark
C008	1-126-096-11	ELECT	10MF	20%	35V	
C009	1-164-159-11	CERAMIC	0.1MF		50V	
C010	1-161-327-00	CERAMIC	0.0033MF	30%	16V	
C012	1-161-374-11	CERAMIC	0.0015MF	30%	16V	
C095	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C096	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C097	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C099	1-161-379-00	CERAMIC	0.01MF	30%	16V	
		CONNECTOR				
CN001	1-569-342-11	CONNECTOR, BOARD TO BOARD 19P				
CN002	1-569-342-11	CONNECTOR, BOARD TO BOARD 19P				
CN003	1-565-309-11	CONNECTOR, FLEXIBLE 4P				
CN004	1-569-339-11	CONNECTOR, BOARD TO BOARD 7P				
CN005	1-568-673-11	CONNECTOR, BOARD TO BOARD 14P				
		TRIMMER				
CV001	1-141-291-11	CAP, TRIMMER 20PF				
		DIODE				
D001	8-719-974-59	DIODE 1SR139-100				
D002	8-719-974-59	DIODE 1SR139-100				
D004	8-719-947-35	DIODE RD8.2ES-B2				
D010	8-719-109-97	DIODE RD6.8ES-B2				
D011	8-719-109-97	DIODE RD6.8ES-B2				
D012	8-719-947-27	DIODE MTZJ-T-72-6.8				
		INDICATOR TUBE				
FL001	1-519-580-11	INDICATOR TUBE, FLUORESCENT				
		IC				
IC001	8-752-813-21	IC CXP50116-050Q				
IC002	8-759-995-76	IC PST529C				
IC003	8-759-971-15	IC PST529H				
		RESISTOR				
R001	1-249-433-11	CARBON	22K	5%	1/4W	
R002	1-247-895-00	CARBON	470K	5%	1/4W	
R004	1-249-423-11	CARBON	3.3K	5%	1/4W	
R005	1-249-419-11	CARBON	1.5K	5%	1/4W	
R007	1-249-429-11	CARBON	10K	5%	1/4W	
R009	1-249-419-11	CARBON	1.5K	5%	1/4W	
R011	1-249-419-11	CARBON	1.5K	5%	1/4W	
R012	1-249-420-11	CARBON	1.8K	5%	1/4W	
R015	1-249-425-11	CARBON	4.7K	5%	1/4W	
R016	1-249-425-11	CARBON	4.7K	5%	1/4W	
R017	1-249-425-11	CARBON	4.7K	5%	1/4W	
R018	1-249-425-11	CARBON	4.7K	5%	1/4W	
R019	1-249-425-11	CARBON	4.7K	5%	1/4W	
R020	1-249-425-11	CARBON	4.7K	5%	1/4W	
R021	1-249-425-11	CARBON	4.7K	5%	1/4W	
R022	1-249-425-11	CARBON	4.7K	5%	1/4W	

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

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Ref.No	Part No.	Description				Remark
R094	1-249-417-11	CARBON	1K	5%	1/4W	
R095	1-249-417-11	CARBON	1K	5%	1/4W	
		SWITCH				
S001	1-571-977-11	SWITCH, TACTIL (PAUSE)				
S002	1-571-977-11	SWITCH, TACTIL (STOP)				
		CRYSTAL				
X001	1-567-519-11	VIBRATOR, CRYSTAL (4.19MHz)				
X002	1-567-098-00	VIBRATOR, CRYSTAL (32.768KHz)				
**********						
	*A-6725-801-A	MA-60 BOARD, COMPLETE **********				
	1-558-924-41	CABLE, PIN				
		BUZZER				
BZ501	1-529-070-11	BUZZER				
		CAPACITOR				
C107	1-126-101-11	ELECT	100MF		20%	16V
C110	1-124-589-11	ELECT	47MF		20%	10V
C201	1-162-839-11	CERAMIC	0.01MF		10%	16V
C202	1-164-058-11	CERAMIC	33PF		5%	50V
C203	1-102-824-00	CERAMIC	470PF		5%	50V
C204	1-164-056-11	CERAMIC	27PF		5%	50V
C205	1-162-839-11	CERAMIC	0.01MF		10%	16V
C206	1-161-772-11	CERAMIC	0.1MF		20%	16V
C207	1-124-234-00	ELECT	22MF		20%	16V
C208	1-162-839-11	CERAMIC	0.01MF		10%	16V
C303	1-130-483-00	MYLAR	0.01MF		5%	50V
C304	1-124-120-11	ELECT	220MF		20%	25V
C351	1-130-495-00	MYLAR	0.1MF		5%	50V
C352	1-124-234-00	ELECT	22MF		20%	16V
C353	1-164-096-11	CERAMIC	0.01MF			50V
C355	1-126-157-11	ELECT	10MF		20%	16V
C356	1-161-772-11	CERAMIC	0.1MF		20%	16V
C401	1-162-847-11	CERAMIC	0.047MF		20%	16V
C402	1-162-847-11	CERAMIC	0.047MF		20%	16V
C403	1-124-589-11	ELECT	47MF		20%	10V
C404	1-102-961-00	CERAMIC	27PF		5%	50V
C405	1-164-060-11	CERAMIC	39PF		5%	50V
C406	1-124-589-11	ELECT	47MF		20%	16V
C407	1-164-058-11	CERAMIC	33PF	5%	50V	(SLV-373VP)
C408	1-126-096-11	ELECT	10MF		20%	25V
C409	1-124-589-11	ELECT	47MF		20%	10V
C410	1-162-839-11	CERAMIC	0.01MF		10%	16V
C411	1-124-589-11	ELECT	47MF		20%	10V
C413	1-162-839-11	CERAMIC	0.01MF		10%	16V
C414	1-162-839-11	CERAMIC	0.01MF		10%	16V
C415	1-162-203-31	CERAMIC	15PF		5%	50V

Ref.No	Part No.	Description			Remark
C416	1-164-025-91	CERAMIC	18PF	5%	50V
C417	1-162-839-11	CERAMIC	0.01MF	10%	16V
C419	1-162-857-91	CERAMIC	0.0047MF	20%	16V
C420	1-164-085-11	CERAMIC	0.001MF	10%	50V
C421	1-124-925-11	ELECT	2.2MF	20%	50V
C423	1-124-589-11	ELECT	47MF	20%	16V
C424	1-162-839-11	CERAMIC	0.01MF	10%	16V
C450	1-161-772-11	CERAMIC	0.1MF	20%	16V
C451	1-126-154-11	ELECT	47MF	20%	6.3V
C452	1-161-772-11	CERAMIC	0.1MF	20%	16V
C453	1-102-980-00	CERAMIC	270PF	5%	50V
C454	1-102-980-00	CERAMIC	270PF	5%	50V
C457	1-164-091-11	CERAMIC	0.0022MF	10%	50V
C458	1-162-843-11	CERAMIC	0.022MF	20%	16V
C459	1-126-160-11	ELECT	1MF	20%	50V
C461	1-164-082-11	CERAMIC	560PF	10%	50V
C466	1-124-589-11	ELECT	47MF	20%	16V
C467	1-162-839-11	CERAMIC	0.01MF	10%	16V
C501	1-124-584-00	ELECT	100MF	20%	10V
C502	1-164-159-11	CERAMIC	0.1MF		50V
C503	1-162-839-11	CERAMIC	0.01MF	10%	16V
C504	1-164-049-11	CERAMIC	13PF	5%	50V
C505	1-164-049-11	CERAMIC	13PF	5%	50V
C506	1-161-772-11	CERAMIC	0.1MF	20%	16V
C507	1-162-854-91	CERAMIC	0.0015MF	20%	16V
C551	1-161-772-11	CERAMIC	0.1MF	20%	16V
C552	1-124-589-11	ELECT	47MF	20%	10V
C553	1-164-058-11	CERAMIC	33PF	5%	50V
C554	1-164-058-11	CERAMIC	33PF	5%	50V
C555	1-162-853-91	CERAMIC	0.001MF	20%	16V
C601	1-124-925-11	ELECT	2.2MF	20%	50V
C602	1-124-925-11	ELECT	2.2MF	20%	50V
C603	1-124-925-11	ELECT	2.2MF	20%	50V
C604	1-124-925-11	ELECT	2.2MF	20%	50V
C605	1-124-925-11	ELECT	2.2MF	20%	50V
C607	1-124-646-91	ELECT	22MF	20%	16V
C608	1-124-234-00	ELECT	22MF	20%	16V
C609	1-124-234-00	ELECT	22MF	20%	16V
C610	1-124-234-00	ELECT	22MF	20%	16V
C611	1-162-839-11	CERAMIC	0.01MF	10%	16V
C612	1-161-772-11	CERAMIC	0.1MF	20%	16V
C613	1-126-101-11	ELECT	100MF	20%	16V
C614	1-126-154-11	ELECT	47MF	20%	6.3V
C615	1-126-154-11	ELECT	47MF	20%	6.3V
C621	1-126-154-11	ELECT	47MF	20%	6.3V
C622	1-162-839-11	CERAMIC	0.01MF	10%	16V
C624	1-124-472-11	ELECT	470MF	20%	6.3V
C625	1-124-443-00	ELECT	100MF	20%	10V
C626	1-101-361-00	CERAMIC	150PF	5%	50V
C627	1-101-361-00	CERAMIC	150PF	5%	50V
C628	1-164-085-11	CERAMIC	0.001MF	10%	50V
C630	1-164-085-11	CERAMIC	0.001MF	10%	50V
C632	1-161-772-11	CERAMIC	0.1MF	20%	16V

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

Ref.No	Part No.	Description				Remark
C633	1-126-101-11	ELECT	100MF	20%	16V	
C670	1-126-160-11	ELECT	1MF	20%	50V	
C671	1-126-163-11	ELECT	4.7MF	20%	50V	
C700	1-124-234-00	ELECT	22MF	20%	16V	
C703	1-124-927-11	ELECT	4.7MF	20%	50V	
C705	1-164-096-11	CERAMIC	0.01MF		50V	
C706	1-124-589-11	ELECT	47MF	20%	16V	
C710	1-126-233-11	ELECT	22MF	20%	50V	
C711	1-164-056-11	CERAMIC	27PF	5%	50V	
C713	1-164-056-11	CERAMIC	27PF 5% 50V		(SLV-373UB)	
C713	1-164-064-11	CERAMIC	56PF 5% 50V		(SLV-373/373VP)	
C715	1-124-443-00	ELECT	100MF	20%	10V	
C716	1-164-065-91	CERAMIC	62PF 5% 50V		(SLV-373/373VP)	
C716	1-164-068-11	CERAMIC	82PF 5% 50V		(SLV-373UB)	
C717	1-124-242-00	ELECT	33MF	20%	16V	
C718	1-164-089-11	CERAMIC	0.0022MF		50V	
C719	1-164-089-11	CERAMIC	0.0022MF		50V	
C721	1-124-927-11	ELECT	4.7MF	20%	50V	
C723	1-124-499-11	ELECT	1MF 20% 50V		(SLV-373/373UB)	
C726	1-124-242-00	ELECT	33MF	20%	16V	
C727	1-161-379-00	CERAMIC	0.01MF	30%	16V	
C751	1-162-827-11	CERAMIC	0.001MF 10% 16V		(SLV-373VP)	
C752	1-162-827-11	CERAMIC	0.001MF 10% 16V		(SLV-373VP)	
C753	1-162-827-11	CERAMIC	0.001MF 10% 16V		(SLV-373VP)	
C754	1-162-827-11	CERAMIC	0.001MF 10% 16V		(SLV-373VP)	
C755	1-162-827-11	CERAMIC	0.001MF 10% 16V		(SLV-373VP)	
C759	1-126-154-11	ELECT	47MF	20%	6.3V	
C760	1-162-839-11	CERAMIC	0.01MF	10%	16V	
C761	1-164-050-11	CERAMIC	15PF 5%	50V	(SLV-373UB)	
C801	1-164-159-11	CERAMIC	0.1MF	50V	(SLV-373VP)	
C802	1-162-847-11	CERAMIC	0.047MF 20% 16V		(SLV-373VP)	
C803	1-164-058-11	CERAMIC	33PF 5%	50V	(SLV-373VP)	
C804	1-162-847-11	CERAMIC	0.047MF 20% 16V		(SLV-373VP)	
C805	1-164-058-11	CERAMIC	33PF 5%	50V	(SLV-373VP)	
C806	1-161-057-00	CERAMIC	0.033MF 20% 16V		(SLV-373VP)	
C810	1-162-284-31	CERAMIC	150PF 10%	50V	(SLV-373VP)	
C951	1-124-925-11	ELECT	2.2MF	20%	50V	

FILTER

CF801	1-567-160-21	OSCILLATOR, CERAMIC

CONNECTOR

CN201	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P
CN202	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P
CN203	1-506-982-11	PIN, CONNECTOR 14P
CN204	1-506-475-11	PIN, CONNECTOR 10P
CN205	1-506-473-11	PIN, CONNECTOR 8P
CN206	1-506-476-11	PIN, CONNECTOR 11P
CN208	1-569-344-11	CONNECTOR, BOARD TO BOARD 19P
CN209	1-569-344-11	CONNECTOR, BOARD TO BOARD 19P
CN210	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P
CN216	1-561-534-00	SOCKET 21P

Ref.No	Part No.	Description	Remark
CN218	*1-566-249-11	PIN, CONNECTOR 9P	

JACK

CNJ951	1-507-562-00	JACK (SIRCS)	

TRIMMER

CV401	1-141-227-00	CAP, CERAMIC TRIMMER	

DIODE

D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D304	8-719-974-59	DIODE 1SR139-100	
D351	8-719-109-85	DIODE RD6.1ES-B2	
D401	8-719-911-19	DIODE 1SS119	
D402	8-719-911-19	DIODE 1SS119	
D403	8-719-911-19	DIODE 1SS119	
D404	8-719-109-97	DIODE RD6.8ES-B2	
D501	8-719-911-19	DIODE 1SS119	
D502	8-719-911-19	DIODE 1SS119	
D503	8-719-911-19	DIODE 1SS119	
D504	8-719-109-97	DIODE RD6.8ES-B2	
D551	8-719-109-97	DIODE RD6.8ES-B2	
D601	8-719-911-19	DIODE 1SS119	
D602	8-719-109-97	DIODE RD6.8ES-B2	
D603	8-719-911-19	DIODE 1SS119	
D604	8-719-911-19	DIODE 1SS119	
D670	8-719-911-19	DIODE 1SS119	
D671	8-719-911-19	DIODE 1SS119	
D701	8-719-110-78	DIODE RD33ES-B2	
D901	8-719-109-97	DIODE RD6.8ES-B2	
D902	8-719-109-97	DIODE RD6.8ES-B2	
D903	8-719-109-97	DIODE RD6.8ES-B2	
D951	8-719-911-19	DIODE 1SS119	
D952	8-719-911-19	DIODE 1SS119	
D953	8-719-109-97	DIODE RD6.8ES-B2	

IC

IC101⚠	8-759-983-45	IC BA6238A
IC103	8-759-923-90	IC BA4560
IC302	8-759-008-71	IC LM324N
IC401	8-759-634-22	IC M50554-182SP
IC402	8-759-996-03	IC LVA519S
IC501	8-752-813-20	IC CXP80116-VSX350
IC502	8-759-822-65	IC LC6543H-4374
IC601	8-759-208-08	IC TC4052BPHB
IC702	8-759-501-XX	IC ST93C46AB1
IC801	8-759-030-60	IC SDA5642 (SLV-373VP)
IC802	8-759-147-30	IC UPD75004GB-VSX182 (SLV-373VP)

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

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

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Ref.No	Part No.	Description	Remark
		IF BLOCK	
IF701⚠	1-464-553-21	IF BLOCK (IFB-389) (SLV-373)	
IF701⚠	1-464-583-21	IF BLOCK (IFB-395) (SLV-373UB)	
IF701⚠	1-466-034-11	IF BLOCK (IFV-389A)	
		COIL	
L201	1-408-413-00	INDUCTOR 22UH	
L202	1-408-409-00	INDUCTOR 10UH	
L203	1-408-413-00	INDUCTOR 22UH	
L351	1-408-409-00	INDUCTOR 10UH	
L401	1-408-421-00	INDUCTOR 100UH	
L402	1-410-423-11	INDUCTOR 22UH	
L403	1-408-415-00	INDUCTOR 33UH (SLV-373VP)	
L404	1-408-421-00	INDUCTOR 100UH	
L405	1-408-414-00	INDUCTOR 27UH	
L406	1-408-415-00	INDUCTOR 33UH	
L407	1-408-421-00	INDUCTOR 100UH	
L408	1-408-413-00	INDUCTOR 22UH	
L501	1-408-409-00	INDUCTOR 10UH	
L551	1-408-409-00	INDUCTOR 10UH	
L601	1-408-421-00	INDUCTOR 100UH	
L602	1-408-409-00	INDUCTOR 10UH	
L603	1-408-425-00	INDUCTOR 220UH	
L604	1-408-425-00	INDUCTOR 220UH	
L701	1-408-409-00	INDUCTOR 10UH	
L702	1-408-425-00	INDUCTOR 220UH	
L703	1-408-413-00	INDUCTOR 22UH	
L705	1-408-413-00	INDUCTOR 22UH (SLV-373UB)	
L705	1-408-415-00	INDUCTOR 33UH (SLV-373/373VP)	
L706	1-408-409-00	INDUCTOR 10UH	
L752	1-408-409-00	INDUCTOR 10UH	
L753	1-408-409-00	INDUCTOR 10UH	
L754	1-410-509-11	INDUCTOR 10UH (SLV-373VP)	
		TRANSISTOR	
Q103	8-729-900-61	TRANSISTOR DTA114ES	
Q201	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q202	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q203	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q204	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q301	8-729-900-89	TRANSISTOR DTC144ES	
Q302	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q304	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q401	8-729-920-70	TRANSISTOR 2SC1740S-QR (SLV-373VP)	
Q402	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q403	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q404	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q405	8-729-900-89	TRANSISTOR DTC144ES (SLV-373VP)	
Q406	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q407	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q451	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q501	8-729-900-89	TRANSISTOR DTC144ES	
Q515	8-729-900-89	TRANSISTOR DTC144ES	
Q601	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q602	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q603	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q604	8-729-900-65	TRANSISTOR DTA144ES	
Q608	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q609	8-729-900-89	TRANSISTOR DTC144ES	
Q610	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q670	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q710	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q711	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q712	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q751	8-729-920-70	TRANSISTOR C1740S-QR	
Q951	8-729-900-89	TRANSISTOR DTC144ES	
Q952	8-729-900-63	TRANSISTOR DTA124ES	
		RESISTOR	
R117	1-249-413-11	CARBON 470 5% 1/4W	
R118	1-249-425-11	CARBON 4.7K 5% 1/4W	
R201	1-249-431-11	CARBON 15K 5% 1/4W	
R202	1-249-430-11	CARBON 12K 5% 1/4W	
R203	1-249-417-11	CARBON 1K 5% 1/4W	
R204	1-249-417-11	CARBON 1K 5% 1/4W	
R205	1-249-418-11	CARBON 1.2K 5% 1/4W	
R206	1-249-417-11	CARBON 1K 5% 1/4W	
R207	1-247-897-11	CARBON 560K 5% 1/4W	
R208	1-249-421-11	CARBON 2.2K 5% 1/4W	
R209	1-249-428-11	CARBON 8.2K 5% 1/4W	
R210	1-249-421-11	CARBON 2.2K 5% 1/4W	
R211	1-249-412-11	CARBON 390 5% 1/4W	
R212	1-249-405-11	CARBON 100 5% 1/4W	
R213	1-249-437-11	CARBON 47K 5% 1/4W	
R214	1-249-427-11	CARBON 6.8K 5% 1/4W	
R215	1-249-435-11	CARBON 33K 5% 1/4W	
R216	1-249-429-11	CARBON 10K 5% 1/4W	
R301	1-247-885-00	CARBON 180K 5% 1/4W	
R302	1-249-417-11	CARBON 1K 5% 1/4W	
R303	1-249-423-11	CARBON 3.3K 5% 1/4W	
R304	1-249-421-11	CARBON 2.2K 5% 1/4W	
R305	1-249-423-11	CARBON 3.3K 5% 1/4W	
R306	1-249-423-11	CARBON 3.3K 5% 1/4W	
R309	1-247-889-00	CARBON 270K 5% 1/4W	
R310⚠	1-247-744-11	CARBON 270 5% 1/2W F	
R312	1-249-441-11	CARBON 100K 5% 1/4W	
R313	1-249-426-11	CARBON 5.6K 5% 1/4W	
R351	1-249-436-11	CARBON 39K 5% 1/4W	
R352	1-249-417-11	CARBON 1K 5% 1/4W	
R353	1-249-435-11	CARBON 33K 5% 1/4W	
R355	1-249-429-11	CARBON 10K 5% 1/4W	
R356	1-249-429-11	CARBON 10K 5% 1/4W	
R359	1-249-435-11	CARBON 33K 5% 1/4W	
R401	1-249-429-11	CARBON 10K 5% 1/4W	
R403	1-249-421-11	CARBON 2.2K 5% 1/4W	

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

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

Ref.No	Part No.	Description				Remark
R404	1-249-413-11	CARBON	470	5%	1/4W	
R405	1-249-413-11	CARBON	470	5%	1/4W	
R406	1-249-425-11	CARBON	4.7K	5%	1/4W	
R407	1-249-431-11	CARBON	15K	5%	1/4W	
R408	1-249-435-11	CARBON	33K	5%	1/4W	
R409	1-249-403-11	CARBON	68	5%	1/4W	
R410	1-249-429-11	CARBON	10K	5%	1/4W (SLV-373VP)	
R411	1-249-423-11	CARBON	3.3K	5%	1/4W	
R412	1-249-405-11	CARBON	100	5%	1/4W	
R413	1-249-414-11	CARBON	560	5%	1/4W	
R414	1-249-433-11	CARBON	22K	5%	1/4W	
R415	1-249-409-11	CARBON	220	5%	1/4W	
R416	1-249-435-11	CARBON	33K	5%	1/4W	
R417	1-249-431-11	CARBON	15K	5%	1/4W	
R419	1-249-414-11	CARBON	560	5%	1/4W	
R419	1-249-419-11	CARBON	1.5K	5%	1/4W	
R420	1-249-420-11	CARBON	1.8K	5%	1/4W	
R421	1-249-428-11	CARBON	8.2K	5%	1/4W	
R422	1-249-417-11	CARBON	1K	5%	1/4W	
R425	1-249-422-11	CARBON	2.7K	5%	1/4W	
R426	1-249-421-11	CARBON	2.2K	5%	1/4W	
R427	1-249-415-11	CARBON	680	5%	1/4W	
R428	1-249-414-11	CARBON	560	5%	1/4W	
R429	1-249-422-11	CARBON	2.7K	5%	1/4W	
R430	1-249-424-11	CARBON	3.9K	5%	1/4W	
R431	1-249-421-11	CARBON	2.2K	5%	1/4W	
R432	1-249-423-11	CARBON	3.3K	5%	1/4W	
R433	1-249-429-11	CARBON	10K	5%	1/4W (SLV-373VP)	
R434	1-249-419-11	CARBON	1.5K	5%	1/4W	
R435	1-247-903-00	CARBON	1M	5%	1/4W	
R436	1-249-422-11	CARBON	2.7K	5%	1/4W	
R437	1-249-429-11	CARBON	10K	5%	1/4W	
R438	1-249-424-11	CARBON	3.9K	5%	1/4W	
R451	1-249-429-11	CARBON	10K	5%	1/4W	
R452	1-249-429-11	CARBON	10K	5%	1/4W	
R453	1-249-422-11	CARBON	2.7K	5%	1/4W	
R454	1-249-434-11	CARBON	27K	5%	1/4W	
R456	1-249-429-11	CARBON	10K	5%	1/4W	
R457	1-247-903-00	CARBON	1M	5%	1/4W	
R458	1-249-414-11	CARBON	560	5%	1/4W	
R459	1-249-418-11	CARBON	1.2K	5%	1/4W	
R460	1-249-417-11	CARBON	1K	5%	1/4W	
R461	1-249-441-11	CARBON	100K	5%	1/4W	
R501	1-249-429-11	CARBON	10K	5%	1/4W	
R502	1-249-429-11	CARBON	10K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-249-417-11	CARBON	1K	5%	1/4W	
R505	1-249-433-11	CARBON	22K	5%	1/4W	
R506	1-249-433-11	CARBON	22K	5%	1/4W	
R507	1-249-433-11	CARBON	22K	5%	1/4W	
R508	1-249-433-11	CARBON	22K	5%	1/4W	
R509	1-249-433-11	CARBON	22K	5%	1/4W	
R510	1-249-433-11	CARBON	22K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R511	1-249-414-11	CARBON	560	5%	1/4W	
R512	1-249-417-11	CARBON	1K	5%	1/4W	
R513	1-249-429-11	CARBON	10K	5%	1/4W	
R514	1-249-429-11	CARBON	10K	5%	1/4W	
R515	1-249-417-11	CARBON	1K	5%	1/4W	
R516	1-249-441-11	CARBON	100K	5%	1/4W	
R517	1-249-433-11	CARBON	22K	5%	1/4W	
R518	1-249-433-11	CARBON	22K	5%	1/4W	
R524	1-249-429-11	CARBON	10K	5%	1/4W	
R525	1-249-429-11	CARBON	10K	5%	1/4W	
R528	1-249-429-11	CARBON	10K	5%	1/4W	
R553	1-249-433-11	CARBON	22K	5%	1/4W	
R554	1-249-433-11	CARBON	22K	5%	1/4W	
R555	1-249-413-11	CARBON	470	5%	1/4W	
R556	1-249-417-11	CARBON	1K	5%	1/4W	
R560	1-249-437-11	CARBON	47K	5%	1/4W	
R601	1-249-437-11	CARBON	47K	5%	1/4W	
R602	1-249-437-11	CARBON	47K	5%	1/4W	
R604	1-249-437-11	CARBON	47K	5%	1/4W	
R606	1-249-437-11	CARBON	47K	5%	1/4W	
R607	1-249-429-11	CARBON	10K	5%	1/4W	
R608	1-249-429-11	CARBON	10K	5%	1/4W	
R609	1-249-429-11	CARBON	10K	5%	1/4W	
R610	1-249-429-11	CARBON	10K	5%	1/4W	
R611	1-249-429-11	CARBON	10K	5%	1/4W	
R612	1-249-417-11	CARBON	1K	5%	1/4W	
R613	1-249-417-11	CARBON	1K	5%	1/4W	
R614	1-249-437-11	CARBON	47K	5%	1/4W	
R615	1-249-439-11	CARBON	68K	5%	1/4W	
R616	1-249-421-11	CARBON	2.2K	5%	1/4W	
R617	1-249-429-11	CARBON	10K	5%	1/4W	
R618	1-249-427-11	CARBON	6.8K	5%	1/4W	
R619	1-249-419-11	CARBON	1.5K	5%	1/4W	
R620	1-249-421-11	CARBON	2.2K	5%	1/4W	
R634	1-249-417-11	CARBON	1K	5%	1/4W	
R635	1-249-417-11	CARBON	1K	5%	1/4W	
R636	1-249-426-11	CARBON	5.6K	5%	1/4W	
R637	1-249-426-11	CARBON	5.6K	5%	1/4W	
R638	1-249-408-11	CARBON	180	5%	1/4W	
R639	1-249-404-00	CARBON	82	5%	1/4W	
R640	1-249-406-11	CARBON	120	5%	1/4W	
R641	1-249-406-11	CARBON	120	5%	1/4W	
R642	1-249-403-11	CARBON	68	5%	1/4W	
R644	1-249-426-11	CARBON	5.6K	5%	1/4W	
R645	1-249-417-11	CARBON	1K	5%	1/4W	
R670	1-249-413-11	CARBON	470	5%	1/4W	
R671	1-249-429-11	CARBON	10K	5%	1/4W	
R672	1-249-429-11	CARBON	10K	5%	1/4W	
R700	1-249-435-11	CARBON	33K	5%	1/4W	
R708	1-249-417-11	CARBON	1K	5%	1/4W	
R709	1-249-417-11	CARBON	1K	5%	1/4W	
R712	1-249-409-11	CARBON	220	5%	1/4W	
R713	1-249-417-11	CARBON	1K	5%	1/4W	

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

Ref.No	Part No.	Description		Remark
R714	1-249-421-11	CARBON	2.2K 5% 1/4W	
R715	1-249-405-11	CARBON	100 5% 1/4W	
R716	1-249-417-11	CARBON	1K 5% 1/4W	
R717	1-249-417-11	CARBON	1K 5% 1/4W	
R720	1-249-417-11	CARBON	1K 5% 1/4W	
R722	1-249-417-11	CARBON	1K 5% 1/4W	
R723	1-249-417-11	CARBON	1K 5% 1/4W	
R725	1-247-826-00	CARBON	620 5% 1/4W (SLV-373UB)	
R725	1-249-417-11	CARBON	1K 5% 1/4W (SLV-373/373VP)	
R726	1-247-883-00	CARBON	150K 5% 1/4W (SLV-373/373UB)	
R727	1-247-883-00	CARBON	150K 5% 1/4W (SLV-373/373UB)	
R728	1-249-405-11	CARBON	100 5% 1/4W	
R730	1-249-424-11	CARBON	3.9K 5% 1/4W (SLV-373/373UB)	
R731	1-249-429-11	CARBON	10K 5% 1/4W (SLV-373/373UB)	
R732	1-249-417-11	CARBON	1K 5% 1/4W	
R735	1-249-421-11	CARBON	2.2K 5% 1/4W (SLV-373VP)	
R737	1-249-424-11	CARBON	3.9K 5% 1/4W (SLV-373VP)	
R739	1-249-417-11	CARBON	1K 5% 1/4W	
R740	1-249-429-11	CARBON	10K 5% 1/4W	
R759	1-249-438-11	CARBON	56K 5% 1/4W (SLV-373/373UB)	
R760	1-249-438-11	CARBON	56K 5% 1/4W (SLV-373/373UB)	
R801	1-249-429-11	CARBON	10K 5% 1/4W (SLV-373VP)	
R802	1-249-429-11	CARBON	10K 5% 1/4W (SLV-373VP)	
R803	1-249-441-11	CARBON	100K 5% 1/4W (SLV-373VP)	
R804	1-247-901-11	CARBON	820K 5% 1/4W (SLV-373VP)	
R805	1-249-405-11	CARBON	100 5% 1/4W (SLV-373VP)	
R806	1-247-901-11	CARBON	820K 5% 1/4W (SLV-373VP)	
R807	1-249-426-11	CARBON	5.6K 5% 1/4W (SLV-373VP)	
R808	1-247-903-00	CARBON	1M 5% 1/4W (SLV-373VP)	
R810	1-249-421-11	CARBON	2.2K 5% 1/4W (SLV-373VP)	
R811	1-249-429-11	CARBON	10K 5% 1/4W (SLV-373VP)	
R812	1-249-429-11	CARBON	10K 5% 1/4W (SLV-373VP)	
R951	1-249-421-11	CARBON	2.2K 5% 1/4W	

MODULATOR

RF401⚠	1-466-328-11	MODULATOR, RF (RFU-2017)(SLV-373/373VP)	
RF401⚠	1-466-347-11	MODULATOR, RF (RFU-2024)(SLV-373UB)	

VARIABLE RESISTOR

RV451	1-238-015-11	RES, ADJ, CARBON 4.7K	
RV501	1-238-019-11	RES, ADJ, CARBON 47K	

TUNER

TU701	1-465-260-11	TUNER, ET (BTP-2C401) (SLV-373/373VP)	
TU701	1-465-262-11	TUNER, ET (BTP-2U601) (SLV-373UB)	

CRYSTAL

X401	1-577-289-11	VIBRATOR, CRYSTAL 17.7MHZ	
X501	1-577-383-11	VIBRATOR, CRYSTAL 16MHz	
X551	1-567-192-11	OSCILLATOR, CERAMIC 4MHz	

Ref.No	Part No.	Description			Remark
	*A-6727-187-A	YC-90 BOARD, COMPLETE **********			
	*3-738-015-01	COVER, (DIA. 6) CARBON VR			
	*3-746-013-01	HOLDER (Y), PC BOARD			

CAPACITOR

C701	1-164-095-11	CERAMIC	0.01MF	10%	16V
C702	1-164-096-11	CERAMIC	0.01MF		50V
C703	1-124-927-11	ELECT	4.7MF	20%	50V
C704	1-126-233-11	ELECT	22MF	20%	25V
C705	1-162-851-11	CERAMIC	0.1MF	10%	16V
C706	1-124-927-11	ELECT	4.7MF	20%	50V
C707	1-124-927-11	ELECT	4.7MF	20%	50V
C708	1-164-046-11	CERAMIC	10PF	0.5PF	50V
C709	1-124-446-11	ELECT	47MF	20%	10V
C710	1-164-098-11	CERAMIC	0.047MF		12V
C711	1-102-820-00	CERAMIC	330PF	5%	50V
C712	1-102-822-00	CERAMIC	390PF	5%	50V
C713	1-162-293-31	CERAMIC	820PF	10%	50V
C714	1-164-096-11	CERAMIC	0.01MF		50V
C715	1-164-096-11	CERAMIC	0.01MF		50V
C716	1-124-446-11	ELECT	47MF	20%	10V
C718	1-124-927-11	ELECT	4.7MF	20%	50V
C723	1-164-096-11	CERAMIC	0.01MF		50V
C724	1-164-097-11	CERAMIC	0.022MF		50V
C725	1-164-096-11	CERAMIC	0.01MF		50V
C726	1-164-096-11	CERAMIC	0.01MF		50V
C727	1-164-096-11	CERAMIC	0.01MF		50V
C728	1-164-060-11	CERAMIC	39PF	5%	50V
C730	1-164-096-11	CERAMIC	0.01MF		50V
C731	1-124-446-11	ELECT	47MF	20%	10V
C732	1-164-068-11	CERAMIC	82PF	5%	50V
C733	1-164-058-11	CERAMIC	33PF	5%	50V
C734	1-102-824-00	CERAMIC	470PF	5%	50V
C735	1-162-851-11	CERAMIC	0.1MF	10%	16V
C736	1-164-066-11	CERAMIC	68PF	5%	50V
C737	1-164-096-11	CERAMIC	0.01MF		50V
C738	1-124-925-11	ELECT	2.2MF	20%	50V
C739	1-162-280-31	CERAMIC	82PF	10%	50V
C740	1-164-056-11	CERAMIC	27PF	5%	50V
C741	1-124-446-11	ELECT	47MF	20%	10V
C743	1-162-851-11	CERAMIC	0.1MF	10%	16V
C744	1-124-446-11	ELECT	47MF	20%	10V
C746	1-164-096-11	CERAMIC	0.01MF		50V
C747	1-162-851-11	CERAMIC	0.1MF	10%	16V
C749	1-162-851-11	CERAMIC	0.1MF	10%	16V
C750	1-164-096-11	CERAMIC	0.01MF		50V
C751	1-162-851-11	CERAMIC	0.1MF	10%	16V
C753	1-124-446-11	ELECT	47MF	20%	10V
C754	1-164-058-11	CERAMIC	33PF	5%	50V
C755	1-164-072-11	CERAMIC	120PF	5%	50V
C756	1-102-978-00	CERAMIC	220PF	5%	50V

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

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

Ref.No	Part No.	Description			Remark
C760	1-164-096-11	CERAMIC	0.01MF		50V
C763	1-124-927-11	ELECT	4.7MF	20%	50V
C766	1-124-927-11	ELECT	4.7MF	20%	50V
C768	1-164-096-11	CERAMIC	0.01MF		50V
C770	1-102-978-00	CERAMIC	220PF	5%	50V
C780	1-162-851-11	CERAMIC	0.1MF	10%	16V
C782	1-164-068-11	CERAMIC	82PF	5%	50V
C783	1-102-820-00	CERAMIC	330PF	5%	50V
C785	1-164-096-11	CERAMIC	0.01MF		50V
C790	1-164-096-11	CERAMIC	0.01MF		50V
C801	1-162-851-11	CERAMIC	0.1MF	10%	16V
C802	1-124-446-11	ELECT	47MF	20%	10V
C803	1-164-096-11	CERAMIC	0.01MF		50V
C804	1-162-851-11	CERAMIC	0.1MF	10%	16V
C805	1-164-097-11	CERAMIC	0.022MF		50V
C806	1-164-096-11	CERAMIC	0.01MF		50V
C807	1-164-096-11	CERAMIC	0.01MF		50V
C808	1-164-096-11	CERAMIC	0.01MF		50V
C809	1-102-978-00	CERAMIC	220PF	5%	50V
C810	1-102-978-00	CERAMIC	220PF	5%	50V
C811	1-164-031-11	CERAMIC	33PF	5%	50V
C812	1-164-096-11	CERAMIC	0.01MF		50V
C813	1-124-443-00	ELECT	100MF	20%	6.3V
C814	1-124-443-00	ELECT	100MF	20%	6.3V
C815	1-136-169-00	MYLAR	0.22MF	5%	50V
C816	1-124-927-11	ELECT	4.7MF	20%	50V
C817	1-164-096-11	CERAMIC	0.01MF		50V
C818	1-161-061-11	CERAMIC	0.068MF	10%	25V
C819	1-124-443-00	ELECT	100MF	20%	6.3V
C820	1-164-070-11	CERAMIC	100PF	5%	50V
C823	1-124-927-11	ELECT	4.7MF	20%	50V
C825	1-162-851-11	CERAMIC	0.1MF	10%	16V
C826	1-164-098-11	CERAMIC	0.047MF		12V
C827	1-162-851-11	CERAMIC	0.1MF	10%	16V
C828	1-164-096-11	CERAMIC	0.01MF		50V
C829	1-164-096-11	CERAMIC	0.01MF		50V
C830	1-162-851-11	CERAMIC	0.1MF	10%	16V
C831	1-101-361-00	CERAMIC	150PF	5%	50V
C832	1-124-791-11	ELECT	1MF	20%	50V
C833	1-164-096-11	CERAMIC	0.01MF		50V
C834	1-123-382-00	ELECT	3.3MF	20%	50V
C835	1-164-096-11	CERAMIC	0.01MF		50V
C836	1-162-851-11	CERAMIC	0.1MF	10%	16V
C837	1-164-052-11	CERAMIC	18PF	5%	50V
C840	1-164-096-11	CERAMIC	0.01MF		50V
C841	1-164-096-11	CERAMIC	0.01MF		50V
C842	1-164-096-11	CERAMIC	0.01MF		50V
C844	1-164-096-11	CERAMIC	0.01MF		50V
C847	1-124-446-11	ELECT	47MF	20%	10V
C848	1-164-096-11	CERAMIC	0.01MF		50V
C849	1-130-495-00	MYLAR	0.1MF	5%	50V
C850	1-164-091-11	CERAMIC	0.0022MF	10%	50V
C851	1-102-978-00	CERAMIC	220PF	5%	50V

Ref.No	Part No.	Description			Remark
C852	1-162-851-11	CERAMIC	0.1MF	10%	16V
C853	1-124-446-11	ELECT	47MF	20%	10V
C854	1-124-927-11	ELECT	4.7MF	20%	50V
C855	1-124-446-11	ELECT	47MF	20%	10V
C857	1-164-096-11	CERAMIC	0.01MF		50V
C858	1-164-072-11	CERAMIC	120PF	5%	50V
C859	1-123-875-11	ELECT	10MF	20%	50V
C860	1-123-875-11	ELECT	10MF	20%	50V
C861	1-164-092-11	CERAMIC	0.0033MF	10%	25V
C862	1-101-361-00	CERAMIC	150PF	5%	50V
C863	1-124-791-11	ELECT	1MF	20%	50V
C864	1-124-446-11	ELECT	47MF	20%	10V
C865	1-124-446-11	ELECT	47MF	20%	10V
C866	1-124-791-11	ELECT	1MF	20%	50V
C867	1-123-875-11	ELECT	10MF	20%	50V
C868	1-164-077-11	CERAMIC	220PF	10%	50V
C869	1-164-096-11	CERAMIC	0.01MF		50V
C870	1-164-056-11	CERAMIC	27PF	5%	50V
C871	1-164-056-11	CERAMIC	27PF	5%	50V
C872	1-164-096-11	CERAMIC	0.01MF		50V
C873	1-164-054-11	CERAMIC	22PF	5%	50V
C874	1-164-096-11	CERAMIC	0.01MF		50V
C875	1-162-851-11	CERAMIC	0.1MF	10%	16V
C876	1-130-475-00	MYLAR	0.0022MF	5%	50V
C877	1-164-096-11	CERAMIC	0.01MF		50V
C878	1-130-475-00	MYLAR	0.0022MF	5%	50V
C879	1-164-098-11	CERAMIC	0.047MF		12V
C880	1-124-791-11	ELECT	1MF	20%	50V
C881	1-123-875-11	ELECT	10MF	20%	50V
C882	1-123-382-00	ELECT	3.3MF	20%	50V
C883	1-164-096-11	CERAMIC	0.01MF		50V
C884	1-164-096-11	CERAMIC	0.01MF		50V
C885	1-123-875-11	ELECT	10MF	20%	50V
C886	1-162-851-11	CERAMIC	0.1MF	10%	16V
C887	1-162-851-11	CERAMIC	0.1MF	10%	16V
C888	1-123-875-11	ELECT	10MF	20%	50V
C889	1-164-062-11	CERAMIC	47PF	5%	50V
C890	1-164-050-11	CERAMIC	15PF	5%	50V
C891	1-164-066-11	CERAMIC	68PF	5%	50V
C892	1-164-066-11	CERAMIC	68PF	5%	50V
C893	1-124-446-11	ELECT	47MF	20%	10V
C894	1-124-446-11	ELECT	47MF	20%	10V
C895	1-164-096-11	CERAMIC	0.01MF		50V
C896	1-124-446-11	ELECT	47MF	20%	10V
C897	1-124-927-11	ELECT	4.7MF	20%	50V
C898	1-164-096-11	CERAMIC	0.01MF		50V
C899	1-164-085-11	CERAMIC	0.001MF	10%	50V

CONNECTOR

CN701	1-506-471-11	PIN, CONNECTOR 6P
CN702	1-506-473-11	PIN, CONNECTOR 8P
CN703	1-506-476-11	PIN, CONNECTOR 11P
CN704	1-506-469-11	PIN, CONNECTOR 4P

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

Ref.No	Part No.	Description	Remark
		DIODE	
D701	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
D801	8-719-911-19	DIODE 1SS119	
		DELAY LINE	
DL801	1-415-602-11	DELAY LINE, GLASS	
		FILTER	
FL701	1-236-312-11	FILTER, BAND PASS	
FL801	1-239-915-11	FILTER, BAND PASS	
FL802	1-236-311-11	FILTER, BAND PASS (5.06MHz)	
FL803	1-527-849-00	FILTER, CERAMIC	
FL850	1-527-943-00	FILTER, CERAMIC (4.5MHz)	
		IC	
IC701	8-759-420-07	IC AN3231K	
IC702	8-752-321-89	IC CXL5003P	
IC801	8-759-320-78	IC HA118016NT	
IC802	8-759-822-05	IC LA7213	
IC850	8-759-904-95	IC BA7007	
IC860	8-759-420-53	IC AN3592K	
IC861	8-759-991-54	IC MSM6989RS	
IC862	8-752-006-12	IC CX20061	
IC863	8-759-822-05	IC LA7213	
		COIL	
L701	1-408-421-00	INDUCTOR 100UH	
L704	1-408-420-00	INDUCTOR 82UH	
L705	1-408-422-00	INDUCTOR 120UH	
L706	1-408-421-00	INDUCTOR 100UH	
L707	1-408-421-00	INDUCTOR 100UH	
L708	1-408-421-00	INDUCTOR 100UH	
L709	1-408-421-00	INDUCTOR 100UH	
L712	1-408-410-00	INDUCTOR 12UH	
L713	1-408-413-00	INDUCTOR 22UH	
L726	1-408-424-00	INDUCTOR 180UH	
L801	1-408-421-00	INDUCTOR 100UH	
L802	1-408-427-00	INDUCTOR 330UH	
L803	1-408-429-00	INDUCTOR 470UH	
L805	1-408-409-00	INDUCTOR 10UH	
L806	1-408-408-00	INDUCTOR 8.2UH	
L807	1-408-408-00	INDUCTOR 8.2UH	
L809	1-407-499-00	INDUCTOR 3.9MMH	
L850	1-407-499-00	INDUCTOR 3.9MMH	
L861	1-408-415-00	INDUCTOR 33UH	
L862	1-408-409-00	INDUCTOR 10UH	
L863	1-408-409-00	INDUCTOR 10UH	
L880	1-408-421-00	INDUCTOR 100UH	
L881	1-408-421-00	INDUCTOR 100UH	
L882	1-408-411-00	INDUCTOR 15UH	
L883	1-408-414-00	INDUCTOR 27UH	

Ref.No	Part No.	Description	Remark
L891	1-408-409-00	INDUCTOR 10UH	
L892	1-408-409-00	INDUCTOR 10UH	
L893	1-408-409-00	INDUCTOR 10UH	
		TRANSISTOR	
Q702	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q704	8-729-900-89	TRANSISTOR DTC144ES	
Q705	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q706	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q710	8-729-900-89	TRANSISTOR DTC144ES	
Q711	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q721	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q722	8-729-900-89	TRANSISTOR DTC144ES	
Q723	8-729-900-89	TRANSISTOR DTC144ES	
Q801	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q803	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q804	8-729-900-80	TRANSISTOR DTC114ES	
Q805	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q806	8-729-900-89	TRANSISTOR DTC144ES	
Q807	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q808	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q809	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q810	8-729-900-65	TRANSISTOR DTA144ES	
Q813	8-729-903-02	TRANSISTOR DTA143XS	
Q850	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q851	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q852	8-729-900-89	TRANSISTOR DTC144ES	
Q860	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q862	8-729-900-89	TRANSISTOR DTC144ES	
Q880	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q881	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q882	8-729-920-68	TRANSISTOR 2SA933S-QR	
Q883	8-729-920-70	TRANSISTOR 2SC1740S-QR	
Q884	8-729-900-89	TRANSISTOR DTC144ES	
		RESISTOR	
R701	1-247-887-00	CARBON 220K 5% 1/4W	
R702	1-249-421-11	CARBON 2.2K 5% 1/4W	
R703	1-249-428-11	CARBON 8.2K 5% 1/4W	
R704	1-249-427-11	CARBON 6.8K 5% 1/4W	
R705	1-249-426-11	CARBON 5.6K 5% 1/4W	
R706	1-249-421-11	CARBON 2.2K 5% 1/4W	
R707	1-247-834-11	CARBON 1.3K 5% 1/4W	
R708	1-247-818-11	CARBON 300 5% 1/4W	
R709	1-249-423-11	CARBON 3.3K 5% 1/4W	
R710	1-249-438-11	CARBON 56K 5% 1/4W	
R713	1-249-421-11	CARBON 2.2K 5% 1/4W	
R714	1-249-425-11	CARBON 4.7K 5% 1/4W	
R717	1-249-420-11	CARBON 1.8K 5% 1/4W	
R718	1-249-422-11	CARBON 2.7K 5% 1/4W	
R719	1-249-426-11	CARBON 5.6K 5% 1/4W	
R720	1-249-424-11	CARBON 3.9K 5% 1/4W	
R722	1-249-419-11	CARBON 1.5K 5% 1/4W	

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

Ref.No	Part No.	Description				Remark
R723	1-249-426-11	CARBON	5.6K	5%	1/4W	
R724	1-249-419-11	CARBON	1.5K	5%	1/4W	
R725	1-249-412-11	CARBON	390	5%	1/4W	
R726	1-249-416-11	CARBON	820	5%	1/4W	
R727	1-249-413-11	CARBON	470	5%	1/4W	
R728	1-247-897-11	CARBON	560K	5%	1/4W	
R729	1-249-437-11	CARBON	47K	5%	1/4W	
R730	1-249-437-11	CARBON	47K	5%	1/4W	
R731	1-249-413-11	CARBON	470	5%	1/4W	
R733	1-249-413-11	CARBON	470	5%	1/4W	
R734	1-249-434-11	CARBON	27K	5%	1/4W	
R735	1-249-429-11	CARBON	10K	5%	1/4W	
R736	1-249-409-11	CARBON	220	5%	1/4W	
R737	1-249-413-11	CARBON	470	5%	1/4W	
R738	1-249-405-11	CARBON	100	5%	1/4W	
R741	1-249-417-11	CARBON	1K	5%	1/4W	
R744	1-247-903-00	CARBON	1M	5%	1/4W	
R754	1-249-412-11	CARBON	390	5%	1/4W	
R755	1-259-880-11	CARBON	2.2M	5%	1/4W	
R761	1-249-437-11	CARBON	47K	5%	1/4W	
R763	1-249-423-11	CARBON	3.3K	5%	1/4W	
R774	1-249-433-11	CARBON	22K	5%	1/4W	
R775	1-249-435-11	CARBON	33K	5%	1/4W	
R776	1-249-410-11	CARBON	270	5%	1/4W	
R777	1-249-417-11	CARBON	1K	5%	1/4W	
R778	1-249-415-11	CARBON	680	5%	1/4W	
R779	1-249-413-11	CARBON	470	5%	1/4W	
R780	1-249-429-11	CARBON	10K	5%	1/4W	
R781	1-249-422-11	CARBON	2.7K	5%	1/4W	
R801	1-249-417-11	CARBON	1K	5%	1/4W	
R802	1-249-417-11	CARBON	1K	5%	1/4W	
R803	1-249-413-11	CARBON	470	5%	1/4W	
R805	1-249-429-11	CARBON	10K	5%	1/4W	
R806	1-249-427-11	CARBON	6.8K	5%	1/4W	
R807	1-249-417-11	CARBON	1K	5%	1/4W	
R808	1-249-418-11	CARBON	1.2K	5%	1/4W	
R809	1-249-417-11	CARBON	1K	5%	1/4W	
R810	1-249-415-11	CARBON	680	5%	1/4W	
R811	1-249-417-11	CARBON	1K	5%	1/4W	
R812	1-249-423-11	CARBON	3.3K	5%	1/4W	
R813	1-249-416-11	CARBON	820	5%	1/4W	
R814	1-249-415-11	CARBON	680	5%	1/4W	
R815	1-249-429-11	CARBON	10K	5%	1/4W	
R816	1-249-441-11	CARBON	100K	5%	1/4W	
R817	1-249-405-11	CARBON	100	5%	1/4W	
R818	1-249-412-11	CARBON	390	5%	1/4W	
R819	1-249-421-11	CARBON	2.2K	5%	1/4W	
R820	1-249-427-11	CARBON	6.8K	5%	1/4W	
R822	1-249-420-11	CARBON	1.8K	5%	1/4W	
R823	1-249-423-11	CARBON	3.3K	5%	1/4W	
R824	1-249-417-11	CARBON	1K	5%	1/4W	
R825	1-249-422-11	CARBON	2.7K	5%	1/4W	
R826	1-249-427-11	CARBON	6.8K	5%	1/4W	

Ref.No	Part No.	Description				Remark
R827	1-249-424-11	CARBON	3.9K	5%	1/4W	
R828	1-249-410-11	CARBON	270	5%	1/4W	
R831	1-249-429-11	CARBON	10K	5%	1/4W	
R832	1-249-409-11	CARBON	220	5%	1/4W	
R833	1-249-411-11	CARBON	330	5%	1/4W	
R834	1-249-422-11	CARBON	2.7K	5%	1/4W	
R835	1-249-411-11	CARBON	330	5%	1/4W	
R836	1-249-411-11	CARBON	330	5%	1/4W	
R837	1-249-425-11	CARBON	4.7K	5%	1/4W	
R838	1-249-437-11	CARBON	47K	5%	1/4W	
R839	1-249-417-11	CARBON	1K	5%	1/4W	
R846	1-249-425-11	CARBON	4.7K	5%	1/4W	
R847	1-249-421-11	CARBON	2.2K	5%	1/4W	
R848	1-249-421-11	CARBON	2.2K	5%	1/4W	
R849	1-249-429-11	CARBON	10K	5%	1/4W	
R850	1-249-421-11	CARBON	2.2K	5%	1/4W	
R851	1-249-434-11	CARBON	27K	5%	1/4W	
R854	1-247-891-00	CARBON	330K	5%	1/4W	
R855	1-249-411-11	CARBON	330	5%	1/4W	
R856	1-247-887-00	CARBON	220K	5%	1/4W	
R857	1-249-417-11	CARBON	1K	5%	1/4W	
R858	1-249-435-11	CARBON	33K	5%	1/4W	
R862	1-249-423-11	CARBON	3.3K	5%	1/4W	
R863	1-249-430-11	CARBON	12K	5%	1/4W	
R864	1-249-425-11	CARBON	4.7K	5%	1/4W	
R865	1-249-441-11	CARBON	100K	5%	1/4W	
R867	1-249-417-11	CARBON	1K	5%	1/4W	
R868	1-249-421-11	CARBON	2.2K	5%	1/4W	
R869	1-249-433-11	CARBON	22K	5%	1/4W	
R870	1-249-435-11	CARBON	33K	5%	1/4W	
R872	1-249-409-11	CARBON	220	5%	1/4W	
R873	1-247-885-00	CARBON	180K	5%	1/4W	
R874	1-249-429-11	CARBON	10K	5%	1/4W	
R880	1-249-417-11	CARBON	1K	5%	1/4W	
R881	1-249-411-11	CARBON	330	5%	1/4W	
R882	1-249-417-11	CARBON	1K	5%	1/4W	
R883	1-249-419-11	CARBON	1.5K	5%	1/4W	
R884	1-249-436-11	CARBON	39K	5%	1/4W	
R885	1-249-429-11	CARBON	10K	5%	1/4W	
R886	1-249-413-11	CARBON	470	5%	1/4W	
R887	1-249-409-11	CARBON	220	5%	1/4W	
R888	1-249-415-11	CARBON	680	5%	1/4W	
R889	1-249-417-11	CARBON	1K	5%	1/4W	
R890	1-249-417-11	CARBON	1K	5%	1/4W	
R891	1-247-887-00	CARBON	220K	5%	1/4W	
R892	1-249-429-11	CARBON	10K	5%	1/4W	
R893	1-249-417-11	CARBON	1K	5%	1/4W	
R894	1-249-405-11	CARBON	100	5%	1/4W	
R895	1-249-413-11	CARBON	470	5%	1/4W	
R896	1-249-429-11	CARBON	10K	5%	1/4W	
R897	1-249-429-11	CARBON	10K	5%	1/4W	
R898	1-249-429-11	CARBON	10K	5%	1/4W	
R899	1-249-429-11	CARBON	10K	5%	1/4W	

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

Ref.No	Part No.	Description			Remark
		VARIABLE RESISTOR			
RV701	1-238-015-11	RES, ADJ, CARBON 4.7K (AGC)			
RV702	1-238-015-11	RES, ADJ, CARBON 4.7K (DEV)			
RV703	1-238-017-11	RES, ADJ, CARBON 22K (CARR)			
RV704	1-238-017-11	RES, ADJ, CARBON 22K (DARK CLIP)			
RV705	1-238-017-11	RES, ADJ, CARBON 22K (WHITE CLIP)			
RV707	1-238-012-11	RES, ADJ, CARBON 1K (CCD LEVEL)			
RV708	1-238-016-11	RES, ADJ, CARBON 10K (DEMOD GAIN)			
RV710	1-238-012-11	RES, ADJ, CARBON 1K (REC Y)			
RV801	1-238-012-11	RES, ADJ, CARBON 1K (REC C)			
RV850	1-238-011-11	RES, ADJ, CARBON 470 (SECAM DET)			
RV860	1-238-020-11	RES, ADJ, CARBON 100K (PLAY J O G AFC)			
RV861	1-238-012-11	RES, ADJ, CARBON 1K (0.5H CCD LEVEL)			
		COIL			
T802	1-409-467-11	COIL (TRAP 7.8K)			
T850	1-409-467-11	COIL (TRAP 7.8K)			
		CRYSTAL			
X801	1-577-651-11	VIBRATOR, CRYSTAL (4.433619MHz)			
**********					
	*A-6727-189-A	RP-100 BOARD, COMPLETE **********			
	*3-746-014-01	CASE (MAIN), GRP			
	*3-746-015-01	CASE (UPPER), GRP			
		CAPACITOR			
C001	1-162-839-11	CERAMIC	0.01MF	10%	16V
C002	1-124-465-00	ELECT	0.47MF	20%	50V
C003	1-124-465-00	ELECT	0.47MF	20%	50V
C004	1-164-031-11	CERAMIC	33PF	5%	50V
C005	1-164-031-11	CERAMIC	33PF	5%	50V
C006	1-124-465-00	ELECT	0.47MF	20%	50V
C007	1-124-465-00	ELECT	0.47MF	20%	50V
C008	1-162-306-11	CERAMIC	0.01MF	20%	16V
C009	1-162-306-11	CERAMIC	0.01MF	20%	16V
C010	1-124-465-00	ELECT	0.47MF	20%	50V
C011	1-124-465-00	ELECT	0.47MF	20%	50V
C012	1-164-027-11	CERAMIC	22PF	5%	50V
C013	1-164-031-11	CERAMIC	33PF	5%	50V
C014	1-124-465-00	ELECT	0.47MF	20%	50V
C015	1-124-465-00	ELECT	0.47MF	20%	50V
C016	1-162-839-11	CERAMIC	0.01MF	10%	16V
C017	1-162-306-11	CERAMIC	0.01MF	20%	16V
C018	1-126-154-11	ELECT	47MF	20%	6.3V
C019	1-162-306-11	CERAMIC	0.01MF	20%	16V
C020	1-126-154-11	ELECT	47MF	20%	6.3V
C021	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C022	1-161-375-00	CERAMIC	0.0022MF	30%	16V
C023	1-162-839-11	CERAMIC	0.01MF	10%	16V

Ref.No	Part No.	Description			Remark
C024	1-124-463-00	ELECT	0.1MF	20%	50V
C025	1-162-839-11	CERAMIC	0.01MF	10%	16V
C026	1-162-306-11	CERAMIC	0.01MF	20%	16V
C027	1-164-027-11	CERAMIC	22PF	5%	50V
C028	1-162-839-11	CERAMIC	0.01MF	10%	16V
C029	1-162-839-11	CERAMIC	0.01MF	10%	16V
C030	1-164-023-11	CERAMIC	15PF	5%	50V
C031	1-162-839-11	CERAMIC	0.01MF	10%	16V
C032	1-164-033-11	CERAMIC	39PF	5%	50V
C033	1-162-839-11	CERAMIC	0.01MF	10%	16V
C034	1-102-973-00	CERAMIC	100PF	5%	50V
C035	1-101-888-00	CERAMIC	68PF	5%	50V
C036	1-102-820-00	CERAMIC	330PF	5%	50V
C037	1-162-839-11	CERAMIC	0.01MF	10%	16V
C038	1-126-154-11	ELECT	47MF	20%	6.3V
C039	1-162-839-11	CERAMIC	0.01MF	10%	16V
C040	1-162-839-11	CERAMIC	0.01MF	10%	16V
C041	1-162-839-11	CERAMIC	0.01MF	10%	16V
C042	1-162-839-11	CERAMIC	0.01MF	10%	16V
		CONNECTOR			
CN001	1-569-709-11	SOCKET, CONNECTOR 8P			
CN002	*1-564-030-00	PIN, CONNECTOR 5P			
CN003	1-506-489-11	PIN, CONNECTOR 10P			
CN004	1-506-489-11	PIN, CONNECTOR 10P			
		DIODE			
D001	8-719-911-19	DIODE 1SS119			
D002	8-719-911-19	DIODE 1SS119			
D003	8-719-911-19	DIODE 1SS119			
		IC			
IC001	8-759-320-52	IC HA118019NT			
		COIL			
L001	1-407-169-XX	INDUCTOR	100UH		
L002	1-407-169-XX	INDUCTOR	100UH		
L003	1-408-975-21	INDUCTOR	27UH		
L004	1-408-973-21	INDUCTOR	18UH		
L005	1-408-977-21	INDUCTOR	39UH		
L006	1-408-970-21	INDUCTOR	10UH		
L007	1-408-973-21	INDUCTOR	18UH		
L008	1-408-985-21	INDUCTOR	180UH		
L009	1-407-169-XX	INDUCTOR	100UH		
		TRANSISTOR			
Q002	8-729-920-68	TRANSISTOR 2SA933S-QR			
Q003	8-729-920-70	TRANSISTOR 2SC1740S-QR			
Q004	8-729-900-89	TRANSISTOR DTC144ES			
Q005	8-729-920-70	TRANSISTOR 2SC1740S-QR			
Q006	8-729-900-89	TRANSISTOR DTC144ES			
Q007	8-729-900-89	TRANSISTOR DTC144ES			

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

Ref.No	Part No.	Description				Remark
		RESISTOR				
R001	1-249-404-00	CARBON	82	5%	1/4W	
R002	1-249-403-11	CARBON	68	5%	1/4W	
R003	1-249-404-00	CARBON	82	5%	1/4W	
R004	1-249-405-11	CARBON	100	5%	1/4W	
R005	1-249-429-11	CARBON	10K	5%	1/4W	
R007	1-249-429-11	CARBON	10K	5%	1/4W	
R008	1-249-429-11	CARBON	10K	5%	1/4W	
R009	1-247-891-00	CARBON	330K	5%	1/4W	
R010	1-249-420-11	CARBON	1.8K	5%	1/4W	
R011	1-247-895-00	CARBON	470K	5%	1/4W	
R012	1-249-433-11	CARBON	22K	5%	1/4W	
R013	1-249-432-11	CARBON	18K	5%	1/4W	
R014	1-249-417-11	CARBON	1K	5%	1/4W	
R016	1-249-417-11	CARBON	1K	5%	1/4W	
R017	1-249-421-11	CARBON	2.2K	5%	1/4W	
R018	1-249-421-11	CARBON	2.2K	5%	1/4W	
R019	1-249-412-11	CARBON	390	5%	1/4W	
R020	1-249-412-11	CARBON	390	5%	1/4W	
R021	1-249-416-11	CARBON	820	5%	1/4W	
R022	1-249-426-11	CARBON	5.6K	5%	1/4W	
R023	1-249-421-11	CARBON	2.2K	5%	1/4W	
R024	1-249-413-11	CARBON	470	5%	1/4W	
R025	1-249-415-11	CARBON	680	5%	1/4W	
R026	1-249-414-11	CARBON	560	5%	1/4W	
R027	1-249-416-11	CARBON	820	5%	1/4W	
R028	1-249-417-11	CARBON	1K	5%	1/4W	
R029	1-249-418-11	CARBON	1.2K	5%	1/4W	
R030	1-249-419-11	CARBON	1.5K	5%	1/4W	
R031	1-249-421-11	CARBON	2.2K	5%	1/4W	
R032	1-249-417-11	CARBON	1K	5%	1/4W	
R033	1-249-429-11	CARBON	10K	5%	1/4W	
**********						
	*A-6754-052-A	MF-95 BOARD, COMPLETE				
		**********				
		CAPACITOR				
C061	1-164-075-11	CERAMIC	150PF	10%	50V	
C062	1-164-075-11	CERAMIC	150PF	10%	50V	
C063	1-164-159-11	CERAMIC	0.1MF		50V	
C099	1-162-851-11	CERAMIC	0.1MF	10%	16V	
		CONNECTOR				
CN060	1-568-667-11	CONNECTOR, BOARD TO BOARD 14P				
		JACK				
CNJ061	1-569-444-11	JACK, PIN 2P (AUDIO/VIDEO)				
		DIODE				
D061	8-719-940-82	DIODE SLR-34MC3				
D062	8-719-940-82	DIODE SLR-34MC3				
D063	8-719-110-36	DIODE RD13ES-B2				
D064	8-719-110-36	DIODE RD13ES-B2				
D065	8-719-110-36	DIODE RD13ES-B2				
D066	8-719-940-99	DIODE SLR-34VC3 (SLV-373UB)				
D067	8-719-940-99	DIODE SLR-34VC3 (SLV-373UB)				
		IC				
IC061	1-466-131-11	CATCHER RAY BLOCK GP1U52X				
		COIL				
L061	1-408-425-00	INDUCTOR	220UH			
		TRANSISTOR				
Q061	8-729-900-61	TRANSISTOR DTA114ES (SLV-373UB)				
		RESISTOR				
R061	1-249-437-11	CARBON	47K	5%	1/4W	
R062	1-249-423-11	CARBON	3.3K	5%	1/4W	
R063	1-249-407-11	CARBON	150	5%	1/4W	
R064	1-249-407-11	CARBON	150	5%	1/4W	
R065	1-249-427-11	CARBON	6.8K	5%	1/4W	
R066	1-247-848-11	CARBON	5.1K	5%	1/4W	
R067	1-249-404-00	CARBON	82	5%	1/4W	
R068	1-249-422-11	CARBON	2.7K	5%	1/4W	
R069	1-249-427-11	CARBON	6.8K	5%	1/4W	
R070	1-249-417-11	CARBON	1K	5%	1/4W	
R071	1-249-409-11	CARBON	220	5%	1/4W	(SLV-373UB)
R072	1-249-409-11	CARBON	220	5%	1/4W	(SLV-373UB)
R099	1-249-401-11	CARBON	47	5%	1/4W	
		VARIABLE RESISTOR				
RV061	1-230-819-11	RES, VAR, CARBON 2K (SHARPNESS)				
		SWITCH				
S061	1-571-977-11	SWITCH, TACTIL (POWER)				
S062	1-571-977-11	SWITCH, TACTIL (EJECT)				
S063	1-570-854-11	SWITCH, SLIDE (VTR MODE)				
S065	1-571-977-11	SWITCH, TACTIL (VPS) (SLV-373VP)				
**********						
	*1-635-173-11	MF-96 BOARD				
		**********				
		CONNECTOR				
CN080	1-569-336-11	CONNECTOR, BOARD TO BOARD 7P				
		SWITCH				
S081	1-466-302-11	SWITCH, ROTARY				

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

MD-40

Ref.No	Part No.	Description			Remark
	*A-6754-055-A	MD-40 BOARD, COMPLETE **********			
	*3-736-144-01	HOLDER, LED			
	3-736-149-01	HOLDER, ST SENSOR			
		CAPACITOR			
C001	1-161-494-00	CERAMIC	0.022MF	25V	
C002	1-161-494-00	CERAMIC	0.022MF	25V	
C003	1-124-240-71	ELECT	10MF 20%	25V	
C004	1-161-379-00	CERAMIC	0.01MF 30%	16V	
C005	1-124-240-71	ELECT	10MF 20%	25V	
C006	1-126-154-11	ELECT	47MF 20%	6.3V	
C008	1-164-159-11	CERAMIC	0.1MF	50V	
C009	1-164-159-11	CERAMIC	0.1MF	50V	
C013	1-164-159-11	CERAMIC	0.1MF	50V	
C014	1-164-159-11	CERAMIC	0.1MF	50V	
C015	1-164-159-11	CERAMIC	0.1MF	50V	
C016	1-124-240-71	ELECT	10MF 20%	25V	
C017	1-124-240-71	ELECT	10MF 20%	25V	
C018	1-124-240-71	ELECT	10MF 20%	25V	
C019	1-162-852-11	CERAMIC	0.15MF 10%	16V	
C020	1-162-851-11	CERAMIC	0.1MF 10%	16V	
C025	1-124-240-71	ELECT	10MF 20%	25V	
C026	1-124-240-71	ELECT	10MF 20%	25V	
C027	1-124-240-71	ELECT	10MF 20%	25V	
		CONNECTOR			
CN001	*1-564-201-11	PIN HEADER, ANGLE 10P			
CN002	1-569-335-11	CONNECTOR, BOARD TO BOARD 9P			
CN003	1-569-334-11	CONNECTOR, BOARD TO BOARD 5P			
CN004	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P			
CN005	1-506-468-11	PIN, CONNECTOR 3P			
CN006	1-569-333-11	CONNECTOR, BOARD TO BOARD 3P			
CN007	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P			
		DIODE			
D001	8-719-974-65	DIODE GL451V (LED)			
D002	8-719-109-97	DIODE RD6.8ES-B2			
D003	8-719-109-97	DIODE RD6.8ES-B2			
		IC			
IC002	8-759-938-12	IC BA10324			
IC004⚠	8-759-420-83	IC AN3814K			
IC005	8-759-008-72	IC LM393N			
		PHOTO SENSOR			
PH001	8-759-144-33	PHOTO SENSOR PS6002			
PH002	8-759-144-33	PHOTO SENSOR PS6002			
		TRANSISTOR			
Q001	8-729-921-53	PHOTO TRANSISTOR PT483F1			
Q002	8-729-921-53	PHOTO TRANSISTOR PT483F1			

Ref.No	Part No.	Description			Remark
		RESISTOR			
R001	1-249-423-11	CARBON	3.3K 5%	1/4W	
R002	1-249-423-11	CARBON	3.3K 5%	1/4W	
R003	1-249-426-11	CARBON	5.6K 5%	1/4W	
R004	1-249-426-11	CARBON	5.6K 5%	1/4W	
R005	1-249-420-11	CARBON	1.8K 5%	1/4W	
R006	1-249-441-11	CARBON	100K 5%	1/4W	
R007	1-249-441-11	CARBON	100K 5%	1/4W	
R008	1-249-425-11	CARBON	4.7K 5%	1/4W	
R009	1-249-409-11	CARBON	220 5%	1/4W	
R010	1-249-425-11	CARBON	4.7K 5%	1/4W	
R011	1-249-437-11	CARBON	47K 5%	1/4W	
R012	1-249-421-11	CARBON	2.2K 5%	1/4W	
R013	1-249-429-11	CARBON	10K 5%	1/4W	
R014	1-249-427-11	CARBON	6.8K 5%	1/4W	
R015	1-249-437-11	CARBON	47K 5%	1/4W	
R016	1-249-421-11	CARBON	2.2K 5%	1/4W	
R022	1-249-430-11	CARBON	12K 5%	1/4W	
R023	1-249-429-11	CARBON	10K 5%	1/4W	
R024	1-249-430-11	CARBON	12K 5%	1/4W	
R025	1-249-429-11	CARBON	10K 5%	1/4W	
R026	1-249-437-11	CARBON	47K 5%	1/4W	
R028	1-249-418-11	CARBON	1.2K 5%	1/4W	
R029	1-249-395-11	CARBON	15 5%	1/4W	
R030	1-249-395-11	CARBON	15 5%	1/4W	
R031	1-249-395-11	CARBON	15 5%	1/4W	
R032 ⚠	1-216-347-11	METAL OXIDE	0.68 5%	1W	F
		SWITCH			
S001	1-570-953-11	SWITCH, PUSH (1 KEY)			
S002	1-570-953-11	SWITCH, PUSH (1 KEY)			

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MISCELLANEOUS
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	A-6761-129-A	HEAD BLOCK ASSY, ACE
⚠	1-413-535-11	BLOCK, POWER (SLV-373UB)
⚠	1-413-537-11	BLOCK, POWER (SLV-373VP)
⚠	1-413-538-11	BLOCK, POWER (SLV-373)
	1-466-315-31	SWITCH BLOCK, CONTROL (SLV-373VP)
	1-543-647-11	HEAD, FE
	1-550-573-11	DRUM ASSY (DZR-22R)
	1-550-574-11	DRUM ASSY (DZL-22A-R)
CN001	1-506-482-11	PIN, CONNECTOR 3P
M903	X-3733-302-1	MOTOR ASSY, CAM
M904	X-3727-784-1	MOTOR ASSY (LOADING)
S001	1-571-920-11	SWITCH, ROTARY

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

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

ACCESSORIES AND PACKING MATERIALS

Part No.	Description	Remark
1-465-514-11	COMMANDER, REMOTE (RMT-V373)	
1-551-513-00	CORD ASSY, COAXIAL	
⚠.1-558-032-11	CORD, POWER (SLV-373UB)	
⚠.1-575-131-11	CORD, POWER (SLV-373)	
⚠.1-575-132-11	CORD, POWER (SLV-373VP)	
3-695-308-01	DRIVER, VOLUME	
*3-744-232-01	CUSHION (UPPER)	
*3-744-233-01	CUSHION (LOWER)	
*3-746-027-21	INDIVIDUAL CARTON	
3-751-655-11	MANUAL, INSTRUCTION (ENGLISH)(SLV-373UB)	
3-751-655-41	MANUAL, INSTRUCTION (SLV-373VP) (FRENCH/GERMAN/DUTCH/ITALIAN)	
3-751-655-51	MANUAL, INSTRUCTION (SLV-373) (SWEDISH SPANISH PORTUGUESE/ITALIAN)	
*3-751-893-41	CARD, CONTROL INSTANT	

HARDWARE LIST

SET-SCT

7-621-732-08	SET-SCT, HEX. 2X3 FLAT POINT	

STOP RING

7-624-102-04	STOP RING 1.5, TYPE -E	

SCREW

7-627-552-08	SCREW, PRECISION +P 1.7X2.5	
7-628-254-00	SCREW +PS 2.6X5	
7-682-547-04	SCREW +P 3X6	
7-682-548-04	SCREW +P 3X8	
7-682-645-01	SCREW +PS 3X4	
7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	

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

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

SECTION 7
MECHANICAL ADJUSTMENTS

Refer to "VHS MECHANICAL ADJUSTMENT MANUAL Ⅱ" separately issued for MECHANICAL ADJUSTMENTS.

PERIODIC CHECK AND REPLACEMENT

In order to obtain the best performance from this unit and make full use of its capabilities, and to extend the life of the unit and tapes, it is recommended that the following periodic checks and maintenance be performed.

* The following must be done after every repair regardless of how many hours the user has operated the machine.

CLEANING OF ROTATING HEAD DISK ASSEMBLY

1) Press a chamois cloth (Jig Ref. No. J-7) which has been dipped in cleaning fluid (Jig Ref. No. J-5) lightly against the rotating drum assembly, then do the cleaning by slowly rotating the rotating head disk by hand. (Never try to clean by using the motor to turn it.)
2) Never try to clean by moving the chamois cloth at a vertical angle to the head tip. There is a very great danger of damaging the head tip if this is doen.

CLEANING OF THE TAPE MOVEMENT SYSTEM

1) Clean the surfaces which the tape contacts during its movement (tape guide, drum assembly surface, capstan, pinch roller, etc.) with a chamois cloth that has been dipped in cleaning fluid.

CLEANING THE DRIVE SYSTEM

1) Clean the driving parts with a cloth that has been dipped in cleaning fluid.

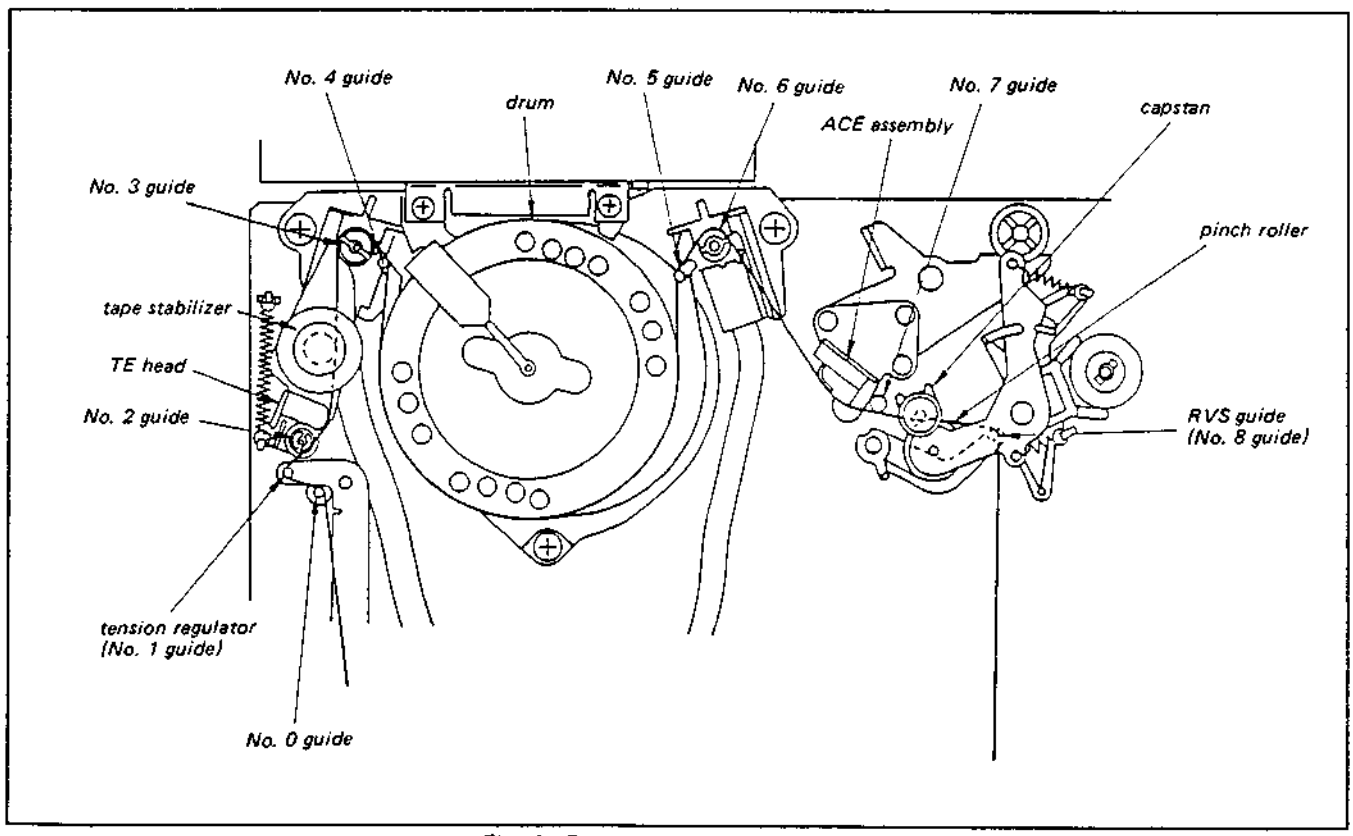


Fig. 1. Parts requiring cleaning

PERIODIC CHECK ITEMS

Perform the maintenance and check listed on the table below, according to users operating hours.

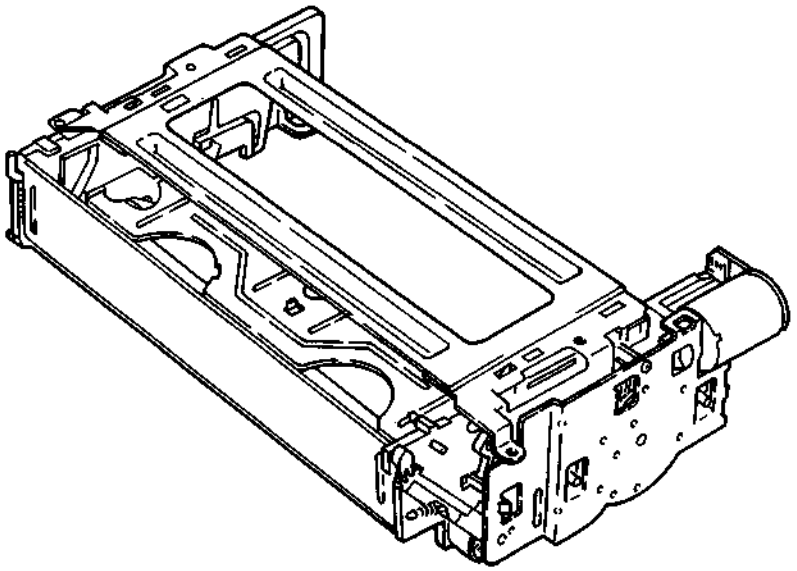
	Maintenance & Check	Replacement Part No.	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	Remarks
		Operating Hours (H)											
Tape Transportation System	Cleaning of tape transportation system		○	○	○	○	○	○	○	○	○	○	This cleaning must be done whenever a repair is made.
	Cleaning and degaussing of ACE ass'y	A-6761-129-A	○	○	○	○	○	○	○	○	○	○	
	Cleaning & degaussing of video disk ass'y		○	○	○	○	○	○	○	○	○	○	The life of the head varies, depending on operational conditions and method.
Driving System	Timing belt	3-736-013-01	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	This cleaning must be done whenever a repair is made.
Performance Confirmation	Abnormal sound		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Adjust or replace the section which causes abnormal sound.
	Measurement of FWD back tension		-	☆	-	☆	-	☆	-	☆	-	☆	Confirmation must be made according to "VHS MECHANICAL ADJUSTMENT MANUAL II" item 4-1-1. Specified value: adjust to 30 to 42 g·cm (when measured with torque cassette tape)
	Confirmation of brake system		-	☆	-	☆	-	☆	-	☆	-	☆	Confirmation must be made according to section
	Confirmation of record & playback functions		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Perform the confirmation whenever repair is made.
	Measurement of forward torque		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Adjust to 80-170 g·cm

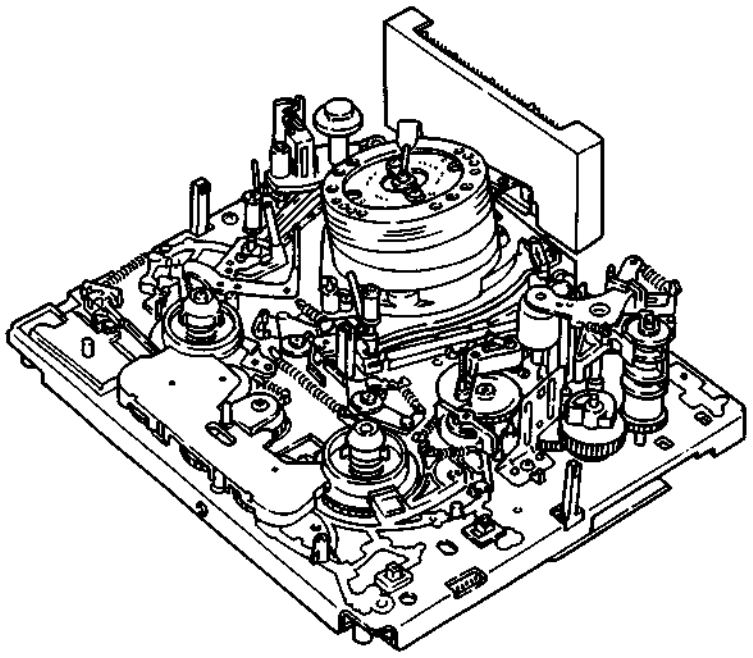
○ Cleaning ☆ Confirmation

Note: On overhaul
When overhauling the unit, replace parts as indicated in the above table.

VHS MECHANICAL ADJUSTMENT MANUAL II

- Please use in conjunction with the SERVICE MANUAL.
- This VHS MECHANICAL ADJUSTMENT MANUAL II can be used for NTSC system and PAL system.





MICROFILM

VHS VIDEO RECORDER

SONY®

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1926

1. PREPARATIONS FOR CHECKS, ADJUSTMENTS AND REPLACEMENT OF THE DECK MECHANISM

Note : Refer to "Replacement Method" in the Service Guide for instructions on replacing the cabinet and PC boards. DO not perform cassette loading or threading with the VCR positioned upside-down.

1-1. LOADING AND UNLOADING VIDEO CASSETTES WITH THE POWER OFF. (Fig. 1-1.)

1-1-1. Manual loading and unloading

1) Rotate the loading motor in the direction of arrow Ⓐ until loading is compleated.
(When unloading, rotate the loading motor in the direction of arrowⒷ.)

1-1-2. Loading and unloading using a separate power source.

1) Cassette loading is performed by applying approx. 10V (300 mA) to the power terminal of the loading motor using a stabilized DC power source.
(When unloading, apply the same voltage to the opposite polarity of the power terminal.)

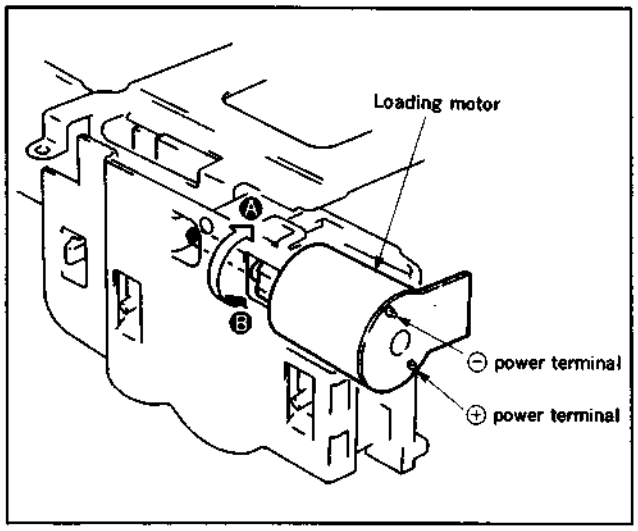


Fig. 1-1.

1-2. THREADING AND UNTHREADING WITH THE POWER OFF. (Fig. 1-2)

1-2-1. Manual threading and unthreading

1) Rotate the cam motor ● in the direction of arrow Ⓐ until threading is completed.
(When unthreading, rotate the cam motor ● in the direction of arrowⒷ.)

1-2-2. Threading and unthreading using a separate power source.

1) Threading is performed by applying approx. 10V (500 mA) to the power terminal for the cam motor ● using a DC stabilized power source.
(When unthreading, apply the same voltage to the opposite polarity of the power terminal.)

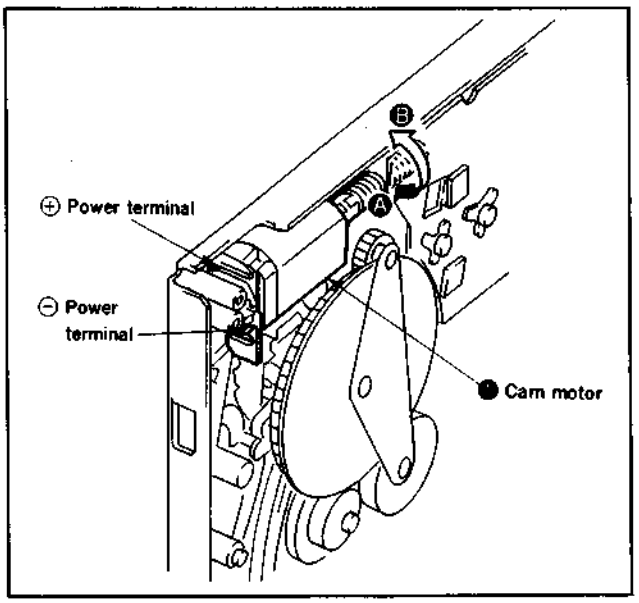


Fig. 1-2.

1-3. TO COMPLETE THREADING WITH THE FL CASSETTE CONTROLLER REMOVED. (Fig. 1-3)

1) Unplug the AC power cord from the power outlet.
2) Shield the supply, take-up sensors and the LED with black-masking tape.
3) Hold the cassatte down switch depressed by taping it, etc.
4) Plug the AC power cord into a power outlet.
   (At this time, the power should turn on and the tape rewinds for approx. 10 seconds, and the power turns off.)
5) Turn the power switch ON so that the mechanism is ready for loading.

Note : In this condition, the VTR is ready to operate in the different operating modes, including the record mode. At this time, rewind the tape for at least 15 seconds, then perform fast forward (FF).

Note : Following the above, be sure to reset the mechanism to the previous state as outlined below.

1) Remove the black-masking tape shielding the supply and take-up sensors, the LED and the tape holding cassette down switch.
2) Unplug the AC power cord from the power outlet to reset the system control microprocessor.

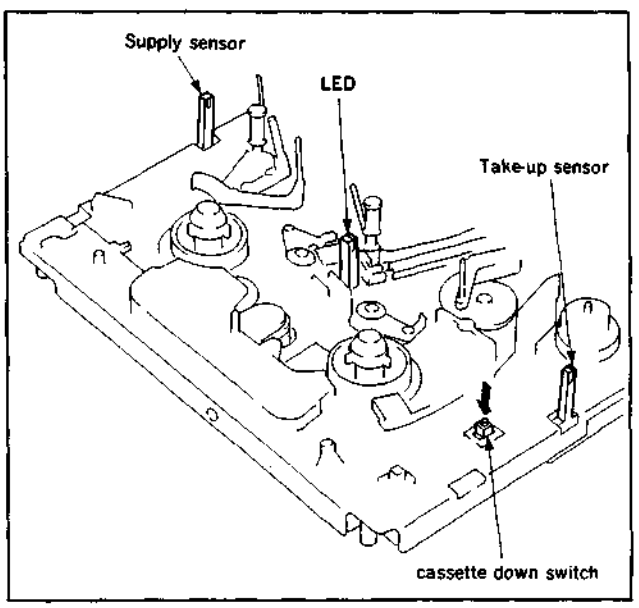


Fig. 1-3.

2. PERIODICAL INSPECTION AND REPLACEMENT

We recommend performing the following periodical inspections and maintenance in order to ensure that the unit operates in top condition and offers full performance, as well as realizes a long life of the mechanism and tapes.

* Be sure to perform the following maintenance procedures after the unit is repaired (regardless how long the unit has been used.)

2-1. CLEANING THE ROTARY HEAD DISC ASS'Y

1) Press Attach a deer skin cloth (Jig. Ref. No. J-7) soaked in cleaning solution (Jig. Ref. No. J-5) lightly to the rotary drum ass'y, then turn the rotary head disc slowly by hand to clean the surface of the rotary drum ass'y. (At this time, do not turn on the power motor to rotate the rotary head disc for cleaning.)
2) Also, do not wipe the drum ass'y by moving the deer skin cloth vertically across the head as this could damage of the tip of the head.

2-2. CLEANING THE TAPE TRANSPORT SYSTEM

1) Clean the tape transport surfaces (tape guide, a drum ass'y surfaces, capstan, pinch roller, etc.) with a deer skin cloth soaked in an approved in the recommended cleaning solution.

2-3. CLEANING THE DRIVE SYSTEM

1) Wipe the drive mechanism with an ordinary cloth soaked in an approved cleaning solution.

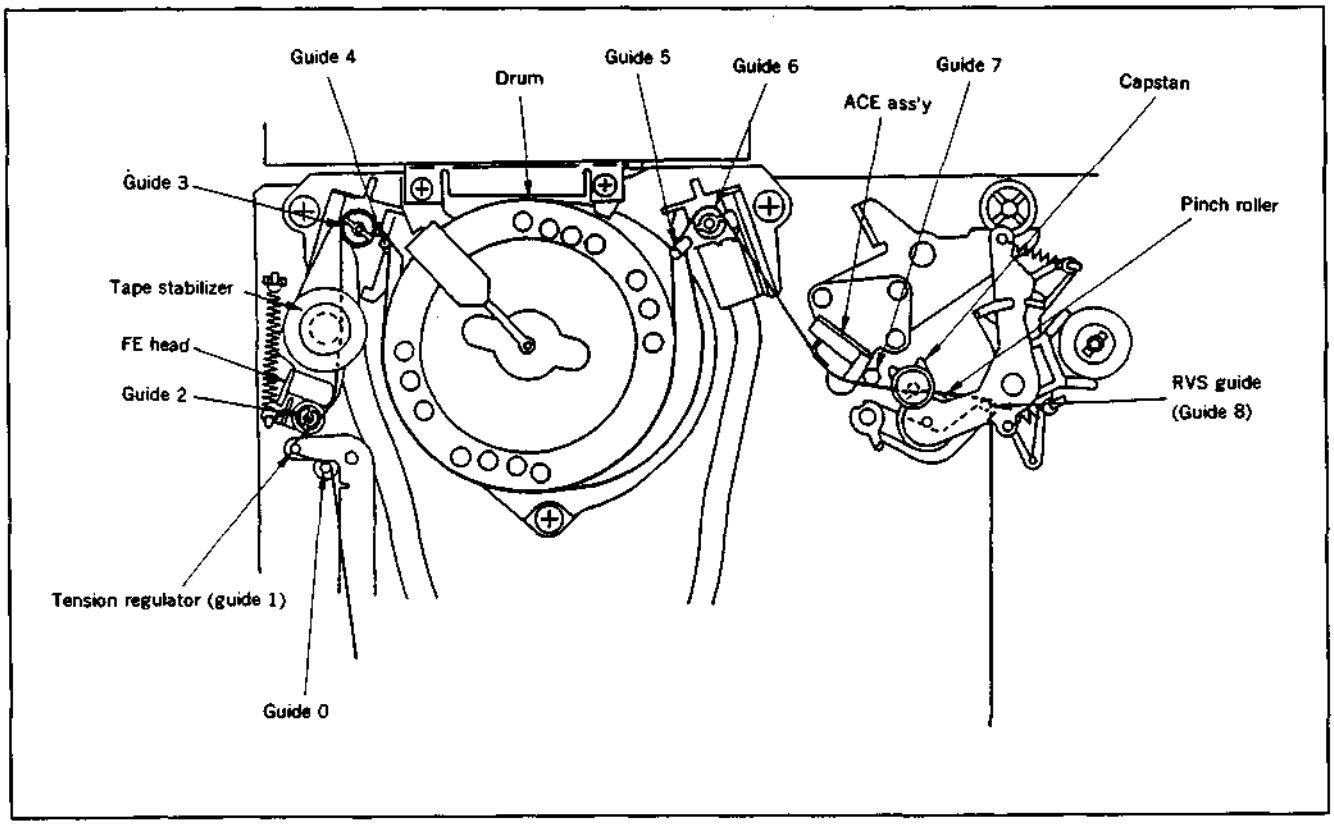


Fig. 2-1.

2-4. PERIODIC MAINTENANCE

Location of Maintenance and Check		User Hours / Replacement Part No.	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	Remarks
Performance Check	Clean tape running surfaces	——	○	○	○	○	○	○	○	○	○	○	Always perform after repair.
	Clean, degauss ACE ass'y	——	○	○	○	○	○	○	○	○	○	○	
	Clean, degauss video disc ass'y	——	○	○	○	○	○	○	○	○	○	○	Head life is greatly affected by environment and method of use.
Driving System	Reel belt	3-736-013-01	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Always perform after repair.
Tape Running System	Abnormal noise	——	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Adjust or replace source of abnormal noise.
	Back tension measurement	——	–	☆	–	☆	–	☆	–	☆	–	☆	Check according to 4-1-1. Spec : 24 — 34g/cm (Measured with torque cassette)
	Brake system check	——	–	☆	–	☆	–	☆	–	☆	–	☆	
	REC/PB function check	——	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Always perform after repair.
	Forward torque measurement		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Spec : 80 — 140 g•cm

○ Cleaning ☆ Check

Note : Refer to the above items for part replacement when performing an overhaul.

2-5. SERVICE TOOLS AND JIGS

Ref. No.	Description	Part No.	Printing on jig	Remarks
J-1	Master plane	H-7099-279-H		
J-2	Reel disc height jig	H-7099-038-H		
J-3	Torque gauge adapter	H-7099-035-H		
J-4	Torque gauge	H-7099-039-H		
J-5	0.93mm Allen wrench	H-7099-202-H		
J-6	NTSC torque cassette VHT-063S PAL torque cassette	J-6082-011-A J-6082-066-A		For rewind torque and back tension
	NTSC torque cassette VHT-404S PAL torque cassette	J-6082-012-A J-6082-067-A		For cue/review
J-7	NTSC alignment tape JVC-MH-1 PAL alignment tape JVC-MH-2	H-7099-046-H H-7099-052-H		
	NTSC Hi-Fi alignment tape PAL Hi-Fi alignment tape	H-7099-153-H H-7099-175-H		
J-8	Cleaning fluid	Y-2031-001-0	———	
J-9	Chamois cloth	2-034-697-00	———	Cleaning
J-10	Head degausser	Widely available	———	Video, audio head degaussing
J-11	Small adjustment mirror (with handle) Small adjustment mirror (mirror only)	J-6080-029-A J-6080-030-1	SL-5052	For tape path and tape running adjustment and check

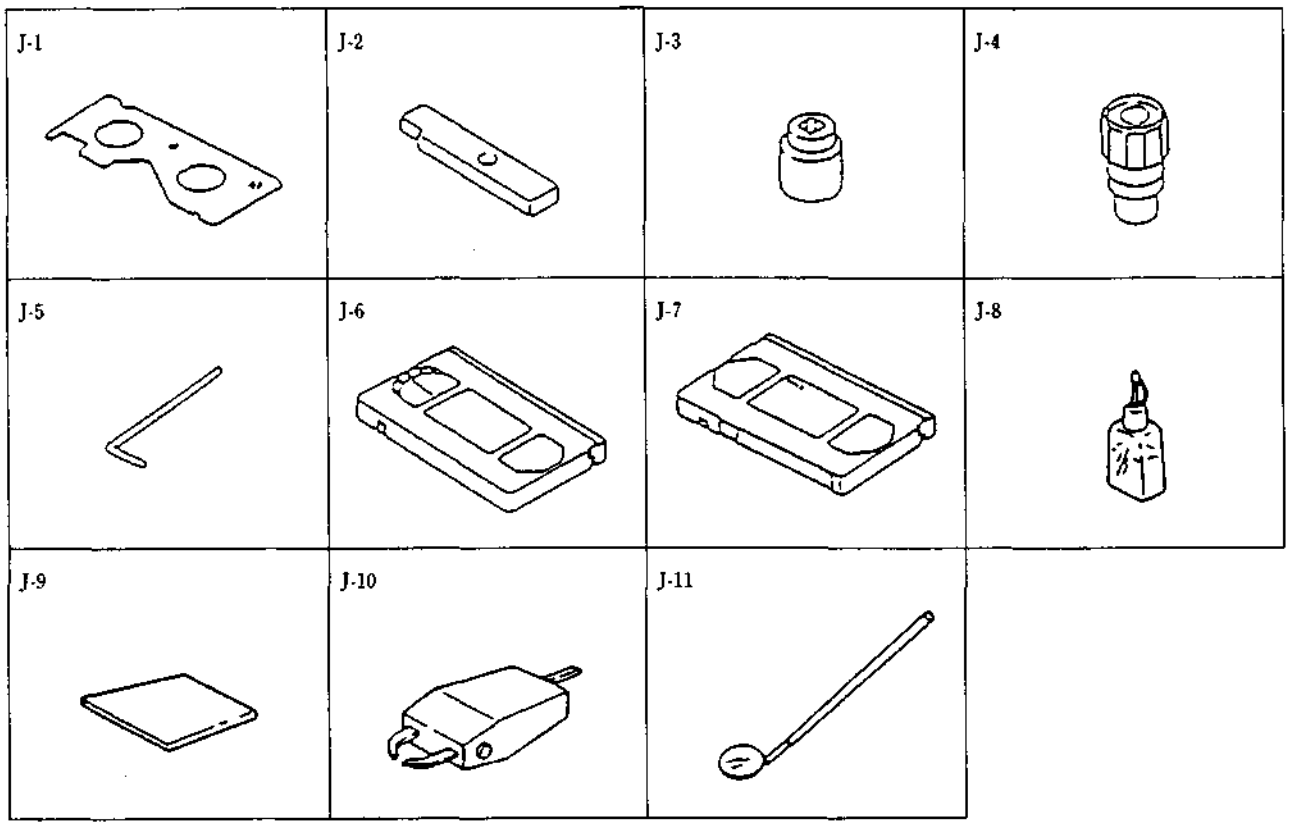


Fig. 2-2. Service tools and jigs

3. REPLACEMENT OF MAJOR COMPONENT PARTS OF THE DECK MECHANISM

Note : ○ Refer to "Replacement Method" in the Service Guide for replacing the cabinet and PC boards.
○ When mounting parts, reverse the replacement procedure while referring to "Precautions on Mounting Parts".
○ After grease coated parts such as gears are replaced, re-grease the replaced part.
○ Do not touch the guides (taped surface) and brake shoe directly with your fingers or grease them, etc.
○ Gears must be mounted so that they mesh with each other.

3-1. FL MECHANISM

3-1-1. FL door (Fig. 3-1.)

1) Press the claw ❶ in the direction of arrow Ⓐ, then remove the FL door ❷ in the direction of arrow Ⓑ.

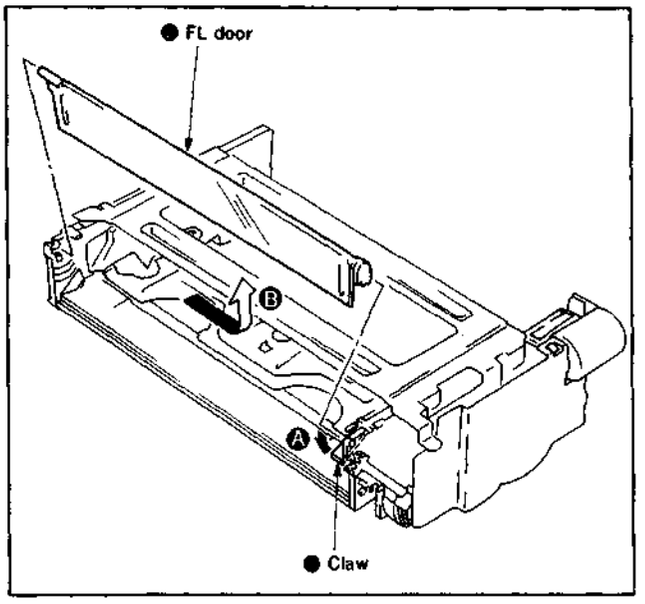


Fig. 3-1.

3-1-2. Erasure protection lever (Fig. 3-2)

1) Remove the spring ❶.
2) Disengage the claw ❷, then slide the erasure protection lever ❸ in the direction of arrow Ⓐ.
3) Disengage the erasure protection lever ❸ in the direction of arrow Ⓑ.

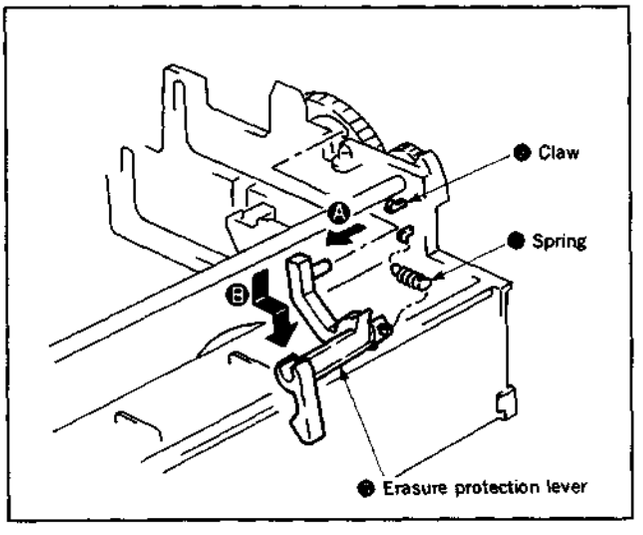


Fig. 3-2.

3-1-3. Gear cover ass'y (Fig. 3-3)

1) Disengage the four claws ❶, then remove the gear cover ass'y ❷.

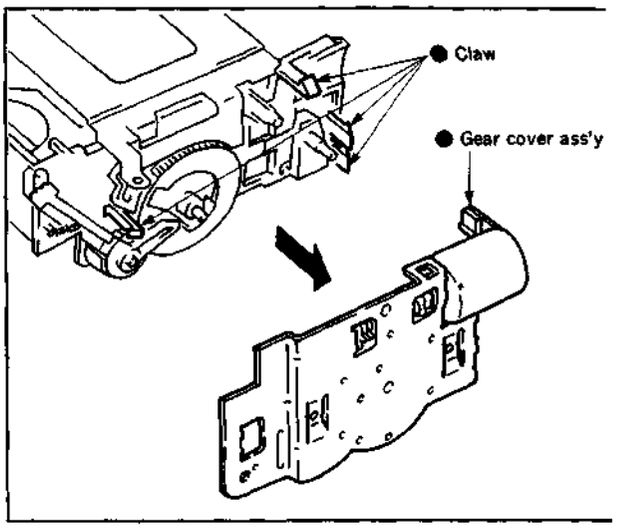


Fig. 3-3.

3-1-4. Loading motor, worm gear (FL), worm wheel (FL), worm bearing (Fig. 3-4)

1) Remove washer 3 ❶, then pull out the worm wheel (FL) ❷.
2) Remove the two screws ❸, then remove the loading motor ❹.
3) Remove the worm gear (FL) ❺ and worm bearing ❻.

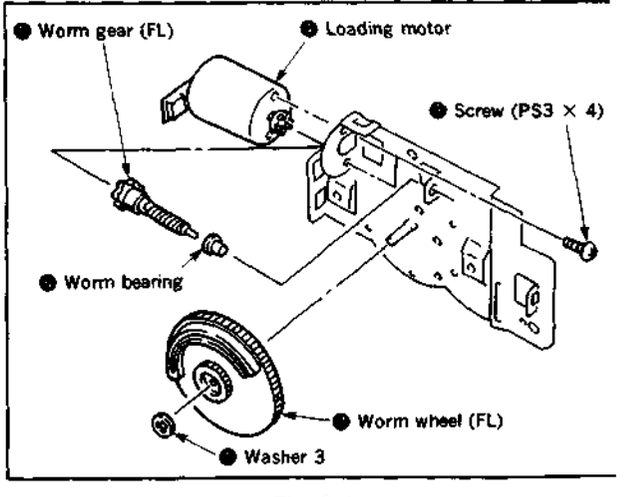


Fig. 3-4.

3-1-5. Door OPEN/CLOSE arm (Fig. 3-5)

1) Remove the spring ●.
2) Pull out the door OPEN/CLOSE arm ●.

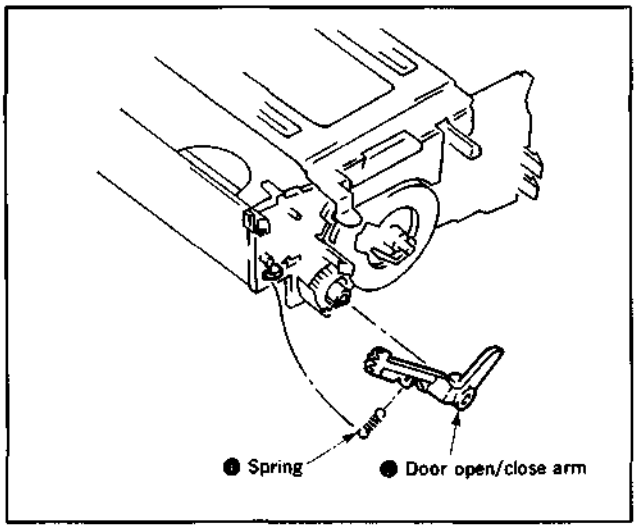


Fig. 3-5.

[Precautions on remounting] (Figs. 3-6 and 3-7.)

- ○ When mounting the gear cover ass'y, match up the two holes on the gear cover ass'y with the two holes on the worm wheel (FL) and then with the hole on the right drive arm ass'y.
- ○ Mesh the FL door and the door OPEN/CLOSE arm together as shown in Ⓐ section in the figure below.
- ○ The erasure protection lever shaft must fit into the groove on the left drive arm ass'y.

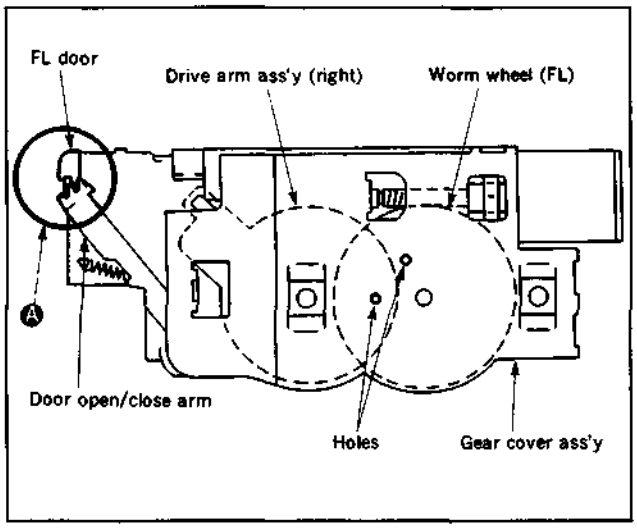


Fig. 3-6.

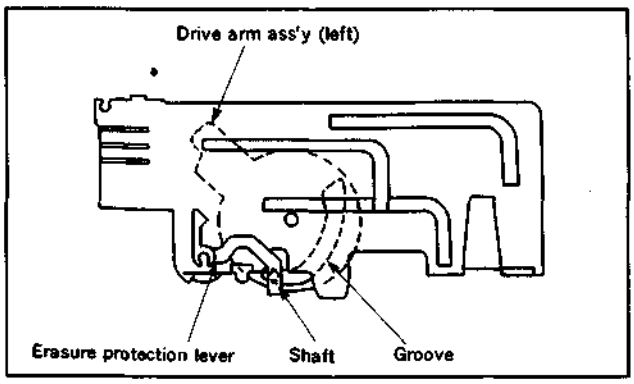


Fig. 3-7.

3-2. TS ASS'Y AND GUIDE ROLLER ASS'Y No. 2 (Fig. 3-8)

1) Remove the spring ●.
2) *Remove the TS ass'y ● in the direction of arrow Ⓐ.*
3) Turn guide roller ass'y No. 2 ● in the direction of arrow Ⓑ and pull it out.

[Precautions on remounting]

- ○ Clean the surface of guide roller No. 2 ● where the tape is attached.
- ○ Apply lubricant over the section shown in Figure A below.

[Adjustment after replacement]

- ○ Perform tape path adjustments as described in 4-1.

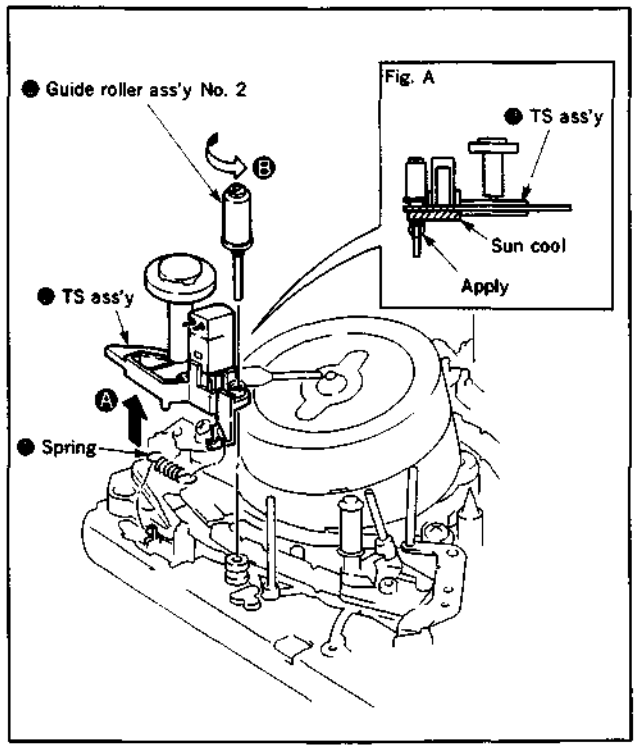


Fig. 3-8.

3-3. ACE ASS'Y (Fig. 3-9)

1) Slide the torsion coil spring ❶ in the direction of the arrow.
2) Remove the nylon nut N3 ❷, then pull out the ACE ass'y ❸.
3) Remove the ACE adjuster screw ❹.

[Precautions on remounting]

- ○ Clean the surface of the ACE ass'y ❸ where the tape is attached.
- ○ Hook both ends of the torsion coil spring ❶ to the ass'y as shown in Figure A below.
- ○ Adjust the ACE adjuster screw ❹ to the height shown in Figure A.

[Adjustment after replacement]

- ○ Perform tape path adjustments as described in 4-1.

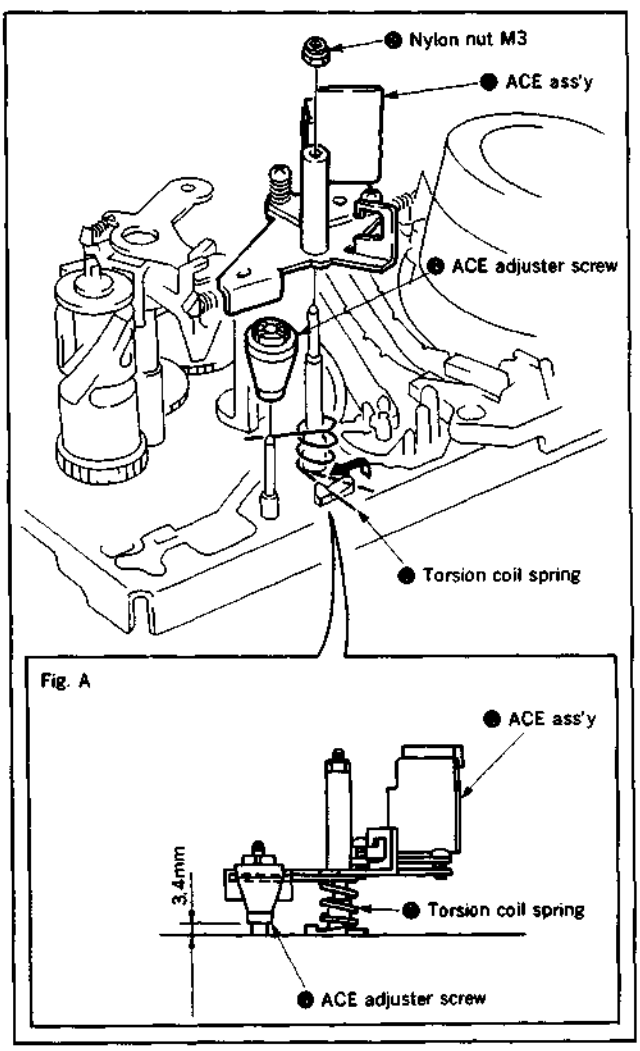


Fig. 3-9.

3-4. DRUM ASS'Y (Fig. 3-10)

1) Remove the three screws ❶, then remove the drum ass ❷.

[Precautions on remounting]

- ○ Do not touch the head tips ❸ and the ground plate directly with your fingers or tools.
- ○ Clean the surface of the drum ass'y ❷ where a tape attached.
- ○ The stopper ❹ must be attached at the point shown in tl figure below.
- ○ Screws must be fastened with a 6kg·cm (±1kg·cm) scre fastening torque. (The screws can be mounted in a order.)

[Adjustment after replacement]

- ○ Perform tape path adjustments as described in 4-1.

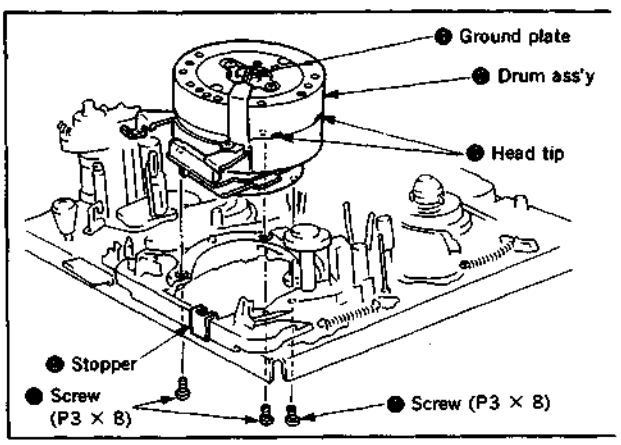


Fig. 3-10.

3-5. DRUM BASE ASS'Y (Fig. 3-11)

1) Remove the drum. (Refer to 3-4.)
2) Remove the three screws ❶, then remove the drum ba ass'y ❷.

[Precautions on remounting]

- ○ The spacer ❸ for the drum base must be mounted in i previous position as shown in the figure below. (Note that some units do not feature the spacer ❸.)
- ○ Fastening torque must be 10kg·cm (±1kg·cm)
- ○ The screws must be mounted in order of (a),(b) and (c).

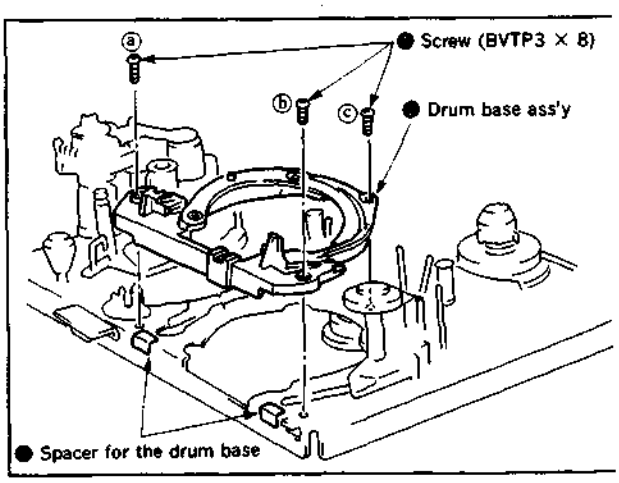


Fig. 3-11.

3-6. PINCH ROLLER ASS'Y AND ELEVATOR CAM (Fig. 3-12)

1) Remove the two claws ●, then pull out the stopper ●.
2) Pull out the pinch roller ass'y ●.
3) Pull out the elevator cam ●.

[Precautions on remounting]

○ Clean the surface of the pinch roller ass'y ● where the tape is attached.
○ Match up the ▯ marks on the elevator cam ● and cam gear, press ●.

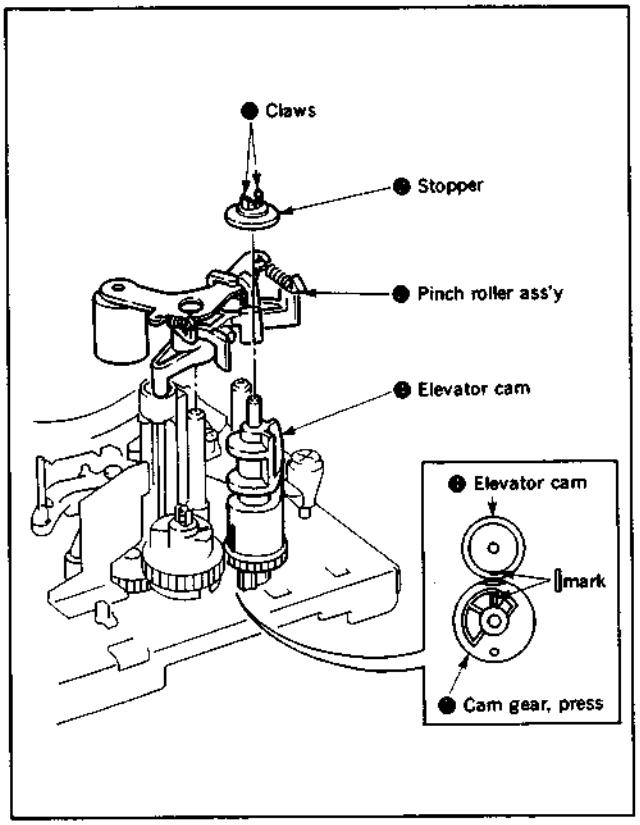


Fig. 3-12.

3-7. CAM GEAR, PRESS AND TRANSMISSION GEAR (Fig. 3-13)

1) Remove the pinch roller ass'y. (Refer to 3-6.)
2) Remove the screw ●, then remove the lid release plate ●.
3) Remove the two claws ●, then pull out the cam gear, press ●.
4) Remove the washer 2 ●, then pull out the transmission gear ●.

[Precautions on remounting]

○ Check the top and bottom of the transmission gear ●.
○ Match up the hole ● on the chassis with the hole ● on the cam gear, press ●.
○ Match up the ▯ mark on the cam gear, press ● with the ▯ mark on the alleviator cam ●.

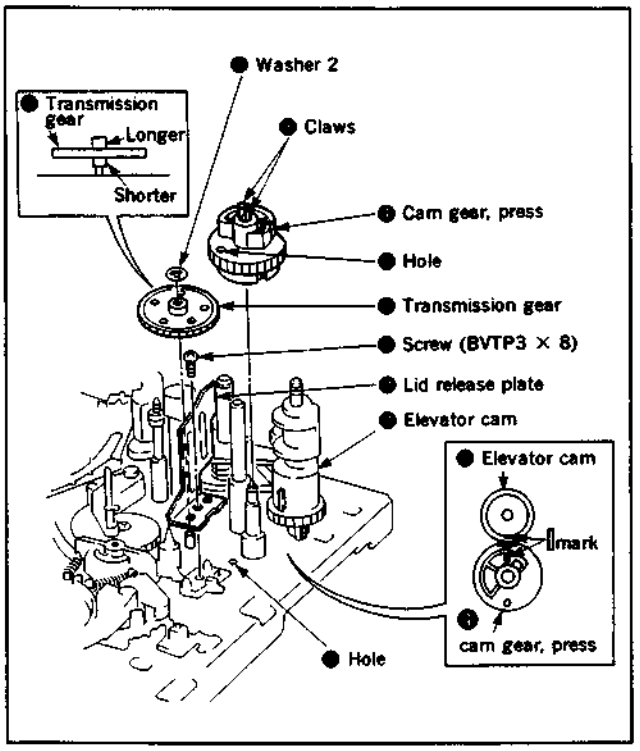


Fig. 3-13.

3-8. RVS ARM ASS'Y AND RVS CAM GEAR (Fig. 3-14)

1) Remove the nylon nut M2 ❶ and plastic washer ❷.
2) Disengage the claw ❸, then pull out the RVS arm ass'y ❹.
3) Remove washer 2 ❺, then pull out the RVS cam gear ❻.

[Precautions on remounting]

- ○ The holes ❼ in the chassis and in the RVS cam gear ❽ must match up. Also, make sure to match up the holes ❾ on the cam gear, press ❽ and the chassis.
- ○ The spring ❿ must be hooked as shown in Fig. A below.
- ○ Clean the surface of the RVS arm ass'y ❹ where a tape is attached.
- ○ Apply 1/2 drop of lubricant to the shaft ⓫.

[Adjustment after replacement]

- ○ Perform tape path adjustments as described in 4-1.

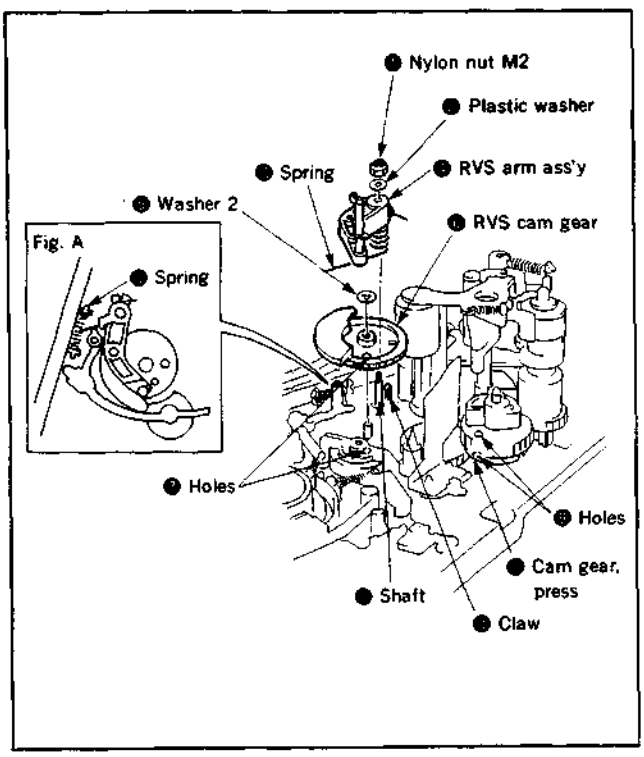


Fig. 3-14.

3-9. GUIDE No. 7 (Fig. 3-15)

1) Remove the nylon nut M3 ❶.
2) Pull out guide flange No. 7 ❷, guide sleeve No. 7 ❸ guide flange No. 7 ❹ and compression coil spring ❺ the given order.

[Precautions on remounting]

- ○ Clean the surface of the guide sleeve No. 7 ❸ where ti tape is attached.
- ○ Adjust the height of guide No. 7 to the height shown Fig. A below.

[Adjustment after replacement]

- ○ Perform tape path adjustments as described in 4-1.

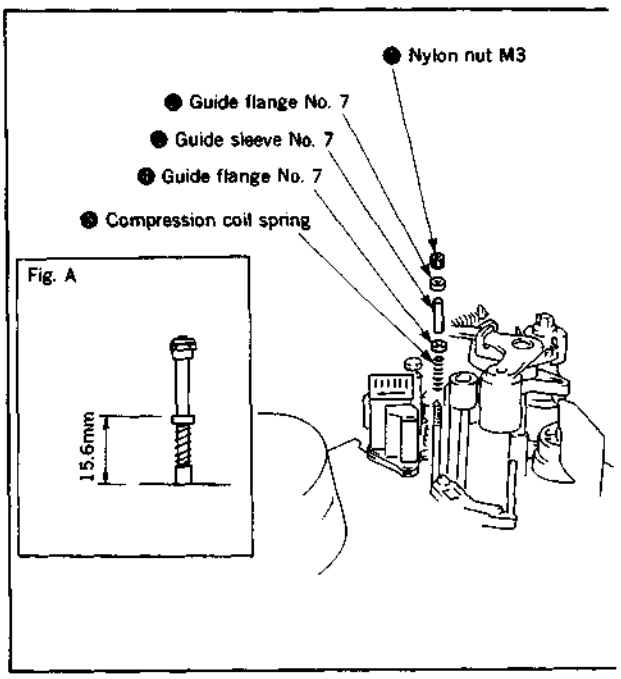


Fig. 3-15.

3-10. S-BRAKE ASS'Y, T-BRAKE ASS'Y (Fig. 3-16)

1) Remove the spring ❶.
2) Disengage the claw ❷, then pull out the S-brake ass'y ❸.
3) Disengage the claw ❹, then pull out the T-brake ass'y ❺.

[Precautions on remounting]

- ○ Do not touch the brake shoes for the respective S-brake ❸ and T-brake ❺ assy's directly with your fingers.
- ○ Do not hold on to the S-brake ❸ and T-brake ❺ assy's by the arms when inserting them.
- ○ The T-brake ass'y ❺ must be positioned above the S-brake ass'y ❸ as shown in Fig. A below.

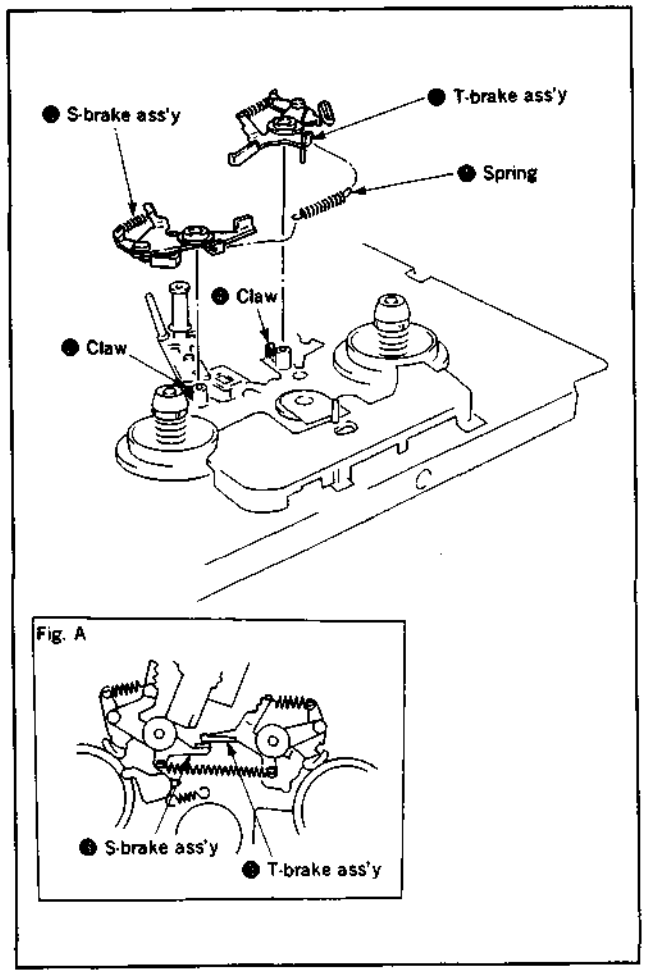


Fig. 3-16.

3-11. T-SOFT BRAKE ASS'Y REV BRAKE ARM (Fig. 3-17)

1) Remove the end of the spring ❶ from the REV brake arm ❷.
2) Remove the end of the spring ❸ from the chassis.
3) Disengage the claw ❹, then pull out the T-soft brake ass'y ❺.
4) Disengage the claw ❻, then pull out the REV brake arm ❼.

[Precautions on remounting]

- ○ Do not touch the brake shoe of the T-soft brake ass'y ❺ directly with your fingers.

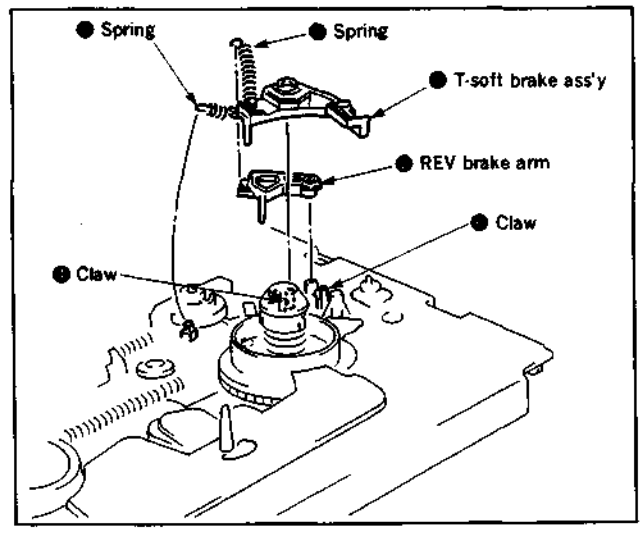


Fig. 3-17.

3-12. S-SOFT BRAKE ARM ASS'Y (Fig. 3-18)

1) Unhook the end of the spring ❶ from the chassis.
2) Disengage the claw ❷, then pull out the S-soft brake arm ass'y ❸.

[Precautions on remounting]

- ○ The S-soft brake arm ass'y must not clamp down the tension regulator band ass'y ❹ nor be positioned below the tension regulator band ❹.

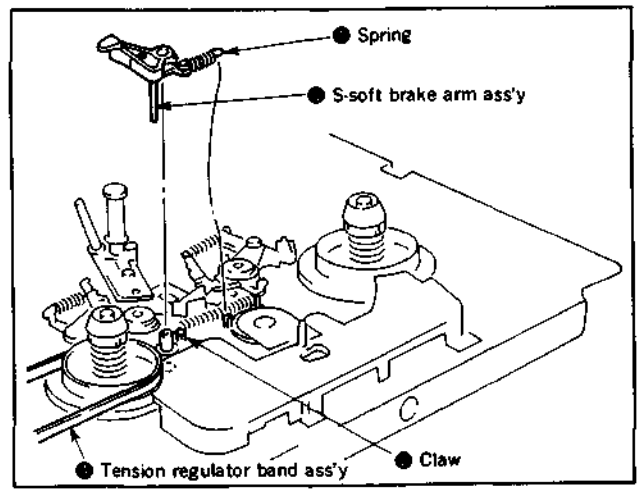


Fig. 3-18.

3-13. S-GUIDE AND T-GUIDE ROLLER ASSY'S (Fig. 3-19)

1) Loosen the setscrew ❶, then remove the S-guide roller ass'y ❷ by turning it in the direction of the arrow Ⓐ.
2) Loosen the setscrew ❸, then remove the T-guide roller ass'y ❹ by turning it in the direction of arrow Ⓑ.

[Precautions on remounting]

○ Clean the surfaces of the S-guide roller ❷ and T-guide roller assy's ❹ where a tape is attached.

[Adjustment after replacement]

○ Perform tape path adjustments as described in 4-1.

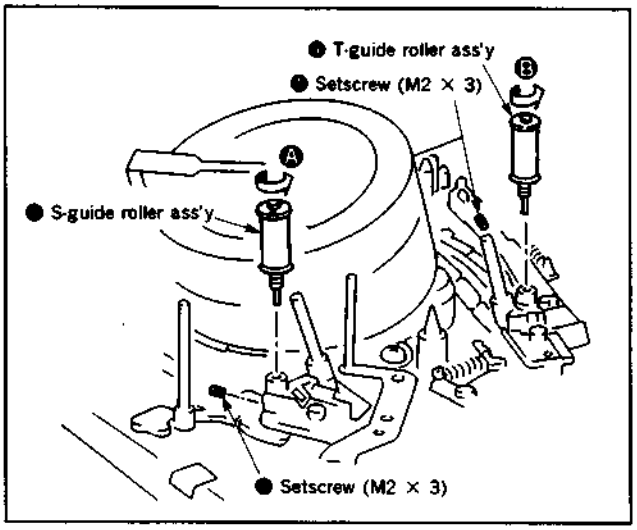


Fig. 3-19.

3-14. REEL LOCK RELEASE AND REW GEAR (Fig. 3-20)

1) Disengage the two claws ❶, then remove the reel lo release ❷ along with the spring ❸ (while the spring still attached).
2) Next, pull out the REW gear ❹ with the spring beari ❺ still attached).

[Precautions on remounting]

○ Make sure that the small thrust bearing ❺ remai attached.
○ Make sure that the two claws ❶ lock the real lock relea ❷ in place.
○ Apply 1/2 drop of lubricant to the shaft ❻.
○ Make sure that the spring ❸ adheres to the reel lo release ❷ and that it fits inside the rib of the REW ge ❹.
○ Mount the REW gear ❹ by meshing it with gear ❻.

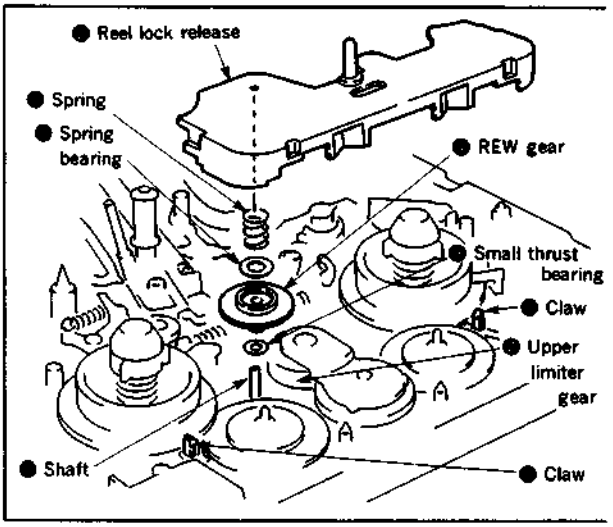


Fig. 3-20.

3-15. TENSION REGULATOR ARM ASS'Y, TENSION REGULATOR BAND ASS'Y (Fig. 3-21)

1) Remove the reel lock release ass'y. (Refer to Fig. 3-14.)
2) Disengage the three claws marked ❶ and the claw marked ❷, then remove the tension regulator band ass'y ❸.
3) Unhook the end of the spring ❹ from the chassis.
4) Disengage the claw ❺, then pull out the tension regulator arm ass'y ❻.

[Precautions on remounting]

- ○ Roll up the tension regulator band ❸ on the S-reel by turning the S-soft brake arm ass'y ❼ in the direction of the arrow.
- ○ Hook the spring ❹ at the center of the spring hook ❽.
- ○ Do not touch the brake shoe of the tension regulator band ass'y ❸ directly with your fingers.
- ○ Mount the tension regulator arm ass'y ❻ at the position shown in Fig. A below.

[Adjustment after replacement]

- ○ Check the back tension. (Refer to 4-1-1.)
- ○ Perform tape path adjustments as described in 4-1.

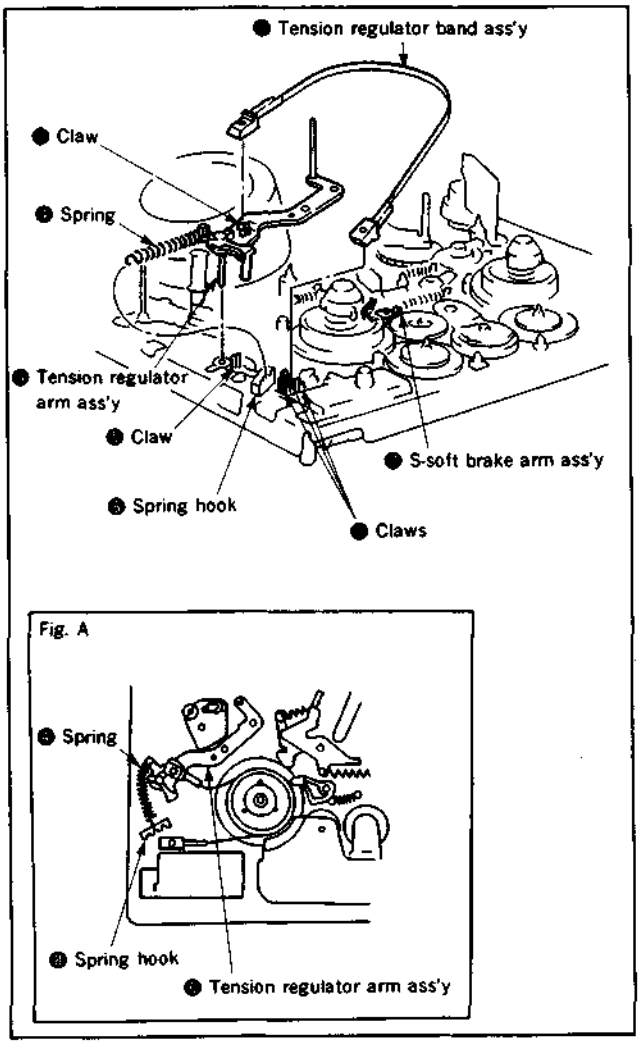


Fig. 3-21.

3-16. S TAKE-UP ASS'Y (Fig. 3-22)

1) Remove the tension regulator arm ass'y and the tension regulator band ass'y. (Refer to 3-15.)
2) Unhook the end of the spring ● from the S take-up arm ●.
3) Disengage the two claws ●, then remove the S take-up ass'y ●.

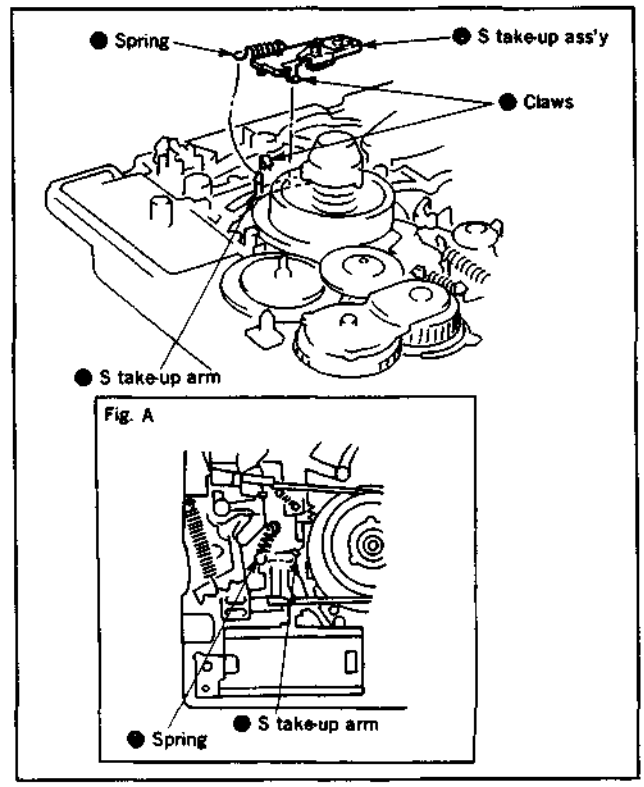


Fig. 3-22.

3-17. S-REEL ASS'Y (Fig. 3-23)

1) Remove the S-soft brake arm ass'y. (Refer to 3-12.)
2) Remove the reel lock release. (Refer to 3-14.)
3) Remove the tension regulator band ass'y. (Refer to 3-15.)
4) Turn the S-brake ass'y ❶ in the direction of the arrow.
5) Pull out the S-reel ass'y ❷.

[Precautions on remounting]

- ○ At least one reel stand thrust bearing ❸ must be attached (but not more than two).
- ○ Do not touch the outer edge of the S-reel ass'y ❷ directly with your fingers.
- ○ Apply 1/2 drop of lubricant over the shaft ❹.
- ○ Mount the S-reel ass'y ❷ while meshing it with the relay gear ❺.

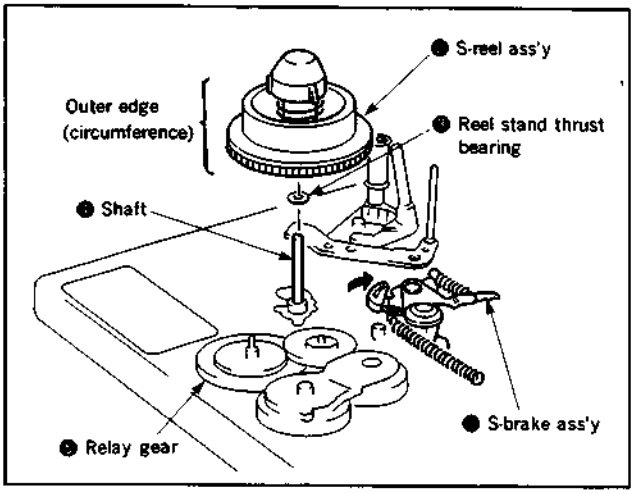


Fig. 3-23.

3-18. T-REEL ASS'Y (Fig. 3-24)

1) Remove the T-soft brake ass'y. (Refer to 3-11.)
2) Remove the reel lock release ass'y. (Refer to 3-14.)
3) Turn the T-brake ass'y ❶ in the direction of the arrow.
4) Pull out the T-reel ass'y ❷.

[Precautions on remounting]

- ○ At least one reel stand thrust bearing ❸ must be attached (but not more than two).
- ○ Do not touch the outer edge of the T-reel ass'y ❷ directly with your fingers.
- ○ Apply 1/2 drop of lubricant on the shaft ❹.
- ○ Mount the T-reel ass'y ❷ while meshing it with the relay gear ❺.

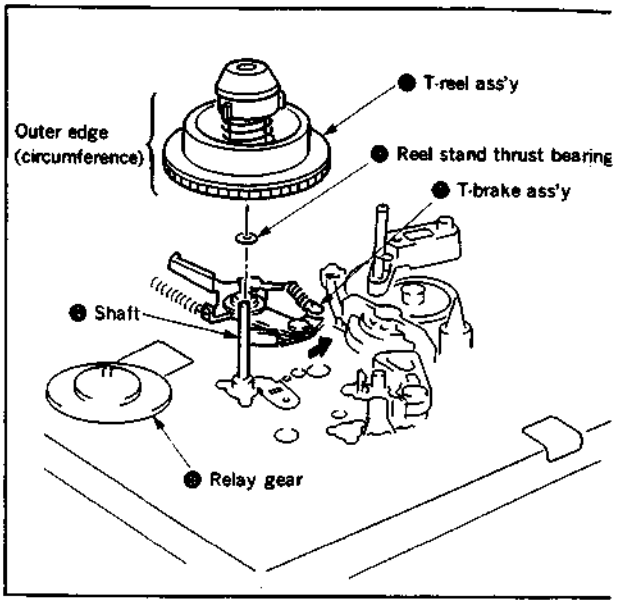


Fig. 3-24.

3-19. PENDULUM ARM ASS'Y (Fig. 3-25)

1) Remove the reel lock release ass'y. (Refer to 3-14.)
2) Remove the washer 2 ❶, then pull out the pendulum ar ass'y ❷.

[Precautions on remounting]

- ○ Fit the boss on the pendulum cap ❸ into the gap in tl pendulum slide plate ❹.
- ○ The plastic slider ❺ must be attzched.
- ○ Apply 1/2 drop of lubricant on the shaft ❻.
- ○ Mount the pendulum arm ass'y ❷ by meshing it with tl upper limiter gear ❼.

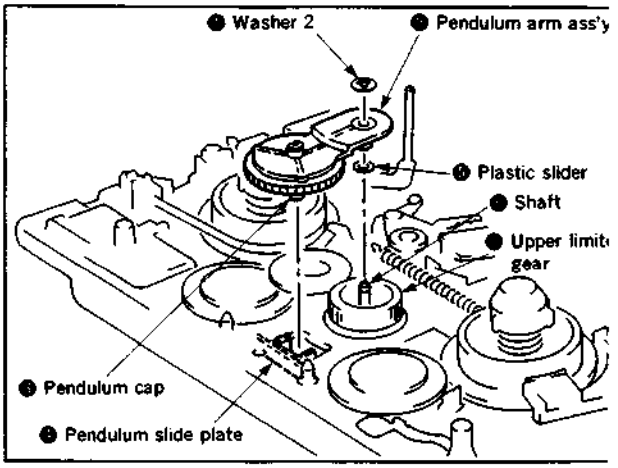


Fig. 3-25.

3-20. RELAY GEAR (Fig. 3-26)

1) Remove the reel lock release and REW gear. (Refer to 3-14.)
2) Remove the S-reel ass'y. (Refer to 3-17.)
3) Remove the T-reel ass'y. (Refer to 3-18).
4) Pull out the two relay gears ❶.

[Precautions on remounting]

○ The relay gears ❶ must rotate smoothly after remounting.
○ Apply 1/2 drop of lubricant to the respective shafts ❷.

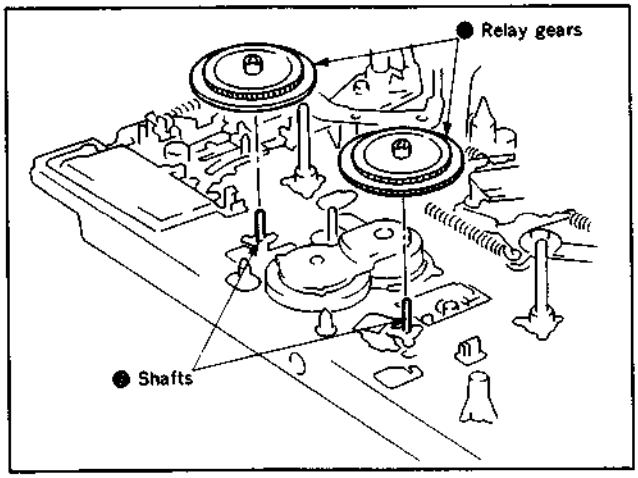


Fig. 3-26.

3-21. ADJUSTER ARM ASS'Y (Fig. 3-27)

1) Remove screw ❶.
2) Remove washer ❷.
3) Remove the end of the spring ❸ hooked to the chassis.
4) Remove the end of the timing belt ❹ from the capstan motor arm ass'y.
5) Disengage the claw ❺, then remove the adjuster arm ass'y.

[Precautions on remounting]

○ First mount the adjuster arm ass'y ❺, timing belt ❹ and spring ❸, then attach the washer ❷ and fasten the screw ❶.
○ The screw fastening torque must be within 5kg•cm (±1kg•cm).

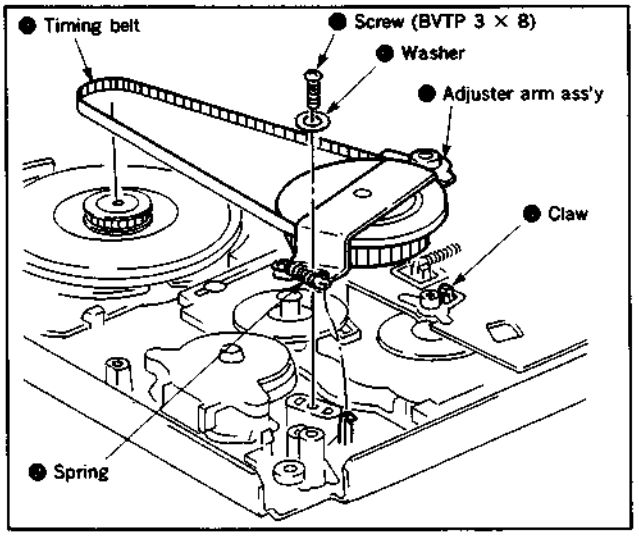


Fig. 3-27.

3-22. CAP BRAKE ASS'Y (Fig. 3-28)

1) Loosen the screw ❶, then push the timing belt ❷ in the direction of the arrow.
2) Unhook the end of the spring ❸ from the chassis.
3) Disengage claw ❹, then pull out CAP brake ass'y ❺.

[Precautions on remounting]

○ Do not touch the brake shoe of the CAP brake ass'y ❺ directly with your fingers.

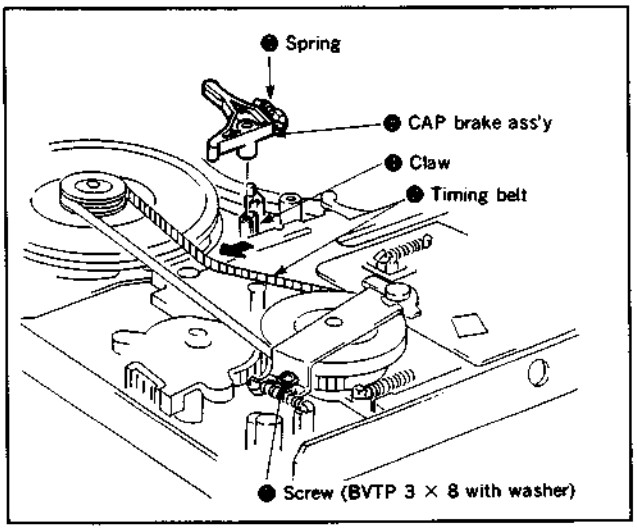


Fig. 3-28.

3-23. CAPSTAN MOTOR (Fig. 3-29)

1) Turn the ACE ass'y ● in the direction of arrow Ⓐ as shown in Fig. A below, then remove three screws ●.
2) Remove screw ●, then remove the rotor clamp ●.
3) Turn the CAP brake ass'y ● in the direction of arrow Ⓑ, then pull out the capstan motor ●.

[Precautions on remounting]

- ○ Clean the section of the capstan motor ● where the tape is attached.
- ○ Do not touch the brake shoe of the CAP brake ass'y ● directly with your fingers.
- ○ Of the three screws ●, first fasten screw A temporarily, then fasten screws B and C firmly, followed by screw A.
- ○ The screw fastening torque must be within 3kg•cm ± 1kg•cm.

[Adjustments after mounting]

- ○ Perform tape path adjustments as described in 4-1.

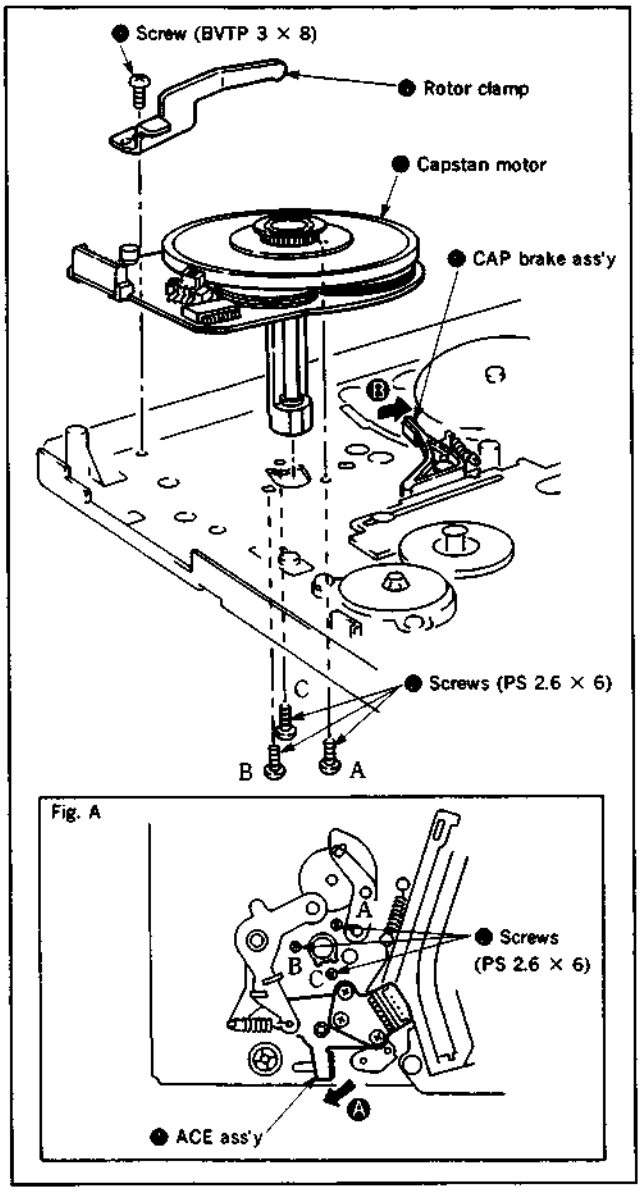


Fig. 3-29.

3-24. ROTARY SWITCH (Fig. 3-30)

1) Remove the adjuster arm ass'y. (Refer to 3-21.)
2) Remove the screws ● and ●, then pull out the rot switch ●.

[Precautions on remounting]

- ○ Match up the ● mark on the rotary switch ● with the mark on the RKB cam gear ● as shown in Fig. A.
- ○ Match up holes ● on the pendulum arm ● and the chas

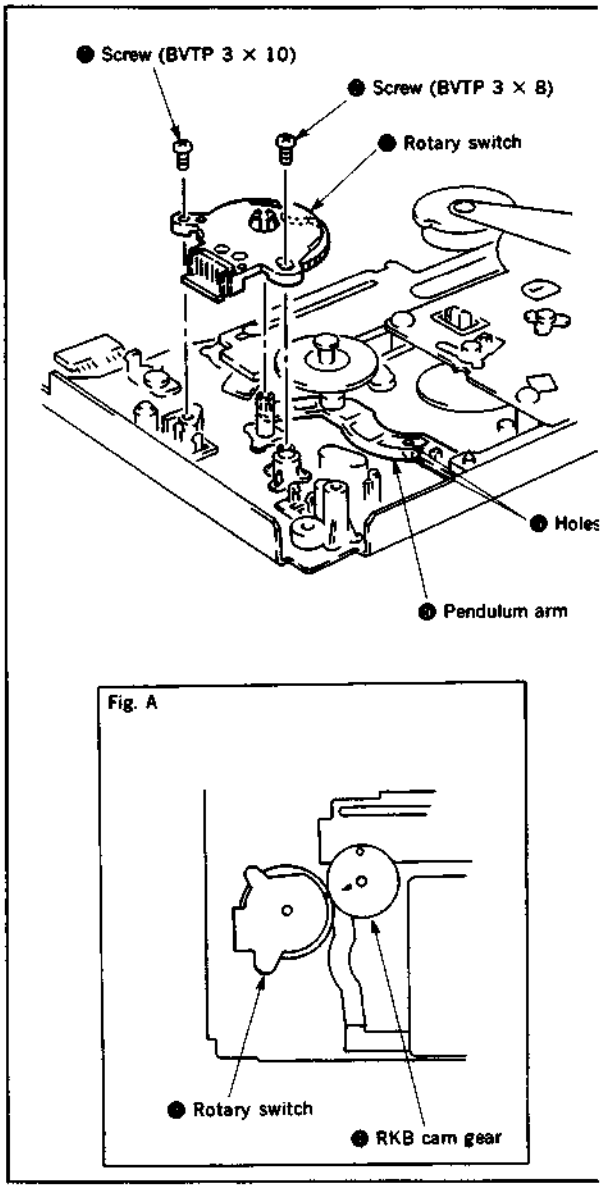


Fig. 3-30.

3-25. RKB CAM GEAR (Fig. 3-31)

1) Remove the adjuster arm ass'y. (Refer to 3-22.)
2) Remove washer 2 ❶, then pull out the RKB cam gear ❷.

[Precautions on remounting]

- When the limiter arm ❸ is pushed in the direction of the arrow, the pin must fit into the notch on the RKB cam gear ❷.
- The ■ mark on rotary switch ❹ must match up with the ◀ mark on the RKB cam gear ❷ as shown in Fig. A.
- Apply 1/2 drop of lubricant to shaft ❺.
- Match up the holes ❻ on the RKB cam gear ❷ and the mode slide plate.

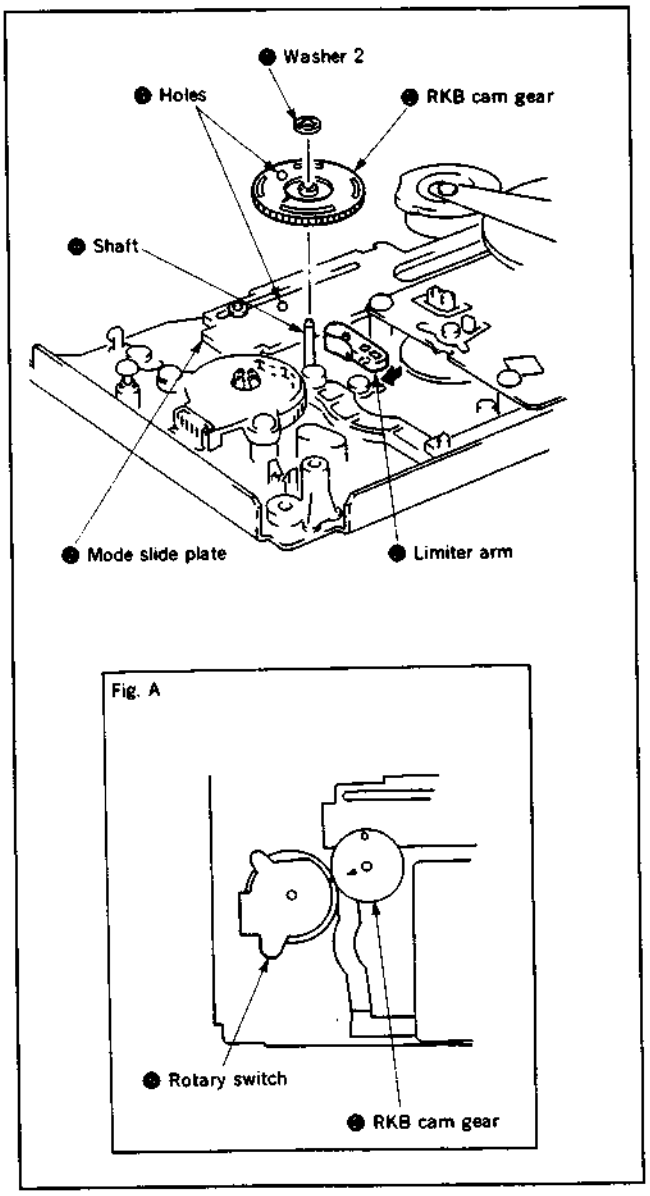


Fig. 3-31.

3-26. SUB-CHASSIS ASS'Y (Fig. 3-32)

1) Remove the reel lock release arm and REW gear. (Refer to 3-15.)
2) Remove the pendulum arm ass'y. (Refer to 3-19.)
3) Remove the adjuster arm ass'y. (Refer to 3-22.)
4) Remove the three screws ❶, then remove sub-chassis ass'y ❷.

[Precautions on remounting]

- The switching arm ❸ must be switched in the direction of the arrow.
- The screws must be fastened in order of a, b and c.
- Mount the sub-chassis carefully so as not to damage the gear.
- The corner edge of the lug terminal ❹ must fit into the gap between the chassis ass'y ❺ and mechanism chassis.

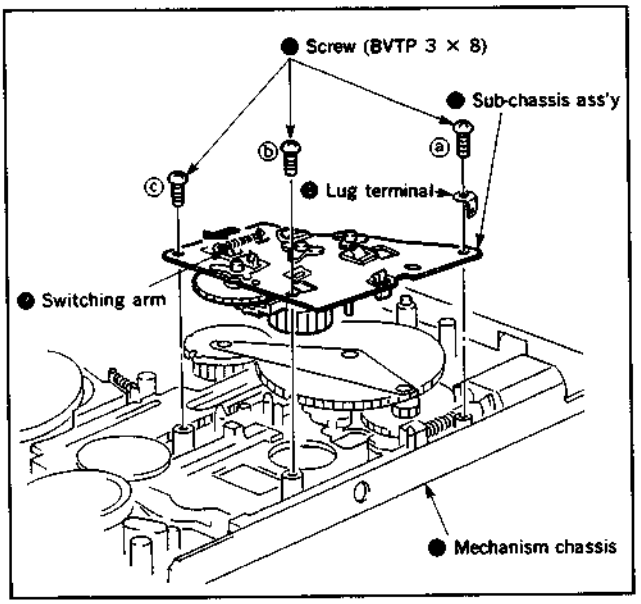


Fig. 3-32.

3-27. PENDULUM SLIDE PLATE, PENDULUM ARM (Fig. 3-33)

1) Remove the rotary switch. (Refer to 3-24.)
2) Remove the RKB cam gear. (Refer to 3-25.)
3) Remove the sub-chassis ass'y. (Refer to 3-26.)
4) Disengage the two claws ❶, then pull out the pendulum slide plate ❷.
5) Unhook the spring ❸.
6) Disengage the claw ❹, then pull out pendulum arm ❺.

[Precautions on remounting]

○ The shaft ❻ must fit into hole ❼.

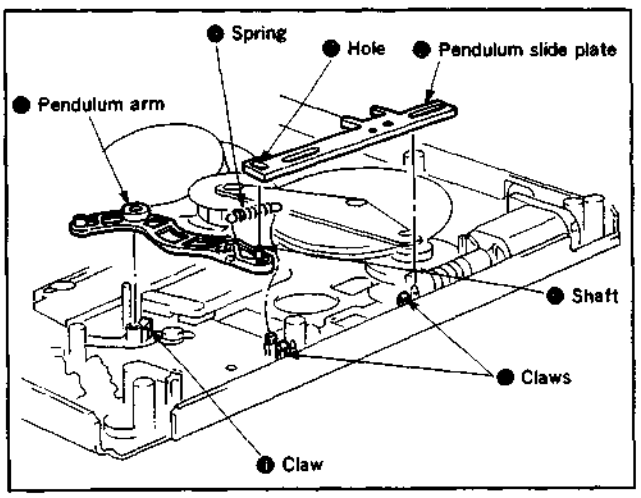


Fig. 3-33.

3-28. THE LIMITER ARM AND LIMITER SLIDE PLATE (Fig. 3-24)

1) Remove the RKB cam gear. (Refer to 3-25.)
2) Remove the sub-chassis. (Refer to Fig. 3-26.)
3) Disengage the claw ❶, then pull out the limiter arm ❷.
4) Disengage the two claws ❸, then pull out the limiter slide plate ❹.

[Precautions on remounting]

○ The shaft ❺ must fit into the hole ❻.

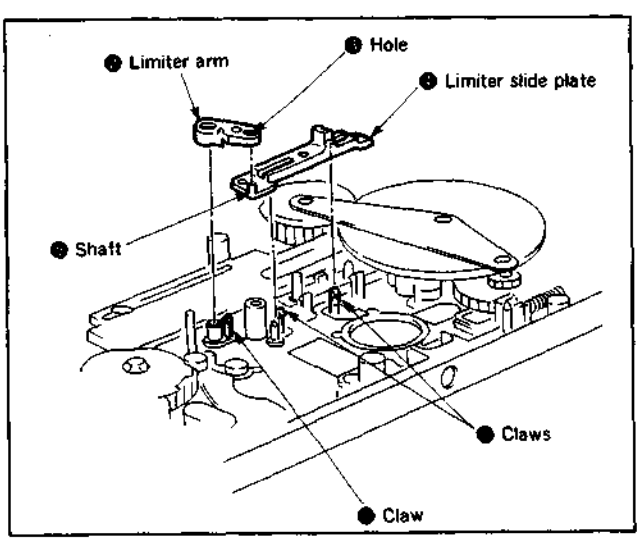


Fig. 3-34.

3-29. CAM MOTOR (Fig. 3-35)

1) Remove the sub- chassis ass'y. (Refer to 3-26.)
2) Disengage the six claws ❶, then remove the cam mc ❷ and worm gear ❸.

[Precautions on remounting]

○ Check the meshing of cam motor ❷ and worm gear ❸

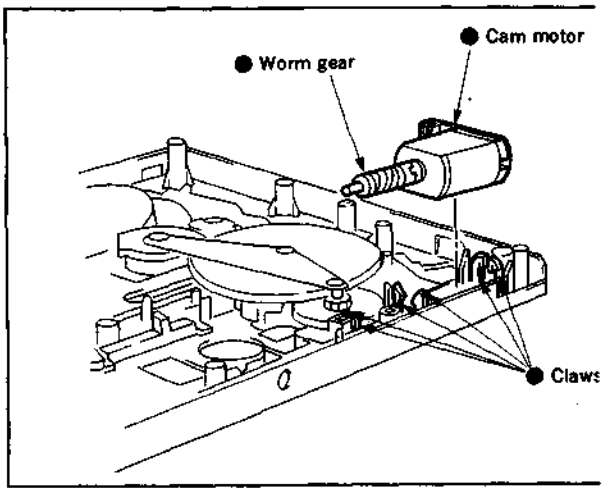


Fig. 3-35.

3-30. CAM GEAR (Fig. 3-36)

1) Remove the three washers 2 ❶, then pull out the c gear holder ❷.
2) Pull out the cam gear ❸.

[Precautions on remounting]

○ Match up the right loading gear ass'y, the tension regu tor arm, the S take-up arm, the work wheel, the brake a and the mode slide plate with respective holes ❶ to ❷ the chassis in that order.

○ Match up the hole ❶ on the mode slide plate with the h ❷ in cam gear ❸.

○ Apply 1/2 drop of lubricant to the shaft ❸.

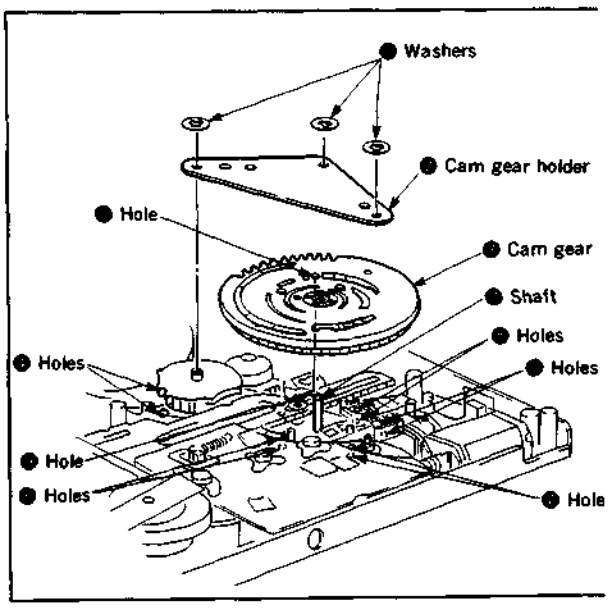


Fig. 3-36.

3-31. TENSION REGULATOR ARM, S TAKE-UP ARM (Fig. 3-37)

1) Remove the cam gear. (Refer to 3-30)
2) Disengage the claw ❶, then remove the tension regulator arm ❷.
3) Remove the end of the spring ❸ from the S take-up arm ❹.
4) Disengage the claw ❺, then pull out S take-up arm ❹.

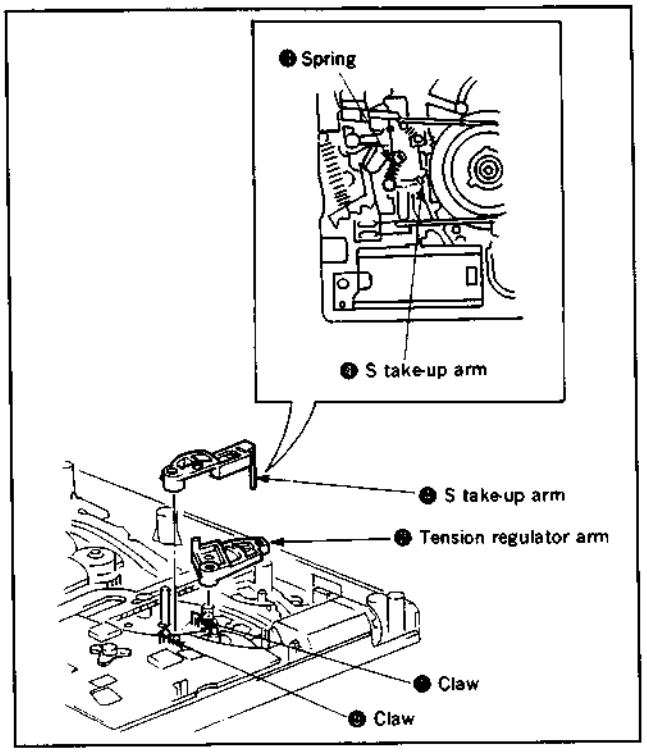


Fig. 3-37.

3-32. MODE SLIDE PLATE, RVS RELAY GEAR (Fig. 3-38)

1) Remove the RKB cam gear. (Refer to 3-25.)
2) Remove the cam gear. (Refer to 3-30.)
3) Remove the two washers 2 ❶.
4) Turn the CAP brake ❷ in the direction of the arrow, then pull out mode slide plate ❸.
5) Pull out the RVS relay gear ❹.

[Precautions on remounting]

- ○ Match up the hole ❶ on the RVS relay gear ❹ with hole ❺ in the chassis.
- ○ Match up the holes ❻ on the mode slide plate ❸ with holes ❼ in the chassis.
- ○ Apply 1/2 drop of lubricant to the shaft ❽.

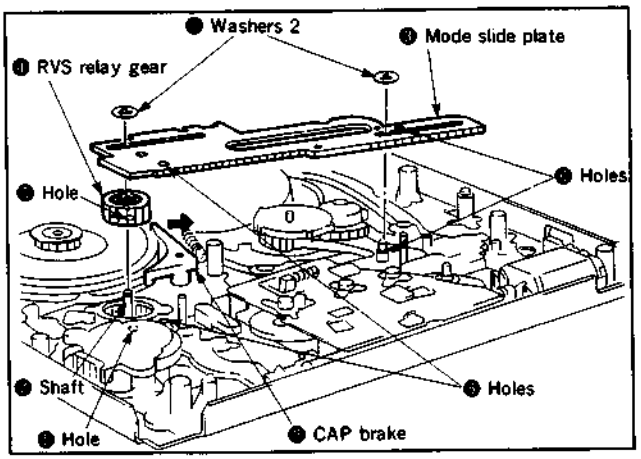


Fig. 3-38.

3-33. BRAKE ARM, BRAKE SLIDE PLATE (Fig. 3-39)

1) Remove the sub-chassis. (Refer to 3-26.)
2) Remove the cam gear. (Refer to 3-30.)
3) Disengage the claw ❶, then pull out the brake arm ❷.
4) Disengage the two claws ❸, then pull out the brake slide plate ❹.

[Precautions on remounting]

- ○ Insert the shaft ❺ into hole ❻.

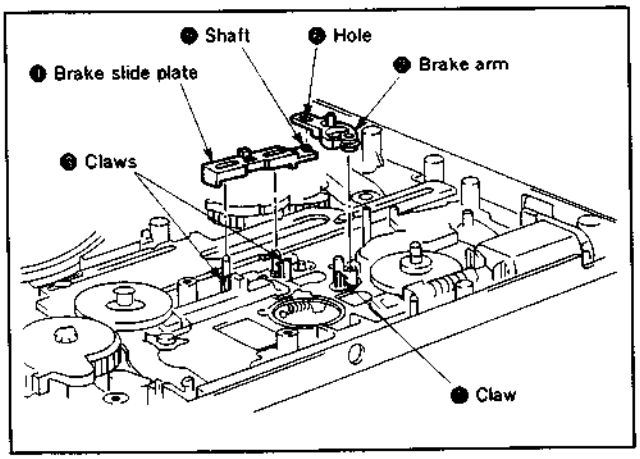


Fig. 3-39.

3-34. RIGHT SHUTTLE, RIGHT LOADING GEAR ASSY'S (Fig. 3-40)

1) Remove the mode slide plate. (Refer to 3-32.)
2) Remove the plastic slider ❶, then pull out the right shuttle ass'y ❷.
3) Pull out the right loading gear ass'y ❸.

[Precautions on remounting]

- ○ Match up the ▲ mark on the right loading gear ass'y ❸ with the ▲ mark on the left loading gear ass'y ❹ as shown in Fig. A below.
- ○ Apply 1/2 drop of lubricant to the shaft ❺.
- ○ Do not hold on to the arm when pressing on the right loading gear ❸.
- ○ Clean the section of the right shuttle ass'y ❷ where the tape is attached.

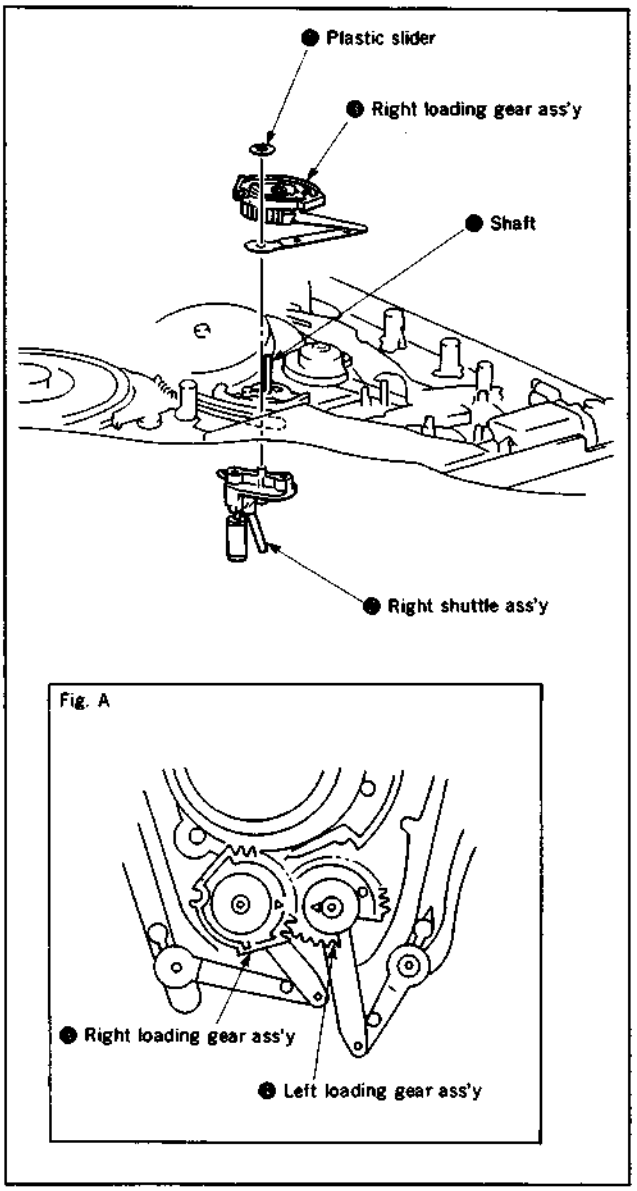


Fig. 3-40.

3-35. LEFT SHUTTLE ASS'Y, LEFT LOADING GEAR ASS'Y (Fig. 3-41)

1) Remove the right shuttle ass'y and right loading ge ass'y. (Refer to 3-34.)
2) Remove the plastic slider ❶, then pull out the left shut ass'y ❷.
3) Remove washer 2 ❸, then pull out the left loading ge ass'y ❹.

[Precautions on remounting]

- ○ Apply 1/2 drop of lubricant to shaft ❺.
- ○ The tension regulator arm ass'y ❶ and left shuttle ass'y must be positioned as shown in Fig. A below.
- ○ Do not hold on to the arm of the left loading gear ass'y when the left loading gear ass'y ❹ is pressed.
- ○ Clean the section of the felt shuttle ass'y ❷ where the ta is attached.

[Adjustments after replacement]

- ○ Perform tape path adjustments as described in 4-1.

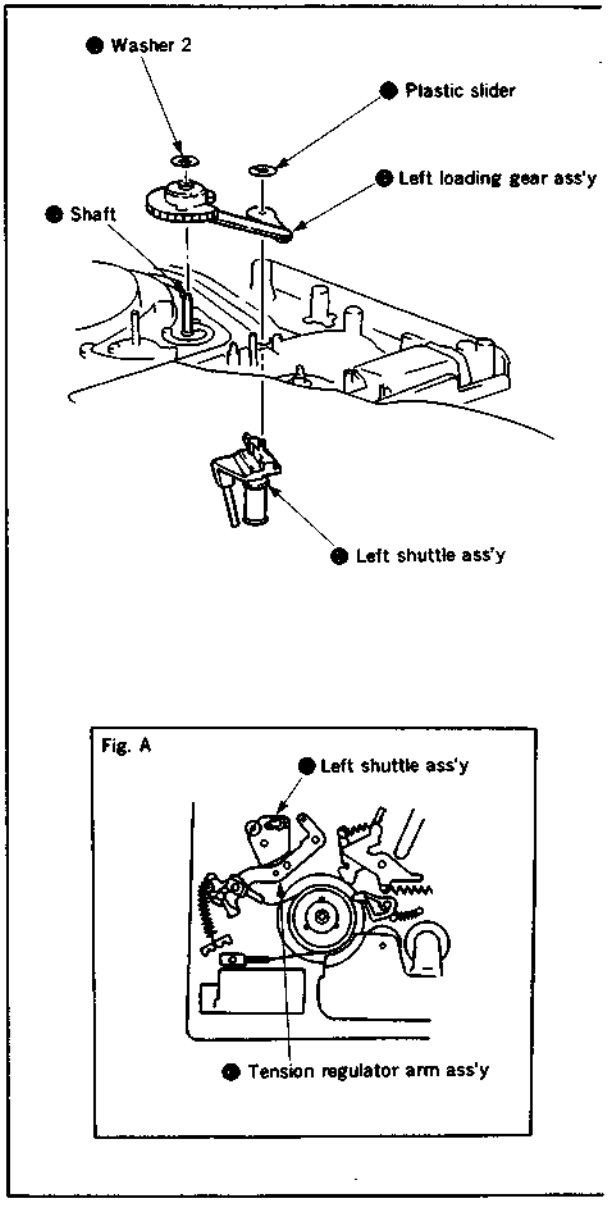


Fig. 3-41.

3-36. C-ROLLER ARM ASS'Y, C-ROLLER RELEASE LEVER (Fig. 3-42)

1) Disengage the claw ❶, then pull out the C-roller arm ass'y ❷.
2) Unhook the end of the spring ❸ from the chassis.
3) Disengage the two claws ❹, then pull out the C-roller release lever ❺.

[Precautions on remounting]

○ Mount C-roller arm ass'y ❷ so that the hole ❻ on the C-roller arm ass'y ❷ fits into the boss ❼ on the C-roller release lever ❺.

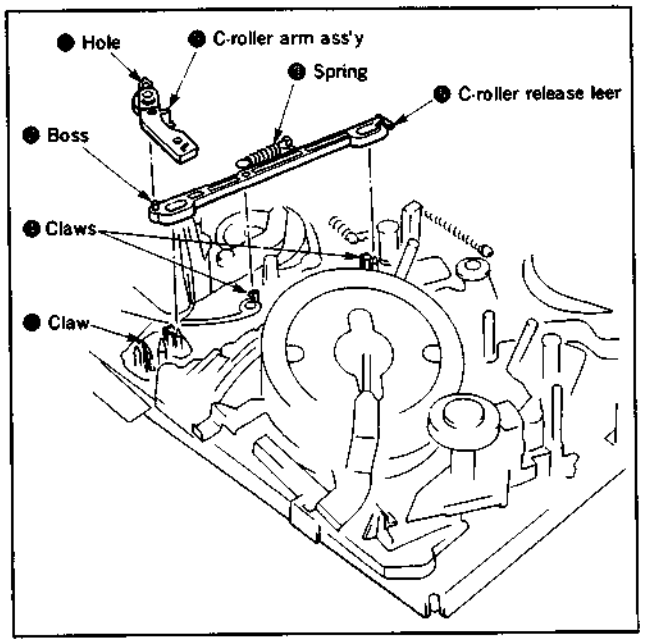


Fig. 3-42.

4. ADJUSTMENT

4-1. TAPE PATH ADJUSTMENT

The "Tape path" refers to the route of the tape from the supply reel disk to the take-up reel disc via the video heads. Each component part of the tape transport system, particularly the surface of parts which make direct contact with the tape must always be kept clean, free of dust, oil, scratches and so forth.

The tape path system is factory preadjusted. when parts of the tape transport system are replaced, be sure to make the required adjustments as precisely as possible in order to ensure stable tape transport.

4-1-1. Tension regulator position/tension adjustment (Fig. 4-1.)

Purpose : Stabilizes contact of the video head and the tape to maintain the tension of the tape so that it feeds at a constant level.

- **Position adjustment**

Mode	Threading is completed without a cassette loaded. (Refer to section 1-2.)
Adjustment locations	Tension band holder

[Adjustment method]

1) Allow the unit to go through the threading procedure without a cassette loaded.
2) Set the VTR unit to playback, then turn the tension band adjuster lever so that the gap between guide No. 0 and tension arm is within 4.5±0.4mm. *(Set the unit to playback without a cassette loaded.)
3) After adjustment, go through the loading procedure once more without a cassette loaded, then check the position of the tension arm.

- **Tension adjustment**

Mode	Playback
Measuring instrument/tool	Torque cassette
Adjustment locations	Position for hooking the tension sprin
Specification	28 to 34 g•cm

[Adjustment method]

1) Playback the torque cassette.
2) Check that the center value deviation reading on torque cassette meets with the standards.
3) When the reading is higher than the standards: M the spring toward direction Ⓐ.
   When the reading is less than the standards: Move spring toward direction Ⓑ.

Note : Move the spring to the tension spring hook posit and recheck the tension arm position. If the a position is misaligned, adjust the position and tens of the tension arm.

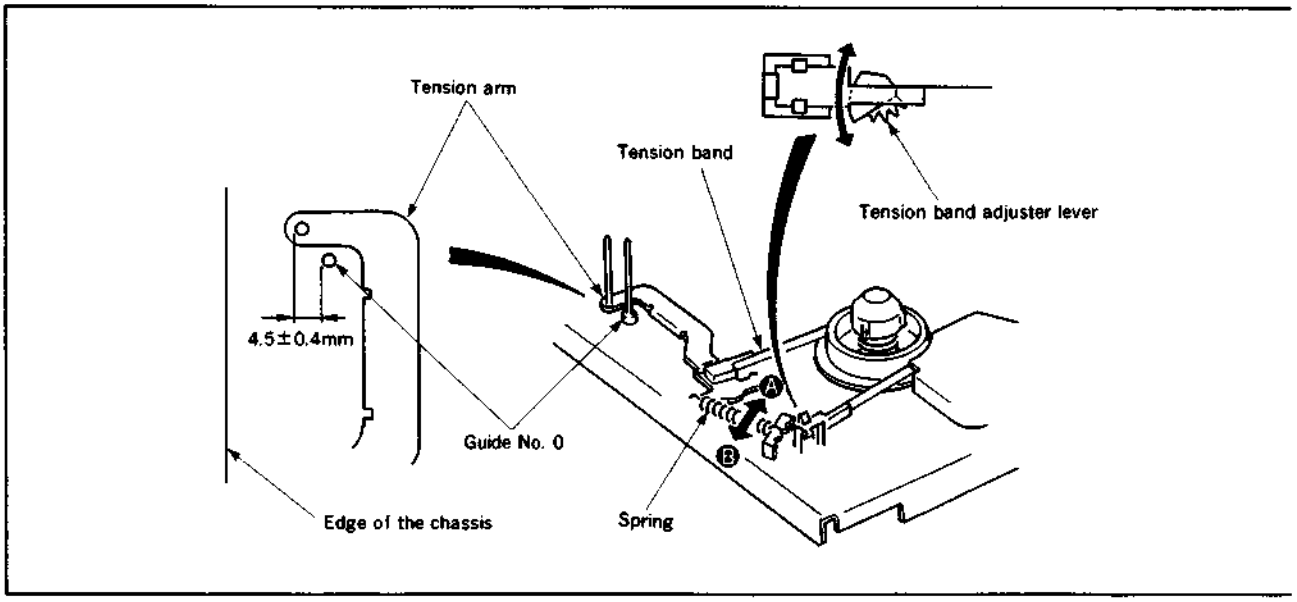


Fig. 4-1.

4-1-2. Height adjustment of the guide roller No. 2 (Fig. 4-2)

Mode	Playback
Tool	Blank tape
Adjustment locations	Guide roller height adjuster screw

[Adjustment method]

1) Load a new tape in the unit, then play it back.
2) Make sure that the lower flange of guide roller No. 2 does not curl up.
3) When the tape curls up: Turn the guide roller adjuster screw clockwise.
   When the tape does not fit into the lower flange: Turn the guide roller adjuster screw counter-clockwise.
4) After the above check, separate the tension arm from the tape, then re-attach it slowly. At this time, check if the tape curls up at the lower flange of the guide roller No. 2 and if the curl disappears within 2 seconds.
5) If curl does not disappear in two seconds: Turn the adjuster screw clockwise.
   If the tape does not curl up: Turn the adjuster screw counter-clockwise.

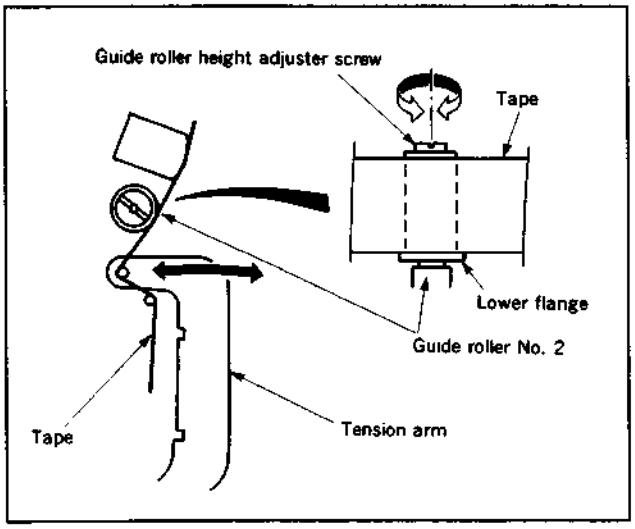


Fig. 4-2.

4-1-3. Height adjustment of guide roller No. 7 and the RVS arm (Fig. 4-3.)

Mode	Playback
Tool	Blank tape
Adjustment locations	Height adjuster nut

[Adjustment method]

1) Load the tape into the VTR and play it back, then adjust the height of the guide roller No. 7 so that the tape runs along the lower flange of guide roller No. 7.
2) If the guide roller is too low: Turn the height adjuster nut counter-clockwise.
   If the guide roller is too high: Turn the height adjuster nut clockwise.
3) Run the tape in REV, then adjust the height of the RVS arm so that the tape runs along guide roller No. 7.
4) If the tape gets caught in the upper flange of guide roller No. 7: Turn the RVS arm height adjuster nut clockwise.
5) If the tape catches on the lower flange of guide roller No. 7 : Turn the RVS arm height adjuster nut counter-clockwise.

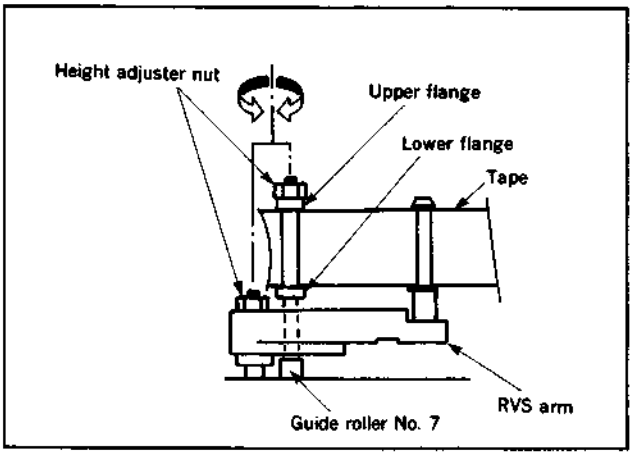


Fig. 4-3.

4-1-4. Height adjustment of guide rollers No. 3 and No. 6 (Fig. 4-4)

Mode	Playback
Signal	Hi-Fi alignment tape (Hi-Fi 400Hz)
Measuring instrument	Oscilloscope
Measuring point	CH-1 : Connector PB RF pin for RF PC board check. CH-2 : Connector RF SW P pin for RF PC board check.
Adjustment locations	Guide roller height adjuster screw.

[Adjustment method]

1) Tracking (playback): Turn off the auto tracking, then press the tracking buttons ▽ and △ simultaneously to set the tracking at the center position.
   (If adjustment is made after the drum is replaced, the tracking must be set at the max. Rf output position.)
2) Height adjuster screw: Even out the RF output waveforms.
3) Press the tracking buttons (playback), ▽ and △ alternately.
4) Check that RF output drops the same amount at the front and rear edges.

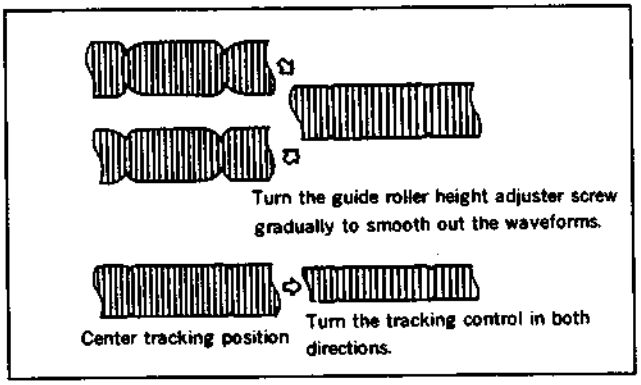


Fig. 4-4.

4-1-5. ACE head ass'y adjustment (rough adjustment) (Figs. 4-5 and 4-6)

Purpose : Allows the tape to make even contact with t head for recording and playback of the specifi track.

Mode	Playback
Tool	Blank tape
Adjustment locations	Height adjuster nut, tilt adjuster screw

[Adjustment method]

1) Mount the ACE head ass'y. At this time, adjust the heig so that the height of guide flange No. 7 matches the le of the lower edge of the control head.
2) Remove the adjustment tool and load a new tape, then the unit for playback.
3) Check that the tape does not curl or raise up noticeal near the ACE head.
4) If the yape curls up or rarises noticeably, readjust the adjuster screw, the azimuth adjuster screw and the heig adjuster nut.
   (The height of the ACE head should be adjusted so tl the lower edge of the tape is approx. 0.1 to 0.15 mm fr the control head.)
5) Perform precision adjustment.

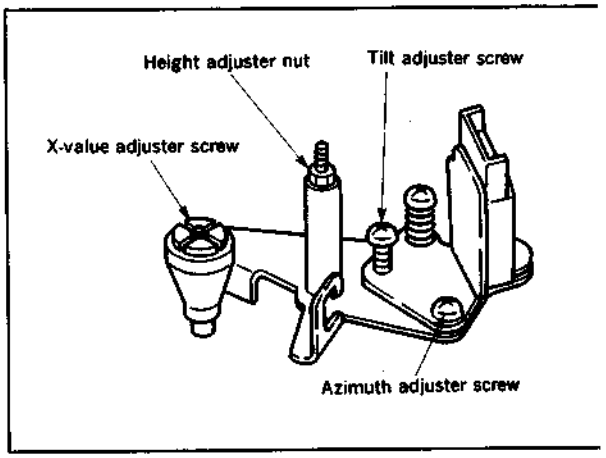


Fig. 4-5.

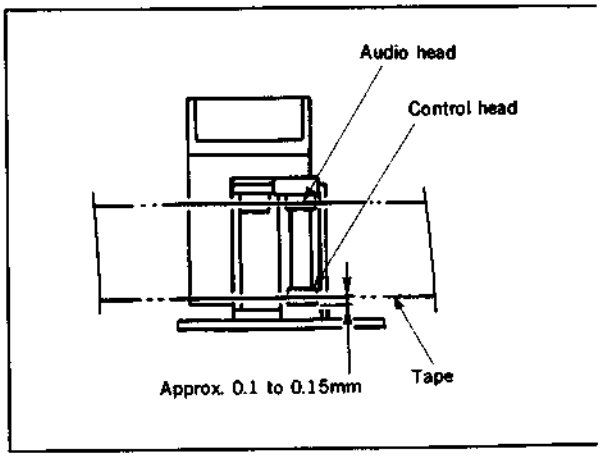


Fig. 4-6.

4-1-6. ACE head assembly adjustment (precision adjustment)

Mode	Playback
Signal	Alignment tape (JVC-MH-1 1KHz)
Measuring instrument	Oscilloscope
Measuring point	Audio output terminal
Adjustment locations	Azimuth adjuster screw Height adjuster nut Tilt adjuster screw

[Adjustment method]

1) Adjust the tilt adjuster screw in the FWD or REV mode so that the lower flange of guide No. 7 does not curl up or raise.
2) Alternately adjust the azimuth adjuster screw, the height adjuster nut, and the tilt adjuster screw to maintain even audio output at maximum with minimum deviation.

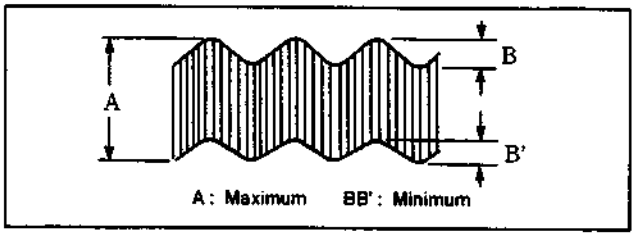


Fig. 4-7.

4-1-7. X-value adjustment

Purpose : To obtain compatibility with other VTR.

Precaution : Be sure to perform the preset tracking adjustment before perform this adjustment. (Refer to the Service Guide.)
Turn off the auto tracking and set the VTR for manual tracking mode.

Mode	Playbadk
Signal	Hi-Fi alignment tape (Hi-Fi 400Hz), alignment tape (JVC-MH-1)
Measuring instrument	Oscilloscope
Measuring point	CH-1 : Connector PB RF pin for RF PC board check. CH-2 : Connector RF SW P pin for RF PC board check. (Check with the CHA head)
Adjustment locations	X-value adjuster screw

[Adjustment method]

- **Adjustment by Hi-Fi alignment tape**
  When the tracking is set at the center position (by pressing the ▽ and △ keys simultaneously), adjust the RF output to maximum.

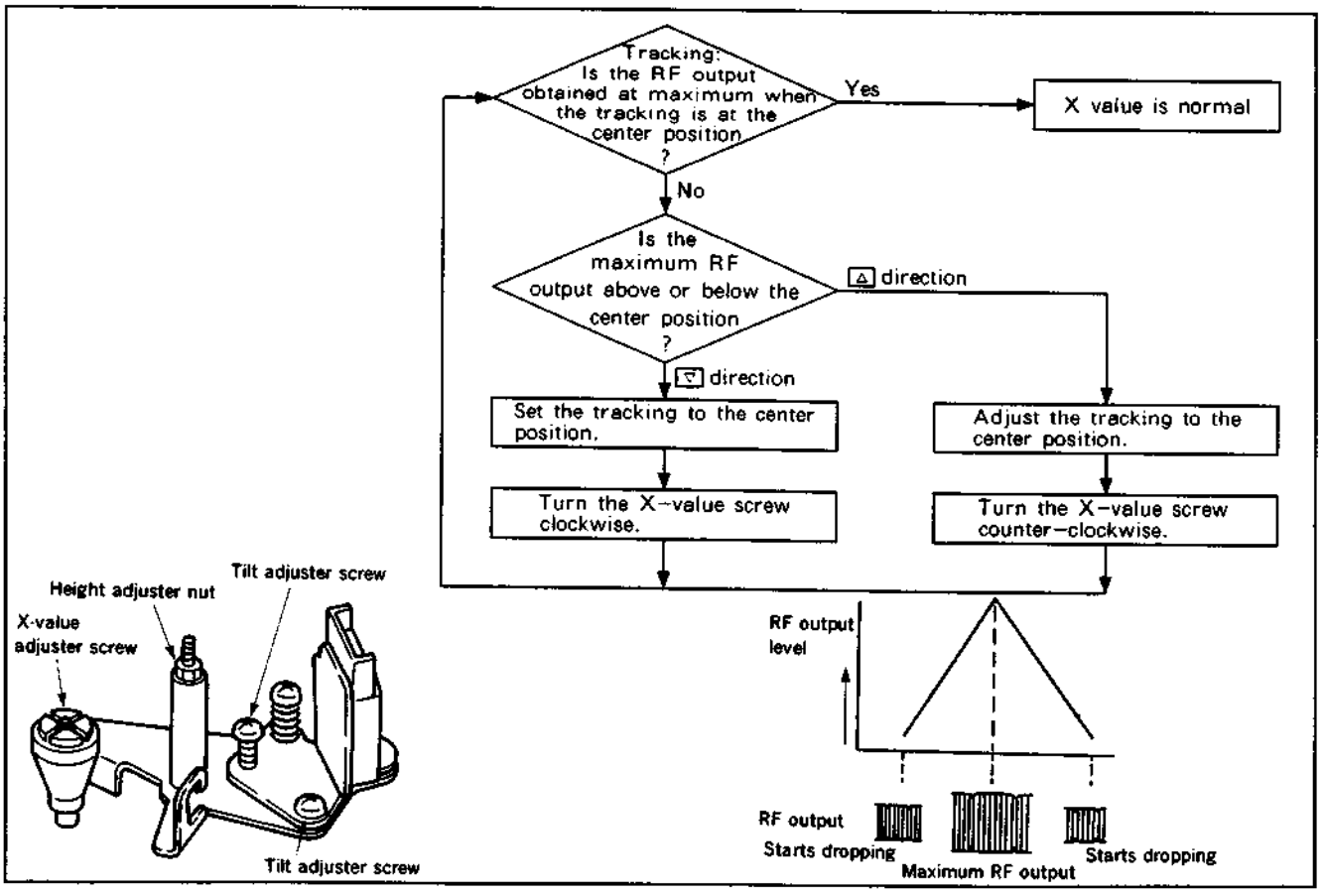


Fig. 4-8.

● **Adjustment by Alignment tape (JVC-MH-1)**

Adjust the X-value adjuster screw so that maximum RF output is obtained and also that the RF output drops the same position on pressing the respective ▽ and △ buttons while the tracking is set at the center positio

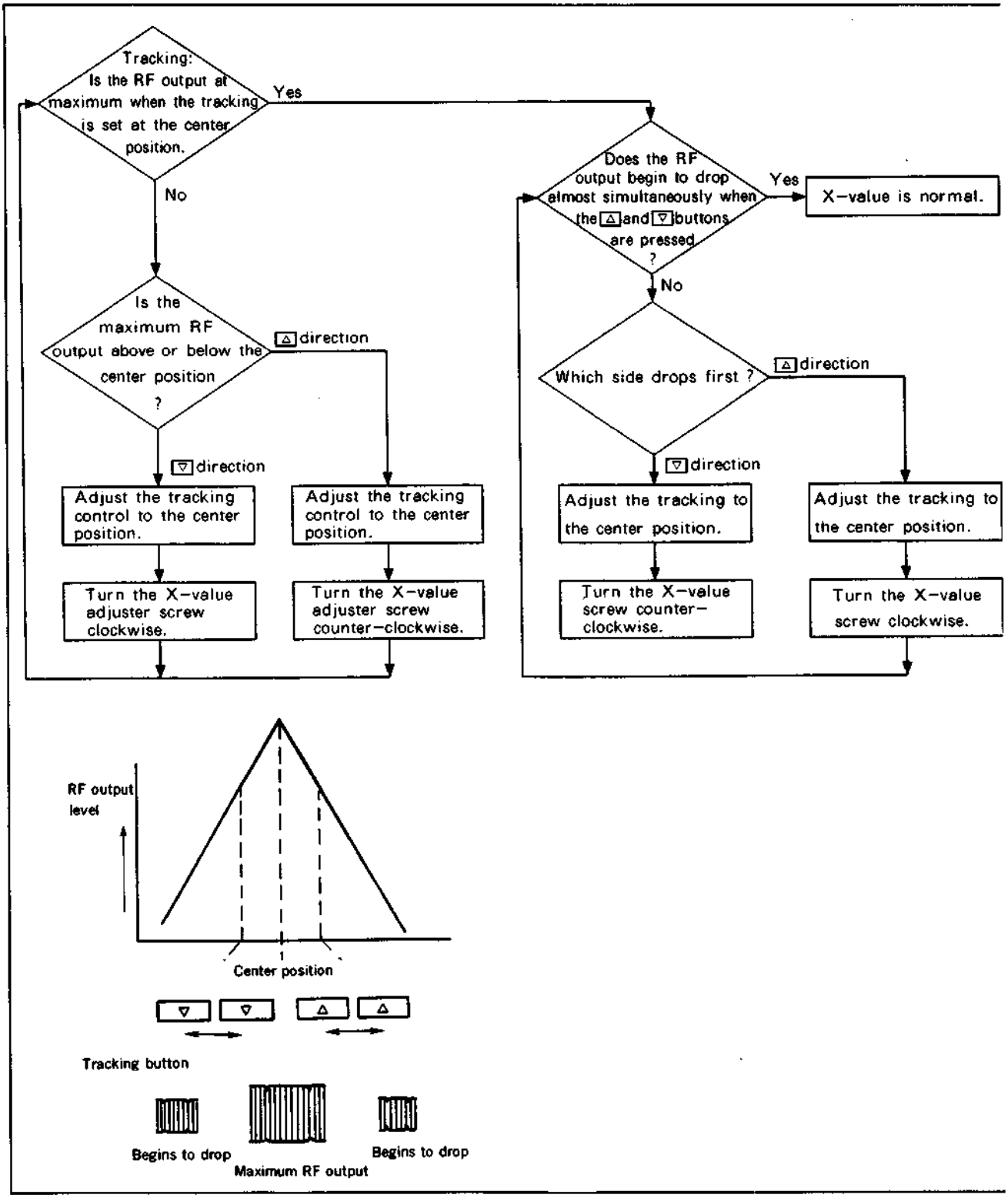


Fig. 4-9.

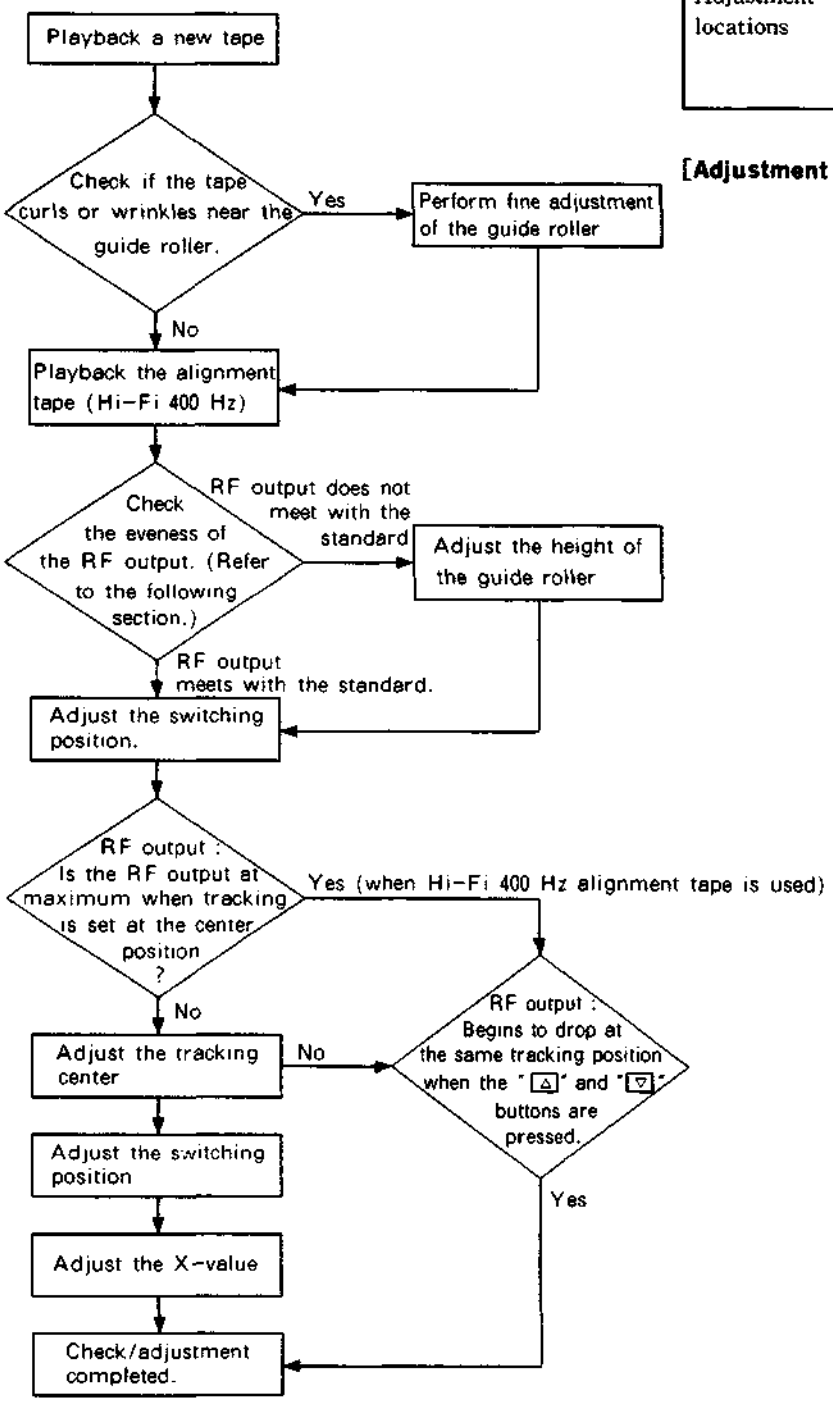
4-1-8. Adjustments after replacing the drum (video head)

Purpose : Co-relative height, X-value and other factors of the drum will deviate from those of the guide roller. If the drum is replaced properly, these deviations are extremely small.

Precaution : Turn off the auto tracking and set the manual tracking mode.

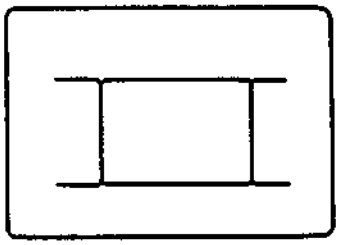
Mode	Playback
Signal	Alignment tape (JVC-MH-1), blank tape
Measuring instrument	Oscilloscope
Measuring point	CH-1 : Connector PB RF pin for RF PC board check. CH-2 : Connector RF SW P pin for RF PC board check.
Adjustment locations	Guide roller (refer to 4-1-5.) Switching position, Tracking preset, SP delay mono-multi, X-value (refer to 4-1-8)) (Refer to the Service Guide)

[Adjustment method]

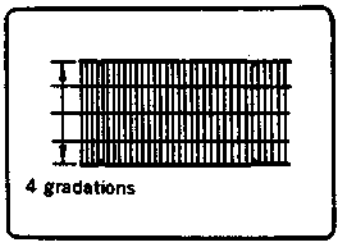


[Checking the eveness and fluctuation of the RF output]

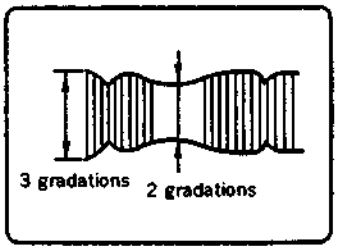
1) Set the RF output to the maximum level using the tracking buttons.



2) Perform fine adjustment of the voltage level range of the oscilloscope, then adjust the RF output deviation to within 4 gradations.



3) Press the tracking buttons and adjust the maximum amplitude of the RF output to within 3 gradations.
4) At this time, check if the minimum amplitude is more than 2 gradations.



5) Check that the RF output fluctuation between minimum and maximum levels is within 13%.

4-1-9. Checking the tension and torque

Purpose: To check that the tension, torque and compression force of the tape take-up section and mobile sections to ensure smooth tape run and achieve standard VTR performance.
If the tape transport is not smooth or problems occur in relation to the tape transport speed, perform the following check.

Mode	Each operation mode without loading a cassette tape. (Refer to section 1-3.)
Measuring instrument	Torque gauge, Torque gauge adapter

Item	VTR operation mode	Reel to be measured	Measurement value
Main brake torque	Stop	Supply and take-up reels	170g•cm or more
Review torque	Review	Supply reel	180±30g•cm (using the torque cassette)
Take-up torque	Playback	Take-up reel	80 to 140g•cm (using torque cassette)
Back tension torque	Rewind	Take-up reel	4 to 25 g•cm

[Check method]
Measure the torque using the torque gauge and torque gauge adaptor with the torque gauge fixed.

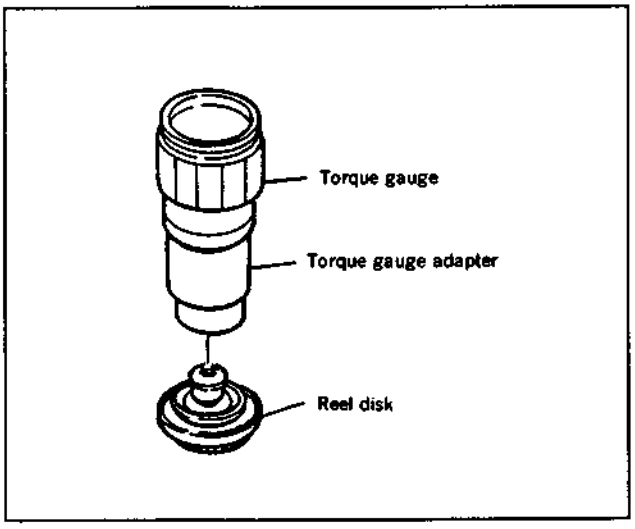


Fig. 4-13.