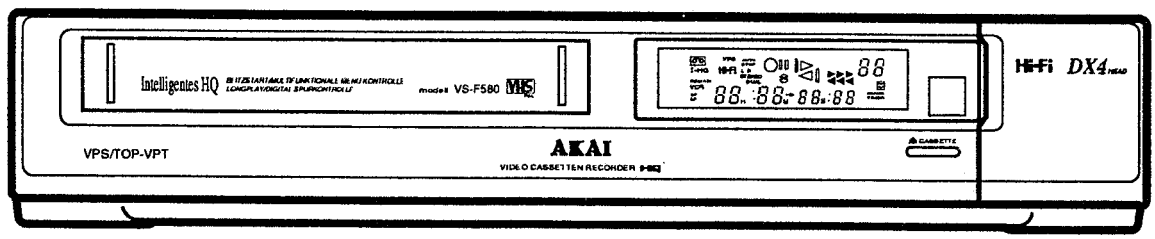
VS-F550,F560
VS-F580,F590

AKAI SERVICE MANUAL



MODEL VS-F580EOG-VD

HIGH QUALITY PAL DIGITAL STEREO

VIDEO CASSETTE RECORDER

MODEL **VS-F550**EA-D/EO-D/EOH-D/EOH-N

MODEL **VS-F560**EK-N

MODEL **VS-F580**EOG-VD

MODEL **VS-F590**EOH-DN

★SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ (*) symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
   These must also be replaced only with the specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (insulating barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.

6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.
The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resister of 1500 ohms paralleled with a 0.15 µF capacitor, under the unit's normal working conditions.
The leakage-current should be less than 0.5 mA rms AC.
The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.
Please leave them at an appropriate depot. All other household batteries can be thrown out with the household waste.

★SPECIFICATIONS

Format	
EA-D/EK-N	VHS standard
EO-D/EOG-VD/EOH-D/ EOH-DN/EOH-N	VHS standard (PAL, MESECAM)
Video recording system	Rotary, slant azimuth two-head helical scan system
Rotary heads	4 video heads and 2 audio heads
RF input	
EA-D	System B, G with monaural or multiplexed 2 channel audio VHF ch 0 - 5, 5a, 6 - 11 UHF ch 21 - 69
EK-N	System I with monaural or multiplexed 2 channel audio (NICAM) UHF ch 21 - 69
EO-D/EOG-VD	System B, G (PAL, SECAM) with monaural or multiplexed 2 channel audio VHF ch 2 - 4, 5 - 12, UHF ch 21 - 69 Cable ch S1' -S3', S1 - S20
EOH-D/EOH-DN	System B, G (PAL, SECAM) with monaural or multiplexed 2 channel audio VHF ch 2 - 4, 5 - 12, UHF ch 21 - 69 Cable ch S1'- S3', S1 - S41
EOH-N	System B,G (PAL, SECAM) with monaural or multiplexed 2 channel audio (NICAM) VHF ch 2 - 4, 5 -12, UHF ch 21 - 69 Cable ch S1' - S3', S1 - S41
RF output	
EA-D	System B type modulation VHF ch 0, 1 switchable (preset ch 1)
EK-N	System I type modulation UHF ch 30 - 39 adjustable (preset ch 36)
EO-D/EOG-VD/EOH-D/ EOH-DN/EOH-N	System G type modulation UHF ch 30 - 39 adjustable (preset ch 36)
Recording (line input)	
EA-D/EK-N	PAL
EO-D/EOG-VD/EOH-D/ EOH-DN/EOH-N	PAL, SECAM (recorded as MESECAM)
Playback (line output)	
EA-D/EK-N	PAL
EO-D/EOG-VD/EOH-D/ EOH-DN/EOH-N	PAL, SECAM (MESECAM Tape)

Video	
Line input level	0.5 - 2.0 Vp-p/75 ohms, unbalanced
Line output level	1.0 Vp-p/75 ohms, unbalanced
S/N ratio	More than 45 dB
Horizontal resolution	More than 250 lines
Audio	(VHS HiFi : 2 ch, Linear : 1 ch)
Line input level	−6 dBs/50 k ohms, unbalanced
Line output level	−6 dBs/1 k ohms, unbalanced
S/N ratio	More than 40 dB
Frequency response	70 - 10,000 Hz
Wow & Flutter	less than 0.005 % WRMS (VHS HiFi)
Recording/playback time	
SP mode	240 min. with E-240 cassette
LP mode	480 min. with E-240 cassette
Tape speed	
SP mode	23.39 mm/sec.
LP mode	11.695 mm/sec.
Quick finder	
SP mode	Approx. 5 or 13 times normal speed
LP mode	Approx. 3 or 7 times normal speed
FF,REW,TIME	Approx. 4.5 min with E-180 cassette
TIMER	
Program	8 Programs / year and QUICK TIMER
Clock reference	Quartz crystal
Display	TV screen & FL (Tape counter, Timer etc.)
Power requirements	
EA-D/EK-N	240 V AC, 50 Hz
EO-D/EOG-VD/EOH-D/ EOH-DN/EOH-N	220 - 230V AC, 50Hz
Power consumption	
EA-D	31 W
EO-D	33 W
EOH-D	36 W
EOH-N/EOH-DN	40 W
EK-N	34 W
EOG-VD	38 W
Operating temperature	5°C - 40°C
Dimensions	425(W) x 82(H) x 357(D) mm
Weight.	
EO-D	5.8 kg
EK-N/EA-D/EOH-D	5.9 kg
EOG-VD/ EOH-N/EOH-DN	6.0 kg

Standard accessories

Antenna cable	1
Remote control unit	1
Batteries for remote control	3
Operator's manual	1

0 dBs = 0.775 V

* For improvement purposes, specifications and design are subject to change without notice.

SYMBOLS OF MODEL NAME FOR PRIMARY DESTINATION

Symbol indicates the destination of the units as listed below.

Symbol	Power Classification	Principal destination	TV System	
			Color	Broadcast
EA	S	Australia	PAL	B,G
ED	E	China	PAL	D
EDG	E	East Europe	PAL	D,K
EDI	E	China, Hong Kong	PAL	D,K,I
EG	E	Spain, Northern Europe, Other	PAL	B,G
	Y7	Saudi Arabia		
EK	B	U.K.	PAL	I
	Y1	Hong kong		
EM	E	Middle East	PAL	B,G
	Y7	Saudi Arabia		
EO	E	Holland, Switzerland, Northern Europe	PAL	B,G
	V	Italy		
EOH	E	Holland, Belgium	PAL	B,G
	V	Italy		
EOG	V	Germany	PAL	B,G
ES	E	South Africa, Ireland, Hong kong	PAL	I
EV	E	South-East Asia	PAL	B,G
	U	Middle East, South-East Asia		
	Y1	New Zealand		
	Y7	Saudi Arabia		
EZ	S	New Zealand	PAL	B,G
EGN	E	Middle East	PAL,NTSC	B,G
	Y7	Saudi Arabia		
S	E	France	SECAM	L
SK	E	Latin America, Oceania, SECAM-OIRT	SECAM	K,K1
SEG	E	France, Switzerland	SECAM,PAL	L,B,G
U	A	U.S.A.	NTSC	M
	C	Canada		
UM	U	Latin America	NTSC	M
J	J	Japan	NTSC	M

TEST MODE

To set the VCR to the TEST MODE, press and hold both the "POWER" and "EJECT" buttons on the front panel, then plug in the AC power cord.
The TEST MODE can be cancelled by disconnecting the AC power cord or simply by pressing the SYSTEM RESET button.

1) MEMORIZATION OF THE REFERENCE RF ENVELOPE DETECT VOLTAGE
For the purpose of correct operation of the I.HQ tape tuning system, memorization of the reference RF envelope detect voltage is absolutely necessary.
When the VIDEO HEAD DRUM, PRE AMP PCB or EEP ROM in the OPERATION PCB is replaced for any reason, memorize the reference RF envelope detect voltage according to the following procedure.

1. Set the VCR to the "TEST MODE" and set the tape speed to "SP mode".
2. Make a recording on the tast tape TF-556AT (AT-751822J) and play it back.
3. Reference RF envelope detect voltage data in the memory is displayed in the left 2 digits of the time display part of the FL display and present envelope detect voltage data is displayed in the right 2 digits of the time display part.
4. After the auto tracking is activated, press the "CANCEL" button on the remote control unit. So, present RF envelope detect voltage data will be memorized in the EEP ROM IC.
5. Set the tape speed to the "LP mode" and repeat steps 2 to 4.

2) TRACKING POSITION DISPLAY
In the SP play mode, tracking position data can be displayed on the FL display. Data is displayed in 64 steps (in hexadecimal numbers from "00" to "3F") in the channel number indicator segment on the FL display.
Pressing the "TV/VCR" button sets tracking to the maximum "3F" tracking position directly during playback and pressing the "COUNTER RESET" button sets it to the minimum "00" position.
Pressing the PLAY button during playback sets tracking to the center position automatically.

SAFETY LOCK SYSTEM

The play button on the VCR and remote control can be locked to prevent access by young children (this feature does not effect other functions of the VCR).
This feature can only be operated by the remote control.

To lock : Press and hold the remote control's stop button for approx. 8 seconds. As long as the play button is locked, safety lock indicator " L" will light on the FL display and "▶—○" will flash on the TV screen any time the play button is pressed.

To unlock : Press and hold the remote control's play button for approx. 8 seconds. If a tape is loaded, the safety lock indicator will disappear from the FL display and TV screen, and playback will begin automatically.

MULTI-FUNCTION MENU MODE

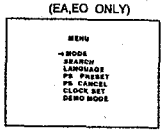
This is an on-screen display of the various modes you can programme via the TV screen.

MODE : To select the AV MUTE and OSD modes and tape speed. (SP/LP SELECT)
SEARCH : To select the BLANK SEARCH and INTRO SCAN modes.
LANGUAGE : To select a language for the on-screen displays.
PS PRESET : To preset TV stations.
PS CANCEL : To cancel preset TV stations.
CLOCK SET : To set the clock.
VPT SET : To set the VPT (EXCEPT EA, EO)
DEMO MODE : To demonstrate some of the modes available on this VCR.

If necessary, refer to the respective sections in the operator's manual for detailed information.

1. Press the "MENU" button on the remote control unit.
The menu list screen will be displayed on the TV screen.
The arrow indicator is automatically set to the "MODE" position.

(EA,EO ONLY)



(EXCEPT EA, EO)

2. Select the desired mode by setting the arrow indicator to the appropriate position with cursor "∨" button.
The arrow indicator moves downwards each time the button is pressed. Pressing the cursor "∧" button will move the arrow indicator upwards.
3. Press the "OK" button.
The selected function screen will be displayed on the TV screen.

* Press the "MENU" button again to return to the normal screen.

MANUAL TRACKING/PICTURE/STABILITY ADJUSTMENT

The VCR can be adjusted for tracking and picture sharpness anytime it is in the playback mode with the remote control unit.

- **Manual tracking control**
Press the "<" or ">" cursor botton repeatedly until the picture is clear. During manual tracking adjustment, the tracking position is shown on the TV screen, this will disappear automatically after adjustment has been completed. Use this function when performing the A/C HEAD phase adjustment.

- **Picture sharpness control**
Press the "∧" button repeatedly to sharpen the picture or press the "∨" button to soften the picture.

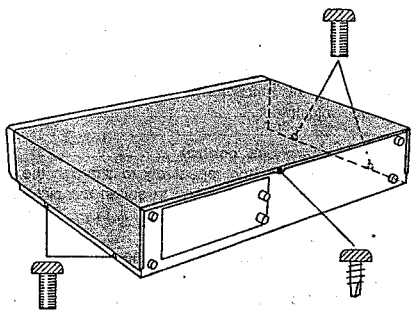
- **Stability adjustment**

1) To correct picture shake during the slow motion or still mode:
Press "∧" or "∨" cursor button until the picture shake is corrected.
2) To correct tracking during the still mode:
Press the "<" or ">" cursor button repeatedly until the picture is clear.

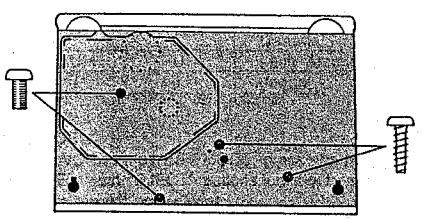
I. DISASSEMBLY

In case of trouble,etc. necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.
When reattaching the FRONT PANEL, hold the cassette loading slot door in the upright (open) position.

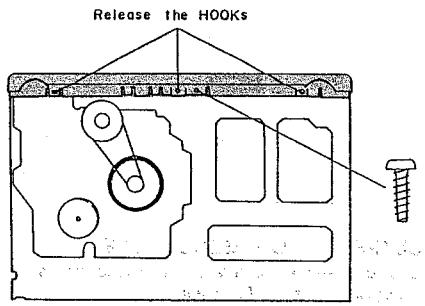
1. Removal of UPPER COVER

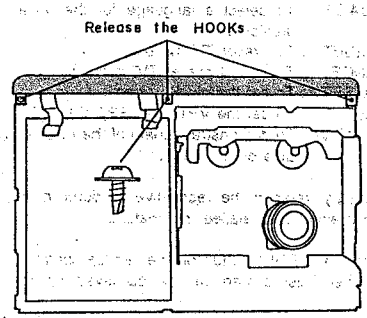


2. Removal of BOTTOM COVER



3. Removal of FRONT PANEL





II. PRINCIPAL PARTS LOCATION

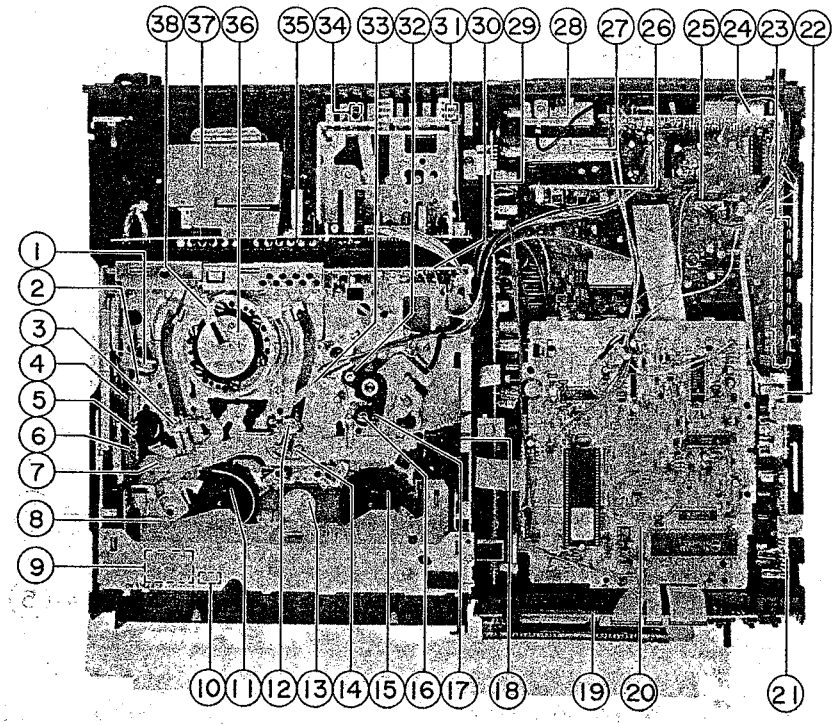


Fig. 2-1 Top view

1. FULL TRACK ERASE HEAD
2. SUPPLY TAPE GUIDE
3. SUPPLY LOADING LEADER
4. SENSOR (S) PCB (END SENSOR)
5. FRONT LOADING GEAR
6. FRONT LOADING SLIDER
7. TENSION ARM
8. CASSETTE LOAD BLK
9. LOADING MOTOR
10. REC SAFETY SWITCH
11. SUPPLY REEL TABLE
12. TAKE UP LOADING LEADER
13. IDLER PART
14. SENSOR LED
15. TAKE UP REEL TABLE
16. CAPSTAN MOTOR
17. REVIEW ARM
18. SENSOR (T) PCB (START SENSOR)
19. OPERATION PCB
20. VPST / PDC PCB (EOG-VD only)
    OPTION: PDC (EOH-DN, EOH-D, EOH-N)
    OPTION: PDCT (EK-N)
21. I-HQ PCB
22. D. MULTI PCB (EA-D, EO-D, EOH-D, EOG-VD)
23. NICAM PCB (EK-N, EOH-N, EOH-DN))
24. I/O (INPUT/OUTPUT) PCB
25. MAIN PCB
26. VIF UNIT
27. TUNER UNIT
28. RF CONVERTOR UNIT
29. SERVO/SYSCON PCB
30. PRE AMP PCB
31. TR (2) PCB
32. PINCH ROLLER
33. AUDIO / CONTROL / S. ERASE HEAD
34. TR (1) PCB
35. POWER SUPPLY PCB
36. VIDEO HEAD DRUM BLOCK
37. POWER TRANSFORMER
38. EARTH BRUSH

* Photograph employed on this page is of model VS-F580EOG-VD.

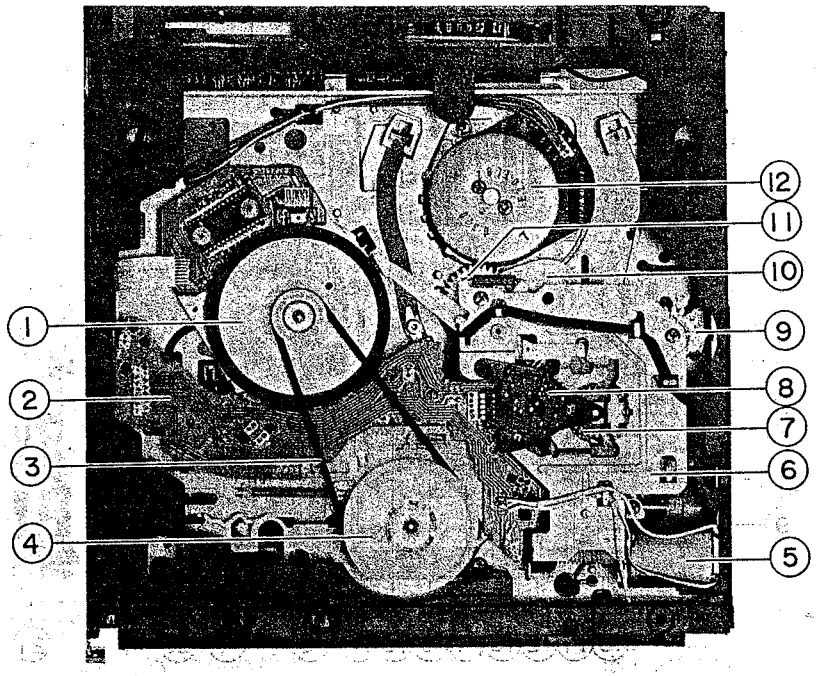


Fig. 2-2 Bottom view

1. CAPSTAN MOTOR BLOCK
2. SENSOR PCB
3. CAPSTAN BELT
4. CLUTCH DISK PART
5. LOADING MOTOR
6. LOADING DRIVE BLOCK
7. CAM SLIDER GEAR
8. MODE SELECT SWITCH
9. FRONT LOADING GEAR
10. TOGGLE (S) GEAR BLOCK
11. TOGGLE (T) GEAR BLOCK
12. DRUM MOTOR BLOCK

III. MAIN COMPONENTS REPLACEMENT

3-1. REMOVAL OF THE EJECTOR BLOCK

Set the loading mechanism to the "EJECT" position by pressing the EJECT button. Then disconnect the AC power plug from the AC socket before proceeding.

3-1-1. Removal of the CASSETTE LOAD BLK

1) Remove the two Ⓐ screws on the UPPER PLATE, as shown in Fig. 3-1 then remove the UPPER PLATE.
2) Lift up the FRONT GUIDE while pushing the CASSETTE LOAD BLK backwardS, then remove the FRONT GUIDE.
3) Gently lift up the front side of the CASSETTE LOAD BLK, then remove it. To avoid damaging the pins of the CASSETTE LOAD BLK and the groove of the MECHA.FRAME, do not use excessive force when removing the CASSETTE LOAD BLK.

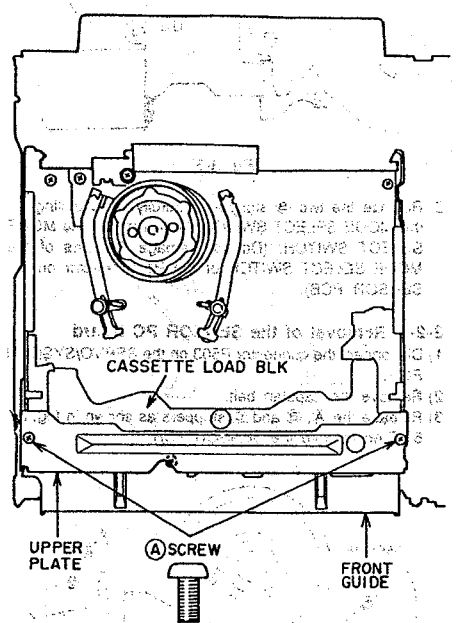


Fig. 3-1

3-1-2. Removal of the LOADING ARM BLK

1) Release the stopper on the right side end of the LOADING ARM BLK's shaft (Refer to Fig. 3-2) by pressing the stopper tab with a flat head (—) screwdriver. Then remove the shaft's right end from the bracket.

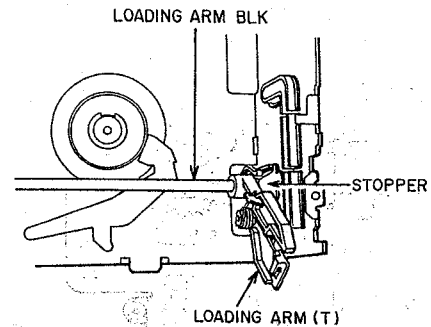


Fig. 3-2

2) Hold the LOADING ARM (T) and turn it 30 degrees clockwise, then pull out the shaft's left end from the bracket. Take special care when removing it to avoid damaging the JOINT and EJECT GEARs. (Refer Fig. 3-3)

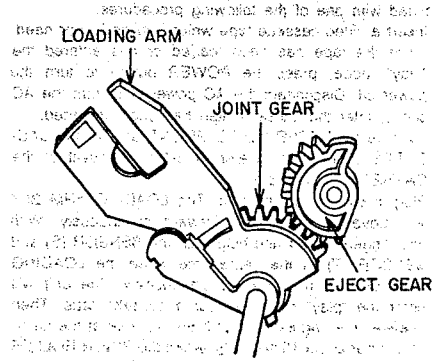


Fig. 3-3

3-2. REMOVAL OF THE SENSOR PC BOARD

* Before proceeding with removal of the SENSOR PCB, the loading mechanism must be set to the "unloaded" position (the position where the CAM SLIDER GEAR's groove mark is visible through the hole of the MODE SELECT SW.) as shown in Fig. 3-4.

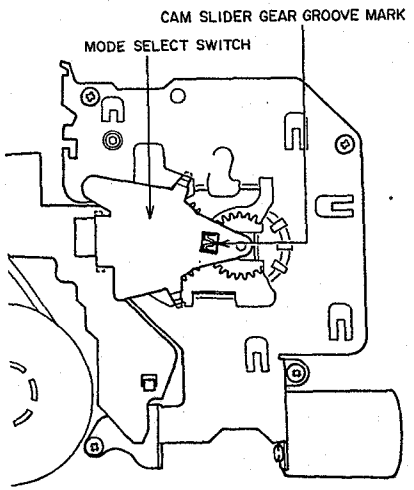


Fig. 3-4

To set the loading mechanism to the "unloaded" position, proceed with one of the following procedures.

1) Insert a video cassette tape which you no longer need. Once the tape has been loaded or has entered the "play" mode, press the POWER button to turn the power off. Disconnect the AC power plug from the AC socket after the cassette tape has been unloaded.
2) Remove the UPPER PLATE, FRONT GUIDE and CASSETTE LOAD BLK. (Refer to 3-1-1. Removal of the CASSETTE LOAD BLK.)
   Plug in the AC power cord. The LOADING ARM BLK will move backward and forward continuously. With your fingers, cover and hold both the SENSOR (S) and SENSOR (T) at the same time when the LOADING ARM BLK is in the backward position. The unit will enter the "play" mode without a cassette tape. Then release your fingers from both the sensors at the same time. After about 10 seconds (when the PINCH ROLLER is disengaged from the CAPSTAN and the SUPPLY REEL stops rotating, and the mechanism is set to "standby"), press the POWER button on the OPERATION PCB.
   The mechanism will now be set to the "tape unloaded" position.
   Disconnect the AC power plug from the AC power socket.

3-2-1. Removal of the MODE SELECT SWITCH

1) Release the two Ⓐ stoppers as shown in Fig. 3-5.

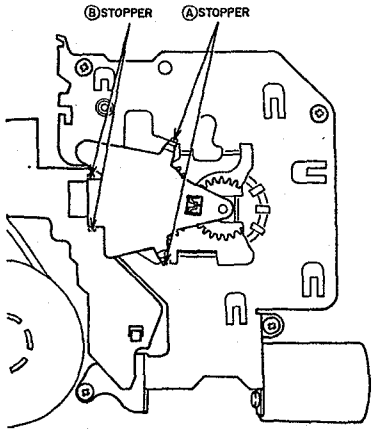


Fig. 3-5

2) Release the two Ⓑ stoppers carefully while pulling up the MODE SELECT SWITCH. Then remove the MODE SELECT SWITCH. (Do not damage the pins of the MODE SELECT SWITCH or the P1 connector on the SENSOR PCB).

3-2-2. Removal of the SENSOR PC Board

1) Disconnect the connector P503 on the SERVO/SYSCON PCB.
2) Remove the capstan belt.
3) Release the Ⓐ, Ⓑ and Ⓒ stoppers as shown in Fig. 3-6. Then remove the SENSOR PCB.

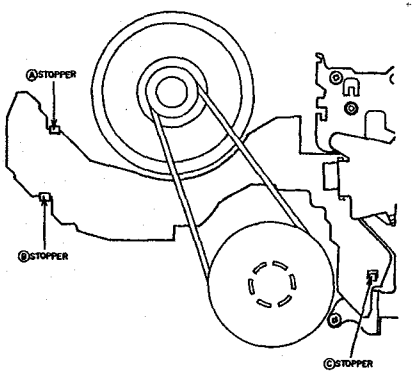


Fig. 3-6

3-3. REMOVAL OF THE LOADING DRIVE BLK

Set the loading mechanism to the "unloaded" position as well as 3-2 (REMOVAL OF THE SENSOR PC BOARD). However, this time, to avoid damaging the tape and mechanical parts, refer to 3-2, * 2) only.

1) Remove the MODE SELECT SWITCH (refer to 3-2-1 Removal of the MODE SELECT SWITCH).
2) Unhook the five wires from each tab. Two wires from the SENSOR (S), two wires from the LOADING MOTOR and one wire from the REC SAFETY SWITCH.
3) Remove the Ⓐ, Ⓑ, Ⓒ and Ⓓ screws, then remove the LOADING DRIVE BLK as shown in Fig. 3-7.

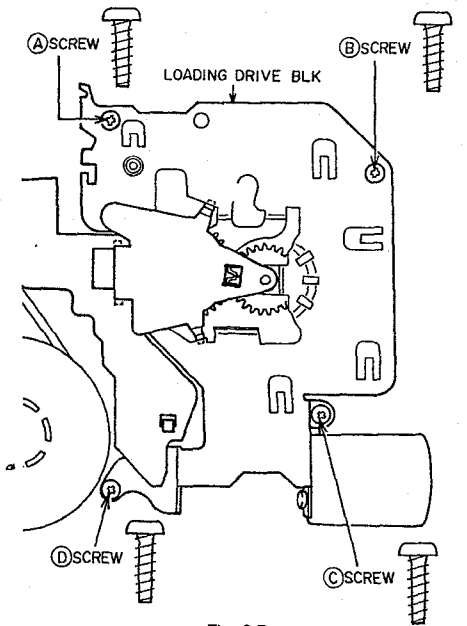


Fig. 3-7

3-4. REASSEMBLY OF THE LOADING MECHANISM BLK

3-4-1. Position of the TOGGLE GEARs (T) and (S)

1) Set the TOGGLE GEARs (T) and (S) to the unloaded position with your fingers. Align the Ⓐ mark on TOGGLE GEAR (S) with the Ⓐ hole of TOGGLE GEAR (T) as shown in Fig. 3-8.

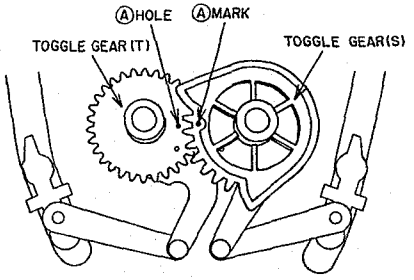


Fig. 3-8

3-4-2. Installation of the CAM SLIDER GEAR & FRONT LOADING GEAR

1) Attach the WORM WHEEL GEAR as shown in Fig. 3-9.

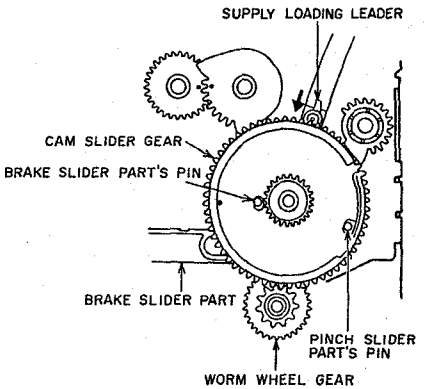


Fig. 3-9

2) Set the CAM SLIDER GEAR and adjust the position of the BRAKE SLIDER PART and PINCH SLIDER PART so that both pins appear through the holes on the CAM SLIDER GEAR as shown in Fig. 3-9. When inserting the CAM SLIDER GEAR onto its shaft, press the SUPPLY LOADING LEADER slightly in the direction of the arrow to make installation easy.

3) Attach the FRONT LOADING GEAR as shown in Fig. 3-10 and align the Ⓑ mark on the FRONT LOADING GEAR with the Ⓑ hole of the FRONT LOADING SLIDER as shown in Fig. 3-11.

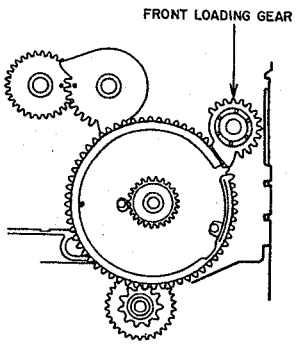


Fig. 3-10

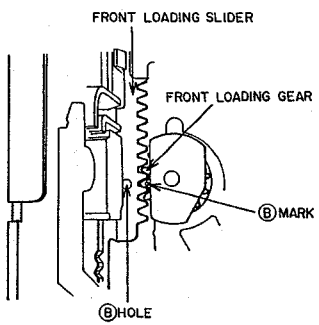


Fig. 3-11

3-4-3. Confirmation of the position of the EJECT GEAR

1) Confirm that the EJECT GEAR is in the correct position as shown in Fig. 3-12.

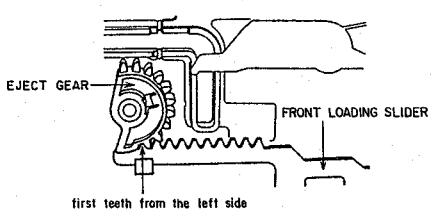


Fig. 3-12

2) Install the LOADING DRIVE BLK as shown in Fig.3-13.

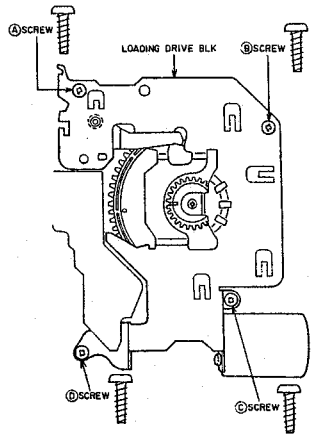


Fig. 3-13

3-4-4. Installation of the MODE SELECT SWITCH

1) Set the MODE SELECT SWITCH's gear, so that the Ⓒ mark is in the center of the Ⓒ hole as shown in Fig. 3-14.

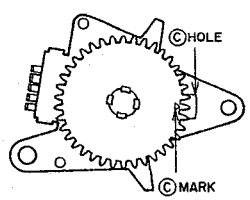


Fig. 3-14

2) Attach the MODE SELECT SWITCH to the LOADING DRIVE BLK and align the hollow of the gear's tooth (reverse side of the Ⓒ mark) with the Ⓒ groove of the CAM SLIDER GEAR as shown in Fig. 3-15.

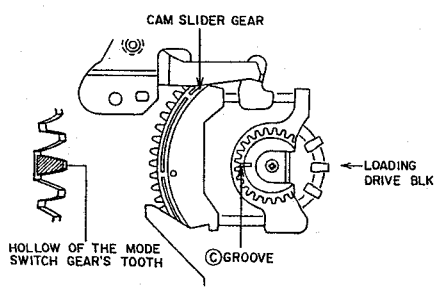


Fig. 3-15

3-4-5. Installation of the LOADING ARM BLK

1) While covering SENSOR (S) with your fingers, connect the AC power plug to the AC socket. The FRONT LOADING SLIDER will reach the "EJECT" position. Then disconnect the AC power plug from the AC socket before you release your fingers from SENSOR (S).
2) Install the LOADING ARM BLK in the reverse order of 3-1-2 (Removal of the LOADING ARM BLK). Position the EJECT GEAR and the JOINT GEAR as shown in Fig. 3-16.

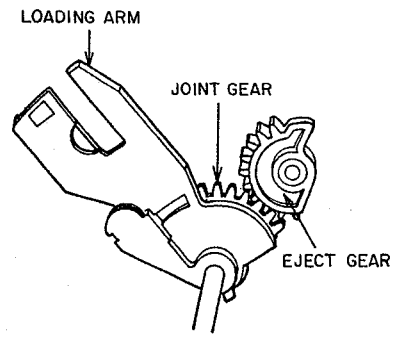


Fig. 3-16

3-4-6. Installation of the CASSETTE LOAD BLK, FRONT GUIDE and UPPER PLATE

1) Attach the CASSETTE LOAD BLK, FRONT GUIDE and UPPER PLATE in the reverse order of 3-1-1 (Removal of the CASSETTE LOAD BLK).
2) Insert a video cassette tape and confirm that the loading mechanism operates properly.

3-5. REPLACEMENT OF THE PINCH ROLLER PART

1) Remove the Ⓐ screw, then remove the PINCH ROLLER part, as shown in fig. 3-17
2) Set the pinch roller so that white plastic spacer side faces chassis when replacing. Then tighten the Ⓐ screw.

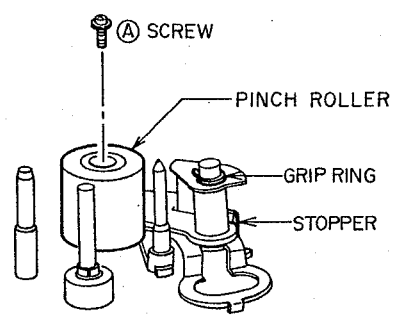


Fig. 3-17

3-6. REPLACEMENT OF THE IDLER PART AND REVIEW BRAKE PART

1) Remove the CASSETTE LOAD BLOCK & LOADING ARM BLK. (refer to 3-1, REMOVAL OF THE EJECTOR BLOCK).
2) Release the stopper of IDLER PART as shown in Fig. 3-18, then remove it.

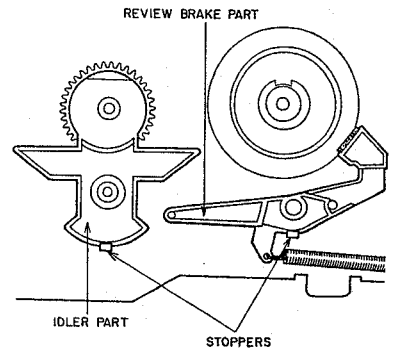


Fig. 3-18

3) Take off the review brake part spring, then release the stopper of the REVIEW BRAKE PART and remove it.
4) Reassemble the parts in the reverse order of steps 1) to 3).

3-7. REPLACEMENT OF THE UPPER DRUM

3-7-1. Removal of the UPPER DRUM

1) Remove one of the PRE AMP retaining screw and remove the EARTH BRUSH.
2) Unsolder the twelve relay leads and remove the two upper drum fixing screws as shown in Fig. 3-19.
3) Gently lift and remove the UPPER DRUM.

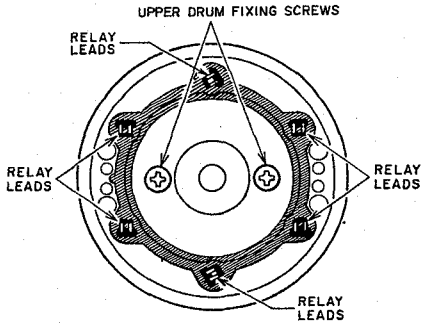


Fig. 3-19

3-7-2. Installation of the UPPER DRUM

1) Attach the UPPER DRUM to the LOWER DRUM ROTOR, so that the upper drum convex Ⓐ and lower drum rotor's white mark line up, as shown in Fig. 3-20.

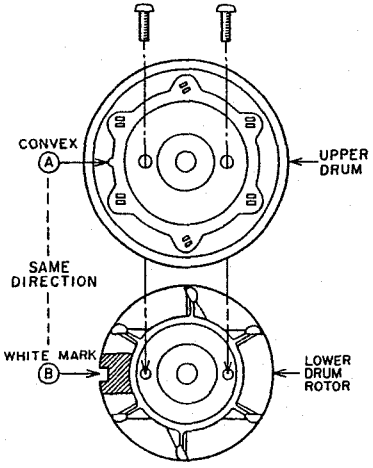


Fig. 3-20

NOTE: Because height precision is required for proper performance, and because head tips are fragile, the following points should be noted when replacing the UPPER DRUM BLOCK.

(a) Do not loosen the set screw on the collar preload.
(b) Before fixing, use alcohol to clean both surfaces where the upper drum and the rotary transformer meet.
(c) If the UPPER DRUM can not be inserted on to the shaft easily during installation, clean the hole in the UPPER DRUM with alcohol and put a little oil on the shaft.
(d) Make sure that the upper drum fixing screw holes, on the rotary transformer part, and the upper drum fixing screw penetration holes match exactly before inserting the fixing screws.
(e) Tighten the two upper drum fixing screws alternately and gradually.

3-7-3. After replacement

After replacement, the following adjustments are necessary for the proper performance.

1) Reference RF envelope detect voltage preset. (Refer to "TEST MODE", step 1)
2) Control head Phase adjustment (IV. MECHANICAL ADJUSTMENT 4-3-3.)
3) PB switching point adjustment. (V. ELECTRICAL ADJUSTMENT Step 1)
4) Video head REC current adjustment. (V. ELECTRICAL ADJUSTMENT Step 7)
5) HiFi head REC current adjustment. (V. ELECTRICAL ADJUSTMENT 5-2 Step 5)

3-8. DRUM MOTOR PC BOARD REPLACEMENT

1) Remove the two Ⓐ screws on the ROTARY PLATE and then remove it.
Then disconnect the connector on the DRUM MOTOR PCB as shown.

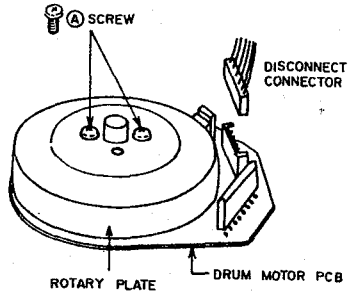


Fig. 3-21

2) Remove the three Ⓑ screws which retain the DRUM MOTOR PCB and replace it.

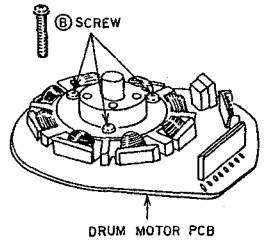


Fig. 3-22

3) Attach the ROTARY PLATE to the collar preload so that the rotary plate Ⓒ hole and collar preload Ⓓ hole line up.

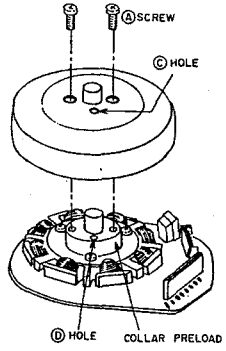


Fig. 3-23

3-9. REMOVAL OF THE MECHANISM BLOCK

3-9-1. Removal of the PRE AMP PC Board

1) Remove the Ⓐ screw and remove the EARTH BRUSH as shown in Fig. 3-24.

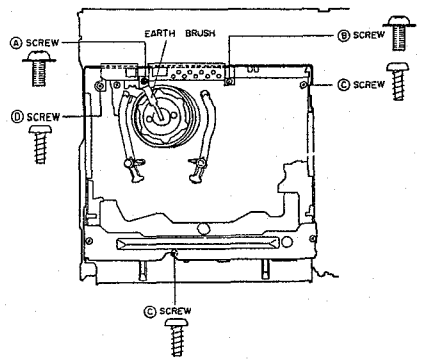


Fig. 3-24

2) Remove the Ⓑ and Ⓓ screw which fix the PRE AMP PCB then pull up the PRE AMP PCB as shown in Fig. 3-24.

3-9-2. Removal of the MECHANISM BLK (MECHA. FRAME)

1) Disconnect the connectors P501, P502, P503 on the SERVO/SYSCON PCB.
2) Disconnect the P1 connector on the A/C HEAD PCB and connector on the FULL TRACK ERASE HEAD.
3) Remove the two Ⓒ screws from the MECHA. FRAME as shown in Fig. 3-24.
4) Hold the rear side of the MECHA. FRAME then remove it by pulling it up backwards.
5) Reassemble in the reverse order for installation.

IV. MECHANICAL ADJUSTMENT

4-1.BACK TENSION ADJUSTMENT

1) Prepare a video cassette tape which you no longer needed. Remove both tape reels and the tape protection cover from the cassette tape. Then cover the video cassette's left and right side detection holes with black adhesive tape.
2) Play back the tapeless cassette which you prepared.
3) Confirm the distance between Ⓐ groove on the TENSION ARM and the Ⓐ mark on the MECHA. CHASSIS so that the distance should be within the value shown in Fig. 4-1
4) If the result is not satisfactory, eject the tape and adjust the TENSION ADJUST repeatedly until the result is satisfactory.

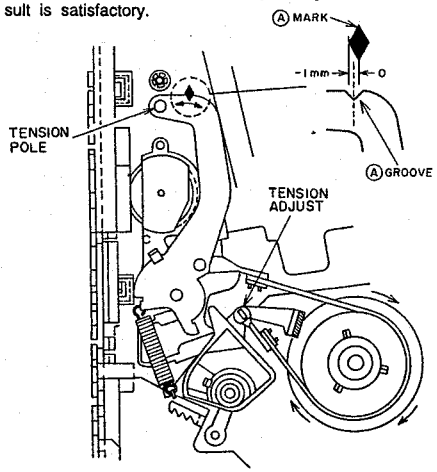


Fig. 4-1

4-2.TAPE TRANSPORT ADJUSTMENTS

NOTE: The following adjustments are required only when an irregularity is found, since these adjustment are precisely set at the factory.

4-2-1. Tape curl adjustment at the TAKE-UP TAPE GUIDE

1) Playback a recorded tape which is no longer needed.
2) Turn the Ⓐ screw on the A/C HEAD BLK, until the edge of the tape barely touches the lower part of the TAKE UP TAPE GUIDE, without any curl or wrinkle.
3) Once the Ⓐ screw is adjusted, A/C HEAD height and azimuth adjustment is required. (Refer to 4-3. A/C HEAD POSITION ADJUSTMENT.)

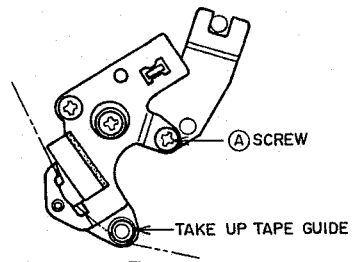


Fig. 4-2

(TAKE-UP TAPE GUIDE)

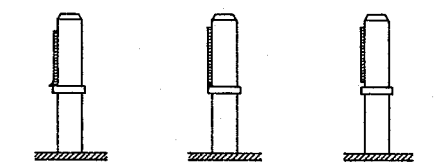


Fig. 4-3

4-2-2. Confirmation of tape curl on the SUPPLY TAPE GUIDE

Confirm that the edge of the tape barely touches the lower part of the SUPPLY TAPE GUIDE, without any curl or wrinkle as shown in Fig. 4-4.

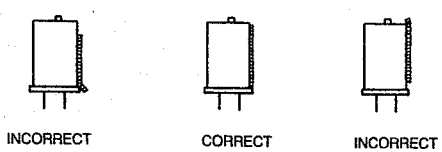


Fig. 4-4

4-2-3. REVIEW ARM height adjustment

1) Play back the beginning part of an E-240 tape and set the unit to the REVIEW mode by pressing the REW button. (Remove the tape protection cover to make the adjustment easier.)

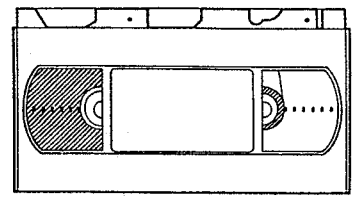


Fig. 4-5

2) Turn the REVIEW ARM height Ⓐ nut so that the edge of the tape barely touches the lower part of the TAKE-UP TAPE GUIDE, without any curl or wrinkle between the TAKE-UP TAPE GUIDE and the CAPSTAN SHAFT as shown in Fig. 4-6 to Fig. 4-8.

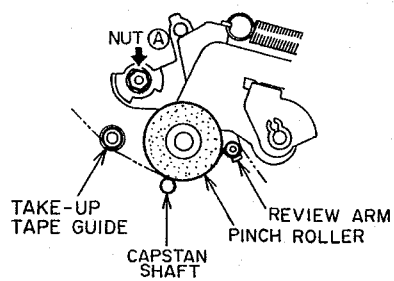


Fig. 4-6

(TAKE-UP TAPE GUIDE)

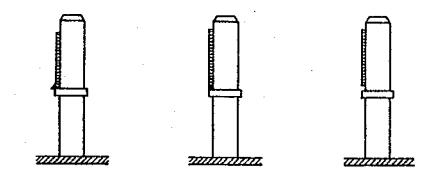


Fig. 4-7

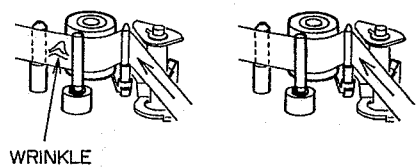


Fig. 4-8

3) Play back the beginning part of an E-240 tape and this time set the unit to the CUE mode by pressing the F.FWD button.
4) Confirm there is no curl or wrinkle near the REVIEW ARM's guide.
If curl or wrinkle of the tape occurs, slightly turn the Ⓐ nut (Shown in Fig. 4-6) until it disappears.

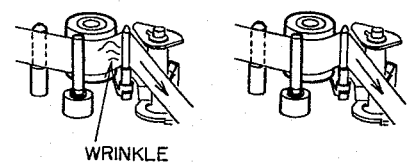


Fig. 4-9

5) Set the unit to the REVIEW mode again. Then confirm that there is no curl or wrinkle near the TAKE-UP TAPE GUIDE. (A small gap may appear after this adjustment, but this is allowable.)

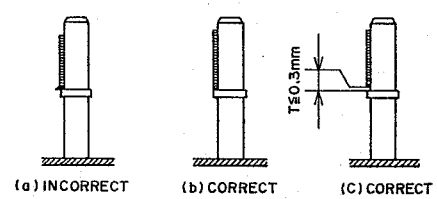


Fig. 4-10

NOTE:
1. If the results are not satisfactory, repeat steps 2) to 5).
2. Always play an undamaged tape to obtain satisfactory adjustment.
3. Because an E-240 tape can be damaged easily, due of its thinness, a pre-adjustment with an E-180 tape is recommended.

4-2-4. LOADING LEADER height adjustments

1) Slightly loosen the set screw at the lower part of the LOADING LEADERs (L), (R) so that the LOADING LEADER can be adjusted with reasonable tightness. (Refer to Fig. 4-11.)

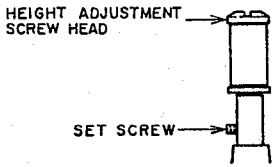


Fig. 4-11

2) Play back reference tape TF-530RFS (AT-751775).
3) Connect an oscilloscope's CH-1 to Q204 emitter (ENVE) on the MAIN PCB and CH-2 to TP803 (V-SWP) on the PRE AMP PCB for triggering.
4) Turn the LOADING LEADER heads with a flat head (—) screwdriver to obtain a flat RF envelope as the ideal envelope, as shown in Fig. 4-12.
5) After adjustment is completed, tighten the loading leader set screws.

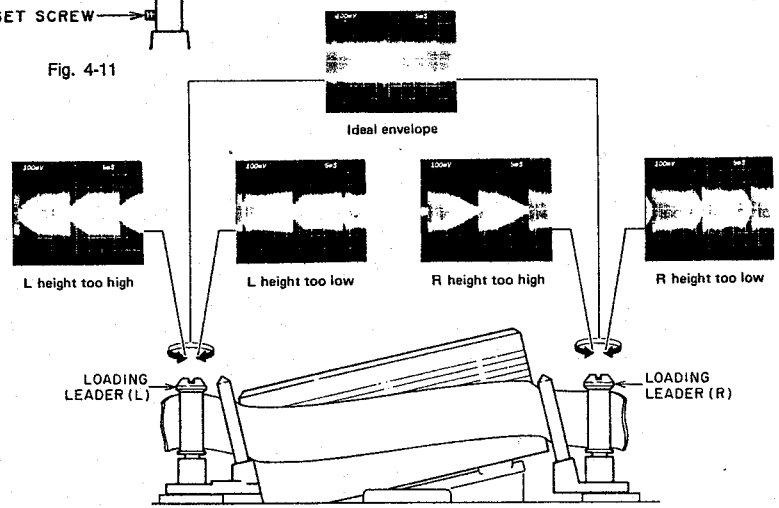


Fig. 4-12

4-3.A/C HEAD POSITION ADJUSTMENT

4-3-1. Azimuth adjustment

1) Connect an AC voltmeter or an oscilloscope to the AUDIO OUT terminal on the rear panel.
2) Play back reference tape TF-530RFS (AT-751775).
3) Press the AUDIO MONITOR button on the remote control unit and choose LINEAR audio track playback.
4) Adjust the Ⓑ screw to obtain the maximum audio output.

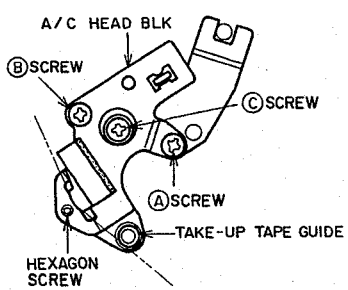


Fig. 4-13

4-3-2. Height adjustment

1) Play back test tape TF-526HH (AT-751788).
2) Connect an oscilloscope's CH-1 to the AUDIO OUT terminal on the rear panel and CH-2 to TP502 (CTL OUT) on the SERVO/SYSCON PCB.
3) Turn the hexagon screw to obtain 1/2 of the output level of either CH-1 or CH-2, whichever has an output signal as shown in Fig. 4-14.
   Then set both of the oscilloscope's channels to 100 mV/div and finely adjust the hexagon screw until both signals of CH-1 and CH-2 are nearly the same level.
4) Slightly turn the Ⓐ screw until the tape edge barely touches the lower part of the TAKE-UP TAPE GUIDE without any curl or wrinkle as shown in Fig. 4-3.
5) Adjust the head azimuth again. (Turning the hexagon screw, or Ⓐ screw, will cause head azimuth mis-alignment. Refer to 4-3-1. Azimuth adjustment.)
6) Confirm that both signals of CH-1 and CH-2 are nearly the same level (confirm that neither of the CH-1 or CH-2 output levels exceed 100 mVp-p). If the result is not satisfactory, repeat steps 3) to 5).

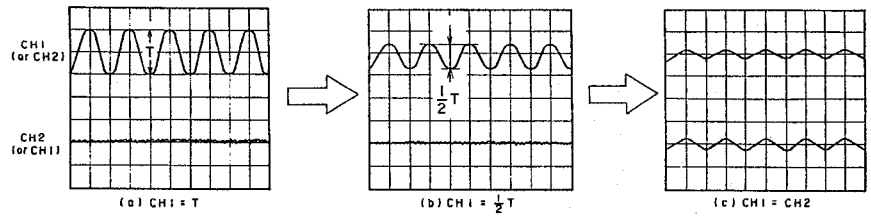


Fig. 4-14

4-3-3. Phase adjustment

1) Connect an oscilloscope's CH-1 to the Q204 emitter (ENVE) on the MAIN PCB and CH-2 to TP803 (V-SWP) on the PRE AMP PCB for triggering.
2) Play back reference tape TF-530RFS (AT-751775).
3) Press the "<" or ">" cursor button on the remote control until the "X" mark can be seen in the center position of the tracking range on the TV screen as shown in Fig. 4-15.
4) Loosen the Ⓒ screw slightly so that the A/C HEAD PLATE can be moved with reasonable tightness.
5) Insert a sharp, flat head (—) screwdriver into the A/C HEAD BASE and Ⓐ hole as shown in Fig. 4-17.
6) Move the A/C HEAD BASE by moving a screwdriver in the direction of the arrow as shown in Fig. 4-17 to obtain the maximum RF output, then tighten the Ⓒ screw.

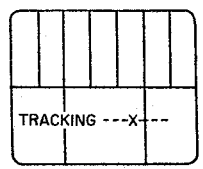


Fig. 4-15

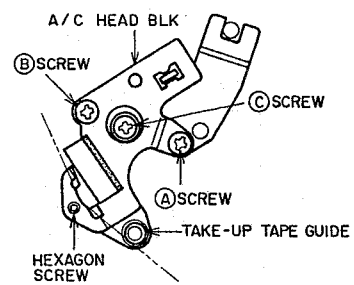


Fig. 4-16

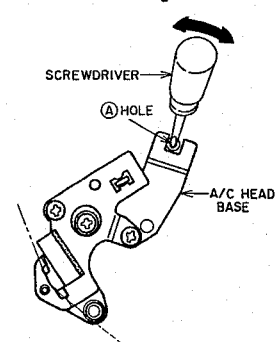


Fig. 4-17

V. ELECTRICAL ADJUSTMENT

5-1. VIDEO & SERVO CIRCUIT ADJUSTMENT

Precautionary items prior to adjustments
1. The color bar generator output should be 1.0 Vp-p
2. The video output terminal should be terminated with 75 ohms (connect dummy load or 75 ohms input TV.)

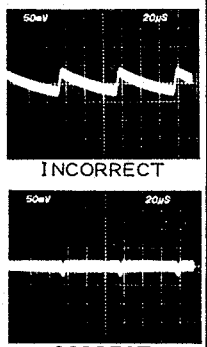
STEP	ADJUSTMENT ITEM
1.	MODE and INPUT SIGNAL / TEST TAPE
2.	TEST POINT and ADJ part
3.	REMARKS (•) & RESULT (✻)

Test point ADJ. part

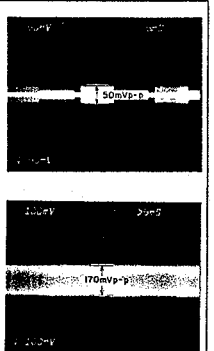
Required following test tapes.

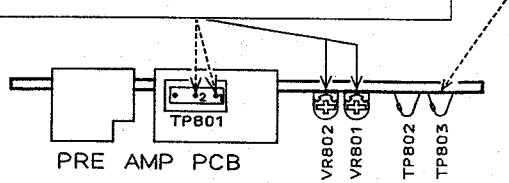
Test tape	Parts No.
TF-527BL	AT-711880
TF-530RFS	AT-751775
TF-532CBS	AT-751360

2 AFC ERROR
1. "E-E" (stop mode), PAL colour bar signal
2. TP501 (AFC ERROR) & VR500 (AFC)
3. • Connect an oscilloscope to TP501.
   * Adjust the VR500 so that the wave form becomes as flat as possible.

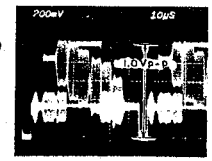


6 VIDEO REC CURRENT
1. "REC" (LP mode), PAL color bar signal
2. TP801 (TP REC. CURR) & VR802 (REC-CHROMA), VR801 (REC-Y)
3. • Connect an oscilloscope's CH-1 to TP801 ① pin and CH-2 to ② pin. And set the oscilloscope' display mode to "ADD" mode and CH-2 polarity to "INVERTED".
   • Turn the VR801 (REC-Y) fully counterclockwise.
   * Adjust VR802 so that the chroma REC current becomes 50 mVp-p at the cyan part.
   * Adjust VR801 so that Y REC current becomes 170 mVp-p at the V-SYNC area.

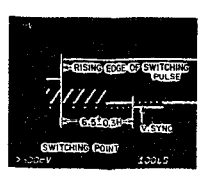


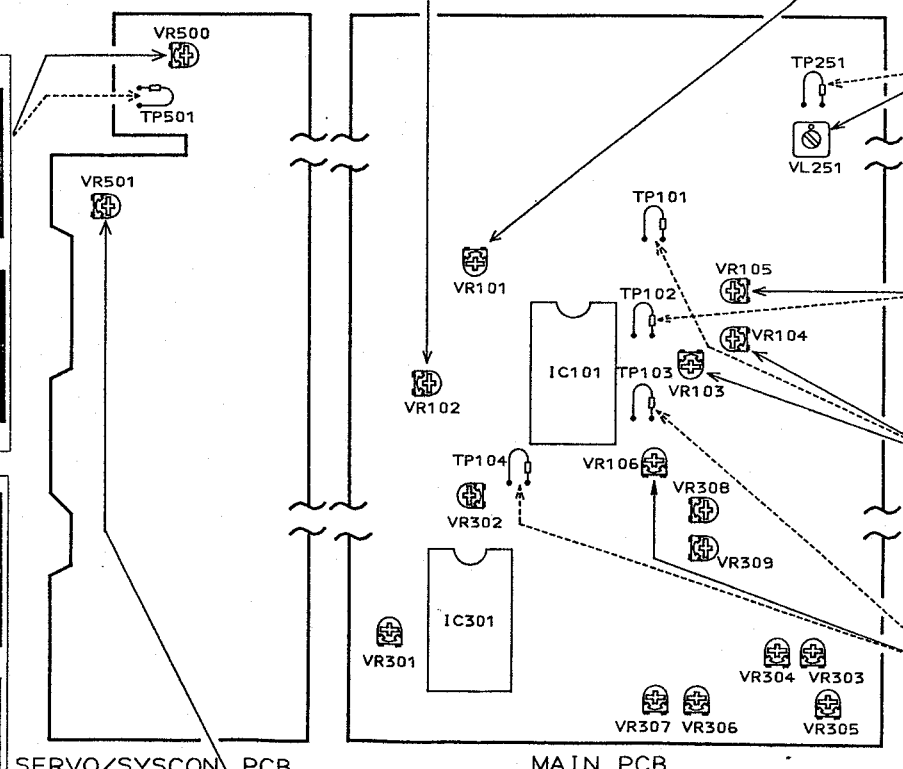


8 VIDEO PB LEVEL
1. "REC"-"PB", PAL color bar signal
2. VIDEO OUT & VR102 (PB LEVEL)
3. • Connect an oscilloscope to VIDEO OUT
   • Make some recording on the tape, then play it back
   * Adjust VR102 so that PB level becomes 1.0 Vp-p

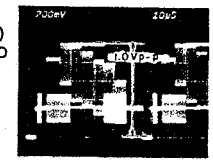


1 PB SWITCHING POINT
1. "PB", test tape TF-530RFS
2. TP803 (SWP), VIDEO OUT & VR501 (SW. POINT)
3. • Connect an oscilloscope's CH-1 to TP803 (SWP) for triggering and CH-2 to VIDEO OUT
   * Adjust VR501 so that the switching point is positioned 6.5 H from the V-SYNC left edge as shown.

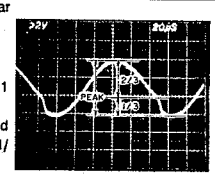




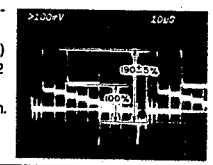
3 VIDEO E-E LEVEL
1. "E-E" (STOP mode), PAL color bar signal
2. VIDEO OUT & VR101 (E-E LEVEL)
3. • Connect an oscilloscope to VIDEO OUT.
   * 1.0 Vp-p



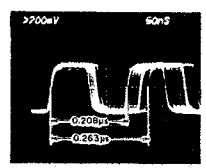
9 P / S AUTO SENSITIVITY (EOG ONLY)
1. "E-E" (stop mode), SECAM color bar signal
2. TP251 (P / S SENS), VL251 (P / S SENS)
3. • Connect an oscilloscope to TP251 (P / S SENS).
   * Adjust the VL251 so that distorted point of the waveform becomes 1/3 from the bottom as shown.



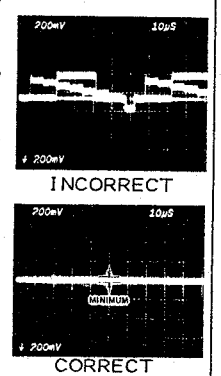
4 WHITE CLIP
1. "E-E" (stop mode), PAL color bar signal
2. TP102 (W.CLIP) & VR105 (W.CLIP)
3. • Connect an oscilloscope to TP102
   * Adjust VR105 so that white clip level becomes 190 ± 5 % as shown.



5 CARRIER SET & DEVIATION
1. "REC", PAL color bar signal
2. TP101 (REC.Y) & VR104 (CARRIER), VR103 (DEVIATION)
3. • Connect an oscilloscope to TP101 (REC. Y)
   * VR104 (CARRIER) : 0.263 µs (3.8 MHz)
   * VR103 (DEVIATION) : 0.208 µs (4.8 MHz)



7 CCD
1. "PB", test tape TF-532CBS
2. TP103 (CCD), TP104 (CCD) & VR106 (CCD LEVEL)
3. • Connect an oscilloscope's CH-1 to TP103 and CH-2 to TP104. And set the oscilloscope's display mode to "ADD" mode and CH-2 polarity to "INVERTED".
   * Adjust VR106 so that waveform level on the oscilloscope becomes minimum.



5-2. AUDIO CIRCUIT ADJUSTMENT

Precautionary items prior to adjustments
1. Never adjust the D MULTI circuit because it is adjusted precisely at the factory and the adjustment of the D MULTI circuit is required special testing equipments.

Required following test tapes.

Test tape	Parts No.
TF-527BL	AT-711880
TF-532CBS	AT-751360

STEP	ADJUSTMENT ITEM
1.	MODE and INPUT SIGNAL / TEST TAPE
2.	TEST POINT and ADJ part
3.	REMARKS (•) & RESULT(*)

→ ADJ. part
→ Test point

1 REC BIAS
1. "REC" (LP mode), (no signal input)
2. TP301 1,2 pin & VR302 (REC BIAS)
3. • Connect an AC voltmeter to TP301 ① pin and ② pin (ground). (Never connect the AC voltmeter's ground to the VCR's ground)
   * Adjust VR302 so that the reading on the AC voltmeter becomes 2.4 mV.

6 METER SENSITIVITY
1. "E-E", 1kHz −6 dB
2. AUDIO OUT & VR309 (L-CH), VR308 (R-CH)
3. • Connect an AC voltmeter to the AUDIO OUT.
   • Set the volume on the front panel to the center position. And confirm that the output level is −6 dBs. If not, adjust the volume slightly until the level becomes −6 dBs.
   * To adjust the VR308 and VR309, first display the bar meter on the TV screen using the remote controls DISPLAY button.adjust the VR308, VR309 until the bar meter reaches the (O) mark. If the result is not satisfactly, readjust the VR308 or VR309 again.

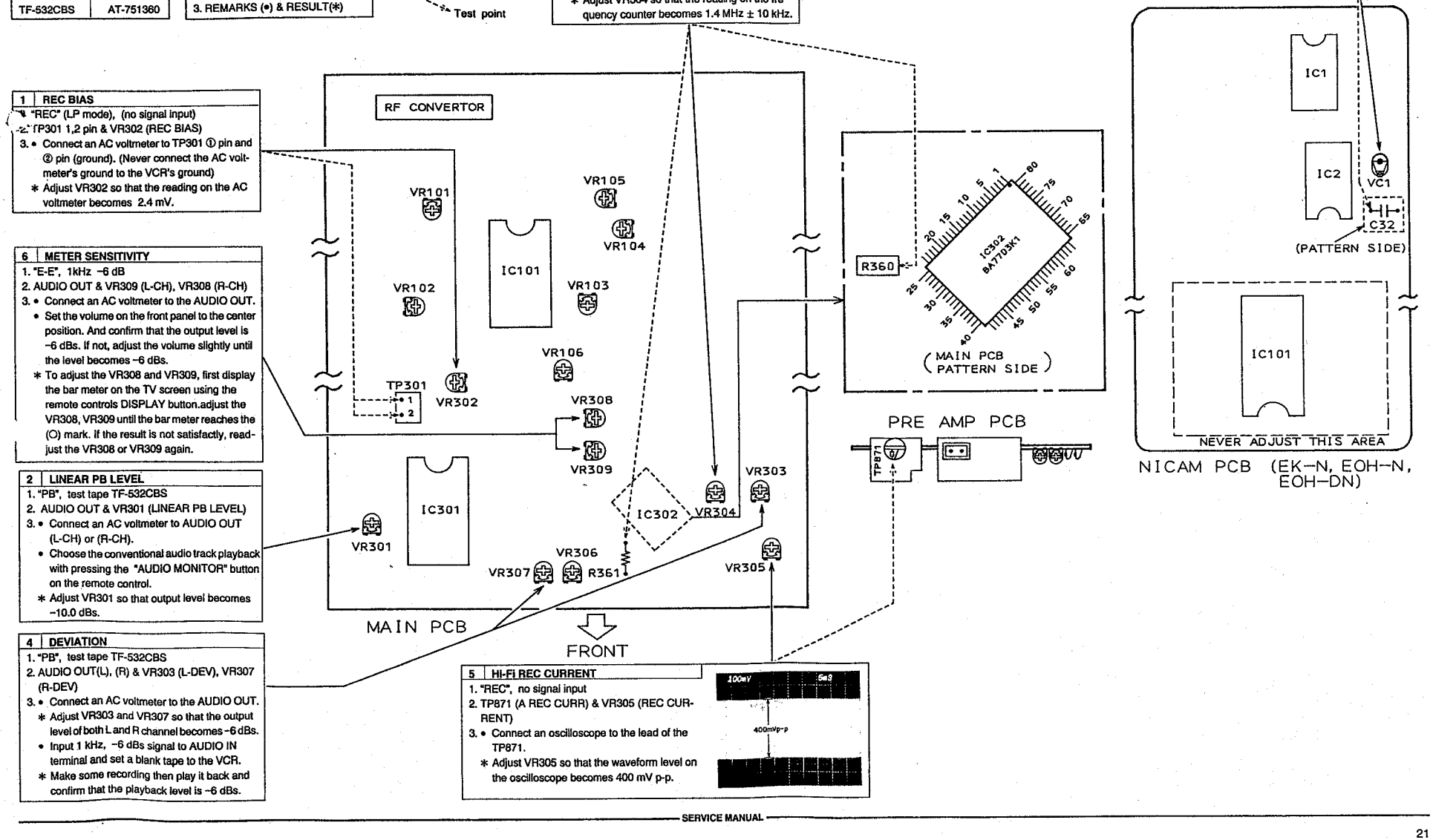
2 LINEAR PB LEVEL
1. "PB", test tape TF-532CBS
2. AUDIO OUT & VR301 (LINEAR PB LEVEL)
3. • Connect an AC voltmeter to AUDIO OUT (L-CH) or (R-CH).
   • Choose the conventional audio track playback with pressing the "AUDIO MONITOR" button on the remote control.
   * Adjust VR301 so that output level becomes −10.0 dBs.

4 DEVIATION
1. "PB", test tape TF-532CBS
2. AUDIO OUT(L), (R) & VR303 (L-DEV), VR307 (R-DEV)
3. • Connect an AC voltmeter to the AUDIO OUT.
   * Adjust VR303 and VR307 so that the output level of both L and R channel becomes −6 dBs.
   • Input 1 kHz, −6 dBs signal to AUDIO IN terminal and set a blank tape to the VCR.
   * Make some recording then play it back and confirm that the playback level is −6 dBs.

3 CARRIER FREQUENCY
1. "E-E" (stop mode), no signal input
2. R361 (R), R360 (L) & VR306 (R-fo), VR304 (L-fo)
3. • Connect a frequency counter to the lead of the R361 and ground.
   Adjust VR306 so that the reading on the frequency counter becomes 1.8 MHz ±10 kHz.
   • Connect the frequency counter to the lead of the R360 and ground.
   * Adjust VR304 so that the reading on the frequency counter becomes 1.4 MHz ± 10 kHz.

5 HI-FI REC CURRENT
1. "REC", no signal input
2. TP871 (A REC CURR) & VR305 (REC CURRENT)
3. • Connect an oscilloscope to the lead of the TP871.
   * Adjust VR305 so that the waveform level on the oscilloscope becomes 400 mV p-p.

7 D/A OSC
1. "E-E" (stop mode), receive NICAM broadcast station
2. TP-OSC (C32 positive side) & VC1 (D/A OSC)
3. • Connect the oscilloscope to TP-OSC and set input mode to "DC".
   * Adjust VC1 so that average DC voltage becomes 1.8 V.



VI. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list Part No., Model No. and the description of eachpart. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

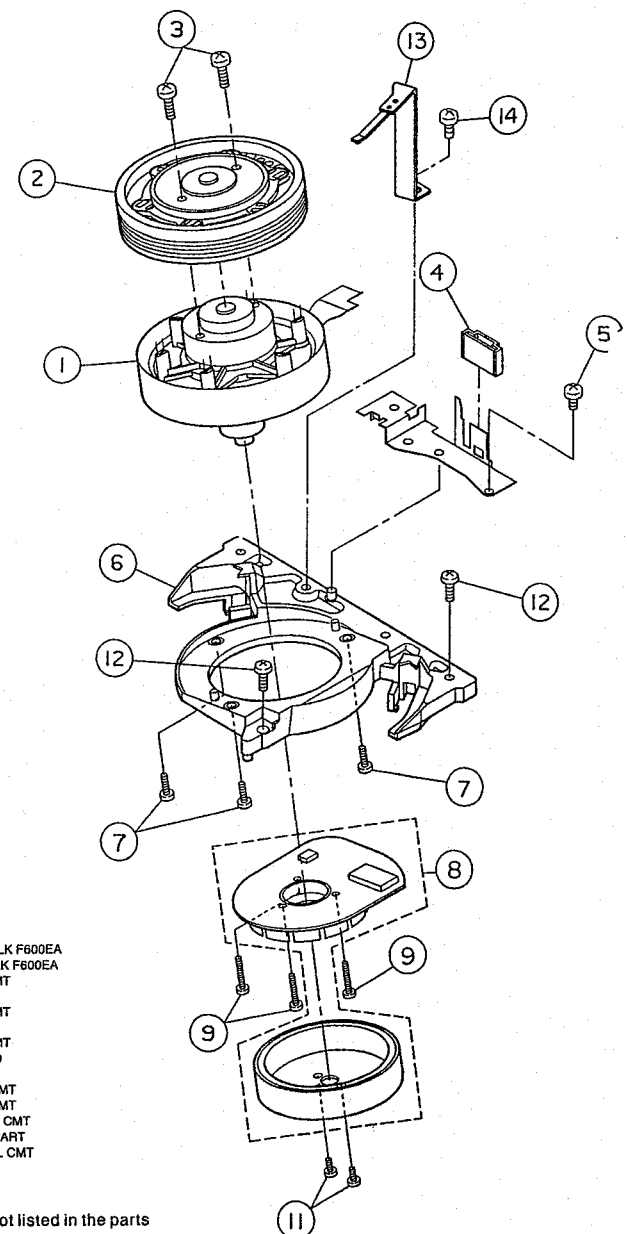
1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	AV-B1040A010A	REMOCON BLK RC-V551E [EK]
2	AV-B1040A010B	REMOCON BLK RC-V551G [EOG]
3	AV-B1043A010A	REMOCON BLK RC-V552E [EA,EO,EOH]
4	BL-V1102A140A	ARM LOADING BLK 425EA
5	BL-387458J2	CAPSTAN BRAKE PART
6	BL-V1123A050A	TENSION ARM BLK F600EA
7	BM-400682J1	MOTOR DFX-67B3VWB1 [CAPSTAN MOTOR]
8	BM-401296J1	MOTOR E20EL89 [DRUM MOTOR]
9	BM-387503J	MOTOR PART [LOADING MOTOR]
10	*BT-732677J	TRANS POW F510EK [EA,EK]
11	*BT-732678J	TRANS POW F510EO [EO,EOG,EOH]
12	BV-V1102A150A	CASSETTE LOAD BLK 425EA
13	BV-V1102A070A	LEADER S BLK 425EA
14	BV-V1102A080A	LEADER T BLK 425EA
15	BV-V1123A410C	LOWER DRUM BLK F600EA
16	BV-732641J	RF CONVERTER MDLK5S160A [EA]
17	BV-732642J	RF CONVERTER MDLK6B731A [EK]
18	BV-732643J	RF CONVERTER MDLK6D748A [EO,EOG,EOH]
19	BV-V1123A420C	UPPER DRUM BLK F600EA
20	EC-732653J	C DBL LAYER AC310-502G 473Z 5R5
21	ED-397391J	D LED BR3668S RED
22	ED-390011J	D LED GL451 INFRARED [D1]
23	ED-390012J	D LED GL4800 INFRARED [D2][D3]
24	ED-403450J	D LED SE303ARF-C INFRARED
25	ED-386226J	D SCHOTTKY RB100AT-32T26 40/1
26	ED-733270J	D SILICON CHIP DA204K
27	ED-386031J	D SILICON CHIP MA110-TW
28	ED-724694J	D SILICON CHIP MC2838
29	*ED-383752J	D SILICON DBF40C 200V/4.0A
30	*ED-732667J	D SILICON DSC30TC
31	*ED-357754	D SILICON DS135D 200/1.0A
32	ED-307572	D SILICON H 1SS131
33	*ED-379041	D SILICON S5566B 100/1.0A
34	ED-511907	D SILICON 1N4002 100/1.0A
35	ED-394936J	D VARACTOR 1SV111
36	ED-396065J	D ZENER H HZS12C1
37	ED-396067J	D ZENER H HZS18-1
38	ED-396068J	D ZENER H HZS18-3
39	ED-397289J	D ZENER H HZS20-2
40	ED-397399J	D ZENER H HZS3C3
41	ED-386086J	D ZENER H HZS30-2L
42	ED-365699	D ZENER H HZS5.6B1J
43	ED-389688J	D ZENER H HZS5B2
44	ED-397233J	D ZENER H HZS5C3
45	ED-387919J	D ZENER H HZS6A1L
46	ED-378530J	D ZENER H HZS6B2L
47	ED-400171J	D ZENER H HZS6C2L
48	ED-387783J	D ZENER H HZS6C3L
49	ED-387763J	D ZENER H HZS7B3L
50	ED-367502	D ZENER H HZS9A1L
51	ED-388368J	D ZENER H HZS9B3L
52	ED-387765J	D ZENER H HZS9C1L
53	ED-403227J	D ZENER H MTZJ6.8C T26
54	ED-405446J	D ZENER H UTZJ5.6B T26
55	EH-383056J	COMP R RGLE4X 103J
56	EH-386637J	COMP R RGLE8X 103J
57	EH-725827J	FILTER CE SAF32.9MDE70Z
58	EH-725828J	FILTER CE SAF33.0MDA70Z [EOH-DN/N]
59	EH-373916	FILTER CE SAF36.9MZ70Z
60	EH-730625J	FILTER CE SAF38.9MZW70Z
61	EH-373917	FILTER CE SAF39.5MZ70Z
62	EH-394948J	FILTER CE SFT5.5MA [EOH-DN/N]
63	EH-712604	FILTER CE SFT5.74MA
64	EH-394947J	FILTER CE SFT5.74MA
65	EH-725829J	FILTER CE SFT6.0MA
66	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
67	EH-373919	FILTER CE TPS6.0MB
68	EH-394684J	FILTER EMI ZBF503D-00TA T05
69	EH-732529J	FILTER SAW SAF31.4MC70Z
70	EH-732528J	FILTER SAW SAF33.4MC70Z [EO,EOG,EOH-D]
71	EI-410479J1	IC UPD75217CW-155 JHXOPP2
72	EI-408432J	IC UPD75218CW-012 JXVPT1
73	EI-394680J	IC AN3171K
74	EI-396454J	IC AN3267K
75	EI-376794J1	IC BA10393
76	EI-373980	IC BA15218N
77	EI-364696	IC BA6138
78	EI-397299J	IC BA6229-U2
79	EI-366892	IC BA7025L [EOG]
80	EI-393786J	IC BA7046
81	EI-387586J	IC BA7244BS
82	EI-394983J	IC BA7703K1
83	EI-397285J	IC BA7740S
84	EI-388360J	IC BA7765AS
85	EI-356457	IC BU4013B
86	EI-354640	IC BU4052B
87	EI-394937J	IC CF70124
88	EI-394949J	IC IR3P72
89	EI-360586	IC LA6358S
90	EI-394839J	IC LA7332
91	EI-729997J	IC LA7575
92	EI-390053J	IC LA7910 [EXCEPT EK]
93	EI-394951J	IC LB1215
94	EI-394856J	IC LC8992
95	EI-401050J	IC LVA523SA2
96	EI-389622J	IC L5631
97	EI-387019J	IC MC1377P
98	EI-410486J	IC MN675201 XDN JHXSYP1
99	EI-408434J	IC MV1815-1BA
100	EI-408408J1	IC M50933-126FP JXLCDR2
101	EI-393323J	IC M5218AL-771
102	EI-400672J	IC S-8052ALB-LE
103	EI-373955	IC S-8053ALR
104	EI-385958J	IC SAA4700
105	EI-397560J	IC SAA7322GP
106	EI-405224J	IC ST24C02
107	EI-397123J	IC TA8703S
108	EI-330391	IC TC4050BP
109	EI-310036	IC TC4066BP
110	EI-408930J	IC TDA8732
111	EI-405722J	IC UPD6450CX-515
112	EI-408449J	IC UPD75004GB-771 JXVPTR1 QF
113	EI-410125J	IC V53C464AP-80
114	EI-394467J	IC X24C01P
115	EI-403451J	OSC CE CSB1200J 1.200MHZ
116	EI-408450J	OSC CE CST2.45MGW 2.450MHZ
117	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
118	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
119	EI-716825	OSC X'TAL DT-38 32.768KHZ
120	EI-408433J	OSC X'TAL HC-43/U 27750KHZ
121	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
122	EI-408932J	OSC X'TAL HC-49/U 11700KHZ [EOH-N]
123	EI-408931J	OSC X'TAL HC-49/U 13104KHZ [EK-N]
124	EI-389974J	OSC X'TAL HC-49/U 17.734475MHZ
125	EI-389640J	OSC X'TAL HC-49/U 8000KHZ
126	EI-394673J	OSC X'TAL HC-49/U 8867.238KHZ
127	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ
128	EI-381632J	OSC X'TAL 86686 4.433619MHZ
129	EJ-408427J	CONNECTOR LCD (4) B1043
130	EM-403369J	IND FL FV508G CHARACTER [EA,EO,EOG]
131	EM-408462J	IND FL FV563G CHARACTER [EK,EOH]
132	EM-408437J	IND LCD LD-B5444A ENGLISH
133	EO-376612	COIL FIX 1 LF-5.0S F05 680K
134	*ER-331188	R FUSE H S10 ERD2FC 1/4W 8R2J

Ref.No.	Part No.	Description
135	*ER-393222J	R FUSE H S10 RF25S 1/4W 100J
136	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
137	*ER-397385J	R FUSE V T05 RF25SCVTP1/4WR20K
138	*ER-336756	R OMF H FS 1W R47J
139	*ER-383007J	R OMF H S12 FS 1W 1R0J
140	ES-373099	SW LEAF MTS10110MPC1
141	ES-387465J	SW MODE SELECT MMS00070ZLBO [SW1]
142	ES-408429J	SW ROTARY ENCODER SRGPQJ
143	ES-393431J	SW TACT CHIP SKHUAB T12E
144	ES-732664J	SW TACT SKHVBK
145	ET-381637J2	DETECTOR GP1U521X
146	ET-719669	TR CHIP DTA114EK
147	ET-716956	TR CHIP DTA144EK
148	ET-730132J	TR CHIP DTA144TK
149	ET-731437J	TR CHIP DTC114EK
150	ET-732687J	TR CHIP DTC124TK
151	ET-732638J	TR CHIP DTC144EK
152	ET-732644J	TR CHIP DTC144TK
153	ET-732640J	TR CHIP 2SC2412K
154	ET-725820J	TR CHIP 2SC2735J
155	ET-356336	TR DTA114ES
156	ET-354415	TR DTA144ES
157	ET-373985	TR DTA144TS
158	ET-353897	TR DTC114ES
159	ET-360399	TR DTC114TS
160	ET-354371	TR DTC124ES
161	ET-364060	TR DTC143ES
162	ET-354414	TR DTC144ES
163	ET-370310	TR DTC144TS
164	ET-356236	TR FET 2SK363 GR,BL [EOH]
165	ET-361490	TR PHOTO PN268 [PTR1]
166	ET-390010J	TR PHOTO PT4800 [PTR2][PTR3]
167	ET-390009J	TR PHOTO PT493F [PTR4]
168	ET-364040	TR UN421D
169	ET-732639J	TR 2SA1037K
170	ET-730419J	TR 2SA1235 E,F
171	ET-356224	TR 2SA1286 G,H,J F05
172	ET-353899	TR 2SA1317 S,T,U
173	*ET-366365	TR 2SB1185 E,F
174	ET-388338J	TR 2SB1425 S,E
175	ET-375777	TR 2SC2926S P,Q
176	ET-364153	TR 2SC3246 J,K F05
177	ET-397160J	TR 2SC3330 R,S,T,U,V
178	ET-354083	TR 2SD1189 Q,R
179	ET-366168	TR 2SD1292 Q,R
180	ET-380685J	TR 2SD1761 E,F,G
181	*ET-405622J	TR 2SD2061 E,F
182	ET-370819	TR.CHIP 2SC3052
183	ET-405342J	TR.CHIP 2SD1620
184	EV-732666J	VR ROTARY RK09K113C203
185	HE-390013J	HEAD E HVFME0020A
186	HR-405340J	HEAD COMBO HVMZA1121A
187	MB-387289J	BELT CAPSTAN
188	MI-387294J	IDLER PART
189	ML-391745J3	ARM DAMPER
190	ML-387350J1	ARM LID OPENER
191	ML-387277J3	ARM REVIEW PART
192	ML-387402J1	LEVER TRIGGER
193	ML-387316J	MAIN BRAKE (S) PART
194	ML-387318J	MAIN BRAKE (T) PART
195	ML-387321J	REVIEW BRAKE PART
196	ML-396018J1	SLIDER BRAKE (2) PART
197	ML-404944J	SLIDER TRIGGER (2)
198	MP-404852J	PINCH ROLLER (2) PART
199	MR-387406J	HOLDER THRUST WORM
200	MR-391968J	PULLEY TRIGGER (2)
201	MR-387286J1	ROLLER IMPEDANCE
202	MT-390954J1	DISK (2) PART
203	MZ-387298J3	DISK CLUTCH PART
204	MZ-396021J	GEAR CAM SLIDER (2)
205	MZ-387335J	GEAR EJECT
206	MZ-387333J	GEAR FRONT LOADING
207	MZ-V1102A090A	GEAR TOGGLE (S) BLK 425EA
208	MZ-V1102A100A	GEAR TOGGLE (T) BLK 425EA
209	MZ-387330J	GEAR WORM PART
210	MZ-387332J	GEAR WORM WHEEL
211	MZ-395471J3	TENSION BRAKE PART

HEAD DRUM BLOCK



2. HEAD DRUM BLOCK

Ref.No.	Part No.	Description
1	BV-V1123A410C	LOWER DRUM BLK F600EA
2	BV-V1123A420C	UPPER DRUM BLK F600EA
3	ZS-321298	BID30X08STL CMT
4	SZ-387388J	HOLDER FPC
5	ZS-379405	BID30X06STL CMT
6	MA-387474J3	BASE DRUM
7	ZS-563444	BID26X08STL CMT
8	BM-401296J1	MOTOR E20EL89 [DRUM MOTOR]
9	ZS-467796	PAN26X12STL CMT
11	ZS-379350	PAN30X06STL CMT
12	ZS-336714	ST BID30X12STL CMT
13	VT-401282J	EARTH BRUSH PART
14	ZS- 358936	ST BID 30X06STL CMT

NOTE:
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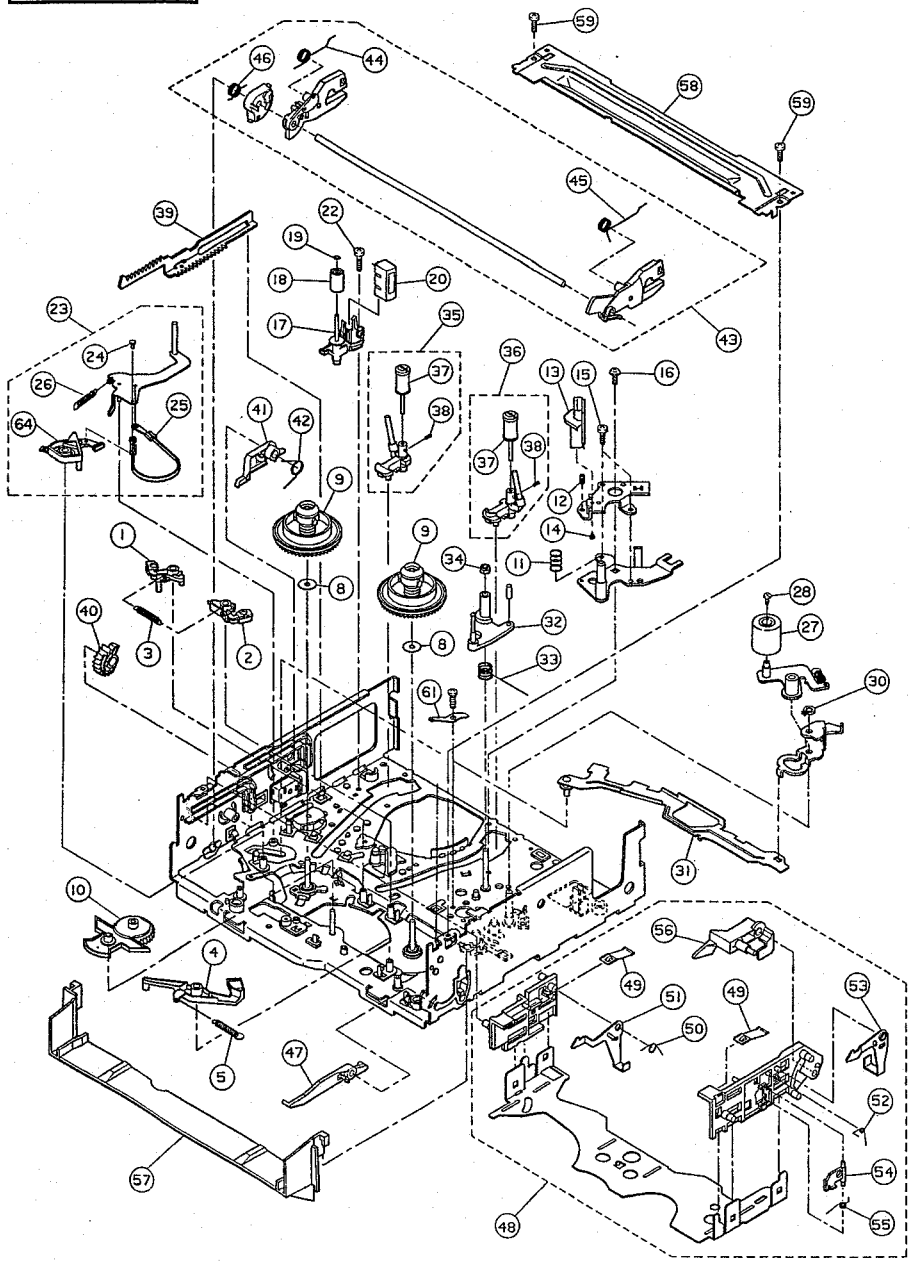
MECHA BLOCK (1)



3. MECHA BLOCK (1)

Ref.No.	Part No.	Description
1	ML-387316J	MAIN BRAKE (S) PART
2	ML-387318J	MAIN BRAKE (T) PART
3	ZG-387320J	SP PULL MAIN BRAKE
4	ML-387321J	REVIEW BRAKE PART
5	ZG-387323J	SP PULL REVIEW BRAKE
8	ZW-389814J	PW31X110X050PSL
9	MT-390954J1	DISK (2) PART
10	MI-387294J	IDLER PART
11	ZG-387438J1	SP PUSH A/C
12	ZG-373900	6SET30X080SCM PKR CP
13	HR-405340J	HEAD COMBO HVMZA1121A
14	ZS-404844J	PAN20X02STL BZN PS1
15	ZS-321298	BID30X08STL CMT
16	ZS-344754	ST PAN30X06STL CMT C080
17	MZ-407375J	HOLDER FE HEAD (2) PART
18	MR-387286J1	ROLLER IMPEDANCE
19	ZW-374445	SLIT W17X032X025PSL
20	HE-390013J	HEAD E HVFME0020A
22	ZS-336714	ST BID30X12STL CMT
23	BL-V1123A050A	TENSION ARM BLK F600EA
24	SZ-387263J4	HOLDER LEVER TENSION
25	ML-390768J4	TENSION BAND PART
26	ZG-395470J	SP PULL TENSION (2)
27	MP-404652J	PINCH ROLLER (2) PART
28	ZS-464703	BID20X04STL CMT
30	ZW-332843	RETAINING RING GRIP 380STL ACP
31	ML-387431J1	SLIDER PINCH PART
32	ML-387277J3	ARM REVIEW PART
33	ZG-387282J	SP TORSION REVIEW
34	ZW-401776J	NUT REVIEW
35	BV-V1102A070A	LEADER S BLK 425EA
36	BV-V1102A080A	LEADER T BLK 425EA
37	VT-387394J1	GUIDE ROLLER D8 PART
38	ZS-374458	6SET20X030SCM PKR FP
39	ML-387428J	SLIDER FRONT LOADING
40	MZ-387335J	GEAR EJECT
41	ML-391745J3	ARM DAMPER
42	ZG-395567J	SP TORSION ARM DAMPER
43	BL-V1102A140A	ARM LOADING BLK 425EA
44	ZG-387417J	SP TORSION LOAD (S)
45	ZG-387418J	SP TORSION LOAD (T)
46	ZG-392831J	SP TORSION JOINT (2)
47	ML-387350J1	ARM LID OPENER
48	BV-V1102A150A	CASSETTE LOAD BLK 425EA
49	ZG-387348J1	SP PLATE HOLDER
50	ZG-387421J	SP TORSION DAMPER (S)
51	ML-387345J	LEVER DAMPER (S)
52	ZG-388290J1	SP TORSION DAMPER (T)
53	ML-387346J	LEVER DAMPER (T)
54	ML-387344J	LEVER LOCK RELEASE
55	ZG-387420J1	SP TORSION RELEASE
56	ML-387349J2	ARM SHUTTER
57	SE-395554J	GUIDE FRONT (2)
58	MZ-406134J	PLATE UPPER (2)
59	ZS-358936	ST BID30X06STL CMT
61	ZG-392294J	SP PLATE EARTH
64	MZ-395471J3	TENSION BRAKE PART
65	BB-V1130A020J	MECHA DECK BLK F300EA

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

4. MECHA BLOCK (2)

Ref.No.	Part No.	Description
1	ML-396018J1	SLIDER BRAKE (2) PART
2	ML-404944J	SLIDER TRIGGER (2)
3	ML-387402J1	LEVER TRIGGER
4	ZG-387468J	SP PULL SLIDER
5	ZG-387403J	SP TORSION COUPLING
6	ZW-389923J	PW26X060X050PSL
7	MZ-387298J3	DISK CLUTCH PART
8	ZW-387492J	SLIT W21X040X050PSL
9	BM-400682J1	MOTOR DFX-67B3VWB1 [CAPSTAN MOTOR]
10	ZS-365149	PT BID26X06STL CMT
11	MB-387289J	BELT CAPSTAN
12	EA-387496J	PC (#) SENSOR
13	ED-390011J	D LED GL451 INFRARED [D1]
14	ED-390012J	D LED GL4800 INFRARED [D2][D3]
15	EJ-387497J	SOCKET HOUSING 5062-30-10-13 [PS1]
16	EJ-381837J	SOCKET 174074-5 5P [P1]
17	ES-387465J	SW MODE SELECT MMS00070ZLBO [SW1]
18	ET-390010J	TR PHOTO PT4800 [PTR2][PTR3]
19	ET-390009J	TR PHOTO PT493F [PTR4]
20	EW-389313J	CORD FFC P1.25 L=120 13P [WP1]
21	MZ-387430J	HOLDER D-LED
22	MZ-387445J	HOLDER S SENSOR
23	MZ-387446J	HOLDER PHOTO SENSOR
24	ET-361490	TR PHOTO PN268 [PTR1]
25	MZ-V1102A090A	GEAR TOGGLE (S) BLK 425EA
26	MZ-V1102A100A	GEAR TOGGLE (T) BLK 425EA
27	ZG-387413J1	SP PULL TOGGLE
28	MZ-387332J	GEAR WORM WHEEL
29	MZ-396021J	GEAR CAM SLIDER (2)
30	MZ-387333J	GEAR FRONT LOADING
31	BM-387503J	MOTOR PART [LOADING MOTOR]
32	MZ-387330J	GEAR WORM PART
33	MR-391968J	PULLEY TRIGGER (2)
34	ZG-387443J	SP TRIGGER
35	MR-387406J	HOLDER THRUST WORM
36	ZS-425981	BID30X03STL CMT
37	BL-387458J2	CAPSTAN BRAKE PART
38	ZG-387502J	SP PULL CAPSTAN BRAKE
39	ES-373099	SW LEAF MTS10110MPC1
40	ZS-389950J	PT BID26X10STL CMT
41	ZS-364543	DT BID30X06STL CMT
42	ML-387311J2	ARM COUPLING

NOTE:
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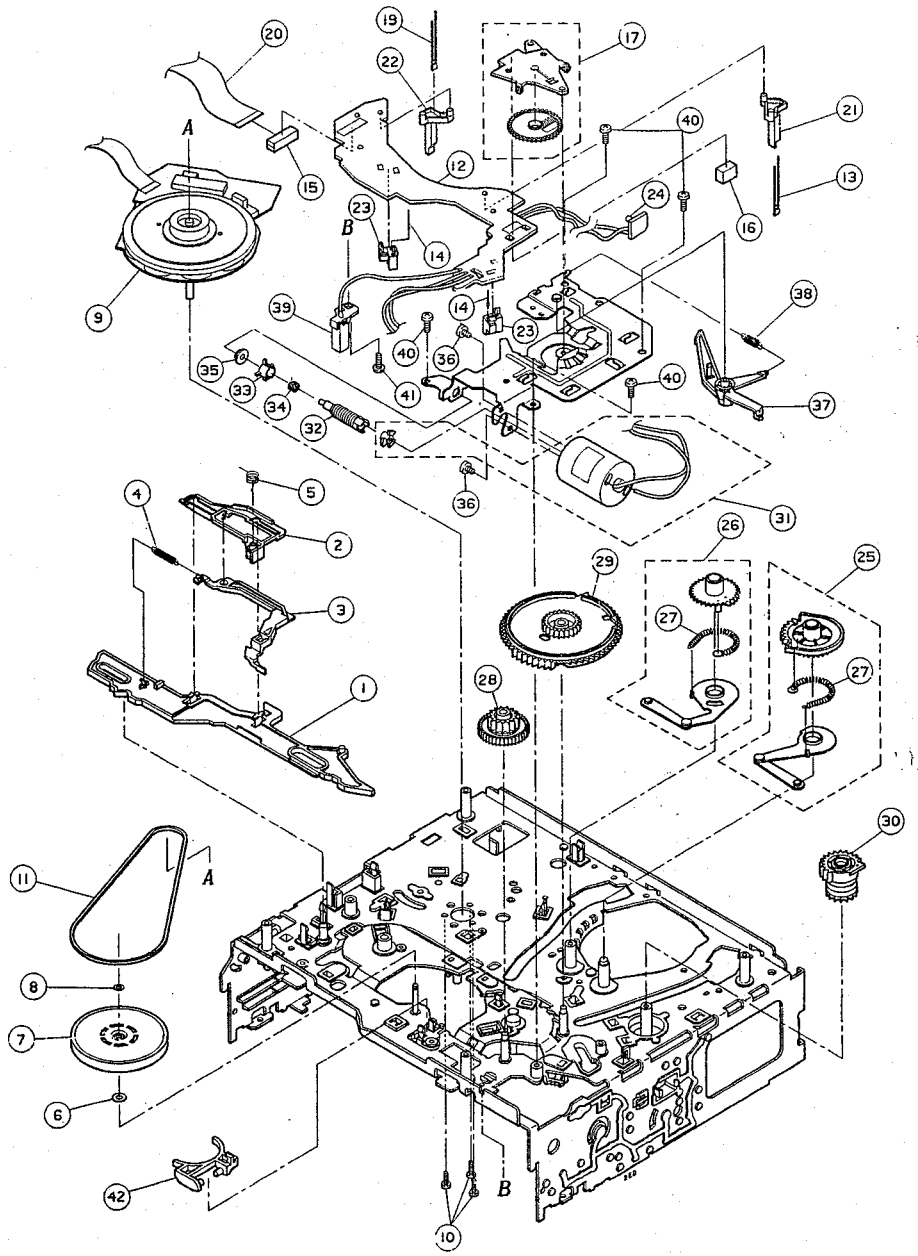
MACHA BLOCK (2)



5. P.C BOARD BLOCK

Ref.No.	Part No.	Description
1A	BA-VA037A600A	PC (#) MAIN BLK F550EA-D
1B	BA-VA037A600G	PC (#) MAIN BLK F550EO-D
1C	BA-VA037A600C	PC (#) MAIN BLK F550EOH-D
1D	BA-VA037A600E	PC (#) MAIN BLK F550EOH-N
1E	BA-VA037A600B	PC (#) MAIN BLK F560EK-N
1F	BA-VA037A600F	PC (#) MAIN BLK F580EOG-VD
1G	BA-VA037A600D	PC (#) MAIN BLK F590EOH-DN
2	BA-VA037A610A	PC PRE AMP BLK F550EA-D
3A	BA-VA037A630A	PC OPERATION BLK F550EA-D
3B	BA-VA037A630G	PC OPERATION BLK F550EO-D
3C	BA-VA037A630C	PC OPERATION BLK F550EOH-D
3D	BA-VA037A630E	PC OPERATION BLK F550EOH-N
3E	BA-VA037A630B	PC OPERATION BLK F560EK-N
3F	BA-VA037A630F	PC OPERATION BLK F580EOG-VD
3G	BA-VA037A630D	PC OPERATION BLK F590EOH-DN
4A	BA-VA037A500A	PC POWER BLK F550EA-D [EA]
4B	BA-VA037A500C	PC POWER BLK F550EOH-D [EO,EOH]
4C	BA-VA037A500B	PC POWER BLK F560EK-N [EK]
4D	BA-VA037A500D	PC POWER BLK F580EOG-VD [EOG]
5A	BA-VA037A650C	PC NICAM BLK F550EOH-N [EOH-N]
5B	BA-VA037A650A	PC NICAM BLK F560EK-N [EK-N]
5C	BA-VA037A650B	PC NICAM BLK F590EOH-DN [EOH-DN]
6	BA-VA037A660A	PC D-MULTI BLK F550EA-D [EA-D,EO-D,EOG-VD,EOH-D]
7A	BA-VA037A720A	PC I/O BLK F550EA-D [EA]
7B	BA-VA037A720E	PC I/O BLK F550EO-D [EO]
7C	BA-VA037A720C	PC I/O BLK F550EOH-D [EOH]
7D	BA-VA037A720B	PC I/O BLK F560EK-N [EK]
7E	BA-VA037A720D	PC I/O BLK F580EOG-VD [EOG]

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARD.
- MAIN P.C BOARD
- SERVO/SYSCON P.C BOARD
  VIF UNIT

PC (#) POWER BLK CONSISTS OF FOLLOWING P.C BOARD.
- POWER SUPPLY P.C BOARD
- I-HQ P.C BOARD

6. MAIN P.C BOARD

Ref.No.	Part No.	Description
C701	EC-732653J	C DBL LAYER AC310-502G 473Z 5R5
D2	ED-387765J	D ZENER H HZS9C1L
D3	ED-307572	D SILICON H 1SS131
D4	ED-307572	D SILICON H 1SS131
D5	ED-307572	D SILICON H 1SS131 [EXCEPT EK]
D6	ED-387919J	D ZENER H HZS6A1L
D7	ED-367502	D ZENER H HZS9A1L [EOH]
D8	ED-307572	D SILICON H 1SS131 [EOH]
D9	ED-307572	D SILICON H 1SS131 [EO,EOG]
D10	ED-307572	D SILICON H 1SS131 [EO,EOG]
D11	ED-307572	D SILICON H 1SS131
D15	ED-378530J	D ZENER H HZS6B2L [EOH]
D101	ED-386226J	D SCHOTTKY RB100AT-32T26 40/1
D102	ED-307572	D SILICON H 1SS131
D103	ED-307572	D SILICON H 1SS131
D104	ED-378530J	D ZENER H HZS6B2L
D105	ED-388368J	D ZENER H HZS9B3L
D106	ED-307572	D SILICON H 1SS131
D201	ED-307572	D SILICON H 1SS131
D202	ED-307572	D SILICON H 1SS131
D301	ED-397399J	D ZENER H HZS3C3
D302	ED-307572	D SILICON H 1SS131
D303	ED-307572	D SILICON H 1SS131
D304	ED-307572	D SILICON H 1SS131
D305	ED-307572	D SILICON H 1SS131
D306	ED-307572	D SILICON H 1SS131
D307	ED-307572	D SILICON H 1SS131
D308	ED-307572	D SILICON H 1SS131
D309	ED-365699	D ZENER H HZS5.6B1J
D310	ED-307572	D SILICON H 1SS131
D311	ED-388368J	D ZENER H HZS9B3L
D312	ED-307572	D SILICON H 1SS131
D700	ED-397399J	D ZENER H HZS3C3
D701	ED-307572	D SILICON H 1SS131
D702	ED-397233J	D ZENER H HZS5C3
D703	ED-397289J	D ZENER H HZS20-2
D704	ED-307572	D SILICON H 1SS131
D706	ED-307572	D SILICON H 1SS131
D707	ED-307572	D SILICON H 1SS131
D708	ED-307572	D SILICON H 1SS131
D709	ED-307572	D SILICON H 1SS131
D710	ED-307572	D SILICON H 1SS131
D711	ED-307572	D SILICON H 1SS131 [EOG]
D712	ED-307572	D SILICON H 1SS131 [EOG]
D713	ED-386086J	D ZENER H HZS30-2L [EOG]
D714	ED-400171J	D ZENER H HZS6C2L [EOG]
D715	ED-307572	D SILICON H 1SS131
DL201	EH-730666J	DL FE-2247Q
FL101	EH-732652J	FILTER LP SEL102681-P5E-5065-01
FL102	EH-394858J	FILTER LC LP MYV-2V2
FL201	EH-731166J	FILTER BLK SFBBLB000F4E-0698-03
FL251	EH-366594	FILTER CE SFE-4.16MB 4.16MHZ [EOG]
FL301	EH-730145J	FILTER LP SFBBB0000F5E-4174-03
IC1	EI-389622J	IC L5631
IC2	EI-390053J	IC LA7910 [EXCEPT EK]
IC101	EI-396454J	IC AN3267K
IC102	EI-394856J	IC LC8992
IC201	EI-394839J	IC LA7332
IC251	EI-366892	IC BA7025L [EOG]
IC301	EI-388360J	IC BA7765AS
IC302	EI-394983J	IC BA7703K1
IC303	EI-364896	IC BA6138
IC700	EI-405722J	IC UPD6450CX-515
IC701	EI-393323J	IC M5218AL-771
L1	EO-345893	COIL FIX 1 EL0606SKI 471J [EO,EOG,EOH]
L102	EO-732646J	COIL FIX 1 LF-7.5 101J

Ref.No.	Part No.	Description
L103	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L104	EO-376611	COIL FIX 1 LF-5.0S F05 470K
L105	EO-376605	COIL FIX 1 LF-5.0S F05 151K
L106	EO-376599	COIL FIX 1 LF-5.0S F05 100K
L107	EO-376606	COIL FIX 1 LF-5.0S F05 180K
L108	EO-392801J	COIL FIX 1 LF-7.5 F10 2R2M
L109	EO-392800J	COIL FIX 1 LF-7.5 F10 820K
L110	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L111	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L112A	EO-380734J	COIL FIX 1 LF-5.0S F05 6R8K [EO]
L112B	EO-403937J	COIL FIX 1 EL0405RA T05 4R7J [EOG]
L113	EO-376614	COIL FIX 1 LF-5.0S F05 220K [EOG]
L201	EO-392800J	COIL FIX 1 LF-7.5 F10 820K
L202	EO-376601	COIL FIX 1 LF-5.0S F05 120K [EXCEPT EK]
L203	EO-388353J	COIL FIX 1 LF-5.0S F05 471K
L204	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L205	EO-376861	COIL FIX 1 LF-5.0S F05 390K
L206	EO-376603	COIL FIX 1 LF-5.0S F05 150K
L207	EO-392800J	COIL FIX 1 LF-7.5 F10 820K
L208	EO-376606	COIL FIX 1 LF-5.0S F05 180K
L209	EO-381133J	COIL FIX 1 LF-7.5 F10 4R7K
L210	EO-732651J	COIL FIX 1 LE-7.5 1R2
L211	EO-392800J	COIL FIX 1 LF-7.5 F10 820K
L212	EO-392800J	COIL FIX 1 LF-7.5 F10 820K [EOG]
L301	EO-387987J	COIL FIX 1 EL0607SKI F05 103K
L302	EO-732646J	COIL FIX 1 LF-7.5 101J
L303	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L304	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L305	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L306	EO-376610	COIL FIX 1 LF-5.0S F05 330K
L307	EO-732647J	COIL FIX 1 EL0607RA 272K
L700	EO-376860	COIL FIX 1 LF-5.0S F05 820K
L701	EO-376610	COIL FIX 1 LF-5.0S F05 330K
L702	EO-376606	COIL FIX 1 LF-5.0S F05 180K
L704	EO-376860	COIL FIX 1 LF-5.0S F05 820K [EXCEPT EK]
L705	EO-392800J	COIL FIX 1 LF-7.5 F10 820K
MD1A	BV-732641J	RF CONVERTER MDLK5S160A [EA]
MD1B	BV-732642J	RF CONVERTER MDLK6B731A [EK]
MD1C	BV-732643J	RF CONVERTER MDLK6D748A [EO,EOG,EOH]
Q1	ET-353899	TR 2SA1317 S,T,U
Q3	ET-364153	TR 2SC3246 J,K F05
Q4	ET-375777	TR 2SC2926S P,Q
Q5	ET-353899	TR 2SA1317 S,T,U
Q6	ET-732639J	TR 2SA1037K
Q7	ET-732640J	TR CHIP 2SC2412K
Q8	ET-353899	TR 2SA1317 S,T,U [EXCEPT EOH]
Q9	ET-732687J	TR CHIP DTC124TK
Q10	ET-356236	TR FET 2SK363 GR,BL [EOH]
Q11	ET-732640J	TR CHIP 2SC2412K [EOH]
Q12	ET-732639J	TR 2SA1037K
Q13	ET-732640J	TR CHIP 2SC2412K
Q14	ET-732640J	TR CHIP 2SC2412K
Q101	ET-354414	TR DTC144ES
Q102	ET-354414	TR DTC144ES
Q103	ET-716956	TR CHIP DTA144EK
Q105	ET-354414	TR DTC144ES
Q106	ET-354414	TR DTC144ES
Q107	ET-364040	TR UN421D
Q108	ET-370310	TR DTC144TS
Q109	ET-366168	TR 2SD1292 Q,R
Q110	ET-353899	TR 2SA1317 S,T,U
Q111	ET-354371	TR DTC124ES
Q112	ET-356224	TR 2SA1286 G,H,J F05
Q129	ET-354415	TR DTA144ES
Q130	ET-354415	TR DTA144ES
Q201	ET-354415	TR DTA144ES [EO,EOG,EOH]
Q202	ET-354414	TR DTC144ES [EO,EOG,EOH]
Q203	ET-397160J	TR 2SC3330 R,S,T,U,V
Q204	ET-397160J	TR 2SC3330 R,S,T,U,V
Q205	ET-353899	TR 2SA1317 S,T,U
Q206	ET-353897	TR DTC114ES
Q207	ET-353897	TR DTC114ES
Q208	ET-397160J	TR 2SC3330 R,S,T,U,V
Q209	ET-397160J	TR 2SC3330 R,S,T,U,V
Q210	ET-397160J	TR 2SC3330 R,S,T,U,V
Q211	ET-397160J	TR 2SC3330 R,S,T,U,V
Q212	ET-397160J	TR 2SC3330 R,S,T,U,V
Q213	ET-353899	TR 2SA1317 S,T,U
Q214	ET-370310	TR DTC144TS
Q215	ET-370310	TR DTC144TS
Q251	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
Q252	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
Q253	ET-353897	TR DTC114ES [EOG]
Q254	ET-353897	TR DTC114ES [EOG]
Q301	ET-360399	TR DTC114TS [EK,EOH-DN/N]
Q302	ET-397160J	TR 2SC3330 R,S,T,U,V
Q303	ET-397160J	TR 2SC3330 R,S,T,U,V
Q304	ET-354414	TR DTC144ES
Q305	ET-397160J	TR 2SC3330 R,S,T,U,V
Q306	ET-353899	TR 2SA1317 S,T,U
Q307	ET-353897	TR DTC114ES
Q308	ET-356336	TR DTA114ES
Q309	ET-360399	TR DTC114TS
Q310	ET-360399	TR DTC114TS
Q311	ET-397160J	TR 2SC3330 R,S,T,U,V
Q312	ET-397160J	TR 2SC3330 R,S,T,U,V
Q313	ET-353897	TR DTC114ES
Q314	ET-356336	TR DTA114ES
Q315	ET-360399	TR DTC114TS
Q316	ET-360399	TR DTC114TS
Q317	ET-366168	TR 2SD1292 Q,R
Q700	ET-397160J	TR 2SC3330 R,S,T,U,V
Q701	ET-719669	TR CHIP DTA114EK
Q702	ET-380685J	TR 2SD1761 E,F,G
Q703	ET-719669	TR CHIP DTA114EK [EO,EOG,EOH]
Q704	ET-719669	TR CHIP DTA114EK [EO,EOG,EOH]
Q705	ET-366168	TR 2SD1292 Q,R
Q706	ET-732640J	TR CHIP 2SC2412K
Q707	ET-732640J	TR CHIP 2SC2412K
Q708	ET-353899	TR 2SA1317 S,T,U
Q709	ET-354414	TR DTC144ES
Q710	ET-732640J	TR CHIP 2SC2412K
Q711	ET-732640J	TR CHIP 2SC2412K [EXCEPT EK]
Q712	ET-366168	TR 2SD1292 Q,R [EOG]
Q713	ET-732639J	TR 2SA1037K
Q714	ET-732640J	TR CHIP 2SC2412K [EXCEPT EA]
Q715	ET-356336	TR DTA114ES [EOG]
Q716	ET-732638J	TR CHIP DTC144EK [EOG]
Q718	ET-732638J	TR CHIP DTC144EK
Q719	ET-732639J	TR 2SA1037K
Q720	ET-353899	TR 2SA1317 S,T,U
Q721	ET-732640J	TR CHIP 2SC2412K [EXCEPT EA]
R500	ER-383007J	R OMF H S12 FS 1W 1R0J
R513	*ER-383007J	R OMF H S12 FS 1W 1R0J
R555	*ER-336756	R OMF H FS 1W R47J
T301	EO-388362J	COIL OSC 1 V1102
TU1A	EE-730156J	TV TUNER TERS1-009A [EA]
TU1B	EE-732655J	TV TUNER EC-CK-0734 [EK]
TU1C	EE-730153J	TV TUNER TERE1-028A [EO]
TU1D	EE-730157J	TV TUNER TERE3-007A [EOH]
TU1E	EE-732654J	TV TUNER TERE1-025B [EOG]
VIF1A	BV-732657J	VIF UNIT KHX EA [EA]

Ref.No.	Part No.	Description
VIF1B	BV-732658J	VIF UNIT KHX EK [EK]
VIF1C	BV-732662J	VIF UNIT KHX EOG [EO,EOG]
VIF1D	BV-732660J	VIF UNIT KHX EOH [EOH-D]
VIF1E	BV-732661J	VIF UNIT KHX EOH-DN/N [EOH-DN/N]
VC701	EC-732825J	C S-FIX ECR-LA030E 53R
VL251	EO-726188J	COIL 21D6 8R2 [EOG]
VR101	EV-732503J	R S-FIX H RH0636C 153
VR102	EV-732503J	R S-FIX H RH0636C 153
VR103	EV-732500J	R S-FIX H RH0636C 472
VR104	EV-732501J	R S-FIX H RH0636C 682
VR105	EV-732499J	R S-FIX H RH0636C 332
VR106	EV-732502J	R S-FIX H RH0636C 103
VR301	EV-732500J	R S-FIX H RH0636C 472
VR302	EV-732648J	R S-FIX H RH0636C 473
VR303	EV-732649J	R S-FIX H RH0636C 223
VR304	EV-732502J	R S-FIX H RH0636C 103
VR305	EV-732502J	R S-FIX H RH0636C 103
VR306	EV-732502J	R S-FIX H RH0636C 103
VR307	EV-732649J	R S-FIX H RH0636C 223
VR308	EV-732503J	R S-FIX H RH0636C 153
VR309	EV-732503J	R S-FIX H RH0636C 153
X201	EI-381632J	OSC X'TAL 86686 4.433619MHZ
X700	EI-389974J	OSC X'TAL HC-49/U 17.734475MHZ

7. SERVO/SYSCON P.C BOARD

Ref.No.	Part No.	Description
D500	ED-307572	D SILICON H 1SS131
D501	ED-307572	D SILICON H 1SS131
D502	ED-307572	D SILICON H 1SS131
D503	ED-511907	D SILICON 1N4002 100/1.0A
D504	ED-624903	D SILICON H 1S2473
D505	ED-307572	D SILICON H 1SS131
D506	ED-307572	D SILICON H 1SS131
D507	ED-307572	D SILICON H 1SS131
D508	ED-307572	D SILICON H 1SS131
D509	ED-388368J	D ZENER H HZS9B3L
D510	ED-387763J	D ZENER H HZS7B3L
D511	ED-307572	D SILICON H 1SS131
D512	ED-307572	D SILICON H 1SS131
D513	ED-307572	D SILICON H 1SS131
IC500	EI-393786J	IC BA7046
IC501	EI-373980	IC BA15218N
IC502	EI-360586	IC LA6358S
IC503	EI-397299J	IC BA6229-U2
IC504	EI-410486J	IC MN675201 XDN JHXSYP1
IC505	EI-354640	IC BU4052B
L500	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L501	EO-392799J	COIL FIX 1 LF-7.5 F10 470K
L502	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L503	EO-376860	COIL FIX 1 LF-5.0S F05 820K
L602	EO-376600	COIL FIX 1 LF-5.0S F05 101K
Q15	ET-732644J	TR CHIP DTC144TK [EOH]
Q500	ET-397160J	TR 2SC3330 R,S,T,U,V
Q501	ET-388338J	TR 2SB1425 S,E
Q502	ET-353899	TR 2SA1317 S,T,U
Q503	ET-397160J	TR 2SC3330 R,S,T,U,V
Q504	ET-373985	TR DTA144TS
Q505	ET-373985	TR DTA144TS
Q506	ET-373985	TR DTA144TS
Q507	ET-354414	TR DTC144ES
Q508	ET-373985	TR DTA144TS
Q509	ET-354414	TR DTC144ES
Q510	ET-353899	TR 2SA1317 S,T,U
Q511	ET-353899	TR 2SA1317 S,T,U
Q512	ET-354414	TR DTC144ES
Q514	ET-397160J	TR 2SC3330 R,S,T,U,V
Q515	ET-353899	TR 2SA1317 S,T,U
Q516	ET-388338J	TR 2SB1425 S,E
Q517	ET-353899	TR 2SA1317 S,T,U
R513	*ER-383007J	R OMF H S12 FS 1W 1R0J
R555	*ER-336756	R OMF H FS 1W R47J
VR500	EV-732504J	R S-FIX V RH0632C 473
VR501	EV-732645J	R S-FIX V RH0632C 333
X500	EI-389640J	OSC X'TAL HC-49/U 8000KHZ

8. VIF UNIT (EA)

Ref.No.	Part No.	Description
CF1	EH-373916	FILTER CE SAF36.9MZ70Z
CF2	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
CF4	EH-732529J	FILTER SAW SAF31.4MC70Z
IC1	EI-729997J	IC LA7575
L3	EO-381188J	COIL FIX 1 EL0405SKI 1R0K
L4	EO-392817J	COIL FIX 1 EL0405SKI 1R2K
L6	EO-388160J	COIL FIX 1 EL0405SKI 1R8K
L7	EO-714616	COIL RF 6F16115B3
L8	EO-732526J	COIL OSC 6F16403A2
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
Q1	ET-725820J	TR CHIP 2SC2735J
Q6	ET-370819	TR CHIP 2SC3052
VR1	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333

9. VIF UNIT (EK)

Ref.No.	Part No.	Description
CF1	EH-373917	FILTER CE SAF39.5MZ70Z
CF2	EH-373919	FILTER CE TPS6.0MB
CF3	EH-725829J	FILTER CE SFT6.0MA
CF4	EH-725827J	FILTER CE SAF32.9MDE70Z
IC1	EI-729997J	IC LA7575
IC2	EI-397123J	IC TA8703S
L3C	EO-381187J	COIL FIX 1 EL0405SKI R68M
L4	EO-381188J	COIL FIX 1 EL0405SKI 1R0K
L5	EO-725954J	COIL SIF DET 6F16263A3
L7	EO-714614	COIL RF 6F16115B1
L8	EO-732656J	COIL OSC 6F16403B1
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
L11	EO-714610	COIL RF 6F16113B1
Q1	ET-725820J	TR CHIP 2SC2735J
Q5	ET-730419J	TR 2SA1235 E,F
Q6	ET-370819	TR.CHIP 2SC3052
VR1	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333
VR3	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103

10. VIF UNIT (EO,EOG,EOH)

Ref.No.	Part No.	Description
CF1	EH-730625J	FILTER CE SAF38.9MZW70Z
CF2	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
CF3	EH-394948J	FILTER CE SFT5.5MA [EOH-DN/N]
CF4A	EH-732528J	FILTER SAW SAF33.4MC70Z [EO,EOG,EOH-D]
CF4B	EH-725828J	FILTER CE SAF33.0MDA70Z [EOH-DN/N]
IC1	EI-729997J	IC LA7575
IC2	EI-397123J	IC TA8703S [EOH-DN/N]
L1	EO-725824J	COIL TRAP 6F16185A1 [EOG]
L2	EO-725825J	COIL TRAP 6F16186A1 [EOG]
L3	EO-391141J	COIL FIX 1 EL0405SKI R47M [EO,EOH]
L4A	EO-392817J	COIL FIX 1 EL0405SKI 1R2K [EO,EOG,EOH-D]
L4B	EO-381188J	COIL FIX 1 EL0405SKI 1R0K [EOH-DN/N]
L5	EO-725953J	COIL SIF DET 6F16263A2 [EOH-DN]
L6	EO-388160J	COIL FIX 1 EL0405SKI 1R8K [EXCEPT EOH-DN]
L7	EO-714614	COIL RF 6F16115B1
L8	EO-732656J	COIL OSC 6F16403B1
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
L11	EO-714610	COIL RF 6F16113B1 [EOH-DN]
Q1	ET-725820J	TR CHIP 2SC2735J
Q2	ET-731437J	TR CHIP DTC114EK [EOG]
Q3	ET-731437J	TR CHIP DTC114EK [EOG]
Q5	ET-730419J	TR 2SA1235 E,F [EOH-DN/N]
Q6	ET-370819	TR.CHIP 2SC3052
VR1	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333
VR2	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333 [EOG]
VR3	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103 [EOH-DN/N]

11. OPERATION P.C BOARD

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131 [EOH]
D2	ED-307572	D SILICON H 1SS131 [EXCEPT EA]
D3	ED-307572	D SILICON H 1SS131 [EA]
D4	ED-307572	D SILICON H 1SS131 [EK]
D5	ED-307572	D SILICON H 1SS131 [EK]
D8	ED-307572	D SILICON H 1SS131 [EXCEPT EA]
D10	ED-307572	D SILICON H 1SS131 [EOG]
D11	ED-307572	D SILICON H 1SS131 [EO,EOH]
D12	ED-307572	D SILICON H 1SS131 [EK,EOH-DN/N]
D13	ED-307572	D SILICON H 1SS131 [EOG]
D14	ED-307572	D SILICON H 1SS131 [EOG]
D901	ED-307572	D SILICON H 1SS131
D902	ED-307572	D SILICON H 1SS131
D903	ED-307572	D SILICON H 1SS131
D904	ED-307572	D SILICON H 1SS131
D905	ED-307572	D SILICON H 1SS131
D906	ED-307572	D SILICON H 1SS131
D907	ED-307572	D SILICON H 1SS131
D908	ED-307572	D SILICON H 1SS131
D909	ED-307572	D SILICON H 1SS131
D910	ED-307572	D SILICON H 1SS131
D911	ED-307572	D SILICON H 1SS131
D912	ED-307572	D SILICON H 1SS131
D913	ED-307572	D SILICON H 1SS131
D914	ED-307572	D SILICON H 1SS131
D915	ED-307572	D SILICON H 1SS131
D916	ED-307572	D SILICON H 1SS131
D917	ED-307572	D SILICON H 1SS131
FL1A	EM-408462J	IND FL FV563G CHARACTER [EK,EOH]
FL1B	EM-403369J	IND FL FV508G CHARACTER [EA,EO,EOG]
IC901A	EI-413005J	IC UPD75217CW-161 JHXOPD1 [EK,EOH]
IC901B	EI-410479J1	IC UPD75217CW-155 JHXOPP2 [EA,EO,EOG]
IC902	EI-373955	IC S-8053ALR
IC903	EI-394467J	IC X24C01P
IC904	EI-330391	IC TC4050BP
IC905	EI-376794J1	IC BA10393
L901	EO-376614	COIL FIX 1 LF-5.0S F05 220K
RN901	EH-387619J	COMP R RGLE14X 103J
RN902	EH-378540J	COMP R RGLE5X 103J
RN904	EH-383056J	COMP R RGLE4X 103J
RN905	EH-383057J	COMP R RGLE5X 473J
RN906	EH-367912	COMP R RKM6L502F
SW901	ES-732664J	SW TACT SKHVBK [POWER]
SW902	ES-732664J	SW TACT SKHVBK [RWD]
SW903	ES-732664J	SW TACT SKHVBK [REC]
SW904	ES-732664J	SW TACT SKHVBK [PLAY]
SW905	ES-732664J	SW TACT SKHVBK [T.MIN]
SW906	ES-732664J	SW TACT SKHVBK [T.STOP]
SW907	ES-732664J	SW TACT SKHVBK [STOP]
SW908	ES-732664J	SW TACT SKHVBK [PAUSE/STILL]
SW909	ES-732664J	SW TACT SKHVBK [TIMER]
SW910	ES-732664J	SW TACT SKHVBK [RESET]
SW911	ES-732664J	SW TACT SKHVBK [EJECT]
SW912	ES-732664J	SW TACT SKHVBK [FF]
SW913	ES-732664J	SW TACT SKHVBK [I-HQ]
SW914	ES-732664J	SW TACT SKHVBK [CH UP]
SW915	ES-732664J	SW TACT SKHVBK [CH DOWN]
SW916	ES-732664J	SW TACT SKHVBK [T.HOUR]
SW917	ES-732664J	SW TACT SKHVBK [TV/VCR]
SW918	ES-732664J	SW TACT SKHVBK [SPEED]
TR901	ET-354414	TR DTC144ES
TR902	ET-364060	TR DTC143ES
TR903	ET-364060	TR DTC143ES
VR901	EV-732666J	VR ROTARY RK09K113C203
X901	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
X902	EI-716825	OSC XTAL DT-38 32.768KHZ
Z901	ET-381637J2	DETECTOR GP1U521X

12. PRE AMP P.C BOARD

Ref.No.	Part No.	Description
D801	ED-307572	D SILICON H 1SS131
D802	ED-307572	D SILICON H 1SS131
IC801	EI-387586J	IC BA7244BS
IC802	EI-356457	IC BU4013B
IC871	EI-397285J	IC BA7740S
L801	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L802	EO-376857	COIL FIX 1 LF-5.0S F05 5R6K
L803	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L804	EO-380734J	COIL FIX 1 LF-5.0S F05 6R8K
L805	EO-376607	COIL FIX 1 LF-5.0S F05 181K
L806	EO-376612	COIL FIX 1 LF-5.0S F05 680K
L807	EO-732646J	COIL FIX 1 LF-7.5 101J
L808	EO-376614	COIL FIX 1 LF-5.0S F05 220K
L809	EO-732646J	COIL FIX 1 LF-7.5 101J
L810	EO-376860	COIL FIX 1 LF-5.0S F05 820K
L811	EO-732646J	COIL FIX 1 LF-7.5 101J
L812	EO-376612	COIL FIX 1 LF-5.0S F05 680K
L813	EO-376606	COIL FIX 1 LF-5.0S F05 180K
L814	EO-732663J	COIL FIX 1 LF-7.5 271K
L871	EO-732646J	COIL FIX 1 LF-7.5 101J
L872	EO-732646J	COIL FIX 1 LF-7.5 101J
Q801	ET-354414	TR DTC144ES
Q802	ET-364040	TR UN421D
Q803	ET-397160J	TR 2SC3330 R,S,T,U,V
Q804	ET-354414	TR DTC144ES
Q805	ET-397160J	TR 2SC3330 R,S,T,U,V
Q806	ET-397160J	TR 2SC3330 R,S,T,U,V
Q807	ET-353897	TR DTC114ES
Q808	ET-353899	TR 2SA1317 S,T,U
Q809	ET-353899	TR 2SA1317 S,T,U
Q810	ET-360399	TR DTC114TS
Q811	ET-353899	TR 2SA1317 S,T,U
Q812	ET-397160J	TR 2SC3330 R,S,T,U,V
Q813	ET-364040	TR UN421D
Q814	ET-397160J	TR 2SC3330 R,S,T,U,V
Q817	ET-353899	TR 2SA1317 S,T,U
Q818	ET-364040	TR UN421D
Q819	ET-364040	TR UN421D
Q871	ET-370310	TR DTC144TS
VR801	EV-732497J	R S-FIX V RH0632C 102
VR802	EV-732497J	R S-FIX V RH0632C 102

13. POWER SUPPLY P.C BOARD

Ref.No.	Part No.	Description
C801A	EC-718880	C EC V SXE 472M 16DC [EA,EK,EO,EOG]
C801B	EC-410495J	C EC V CUT TWSS 682M 16.0DC [EOH]
C804	EC-406634J	C EC V SXE12 222M 25.0DC
C807	EC-406634J	C EC V SXE12 222M 25.0DC
D801	*ED-732667J	D SILICON DSC30TC
D803	*ED-357754	D SILICON DS135D 200/1.0A
D804	ED-396065J	D ZENER H HZS12C1
D805	*ED-383752J	D SILICON DBF40C 200V/4.0A
D806	ED-396067J	D ZENER H HZS18-1
D807	ED-403227J	D ZENER H MTZJ6.8C T26
D808	*ED-379041	D SILICON S5566B 100/1.0A
D809	*ED-379041	D SILICON S5566B 100/1.0A
D810	ED-396068J	D ZENER H HZS18-3
D811	ED-397289J	D ZENER H HZS20-2
D812	ED-386086J	D ZENER H HZS30-2L
D813	ED-389688J	D ZENER H HZS5B2
D814	*ED-379041	D SILICON S5566B 100/1.0A
D815	*ED-379041	D SILICON S5566B 100/1.0A
D816	*ED-357754	D SILICON DS135D 200/1.0A
D817	*ED-357754	D SILICON DS135D 200/1.0A
D818	*ED-357754	D SILICON DS135D 200/1.0A
D819	ED-387783J	D ZENER H HZS6C3L
D821	ED-307572	D SILICON H 1SS131
D822	ED-307572	D SILICON H 1SS131
FR801	*ER-397385J	R FUSE V T05 RF25SCVTP1/4WR20K
FR802	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
FR803	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
FR804	*ER-331188	R FUSE H S10 ERD2FC 1/4W 8R2J
FR805	*ER-393222J	R FUSE H S10 RF25S 1/4W 100J
FR806	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
FR807	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
FR808	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
FR809	*ER-400688J	R FUSE V T05 RF25SCVTP1/4WR10K
L801	*EH-732826J	FILTER FK0B160MH16 [EO,EOG]
L802	*EH-732827J	FILTER PLH11C-1811R2 [EXCEPT EOG]
Q801	*ET-380685J	TR 2SD1761 E,F,G [TR(1) P.C BOARD]
Q802	*ET-380685J	TR 2SD1761 E,F,G
Q803	*ET-380685J	TR 2SD1761 E,F,G
Q804	ET-397160J	TR 2SC3330 R,S,T,U,V
Q805	*ET-380685J	TR 2SD1761 E,F,G
Q806	ET-397160J	TR 2SC3330 R,S,T,U,V
Q807	*ET-380685J	TR 2SD1761 E,F,G [TR(2) P.C BOARD]
Q808	*ET-405622J	TR 2SD2061 E,F
Q809	*ET-366065	TR 2SB1185 E,F
Q810	*ET-366168	TR 2SD1292 Q,R
Q811	ET-397160J	TR 2SC3330 R,S,T,U,V

14. I-HQ P.C BOARD

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D2	ED-307572	D SILICON H 1SS131
D3	ED-307572	D SILICON H 1SS131
D4	ED-307572	D SILICON H 1SS131
IC1	EI-394951J	IC LB1215
IC2	EI-373980	IC BA15218N
L1	EO-732646J	COIL FIX 1 LF-7.5 101J
Q1	ET-397160J	TR 2SC3330 R,S,T,U,V
Q2	ET-397160J	TR 2SC3330 R,S,T,U,V
Q3	ET-354414	TR DTC144ES
Q4	ET-397160J	TR 2SC3330 R,S,T,U,V
Q5	ET-397160J	TR 2SC3330 R,S,T,U,V
Q6	ET-397160J	TR 2SC3330 R,S,T,U,V
Q7	ET-397160J	TR 2SC3330 R,S,T,U,V
Q8	ET-397160J	TR 2SC3330 R,S,T,U,V
Q9	ET-397160J	TR 2SC3330 R,S,T,U,V
Q10	ET-353899	TR 2SA1317 S,T,U
Q11	ET-353899	TR 2SA1317 S,T,U
Q12	ET-354414	TR DTC144ES

15. I/O P.C BOARD (EA)

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D2	ED-307572	D SILICON H 1SS131
D4	ED-733270J	D SILICON CHIP DA204K
D5	ED-733270J	D SILICON CHIP DA204K
IC1	EI-310036	IC TC4066BP
PJ1	EJ-389324J	PIN J YKB11-0178 1P
PJ2	EJ-389325J	PIN J YKB11-0179 1P
PJ3	EJ-389325J	PIN J YKB11-0179 1P
PJ4	EJ-389324J	PIN J YKB11-0178 1P
PJ6	EJ-389323J	PIN J YKB11-0180 1P
PJ7	EJ-389323J	PIN J YKB11-0180 1P
L2	EO-376600	COIL FIX 1 LF-5.0S F05 101K
Q1	ET-732640J	TR CHIP 2SC2412K
Q2	ET-732640J	TR CHIP 2SC2412K
Q3	ET-731437J	TR CHIP DTC114EK
Q4	ET-731437J	TR CHIP DTC114EK
Q5	ET-732639J	TR 2SA1037K
Q9	ET-719669	TR CHIP DTA114EK
Q10	ET-731437J	TR CHIP DTC114EK
Q15	ET-732640J	TR CHIP 2SC2412K

16. I/O P.C BOARD (EK,EO,EOG,EOH)

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D2	ED-307572	D SILICON H 1SS131
D3	ED-388368J	D ZENER H HZS9B3L
D4	ED-733270J	D SILICON CHIP DA204K
D5	ED-733270J	D SILICON CHIP DA204K
IC1	EI-310036	IC TC4066BP
IC2	EI-310036	IC TC4066BP
PJ1	EJ-389324J	PIN J YKB11-0178 1P
PJ2	EJ-389325J	PIN J YKB11-0179 1P
PJ3	EJ-389980J	PIN J YKB11-0176 WHITE 1P
PJ4	EJ-389979J	PIN J YKB11-0175 RED 1P
PJ5	EJ-389864J	SOCKET M1817 21P
PJ6	EJ-389914J	PIN J YKB11-0177 YELLOW 1P
L1	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L2	EO-376600	COIL FIX 1 LF-5.0S F05 101K
Q1	ET-732640J	TR CHIP 2SC2412K
Q2	ET-732640J	TR CHIP 2SC2412K
Q3	ET-731437J	TR CHIP DTC114EK
Q4	ET-731437J	TR CHIP DTC114EK
Q5	ET-732639J	TR 2SA1037K
Q6	ET-732640J	TR CHIP 2SC2412K
Q7	ET-719669	TR CHIP DTA114EK
Q8	ET-731437J	TR CHIP DTC114EK
Q9	ET-719669	TR CHIP DTA114EK
Q10	ET-731437J	TR CHIP DTC114EK
Q11	ET-356336	TR DTA114ES
Q12	ET-732640J	TR CHIP 2SC2412K
Q13	ET-732639J	TR 2SA1037K
Q14	ET-732640J	TR CHIP 2SC2412K
Q15	ET-732640J	TR CHIP 2SC2412K

17. D-MULTI P.C BOARD (EA,EO,EOG,EOH-D)

Ref.No.	Part No.	Description
FL1	EH-712604	FILTER CE SFT5.74MA
FL2	EH-394948J	FILTER CE SFT5.5MA
IC1	EI-394949J	IC IR3P72
L1	EO-732646J	COIL FIX 1 LF-7.5 101J
T1	EO-732670J	COIL SIF DET 6F16412A1
T2	EO-732671J	COIL SIF DET 6F16411A1
VR1	EV-404298J	R S-FIX H T05 KVSF637T 0.1W222
VR2	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR3	EV-355372	R S-FIX H RH0615C 0.10W 105
VR4	EV-404303J	R S-FIX H T05 KVSF637T 0.1W474
VR5	EV-404295J	R S-FIX H T05 KVSF637T 0.1W104
VR6	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR7	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223

18. NICAM P.C BOARD (EK,EOH-N)

Ref.No.	Part No.	Description
D1	ED-394936J	D VARACTOR 1SV111
D2	ED-724694J	D SILICON CHIP MC2838
D3	ED-394936J	D VARACTOR 1SV111
D4	ED-394936J	D VARACTOR 1SV111
IC1	EI-408930J	IC TDA8732
IC2	EI-394937J	IC CF70124
IC3	EI-397560J	IC SAA7322GP
IC4	EI-393323J	IC M5218AL-771
L1	EO-732646J	COIL FIX 1 LF-7.5 101J
L2	EO-384903J	COIL FIX 1 EL0405SKI 102K
L3	EO-384903J	COIL FIX 1 EL0405SKI 102K
L4	EO-732646J	COIL FIX 1 LF-7.5 101J
L5	EO-732646J	COIL FIX 1 LF-7.5 101J
L6	EO-732646J	COIL FIX 1 LF-7.5 101J
L7	EO-732646J	COIL FIX 1 LF-7.5 101J
L8	EO-732646J	COIL FIX 1 LF-7.5 101J
L9	EO-732646J	COIL FIX 1 LF-7.5 101J
Q1	ET-370819	TR CHIP 2SC2852
Q2	ET-370819	TR CHIP 2SC2852
Q3	ET-370819	TR CHIP 2SC2852
Q4	ET-370819	TR CHIP 2SC2852
Q5	ET-732644J	TR CHIP DTC144TK
Q6	ET-370819	TR CHIP 2SC2852
Q7	ET-370819	TR CHIP 2SC2852
Q8	ET-732644J	TR CHIP DTC144TK
Q9	ET-730132J	TR CHIP DTA144TK
T1A	EH-732668J	FILTER BPF H316 BQKS-2982QDD [EOH-N]
T1B	EH-732669J	FILTER BPF TH316 BQM-2110QDAF [EK-N]
VC1	EC-729779J	C S-FIX H TZ03T200FR
X1A	EI-408932J	OSC X'TAL HC-49/U 11700KHZ [EOH-N]
X1B	EI-408931J	OSC X'TAL HC-49/U 13104KHZ [EK-N]
X2	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
X3	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ

19. NICAM P.C BOARD (EOH-DN)

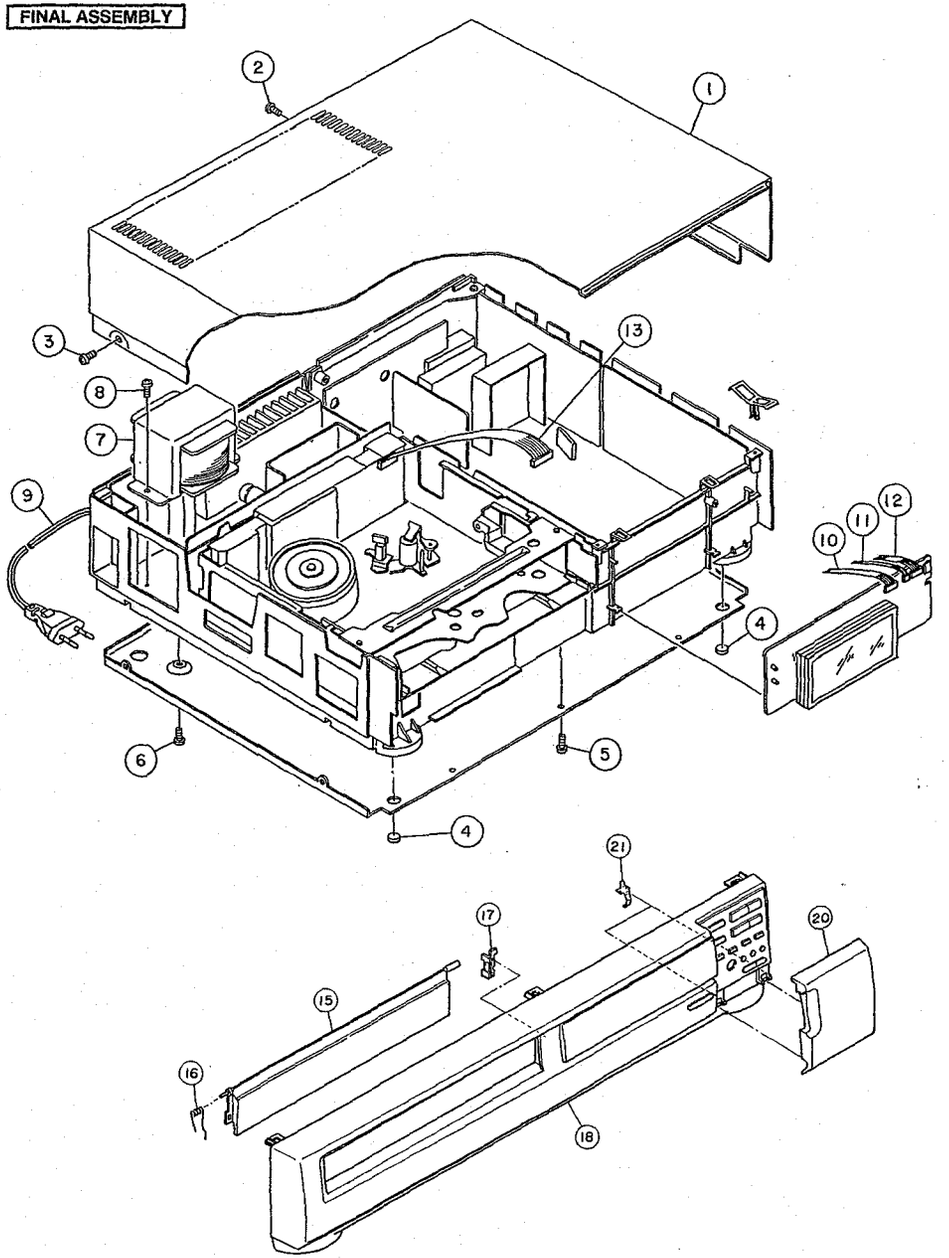
Ref.No.	Part No.	Description
D1	ED-394936J	D VARACTOR 1SV111
D2	ED-724694J	D SILICON CHIP MC2838
D3	ED-394936J	D VARACTOR 1SV111
D4	ED-394936J	D VARACTOR 1SV111
FL101	EH-394947J	FILTER CE SFT5.74MA
FL102	EH-394948J	FILTER CE SFT5.5MA
IC1	EI-408930J	IC TDA8732
IC2	EI-394937J	IC CF70124
IC3	EI-397560J	IC SAA7322GP
IC4	EI-393323J	IC M5218AL-771
IC101	EI-394949J	IC IR3P72
L1	EO-732646J	COIL FIX 1 LF-7.5 101J
L2	EO-384903J	COIL FIX 1 EL0405SKI 102K
L3	EO-384903J	COIL FIX 1 EL0405SKI 102K
L4	EO-732646J	COIL FIX 1 LF-7.5 101J
L5	EO-732646J	COIL FIX 1 LF-7.5 101J
L6	EO-732646J	COIL FIX 1 LF-7.5 101J
L7	EO-732646J	COIL FIX 1 LF-7.5 101J
L8	EO-732646J	COIL FIX 1 LF-7.5 101J
L9	EO-732646J	COIL FIX 1 LF-7.5 101J
L101	EO-732646J	COIL FIX 1 LF-7.5 101J
Q1	ET-370819	TR CHIP 2SC3052
Q2	ET-370819	TR CHIP 2SC3052
Q3	ET-370819	TR CHIP 2SC3052
Q4	ET-370819	TR CHIP 2SC3052
Q5	ET-732644J	TR CHIP DTC144TK
Q6	ET-370819	TR CHIP 2SC3052
Q7	ET-370819	TR CHIP 2SC3052
Q8	ET-732644J	TR CHIP DTC144TK
Q9	ET-730132J	TR CHIP DTA144TK
Q10	ET-732644J	TR CHIP DTC144TK
Q11	ET-370819	TR CHIP 2SC3052
T1	EH-732668J	FILTER BPF H316 BQKS-2982QDD
T101	EO-732670J	COIL SIF DET 6F16412A1
T102	EO-732671J	COIL SIF DET 6F16411A1
VC1	EC-729779J	C S-FIX H TZ03T200FR

Ref.No.	Part No.	Description
VR101	EV-404298J	R S-FIX H T05 KVSF637T 0.1W222
VR102	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR103	EV-355372	R S-FIX H RH0615C 0.10W 105
VR104	EV-404303J	R S-FIX H T05 KVSF637T 0.1W474
VR105	EV-404295J	R S-FIX H T05 KVSF637T 0.1W104
VR106	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR107	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
X1	EI-408932J	OSC X'TAL HC-49/U 11700KHZ
X2	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
X3	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ

20. VPST P.C BOARD (EOG ONLY)

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D101	ED-307572	D SILICON H 1SS131
D201	ED-307572	D SILICON H 1SS131
D601	ED-307572	D SILICON H 1SS131
D602	ED-405446J	D ZENER H UTZJ5.6B T26
[illegible]101	EH-394684J	FILTER EMI ZBF503D-00TA T05
[illegible]601	*ER-331188	R FUSE H S10 ERD2FC 1/4W 8R2J
IB101	EH-383056J	COMP R RGLE4X 103J
IB102	EH-386637J	COMP R RGLE8X 103J
IC101	EI-408432J	IC UPD75218CW-012 JXVPT1
IC102	EI-405224J	IC ST24C02
IC103	EI-405224J	IC ST24C02
IC104	EI-408434J	IC MV1815-1BA
IC105	EI-410125J	IC V53C464AP-80
IC106	EI-401050J	IC LVA523SA2
IC107	EI-394680J	IC AN3171K
IC108	EI-387019J	IC MC1377P
IC301	EI-385958J	IC SAA4700
L1	EO-345865	COIL FIX 1 EL0606SKI 100J
L101	EO-345865	COIL FIX 1 EL0606SKI 100J
L102	EO-345865	COIL FIX 1 EL0606SKI 100J
L121	EO-345865	COIL FIX 1 EL0606SKI 100J
L151	EO-410104J	COIL FIX 1 SPT0203SA T26 181J
L152	EO-410104J	COIL FIX 1 SPT0203SA T26 181J
L153	EO-345880	COIL FIX 1 EL0606SKI 820J
L154	EO-410099J	COIL FIX 1 SPT0203SA T26 470J
L155	EO-345865	COIL FIX 1 EL0606SKI 100J
L201	EO-345865	COIL FIX 1 EL0606SKI 100J
L202	EO-345865	COIL FIX 1 EL0606SKI 100J
L203	EO-345875	COIL FIX 1 EL0606SKI 390J
L204	EO-345873	COIL FIX 1 EL0606SKI 270J
L206	EO-345871	COIL FIX 1 EL0606SKI 180J
L207	EO-345874	COIL FIX 1 EL0606SKI 330J
L208	EO-345874	COIL FIX 1 EL0606SKI 330J
L251	EO-345865	COIL FIX 1 EL0606SKI 100J
L301	EO-345865	COIL FIX 1 EL0606SKI 100J
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR101	ET-354415	TR DTA144ES
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR151	ET-397160J	TR 2SC3330 R,S,T,U,V
TR152	ET-353899	TR 2SA1317 S,T,U
TR153	ET-353899	TR 2SA1317 S,T,U
TR154	ET-397160J	TR 2SC3330 R,S,T,U,V
TR155	ET-397160J	TR 2SC3330 R,S,T,U,V
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V
TR204	ET-353899	TR 2SA1317 S,T,U
TR208	ET-353899	TR 2SA1317 S,T,U
TR251	ET-397160J	TR 2SC3330 R,S,T,U,V
TR252	ET-353899	TR 2SA1317 S,T,U
TR253	ET-353899	TR 2SA1317 S,T,U
TR601	ET-354083	TR 2SD1189 Q,R
X101	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
X102	EI-408433J	OSC X'TAL HC-43/U 27750KHZ
X103	EI-394673J	OSC X'TAL HC-49/U 8867.238KHZ

FINAL ASSEMBLY



21. FINAL ASSEMBLY

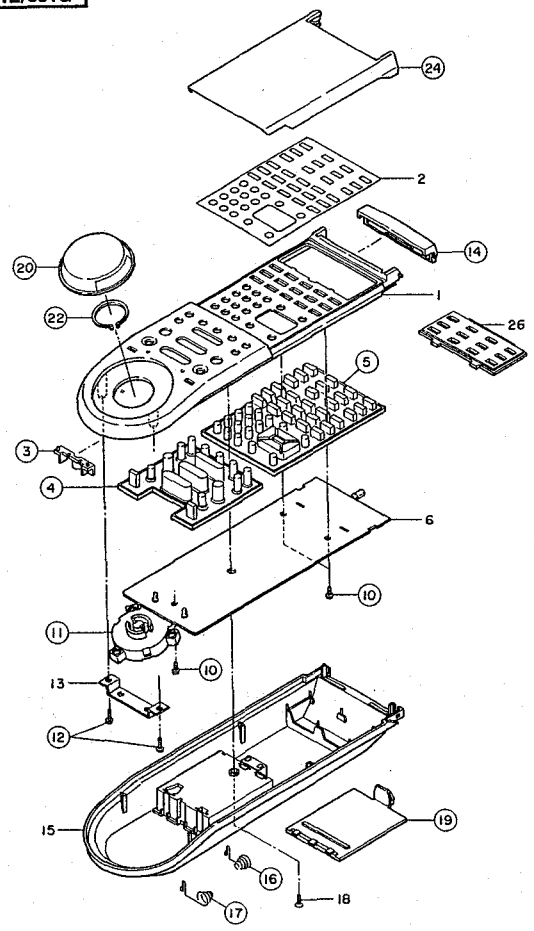
Ref.No.	Part No.	Description
1	SP-733275J	COVER UPPER VS-F550
2	ZS-389965J	PLX BID26X08STL BNI
3	ZS-385611J	DT BID26X06STL BNI
4	SA-387507J	FOOT SX
5	ZS-361105	PLX BID30X08STL BNI
6	ZS-331182	BT BID30X08STL BNI
7A	*BT-732677J	TRANS POW F510EK [EA,EK]
7B	*BT-732678J	TRANS POW F510EO [EO,EOG,EOH]
8	ZS-565942	T2PAN40X08STL CMT
9A	*EW-385901M	AC CORD 200 SA-2 LDF B130 A S [EA]
9B	*EW-389300J	AC CORD200 NRASBS LC2 B140 A B [EK]
9C	*EW-385900M	AC CORD 200 SE-1H03VV B130 A E [EO,EOG,EOH]
10	EW-732684J	CORD FFC-K3 11P
11	EW-732685J	CORD FFC-K4 6P
12	EW-732683J	CORD FFC-K2 16P
13	EW-732686J	CORD FFC-K1 20P
15A	SE-408301J	MASK CASSETTE (J) VS-F550 (E)
15B	SE-408303J	MASK CASSETTE (J) VS-F560 (E)
15C	SE-408304J	MASK CASSETTE (J) VS-F580 (G)
15D	SE-408300J	MASK CASSETTE (J) VS-F590 (E)
16	ZG-387370J	SP MASK
17	SZ-732676J	STOPPER MASK
18A	BD-VA037A300A	PANEL FRONT BLK F550EA-D
18B	BD-VA037A300E	PANEL FRONT BLK F550EOH-N
18C	BD-VA037A300B	PANEL FRONT BLK F560EK-N
18D	BD-VA037A300F	PANEL FRONT BLK F580EOG-VD
18E	BD-VA037A300D	PANEL FRONT BLK F590EOH-DN
20A	SP-733271J	DOOR (F550-D) [EA,EO,EOG,EOH-D]
20B	SP-733273J	DOOR (F550-N) [EK-N,EOH-N]
20C	SP-733272J	DOOR (F590-DN) [EOH-DN]
21	ZG-386833J1	SP PLATE DOOR (D)

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

22. ACCESSARY

Ref.No.	Part No.	Description
1	EW-348414	CORD PAL
2A	AV-B1040A010A	REMOCON BLK RC-V551E [EK]
2B	AV-B1040A010B	REMOCON BLK RC-V551G [EOG]
2C	AV-B1043A010A	REMOCON BLK RC-V552E [EA,EO,EOH]

REMOCON RC-V551E/551G



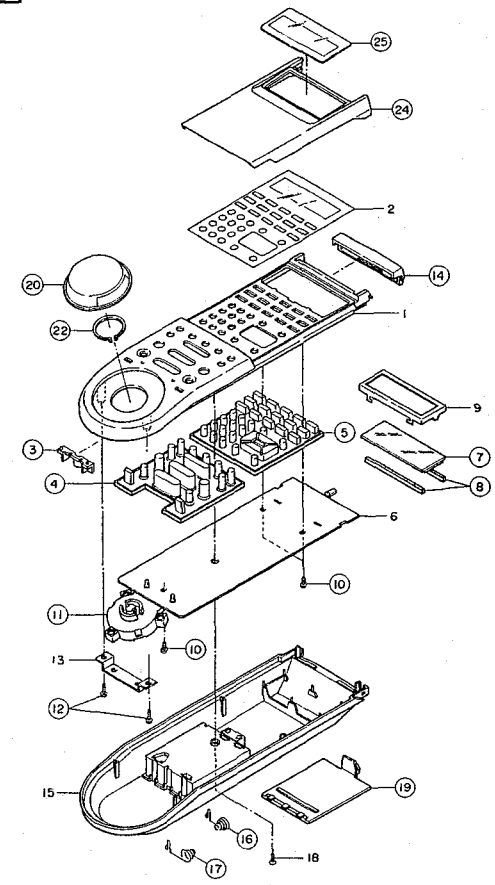
23. REMOCON RC-V551E/V551G

Ref.No.	Part No.	Description
3	SE-407612J	LENS (V)
4	MB-407645J	KEY RUBBER (V1)
5	MB-407622J	KEY RUBBER (V2)-A
10	ZS-374389	PT BID20X06STL BNI
11	ES-408429J	SW ROTARY ENCODER SRGPQJ
12	ZS-336614	PT PAN26X08STL CMT
14	SE-407625J	FILTER (V)
16	ZG-407614J	TERMINAL BATTERY (V3)
17	ZG-407615J	TERMINAL BATTERY (V4)
19	SC-407627J	COVER BATTERY (V)
20	SK-407710J	KNOB SHUTTLE-R
22	SZ-408436J	RING C S-19
24A	SP-407629J	DOOR PANEL (V)-551E [RC-V551E]
24B	SP-407628J	DOOR PANEL (V)-551G [RC-V551G]

24. REMOCON P.C BOARD RC-V551

Ref.No.	Part No.	Description
D1	ED-403450J	D LED SE303ARF-C INFRARED
D2	ED-397391J	D LED BR3668S RED
D3	ED-397391J	D LED BR3668S RED
IC1	EI-408449J	IC UPD75004GB-771 JXVPTR1 QF
IC2	EI-400672J	IC S-8052ALB-LE
TR1	ET-405342J	TR.CHIP 2SD1620
X1	EI-408450J	OSC CE CST2.45MGW 2.450MHZ
1	ZG-407616J	TERMINAL BATTERY (V1)
2	ZG-407617J	TERMINAL BATTERY (V2)

REMOCON RC-V552E



25. REMOCON RC-V552E

Ref.No.	Part No.	Description
3	SE-407612J	LENS (V)
4	MB-407645J	KEY RUBBER (V1)
5	MB-407618J	KEY RUBBER (W)-A
7	EM-408437J	IND LCD LD-B5444A ENGLISH
8	EJ-408427J	CONNECTOR LCD (4) B1043
10	ZS-374389	PT BID20X06STL BNI
11	ES-408429J	SW ROTARY ENCODER SRGPQJ
12	ZS-336614	PT PAN26X08STL CMT
14	SE-407625J	FILTER (V)
16	ZG-407614J	TERMINAL BATTERY (V3)
17	ZG-407615J	TERMINAL BATTERY (V4)
19	SC-407627J	COVER BATTERY (V)
20	SK-407710J	KNOB SHUTTLE-R
22	SZ-408436J	RING C S-19
24	SP-407636J	DOOR PANEL (W)-552E
25	SE-407613J	WINDOW DOOR (W)

26. REMOCON P.C BOARD RC-V552

Ref.No.	Part No.	Description
D1	ED-403450J	D LED SE303ARF-C INFRARED
D2	ED-397391J	D LED BR3668S RED
D3	ED-397391J	D LED BR3668S RED
D4	ED-386031J	D SILICON CHIP MA110-TW
D5	ED-386031J	D SILICON CHIP MA110-TW
D6	ED-386031J	D SILICON CHIP MA110-TW
D7	ED-386031J	D SILICON CHIP MA110-TW
D8	ED-386031J	D SILICON CHIP MA110-TW
D9	ED-386031J	D SILICON CHIP MA110-TW
D10	ED-386031J	D SILICON CHIP MA110-TW
D11	ED-386031J	D SILICON CHIP MA110-TW
IC1	EI-408408J1	IC M50933-128FP JXLCDR2
IC2	EI-400672J	IC S-8052ALB-LE
SW1	ES-393431J	SW TACT CHIP SKHUAB T12E
TR1	ET-405342J	TR.CHIP 2SD1620
X1	EI-368825M	OSC XTAL C-002RX 32.768KHZ
X2	EI-403451J	OSC CE CSB1200J 1.200MHZ
1	ZG-407616J	TERMINAL BATTERY (V1)
2	ZG-407617J	TERMINAL BATTERY (V2)

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Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
AVB1040A010A	22-2A	ED307572	6-D8	ED307572	14-D1	ED511907	7-D503
AVB1040A010B	22-2B	ED307572	6-D9	ED307572	14-D2	ED624903	7-D504
AVB1043A010A	22-2C	ED307572	6-D10	ED307572	14-D3	ED724694J	18-D2
BAVA037A500A	5-4A	ED307572	6-D11	ED307572	14-D4	ED724694J	19-D2
BAVA037A500B	5-4C	ED307572	6-D102	ED307572	15-D1	ED732667J	13-D801
BAVA037A500C	5-4B	ED307572	6-D103	ED307572	15-D2	ED733270J	15-D4
BAVA037A500D	5-4D	ED307572	6-D106	ED307572	16-D1	ED733270J	15-D5
BAVA037A600A	5-1A	ED307572	6-D201	ED307572	16-D2	ED733270J	16-D4
BAVA037A600B	5-1E	ED307572	6-D202	ED307572	20-D1	ED733270J	16-D5
BAVA037A600C	5-1C	ED307572	6-D302	ED307572	20-D101	EE730153J	6-TU1C
BAVA037A600D	5-1G	ED307572	6-D303	ED307572	20-D201	EE730156J	6-TU1A
BAVA037A600E	5-1D	ED307572	6-D304	ED307572	20-D601	EE730157J	6-TU1D
BAVA037A600F	5-1F	ED307572	6-D305	ED357754	13-D803	EE732654J	6-TU1E
BAVA037A600G	5-1B	ED307572	6-D306	ED357754	13-D816	EE732655J	6-TU1B
BAVA037A610A	5-2	ED307572	6-D307	ED357754	13-D817	EH366894	6-FL251
BAVA037A630A	5-3A	ED307572	6-D308	ED357754	13-D818	EH367912	11-RN906
BAVA037A630B	5-3E	ED307572	6-D310	ED365699	6-D309	EH368948	8-CF2
BAVA037A630C	5-3C	ED307572	6-D312	ED367502	6-D7	EH368948	10-CF2
BAVA037A630D	5-3G	ED307572	6-D701	ED378530J	6-D15	EH373916	8-CF1
BAVA037A630E	5-3D	ED307572	6-D704	ED378530J	6-D104	EH373917	9-CF1
BAVA037A630F	5-3F	ED307572	6-D706	ED379041	13-D808	EH373919	9-CF2
BAVA037A630G	5-3B	ED307572	6-D707	ED379041	13-D809	EH378540J	11-RN902
BAVA037A650A	5-5B	ED307572	6-D708	ED379041	13-D814	EH383056J	11-RN904
BAVA037A650B	5-5C	ED307572	6-D709	ED379041	13-D815	EH383056J	20-IB101
BAVA037A650C	5-5A	ED307572	6-D710	ED383752J	13-D805	EH383057J	11-RN905
BAVA037A660A	5-6	ED307572	6-D711	ED386031J	26-D4	EH386637J	20-IB102
BAVA037A720A	5-7A	ED307572	6-D712	ED386031J	26-D5	EH387619J	11-RN901
BAVA037A720B	5-7D	ED307572	6-D715	ED386031J	26-D6	EH394684J	20-FL101
BAVA037A720C	5-7C	ED307572	7-D500	ED386031J	26-D7	EH394858J	6-FL102
BAVA037A720D	5-7E	ED307572	7-D501	ED386031J	26-D8	EH394947J	19-FL101
BAVA037A720E	5-7B	ED307572	7-D502	ED386031J	26-D9	EH394948J	10-CF3
BBV1130D020J	3-65	ED307572	7-D505	ED386031J	26-D10	EH394948J	17-FL2
BDVA037A300A	21-18A	ED307572	7-D506	ED386031J	26-D11	EH394948J	19-FL102
BDVA037A300B	21-18C	ED307572	7-D507	ED386086J	6-D713	EH712604	17-FL1
BDVA037A300D	21-18E	ED307572	7-D508	ED386086J	13-D812	EH725827J	9-CF4
BDVA037A300E	21-18B	ED307572	7-D511	ED386226J	6-D101	EH725828J	10-CF4B
BDVA037A300F	21-18D	ED307572	7-D512	ED387763J	7-D510	EH725829J	9-CF3
BLV1102A140A	3-43	ED307572	7-D513	ED387765J	6-D2	EH730145J	6-FL301
BLV1123A050A	3-23	ED307572	11-D1	ED387783J	13-D819	EH730625J	10-CF1
BL387458J2	4-37	ED307572	11-D2	ED387919J	6-D6	EH730666J	6-DL201
BM387503J	4-31	ED307572	11-D3	ED388368J	6-D105	EH731166J	6-FL201
BM400682J1	4-9	ED307572	11-D4	ED388368J	6-D311	EH732528J	10-CF4A
BM401296J1	2-8	ED307572	11-D5	ED388368J	7-D509	EH732529J	8-CF4
BT732677J	21-7A	ED307572	11-D8	ED388368J	16-D3	EH732652J	6-FL101
BT732678J	21-7B	ED307572	11-D10	ED389688J	13-D813	EH732668J	18-T1A
BVV1102A070A	3-35	ED307572	11-D11	ED390011J	4-13	EH732668J	19-T1
BVV1102A080A	3-36	ED307572	11-D12	ED390012J	4-14	EH732669J	18-T1B
BVV1102A150A	3-48	ED307572	11-D13	ED394936J	18-D1	EH732826J	13-L801
BVV1123A410C	2-1	ED307572	11-D14	ED394936J	18-D3	EH732827J	13-L802
BVV1123A420C	2-2	ED307572	11-D901	ED394936J	18-D4	EI310036	15-IC1
BV732641J	6-MD1A	ED307572	11-D902	ED394936J	19-D1	EI310036	16-IC1
BV732642J	6-MD1B	ED307572	11-D903	ED394936J	19-D3	EI310036	16-IC2
BV732643J	6-MD1C	ED307572	11-D904	ED394936J	19-D4	EI330391	11-IC904
BV732657J	6-VIF1A	ED307572	11-D905	ED396065J	13-D804	EI354640	7-IC505
BV732658J	6-VIF1B	ED307572	11-D906	ED396067J	13-D806	EI356457	12-IC802
BV732660J	6-VIF1D	ED307572	11-D907	ED396068J	13-D810	EI360586	7-IC502
BV732661J	6-VIF1E	ED307572	11-D908	ED397233J	6-D702	EI364896	6-IC303
BV732662J	6-VIF1C	ED307572	11-D909	ED397289J	6-D703	EI366892	6-IC251
EA387496J	4-12	ED307572	11-D910	ED397289J	13-D811	EI368825M	26-X1
EC406634J	13-C804	ED307572	11-D911	ED397391J	24-D2	EI373955	11-IC902
EC406634J	13-C807	ED307572	11-D912	ED397391J	24-D3	EI373957J1	11-X901
EC410495J	13-C801B	ED307572	11-D913	ED397391J	26-D2	EI373957J1	20-X101
EC718880	13-C801A	ED307572	11-D914	ED397391J	26-D3	EI373980	7-IC501
EC729779J	18-VC1	ED307572	11-D915	ED397399J	6-D301	EI373980	14-IC2
EC729779J	19-VC1	ED307572	11-D916	ED397399J	6-D700	EI376794J1	11-IC905
EC732653J	6-C701	ED307572	11-D917	ED400171J	6-D714	EI381632J	6-X201
EC732825J	6-VC701	ED307572	12-D801	ED403227J	13-D807	EI385958J	20-IC301
ED307572	6-D3	ED307572	12-D802	ED403450J	24-D1	EI387019J	20-IC108
ED307572	6-D4	ED307572	13-D821	ED403450J	26-D1	EI387586J	12-IC801
ED307572	6-D5	ED307572	13-D822	ED405446J	20-D602	EI388360J	6-IC301

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EI389640J	7-X500	EM408437J	25-7	EO387781J	10-L9	ER336756	7-R555
EI389974J	6-X700	EM408462J	11-FL1A	EO387987J	6-L301	ER383007J	6-R500
EI390053J	6-IC2	EO345865	20-L1	EO388087J	6-L204	ER383007J	6-R513
EI393323J	6-IC701	EO345865	20-L101	EO388087J	12-L803	ER383007J	7-R513
EI393323J	18-IC4	EO345865	20-L102	EO388160J	8-L6	ER393222J	13-FR805
EI393323J	19-IC4	EO345865	20-L121	EO388160J	10-L6	ER397385J	13-FR801
EI393786J	7-IC500	EO345865	20-L155	EO388353J	6-L203	ER400688J	13-FR802
EI394467J	11-IC903	EO345865	20-L201	EO388362J	6-T301	ER400688J	13-FR803
EI394673J	20-X103	EO345865	20-L202	EO391141J	10-L3	ER400688J	13-FR806
EI394680J	20-IC107	EO345865	20-L251	EO392799J	7-L501	ER400688J	13-FR807
EI394839J	6-IC201	EO345865	20-L301	EO392800J	6-L109	ER400688J	13-FR808
EI394856J	6-IC102	EO345871	20-L206	EO392800J	6-L201	ER400688J	13-FR809
EI394937J	18-IC2	EO345873	20-L204	EO392800J	6-L207	ES373099	4-39
EI394937J	19-IC2	EO345874	20-L207	EO392800J	6-L211	ES387465J	4-17
EI394949J	17-IC1	EO345874	20-L208	EO392800J	6-L212	ES393431J	26-SW1
EI394949J	19-IC101	EO345875	20-L203	EO392800J	6-L705	ES408429J	23-11
EI394951J	14-IC1	EO345880	20-L153	EO392801J	6-L108	ES408429J	25-11
EI394983J	6-IC302	EO345893	6-L1	EO392817J	8-L4	ES732664J	11-SW901
EI396454J	6-IC101	EO376599	6-L106	EO392817J	10-L4A	ES732664J	11-SW902
EI397123J	9-IC2	EO376600	6-L103	EO403937J	6-L112B	ES732664J	11-SW903
EI397123J	10-IC2	EO376600	6-L110	EO410099J	20-L154	ES732664J	11-SW904
EI397285J	12-IC871	EO376600	6-L111	EO410104J	20-L151	ES732664J	11-SW905
EI397299J	7-IC503	EO376600	6-L303	EO410104J	20-L152	ES732664J	11-SW906
EI397560J	18-IC3	EO376600	6-L304	EO714610	9-L11	ES732664J	11-SW907
EI397560J	19-IC3	EO376600	6-L305	EO714610	10-L11	ES732664J	11-SW908
EI400672J	24-IC2	EO376600	7-L500	EO714614	9-L7	ES732664J	11-SW909
EI400672J	26-IC2	EO376600	7-L502	EO714614	10-L7	ES732664J	11-SW910
EI401050J	20-IC106	EO376600	7-L602	EO714616	8-L7	ES732664J	11-SW911
EI403347J	18-X3	EO376600	12-L801	EO725824J	10-L1	ES732664J	11-SW912
EI403347J	19-X3	EO376600	15-L2	EO725825J	10-L2	ES732664J	11-SW913
EI403451J	26-X2	EO376600	16-L1	EO725953J	10-L5	ES732664J	11-SW914
EI405224J	20-IC102	EO376600	16-L2	EO725954J	9-L5	ES732664J	11-SW915
EI405224J	20-IC103	EO376601	6-L202	EO726188J	6-VL251	ES732664J	11-SW916
EI405722J	6-IC700	EO376603	6-L206	EO732526J	8-L8	ES732664J	11-SW917
EI408408J1	26-IC1	EO376605	6-L105	EO732646J	6-L102	ES732664J	11-SW918
EI408432J	20-IC101	EO376606	6-L107	EO732646J	6-L302	ET353897	6-Q206
EI408433J	20-X102	EO376606	6-L208	EO732646J	12-L807	ET353897	6-Q207
EI408434J	20-IC104	EO376606	6-L702	EO732646J	12-L809	ET353897	6-Q253
EI408449J	24-IC1	EO376606	12-L813	EO732646J	12-L811	ET353897	6-Q254
EI408450J	24-X1	EO376607	12-L805	EO732646J	12-L871	ET353897	6-Q307
EI408930J	18-IC1	EO376610	6-L306	EO732646J	12-L872	ET353897	6-Q313
EI408930J	19-IC1	EO376610	6-L701	EO732646J	14-L1	ET353897	12-Q807
EI408931J	18-X1B	EO376611	6-L104	EO732646J	17-L1	ET353899	6-Q1
EI408932J	18-X1A	EO376612	12-L806	EO732646J	18-L1	ET353899	6-Q5
EI408932J	19-X1	EO376612	12-L812	EO732646J	18-L4	ET353899	6-Q8
EI408933J	18-X2	EO376614	6-L113	EO732646J	18-L5	ET353899	6-Q110
EI408933J	19-X2	EO376614	11-L901	EO732646J	18-L6	ET353899	6-Q205
EI410125J	20-IC105	EO376614	12-L808	EO732646J	18-L7	ET353899	6-Q213
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EI410486J	7-IC504	EO376860	6-L700	EO732646J	18-L9	ET353899	6-Q708
EI716825	11-X902	EO376860	6-L704	EO732646J	19-L1	ET353899	6-Q720
EI729997J	8-IC1	EO376860	7-L503	EO732646J	19-L4	ET353899	7-Q502
EI729997J	9-IC1	EO376860	12-L810	EO732646J	19-L5	ET353899	7-Q510
EI729997J	10-IC1	EO376861	6-L205	EO732646J	19-L6	ET353899	7-Q511
EJ381837J	4-16	EO380734J	6-L112A	EO732646J	19-L7	ET353899	7-Q515
EJ387497J	4-15	EO380734J	12-L804	EO732646J	19-L8	ET353899	7-Q517
EJ389323J	15-PJ6	EO381133J	6-L209	EO732646J	19-L9	ET353899	12-Q808
EJ389323J	15-PJ7	EO381187J	9-L3C	EO732646J	19-L101	ET353899	12-Q809
EJ389324J	15-PJ1	EO381188J	8-L3	EO732647J	6-L307	ET353899	12-Q811
EJ389324J	15-PJ4	EO381188J	9-L4	EO732651J	6-L210	ET353899	12-Q817
EJ389324J	16-PJ1	EO381188J	10-L4B	EO732656J	9-L8	ET353899	14-Q10
EJ389325J	15-PJ2	EO381196J	8-L10	EO732656J	10-L8	ET353899	14-Q11
EJ389325J	15-PJ3	EO381196J	9-L10	EO732663J	12-L814	ET353899	20-TR152
EJ389325J	16-PJ2	EO381196J	10-L10	EO732670J	17-T1	ET353899	20-TR153
EJ389864J	16-PJ5	EO384903J	18-L2	EO732670J	19-T101	ET353899	20-TR204
EJ389914J	16-PJ6	EO384903J	18-L3	EO732671J	17-T2	ET353899	20-TR208
EJ389979J	16-PJ4	EO384903J	19-L2	EO732671J	19-T102	ET353899	20-TR252
EJ389980J	16-PJ3	EO384903J	19-L3	ER331188	13-FR804	ET353899	20-TR253
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ET354414	6-Q101	ET375777	6-Q4	ET730419J	9-Q5	EV732500J	6-VR301
ET354414	6-Q102	ET380685J	6-Q702	ET730419J	10-Q5	EV732501J	6-VR104
ET354414	6-Q105	ET380685J	13-Q801	ET731437J	10-Q2	EV732502J	6-VR106
ET354414	6-Q106	ET380685J	13-Q802	ET731437J	10-Q3	EV732502J	6-VR304
ET354414	6-Q202	ET380685J	13-Q803	ET731437J	15-Q3	EV732502J	6-VR305
ET354414	6-Q304	ET380685J	13-Q805	ET731437J	15-Q4	EV732502J	6-VR306
ET354414	6-Q709	ET380685J	13-Q807	ET731437J	15-Q10	EV732503J	6-VR101
ET354414	7-Q507	ET381637J2	11-Z901	ET731437J	16-Q3	EV732503J	6-VR102
ET354414	7-Q509	ET388338J	7-Q501	ET731437J	16-Q4	EV732503J	6-VR308
ET354414	7-Q512	ET388338J	7-Q516	ET731437J	16-Q8	EV732503J	6-VR309
ET354414	11-TR901	ET390009J	4-19	ET731437J	16-Q10	EV732504J	7-VR500
ET354414	12-Q801	ET390010J	4-18	ET732638J	6-Q716	EV732645J	7-VR501
ET354414	12-Q804	ET397160J	6-Q203	ET732638J	6-Q718	EV732648J	6-VR302
ET354414	14-Q3	ET397160J	6-Q204	ET732639J	6-Q6	EV732649J	6-VR303
ET354414	14-Q12	ET397160J	6-Q208	ET732639J	6-Q12	EV732649J	6-VR307
ET354415	6-Q129	ET397160J	6-Q209	ET732639J	6-Q713	EV732666J	11-VR901
ET354415	6-Q130	ET397160J	6-Q210	ET732639J	6-Q719	EW348414	22-1
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ET356336	6-Q314	ET397160J	6-Q303	ET732640J	6-Q13	EW732684J	21-10
ET356336	6-Q715	ET397160J	6-Q305	ET732640J	6-Q14	EW732685J	21-11
ET356336	16-Q11	ET397160J	6-Q311	ET732640J	6-Q706	EW732686J	21-13
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ET360399	6-Q316	ET397160J	7-Q514	ET732640J	6-Q721	MB407618J	25-5
ET360399	12-Q810	ET397160J	12-Q803	ET732640J	15-Q1	MB407622J	23-5
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ET364060	11-TR902	ET397160J	13-Q811	ET732640J	16-Q14	ML387318J	3-2
ET364060	11-TR903	ET397160J	14-Q1	ET732640J	16-Q15	ML387321J	3-4
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SZ408436J	25-22						
SZ732676J	21-17						
VT387394J1	3-37						
ZG373900	3-12						
ZG386833J1	21-21						
ZG387282J	3-33						
ZG387320J	3-3						
ZG387323J	3-5						
ZG387348J1	3-49						
ZG387370J	21-16						
ZG387403J	4-5						
ZG387413J1	4-27						
ZG387417J	3-44						
ZG387418J	3-45						
ZG387420J1	3-55						
ZG387421J	3-50						
ZG387438J1	3-11						
ZG387443J	4-34						
ZG387468J	4-4						
ZG387502J	4-38						
ZG388290J1	3-52						
ZG392294J	3-61						
ZG392831J	3-46						
ZG395470J	3-26						
ZG395567J	3-42						
ZG407614J	23-16						
ZG407614J	25-16						
ZG407615J	23-17						
ZG407615J	25-17						
ZG407616J	24-1						
ZG407616J	26-1						
ZG407617J	24-2						
ZG407617J	26-2						
ZS321298	2-3						
ZS321298	3-15						
ZS331182	21-6						
ZS336614	23-12						
ZS336614	25-12						
ZS336714	2-12						
ZS336714	3-22						
ZS344754	3-16						
ZS358936	3-59						
ZS361105	21-5						
ZS364543	4-41						

NOTE

ABBREVIATIONS (VIDEO)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
A	Audio or Analogue	MOD	MODulator
AC	Alternating Current	MRS	Motor ReverSe
ACC	Automatic Color Control	NG	Noise Gate
A/C	Audio and Control	NICAM	Near Instanteneous Compand Audio Multiplex
ADJ	ADJust (ment)		
AFC	Automatic Frequency Control	NON-LIN	NON-LINear
AFT	Automatic Fine Tuning	N.T.S.C.	National Television System Committee
AGC	Automatic Gain Control	OSC	OSCillator
AH	Audio Head	PAL	Phase Alternation by Line
AL	ALways (voltage)	PB	Play Back
ALC	Automatic Level Control	PCB (P.C.B)	Printed Circuit Board
A-SW.P	Audio SWitching Pulse	P-COM	Phase-COMparator
A-MUTE	Audio MUTE	P DOWN	Power DOWN
ANT	ANTenna	PG	Pulse Generator
APC	Automatic Phase Control	P.I.P	Picture In Picture
ASSY	ASSemblY	PL, PLG	PLunger (PLunGer)
BAL	BALance	PRG (PGM)	PRoGram (ProGraM)
B DOWN	Break DOWN	PU	Pick UP (head, pulse)
BGP	Burst Gate Pulse	PWR	PoWeR
BLK	BLocK or BLacK	Q	Quality factor
BPF	Band Pass Filter	R	Right
BU	Back Up (voltage)	RAM	Random Access Memory
B/W	Black and White	REC	RECord
C	Chroma or Color	REF	REFerence
CCD	Charge Coupled Device	REF-V	REFerence Vertical signal
CCIR	Comité Consultatif International des Radio communications	REG	REGulator
		REV (REVW)	REView (REVieW)
CH (ch)	CHannel (channel)	REW	REWind
CLK	CLocK	RF	Radio Frequency
CM	Capstan Motor	ROM	Read Only Memory
CN	CoNnector	R.S SW	Record-Safety SWitch
COMP	COMParator	RST (RES)	ReSet (RESet)
CSW	Cassette SWitch	RVS	ReVerSe
CSYNC	Composite SYNC	S	Sensor, Shield
CTL	ConTrol	SAW	Surface Acoustic Wave
CUE	CUE	SC	SimulCast
DAC	Digital to Analog Converter	S CLK	Serial CLocK
DC	Direct Current	SECAM	SÉquentiel Couleur À Mémoire
DEMOD	DEMODulator	S & H	Sample and Hold
DET	DETetct (DETector)	SLP	Super Long Play
DL	Delay Line	SP	Standard Play
DM	Drum Motor	SPD	SPeeD
DOC	Drop Out Compensator	SRP	Supply Reel Pulse
D.P.E	Drum Phase Error	SRV	SeRVo
D.PG	Drum Pulse Generator	SOW	Sync On Word
EE	Electronic to Electronic	STBY	STandBY
EF	Emitter Follower	S.VHS	Super VHS
EMPHA	EMPHAsis	SW	SWitch
ENV	ENVelope	SW'NG	SWitchiNG
EP	Extended Play	SWP	SWitching Pulse
EP ROM	Erasable Programmable ROM	SYNC	SYNChronize
EQ	EQualizer	T-AUDIO	Tuner AUDIO
FE	Full track Erase	TPZ (TRAPE)	TraPeZoid (TRAPEzoid)
FF	Flip-Flop or Fast Foward	TRK	TRacKing
FG	Frequency Generator	TRP	Take up Reel Pulse
Fig	Figure	T/U	Take Up
FLD	FLuorescent Display	TV	TeleVision
FM	Frequency Modulation	UHF	Ultra High Frequency
Fo	resonance Frequency	UNR	UNRegulated (voltage)
FREQ	FREQuency	V	Vertical or Video
GND	GrouND	VASS	Video Address Search System
H	Horizontal	VCO	Voltage Controlled Oscillator
HP	Horizontal (sync) pulse	VH	Video Head
HPF	High Pass Filter	VHF	Very High Frequency
HQ	High Quality System	VHS	Video Home System
IC	Integrated Circuit	VIF	Video Intermediate Frequency
ID	IDentification	VISS	Video Index Search System
IDL	IDLe (Voltage)	VJ	Video Judge
IMS	Interactive Monitor System	VM	Voltage for Memory
INS	INSert	VOB	Video On Blank
INV	INVerter	VOW	Video On Word
L	Left	VP	Vertical (sync) Pulse
LED	Light Emitting Diode	VPS	Video Program System
LIM	LIMitter	VPT	Video Programming by video Text
LM	Loading Motor	VT	Voltage for Tuning
LM STP	Loading Motor STop	WHT	WHiTe
LP	Long Play	Y	Luminance
LPF	Low Pass Filter	2H	2 Hour (SP)
ME-SECAM	Middle East SECAM	4H	4 Hour (LP)
MI-COM	MIcro COMputer	6H	6 Hour (SLP/EP)
MM	Mono-stayble Multi		

SERV. 670E

AKAI

MODEL VS-F550EA-D/EO-D/EOH-D/N
MODEL VS-F560EK-N
MODEL VS-F580EOG-VD, F590EOH-DN

SCHEMATIC DIAGRAMS AND PC BOARDS

TABLE OF CONTENTS

Use these schematic diagrams and PC boards together with the provided service manual.

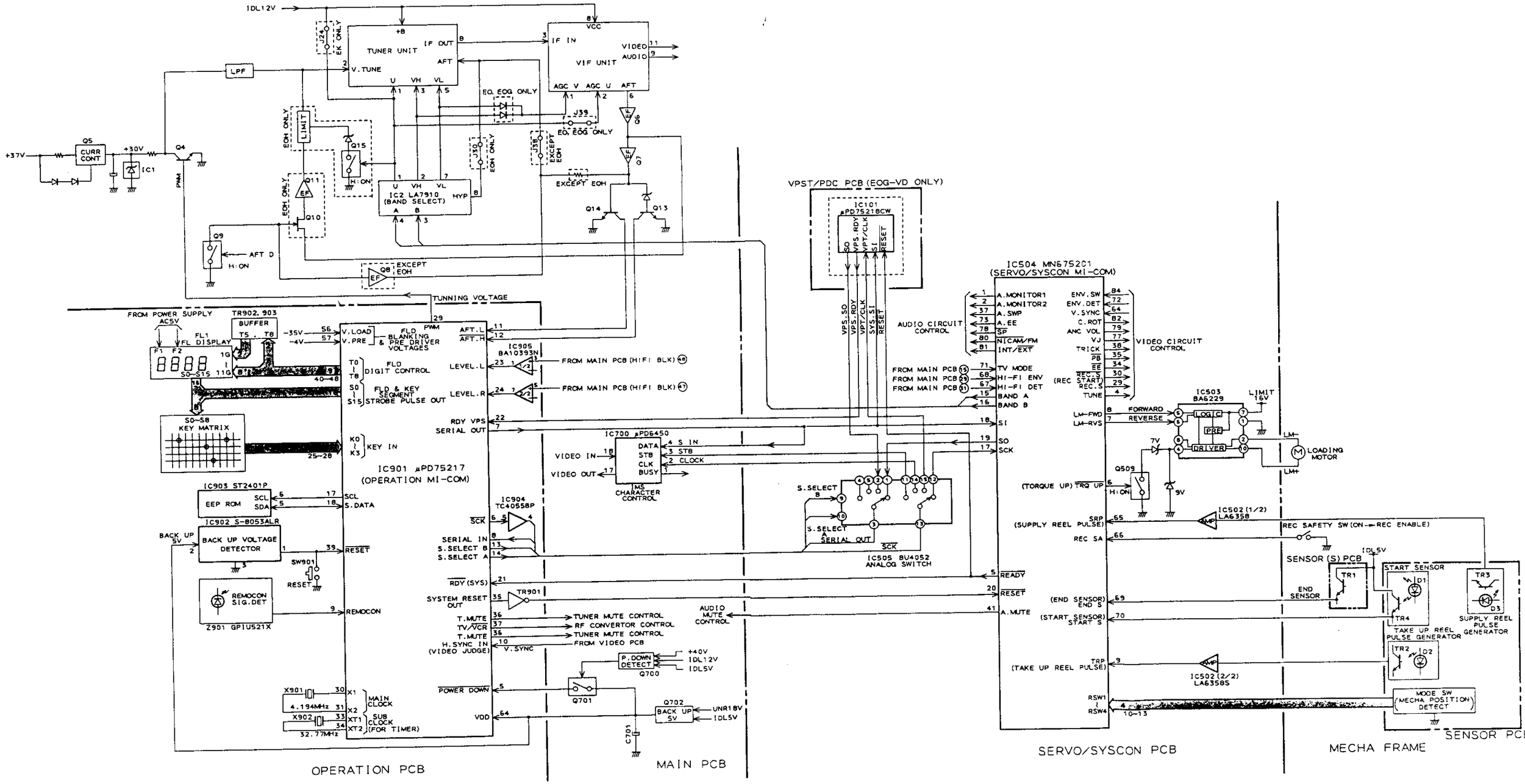
AKAI

MODEL VS-F550EA-D/EO-D/EOH-D/N
MODEL VS-F560EK-N
MODEL VS-F580EOG-VD, F590EOH-DN

SCHEMATIC DIAGRAMS AND PC BOARDS

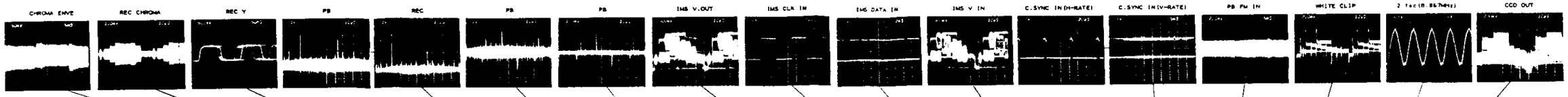
TABLE OF CONTENTS

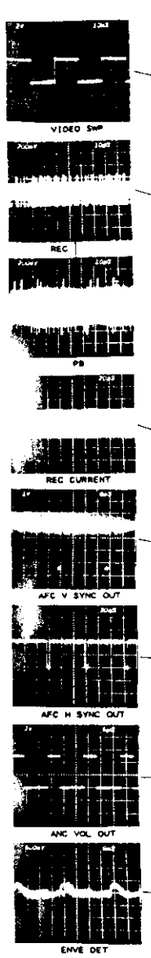
Use these schematic diagrams and PC boards together with the provided service manual.

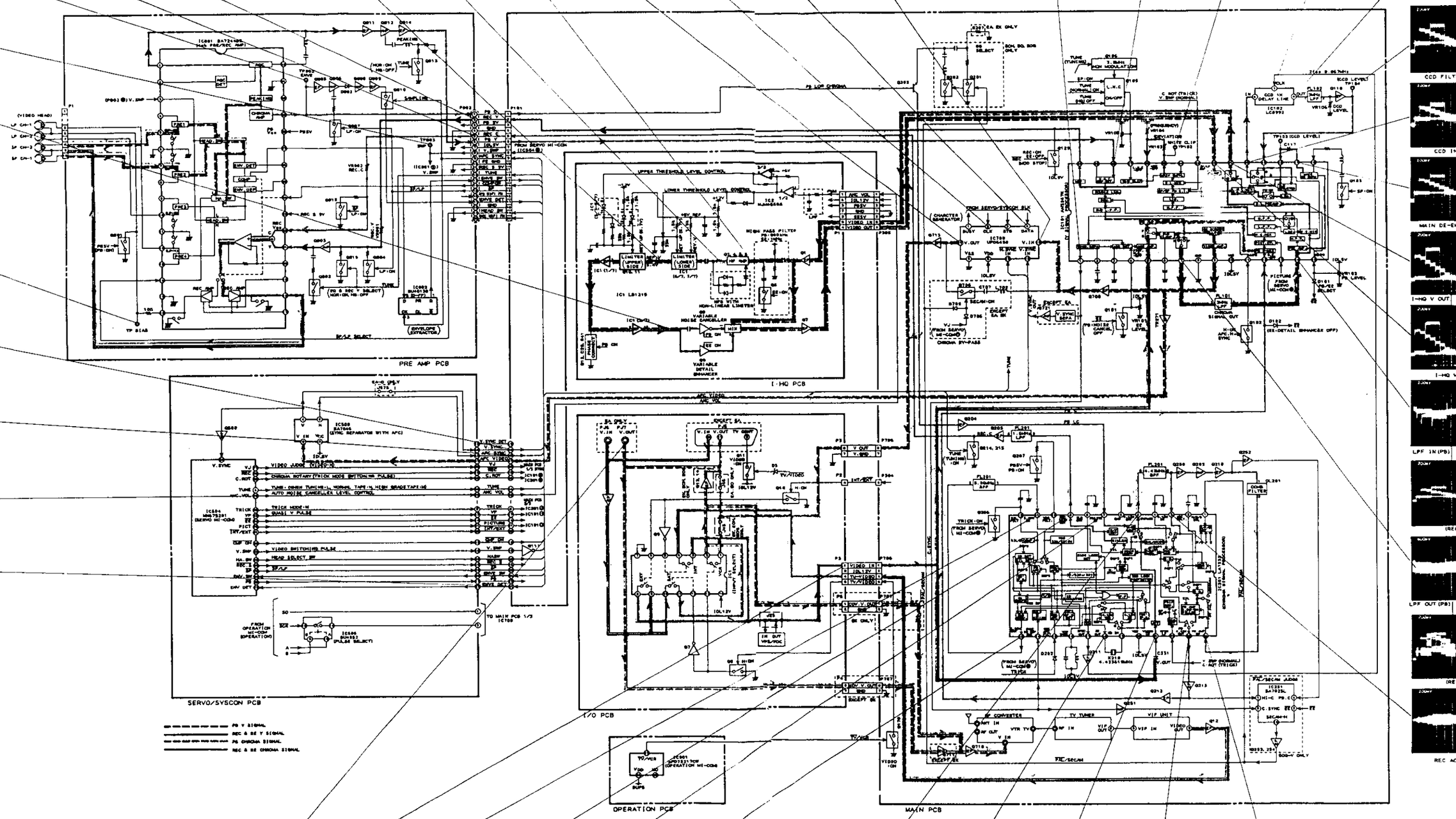


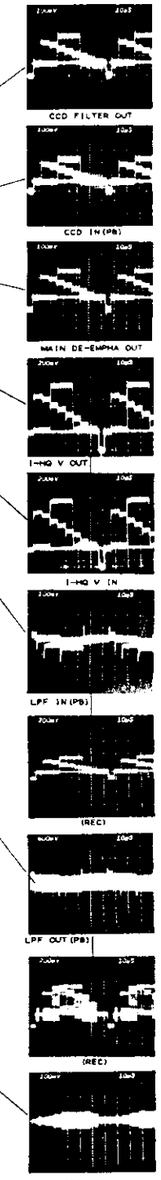
VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
OPERATION & SYSCON
BLOCK DIAGRAM

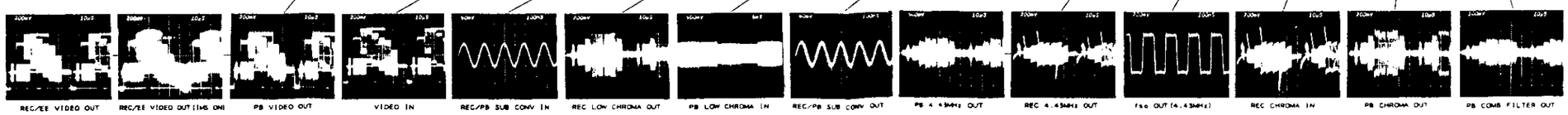
No.5-1 VA03751M A2





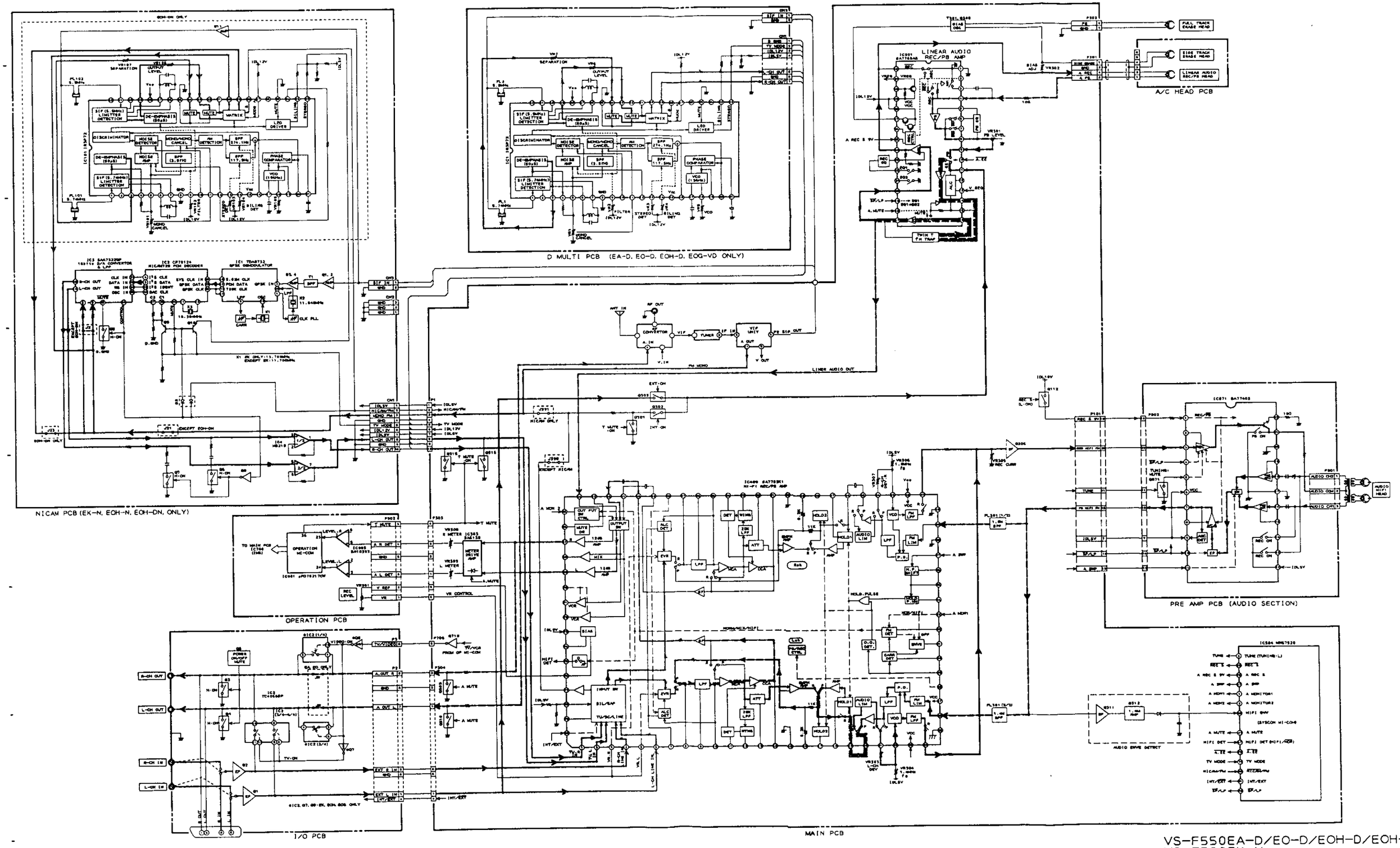






VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
VIDEO
BLOCK DIAGRAM

No.5-2 VA03752M
AD



VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
AUDIO
BLOCK DIAGRAM

No.5-3 VA03753M

CAPSTAN MOTOR

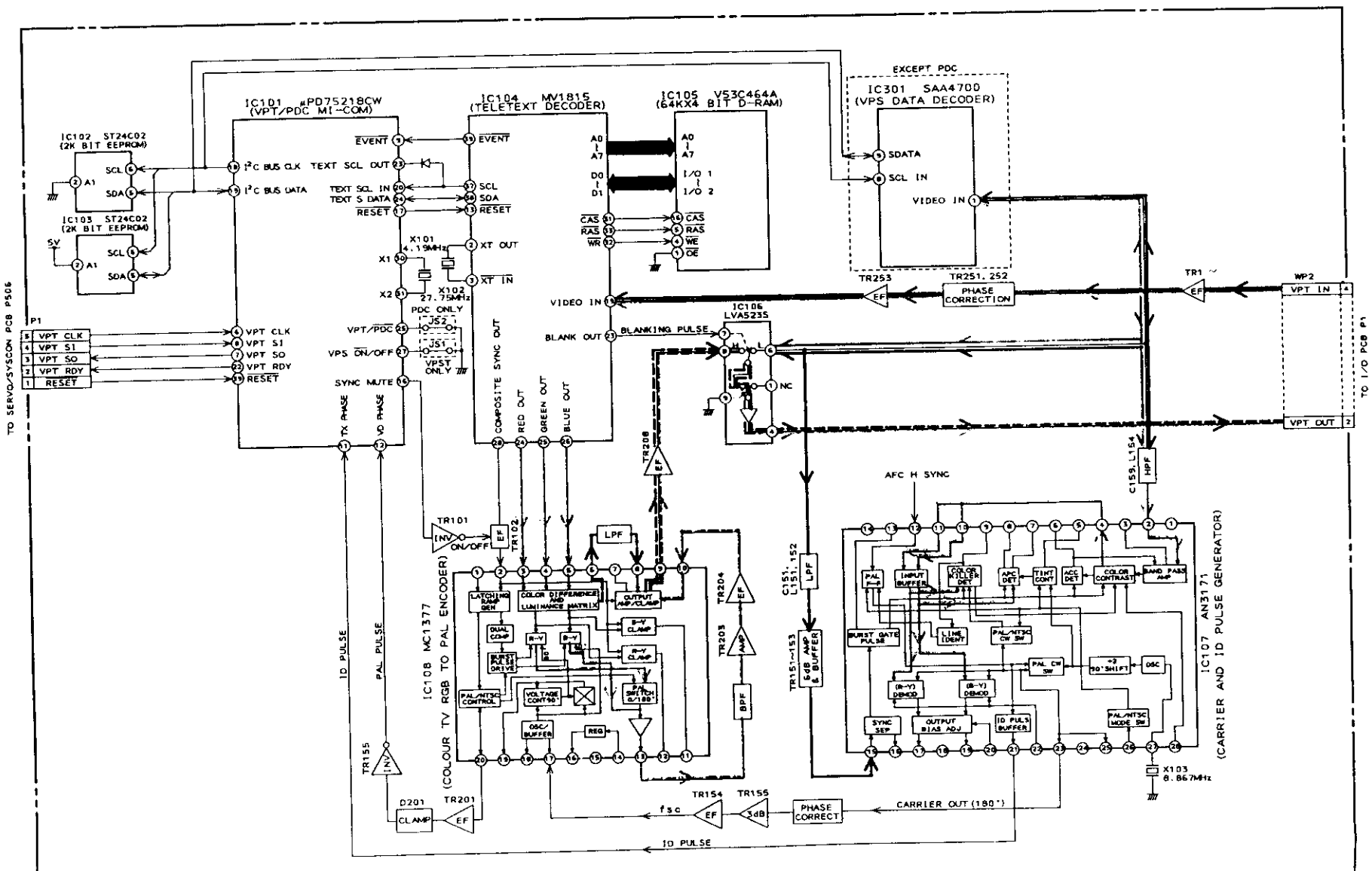
DRUM MOTOR

SERVO/SYSCON PCB

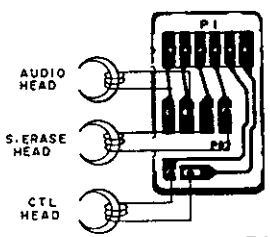
CM SPEED CONTROL LINE
CM PHASE CONTROL LINE
DM SPEED CONTROL LINE
DM PHASE CONTROL LINE

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
SERVO
BLOCK DIAGRAM

No.5-4 VA03711M A1

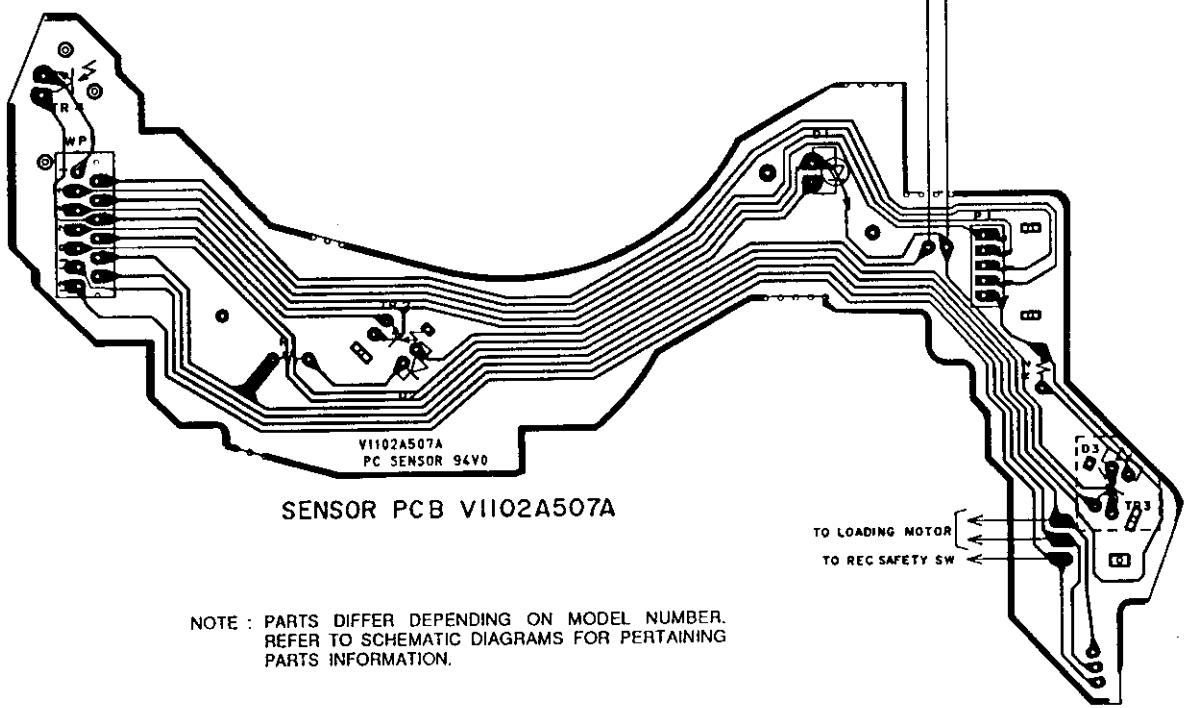


VS-F580EOG-V
VPST/PDC
BLOCK DIAGRAM
No.5-5 VA03752M



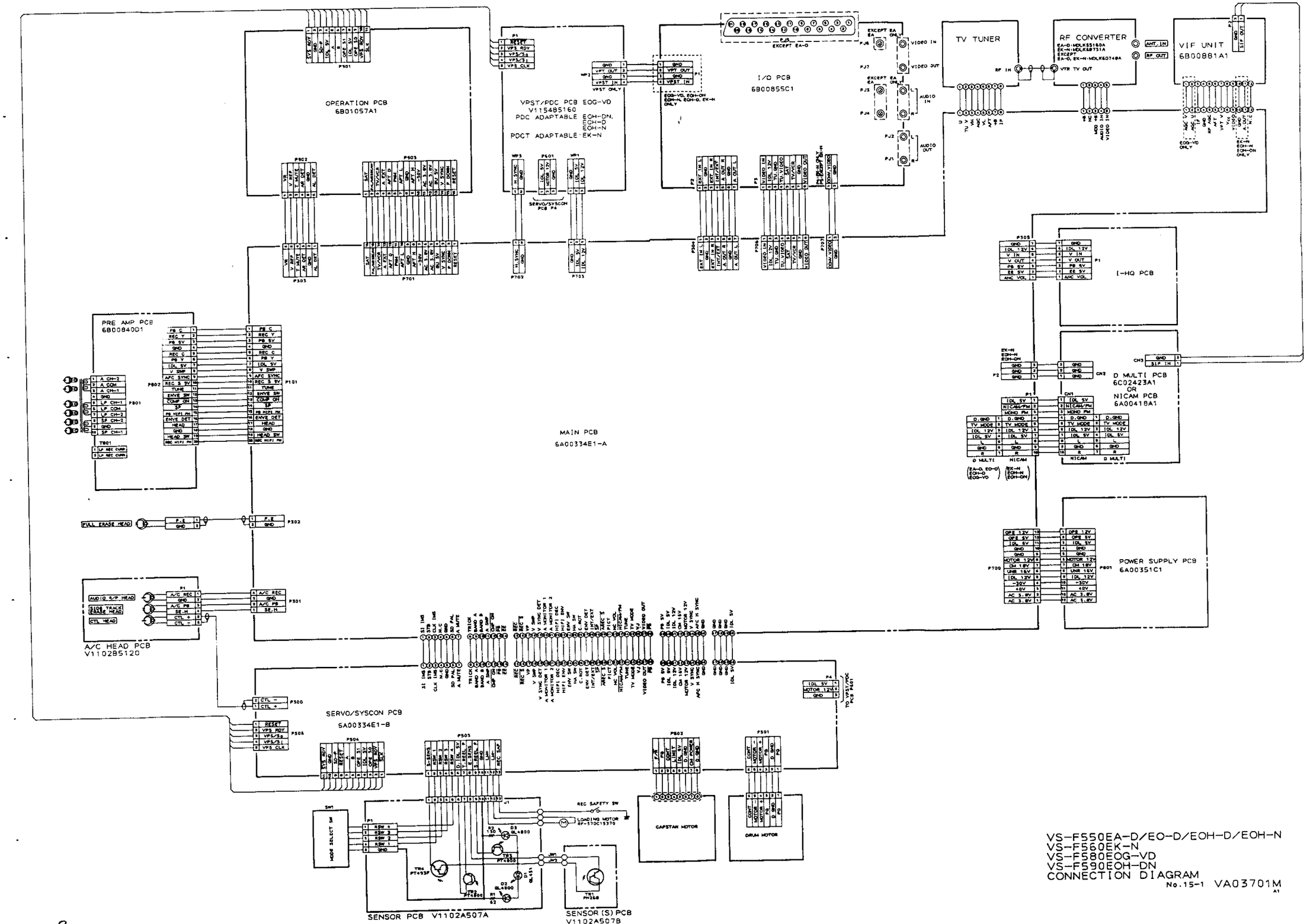
A/C HEAD PCB
V1102B5120(J1)

SENSOR(S) PCB
V1102A507B

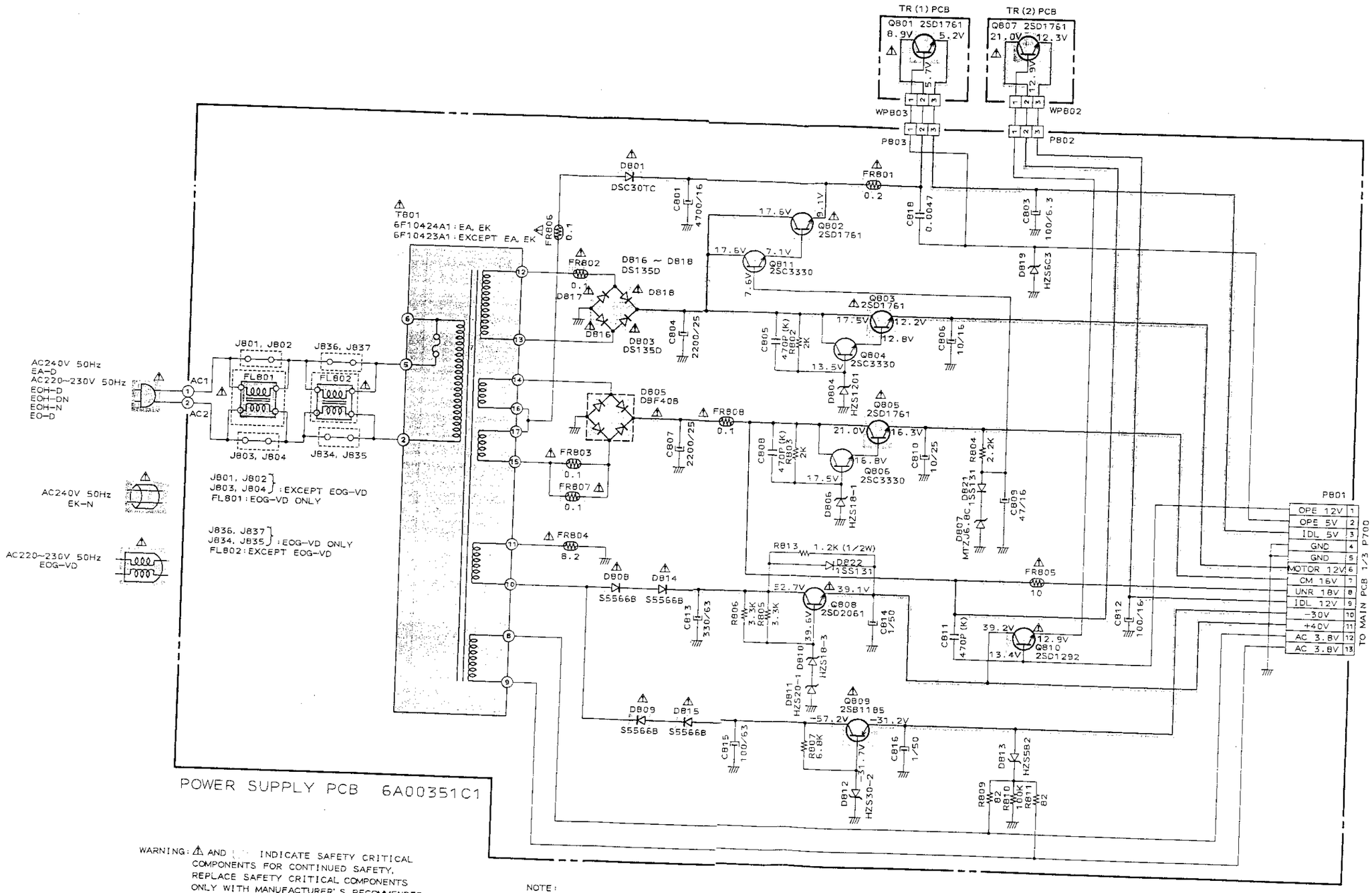


SENSOR PCB V1102A507A

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.



VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
CONNECTION DIAGRAM
No.15-1 VA03701M
A1



WARNING: ⚠ AND [illegible] INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET [illegible], ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

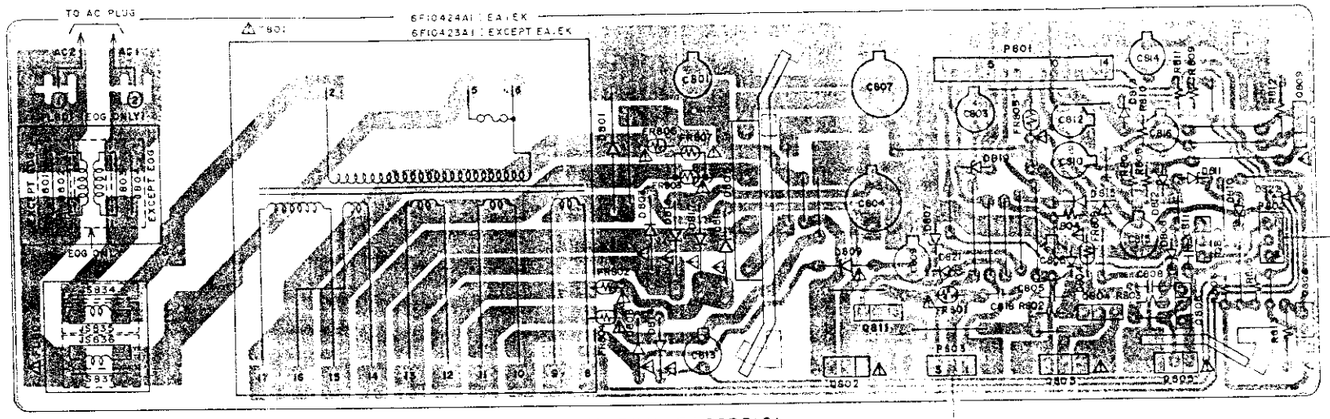
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN μF 50WV (L)

[illegible] : B (POWER SUPPLY) LINE

INDICATED VOLTAGES WERE MEASURED DURING E-E (STOP) MODE.

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
POWER SUPPLY
SCHEMATIC DIAGRAM

No.15-2 VA03702M
A2



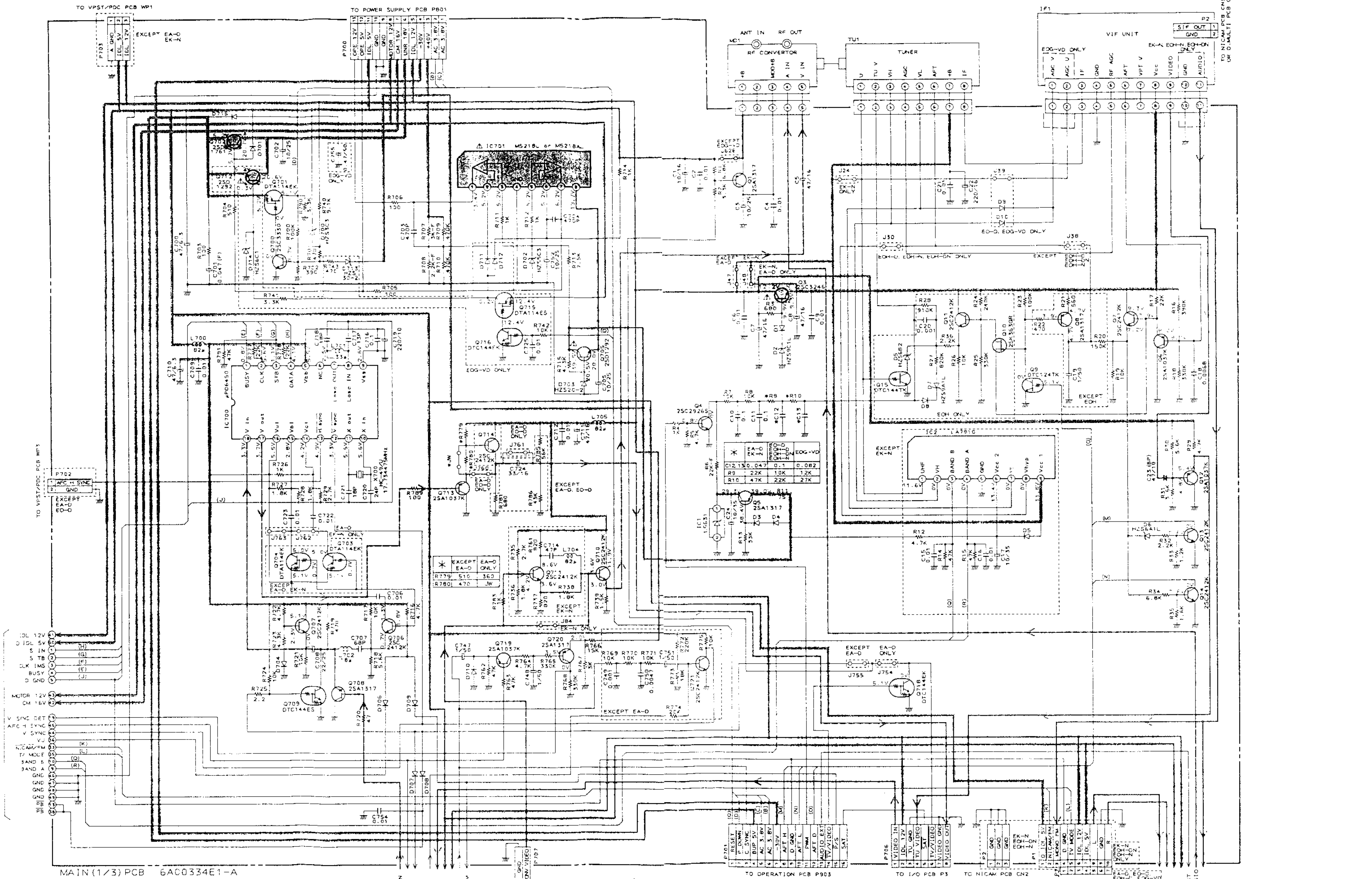
POWER SUPPLY PCB 6A00351C1

TR(1) PCB

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

WARNING ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT



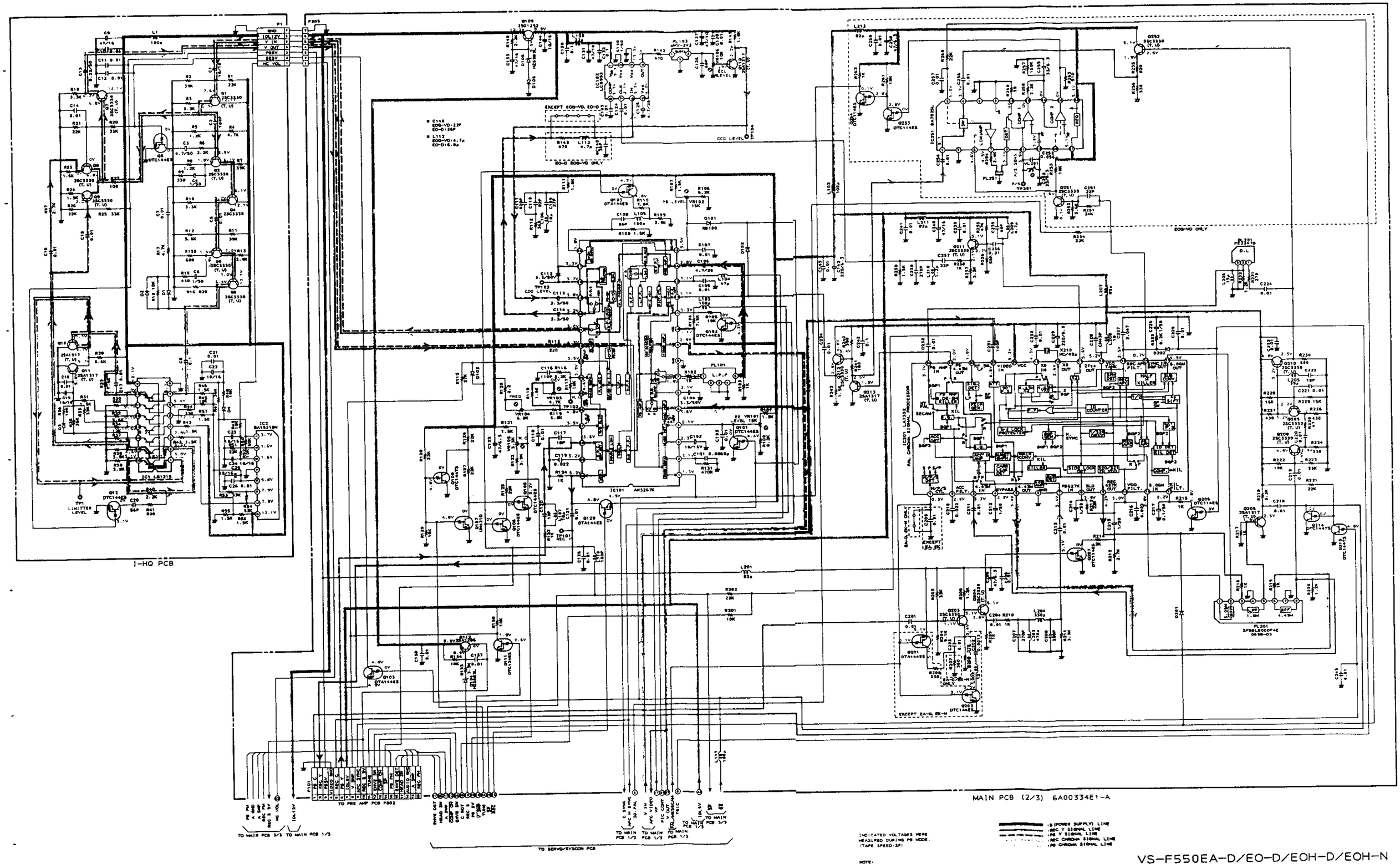
WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV
ALL DIODES ARE 1SS120
ALL INDUCTORS IN µH

INDICATED VOLTAGES WERE MEASURED DURING PB MODE. (TAPE SPEED:SP)

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
MAIN 1/3
SCHEMATIC DIAGRAM
NO. 15-3 VA03703M



VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
MAIN 2/3
SCHEMATIC DIAGRAM
No.15-4 VA03704M

	EA-O (E)	EK-H (Q)	EOH-N (E)	EOH-DN (E)	EOH-D (E)	EOS-VD (V)	EO-D (V)
R312	47K	JUMPER	JUMPER	JUMPER	47K	47K	47K
R313	4.7K	910	910	910	6.7K	4.7K	4.7K
R314	JUMPER	6.7K	6.7K	6.7K	JUMPER	JUMPER	JUMPER
R332	15K	3.3K	3.3K	3.3K	15K	15K	15K
R333	2.7K	47K	47K	47K	2.7K	2.7K	2.7K
R334	15K	3.3K	3.3K	3.3K	15K	15K	15K
R335	2.7K	47K	47K	47K	2.7K	2.7K	2.7K
R412	330	3.9K	3.9K	130	330	330	330
R416	JUMPER	39K	39K	39K	33	33	33
R417	—	33K	39K	39K	—	—	—

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL DIODES ARE 1SS130TE

INDICATED VOLTAGES WERE MEASURED DURING PB MODE (TAPE SPEED SP)

: B (POWER SUPPLY) LINE
: REC SIGNAL LINE
: PB SIGNAL LINE

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
MAIN 3/3
SCHEMATIC DIAGRAM
No.15-5 VA03705M
A1

MAIN PCB 3/3 6A00334E1-A

PRINCIPAL PARTS LOCATION

ICS

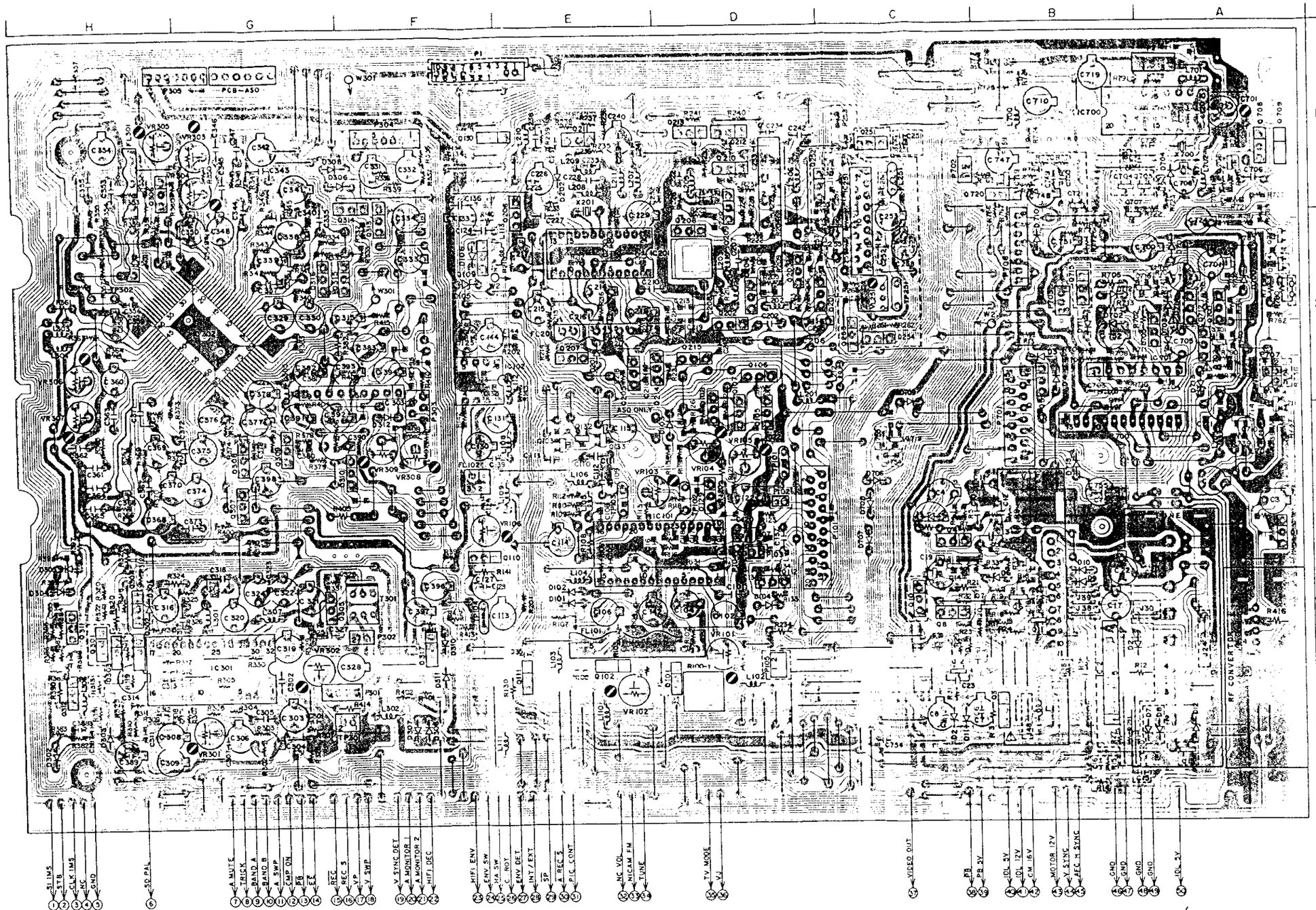
IC1	C3
IC2	B4
IC101	D3
IC102	F2
IC201	E2
IC251	C1,2
IC301	G,H4
IC302	G,H2
IC303	F,G2
IC700	A,B1
IC701	A,B2

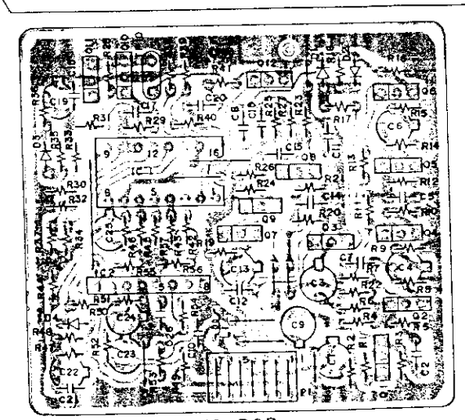
CONNECTORS

P1	E,F1
P2	A1
P101	D3
P102	D3
P103	D3
P104	D3
P105	D4
P301	F,G4
P302	F4
P303	F1,2
P304	F1
P305	G1
P700	A,B3
P701	B2,3
P702	C1
P703	B1
P706	B1

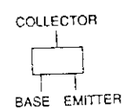
TRANSISTORS

Q1	A1
Q2	A3
Q3	B4
Q4	C3
Q5	B2
Q6	B3
Q7	B4
Q8	C4
Q9	C3
Q10	C3
Q11	B4
Q12	C4
Q13	B3
Q14	C3
Q15	A4
Q101	D4
Q102	E4
Q103	E3
Q105	D3
Q106	D2
Q107	D3
Q108	D2,3
Q109	F2
Q110	F3
Q111	E4
Q112	D3
Q129	D3
Q130	E,F1
Q201	C2
Q202	D2
Q203	D2
Q204	D2
Q205	E2
Q206	E1
Q207	E2
Q208	D2
Q209	D1
Q210	D1
Q211	E1
Q212	D1
Q213	D1
Q214	D,E2
Q215	D2
Q251	C1
Q252	C1
Q253	C2
Q254	C2
Q301	H4
Q302	H4
Q303	H4
Q304	H3
Q305	G3
Q306	H1
Q307	G3
Q308	G3
Q309	G3
Q310	F3
Q311	H4
Q312	H4
Q313	F1,2
Q314	F1
Q315	F2
Q316	G2
Q317	F4
Q700	A2
Q701	A2
Q702	A2
Q703	A1
Q704	B1
Q705	A2
Q706	A1
Q707	B2
Q708	A1
Q709	A1
Q710	A3
Q711	A2
Q712	A2
Q713	A2
Q714	A2
Q715	B2
Q716	A2
Q718	C3
Q719	B1
Q720	B1
Q721	B1





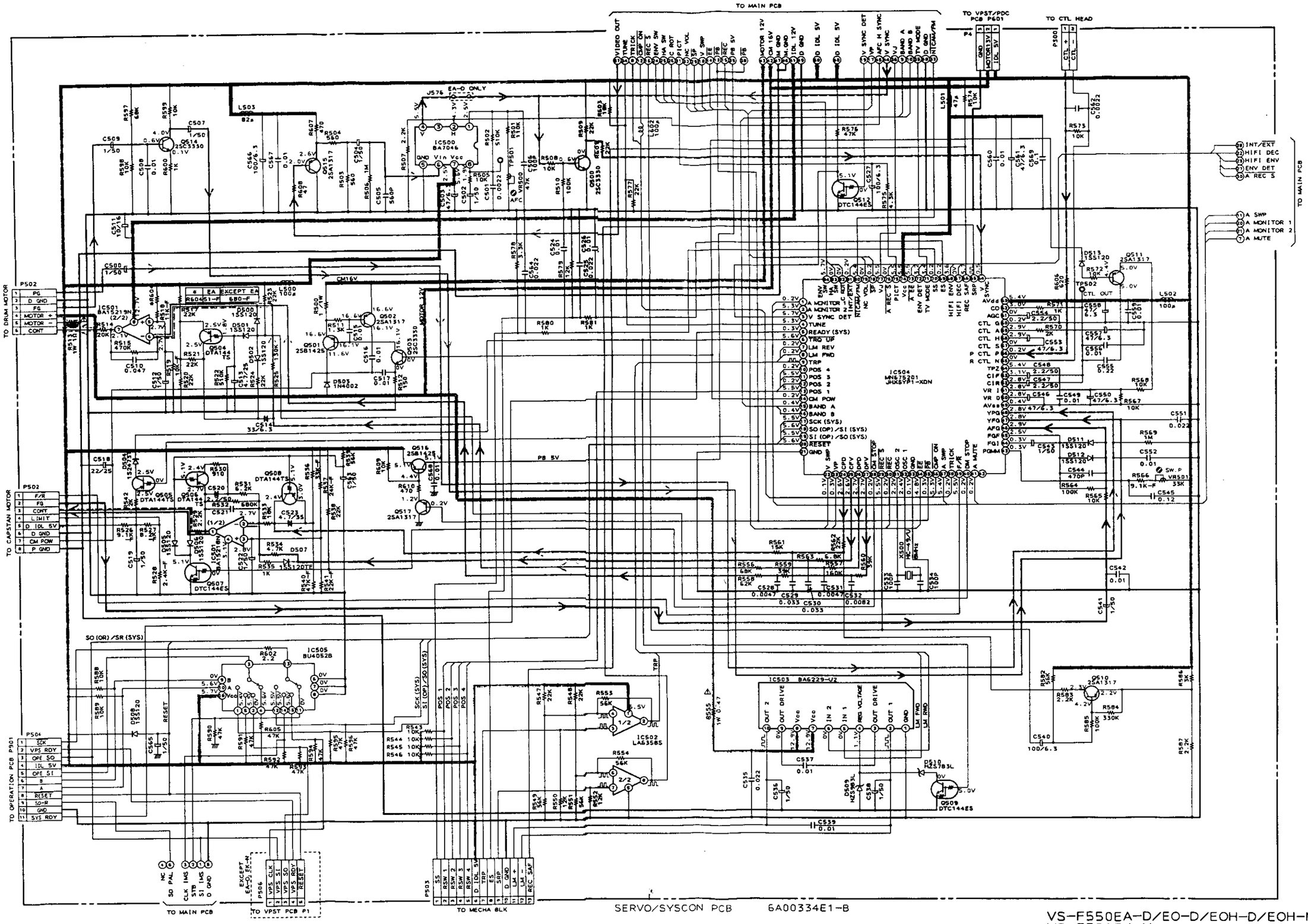
MAIN PCB 6A00334E1-A



NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

WARNING ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT



SERVO/SYSCON PCB 6A00334E1-B

WARNING ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

INDICATED VOLTAGES WERE MEASURED DURING PB MODE (TAPE SPEED SP)

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL INDUCTORS IN μH (K)

: B (POWER SUPPLY) LINE
: CAPSTAN MOTOR SPEED
: CAPSTAN MOTOR PHASE
: DRUM MOTOR SPEED
: DRUM MOTOR PHASE
: VIDEO SIGNAL

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
SERVO/SYSCON
SCHEMATIC DIAGRAM

NO.15-6 VA0376M
A1

PRINCIPAL PARTS LOCATION

ICS

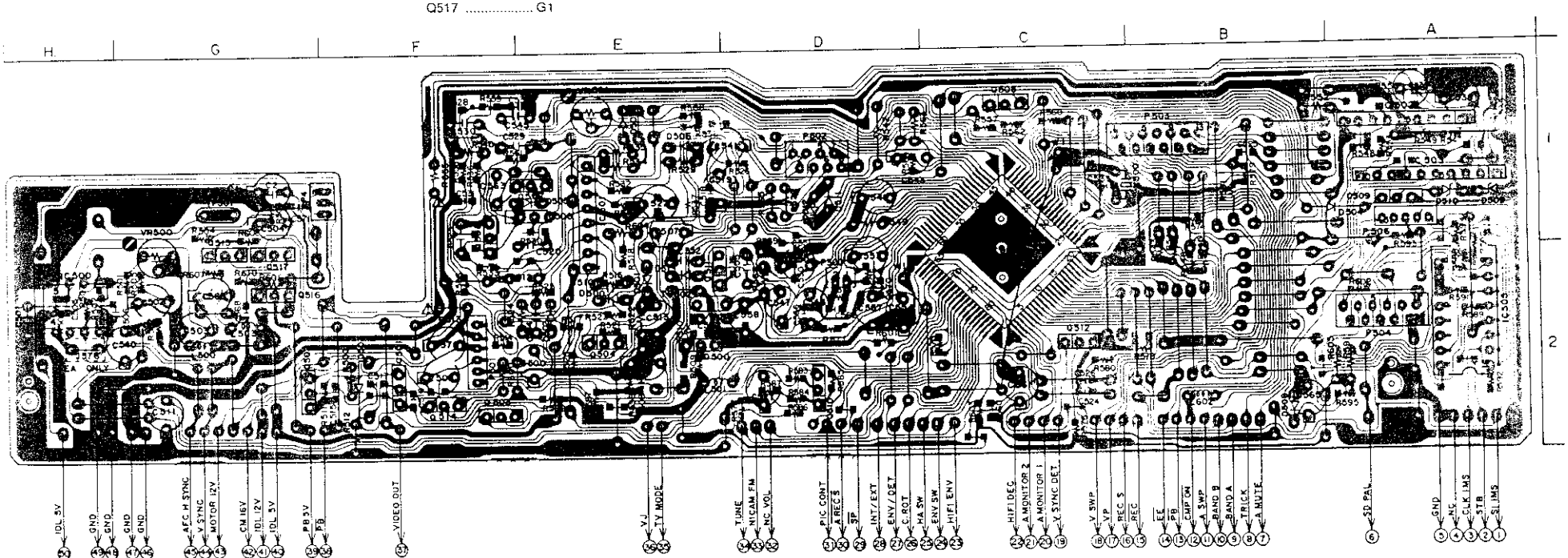
IC500	H2
IC501	E1
IC502	A1
IC503	A1
IC504	C1,2
IC505	A2

CONNECTORS

P4	F,G1
P300	D2
P501	F2
P502	D1
P503	B1
P504	A2
P506	A1
P300	D2

TRANSISTORS

Q500	E2
Q501	F2
Q502	G2
Q503	F2
Q504	E2
Q505	C1
Q506	E1
Q507	E1
Q508	F1
Q509	A1
Q510	D2
Q511	E2
Q512	C2
Q514	F2
Q515	G1
Q516	G2
Q517	G1



WARNING ⚠ NO CATES SAFETY CR TICAL COMPONENTS FOR CONT NUED SAFETY. RE PLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DI SECURITE POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER QUE DES PIECES RECOMMANDEES PAR LE FABRICANT

SERVO/SYSCON PCB 6A00334E1-B

PRINCIPAL PARTS LOCATION

ICS

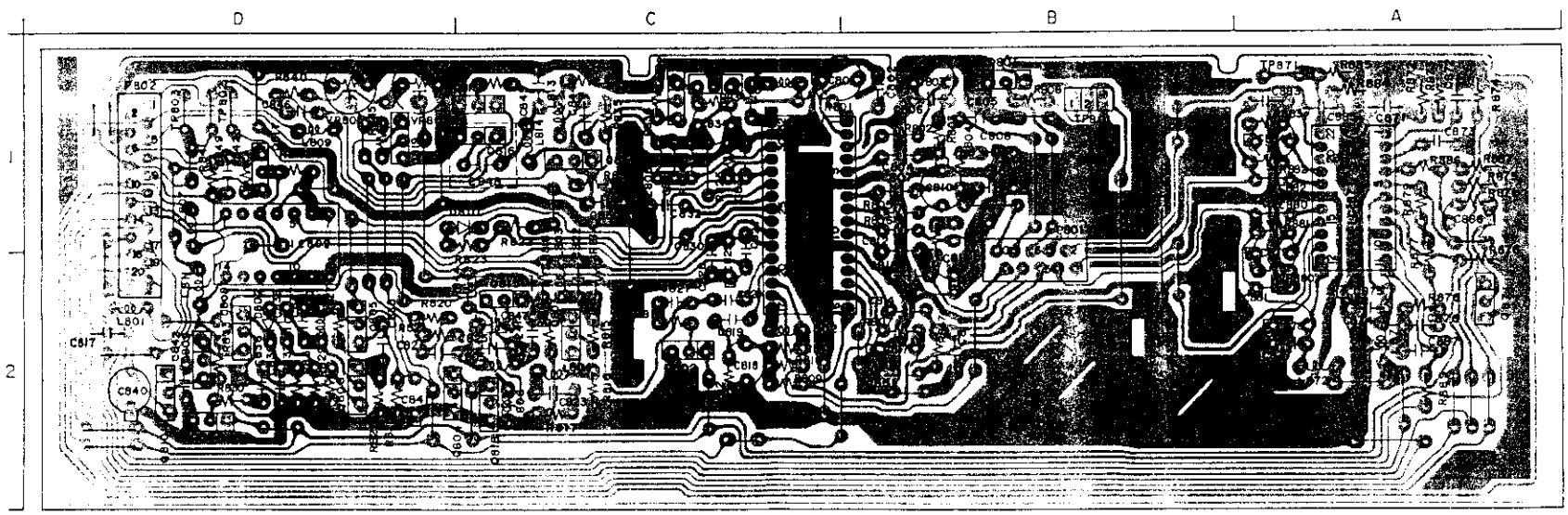
IC801 ..... C1
IC802 ..... D1,2
IC871 ..... A1

CONNECTORS

P801 ..... B2
P802 ..... D1,2

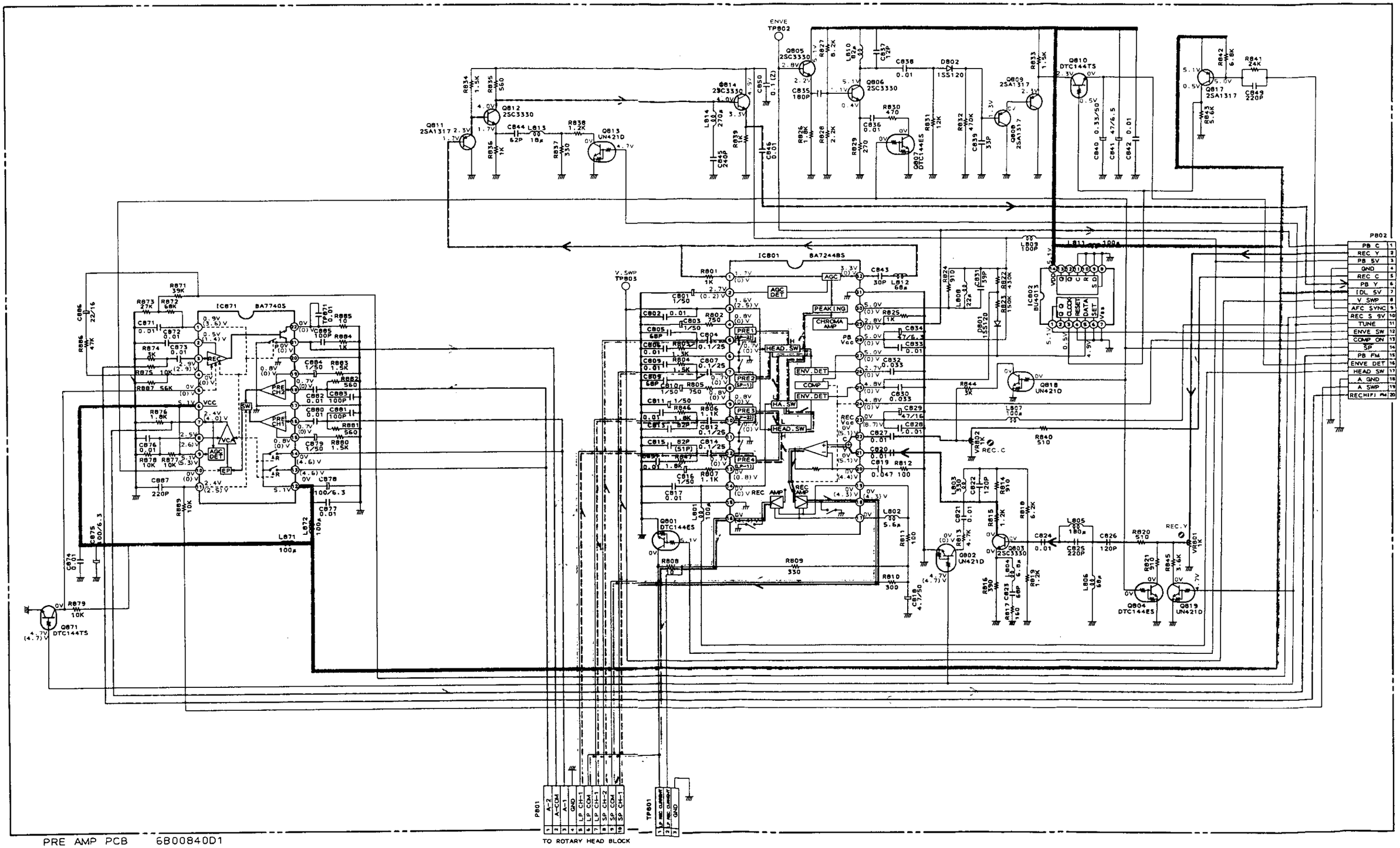
TRANSISTORS

Q801 ..... B1
Q803 ..... C2
Q804 ..... C2
Q805 ..... D2
Q806 ..... D2
Q807 ..... D2
Q808 ..... D2
Q809 ..... D2
Q810 ..... D2
Q811 ..... C1
Q812 ..... C1
Q814 ..... C1
Q815 ..... C2
Q816 ..... C1
Q817 ..... D1
Q818 ..... C2



PRE AMP PCB 6B00840DI

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.



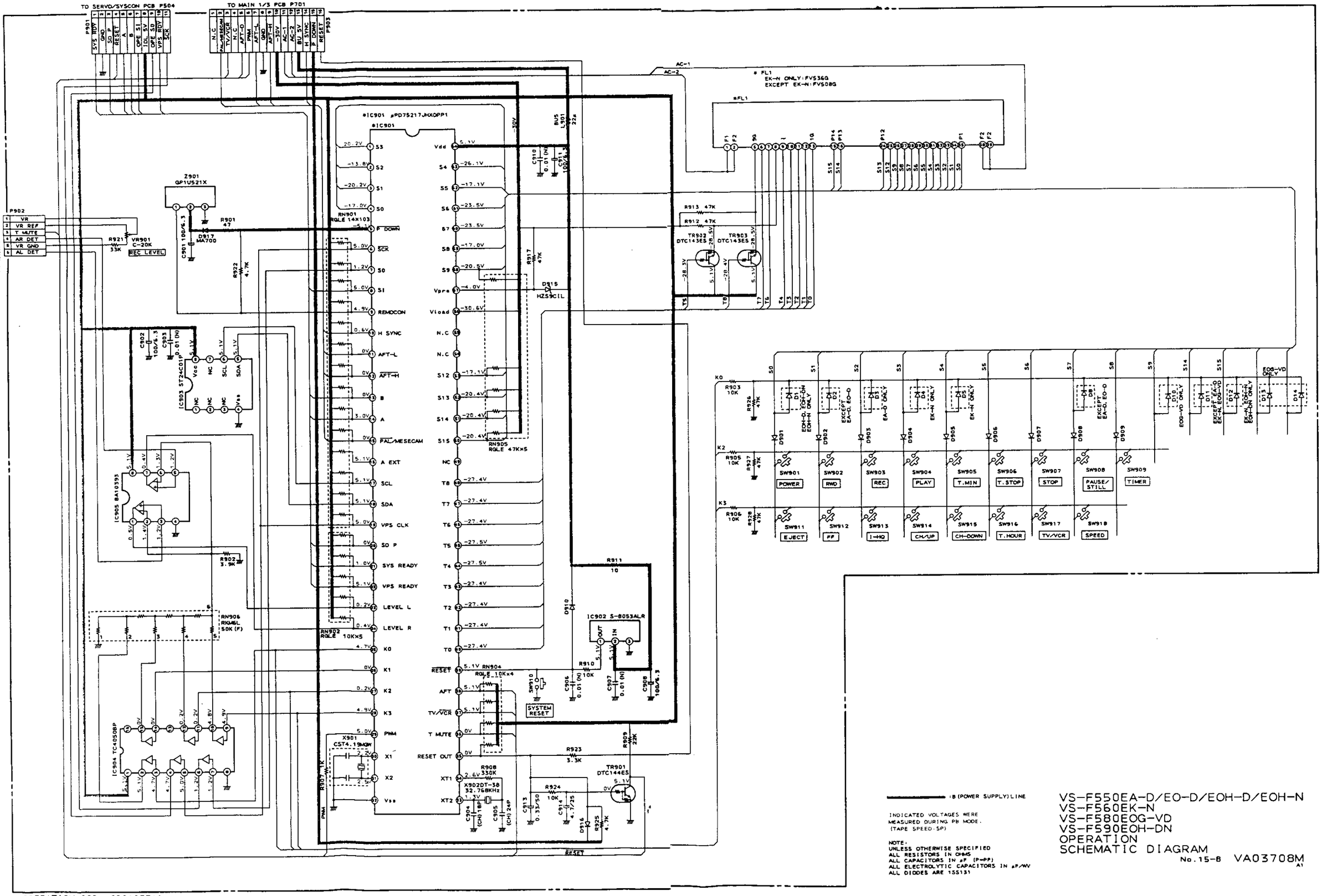
PRE AMP PCB 6800840D1

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV

: POWER SUPPLY LINE
: REC Y SIGNAL LINE
: PB Y SIGNAL LINE
: REC CHROMA SIGNAL LINE
: PB CHROMA SIGNAL LINE
: REC AUDIO SIGNAL LINE
: PB AUDIO SIGNAL LINE

INDICATED VOLTAGES WERE MEASURED DURING PB MODE.
( ) REC MODE
(TAPE SPEED: SP)

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
PRE AMP
SCHEMATIC DIAGRAM
No.15-7 VA03707M
A1



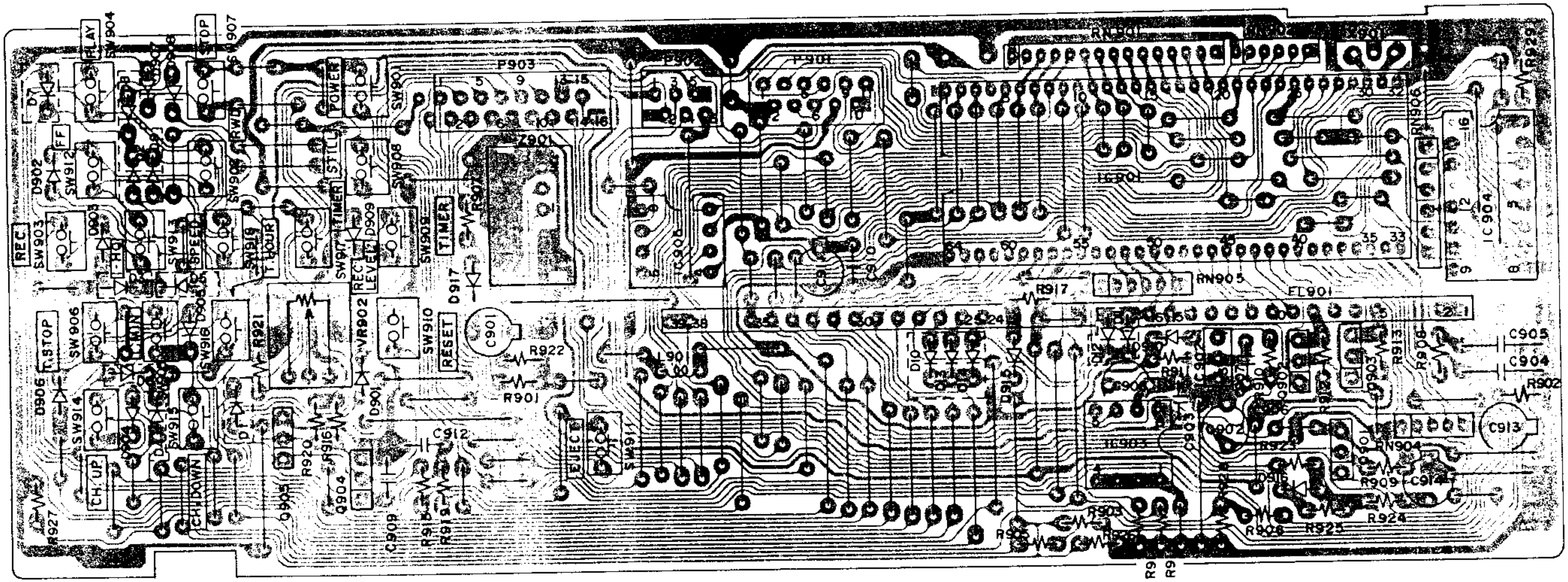
—— : B (POWER SUPPLY) LINE

INDICATED VOLTAGES WERE MEASURED DURING PB MODE. (TAPE SPEED: SP)

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P→PP)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL DIODES ARE 1SS131

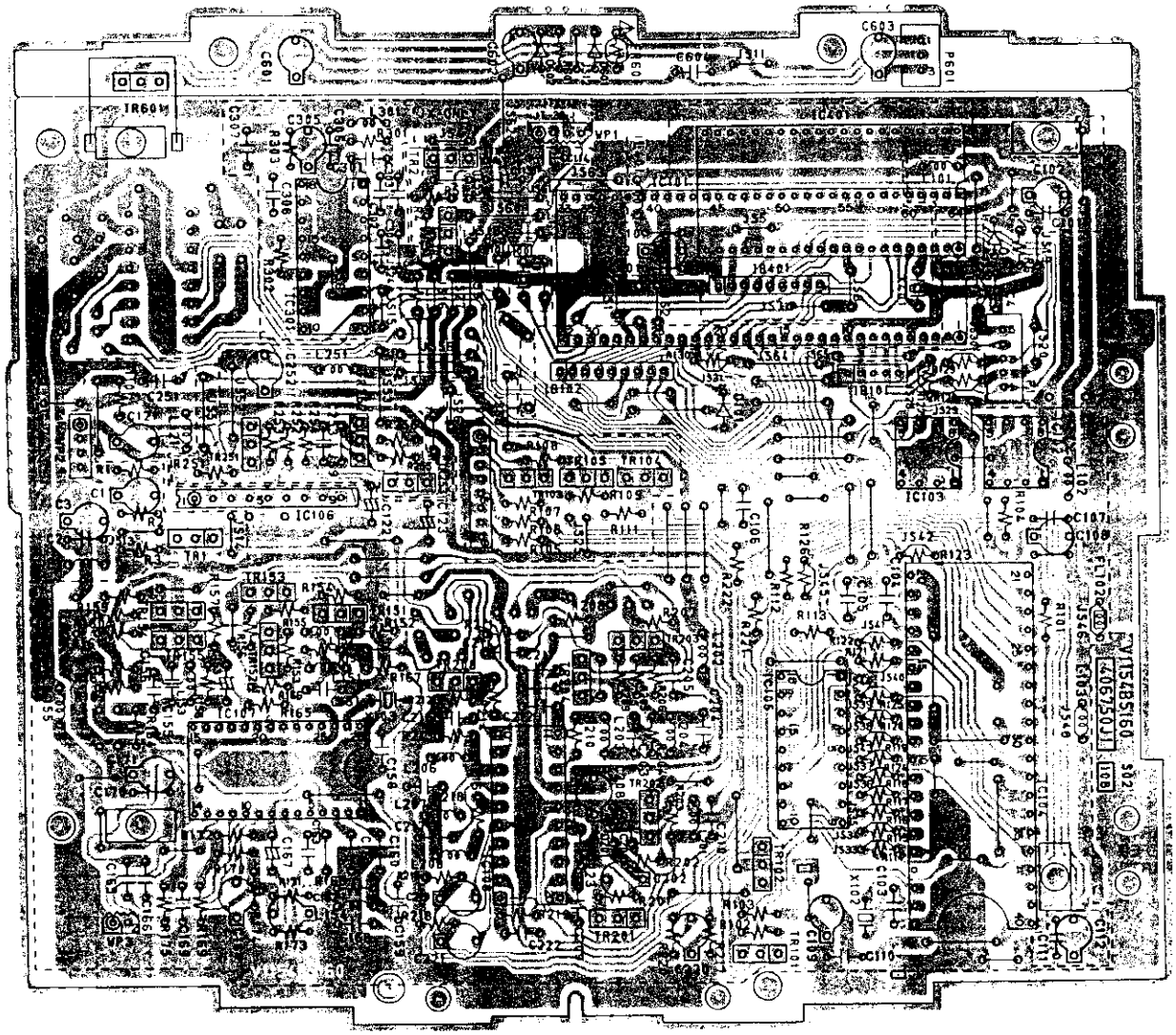
VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
OPERATION
SCHEMATIC DIAGRAM
No.15-B VA03708M
A1

OPERATION PCB 6B01057A1



OPERATION PCB 6B01057A1

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.

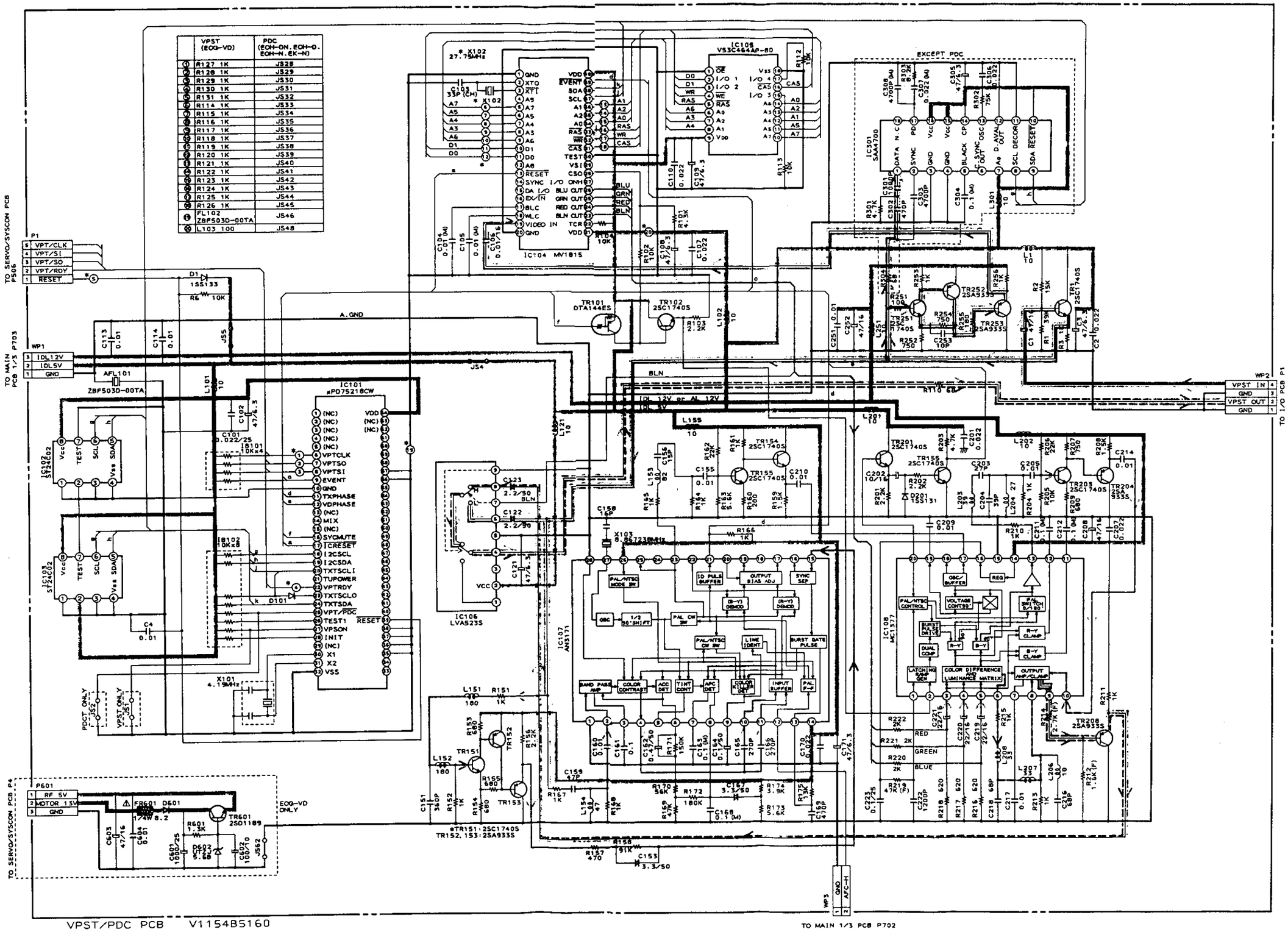


VPST / PDC PCB VI154B5160J1

WARNING : ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT : ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

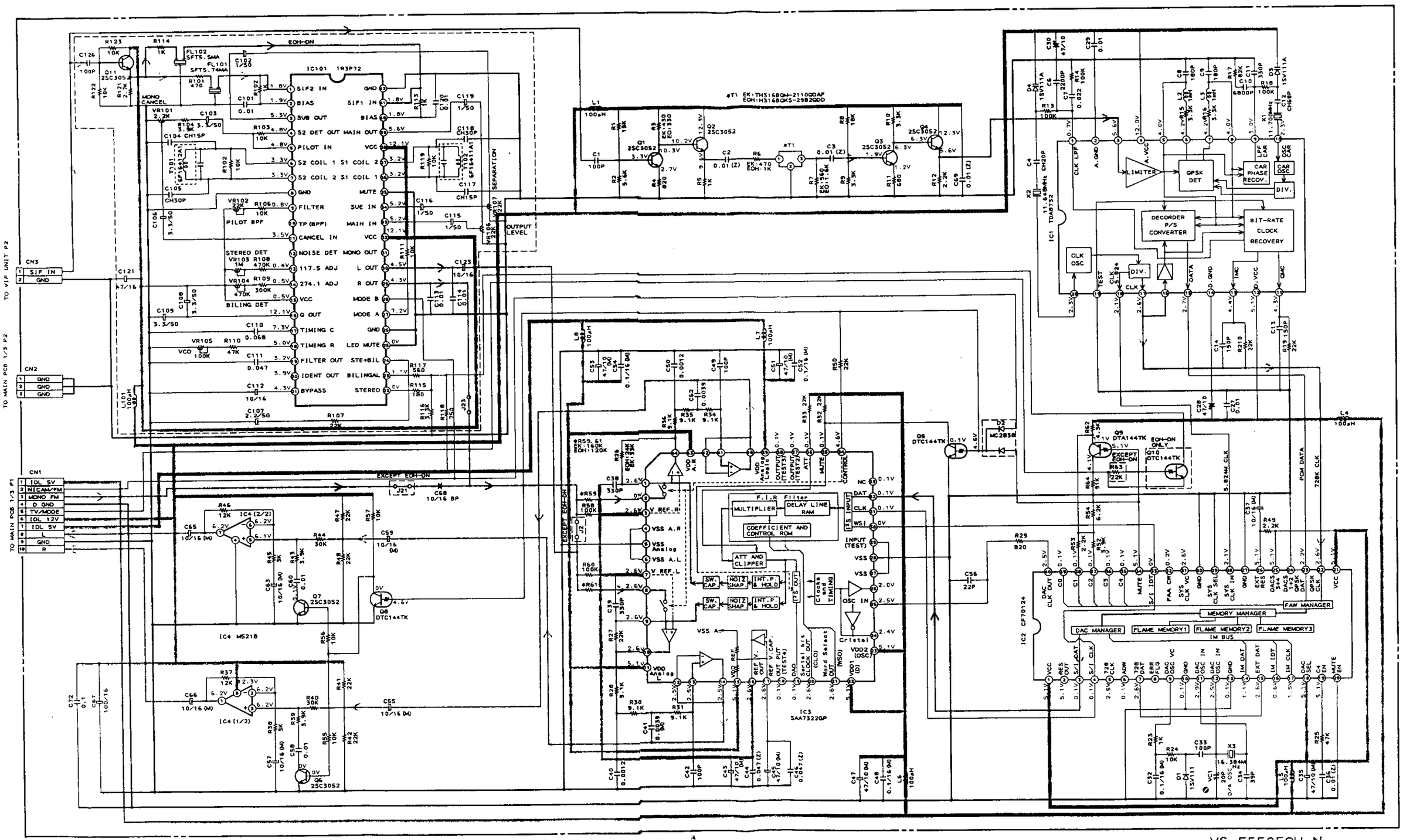


B (POWER SUPPLY) LINE
Y IN (TUNER) SIGNAL
Y VPT SIGNAL
CHROMA IN (TUNER) SIGNAL
CHROMA VPT SIGNAL

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL INDUCTORS IN μH

WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSMENT: ⚠ ET ■. ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

VS-F580EOG-VD
VPST/PDC
SCHEMATIC DIAGRAM
No.15-9 VA03709M
A1



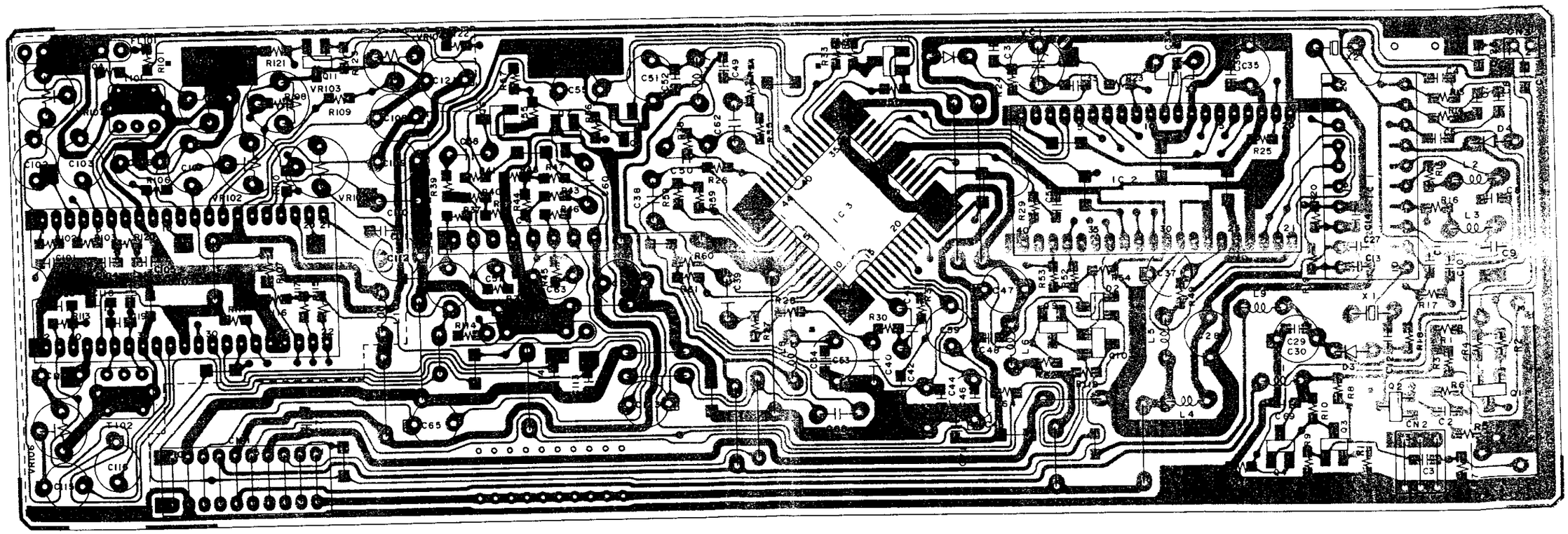
NICAM PCB 6A00418A1

— 8 (POWER SUPPY) LINE
- - - IF SIGNAL OR PCM SIGNAL LINE
— · — · — AUDIO SIGNAL LINE

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF

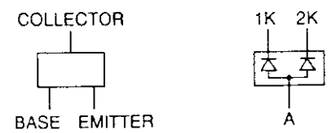
INDICATED VOLTAGES WERE MEASURED DURING E-E (STOP) MODE.

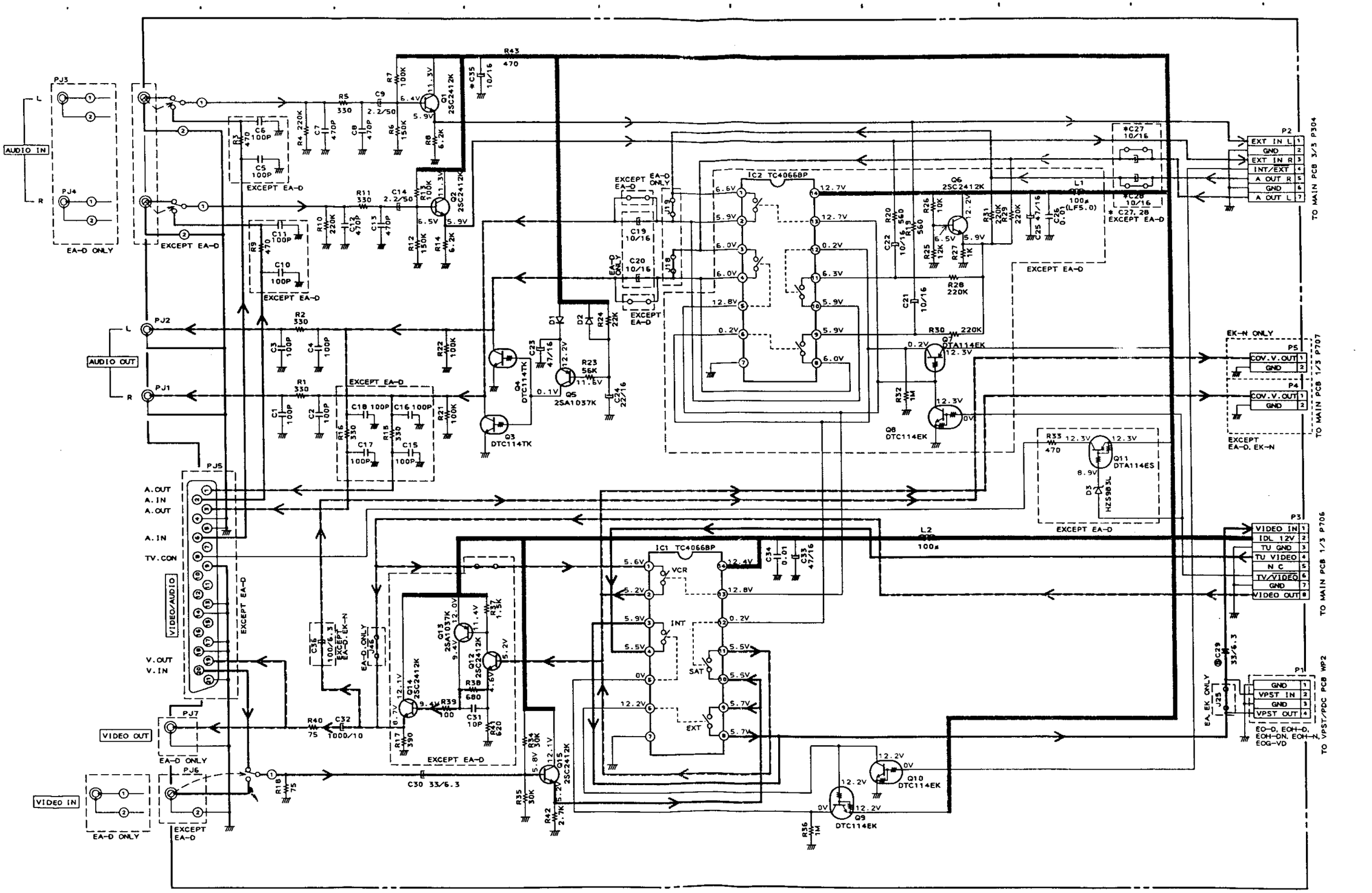
VS-F550EOH-N
VS-F560EK-N
VS-F590EOH-DN
NICAM
SCHEMATIC DIAGRAM
NO.15-10 VA03710M
A1



NICAM PCB 6A00418A1 (EK-N, EOH-N, EOH-DN)

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.





I/O PCB 6B00855C1

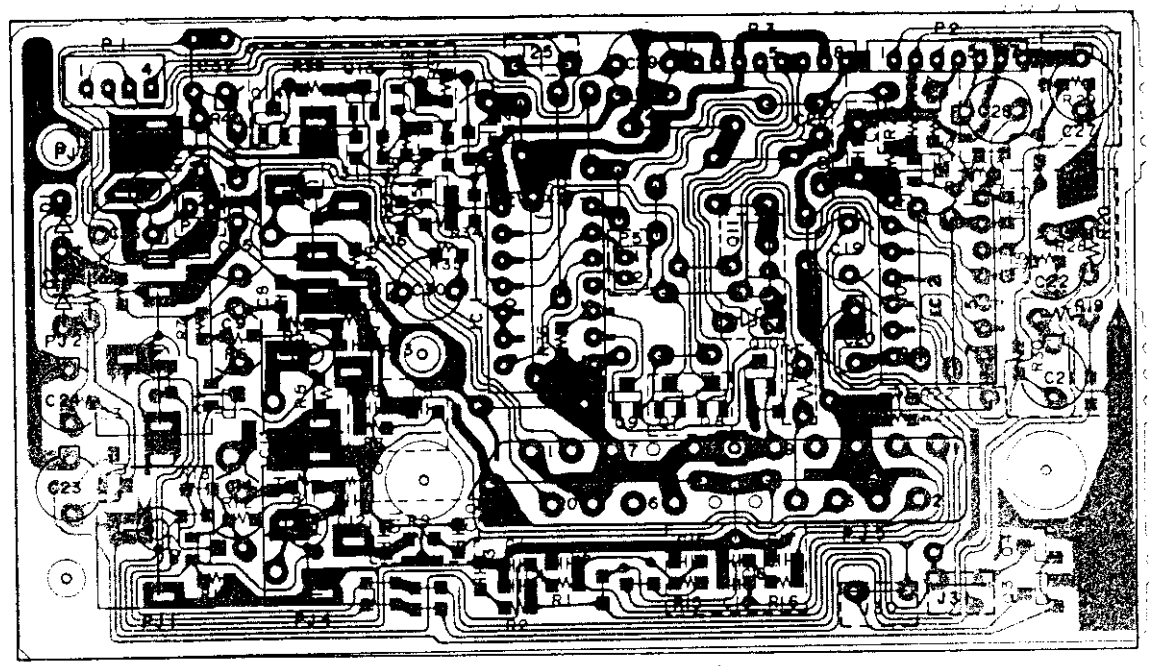
:B (POWER SUPPLY) LINE
:VIDEO IN SIGNAL LINE
:VIDEO OUT SIGNAL LINE
:AUDIO IN SIGNAL LINE
:AUDIO OUT SIGNAL LINE

INDICATED VOLTAGES WERE MEASURED DURING PB MODE. (TAPE SPEED SP)

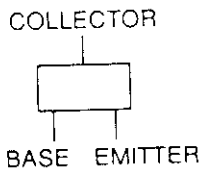
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV
ALL DIODES ARE 1SS120
*=NX

VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
I/O
SCHEMATIC DIAGRAM

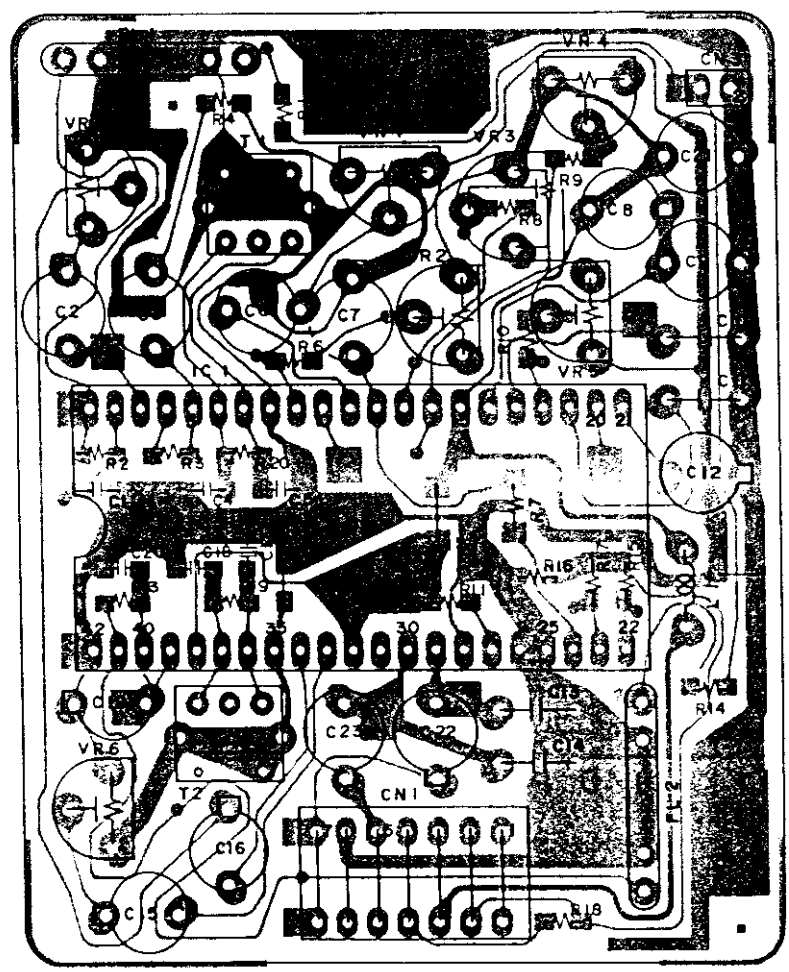
No.15-11 VA03711M
A1



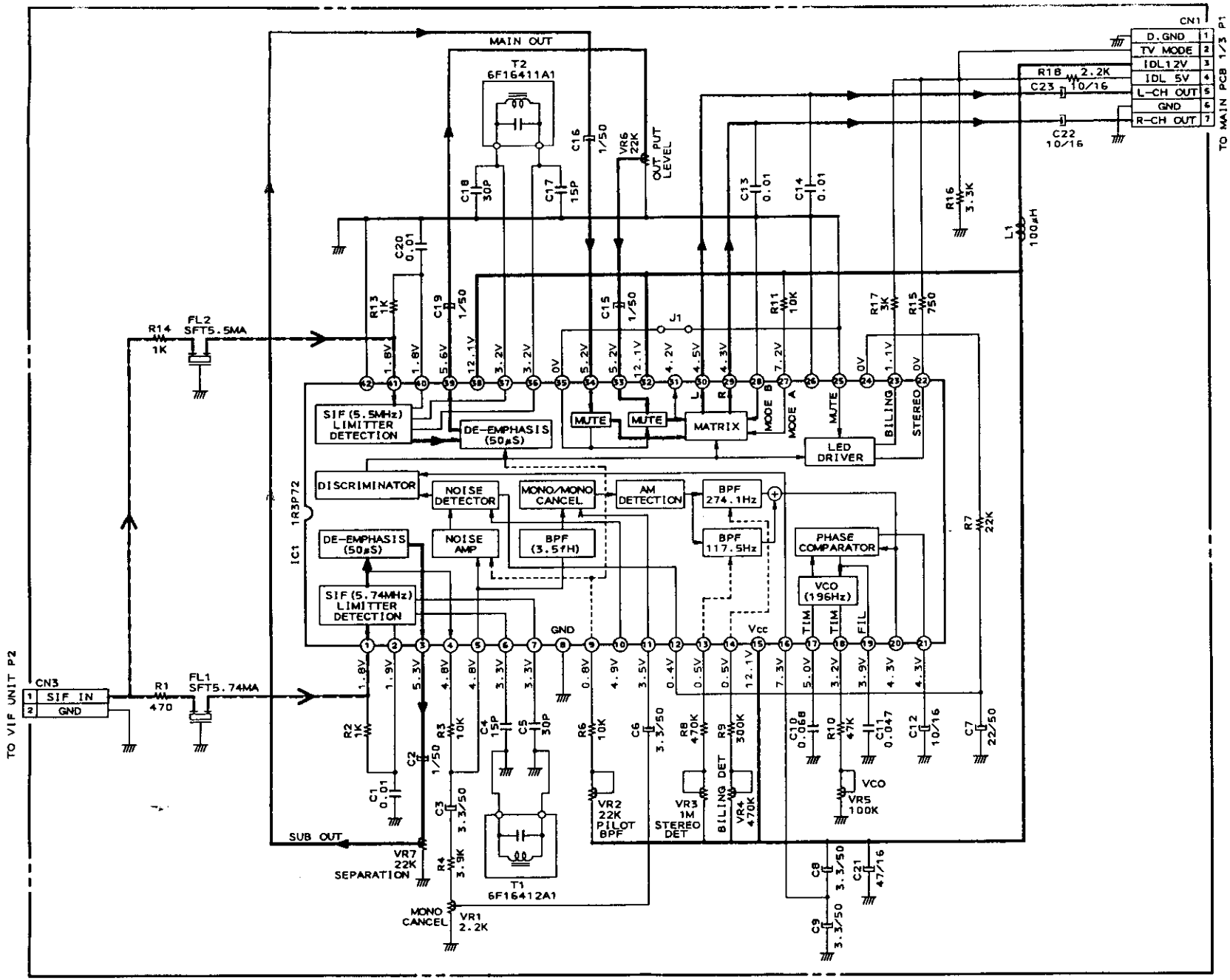
I/O PCB 6B00855C1



NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PARTAINING PARTS INFORMATION.



D MULTI PCB 6C02423A1
(EA-D/EO-D/EOH-D/EOG-VD ONLY)



D MULTI PCB 6C02423A1

——— :POWER SUPPLY LINE

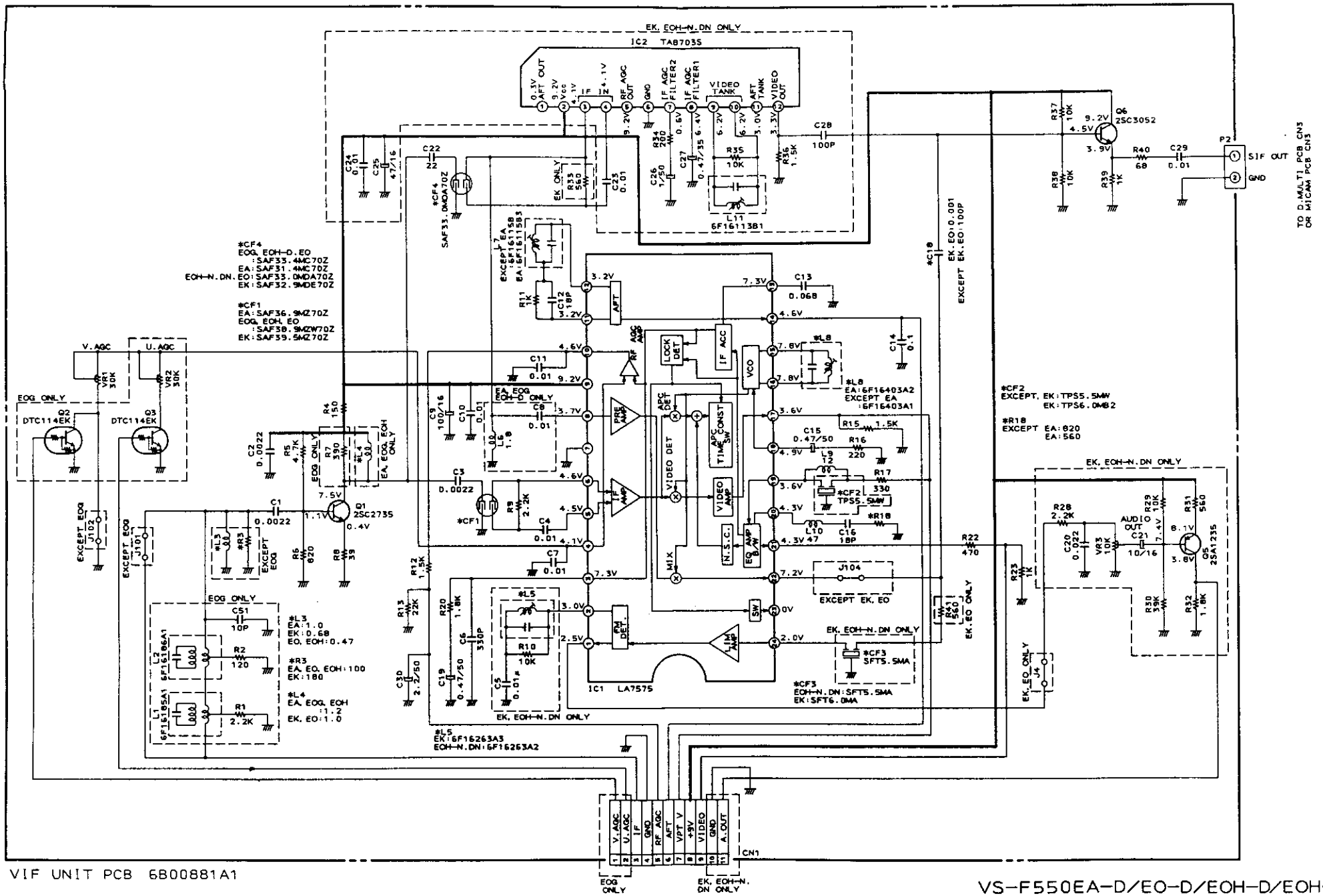
– – – – :AUDIO IF SIGNAL LINE

——— :AUDIO SIGNAL LINE

INDICATED VOLTAGES WERE MEASURED IN E-E, STEREO MODE.

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL INDUCTORS IN μH
ALL DIODES ARE 1SS131T

VS-F550EA-D/EO-D/EOH-D
VS-F580EOG-VD
D.MULTI
SCHEMATIC DIAGRAM
No.15-12 VA03712M
A2



VIF UNIT PCB 6800881A1

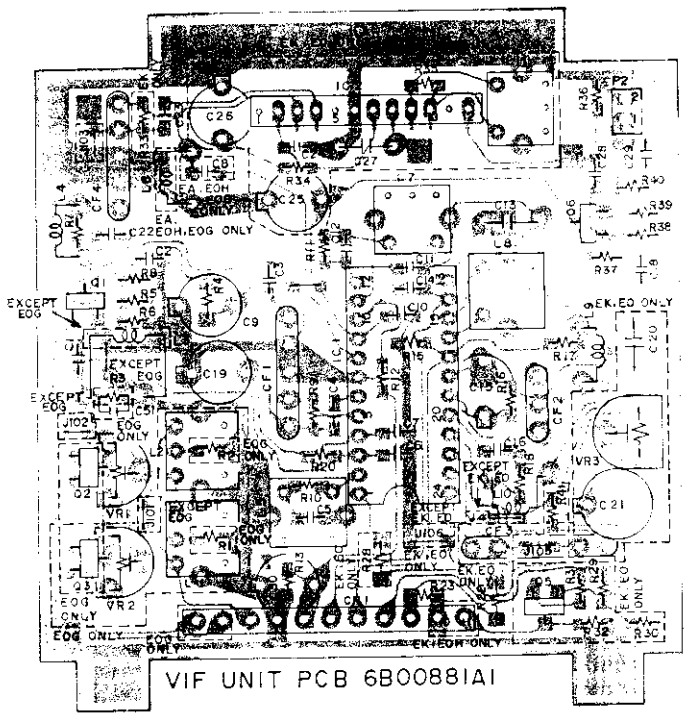
INDICATED VOLTAGES WERE MEASURED
DURING E-E (STOP) MODE.
(WHEN A STATION IS BEING RECEIVED)

———— :POWER SUPPLY LINE

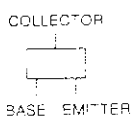
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL INDUCTORS IN μH
ALL DIODES ARE 1SS131T

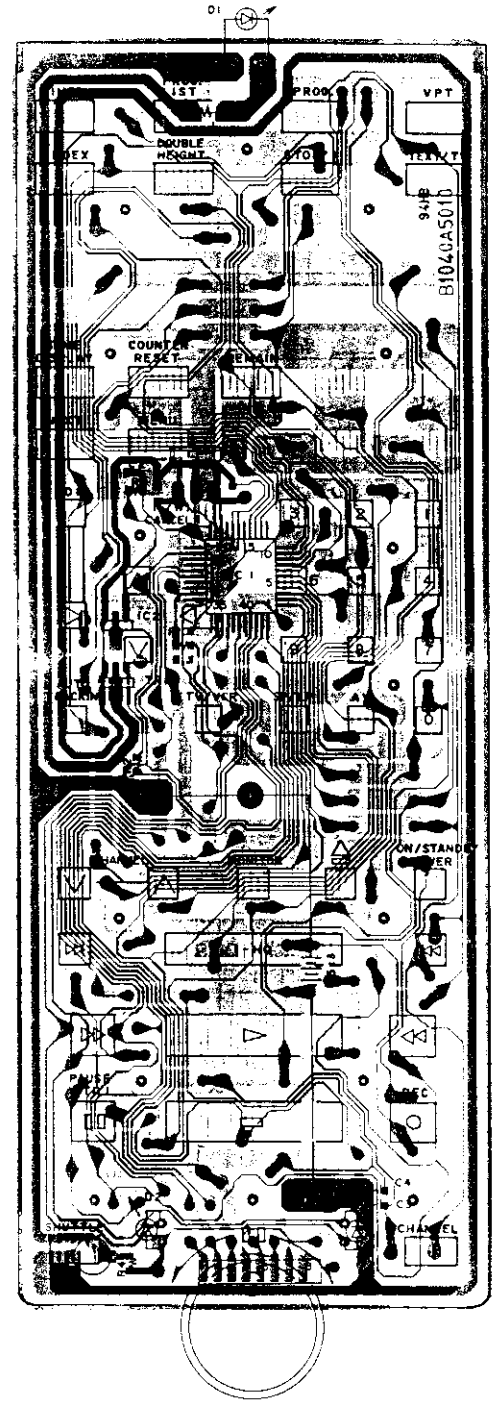
VS-F550EA-D/EO-D/EOH-D/EOH-N
VS-F560EK-N
VS-F580EOG-VD
VS-F590EOH-DN
VIF UNIT
SCHEMATIC DIAGRAM

NO.15-13 VA03713M
A2

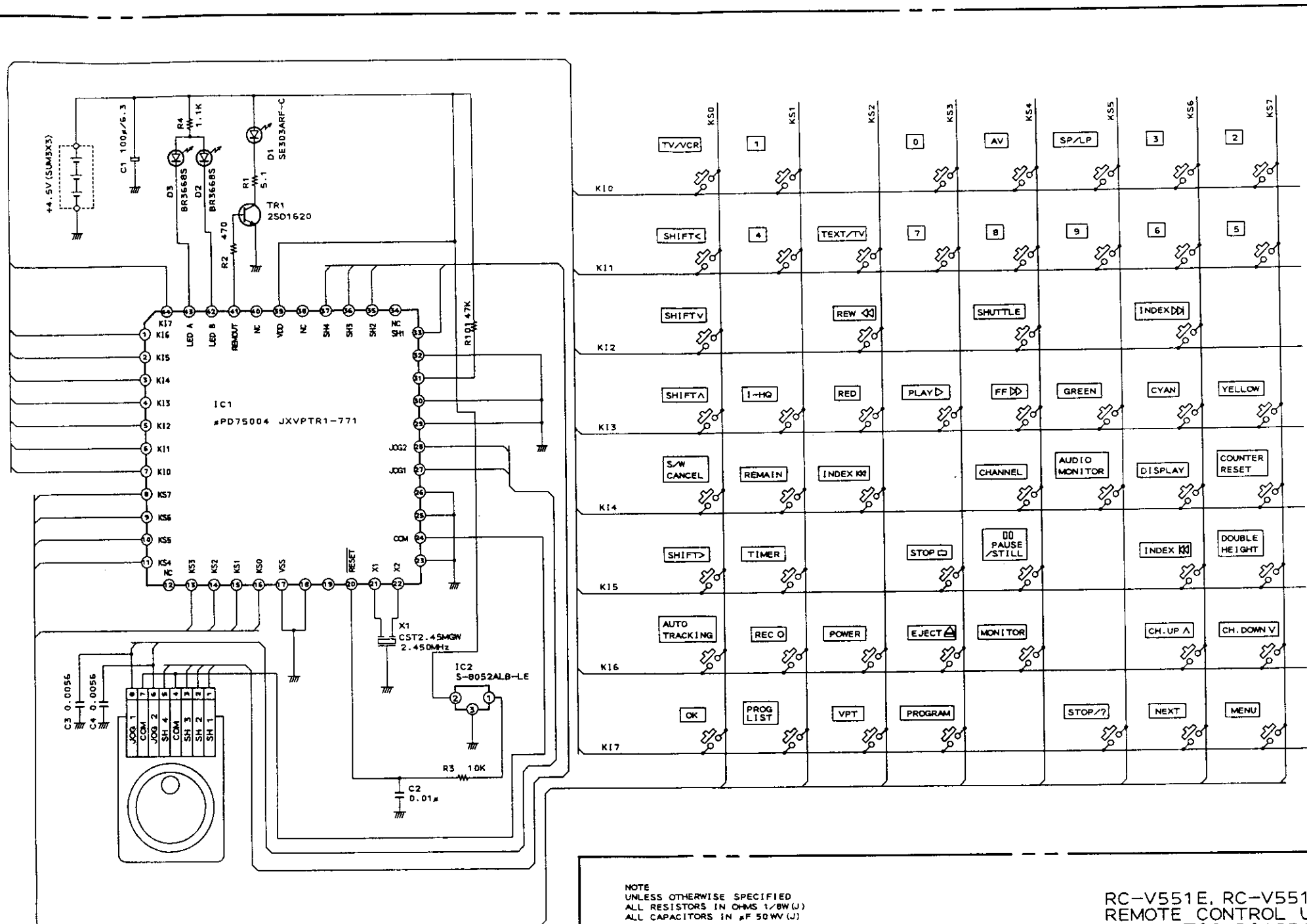


VIF UNIT PCB 6B00881A1



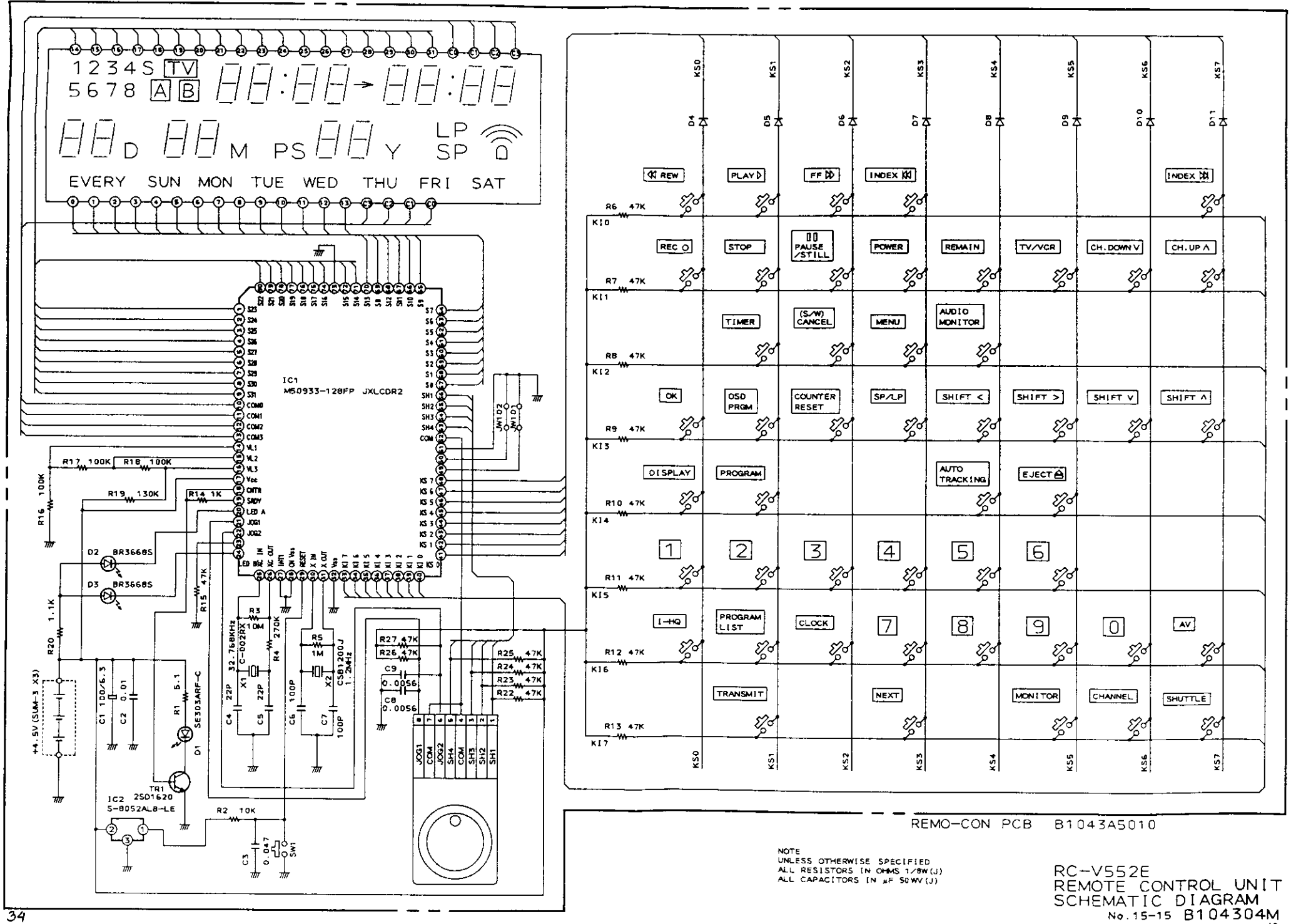


REMO-CON PCB B1040A5010J1



NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/8W (J)
ALL CAPACITORS IN μF 50WV (J)

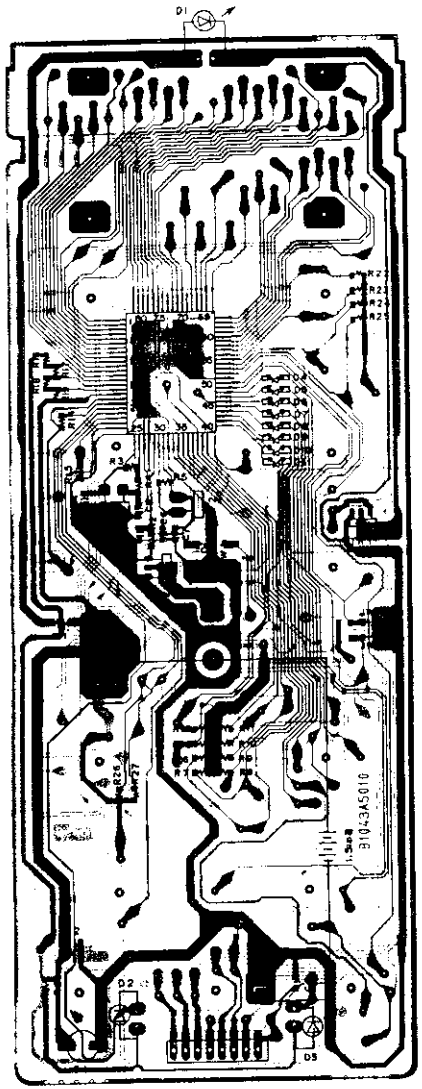
RC-V551E, RC-V551G
REMOTE CONTROL UNIT
SCHEMATIC DIAGRAM
No.15-14 B104002M
A2



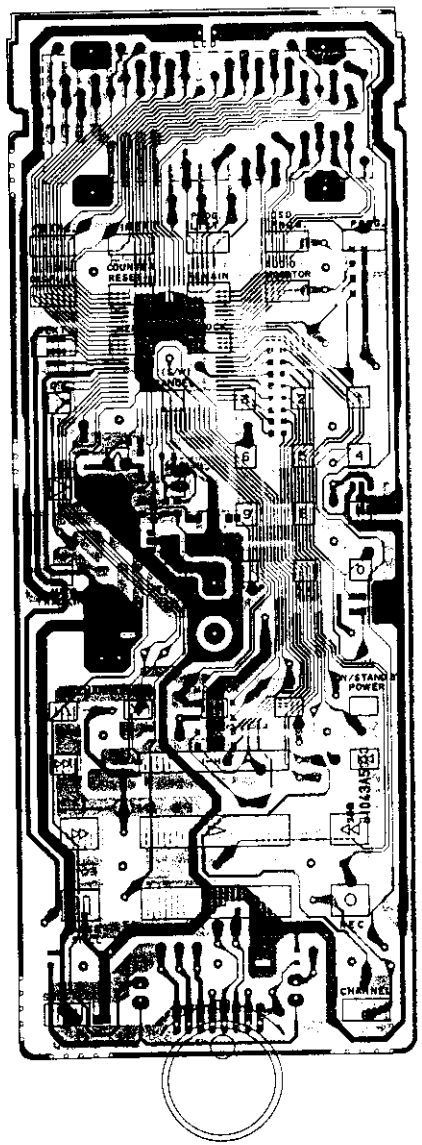
REMO-CON PCB B1043A5010

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/8W(J)
ALL CAPACITORS IN μF 50WV(J)

RC-V552E
REMOTE CONTROL UNIT
SCHEMATIC DIAGRAM
No.15-15 B104304M
A2

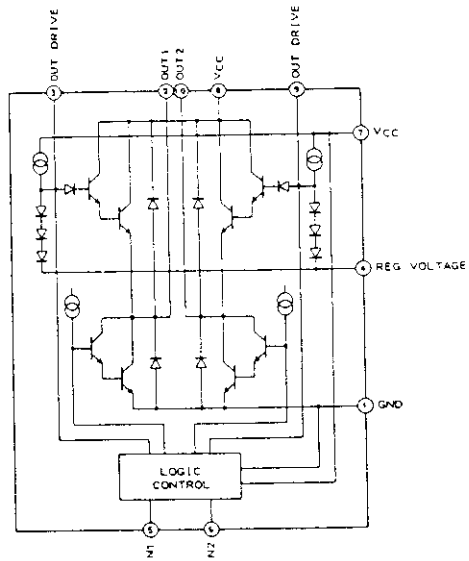


REMO-CON PCB B1043A5010J1
(PARTS LOCATION)



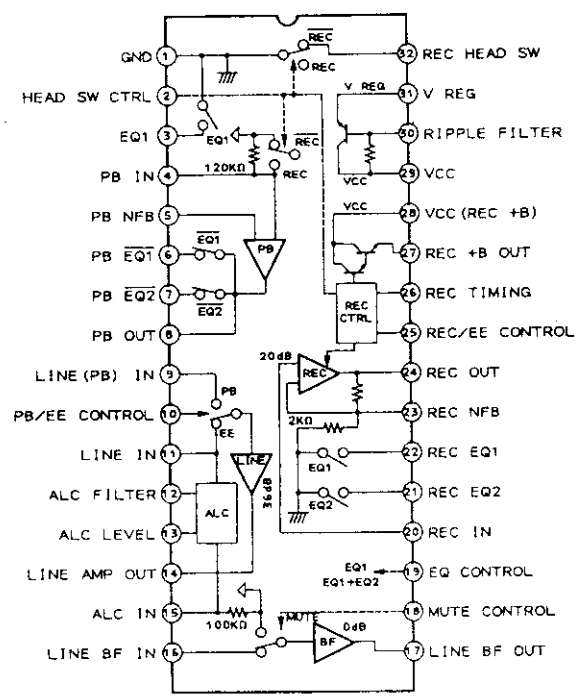
REMO-CON PCB B1043A5010J1
(SWITCH LOCATION)

BA6229 (Bi-DIRECTIONAL MOTOR DRIVE)

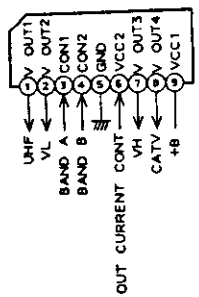


INPUT		OUTPUT		MODE
⑤	⑥	③	⑩	
H	H	L	L	BRAKE
L	H	L	H	CASSETTE & TAPE LOADING
H	L	H	L	CASSETTE & TAPE UNLOADING
L	L	OPEN	OPEN	STOP

BA7765AS (AUDIO SIGNAL REC/PB AMPLIFIER)



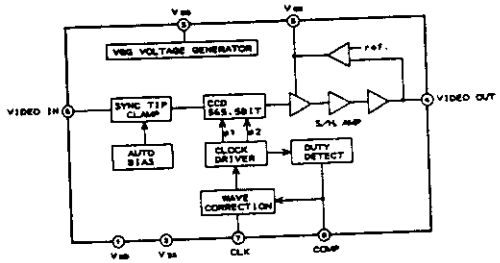
LA7910 (TUNER BAND SELECTOR)



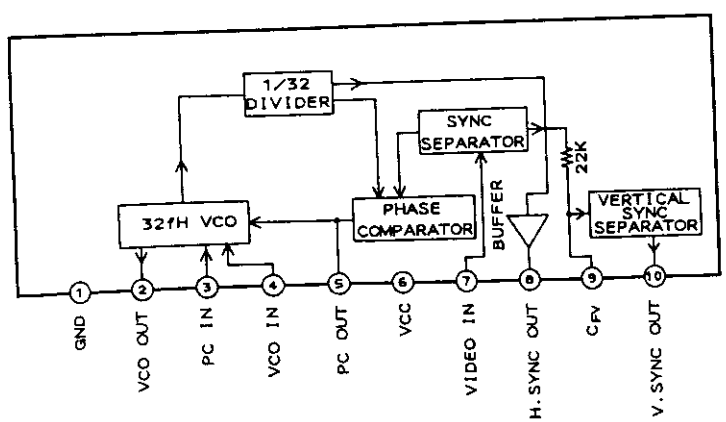
INPUT		OUTPUT			
CON1	CON2	V OUT1	V OUT2	V OUT3	V OUT4
L	L	H	Z	Z	Z
H	L	Z	H	Z	Z
L	H	Z	Z	H	Z
H	H	Z	Z	Z	H

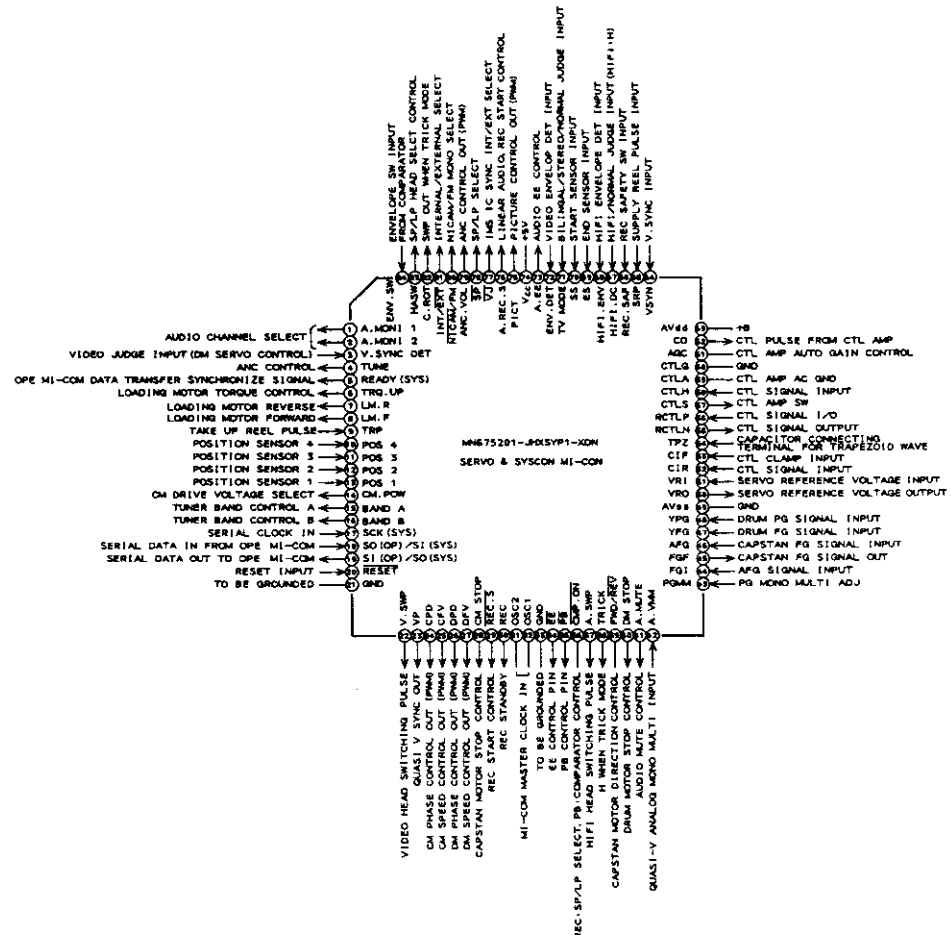
Z:HIGH IMPEDANCE

LC8992 (CCD 1H DELAY LINE)

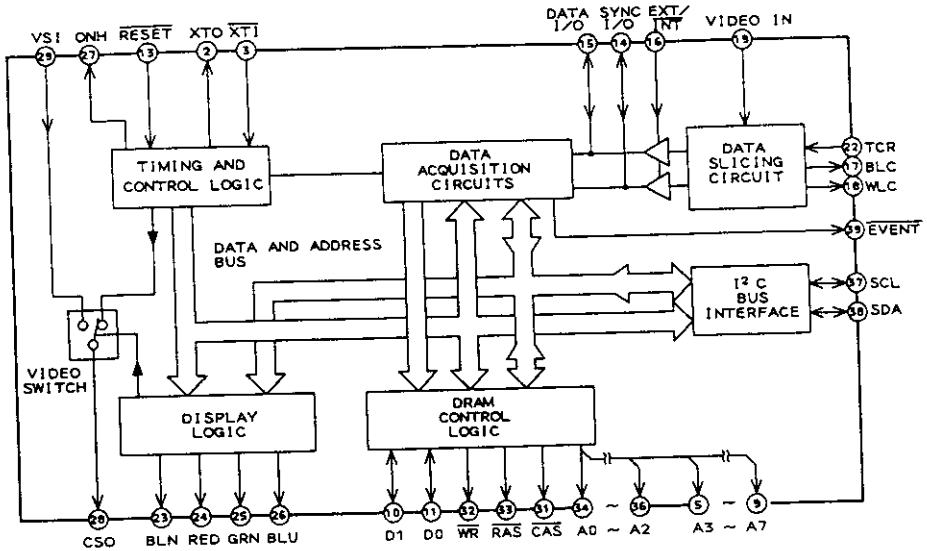


MM1068XS (SYNC SEPARATOR)

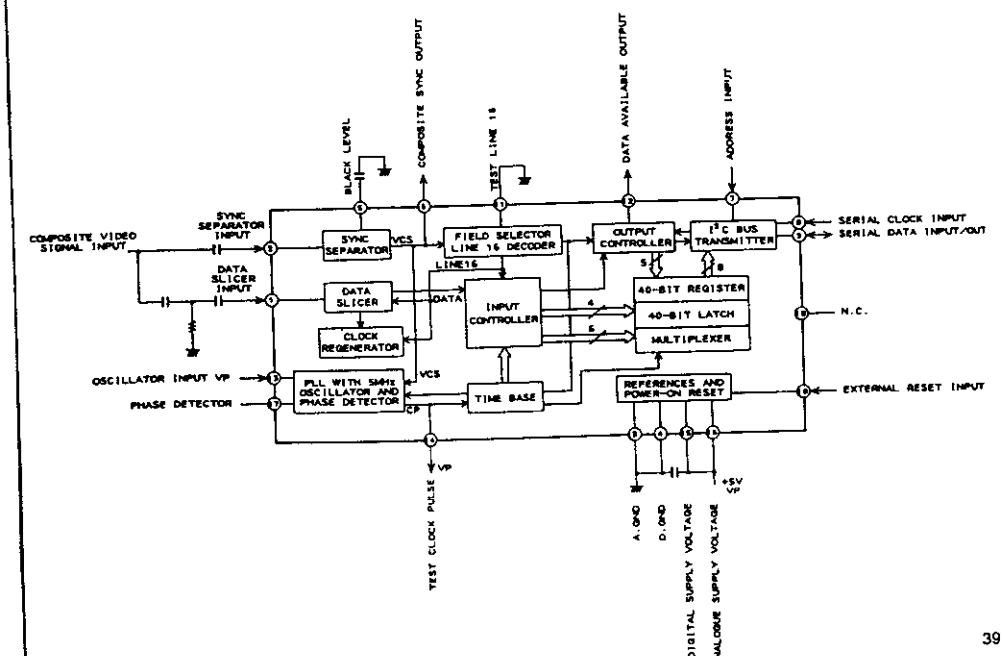




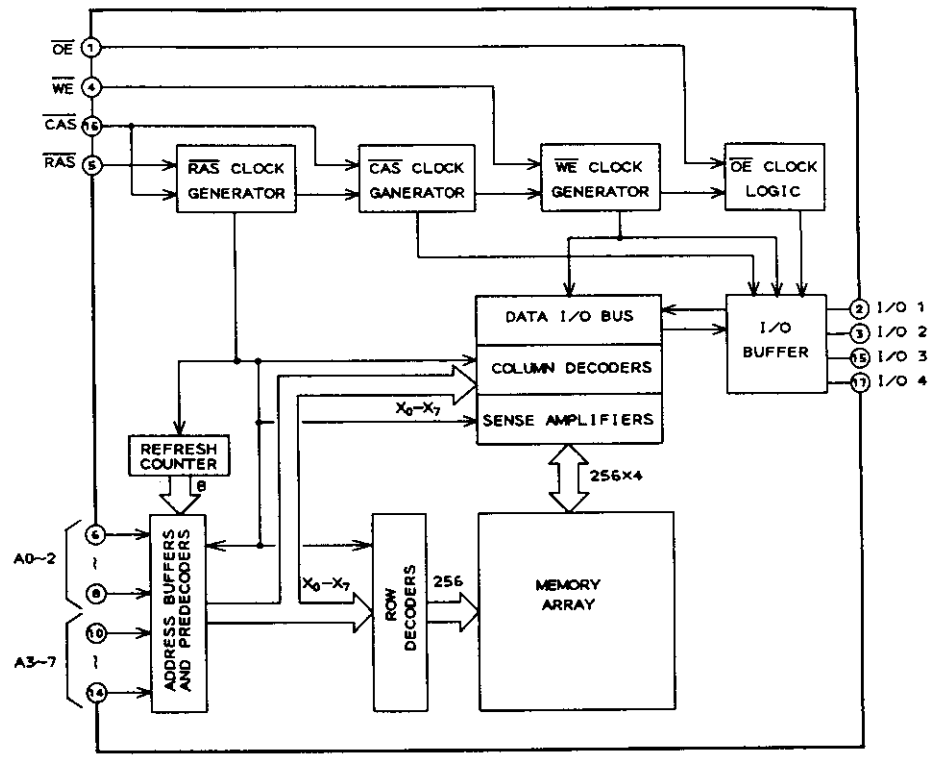
MV1815 (TELETEXT DECODER FOR 625 LINE OPERATION)



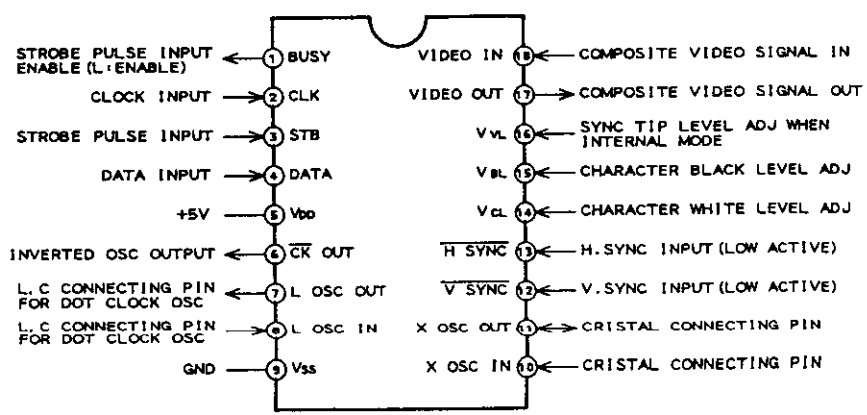
SAA4700 (VPS DATALINE PROCESSOR)



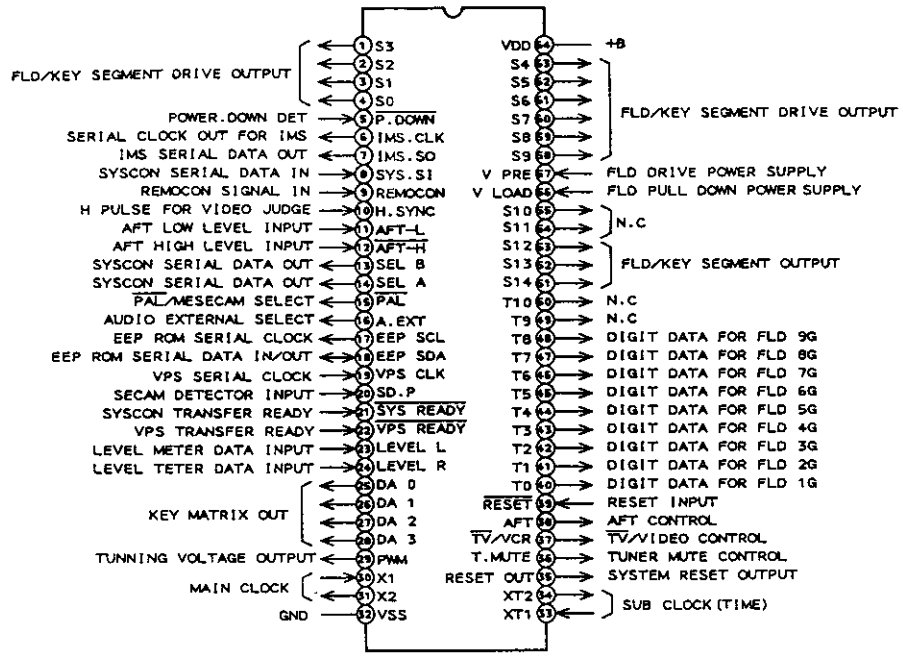
V53C464A (64K ×4 BIT D-RAM)



μPD6450 (CHARACTER GENERATOR)



µPD75217 JHXOPP1 (OPERATION MI-COM)



µPD75218CW (VPT/PDC MI-COM)