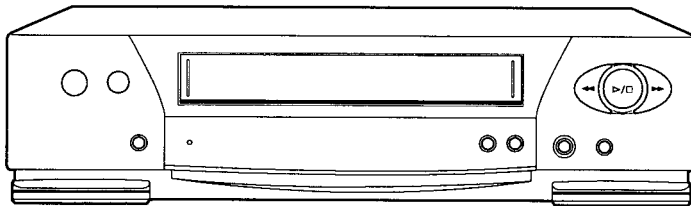




# Service Manual

VIDEO CASSETTE RECORDER



MODEL  
**HS-751V(B)**  
**HS-751V(E)**  
**HS-751V(GY)**  
**HS-751V(IR)**

Only cassettes marked VHS can be used with this video cassette recorder.

## SPECIFICATIONS

<b>Tape Format</b>	: VHS 1/2" high-density video cassette tape	<b>Video Output</b>	: 1.0Vp-p, 75Ω unbalanced EURO AV socket
<b>Power Source</b>	: AC 230V ; 50Hz	<b>Audio Output</b>	: -8dBs, 1kΩ unbalanced EURO AV socket
<b>Power Consumption</b>	: Approx. 25W	<b>TV Tuner</b>	<b>VHF</b> : 47~68MHz, 174~230MHz[E, GY] 44.5~68.5MHz, 174~222MHz[IR]
<b>Television System</b>	: 625lines, 50fields System CCIR B&G PAL [E, GY] System CCIR I PAL [B, IR]	<b>UHF</b>	: 470~862MHz
<b>Video Recording System</b>	: Azimuth helical scanning system	<b>CATV</b>	: 47~103MHz, 104~300MHz, 302~470MHz
<b>Luminance</b>	: Frequency modulation recording	<b>Operating Temperature</b>	: 5°C to 40°C
<b>Colour Signal</b>	: Low frequency conversion subcarrier phase shift recording	<b>Relative Humidity</b>	: 30% to 80%
<b>Hi-Fi Audio Recording System</b>	: Azimuth helical scanning system, Frequency modulation, deep layer recording	<b>RF Channel Output</b>	: Set to Channel 68 [B] Set to Channel 36 [E, GY] Set to Channel 38 [IR] (Channel 22~69 selectable)[B] (Channel 32~40 selectable) [E, GY, IR]
<b>Linear Audio Track</b>	: 1 track	<b>Weight</b>	: Approx. 4.3kg
<b>Tape Speed</b>	: 23.39mm/sec (PAL SP mode) 11.70mm/sec (PAL LP mode)	<b>Dimensions</b>	: 380 (W) × 92 (H) × 303 (D) mm
<b>Record/Playback Time</b>	: 240min. with E-240 cassette (PAL SP mode) 480min. with E-240 cassette (PAL LP mode)	<b>Timer</b>	: 8 programmes for any channels in one month/every day/every week day 24 hour digital synchronized with oscillator frequency.
<b>Heads: Video</b>	: 4 rotary heads	<b>Channel Selection</b>	: 60 position Up/Down + EXT
<b>Hi-Fi Audio</b>	: 2 rotary head	<b>Deck</b>	: U Deck
<b>Audio/Control</b>	: 1 stationary head		
<b>Erase</b>	: 1 full track head		
<b>Video Input</b>	: 0.5 to 2.0Vp-p, 75Ω unbalanced EURO AV socket		
<b>Audio Input</b>	: -8dBs, 10kΩ unbalanced EURO AV socket		

- Weight and dimensions shown are approximate.
- Design and specifications are subject to change without notice.

# CONTENTS

<b>DISASSEMBLY</b> .....	1
<b>HOW TO EXECUTE CIRCUIT BOARD SERVICE</b> .....	4
<b>MECHANICAL ADJUSTMENT TOOLS</b> .....	8
<b>ELECTRICAL ADJUSTMENT TOOLS</b> .....	9
<b>HOW TO INITIALIZE THE E2PROM</b> .....	10
<b>SERVICE POSITION</b> .....	10
<b>DECK OPERATION CHECK</b> .....	12
<b>ELECTRICAL ADJUSTMENTS</b> .....	13
Servo Circuit Adjustment.....	15
Timer Circuit Adjustment.....	15
Dual Audio Circuit Adjustment.....	16
<b>MECHANICAL ADJUSTMENT AND REPLACEMENT</b> .....	17
1.    Cleaning the DECK.....	17
1-1    VIDEO HEAD.....	17
1-2    Tape Transports.....	17
1-3    REEL DISK Drive System.....	17
2.    Replacement of Major Parts.....	18
2-1    GUIDE ARM (SP), CLEANING ARM, CLEANING ROLLER UNIT.....	18
2-2    STAY PLATE.....	18
2-3    BOTTOM UNIT.....	19
2-4    A/C HEAD UNIT.....	21
2-5    FE HEAD.....	21
2-6    SHUT LEVER UNIT.....	22
2-7    LAMP GUIDE, MODE POSITION GUIDE.....	23
2-8    TENSION SPRING, TENSION ARM, TENSION BELT UNIT.....	24
2-9    BRAKE SPRING (for MAIN BRAKE (SP)), MAIN BRAKE (SP), BRAKE SPRING (for MAIN BRAKE (TU)), MAIN BRAKE (TU).....	26
2-10   REEL DISK (On SP side), REEL DISK (On TU side).....	26
2-11   LOADING BELT, LOADING MOTOR ASSY.....	28
2-12   PINCH ARM CAP, PINCH ARM UNIT, PINCH GEAR ARM 2, PINCH CAM HOLDER, PINCH CAM SPRING, PINCH CAM LEVER, PINCH RACK SLIDER, PINCH CAM GEAR.....	29
2-13   GUIDE ARM ASSY (TU), GUIDE SPRING (TU), LOADING TG LEVER.....	32
2-14   REC SPRING, REC LEVER.....	34
2-15   REEL BELT, BELT PULLEY, SHIFT SPRING.....	35
2-16   CAPSTAN BRAKE SPRING, CAPSTAN BRAKE.....	36
2-17   MODE HOLDER, REEL LOCK LEVER, MODE GEAR, F/L DRIVE GEAR, F/L DRIVE LEVER, WORM PULLEY UNIT, LOADING WORM GEAR.....	36
2-18   CONTROL WIND LEVER, TENSION LEVER UNIT.....	40
2-19   PHOTO GUIDE UNIT (SP), PHOTO GUIDE UNIT (TU).....	42
2-20   LOADING GEAR, LAMP LOADING GEAR.....	43
2-21   CAM GEAR (TU).....	43
2-22   PHOTO UNIT, REEL GEAR UNIT (TU), REEL GEAR UNIT (SP).....	44
2-23   IDLER CENTER LEVER.....	46
2-24   PULLEY GEAR, IDLER UNIT.....	47
2-25   F/L ARM UNIT (SP).....	47
2-26   F/L ARM UNIT (TU).....	48
2-27   SYNC GEAR ASSY.....	49
2-28   F/L DOOR ARM.....	50
2-29   WIND LEVER UNIT.....	50
2-30   LOADING LOCK SPRING, LOADING LOCK LEVER.....	51
2-31   CAPSTAN MOTOR.....	52
2-32   CAM GEAR (SP).....	53
2-33   LOADING ARM UNIT (TU), LOADING ARM UNIT (SP).....	54
2-34   CAM SPRING (C), CAM PLATE UNIT (C).....	55
2-35   TAPE GUIDE ASSY (SP), TAPE GUIDE ASSY (TU).....	56
2-36   GUIDE ROLLER (SP), GUIDE ROLLER (TU).....	57
2-37   DRUM CLAMPER, DRUM ASSY.....	58

# CONTENTS

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2-38	DRUM MOTOR STATOR, BRUSH SPRING, ROTOR CASE, END RING, BRUSH, UPPER DRUM ASSY, SPACER.....	59
2-39	SHIFT LEVER .....	60
2-40	IMPEDANCE UNIT (SP), FLYWHEEL (SP) .....	61
3.	Interchangeability Adjustment of the Mechanism .....	62
3-1	Adjustment of BACK TENSION and TENSION PIN Position.....	62
3-2	Check and Adjustment of the FM Envelope .....	63
3-2-1	GUIDE ROLLER Adjustment.....	63
3-2-2	Adjustment of GUIDE ROLLER (SP) Height .....	63
3-2-3	Adjustment of GUIDE ROLLER (TU) Height .....	63
3-2-4	Coarse Adjustment of Phase.....	64
3-2-5	Check of FM Waveform Flatness .....	64
3-2-6	Tape Running Condition at the GUIDE ROLLERS (check 1) .....	65
3-2-7	Tape Running Condition at the GUIDE ROLLERS (check 2) .....	65
3-3	Adjustment of A/C HEAD.....	66
3-3-1	Adjustment of A/C HEAD Slant .....	66
3-3-2	Adjustment of A/C HEAD Azimuth and Height .....	66
3-4	Adjustment of Phase .....	67
3-5	Adjustment of GUIDE ARM ASSY (TU) Height.....	68
4.	Servicing for Tape Jamming during the Loading Process.....	69
	<b>GLOSSARY OF ABBREVIATIONS.....</b>	<b>70</b>
	<b>CHIP PARTS REPLACEMENT .....</b>	<b>71</b>
	<b>Parts List.....</b>	<b>72</b>
1.	CABINET ASSEMBLY .....	72
2.	PACKING PARTS .....	74
3.	ELECTRICAL PARTS.....	76
4.	DECK ASSEMBLY	

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# DISASSEMBLY

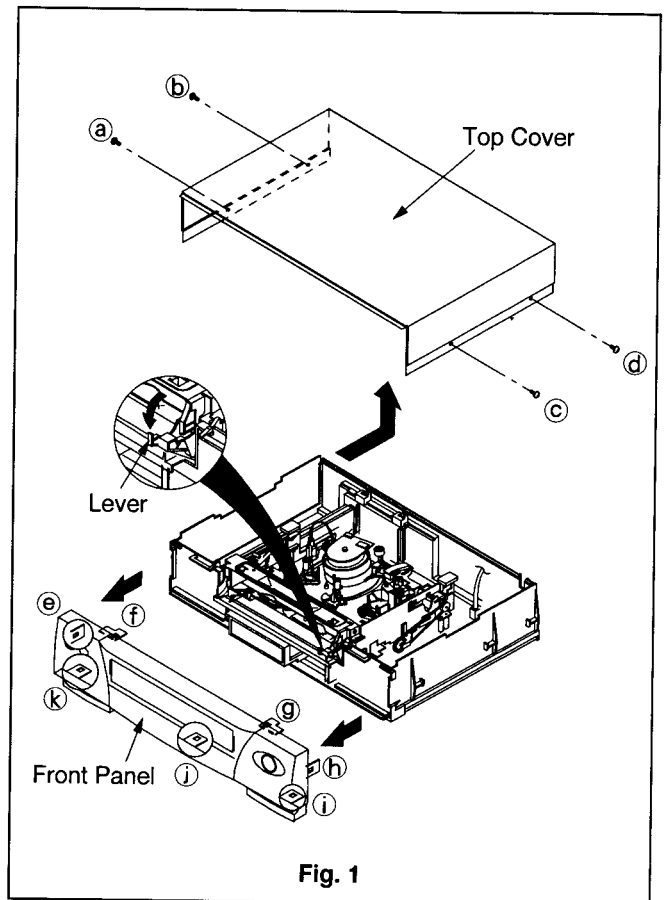
## 1. Removal of Top Cover

- 1 Remove the four Top Cover fastening screws (a), (b), (c) and (d) shown in Fig. 1 and remove the Top Cover in the direction shown by the arrow.

## 2. Removal of Front Panel

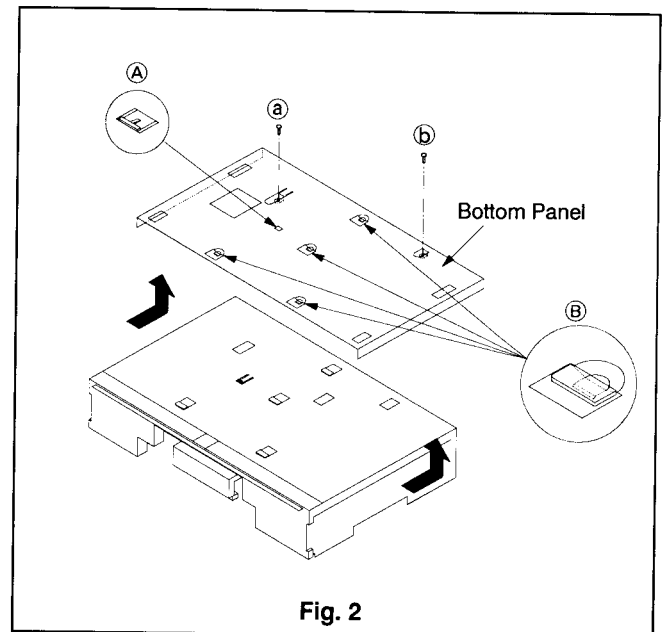
- 1 Remove the Top Cover.  
(Refer to Para. 1 of the DISASSEMBLY.)
- 2 Unfasten the seven catches (e) ~ (k) shown in Fig. 1 and remove the Front Panel in the direction shown by the arrows.

**Note :** Before installing the Front Panel, make sure that the lever is on the lower position. Push the cassette door open and install it.



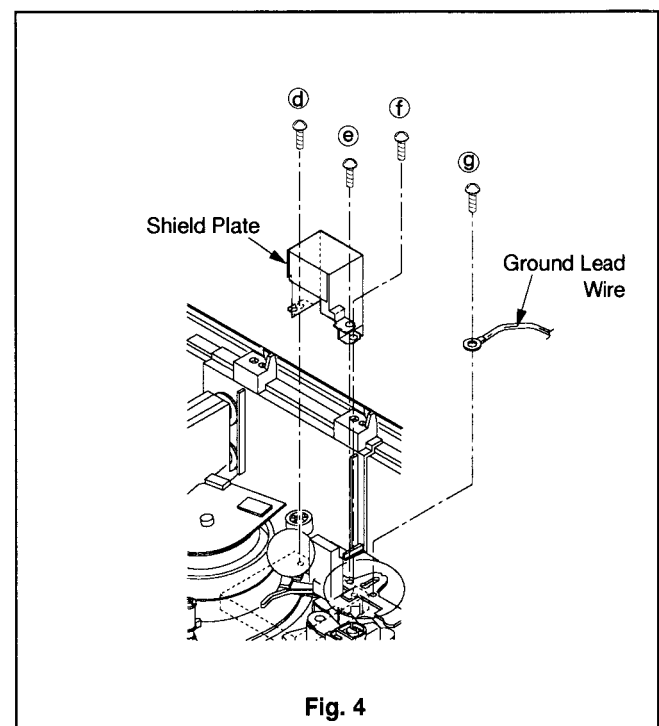
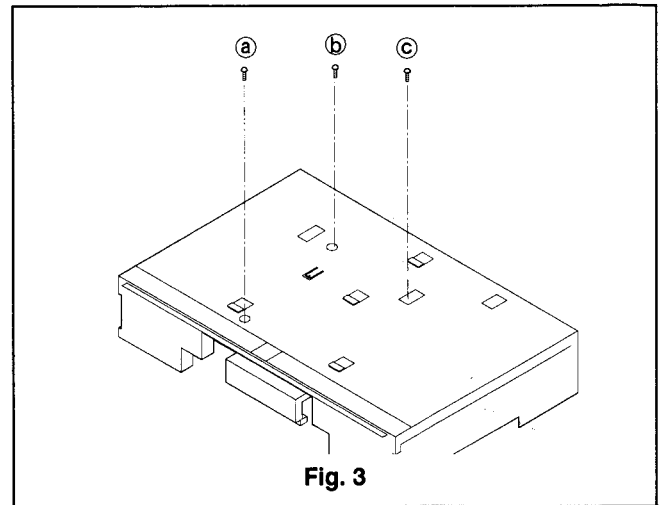
## 3. Removal of Bottom Panel

- 1 Turn the set upside down as shown in Fig. 2.
- 2 Remove the two fastening screws (a) and (b) shown in Fig. 2.
- 3 Push the one hook (A) toward inside. Slide the Bottom Panel backward to remove it, with taking care of the four catches (B).



#### 4. Removal of DECK ASSY

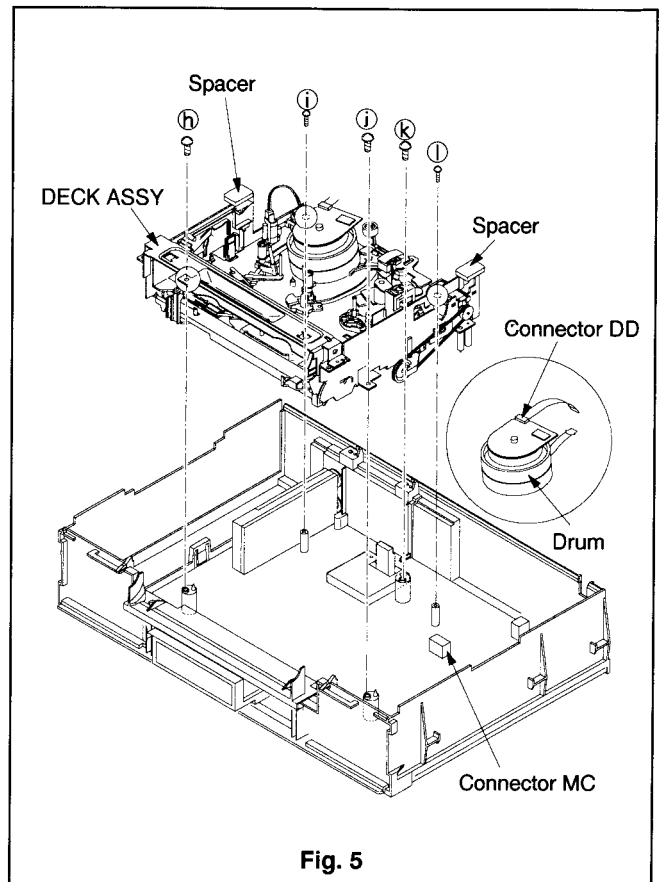
- 1 Remove the Top Cover.  
(Refer to Para. 1 of the DISASSEMBLY.)
- 2 Remove the Front Panel.  
(Refer to Para. 2 of the DISASSEMBLY.)
- 3 Remove the Bottom Panel.  
(Refer to Para. 3 of the DISASSEMBLY.)
- 4 Remove the three screws (a), (b) and (c) shown in Fig. 3.
- 5 Remove the three screws (d), (e) and (f) shown in Fig. 4 and raise the Shield Plate upward to remove it.
- 6 Remove the one screw (g) shown in Fig. 4 and remove the Ground Lead Wire.



- 7 Remove the five screws (h) ~ (l) shown in Fig. 5.
- 8 Disconnect the connectors MA, MD, MF, MH and ML.
- 9 Raise the DECK ASSY upward to remove it, paying attention to the connector MC placed below the DECK ASSY.

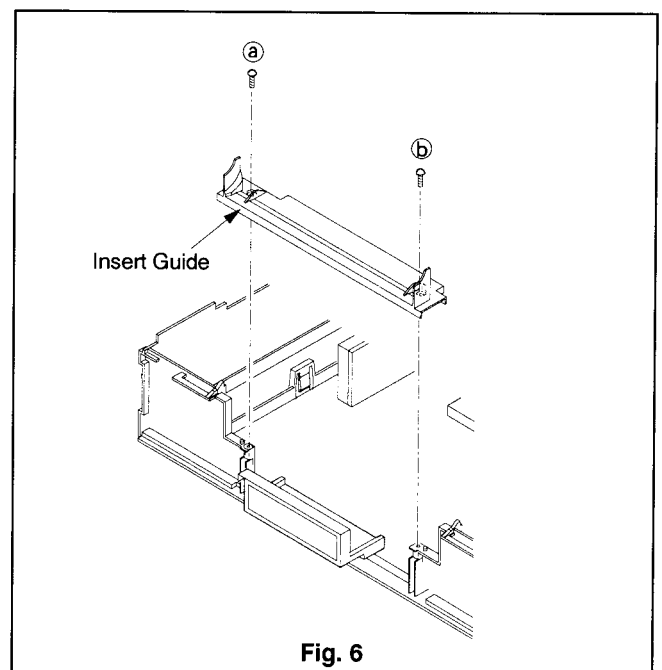
**Note** :During installation of DECK ASSY, take care of the connector DD which is apt to be removed by the side force.

Do not pull the spacer to raise the DECK ASSY.



## 5. Removal of Insert Guide

- 1 Remove the DECK ASSY.  
(Refer to Para. 4 of the DISASSEMBLY.)
- 2 Remove the two screws (a) and (b) shown in Fig. 6.  
Raise the Insert Guide upward to remove it.



# HOW TO EXECUTE CIRCUIT BOARD SERVICE

**CAUTION:** BEFORE ATTEMPTING TO REMOVE OR REPAIR ANY PCB, UNPLUG THE POWER CORD FROM THE A.C. SOURCE.

## LOCATION OF PRINT CIRCUIT BOARDS

**Note:** Take caution when removing flat cables to prevent any contact problem.  
Connect and disconnect the flat cables at right angles to the connector and make sure that it is completely secured.  
After servicing the PCB, restore the flat cable and leads to their former state.

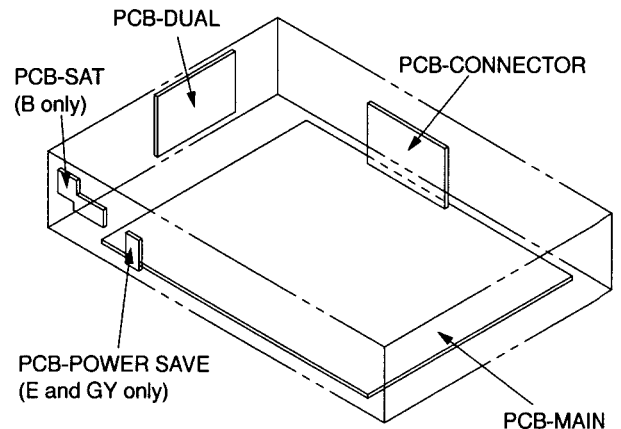


Fig. 7

### 1. PCB-SAT (B only)

- 1 Remove the Top Cover.  
(Refer to Para. 1 of the DISASSEMBLY.)
- 2 Remove the Front Panel.  
(Refer to Para. 2 of the DISASSEMBLY.)
- 3 Disconnect connector SJ and unscrew the screw (a) as shown in Fig. 8 to remove the PCB-SAT in the direction shown by the arrow.

### 2. PCB-POWER SAVE (E and GY only)

- 1 Remove the Top Cover.  
(Refer to Para. 1 of the DISASSEMBLY.)
- 2 Remove the Front Panel.  
(Refer to Para. 2 of the DISASSEMBLY.)
- 3 Disconnect connector PN and unscrew the screw (b) as shown in Fig. 8 to remove the PCB-POWER SAVE in the direction shown by the arrow.

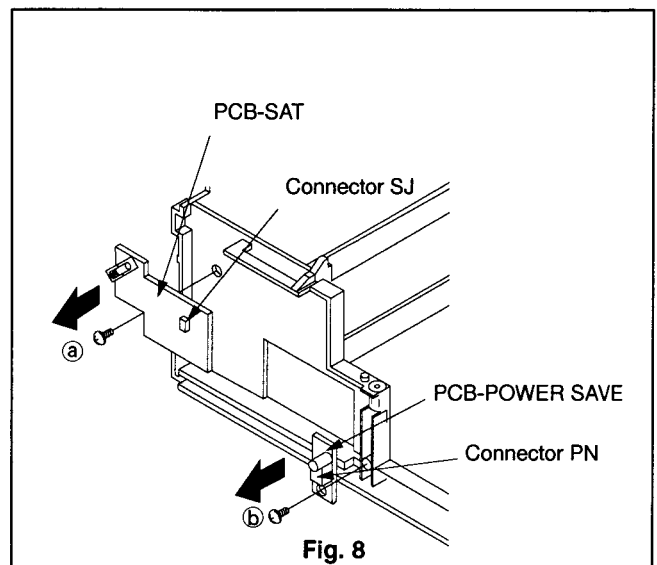


Fig. 8

### 3. PCB-DUAL

- 1 Unfasten two catches (a) and (b) on the Holder as shown in Fig. 9 to remove the Holder.
- 2 Remove the connector HE as shown in Fig.9.
- 3 Raise the PCB-DUAL upward to remove it.

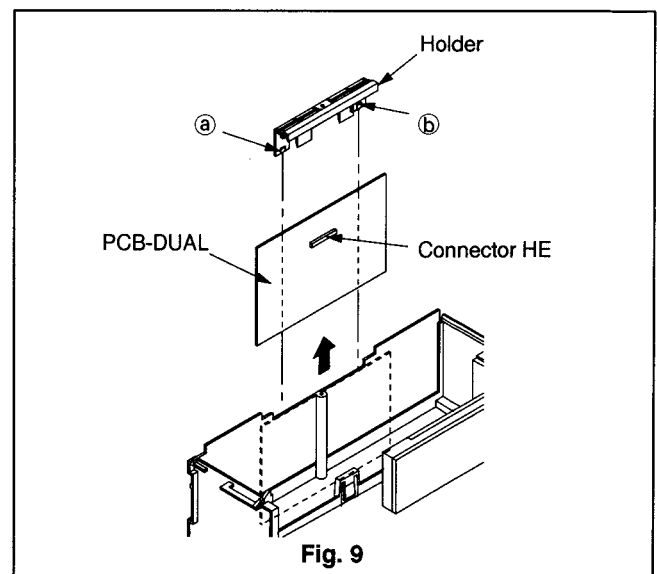
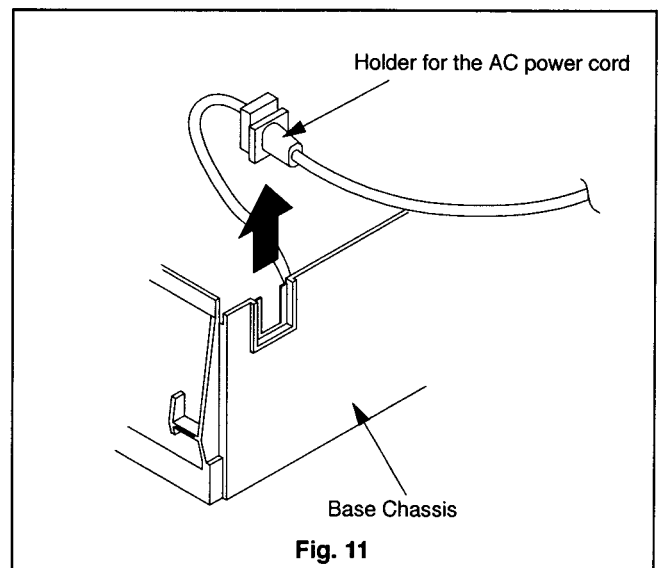
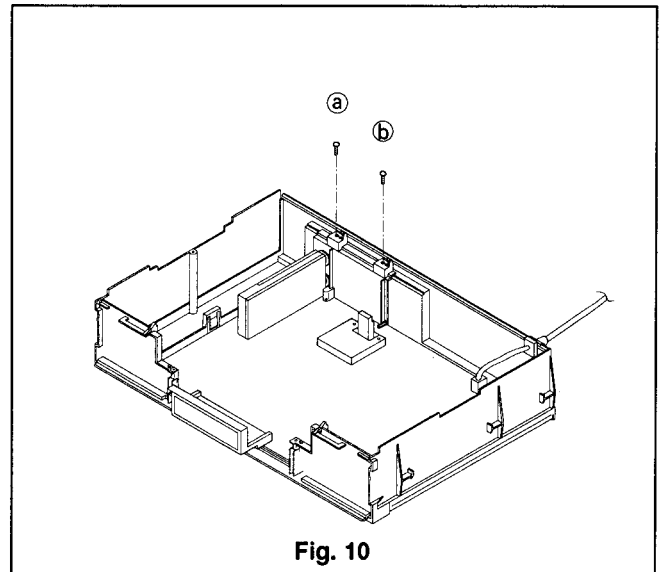


Fig. 9

## 4. PCB-MAIN

### 4-1 Removal of PCB-MAIN

- 1 Remove the DECK ASSY.  
(Refer to Para. 4 of the DISASSEMBLY.)
- 2 Remove the Insert Guide.  
(Refer to Para. 5 of the DISASSEMBLY.)
- 3 Remove the two screws (a) and (b) shown in Fig. 10.
- 4 Remove the holder for the AC power cord from the Base Chassis shown in Fig. 11.





- 5 Unfasten the three fastening catches (a), (b) and (c) shown in Fig. 12. Raise the PCB-MAIN upward to remove it.

#### ▣ Service of PCB

##### • Head Amp block

- (1) Unsolder the four soldering points of the Shield Case shown in Fig. 12 and remove it.
- (2) Unsolder the two soldering points of the Shield Plate shown in Fig. 12 and remove it.

**Note:** Before checking the operation, mount the Shield Case and the Shield Plate on the original position. If not provided, beat or picture disturbance may appear.

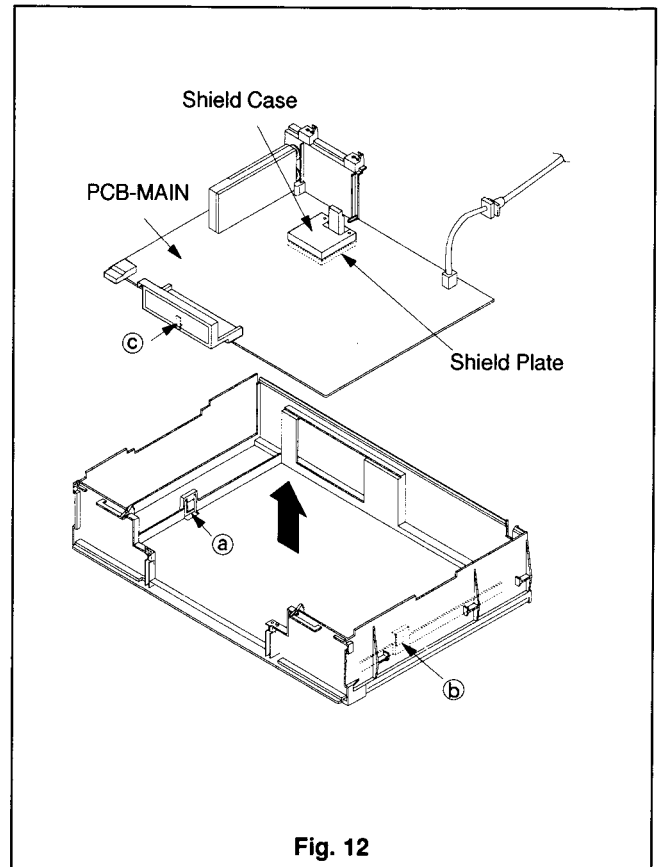


Fig. 12

#### ▣ Service of Transistors

##### (Q901 [B and IR only], Q9A4, Q9A5 and Q9A7)

- 1 Disconnect the power plug.
- 2 Remove the four fastening screws (a), (b), (c) and (d) shown in Fig. 13.

**Note:** Check that transistors (Q901, Q9A4, Q9A5 and Q9A7) is connected to the Heat Sink 1 and Heat Sink 2 before turning the power on. If the power on is turned on without installing the Heat Sink 1, Heat Sink 2, Q901, Q9A4, Q9A5 and Q9A7 can be damaged.

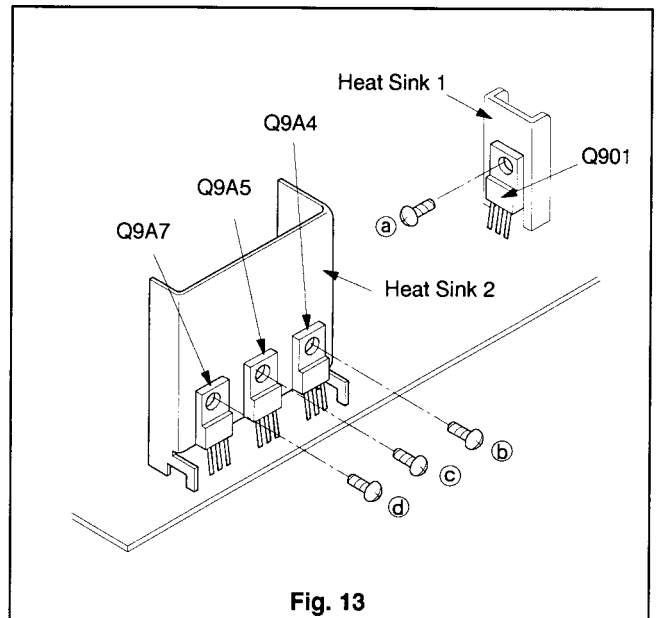
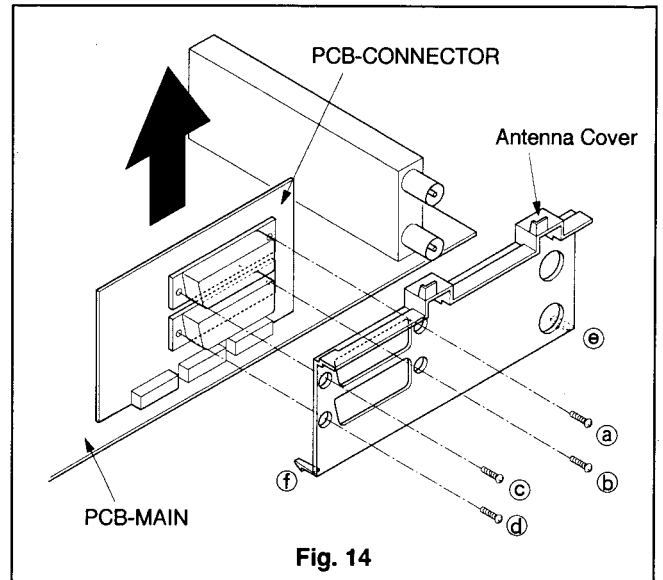


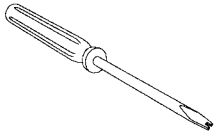
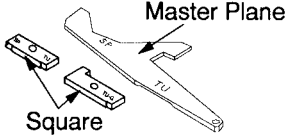
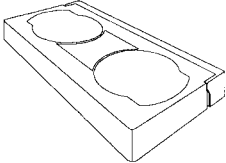
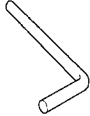
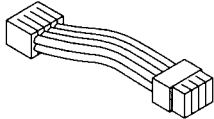
Fig. 13

## 4-2 Removal of PCB-CONNECTOR

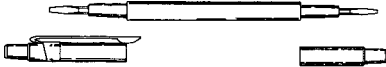
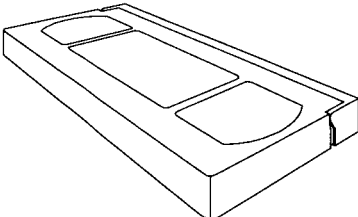
- 1 Remove the PCB-MAIN.  
(Refer to the preceding paragraph.)
- 2 Remove the four screws (a, b, c and d), unfasten two catches (e and f) on the Antenna Cover as shown in Fig. 14, and remove the Antenna Cover.
- 3 Raise the PCB-CONNECTOR upward to remove it.



# MECHANICAL ADJUSTMENT TOOLS

	PURPOSE	METHOD
<b>Adjustment Driver (859C259O80)</b> 	For adjustment of guide rollers.	Carefully insert and adjust guide rollers.
<b>Height adjusting Jig</b> • Master Plane (859C342O20) • Square (859C433O60) 	The master plane and the square are used for measuring height and perpendicularity of the reel disk and Take up guide arm.	The gauge is applied to the part being measured.
<b>Back Tension Gauge (859C345O80)</b> 	The back tension gauge is used for measuring the tension of the tape on the supply side.	Load this gauge in the cassette housing and run in the play mode. Read the gauge indicator.
<b>Cotton gloves</b>	For changing, cleaning and handling of drum, heads and guides.	Use when handling all parts in the tape path.
<b>Grease</b> <b>MULTEMP SH-A (859D055O80)</b>	Lubrication of various parts.	To be applied as specified.
<b>L SHARPED BOX DRIVER (859C433O70)</b> 	The L SHARPED BOX DRIVER is used for tightening or removing screws which fasten the guide rollers.	Insert the screw and turn.
<b>Extension Cable (859C433O80)</b> 	For check of DECK operation.	Connect the MC connector and the CAPSTAN MOTOR.
<b>Oil</b> <b>FLOIL (859D154O20)</b>	Lubrication of various parts.	To be applied as specified.

# ELECTRICAL ADJUSTMENT TOOLS

	PURPOSE	METHOD
<p><b>Adjustment Driver (859C338000)</b></p> <p style="text-align: center;"><b>767-M</b></p> 	<p>The adjustment driver is intended to adjust variable resistors, trimmers, transformers etc. in the circuitry.</p>	<p>Select a tip suitable for the particular head of the component concerned and adjust.</p>
<p><b>Alignment Tape</b></p> <p><b>(PS2 : 859C339010)</b></p> <p><b>(PM6KH3 : 859C339030)</b></p> <p><b>(PM3KE6(CH1) 25 : 859C568050)</b></p> <p><b>(PMX : 859C568070)</b></p> 	<p>Standard signals(VHS Standard) are recorded on the alignment tape and reproduced when required in the adjustment of Servo circuit and interchangeability alignment.</p>	<p>Install and run in the play mode, the same as for an ordinary tape.</p>

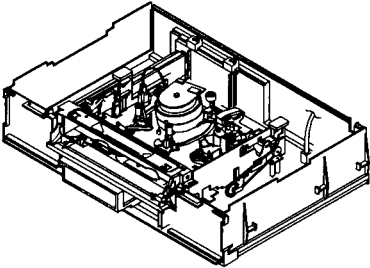
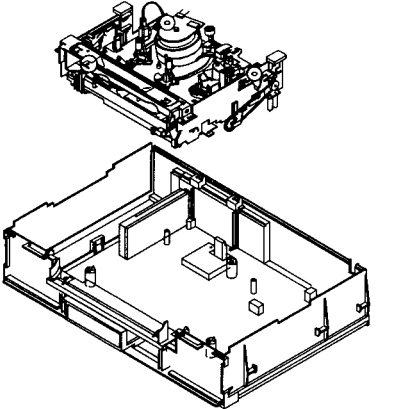

# HOW TO INITIALIZE THE E<sup>2</sup>PROM

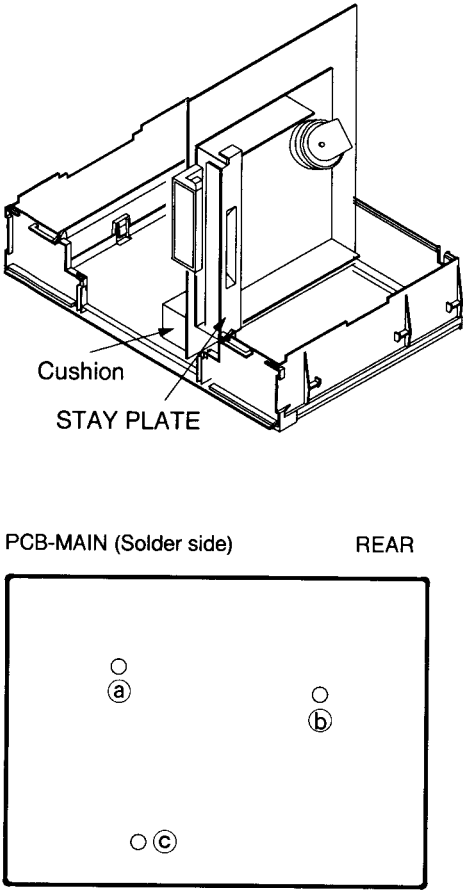
A replacement E<sup>2</sup>PROM is not initialized before shipping, so the E<sup>2</sup>PROM must be initialized when replaced.

Initialize the E<sup>2</sup>PROM by following the steps below.

1. Set the VCR to "CLOCK SET" mode. [B, E, IR]  
Set the VCR to "UHR-EINSTELLUNG" mode. [GY]
2. Push COUNTER RESET button on the remote hand unit for 8 seconds.
3. E<sup>2</sup>PROM initial setting is completed.

## SERVICE POSITION

Service Position	Service Item
<p>(A)</p> 	<ul style="list-style-type: none"> <li>• Worn parts on the deck (UPPER DRUM ASSY, PINCH ARM ASSY, A/C HEAD UNIT and FE HEAD.) can be replaced.</li> <li>• Checks at test points may be made to isolate a problem to a specific circuit.</li> </ul> <ol style="list-style-type: none"> <li>1. Remove the Top Cover and Front Panel. (Refer to Para. 1 and 2 of the DISASSEMBLY.)</li> </ol>
<p>(B)</p>  <p>PCB-MAIN (Component side)      REAR</p> 	<ul style="list-style-type: none"> <li>• Parts on the deck can be replaced.</li> <li>• Service can be executed with the EE picture displayed.</li> </ul> <ol style="list-style-type: none"> <li>1. Remove the DECK ASSY. (Refer to Para. 4 of the DISASSEMBLY.)</li> <li>2. Connect TP5X and TP5Y via diode (1SS252) as shown in below.</li> </ol> <p><b>Note:</b> Make this connection before turning the power on.</p>

Service Position	Service Item
<p>(C)</p>  <p>Cushion</p> <p>STAY PLATE</p> <p>PCB-MAIN (Solder side) REAR</p> <p>(a)</p> <p>(b)</p> <p>(c)</p>	<ul style="list-style-type: none"> <li>• Operation can be checked in every mode.</li> <li>• Parts on the Solder side of the PCB-MAIN can be checked and replaced.</li> </ul> <ol style="list-style-type: none"> <li>1. Remove the DECK ASSY, INSERT GUIDE, PCB-DUAL, , PCB-SAT and PCB-MAIN. (Refer to Para. 4 and 5 of the DISASSEMBLY and Para. 1, 3 and 4 of the HOW TO EXECUTE CIRCUIT BOARD SERVICE.)</li> <li>2. Install the three screws (a), (b) and (c) to secure the PCB-MAIN and DECK ASSY.</li> </ol> <p><b>Note</b> : Check the connection of the MC connector.</p> <ol style="list-style-type: none"> <li>3. Rotate the PCB-MAIN and DECK ASSY upward holding them in position.</li> <li>4. Connect all connectors on PCB-MAIN.</li> <li>5. Stand the DECK ASSY and the PCB-MAIN.</li> <li>6. Fix the PCB-MAIN on the Base chassis, providing a cushion between them for secure installation.</li> </ol>

# DECK OPERATION CHECK

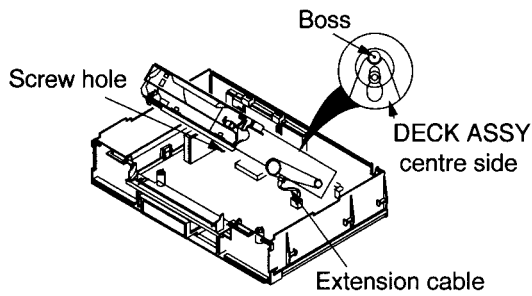


Fig. 1

PCB-MAIN (Component side) REAR

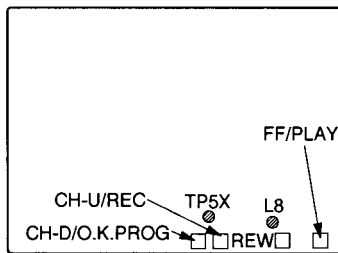


Fig. 2

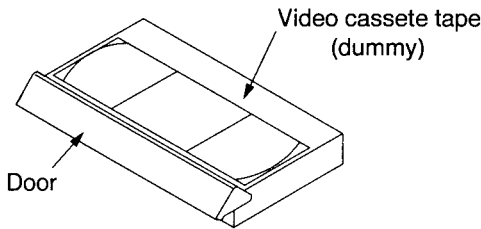


Fig. 3

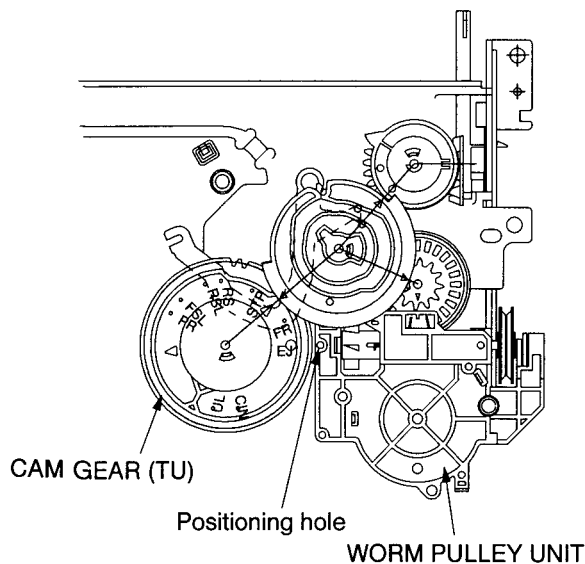


Fig. 4

Operation of the deck position and tape running systems can be checked according to the following method.

1. Unscrew all screws fastening the DECK ASSY and Shield Case.
2. Place the DECK ASSY on the Base Chassis so that the centre of the rear side aligns with the boss and that the rear side of the supply side aligns with the screw hole as shown in Fig. 1. Raise the front side of the DECK ASSY and hold it with a support.

**Note:** The MODE DETECT SENSOR, START SENSOR, END SENSOR, REEL SENSOR and RECORD PROTECTION SENSOR cannot operate in this state.

- Parts on the DECK (LOADING BELT and REEL BELT) can be replaced.

3. Connect L8 and TP5X via diode (1SS252) as shown in below.



**Note:** Connect them before plugging in the set.

4. Insert the power cord into the receptacle.
5. Insert the video cassette tape.

**Note:** This check may damage the cassette tape.

Use a dummy cassette tape with a door or other tapes for check purpose only.

6. Press the CH-U/REC and CH-D/O.K.PROG buttons on the PCB-MAIN to check the deck position.

CH-U/REC button : Operation in the loading direction.

CH-D/O.K.PROG button: Operation in the unloading direction.

7. Connect the MC connector and the CAPSTAN MOTOR on the PCB-MAIN with the Extension cable (859C433080). Press the FF/PLAY and REW buttons on the remote hand unit to check the operation of the tape running system.

**Note:** Take care so that the two connectors of the Extension cable are attached in the same direction, without twisting the cable.

FF/PLAY button : Forward rotation is implemented

REW button : Reverse rotation is implemented

- Example: Playback, REW/FF

1. Press the CH-U/REC or CH-D/O.K.PROG button to align the character "PR" or "FR" of the CAM GEAR (TU) with the positioning hole of the WORM PULLEY UNIT shown in Fig. 4.

PR : Playback position

FR : REW/FF position

2. For fast forward operation check, press the FF/PLAY button on the remote hand unit to make the CAPSTAN MOTOR rotate in the forward direction. For rewind operation check, press the REW button on the remote hand unit to make the CAPSTAN MOTOR rotate in the reverse direction.

# Electrical Adjustments

Perform only the alignments required. If proper equipment is not available, do not attempt an alignment.

## □ PRE-ADJUSTMENT SETTINGS

- Set the "COLOUR SYSTEM" to "PAL" mode in the MENU. [B, E, IR]
- Set the "FARBNORM" to "PAL" mode in the MENU. [GY]
- Set the "SYSTEMA" to "PAL" mode in the MENU. [GY]
- Set the "NICAM" to "OFF" mode in the MENU. [B, IR]
- Set the "NICAM/A2" to "OFF" mode in the MENU. [E]
- Set the "STEREO/2-TON" to "OFF" mode in the MENU. [GY]
- Set the "STEREO/DUALE" to "OFF" mode in the MENU. [GY]
- Set the "SHARPNESS" to "0" POSITION in the EXCELLENT PICTURE of the MENU. [B, E, IR]
- Set the "SCHAREFE" to "0" POSITION in the EXCELLENT PICTURE of the MENU. [GY]
- Set the "DEFINIZ" to "0" POSITION in the EXCELLENT PICTURE of the MENU. [GY]
- Set the "TAPE OPTIMIZER" to "OFF" mode in the EXCELLENT PICTURE of the MENU. [B, E, GY, IR]
- Set the "TAPE OPTIMIZER" to "AUS" mode in the EXCELLENT PICTURE of the MENU. [GY]
- Set the "RENTAL PB" to "OFF" mode in the INITIAL SET-UP of the MENU. [B, E, IR]
- Set the "TAPE OPTIMIZER" to "AUS" mode in the EXCELLENT PICTURE of the MENU. [GY]
- Set the "FUNZIONE RENTAL" to "OFF" mode in the SISTEMAZIONE INIZIALE of the MENU. [GY]

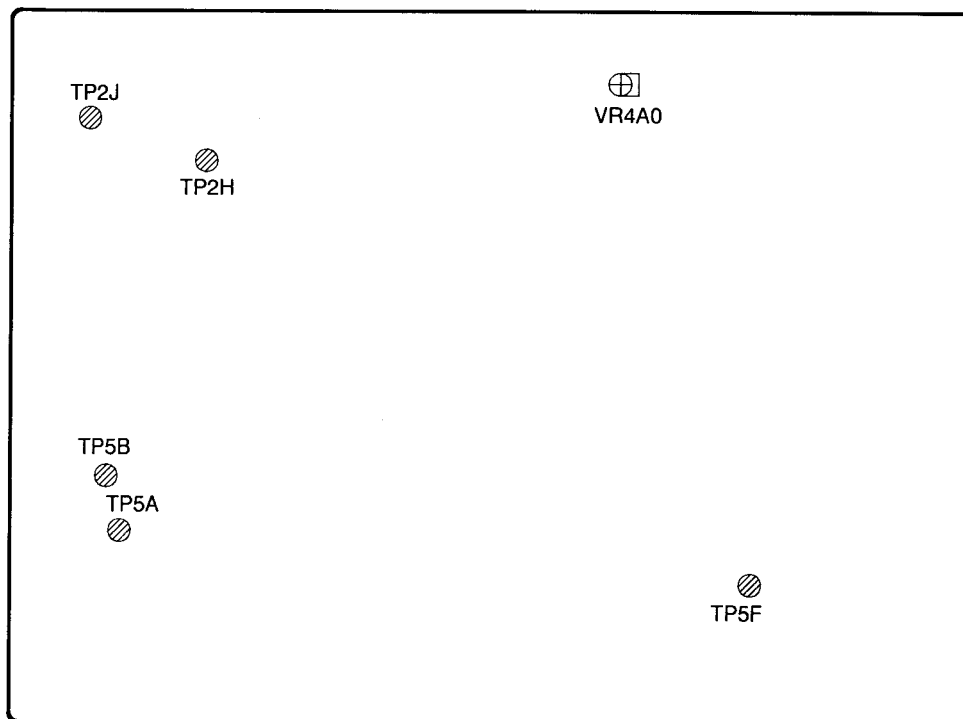
## □ MEASURING EQUIPMENT

- Oscilloscope (10:1 probe unless 1:1 specified.)
- Frequency counter
- Electrical tools

## LOCATIONS

PCB-MAIN (Component side)

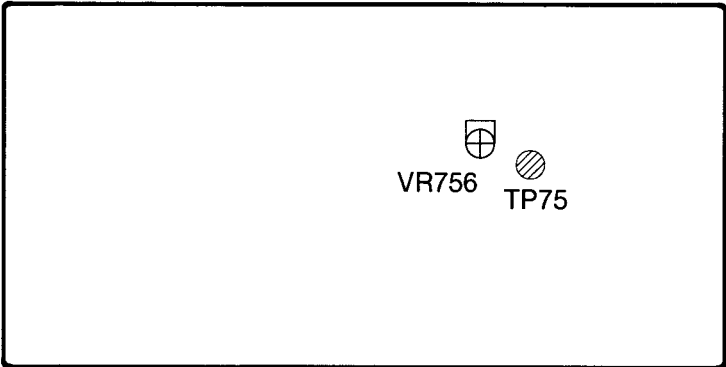
REAR





PCB-DUAL (Component side)

TOP

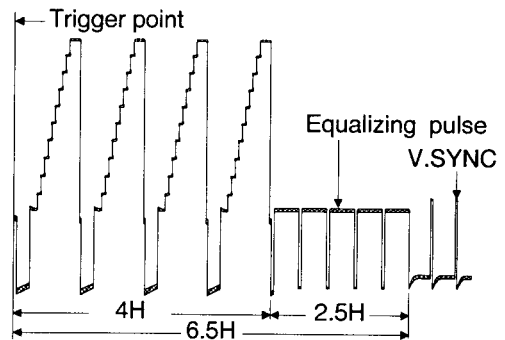
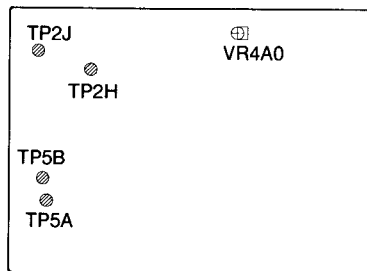


[ Servo circuit ] 1. Playback Switching Point	<b>Adjustment purpose</b>	Video switch over timing during playback.
	<b>Symptom when incorrectly adjusted</b>	Switching noise or jitter in the playback picture.

Measuring instrument and condition		VCR set up condition	
Oscilloscope		<b>Input signal</b>	---
<b>Test point</b>	TP2J	<b>Using tape</b>	Alignment tape (PS2, stair step)
<b>EXT trigger</b>	TP2H	<b>VCR condition</b>	Playback
<b>Measurement range</b>	DIV 20mV TIM 50μs	<b>Using Jig</b>	---

1. Playback an alignment tape (PS2, stair step).
2. Short-circuit TP5A to TP5B. Confirm that the "D" displayed in Fluorescent Display flashes fast.
3. Observe the waveform at TP2J.
4. Set the oscilloscope's slope to (-).
5. Adjust VR4A0 so that the trigger point is located at  $6.5 \pm 1.0H$  before the vertical synchronizing signal.
6. Open-circuit TP5A to TP5B.

**PCB-MAIN (Component side)**

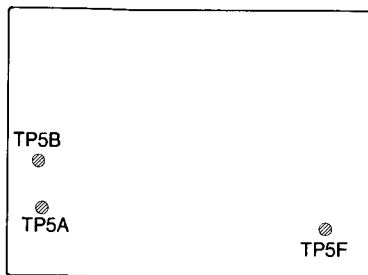


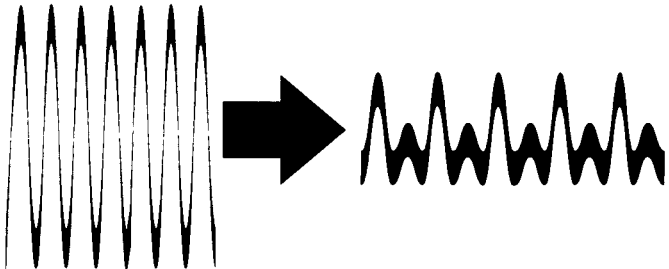
[ Timer circuit ] 2. Clock Frequency Correction	<b>Adjustment purpose</b>	To set the accuracy of clock.
	<b>Symptom when incorrectly adjusted</b>	Poor clock accuracy.

Measuring instrument and condition		VCR set up condition	
Frequency Counter		<b>Input signal</b>	---
<b>Test point</b>	TP5F	<b>Using tape</b>	---
<b>EXT trigger</b>	---	<b>VCR condition</b>	POWER off
<b>Measurement range</b>	---	<b>Using Jig</b>	---

1. Set the VCR to POWER off. (With the tape ejected from VCR.)
2. Short-circuit TP5A to TP5B.
3. Observe the frequency at TP5F.
4. Be certain that the frequency is between 262.1000 ~ 262.1882kHz.
5. Use the number buttons on the remote hand unit to enter the last three digits of the frequency counter reading (262.1@b@ckHz). (Confirm that the "." is not displayed in fluorescent display.) Enter the digits in @b@c sequence.
6. Push the REC button on the remote hand unit. (Confirm that the "." is displayed in fluorescent display.)
7. Open-circuit TP5A to TP5B.

**PCB-MAIN (Component side)**



<b>[Dual Audio circuit ]</b> 3. Channel Separation ([E,GY] only)	<b>Adjustment purpose</b> Positioning of audio separation.  <b>Symptom when incorrectly adjusted</b> Mixing audio separation.																								
<b>Measuring instrument and condition</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Oscilloscope</td> <td style="text-align: center;"><b>Input signal</b></td> <td style="text-align: center;">RF signal (Stereo sound)</td> </tr> <tr> <td style="text-align: center;"><b>Test point</b></td> <td style="text-align: center;">TP75</td> <td style="text-align: center;"><b>Using tape</b></td> <td style="text-align: center;">---</td> </tr> <tr> <td style="text-align: center;"><b>EXT trigger</b></td> <td style="text-align: center;">---</td> <td style="text-align: center;"><b>VCR condition</b></td> <td style="text-align: center;">STOP</td> </tr> <tr> <td style="text-align: center;"><b>Measurement range</b></td> <td style="text-align: center;">DIV 20mV TIM 2ms</td> <td style="text-align: center;"><b>Using Jig</b></td> <td style="text-align: center;">---</td> </tr> </table>	Oscilloscope		<b>Input signal</b>	RF signal (Stereo sound)	<b>Test point</b>	TP75	<b>Using tape</b>	---	<b>EXT trigger</b>	---	<b>VCR condition</b>	STOP	<b>Measurement range</b>	DIV 20mV TIM 2ms	<b>Using Jig</b>	---	<table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr> <td style="text-align: center;">PILOT</td> <td style="text-align: center;">50% AM MODULATION</td> </tr> <tr> <td style="text-align: center;">RIGHT CH</td> <td style="text-align: center;">1kHz, 100% FM MODULATION</td> </tr> <tr> <td style="text-align: center;">LEFT CH</td> <td style="text-align: center;">NO MODULATION</td> </tr> <tr> <td style="text-align: center;">RF INPUT</td> <td style="text-align: center;">70dB<math>\mu</math>(75<math>\Omega</math> LOAD)</td> </tr> </table> <ol style="list-style-type: none"> <li>1. Supply an RF signal.</li> <li>2. Set the VCR to STEREO mode.</li> <li>3. Set the VCR to TUNER mode.</li> <li>4. Observe the waveform at TP75.</li> <li>5. Adjust VR756 so that the audio output signal at L-CH is minimum.</li> </ol> <p><b>Note:</b> This adjustment should be done precisely because it determines the separation.</p>	PILOT	50% AM MODULATION	RIGHT CH	1kHz, 100% FM MODULATION	LEFT CH	NO MODULATION	RF INPUT	70dB $\mu$ (75 $\Omega$ LOAD)
Oscilloscope		<b>Input signal</b>	RF signal (Stereo sound)																						
<b>Test point</b>	TP75	<b>Using tape</b>	---																						
<b>EXT trigger</b>	---	<b>VCR condition</b>	STOP																						
<b>Measurement range</b>	DIV 20mV TIM 2ms	<b>Using Jig</b>	---																						
PILOT	50% AM MODULATION																								
RIGHT CH	1kHz, 100% FM MODULATION																								
LEFT CH	NO MODULATION																								
RF INPUT	70dB $\mu$ (75 $\Omega$ LOAD)																								
<b>PCB-DUAL (Component side)</b>  <div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> <div style="text-align: center;">             VR756                TP75           </div> </div>																									

# MECHANICAL ADJUSTMENT AND REPLACEMENT

## 1. Cleaning the DECK

The following parts require cleaning whenever serviced to maintain satisfactory performance.

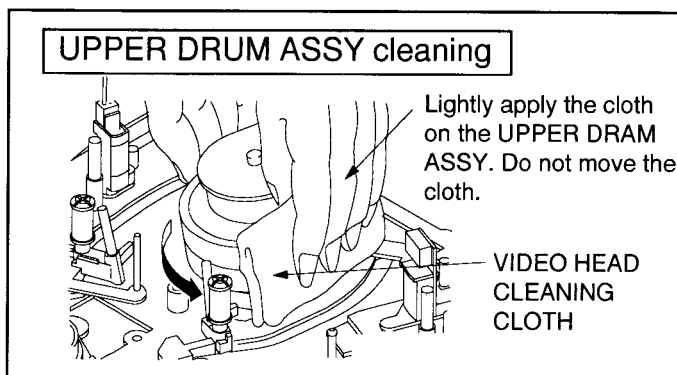
### 1-1 VIDEO HEAD

1. Clean the VIDEO HEADS by the following method.  
Dust and other foreign objects on the VIDEO HEADS disturb the normal playback picture.  
Dampen a VIDEO HEAD CLEANING CLOTH with alcohol. Hold the cloth against the DRUM and slowly turn the DRUM counte-r-clockwise to clean.

**Note :** Do not directly touch the HEAD attached to the UPPER DRUM ASSY. The HEAD is very hard but brittle to impact, especially in the vertical direction.

Do not apply force in the vertical direction.

2. Allow residual alcohol to dry thoroughly before running a tape. Otherwise, the liquid may stick to and damage the tape.



### 1-2 Tape Transport (Refer to Fig. 1.)

Clean the following parts of the Tape transport.

1. TENSION PIN
2. GUIDE POLE (SP)
3. FE HEAD
4. SLANT POLE (SP)
5. UPPER/LOWER DRUM ASSY
6. SLANT POLE (TU)
7. A/C HEAD
8. GUIDE POLE (TU)
9. CAPSTAN SHAFT
10. GUIDE PIN (TU)
11. GUIDE ROLLER (SP)
12. GUIDE ROLLER (TU)
13. PINCH ROLLER
14. IMPEDANCE UNIT (SP)

1. Clean the tape transport using gauze dampened with alcohol, except the GUIDE ROLLER (SP), GUIDE ROLLER (TU) and PINCH ROLLER for which dry gauze should be used.
2. Allow residual alcohol to dry thoroughly before running a tape. Otherwise the liquid may stick to and damage the tape.

### 1-3 REEL DISK Drive System

1. Clean the REEL DISK braking surfaces and the REEL BELT.
2. Clean the REEL DISK drive system using gauze dampened with alcohol, except the REEL BELT for which dry gauze shall be used.
3. Allow residual alcohol to dry thoroughly before operation.

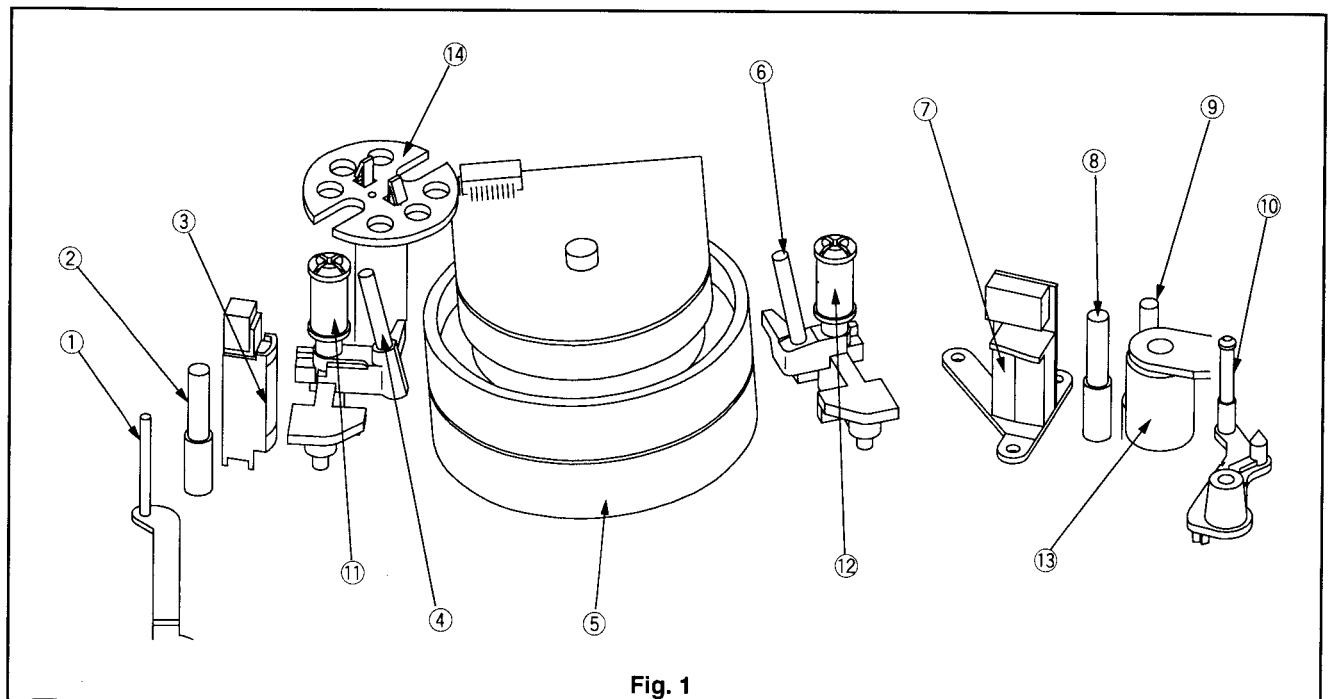


Fig. 1

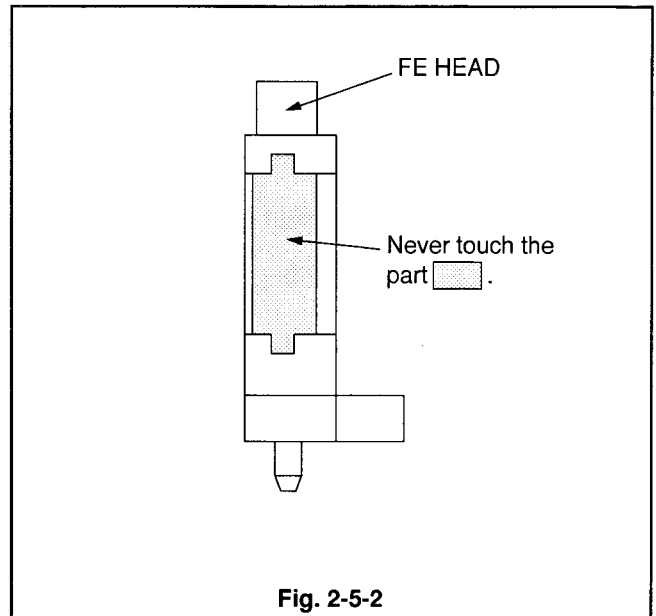


Fig. 2-5-2

## 2-6 SHUT LEVER UNIT

Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- STAY PLATE (Para. 2-2)
- BOTTOM UNIT (Para. 2-3)

### (Removal)

- 1 Unfasten the two catches (a) and (b) of the SHUT LEVER UNIT shown in Fig. 2-6-1 to remove the SHUT LEVER UNIT.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-6-1 on the MAIN PLATE ASSY.
- 2 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-6-1 on the new SHUT LEVER UNIT.
- 3 Install the SHUT LEVER UNIT shown in Fig. 2-6-1.
- 4 Insert the spring of the SHUT LEVER UNIT under groove of the MAIN PLATE ASSY shown in Fig. 2-6-2.
- 5 Make sure that the SHUT LEVER UNIT returns in the direction shown by arrow (B) when it is moved in the direction shown by arrow (A).

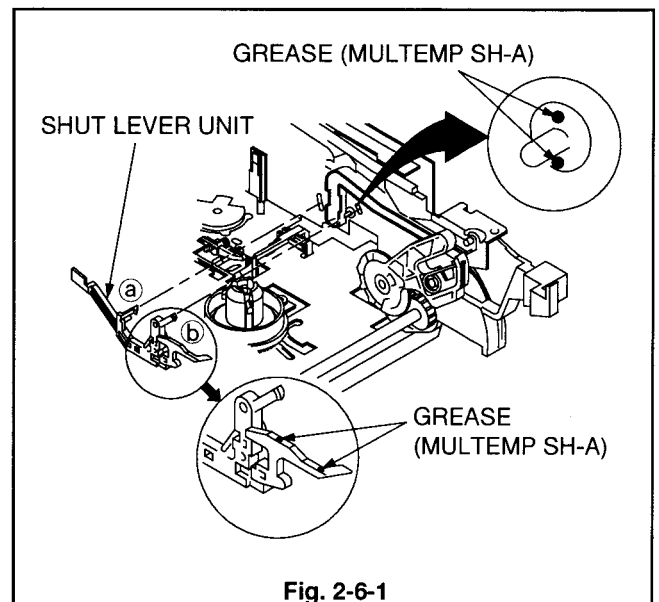


Fig. 2-6-1

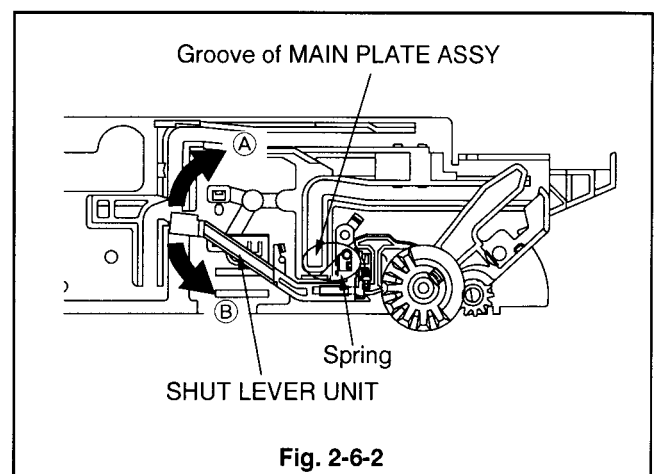


Fig. 2-6-2

## 2-7 LAMP GUIDE, MODE POSITION GUIDE

Position the set normally.

### (Removal)

- 1 Unfasten the catch (a) of the MAIN PLATE ASSY shown in Fig. 2-7-1 to remove the LAMP GUIDE.
- 2 Unfasten the catch (b) of the MODE POSITION GUIDE shown in Fig. 2-7-1 to remove the MODE POSITION GUIDE.

### (Installation)

- 1 Clean the part A of the MODE POSITION GUIDE shown in Fig. 2-7-2 with the VIDEO HEAD CLEANING CLOTH.

**Note :** Never use alcohol or equivalent solvent.

- 2 Install the MODE POSITION GUIDE shown in Fig. 2-7-1.
- 3 Clean the part B of the LAMP GUIDE shown in Fig. 2-7-2 with the VIDEO HEAD CLEANING CLOTH.

**Note :** Never use alcohol or equivalent solvent.

- 4 Install the LAMP GUIDE shown in Fig. 2-7-1.
- 5 After installing the LAMP GUIDE and MODE POSITION GUIDE, clean the surface of them with the VIDEO HEAD CLEANING CLOTH.

**Note :** Never use alcohol or equivalent solvent.

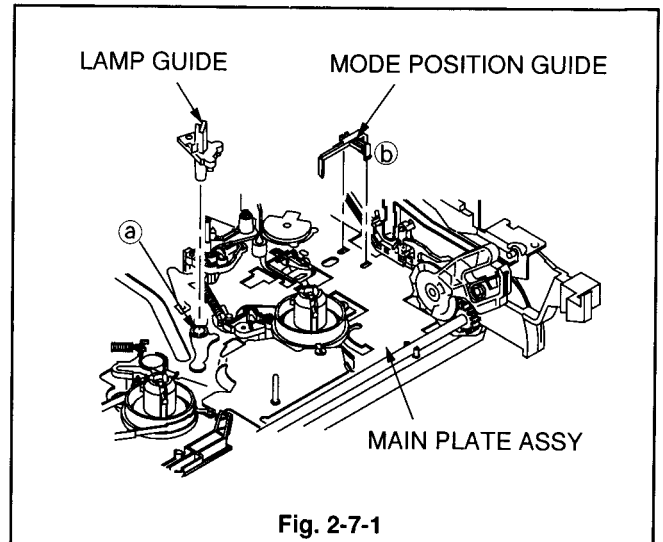


Fig. 2-7-1

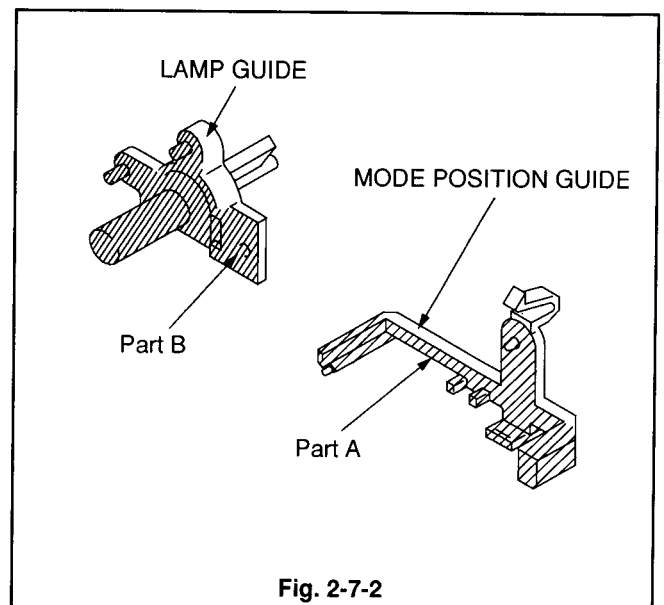


Fig. 2-7-2

## 2-8 TENSION SPRING, TENSION ARM, TENSION BELT UNIT

Position the set normally.

### (Removal)

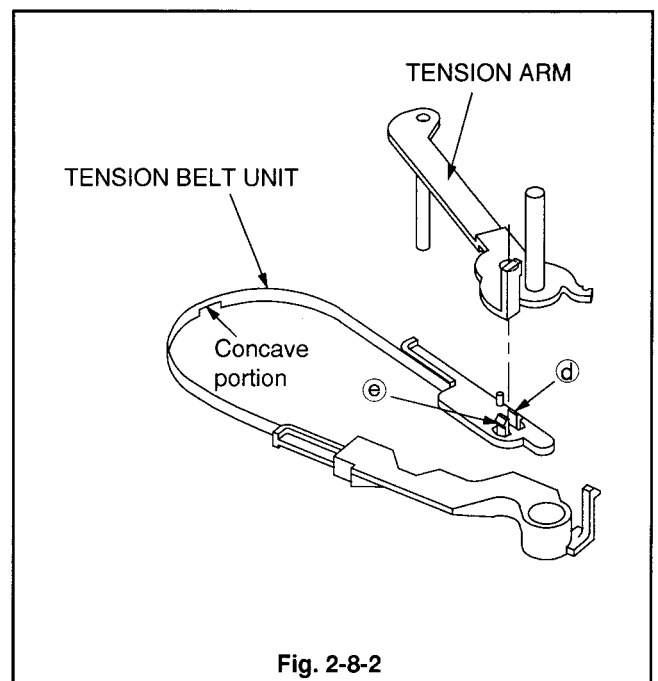
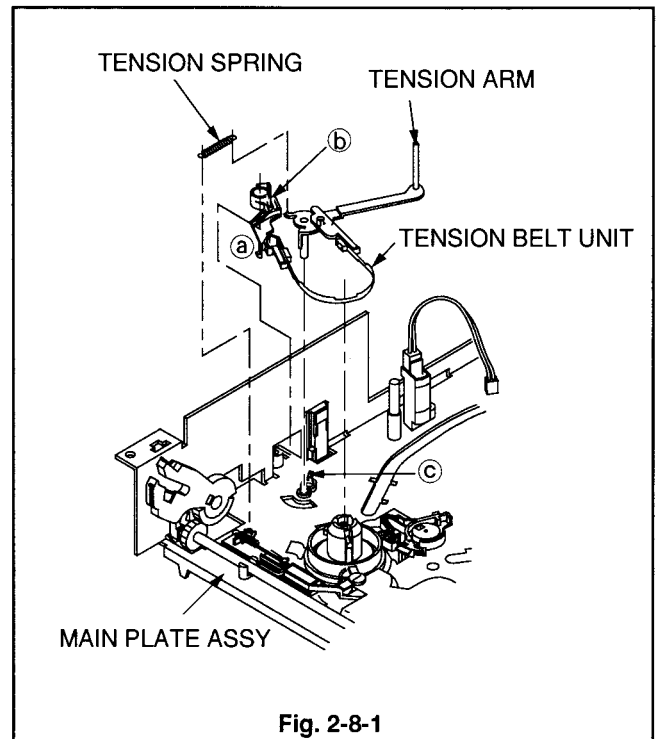
- 1 Remove the TENSION SPRING shown in Fig. 2-8-1.
- 2 Move the part A of the MAIN PLATE ASSY shown in Fig 2-8-3 in the direction shown by arrow (A) with a minus driver, etc.
- 3 Unfasten the two catches (a) and (b) of the TENSION BELT UNIT shown in Fig. 2-8-1. Unfasten the catch (c) of the MAIN PLATE ASSY. Remove the TENSION BELT UNIT with the TENSION ARM attached.
- 4 Unfasten the two catches (d) and (e) of the TENSION BELT UNIT shown in Fig. 2-8-2 to remove the TENSION ARM .

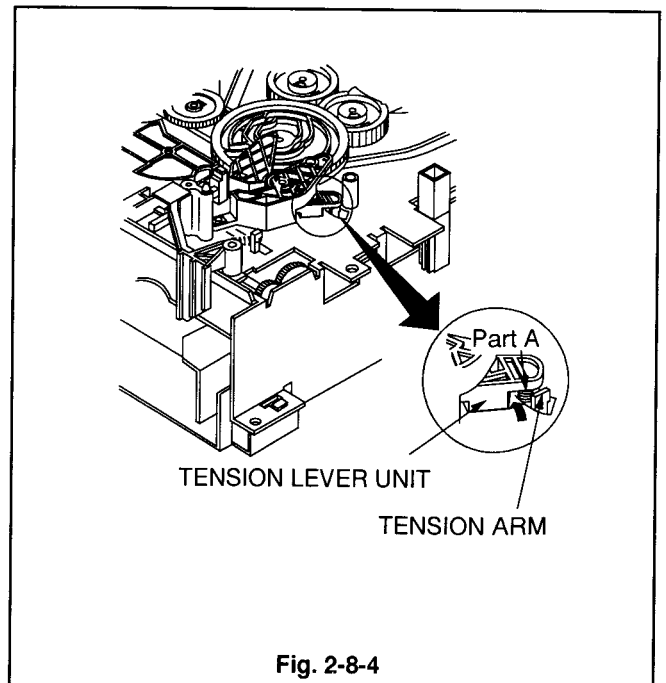
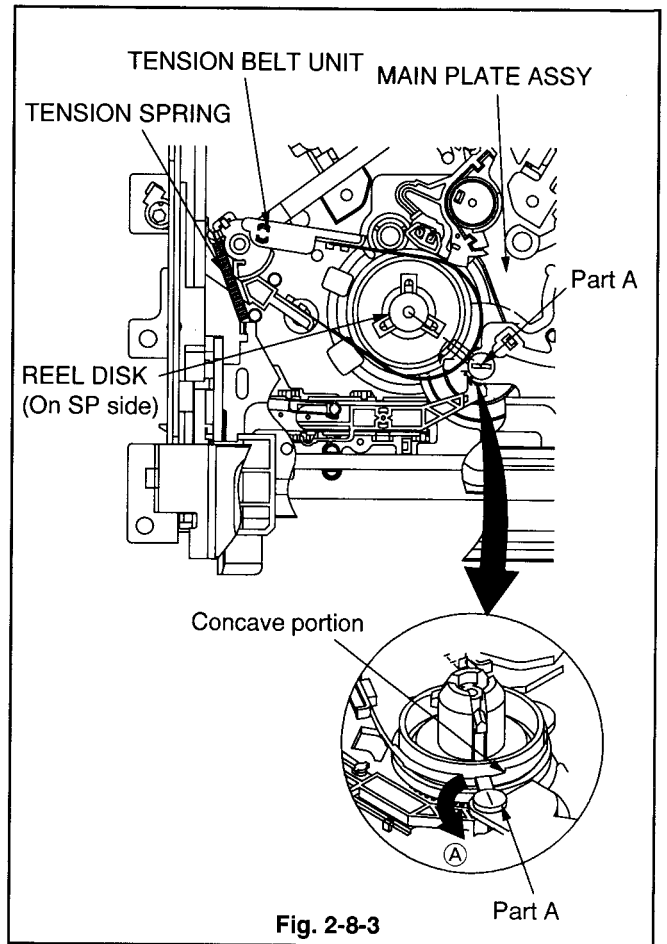
### (Installation)

- 1 Attach the TENSION ARM on the TENSION BELT UNIT shown in Fig. 2-8-2.
- 2 Fasten the TENSION BELT UNIT around the part shown in Fig. 2-8-3 of the REEL DISK (On SP side).

**Note :** Take care never to make GREASE or OIL adhere to the TENSION BELT UNIT during installation.

- 3 Move the part A of the spring of the TENSION LEVER UNIT shown in Fig. 2-8-4 in the direction shown by the arrow and install the TENSION ARM on the position shown in Fig. 2-8-4.
- 4 Move the part A of the MAIN PLATE ASSY in the opposite direction of arrow (A) to let it enter the concave portion of the TENSION BELT UNIT as shown in Fig. 2-8-3 so that it points to the centre of the REEL DISK (On SP side).
- 5 Install the TENSION SPRING shown in Fig. 2-8-1.
- 6 Perform "Adjustment of BACK TENSION and TENSION PIN Position" in Para. 3-1 of "Interchangeability Adjustment of the Mechanism".







## 2-9 BRAKE SPRING (for MAIN BRAKE (SP)), MAIN BRAKE (SP), BRAKE SPRING (for MAIN BRAKE (TU)), MAIN BRAKE (TU)

Position the set normally.

### (Removal)

- 1 Remove the BRAKE SPRING (for MAIN BRAKE (SP)) shown in Fig. 2-9.
- 2 Unfasten the catch (a) of the MAIN BRAKE (SP) shown in Fig. 2-9 with tweezers, etc. to remove the MAIN BRAKE (SP).
- 3 Remove the BRAKE SPRING (for MAIN BRAKE (TU)) shown in Fig. 2-9.
- 4 Unfasten the catch (b) of the MAIN BRAKE (TU) shown in Fig. 2-9 to remove the MAIN BRAKE (TU).

### (Installation)

- 1 Install the MAIN BRAKE (TU) shown in Fig. 2-9.
- 2 Install the BRAKE SPRING (for MAIN BRAKE (TU)) shown in Fig. 2-9.
- 3 Install the MAIN BRAKE (SP) shown in Fig. 2-9.
- 4 Install the BRAKE SPRING (for MAIN BRAKE (SP)) shown in Fig. 2-9.

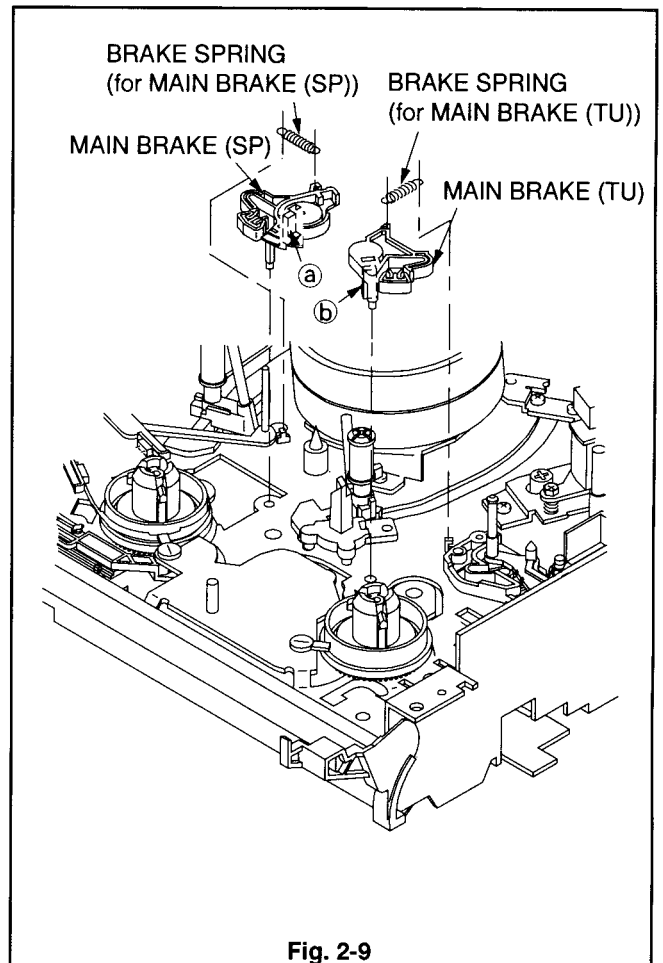


Fig. 2-9

## 2-10 REEL DISK (On SP side), REEL DISK (On TU side)

Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- TENSION SPRING (Para. 2-8)
- TENSION ARM (Para. 2-8)
- TENSION BELT UNIT (Para. 2-8)

### (Removal)

- 1 Move the MAIN BRAKE (SP) in the direction shown by arrow (A) hold it in that state. Remove the REEL DISK (On SP side) as shown in Fig. 2-10-1.
- 2 Move the part B in the direction shown by arrow (B) with a minus screw driver as shown in Fig. 2-10-1.
- 3 Move the MAIN BRAKE (TU) in the direction shown by arrow (C) hold it in that state. Remove the REEL DISK (On TU side) as shown in Fig. 2-10-1.

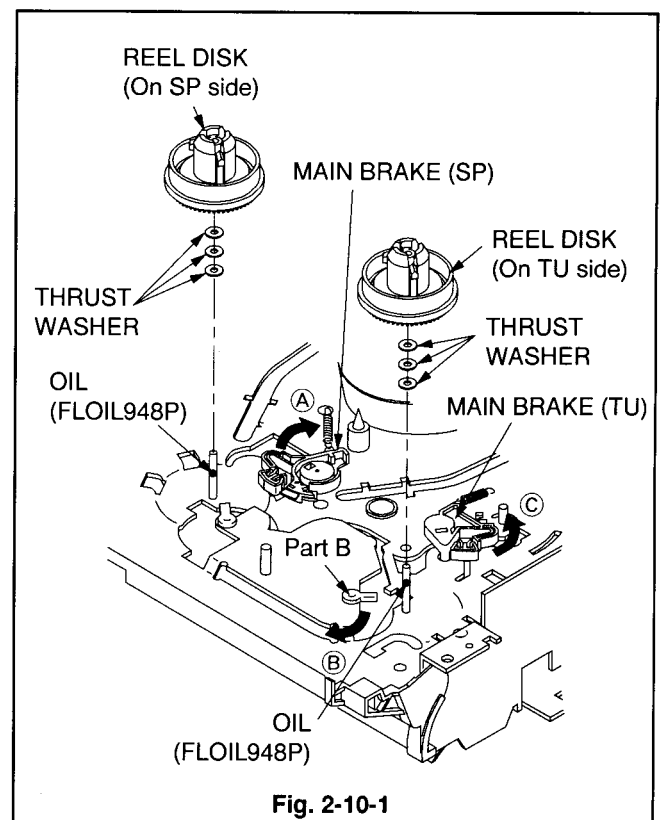
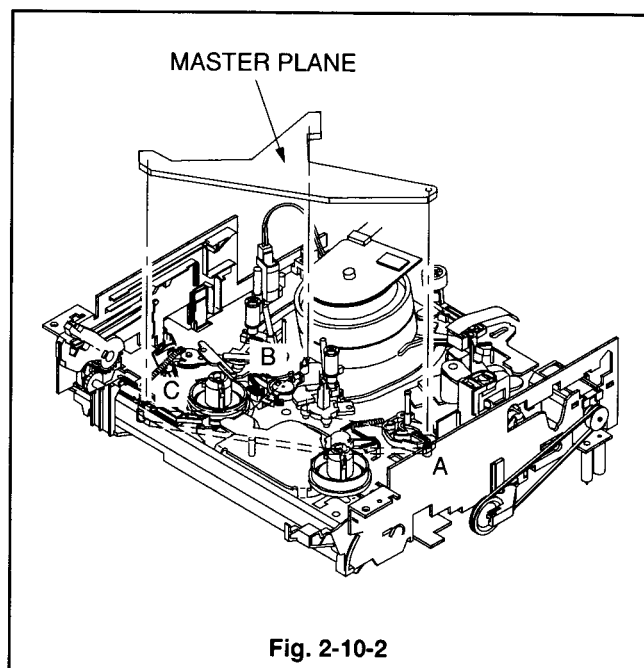


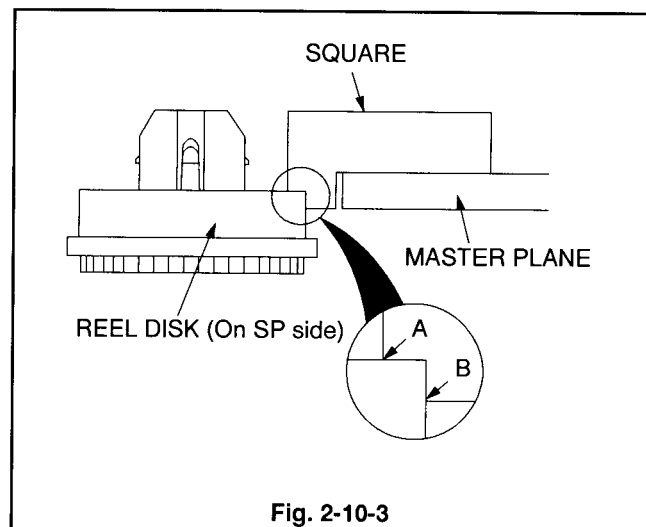
Fig. 2-10-1

**(Installation)**

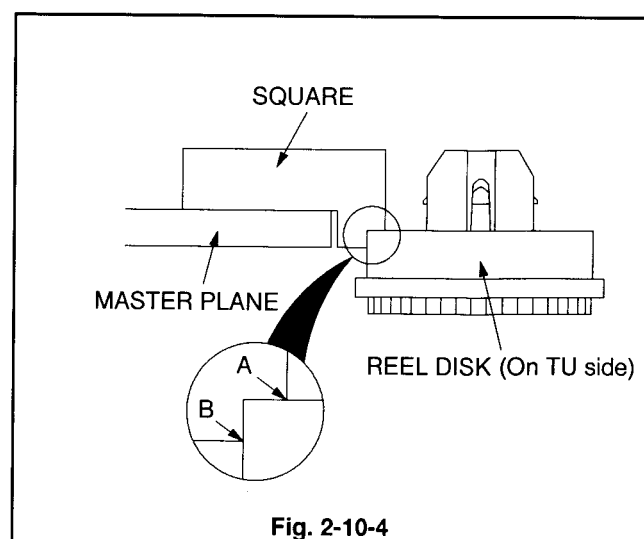
- 1 Apply OIL (FLOIL 948P) [859D154O20] to the shaft shown in Fig. 2-10-1 in which the REEL DISK (On SP side) on the MAIN PLATE ASSY is to enter.
- 2 Install the REEL DISK (On SP side) shown in Fig. 2-10-1.
- 3 Place the height adjustment jig [MASTER PLANE] (859C342O20) shown in Fig. 2-10-2 in the reference position.  
(Place the MASTER PLANE so that the points A, B and C of the MAIN PLATE ASSY support it.)
- 4 Place the height adjustment jig [SQUARE] (859C433O60) shown in Fig. 2-10-2 on the MASTER PLANE. Move it to the position shown in Fig. 2-10-3 to make sure that A can pass but B cannot pass under the REEL DISK (On SP side).
- 5 If the height of the REEL DISK (On SP side) is not correct, adjust it to the height specified in Item 4 by removing or adding the THRUST WASHER to be fixed to the shaft under the REEL DISK (On SP side).
  - If it is high, remove THRUST WASHER.
  - If it is low, add THRUST WASHER.
- 6 Install the TENSION BELT UNIT, TENSION ARM and TENSION SPRING.  
(Refer to Para. 2-8 for the installation method.)
- 7 Make sure that the REEL DISK (On SP side) shown in Fig. 2-10-1 cannot come off.
- 8 Apply OIL (FLOIL 948P) [859D154O20] to the shaft shown in Fig. 2-10-1 in the REEL DISK (On TU side) on the MAIN PLATE ASSY is to enter.
- 9 Install the REEL DISK (On TU side) shown in Fig. 2-10-1.
- 10 Place the height adjustment jig [MASTER PLANE] (859C342O20) shown in Fig. 2-10-2 in the reference position.  
(Place the MASTER PLANE so that the points A, B and C of the MAIN PLATE ASSY support it.)
- 11 Place the height adjustment jig [SQUARE] (859C433O60) shown in Fig. 2-10-2 on the MASTER PLANE. Move it to the position shown in Fig. 2-10-4 to make sure that A can pass but B cannot pass under the REEL DISK (On TU side).
- 12 If the height of the REEL DISK (On TU side) is not correct, adjust it to the height specified in Item 11 by remove or adding the THRUST WASHER to be fixed to the shaft under the REEL DISK (On TU side).
  - If it is high, remove THRUST WASHER.
  - If it is low, add THRUST WASHER.
- 13 Move the part B of the MAIN PLATE ASSY in the opposite direction of arrow ㊸ as shown in Fig. 2-10-1 so that it points to the centre of the REEL DISK (On TU side).
- 14 Make sure that the REEL DISK (On TU side) shown in Fig. 2-10-1 cannot come off.



**Fig. 2-10-2**



**Fig. 2-10-3**



**Fig. 2-10-4**

## 2-11 LOADING BELT, LOADING MOTOR ASSY

Position the set normally.

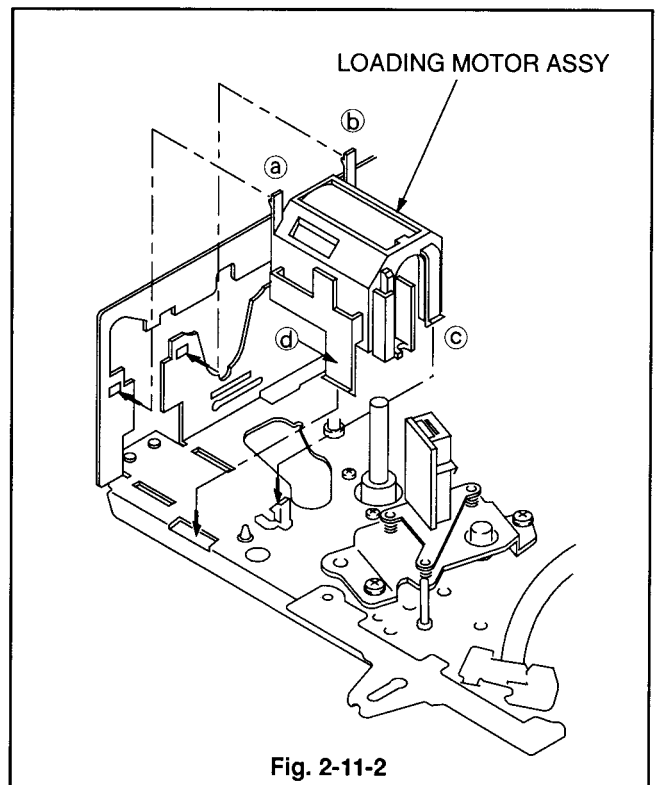
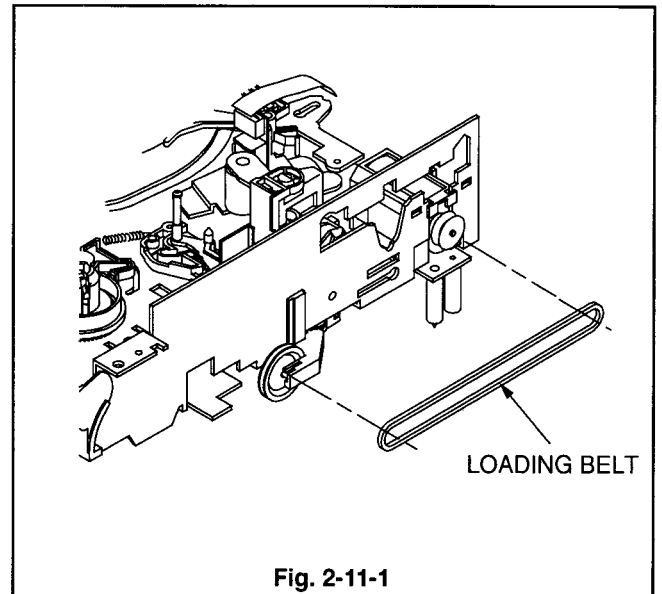
### (Removal)

- 1 Remove the LOADING BELT shown in Fig. 2-11-1.
- 2 Unfasten the two catches (a) and (b) of the LOADING MOTOR ASSY shown in Fig. 2-11-2 and the two catches (c) and (d) of it shown in Fig. 2-11-2 to remove the LOADING MOTOR ASSY.

### (Installation)

- 1 Install the LOADING MOTOR ASSY shown in Fig. 2-11-2.
- 2 Fasten the LOADING BELT shown in Fig. 2-11-1.

**Note :** Take care never to make GREASE or OIL adhere to the LOADING BELT during installation.

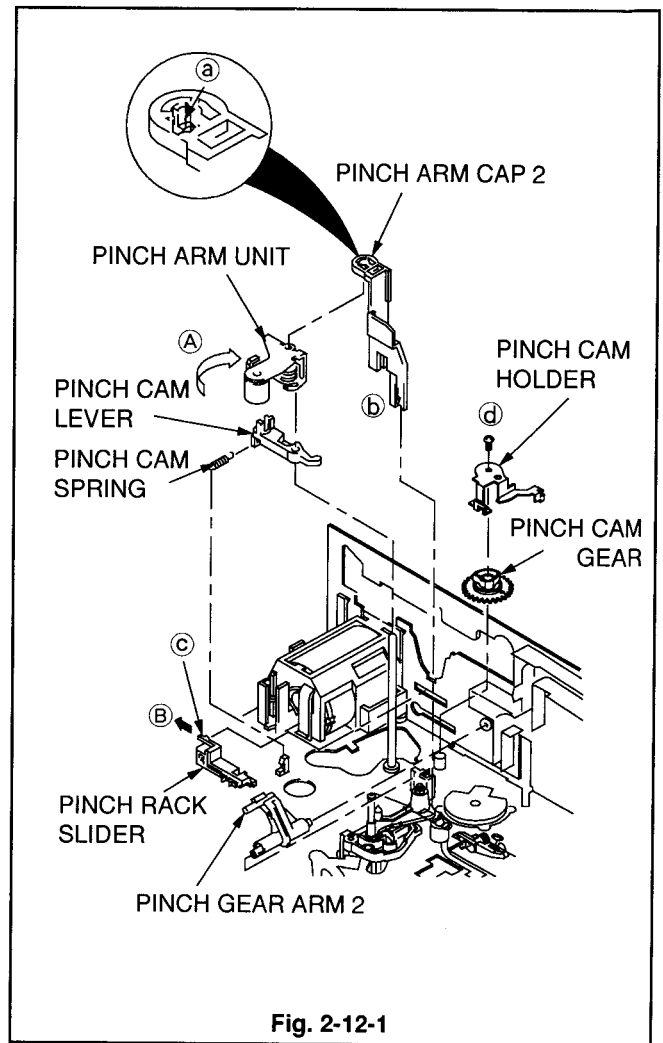


**2-12 PINCH ARM CAP 2,  
PINCH ARM UNIT,  
PINCH GEAR ARM 2,  
PINCH CAM HOLDER,  
PINCH CAM SPRING,  
PINCH CAM LEVER,  
PINCH RACK SLIDER,  
PINCH CAM GEAR**

Position the set normally.

**(Removal)**

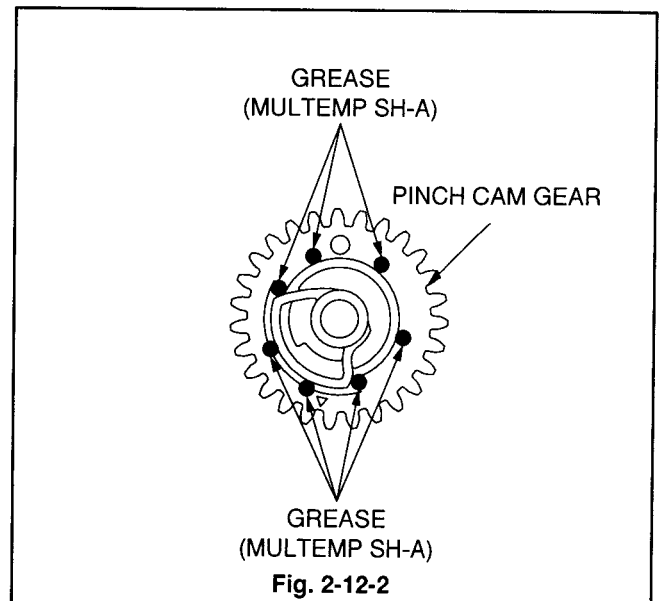
- 1 Unfasten the two catches (a) and (b) of the PINCH ARM CAP 2 shown in Fig. 2-12-1 with the tweezers, etc. to remove the PINCH ARM CAP 2.
- 2 Move the PINCH ARM UNIT in the direction shown by arrow (A) to remove it as shown in Fig. 2-12-1.
- 3 Remove the PINCH GEAR ARM 2 shown in Fig. 2-12-1.
- 4 Remove the PINCH CAM SPRING shown in Fig. 2-12-1.
- 5 Remove the PINCH CAM LEVER shown in Fig. 2-12-1.
- 6 Unfasten the catch (c) of the PINCH RACK SLIDER shown in Fig. 2-12-1. Move the PINCH RACK SLIDER in the direction shown by arrow (B) to remove it.
- 7 Unscrew the screw (d) of the PINCH CAM HOLDER shown in Fig. 2-12-1 to remove the PINCH CAM HOLDER.
- 8 Remove the PINCH CAM GEAR shown in Fig. 2-12-1.



**Fig. 2-12-1**

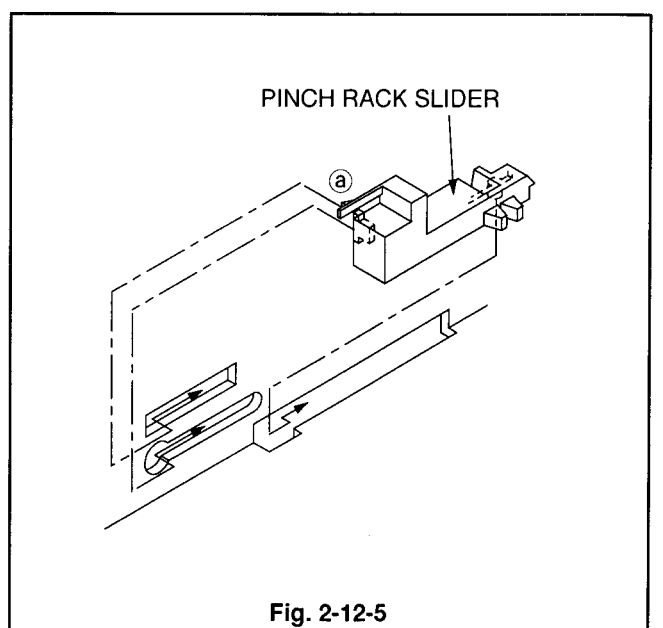
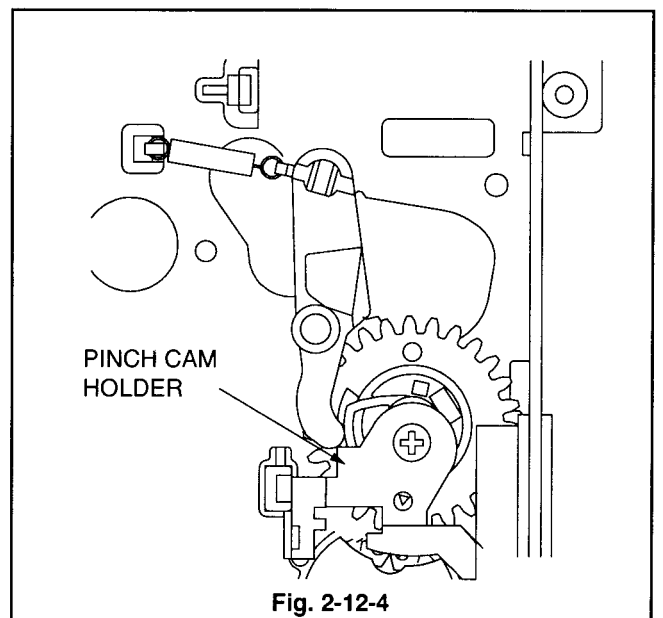
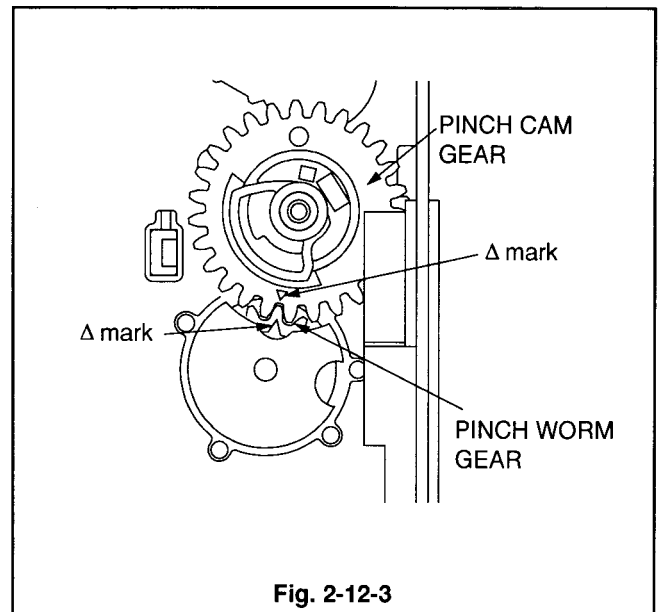
**(Installation)**

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-12-2 on the new PINCH CAM GEAR.

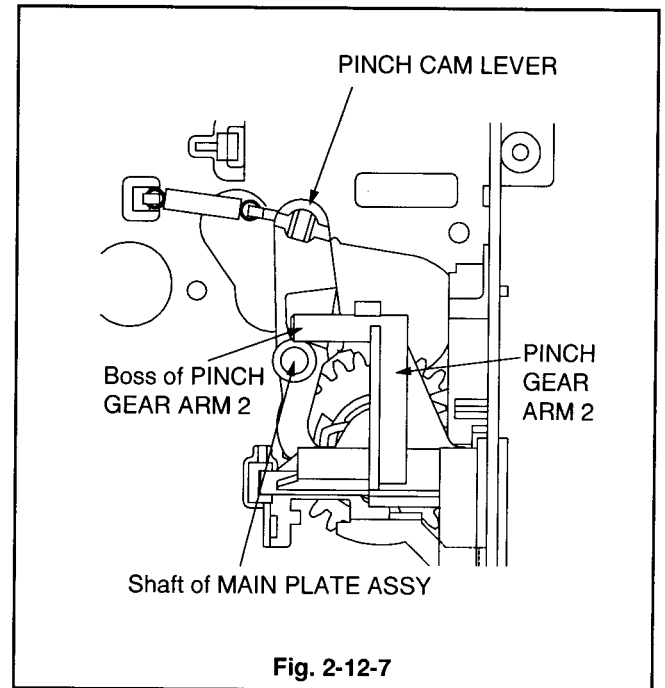
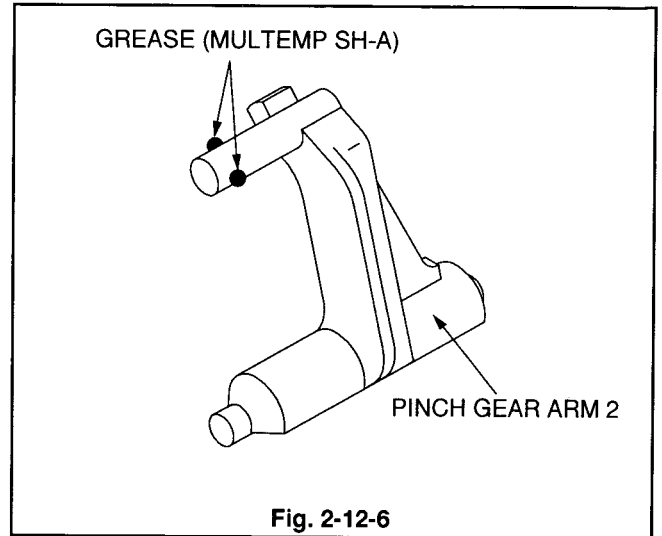


**Fig. 2-12-2**

- 2 Set the PINCH CAM GEAR so that the  $\Delta$  mark on it matches with the  $\Delta$  mark on the PINCH WORM GEAR as shown in Fig. 2-12-3 and install it.
- 3 Install the PINCH CAM HOLDER on the position shown in Fig. 2-12-4.
- 4 Move the PINCH RACK SLIDER in the direction shown by the arrow as shown in Fig. 2-12-5.
- 5 Make sure that the catch (a) of the PINCH RACK SLIDER enters the hole of the MAIN PLATE ASSY as shown in Fig. 2-12-5.
- 6 Install the PINCH CAM LEVER shown in Fig. 2-12-1.
- 7 Install the PINCH CAM SPRING shown in Fig. 2-12-1.



- 8 Apply GREASE (MULTEMP SH-A) [859D055080] to the area specified in Fig. 2-12-6 on the new PINCH GEAR ARM 2.
- 9 Install the PINCH GEAR ARM 2 shown in Fig. 2-12-7 so that the boss of the PINCH GEAR ARM 2 and the shaft of the MAIN PLATE ASSY are positioned as shown.
- 10 Move the PINCH ARM UNIT in the opposite direction of arrow (A) to install it as shown in Fig. 2-12-1.
- 11 Install the PINCH ARM CAP 2 shown in Fig. 2-12-1.



## 2-13 GUIDE ARM ASSY (TU), GUIDE SPRING (TU), LOADING TG LEVER

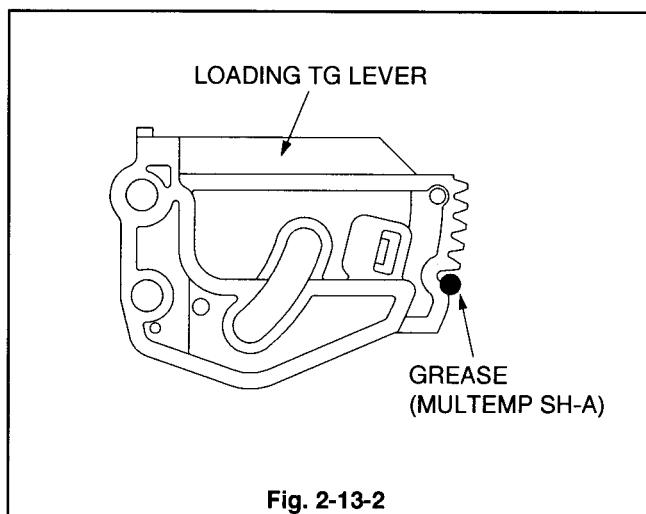
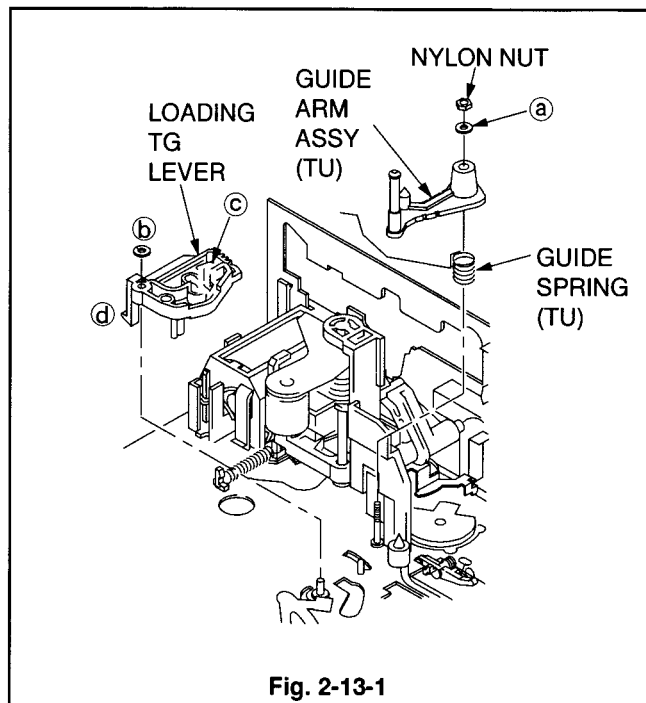
Position the set normally.

### (Removal)

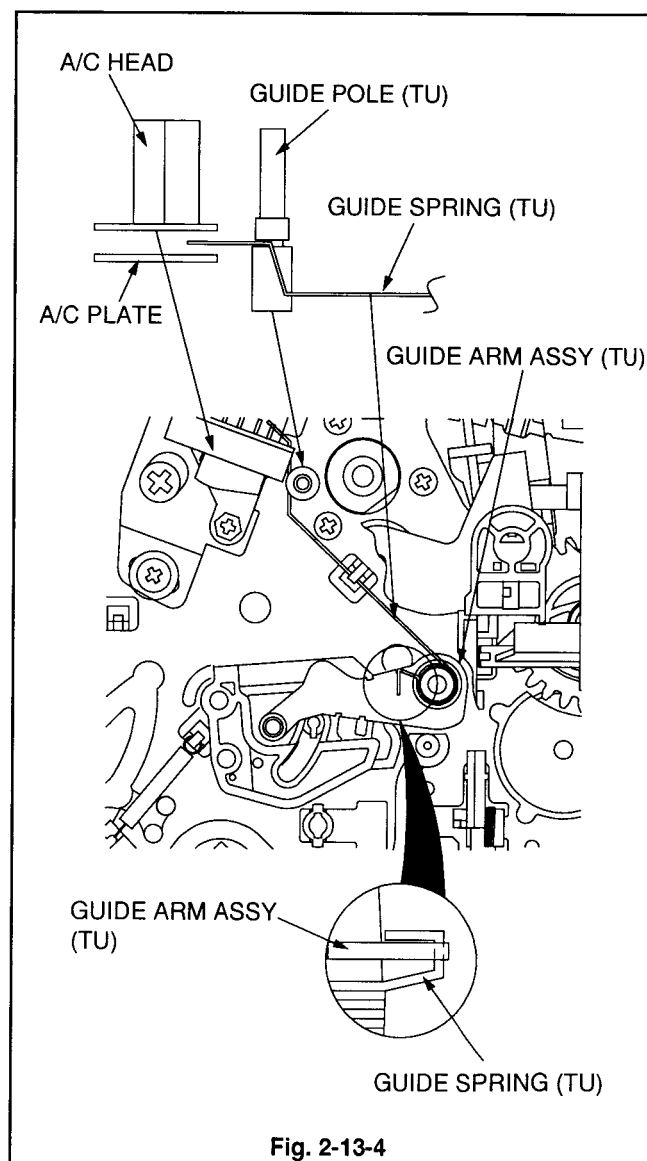
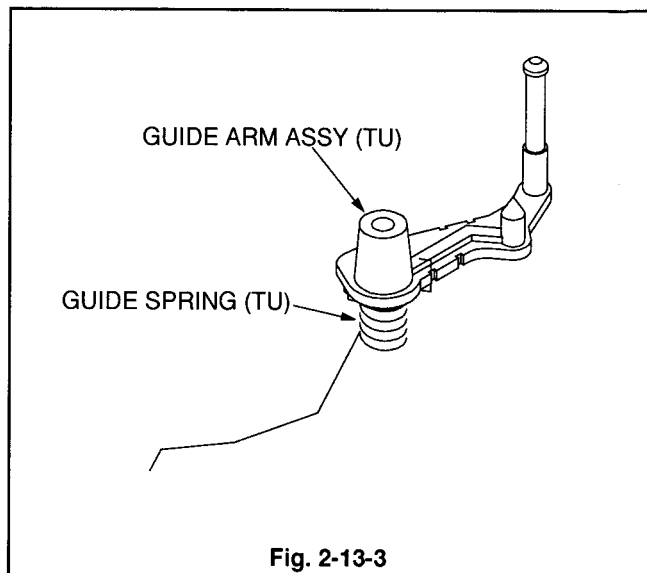
- 1 Remove the NYLON NUT shown in Fig. 2-13-1 to remove the SL WASHER (a) , the GUIDE ARM ASSY (TU) and GUIDE SPRING (TU).
- 2 Remove the CUT WASHER (b) fastening the LOADING TG LEVER shown in Fig. 2-13-1.
- 3 Unfasten the two catches (c and d) of the LOADING TG LEVER shown in Fig. 2-13-1 to remove the LOADING TG LEVER.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-13-2 on the new LOADING TG LEVER.
- 2 Install the LOADING TG LEVER shown in Fig. 2-13-1.
- 3 Install the CUT WASHER (b) shown in Fig. 2-13-1 to fasten the LOADING TG LEVER.52



- 4 Fix the GUIDE SPRING (TU) to the GUIDE ARM ASSY (TU) as shown in Fig. 2-13-3.
- 5 Fix the GUIDE ARM ASSY (TU) with the GUIDE SPRING (TU) attached shown in Fig. 2-13-1 to the shaft of the MAIN PLATE ASSY.
- 6 Install the GUIDE SPRING (TU) on the position shown in Fig. 2-13-4.





- 7 Install the GUIDE ARM ASSY (TU) so that the first tooth of the gear of the GUIDE ARM ASSY (TU) shown in Fig. 2-13-5 matches with hole ① of the LOADING TG LEVER.
- 8 Install the SL WASHER and NYLON NUT shown in Fig. 2-13-1.
- 9 Perform "Adjustment of GUIDE ARM ASSY (TU) Height" in Para. 3-5 of "Interchangeability Adjustment of the Mechanism".

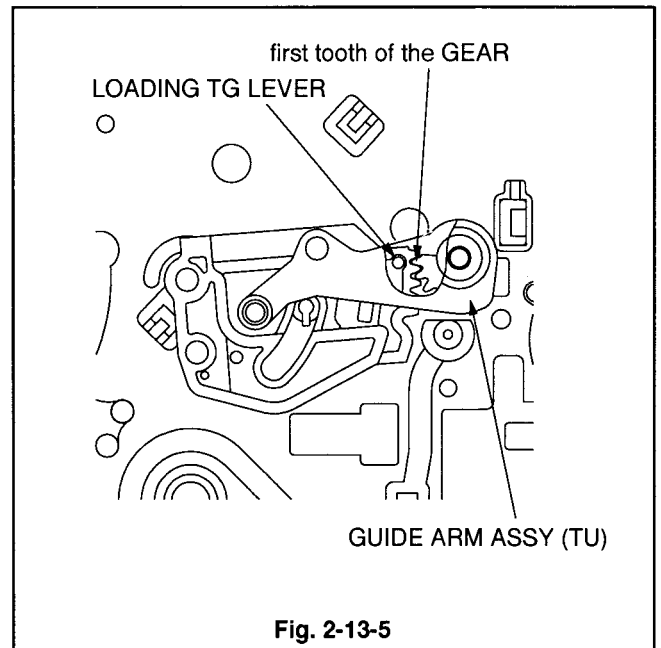


Fig. 2-13-5

## 2-14 REC SPRING, REC LEVER

Place the set upside down.

### (Removal)

- 1 Remove the REC SPRING shown in Fig. 2-14.
- 2 Move the REC LEVER in the direction shown by arrow ① until it strikes on the MAIN PLATE ASSY to remove it as shown in Fig. 2-14.

### (Installation)

- 1 Insert the catch of the REC LEVER shown in Fig. 2-14 into the hole of the MAIN PLATE ASSY and install the REC LEVER.
- 2 Install the REC SPRING shown in Fig. 2-14.

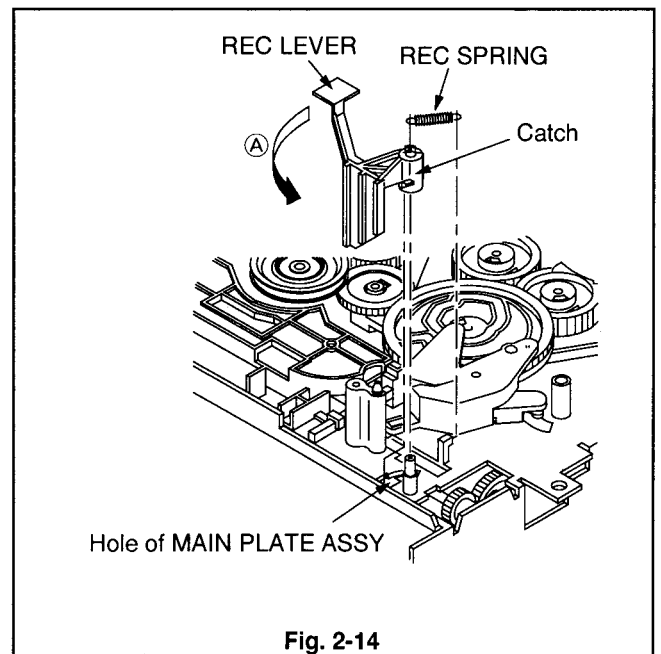


Fig. 2-14

## 2-15 REEL BELT, BELT PULLEY, SHIFT SPRING

Place the set upside down.

### (Removal)

- 1 Remove the REEL BELT shown in Fig. 2-15.
- 2 Remove the CUT WASHER (a) fastening the BELT PULLEY shown in Fig. 2-15 to remove the BELT PULLEY.
- 3 Remove the SHIFT SPRING shown in Fig. 2-15.

### (Installation)

- 1 Install the SHIFT SPRING shown in Fig. 2-15.
- 2 Fasten the BELT PULLEY shown in Fig. 2-15.
- 3 Install the CUT WASHER shown in Fig. 2-15 to fasten the BELT PULLEY.
- 4 Install the REEL BELT shown in Fig. 2-15.

**Note :** Take care never to make GREASE or OIL adhere to the REEL BELT during installation.

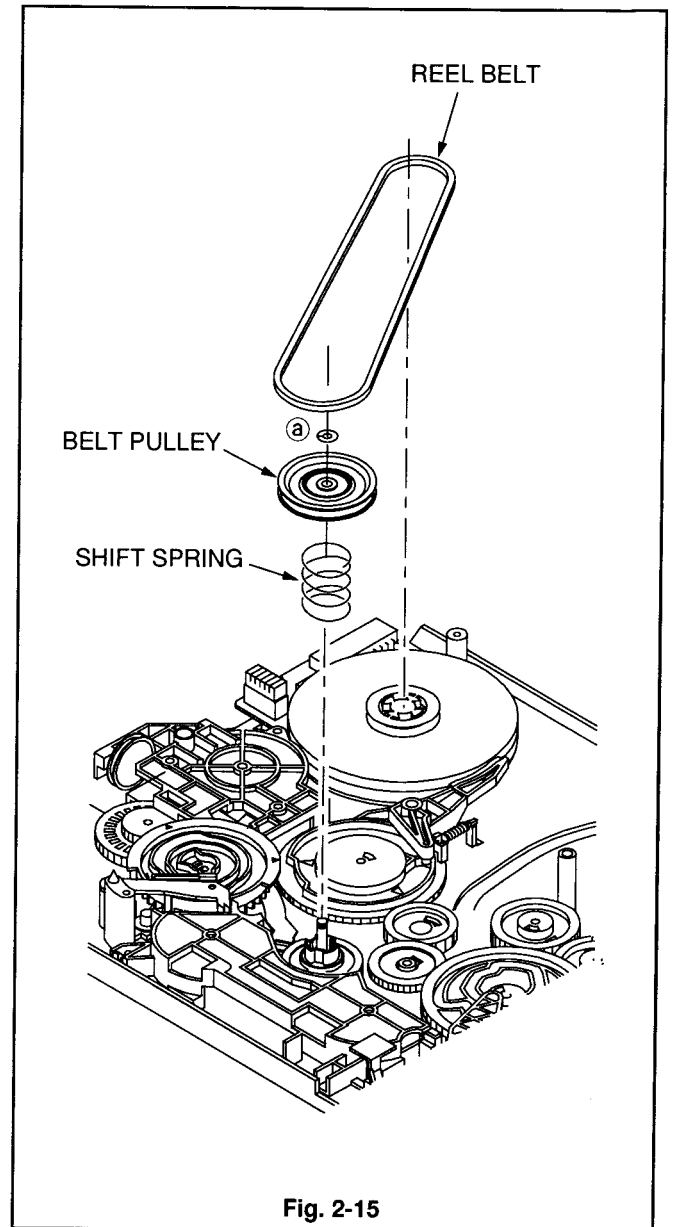


Fig. 2-15

## 2-16 CAPSTAN BRAKE SPRING, CAPSTAN BRAKE

Place the set upside down.

Before performing replacement in this paragraph, remove the following part. Refer to the applicable paragraph for installation of the part.

- REEL BELT (Para. 2-15)

### (Removal)

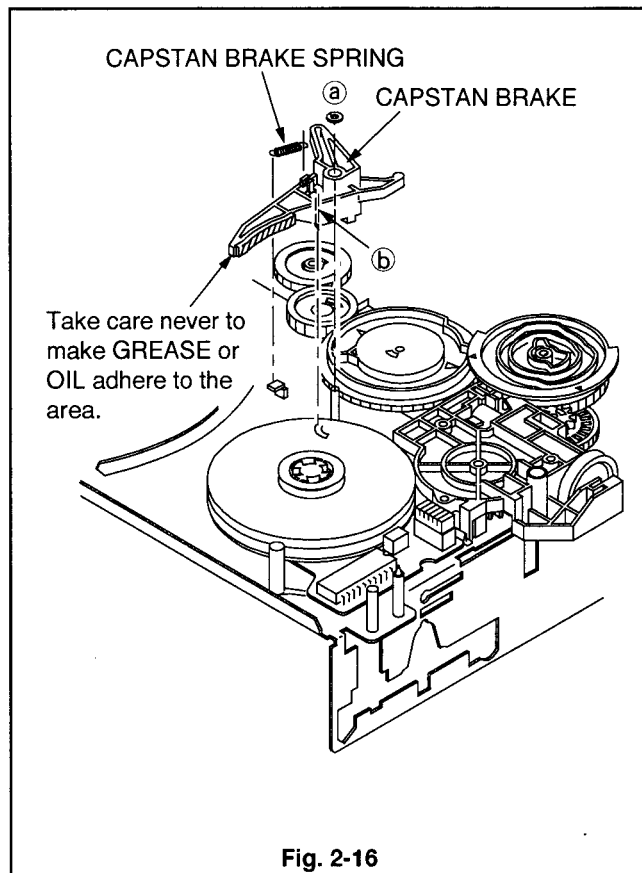
- 1 Remove the CAPSTAN BRAKE SPRING shown in Fig. 2-16.
- 2 Remove the CUT WASHER (a) fastening the CAPSTAN BRAKE shown in Fig. 2-16.
- 3 Unfasten the catch (b) on the surface of the CAPSTAN BRAKE shown in Fig. 2-16 with tweezers, etc. to remove the CAPSTAN BRAKE.

### (Installation)

- 1 Install the CAPSTAN BRAKE shown in Fig. 2-16.

**Note :** Take care never to make GREASE or OIL adhere to the area specified in Fig. 2-16 during installation of the CAPSTAN BRAKE.

- 2 Install the CUT WASHER (a) shown in Fig. 2-16 to fasten the CAPSTAN BRAKE.
- 3 Install the CAPSTAN BRAKE SPRING shown in Fig. 2-16.

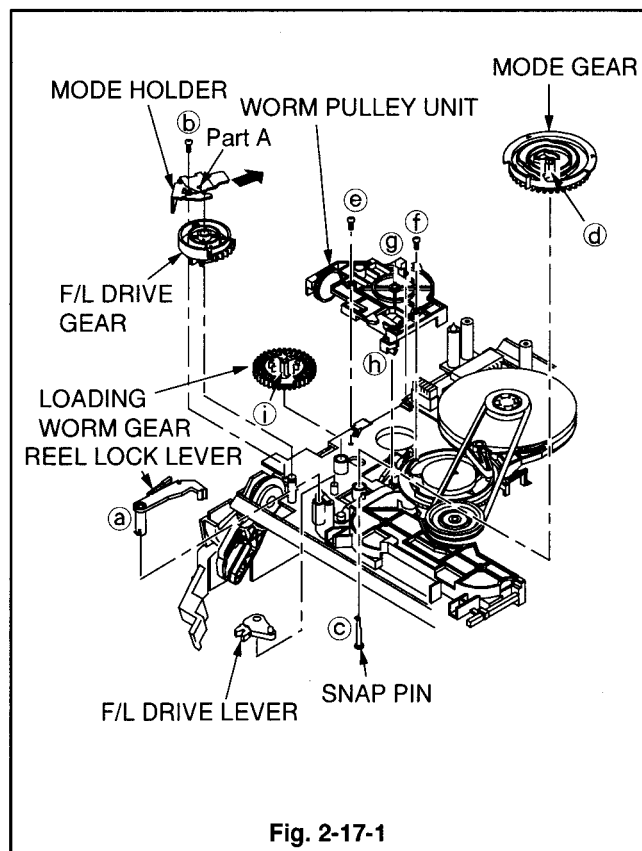


## 2-17 MODE HOLDER, REEL LOCK LEVER, MODE GEAR, F/L DRIVE GEAR, F/L DRIVE LEVER, WORM PULLEY UNIT, LOADING WORM GEAR

Place the set upside down.

### (Removal)

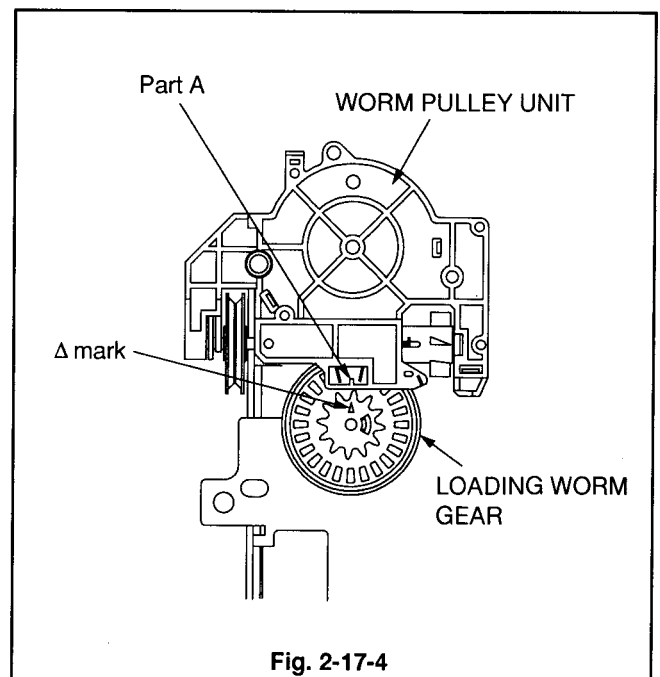
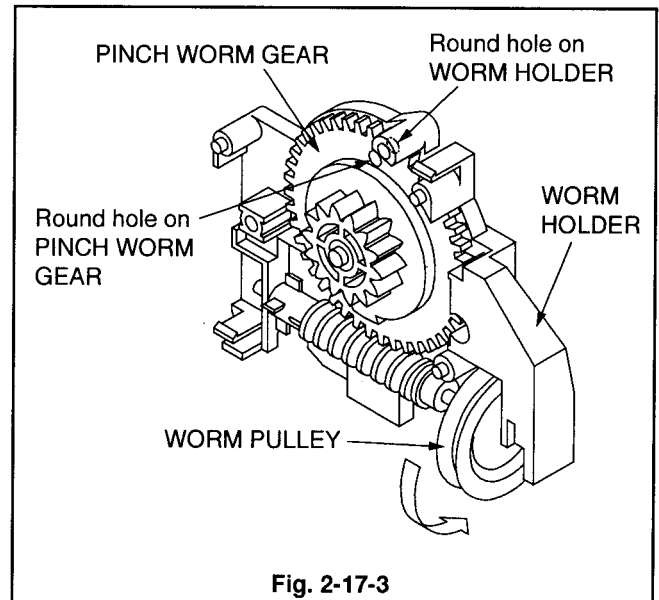
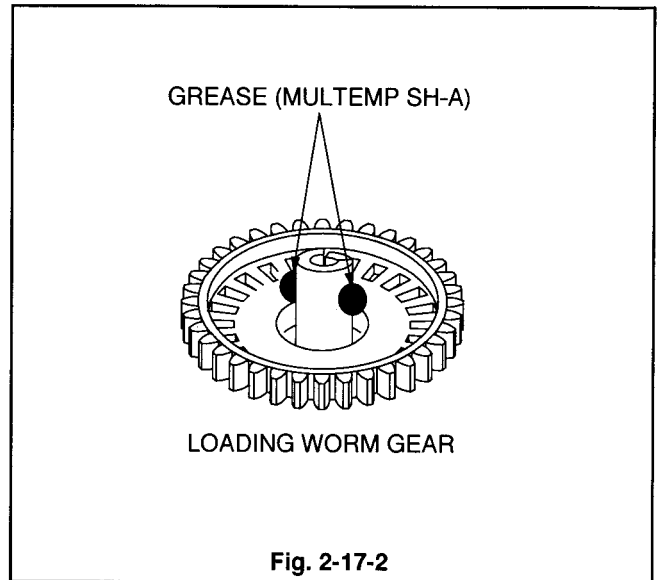
- 1 Unfasten the catch (a) on the surface of the REEL LOCK LEVER shown in Fig. 2-17-1 with tweezers, etc. to remove the REEL LOCK LEVER.
- 2 Unscrew the MODE HOLDER fastening screw (b) shown in Fig. 2-17-1 to remove the MODE HOLDER.
- 3 Unfasten the catch (c) of the SNAP PIN shown in Fig. 2-17-1 with the tweezers, etc. to remove the SNAP PIN.
- 4 Unfasten the catch (d) on the surface of the MODE GEAR shown in Fig. 2-17-1 with tweezers, etc. to remove the MODE GEAR.
- 5 Remove the F/L DRIVE GEAR shown in Fig. 2-17-1 from the shaft of the MAIN PLATE ASSY.
- 6 Remove the F/L DRIVE LEVER shown in Fig. 2-17-1.



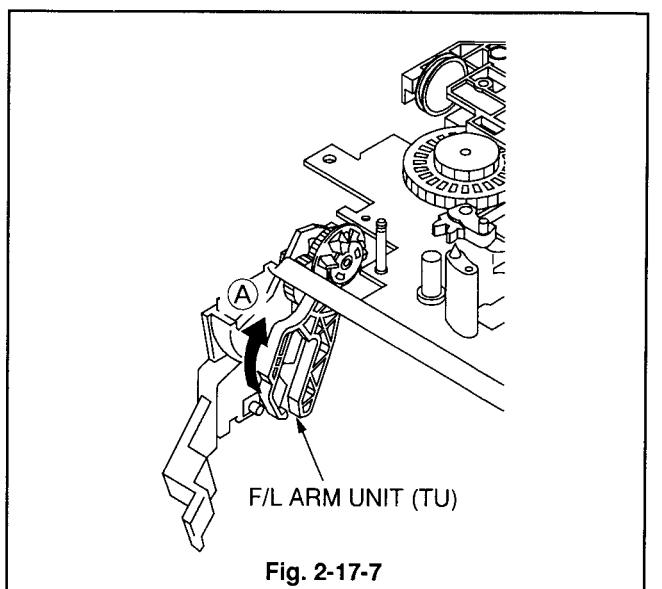
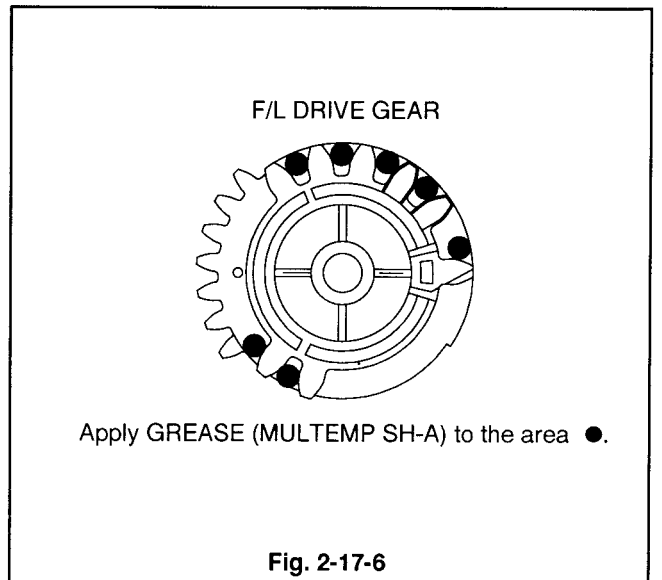
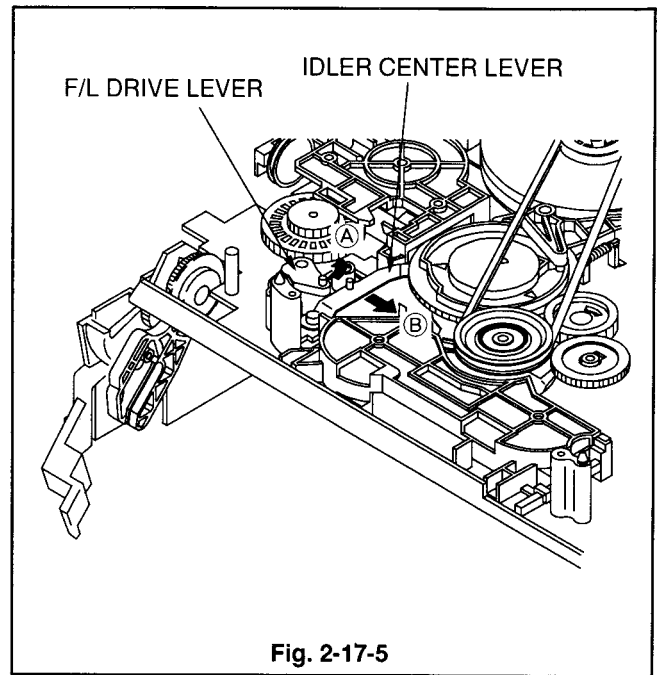
- 7 Unscrew the two WORM PULLEY UNIT fastening screws (Ⓔ and Ⓕ) shown in Fig. 2-17-1.
- 8 Remove the LOADING BELT.  
(Refer to Para. 2-11 for the removal method.)
- 9 Unfasten the two catches (Ⓖ and Ⓗ) of the WORM PULLEY UNIT shown in Fig. 2-17-1 to remove the WORM PULLEY UNIT.
- 10 Unfasten the catch (Ⓘ) on the surface of the LOADING WORM GEAR shown in Fig. 2-17-1 to remove the LOADING WORM GEAR.

**(Installation)**

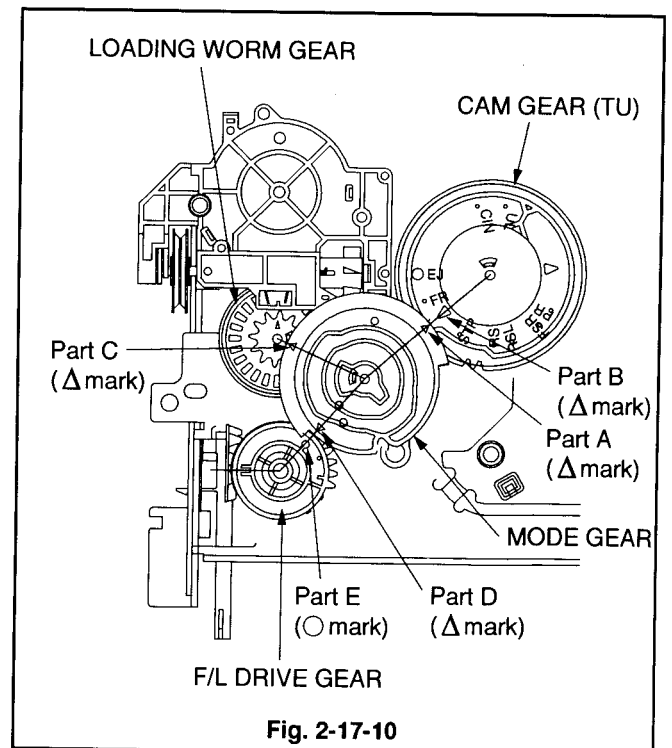
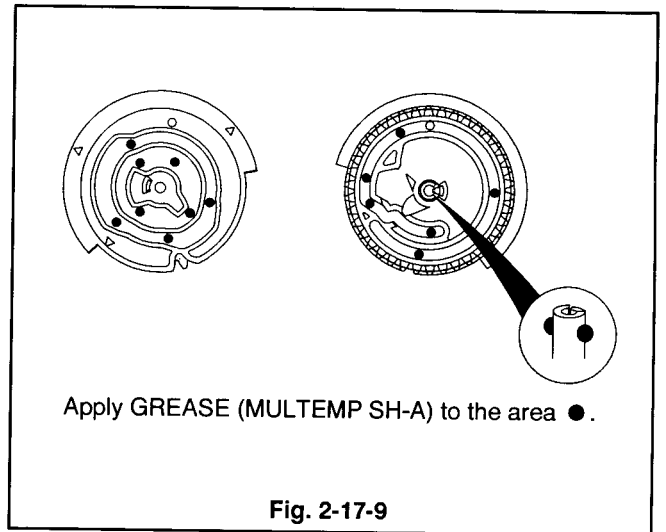
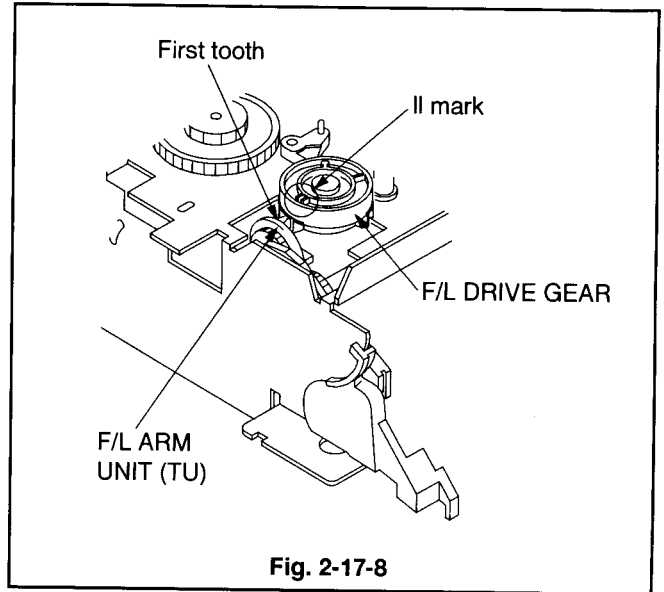
- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-17-2 on the new LOADING WORM GEAR.
- 2 Install the LOADING WORM GEAR shown in Fig. 2-17-1.
- 3 Turn the WORM PULLEY shown in Fig. 2-17-3 so that the round hole of the PINCH WORM GEAR matches with that of the WORM HOLDER.
- 4 Install the WORM PULLEY UNIT so that the Δ mark on the LOADING WORM GEAR shown in Fig. 2-17-4 matches with the part A of it.
- 5 Fasten the LOADING BELT. (Refer to Para. 2-11.)
- 6 Install the F/L DRIVE LEVER shown in Fig. 2-17-1.



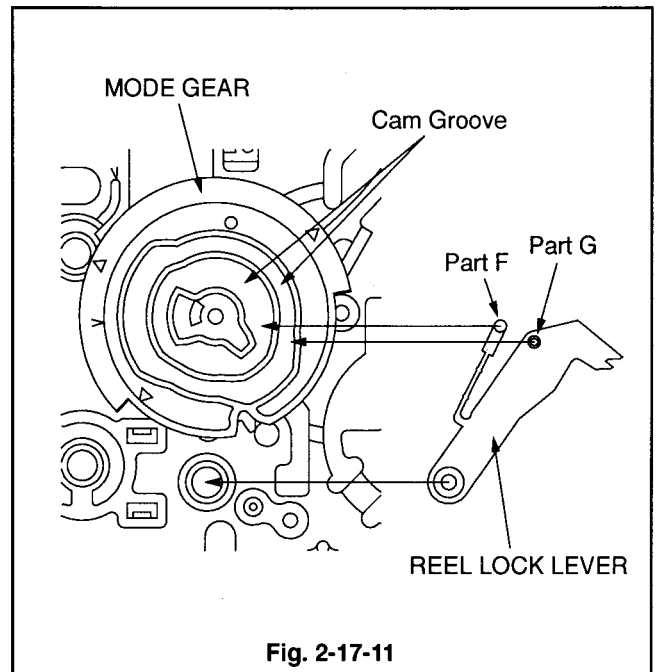
- 7 Fully move the F/L DRIVE LEVER shown in Fig. 2-17-5 in the direction shown by arrow (A).
- 8 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-17-6 on the new F/L DRIVE GEAR.
- 9 Move the F/L ARM UNIT (TU) shown in Fig. 2-17-7 in the direction shown by arrow (A).



- 10 Install the F/L DRIVE GEAR so that the first tooth of the gear of the F/L ARM UNIT (TU) matches with the II mark on the F/L DRIVE GEAR as shown in Fig. 2-17-8.
- 11 Fully move the IDLER CENTRE LEVER shown in Fig. 2-17-5 in the direction shown by arrow ⑥.
- 12 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area shown in Fig. 2-17-9 on the new MODE GEAR.
- 13 Install the MODE GEAR shown in Fig. 2-17-10 so that ;
  - $\Delta$  mark on the part A of the MODE GEAR matches with  $\Delta$  mark on the part B of the CAM GEAR (TU),
  - $\Delta$  mark on the part C of the MODE GEAR points to the centre of the LOADING WORM GEAR, and
  - $\Delta$  mark on the part D of the MODE GEAR matches with the  $\circ$  mark on the part E of the F/L DRIVE GEAR.
- 14 Make sure that the  $\Delta$  mark on the PINCH WORM GEAR shown in Fig. 2-12-3 matches with the  $\Delta$  mark on the PINCH CAM GEAR .
- 15 Push the SNAP PIN shown in Fig. 2-17-1 into the centre hole of the MODE GEAR from the surface to install it.
- 16 Move the MODE HOLDER shown in Fig. 2-17-1 in the direction shown by the arrow so that the part A of it is fixed to the shaft of the MAIN PLATE ASSY and install it.



- 17 Install the REEL LOCK LEVER so that the pins on the parts F and G of the REEL LOCK LEVER shown in Fig. 2-17-11 enter the cam groove of the MODE GEAR.

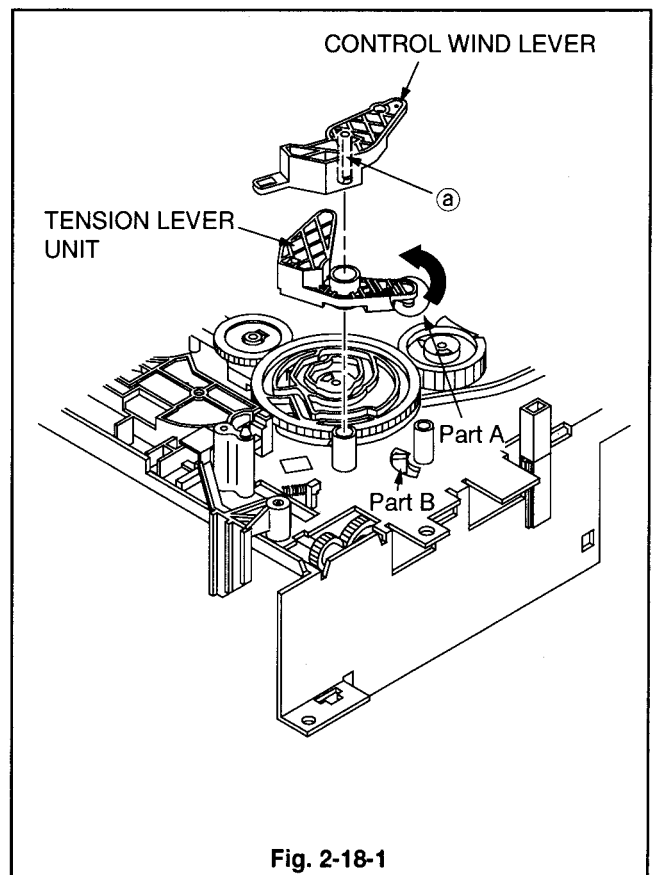


## 2-18 CONTROL WIND LEVER, TENSION LEVER UNIT

Place the set upside down.

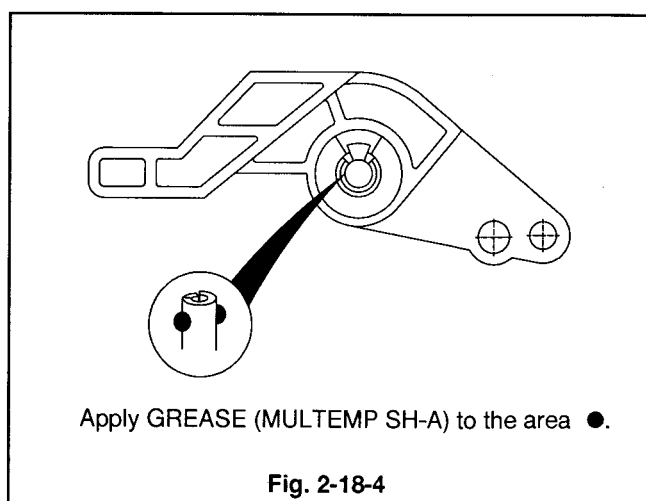
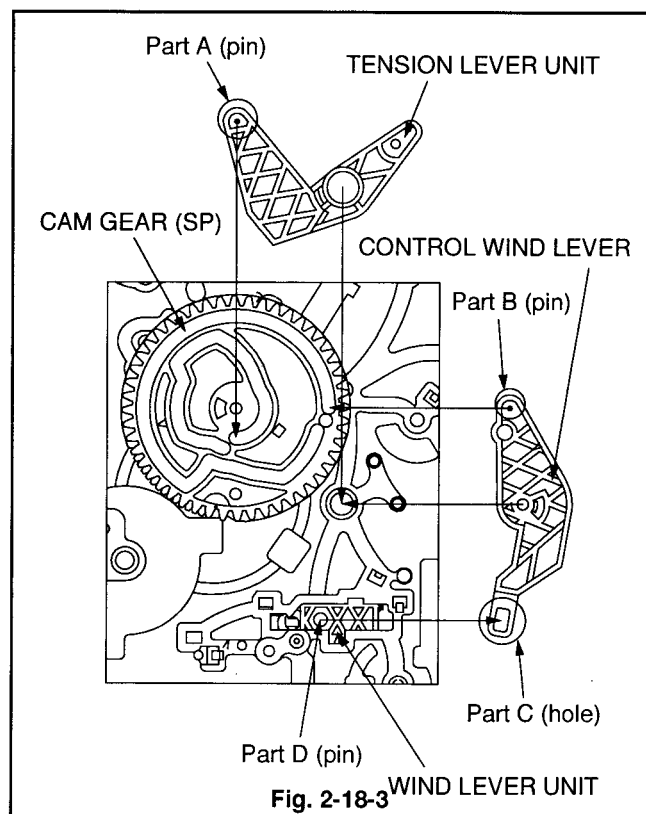
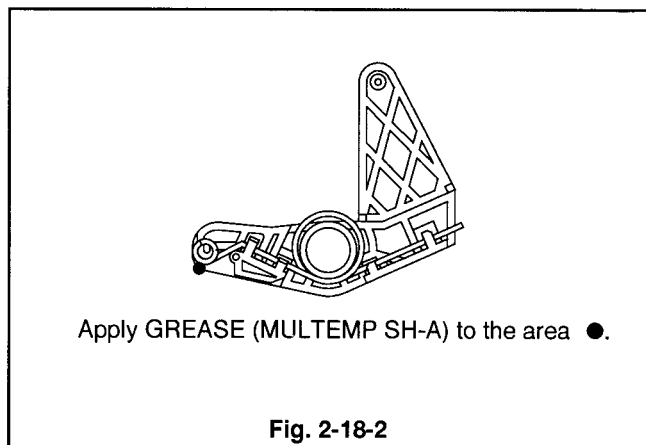
### (Removal)

- 1 Unfasten the catch (a) on the surface of the CONTROL WIND LEVER shown in Fig. 2-18-1 with tweezers, etc. to remove the CONTROL WIND LEVER.
- 2 Remove the TENSION LEVER UNIT shown in Fig. 2-18-1.



**(Installation)**

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-18-2 on the new TENSION LEVER UNIT.
- 2 Install the TENSION LEVER UNIT shown in Fig. 2-18-1 with taking care of the following.
  - Make the pin on the part A of the TENSION LEVER UNIT shown in Fig. 2-18-3 enter the cam groove on the CAM GEAR (SP).
  - Move the part A of the spring of the TENSION LEVER UNIT shown in Fig. 2-18-1 in the direction shown by the arrow. Install the TENSION LEVER UNIT so that the part A of the spring is hooked to the part B of the TENSION ARM.
- 3 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-18-4 on the new CONTROL WIND LEVER.
- 4 Install the CONTROL WIND LEVER so that the pin on the part B on the CONTROL WIND LEVER shown in Fig. 2-18-3 enters the cam groove of the CAM GEAR (SP) and that the pin of the part D of the WIND LEVER UNIT enters the hole of the part C on the CONTROL WIND LEVER.





## 2-19 PHOTO GUIDE UNIT (SP), PHOTO GUIDE UNIT (TU)

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- LOADING BELT (Para. 2-11)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- WORM PULLEY UNIT (Para. 2-17)

### (Removal)

- 1 Unfasten the catch (Ⓐ) of the PHOTO GUIDE UNIT (SP) shown in Fig. 2-19-1 with tweezers, etc. and remove the PHOTO GUIDE UNIT (SP) in the direction shown by the arrow.
- 2 Remove the PHOTO GUIDE UNIT (TU) shown in Fig. 2-19-2 in the direction shown by the arrow.

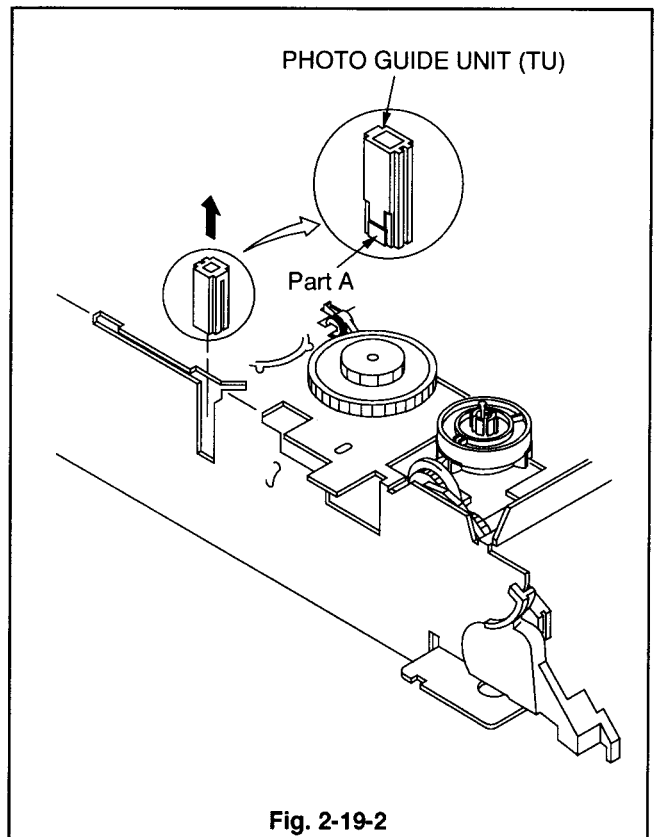
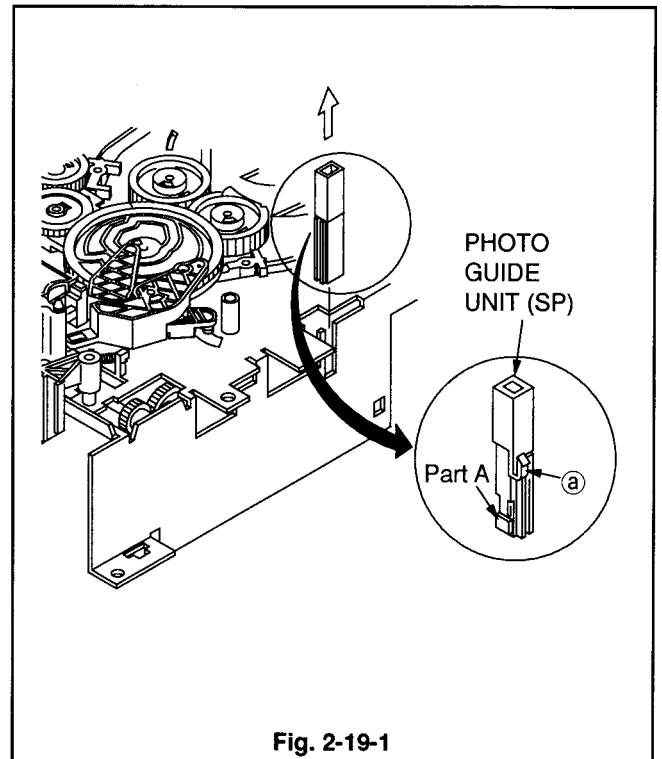
### (Installation)

- 1 Push the PHOTO GUIDE UNIT (TU) into the DECK to the bottom, with the part A shown in Fig. 2-19-2 toward the inside of DECK.

**Note :** Never touch the transparent part of the PHOTO GUIDE UNIT (TU).

- 2 Push the PHOTO GUIDE UNIT (SP) into the DECK so that the catch (Ⓐ) is hooked, with the part A shown in Fig. 2-19-1 toward the inside of DECK.

**Note :** Never touch the transparent part of the PHOTO GUIDE UNIT (SP).



## 2-20 LOADING GEAR, LAMP LOADING GEAR

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- LAMP GUIDE (Para. 2-7)
- REEL BELT (Para. 2-15)

### (Removal)

- 1 Unfasten the catch (Ⓐ) on the surface of the LOADING GEAR shown in Fig. 2-20-1 with tweezers, etc. to remove the LOADING GEAR.
- 2 Unfasten the catch (Ⓑ) on the surface of the LAMP LOADING GEAR shown in Fig. 2-20-1 with tweezers, etc. to remove the LAMP LOADING GEAR.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-20-2 on the new LAMP LOADING GEAR.
- 2 Install the LAMP LOADING GEAR shown in Fig. 2-20-1.
- 3 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-20-2 on the new LOADING GEAR.
- 4 Install the LOADING GEAR shown in Fig. 2-20-1.

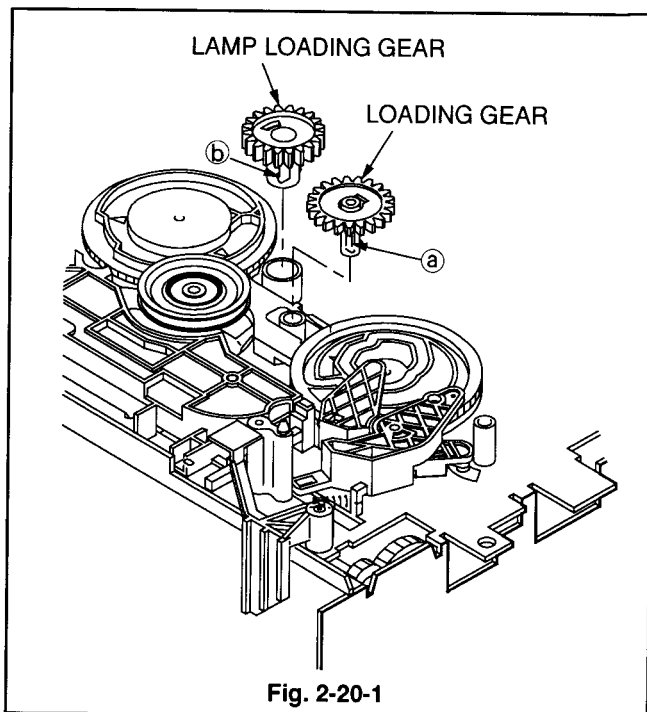


Fig. 2-20-1

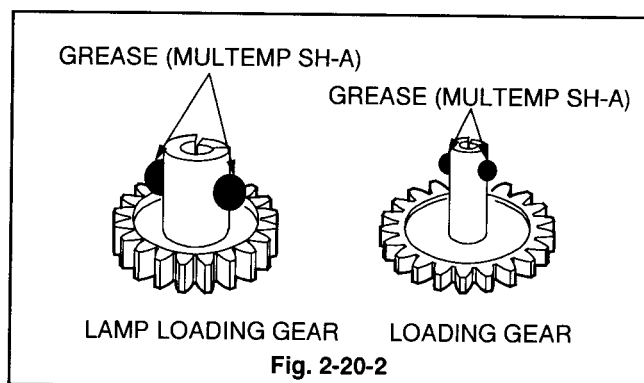


Fig. 2-20-2

## 2-21 CAM GEAR (TU)

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- LOADING BELT (Para. 2-11)
- REEL BELT (Para. 2-15)
- CAPSTAN BRAKE SPRING (Para. 2-16)
- CAPSTAN BRAKE (Para. 2-16)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)

### (Removal)

- 1 Unfasten the catch (Ⓐ) on the surface of the CAM GEAR (TU) shown in Fig. 2-21-1 with tweezers, etc. to remove the CAM GEAR (TU).

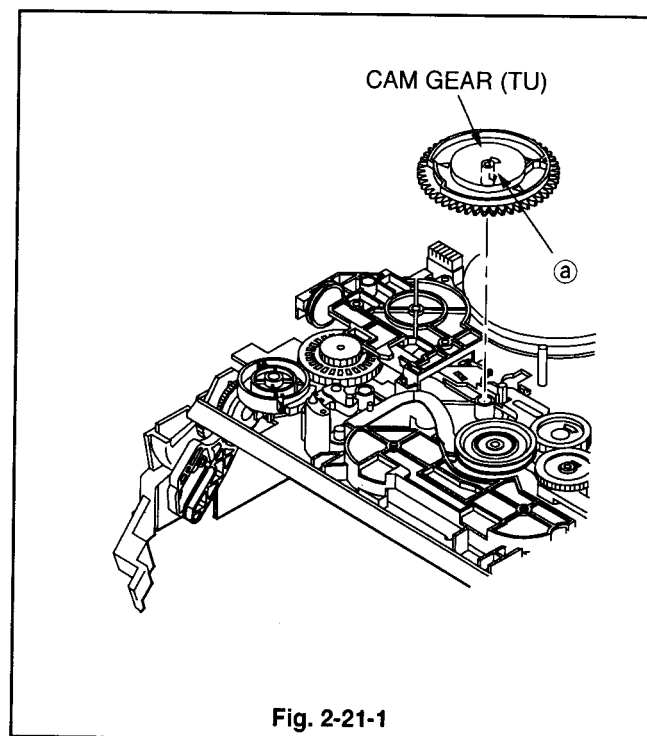
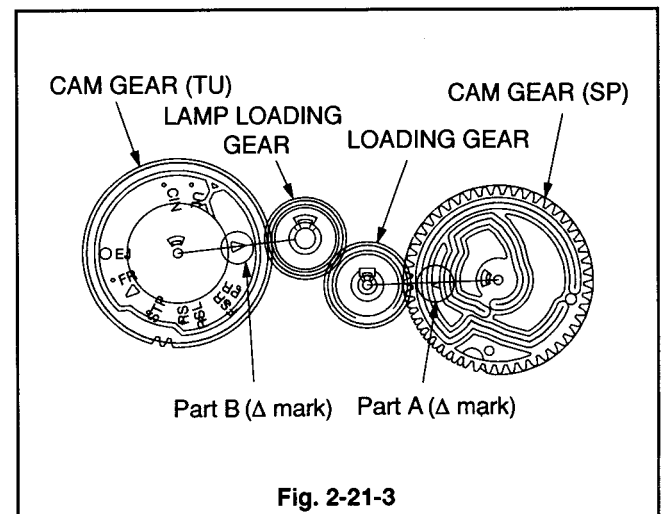
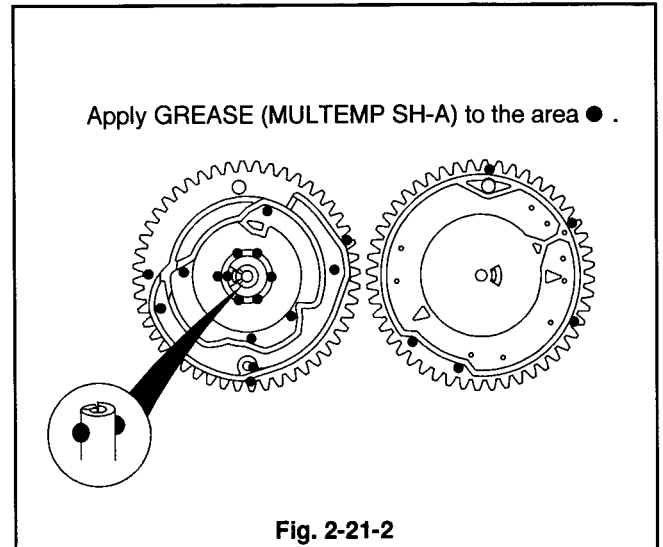


Fig. 2-21-1

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-21-2 on the new CAM GEAR (TU).
- 2 Set the CAM GEAR (SP) shown in Fig. 2-21-3 so that the  $\Delta$  mark on the part A of it points to the centre of the LOADING GEAR.
- 3 Install the CAM GEAR (TU) shown in Fig. 2-21-3 so that the  $\Delta$  mark on the part B of it points to the centre of the LAMP LOADING GEAR.

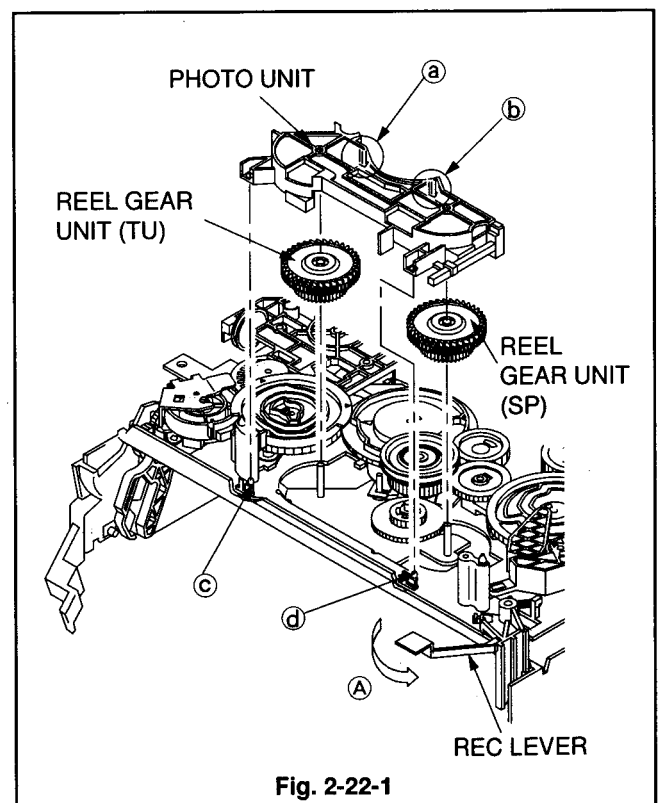


### 2-22 PHOTO UNIT, REEL GEAR UNIT (TU), REEL GEAR UNIT (SP)

Place the set upside down.

#### (Removal)

- 1 Move the REC LEVER shown in Fig. 2-14 in the direction shown by arrow (A). Unfasten the two catches (a) and (b) of the PHOTO UNIT and the two catches (c) and (d) of the MAIN PLATE ASSY shown in Fig. 2-22-1 to remove the PHOTO UNIT.
- 2 Remove the REEL GEAR UNIT (TU) shown in Fig. 2-22-1.
- 3 Remove the REEL GEAR UNIT (SP) shown in Fig. 2-22-1.



**(Installation)**

1 Apply OIL (FLOIL 948P) [859D154O20] to the shaft shown in Fig. 2-22-2 in which the REEL GEAR UNIT (SP) of the MAIN PLATE ASSY is to enter.

2 Install the REEL GEAR UNIT (SP) shown in Fig. 2-22-2.

**Note:** Make sure the colour of the spring according to the table in Fig. 2-22-2 in installing the REEL GEAR UNIT (SP).

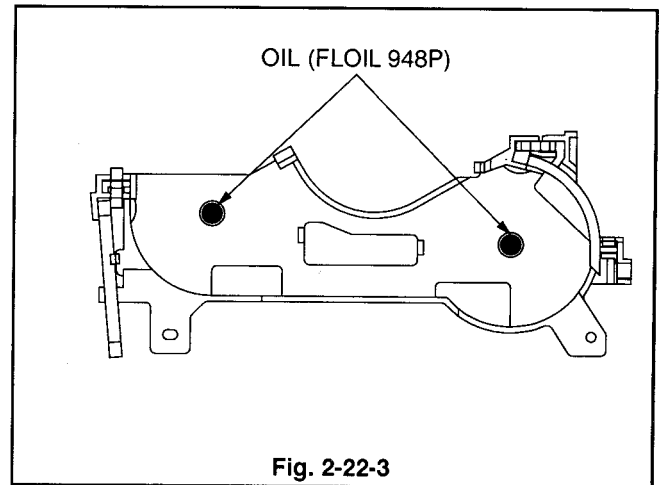
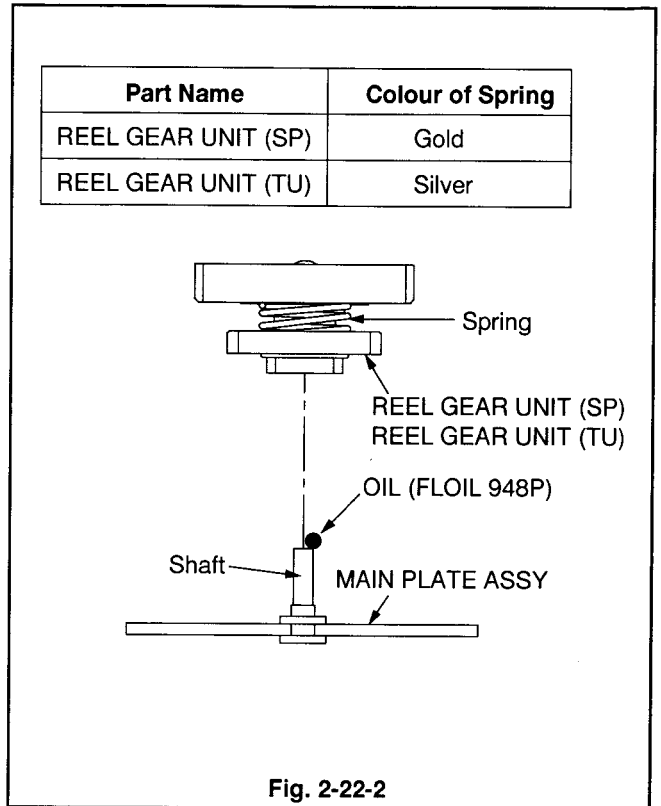
3 Apply OIL (FLOIL 948P) [859D154O20] to the shaft shown in Fig. 2-22-2 in which the REEL GEAR UNIT (TU) of the MAIN PLATE ASSY is to enter.

4 Install the REEL GEAR UNIT (TU) shown in Fig. 2-22-1.

**Note:** Make sure the colour of the spring according to the table in Fig. 2-22-2 in installing the REEL GEAR UNIT (TU).

5 Apply a small quantity of OIL (FLOIL 948P) [859D154O20] to the area specified in Fig. 2-22-3 on the new PHOTO UNIT.

6 Install the PHOTO UNIT shown in Fig. 2-22-1.



## 2-23 IDLER CENTRE LEVER

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

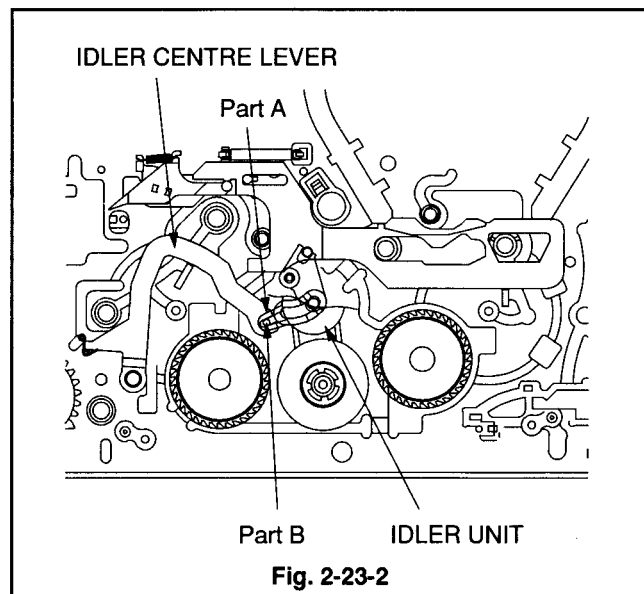
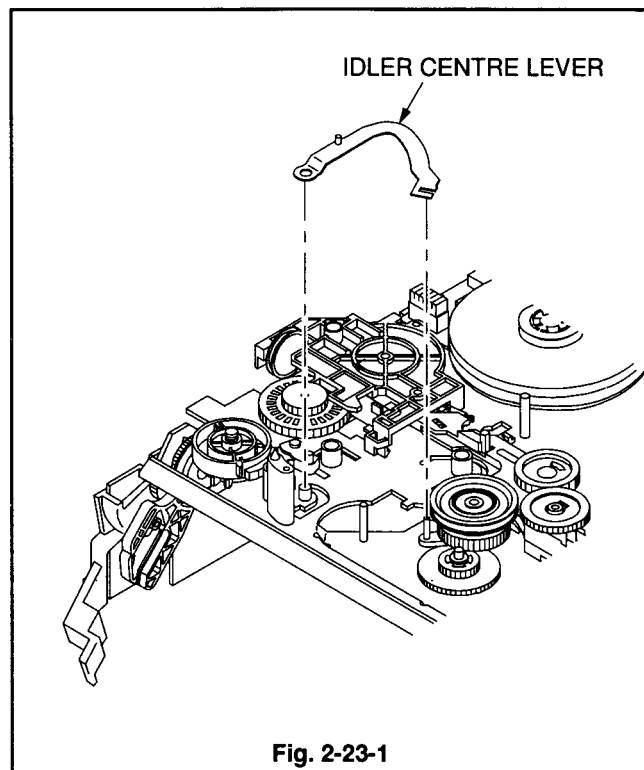
- LOADING BELT (Para. 2-11)
- REEL BELT (Para. 2-15)
- CAPSTAN BRAKE SPRING (Para. 2-16)
- CAPSTAN BRAKE (Para. 2-16)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- CAM GEAR (TU) (Para. 2-21)
- PHOTO UNIT (Para. 2-22)

### (Removal)

- 1 Remove the IDLER CENTRE LEVER shown in Fig. 2-23-1.

### (Installation)

- 1 Insert the part A of the IDLER CENTRE LEVER shown in Fig. 2-23-2 into the part B of the IDLER UNIT to install the IDLER CENTRE LEVER.



## 2-24 PULLEY GEAR, IDLER UNIT

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

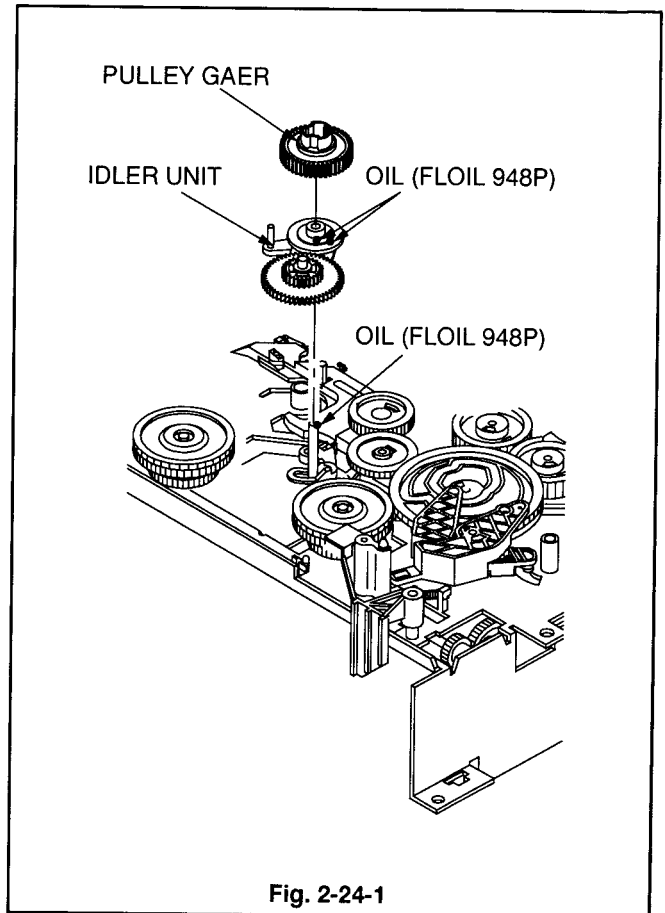
- LOADING BELT (Para. 2-11)
- REEL BELT (Para. 2-15)
- CAPSTAN BRAKE SPRING (Para. 2-16)
- CAPSTAN BRAKE (Para. 2-16)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- CAM GEAR (TU) (Para. 2-21)
- PHOTO UNIT (Para. 2-22)
- IDLER CENTRE LEVER (Para. 2-23)

### (Removal)

- 1 Remove the PULLEY GEAR shown in Fig. 2-24-1.
- 2 Remove the IDLER UNIT shown in Fig. 2-24-1.

### (Installation)

- 1 Apply OIL (FLOIL 948P) [859D154O20] to the shaft shown in Fig. 2-24-1 in which the IDLER UNIT is to enter.
- 2 Apply OIL (FLOIL 948P) [859D154O20] to the area specified in Fig. 2-24-1 on the new IDLER UNIT .
- 3 Install the IDLER UNIT shown in Fig. 2-24-1.
- 4 Install the PULLEY GEAR shown in Fig. 2-24-1.



## 2-25 F/L ARM UNIT (SP)

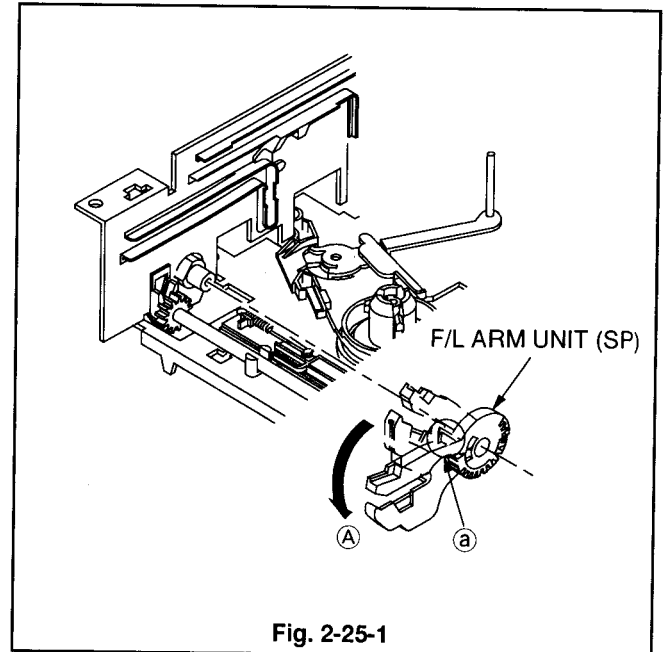
Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- STAY PLATE (Para. 2-2)
- BOTTOM UNIT (Para. 2-3)

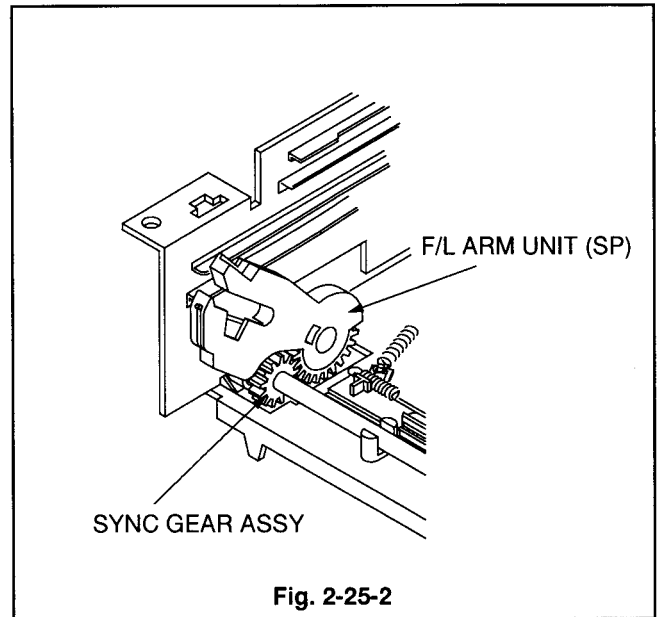
### (Removal)

- 1 Fully move the F/L ARM UNIT (SP) in the direction shown by arrow (A) as shown in Fig. 2-25-1.
- 2 Unfasten the catch (a) of the F/L ARM UNIT (SP) shown in Fig. 2-25-1 to remove the F/L ARM UNIT (SP).



### (Installation)

- 1 Fully move the F/L ARM UNIT (TU) in the direction shown by arrow (A) as shown in Fig. 2-26-1.
- 2 Install the F/L ARM UNIT (SP) so that the gear of the F/L ARM UNIT (SP) and that of the SYNC GEAR ASSY are engaged as shown in Fig. 2-25-2.



## 2-26 F/L ARM UNIT (TU)

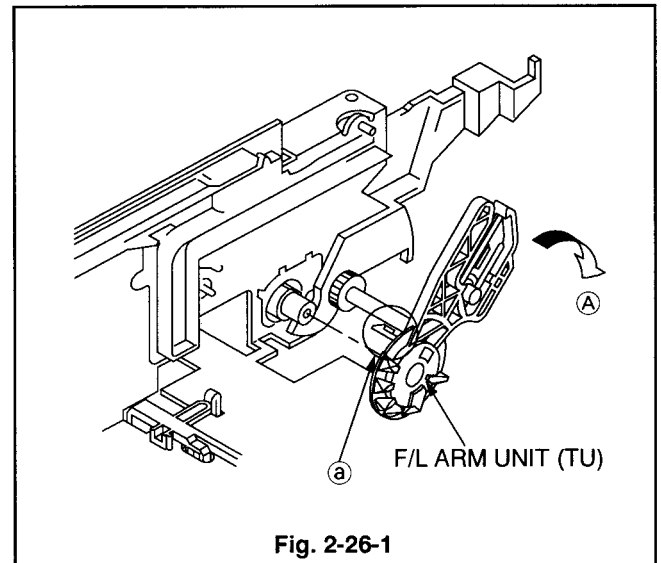
Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- STAY PLATE (Para. 2-2)
- BOTTOM UNIT (Para. 2-3)
- LOADING BELT (Para. 2-11)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- F/L DRIVE GEAR (Para. 2-17)
- F/L DRIVE LEVER (Para. 2-17)

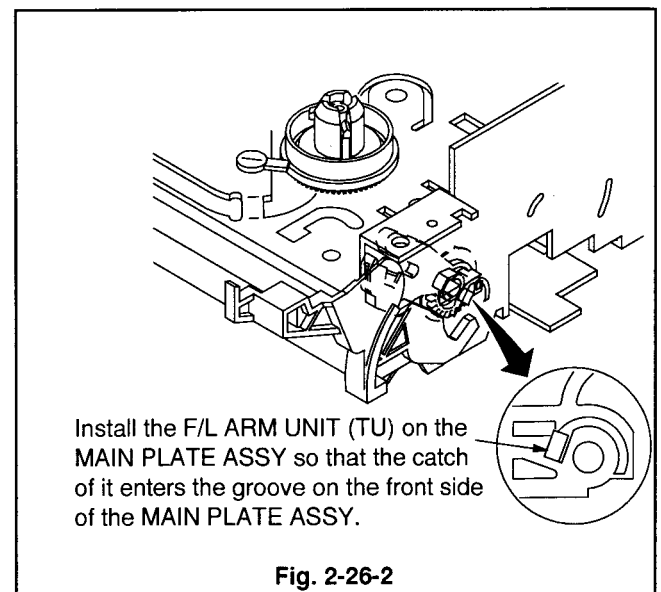
### (Removal)

- 1 Fully move the F/L ARM UNIT (TU) in the direction shown by arrow (A) as shown in Fig. 2-26-1.
- 2 Unfasten the catch (a) of the F/L ARM UNIT (TU) shown in Fig. 2-26-1 to remove the F/L ARM UNIT (TU).



### (Installation)

- 1 Fully move the F/L ARM UNIT (SP) shown in Fig. 2-25-1 in the direction shown by arrow (A).
- 2 Install the F/L ARM UNIT (TU) in the position shown in Fig. 2-26-2.



## 2-27 SYNC GEAR ASSY

Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- STAY PLATE (Para. 2-2)
- BOTTOM UNIT (Para. 2-3)
- LOADING BELT (Para. 2-11)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- F/L DRIVE GEAR (Para. 2-17)
- F/L ARM UNIT (SP) (Para. 2-25)
- F/L ARM UNIT (TU) (Para. 2-26)

### (Removal)

- 1 Unfasten the catch (Ⓐ) of the MAIN PLATE ASSY as shown in Fig. 2-27-1. Move the SYNC GEAR ASSY in the direction shown by the arrow (Ⓐ) to remove it.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-27-2 on the MAIN PLATE ASSY.
- 2 Move the SYNC GEAR ASSY shown in Fig. 2-27-1 in the opposite direction against the arrow (Ⓐ) to install it.

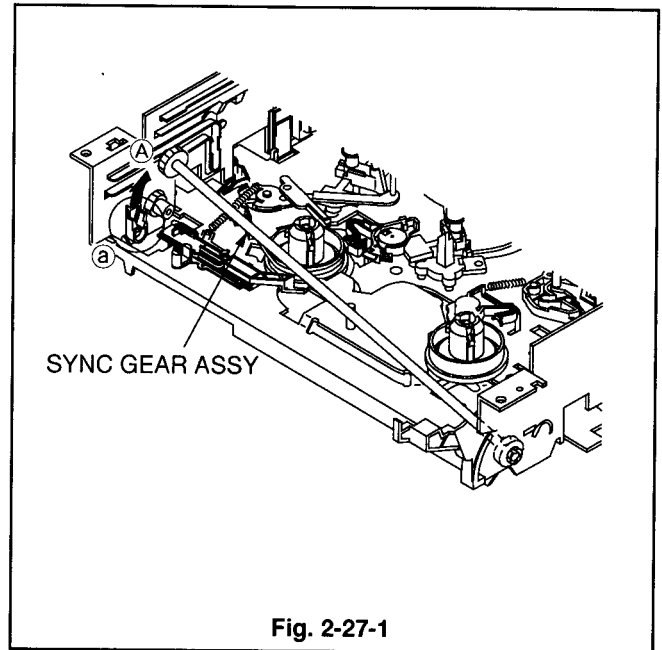


Fig. 2-27-1

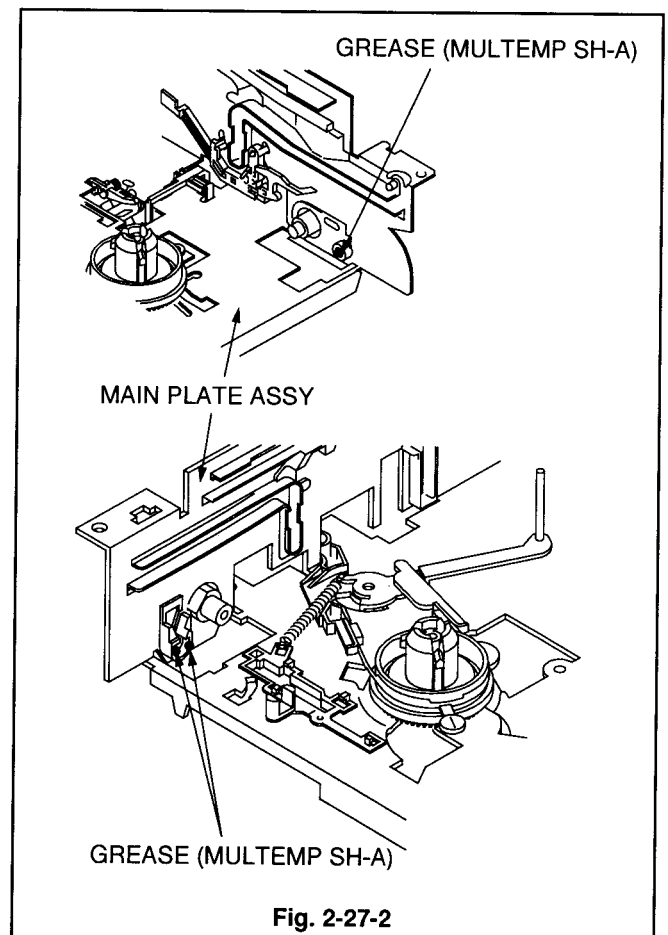


Fig. 2-27-2



## 2-28 F/L DOOR ARM

Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

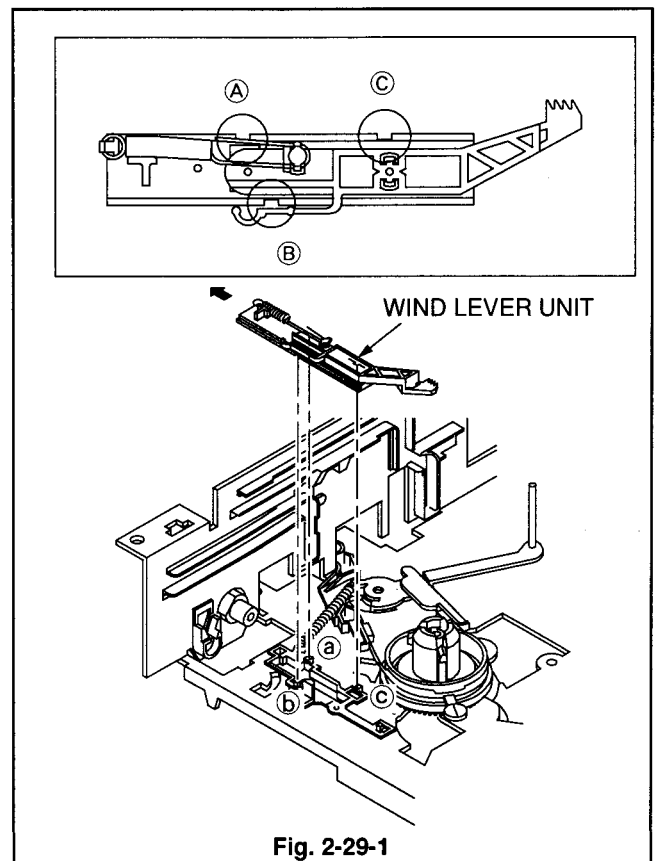
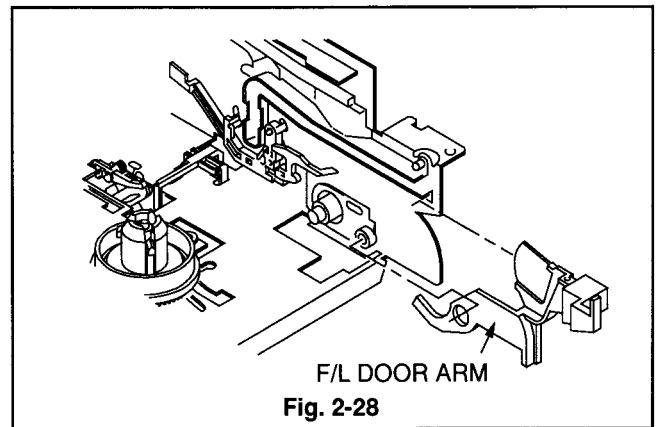
- STAY PLATE (Para. 2-2)
- BOTTOM UNIT (Para. 2-3)
- LOADING BELT (Para. 2-11)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- F/L DRIVE GEAR (Para. 2-17)
- F/L ARM UNIT (SP) (Para. 2-25)
- F/L ARM UNIT (TU) (Para. 2-26)
- SYNC GEAR ASSY (Para. 2-27)

### (Removal)

- 1 Remove the F/L DOOR ARM shown in Fig. 2-28.

### (Installation)

- 1 Install the F/L DOOR ARM shown in Fig. 2-28.



## 2-29 WIND LEVER UNIT

Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

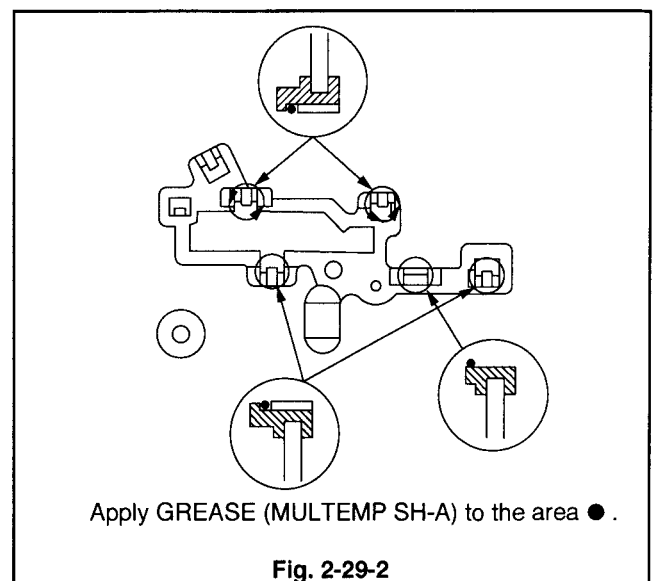
- STAY PLATE (Para. 2-2)
- BOTTOM UNIT (Para. 2-3)
- CONTROL WIND LEVER (Para. 2-18)

### (Removal)

- 1 Move the WIND LEVER UNIT in the direction shown by the arrow to remove it as shown in Fig. 2-29-1.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-29-2 on the MAIN PLATE ASSY.
- 2 Set the WIND LEVER UNIT so that each of three notches (A, B and C) on it respectively matches with the corresponding catch (a, b and c) of the MAIN PLATE ASSY as shown in Fig. 2-29-1. Move the WIND LEVER UNIT in the opposite direction to the arrow to install it.



## 2-30 LOADING LOCK SPRING, LOADING LOCK LEVER

Position the set normally.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

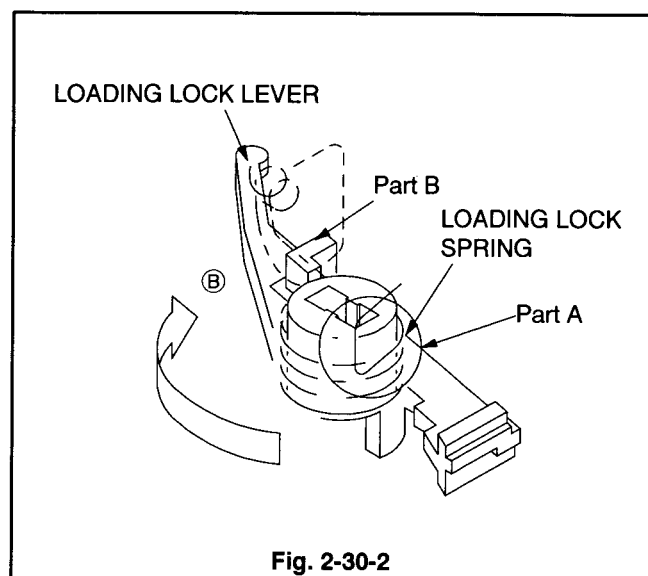
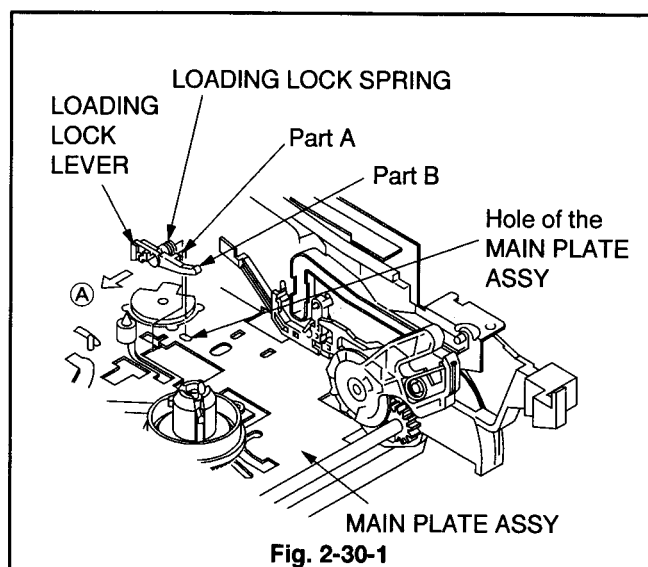
- MODE POSITION GUIDE (Para. 2-7)
- LOADING BELT (Para. 2-11)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- WORM PULLEY UNIT (Para. 2-17)

### (Removal)

- 1 Remove the part A of the LOADING LOCK SPRING shown in Fig. 2-30-1 through the hole of the MAIN PLATE ASSY.
- 2 Move the LOADING LOCK LEVER in the direction shown by arrow (A) with pushing the part B of it to remove the LOADING LOCK LEVER and LOADING LOCK SPRING as shown in Fig. 2-30-1.

### (Installation)

- 1 Attach the LOADING LOCK SPRING shown in Fig. 2-30-2 to the LOADING LOCK LEVER.
- 2 Move the part A of the LOADING LOCK SPRING shown in Fig. 2-30-2 in the direction shown by arrow (B). Hook the part A of the LOADING LOCK SPRING on the catch of the part B of the LOADING LOCK LEVER.
- 3 Install the LOADING LOCK LEVER with the LOADING LOCK SPRING attached shown in Fig. 2-30-1 on the MAIN PLATE ASSY.
- 4 Insert the part A of the LOADING LOCK SPRING shown in Fig. 2-30-1 into the hole of the LOADING LOCK SPRING.



## 2-31 CAPSTAN MOTOR

Place the set upside down.

Before performing replacement in this paragraph, remove the following part. Refer to the applicable paragraph for installation the part.

- REEL BELT (Para. 2-15)

### (Removal)

- 1 Unscrew the CAPSTAN MOTOR fastening the three screws (a) shown in Fig. 2-31-1 to remove the CAPSTAN MOTOR.

### (Installation)

- 1 Set the CAPSTAN MOTOR in the position shown in Fig. 2-31-2 to install it.

**Note :** Take care not to damage the shaft of the CAPSTAN MOTOR during installation.

- 2 Install the three screws (a) shown in Fig. 2-31-1.

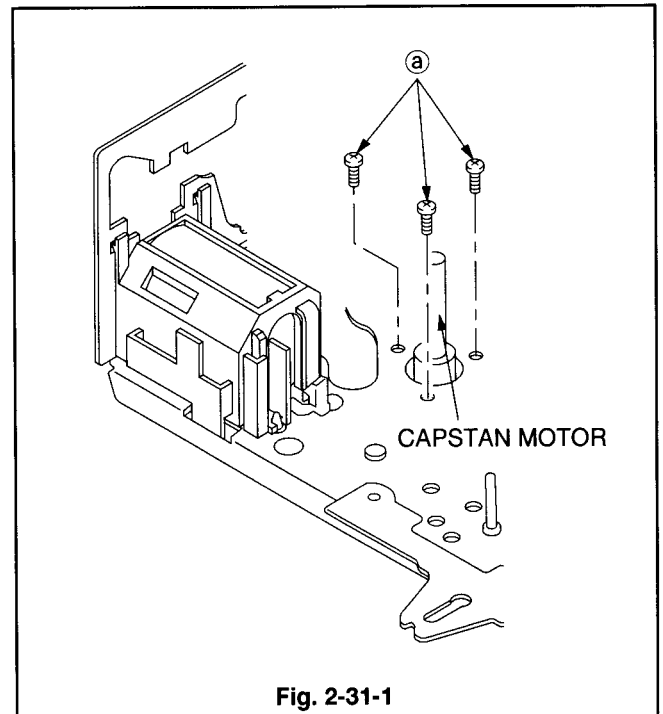


Fig. 2-31-1

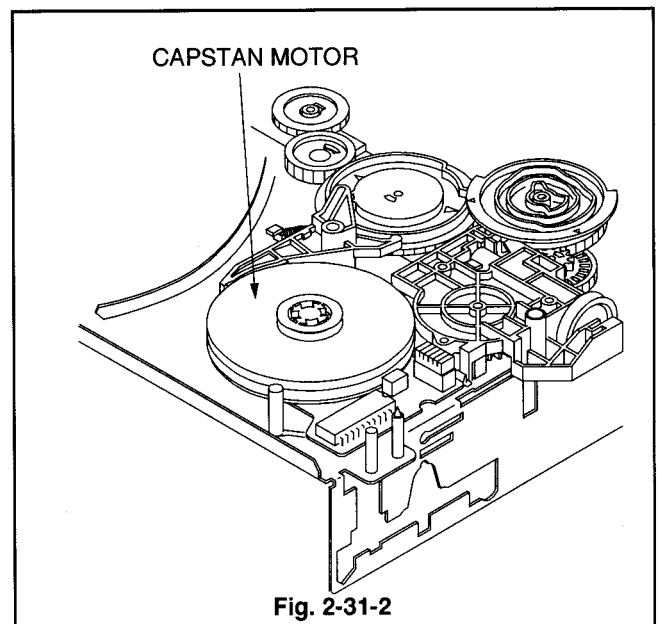


Fig. 2-31-2

## 2-32 CAM GEAR (SP)

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- CONTROL WIND LEVER (Para. 2-18)
- TENSION LEVER UNIT (Para. 2-18)
- LOADING GEAR (Para. 2-20)

### (Removal)

- 1 Unfasten the catch (ⓐ) on the surface of the CAM GEAR (SP) shown in Fig. 2-32-1 with tweezers, etc. to remove the CAM GEAR (SP).

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-32-2 on the new CAM GEAR (SP).
- 2 Set the CAM GEAR (TU) shown in Fig. 2-32-3 so that the  $\Delta$  mark on the part B points to the centre of the LAMP LOADING GEAR.
- 3 Set the CAM GEAR (SP) shown in Fig. 2-32-3 so that the  $\Delta$  mark on the part A points to the centre of the boss into which the LOADING GEAR is to enter and install it.

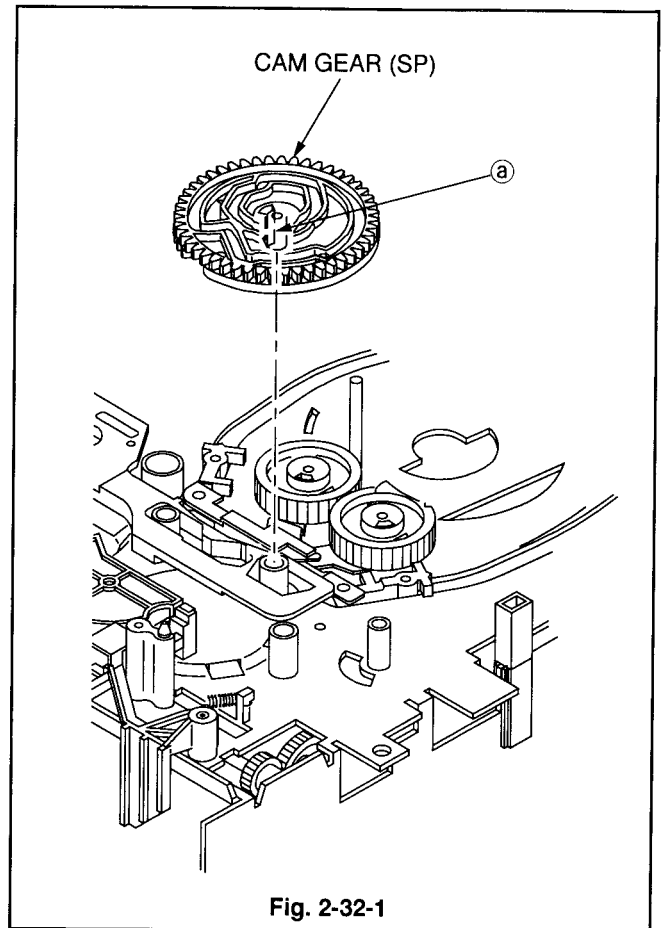


Fig. 2-32-1

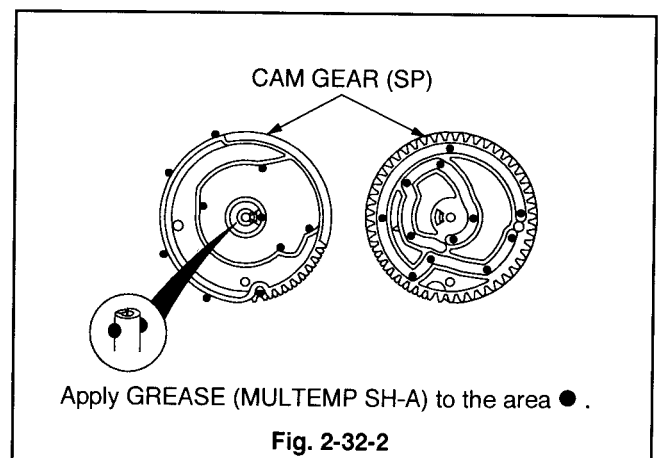


Fig. 2-32-2

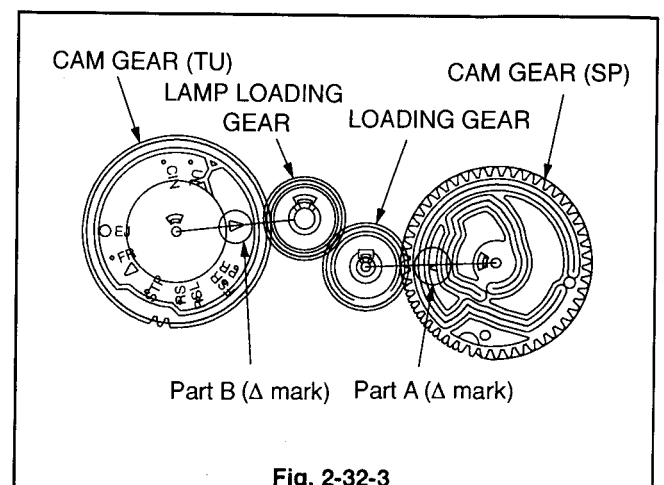


Fig. 2-32-3

## 2-33 LOADING ARM UNIT (TU), LOADING ARM UNIT (SP)

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- CONTROL WIND LEVER (Para. 2-18)
- TENSION LEVER UNIT (Para. 2-18)
- LOADING GEAR (Para. 2-20)
- CAM GEAR (SP) (Para. 2-32)

### (Removal)

- 1 Unscrew the MAIN PLATE SUPPORT fastening the two screws (a) shown in Fig. 2-33-1 to remove the MAIN PLATE SUPPORT.
- 2 Move the TAPE GUIDE ASSY (SP) and TAPE GUIDE ASSY (TU) shown in Fig. 2-33-1 fully to the loading position.
- 3 Unfasten the catch (b) on the surface of the LOADING ARM UNIT (TU) shown in Fig. 2-33-1 with tweezers, etc. to remove the LOADING ARM UNIT (TU).
- 4 Unfasten the catch (c) on the surface of the LOADING ARM UNIT (SP) shown in Fig. 2-33-1 with tweezers, etc. to remove the LOADING ARM UNIT (SP).

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-33-2 on the new LOADING ARM UNIT (SP).
- 2 Install the LOADING ARM UNIT (SP) shown in Fig. 2-33-1.
- 3 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-33-2 on the new LOADING ARM UNIT (TU).

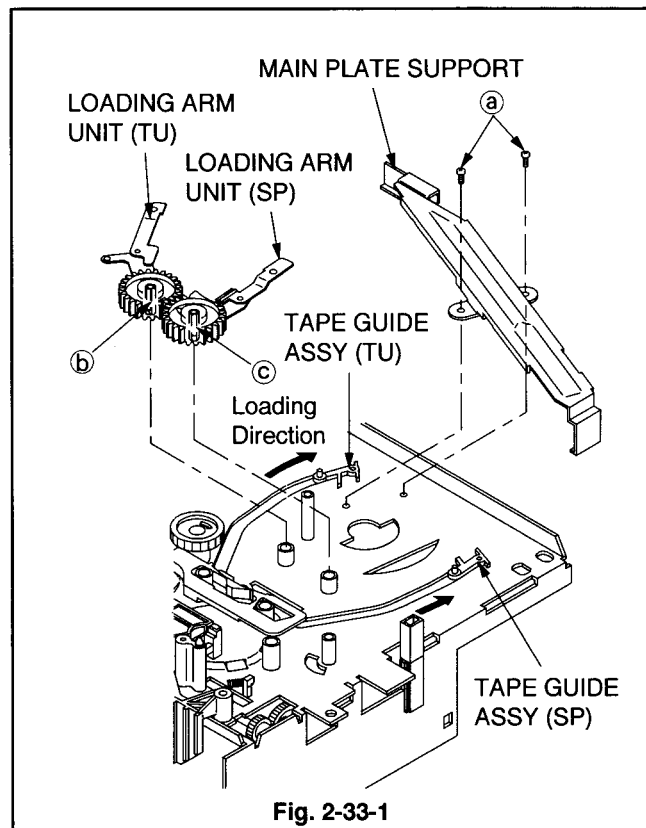


Fig. 2-33-1

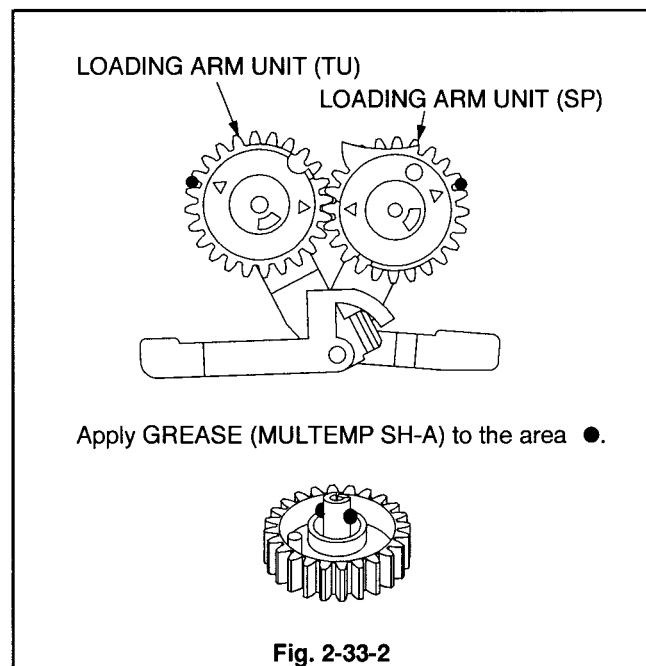


Fig. 2-33-2

- 4 Set the LOADING ARM UNIT (TU) shown in Fig. 2-33-3 so that the  $\Delta$  mark of it matches with the  $\Delta$  mark of the LOADING ARM UNIT (SP) and install it.
- 5 Move the TAPE GUIDE ASSY (SP) and TAPE GUIDE ASSY (TU) shown in Fig. 2-33-1 fully to the unloading position.
- 6 Install the MAIN PLATE SUPPORT shown Fig. 2-33-1.

## 2-34 CAM SPRING (C), CAM PLATE UNIT (C)

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

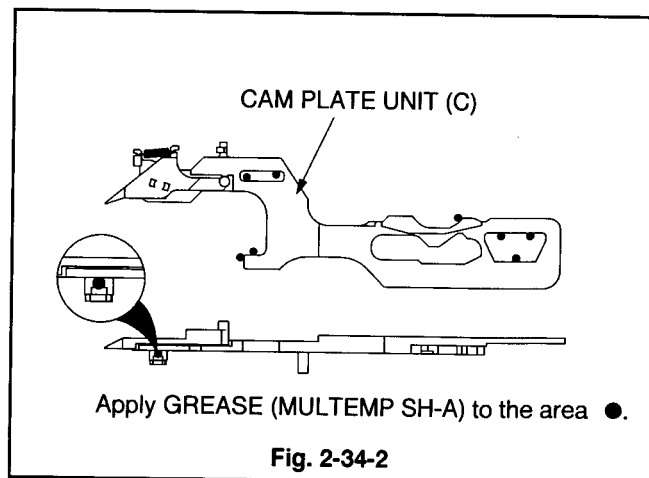
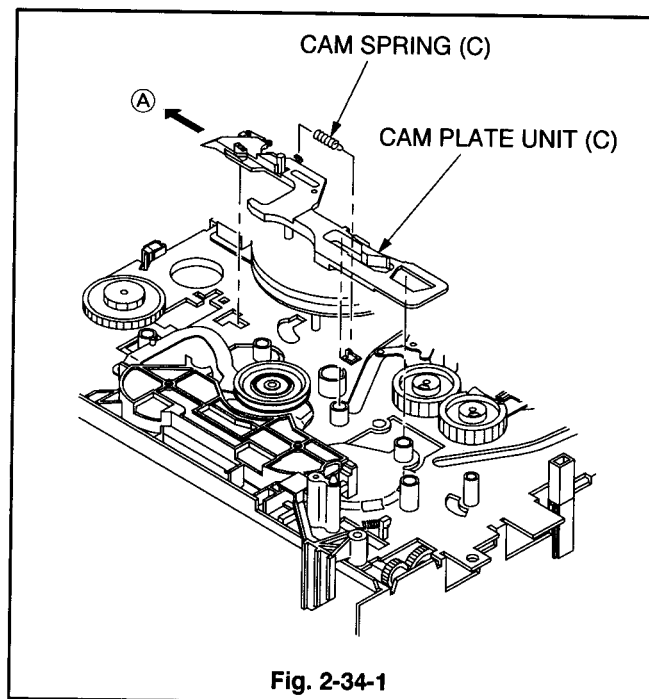
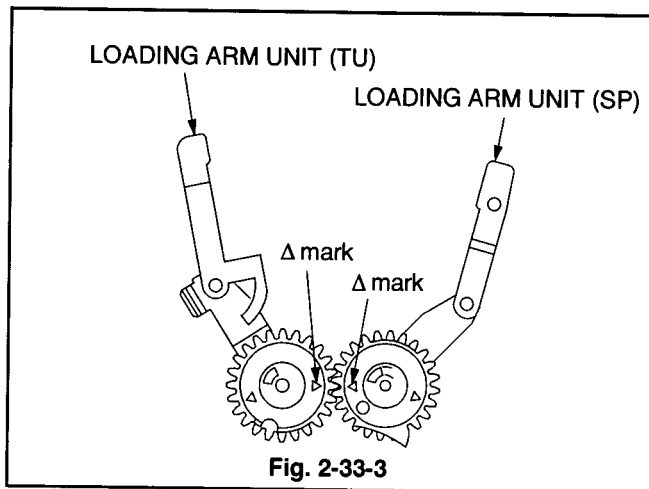
- LAMP GUIDE (Para. 2-7)
- LOADING BELT (Para. 2-11)
- REEL BELT (Para. 2-15)
- CAPSTAN BRAKE SPRING (Para. 2-16)
- CAPSTAN BRAKE (Para. 2-16)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- WORM PULLEY UNIT (Para. 2-17)
- CONTROL WIND LEVER (Para. 2-18)
- TENSION LEVER UNIT (Para. 2-18)
- LOADING GEAR (Para. 2-20)
- LAMP LOADING GEAR (Para. 2-20)
- CAM GEAR (TU) (Para. 2-21)
- CAM GEAR (SP) (Para. 2-32)

### (Removal)

- 1 Move the TAPE GUIDE ASSY (SP) and TAPE GUIDE ASSY (TU) shown in Fig. 2-33-1 fully to the loading position.
- 2 Remove the CAM SPRING (C) shown in Fig. 2-34-1.
- 3 Move the CAM PLATE UNIT (C) in the direction shown by arrow (A) to remove it as shown in Fig. 2-34-1.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-34-2 on the new CAM PLATE UNIT (C).



- 2 Install the CAM PLATE UNIT (C) shown in Fig. 2-34-3 so that the pin (a) of it enters the part A of the SHIFT LEVER.
- 3 Install the CAM SPRING (C) shown in Fig. 2-34-1.
- 4 Move the TENSION ARM shown in Fig. 2-34-4 fully to the direction shown by the arrow. Move the TAPE GUIDE ASSY (SP) and TAPE GUIDE ASSY (TU) shown in Fig. 2-33-1 fully to the unloading position.

## 2-35 TAPE GUIDE ASSY (SP), TAPE GUIDE ASSY (TU)

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

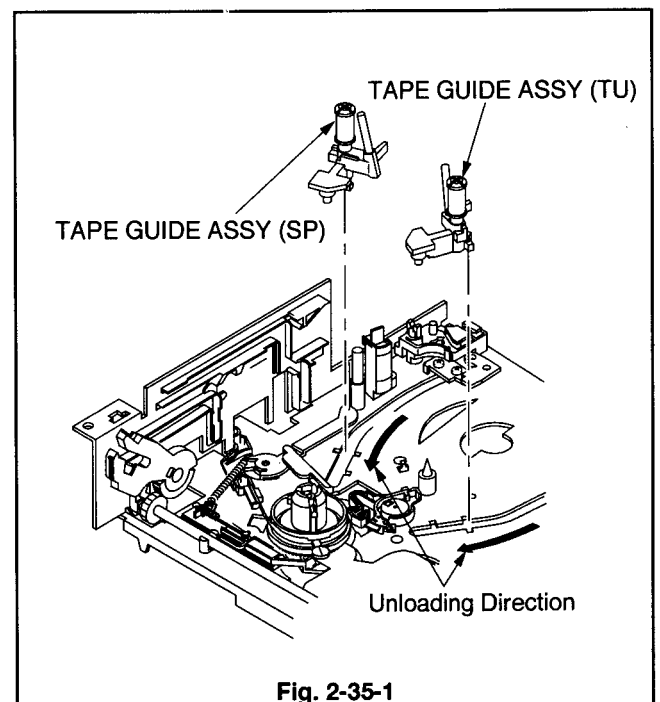
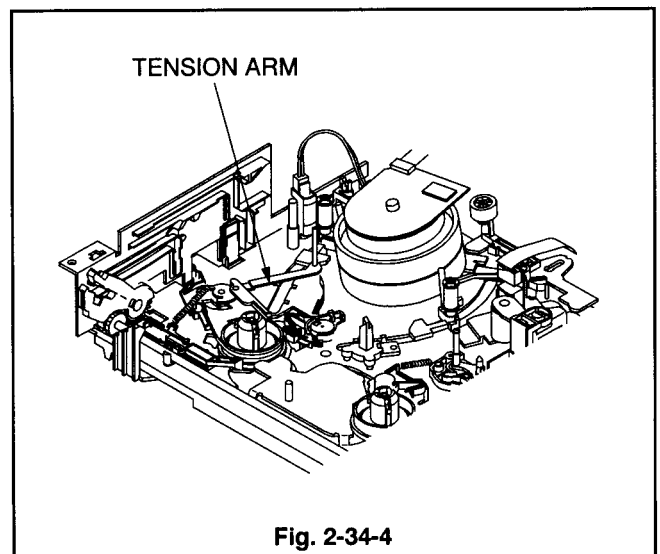
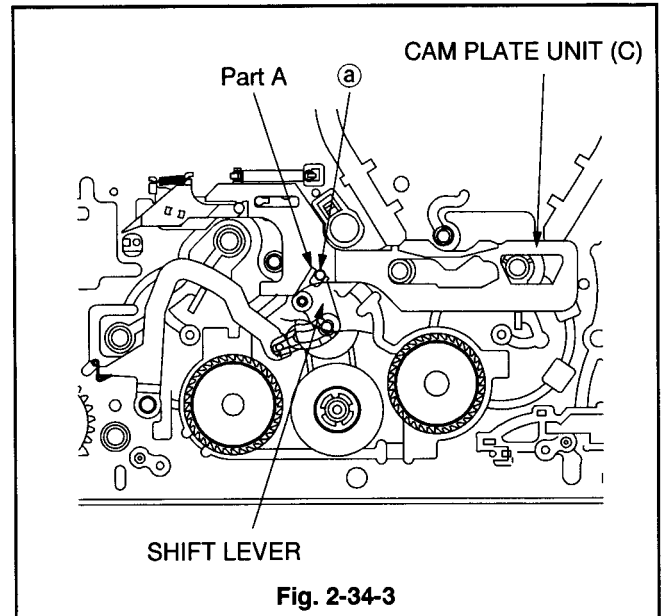
- LAMP GUIDE (Para. 2-7)
- LOADING BELT (Para. 2-11)
- REEL BELT (Para. 2-15)
- CAPSTAN BRAKE SPRING (Para. 2-16)
- CAPSTAN BRAKE (Para. 2-16)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- WORM PULLEY UNIT (Para. 2-17)
- CONTROL WIND LEVER (Para. 2-18)
- TENSION LEVER UNIT (Para. 2-18)
- LOADING GEAR (Para. 2-20)
- LAMP LOADING GEAR (Para. 2-20)
- CAM GEAR (TU) (Para. 2-21)
- CAM GEAR (SP) (Para. 2-32)
- LOADING ARM UNIT (TU) (Para. 2-33)
- LOADING ARM UNIT (SP) (Para. 2-33)
- CAM SPRING (C) (Para. 2-33)
- CAM PLATE UNIT (C) (Para. 2-34)

### (Removal)

- 1 Move the TAPE GUIDE ASSY (SP) shown in Fig. 2-35-1 fully to the unloading position to remove it.
- 2 Move the TAPE GUIDE ASSY (TU) shown in Fig. 2-35-1 fully to the unloading position to remove it.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area specified in Fig. 2-35-2 on the MAIN PLATE ASSY .
- 2 Install the TAPE GUIDE ASSY (TU) shown in Fig. 2-35-1.
- 3 Install the TAPE GUIDE ASSY (SP) shown in Fig. 2-35-1.
- 4 Perform adjustments from "GUIDE ROLLER Adjustment" in Item 3-2-1 to "Check of FM Waveform Flatness" in Item 3-2-5 of "Interchangeability Adjustment of the Mechanism".



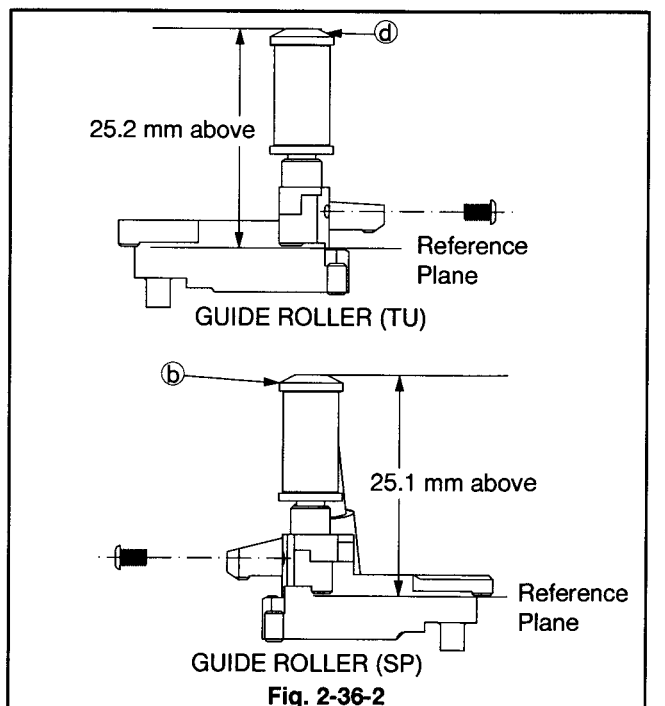
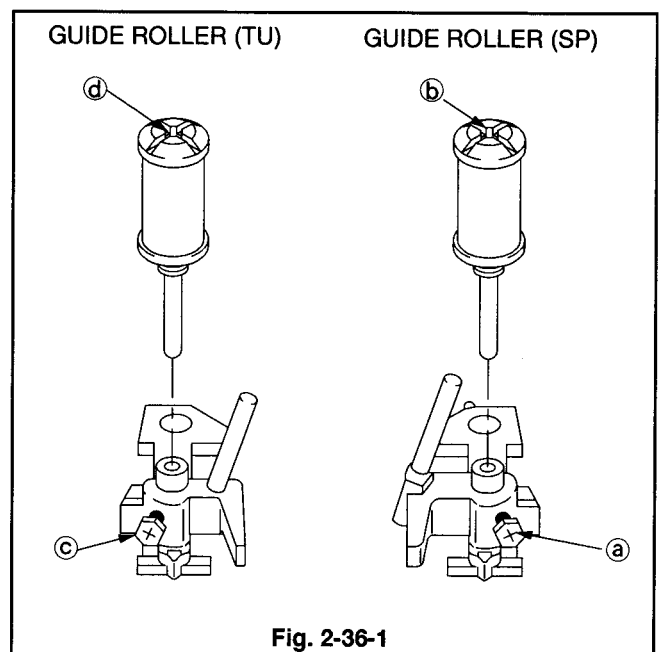
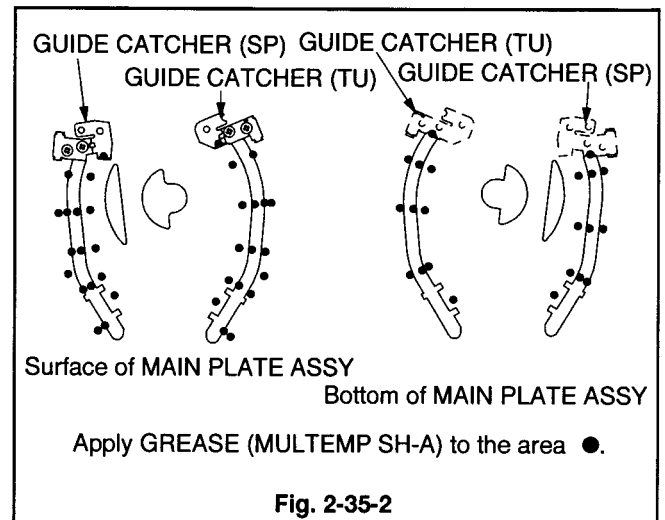
## 2-36 GUIDE ROLLER (SP), GUIDE ROLLER (TU)

### (Removal)

- 1 Loosen the GUIDE ROLLER (SP) fastening screw (a) with a L SHAPED BOX DRIVER (859C433O70) so that the GUIDE ROLLER (SP) shown in Fig. 2-36-1 lightly turns.
- 2 Counter-clockwise turn the height adjustment screw (b) at the top of the GUIDE ROLLER (SP) shown in Fig. 2-36-1 with an adjustment driver (859C259O80) to remove the GUIDE ROLLER (SP).
- 3 Loosen the GUIDE ROLLER (TU) fastening screw (c) so that the GUIDE ROLLER (TU) shown in Fig. 2-36-1 lightly turns.
- 4 Counter-clockwise turn the height adjustment screw (d) at the top of the GUIDE ROLLER (TU) shown in Fig. 2-36-1 with an adjustment driver (859C259O80) to remove the GUIDE ROLLER (TU).

### (Installation)

- 1 Insert the GUIDE ROLLER (TU) shown in Fig. 2-36-1 into the installation hole on the TAPE GUIDE ASSY (TU).
- 2 Clockwise turn the height adjustment screw (d) at the top of the GUIDE ROLLER (TU) shown in Fig. 2-36-2 with an adjustment driver (859C259O80) so that the GUIDE ROLLER (TU) is at a height of 25.2 mm above the reference plane.
- 3 Lightly screw the GUIDE ROLLER (TU) fastening screw (c) shown in Fig. 2-36-1.
- 4 Insert the GUIDE ROLLER (SP) shown in Fig. 2-36-1 into the installation hole on the TAPE GUIDE ASSY (SP).
- 5 Clockwise turn the height adjustment screw (b) at the top of the GUIDE ROLLER (SP) shown in Fig. 2-36-2 with an adjustment driver (859C259O80) so that the GUIDE ROLLER (SP) is at a height of 25.1 mm above the reference plane.
- 6 Lightly screw the GUIDE ROLLER (SP) fastening screw (a) shown in Fig. 2-36-1.
- 7 Perform "Check and Adjustment of the FM Envelope" in Para. 3-2 of "Interchangeability Adjustment of the Mechanism".
- 8 Clean the GUIDE ROLLER (SP) and GUIDE ROLLER (TU) with DRY GAUZE.





## 2-37 DRUM CLAMPER, DRUM ASSY

### (Removal)

- 1 Disconnect the CARD LEAD WIRE of the DRUM ASSY shown in Fig. 2-37-1.
- 2 Unscrew the two DRUM CLAMPER fastening screws (a) and (b) shown in Fig. 2-37-1 to remove the DRUM ASSY with the DRUM CLAMPER attached.
- 3 Move the DRUM CLAMPER in the direction shown by the arrow to remove it from the DRUM ASSY as shown in Fig. 2-37-2.
- 4 If the product is provided with the SHIM shown in Fig. 2-37-1, remove and scrap it.

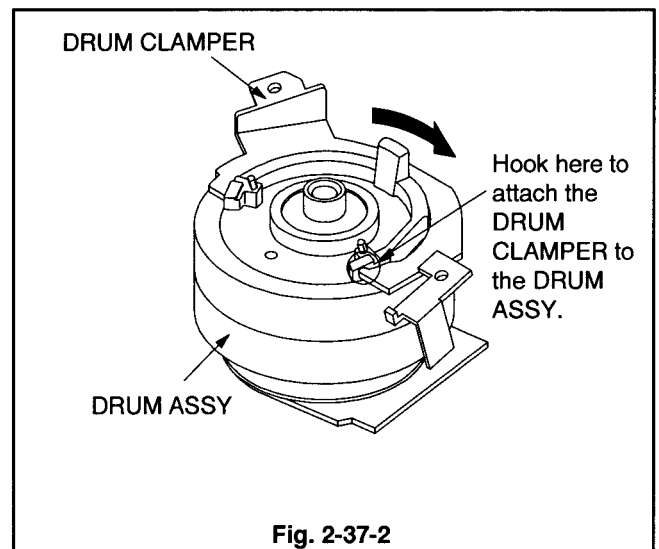
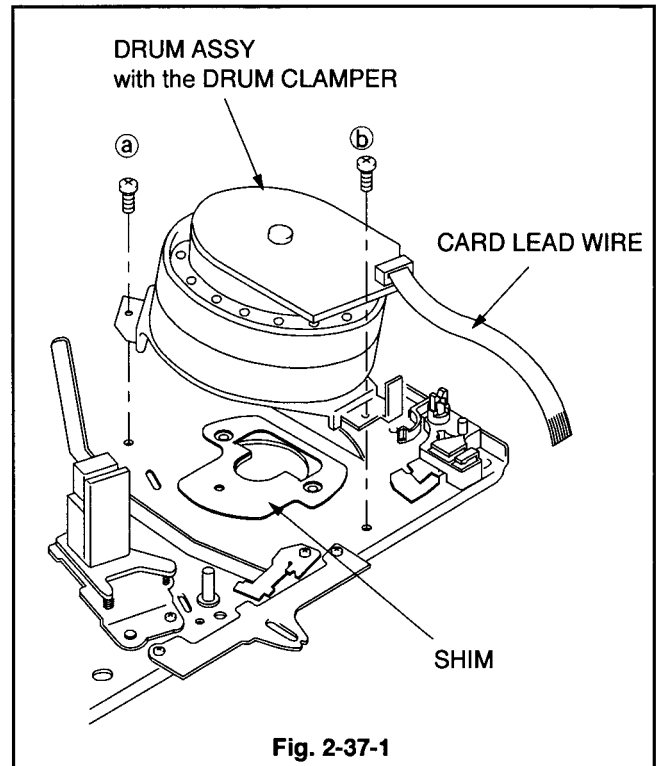
### (Installation)

**Note :** When replacing the DRUM ASSY, do not install the SHIM.

- 1 Attach the DRUM CLAMPER shown in Fig. 2-37-2 to the DRUM ASSY.
- 2 Install the DRUM ASSY with the DRUM CLAMPER attached shown in Fig. 2-37-1 on the MAIN PLATE ASSY.

**Note :** In installing the DRUM CLAMPER shown in Fig. 2-37-1, first install the screw (b) and then install the screw (a).

- 3 Connect the CARD LEAD WIRE of the DRUM ASSY shown in Fig. 2-37-1.
- 4 Perform adjustment of "Playback Switching Point" described in ELECTRICAL ADJUSTMENTS.
- 5 Perform "Interchangeability Adjustment of the Mechanism".
- 6 Clean the DRUM ASSY shown in Fig. 2-37-1 with alcohol.



## 2-38 DRUM MOTOR STATOR, BRUSH SPRING, ROTOR CASE, END RING, BRUSH, UPPER DRUM ASSY, SPACER

Position the set normally.

### (Removal)

- 1 Disconnect the CARD LEAD WIRE of the DRUM ASSY shown in Fig. 2-38-1.
- 2 Unscrew the two DRUM MOTOR STATOR fastening screws (a) and (b) shown in Fig. 2-38-1 to remove the DRUM MOTOR STATOR.
- 3 Unscrew the two ROTOR CASE fastening screws (c) and (d) shown in Fig. 2-38-1 to remove the ROTOR CASE.
- 4 Loosen the END RING fastening screw (e) [hexagon screw] shown in Fig. 2-38-1 to remove the END RING.
- 5 Remove the BRUSH SPRING shown in Fig. 2-38-1.
- 6 Remove the BRUSH shown in Fig. 2-38-1.
- 7 Remove the UPPER DRUM ASSY shown in Fig. 2-38-1.
- 8 Remove the SPACER shown Fig. 2-38-1.

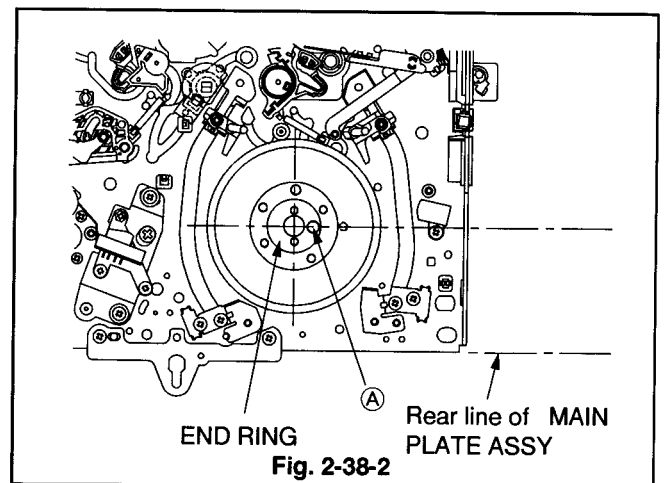
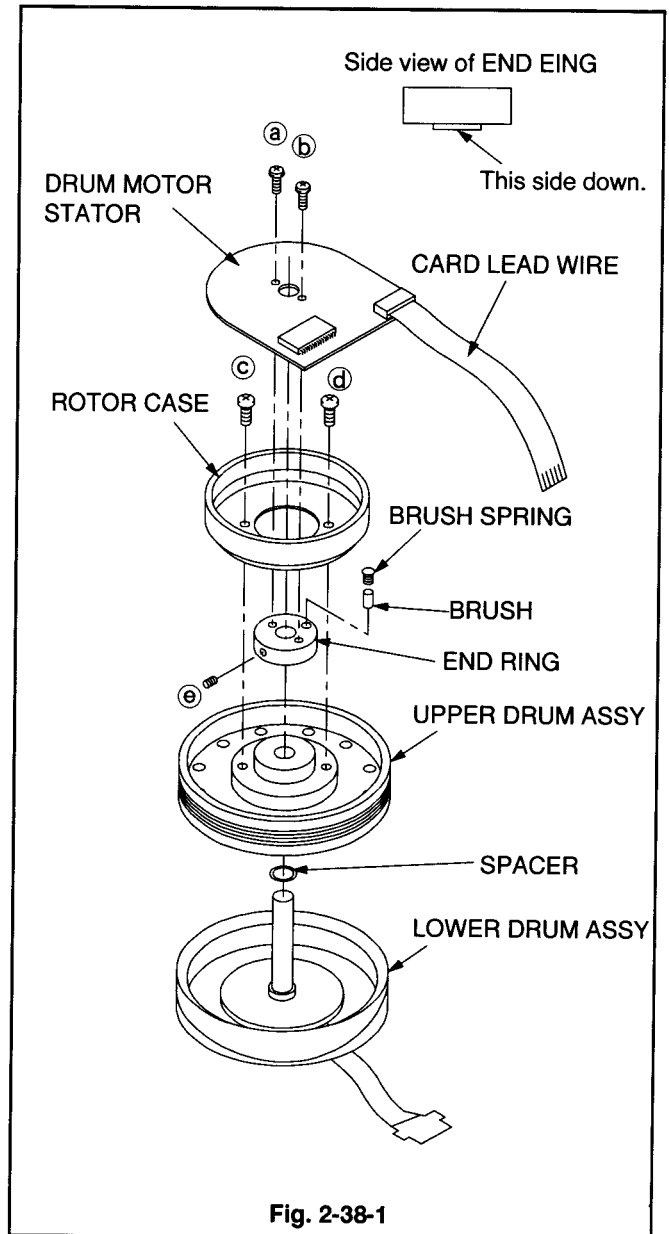
### (Installation)

- 1 Install the SPACER shown in Fig. 2-38-1.

**Note :** Do not use any other SPACER than the one enclosed with the new UPPER DRUM ASSY for replacement.

- 2 Install the UPPER DRUM ASSY shown in Fig. 2-38-1.
- 3 Install the END RING shown in Fig. 2-38-1 so that the reference hole (A) of the END RING is located in parallel with the rear line of the MAIN PLATE ASSY shown in Fig. 2-38-2.  
(Install the reference hole (A) to the right of the rear MAIN PLATE ASSY.)

- 4 Apply screw sealing agent to the END RING fastening screw (e) [hexagon screw] shown in Fig. 2-38-1.



- 5 Install the ROTOR CASE shown in Fig. 2-38-1 so that the reference holes (A) match each other at three points between the ROTOR CASE shown in Fig. 2-38-3 and the UPPER DRUM ASSY.
- 6 Install the BRUSH shown in Fig. 2-38-1.
- 7 Install the BRUSH SPRING shown in Fig. 2-38-1.
- 8 Install the DRUM MOTOR STATOR shown in Fig. 2-38-1.
- 9 Connect the CARD LEAD WIRE of the DRUM ASSY shown in Fig. 2-38-1.
- 10 Perform adjustment of "Playback Switching Point" described in ELECTRICAL ADJUSTMENTS of applicable service manual.
- 11 Perform "Interchangeability Adjustments of the Mechanism".
- 12 Clean the DRUM ASSY with alcohol.

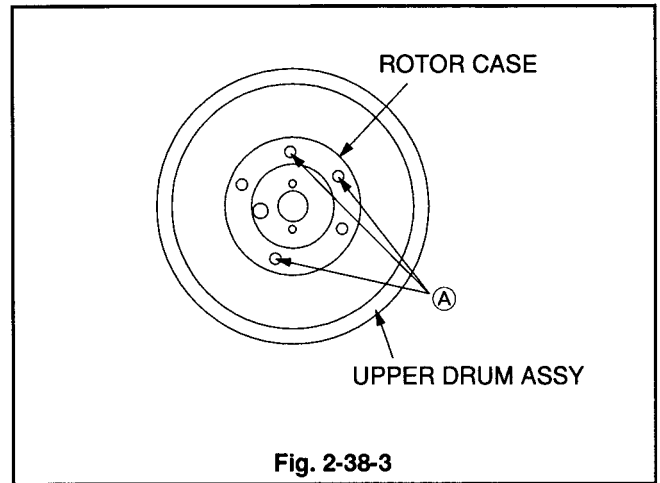


Fig. 2-38-3

## 2-39 SHIFT LEVER

Place the set upside down.

Before performing replacement in this paragraph, remove the following parts. Refer to the applicable paragraph for installation of each part.

- LAMP GUIDE (Para. 2-7)
- LOADING BELT (Para. 2-11)
- REEL BELT (Para. 2-15)
- CAPSTAN BRAKE SPRING (Para. 2-16)
- CAPSTAN BRAKE (Para. 2-16)
- BELT PULLEY (Para. 2-15)
- SHIFT SPRING (Para. 2-15)
- MODE HOLDER (Para. 2-17)
- REEL LOCK LEVER (Para. 2-17)
- MODE GEAR (Para. 2-17)
- WORM PULLEY UNIT (Para. 2-17)
- CONTROL WIND LEVER (Para. 2-18)
- TENSION LEVER UNIT (Para. 2-18)
- LOADING GEAR (Para. 2-20)
- LAMP LOADING GEAR (Para. 2-20)
- CAM GEAR (TU) (Para. 2-21)
- PHOTO UNIT (Para. 2-22)
- IDLER CENTRE LEVER (Para. 2-23)
- PULLEY GEAR (Para. 2-24)
- IDLER UNIT (Para. 2-24)
- CAM GEAR (SP) (Para. 2-32)
- CAM SPRING (C) (Para. 2-34)
- CAM PLATE UNIT (C) (Para. 2-34)

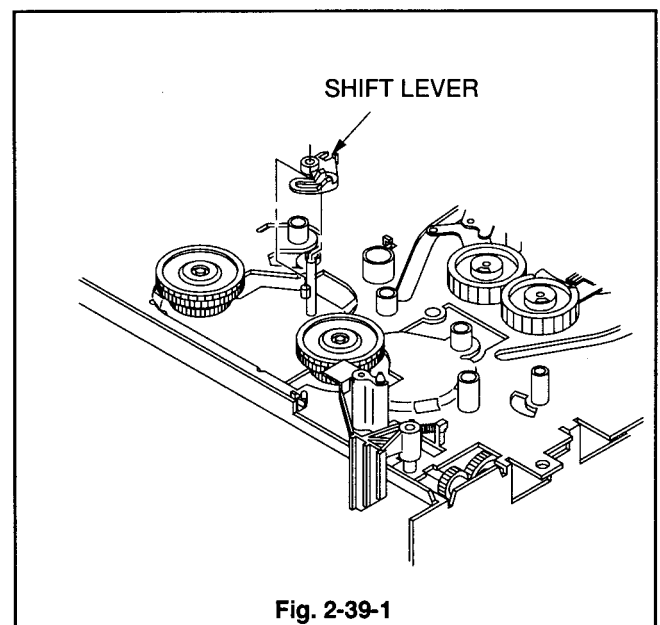


Fig. 2-39-1

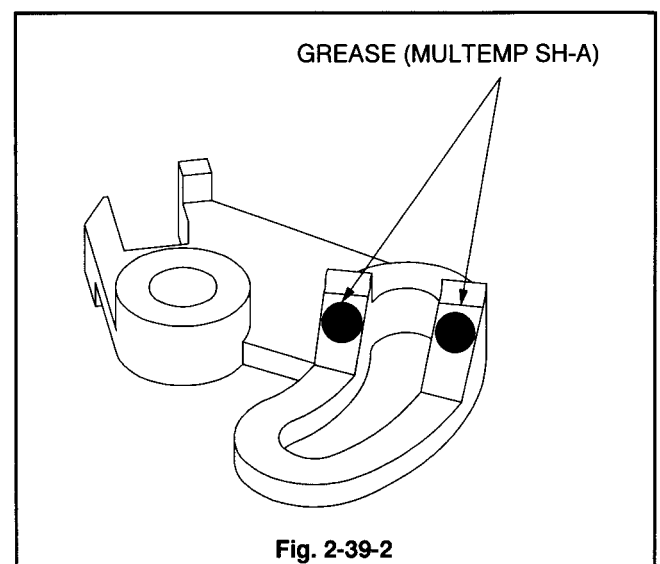


Fig. 2-39-2

### (Removal)

- 1 Remove the SHIFT LEVER shown in Fig. 2-39-1.

### (Installation)

- 1 Apply GREASE (MULTEMP SH-A) [859D055O80] to the area of the new SHIFT LEVER shown in Fig. 2-39-2.
- 2 Install the SHIFT LEVER shown in Fig. 2-39-1.

## 2-40 IMPEDANCE UNIT (SP), FLYWHEEL (SP)

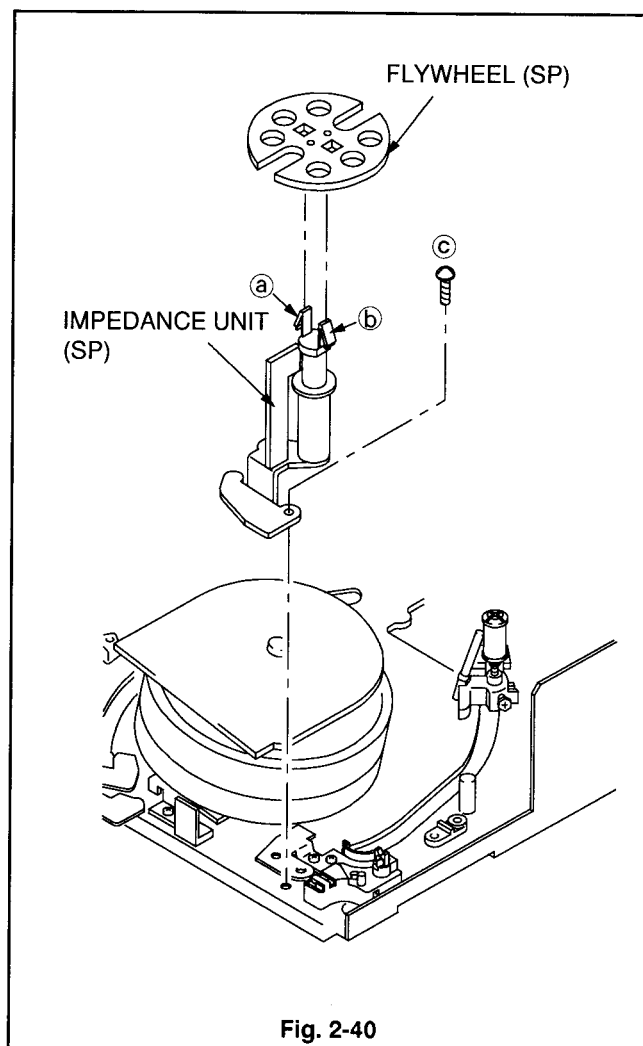
Position the set normally.

### (Removal)

- 1 Unfasten the two catches (a) and (b) securing the IMPEDANCE UNIT (SP) shown in Fig. 2-40 and remove the FLYWHEEL (SP).
- 2 Remove the one screw (c) securing the IMPEDANCE UNIT (SP) shown in Fig. 2-40 and remove the IMPEDANCE UNIT (SP).

### (Installation)

- 1 Install the IMPEDANCE UNIT (SP) shown in Fig. 2-40.
- 2 Install the FLYWHEEL (SP) shown in Fig. 2-40.



### 3. Interchangeability Adjustment of the Mechanism

**Note 1 :** Tracking may need to be preset during interchangeability adjustment of the mechanism. Digital tracking is preset by short circuiting TP5A and TP5B on the PCB-MAIN.

**Note 2 :** The adjustments are performed in the playback mode, using the staircase signal of an alignment tape. Connect an oscilloscope to TP2A and external Trigger from TP2H, unless otherwise specified.

#### 3-1 Adjustment of BACK TENSION and TENSION PIN Position

Run a blank tape for several minutes to break in the REEL DISKS and the transport before making the adjustment.

- 1 Playback an Alignment Tape.  
[PM6KH3 : 859C339O30]
- 2 Make sure that the TENSION PIN is in the position shown in Fig. 3-1.
- 3 If the TENSION PIN is not in the position specified in Fig. 3-1, turn the boss to set the TENSION PIN to be in position.
- 4 Insert the Back Tension Gauge (859C345O80) and set the VCR to the playback mode.
- 5 Make sure that the reading of the Back Tension Gauge (859C345O80) is within  $50 \pm 6$  g/cm.

**Note :** Before the measurement, make sure that the tape travel has become steady.

If the reading exceeds the specified value, replace the TENSION SPRING.

- 6 While tape travel is steady, check visually to make sure that the vibration range of the TENSION PIN is 1 mm or less.

If the vibration range exceeds the specified value, replace the REEL DISK.

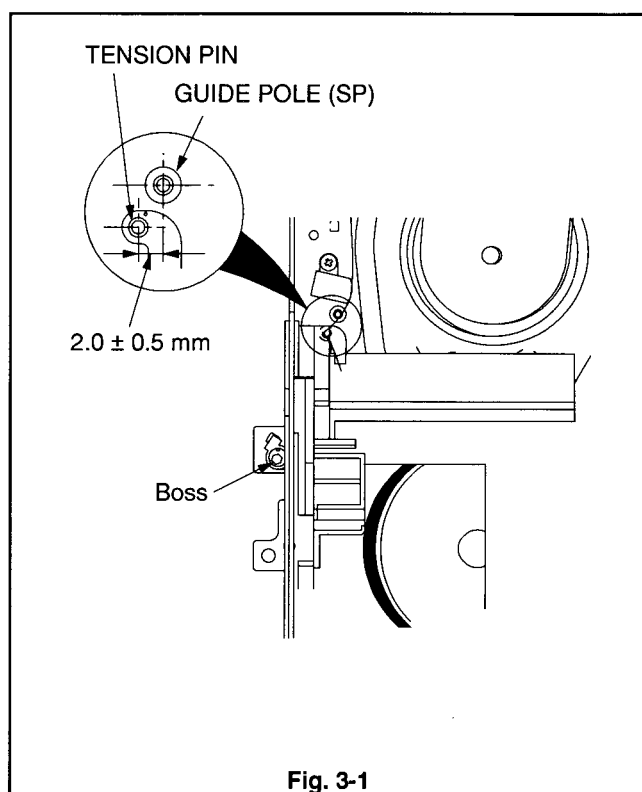


Fig. 3-1

## 3-2 Check and Adjustment of the FM Envelope

### 3-2-1 GUIDE ROLLER Adjustment

#### **IMPORTANT**

The Guide Rollers are secured by a hexagon screw, however, this screw, does not require to be loosened for adjustments to be made.

- 1 Playback an Alignment Tape.  
[PM6KH3 : 859C339O30]
- 2 Preset tracking.
- 3 Make sure that the FM waveform is flat like A.
- 4 Perform "Adjustment of GUIDE ROLLER (SP) Height" in Item 3-2-2 if the leading portion (the entry side of the DRUM) of the FM waveform is like B or C. Perform "Adjustment of GUIDE ROLLER (TU) Height" in Item 3-2-3 if the trailing portion (the exit side of the DRUM) is like D or E.

### 3-2-2 Adjustment of GUIDE ROLLER (SP) Height

- 1 Loosen the screw with an L SHAPED BOX DRIVER (859C433O70) so that the GUIDE ROLLER (SP) rotates freely.
- 2 Observe the leading edge (the entry side of the DRUM) of the FM waveform. If it is like B, the GUIDE ROLLER (SP) may be lower than the specified position, and if it is like C, the GUIDE ROLLER (SP) may be higher. Turn the adjustment screw at the top of the GUIDE ROLLER (SP) so that the FM waveform becomes flat like A.
  - Counter-clockwise turn the adjusting screw if the roller is low.
  - Clockwise turn the adjusting screw if the roller is high.
- 3 Tighten the screw.
- 4 Perform "Coarse Adjustment of Phase" in Item 3-2-4.

### 3-2-3 Adjustment of GUIDE ROLLER (TU) Height

- 1 Loosen the screw with an L SHAPED BOX DRIVER (859C433O70) so that the GUIDE ROLLER (TU) rotates freely.
- 2 Observe the trailing edge (the exit side of the DRUM) of the FM waveform. If it is like D, the GUIDE ROLLER (TU) may be lower than the specified position, and if it is like E, the GUIDE ROLLER (TU) may be higher. Turn the adjustment screw at the top of the GUIDE ROLLER (TU) so that the FM waveform becomes flat like A.
  - Counter-clockwise turn the adjustment screw if the roller is low.
  - Clockwise turn the adjustment screw if the roller is high.
- 3 Tighten the screw .
- 4 Perform "Coarse Adjustment of Phase" in Item 3-2-4.

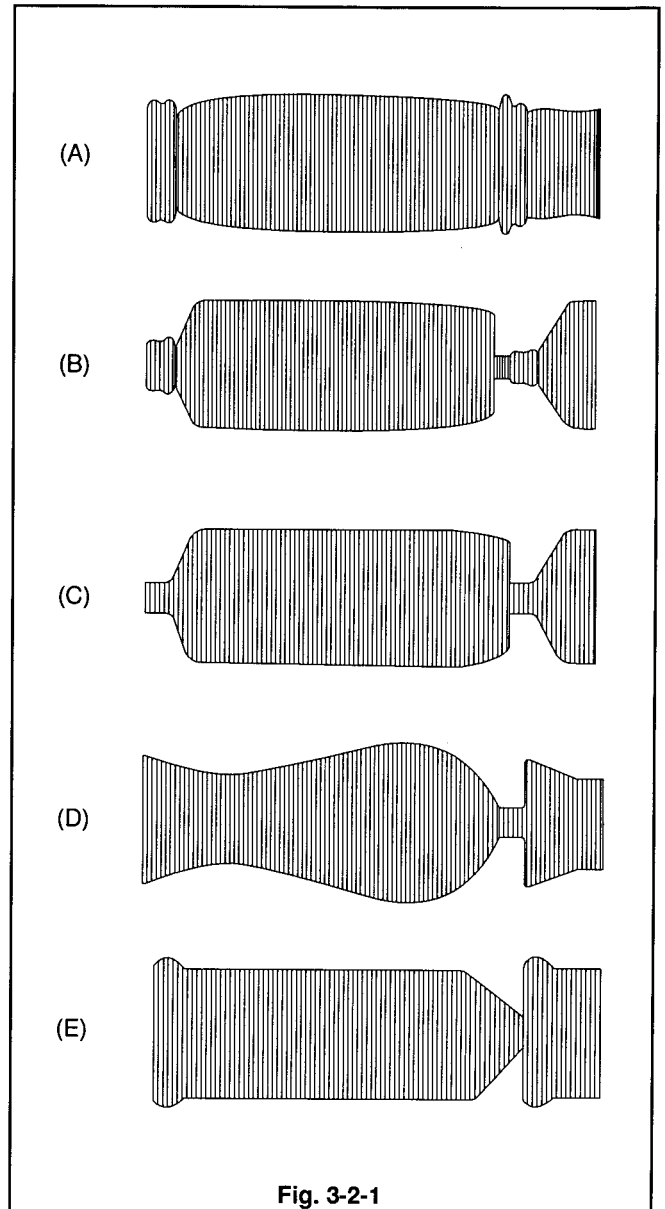


Fig. 3-2-1

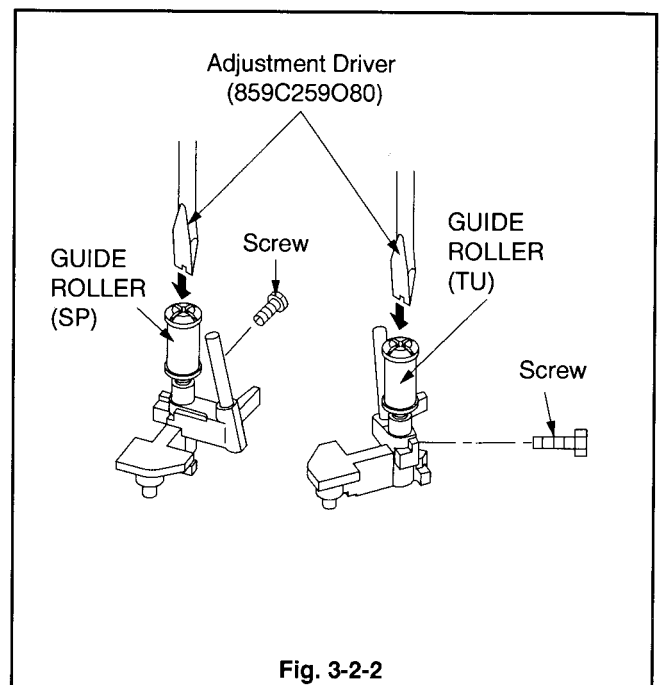


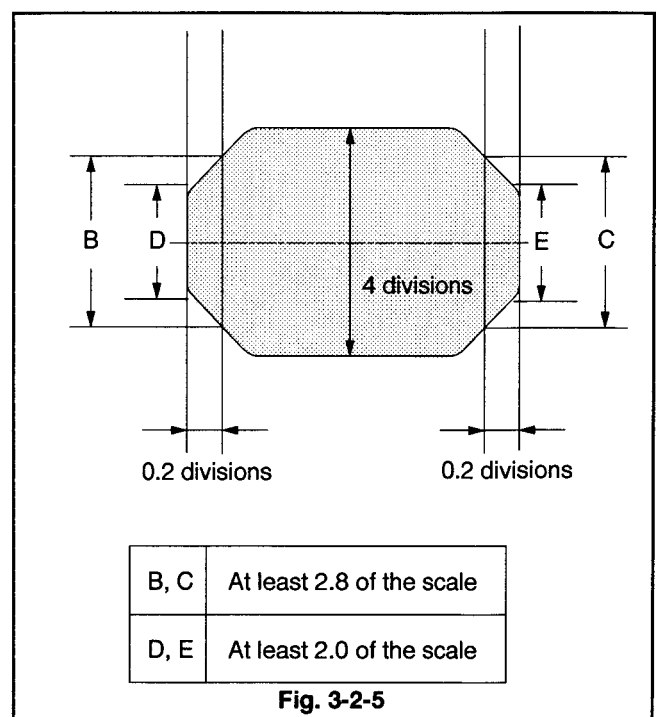
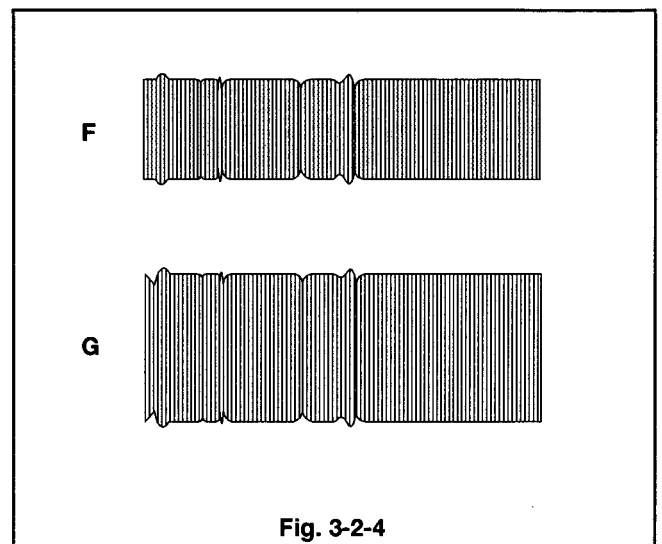
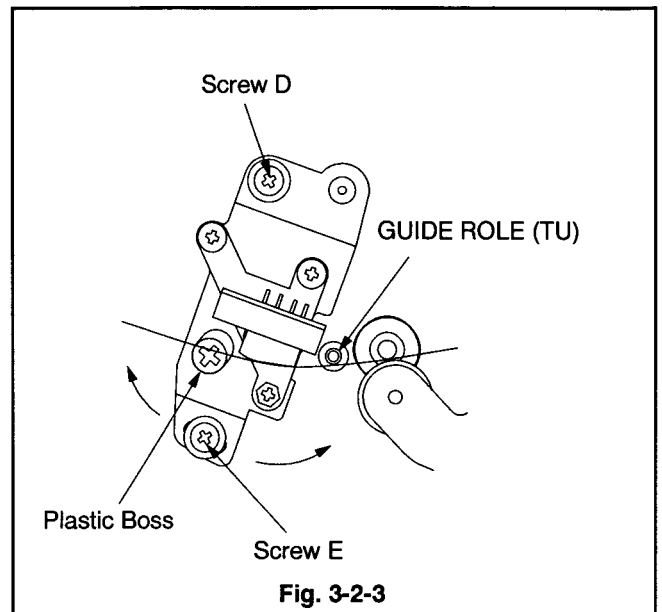
Fig. 3-2-2

### 3-2-4 Coarse Adjustment of Phase

- 1 Play back an Alignment Tape.  
[PM6KH3 : 859C339O30]
- 2 Preset tracking.
- 3 Check the FM waveform after performing "GUIDE ROLLER Adjustment" in Item 3-2-1.
- 4 If the amplitude of the FM waveform is narrow like F because of out of phase, adjust it to the maximum like G in Fig. 3-2-4, by the following procedure.  
Loosen the screws D and E and insert a screw driver into the plastic boss of the MAIN PLATE ASSY. Move the A/C PLATE right and left to adjust the amplitude level of the FM waveform to the maximum. [Waveform G in Fig. 3-2-4]
- 5 Tighten the screws D and E.

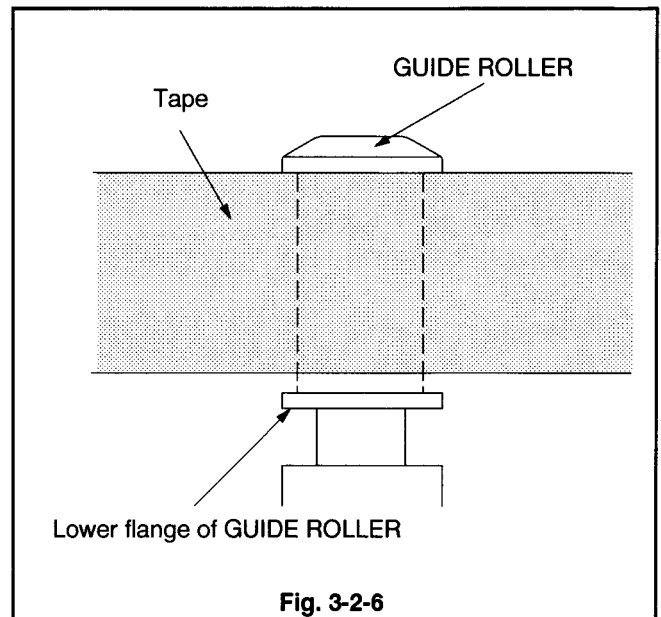
### 3-2-5 Check of FM Waveform Flatness

- 1 Playback an Alignment Tape.  
[PM6KH3 : 859C339O30]
- Note :** Perform the following procedure for selection of tracking method (manual or automatic) and for tracking adjustment.
- For the manual tracking adjustment, press a channel up/ down button during reproduction.
  - To change the adjustment mode from manual to automatic in the tracking adjustment, press the channel up and down buttons at the same time.
- 2 Select the manual tracking mode.  
Change tracking and make sure that the amplitude is changeable while the FM signal remains flat.
  - 3 Adjust the tracking so that the amplitude level of the FM waveform is maximum. Set the oscilloscope so that the amplitude level of the FM waveform is 5 divisions.
  - 4 Adjust tracking so that the peak value of the FM waveform is 4 divisions. Check if the FM waveforms B, C, D and E are within the specified values shown in Fig. 3-2-5.
  - 5 If the waveform is not within the specified value, repeat the procedure in Item 3-2 "Check and adjustment of the FM Envelope" from the beginning.



### 3-2-6 Tape Running Condition at the GUIDE ROLLERS (Check 1)

- 1 Playback an Alignment Tape.  
[PM6KH3 : 859C339O30]
- 2 Visually check if there is a space between the tape and the lower flanges of the GUIDE ROLLER (SP) and GUIDE ROLLER (TU).
- 3 If there is no space, replace the ASSY TAPE GUIDE (SP) and TAPE GUIDE ASSY (TU) according to Para. 2-35 in "Replacement of Major Parts".
- 4 Alternately load and unload the tape several times, check that flatness of the FM waveform does not change.
- 5 If flatness changes, check the installation condition of the A/C HEAD. If it is abnormally installed, replace the A/C HEAD UNIT according to para. 2-4 and perform "Coarse Adjustment of Phase" in Item 3-2-4 again.



### 3-2-7 Tape Running Condition at the GUIDE ROLLERS (Check 2)

- 1 Playback an Alignment Tape.  
[PM6KH3 : 859C339O30]
- 2 Lightly press and release the top of the GUIDE ROLLER (SP) and GUIDE ROLLER (TU). Check that the FM waveform is quickly restored to the previous level.
- 3 Replace the TAPE GUIDE ASSY (SP) and TAPE GUIDE ASSY (TU) according to Para. 2-35 in "Replacement of Major Parts".



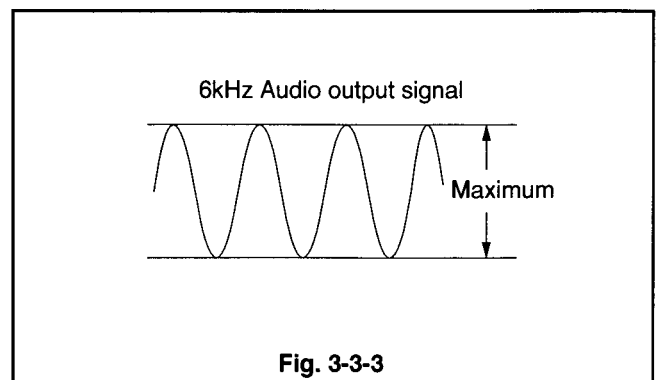
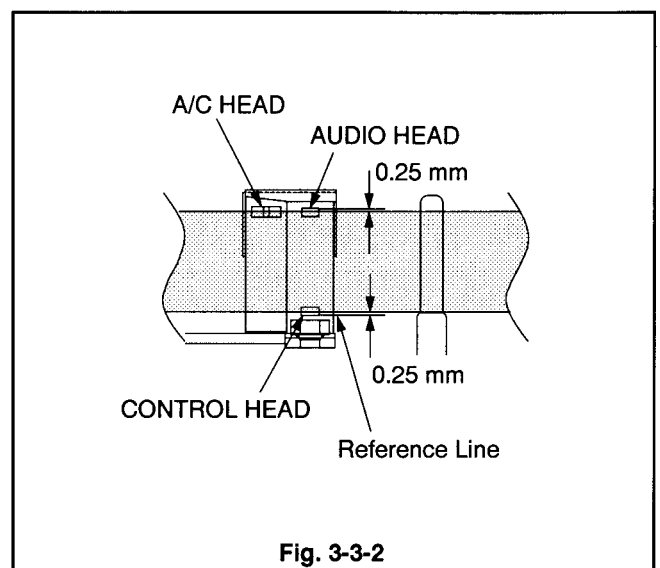
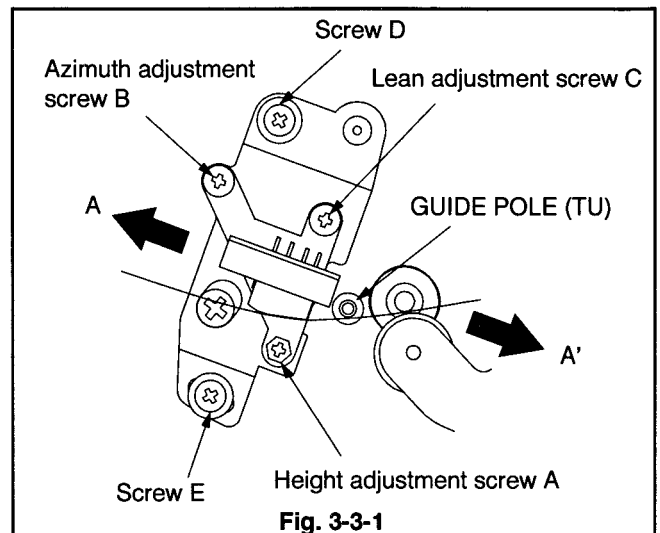
### 3-3 Adjustment of A/C HEAD

#### 3-3-1 Adjustment of A/C HEAD Slant

- 1 Playback a blank tape.
- 2 Slowly turn the adjusting screw C counter-clockwise to slightly crease the bottom of the tape at the flange portion of GUIDE POLE (TU) .
- 3 Slowly return the adjusting screw C to remove the crease.
- 4 Slowly turn the adjusting screw C counter-clockwise again and stop it just before the tape is creased.

#### 3-3-2 Adjustment of A/C HEAD Azimuth and Height

- 1 If the height of the CONTROL HEAD is different from the specified value in Fig. 3-3-2, adjust it with the adjusting screw A.
- 2 After adjustment with the screw A, perform "Adjustment of A/C HEAD Slant" in Item 3-3-1 again.
- 3 Connect the oscilloscope to the audio output terminal.
- 4 Playback an Alignment Tape.  
[PM6KH3 : 859C339O30]
- 5 Adjust the audio output level to the maximum by turning the Azimuth adjusting screw B shown in Fig. 3-3-1.  
After the adjustment, pull out the screw driver and check if the audio output level is 4.6 divisions or more, where the maximum audio output level is set to 5.  
If the audio output level is less than 4.6, repeat the procedure 1 ~ 5.
- 6 Push the A/C HEAD to the right and left (in the direction A and A' in Fig. 3-3-1) and then release it. Check that the audio output level does not change. (Do not push the A/C HEAD such a degree that the audio output level is reduced less than 3/4 of its maximum value.)
- 7 Check that the change in the audio output level is less than 2 dB.
- 8 If the change exceeds 2 dB, perform "Adjustment of A/C HEAD Slant" in Item 3-3-1 and this adjustment.
- 9 If the above procedure of adjustment proves to be unsatisfactory, replace the TAPE GUIDE ASSY (SP) and TAPE GUIDE ASSY (TU) according to Para. 2-35 (Replacement of Major Parts).



### 3-4 Adjustment of Phase

- 1 Set the VCR to the playback mode.  
(Use the Alignment Tape specified below to perform adjustment 1~4).  
[PM3KE6 (CH1) 25 : 859C568O50 ]
- 2 Preset tracking.
- 3 Loosen the screws D and E and insert a screw driver into the plastic boss of the MAIN PLATE ASSY. Move the A/C PLATE right and left to adjust the FM output waveform to the maximum.
- 4 Tighten the screws D and E.
- 5 Playback the Alignment Tape.  
[PMX : 859C568O70]
- 6 Connect TP2A (the FM waveform output) and the audio output terminal to the oscilloscope, external Trig. to TP2H, and check if the missing portions of the FM waveform and that of the audio waveform are within the specified value (field). (Refer to Fig. 3-4-2.)
- 7 If they are not within the specified value, repeat the procedure 3.
- 8 Turn the normal tracking control to adjust the FM waveform for maximum and set the oscilloscope so that the waveform is "5" divisions. (Refer to Note in Para. 3-2-5 about tracking adjustment.)
- 9 Preset tracking.
- 10 Check that the FM waveform on the oscilloscope is "4.8" or more divisions.
- 11 If the FM waveform is below "4.8" divisions, perform this adjustment after tracking preset.
- 12 Push the A/C HEAD to the right and left (in the direction of A-A' in Fig. 3-4-1) and then release the A/C HEAD. Check that the amplitude of the FM waveform does not change from that before shifting the A/C HEAD.
- 13 When the FM waveform Varies in amplitude level , check the mounting position of the A/C HEAD UNIT. If the portion is incorrect, correct the position following Item 2-4 "A/C HEAD UNIT" perform Item 3-3 "Adjustment of A/C HEAD" and repeat this adjustment from the beginning.
- 14 Alternately load and unload the tape several times to check that the amplitude of the FM waveform does not change.

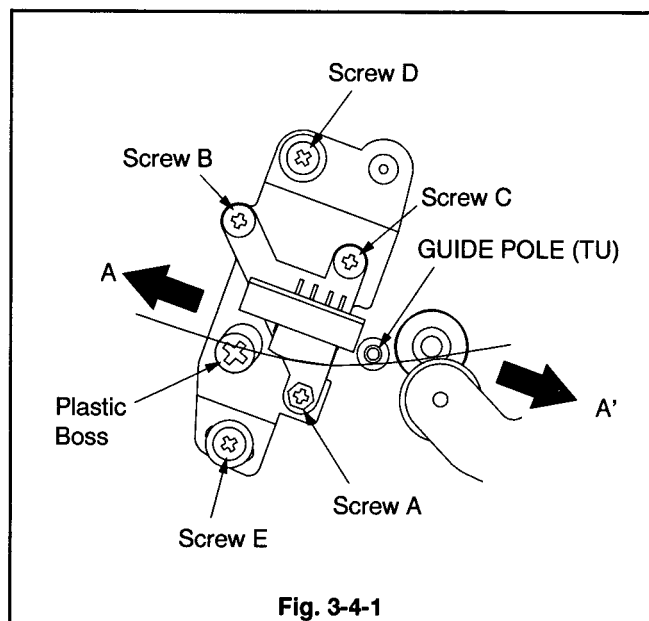


Fig. 3-4-1

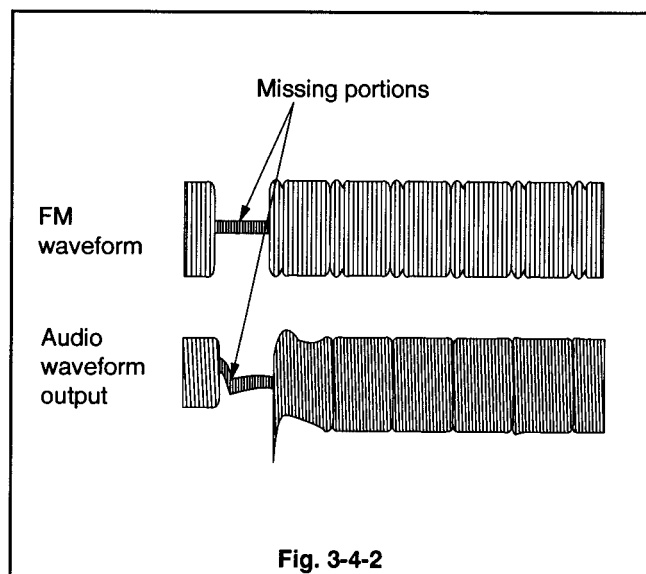


Fig. 3-4-2

### 3-5 Adjustment of GUIDE ARM ASSY (TU) Height

- 1 Run a final portion of T-240 blank tape in the reverse search mode.
- 2 Tighten the NYLON NUT of the GUIDE ARM ASSY (TU) with a box driver to lower the GUIDE ARM ASSY (TU) until the tape is creased at the lower flange of the GUIDE POLE (TU). Then slowly return the NYLON NUT, stop it at the point where the crease is removed. (During adjustment, use an uncovered cassette tape, or raise the cover so that the adjustment is available.)

Note : During adjustment, turn the NYLON NUT in the loosening direction. Do not turn the NYLON NUT more than  $\pm 1/2$  turn.

- 3 Eject and insert the cassette tape, and then set the VCR to the reverse search mode again. Check that the tape is not creased at the lower flange of the GUIDE POLE (TU). If the crease cannot be removed, repeat the procedure 1 ~ 3.
- 4 Set the VCR to the playback mode and check that the tape is not creased at the lower flange of the GUIDE POLE (TU). If the crease cannot be removed, repeat "Adjustment of A/C HEAD Slant" in Item 3-3-1 and the succeeding adjustments.
- 5 Run the start portion of T-180 blank tape in the forward search mode and check that the tape is not creased at the GUIDE POLE (TU).

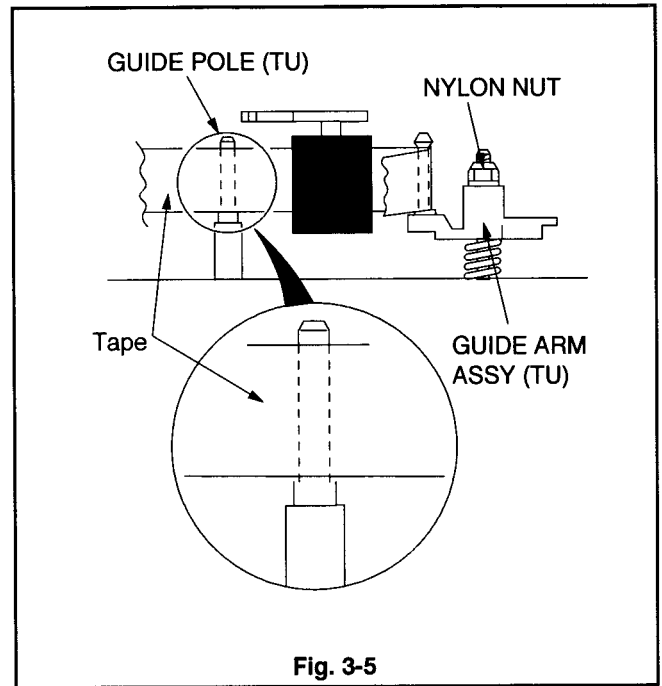


Fig. 3-5

#### 4. Servicing for Tape Jamming during the Loading Process

- 1 Remove the DECK ASSY.
- 2 If the tape is caught in the mechanical parts to lock it, remove the tape.
- 3 If the TAPE GUIDE ASSY (TU) and TAPE GUIDE ASSY (SP) is in a status for loading, turn the LOADING MOTOR ASSY shown in Fig. 4 in the direction shown by arrow (A) and move the TAPE GUIDE ASSY (TU) and TAPE GUIDE ASSY (SP) fully in the unloading direction.
- 4 Turn the CAPSTAN MOTOR shown in Fig. 4 in the direction shown by arrow (B) to wind the tape up within the cassette.
- 5 Turn the LOADING MOTOR ASSY shown in Fig. 4 in the direction shown by arrow (A) to eject the tape.

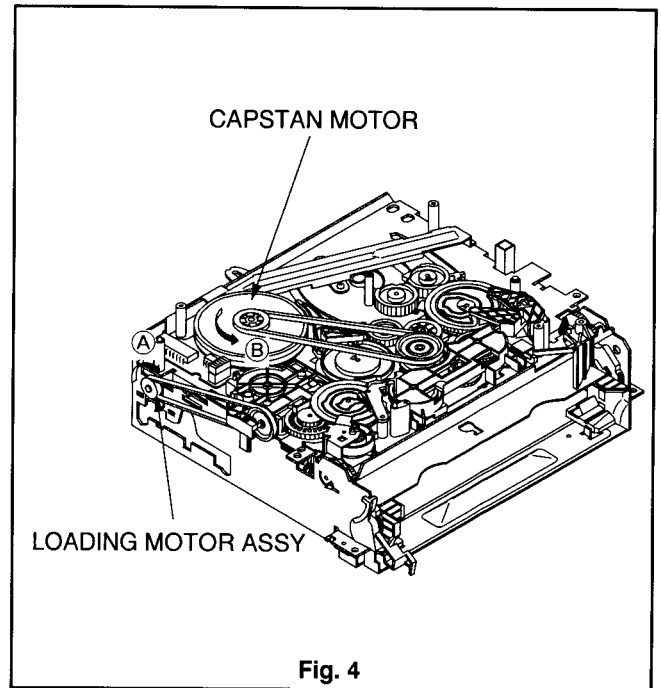


Fig. 4

SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION		SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	
D 907	264P825O10	DIODE	ERA15-02	[E,GY]	L 571	325C167O50	PEAKING COIL	100μH-J	[B]
D 908	264P825O10	DIODE	ERA15-02	[E,GY]	L 701	325C106O30	PEAKING COIL	10μH-J	[E,GY]
D 909	264P568O10	DIODE	1SS252	[B,IR]	L 702	325C106O30	PEAKING COIL	10μH-J	[E,GY]
D 9A1	264P695O50	DIODE	D2S6M		L 703	325C106O30	PEAKING COIL	10μH-J	[E,GY]
D 9A2	264P695O30	DIODE	D2S4M		L 704	321C114O50	RF COIL	4700μH-J	[E,GY]
D 9A3	264P663O10	DIODE	D1NL20U		L 7A0	325C106O60	PEAKING COIL	18μH-J	[B,E,IR]
D 9A4	264P663O10	DIODE	D1NL20U		L 7A1	325C107O50	PEAKING COIL	100μH-J	[B,E,IR]
D 9A5	264P568O10	DIODE	1SS252		L 7A2	325C107O50	PEAKING COIL	100μH-J	[B,E,IR]
D 9A6	264P568O10	DIODE	1SS252		L 7A3	325C107O50	PEAKING COIL	100μH-J	[B,E,IR]
D 9A7	264P104O40	DIODE	HZ30-2		L 7A4	325C107O50	PEAKING COIL	100μH-J	[B,E,IR]
D 9A8	264P568O10	DIODE	1SS252		L 7A5	325C107O10	PEAKING COIL	47μH-J	[B,E,IR]
D 9A9	264P452O30	DIODE	HZ5C3		L 9A1	321C141O30	RF COIL	10μH-K	
D 9B0	264P568O10	DIODE	1SS252		L 9A2	321C141O30	RF COIL	10μH-K	
D 9B1	264P484O30	DIODE	RD5.6FB2	[B]	T 3601	409P852O10	BIAS OSCILLATOR COIL	P852A10	
D 9B1	264P487O80	DIODE	RD12FB2	[E,GY]	<b>TRANSFORMERS</b>				
D 9B2	264P527O10	DIODE	D1NS4		T 901	350P706O10	POWER TRANSFORMER	E-A1-26195	[B,IR]
D 9B3	264P568O10	DIODE	1SS252		T 901	350P706O20	POWER TRANSFORMER	E-A1-26565	[E,GY]
D 9B4	264P568O10	DIODE	1SS252		<b>VARIABLE RESISTORS</b>				
D 9B5	264P456O70	DIODE	RD2.4EB		VR4A0	127C381O20	SEMI-FIXED RESISTOR	1/5W B100kΩ-M	
<b>FILTERS</b>					VR756	127C380O40	SEMI-FIXED RESISTOR	1/5W B1kΩ-M	[E,GY]
CF701	296P071O20	CERAMIC FILTER		[E,GY]	<b>RESISTORS</b>				
CF702	296P071O10	CERAMIC FILTER		[E,GY]	R 101	103P403O80	CHIP RESISTOR	1/10W 12kΩ-J	
L 901	351P038O40	LINE FILTER	ELF-18D290HB		R 102	103P404O00	CHIP RESISTOR	1/10W 18kΩ-J	
<b>COILS</b>					R 105	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[B]
L 101	325C166O30	PEAKING COIL	10μH-J		R 107	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[B]
L 201	325C167O50	PEAKING COIL	100μH-J		R 108	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[B]
L 2A0	325C167O30	PEAKING COIL	68μH-J		R 110	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[B]
L 2A1	325C167O00	PEAKING COIL	39μH-J		R 111	103P401O30	CHIP RESISTOR	1/10W 100Ω-J	
L 2A2	325C168O70	PEAKING COIL	1000μH-J		R 112	103P402O80	CHIP RESISTOR	1/10W 1.8kΩ-J	
L 2E0	325C167O50	PEAKING COIL	100μH-J		R 113	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	
L 2E1	325C167O50	PEAKING COIL	100μH-J		R 114	103P403O60	CHIP RESISTOR	1/10W 8.2kΩ-J	
L 2H0	325C167O50	PEAKING COIL	100μH-J		R 1A3	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	[E,GY,IR]
L 2H1	325C166O60	PEAKING COIL	18μH-J		R 1A4	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	[E,GY,IR]
L 2J0	325C167O50	PEAKING COIL	100μH-J		R 1A5	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	[E,GY,IR]
L 2V0	325C166O50	PEAKING COIL	15μH-J		R 1A6	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[B]
L 2V1	325C167O50	PEAKING COIL	100μH-J		R 1B1	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
L 2V2	325C166O80	PEAKING COIL	27μH-J	[E,GY]	R 1B2	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
L 2V3	325C167O50	PEAKING COIL	100μH-J		R 1C3	103P402O70	CHIP RESISTOR	1/10W 1.5kΩ-J	[E,GY]
L 2601	325C112O50	PEAKING COIL	100μH-K	[E,GY]	R 1C4	103P402O70	CHIP RESISTOR	1/10W 1.5kΩ-J	[E,GY]
L 2603	325C112O50	PEAKING COIL	100μH-K	[E,GY]	R 1C5	103P401O30	CHIP RESISTOR	1/10W 100Ω-J	[E,GY]
L 2609	325C113O10	PEAKING COIL	330μH-K	[E,GY]	R 1C6	103P403O20	CHIP RESISTOR	1/10W 3.9kΩ-J	[E,GY]
L 2610	325C113O10	PEAKING COIL	330μH-K	[E,GY]	R 1C7	103P404O60	CHIP RESISTOR	1/10W 56kΩ-J	[E,GY]
L 2611	325C113O10	PEAKING COIL	330μH-K	[E,GY]	R 1C8	103P405O50	CHIP RESISTOR	1/10W 330kΩ-J	[B,IR]
L 2612	325C113O10	PEAKING COIL	330μH-K	[E,GY]	R 1C8	103P405O80	CHIP RESISTOR	1/10W 560kΩ-J	[E,GY]
L 2709	325C113O10	PEAKING COIL	330μH-K	[B,IR]	R 201	103P475O60	CHIP RESISTOR	1/10W 20kΩ-F	
L 2710	325C113O10	PEAKING COIL	330μH-K	[B,IR]	R 202	103P475O60	CHIP RESISTOR	1/10W 20kΩ-F	
L 2714	325C112O50	PEAKING COIL	100μH-K	[B,IR]	R 203	103P404O70	CHIP RESISTOR	1/10W 68kΩ-J	
L 2715	325C112O50	PEAKING COIL	100μH-K	[B,IR]	R 205	103P474O90	CHIP RESISTOR	1/10W 10kΩ-F	
L 301	325C167O50	PEAKING COIL	100μH-J		R 206	103P474O90	CHIP RESISTOR	1/10W 10kΩ-F	
L 3601	321C114O80	RF COIL	8200μH-J		R 207	103P473O30	CHIP RESISTOR	1/10W 2.2kΩ-F	
L 3602	321C113O70	RF COIL	1000μH-K		R 209	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
L 4A7	325C167O50	PEAKING COIL	100μH-J		R 216	103P401O30	CHIP RESISTOR	1/10W 100Ω-J	
L 4A8	325C121O30	PEAKING COIL	10μH-K		R 217	103P404O40	CHIP RESISTOR	1/10W 39kΩ-J	
L 551	325C167O50	PEAKING COIL	100μH-J		R 218	103P404O10	CHIP RESISTOR	1/10W 22kΩ-J	

SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION
R 219	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	R 2L3	103P403090	CHIP RESISTOR	1/10W 15kΩ-J
R 220	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	R 2L4	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 221	103P402080	CHIP RESISTOR	1/10W 1.8kΩ-J	R 2L5	103P401060	CHIP RESISTOR	1/10W 180Ω-J
R 222	103P402080	CHIP RESISTOR	1/10W 1.8kΩ-J	R 2L6	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 2A0	103P474010	CHIP RESISTOR	1/10W 4.7kΩ-F	R 2L8	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 2A1	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 2M0	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 2A2	103P401030	CHIP RESISTOR	1/10W 100Ω-J	R 2V0	103P401090	CHIP RESISTOR	1/10W 330Ω-J
R 2A3	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 2V2	103P409050	CHIP RESISTOR	0.1W 0Ω(2125) [B,IR]
R 2A4	103P472080	CHIP RESISTOR	1/10W 1.3kΩ-F	R 2V2	103P402000	CHIP RESISTOR	1/10W 390Ω-J [E,GY]
R 2A5	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J	R 2V3	103P403080	CHIP RESISTOR	1/10W 12kΩ-J [E,GY]
R 2A6	103P401090	CHIP RESISTOR	1/10W 330Ω-J	R 2V4	103P472000	CHIP RESISTOR	1/10W 620Ω-F
R 2A7	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	R 2V5	103P472070	CHIP RESISTOR	1/10W 1.2kΩ-F
R 2A8	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	R 2V7	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 2A9	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	R 2V8	103P404010	CHIP RESISTOR	1/10W 22kΩ-J
R 2B0	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	R 2V9	103P403020	CHIP RESISTOR	1/10W 3.9kΩ-J
R 2B1	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 2W0	103P474030	CHIP RESISTOR	1/10W 5.6kΩ-F
R 2B2	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	R 2W1	103P473090	CHIP RESISTOR	1/10W 3.9kΩ-F
R 2B3	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 2W2	103P404010	CHIP RESISTOR	1/10W 22kΩ-J
R 2B4	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 2603	103P403080	CHIP RESISTOR	1/10W 12kΩ-J [E,GY]
R 2B5	103P404050	CHIP RESISTOR	1/10W 47kΩ-J	R 2612	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [E,GY]
R 2B6	103P406010	CHIP RESISTOR	1/10W 1MΩ-J	R 2613	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [E,GY]
R 2B7	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 2614	103P402010	CHIP RESISTOR	1/10W 470Ω-J [E,GY]
R 2B8	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 2615	103P402010	CHIP RESISTOR	1/10W 470Ω-J [E,GY]
R 2C3	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	R 2617	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [E,GY]
R 2C4	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 2618	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [E,GY]
R 2E0	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 2619	103P402010	CHIP RESISTOR	1/10W 470Ω-J [E,GY]
R 2E1	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	R 2620	103P402010	CHIP RESISTOR	1/10W 470Ω-J [E,GY]
R 2E4	103P402040	CHIP RESISTOR	1/10W 820Ω-J	R 2624	103P404050	CHIP RESISTOR	1/10W 47kΩ-J [E,GY]
R 2E5	103P401030	CHIP RESISTOR	1/10W 100Ω-J	R 2625	103P403050	CHIP RESISTOR	1/10W 6.8kΩ-J [E,GY]
R 2E6	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 2629	103P403090	CHIP RESISTOR	1/10W 15kΩ-J [E,GY]
R 2E7	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J	R 2630	103P403090	CHIP RESISTOR	1/10W 15kΩ-J [E,GY]
R 2F1	103P401060	CHIP RESISTOR	1/10W 180Ω-J	R 2632	103P404010	CHIP RESISTOR	1/10W 22kΩ-J [E,GY]
R 2F6	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 2633	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J [E,GY]
R 2F7	103P404060	CHIP RESISTOR	1/10W 56kΩ-J	R 2634	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J [E,GY]
R 2F8	103P404060	CHIP RESISTOR	1/10W 56kΩ-J	R 2712	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B,IR]
R 2H0	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F	R 2713	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B,IR]
R 2H1	103P472050	CHIP RESISTOR	1/10W 1kΩ-F	R 2717	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B,IR]
R 2H2	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	R 2718	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B,IR]
R 2H5	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 2719	103P402010	CHIP RESISTOR	1/10W 470Ω-J [B,IR]
R 2H6	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 2720	103P402010	CHIP RESISTOR	1/10W 470Ω-J [B,IR]
R 2H8	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 2721	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B]
R 2H9	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 2722	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B]
R 2J0	103P401070	CHIP RESISTOR	1/10W 220Ω-J	R 2724	103P401070	CHIP RESISTOR	1/10W 220Ω-J [B,IR]
R 2J2	103P401010	CHIP RESISTOR	1/10W 68Ω-J	R 2725	103P401070	CHIP RESISTOR	1/10W 220Ω-J [B,IR]
R 2J3	103P470070	CHIP RESISTOR	1/10W 180Ω-F	R 2726	103P401030	CHIP RESISTOR	1/10W 100Ω-J [B,IR]
R 2J4	103P470090	CHIP RESISTOR	1/10W 220Ω-F	R 2727	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [B,IR]
R 2J5	103P409090	CHIP RESISTOR	1/10W 75Ω-J [E,GY]	R 2728	103P403090	CHIP RESISTOR	1/10W 15kΩ-J [B,IR]
R 2J8	103P401060	CHIP RESISTOR	1/10W 180Ω-J	R 2729	103P404010	CHIP RESISTOR	1/10W 22kΩ-J [B,IR]
R 2J9	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	R 302	103P402030	CHIP RESISTOR	1/10W 680Ω-J
R 2K0	103P404050	CHIP RESISTOR	1/10W 47kΩ-J [B,IR]	R 303	103P402000	CHIP RESISTOR	1/10W 390Ω-J
R 2K1	103P403090	CHIP RESISTOR	1/10W 15kΩ-J [B,IR]	R 304	103P402080	CHIP RESISTOR	1/10W 1.8kΩ-J
R 2K3	103P402040	CHIP RESISTOR	1/10W 820Ω-J [B,IR]	R 306	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)
R 2K6	103P409050	CHIP RESISTOR	0.1W 0Ω(2125) [E,GY]	R 307	103P402000	CHIP RESISTOR	1/10W 390Ω-J
R 2K7	103P409050	CHIP RESISTOR	0.1W 0Ω(2125) [B,IR]	R 308	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 2L0	103P409050	CHIP RESISTOR	0.1W 0Ω(2125) [B,IR]	R 309	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 2L1	103P409050	CHIP RESISTOR	0.1W 0Ω(2125) [B,IR]	R 310	103P402000	CHIP RESISTOR	1/10W 390Ω-J
R 2L2	103P404030	CHIP RESISTOR	1/10W 33kΩ-J				

SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION		SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	
R 311	103P400O20	CHIP METAL RESISTOR	1/10W 12Ω-J		R 3622	103P404O90	CHIP RESISTOR	1/10W 100kΩ-J	
R 312	103P405O30	CHIP RESISTOR	1/10W 220kΩ-J		R 3623	103P476O60	CHIP METAL RESISTOR	1/10W 51kΩ-F	
R 313	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		R 3699	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	
R 3002	103P404O30	CHIP RESISTOR	1/10W 33kΩ-J		R 4A0	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3003	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J		R 4A1	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3004	103P404O30	CHIP RESISTOR	1/10W 33kΩ-J		R 4A2	103P474O90	CHIP RESISTOR	1/10W 10kΩ-F	
R 3005	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J		R 4A3	103P472O70	CHIP RESISTOR	1/10W 1.2kΩ-F	
R 3006	103P402O80	CHIP RESISTOR	1/10W 1.8kΩ-J	[B,IR]	R 4A4	103P472O70	CHIP RESISTOR	1/10W 1.2kΩ-F	
R 3006	103P403O40	CHIP RESISTOR	1/10W 5.6kΩ-J	[E]	R 4A5	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	
R 3007	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	[B,E,IR]	R 4A6	103P402O50	CHIP RESISTOR	1/10W 1kΩ-J	
R 3008	103P402O80	CHIP RESISTOR	1/10W 1.8kΩ-J	[B,IR]	R 4A7	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3008	103P403O40	CHIP RESISTOR	1/10W 5.6kΩ-J	[E]	R 4A9	103P403O50	CHIP RESISTOR	1/10W 6.8kΩ-J	
R 3009	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	[B,E,IR]	R 4B0	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3010	103P406O10	CHIP RESISTOR	1/10W 1MΩ-J		R 4B1	103P405O00	CHIP RESISTOR	1/10W 120kΩ-J	
R 3011	103P404O30	CHIP RESISTOR	1/10W 33kΩ-J		R 4B2	103P403O20	CHIP RESISTOR	1/10W 3.9kΩ-J	
R 3012	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J		R 4B3	103P404O60	CHIP RESISTOR	1/10W 56kΩ-J	
R 3013	103P402O70	CHIP RESISTOR	1/10W 1.5kΩ-J		R 4B4	103P405O40	CHIP RESISTOR	1/10W 270kΩ-J	
R 3014	103P403O10	CHIP RESISTOR	1/10W 3.3kΩ-J		R 4B5	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	
R 3015	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J		R 4B7	103P404O90	CHIP RESISTOR	1/10W 100kΩ-J	
R 3016	103P403O10	CHIP RESISTOR	1/10W 3.3kΩ-J		R 4B8	103P405O50	CHIP RESISTOR	1/10W 330kΩ-J	
R 3017	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J		R 4B9	103P403O50	CHIP RESISTOR	1/10W 56kΩ-J	
R 3018	103P405O30	CHIP RESISTOR	1/10W 220kΩ-J		R 4C0	103P404O10	CHIP RESISTOR	1/10W 22kΩ-J	
R 3019	103P406O10	CHIP RESISTOR	1/10W 1MΩ-J		R 4C1	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3020	103P404O50	CHIP RESISTOR	1/10W 47kΩ-J	[E,GY]	R 4C2	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3021	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	[E,GY]	R 4C3	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3022	103P404O50	CHIP RESISTOR	1/10W 47kΩ-J	[E,GY]	R 4C4	103P403O50	CHIP RESISTOR	1/10W 6.8kΩ-J	
R 3023	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	[E,GY]	R 4C5	103P403O50	CHIP RESISTOR	1/10W 6.8kΩ-J	
R 3024	103P404O50	CHIP RESISTOR	1/10W 47kΩ-J		R 4C6	103P405O10	CHIP RESISTOR	1/10W 150kΩ-J	
R 3025	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J	[B,IR]	R 4C7	103P405O10	CHIP RESISTOR	1/10W 150kΩ-J	
R 3025	103P404O30	CHIP RESISTOR	1/10W 33kΩ-J	[E,GY]	R 4C8	103P405O30	CHIP RESISTOR	1/10W 220kΩ-J	
R 3026	103P404O50	CHIP RESISTOR	1/10W 47kΩ-J		R 4C9	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3027	103P404O40	CHIP RESISTOR	1/10W 39kΩ-J	[B,IR]	R 4D0	103P404O90	CHIP RESISTOR	1/10W 100kΩ-J	
R 3027	103P404O50	CHIP RESISTOR	1/10W 47kΩ-J	[E,GY]	R 4D1	103P404O40	CHIP RESISTOR	1/10W 39kΩ-J	
R 3031	103P404O30	CHIP RESISTOR	1/10W 33kΩ-J		R 4D2	103P405O30	CHIP RESISTOR	1/10W 220kΩ-J	
R 3032	103P403O80	CHIP RESISTOR	1/10W 12kΩ-J		R 4D3	103P404O60	CHIP RESISTOR	1/10W 56kΩ-J	
R 3034	103P403O80	CHIP RESISTOR	1/10W 12kΩ-J		R 4D4	103P404O30	CHIP RESISTOR	1/10W 33kΩ-J	
R 3036	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		R 4D5	103P405O50	CHIP RESISTOR	1/10W 330kΩ-J	
R 3038	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		R 4D6	103P402O90	CHIP RESISTOR	1/10W 2.2kΩ-J	
R 3100	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		R 4D8	103P402O90	CHIP RESISTOR	1/10W 2.2kΩ-J	
R 3601	103P403O80	CHIP RESISTOR	1/10W 12kΩ-J		R 4D9	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3602	103P405O50	CHIP RESISTOR	1/10W 330kΩ-J		R 4E0	103P402O60	CHIP RESISTOR	1/10W 1.2kΩ-J	
R 3603	103P470O80	CHIP RESISTOR	1/10W 200Ω-F		R 4E1	103P404O90	CHIP RESISTOR	1/10W 100kΩ-J	
R 3604	103P402O50	CHIP RESISTOR	1/10W 1kΩ-J		R 4E3	103P473O70	CHIP RESISTOR	1/10W 3.3kΩ-F	
R 3605	103P404O50	CHIP RESISTOR	1/10W 47kΩ-J		R 4F1	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3606	103P402O00	CHIP RESISTOR	1/10W 390Ω-J		R 4S1	103P402O30	CHIP RESISTOR	1/10W 680Ω-J	
R 3607	103P401O10	CHIP RESISTOR	1/10W 68Ω-J		R 4S5	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	
R 3608	103P403O40	CHIP RESISTOR	1/10W 5.6kΩ-J		R 4S6	103P404O00	CHIP RESISTOR	1/10W 18kΩ-J	
R 3609	103P403O30	CHIP RESISTOR	1/10W 4.7kΩ-J		R 4S7	103P409O90	CHIP RESISTOR	1/10W 75Ω-J	
R 3610	103P404O10	CHIP RESISTOR	1/10W 22kΩ-J		R 4S9	103P403O00	CHIP RESISTOR	1/10W 2.7kΩ-J	
R 3611	103P403O20	CHIP RESISTOR	1/10W 3.9kΩ-J		R 551	103P402O90	CHIP RESISTOR	1/10W 2.2kΩ-J	
R 3612	103P402O50	CHIP RESISTOR	1/10W 1kΩ-J		R 552	103P406O10	CHIP RESISTOR	1/10W 1MΩ-J	
R 3613	103P404O20	CHIP RESISTOR	1/10W 27kΩ-J		R 553	103P404O90	CHIP RESISTOR	1/10W 100kΩ-J	
R 3614	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J		R 554	103P403O50	CHIP RESISTOR	1/10W 6.8kΩ-J	
R 3615	103P408O40	CHIP RESISTOR	1/10W 2.2Ω-K		R 555	103P406O20	CHIP METAL RESISTOR	1/10W 1.2MΩ-J	
R 3616	103P475O10	CHIP RESISTOR	1/10W 12kΩ-F		R 556	103P403O50	CHIP RESISTOR	1/10W 6.8kΩ-J	
R 3617	103P403O90	CHIP RESISTOR	1/10W 15kΩ-J		R 557	103P406O20	CHIP METAL RESISTOR	1/10W 1.2MΩ-J	
R 3621	103P404O90	CHIP RESISTOR	1/10W 100kΩ-J		R 573	103P403O70	CHIP RESISTOR	1/10W 10kΩ-J	[B]

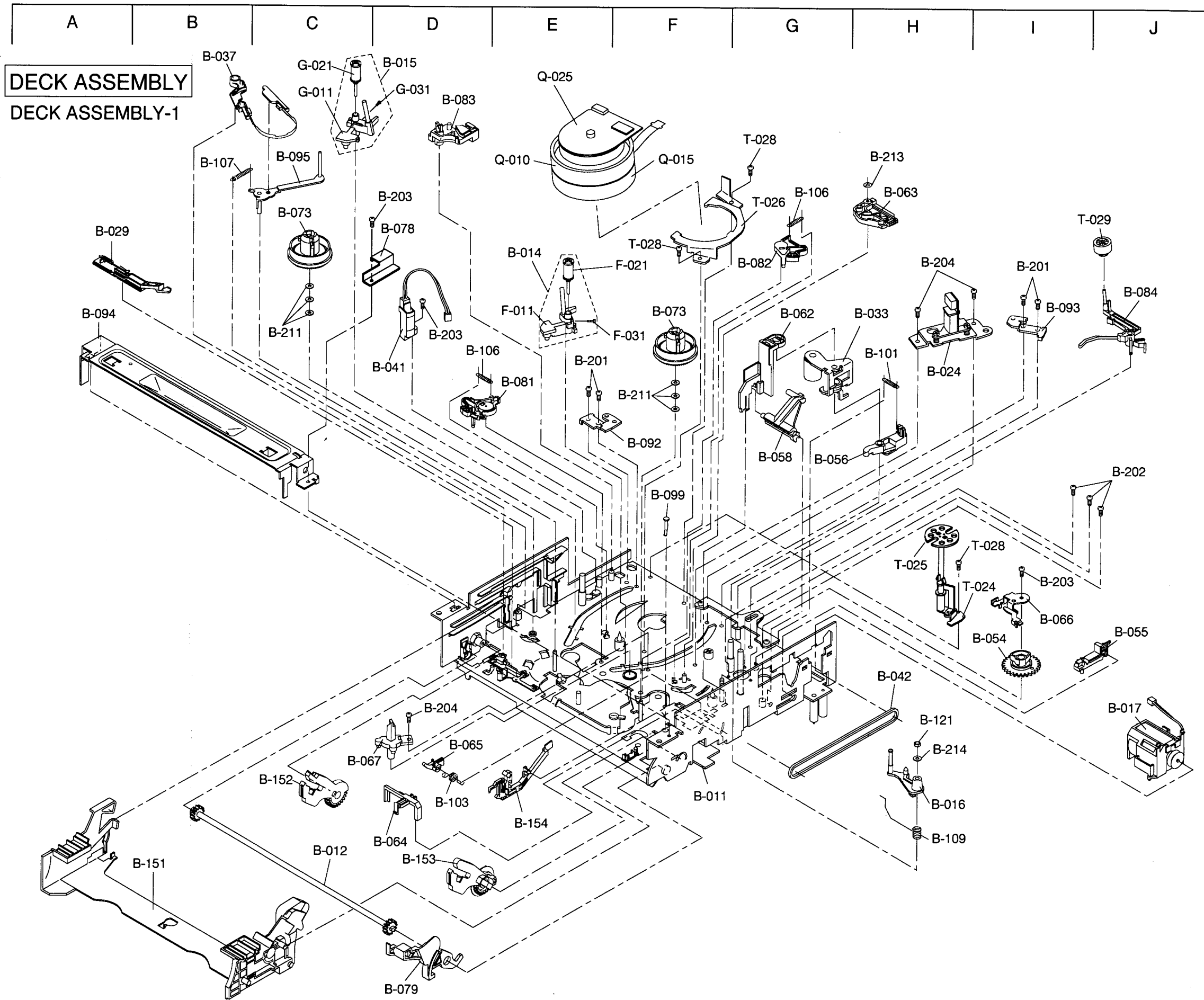
SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION		SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	
R 575	103P402000	CHIP RESISTOR	1/10W 390Ω-J	[B]	R 702	103P403090	CHIP RESISTOR	1/10W 15kΩ-J	[E,GY]
R 583	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	[B]	R 703	103P472000	CHIP RESISTOR	1/10W 620Ω-F	[E,GY]
R 585	103P402000	CHIP RESISTOR	1/10W 390Ω-J	[B]	R 704	103P472000	CHIP RESISTOR	1/10W 620Ω-F	[E,GY]
R 5A1	103P404010	CHIP RESISTOR	1/10W 22kΩ-J		R 705	103P401070	CHIP RESISTOR	1/10W 220Ω-J	[E,GY]
R 5A2	103P404010	CHIP RESISTOR	1/10W 22kΩ-J		R 706	103P401030	CHIP RESISTOR	1/10W 100Ω-J	[E,GY]
R 5A3	103P404010	CHIP RESISTOR	1/10W 22kΩ-J		R 707	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	[E,GY]
R 5A8	103P401070	CHIP RESISTOR	1/10W 220Ω-J		R 710	103P403050	CHIP RESISTOR	1/10W 6.8kΩ-J	[E,GY]
R 5A9	103P402050	CHIP RESISTOR	1/10W 1kΩ-J		R 731	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	[E,GY]
R 5B0	103P402010	CHIP RESISTOR	1/10W 470Ω-J		R 732	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	[E,GY]
R 5B1	103P404030	CHIP RESISTOR	1/10W 33kΩ-J		R 7A1	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	[B,E,IR]
R 5B2	103P402030	CHIP RESISTOR	1/10W 680Ω-J	[B,IR]	R 7A2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	[B,E,IR]
R 5B2	103P403090	CHIP RESISTOR	1/10W 15kΩ-J	[E,GY]	R 7A3	103P402030	CHIP RESISTOR	1/10W 680Ω-J	[B,E,IR]
R 5B3	103P403070	CHIP RESISTOR	1/10W 10kΩ-J		R 7A4	103P401010	CHIP RESISTOR	1/10W 68Ω-J	[B,E,IR]
R 5B5	103P405050	CHIP RESISTOR	1/10W 330kΩ-J		R 7C0	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	[B,E,IR]
R 5B6	103P405050	CHIP RESISTOR	1/10W 330kΩ-J		R 7C1	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	[B,E,IR]
R 5B8	103P404080	CHIP RESISTOR	1/10W 82kΩ-J		R 7C2	103P406010	CHIP RESISTOR	1/10W 1MΩ-J	[B,E,IR]
R 5B9	103P404090	CHIP RESISTOR	1/10W 100kΩ-J		R 7C4	103P405090	CHIP RESISTOR	1/10W 680kΩ-J	[B,E,IR]
R 5C0	103P404090	CHIP RESISTOR	1/10W 100kΩ-J		R 7C5	103P406010	CHIP RESISTOR	1/10W 1MΩ-J	[B,E,IR]
R 5C1	103P401090	CHIP RESISTOR	1/10W 330Ω-J		R 7C6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	[B,E,IR]
R 5C2	103P404030	CHIP RESISTOR	1/10W 33kΩ-J		R 7C7	103P406010	CHIP RESISTOR	1/10W 1MΩ-J	[B,E,IR]
R 5C3	103P404030	CHIP RESISTOR	1/10W 33kΩ-J		R 7C8	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	[B,E,IR]
R 5C6	103P402050	CHIP RESISTOR	1/10W 1kΩ-J		R 7C9	103P402080	CHIP RESISTOR	1/10W 1.8kΩ-J	[B,E,IR]
R 5C7	103P404090	CHIP RESISTOR	1/10W 100kΩ-J		R 7D0	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	[B,E,IR]
R 5D4	103P405030	CHIP RESISTOR	1/10W 220kΩ-J		R 7D1	103P401030	CHIP RESISTOR	1/10W 100Ω-J	[B,E,IR]
R 5D5	103P406010	CHIP RESISTOR	1/10W 1MΩ-J		R 7D2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	[B,E,IR]
R 5D6	103P405070	CHIP RESISTOR	1/10W 470kΩ-J		R 901	102P108060	WIRE RESISTOR	2W 3.3Ω-J	
R 5D7	103P403070	CHIP RESISTOR	1/10W 10kΩ-J		R 910	109D036040	COMPOSITION RESISTOR	1/2W 8.2MΩ-K	
R 5D8	103P404020	CHIP RESISTOR	1/10W 27kΩ-J		R 9A5	103P405080	CHIP RESISTOR	1/10W 560kΩ-J	
R 5D9	103P404020	CHIP RESISTOR	1/10W 27kΩ-J		R 9A7	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	
R 5E0	103P403070	CHIP RESISTOR	1/10W 10kΩ-J		R 9A8	109P052010	FUSE RESISTOR	1/4W 100Ω-J	
R 5E1	103P403090	CHIP RESISTOR	1/10W 15kΩ-J		R 9A9	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	
R 5E2	103P404000	CHIP RESISTOR	1/10W 18kΩ-J		R 9B3	103P475030	CHIP RESISTOR	1/10W 15kΩ-F	
R 5E3	103P406090	CHIP METAL RESISTOR	1/10W 4.7MΩ-K		R 9B6	103P476060	CHIP METAL RESISTOR	1/10W 51kΩ-F	
R 5E4	103P406090	CHIP METAL RESISTOR	1/10W 4.7MΩ-K		R 9C0	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	
R 5E5	103P402050	CHIP RESISTOR	1/10W 1kΩ-J		R 9C1	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J	
R 5E6	103P477010	CHIP RESISTOR	1/10W 82kΩ-F		R 9C3	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	
R 5E7	103P476030	CHIP RESISTOR	1/10W 39kΩ-F		R 9C4	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	
R 5E8	103P475060	CHIP RESISTOR	1/10W 20kΩ-F		R 9C5	103P378050	FUSE RESISTOR	1/4W 2.7Ω-J	
R 5E9	103P404000	CHIP RESISTOR	1/10W 18kΩ-J		R 9D1	103P401050	CHIP RESISTOR	1/10W 150Ω-J	
R 5F0	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J		R 9E1	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	[E,GY]
R 5F7	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J		R 9E3	103P404050	CHIP RESISTOR	1/10W 47kΩ-J	[E,GY]
R 5F8	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J		R 9E4	103P404050	CHIP RESISTOR	1/10W 47kΩ-J	[E,GY]
R 5F9	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	[E,GY]	R 9E5	103P403040	CHIP RESISTOR	1/10W 5.6kΩ-J	[E,GY]
R 5G0	103P402050	CHIP RESISTOR	1/10W 1kΩ-J		R 9E6	103P403040	CHIP RESISTOR	1/10W 5.6kΩ-J	[E,GY]
R 5H1	103P404090	CHIP RESISTOR	1/10W 100kΩ-J		R 9E7	103P404050	CHIP RESISTOR	1/10W 47kΩ-J	[E,GY]
R 5H3	103P404030	CHIP RESISTOR	1/10W 33kΩ-J		R 9E9	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	[E,GY]
R 5H4	103P404030	CHIP RESISTOR	1/10W 33kΩ-J		R 9F0	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	
R 5H7	103P404090	CHIP RESISTOR	1/10W 100kΩ-J		R 9F1	103P403040	CHIP RESISTOR	1/10W 5.6kΩ-J	[E,GY]
R 5H8	103P406010	CHIP RESISTOR	1/10W 1MΩ-J		R 9F2	103P403040	CHIP RESISTOR	1/10W 5.6kΩ-J	[E,GY]
R 5J1	103P404000	CHIP RESISTOR	1/10W 18kΩ-J		RJ 4	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	
R 5J3	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J		RJ 6	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	
R 5J6	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	[E,GY]	RJ 7	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	
R 5J7	103P404010	CHIP RESISTOR	1/10W 22kΩ-J		RJ 8	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]
R 5J8	103P401090	CHIP RESISTOR	1/10W 330Ω-J		RJ 9	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	
R 5K0	103P403050	CHIP RESISTOR	1/10W 6.8kΩ-J		RJ 10	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	
R 701	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	[E,GY]	RJ 12	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	
					RJ 13	103P409050	CHIP RESISTOR	0.1W 0Ω(2125)	



SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION		SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	
RJ 14	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 217	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 15	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 218	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 22	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 219	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K	
RJ 23	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 226	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 24	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 227	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 31	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 2A0	154P324O40	CHIP CAPACITOR	SL50V 220pF-J	
RJ 32	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A1	154P323O20	CHIP CAPACITOR	SL50V 68pF-J	
RJ 33	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		○ C 2A2	154P325O60	CHIP CAPACITOR	SL50V 680pF-J	
RJ 34	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A3	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 35	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A5	141P137O30	CHIP CAPACITOR	B50V 0.018μF-K	
RJ 36	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A6	154P321O60	CHIP CAPACITOR	SL50V 15pF-J	
RJ 37	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A7	141P130O90	CHIP CAPACITOR	B50V 1000pF-K	
RJ 38	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A8	154P324O40	CHIP CAPACITOR	SL50V 220pF-J	
RJ 39	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2A9	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 40	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2B0	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 41	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2B3	141P139O00	CHIP CAPACITOR	B25V 0.056μF-K	
RJ 44	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2B5	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 45	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2B7	154P322O40	CHIP CAPACITOR	SL50V 33pF-J	
RJ 46	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2B8	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
RJ 47	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2D1	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 48	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2D2	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	
RJ 50	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 2D4	154P324O00	CHIP CAPACITOR	SL50V 150pF-J	
RJ 53	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2D5	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K	
RJ 60	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 2E0	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 61	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 2E1	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 62	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 2E2	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 63	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2E3	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 64	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2E4	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 65	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2E5	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 66	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		○ C 2E6	141P131O70	CHIP CAPACITOR	B50V 4700pF-K	
RJ 67	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2E7	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 68	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2E9	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 69	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2F0	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 70	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2F1	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
RJ 71	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2F2	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 72	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2F3	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 73	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2F4	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ 74	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2F7	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ701	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)	[E,GY]	C 2H0	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
RJ702	103P409O50	CHIP RESISTOR	0.1W 0Ω(2125)		C 2H1	154P325O20	CHIP CAPACITOR	SL50V 470pF-J	
<b>CAPACITORS AND TRIMMERS</b>					C 2H2	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 104	141P130O90	CHIP CAPACITOR	B50V 1000pF-K		C 2H3	154P323O20	CHIP CAPACITOR	SL50V 68pF-J	
C 201	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2H4	154P323O00	CHIP CAPACITOR	SL50V 56pF-J	
C 202	154P323O00	CHIP CAPACITOR	SL50V 56pF-J		C 2H5	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 203	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V0	154P332O30	CHIP CAPACITOR	CH50V 33pF-J	
C 204	154P323O00	CHIP CAPACITOR	SL50V 56pF-J		C 2V1	154P332O30	CHIP CAPACITOR	CH50V 33pF-J	
C 205	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V2	154P322O80	CHIP CAPACITOR	SL50V 47pF-J	[E,GY]
C 206	154P322O80	CHIP CAPACITOR	SL50V 47pF-J		C 2V3	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 207	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V4	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K	
C 208	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V5	141P130O50	CHIP CAPACITOR	B50V 470pF-K	
C 209	154P322O80	CHIP CAPACITOR	SL50V 47pF-J		C 2V6	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 210	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V7	141P131O10	CHIP CAPACITOR	B50V 1500pF-K	
C 211	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V8	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 212	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2V9	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 213	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2601	141P137O40	CHIP CAPACITOR	B25V 0.022μF-K	[E,GY]
C 215	141P132O00	CHIP CAPACITOR	B50V 8200pF-K		C 2603	141P137O40	CHIP CAPACITOR	B25V 0.022μF-K	[E,GY]

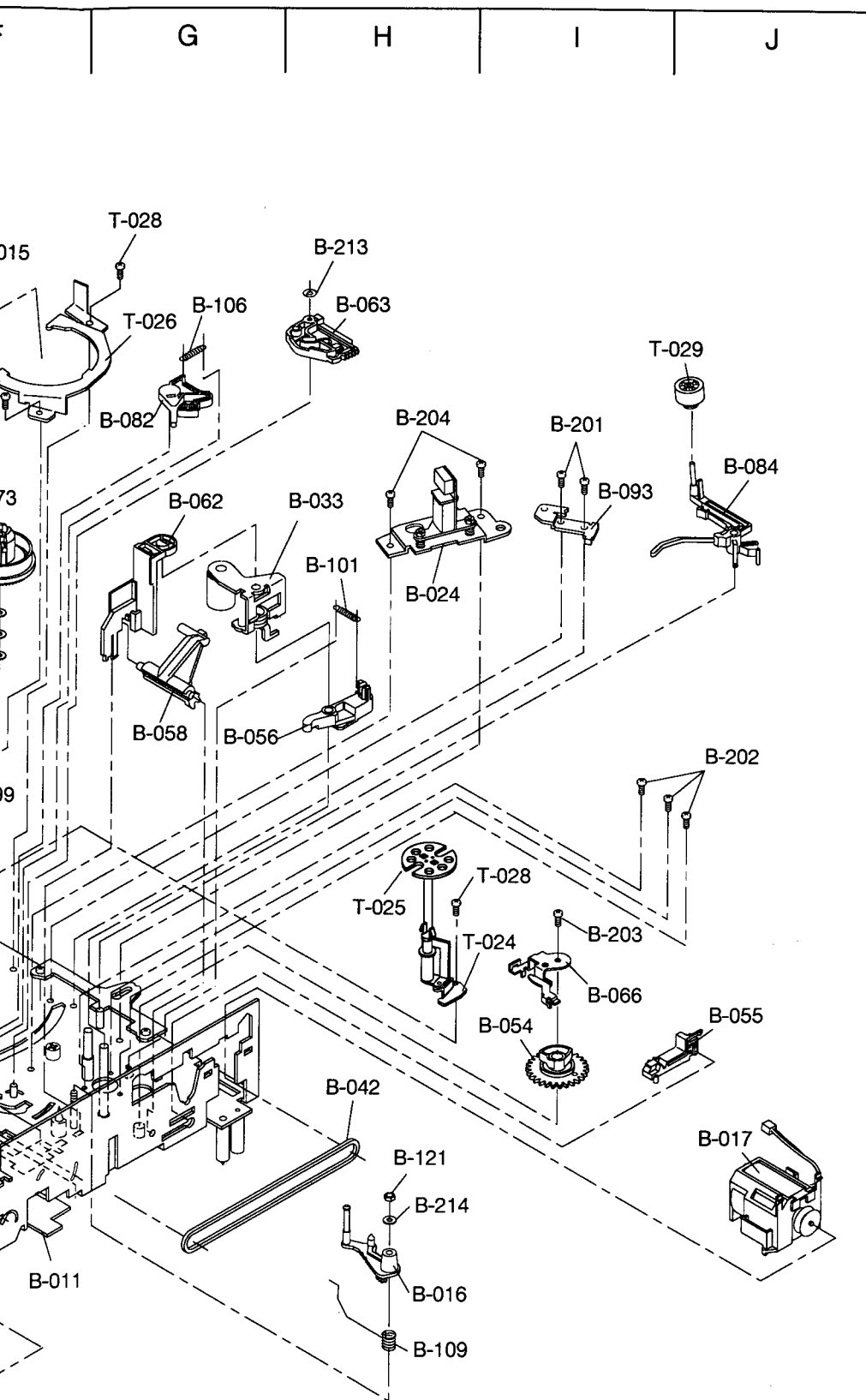
SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION		SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	
C 2604	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z	[E,GY]	C 3013	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K	
C 2605	141P137O40	CHIP CAPACITOR	B25V 0.022μF-K	[E,GY]	C 3020	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
C 2606	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z	[E,GY]					
C 2615	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z	[E,GY]	C 3021	141P139O00	CHIP CAPACITOR	B25V 0.056μF-K	
					○ C 3022	141P130O70	CHIP CAPACITOR	B50V 680pF-K	
C 2616	141P137O40	CHIP CAPACITOR	B25V 0.022μF-K	[E,GY]	C 3026	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z	
C 2633	154P324O80	CHIP CAPACITOR	SL50V 330pF-J	[E,GY]	C 3042	141P135O10	CHIP CAPACITOR	F25V 0.33μF-Z	
C 2634	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]	C 3043	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K	
C 2635	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]					
C 2636	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]	C 3044	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z	
					C 3603	141P131O40	CHIP CAPACITOR	B50V 2700pF-K	
C 2637	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]	○ C 3605	141P130O70	CHIP CAPACITOR	B50V 680pF-K	
C 2638	141P131O20	CHIP CAPACITOR	B50V 1800pF-K	[E,GY]	C 3610	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
C 2639	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	[E,GY]	C 3611	141P130O60	CHIP CAPACITOR	B50V 560pF-K	
C 2640	141P131O20	CHIP CAPACITOR	B50V 1800pF-K	[E,GY]					
C 2641	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	[E,GY]	C 3614	141P130O90	CHIP CAPACITOR	B50V 1000pF-K	
					C 3615	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 2642	154P324O80	CHIP CAPACITOR	SL50V 330pF-J	[E,GY]	C 3620	154P323O60	CHIP CAPACITOR	SL50V 100pF-J	
C 2643	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]	C 3621	154P323O60	CHIP CAPACITOR	SL50V 100pF-J	
C 2644	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]	C 3622	154P324O40	CHIP CAPACITOR	SL50V 220pF-J	
C 2645	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]					
C 2646	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[E,GY]	C 480	141P131O80	CHIP CAPACITOR	B50V 5600pF-K	
					C 481	141P131O80	CHIP CAPACITOR	B50V 5600pF-K	
C 2647	141P131O20	CHIP CAPACITOR	B50V 1800pF-K	[E,GY]	C 483	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	
C 2648	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	[E,GY]	C 485	141P130O90	CHIP CAPACITOR	B50V 1000pF-K	
C 2649	141P131O20	CHIP CAPACITOR	B50V 1800pF-K	[E,GY]	C 486	141P139O00	CHIP CAPACITOR	B25V 0.056μF-K	
C 2650	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	[E,GY]					
C 2655	141P132O00	CHIP CAPACITOR	B50V 8200pF-K	[E,GY]	C 487	154P332O10	CHIP CAPACITOR	CH50V 27pF-J	
					C 488	141P139O10	CHIP CAPACITOR	B25V 0.068μF-K	
C 2733	154P324O80	CHIP CAPACITOR	SL50V 330pF-J	[B,IR]	C 489	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K	
C 2734	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]	C 4C0	141P131O50	CHIP CAPACITOR	B50V 3300pF-K	
C 2735	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]	C 4C4	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 2736	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]					
C 2737	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]	C 4C5	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
					C 4C9	141P131O60	CHIP CAPACITOR	B50V 3900pF-K	
C 2742	154P324O80	CHIP CAPACITOR	SL50V 330pF-J	[B,IR]	C 4D0	141P131O10	CHIP CAPACITOR	B50V 1500pF-K	
C 2743	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]	C 4D3	141P137O70	CHIP CAPACITOR	B25V 0.039μF-K	
C 2744	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]	C 4D7	141P137O70	CHIP CAPACITOR	B25V 0.039μF-K	
C 2745	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]					
C 2746	141P130O30	CHIP CAPACITOR	B50V 330pF-K	[B,IR]	C 4G7	154P333O50	CHIP CAPACITOR	CH50V 100pF-J	
					C 4G8	154P333O50	CHIP CAPACITOR	CH50V 100pF-J	
C 2747	141P131O20	CHIP CAPACITOR	B50V 1800pF-K	[B,IR]	C 4J0	154P332O30	CHIP CAPACITOR	CH50V 33pF-J	
C 2748	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	[B,IR]	C 551	154P324O00	CHIP CAPACITOR	SL50V 150pF-J	
C 2749	141P131O20	CHIP CAPACITOR	B50V 1800pF-K	[B,IR]	C 552	141P137O60	CHIP CAPACITOR	B50V 0.033μF-K	
C 2750	141P131O90	CHIP CAPACITOR	B50V 6800pF-K	[B,IR]					
C 2751	154P324O80	CHIP CAPACITOR	SL50V 330pF-J	[B]	C 554	141P131O30	CHIP CAPACITOR	B50V 2200pF-K	
					C 555	141P137O60	CHIP CAPACITOR	B50V 0.033μF-K	
C 2752	154P324O80	CHIP CAPACITOR	SL50V 330pF-J	[B]	C 556	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 2773	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	[B,IR]	C 573	154P331O70	CHIP CAPACITOR	CH50V 18pF-J	[B]
C 301	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K		C 574	154P331O70	CHIP CAPACITOR	CH50V 18pF-J	[B]
C 302	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z						
C 303	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K		C 576	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	[B]
					C 5A0	189P197O20	ELE DOUBLE LAYER C	FM0H473Z	
C 304	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z		C 5A3	141P134O10	CHIP CAPACITOR	F50V 0.047μF-Z	
C 305	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z		C 5A5	141P135O80	CHIP CAPACITOR	F25V 0.1μF-Z	
C 307	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K		C 5A6	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 308	154P324O40	CHIP CAPACITOR	SL50V 220pF-J						
C 309	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K		C 5A7	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
					C 5A8	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 310	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z		C 5A9	141P133O90	CHIP CAPACITOR	F50V 0.022μF-Z	
C 311	154P323O60	CHIP CAPACITOR	SL50V 100pF-J		C 5B1	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 312	154P323O60	CHIP CAPACITOR	SL50V 100pF-J		C 5B2	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
C 313	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z						
C 314	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K		C 5B3	141P133O80	CHIP CAPACITOR	F50V 0.01μF-Z	
					C 5B5	141P134O10	CHIP CAPACITOR	F50V 0.047μF-Z	
C 315	141P139O30	CHIP CAPACITOR	B25V 0.1μF-K		C 5B6	154P331O70	CHIP CAPACITOR	CH50V 18pF-J	
C 3009	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K		C 5B7	154P331O70	CHIP CAPACITOR	CH50V 18pF-J	
C 3012	141P132O10	CHIP CAPACITOR	B50V 0.01μF-K		C 5B8	154P330O90	CHIP CAPACITOR	CH50V 8pF-C	

SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION		SYMBOL No.	PARTS No.	PARTS NAME	DESCRIPTION	
C 5B9	154P331010	CHIP CAPACITOR	CH50V 10pF-C		J 2602	452C210010	CONNECTOR	21	[E,GY]
C 5C0	141P130060	CHIP CAPACITOR	B50V 560pF-K		J 2603	451C086090	RCA PIN JACK	WHITE	[GY]
C 701	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	J 2604	451C086010	RCA PIN JACK	RED	[GY]
C 703	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	J 2701	452C210010	CONNECTOR	21	[B,IR]
C 704	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	J 2702	452C210010	CONNECTOR	21	[B,IR]
C 705	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	J 2703	451C086090	RCA PIN JACK	WHITE	[B]
C 706	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	J 2704	451C086010	RCA PIN JACK	RED	[B]
C 707	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	J 581	451C193010	HEADPHONE JACK		[B]
C 709	141P132010	CHIP CAPACITOR	B50V 0.01μF-K	[E,GY]	M 572	288P159010	CAPSTAN MOTOR	F2QTB22	
C 714	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[E,GY]	MA DA	243C193030	CARD LEAD WIRE	7PIN L=120	
C 721	154P322080	CHIP CAPACITOR	SL50V 47pF-J	[E,GY]	MD DD	243C193050	CARD LEAD WIRE	7PIN L=160	
C 7A1	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	ME HE	243C157020	CARD LEAD WIRE	13P L=100	
C 7A2	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z	[B,E,IR]	PC901	268P069010	PHOTO COUPLER	ON3171R	
C 7C0	154P324040	CHIP CAPACITOR	SL50V 220pF-J	[B,E,IR]	PC902	268P069010	PHOTO COUPLER	ON3171R	[E,GY]
C 7C1	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	SA901	299P198010	SURGE ABSORBER	ERZV07D471	
C 7C3	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	T 371	460P055050	FE HEAD		
C 7C5	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	TU 01	295P455020	TUNER	ENG57539N1	[B]
C 7C8	154P322080	CHIP CAPACITOR	SL50V 47pF-J	[B,E,IR]	TU 01	295P455010	TUNER	ENG57538N	[E,GY]
C 7C9	154P322080	CHIP CAPACITOR	SL50V 47pF-J	[B,E,IR]	○ TU 01	295P455040	TUNER	ENG57544N	[IR]
C 7D3	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	○ V 5A0	253P127030	FLOUR DISPLAY TUBE	25U48104TA	
C 7D4	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	○ X 2A0	285P304010	CRYSTAL RESONATOR	4.43MHz	
C 7D6	154P323020	CHIP CAPACITOR	SL50V 68pF-J	[B,E,IR]	X 4A0	285P272010	CRYSTAL RESONATOR	4.43362MHz	
C 7D9	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	X 571	285P029040	CRYSTAL RESONATOR	4.00000MHz	[B]
C 7E0	154P323020	CHIP CAPACITOR	SL50V 68pF-J	[B,E,IR]	X 5A0	285P054030	CRYSTAL RESONATOR	32.8kHz	
C 7E5	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	X 5A1	285P235010	CRYSTAL RESONATOR	8.3886MHz	
C 7E6	154P321020	CHIP CAPACITOR	SL50V 10pF-C	[B,E,IR]	X 701	285P204020	CRYSTAL RESONATOR	10MHz	[E,GY]
C 7E8	141P139030	CHIP CAPACITOR	B25V 0.1μF-K	[B,E,IR]	X 7A0	285P253010	CRYSTAL RESONATOR	8.192MHz	[B,E,IR]
C 7F0	141P130040	CHIP CAPACITOR	B50V 390pF-K	[B,E,IR]	Z 5A0	939P580040	PREAMP UNIT	TFMX 5330	
C 7F1	141P137080	CHIP CAPACITOR	B25V 0.047μF-K	[B,E,IR]	<b>PRINTED CIRCUIT BOARD ASSY'S</b>				
C 901	189P153040	M-P CAPACITOR-AC	AC250V 0.1μF-M		○	928D370001	CONNECTOR PCB ASSY		[B,IR]
C 904	189P153040	M-P CAPACITOR-AC	AC250V 0.1μF-M		○	928D371001	CONNECTOR PCB ASSY		[E]
C 909	189P094060	CERAMIC CAPACITOR AC	ACT4K E1000pF-M	[B,IR]		928D371005	CONNECTOR PCB ASSY		[GY]
C 909	189P094040	CERAMIC CAPACITOR AC	ACT4K E2200pF-M	[E,GY]		928D369001	DUAL PCB ASSY		[B,IR]
C 9A9	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z			928D378002	DUAL PCB ASSY		[E]
C 9B1	141P133080	CHIP CAPACITOR	F50V 0.01μF-Z		○	928D378001	DUAL PCB ASSY		[GY]
C 9B2	141P139030	CHIP CAPACITOR	B25V 0.1μF-K		○	927B987001	MAIN PCB ASSY		[B]
<b>SWITCHES</b>					○	925B003002	MAIN PCB ASSY		[E]
S 101	431C110010	SLIDE SWITCH	ANTENNA	[E,GY,IR]	○	925B003001	MAIN PCB ASSY		[GY]
S 5A0	432P089020	KEY BOARD SWITCH	POWER		○	927B987004	MAIN PCB ASSY		[IR]
S 5A1	432P089020	KEY BOARD SWITCH	EJECT			928D380001	POWER SAVE PCB ASSY		[E,GY]
S 5A2	432P089020	KEY BOARD SWITCH	O.K.PROG						
S 5A3	432P089020	KEY BOARD SWITCH	AUTO SETUP/JUST CLOCK						
S 5A4	432P089020	KEY BOARD SWITCH	COUNTER-RESET	[B,IR]					
S 5A4	432P089020	KEY BOARD SWITCH	POWER-SAVE	[E,GY]					
S 5A5	432P089020	KEY BOARD SWITCH	PLAY/STOP						
S 5A6	432P089020	KEY BOARD SWITCH	REC/OTR						
S 5A7	432P089020	KEY BOARD SWITCH	CH-DOWN						
S 5A8	432P089020	KEY BOARD SWITCH	CH-UP						
S 5A9	432P089020	KEY BOARD SWITCH	REW						
S 5B0	432P089020	KEY BOARD SWITCH	FF						
S 5B1	432P166010	KEY BOARD SWITCH	RESET						
<b>MISCELLANEOUS</b>									
○ F 901	283D147040	FUSE	T2A						
J 2601	452C210010	CONNECTOR	21	[E,GY]					



\* Settled Service Parts

ITEM	PARTS NO.	*	ADDRESS	PARTS NAM
B-021	641B805050	o	D-6	REEL GEAR UNIT
B-022	641B805060	o	C-6	REEL GEAR UNIT
B-023	621C536010	o	E-4	IDLER UNIT
B-025	621C538010	o	C-3	WORM PULLEY U
B-026	641B827010	o	B-6	PHOTO UNIT
B-030	622D585010	o	G-5	PHOTO GUIDE UN
B-031	622D586010	o	B-3	PHOTO GUIDE UN
B-043	521D097010	o	E-1	REEL BELT
B-044	288P159010	o	F-2	CAPSTAN MOTOF
B-051	641B794010	o	C-2	MODE GEAR
B-052	621C504010	o	B-3	LOADING WORM
B-053	641B791010	o	G-2	CAM GEAR(SP)
B-057	621C503010	o	G-2	LOADING GEAR
B-059	621C502010	o	F-2	LAMP LOADING G
B-060	641B792010	o	D-1	CAM GEAR(TU)
B-061	641B793010	o	B-3	F/L DRIVE GEAR
B-068	641B817010	o	H-8	REC LEVER
B-070	641B838010	o	G-6	TENSION LEVER
B-071	621C508010	o	G-6	CONTROL WIND L
B-072	621C506010	o	B-5	REEL LOCK LEVE
B-074	621C494010	o	E-4	SHIFT LEVER
B-075	621C493010	o	E-3	PULLEY GEAR
B-076	621C492010	o	E-3	BELT PULLEY
B-077	635C106010	o	B-4	F/L DRIVE LEVER
B-080	641B819010	o	E-4	CAPSTAN BRAKE
B-091	593C799010	o	D-2	IDLER CENTER LE
B-097	592B365010	o	I-5	MAIN PLATE SUPP
B-098	593C903010	o	A-3	MODE HOLDER
B-102	572D835010	o	G-3	CAM SPRING(C)
B-104	572D842010	o	E-3	CAPSTAN BRAKE S
B-105	572D870010	o	H-7	REC SPRING
B-108	572D865010	o	E-3	SHIFT SPRING
B-156	593C825010	o	H-3	LOADING ARM UN
B-157	593C826010	o	H-3	LOADING ARM UN
B-158	621C537010	o	F-3	CAM PLATE UNIT(
B-201	669D224010	o	A-2	SCREW
B-205	669D224050	o	C-3	SCREW
B-212	552C018010	o	E-2	CUT WASHER

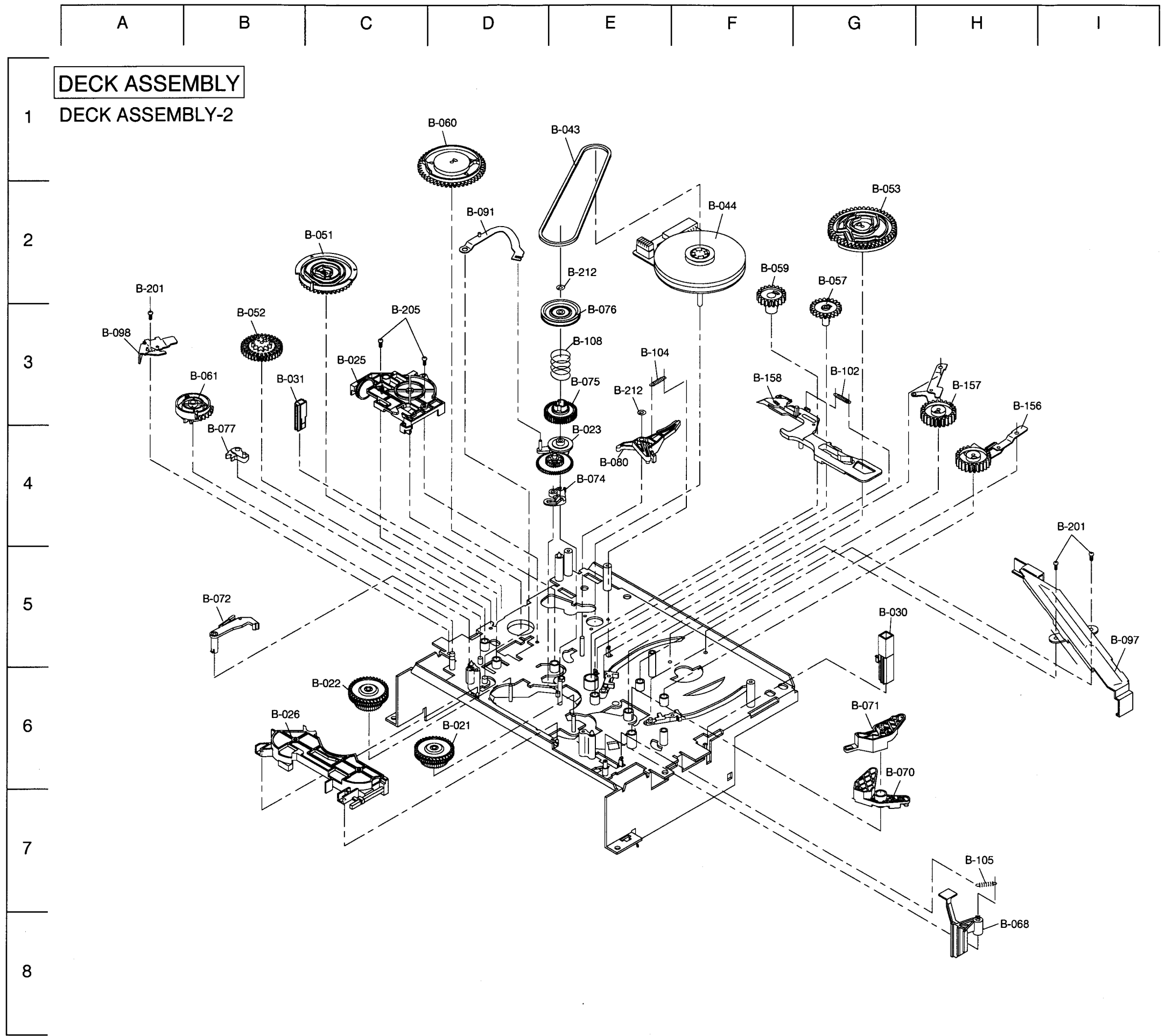


\* Settled Service Parts

ITEM	PARTS NO.	*	ADDRESS	PARTS NAME	DESCRIPTION	Qt.	
B-021	641B805050	○	D-6	REEL GEAR UNIT(SP)	SUPPLY	1	
B-022	641B805060	○	C-6	REEL GEAR UNIT(TU)	TAKE UP	1	
B-023	621C536010	○	E-4	IDLER UNIT		1	
B-025	621C538010	○	C-3	WORM PULLEY UNIT		1	
B-026	641B827010	○	B-6	PHOTO UNIT		1	
B-030	622D585010	○	G-5	PHOTO GUIDE UNIT(SP)	SUPPLY	1	
B-031	622D586010	○	B-3	PHOTO GUIDE UNIT(TU)	TAKE UP	1	
B-043	521D097010	○	E-1	REEL BELT		1	
B-044	288P159010	○	F-2	CAPSTAN MOTOR	F2QTB22	1	
B-051	641B794010	○	C-2	MODE GEAR		1	
B-052	621C504010	○	B-3	LOADING WORM GEAR		1	
B-053	641B791010	○	G-2	CAM GEAR(SP)	SUPPLY	1	
B-057	621C503010	○	G-2	LOADING GEAR		1	
B-059	621C502010	○	F-2	LAMP LOADING GEAR		1	
B-060	641B792010	○	D-1	CAM GEAR(TU)	TAKE UP	1	
B-061	641B793010	○	B-3	F/L DRIVE GEAR		1	
B-068	641B817010	○	H-8	REC LEVER		1	
B-070	641B838010	○	G-6	TENSION LEVER UNIT		1	
B-071	621C508010	○	G-6	CONTROL WIND LEVER		1	
B-072	621C506010	○	B-5	REEL LOCK LEVER		1	
B-074	621C494010	○	E-4	SHIFT LEVER		1	
B-075	621C493010	○	E-3	PULLEY GEAR		1	
B-076	621C492010	○	E-3	BELT PULLEY		1	
B-077	635C106010	○	B-4	F/L DRIVE LEVER		1	
B-080	641B819010	○	E-4	CAPSTAN BRAKE		1	
B-091	593C799010	○	D-2	IDLER CENTER LEVER		1	
B-097	592B365010	○	I-5	MAIN PLATE SUPPORT		1	
B-098	593C903010	○	A-3	MODE HOLDER		1	
B-102	572D835010	○	G-3	CAM SPRING(C)		1	
B-104	572D842010	○	E-3	CAPSTAN BRAKE SPRING		1	
B-105	572D870010	○	H-7	REC SPRING		1	
B-108	572D865010	○	E-3	SHIFT SPRING		1	
B-156	593C825010	○	H-3	LOADING ARM UNIT(SP)	SUPPLY	1	
B-157	593C826010	○	H-3	LOADING ARM UNIT(TU)	TAKE UP	1	
B-158	621C537010	○	F-3	CAM PLATE UNIT(C)		1	
B-201	669D224010	○	A-2	I-4	SCREW	2.6X6	3
B-205	669D224050	○	C-3	SCREW	2.6X14	2	
B-212	552C018010	○	E-2	E-3	CUT WASHER	2.5X6.0X0.5	2

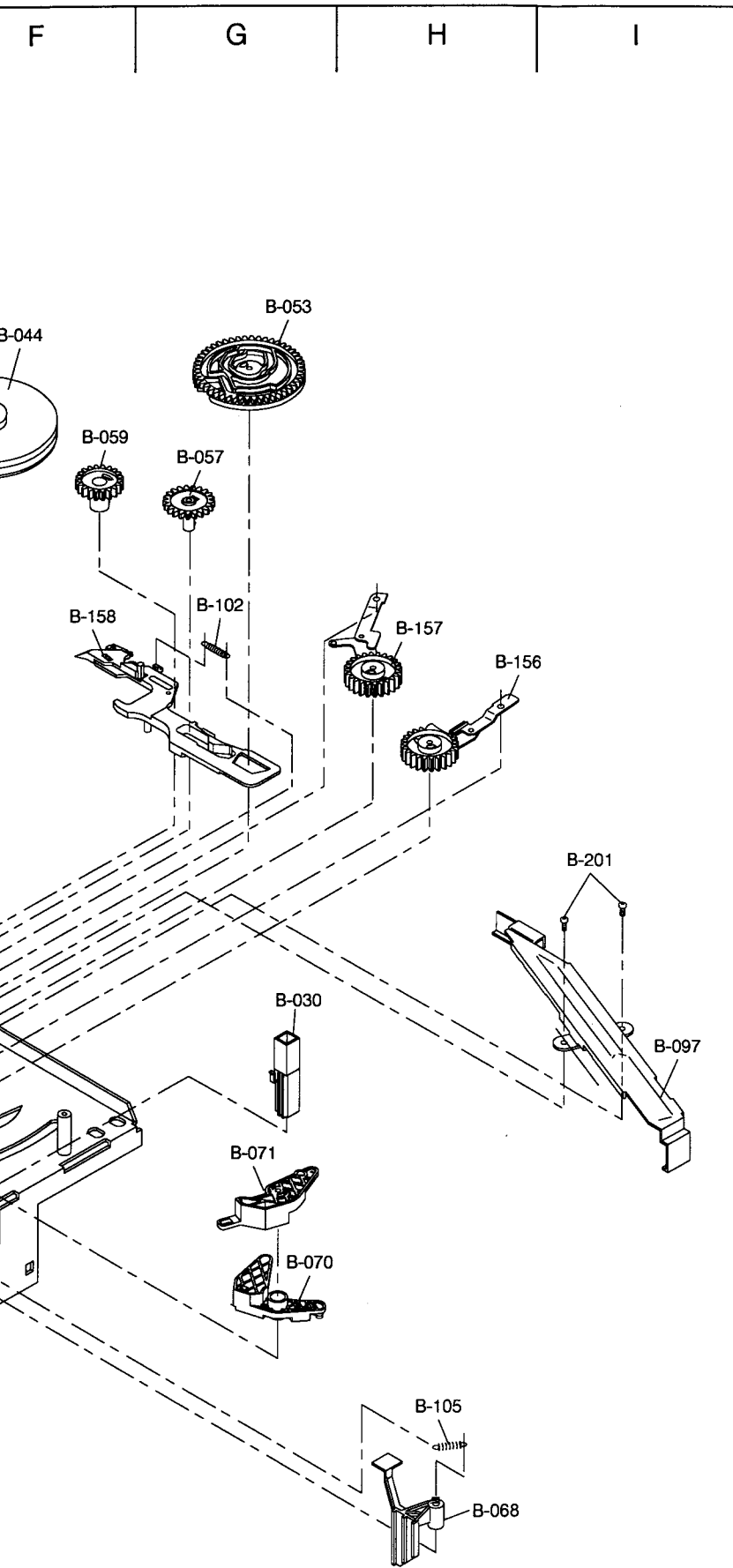
\* Settled Service Parts

ITEM	PARTS NO.	*	ADDRESS	PARTS NAME	DESCRIPTION	Qt.	
G-011	635B092010	○	C-1	TAPE GUIDE(SP)	SUPPLY	1	
G-021	522B061010	○	C-1	GUIDE ROLLER(SP)		1	
G-031	669D506090	○	D-1	SCREW	M2X0.4 L=4	1	
Q-010	927B954018	○	E-1	UPPER DRUM ASSY		1	
Q-015	927B955004	○	E-1	LOWER DRUM ASSY		1	
Q-025	288P158020	○	E-1	DRUM MOTOR	E20EL50	1	
T-024	621C553010	○	I-5	IMPEDANCE UNIT(SP)		1	
T-025	597D568010	○	H-5	FLYWHEEL(SP)		1	
T-026	592B345010	○	G-2	DRUM CLAMPER		1	
T-028	669D224010	○	F-2	G-1	SCREW	2.6X6	3
T-029	622D598010	○	I-2	CLEANING ROLLER UNIT		1	



\* Settled Service Parts

ITEM	PARTS NO.	*	ADDRESS	PARTS NAME
B-021	641B805O10	o	D-6	REEL GEAR UNIT
B-022	641B805O20	o	C-6	REEL GEAR UNIT
B-023	621C536O10	o	E-4	IDLER UNIT
B-025	621C538O10	o	C-3	WORM PULLEY UN
B-026	641B827O10	o	B-6	PHOTO UNIT
B-030	622D585O10	o	G-5	PHOTO GUIDE UN
B-031	622D586O10	o	B-3	PHOTO GUIDE UN
B-043	521D097O10	o	E-1	REEL BELT
B-044	288P159O10	o	F-2	CAPSTAN MOTOR
B-051	641B794O10	o	C-2	MODE GEAR
B-052	621C504O10	o	B-3	LOADING WORM C
B-053	641B791O10	o	G-2	CAM GEAR(SP)
B-057	621C503O10	o	G-2	LOADING GEAR
B-059	621C502O10	o	F-2	LAMP LOADING G
B-060	641B792O10	o	D-1	CAM GEAR(TU)
B-061	641B793O10	o	B-3	F/L DRIVE GEAR
B-068	641B817O10	o	H-8	REC LEVER
B-070	641B838O10	o	G-6	TENSION LEVER U
B-071	621C508O10	o	G-6	CONTROL WIND L
B-072	621C506O10	o	B-5	REEL LOCK LEVER
B-074	621C494O10	o	E-4	SHIFT LEVER
B-075	621C493O10	o	E-3	PULLEY GEAR
B-076	621C492O10	o	E-3	BELT PULLEY
B-077	635C106O10	o	B-4	F/L DRIVE LEVER
B-080	641B819O10	o	E-4	CAPSTAN BRAKE
B-091	593C799O10	o	D-2	IDLER CENTER LE
B-097	592B365O10	o	I-5	MAIN PLATE SUPP
B-098	593C903O10	o	A-3	MODE HOLDER
B-102	572D835O10	o	G-3	CAM SPRING(C)
B-104	572D842O10	o	E-3	CAPSTAN BRAKE S
B-105	572D870O10	o	H-7	REC SPRING
B-108	572D865O10	o	E-3	SHIFT SPRING
B-156	593C825O10	o	H-3	LOADING ARM UN
B-157	593C826O10	o	H-3	LOADING ARM UN
B-158	621C537O10	o	F-3	CAM PLATE UNIT
B-201	669D224O10	o	A-2	SCREW
B-205	669D224O50	o	C-3	SCREW
B-212	552C018O10	o	E-2	CUT WASHER



\* Settled Service Parts

ITEM	PARTS NO.	*	ADDRESS	PARTS NAME	DESCRIPTION	Qt.	
B-021	641B805O10	○	D-6	REEL GEAR UNIT(SP)	SUPPLY	1	
B-022	641B805O20	○	C-6	REEL GEAR UNIT(TU)	TAKE UP	1	
B-023	621C536O10	○	E-4	IDLER UNIT		1	
B-025	621C538O10	○	C-3	WORM PULLEY UNIT		1	
B-026	641B827O10	○	B-6	PHOTO UNIT		1	
B-030	622D585O10	○	G-5	PHOTO GUIDE UNIT(SP)	SUPPLY	1	
B-031	622D586O10	○	B-3	PHOTO GUIDE UNIT(TU)	TAKE UP	1	
B-043	521D097O10	○	E-1	REEL BELT		1	
B-044	288P159O10	○	F-2	CAPSTAN MOTOR	F2QTB22	1	
B-051	641B794O10	○	C-2	MODE GEAR		1	
B-052	621C504O10	○	B-3	LOADING WORM GEAR		1	
B-053	641B791O10	○	G-2	CAM GEAR(SP)	SUPPLY	1	
B-057	621C503O10	○	G-2	LOADING GEAR		1	
B-059	621C502O10	○	F-2	LAMP LOADING GEAR		1	
B-060	641B792O10	○	D-1	CAM GEAR(TU)	TAKE UP	1	
B-061	641B793O10	○	B-3	F/L DRIVE GEAR		1	
B-068	641B817O10	○	H-8	REC LEVER		1	
B-070	641B838O10	○	G-6	TENSION LEVER UNIT		1	
B-071	621C508O10	○	G-6	CONTROL WIND LEVER		1	
B-072	621C506O10	○	B-5	REEL LOCK LEVER		1	
B-074	621C494O10	○	E-4	SHIFT LEVER		1	
B-075	621C493O10	○	E-3	PULLEY GEAR		1	
B-076	621C492O10	○	E-3	BELT PULLEY		1	
B-077	635C106O10	○	B-4	F/L DRIVE LEVER		1	
B-080	641B819O10	○	E-4	CAPSTAN BRAKE		1	
B-091	593C799O10	○	D-2	IDLER CENTER LEVER		1	
B-097	592B365O10	○	I-5	MAIN PLATE SUPPORT		1	
B-098	593C903O10	○	A-3	MODE HOLDER		1	
B-102	572D835O10	○	G-3	CAM SPRING(C)		1	
B-104	572D842O10	○	E-3	CAPSTAN BRAKE SPRING		1	
B-105	572D870O10	○	H-7	REC SPRING		1	
B-108	572D865O10	○	E-3	SHIFT SPRING		1	
B-156	593C825O10	○	H-3	LOADING ARM UNIT(SP)	SUPPLY	1	
B-157	593C826O10	○	H-3	LOADING ARM UNIT(TU)	TAKE UP	1	
B-158	621C537O10	○	F-3	CAM PLATE UNIT(C)		1	
B-201	669D224O10	○	A-2	SCREW	2.6X6	3	
B-205	669D224O50	○	C-3	SCREW	2.6X14	2	
B-212	552C018O10	○	E-2	E-3	CUT WASHER	2.5X6.0X0.5	2

# PCB-BLOCK DIAGRAM

A

B

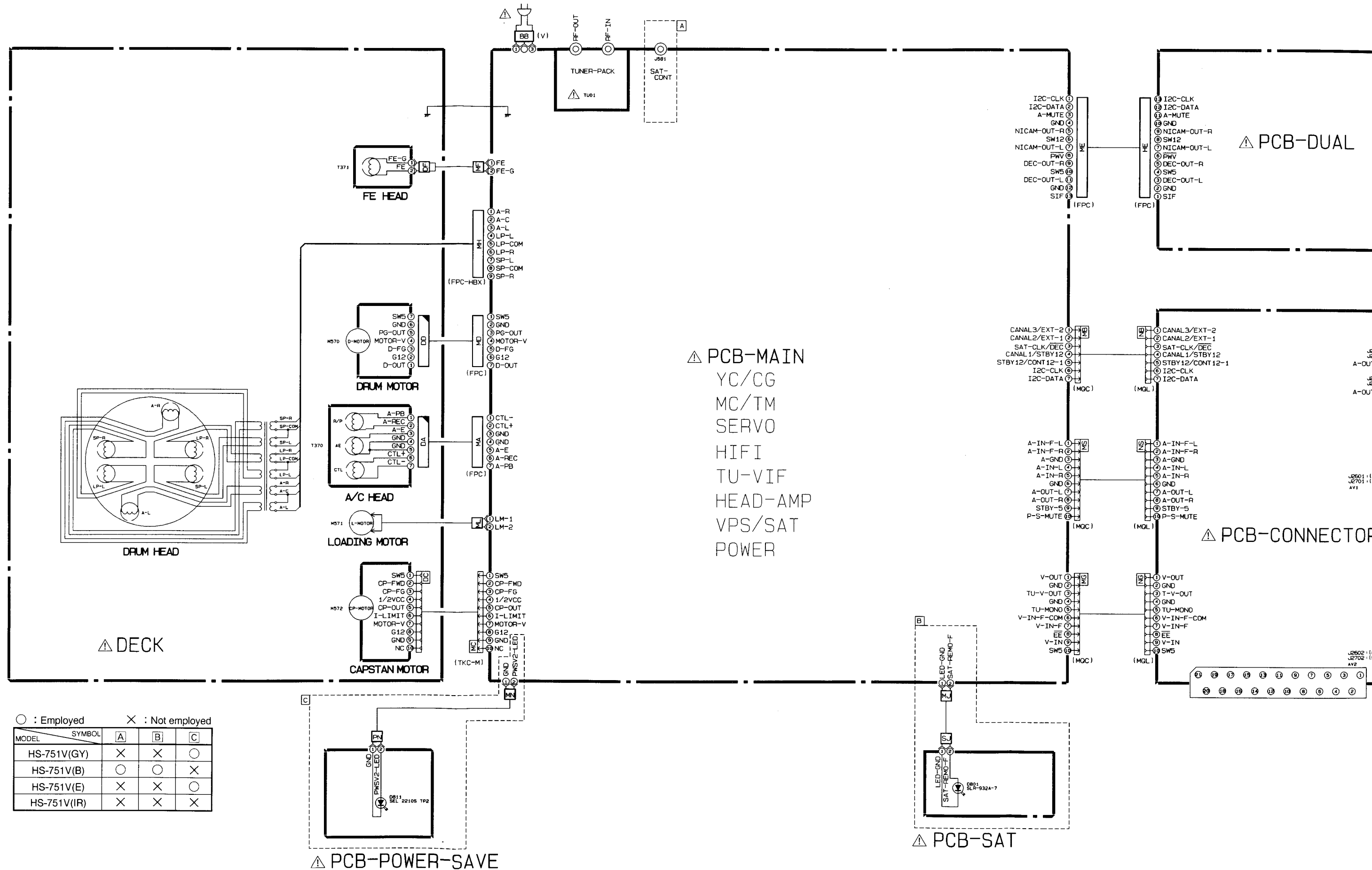
C

D

E

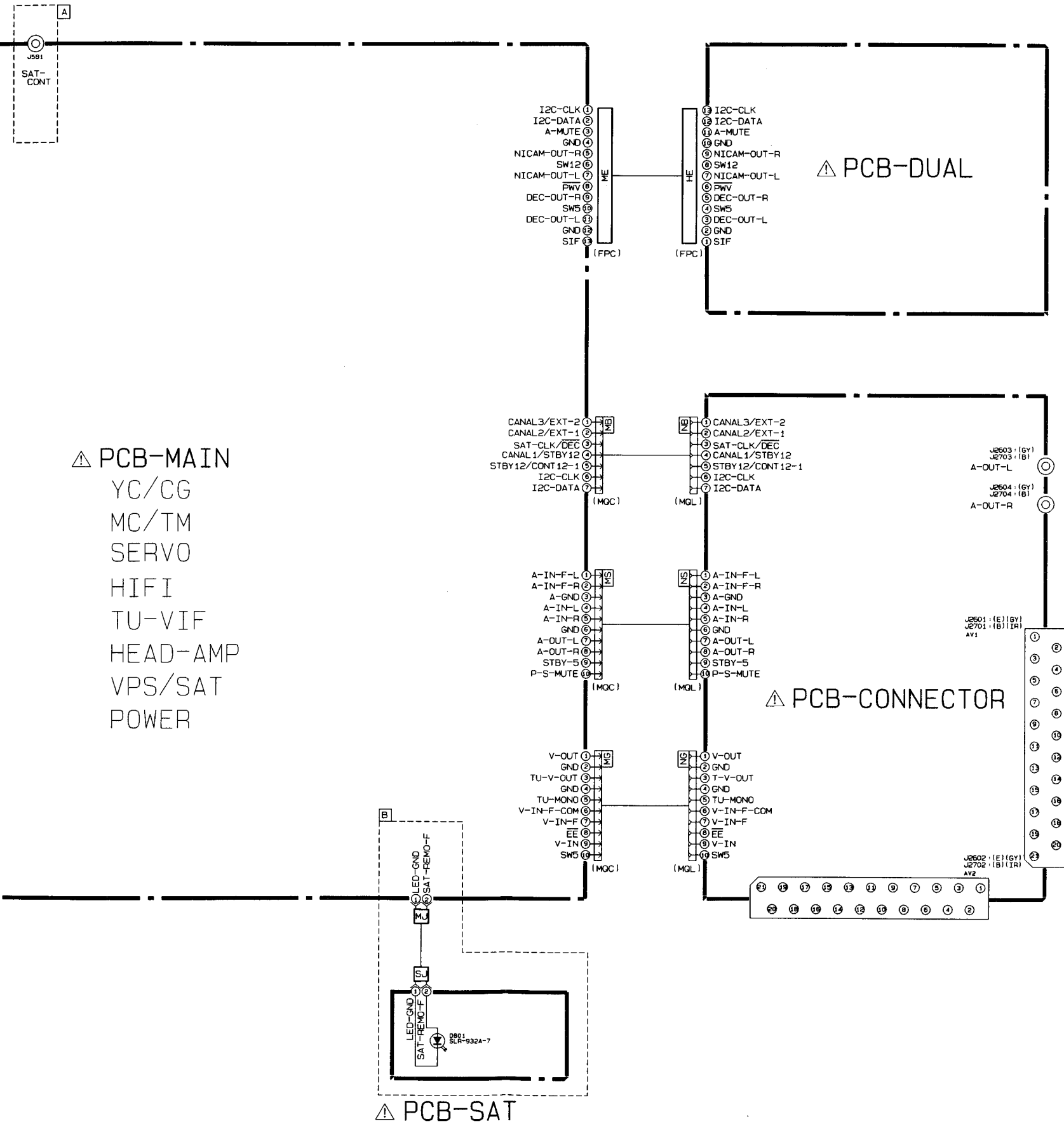
F

G





# PCB-BLOCK DIAGRAM



CONTENTS	
①	PCB-BLOCK DIAGRAM
②	PCB-MAIN (TU-VIF) (HEAD-AMP)
③	PCB-CONNECTOR
④	PCB-DUAL (HIFI)
⑤	PCB-MAIN (YC/CG)
⑥	PCB-MAIN (MC/TM) PCB-SAT PCB-POWER-SAVE TRANSMITTER REMOTE CONTROLLER
⑦	PCB-MAIN (SERVO) (VPS/SAT)
⑧	PCB-MAIN (POWER)
⑨	PATTERN
⑩	
⑪	

**⚠️ SERVICING PRECAUTION**  
 SYMBOLS INDICATE COMPONENTS HAVING SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY AND PERFORMANCE. THEREFOR REPLACEMENT OF ANY SAFETY PARTS SHOULD BE IDENTICAL IN VALUE AND CHARACTERISTICS. DON'T DEGRADE THE SAFETY OF THE VCR THROUGH IMPROPER SERVICING.

HS-751V(B)/V(E)/V(GY)/V(IR)

# SCHEMATIC DIAGRAM

- NOTE**
- Each voltage should be within ±20% of the DC voltages measured with a digital voltmeter.
  - The voltages parenthesised are on SP recording mode. While those without parenthesised on SP play back mode.
  - Waveforms were taken with standard colour bar signal.
  - TP6A, etc. show Test Points.

**5. CAPACITORS**

Value	Not indicated	PF, for numbers more than 1 μF, for numbers less than 1
Dielectric Strength	Not indicated	:50V
Tolerance	Not indicated	±10% (No Tolerance is indicated for electrolytic capacitors and ±20%)
	G=±2% J=±5% K=±10% M=±20%	P=+100% -0% Z=+80% -20% Q=+30% -10% T=+200% -0% C=±0.25PF D=±0.5PF F=±1PF G=±2PF
Sort	Parts except for chips	Not indicated: Ceramic capacitor (MF): Polyester capacitor (PP): Polypropylene film capacitor (ALM): Aluminum electrolytic capacitor (TF): Twin film capacitor (SC): Semiconductor ceramic capacitor (MP): Metalized paper (MPP): Metalized plastic film capacitor (MMP): Metalized polyester capacitor (MF-PP): Polyester polypropylene film capacitor (PS): Styrol capacitor (TAN) or (TANT): Tantalum capacitor (E): Electrolytic capacitor (BP) or (NP): Non polarized electrolytic capacitor
		II Chips Not indicated: Ceramic capacitor chip (E): Electrolytic capacitor (BP) or (NP): Non polarized electrolytic capacitor chip
Characteristic (only ceramic capacitor)	Not indicated	: F or B (high dielectric percentage) CH, SL, etc.: Temperature compensating types

**6. Resistors**

Value	Not indicated	= Ω K = kΩ(1000Ω) M = MΩ(1000kΩ)
Wattage	Parts except for chips	Not indicated = 1/4W or 1/6W
	Chips	Not indicated = 1/10W
Tolerance	Not indicated	±5%
	D=±0.5% F=±1%	J=±5% K=±10%
Short	Parts except for chips	Not indicated: Carbon resistor (S): Fixed composition resistor (MB): Metal oxide film resistor(type B) (CE): Cemented resistor (W): Wire wound resistor (M): Metal film resistor (MPC): Metal plate cement resistor (ML): Metal liner resistor
		II Chip Not indicated: Chip resistor

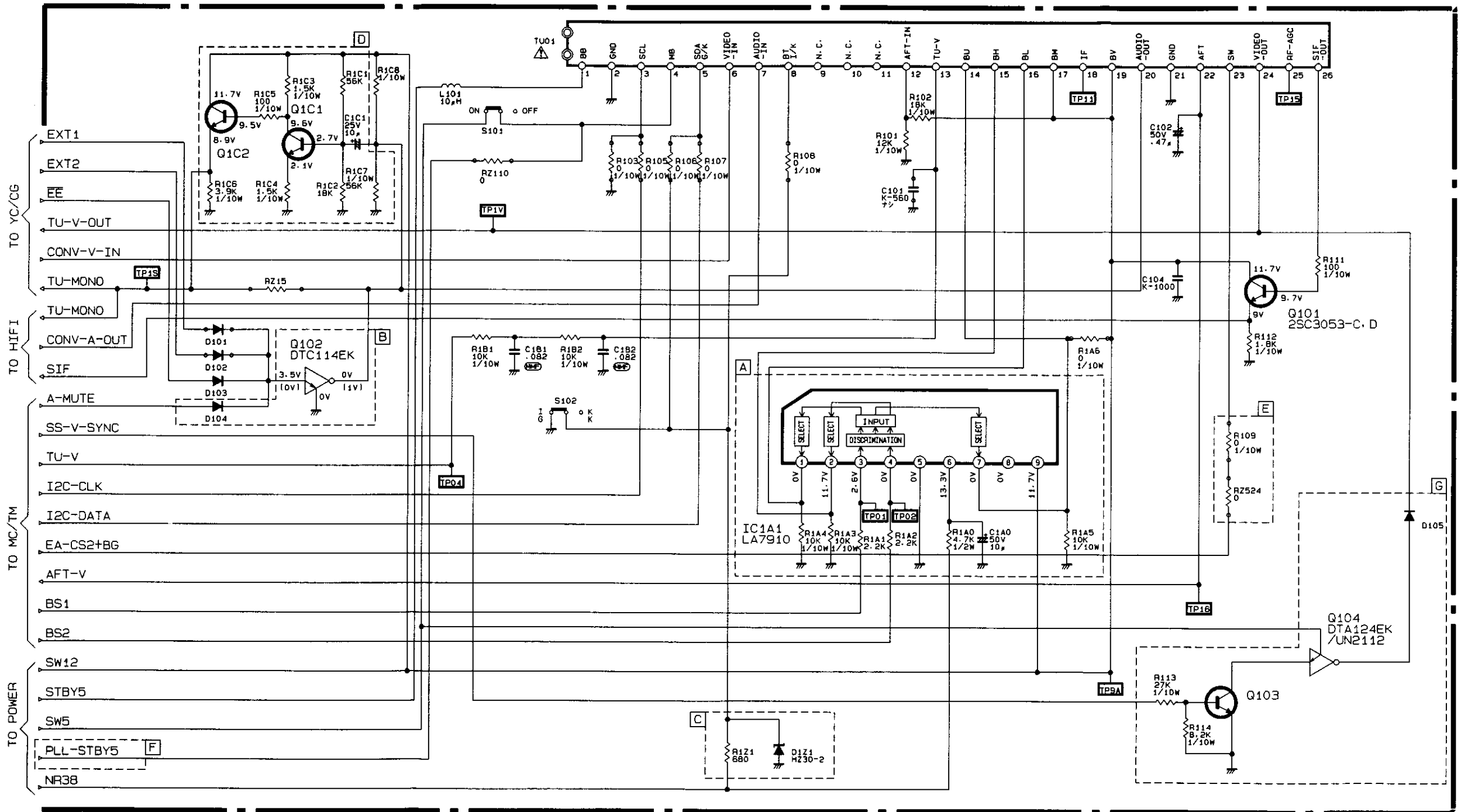
7. This is a basic schematic diagram. Some sets may be subject to modification according to engineering improvement.

**SPECIFIC SYMBOL**

	Zener Diode		Crystal unit
	Varicap		LE Diode
	Thermistor		Photo Diode
	Fusible Resistor		Ceramic filter
	PNP DIGITAL TRANSISTOR		NPN DIGITAL TRANSISTOR

①

(TU-VIF) PCB-MAIN



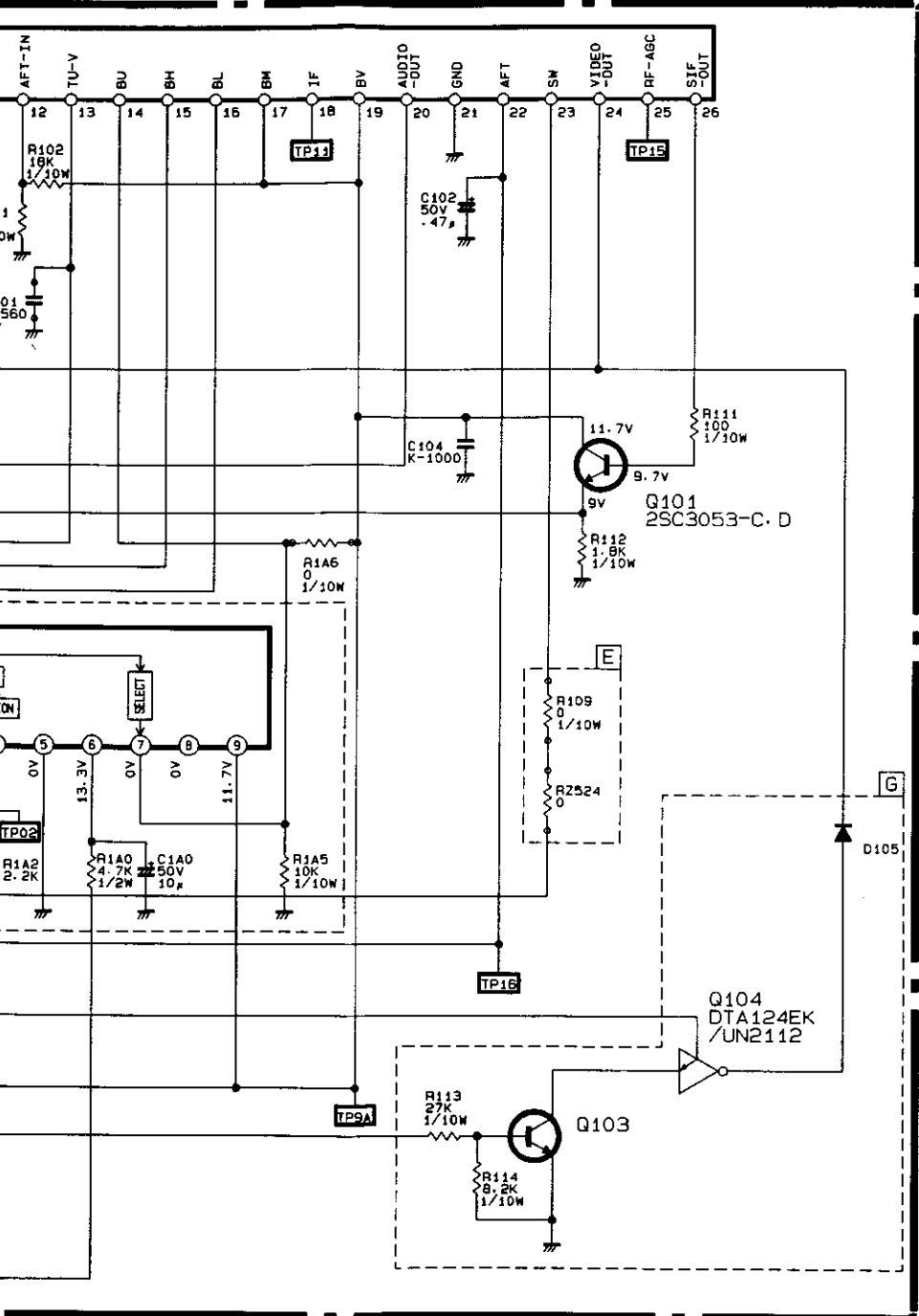
All NPN transistors are 2SC3052-E,F unless otherwise specified  
 All diodes are 1SS252/1SS1310M unless otherwise specified  
 O : Employed X : Not Employed

SYMBOL	A	B	C	D	E	F	G	R103	R105	R106	R107	R108	R1A6	R1C8	RZ15	RZ110	S101	S102	D101	D102	
ADDRESS	C-5	C-3	D-5	A-3	B-7	C-5	C-8	A-4	A-4	A-4	A-4	A-5	B-6	A-3	B-2	A-4	C-4	C-4	C-2	C-2	
HS-751V(E)/V(GY)	O	O	X	O	X	X	X	X	X	X	X	X	X	560K	X	X	O	X	X	X	X
HS-751V(B)	X	O	O	X	X	O	X	X	O	X	O	O	O	330K	O	O	X	X	X	X	X
HS-751V(IR)	O	O	X	X	X	X	X	X	X	X	X	X	X	330K	O	X	O	X	X	X	X

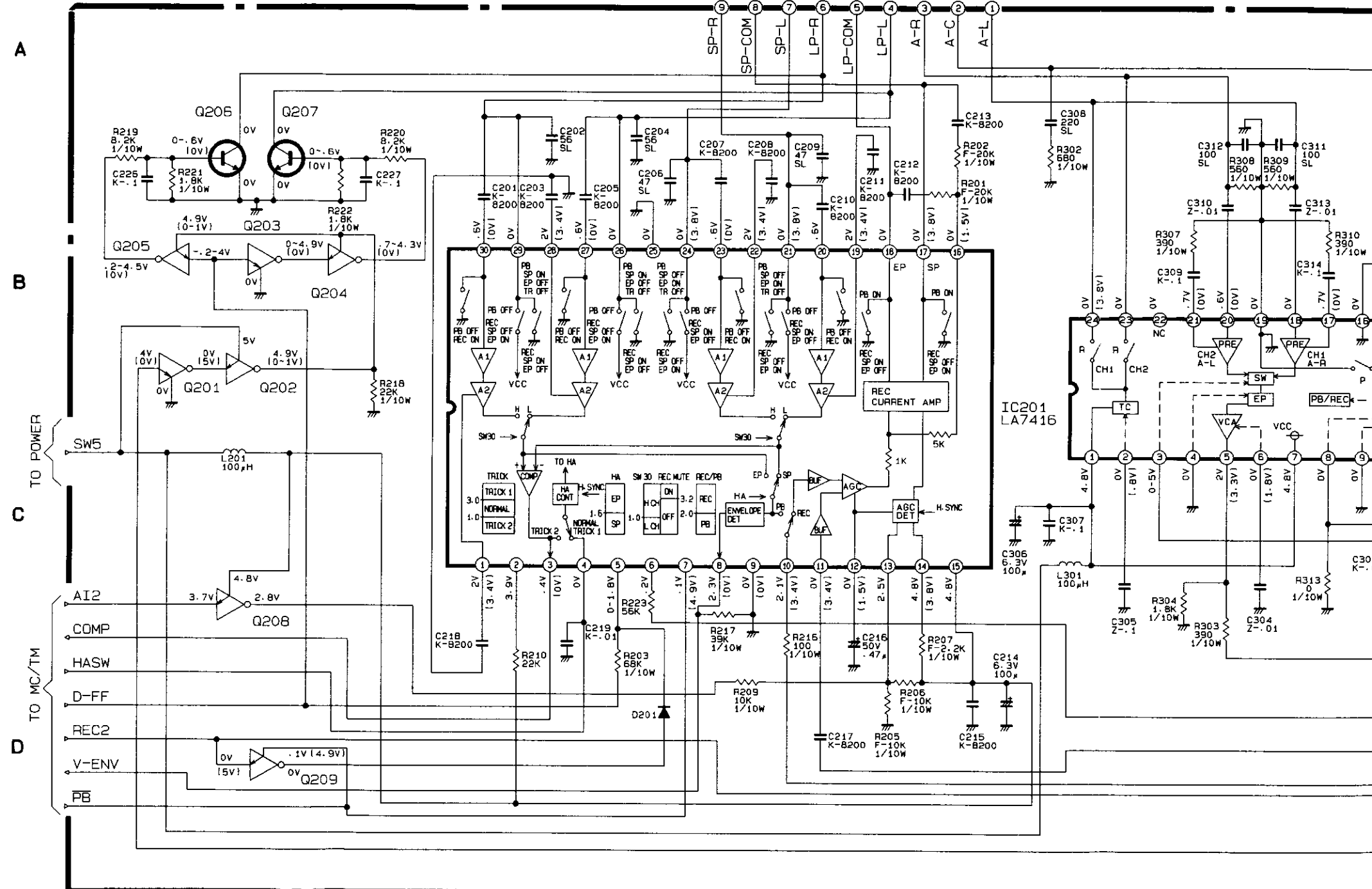
All  
 All  
 All

E

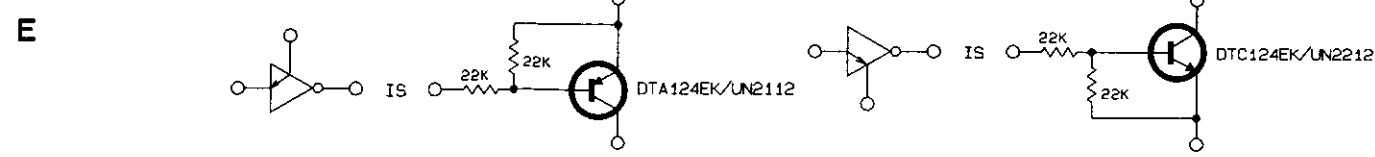
(TU-VIF) PCB-MAIN



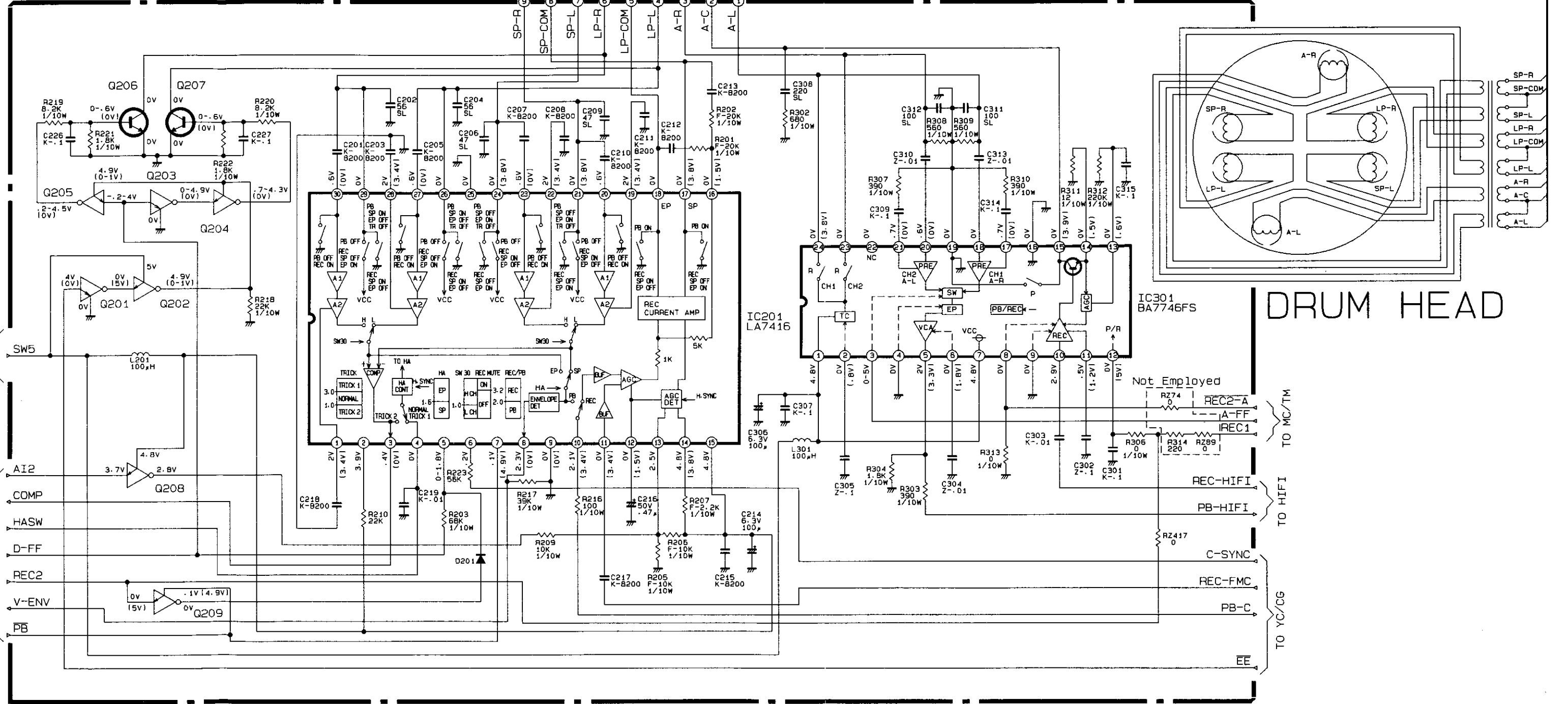
(HEAD-AMP) PCB-MAIN



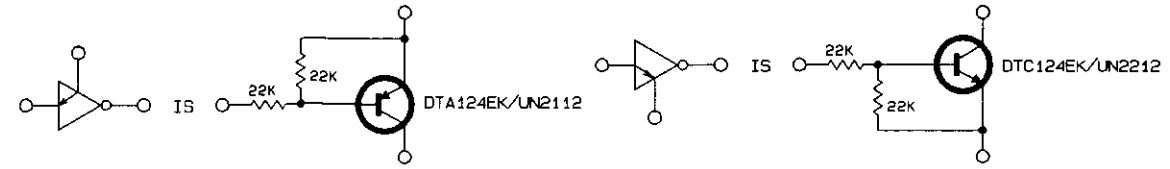
All diodes are 1SS252/1SS1310M unless otherwise specified.  
 All NPN transistors are 2SC3053-C.D unless otherwise specified.  
 All PNP transistors are 2SA1235-E.F unless otherwise specified.



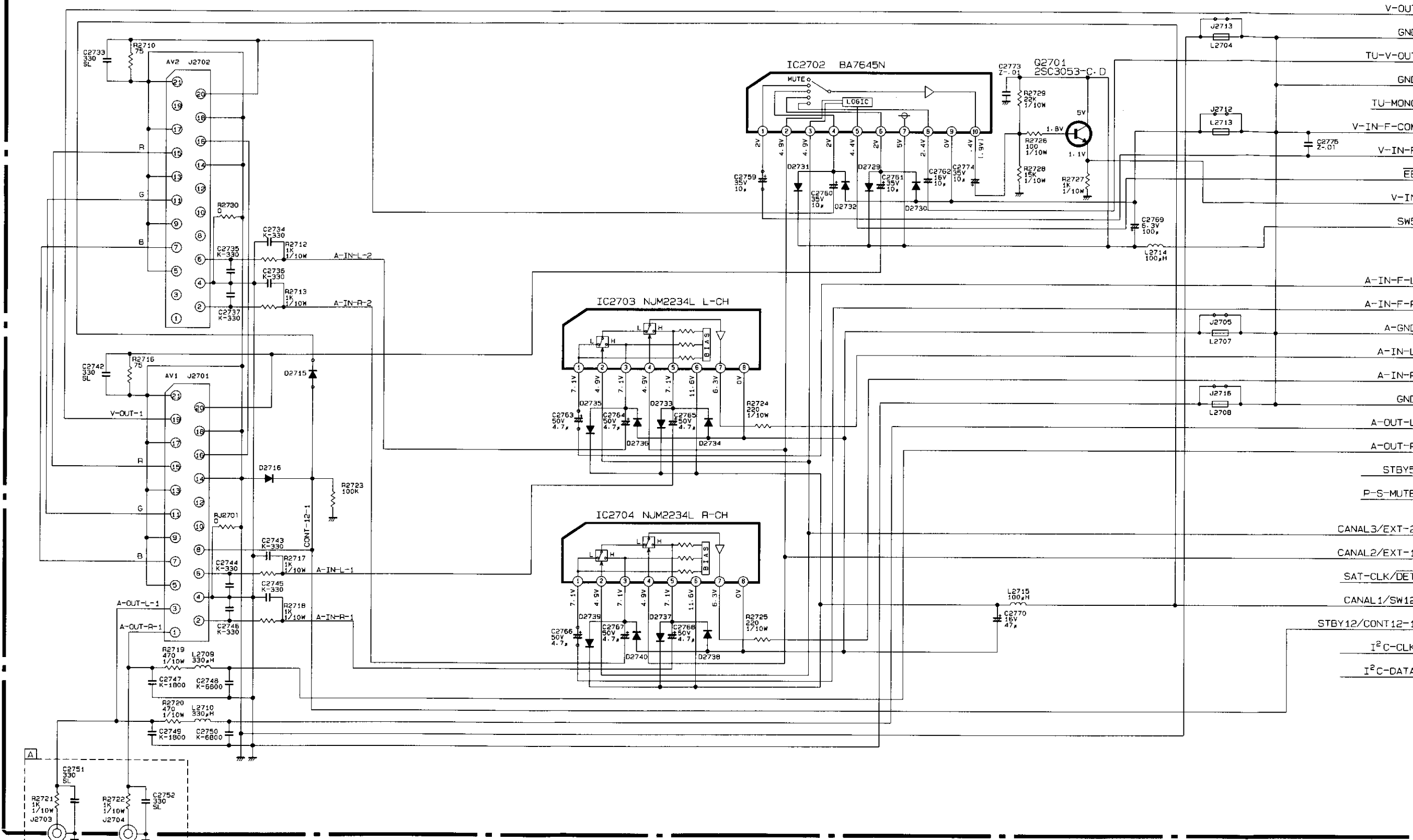
( HEAD-AMP ) PCB-MAIN



All diodes are 1SS252/1SS1310M unless otherwise specified.  
 All NPN transistors are 2SC3053-C unless otherwise specified.  
 All PNP transistors are 2SA1235-E unless otherwise specified.



A  
B  
C  
D  
E  
F  
G

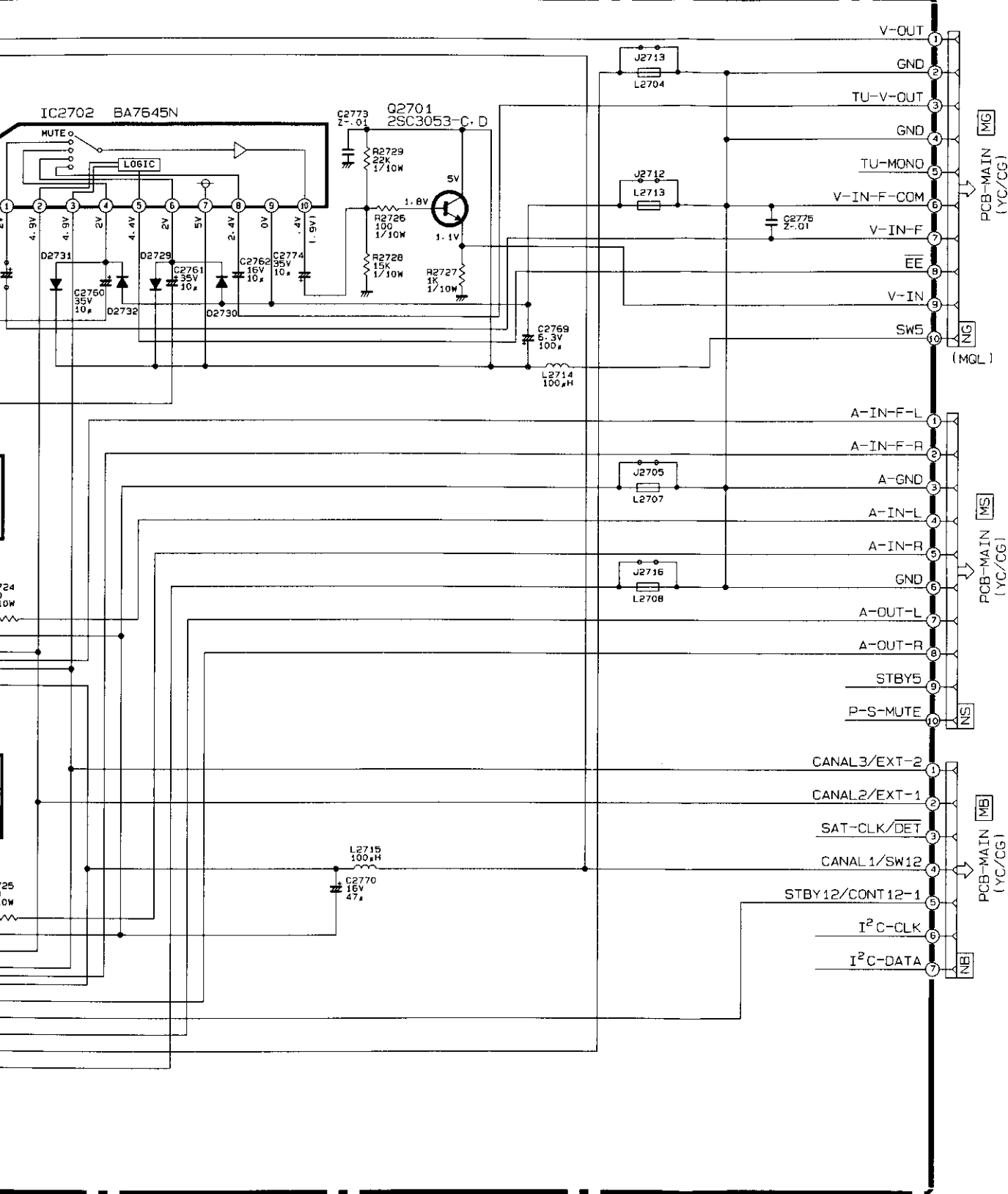


All diodes are 1SS252/1SS1310M unless otherwise specified.  
 All NPN transistors are 2SC3052-E.F unless otherwise specified.  
 All PNP transistors are 2SA1235-E.F unless otherwise specified.

○ : Employed    × : Not employed

SYMBOL	C2759	C2763	C2766	L2704	L2713	L2707	L2708	D2715	ⓐ
ADDRESS	B-6	D-5	E-5	A-9	B-9	C-9	D-9	C-3	F-1
HS-751V(IR)	×	×	×	×	×	○	×	×	×
HS-751V(B)	×	×	×	×	×	○	×	×	○

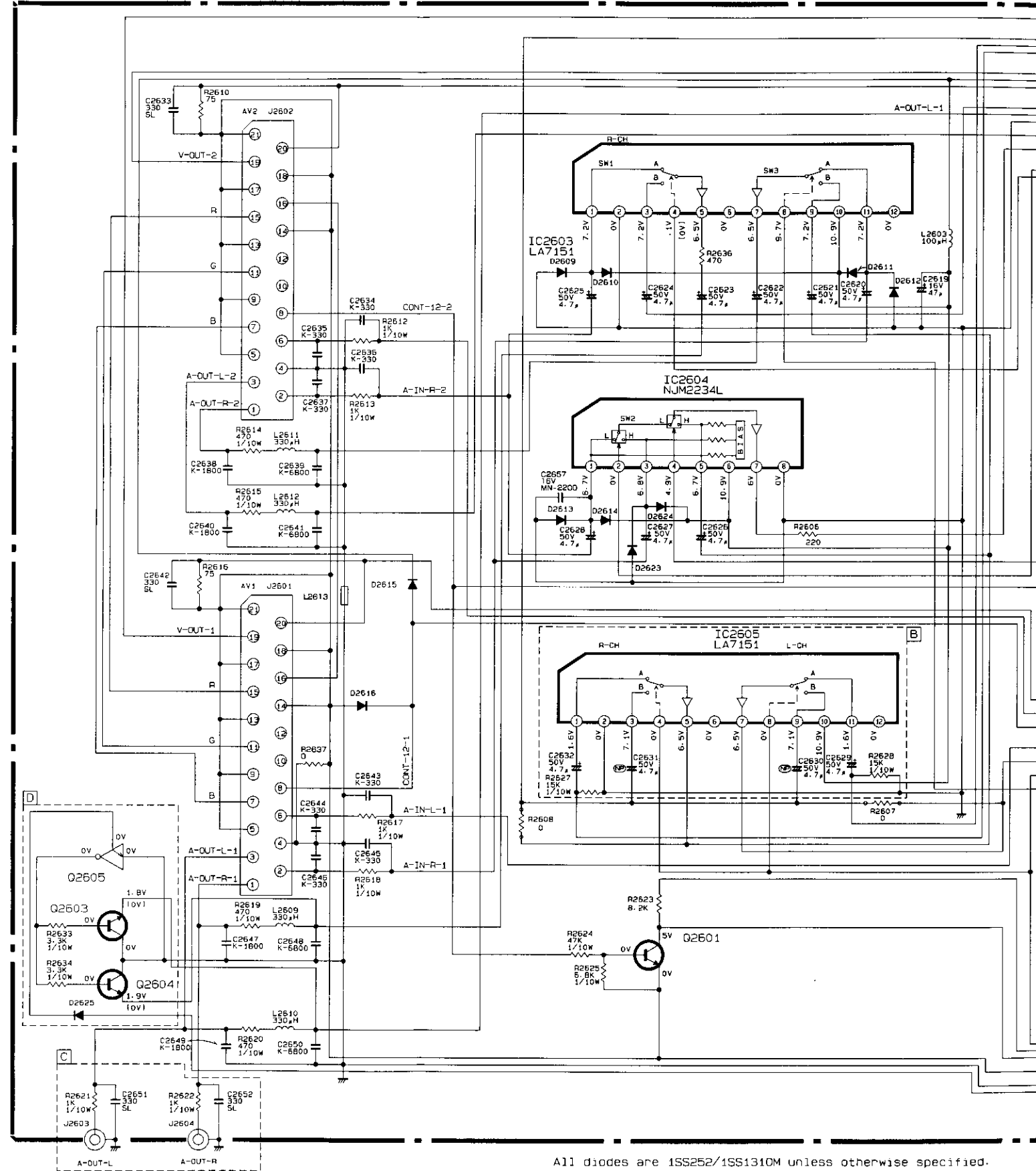
(B) (IR) ONLY PCB-CONNECTOR



○ : Employed    × : Not employed

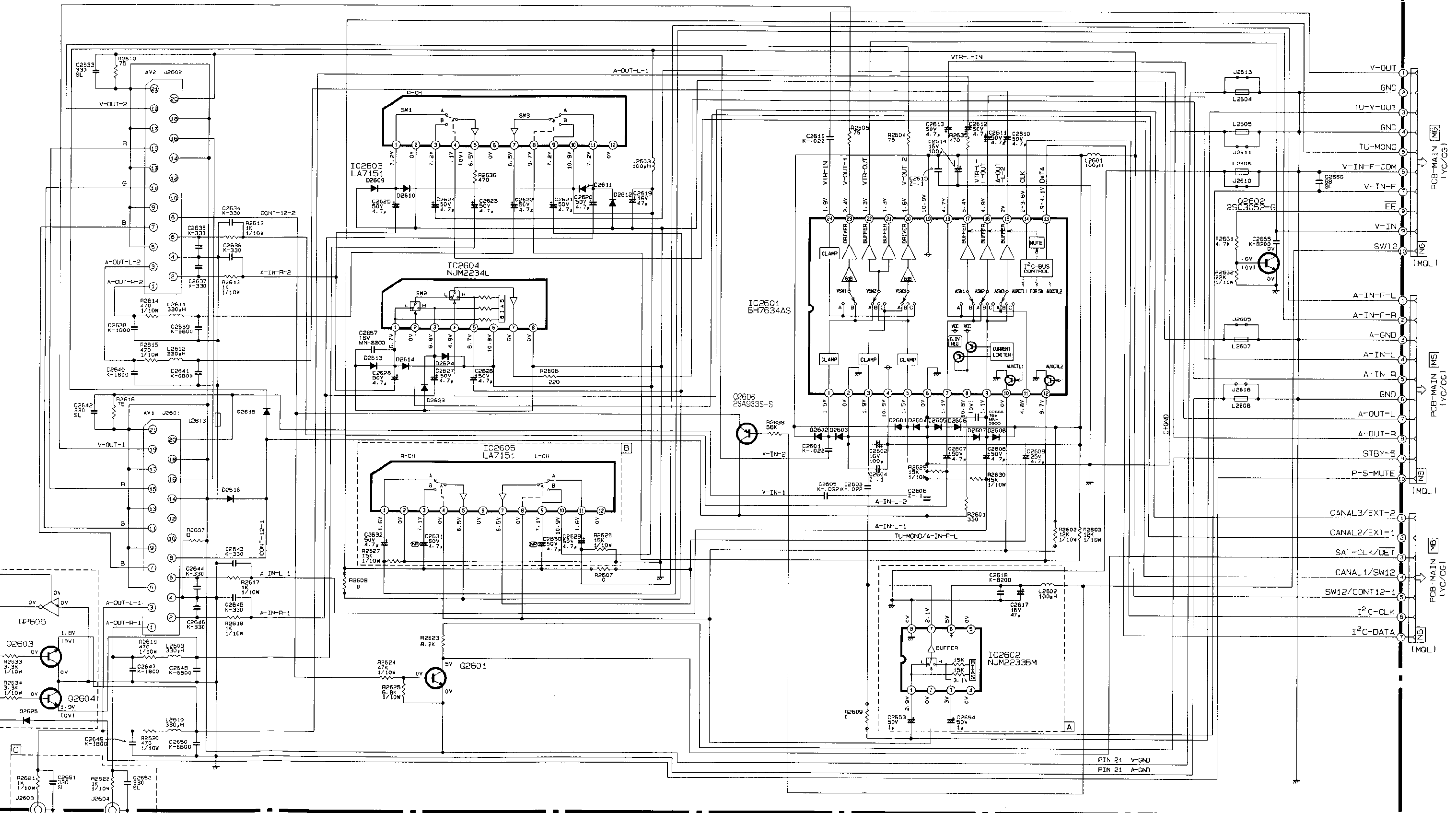
SYMBOL	C2759	C2763	C2766	L2704	L2713	L2707	L2708	D2715	[A]
ADDRESS	B-6	D-5	E-5	A-9	B-9	C-9	D-9	C-3	F-1
HS-751V(IR)	×	×	×	×	×	○	×	×	×
HS-751V(B)	×	×	×	×	×	○	×	×	○

A  
B  
C  
D  
E  
F  
G



All diodes are 1SS252/1SS1310M unless otherwise specified.  
All NPN transistors are 2SC3052-E.F unless otherwise specified.  
All PNP transistors are 2SA1235-E.F unless otherwise specified.

(E)(GY) ONLY PCB-CONNECTOR



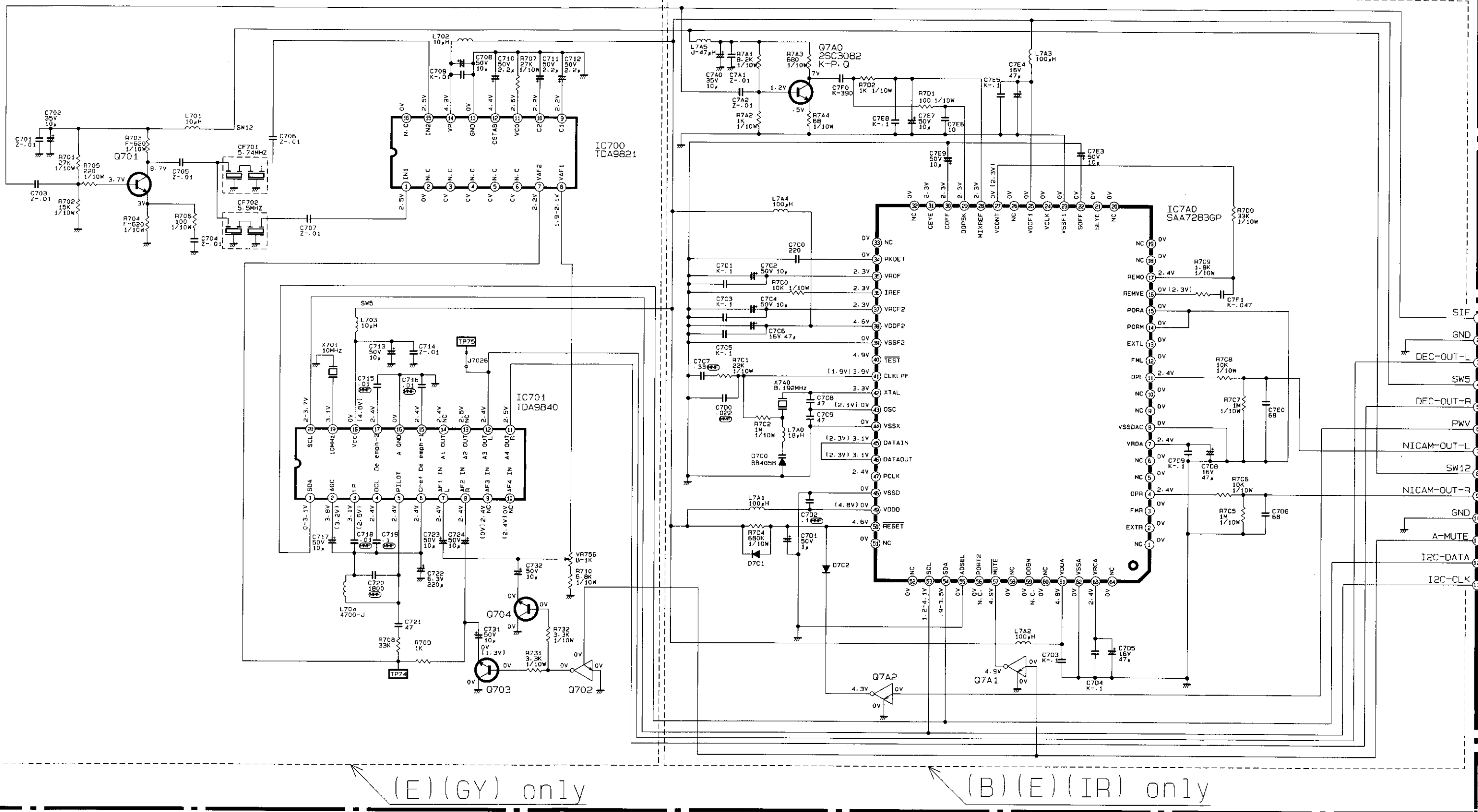
All diodes are 1SS252/1SS1310M unless otherwise specified.  
 All NPN transistors are 2SC3052-E.F unless otherwise specified.  
 All PNP transistors are 2SA1235-E.F unless otherwise specified.

○: Employed  
 ×: Not employed

SYMBOL	A	B	C	D	R2607	R2608	R2609	R2602	L2604	L2605	L2606	L2607	L2608	D2615
ADDRESS	F-9	D-5	F-1	E-1	E-5	E-3	F-7	E-9	A-10	B-10	B-10	C-10	D-10	D-3
HS-751V(E)	×	×	×	○	○	○	○	×	×	×	×	×	×	×
HS-751V(GY)	×	×	○	○	○	○	○	×	×	×	×	×	×	×

HS-751V(B)/V(E)/V(GY)/V(IR)

A  
B  
C  
D  
E  
F  
G

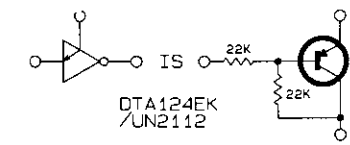
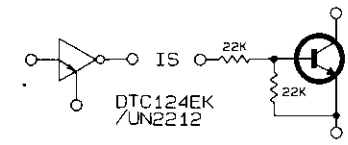


(E)(GY) only

(B)(E)(IR) only

IC-BLOCK DIAGRAM on next page.

All diodes are 1S5252 unless otherwise specified.  
All NPN transistors are 2SC3053-C-D unless otherwise specified.  
All PNP transistors are 2SA1235-E-F unless otherwise specified.

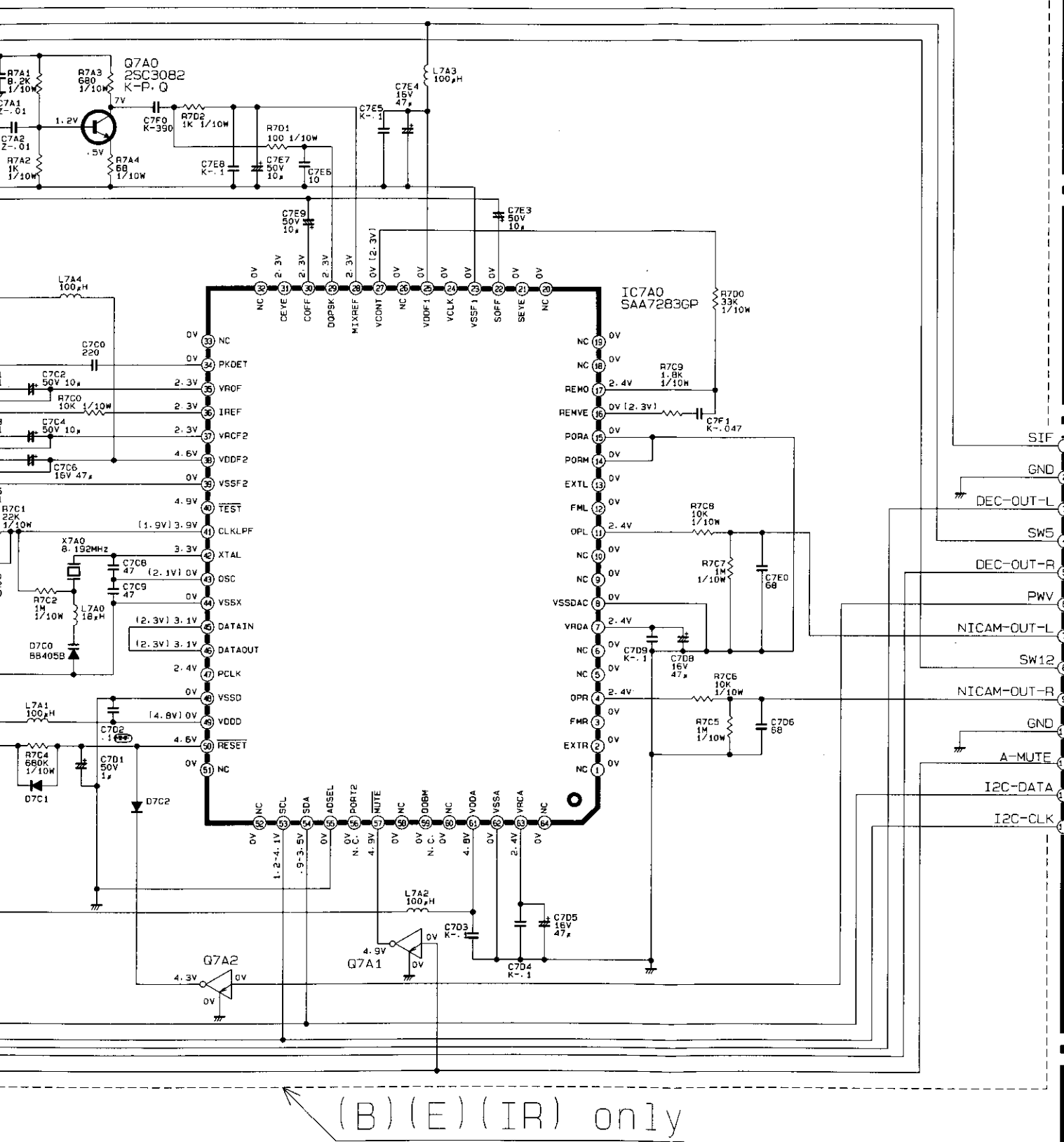


④

HS-751V(B)/V(E)/V(GY)/V(IR)

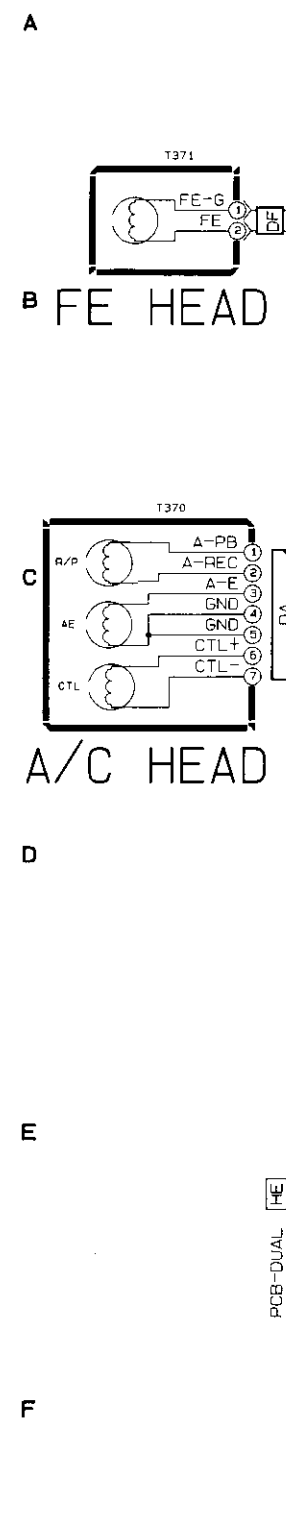
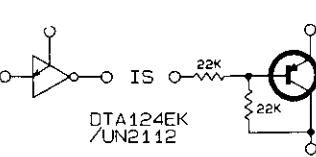


! PCB-DUAL

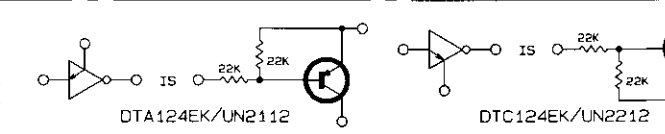


(B)(E)(IR) only

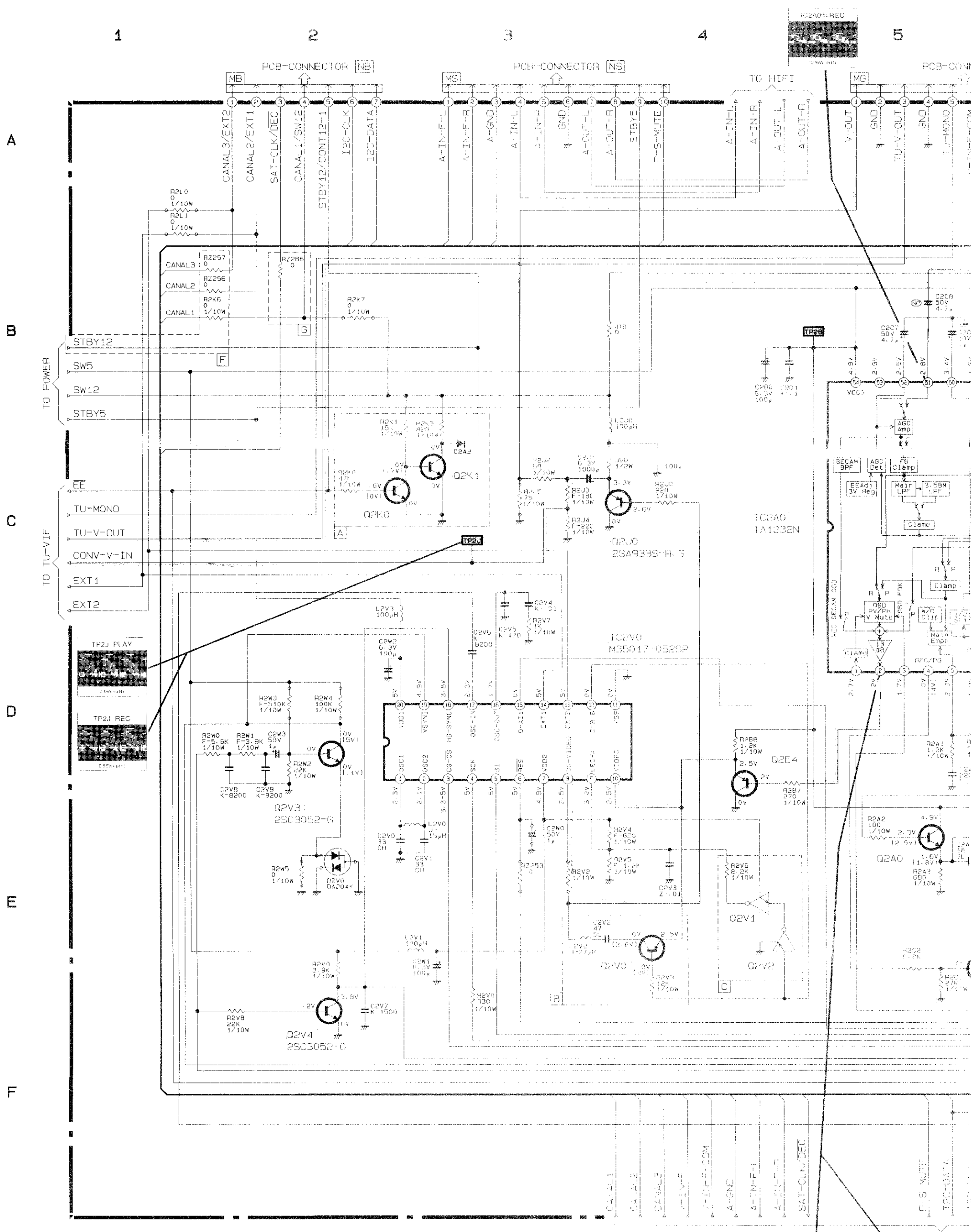
IC-BLOCK DIAGRAM on next page.



All diodes are 1SS252/1SS1310M unless otherwise specified.  
 All NPN transistors are 2SC3052-E.F unless otherwise specified.  
 All PNP transistors are 2SA1235-E.F unless otherwise specified.

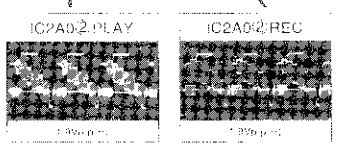




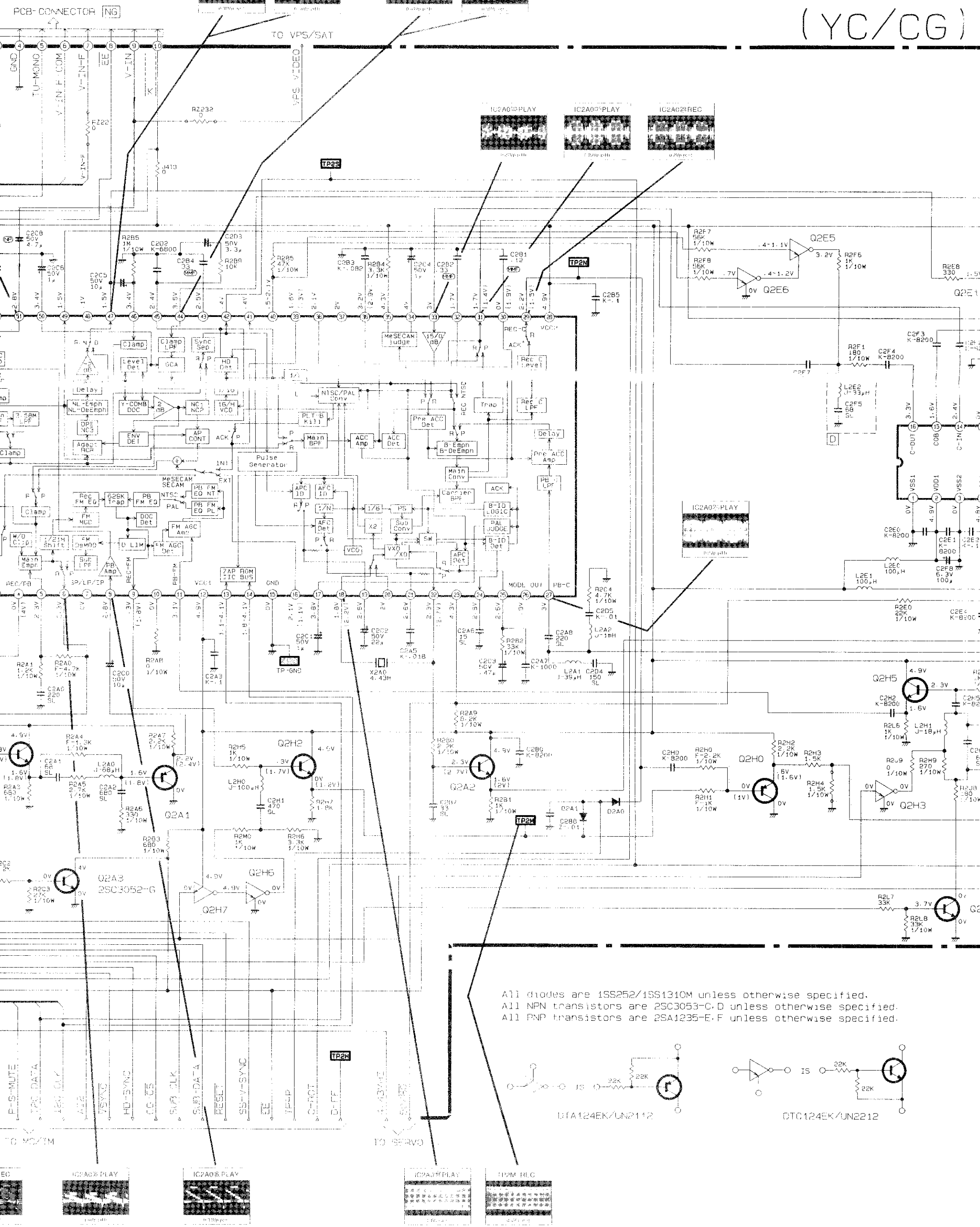


○ Employed × Not Employed

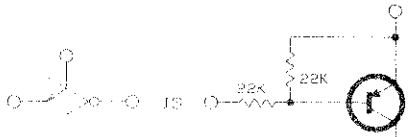
G	SYMBOL	[A]	[B]	[C]	[D]	[F]	[G]	R2J5	R2K7	R2L0	R2L1	R2V2	R2W3	R2W4	R2Z53	R2Z2	C2P8	R2H4	R2C1	R2W5	[K]	J16	J413
		ADDRESS	C-2	F-3	E-4	C-9	B-2	B-2	C-3	B-2	A-1	A-1	E-3	D-2	D-2	E-3	A-5	C-11	E-9	D-11	E-2	A-6	B-3
	HS-751V(GY)	×	○	×	×	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×	○	×
	HS-751V(B)	○	×	×	×	×	×	×	○	○	○	×	×	×	×	×	×	×	×	×	×	×	○
	HS-751V(E)	×	○	×	×	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	○	×
	HS-751V(IR)	○	×	×	×	×	×	×	○	○	○	×	×	×	×	×	×	×	×	×	×	×	○



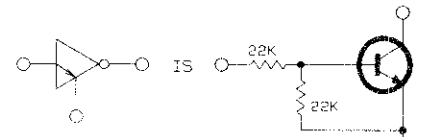
(YC/CG)



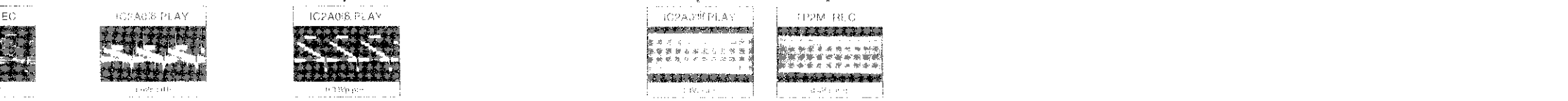
All diodes are 1SS252/1SS1310M unless otherwise specified.  
 All NPN transistors are 2SC3053-C.D unless otherwise specified.  
 All PNP transistors are 2SA1235-E.F unless otherwise specified.



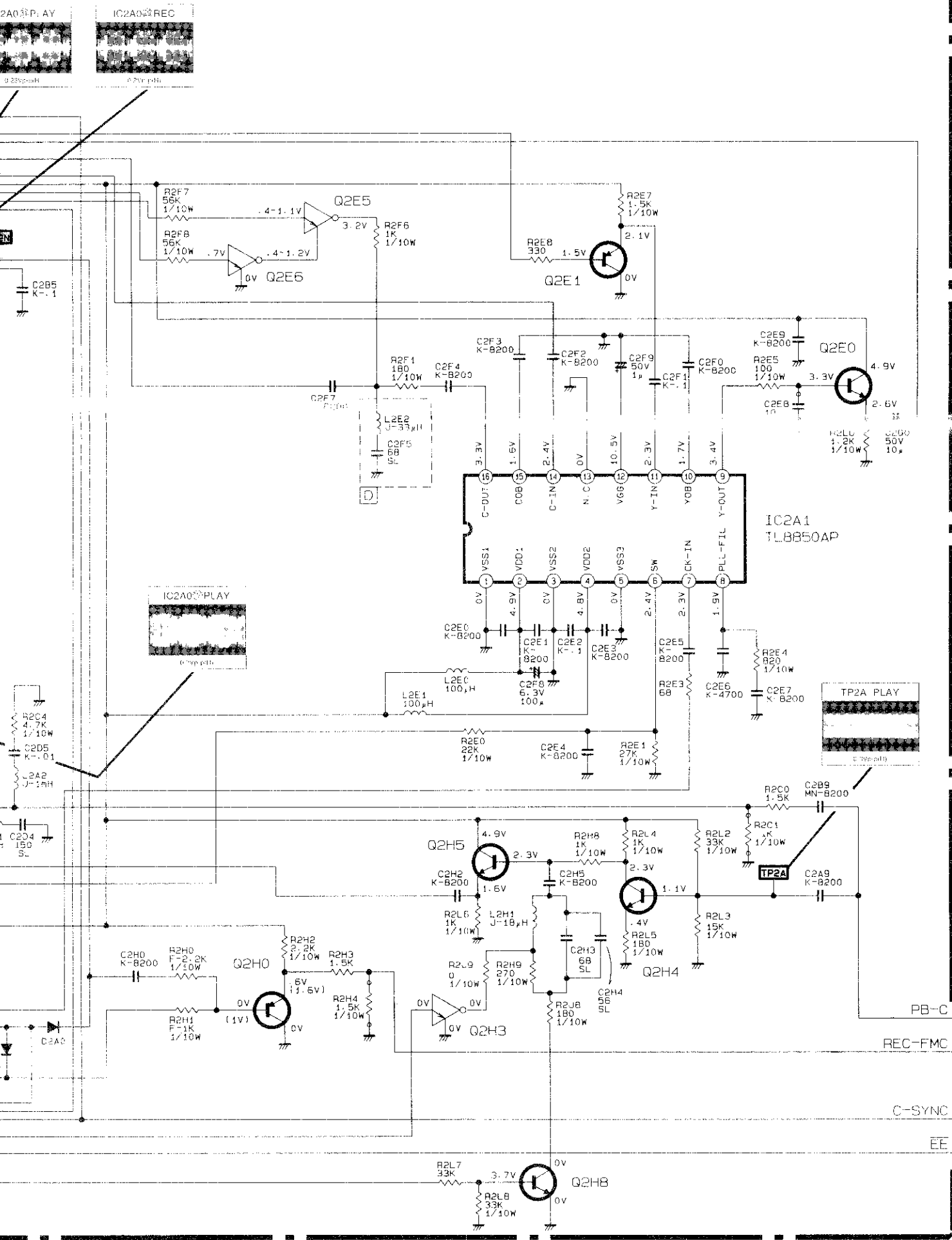
15A124EK/UN2112



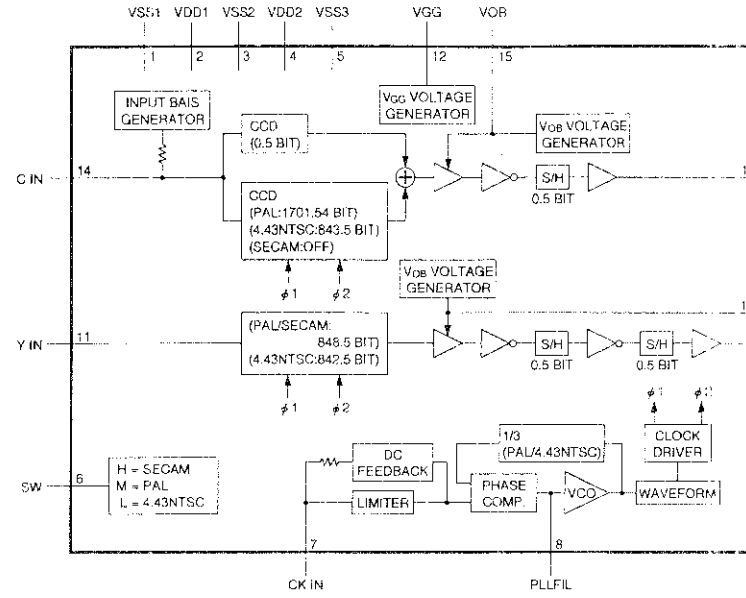
DT0124EK/UN2212



# (YC/CG) PCB-MAIN

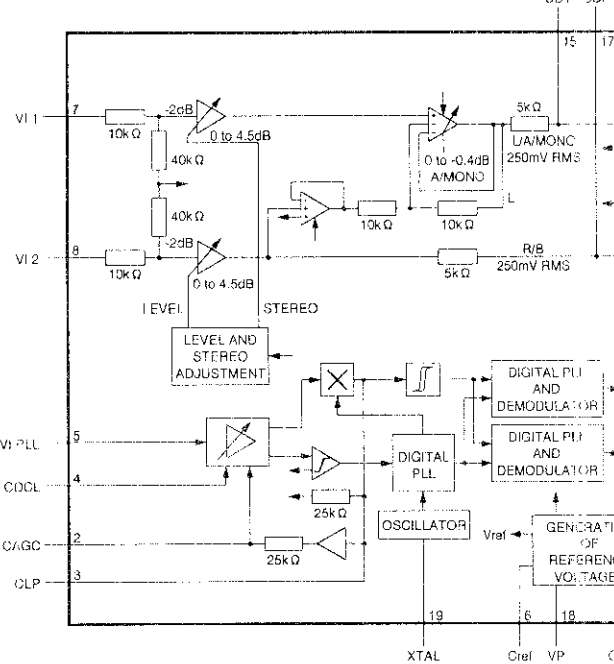


IC2A1 TL8850AP



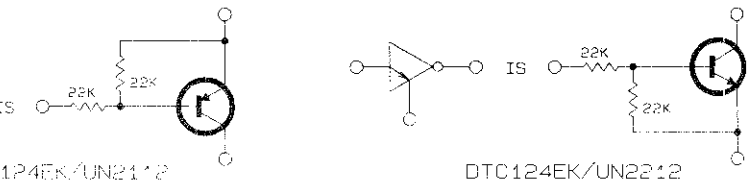
## [ IC-BLOCK

IC701 TDA9840



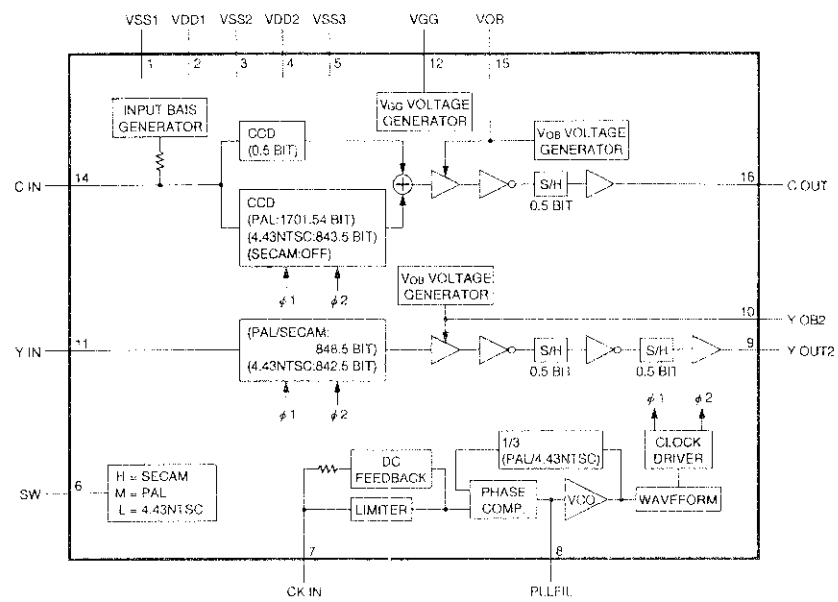
Resistors are 1SS252/1SS1310M unless otherwise specified.  
 Resistors are 2SC3053-C.D unless otherwise specified.  
 Resistors are 2SA1235-E.F unless otherwise specified.

Recording of Luminance Signal  
 Playback of Luminance Signal  
 Recording of Color Signal  
 Playback of Color Signal

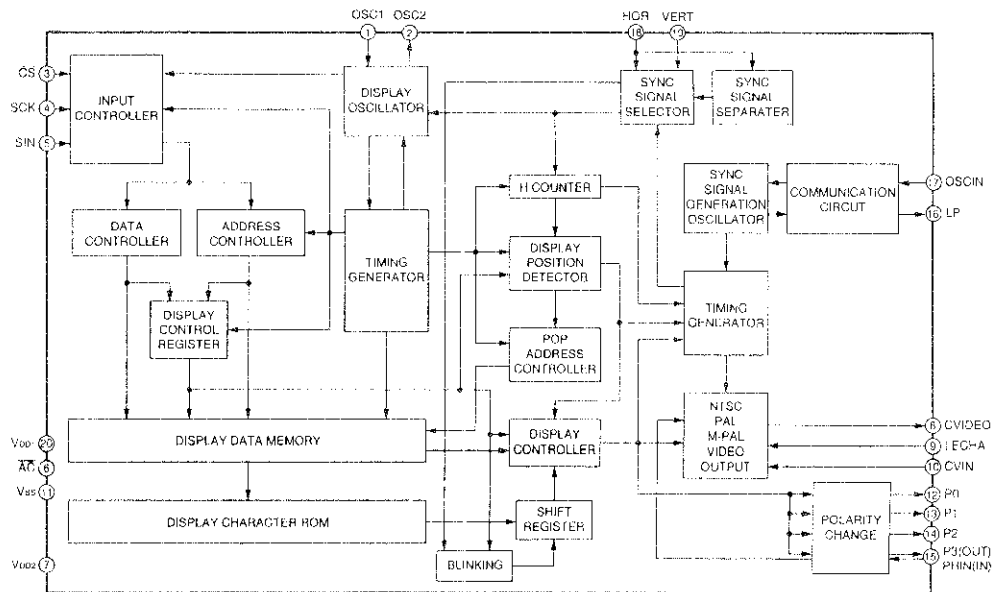


1  
-MAIN

IC2A1 TL8850AP

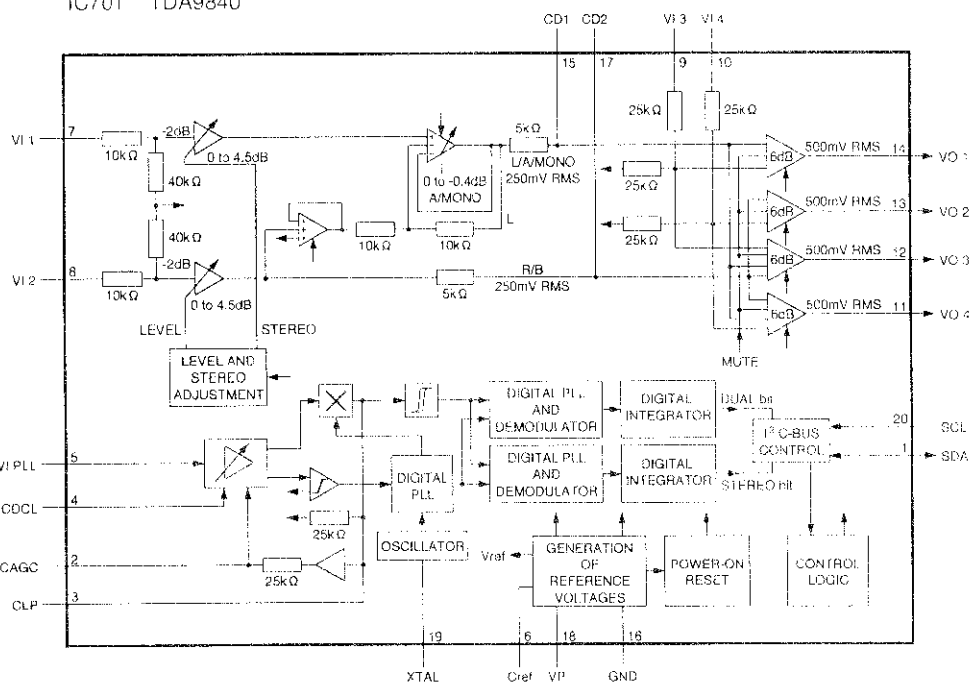


IC2V0 M35017-052SP

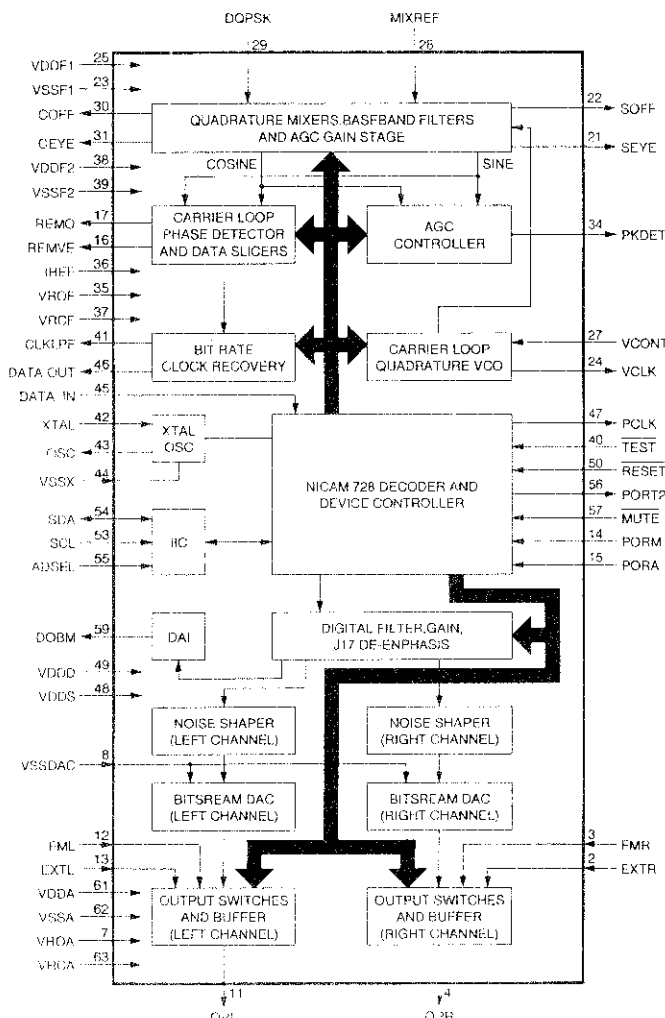


[ IC-BLOCK DIAGRAM PCB-DUAL ]

IC701 TDA9840



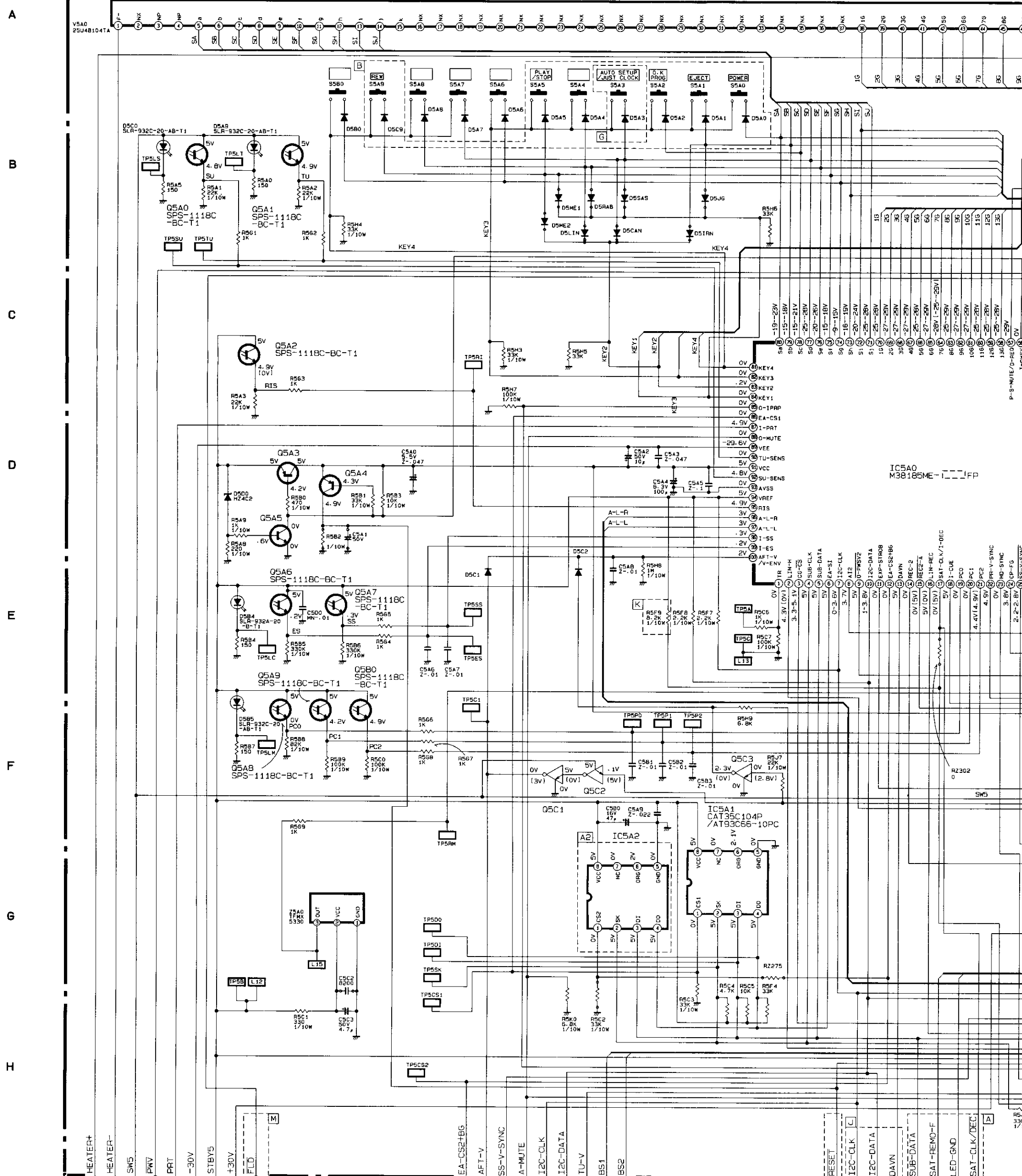
IC7A0 SAA7283GP



↔ REPRESENTS CONTROLLER BUS

g of Luminance Signal  
of Luminance Signal  
g of Color Signal  
of Color Signal

1 2 3 4 5 6 7  
 (MC/TM) PCB-MAIN

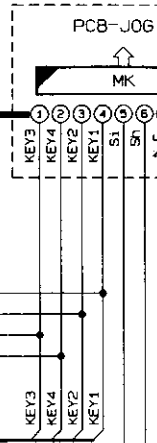
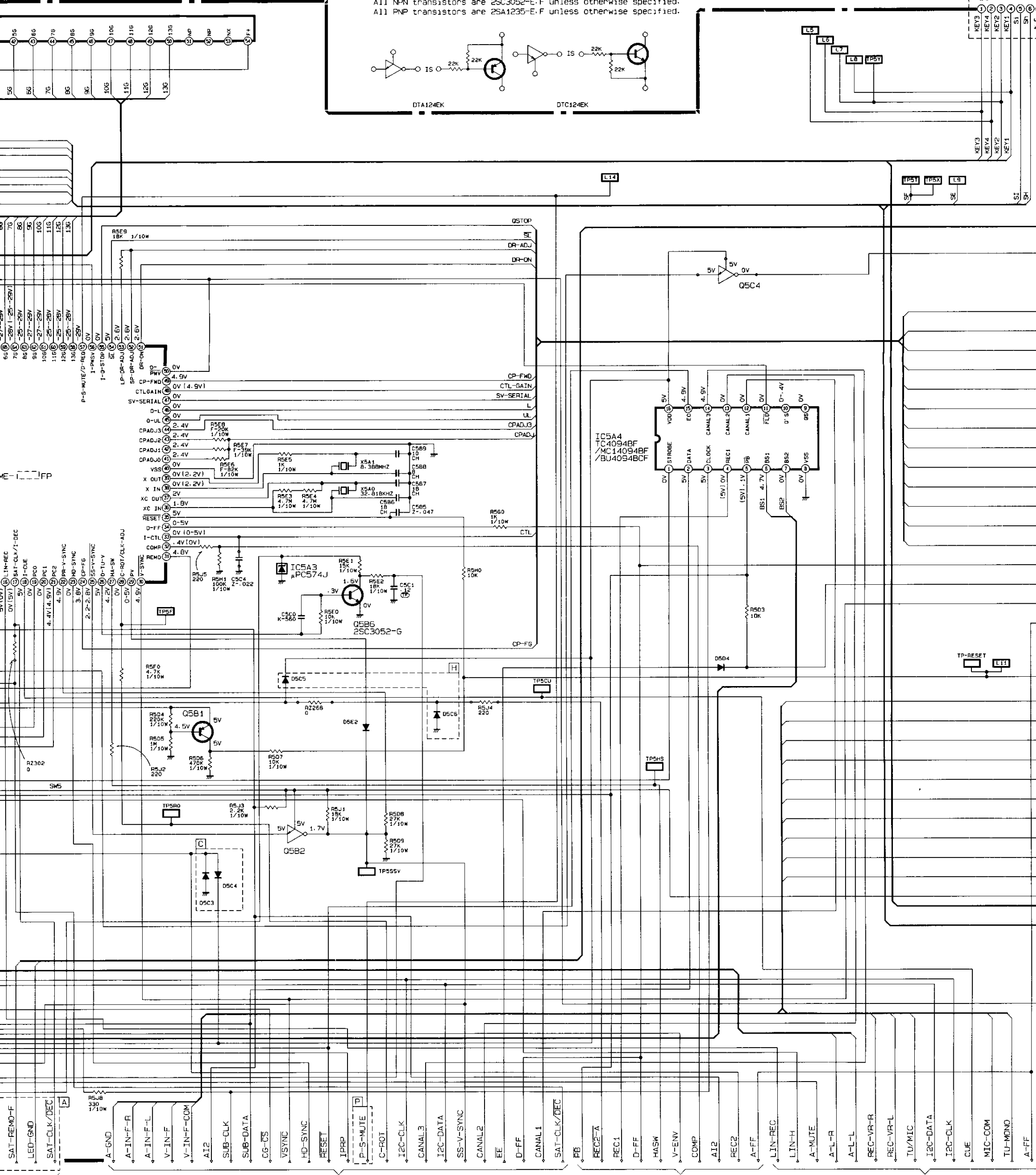
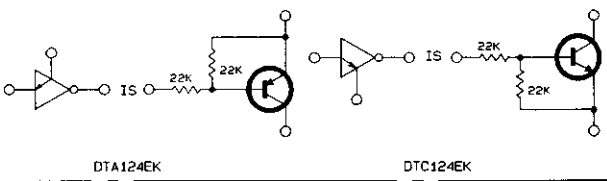


○: Employed  
 ×: Not employed

SYMBOL	D5JG	D5IAN	D5SAS	D5CAN	D5RAB	D5LIN	D5ME1	D5ME2	IC5A0	[A2]	C5C2	C5C4	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[J]	[K]	[L]	[M]	RZ302	RZ268	R5J4	Q5C4	S5B0	S5A8	S5A7
HS-751V(B)	×	×	×	×	×	×	×	×	215	AT93C56-10PC	×	×	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	FF	CH-UP	CH-DOW	
HS-751V(GY)	×	×	×	×	×	×	×	×	215	AT93C56-10PC	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	FF	CH-UP	CH-DOW		
HS-751V(E)	×	×	×	×	×	×	×	×	222	AT93C56-10PC	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	FF	CH-UP	CH-DOW		
HS-751V(IR)	×	○	×	×	×	×	×	×	215	AT93C56-10PC	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	FF	CH-UP	CH-DOW		

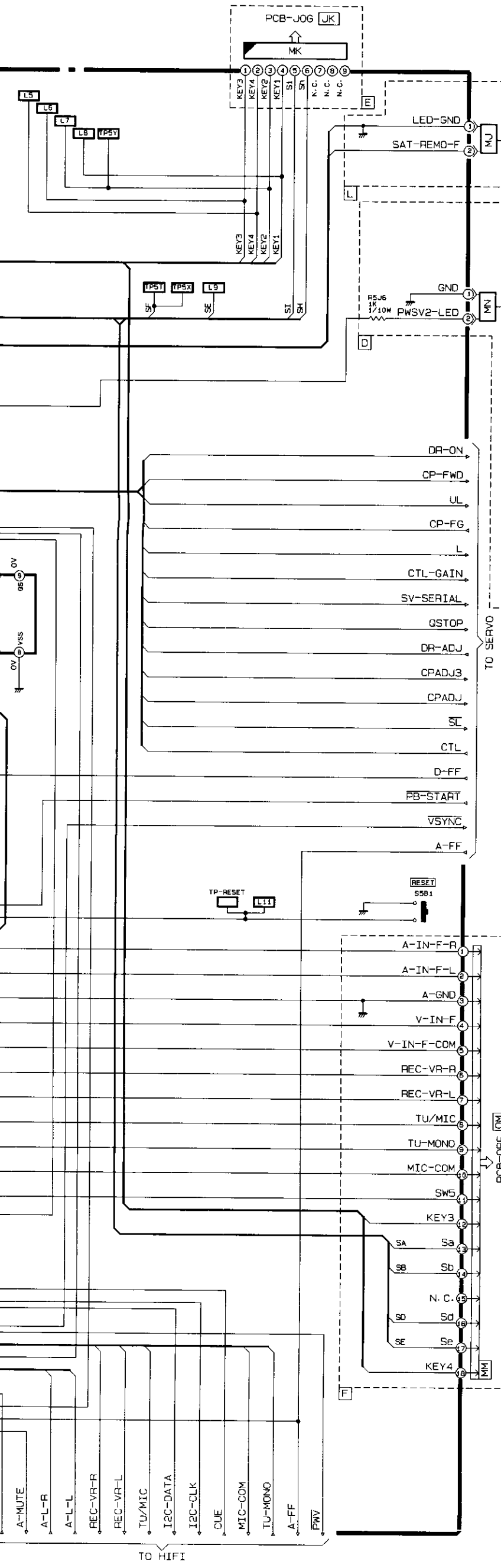
HS-751V(B)/V(E)/V(GY)/V(IR)

All diodes are 1SS252/1SS131 unless otherwise specified.  
 All NPN transistors are 2SC3052-E.F unless otherwise specified.  
 All PNP transistors are 2SA1235-E.F unless otherwise specified.

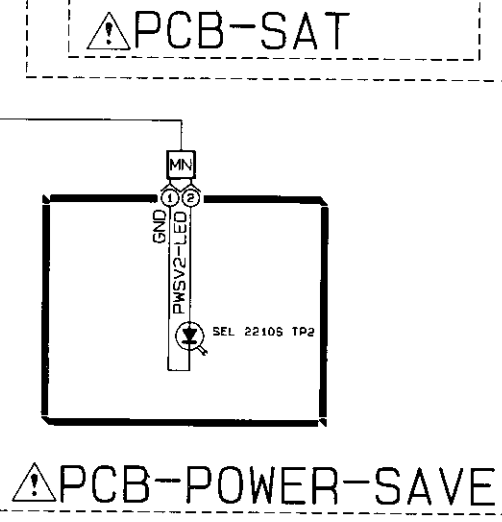
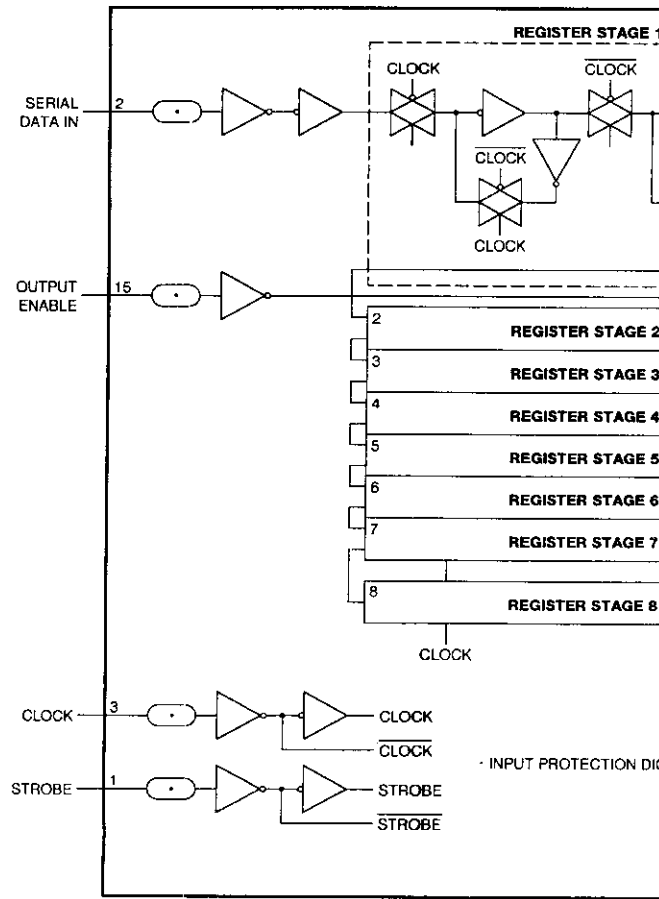


4	S5B0	S5A8	S5A7	S5A6	S5A4	R5B2	C5A1
2	A-3	A-3	A-3	A-4	A-4	H-9	D-3
	FF	CH-UP	CH-DOWN	REC/OTR	COUNTER-RESET	X	680 10 $\mu$
	FF	CH-UP	CH-DOWN	REC/OTR	POWER-SAVE	O	15K .47 $\mu$
	FF	CH-UP	CH-DOWN	REC/OTR	POWER-SAVE	O	15K .47 $\mu$
	FF	CH-UP	CH-DOWN	REC/OTR	COUNTER-RESET	X	680 10 $\mu$

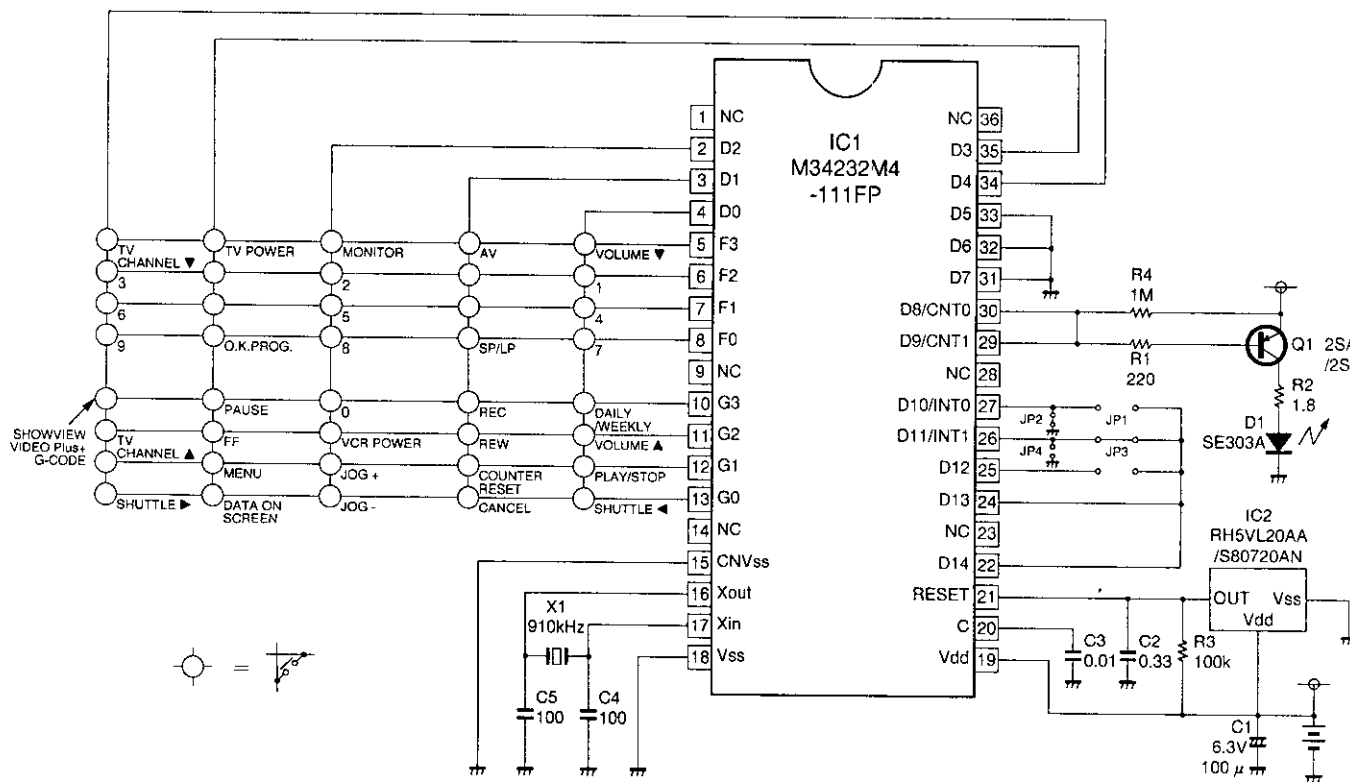




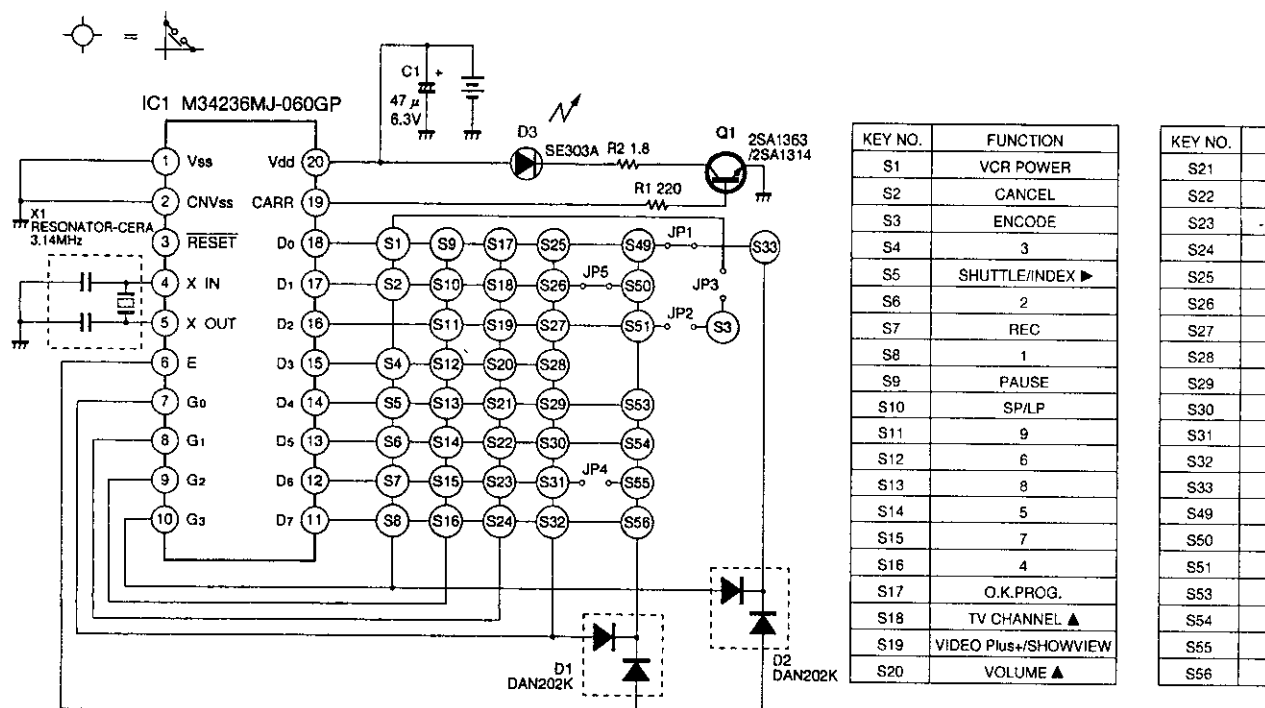
IC5A4 TC4094BF/MC14094BF/BU4094BCF



### HS-751V(B)/HS-751V(GY) TRANSMITTER REMOTE CONTROLLER

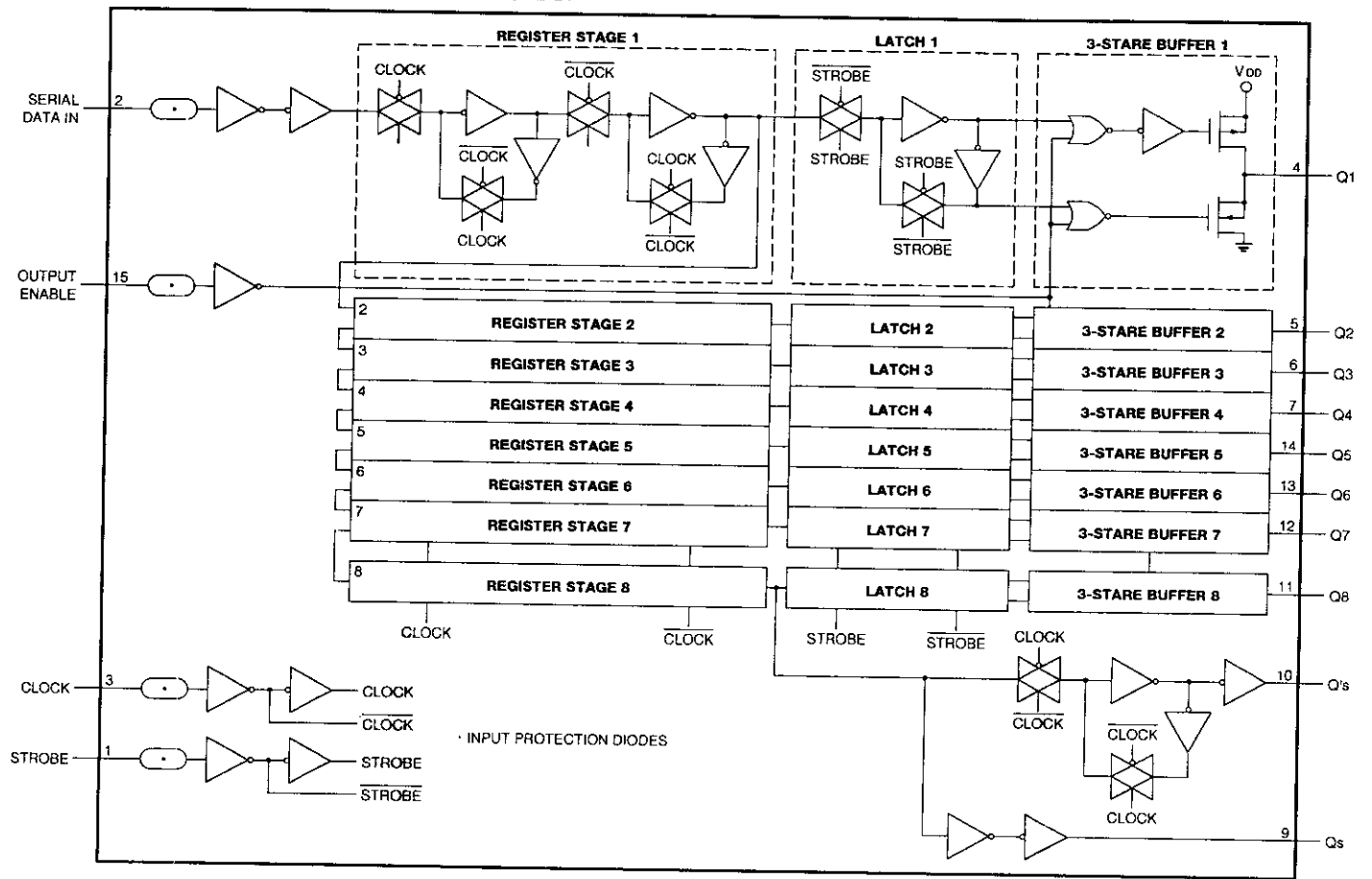


### HS-751V(E)/HS-751V(IR) TRANSMITTER REMOTE CONTROLLER



KEY NO.	FUNCTION	KEY NO.
S1	VCR POWER	S21
S2	CANCEL	S22
S3	ENCODE	S23
S4	3	S24
S5	SHUTTLE/INDEX ▶	S25
S6	2	S26
S7	REC	S27
S8	1	S28
S9	PAUSE	S29
S10	SP/LP	S30
S11	9	S31
S12	6	S32
S13	8	S33
S14	5	S49
S15	7	S50
S16	4	S51
S17	O.K.PROG.	S53
S18	TV CHANNEL ▲	S54
S19	VIDEO Plus+/SHOWVIEW	S55
S20	VOLUME ▲	S56

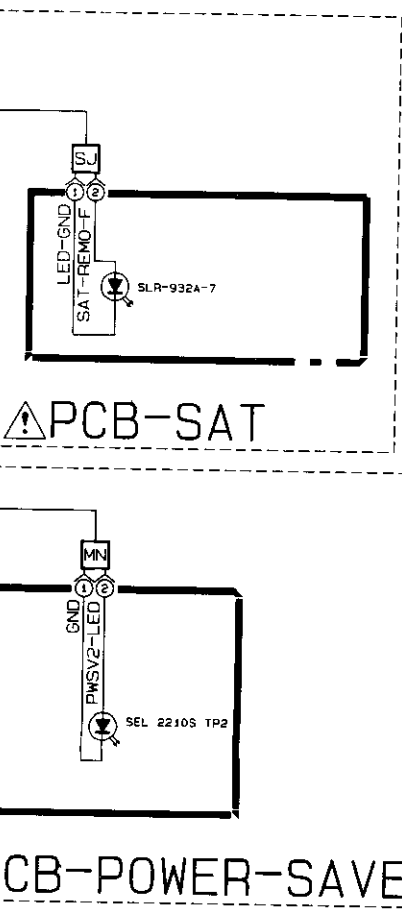
IC5A4 TC4094BF/MC14094BF/BU4094BCF



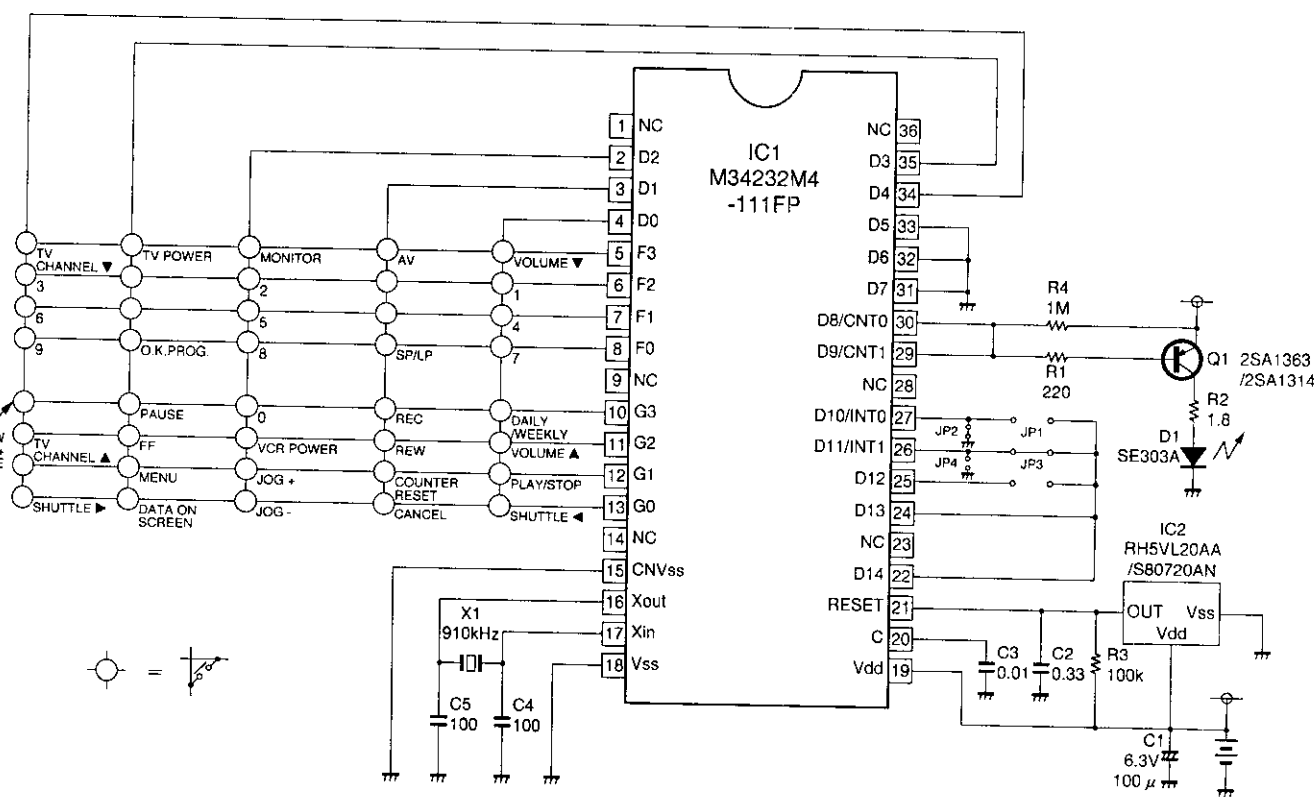
\* TRUE TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Q2	Q3	Q4
0	0	X	X	3S	3S	Q7	NO CHG.
0	0	X	X	3S	3S	NO CHG.	Q7
1	0	0	X	NO CHG.	NO CHG.	Q7	NO CHG.
1	1	1	0	0	Q1-1	Q7	NO CHG.
1	1	1	1	1	Q1-1	Q7	NO CHG.
1	1	1	1	NO CHG.	NO CHG.	NO CHG.	Q7

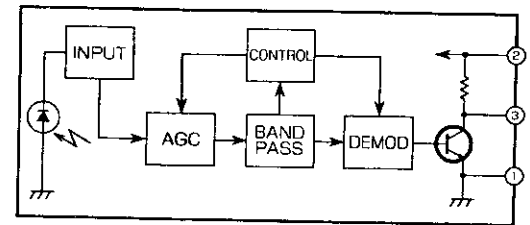
3S = Three-State  
 X = Don't Care  
 At the positive clock edge.  
 Information in the 7th shift register stage is transferred to Q8 and Qs.



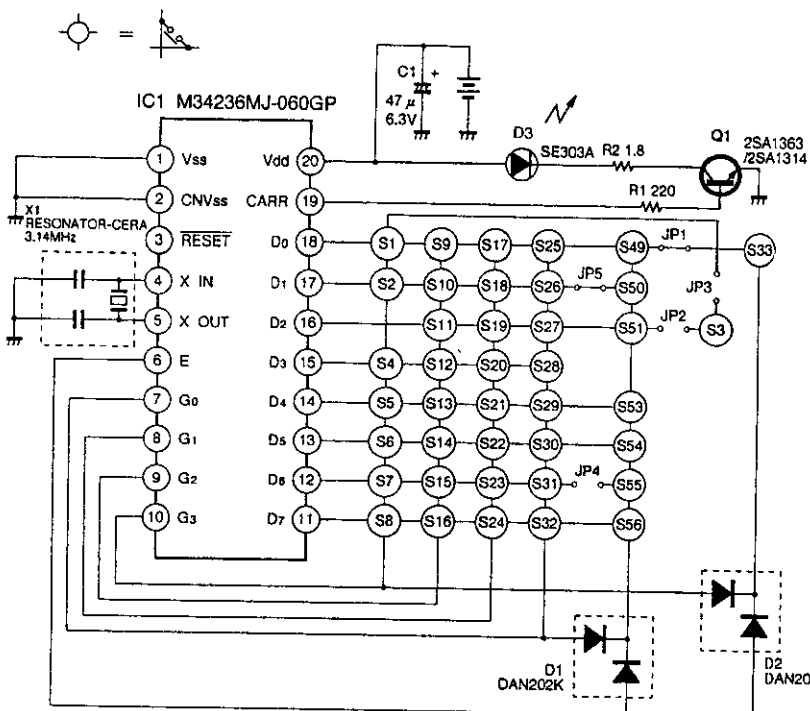
HS-751V(B)/HS-751V(GY)  
 TRANSMITTER REMOTE CONTROLLER



Z5A0 TFMX 5330



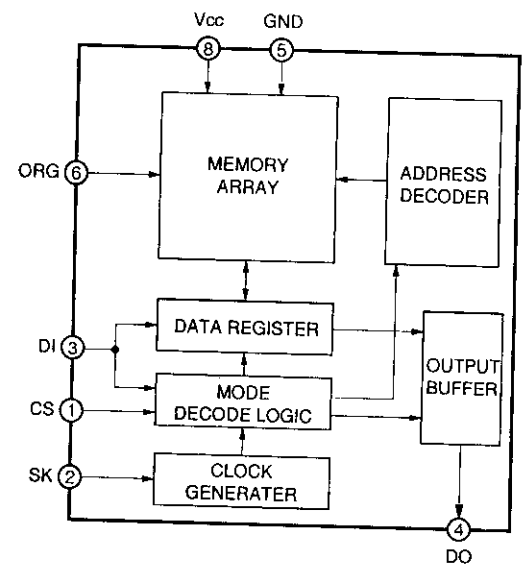
HS-751V(E)/HS-751V(IR)  
 TRANSMITTER REMOTE CONTROLLER

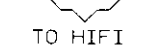
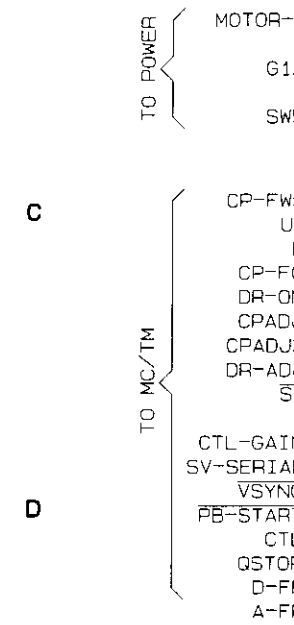
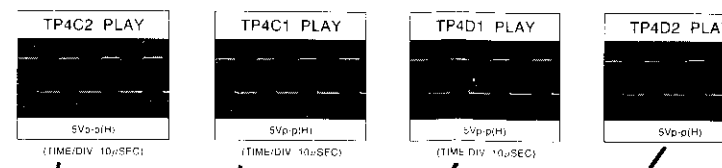
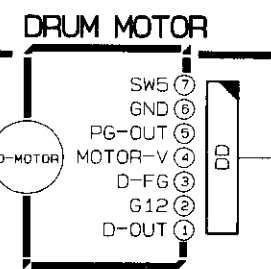
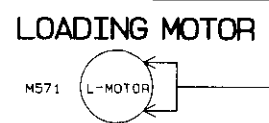
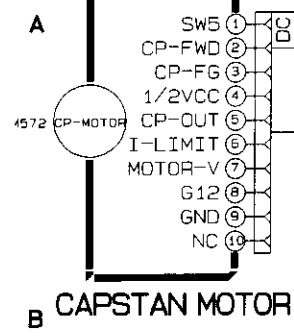
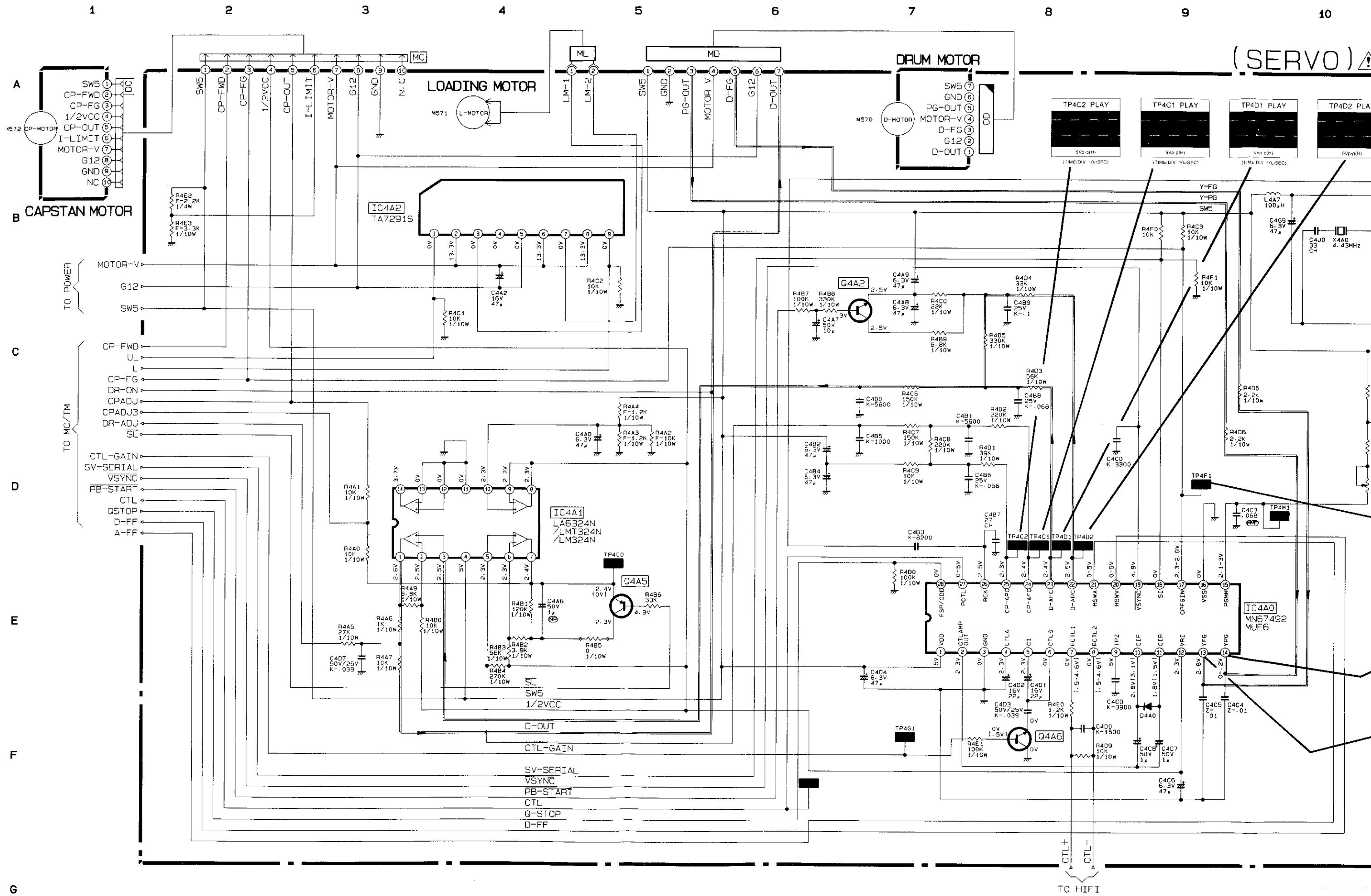


KEY NO.	FUNCTION
S1	VCR POWER
S2	CANCEL
S3	ENCODE
S4	3
S5	SHUTTLE/INDEX
S6	2
S7	REC
S8	1
S9	PAUSE
S10	SP/LP
S11	9
S12	6
S13	8
S14	5
S15	7
S16	4
S17	O.K.PROG.
S18	TV CHANNEL
S19	VIDEO Plus+/SHOWVIEW
S20	VOLUME

KEY NO.	FUNCTION
S21	0
S22	TV POWER
S23	--- DAILY/WEEKLY
S24	SHUTTLE/INDEX
S25	FF
S26	TV CHANNEL
S27	PLAY/STOP
S28	VOLUME
S29	JOG +
S30	AV
S31	REW
S32	JOG -
S33	COUNTER RESET
S49	MONITOR
S50	MENU
S53	EJECT
S54	1-2-3 MENU
S55	1-2-3 MENU
S56	DATA ON SCREEN

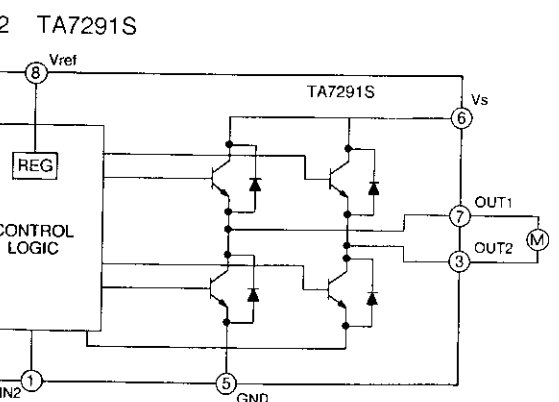
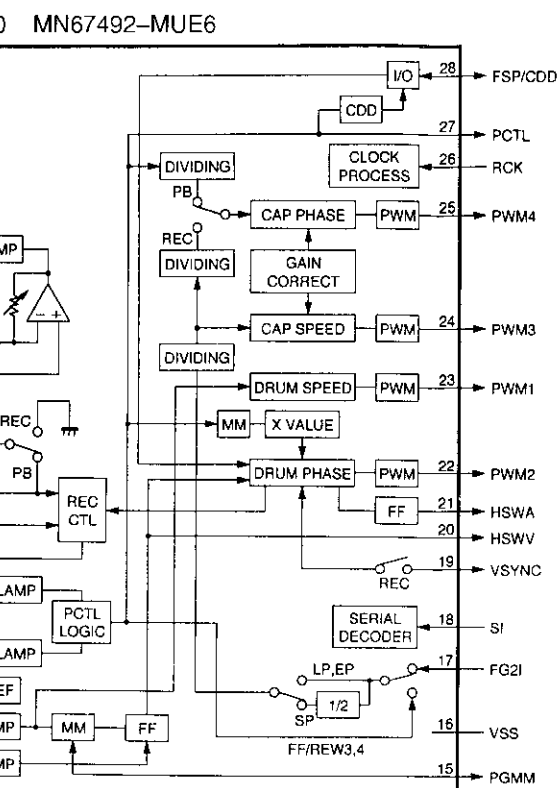
IC5A1 CAT35C104P/AT93C66-10PC  
 IC5A2 AT93C56-10PC



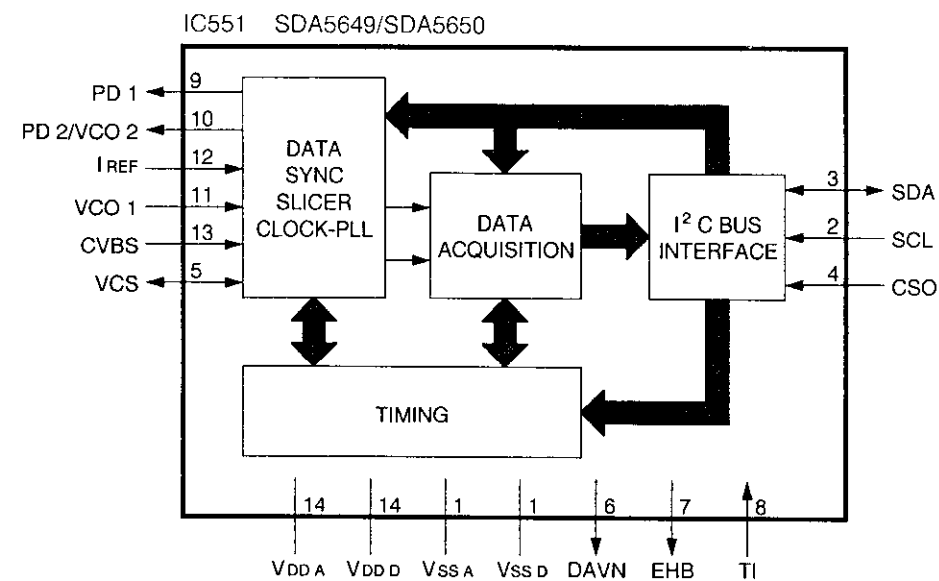
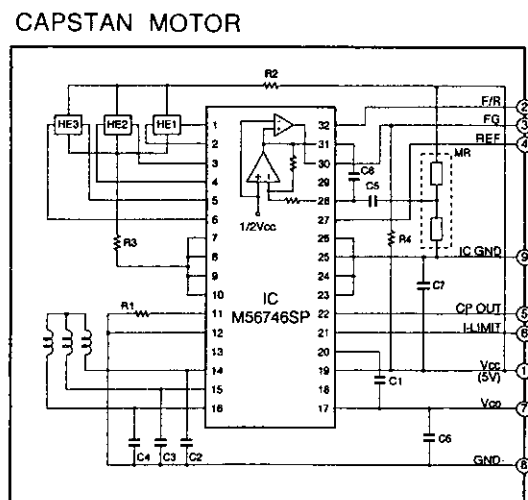
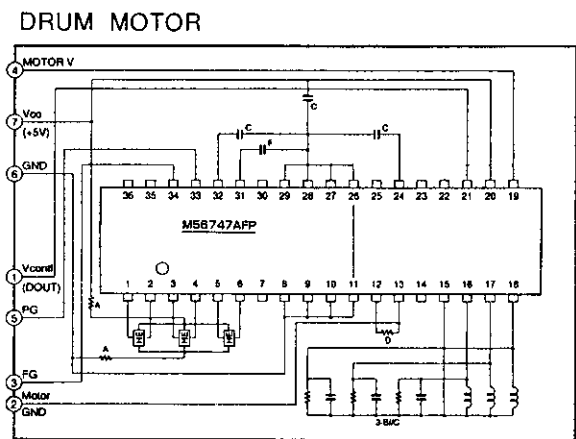
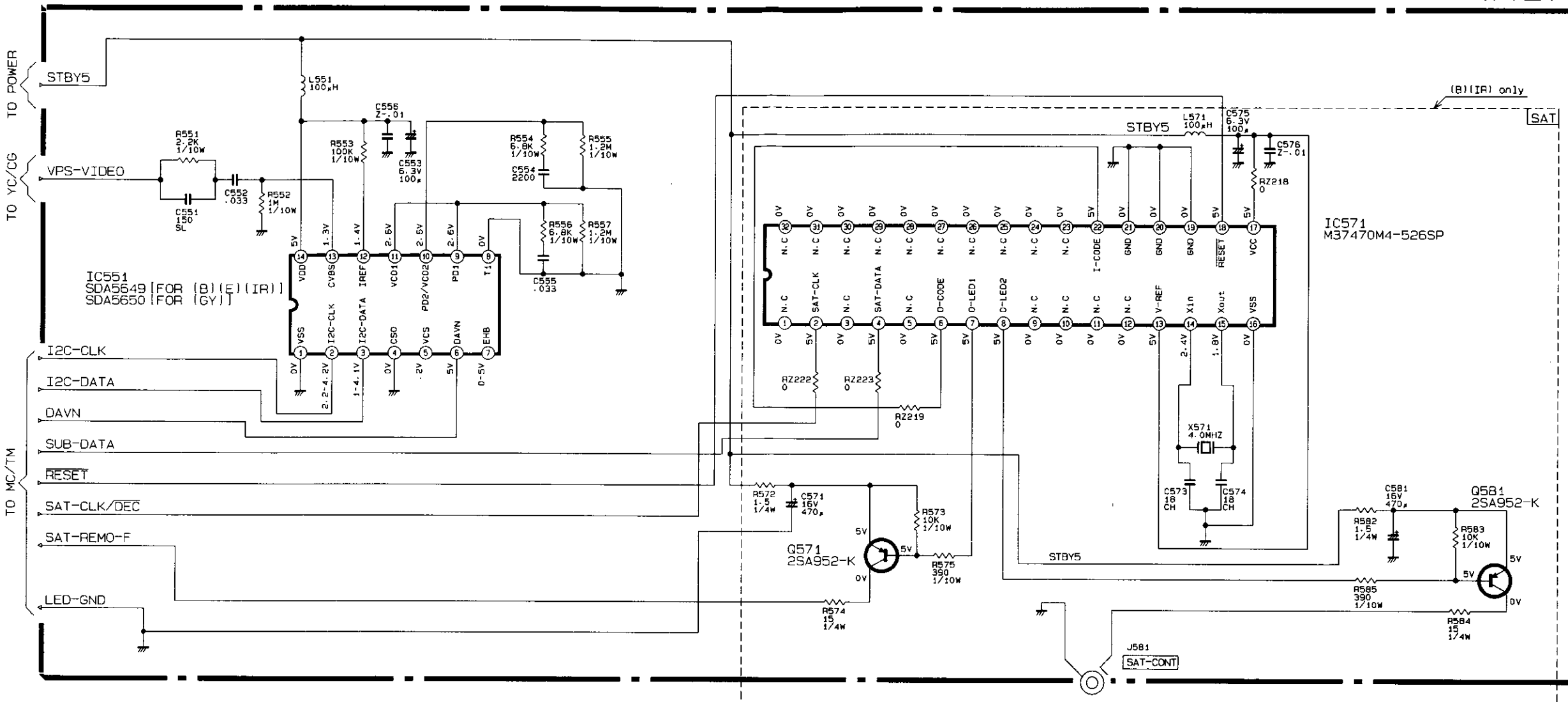
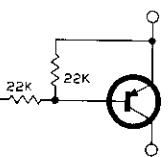




(VPS/SAT) PCB-MAIN



MS252/1SS131 unless otherwise specified.  
 resistors are 25C3052-E.F unless otherwise specified.  
 capacitors are 2SA1235-E.F unless otherwise specified.



(B) (IR) ONLY (POWER) ⚠ PCB-MAIN

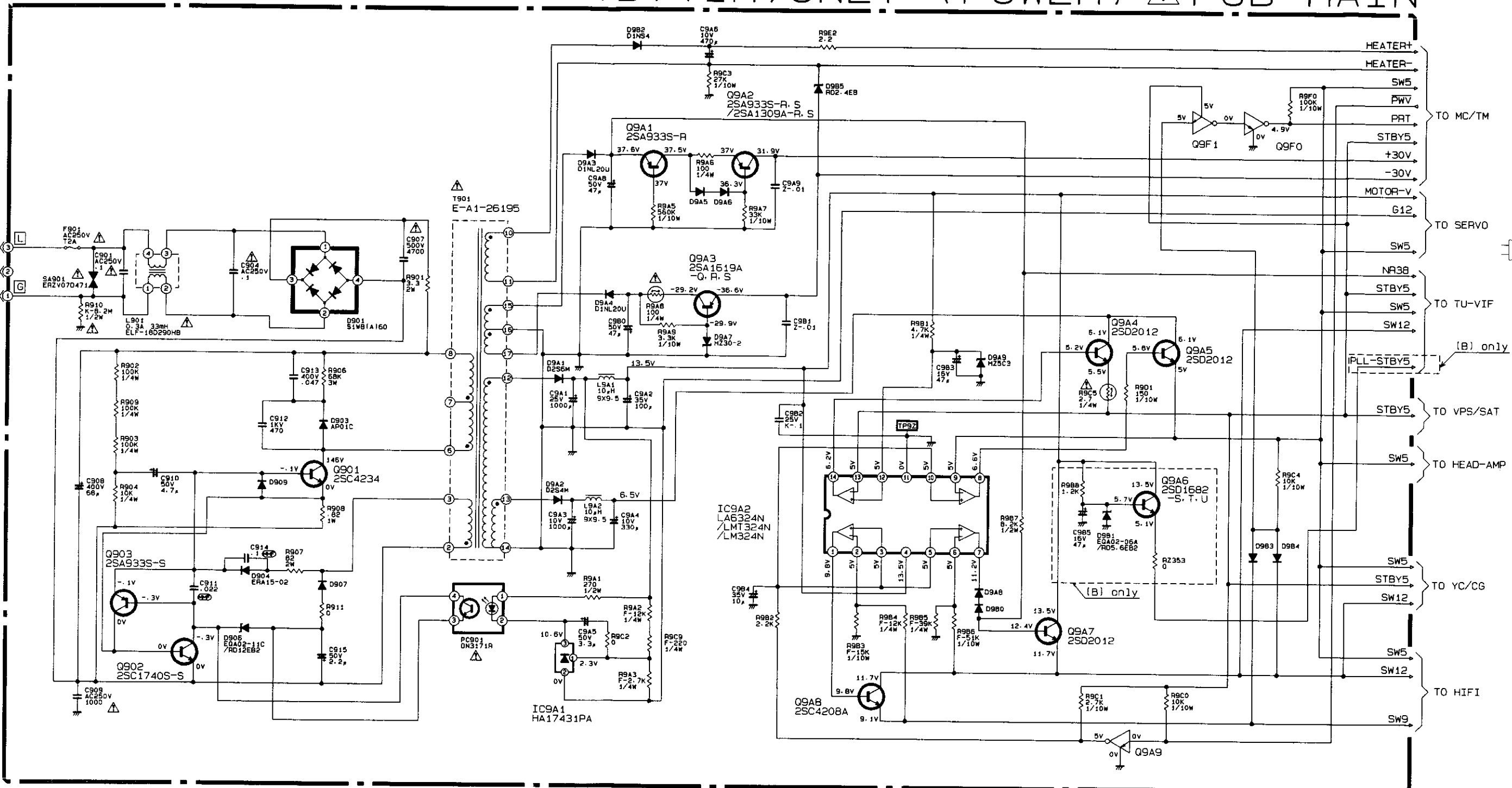
A

B

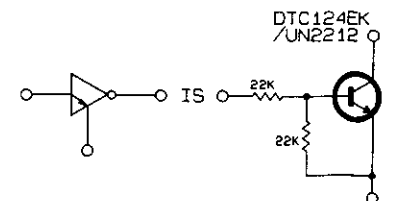
C

D

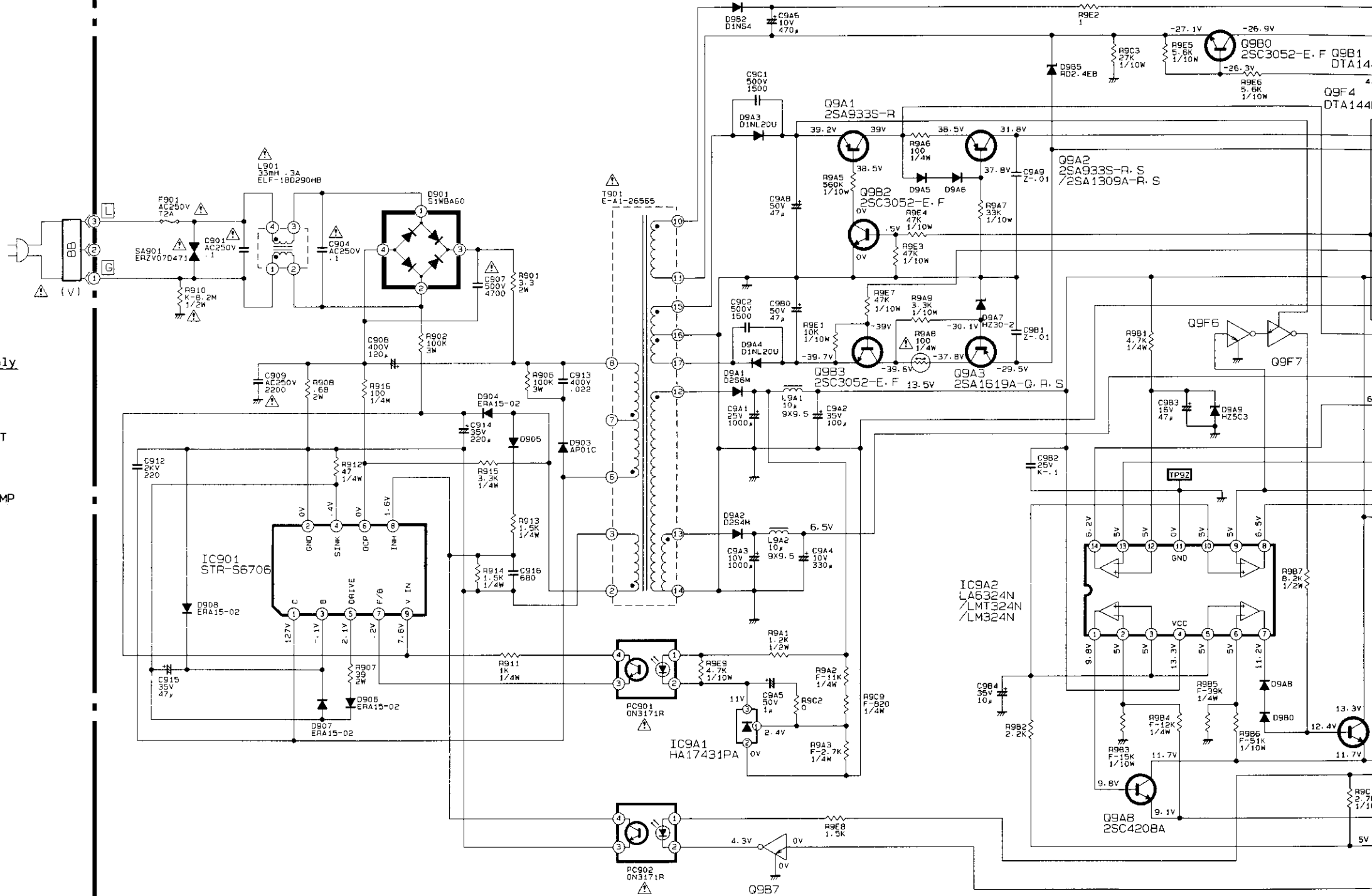
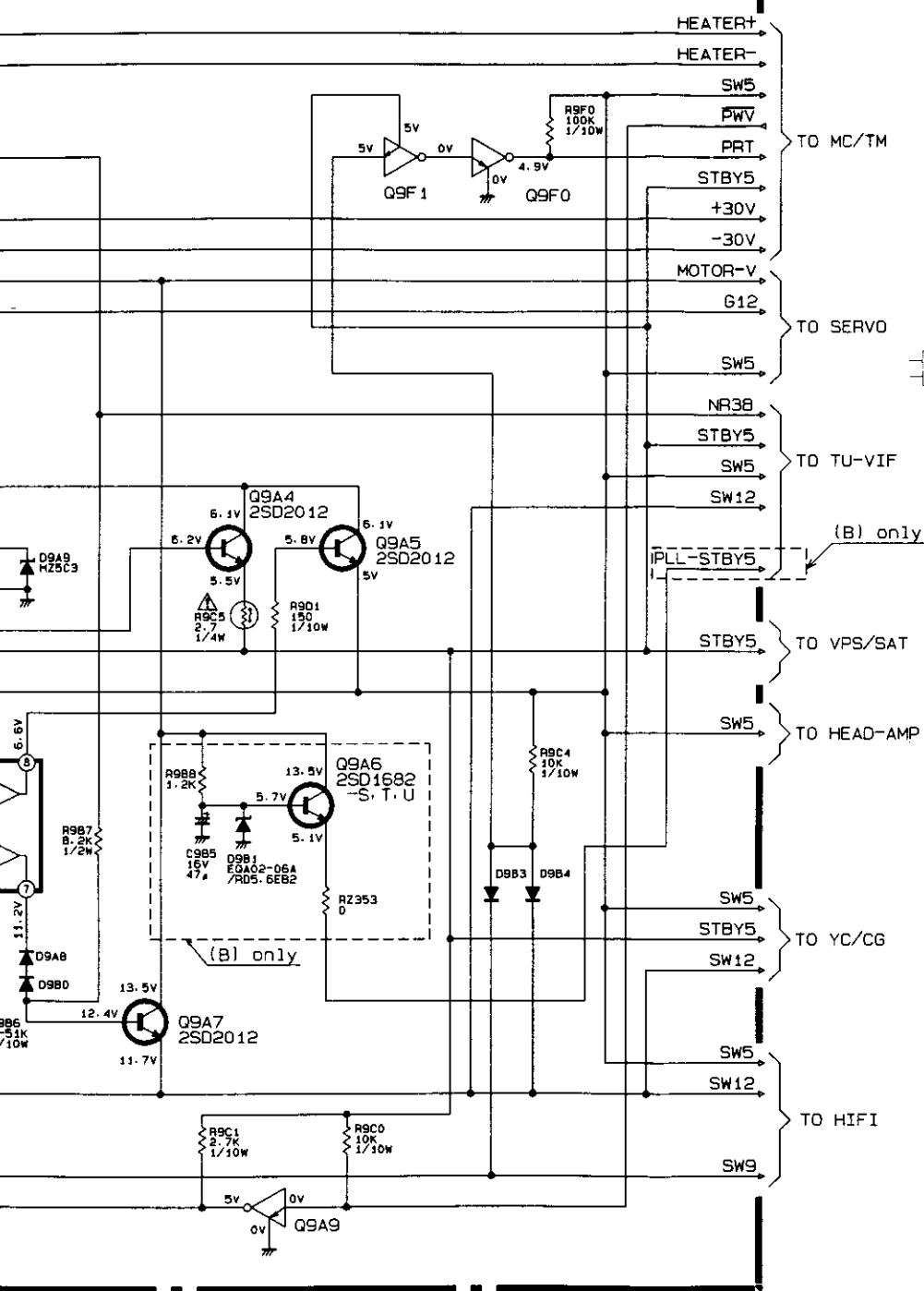
E



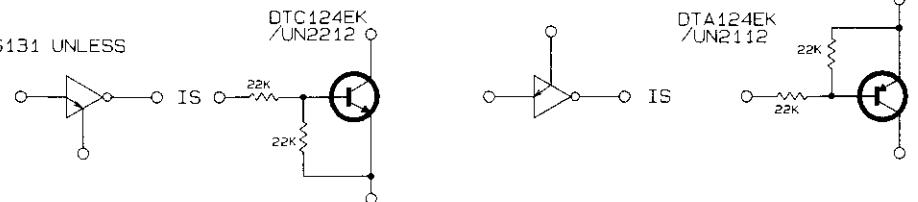
ALL DIODE ARE 1SS252/1SS131 UNLESS OTHERWISE SPECIFIED.



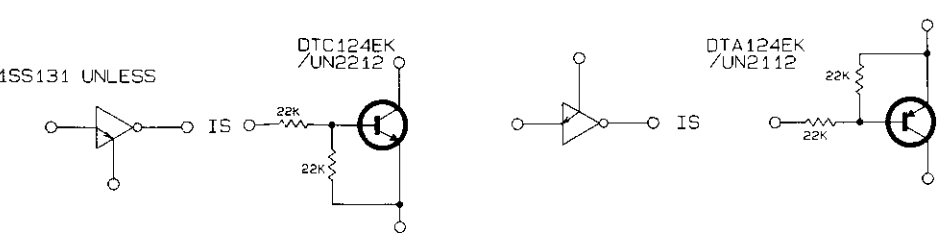
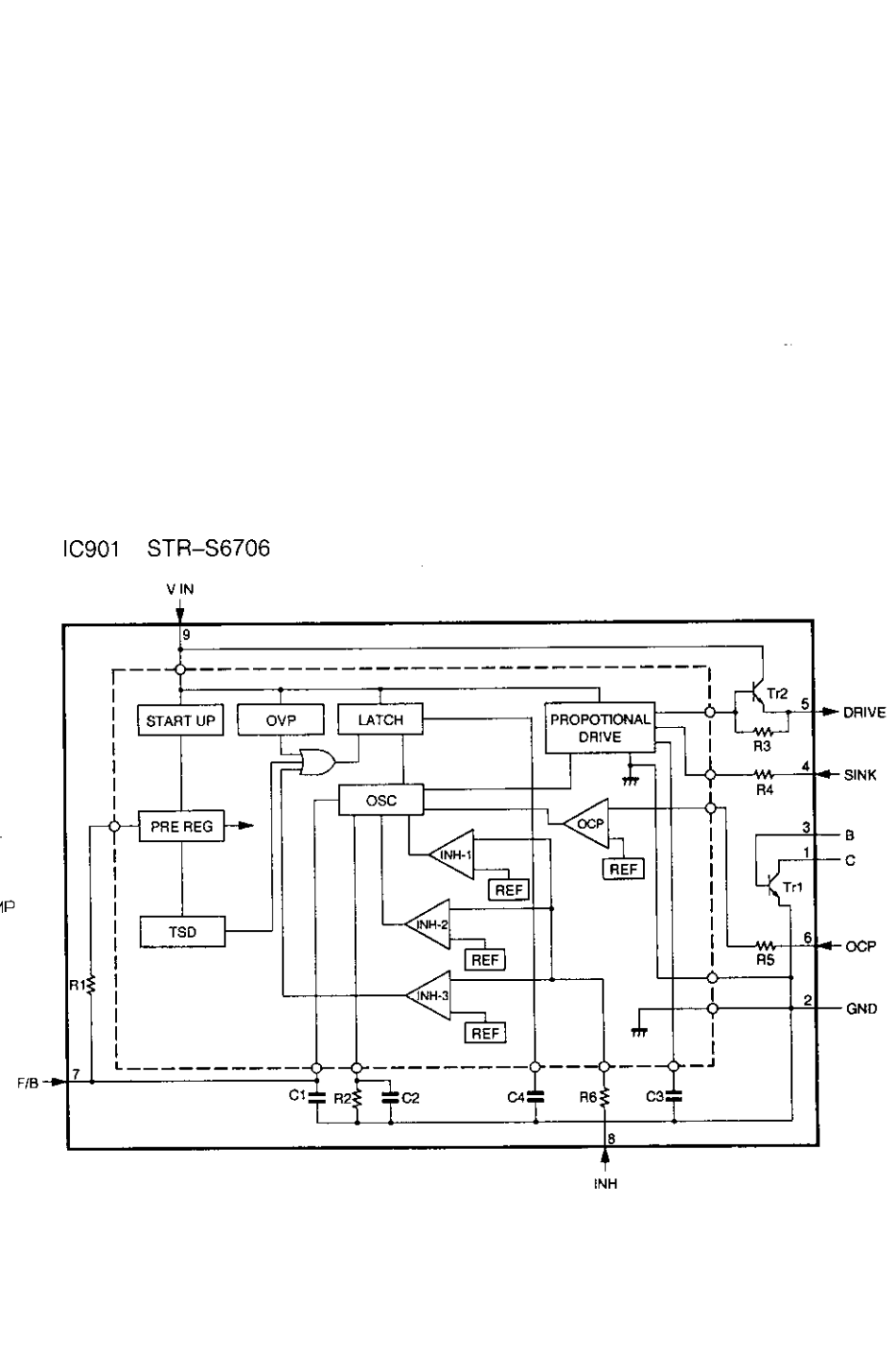
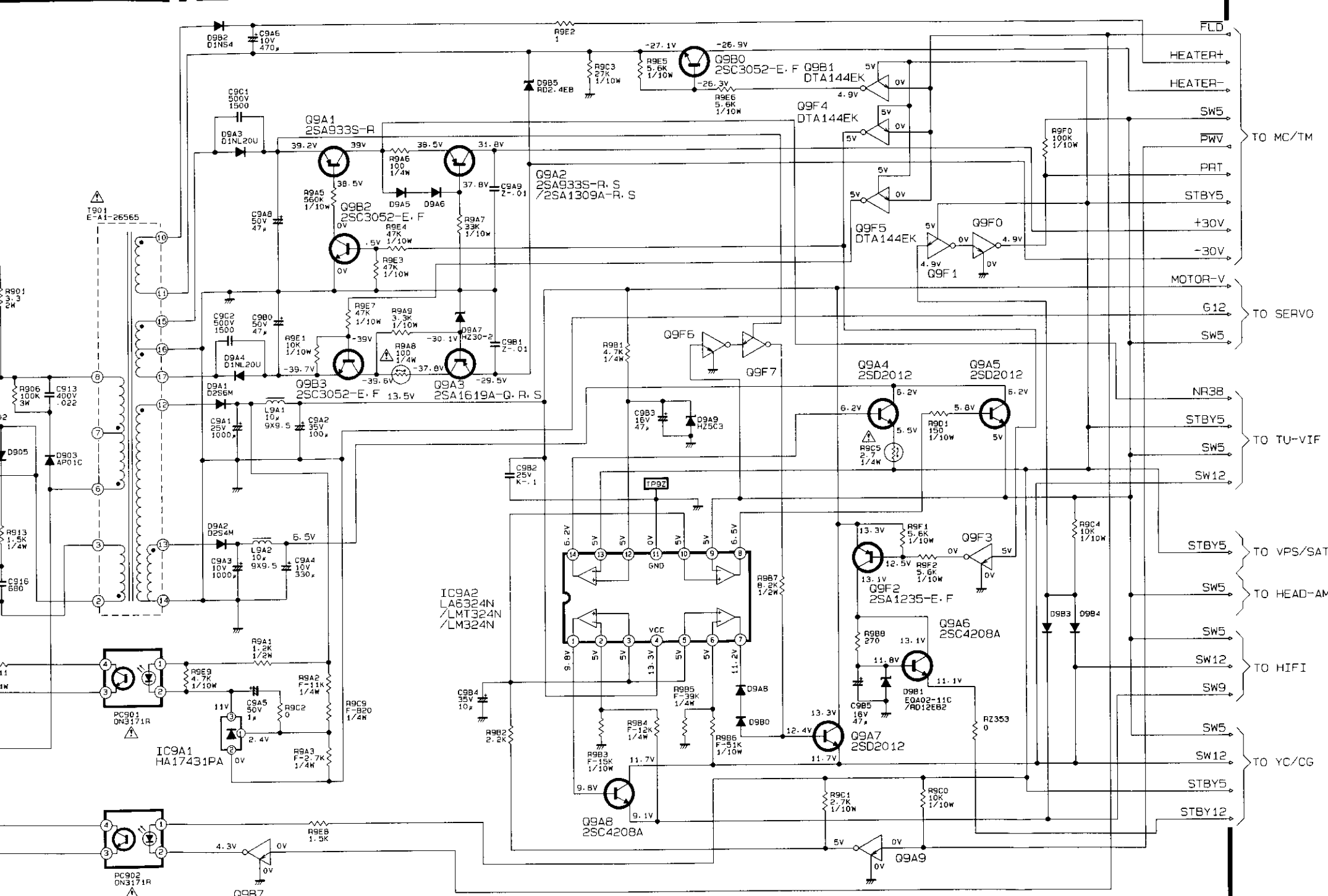
POWER) PCB-MAIN



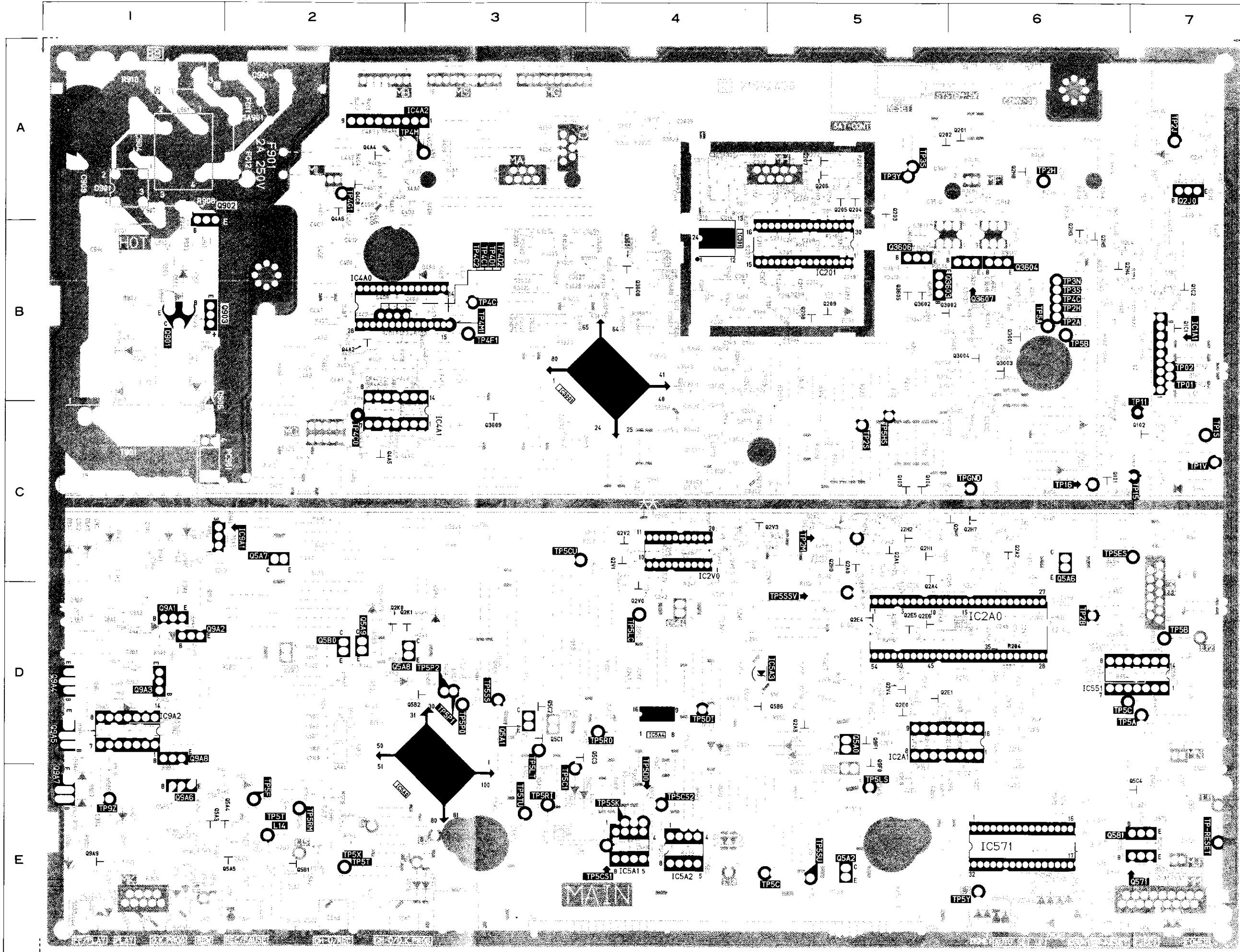
ALL DIODE ARE 1SS252/1SS131 UNLESS OTHERWISE SPECIFIED.



(E)(GY) ONLY (POWER) PCB-MAIN







PCB-MAIN (HS-751V(B)/V(IR))

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
BB	A-1	C2D2	D-6
C101	B-7	C2D3	D-6
C102	C-7	C2D4	D-6
C103	C-7	C2D5	C-6
C104	C-6	C2E0	E-6
C1A0	B-7	C2E1	E-6
C1B1	B-7	C2E2	E-6
C1B2	B-7	C2E3	E-6
C1C1	C-7	C2E4	D-6
C201	B-5	C2E5	E-5
C202	A-5	C2E6	E-5
C203	B-5	C2E7	E-5
C204	B-5	C2E8	D-5
C205	B-5	C2E9	D-5
C206	A-5	C2F0	D-5
C207	B-5	C2F1	D-5
C208	B-5	C2F2	D-6
C209	A-5	C2F3	D-6
C210	B-5	C2F4	D-6
C211	B-5	C2F5	D-6
C212	A-5	C2F6	D-6
C213	A-5	C2F7	D-6
C214	B-5	C2F8	D-6
C215	B-5	C2F9	D-6
C216	B-5	C2G0	D-6
C217	B-5	C2H0	C-5
C218	B-5	C2H1	C-5
C219	B-5	C2H2	B-6
C226	A-5	C2H3	A-6
C227	A-5	C2H4	A-6
C2A0	D-5	C2H5	A-6
C2A1	C-5	C2J0	A-7
C2A2	C-5	C2J1	A-7
C2A3	D-6	C2V0	D-4
C2A5	D-6	C2V1	D-4
C2A6	D-6	C2V2	D-4
C2A7	D-6	C2V3	C-4
C2A8	D-6	C2V4	C-4
C2A9	B-6	C2V5	C-4
C2B0	C-6	C2V6	C-4
C2B1	D-6	C2V7	C-4
C2B2	D-6	C2V8	C-4
C2B3	D-6	C2V9	C-4
C2B4	D-6	C2W0	D-4
C2B5	D-6	C2W1	D-4
C2B7	C-6	C2W2	C-4
C2B8	C-5	C2W3	C-5
C2B9	C-5	C3002	B-3
C2C0	D-5	C3003	B-3
C2C1	D-6	C3004	C-3
C2C2	C-6	C3005	C-6
C2C3	D-6	C3006	C-3
C2C4	D-6	C3007	C-6
C2C5	D-5	C3008	C-3
C2C6	D-5	C3009	C-3
C2C7	D-5	C301	B-4
C2C8	D-5	C3010	C-4
C2D0	D-5	C3011	C-4
C2D1	D-5	C3012	C-3
		C3013	C-4
		C3014	C-4



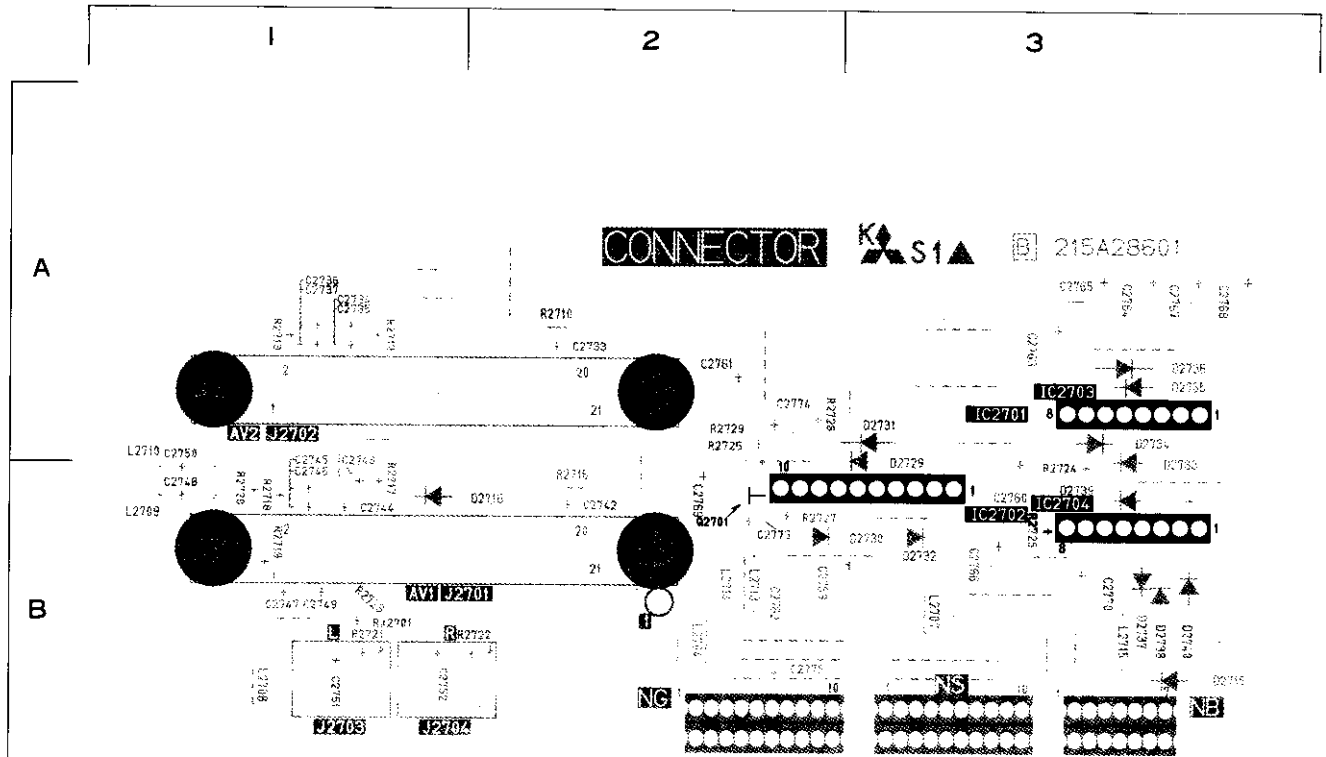




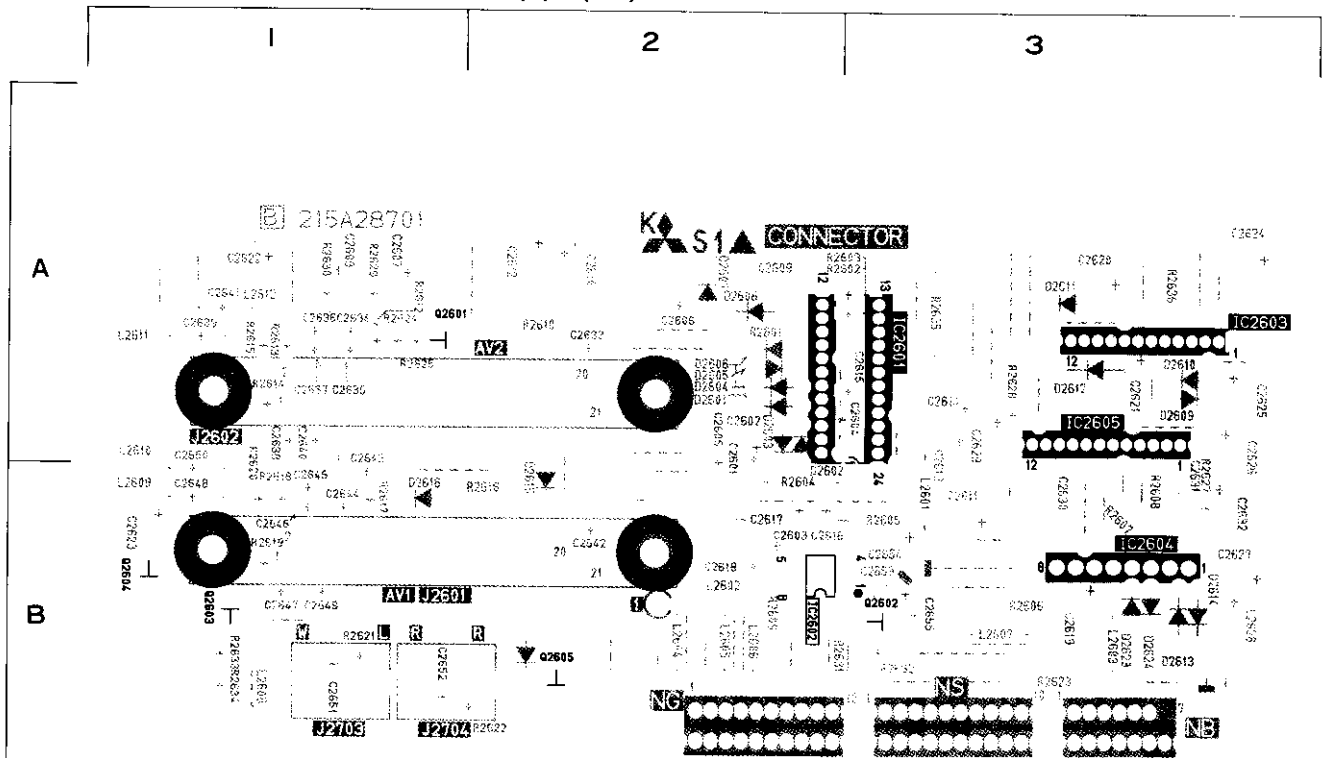




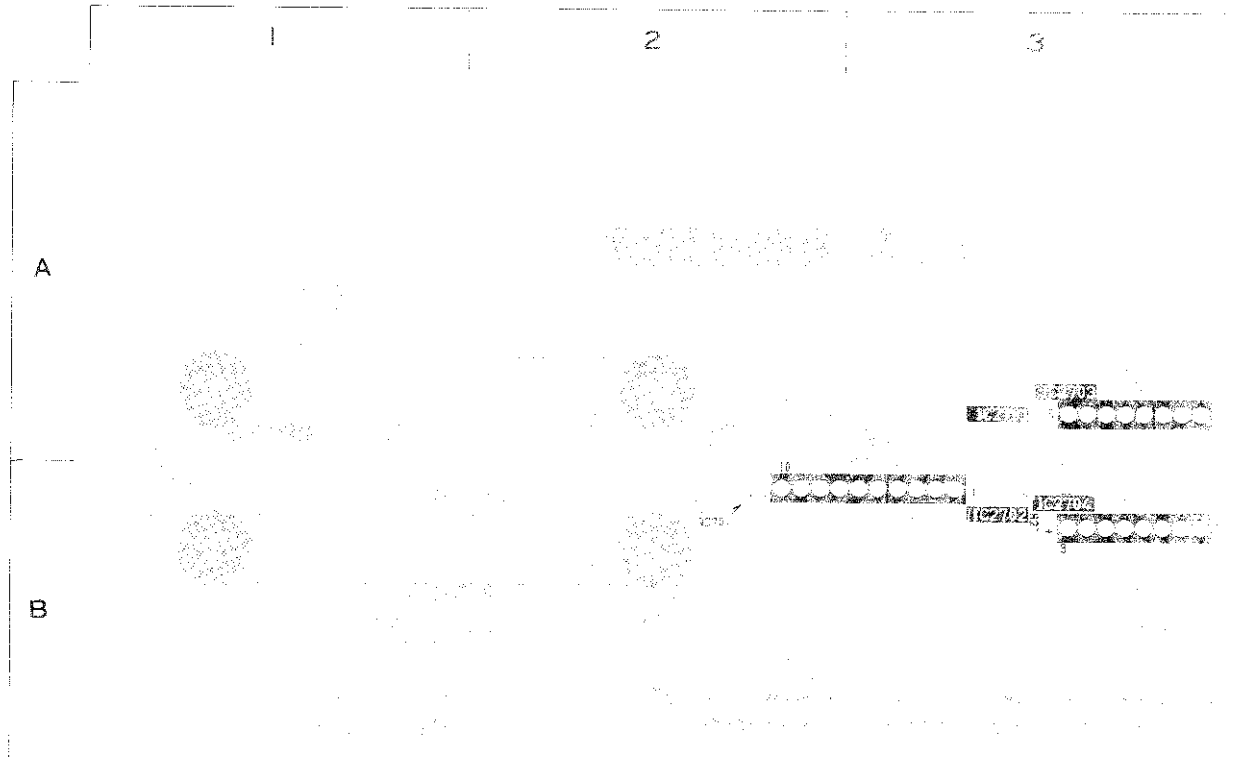
PCB-CONNECTOR (HS-751V(B)/V(IR))



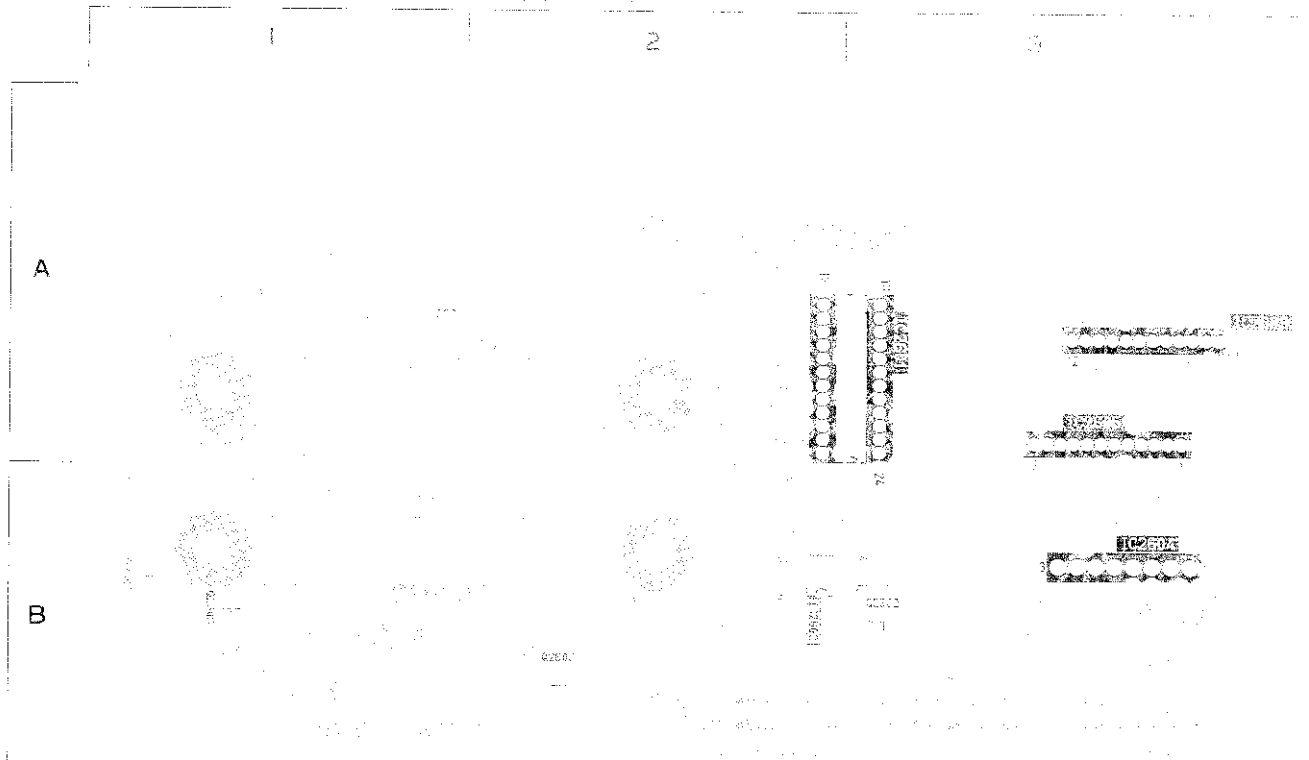
PCB-CONNECTOR (HS-751V(E)/V(GY))



PCB-CONNECTOR (HS-751V(B)/V(IR))



PCB-CONNECTOR (HS-751V(E)/V(GY))





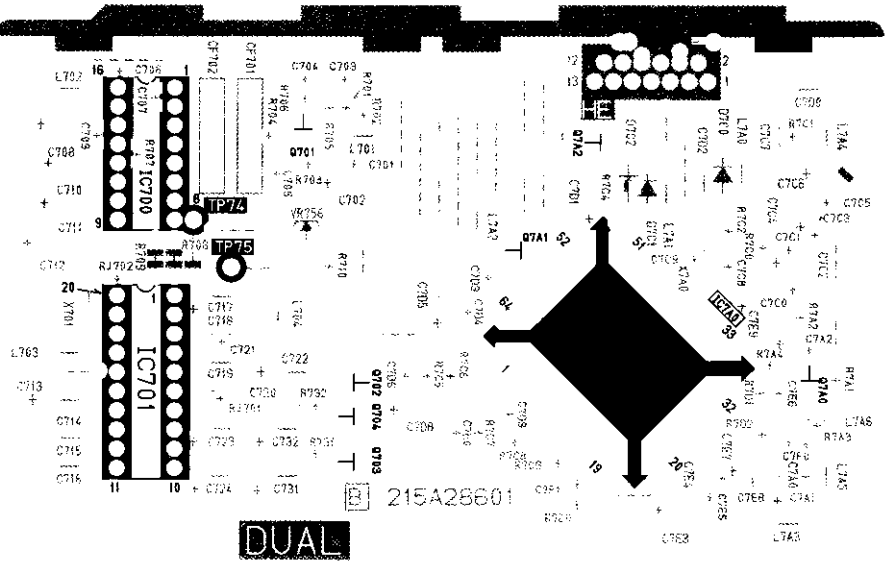
PCB-CONNECTOR (HS-751V(B)/V(IR))

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
C2733	A-2	C2775	B-2	L2709	B-1
C2734	A-1			L2710	B-1
C2735	A-1	D2715	B-3	L2713	B-2
C2736	A-1	D2716	B-1	L2714	B-2
C2737	A-1	D2729	B-3	L2715	B-3
C2742	B-2	D2730	B-3		
C2743	B-1	D2731	A-3	NB	B-3
C2744	B-1	D2732	B-3	NG	B-2
C2745	B-1	D2733	B-3	NS	B-3
C2746	B-1	D2734	A-3		
C2747	B-1	D2735	A-3	Q2701	B-2
C2748	B-1	D2736	A-3		
C2749	B-1	D2737	B-3	R2710	A-2
C2750	B-1	D2738	B-3	R2712	A-1
C2751	B-1	D2739	B-3	R2713	A-1
C2752	B-1	D2740	B-3	R2716	B-2
C2759	B-3			R2717	B-1
C2760	B-3	IC2701	A-3	R2718	B-1
C2761	A-2	IC2702	B-3	R2719	B-1
C2762	B-2	IC2703	A-3	R2720	B-1
C2763	A-3	IC2704	B-3	R2721	B-1
C2764	A-3			R2722	B-2
C2765	A-3	J2701	B-1	R2723	B-1
C2766	B-3	J2702	A-1	R2724	B-3
C2767	A-3	J2703	B-1	R2725	B-3
C2768	A-3	J2704	B-2	R2726	B-2
C2769	B-2			R2727	B-2
C2770	B-3	L2704	B-2	R2728	A-2
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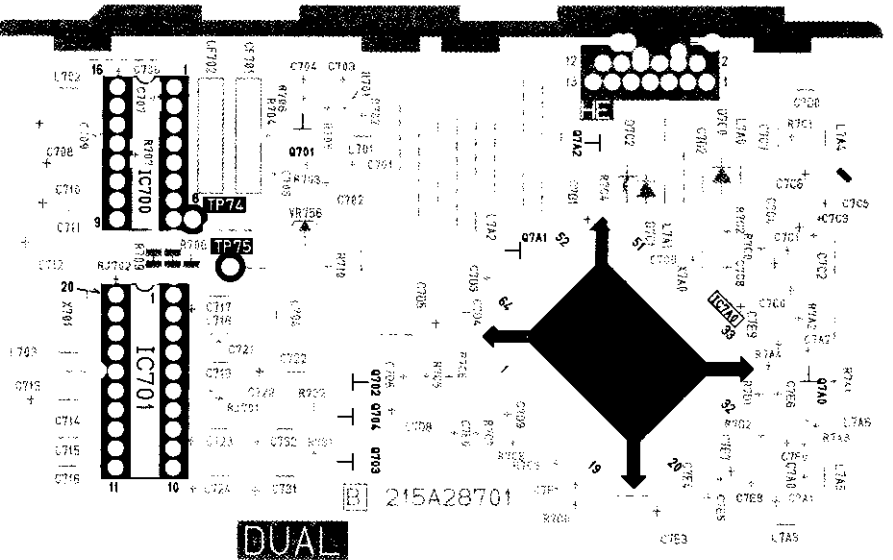
PCB-CONNECTOR (HS-751V(E)/V(GY))

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
C2601	B-2	C2631	B-3	D2605	A-2	L2604	B-2	R2612	A-1
C2602	A-2	C2632	B-4	D2606	A-2	L2605	B-2	R2613	A-1
C2603	B-2	C2633	A-2	D2607	A-2	L2606	B-2	R2614	A-1
C2604	A-3	C2634	A-1	D2608	A-2	L2607	B-3	R2615	A-1
C2605	B-2	C2635	A-1	D2609	A-4	L2608	B-1	R2616	B-2
C2606	A-2	C2636	A-1	D2610	A-3	L2609	B-1	R2617	B-1
C2607	A-1	C2637	A-1	D2611	A-3	L2610	B-1	R2618	B-1
C2608	A-1	C2638	B-1	D2612	A-3	L2611	A-1	R2619	B-1
C2609	A-2	C2639	A-1	D2613	B-3	L2612	A-1	R2620	B-1
C2610	A-2	C2640	B-1	D2614	B-3			R2621	B-1
C2611	B-3	C2641	A-1	D2615	B-2	NB	B-3	R2622	B-2
C2612	A-2	C2642	B-2	D2616	B-1	NG	B-2	R2623	B-3
C2613	B-3	C2643	B-1	D2623	B-3	NS	B-3	R2624	A-1
C2614	A-3	C2644	B-1	D2624	B-3			R2625	A-1
C2615	A-3	C2645	B-1	D2625	B-2	Q2601	A-2	R2627	B-4
C2616	B-3	C2646	B-1			Q2602	B-3	R2628	A-3
C2617	B-2	C2647	B-1	IC2601	B-2	Q2603	B-1	R2629	A-1
C2618	B-2	C2648	B-1	IC2602	B-3	Q2604	B-1	R2630	A-1
C2619	B-3	C2649	B-1	IC2603	A-4	Q2605	B-2	R2631	B-3
C2620	A-3	C2650	B-1	IC2604	B-3			R2632	B-3
C2621	A-3	C2651	B-1	IC2605	A-3	R2601	A-2	R2633	B-1
C2622	A-1	C2652	B-2			R2602	A-3	R2634	B-1
C2623	B-1	C2653	B-3	J2601	B-1	R2603	A-3	R2635	A-3
C2624	A-4	C2654	B-3	J2602	A-1	R2604	B-3	R2636	A-3
C2625	A-4	C2655	B-3	J2703	B-1	R2605	B-3		
C2626	A-4			J2704	B-2	R2606	B-3		
C2627	B-4	D2601	A-2			R2607	B-3		
C2628	B-4	D2602	A-2	L2601	B-3	R2608	B-3		
C2629	A-3	D2603	B-2	L2602	B-2	R2609	B-2		
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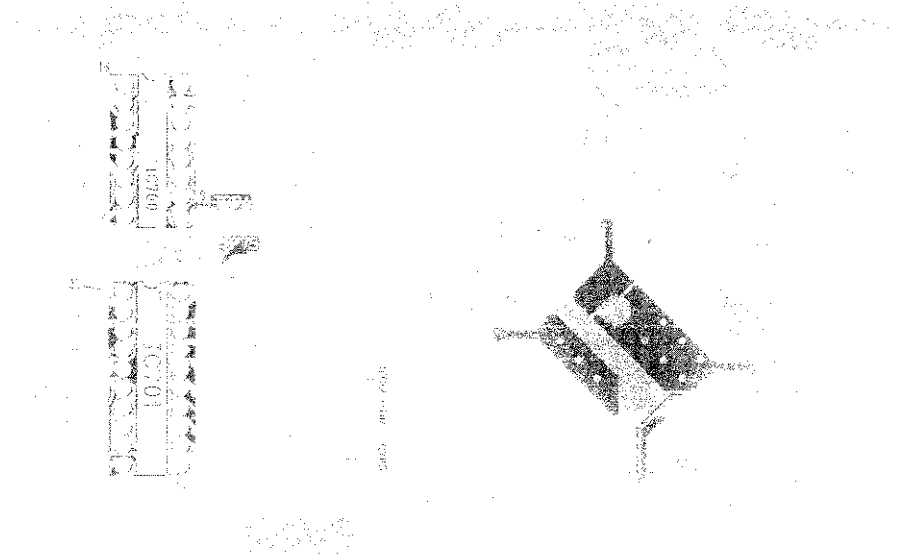
PCB-DUAL (HS-751V(B)/V(IR))



PCB-DUAL (HS-751V(E)/V(GY))



PCB-DUAL (HS-751V(B)/V(IR))



PCB-DUAL (HS-751V(E)/V(GY))

