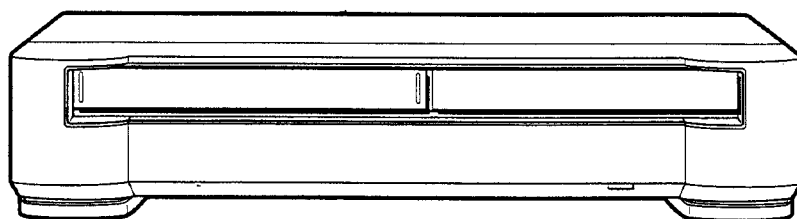



MITSUBISHI


VIDE-V16264

Service Manual

VIDEO CASSETTE RECORDER

VHS
PAL


MODEL

HS-M57(B)
HS-M57(E)
HS-M57(IR)
HS-M57(Y)

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

SPECIFICATION

Tape Format	: VHS 1/2" high-density video cassette tape	Heads:Video	: 4 rotary heads
Power Source	: AC 240 V;50 Hz [B] AC 230 V;50 Hz [E,Y] AC 220 V;50 Hz [IR]	Hi-Fi Audio	: 2 rotary heads
Power Consumption	: Approx. 32W	Audio/Control	: 1 stationary head
Television System	: 625 lines, 50 fields System CCIR IPAL [B,IR] System CCIR B&G PAL [E,Y]	Erase	: 1 full track head
Video Recording System	: Azimuth helical scanning system	Video input	: 0.75 to 1.5 Vp-p, 75 ohm unbalanced EURO AV socket
Luminance	: Frequency modulation recording	Audio Input:Line	: -8 dBs, 50k ohm unbalanced EURO AV socket and RCA pin plug
Colour Signal	: Low frequency conversion sub-carrier phase shift recording	Video Output	: 1.0 Vp-p, 75 ohm unbalanced EURO AV socket
Hi-Fi Audio Recording System	: Azimuth helical scanning system, Frequency modulation, deep layer recording	Audio Output	: -6 dBs, 1k ohm unbalanced EURO AV socket and RCA pin plug
Linear Audio Track	: 1 track	Reception	: 47-89, 104-470 MHz [E]
Tape Speed	: 23.39 mm/sec (PAL SP mode) 11.70 mm/sec (PAL LP mode) 33.35 mm/sec (NTSC SP mode) 11.12 mm/sec (NTSC EP mode) [NTSC mode (IR) only]	Frequency	: 47-118, 118-300 MHz [Y]
Record/Playback Time	: 240 min. with E-240 cassette (PAL SP mode) 480 min. with E-240 cassette (PAL LP mode) / 160 min. with T-160 cassette (NTSC SP mode:playback only) 480 min. with T-160 cassette (NTSC EP mode:playback only) [NTSC mode (IR) only]	VHF	: 44-89, 104-300 MHz [IR]
		UHF	: 470-870 MHz
		Operating Temperature	: 5°C to 40°C
		RF Channel Output	: Set to Channel 38[B,IR]/Channel 36 [E,Y] Channel 32-40 selectable
		Weight	: Approx. 6.5kg
		Dimensions	: 425(W) × 97(H) × 343(D)mm
		Timer	: 8 programmes for any channels in one month/every day/every week day 24 hour digital synchronized with crystal oscillator frequency.
		Channel Selection Deck	: 99 position Up/Down + EXT : F-Deck

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


MITSUBISHI ELECTRIC

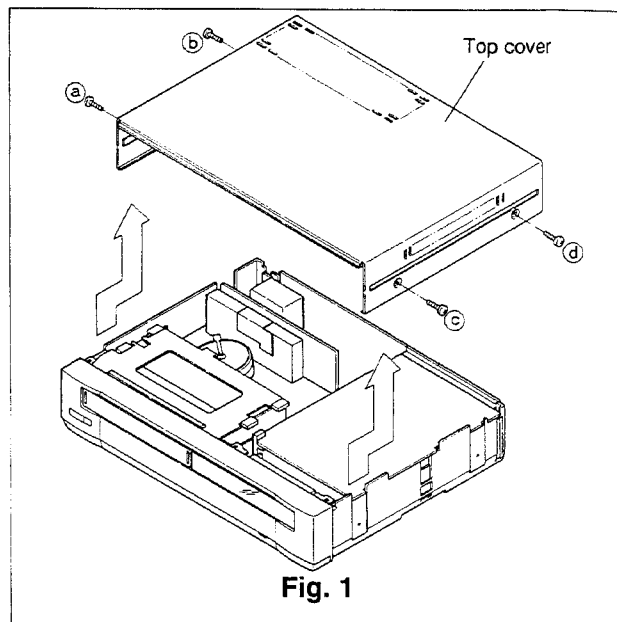
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DISASSEMBLY

1. Removal of Top Cover

- A. Remove four screws (**(a)** ~ **(d)**) retaining the top cover as shown in Fig. 1.
- B. Gently expand the bottom edges of the top cover, pivot cover forward, then slide toward rear in the direction of the arrows.

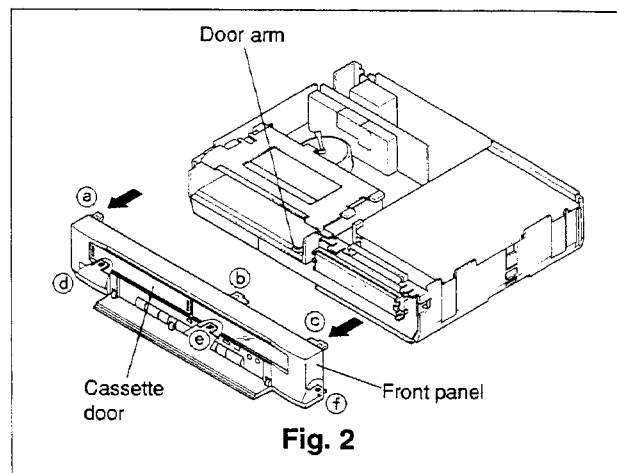


2. Removal of Front Panel

- A. Remove the top cover (item 1).
- B. Unfasten six snaps (**(a)** ~ **(f)**) as shown in Fig. 2, and remove the front panel in the direction shown by the arrows.

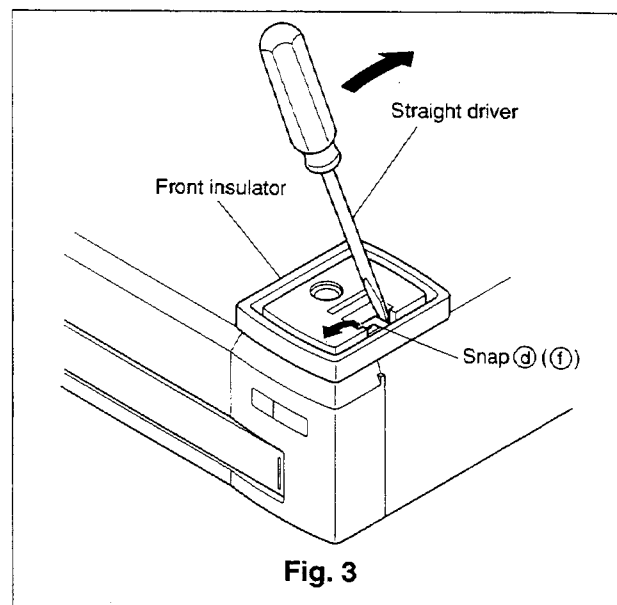
Note:

When unfastening two snaps (**(d)** , **(f)**), lifting the snaps, inserting straight driver to between front insulator and snap as shown in Fig.3.



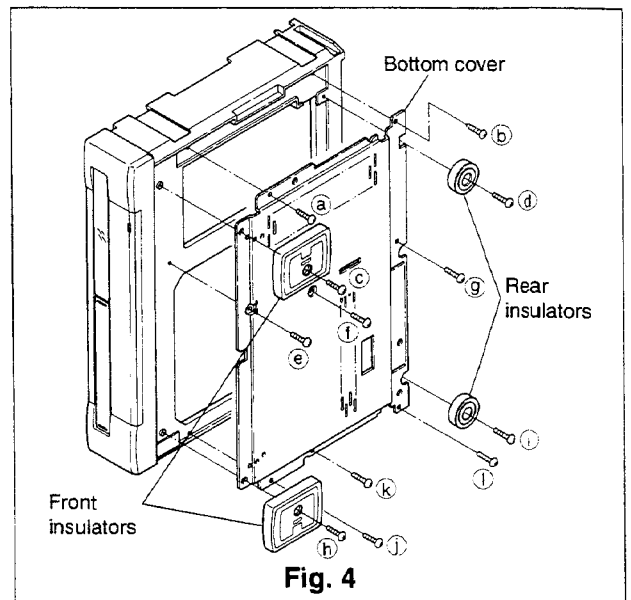
3. Installation of Front Panel

- A. Check that the door arm is in low position.
- B. While holding the Cassette door open, mount the front panel to the VCR and fasten six snaps (**(a)** ~ **(f)**) using gentle pressure to the front panel as shown in Fig. 2.



4. Removal of Bottom Cover

- A. Remove twelve screws (a ~ l) retaining the bottom cover as shown in Fig.4.
- B. Remove the bottom cover.



SERVICING THE PRINTED CIRCUIT BOARDS

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

Location of Printed Circuit Boards
(Refer to Fig. 5)

Note:

Use caution when disconnecting the flat cable connectors to avoid possible contact problems when reconnected.

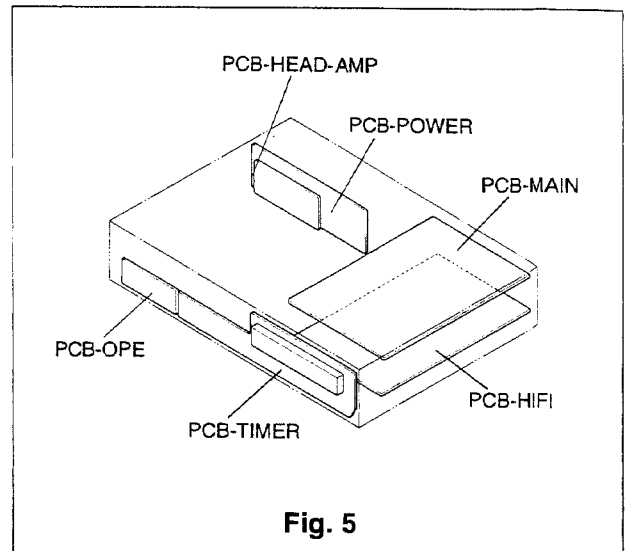


Fig. 5

1. Removal of PCB-MAIN

- A. Remove the top cover. (Page 1, Item 1)
- B. Remove five screws (Ⓐ ~ Ⓔ), as shown in Fig.6.
- C. Pivot the PCB-MAIN in the direction of the arrow.
- D. Hang the edge of PCB-MAIN to the holder on the frame

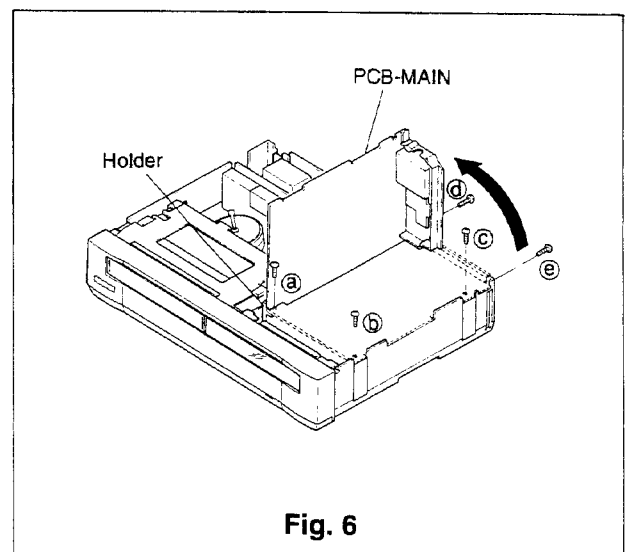


Fig. 6

2. Removal of PCB-HIFI

- A. Remove the bottom cover (Page 2, Item 4) and the service of the PCB-HIFI will be available
- B. If it is necessary to remove the PCB-HIFI comply with the following steps.
 - a. Remove the PCB-MAIN.(Item 1)
 - b. Remove two screws (Ⓐ, Ⓑ) retaining the PCB-HIFI, as shown in Fig.7.

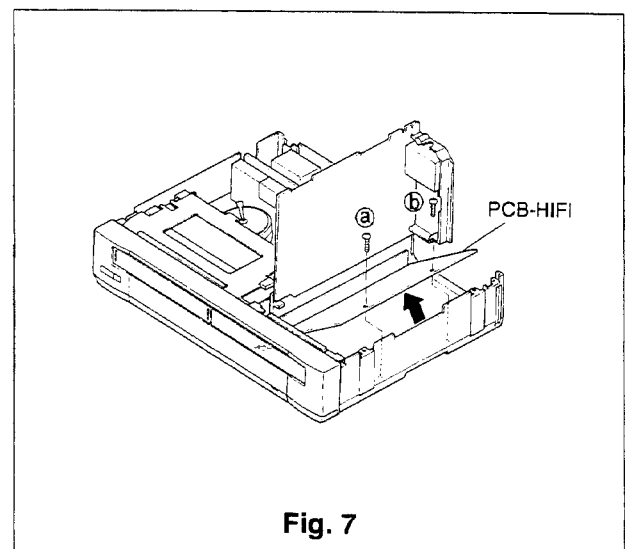
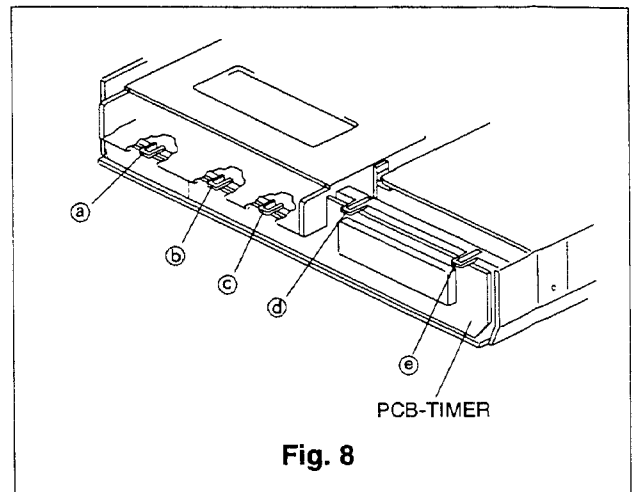


Fig. 7

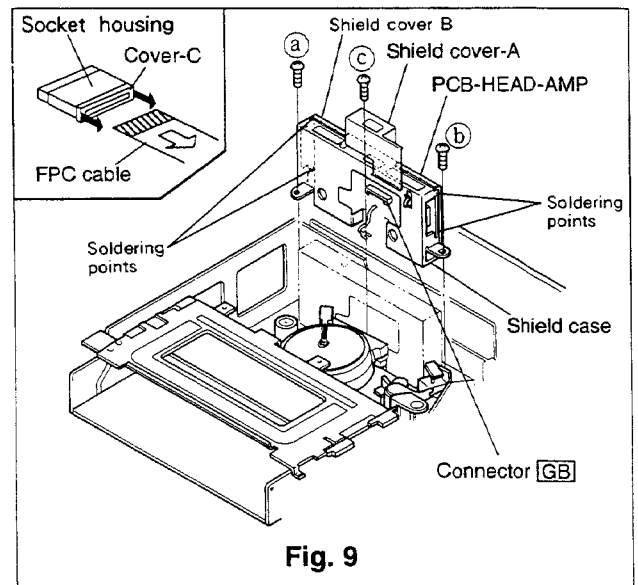
3. Removal of PCB-TIMER and PCB-OPE

- A. Remove the front panel. (Page 1, Item 2)
- B. Unfasten five stoppers (a~e), and remove the PCB-TIMER and PCB-OPE, as shown in Fig. 8.



4. Removal of PCB-HEAD-AMP

- A. Remove the top cover. (Page 1, Item 1)
- B. Lift the shield cover-A upward to remove it.
- C. Disconnect the FPC cable by gently pulling cover-C of the connector GB, as shown in Fig. 9.
- D. Remove three screws (a~c) retaining the lead wire and the PCB-HEAD-AMP.
- E. To service the solder side, remove the shield cover-B, use the extension cord (859C344O40) and ground the lead wire, as removed in above para. D.
- F. To service the component side, unsolder four soldering points of the shield case and remove the shield case.

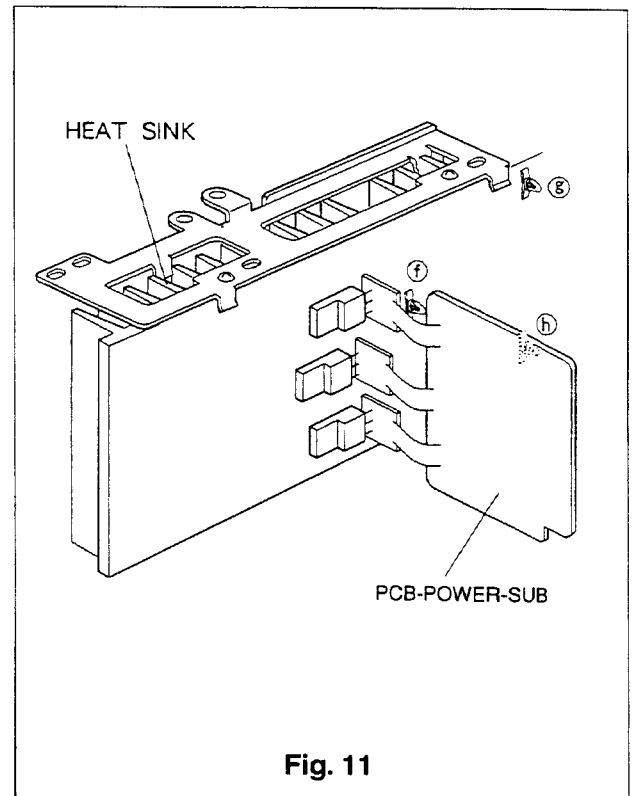
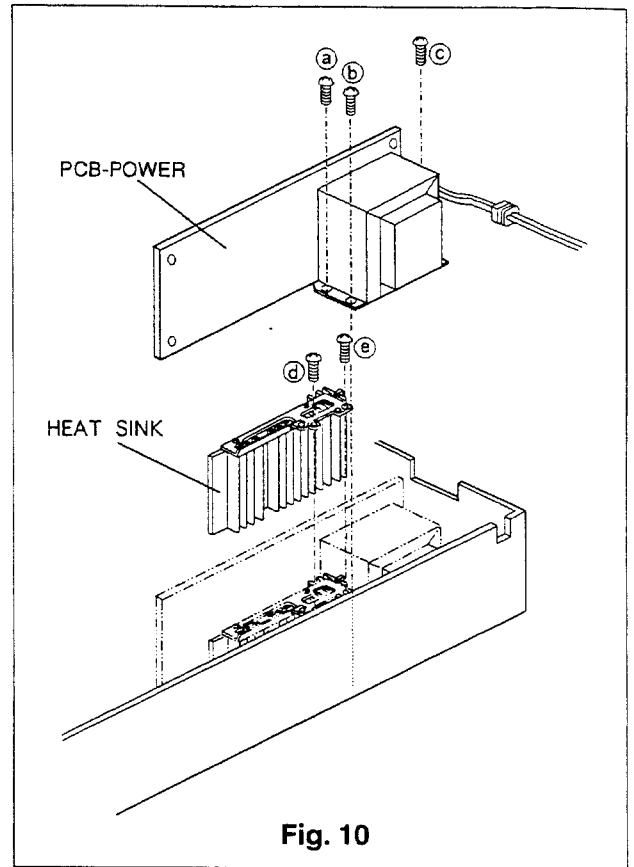


5. Removal of PCB-POWER and PCB-POWER-SUB

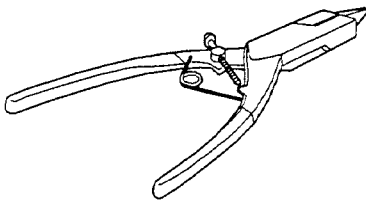
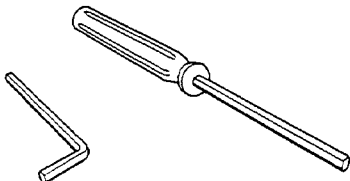
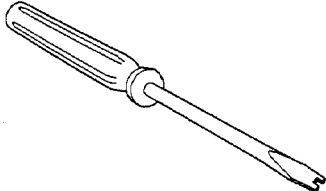
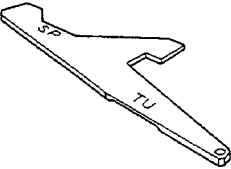
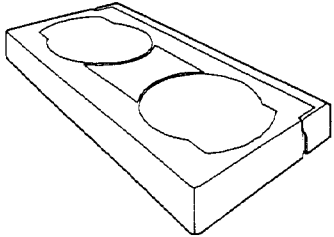
- A. Remove the top cover. (Page 1, item 1)
- B. Remove the three screws (a~c) retaining the PCB-POWER and two screws (d, e) retaining the heat sink as shown in Fig. 10.
- C. Remove the holder of AC power cord from the VCR chassis.
- D. Unfasten the three hooks (f~h) retaining the PCB-POWER-SUB as shown in Fig. 11.

CAUTION:

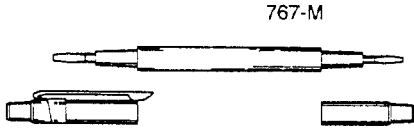
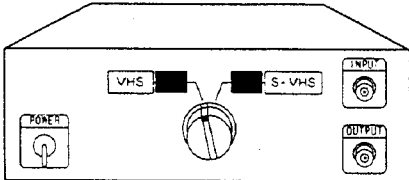
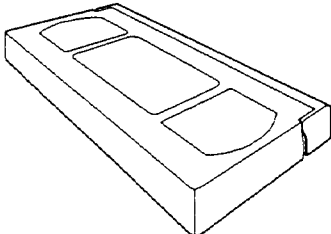
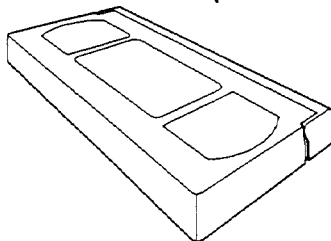
Power regulators are damaged if power supply is turned on without installing the heat sink.



MECHANICAL ADJUSTMENT TOOLS

	PURPOSE	METHOD
Grip ring fixer (859C347O50) 	A tool for preventing the grip ring from opening excessively.	While opening the grip ring with the tips of this tool, install the grip ring on to the shaft.
Hex Keys(1.5mm)  (859C259O20) (859C259O50)	The hex keys are used for tightening or removing hexagonal socket head screws which fasten the guide rollers.	Insert the given size(1.5mm) hexagonal socket and turn.
Adjustment Driver (859C259O80) 	For adjustment of guide rollers.	Carefully insert and adjust guide rollers.
Reel disk Adj. Jig (859C342O20) 	The height gauge is used for measuring height and perpendicularity of the reel disk and Take up guide arm.	The gauge is applied to the part being measured.
BackTension Gauge (859C345O80) 	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.
Extension Cord (859C344O40)	For PCB-HEAD-AMP service	Use when repair of the PCB Head Amp is necessary.
Cotton gloves	For changing, cleaning and handling of drum, heads and guides.	Use when handling all parts in the tape path.

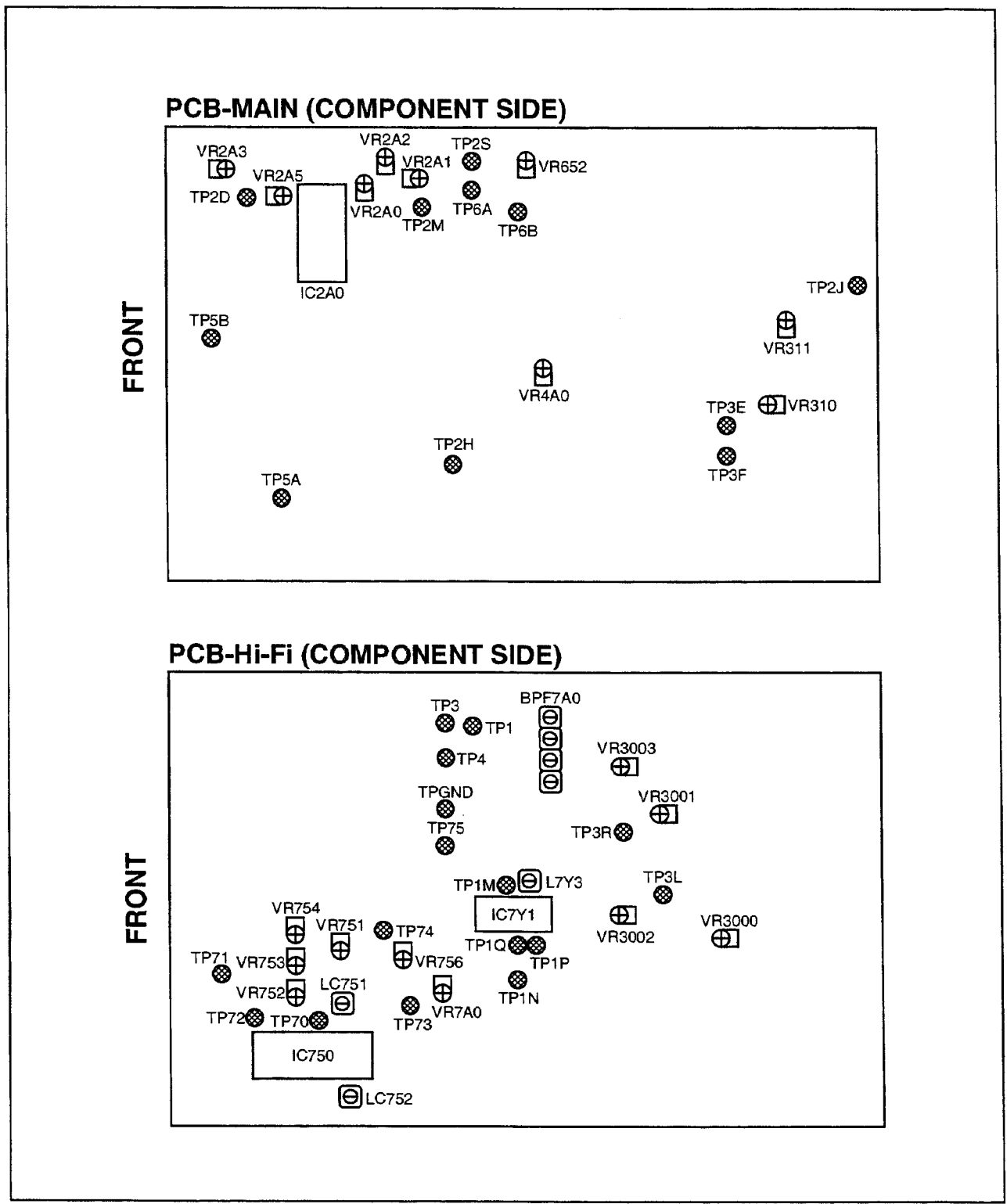
ELECTRICAL ADJUSTMENT TOOLS

	PURPOSE	METHOD
Adjustment Driver (859C338000)  <p>767-M</p>	The adjustment driver is intended to adjust variable resistors, trimmers, transformers etc. in the circuitry.	Select a tip suitable for the particular head of the component concerned and adjust.
Carrier Checker (859C346050) 	Used for the adjustment or inspection of the carrier set deviation.	Use in conjunction with the oscilloscope. For detail refer to the service manual or the attached data.
Alignment Tape(PAL:859C339010) 	Standard signals(VHS Standard) are recorded on the alignment tape and reproduced when required in the adjustment of Y/C circuit, audio circuit and interchangeability alignment.	Install and run in the play mode, the same as for an ordinary tape.
Alignment Tape(Hi-Fi) (859C339030) 	For adjusting the switching point of FM audio. The Video signal can also be used for interchangeability adjustment of SP (3H)/LP (6H) modes.	Install the tape and run the recorder in the play mode. The same as for an ordinary tape.
Record Current Adjustment Jig (859C347080)	For Y/C Recording Level and Hi-Fi FM Recording Level.	For Y/C Recording Level and Hi-Fi FM Recording Level adjustment.

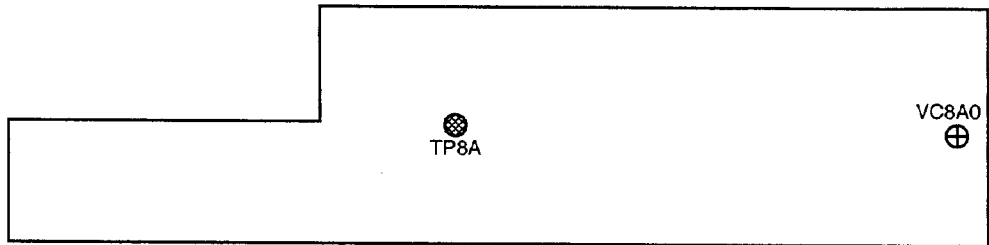
ELECTRICAL ADJUSTMENT

Circuit adjustments become necessary, in most cases, due to the wear of mechanical parts or following the replacement of critical components such as the video head, causing circuit adjustments to vary considerably. Should this occur, be sure to determine the nature of the defect and repair prior to proceeding with adjustments.

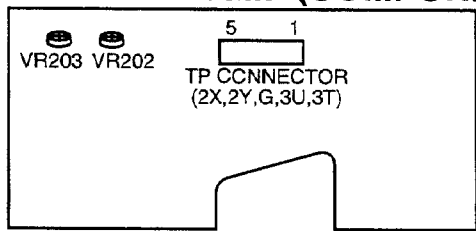
Always use the test equipment recommended for a given adjustment procedure. If the appropriate test equipment is not available, it is recommended that adjustments NOT be attempted. Refrain from the indiscreet adjustment of circuit adjustment controls unless properly equipped to do so.

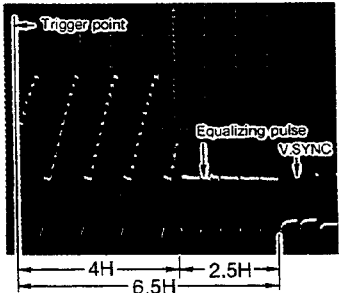
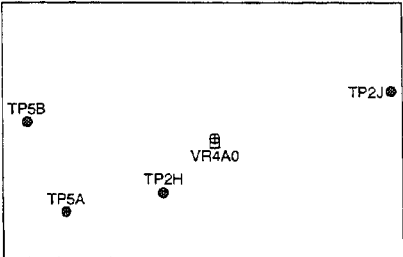



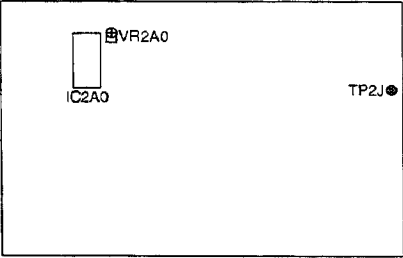
PCB-TIMER (COMPONENT SIDE)



PCB-HEAD-AMP (COMPONENT SIDE)



[Servo Circuit] 1. Playback Switching Point		Adjustment purpose: Video switch over timing during playback. Symptom when incorrectly adjusted: Switching noise or jitter on the playback picture.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 10:1)		Input signal	-----
Test point	TP2J	Using tape	Alignment tape (Grey scale)
EXT trigger	TP2H	VCR condition	Playback
Measurement range	DIV 20mV TIM 50µs	Using Jig.	-----
<ol style="list-style-type: none"> Short-circuit TP5A and TP5B. Confirm that the "DTR" displayed in Fluorescent Display flashes fast. Observe the waveform at TP2J. Set the oscilloscope's slope to (-). Adjust VR4A0 so that the trigger point is located at $6.5 \pm 1.0H$ before the vertical synchronizing signal. 			
PCB-MAIN (COMPONENT SIDE)			
			

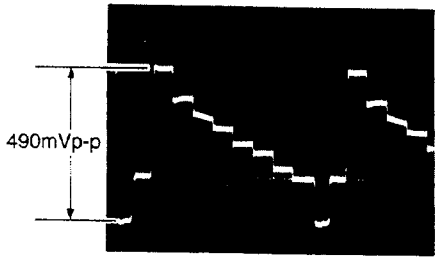
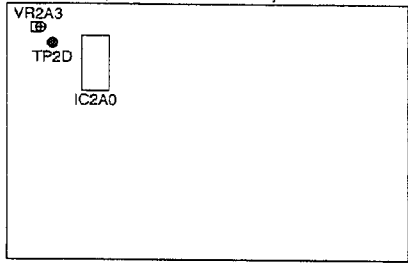
[Y/C Signal Circuit] 2. EE Output Level		Adjustment purpose: Output level of video signal at Stop mode. Symptom when incorrectly adjusted: Too bright or too dark image: colour signal is produced incorrectly.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 10:1)		Input signal	RF signal (Colour bar)
Test point	TP2J	Using tape	-----
EXT trigger	-----	VCR condition	STOP
Measurement range	DIV 20mV TIM 10µs	Using Jig.	-----
<ol style="list-style-type: none"> Observe the waveform at TP2J. Adjust VR2A0 so that the amplitude of waveform is 1.0Vp-p. 			
PCB-MAIN (COMPONENT SIDE)			
			

3.Clamp **Adjustment purpose:** Set the level of video signal.
Symptom when incorrectly adjusted: Blurred image, white streaking black streaking.

Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 10:1)		Input signal	RF signal (colour bar)
Test point	TP2D	Using tape	----
EXT trigger	----	VCR condition	STOP
Measurement range	DIV 10mV TIM 10µs	Using Jig.	----

1. Observe the waveform at TP2D.
2. Adjust VR2A3 so that amplitude of the waveform is 490mVp-p.

PCB-MAIN (COMPONENT SIDE)

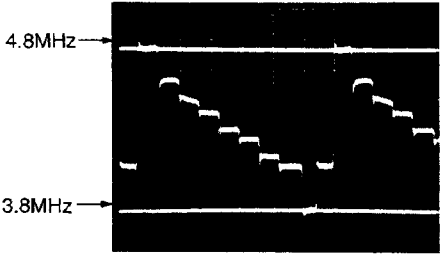
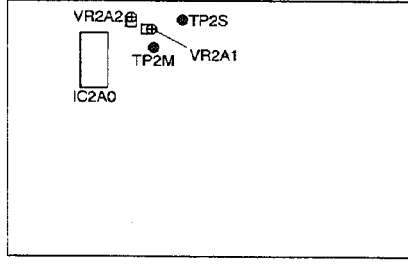


4.Carrier set, Deviation **Adjustment purpose:** FM carrier frequency and frequency deviations.
Symptom when incorrectly adjusted: Too bright or too dark image: colour signal is to reproduced incorrectly. Horizontal noise or out of sync.

Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 1:1)		Input signal	RF signal (colour bar)
Test point	TP2M	Using tape	----
EXT trigger	TP2S	VCR condition	STOP
Measurement range	DIV 0.2V TIM 10µs	Using Jig.	Carrier checker

1. Observe the waveform at TP2M via the carrier checker.
2. Adjust VR2A2 and VR2A1 so that the response waveform 3.8MHz line and 4.8MHz just touch each of white lines on the oscilloscope.

PCB-MAIN (COMPONENT SIDE)



5.Y/C Recording Level		Adjustment purpose: Level of video signal just before recording on tape.	
		Symptom when incorrectly adjusted: Low luminance signal S/N ratio, beats, colour bounding of chrominance signal or flicker.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 1:1)		Input signal	RF signal (colour bar)
Test point	TP connector pin ⑤ and pin ④	Using tape	A tape
EXT trigger	TP2S	VCR condition	LP REC
Measurement range	DIV 10mV TIM 10µs	Using Jig.	REC CURRENT ADJ. JIG

1. Observe the waveform at TP connector pin ⑤ and pin ④ via the REC CURRENT ADJ. JIG.
2. Turn VR203 fully counter clockwise as seen from top side.
3. Adjust VR202 so that the amplitude of cyan is 50mVp-p.

4. Set the oscilloscope's probe to 10:1.
5. Set the oscilloscope's volt range to 5mV/div.
6. Adjust VR203 so that the amplitude of horizontal sync is 150mVp-p.

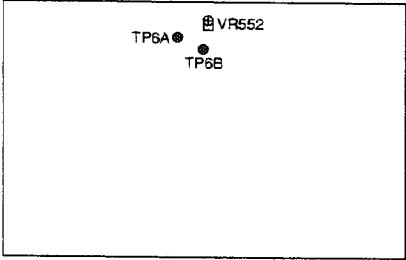
PCB-MAIN (COMPONENT SIDE)

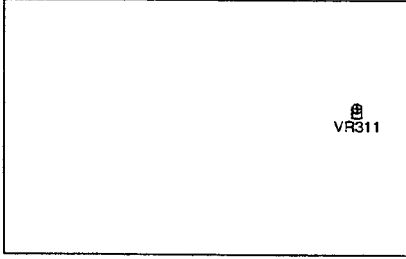
PCB HEAD-AMP (COMPONENT SIDE)

6. Playback Video Output Level		Adjustment purpose: Video output level during playback.	
		Symptom when incorrectly adjusted: Colour signal is not correctly reproduced.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 10:1)		Input signal	-----
Test point	TP2J	Using tape	Alignment tape (Colour bar)
EXT trigger	-----	VCR condition	Playback
Measurement range	DIV 20mV TIM 10µs	Using Jig.	-----

1. Set INTELLIGENT PICTURE switch to "OFF" position.
2. Open the VIDEO OUT terminal.
3. Observe the waveform at TP2J.
4. Adjust VR2A5 so that the amplitude of waveform is 1.0Vp-p.

PCB-MAIN (COMPONENT SIDE)

7.N-PAL VCO (HS-M57(IR) only)		Adjustment purpose: Frequency setting of gate of pulse for sampling the burst signal in order to convert NTSC signal to a guest-PAL signal. Symptom when incorrectly adjusted: No colour signal during N-PAL Playback.			
Measuring instrument and condition		VCR set up condition		<ol style="list-style-type: none"> 1. Supply DC5V to TP6A. 2. Observe the frequency at TP6B. 3. Adjust VR652 so that the frequency is 15.73kHz \pm 50Hz. 4. Open TP6A. 	
Frequency counter		Input signal	-----		
Test point	TP6B	Using tape	Alignment tape (NTSC colour bar)		
EXT trigger	-----	VCR condition	Playback		
Measurement range	-----	Using Jig.	-----		
<p>PCB-MAIN (COMPONENT SIDE)</p>  <p>The diagram shows a rectangular PCB layout with three points marked: TP6A (a circle with a dot), TP6B (a circle with a dot), and VR552 (a square with a circle inside). TP6A and TP6B are positioned vertically, with TP6A above TP6B. VR552 is positioned to the right of TP6A.</p>					

[Audio Circuit] 8.Playback Audio Level		Adjustment purpose: Audio level during playback. Symptom when incorrectly adjusted: Too loud or too low audio level during playback.			
Measuring instrument and condition		VCR set up condition		<ol style="list-style-type: none"> 1. Observe the audio level at AUDIO OUT terminal. 2. Adjust VR311 so that the audio output level is -6dBs (388mVr.m.s.). (0dBs=1mW 600Ω:0.775Vr.m.s.) 3. Check that the level fluctuation is less than \pm1dBs. If level fluctuation is over \pm 1dBs then check that the mechanical adjustment of A/C HEAD slant adjustment. 	
Audio tester		Input signal	-----		
Test point	AUDIO OUT terminal	Using tape	Alignment tape (1kHz audio signal)		
EXT trigger	-----	VCR condition	Playback		
Measurement range	-----	Using Jig.	-----		
<p>PCB-MAIN (COMPONENT SIDE)</p>  <p>The diagram shows a rectangular PCB layout with a single point marked: VR311 (a square with a circle inside). It is positioned in the lower right area of the rectangle.</p>					

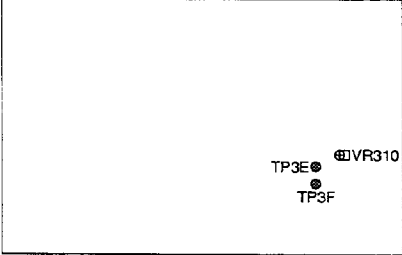
9.Audio Bias Level		Adjustment purpose: Audio bias level during recording.	
		Symptom when incorrectly adjusted: Poor audio response in high frequency area or distortion.	
Measuring instrument and condition		VCR set up condition	
Audio tester		Input signal	----
Test point	TP3E TP3F	Using tape	A tape
EXT trigger	----	VCR condition	SP REC
Measurement range	----	Using Jig.	High pass filter

1. Insert shorted RCA type phono-plug into the AUDIO IN terminal.
2. Observe the signal level at TP3E and TP3F.
3. Confirm that the monitor TV etc. dose not affect the indication of the audio tester and then adjust VR310 so that the level of 2.6mVr.m.s.

Note 1:
Be careful that the audio tester housing does not touch the VCR chassis.

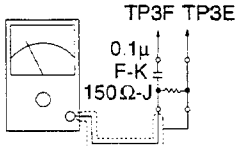
Note 2:
Do not set the VCR to PLAY mode with the audio tester connected.
(The audio amplifier will be overloaded.)

PCB-MAIN (COMPONENT SIDE)



TP3E ● ⊞VR310
TP3F ●

RCA Phono-plug
C-ELE 50V/10μF

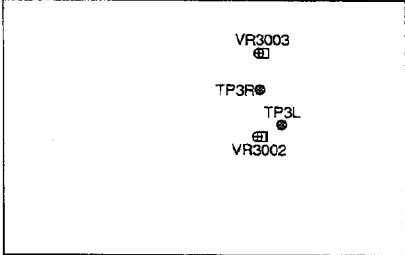


TP3F TP3E
0.1μ
F-K
150Ω-J

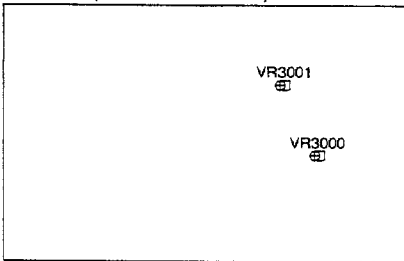
[Hi-Fi Audio Circuit] 10.VCO		Adjustment purpose: Set up of FM carrier frequency for Hi-Fi audio.	
		Symptom when incorrectly adjusted: Buzz only.	
Measuring instrument and condition		VCR set up condition	
Frequency counter		Input signal	----
Test point	TP3L TP3R	Using tape	A tape
EXT trigger	----	VCR condition	SP REC
Measurement range	----	Using Jig.	----

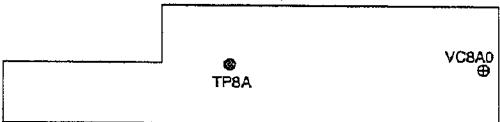
1. Set CHANNEL button to "EXT" position.
2. Set MONITOR button on the remote hand unit to "STEREO" mode.
3. Connect AUDIO IN terminal to ground(L-CH and R-CH).
4. Observe the frequency at TP3L.
5. Adjust VR3002 so that the frequency is 1.400MHz ± 3kHz.
6. Observe the frequency at TP3R.
7. Adjust VR3003 so that the frequency is 1.800MHz ± 3kHz.

PCB-HI-FI (COMPONENT SIDE)



VR3003
⊞
TP3R ●
TP3L ●
⊞ VR3002

11. FM Frequency Deviation		Adjustment purpose: FM Frequency deviation of Hi-Fi sound.		<ol style="list-style-type: none"> 1. Set CHANNEL button to "EXT" position. 2. Set MONITOR button on the remote hand unit to "STEREO" mode. 3. Observe the audio level at AUDIO OUT terminal (L-CH or R-CH). 4. Adjust VR3000 for the L-CH and VR3001 for the R-CH so that output levels of AUDIO OUT terminals are -6dBm.
		Symptom when incorrectly adjusted: Too high or too low recording and playback levels of Hi-Fi sound.		
Measuring instrument and condition		VCR set up condition		
Audio tester		Input signal	----	
Test point	AUDIO OUT terminal (L-CH or R-CH)	Using tape	Alignment tape (PM6KH3)	
EXT trigger	----	VCR condition	playback	
Measurement range	----	Using Jig.	----	
<p>PCB-HI-FI (COMPONENT SIDE)</p> 				

[Timer Circuit]		Adjustment purpose: Accuracy of clock.		<ol style="list-style-type: none"> 1. Observe the period at TP8A. 2. Adjust VC8A0 so that the period is 5.859375 ±0.000024msec.
12. Clock OSC Frequency		Symptom when incorrectly adjusted: Poor clock accuracy.		
Measuring instrument and condition		VCR set up condition		
Frequency counter		Input signal	----	
Test point	TP8A	Using tape	----	
EXT trigger	----	VCR condition	Stand by	
Measurement range	PERIOD mode	Using Jig.	----	
<p>PCB TIMER (COMPONENT SIDE)</p> 				

[Dual Audio Circuit] 13. Audio DET Coil (HS-M57 (Y) only)		Adjustment purpose: Adjustment for audio det coils.	
		Symptom when incorrectly adjusted: Sound Signal will distort.	
Measuring instrument and condition		VCR set up condition	
D.C. Voltmeter		Input signal	RF Signal (Normal Sound Signal)
Test point	TP73	Using tape	-----
EXT trigger	-----	VCR condition	STOP
Measurement range	-----	Using Jig.	-----

1. This VCR should be in the power on mode for at least 3 minutes before attempting this adjustment.
2. Supply the normal mode RF signal (400Hz, 30%FM Modulation, 15kHz Deviation).
3. Adjust LC752 so that the D.C voltage at TP73 is 6V.
4. Supply the dual mode RF signal (SUB-CH should be 1kHz).
5. Adjust LC751 so that the D.C voltage at TP74 is 6V.

PCB-HI-FI (COMPONENT SIDE)

14. Pilot Signal Tuning Frequency (HS-M57 (Y) only)		Adjustment purpose: The level of pilot signal.	
		Symptom when incorrectly adjusted: The pilot signal fails to be detected.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (10:1)		Input signal	RF Signal (Stereo Sound Signal)
Test point	TP70	Using tape	-----
EXT trigger	TP72	VCR condition	STOP
Measurement range	DIV 20mV TIM 1ms	Using Jig.	-----

1. Supply the stereo mode RF signal.
2. Observe the waveform at TP70.
3. Adjust VR751 so that the amplitude of the pilot signal becomes maximum.
4. Make sure that the amplitude is at least 600mVp-p.

PCB-HI-FI (COMPONENT SIDE)

15. Pilot Tone BPF Tuning Frequency of Dual Audio Mode (HS-M57 (Y) only)		Adjustment purpose: For the detection of dual mode. Symptom when incorrectly adjusted: Dual audio fail to be detected.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (10:1)		Input signal	RF Signal (Dual Sound Signal)
Test point	TP72	Using tape	----
EXT trigger	----	VCR condition	STOP
Measurement range	DIV 20mV TIM 1ms	Using Jig.	----

This adjustment must be done after ITEM 14.
1. Supply the dual mode RF signal.
2. Observe the waveform at TP72.
3. Adjust VR753 so that the amplitude of the pilot tone(274.1Hz) of dual mode becomes maximum.

PCB-HI-FI (COMPONENT SIDE)

16. Pilot Tone BPF Tuning Frequency of Stereo mode (HS-M57 (Y) only)		Adjustment purpose: For the detection of Stereo mode. Symptom when incorrectly adjusted: Stereo audio fail to be detected.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (10:1)		Input signal	RF Signal (Stereo Sound Signal)
Test point	TP72	Using tape	----
EXT trigger	----	VCR condition	STOP
Measurement range	DIV 20mV TIM 2ms	Using Jig.	----

This adjustment must be done after ITEM 14.
1. Supply the stereo mode RF signal.

PILOT	50% AM MODURATION
RIGHT CH	1kHz, 100% FM MODURATION
LEFT CH	NO MODURATION
RF INPUT	70dB μ (75 Ω LOAD)

2. Observe the waveform at TP72.
3. Adjust VR752 so that the amplitude of the pilot tone(117.5Hz) becomes maximum.

PCB-HI-PI (COMPONENT SIDE)

17. VCO Frequency (HS-M57 (Y) only)		Adjustment purpose: The frequency of VCO.	
		Symptom when incorrectly adjusted: Multi signal fail to be detected.	
Measuring instrument and condition		VCR set up condition	
Audio Tester, D.C Volt meter		Input signal	RF Signal (Dual Sound Signal)
Test point	TP71	Using tape	-----
EXT trigger	-----	VCR condition	STOP
Measurement range	-----	Using Jig.	-----

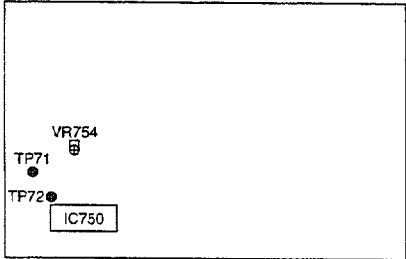
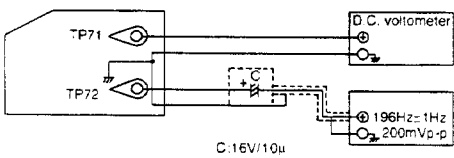
1. Supply the dual mode RF signal.

2. Supply sinewave(196Hz, 200mVp-p) to TP72 via a capacitor.

3. Observe the voltage at TP71.

4. Adjust VR754 so that the D.C voltage at TP71 is 6.1V.

PCB-Hi-Fi (COMPONENT SIDE)

18. Channel Separation (HS-M57 (Y) only)		Adjustment purpose: Positioning of audio separation.	
		Symptom when incorrectly adjusted: Mixing audic separation.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (10:1)		Input signal	RF Signal (Stereo Sound Signal)
Test point	TP75	Using tape	-----
EXT trigger	-----	VCR condition	STOP
Measurement range	DIV 20mV TIM 2ms	Using Jig.	-----

1. Supply the stereo mode RF signal.

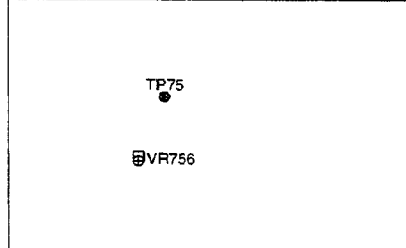
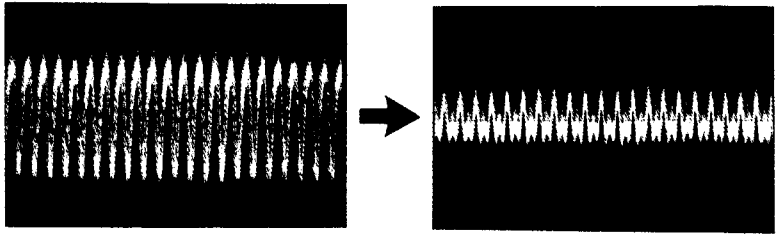
PILOT	50% AM MODURATION
RIGHT CH	1kHz, 100% FM MODURATION
LEFT CH	NO MODURATION
RF INPUT	70dBµ (75Ω LOAD)

2. Observe the waveform at TP75.

3. Adjust VR756 so that the audio out put signal at L-CH becomes minimum.

Attention:
This adjustment should be done precisely because it determines the separation.

PCB-Hi-Fi (COMPONENT SIDE)

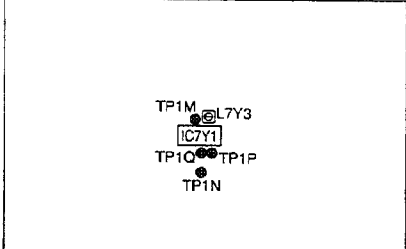
[NICAM Circuit] 19. QUASI-SIF (HS-M57 (E), (B), (IR) only)		Adjustment purpose: Coincide the free run frequency of the NICAM detector to VIF. Symptom when incorrectly adjusted: It can not detect NICAM.	
Measuring instrument and condition		VCR set up condition	
D.C. Voltmeter		Input signal	----
Test point	TP1M	Using tape	----
EXT trigger	----	VCR condition	STOP
Measurement range	----	Using Jig.	----

1. Short the AGC terminal of the Tuner to ground.
2. Supply 12V to the BT terminal of Tuner.
3. Short-circuit TP1N and ground.
4. Take the DC voltage of TP1M.
5. Open-circuit TP1N and ground.
6. Short-circuit TP1P and ground via the capacitor (50V, 2200pF).
7. Supply the signal (as shown in Table) to TP1Q via the pad (as shown in figure).
8. Adjust L7Y3 so that the DC voltage of TP1M become the same voltage in step 4.

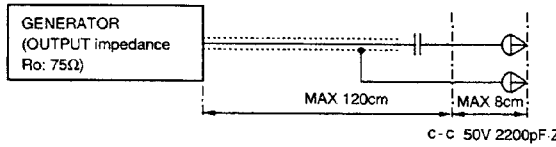
Table

MODEL	Input signal
HS-M57(E)	38.9MHz, 99dB μ V
HS-M57(B), (IR)	39.5MHz, 99dB μ V

PCB-Hi-Fi (COMPONENT SIDE)



GENERATOR
(OUTPUT impedance
Ro: 75 Ω)

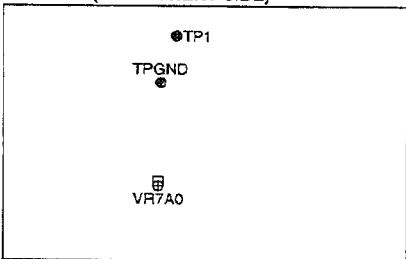


20. Additional Adjustment of Carrier VCXO (HS-M57 (E), (B), (IR) only)		Adjustment purpose: Reference frequency for detecting 2nd SIF. Symptom when incorrectly adjusted: NICAM fails to be detected.	
Measuring instrument and condition		VCR set up condition	
Frequency counter		Input signal	RF Signal (Stereo mode)
Test point	TP1	Using tape	----
EXT trigger	----	VCR condition	STOP
Measurement range	----	Using Jig.	----

1. Observe the Frequency at TP1.
2. Connect TPGND to ground.
3. Adjust VR7A0 so that the frequency at TP1 is a value listed in the table below.

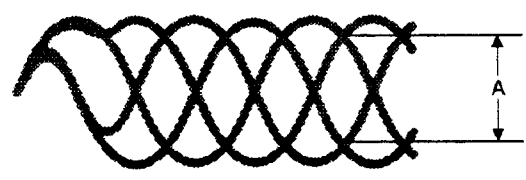
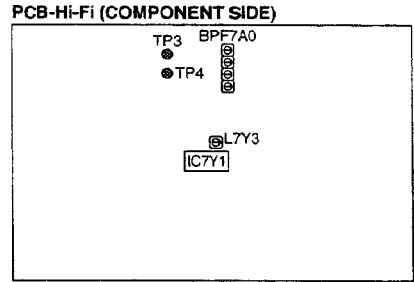
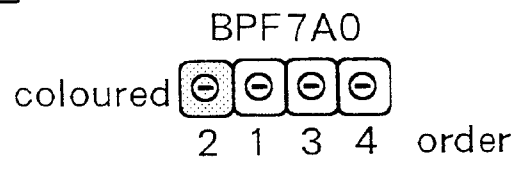
MODEL	Carrier frequency
HS-M57(E)	5.65MHz \pm 300Hz
HS-M57(B), (IR)	6.652MHz \pm 300Hz

PCB-Ni-Fi (COMPONENT SIDE)

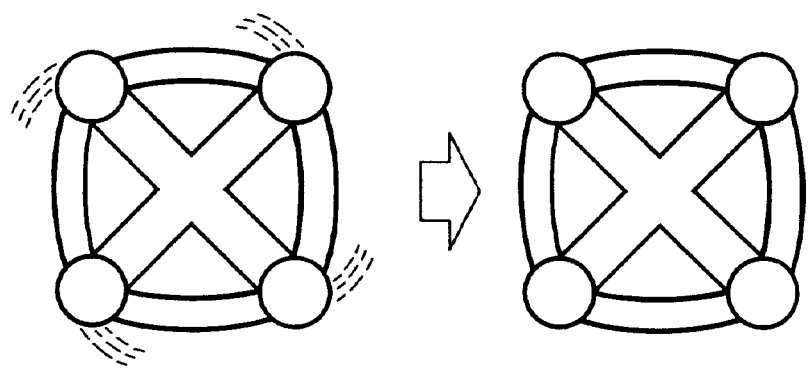


21. BPF (HS-M57 (E), (B), (IR) only)		Adjustment purpose: Set up the characteristic of BPF of NICAM.	
		Symptom when incorrectly adjusted: AUDIO S/N ratio during receiving NICAM become worse.	
Measuring instrument and condition		VCR set up condition	
Oscilloscope (Probe 10:1)		Input signal	RF signal (STEREO sound signal)
Test point	TP3	Using tape	-----
EXT trigger	TP4	VCR condition	STOP
Measurement range	DIV 20mV TIM 1 μ s	Using Jig	-----

1. Set MONITOR button on the remote hand unit to "STEREO" mode.
 2. Observe the waveform at TP3.
 3. Adjust BPF7A0 so that the amplitude of part A becomes maximum.
- Note:**
Perform the coil adjustment in order with refer to following figure adjust repeatedly at least twice.



4. Observe the waveform at TP3 and TP4.
5. Set the oscilloscope to X-Y mode.
6. Adjust L7Y3 so that the noise level is disappeared.



MECHANICAL ADJUSTMENT AND REPLACEMENT

1. Cleaning of Deck

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

1-1 Video Head

A. Clean the video heads in the following method if dust and other foreign objects on the video heads disturb the normal playback of images:

Dampen video head cleaning cloth with alcohol. Hold the cloth against the drum and turn the drum slowly counterclockwise to clean.

Note:

Do not directly touch the head attached to the upper drum. The head is very hard but brittle to impact, especially in the vertical direction.

Do not apply force in the vertical direction.

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

9. Takeup slant pole
10. Takeup guide roller
11. A/C head
12. Takeup guide pole
13. Pinch roller
14. Capstan shaft
15. Takeup guide arm
16. Tension regulation arm T

A. Clean the tape transport with gauze dampened with alcohol, except the supply guide roller, takeup guide roller and pinch roller. If Guide rollers and pinch roller are stained with dust, clean them with dry gauze or exchange them for new parts.

B. 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. 1-1.)

Clean the following parts of the tape transport.

1. Tension regulation arm S
2. Tension arm
3. Supply guide pole
4. FE head
5. Impedance roller
6. Supply guide roller
7. Supply slant pole
8. Upper and lower drum

1-3 Reel Disk Drive System

Clean the reel disk braking surfaces and the reel belt.

A. Clean the reel disk braking surfaces with gauze dampened alcohol.

- After the alcohol dries up completely, perform "Adjustment to Back Tension and Tension Position" (Item 3-1).

B. Reel belt is stained with dust, clean it with dry gauze or exchange it for new part.

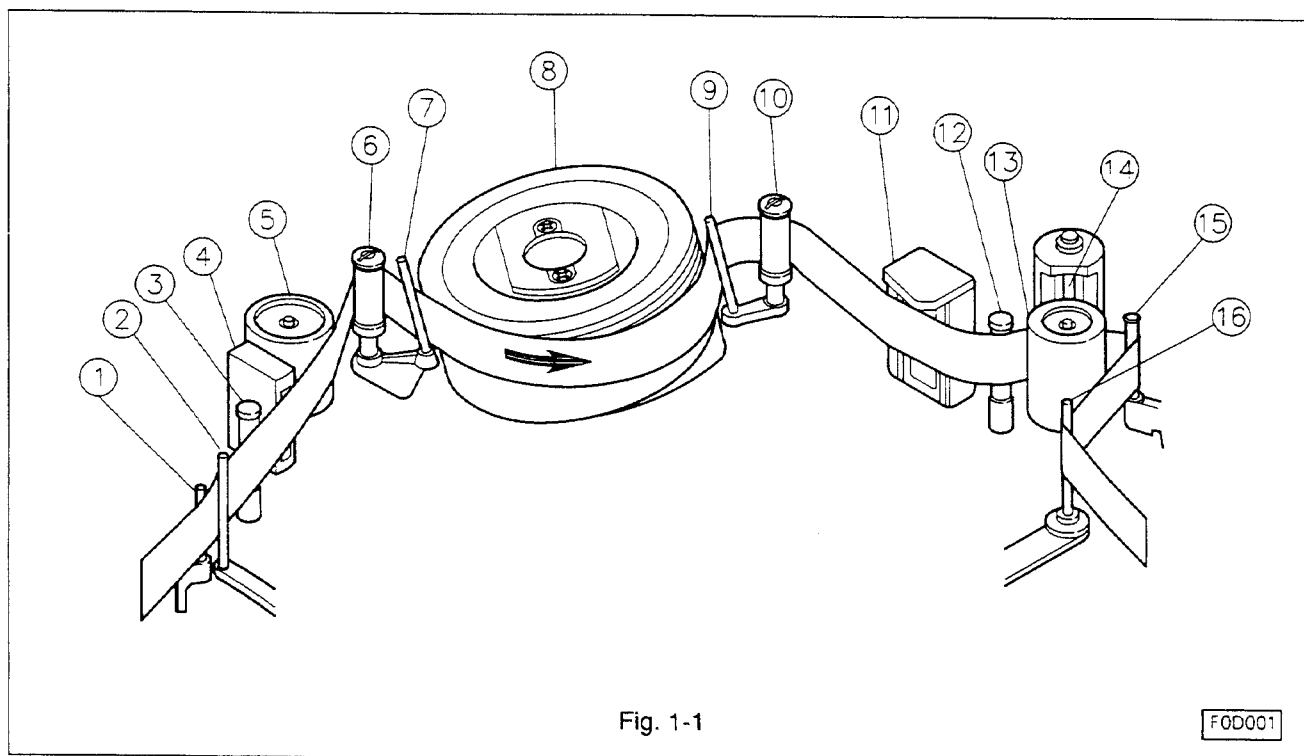


Fig. 1-1

F0D001

2. Replacement of Major Parts

2-1 Cassette Housing

2-1-1 Removal(Refer to Fig. 2-1-1~2-1-2.)

- Set the VCR to the eject mode.
- Remove the top panel, bottom panel, and front panel.
- Unfasten the snap of the cable holder and remove the cable holder from the cassette housing as shown in Fig.2-1-1.
- Unscrew four cassette housing fastening screws (a ~ d). Raise the cassette housing slowly in the direction shown by the arrow.(Refer to Fig. 2-1-2.)

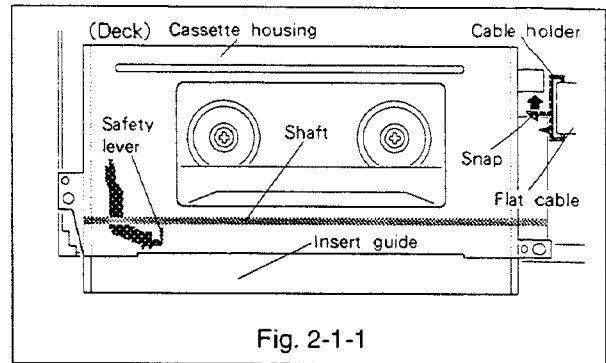


Fig. 2-1-1

2-1-2 Installation(Refer to Fig.2-1-1~2-1-3.)

- Slowly lower the cassette housing onto the main plate of the deck so that the safety lever enters between the insert guide and the shaft as shown in Fig. 2-1-1. Align the two positioning holes (e, f) and the two U holes (g, h) located on the cassette housing with the matching holes in the deck.
- In step A above, if the front loading gear of the cassette housing does NOT engage the boss on the main plate, carefully push the gear toward the front of the VCR using a small-diameter screwdriver, as illustrated in Fig. 2-1-3. If the gear still will not engage, rotate the Front Loading Gear a few degrees from below the deck until the gear engages the boss correctly.
- Fasten the housing to the deck with the four screws (a ~ d).(Refer to Fig. 2-1-2.)

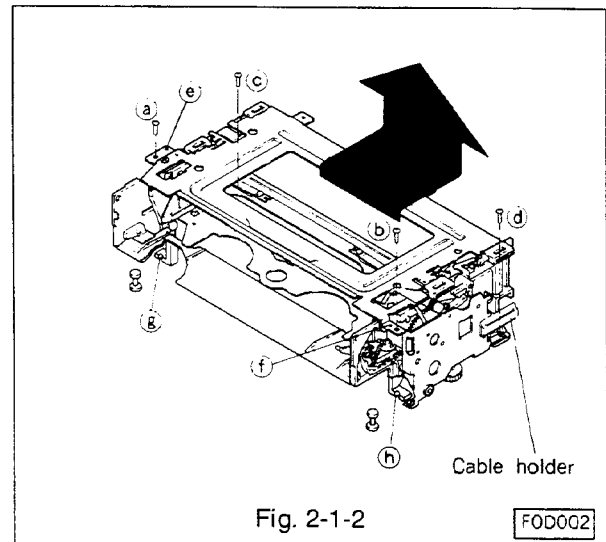


Fig. 2-1-2

2-2 Lock arm and Drive gear

2-2-1 Removal(Refer to Fig. 2-1-3~2-2.)

- Unfasten four snaps (a ~ d) as shown in Fig. 2-1-3, and remove the side plate TU.
- Turn the FL SW lever clockwise to separate the FL SW lever from the drive gear, and pull the lock arm and drive gear to remove them from the shaft as shown in Fig. 2-2.

2-2-2 Installation(Refer to Fig. 2-1-3~2-2.)

- Install the drive gear on the shaft as shown in Fig. 2-2.
- Line the matching mark on the drive gear and beginning of gear section on the lock arm as shown in Fig. 2-2, and install the lock arm.
- Install the side plate TU to the cassette housing, and secure it with four snaps (a ~ d) as shown in Fig. 2-1-3.

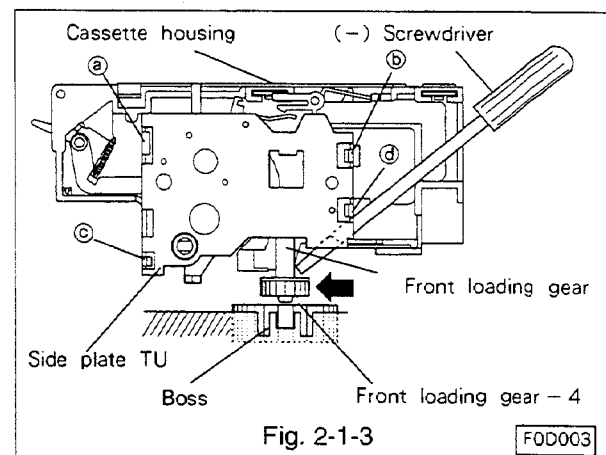


Fig. 2-1-3

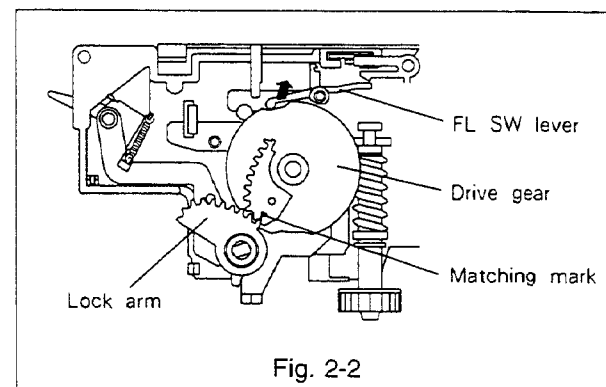


Fig. 2-2

2-3 Drum Assembly

2-3-1 Removal(Refer to Fig. 2-3-1~2-3-3.)

- A. Unscrew the brush fastening screw and remove the brush.(Refer to Fig. 2-3-1.)
- B. Unscrew two fastening screws((a) , (b)) and remove the PCB-HEAD AMP which is connected to the drum assembly.

Note:

The cable and connector between the drum and head amplifier may be damaged if the cable is pulled strongly, as the cable is short.

Remove the shield cap of the PCB, raise the PCB slightly and disconnect the FPC cable.

(Removal method for the FPC cable connector and stopper is shown in Fig. 2-3-3.)

Disconnect the ground wire and remove the PCB-HEAD AMP.

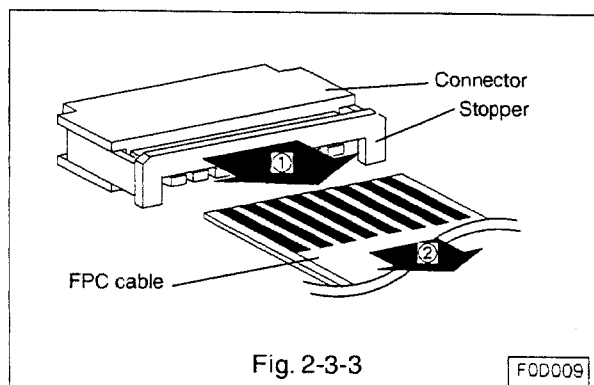
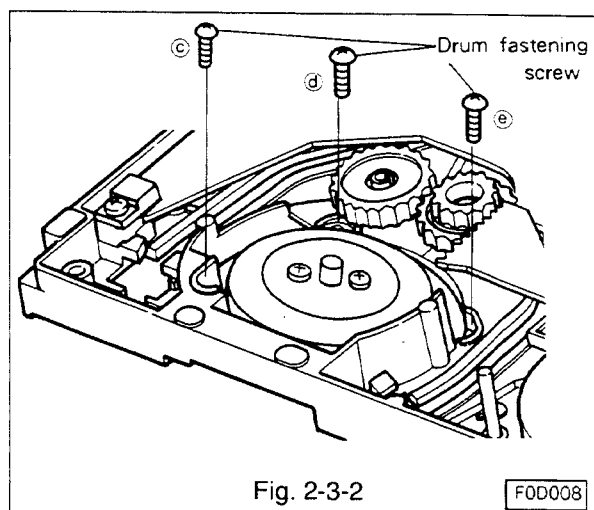
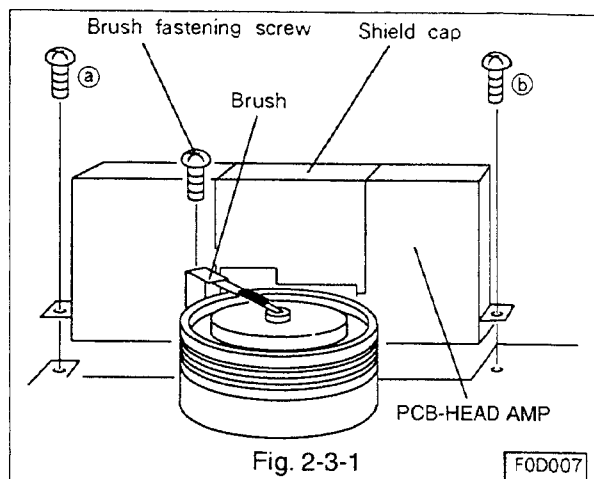
- C. Unscrew three drum fastening screws((c) ~ (e))from the reverse side of the deck.(Refer to Fig. 2-3-2.)
- D. Remove the drum assembly by raising it with care not to touch other parts around the drum assembly.
- E. Disconnect the connectors from the drum assembly. (Refer to Fig. 2-3-3.)

2-3-2 Installation (Refer to Fig. 2-3-1,2-3-2.)

- A. Connect the connectors to a new drum assembly.
- B. Place the new drum assembly on the main plate of the deck slowly with care not to touch other parts.
- C. Fasten the drum assembly with three fastening screws((c) ~ (e))on the reverse side of the deck. (Refer to Fig. 2-3-2.)
- D. Connect the PCB-HEAD AMP to the drum assembly and fasten the PCB with two screws((a) , (b)).(Refer to Fig. 2-3-1.)

Note:

Conduct the mechanism interchangeability adjustment outlined in Para.3 to give optimum performance when the drum assembly is replaced.



2-4 Upper Drum

2-4-1 Removal(Refer to Fig. 2-4-1.)

- Unscrew the brush fastening screw and remove the brush.
- Unsolder two inside soldered terminals of each head on the upper drum.
- Unscrew the upper drum fastening screws.
- Remove the upper drum slowly and carefully.

Note:

If the upper drum is difficult to remove, heat the upper drum fastening screw holes with a soldering iron, and the drum can be easily removed.

2-4-2 Installation(Refer to Fig. 2-4-1.)

Note:

Handle the upper drum carefully as the video heads are fragile.

- Position the lower drum so that the hole in the shaft faces the operator. Align the upper drum with the lower drum so that the CH1 mark on the upper drum is on the right side, and couple the drums.
- Fasten the upper drum with two screws.(Tighten the screws alternately.)
- Solder the terminals not soldered on the upper drum.
- Clean the video heads as outlined in Para. 1-1.

2-5 Reel Belt(Refer to Fig. 2-5)

- Remove the reel belt from the capstan motor and the belt pulley.
- Install a new reel belt.

Note:

Make certain that the new belt is free from grease, before installing.

2-6 Capstan Motor

2-6-1 Removal(Refer to Fig. 2-5, 2-6)

- Disconnect the flat cable.
- Remove the reel belt.(Refer to Fig. 2-5.)
- Remove three fastening screws shown in Fig. 2-6 and remove the capstan motor.

CAUTION:

Restrain the capstan motor as the three screws are removed, since an un-restrained motor may damage other parts of the deck.

When performing removal or installation of the capstan motor, take care that the outside of the rotor's rim is not greased.(Refer to Fig.2-5.) If greasy components are attached on the outside of the rotor's rim, wipe them off with a dry cloth because they may cause defects during special effects playback.

2-6-2 Installation(Refer to Fig. 2-5, 2-6.)

- Fasten the motor with three fastening screws.(Refer to Fig. 2-6.)
- Install the reel belt.
- Connect the flat cable.

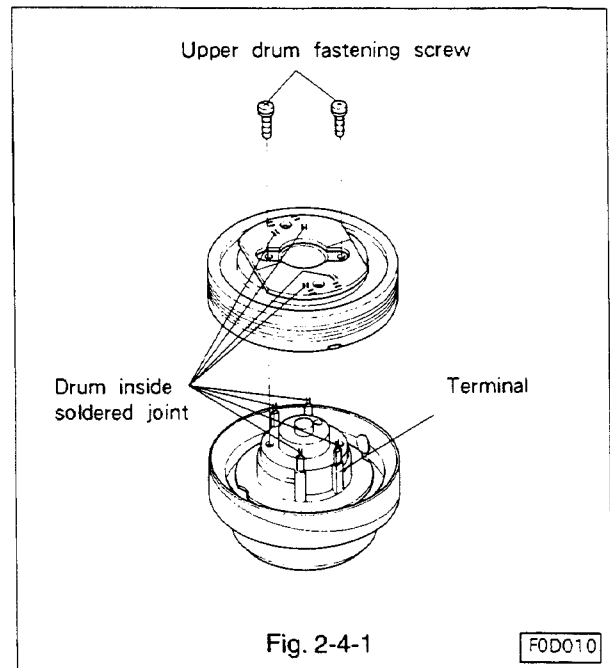


Fig. 2-4-1

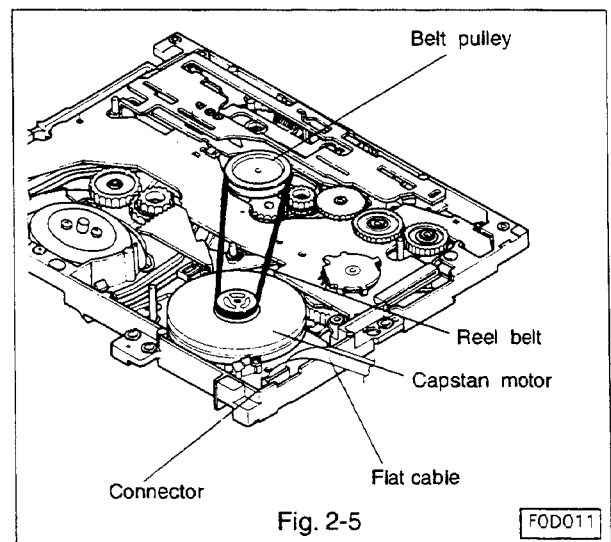


Fig. 2-5

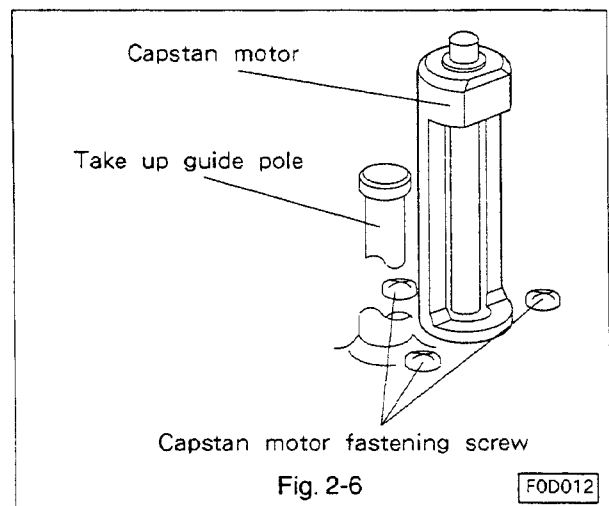


Fig. 2-6

2-7 Loading Motor

2-7-1 Removal(Refer to Fig. 2-7-1, 2-7-2.)

- A. Set the VCR to the eject mode.
- B. Disconnect the wires from the loading motor.
- C. Remove two stoppers securing the motor and the motor holder plate. (Refer to Fig. 2-7-2.)
- D. Slide the motor and motor holder plate away, and then raise them to remove.
- E. Remove the belt-LM from the loading motor and the pulley-L. (TYPE-B only)(Refer to Fig. 2-7-1.)
- F. Unscrew two screws and detach the motor holder plate from the motor.
- G. Disconnect the coupling from the motor.

2-7-2 Installation(Refer to Fig. 2-7-1~2-7-3.)

- A. Fasten the coupling to a new loading motor. (Refer to Fig. 2-7-3.)
- B. Fasten the motor holder plate to the motor with two screws. (Refer to Fig. 2-7-1.)
- C. Install the belt-LM. (TYPE-B only)
- D. Place the motor and motor holder plate in the motor holder to the rest of the deck.
- E. Turn the motor shaft so that the coupling on the loading motor matches the worm gear of the motor holder. Slide the loading motor forward and secure it with the stoppers.
- F. Solder the leads to the loading motor. (Brown lead wire to the positive terminal and red lead wire to the negative terminal.)

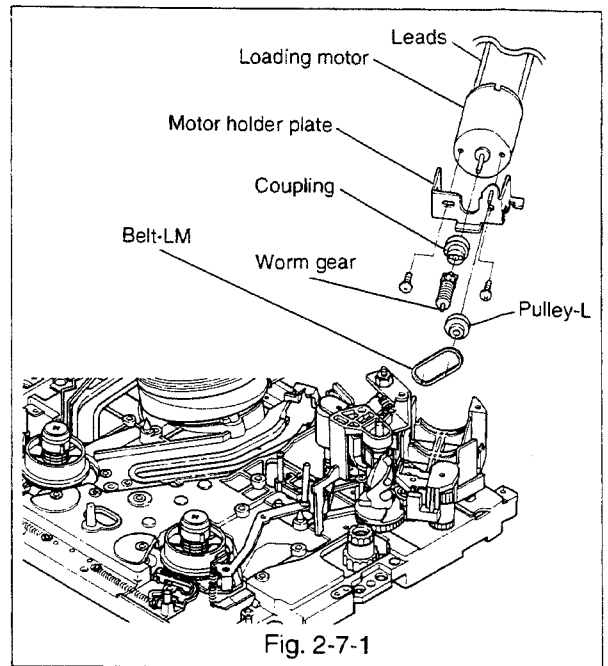


Fig. 2-7-1

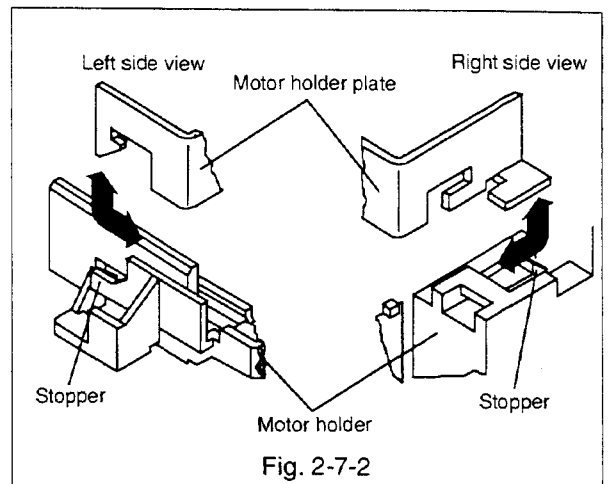


Fig. 2-7-2

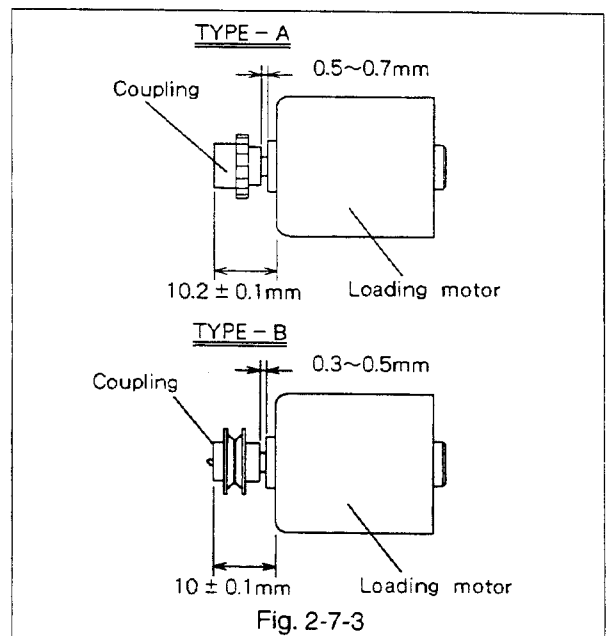


Fig. 2-7-3

2-8 Pinch Roller

2-8-1 Removal(Refer to Fig. 2-8-1, 2-8-2.)

- A. Set the VCR to the eject mode.
- B. Remove the pinch roller arm cap and the grip ring which secures the pinch roller arm assembly.(Refer to Fig. 2-8-1.)
- C. Pull the pinch roller arm assembly upwards to remove.
- D. Remove the pinch roller cap from the pinch roller arm, and remove the pinch roller. (Refer to Fig. 2-8-2.)

2-8-2 Installation(Refer to Fig. 2-8-1,2-8-2.)

- A. Assemble the pinch roller cap and the pinch roller to the pinch roller arm by exercising care with the installation angle of the pinch roller cap and the marking of the Pinch Roller. (Refer to Fig. 2-8-2.)
- B. Assemble the pinch roller assembly to the shaft on the main plate.(Refer to Fig. 2-8-1.)
- C. Secure the pinch roller arm assembly with the pinch roller arm cap and the grip ring.

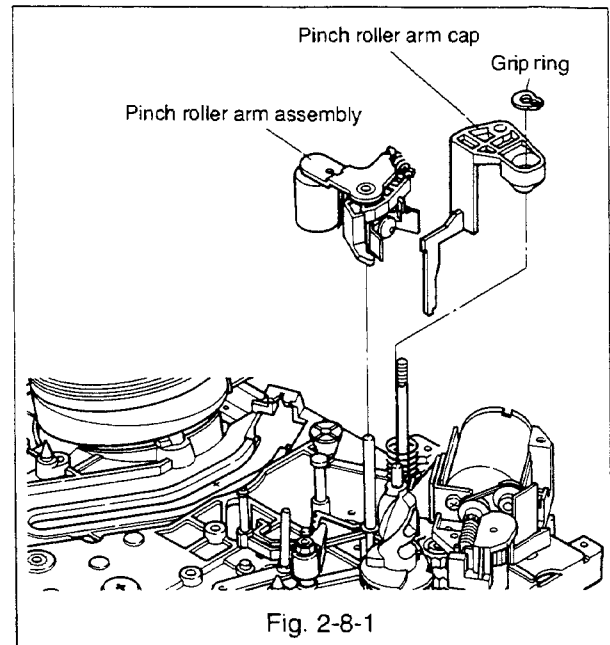


Fig. 2-8-1

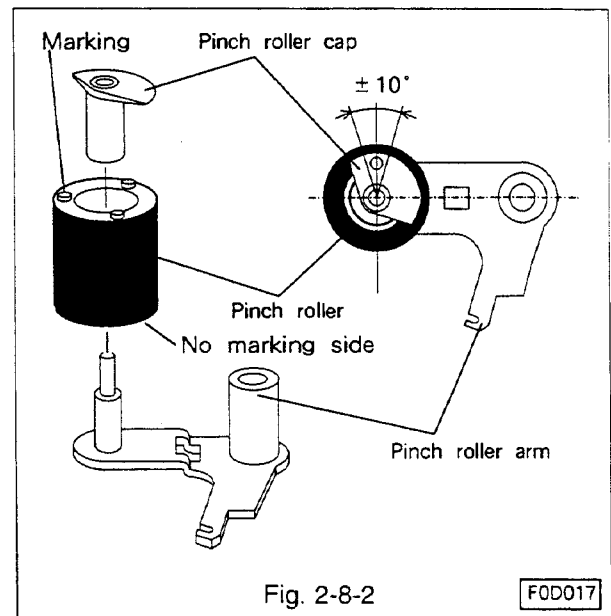


Fig. 2-8-2

F0D017

2-9 Mode Switch

Note:

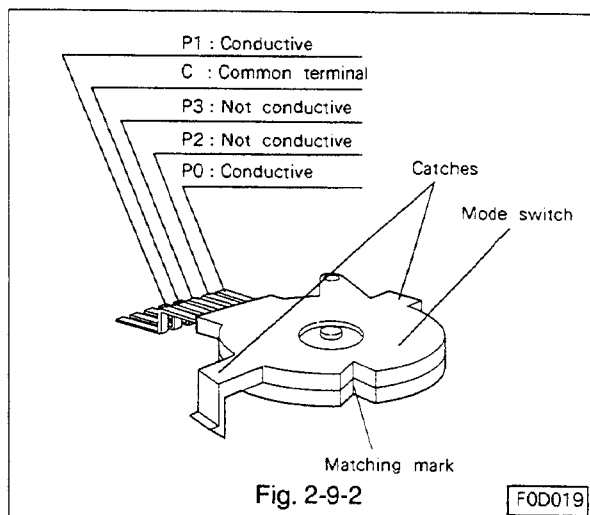
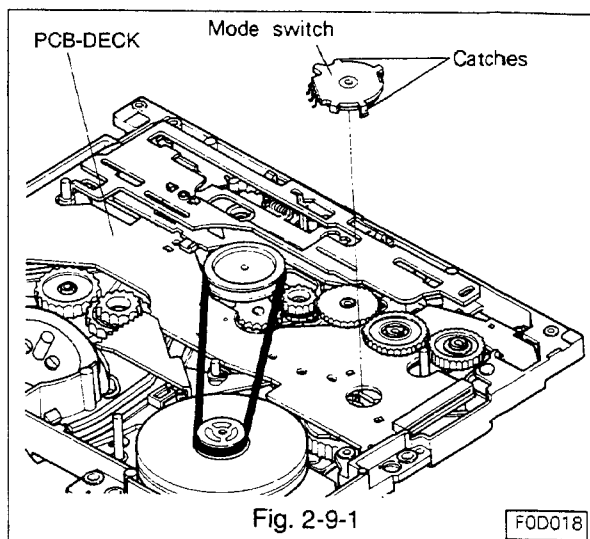
Replace the mode switch with the VCR in the eject mode.

2-9-1 Removal(Refer to Fig. 2-9-1)

- Unsolder the five soldered joints of the mode switch from the PCB-DECK.
- Unfasten two catches fastening the switch to the PCB-DECK assembly.
(Exercise care as the catches may be broken off.)
- Remove the mode switch slowly while insuring that the soldered joints are all unsoldered.

2-9-2 Installation(Refer to Fig. 2-9-1,2-9-2.)

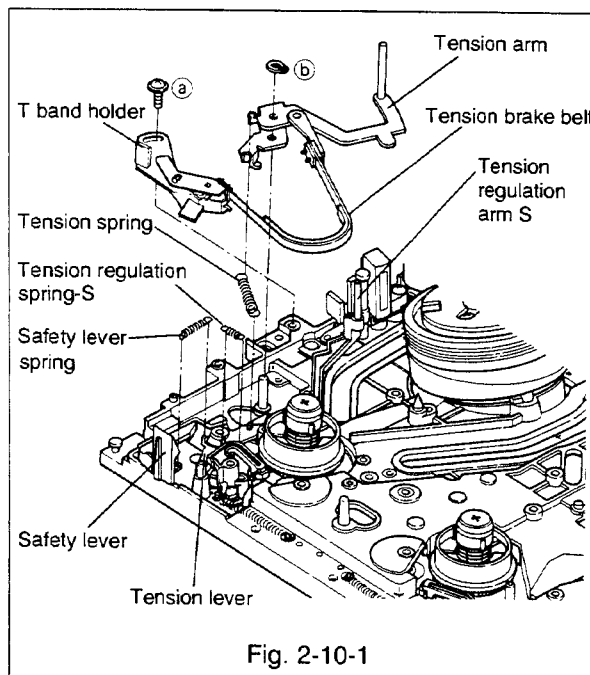
- Line the matching marks of the mode switch. (Refer to Fig. 2-9-2.)
- Finely adjust the mode switch so that continuity at each terminal shall be as given in the illustration.
- Fasten the switch to the PCB-DECK with care so that the switch does not turn, and secure with two catches.(Refer to Fig. 2-9-1.)
- Solder the five terminals which connect the mode switch to the PCB-DECK assembly.



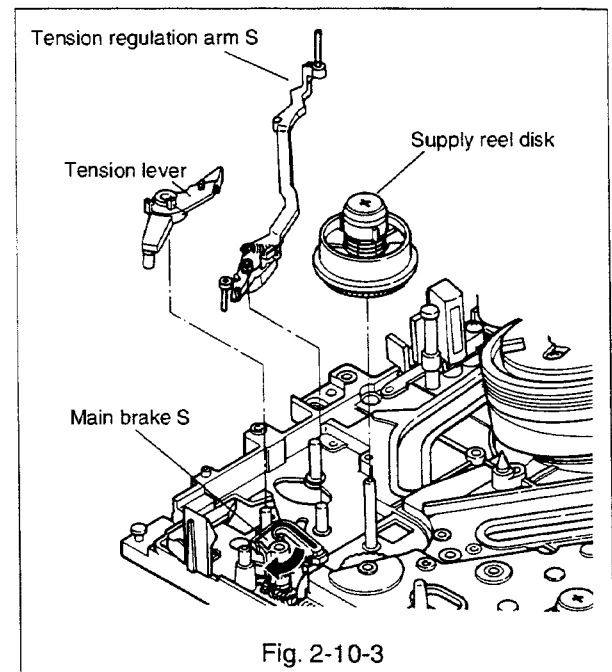
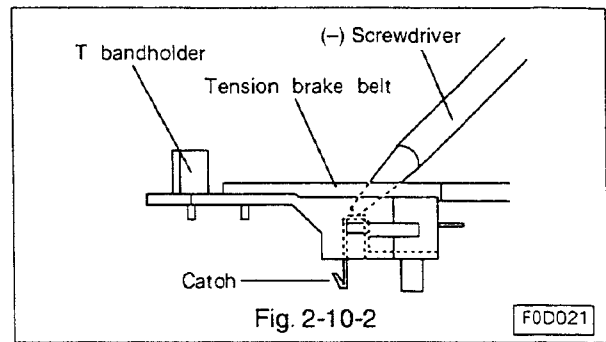
2-10 Supply Reel Disk

2-10-1 Removal (Refer to Fig. 2-10-1~2-10-3.)

- Remove the cassette housing as in Para. 2-1-1.
- Unscrew the screw (a) which fastens the T band holder. (Refer to Fig. 2-10-1.)
- Unfasten the catch of the T band holder from the main plate with a small screw driver etc. as shown in Fig. 2-10-2. Raise and remove the T band holder with care not to score or dirty the tension brake belt.
- Detach the tension spring from the tension arm and the tension lever.(Refer to Fig. 2-10-1.)
- Remove the grip ring (b) which secures the tension arm. Raise the tension arm upward to remove it from the shaft.
- Detach the tension regulation spring S from the tension regulating arm S and the tension lever.
- Detach the safety lever spring from the safety lever and the tension lever.



- H. Raise the tension lever avoiding the main brake S and remove the lever from the shaft. (Refer to Fig. 2-10-3.)
- I. Raise the tension regulation arm S and remove it from the shaft.
- J. While turning the main brake S slightly clockwise to separate the brake from the supply reel disk, and raise the supply reel disk to remove it from the shaft. (Refer to Fig. 2-10-3.)



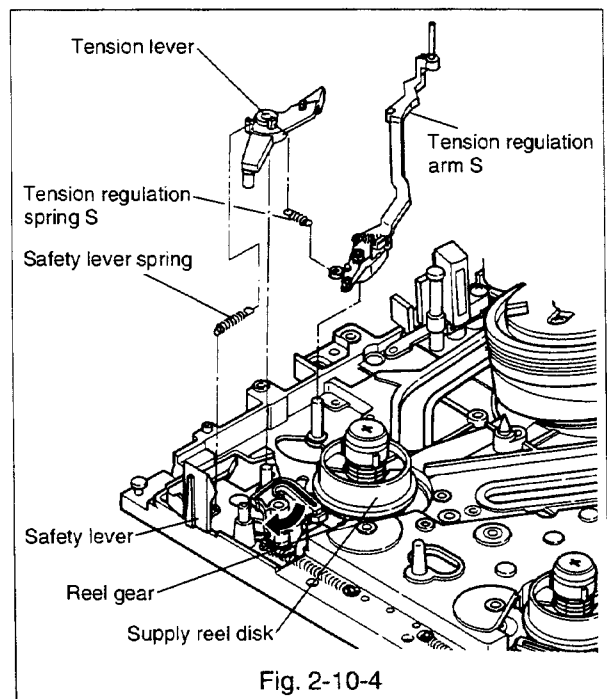
2-10-2 Installation(Refer to Fig. 2-10-4~2-10-7.)

- A. Turn the main brake S slightly clockwise to separate it from the supply reel disk shaft, and mount the supply reel disk on the shaft so that the reel gear meshes with the gear of the supply reel disk.
- B. Assemble the tension regulation arm S to the shaft.
- C. Assemble the tension lever to the shaft avoiding the main brake S.

Note:

Install the tension lever so that the pin at the lower part of the lever shall be in front of the slot in the main plate (viewing the front).

- D. Fasten the safety lever spring to the safety lever and the tension lever.
- E. Fasten the tension regulation spring S to the tension regulation arm S and the tension lever.



- F. Assemble the tension arm to the shaft and secure the arm with the grip ring (b). (Refer to Fig. 2-10-5.)
- G. Fasten the tension spring to the tension arm and the tension lever. (Refer to Fig. 2-10-5.)
- H. Assemble the T band holder to the main plate with care not to score or dirty the tension brake belt, and secure the holder with the screw (a) lightly. (Refer to Fig. 2-10-5.)

Note:

In the assembly of the T band holder, make certain that the hook of the holder positively engages with the reverse side of the main plate.

If the hook is difficult to engage with the main plate, push the hook lightly with a small screw driver etc. (Refer to Fig. 2-10-2.)

- I. Separate the main brake S and the tension regulation arm S from the supply reel disk and make certain that the disk turns freely. (Refer to Fig. 2-10-3.)
- J. Place the reel disk height adjusting jig (Part Number 859C342O20) in the reference position on the main plate. (Refer to Fig. 2-10-6.)
- K. Slowly turn the jig about point A and make sure that the height of the supply reel disk flange agrees with the point B on the supply disk adjusting side of the jig (marked SP). (Refer to Fig. 2-10-7.)
- L. If the height of the disk is not satisfactory, hold the disk so that it does not turn, and turn the height adjusting screw at the top of the disk to adjust the height. (Refer to Fig. 2-11-3.)
 - A) Turn the screw clockwise if the measured height is low.
 - B) Turn the screw counterclockwise if the measured height is high.
- M. On completion of adjustment, lock the height adjusting screw by burning it with the tip of a hot iron.
- N. Install the cassette housing as in Para. 2-1-2.
- O. Adjust back tension and tension pole position as outlined in Para. 3-1.

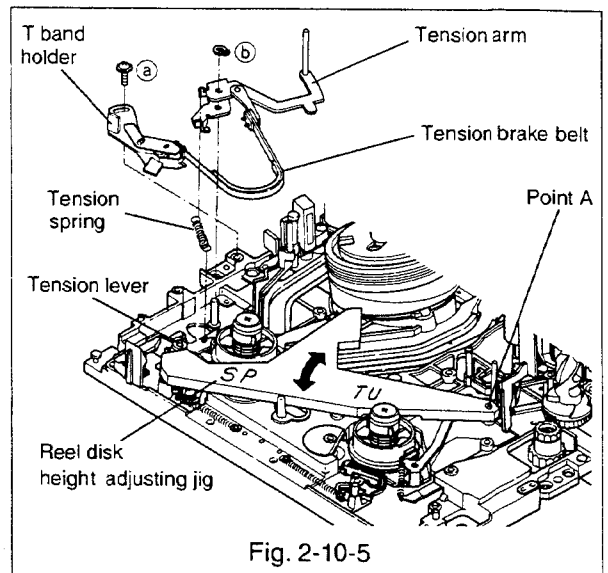


Fig. 2-10-5

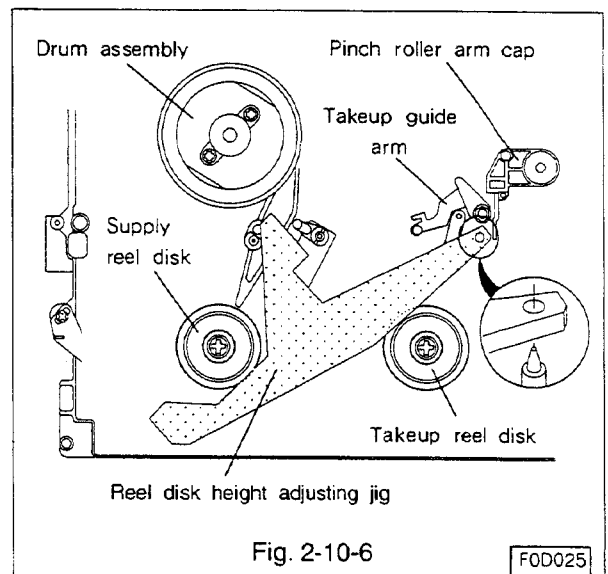


Fig. 2-10-6

F0D025

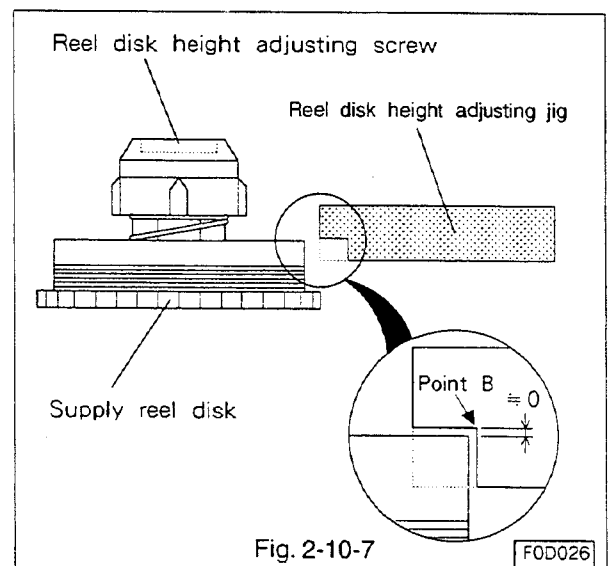


Fig. 2-10-7

F0D026

2-11 Takeup Reel Disk

2-11-1 Removal(Refer to Fig. 2-11-1.)

- A. Remove the cassette housing as in Para. 2-1-1.
- B. Detach the spring RS and the tension regulation spring T from the tension regulation arm T and the lever RS.
- C. Remove the cut washer which fastens the tension regulation arm T.
- D. Turn the takeup guide arm slightly clockwise and raise the tension regulation arm T to remove it from the shaft.
- E. Turn the main brake slightly counter-clockwise to separate the brake from the takeup reel disk and raise the disk upwards to remove it from the shaft.

2-11-2 Installation(Refer to Fig. 2-11-2, 2-11-3.)

- A. Turn the main brake T slightly counter-clockwise to release the takeup reel disk shaft. Slip the takeup reel disk onto the shaft so that the gear of the takeup reel disk shall mesh with the reel gear. (Refer to Fig. 2-11-2.)
- B. Turn the takeup guide arm slightly clockwise and install the tension regulation arm T to the shaft. Secure the arm with a cut washer.
- C. Fasten the tension regulation spring T and the spring RS to the tension regulation arm T and the lever RS.
- D. Separate the main brake T and the tension regulation arm T from the takeup reel disk and make certain that the takeup reel disk turns freely.
- E. Place the reel disk height adjusting jig (Part Number 859C342O20) in the reference position on the main plate. (Refer to Fig. 2-10-6.)
- F. Turn the jig slowly about the point A towards the takeup reel disk to make certain that the height of the disk flange agrees with the point B on the takeup side of the jig (marked TU). (Refer to Fig. 2-11-3.)
- G. If the height of the disk is not satisfactory, hold the disk so that it shall not turn, and turn the height adjusting screw at the top of the disk to adjust the height.
 - A) Turn the screw clockwise if the measured height is low.
 - B) Turn the screw counterclockwise if the measured height is high.
- H. On completion of height adjustment, lock the adjusting screw by burning it with the tip of a hot iron.
- I. Install the cassette housing as in Para. 2-1-2.

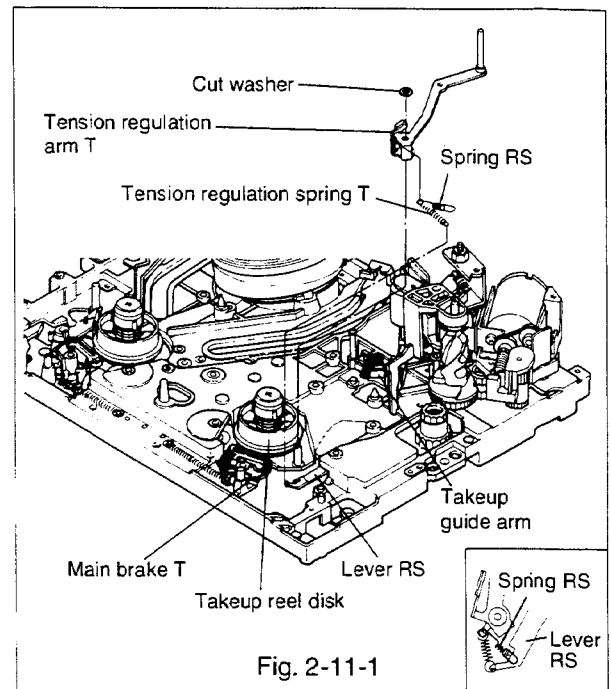


Fig. 2-11-1

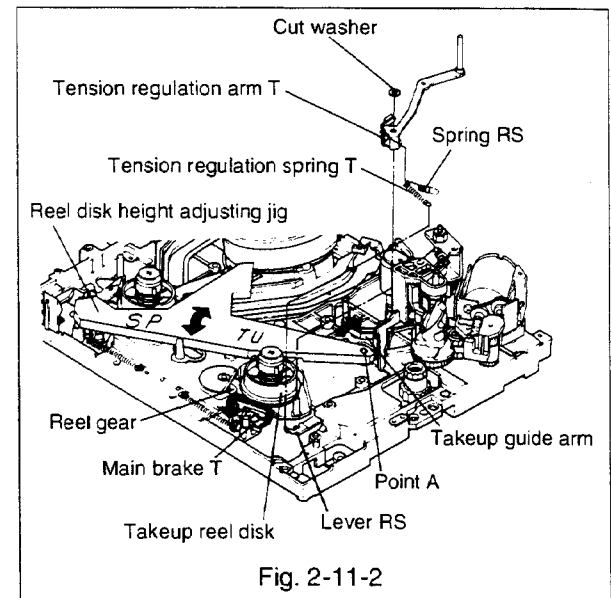


Fig. 2-11-2

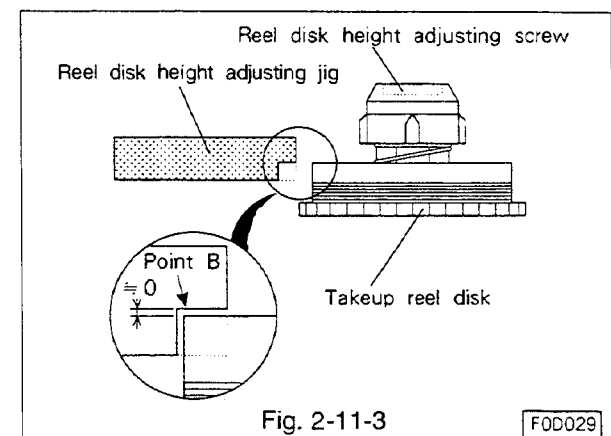


Fig. 2-11-3

F0D029

2-12 A/C Head

2-12-1 Removal (Refer to Fig. 2-12-1, 2-12-2.)

- Disconnect the connector from the PCB-A/C HEAD.(Refer to Fig. 2-12-1.)
- Remove the nut which fastens the A/C head assembly.
- Raise upwards and remove the A/C head assembly from the shaft by paying attention to the A/C arm spring which turns the A/C head assembly clockwise.
- Remove three A/C head fastening screws((a) ~ (c)) and the A/C spring shown in Fig. 2-12-2, and remove the A/C head from the A/C arm.
- Unsolder the PCB-A/C HEAD from the A/C head.(Refer to Fig. 2-12-2.)

2-12-2 Installation(Refer to Fig. 2-12-1~2-12-3.)

- Solder the PCB A/C HEAD to the A/C head.
(Refer to Fig. 2-12-2.)
- Fasten the A/C head to the A/C arm with three screws((a) ~ (c)) and the A/C spring.
Note:
Install the A/C head to the A/C arm so that the base surface of the A/C head shall be parallel to the A/C arm, and their spacing and the A/C head installation screw (c) height shall be as specified in Fig. 2-12-3.
- Assemble the A/C head assembly to the shaft while turning the A/C arm spring counter-clockwise about 60°
(Refer to Fig. 2-12-1.)
- Tighten the A/C head assembly fastening nut so that the base surface of the A/C head shall be about 7mm above the main plate surface.(Refer to Fig. 2-12-3.)
- Plug in the connector to the PCB-A/C HEAD.
(Refer to Fig. 2-12-1.)
- Conduct the A/C head adjustment and the phase adjustment as outlined in Para. 3-3 and 3-4.

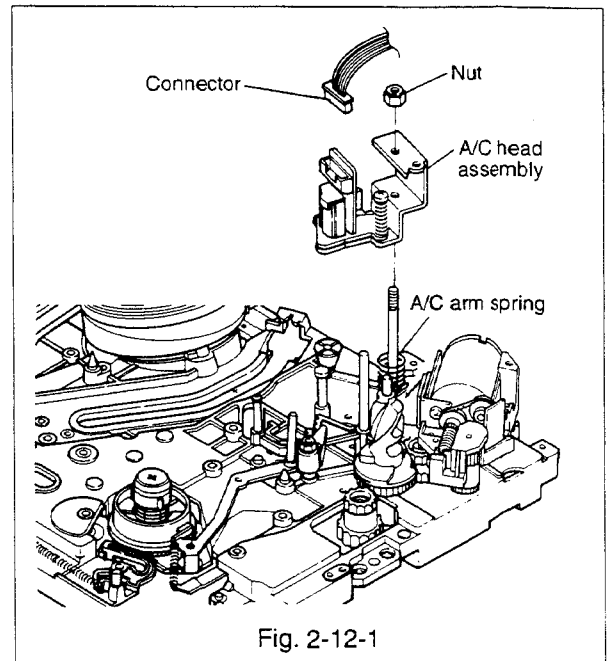


Fig. 2-12-1

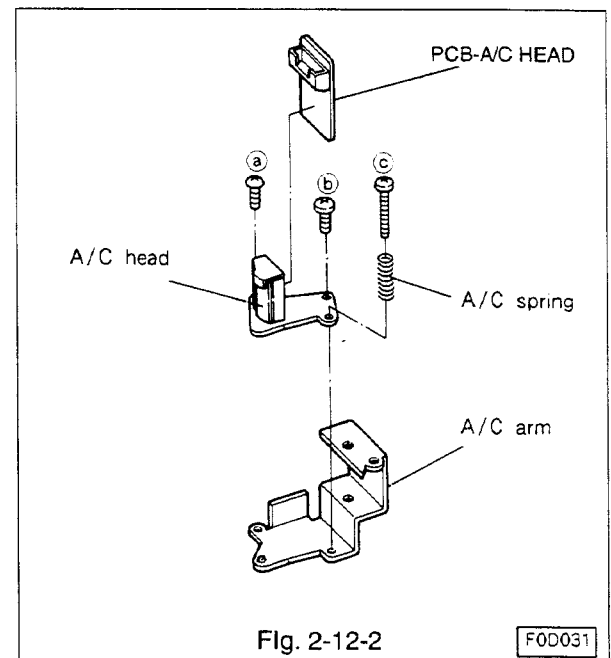


Fig. 2-12-2

F0D031

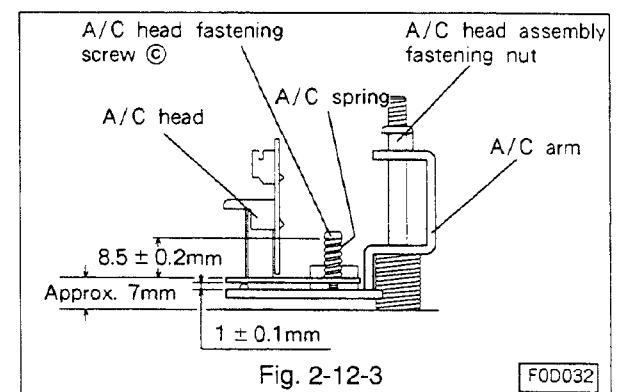


Fig. 2-12-3

F0D032

2-13 Take Up Guide Arm

2-13-1 Removal(Refer to Fig. 2-13-1.)

- A. Set the VCR in the eject mode.
- B. Remove the pinch roller arm assembly.
(Refer to Para. 2-8 " Pinch Roller ")
- C. Raise and separate the pinch roller cam and the TU-G gear arm from the shaft at the same time.
- D. Remove the takeup guide arm fastening nut. Raise and separate the takeup guide arm from the shaft with care not to lose the TU-G spring.

2-13-2 Installation(Refer to Fig. 2-13-1~2-13-3.)

- A. Install the TU-G spring and the takeup guide arm so that one end of the TU-G spring is fastened to the takeup guide arm and the other end is fastened to the hook of the main plate. Secure them with the fastening nut temporarily.
- B. Place the reel disk height adjusting jig(for the F deck) in the reference position on the main plate(Refer to Fig. 2-10-6). Insure the takeup guide arm is level with point B of the height adjusting jig(for the E deck). (Refer to Fig. 2-13-2.)
- C. Turn the takeup tension lever fully clockwise as shown in Fig. 2-13-1.
- D. Line the matching mark on the TU-G gear arm and beginning of gear section on the takeup guide arm, and line the matching mark on the pinch roller cam and center of gear on the joint gear as shown in Fig. 2-13-3, and install the pinch roller cam and the TU-G gear to the shaft at the same time.
- E. Assemble the pinch roller arm assembly to the shaft on the main plate.(Refer to Fig. 2-13-1.)
- F. Secure the pinch roller arm assembly with the pinch roller arm cap and the grip ring.

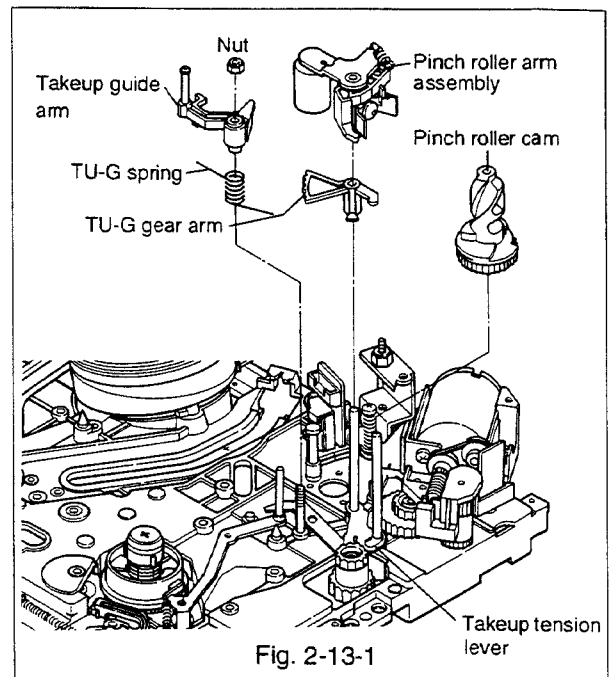


Fig. 2-13-1

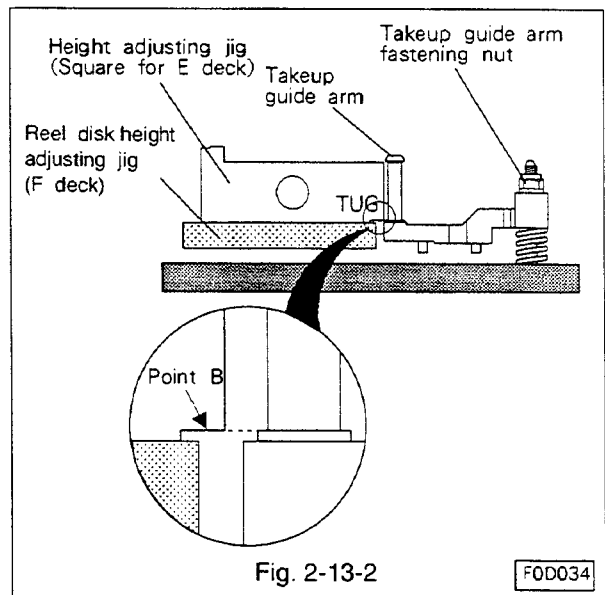


Fig. 2-13-2

F0D034

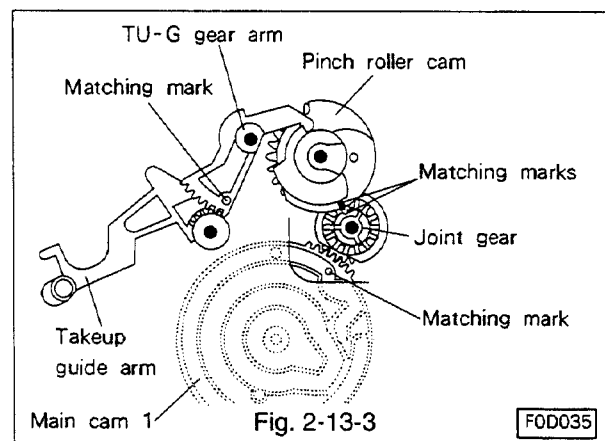


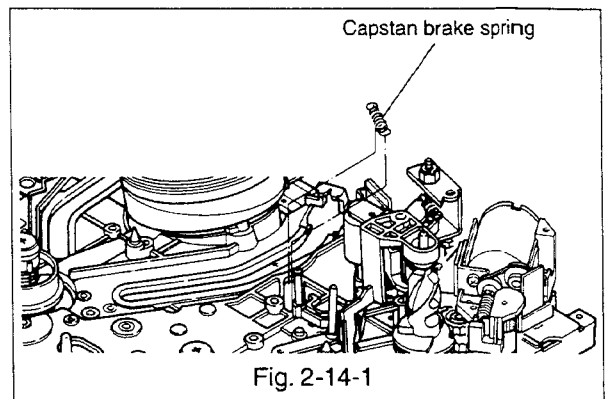
Fig. 2-13-3

F0D035

2-14 PCB-Deck(Printed Circuit Board)

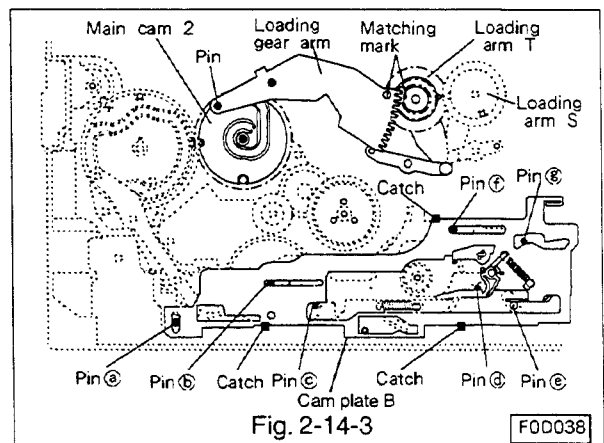
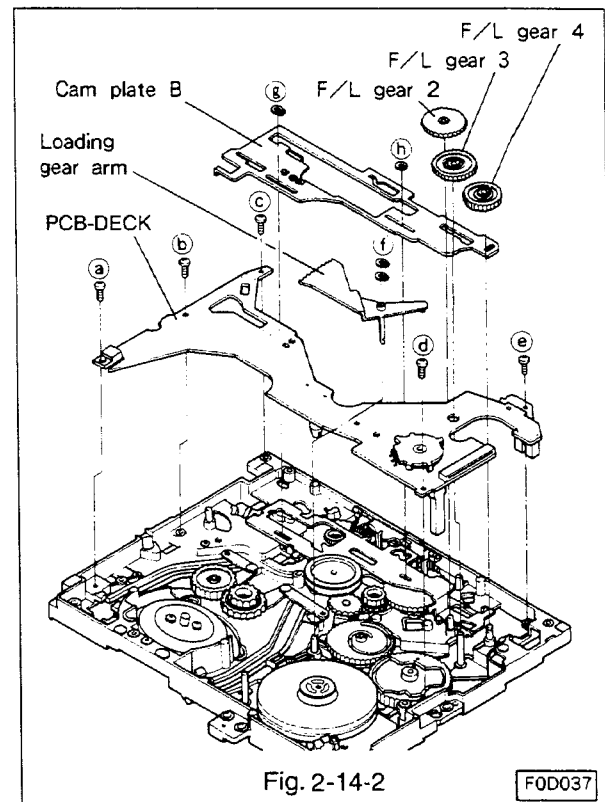
2-14-1 Removal(Refer to Fig. 2-14-1, 2-14-2.)

- Detach the capstan brake spring from the capstan brake and the loading gear arm.(Refer to Fig. 2-14-1.)
- Remove the reel belt from the bottom of the deck.(Refer to Fig. 2-5.)
- Detach two grip rings (f) shown in Fig. 2-14-2 and remove the loading gear arm.
- Unsolder the terminals of the FE head.(Refer to Fig. 2-14-1.)
- Unfasten the catches and remove the F/L gear 2, 3 and 4.(Refer to Fig. 2-14-2.)
- Remove grip ring (g) and cut washer (h), and unfasten three catches shown in Fig. 2-14-3 to remove the cam plate B.(Refer to Fig. 2-14-2.)
- Unscrew five fastening screws(a ~ e)and remove the PCB-DECK.(Refer to Fig. 2-14-2.)



2-14-2 Installation(Refer to Fig. 2-14-1~2-14-3.)

- Make certain that the mode switch is set to the eject position.(Refer to section 2-9.) Fasten the PCB-DECK with five screws and solder the FE head terminals.(Refer to Fig. 2-14-1.)
- Note:**
The safety lever is normally held leftward with a spring. Pull the safety lever forwards and install the PCB-DECK.
- Install the cam plate B by paying attention to the pin(a ~ g) positions shown in Fig. 2-14-3, and secure the plate with three catches, grip ring (g) and cut washer (h).
 - Line the matching mark on the loading arm T and that on the loading gear arm as shown in Fig. 2-14-3, and assemble the loading gear arm so that the pin of the loading gear arm shall enter the groove of the main cam 2. Secure the loading gear arm with two grip rings (f).
 - Assemble the F/L gear 2, 3, and 4 to the shafts.(Refer to Fig. 2-14-2.)
 - Install the reel belt.(Refer to Fig. 2-5.)
 - Fasten the capstan brake spring to the capstan brake and the loading gear arm from the top side of the deck.(Refer to Fig. 2-14-1.)



2-15 Positioning and Installation Sequence of Parts Around Main Cam 1 (Bottom Side of Deck) (Refer to Fig. 2-15-1~2-15-6.)

Note:

Set the VCR to the eject mode to install the main cam 1 and its peripheral parts.

- A. Line the positioning hole in lever RS to that of the main plate, and assemble lever RS to the shaft. (Refer to Fig. 2-15-1.)
- B. Line the positioning hole in lever C with that of the main plate, and assemble lever C to the shaft.
- C. Take care not to move the lever RS and lever C, assemble the main cam 1 to the shaft by lining the matching mark of the joint gear with the positioning hole of main plate. Secure the main cam 1 with the grip ring. (Refer to Fig. 2-15-2.)

Note:

The pins of the lever RS and the lever C enter the groove of the main cam 1 when the levers are lined with the positioning holes.

Make certain that the pins of the levers enter the groove of the main cam 1.

- D. Assemble the thrust washer to the pin (c) shown in Fig. 2-15-2, and install the cam plate C so that the corresponding positions of the plate match the pins (a ~ g).
- E. Fasten cam spring C to cam plate C and the cam plate holder. (Refer to Fig. 2-15-2.)
- F. Assemble lever B to the shaft so that the pin of the lever shown in Fig. 2-15-3 enters the groove of the main cam 1. Secure the lever with a grip ring.
- G. Line the positioning hole of the F/L idler lever with that of the main plate. (Refer to Fig. 2-15-3.)

Note:

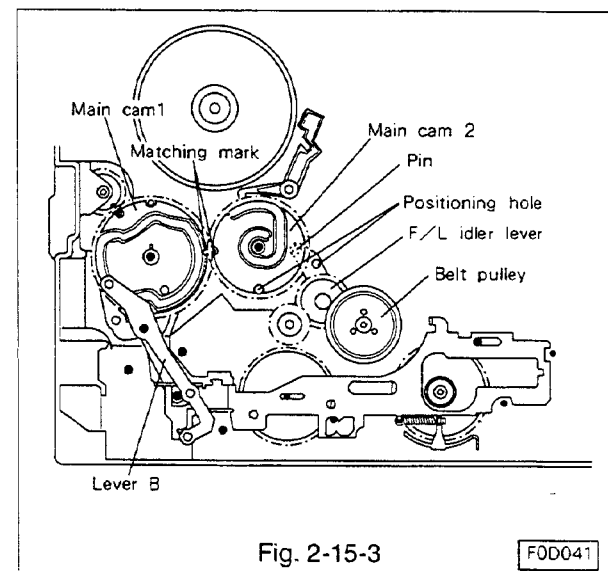
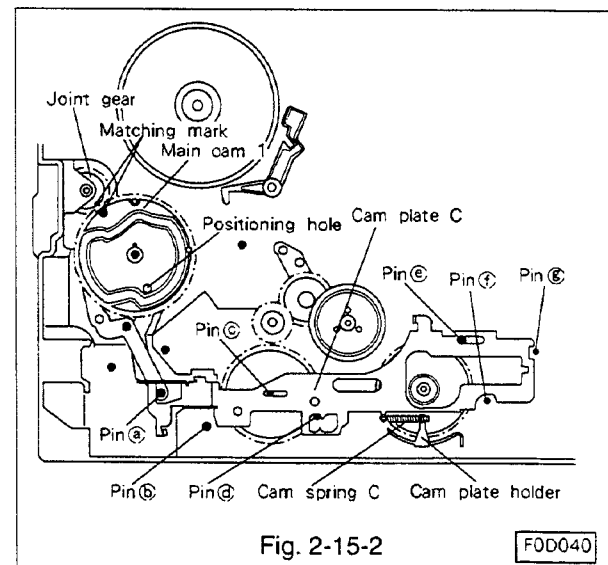
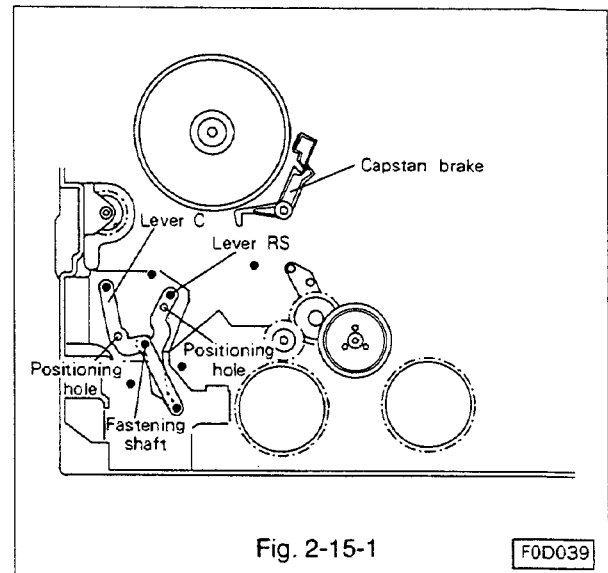
The pin of the F/L idler lever enters the groove of the main cam 2 when the positioning hole of the F/L idler lever is aligned.

Make certain that the pin of the lever enters the groove of the main cam 2.

- H. Line the matching mark of main cam 2 with that of main cam 1, and also the positioning hole of main cam 2, and assemble the main cam 2 to the shaft. (Refer to Fig. 2-15-3.)

Note:

Make certain that the pin of the F/L idler lever correctly enters in the groove of the main cam 2.

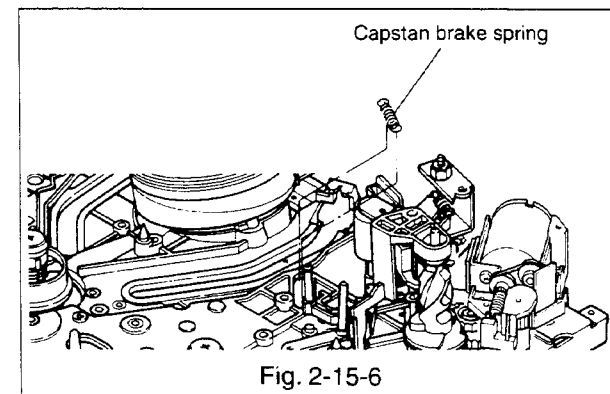
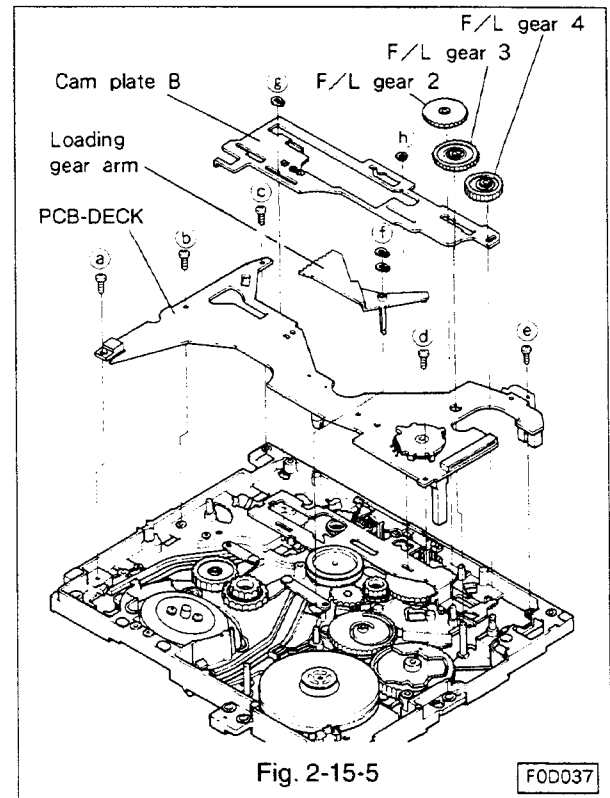
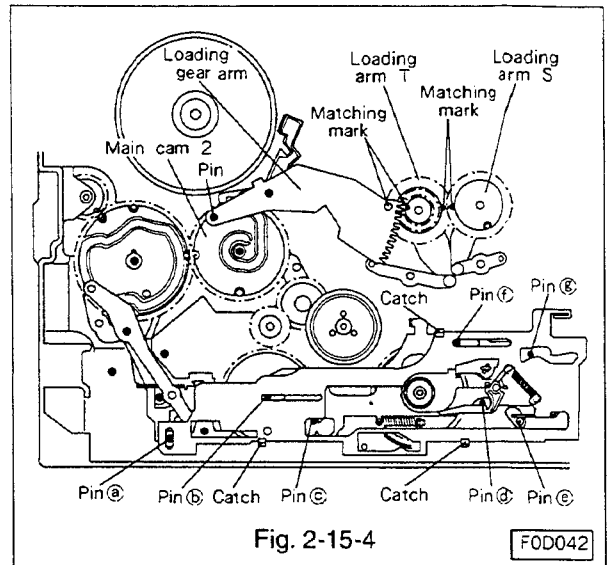


- I. Make certain that the mode switch is in the eject position. Fasten the PCB-DECK assembly with five screws and solder the FE head terminals. (Refer to Fig. 2-14-2 and 2-14-1.)

Note:

The safety lever is normally held in the leftward position by the spring. Pull the lever forwards and install the PCB-DECK assembly.

- J. Install the cam plate B so that the plate matches pins (a) ~ (g) as shown in Fig. 2-15-4, especially pin (e), and secure the plate with three clamps, cut washer (pin (b)) and grip ring (pin (f)).
- K. Line the matching mark of the loading gear arm with that of the loading gear arm as shown in Fig. 2-15-4, and assemble the loading gear arm to the shaft so that the pin of the loading gear arm enters the groove of the main cam 2. Secure arm with two grip rings (f). (Refer to Fig. 2-15-5.)
- L. Assemble the F/L gear 2, 3, and 4 to the shafts as shown in Fig. 2-15-5.
- M. Install the reel belt. (Refer to Fig. 2-5.)
- N. Fasten the tension regulation spring T and the spring RS to the tension regulation arm T and the lever RS from the top side of the deck. (Refer to Fig. 2-11-1.)
- O. Fasten the capstan brake spring to the capstan brake and the loading gear arm from the top side of the deck. (Refer to Fig. 2-15-6.)



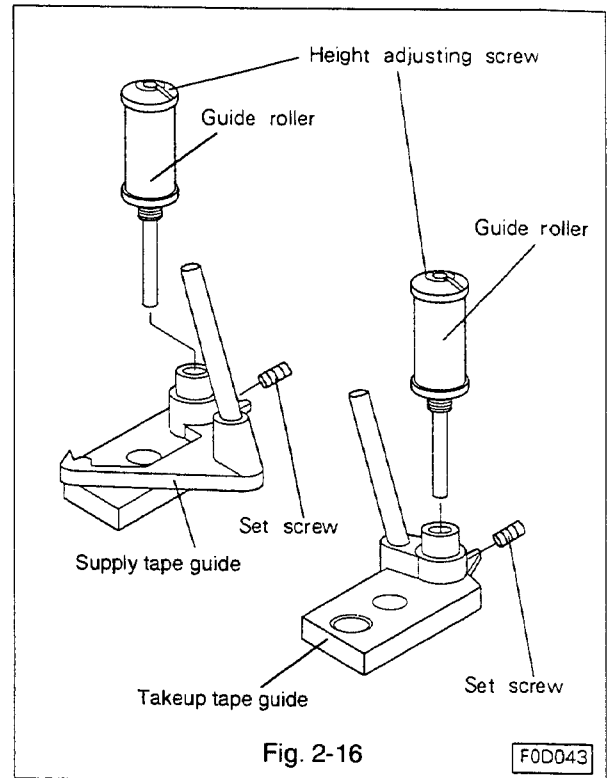
2-16 Supply and Takeup Guide Rollers

2-16-1 Removal(Refer to Fig. 2-16.)

- Remove the cassette housing as in Para. 2-1-1.
- Loosen the set screw so the guide roller turns freely.
- Loosen the guide roller height adjusting screw located at the top of the guide roller by turning counterclockwise with the height adjusting screwdriver. Raise and remove the roller from the tape guide.

2-16-2 Installation(Refer to Fig. 2-16.)

- Make certain that the fastening thread section of a new guide roller is provided with a rubber ring.
- Set the new guide roller in the tape guide fastening hole.
- Turn the guide roller slowly clockwise till it becomes heavy.
- Turn further about 1/6 turn from the point where the guide roller becomes heavy, and return the roller about one turn counter-clockwise.
- Again turn the guide roller slowly clockwise till it becomes heavy. Turn the roller further about 1/6 turn from the point where the roller becomes heavy.
- Secure the guide roller lightly with the set screw. Check and adjust the envelope as in Para. 3-2.



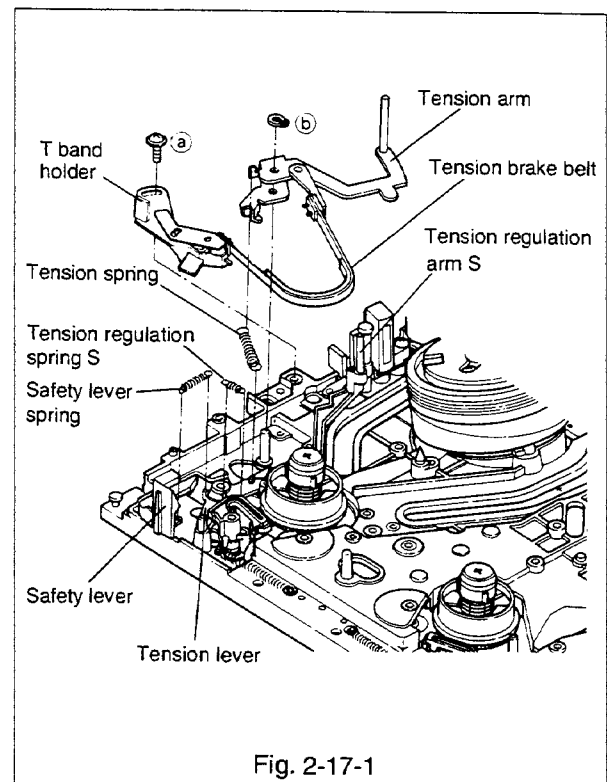
2-17 Supply and Takeup Tape Guide Assemblies

Note:

Refer to section 3-2-7 and 3-3-3 before replacing the supply or takeup tape guide assemblies.

2-17-1 Removal(Refer to Fig. 2-17-1~2-17-4.)

- Remove the cassette housing as in Para. 2-1-1.
- Detach the capstan brake spring from the capstan brake and the loading gear arm.(Refer to Fig. 2-15-6.)
- Remove the reel belt. (Refer to Fig. 2-5.)
- Secure the tension arm and the tension regulation arm S with a rubber band etc. so as to separate them from the supply guide roller.(Refer to Fig. 2-17-1.)



- E. Remove the grip ring and remove the loading gear arm.(Refer to Fig. 2-17-2.)
- F. Turn the loading arm S and T to the loading position.(Refer to Fig. 2-17-2.)
- G. Unfasten the clamp shown in Fig. 2-17-3, and remove loading arm S.
- H. Remove the loading arm T is being replaced the takeup guide assembly.
- I. Unfasten the clamp of the slider which secures the supply or takeup tape guide assembly, and remove the tape guide assembly and the slider from the main plate.(Refer to Fig. 2-17-4.)

2-17-2 Installation(Refer to Fig. 2-17-1~2-17-4.)

- A. Place a new tape guide assembly on the installation rail of the main plate and install the slider on the reverse side of the main plate so that the catch of the slider enters the fastening hole of the tape guide assembly.
- B. If the takeup tape guide is replaced, install the loading arm T first.(Refer to Fig. 2-17-2.)
- C. Install the loading arm T so that the matching mark of the loading arm S is lined with the matching mark of the loading arm T as illustrated in Fig. 2-17-2.
- D. Line the matching mark of the loading gear arm with that of the loading arm T, and assemble the loading gear arm to the shaft so that the pin of the loading gear arm enters the groove of the main cam 2. Secure the loading gear arm with two grip rings.
- E. Install the reel belt.(Refer to Fig. 2-5.)
- F. Fasten the capstan brake spring to the capstan brake and the loading gear arm from the top side of the deck.(Refer to Fig. 2-17-1.)
- G. Install the cassette housing as in Para. 2-1-2.

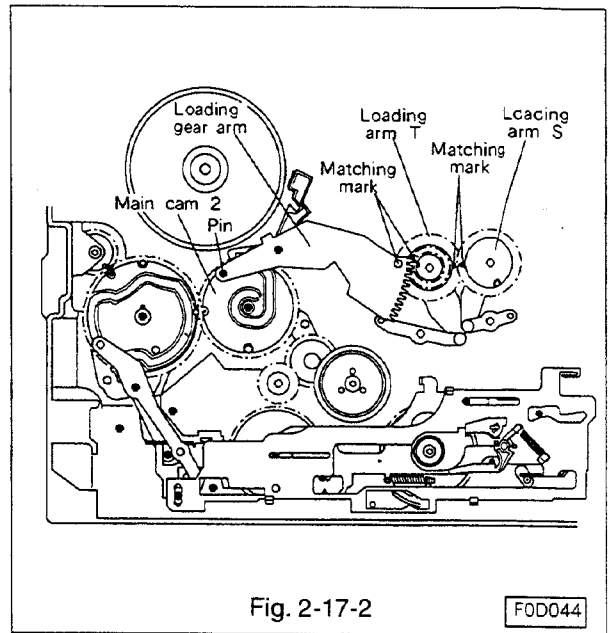


Fig. 2-17-2

F0D044

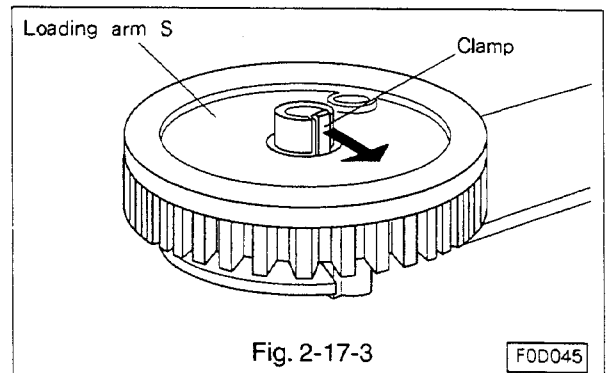


Fig. 2-17-3

F0D045

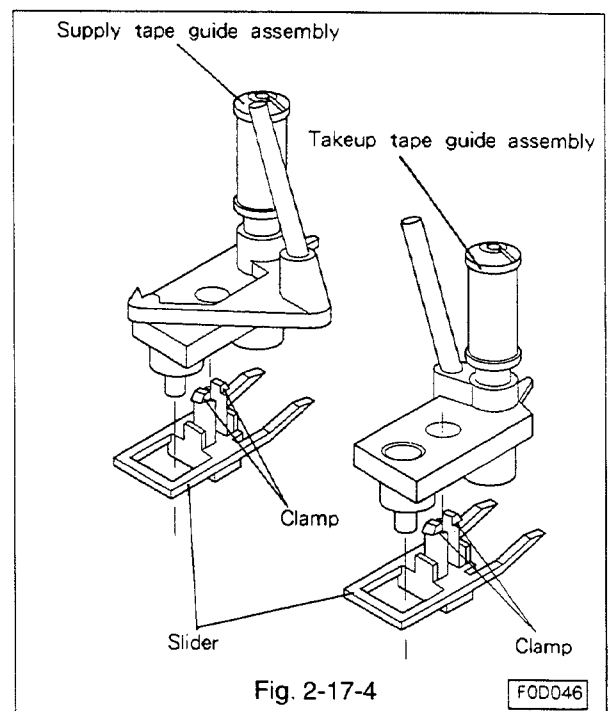


Fig. 2-17-4

F0D046

3. Interchangeability Adjustment of Mechanism

Note:

Tracking may need to be preset in the inter-changeability adjustment of the mechanism.

Digital tracking should be preset. To preset, short circuit TP5A and TP5B on the PCB-MAIN.

Note:

The adjustment is conducted in the playback mode, using the stair step signal of the alignment tape, connect an oscilloscope to TP2A and external Trig. to TP2H, unless other-wise specified.

3-1 Adjustment of Back Tension and Tension Pole Position(Refer to Fig. 3-1.)

Run a blank tape for several minutes to break in the reel disks and the transport before beginning the adjustment.

- A. Set the back tension measuring jig and set the VCR to the playback mode.
- B. When the running of the tape becomes steady, make certain that the tension arm check hole is within the M/P hole of the main plate ($0 \pm 0.5\text{mm}$) or the interval between the centre of tension pole and the centre of Supply guide pole is $2.0 \pm 0.5\text{mm}$.
- C. If neither the centre of Tension pole nor the tension arm check hole is in position, loosen the T band holder fastening screw lightly and move the T band holder so that the condition specified by the para. B is satisfied.
- D. On completion of adjustment, tighten the T band fastening screw.
- E. Make certain that the reading of the back tension measuring jig is $50 \pm 6\text{g-cm}$.
- F. When the running of the tape is steady, check visually to make certain that the deflection of the Tension pole is 1mm or less.

Note:

Slight fluctuation of back tension may be tolerated, however if fluctuation exceeds 5g-cm , the reel disk etc. may be defective. Examine and correct the defect.

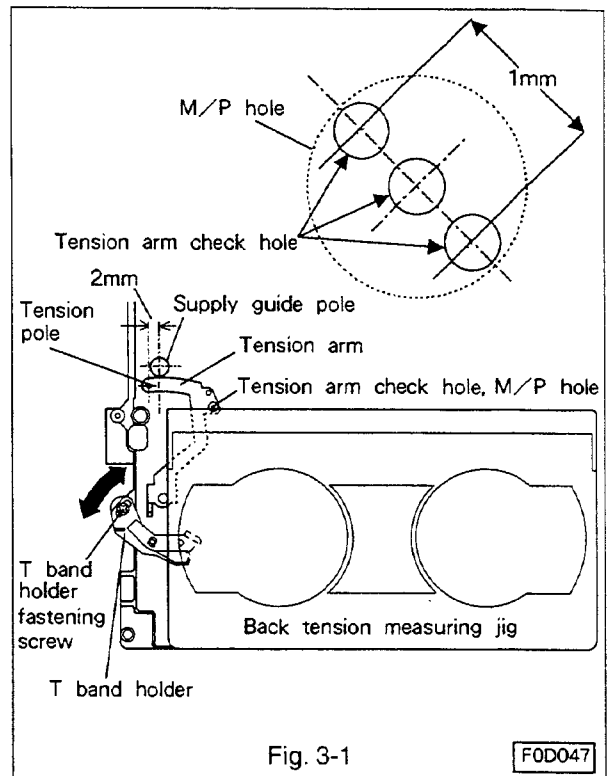


Fig. 3-1

F0D047

3-2 Check and Adjustment of FM Envelope

3-2-1 Guide Roller Adjustment(Refer to Fig. 3-2-1.)

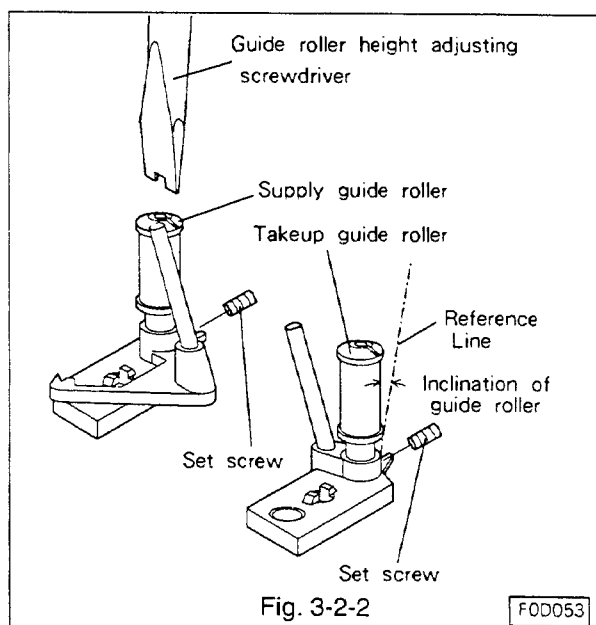
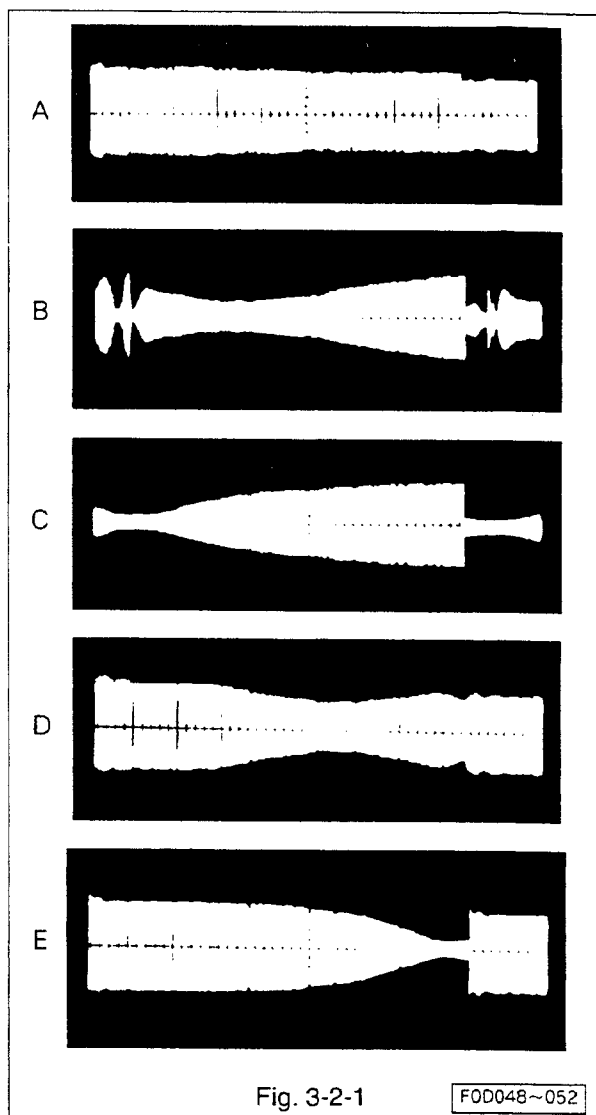
- A. Set the VCR to the playback mode.
 - B. Preset tracking.
 - C. Check if the FM waveform is flat like A shown in Fig. 3-2-1.
 - D. Adjust the height of the supply guide roller as in 3-2-2 if the leading portion (the entry side of the drum)of the FM waveform is not flat like B or C.
- Adjust the height of the takeup guide roller as in 3-2-3 if the trailing portion (the exit side of the drum)is not flat like D or E.

3-2-2 Adjustment of Supply Guide Roller Height (Refer to Fig. 3-2-1, 3-2-2.)

- A. Loosen the set screw to such a degree so the supply guide roller turns lightly.(Refer to Fig. 3-2-2.)
- B. The supply guide roller is low if the leading portion(the entry side of the drum) of the FM waveform is like B, and high if like C. Adjust the height of the roller by turning the adjusting screw at the top of the roller so that the FM waveform shall be flat like A.
 - Turn the adjusting screw counterclockwise if the roller is low.
 - Turn the adjusting screw clockwise if the roller is high.
- C. Carry out the coarse adjustment of phase as in 3-2-4.

3-2-3 Adjustment of Takeup Guide Roller Height (Refer to Fig. 3-2-1, 3-2-2.)

- A. Loosen the set screw to such a degree as the takeup guide roller turns lightly.(Refer to Fig. 3-2-2.)
- B. The takeup guide roller is low if the trailing portion(the exit side of the drum) of the FM waveform is like D, and high if like E. Adjust the height of the roller by turning the adjusting screw at the top of the roller so that the FM waveform shall be flat like A.
 - Turn the adjusting screw counterclockwise if the roller is low.
 - Turn the adjusting screw clockwise if the roller is high.
- C. On completion of height adjustment, adjust the azimuth and height of the A/C head as in 3-3-2.
- D. Coarsely adjust the phase as in 3-2-4.



3-2-4 Coarse Phase Adjustment
(Refer to Fig. 3-2-3, 3-2-4.)

- A. Set the VCR to the playback mode.
- B. Preset tracking.
- C. Check the FM waveform after checking and adjusting the guide rollers.
- D. If the amplitude of the FM waveform is narrow like F because of out of phase, adjust the phase adjusting nut so that the amplitude of the FM waveform is maximum.

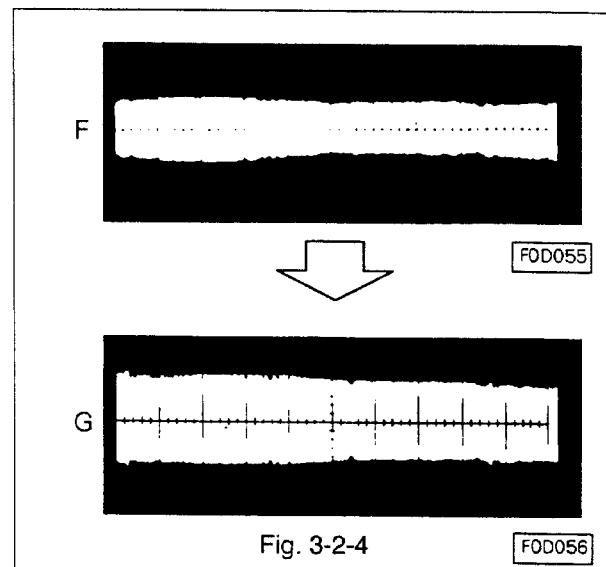
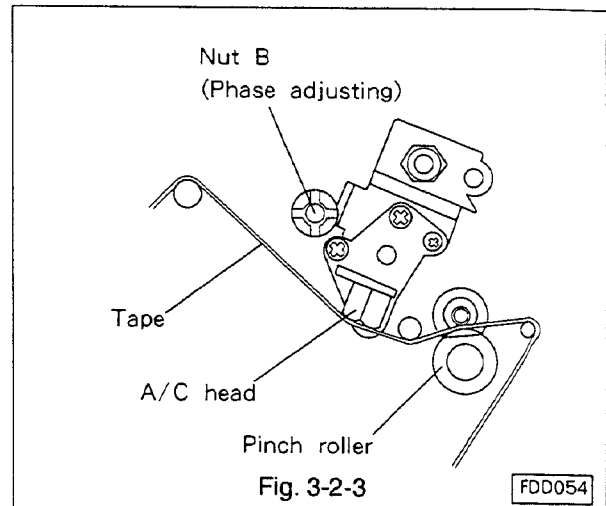


Fig. 3-2-4

3-2-5 Check of FM Waveform Flatness
(Refer to Fig. 3-2-5.)

- A. Set the VCR to the playback mode.
- B. Set the tracking switch to the manual mode. Vary tracking and check if the amplitude changes and the waveform remains flat.
- C. Adjust tracking in the manual mode so that the amplitude is maximum, and adjust the oscilloscope so that the amplitude is '5' on the scale of the oscilloscope.
- D. Adjust tracking so that the amplitude at the middle (around the point 'b') of the FM waveform is about 80% ('4' on the scale of the scope) of the maximum amplitude. Make certain that the amplitudes at points 'a' and 'c' satisfy the requirements given in Fig. 3-2-5.
- E. If deviating from the requirements, conduct the check and adjustment of the FM envelope beginning with 3-2.

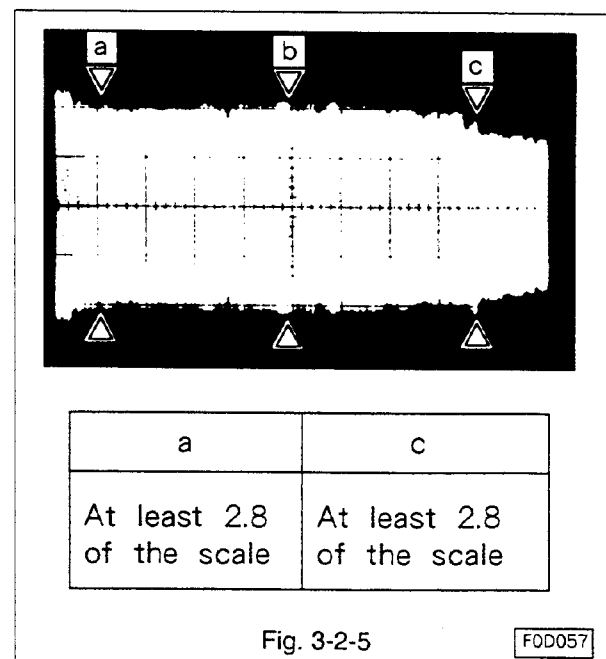


Fig. 3-2-5

3-2-6 Check 1: Tape Running Condition on Guide Rollers(Refer to Fig. 3-2-6.)

- A. Set the VCR to the playback mode.
- B. Visually check if there is a space between the tape and the lower flange of the supply and the take up guide rollers.
- C. If not, replace the tape guide as in 3-2-7.
- Note:**
In this case the tape guide should be replaced with the tape guide which has a larger inclination.
- D. If the supply tape guide is replaced, check the guide roller as in 3-2-1.
If the take up tape guide is replaced, check the guide roller as in 3-2-3, and the waveform flatness as in 3-2-5
- E. Load and unload the tape several times to make certain that the flatness of the FM waveform does not change.
- F. If changes occur, check the A/C arm shaft for looseness. If not free, replace the A/C arm and adjust the audio/control head as in 3-3.

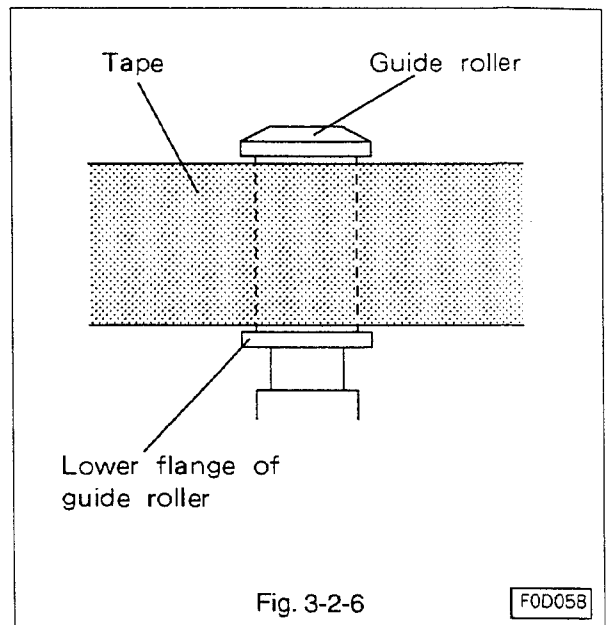


Fig. 3-2-6

3-2-7 Replacement of Tape Guides

- A. Identify the Item Number of the tape guide to be replaced.
This is done by observing the marking present on the die-cast portion of the tape guide base, and comparing that marking to Fig. 3-2-7.
- B. If the Item Number of the tape guide presently installed is a '2', replace the guide with an Item Number '1' guide.(Part No.635B059O10)
- C. If the Item Number of the present tape guide is a '1', replace the guide with an Item Number '3' guide.
- D. If the Item Number of the present tape guide is a '3', replace the guide with other Item Number '3' guide.
- E. Once the tape guide is replaced, resume alignment starting with 3-2-1.

3-2-8 Check 2: Tape Running Condition on Guide Rollers

- A. Set the VCR to the playback mode.
- B. Press the head of the supply guide roller and the take up guide roller lightly, and release the roller. Check if the FM waveform is quickly restored to the previous level.
- C. If the FM waveform is not restored quickly, replace the tape guide as in 3-2-7.
- D. If the supply tape guide is replaced, check the guide roller as in 3-2-1.
If the takeup tape guide is replaced, check the guide roller as in 3-2-1, and check the FM waveform as flatness as in 3-2-5
- E. If satisfactory, tighten the set screw of the guide roller on the supply side and the take up side.

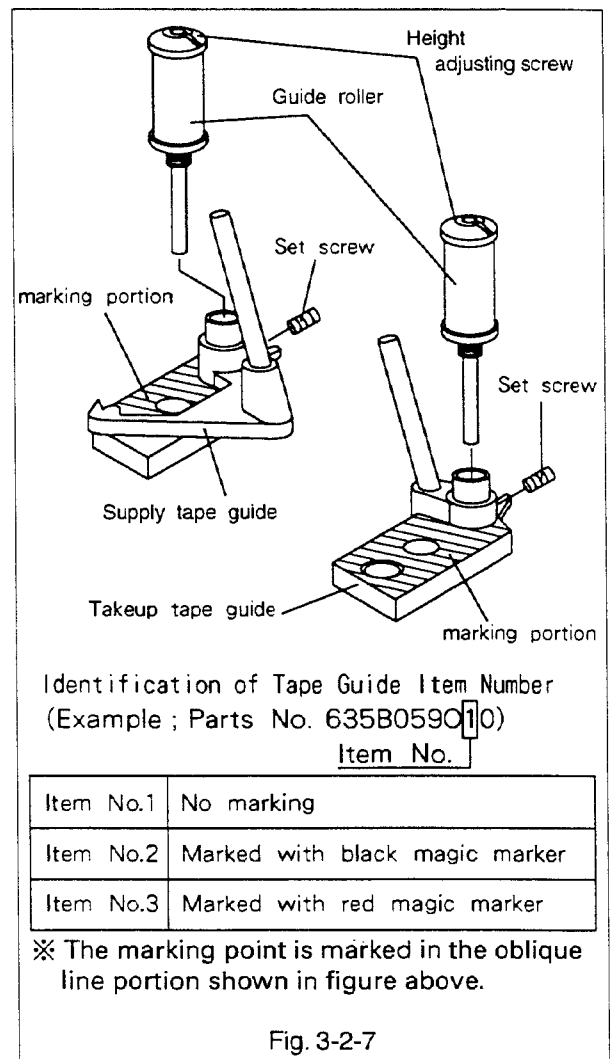


Fig. 3-2-7

3-3 Adjustment of Audio/Control Head

3-3-1 Adjustment of A/C Head Slant

(Refer to Fig. 3-3-1.)

- Play back a blank tape.
- Turn the screw C slowly clockwise to crease the bottom edge of the tape slightly by the lower flange of the takeup guide pole.
- Turn the screw C slowly counterclockwise to eliminate the crease of the bottom edge of the tape.
- Turn the screw C slowly clockwise again and stop turning just before the tape is creased.

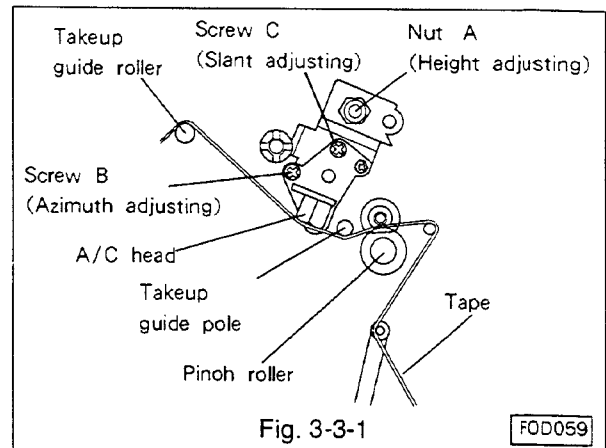


Fig. 3-3-1

3-3-2 Adjustment of A/C Head Azimuth and Height(Refer to Fig. 3-3-1~3-3-3.)

- Using stair step signal of alignment tape, connect an oscilloscope to the audio output terminal and set the VCR to the playback mode.
- Turn the nut A (height adjusting) and the screw B (azimuth adjusting) so that the audio output level is maximum.
- Turn the A/C head counterclockwise and release it to make certain that the audio output level does not change.
- If the level changes, check if the A/C arm shaft is loose. If not free, replace the A/C arm and adjust the slant of the A/C head as in 3-3-1 and the azimuth and height of the A/C head from beginning.
- Apply a force lightly to the A/C head shaft in the direction of A and A' of the arrow shown in Fig. 3-3-3, to make certain that the audio output level remains at maximum level and does not change.
- If the level changes, turn the nut A (height adjusting) so that the audio output level is maximum. Apply a force lightly to the A/C head shaft in the direction of B and B' of the arrow shown in Fig. 3-3-3 and adjust so that the sound output level is maximum.
- Check the sound output level in the playback mode to make sure that the fluctuation of the level is less than 2dBp-p.
- If the fluctuation exceeds 2dBp-p, adjust the slant of the A/C head and the azimuth and height of the head.
- If this is still not satisfactory, replace the takeup tape guide as outlined in 3-3-3.

Note:

In this case the tape guide should be replaced with a guide which has less inclination.

- On completion of the above adjustment, adjust phase as in 3-4.

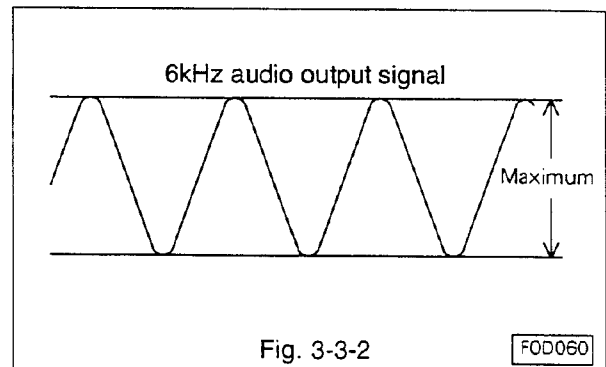


Fig. 3-3-2

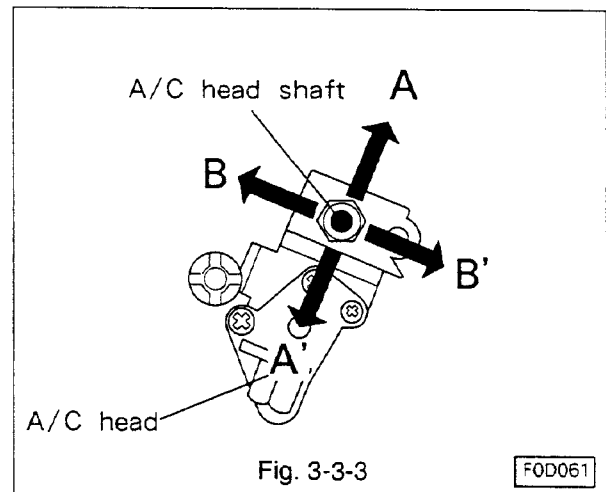


Fig. 3-3-3

Identification of Tape Guide Item Number
(Example ; Parts No. 635B060010)
Item No. 10

Item No.1	No marking
Item No.2	Marked with black magic marker
Item No.3	Marked with red magic marker

※The marking points are marked in the tops of the Takeup and Supply tape guides.(Refer to Fig. 3-2-7)

Fig.3-3-4

3-3-3 Replacement of Tape Guides

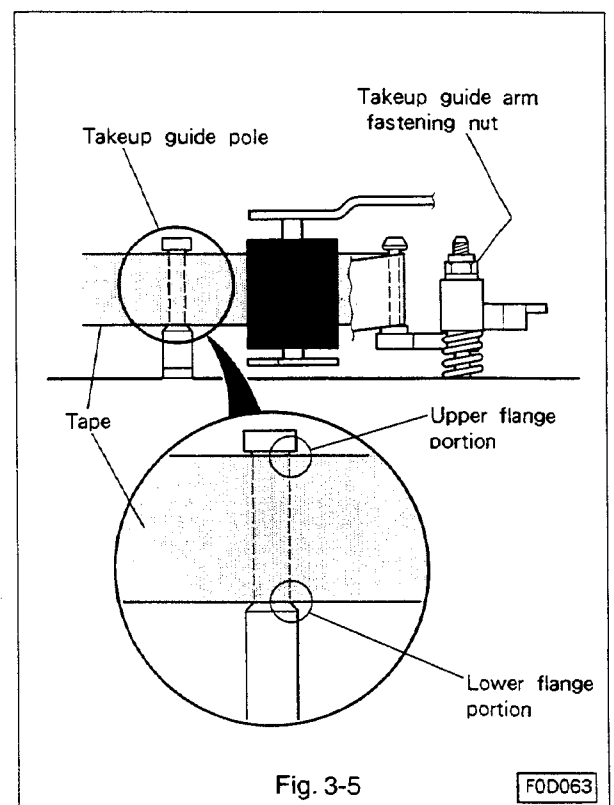
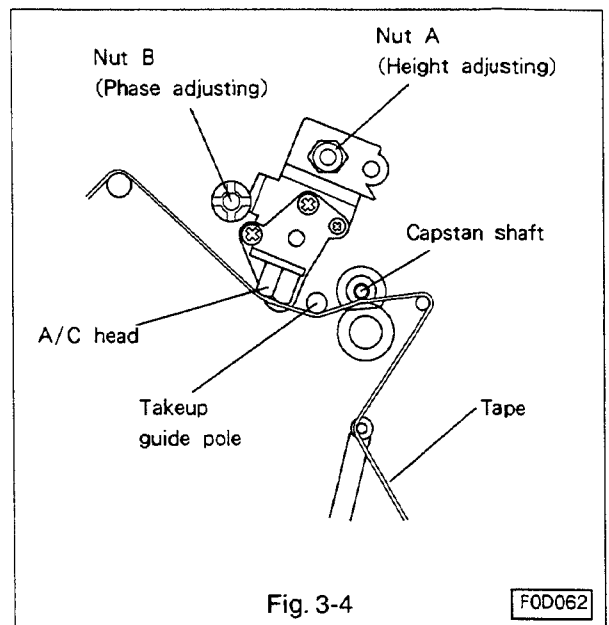
- A. Identify the Item Number of the Tape Guide to be replaced. This is done by observing the marking present on the die-cast portion of the Tape Guide base, and comparing that marking to Fig. 3-3-4.
- B. If the Item Number of the tape guide presently installed is a '3', replace the guide with an Item Number '1' guide.
- C. If the Item Number of the present tape guide is a '1', replace the guide with an Item Number '2' guide.
- D. If the Item Number of the present tape guide is a '2', replace the guide with other Item Number '2' guide.
- E. Once the tape guide is replaced, resume alignment starting with 3-2-1.

3-4 Phase Adjustment(Refer to Fig. 3-4.)

- A. Set the VCR to the playback mode.
- B. Preset tracking.
- C. Turn the phase adjusting nuts to make the amplitude of the FM waveform maximum.
Note:
Do not turn the phase adjusting nut more than one turn in either direction.
- D. Turn the A/C head counterclockwise and return to make sure that the amplitude of the FM waveform is the same as that before turning the head.
- E. If the amplitude changes, check the A/C arm shaft if loose. If not free, replace the A/C arm and adjust the A/C head as in 3-3 and the phase as in this section from beginning.
- F. Load and unload the tape several times to make certain that the amplitude of the FM waveform does not change.

3-5 Adjustment of Takeup Guide Arm Height (Refer to Fig. 3-5.)

- A. Run a final portion of E-240 blank tape in the reverse search mode.
- B. Adjust the height of the takeup guide pole by turning the height adjusting nut so that the tape shall not be creased at the upper and the lower flange portion of the take up guide pole.
Note:
Set the adjusting nut in the screwing-in direction.
Do not turn the nut more than one turn in either direction.
- C. Eject the cassette tape and set to the reverse search mode again to make certain that the tape is not creased at the upper and the lower flange portion of the takeup guide pole.
- D. Set to the playback mode and be sure that the tape is not creased at the upper and the lower flange portion of the takeup guide pole.

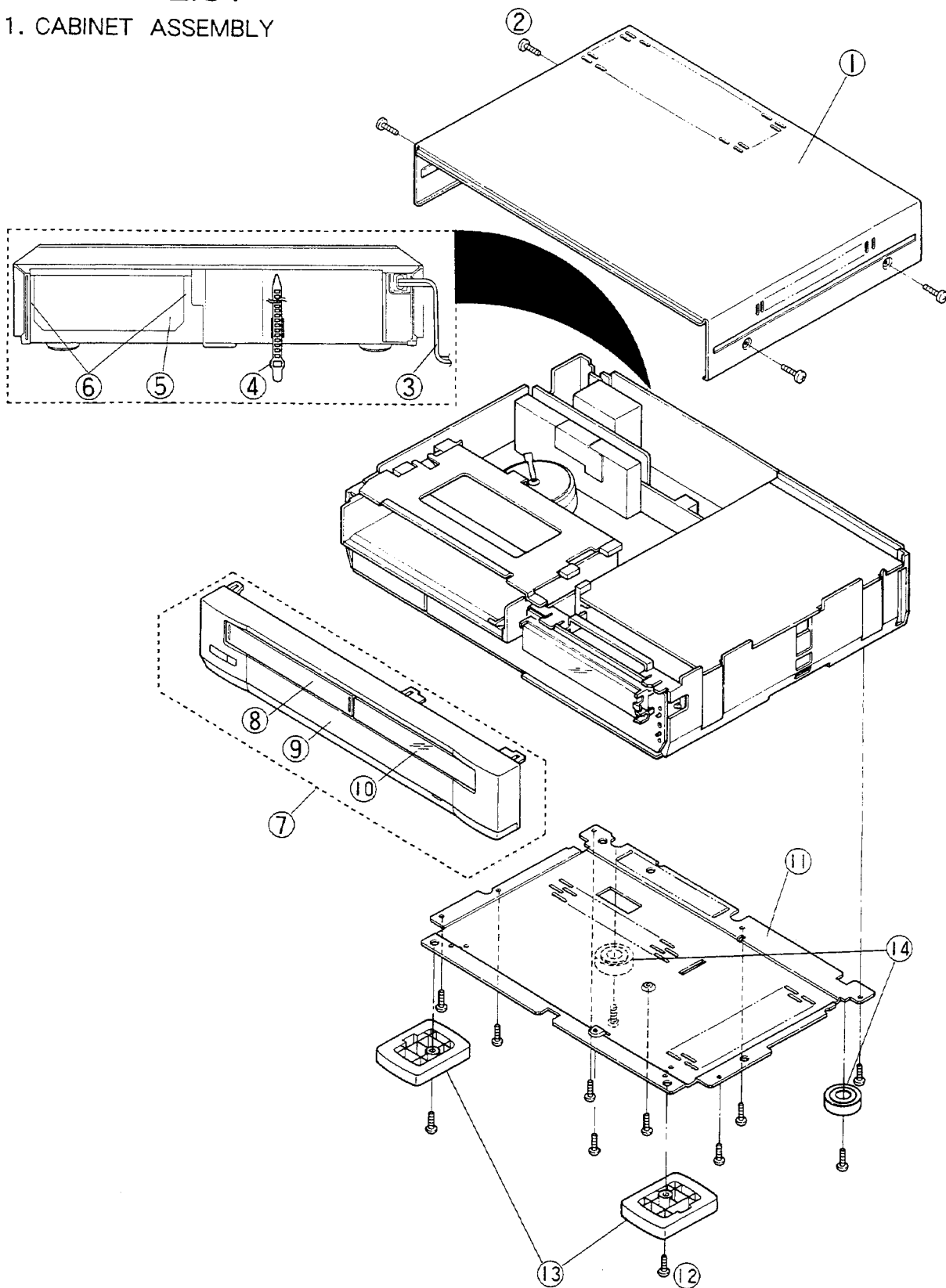


KEY TO ABBREVIATIONS

A/C	: Audio/Control	LIM	: Limiter
ACC	: Automatic Colour Control	LPF	: Low-Pass Filter
A.E	: Audio Erase	LM	: Loading Motor
AFC	: Automatic Frequency Control	MDA	: Motor Drive Amplifier
AFT-D	: Automatic Fine Tuning Door Switch	MC	: Mechanical Control
AGC	: Automatic Gain Control	MIC	: Microphone
AL	: After Loading	MOD	: Modulator
AMP	: Amplifier	OPE	: Operation
ANT	: Antenna	OSC	: Oscillator
A-PB	: Audio-Playback	PB	: Play Back
A-REC	: Audio-Recording	PG	: Pulse Generator
ALC	: Automatic Level Control	P/R-SW	: P.B/REC-Switch
BPF	: Band-Pass Filter	PCB	: Printed Circuit Board
B/W	: Black and White	PIC	: Picture Control
BS	: Band Switch	REC	: Recording
CASS	: Cassette	REF	: Reference
CP	: Capstan	RIS	: Record Inhibit Switch
CP-FO	: Capstan-Frequency Generator	REW	: Rewind
CP-F/R	: Capstan-Forward/Reverse	REG	: Regulator
CP-M	: Capstan-Motor	RS	: Reverse Search
CONV	: Converter	SENS	: Sensor
CTL	: Control	SM	: Supply Motor
C-LAMP	: Cassette Lamp	S/P	: Still/Pause
C-I LAMP	: Cassette Indicator Lamp	SS	: Speed Search
DAL	: Delay-After Loading	STBY	: Stand By
DEMOD	: Demodulator	S & H	: Sample & Hold
DET	: Detector	SYNC SEP	: Sync Separator
DL	: Delay Line	TM	: Take up Motor
DL-REV	: Delay Reverse	T-REC	: Timer-Recording
DL-FWD	: Delay Forward	T.P	: Test Point
DOC	: Drop Out Compensator	TR	: Transistor
EF	: Emitter Follower	TU-P	: Tuner-Power
EMPHA	: Emphasis	UL	: Unloading
EO	: Equalizer	VS	: Voltage Synthesizer
EE	: Electronic-Electronic	V.SYNC	: Vertical Sync
ES	: End Sensor	VCO	: Voltage Controlled Oscillator
FE-H	: Full Erase Head	VXO	: Variable Crystal Oscillator
FF	: Flip Flop or Fast Forward	W/D	: White/Dark
FG	: Frequency generator	X'OSC	: Crystal Oscillator
FL-SW	: Front Loading Switch	Y/C	: Luminance/Chrominance
FLM	: Front Loading Motor		
F/R-SW	: FF/Rewind Switch		
G	: Ground		
HE-1	: Hall Element-1		
HE-2	: Hall Element-2		
H-LED	: Humidity-LED		
H-SENS	: Humidity-Sensor		
HPF	: High-Pass Filter		

PARTS LIST

1. CABINET ASSEMBLY

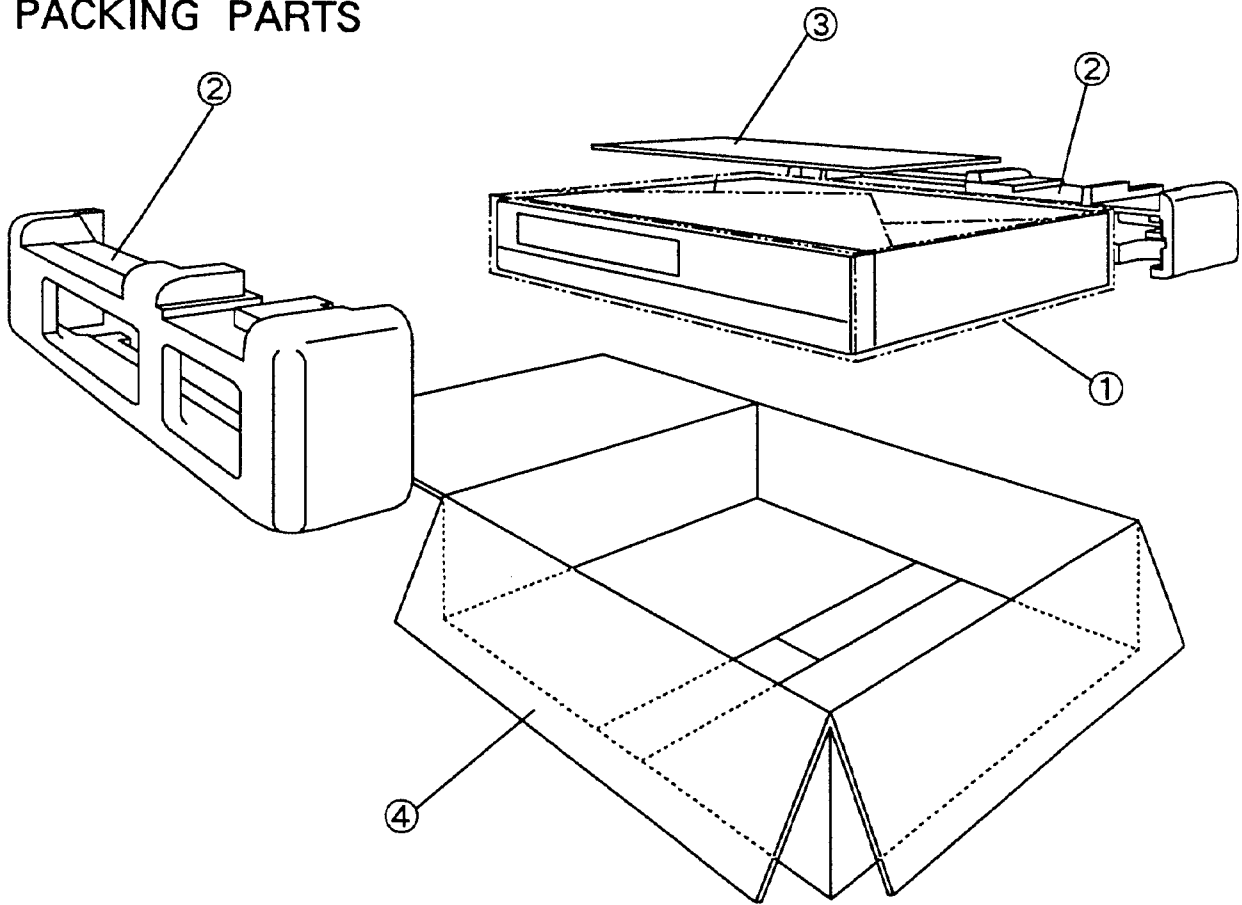


Note:

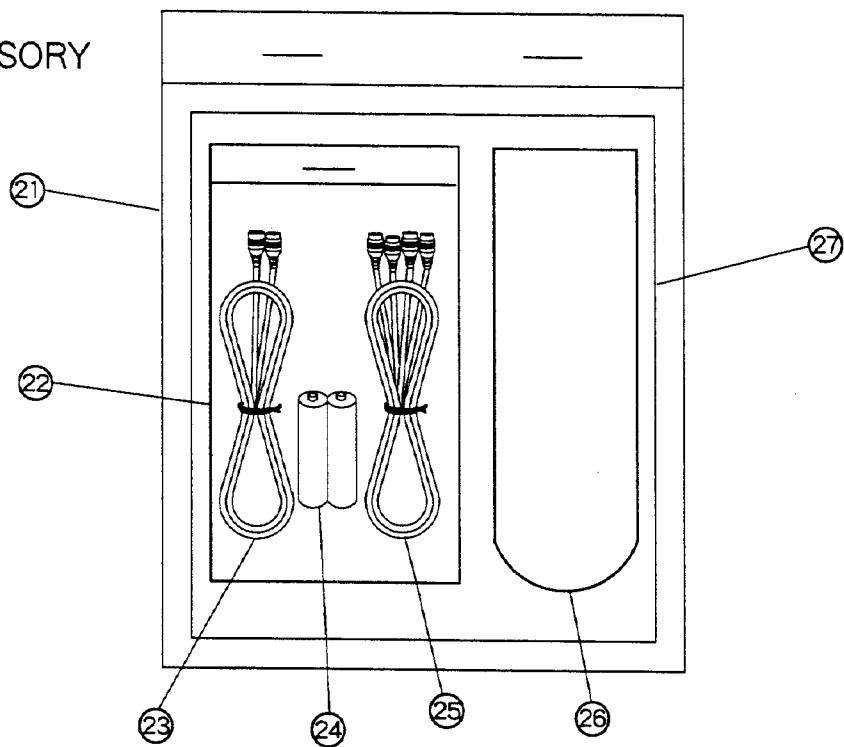
Broken AC power cord must be exchanged with a new original power cord.

ITEM NO.	PARTS NO.	PARTS NAME	DESCRIPTION
CABINET ASSEMBLY			
1	968C020090	TOP COVER ASSY	
2	669D223080	SCREW	3X10
3	246C101020	AC POWER CORD	[B, IR]
3	246C101010	AC POWER CORD	[E, Y]
4	621C027010	CORD BAND	
5	761B170070	ANTENNA COVER	
6	669D359040	SCREW	3X12
7	701B261030	FRONT UNIT	[B, E, IR]
7	701B261020	FRONT UNIT	[Y]
8	702B855090	CASSETTE DOOR	
9	752C010030	DOOR PANEL	[B, E, IR]
9	752C010020	DOOR PANEL	[Y]
10	702B854010	TIMER PANEL	
11	590A267010	BOTTOM PANEL	
12	669D220030	SCREW	3X10 46LA005
13	771B080010	INSULATOR-F	
14	771C134010	INSULATOR-R	

2. PACKING PARTS



ACCESSORY



ITEM NO.	PARTS NO.	PARTS NAME	DESCRIPTION
PACKING PARTS			
1	831D190030	PACKING SHEET	800X800
2	803A319010	PACKING CUSHION	
3	-----	ACCESSORY	
4	802B394070	PACKING CASE	[B]
4	802B394080	PACKING CASE	[E]
4	802B394090	PACKING CASE	[IR]
4	802B394010	PACKING CASE	[Y]
	831D198020	PACKING BAG	FOR AC POWER CORD
ACCESSORY			
21	B31D181020	PACKING BAG	375X250X0.06
22	B31D110080	PACKING BAG	
23	242D231030	CABLE	1.5m
24	-----	BATTERY	
25	242C938010	PHONO CABLE (2PIN)	1.5m
26	939P480010	REMOTE HAND UNIT	
27	872C057060	INSTRUCTION BOOK	[B]
27	B72C059040	INSTRUCTION BOOK	[E]
27	B72C093040	INSTRUGTION BOOK	[IR]
27	872C057070	INSTRUCTION BOOK	[Y]

3. ELECTRICAL PARTS

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION		SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	
INTEGRATED CIRCUITS									
IC101	272P863010	IC	TDA9800		Q 2C7	260P805030	CHIP TRANSISTOR	2SC3053-D	
IC102	266P192010	IC	LA7910	[E, IR, Y]	Q 2C8	260P805030	CHIP TRANSISTOR	2SC3053-D	
IC201	272P221020	IC	XRA7254S		Q 2C9	260P605030	CHIP TRANSISTOR	2SC3053-D	[IR]
IC2A0	272P701020	IC	LA7393A		Q 2D0	260P805030	CHIP TRANSISTOR	2SC3053-D	
IC2A1	272P702010	IC	LC8992		Q 2D1	260P806010	CHIP TRANSISTOR	DTA124EK	[IR]
IC2A3	272P265010	IC	BA7021		Q 2D4	260P802020	CHIP TRANSISTOR	2SA 1235-F	
IC2A4	272P325020	IC	NUM2235S		Q 2D5	260P805030	CHIP TRANSISTOR	2SC3053-D	
IC310	272P234010	IC	LA7295		Q 2D6	260P255040	TRANSISTOR	2SA950-Y	
IC3A0	272P845010	IC	AN3316K		Q 2E1	260P562040	TRANSISTOR	2SA952-K	
IC3000	272P844020	IC	AN3976NF		Q 2E3	260P802020	CHIP TRANSISTOR	2SA 1235-F	
IC3001	266P419010	IC	M5223P		Q 2P0	260P802020	CHIP TRANSISTOR	2SA 1235-F	
IC4A0	274P159020	IC	BU2835AS		Q 2P1	260P805030	CHIP TRANSISTOR	2SC3053-D	
IC4A1	272P079010	IC	NUM2902M		Q 2P2	260P805030	CHIP TRANSISTOR	2SC3063-D	
IC4A2	272P235010	IC	TA7291S		Q 2P3	260P806010	CHIP TRANSISTOR	DTA124EK	[IR]
IC501	274P163010	IC	M35010-051SP		Q 2P4	260P805030	CHIP TRANSISTOR	2SC3053-D	[IR]
IC5A0	274P180010	IC	M37424M8-321SP		Q 2P5	260P807010	CHIP TRANSISTOR	DTC124K	
IC5A2	272P079010	IC	NUM2902M		Q 2P6	260P606010	CHIP TRANSISTOR	DTA124EK	
IC5A3	263P611010	IC	MC14011BF		Q 2P7	260P607010	CHIP TRANSISTOR	DTC124K	
IC651	272P494010	IC	M52063SP	[IR]	Q 2R2	260P805030	CHIP TRANSISTOR	2SC3053-D	
IC750	272P551010	IC	IC IR3P72	[Y]	Q 2S1	260P806010	CHIP TRANSISTOR	DTA124EK	
IC7A0	272P666010	IC	TB1210F	[B, E, IR]	Q 2S3	260P807010	CHIP TRANSISTOR	DTC124K	
IC7A1	266P419010	IC	M5223P	[B, E, IR]	Q 2S4	260P807010	CHIP TRANSISTOR	DTC124K	
IC7A2	272P284010	IC	TD6710AN	[B, E, IR]	Q 310	260P629060	TRANSISTOR	2SC3331-S, T, U	
IC7A3	272P667010	IC	AFS816F14000A1	[B, E, IR]	Q 3000	260P522010	TRANSISTOR	2SC3068	
IC7A4	266P982010	IC	AN608P	[B, E, IR]	Q 3001	260P522010	TRANSISTOR	2SC3068	
IC7A5	266P982010	IC	AN608P	[B, E, IR]	Q 3002	260P603010	TRANSISTOR	DTA124ES/UN4112	
IC7A6	266P982010	IC	AN608P	[B, E, IR]	Q 3003	260P632010	TRANSISTOR	DTC124ES	
IC7Y1	272P025010	IC	M51366SP	[B, E, IR]	Q 3006	260P603010	TRANSISTOR	DTA124ES/UN4112	
IC8A0	274P186010	IC	μ PD752176F-608-3BE		Q 3007	260P632010	TRANSISTOR	DTC124ES	
IC8A1	283P593010	IC	CAT35C104P		Q 3020	260P559040	TRANSISTOR	2SC1740S-R, S	
IC8A2	266P010020	IC	μ PC574J-K		Q 4A1	260P459010	TRANSISTOR	2SK381-A	
IC9A0	272P237010	IC	LAG324N		Q 4A3	260P559060	TRANSISTOR	2SC1740S-S, E	
TRANSISTORS									
Q 02	260P802020	CHIP TRANSISTOR	2SA 1235-F	[E]	Q 4A4	260P560040	TRANSISTOR	2SA933S-S	
Q 101	260P805030	CHIP TRANSISTOR	2SC3053-D		Q 4A5	260P806010	CHIP TRANSISTOR	DTA124EK	
Q 102	260P802020	CHIP TRANSISTOR	2SA 1235-F		Q 4A7	260P802020	CHIP TRANSISTOR	2SA 1235-F	
Q 103	260P805030	CHIP TRANSISTOR	2SC3053-D	[Y]	Q 4A8	260P802020	CHIP TRANSISTOR	2SA 1235-F	
Q 116	260P807010	CHIP TRANSISTOR	DTC124K		Q 4A9	260P806010	CHIP TRANSISTOR	DTA124EK	
Q 1N1	260P321010	TRANSISTOR	2SC1687	[B, E, IR]	Q 460	260P804020	CHIP TRANSISTOR	2SC3052-F	
Q 208	260P817030	CHIP TRANSISTOR	2SA1037K		Q 4S0	260P802020	CHIP TRANSISTOR	2SA 1235-F	
Q 210	260P807010	CHIP TRANSISTOR	DTC124K		Q 501	260P802020	CHIP TRANSISTOR	2SA 1235-F	
Q 290	260P807010	CHIP TRANSISTOR	DTC124K		Q 502	260P807010	CHIP TRANSISTOR	DTC124K	
Q 291	260P807010	CHIP TRANSISTOR	DTC124K		Q 503	260P802020	CHIP TRANSISTOR	2SA 1235-F	
Q 292	260P807010	CHIP TRANSISTOR	DTC124K		Q 504	260P559060	TRANSISTOR	2SC1740S-S, E	
Q 2B1	260P805030	CHIP TRANSISTOR	2SC3053-D		Q 506	260P802020	CHIP TRANSISTOR	2SA 1235-F	[E, Y]
Q 2B2	260P804020	CHIP TRANSISTOR	2SC3052-F		Q 508	260P807010	CHIP TRANSISTOR	DTC124K	
Q 2B5	260P804020	CHIP TRANSISTOR	2SC3052-F		Q 571	268P014020	PHOTO TRANSISTOR	PN205L-(NC)	
Q 2B6	260P805030	CHIP TRANSISTOR	2SC3050-D		Q 572	268P014020	PHOTO TRANSISTOR	PN205L-(NC)	
Q 2B8	260P805030	CHIP TRANSISTOR	2SC3053-D		Q 573	268P044010	PHOTO INTERRUPTER	ON2270-(LZ). MI	
Q 2B9	260P805030	CHIP TRANSISTOR	2SC3053-D		Q 574	268P044010	PHOTO INTERRUPTER	ON2270-(LZ). MI	
Q 2C3	260P806010	CHIP TRANSISTOR	DTA124EK		Q 575	268P045010	PHOTO INTERRUPTER	GP1L52V	
Q 2C4	260P806010	CHIP TRANSISTOR	DTA124EK		Q 501	260P455010	TRANSISTOR	DTC124EF	
Q 2C5	260P807010	CHIP TRANSISTOR	DTC124K		Q 582	260P455010	TRANSISTOR	DTC124EF	
					Q 583	260P455010	TRANSISTOR	DTC124EF	
					Q 5A0	260P804020	CHIP TRANSISTOR	2SC3052-F	
					Q 5A1	260P802020	CHIP TRANSISTOR	2SA 1235-F	

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION		SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	
Q 5A2	260P802020	CHIP TRANSISTOR	2SA 1235-F		Q 8P2	260P544010	TRANSISTOR	JA101-P, Q	
Q 5A3	260P804020	CHIP TRANSISTOR	2SC3052-F		Q 8P4	260P632010	TRANSISTOR	DTC124ES	
Q 5A4	260P804020	CHIP TRANSISTOR	2SC3052-F		Q 901	260P560010	TRANSISTOR	2SA933S-R, S	
Q 5A5	260P804020	CHIP TRANSISTOR	2SC3052-F		Q 902	260P628060	TRANSISTOR	2SA1619A-Q, R, S	
Q 5A6	260P802020	CHIP TRANSISTOR	2SA 1235-F		Q 903	260P560030	TRANSISTOR	2SA933S	
Q 5A7	260P555060	TRANSISTOR	2SC1740S-S, E		Q 971	260P630010	TRANSISTOR	2SD2012	
Q 5A8	260P802020	CHIP TRANSISTOR	2SA 1235-F		Q 9A1	260P630010	TRANSISTOR	2SD2012	
Q 5A9	260P804020	CHIP TRANSISTOR	2SC3052-F		Q 9A2	260P630010	TRANSISTOR	2SD2012	
Q 5B0	260P585050	TRANSISTOR	2SD892-T, U		Q 9A3	280P630010	TRANSISTOR	2SD2012	
Q 5B1	260P585030	TRANSISTOR	2SD1682-T, U		Q 9A4	260P613010	TRANSISTOR	2SC4208A	
Q 5B2	260P807010	CHIP TRANSISTOR	DTC124K		DIODES				
Q 5B3	260P807010	CHIP TRANSISTOR	DTC124K		D 101	264P625010	DIODE	BAT86	
Q 5B4	260P807010	CHIP TRANSISTOR	DTC124K		D 202	264P568010	DIODE	1SS252	
Q 5B5	260P806010	CHIP TRANSISTOR	DTA124EK		D 2A3	264P568010	DIODE	1SS252	
Q 5B7	260P804020	CHIP TRANSISTOR	2SC3052-F		D 2A6	264P568010	DIODE	1SS252	[E, Y]
Q 5C0	260P804020	CHIP TRANSISTOR	2SC3052-F		D 2A8	264P568010	DIODE	1SS252	
Q 5C3	260P807010	CHIP TRANSISTOR	DTC124K		D 2A9	264P568010	DIODE	1SS252	
Q 5D1	260P807010	CHIP TRANSISTOR	DTC124K		D 260	264P568010	DIODE	1SS252	
Q 5G0	260P802020	CHIP TRANSISTOR	2SA 1235-F		D 2D0	264P568010	DIODE	1SS252	
Q 5G1	260P802020	CHIP TRANSISTOR	2SA 1235-F		D 2S0	264P568010	DIODE	1SS252	
Q 5G2	260P805030	CHIP TRANSISTOR	2SC3053-D		D 2S1	264P568010	DIODE	1SS252	
Q 5G3	260P807010	CHIP TRANSISTOR	DTC124K		D 3000	264P568010	DIODE	1SS252	
Q 5G4	260P807010	CHIP TRANSISTOR	DTC124K		D 3001	264P568010	DIODE	1SS252	
Q 5G5	260P807010	CHIP TRANSISTOR	DTC124K		D 3002	264P568010	DIODE	1SS252	
Q 5G6	260P807010	CHIP TRANSISTOR	DTC124K		D 3003	264P568010	DIODE	1SS252	
Q 5G7	260P802020	CHIP TRANSISTOR	2SA 1235-F		D 3005	264P568010	DIODE	1SS252	
Q 5G8	260P802020	CHIP TRANSISTOR	2SA 1235-F		D 3006	264P568010	DIODE	1SS252	
Q 509	260P802020	CHIP TRANSISTOR	2SA 1235-F		D 3007	264P568010	DIODE	1SS252	
Q 5H0	260P804020	CHIP TRANSISTOR	2SC3052-F		D 3008	264P568010	DIODE	1SS252	
Q 5H2	260P804020	CHIP TRANSISTOR	2SC3052-F		D 3020	264P568010	DIODE	1SS252	
Q 5H4	280P807010	CHIP TRANSISTOR	DTC124K		D 4A0	264P568010	DIODE	1SS252	
Q 5J0	260P804020	CHIP TRANSISTOR	2SC3052-F		D 4A6	264P568010	DIODE	1SS252	
Q 5J1	280P804020	CHIP TRANSISTOR	2SC3052-F		D 501	264P568010	DIODE	1SS252	
Q 5J2	260P804020	CHIP TRANSISTOR	2SC3052-F	[E]	D 570	254P307020	LIGHT EMITTING DIODE	GL-451	
Q 5J3	260P804020	CHIP TRANSISTOR	2SC3052-F		D 571	264P515010	DIODE	MA165	
Q 5J4	260P807010	CHIP TRANSISTOR	DTC124K		Q 5A0	264P568010	DIODE	1SS252	
Q 5J5	260P807010	CHIP TRANSISTOR	DTC124K		D 5A1	264P568010	DIODE	1SS252	
Q 5J6	260P804020	CHIP TRANSISTOR	2SC3052-F		D 5A3	264P568010	DIODE	1SS252	
Q 5J7	260P807010	CHIP TRANSISTOR	DTC124K		D 5A5	264P342070	DIODE	HZ4C2	
Q 750	260P356010	TRANSISTOR	2SC1006	[Y]	D 5A6	264P568010	DIODE	1SS252	
Q 751	260P543010	TRANSISTOR	JC501-P, Q	[Y]	D 5A7	264P508020	DIODE	EM01Z	
Q 752	260P544010	TRANSISTOR	JA101-P, Q	[Y]	D 5A6	264P592010	DIODE	HZ16-2L	
Q 7A0	260P522D10	TRANSISTOR	2SC3063	[B, E, IR]	D 5B0	264P568010	DIODE	1SS252	
Q 7A1	260P522D10	TRANSISTOR	2SC3063	[B, E, IR]	D 5B1	264P568010	DIODE	1SS252	
Q 7A2	260P803010	TRANSISTOR	DTA124ES/UN4112	[B, E, IR]	D 562	264P568010	DIODE	1SS252	
Q 7A3	260P543010	TRANSISTOR	JC501-P, Q	[B, E, IR]	D 5B4	264P808010	CHIP DIODE	DAN202K	
Q 7A5	260P603010	TRANSISTOR	DTA124ES/UN4112	[B, E, IR]	D 5B7	264P568010	DIODE	1SS252	
Q 7Y2	260P355C10	TRANSISTOR	2SC1808	[B, E, IR]	D 5B8	264P568010	DIODE	1SS252	
Q 7Y4	260P544010	TRANSISTOR	JA101-P, Q	[B, E, IR]	D 5B9	264P452030	DIODE	HZ5C3	
Q 8A5	260P544010	TRANSISTOR	JA101-P, Q		D 5C0	264P568010	DIODE	1SS252	
Q 8A8	280P559060	TRANSISTOR	2SC1740S-S, E		D 5C1	264P568010	DIODE	1SS252	
Q 8P0	280P544010	TRANSISTOR	JA101-P, Q		D 5C3	264P808010	CHIP DIODE	DAN202K	
Q 8P1	260P544010	TRANSISTOR	JA101-P, Q		D 5C5	264P568010	DIODE	1SS252	
					D 5C6	264P568010	DIODE	1SS252	

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION		SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	
D 5C8	264P808010	CHIP DIODE	DAN202K		FILTERS				
D 5D0	264P588010	DIODE	1SS252		8PF7A0	409P453010	BAND PASS FILTER		[B, IR]
D 5H0	264P808010	CHIP DIODE	DAN202K		BPF7A0	409P453020	BAND PASS FILTER	2080QDAF	[E]
D 5H2	264P588010	DIODE	1SS252		CF101	296P024040	CERAMIC TRAP	TPS6.0MD	[B, IR]
D 5J0	264P588010	DIODE	1SS252		CF101	296P076010	CERAMIC TRAP		[E]
D 5J1	264P483020	DIODE	EQA02-08C/RD8. 2EB2		CF101	296P104010	CERAMIC TRAP	EFC-S3F01W3A	[Y]
D 701	264P621010	LIGHT EMITTING DIODE	SEL2210R TP2		CF151	296P014030	CERAMIC FILTER	SFE-8.0MHz	[B, IR]
D 750	264P588010	DIODE	1SS252	[Y]	CF151	296P014090	CERAMIC FILTER	SFE-5.5MC2	[E, Y]
D 751	264P588010	DIODE	1SS252	[Y]	CF5A0	299P116010	CERAMIC RESONATOR	K8R-4.0KES	
D 752	264P588010	DIODE	1SS252	[Y]	CF750	296P071020	CERAMIC FILTER		[Y]
D 7A0	264P588010	DIODE	1SS252	[B, E, IR]	CF751	296P071010	CERAMIC FILTER		[Y]
D 7A1	264P588010	DIODE	1SS252	[B, E, IR]	CF752	296P116010	CERAMIC FILTER		[Y]
D 7A3	264P588010	DIODE	1SS252	[B, E, IR]	SF101	296P119040	SAW FILTER	SAF39.5MZ681Z	[B, IR]
D 7A4	264P588010	DIODE	1SS252	[B, E, IR]	SF101	296P119030	SAW FILTER		[E]
D 7A5	264P588010	DIODE	1SS252	[B, E, IR]	SF101	296P116010	SAW FILTER		[Y]
D 7A6	264P588010	DIODE	1SS252	[B, E, IR]	SF7Y1	296P112020	SAW FILTER	SAF32.9MD70Z	[B, IR]
D 7A8	264P588010	DIODE	1SS252	[B, E, IR]	SF7Y1	296P112010	SAW FILTER	SAF33.0MDA70Z	[E]
D 7A9	264P588010	DIODE	1SS252	[B, E, IR]	DELAY LINES				
D 7B0	264P588010	DIODE	1SS252	[B, E, IR]	DL2A0	337P081010	DELAY LINE		
D 7B1	264P588010	DIODE	1SS252	[B, E, IR]	DL2A1	337P183010	DELAY LINE	CF706	[IR]
D 8A3	264P588010	DIODE	1SS252		COILS				
D 8A4	264P588010	DIODE	1SS252		L 11	325C111030	PEAKING COIL	10 μ H-K	
D 8A5	264P588010	DIODE	1SS252		L 103	323P175090	VIF COIL	AFT 38.9/39.5MHz	
D 8A6	264P588010	DIODE	1SS252		L 105	411P011010	BEADS FERRITE	ZBF503S-P	
D 8A7	264P588010	DIODE	1SS252		L 107	325C176050	PEAKING COIL	2.2 μ H-K SHIELD	
D 8A8	264P588010	DIODE	1SS252		L 108	325C166030	PEAKING COIL	10 μ H-J	[B, E]
D B80	264P588010	DIODE	1SS252		L 108	325C166050	PEAKING COIL	15 μ H-J	[IR]
D BB1	264P588010	DIODE	1SS252		L 108	325C166000	PEAKING COIL	5.6 μ H-J	[Y]
D BB2	264P588010	DIODE	1SS252		L 109	325C166060	PEAKING COIL	18 μ H-J	
D BB3	264P588010	DIODE	1SS252		L 113	325C165020	PEAKING COIL	1.2 μ H-J	[B]
D 8C0	264P588010	DIODE	1SS252		L 113	325C165030	PEAKING COIL	1.5 μ H-J	[E, IR, Y]
D 8J0	264P588010	DIODE	1SS252	[B, IR]	L 201	325C122050	PEAKING COIL	100 μ H-K	
D 8J4	264P588010	DIODE	1SS252	[B]	L 206	325C166070	PEAKING COIL	22 μ H-J	
D 8J5	264P588010	DIODE	1SS252	[E]	L 210	325C166070	PEAKING COIL	22 μ H-J	
D 8J6	264P588010	DIODE	1SS252		L 211	325C166000	PEAKING COIL	5.8 μ H-J	
D 8J9	264P588010	DIODE	1SS252	[Y]	L 213	325C167050	PEAKING COIL	100 μ H-J	
D 8Z0	264P501040	DIODE	HZ3ALL		L 219	325C167040	PEAKING COIL	82 μ H-J	
D 8Z1	264P461080	DIODE	EQA02-06E/RD6. 2EB3		L 220	325C167070	PEAKING COIL	150 μ H-J	
D 8Z2	264P193080	DIODE	NZ309B2/HZ9024		L 2A0	325C122050	PEAKING COIL	100 μ H-K	
D 901	264P430030	DIODE	DSA3A1 15M FORMING		L 2A8	325C166060	PEAKING COIL	18 μ H-J	
D 902	264P430030	DIODE	DSA3A1 15M FORMING		L 2A9	325C167080	PEAKING COIL	180 μ H-J	
D 903	264P430030	DIODE	DSA3A1 15M FORMING		L 2B0	325C156090	PEAKING COIL	33 μ H-J	
D 904	264P430030	DIODE	DSA3A1 15M FORMING		L 2B1	325C156060	PEAKING COIL	18 μ H-J	
D 905	264P430030	DIODE	DSA3A1 15M FORMING		L 2B2	325C186010	PEAKING COIL	330 μ H-J	
D 906	264P430030	DIODE	DSA3A1 15M FORMING		L 2B4	325C165070	PEAKING COIL	3.3 μ H-J	
D 907	264P430030	DIODE	DSA3A1 15M FORMING		L 2B5	325C166020	PEAKING COIL	8.2 μ H-J	
D 908	264P430030	DIODE	DSA3A1 15M FORMING		L 2B6	325C166050	PEAKING COIL	15 μ H-J	[IR]
D 913	264P500020	DIODE	EM01Z		L 2B7	325C166050	PEAKING COIL	15 μ H-J	[IR]
D 914	264P500020	DIODE	EM01Z		L 2B8	321C112050	RF COIL	100 μ H-K	
D 915	264P588010	DIODE	1SS252		L 2B9	321C112050	RF COIL	100 μ H-K	
D 916	264P588010	DIODE	1SS252		L 2C0	325C122050	PEAKING COIL	100 μ H-K	
D 917	264P104040	DIODE	HZ30-2		L 2C1	325C187010	PEAKING COIL	47 μ H-J	
D 9A0	264P588010	DIODE	1SS252						

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION		SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	
L 2C2	325C166090	PEAKING COIL	33 μ H-J		VR280	120C380080	VR-PCB	1/20W B3k Ω -20TM CS	
L 2C3	325C122050	PEAKING COIL	100 μ H-K		VR2A0	127C080090	VR-SEMIFIXED	1/5W B20k Ω -M	
L 2C6	325C121030	PEAKING COIL	10 μ H-K	[E, Y]	VR2A1	127C090090	VR-SEMIFIXED	1/5W B20k Ω -M	
L 2P1	325C166090	PEAKING COIL	33 μ H-J		VR2A2	127C080080	VR-SEMIFIXED	1/5W B10k Ω -M	
L 2P5	325C166090	PEAKING COIL	33 μ H-J		VR2A3	127C080050	VR-SEMIFIXED	1/5W B2k Ω -M	
L 2P6	325C167010	PEAKING COIL	47 μ H-J		VR2A5	127C080090	VR-SEMIFIXED	1/5W B20k Ω -M	
L 310	321C113070	RF COIL	1000 μ H-K		VR310	127C281020	VR-SEMIFIXED	1/10W B100k Ω -N	
L 311	321C114080	RF COIL	8200 μ H-J		VR311	127C280080	VR-SEMIFIXED	1/10W B10k Ω -N	
L 313	321C112050	RF COIL	100 μ H-K		VR3000	127C081000	VR-SEMIFIXED	1/5W B30k Ω -M	
L 3A0	325C262050	PEAKING COIL	100 μ H-K		VR3001	127C081000	VR-SEMIFIXED	1/5W B30k Ω -M	
L 3000	325C267050	PEAKING COIL	100 μ H-J		VR3002	127C090080	VR-SEMIFIXED	1/5W B10k Ω -M	
L 3001	325C267050	PEAKING COIL	100 μ H-J		VR3003	127C090070	VR-SEMIFIXED	1/5W B5k Ω -M	
L 4A0	325C262000	PEAKING COIL	39 μ H-K		VR3004	127C090040	VR-SEMIFIXED	1/5W B1k Ω -M	
L 4G0	325C108030	PEAKING COIL	470 μ H-J		VR4A0	127C081020	VR-SEMIFIXED	1/5W B100k Ω -M	
L 501	325C122050	PEAKING COIL	100 μ H-K		VR652	127C080080	VR-SEMIFIXED	1/5W B10k Ω -M	[IR]
L 502	325C166050	PEAKING COIL	15 μ H-J		VR750	127C080050	VR-SEMIFIXED	1/5W B2k Ω -M	[Y]
L 503	325C262050	PEAKING COIL	100 μ H-K		VR751	1270080080	VR-SEMIFIXED	1/5W B10k Ω -M	[Y]
L 507	325C266080	PEAKING COIL	27 μ H-J	[E, Y]	VR752	127C081060	VR-SEMIFIXED	1/5W B1M Ω -M	[Y]
L 570	299P124010	LATCH MAGNET			VR753	127C081050	VR-SEMIFIXED	1/10W B500k Ω -N	[Y]
L 5A0	325C262050	PEAKING COIL	100 μ H-K		VR754	127C081020	VR-SEMIFIXED	1/5W B100k Ω -M	[Y]
L 5A1	325C124080	PEAKING COIL	0.56 μ H-M		VR756	127C080090	VR-SEMIFIXED	1/5W B20k Ω -M	[Y]
L 5A2	325C124050	PEAKING COIL	0.33 μ H-M		VR7A0	127C091050	VR-SEMIFIXED	1/5W B500k Ω -M [B, E, IR]	
L 5A3	325C124050	PEAKING COIL	0.33 μ H-M		RESISTORS				
L 5A5	325C167040	PEAKING COIL	B2 μ H-J		R 01	103P403070	CHIP RESISTOR	1/10W 10k Ω -J	
L 651	325C122050	PEAKING COIL	100 μ H-K	[IR]	R 03	103P404000	CHIP RESISTOR	1/10W 18k Ω -J [B, IR, Y]	
L 750	325C267050	PEAKING COIL	100 μ H-J	[B, E, IR]	R 09	103P403070	CHIP RESISTOR	1/10W 10k Ω -J	
L 750	325C107050	PEAKING COIL	100 μ H-J	[Y]	R 11	103P403070	CHIP RESISTOR	1/10W 10k Ω -J [E, IR, Y]	
L 753	325C166090	PEAKING COIL	33 μ H-J	[Y]	R 12	103P403070	CHIP RESISTOR	1/10W 10k Ω -J [E, IR, Y]	
L 754	325C166090	PEAKING COIL	33 μ H-J	[Y]	R 13	103P403070	CHIP RESISTOR	1/10W 10k Ω -J [E, IR, Y]	
L 7A0	325C167050	PEAKING COIL	100 μ H-J	[B, E, IR]	R 14	103P403020	CHIP RESISTOR	1/10W 3.9k Ω -J [E, IR, Y]	
L 7A1	325C166040	PEAKING COIL	12 μ H-J	[B, E, IR]	R 18	103P403070	CHIP RESISTOR	1/10W 10k Ω -J	
L 7A2	325C166040	PEAKING COIL	12 μ H-J	[B, E, IR]	R 19	103P475060	CHIP RESISTOR	1/10W 20k Ω -F	
L 7A3	325C106090	PEAKING COIL	33 μ H-J	[B, E, IR]	R 101	103P472040	CHIP RESISTOR	1/10W 910 Ω -F [B, IR]	
L 7A4	411P001070	FERRITE LEAD	BF50T	[B, E, IR]	R 101	103P472030	CHIP RESISTOR	1/10W 820 Ω -F [E]	
L 7A5	325C107050	PEAKING COIL	100 μ H-J	[B, E, IR]	R 101	103P473040	CHIP RESISTOR	1/10W 2.4k Ω -F [Y]	
L 7A6	409P402090	EMI FILTER	DSS306-93FZ103N100	[B, E, IR]	R 103	103P402000	CHIP RESISTOR	1/10W 390 Ω -J	
L 7A7	325C107010	PEAKING COIL	47 μ H-J	[B, E, IR]	R 104	103P403050	CHIP RESISTOR	1/10W 6.8k Ω -J	
L 7A8	325C120030	PEAKING COIL	1.5 μ H-M	[E]	R 108	103P404020	CHIP RESISTOR	1/10W 27k Ω -J	
L 7Y1	325C165040	PEAKING COIL	1.8 μ H-J	[B, E, IR]	R 109	103P404020	CHIP RESISTOR	1/10W 27k Ω -J	
L 7Y2	325C162030	PEAKING COIL	68 μ H-K	[B, E, IR]	R 113	103P472040	CHIP RESISTOR	1/10W 910 Ω -F [B, IR]	
L 7Y3	323P184010	VIF COIL		[B, E, IR]	R 113	103P471060	CHIP RESISTOR	1/10W 430F [E, Y]	
L 7Y4	325C166030	PEAKING COIL	10 μ H-J	[B, E, IR]	R 115	103P402050	CHIP RESISTOR	1/10W 1k Ω -J	
LC751	327P077010	SIF COIL	5.74MHz	[Y]	R 116	103P402050	CHIP RESISTOR	1/10W 1k Ω -J	
LC752	327P076010	SIF COIL	5.5MHz	[Y]	R 117	103P402050	CHIP RESISTOR	1/10W 1k Ω -J	
TRANSFORMERS					R 118	103P474050	CHIP RESISTOR	1/10W 6.8k Ω -F [B]	
T 310	409P423010	AUDIO BIAS OSC	705720044D		R 118	103P472070	CHIP RESISTOR	1/10W 1.2k Ω -F [E]	
T 901	350P577020	POWER	PRI 240V	[8]	R 118	103P472020	CHIP RESISTOR	1/10W 750 Ω -F [IR]	
T 901	350P577010	POWER	PRI 220V	[E, IR, Y]	R 118	103P473040	CHIP RESISTOR	1/10W 2.4k Ω -F [Y]	
VARIABLE RESISTORS					R 120	103P402090	CHIP RESISTOR	1/10W 2.2k Ω -J	
VR101	127C080090	VR-SEMIFIXED	1/5W B20k Ω -M		R 121	103P402060	CHIP RESISTOR	1/10W 1.2k Ω -J	
VR103	127C090040	VR-SEMIFIXED	1/5W B1k Ω -M		R 122	103P402030	CHIP RESISTOR	1/10W 680 Ω -J	
VR202	127C290040	VR-SEMIFIXED	1/10W B1k Ω -H		R 123	103P472070	CHIP RESISTOR	1/10W 1.2k Ω -F [B]	
VR203	127C290080	VR-SEMIFIXED	1/10W 810k Ω -N		R 123	103P471050	CHIP RESISTOR	1/10W 390 Ω -F [E]	

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
R 123	103P471080	CHIP RESISTOR	1/10W 510Ω-F [IR]	R 286	103P405000	CHIP RESISTOR	1/10W 120kΩ-J
R 123	103P471000	CHIP RESISTOR	1/10W 240Ω-F [Y]	R 287	103P471030	CHIP RESISTOR	1/10W 330Ω-F
R 126	103P404050	CHIP RESISTOR	1/10W 47kΩ-J [Y]	R 288	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 127	103P404050	CHIP RESISTOR	1/10W 47kΩ-J [Y]	R 291	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J
R 128	103P401090	CHIP RESISTOR	1/10W 330Ω-J [Y]	R 299	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 129	103P401030	CHIP RESISTOR	1/10W 100Ω-J [Y]	R 2D2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 153	103P402020	CHIP RESISTOR	1/10W 560Ω-J	R 2D3	103P402030	CHIP RESISTOR	1/10W 680Ω-J
R 160	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 2D4	103P401070	CHIP RESISTOR	1/10W 220Ω-J
R 162	103P404000	CHIP RESISTOR	1/10W 18kΩ-J	R 2D5	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J
R 1J1	103P409050	CHIP RESISTOR	1/10W 0Ω [IR, Y]	R 2D6	103P403020	CHIP RESISTOR	1/10W 3.9kΩ-J
R 1J2	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2D7	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 1J3	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2D8	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 1J5	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2E1	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J
R 1M0	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2E2	103P401060	CHIP RESISTOR	1/10W 180Ω-J
R 1N0	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2E3	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 1N1	103P404050	CHIP RESISTOR	1/10W 47kΩ-J [8, E, IR]	R 2E5	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 1N2	103P404050	CHIP RESISTOR	1/10W 47kΩ-J [8, E, IR]	R 2E6	103P403020	CHIP RESISTOR	1/10W 3.9kΩ-J
R 1N3	103P401090	CHIP RESISTOR	1/10W 330Ω-J [8, E, IR]	R 2E7	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 1N4	103P401030	CHIP RESISTOR	1/10W 100Ω-J [8, E, IR]	R 2E8	103P404040	CHIP RESISTOR	1/10W 39kΩ-J
R 1N5	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F1	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 1N7	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 1N8	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F3	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 1N9	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F4	103P403090	CHIP RESISTOR	1/10W 15kΩ-J
R 203	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F5	103P401070	CHIP RESISTOR	1/10W 220Ω-J
R 204	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F6	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 205	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2F7	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 206	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 2F8	103P473080	CHIP RESISTOR	1/10W 3.6kΩ-F
R 206	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2G0	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J
R 206	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2G1	103P403020	CHIP RESISTOR	1/10W 3.9kΩ-J
R 207	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J	R 2G2	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J
R 208	103P402000	CHIP RESISTOR	1/10W 390Ω-J	R 2G3	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 208	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2G4	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [IR]
R 208	103P409050	CHIP RESISTOR	1/10W 0Ω	R 267	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 209	103P401030	CHIP RESISTOR	1/10W 100Ω-J	R 268	103P406010	CHIP RESISTOR	1/10W 1MΩ-J
R 209	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2G9	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J
R 210	103P401020	CHIP RESISTOR	1/10W 82Ω-J	R 2H1	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 210	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2H2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 212	103P402010	CHIP RESISTOR	1/10W 470Ω-J	R 2H4	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J
R 212	103P409050	CHIP RESISTOR	1/10W 0Ω [IR]	R 2H6	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J [IR]
R 213	103P409050	CHIP RESISTOR	1/10W 0Ω	R 2H7	103P403070	CHIP RESISTOR	1/10W 10kΩ-J [IR]
R 214	103P401030	CHIP RESISTOR	1/10W 100Ω-J	R 2H9	103P404040	CHIP RESISTOR	1/10W 39kΩ-J [IR]
R 216	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 2J2	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 217	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 2J3	103P404010	CHIP RESISTOR	1/10W 22kΩ-J
R 218	103P402010	CHIP RESISTOR	1/10W 470Ω-J	R 2J4	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 219	103P402020	CHIP RESISTOR	1/10W 560Ω-J	R 2J5	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 242	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 2J6	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 243	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 2J7	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 255	103P405050	CHIP RESISTOR	1/10W 330kΩ-J	R 2J8	103P402080	CHIP RESISTOR	1/10W 1.8kΩ-J
				R 2J9	103P403080	CHIP RESISTOR	1/10W 12kΩ-J
				R 2K1	103P404010	CHIP RESISTOR	1/10W 22kΩ-J [IR]
				R 2K4	103P401070	CHIP RESISTOR	1/10W 220Ω-J
				R 2L9	103P400050	CHIP RESISTOR	1/10W 22Ω-J
				R 2M0	103P403050	CHIP RESISTOR	1/10W 8.8kΩ-J
				R 2M2	103P405040	CHIP RESISTOR	1/10W 270kΩ-J
				R 2M3	103P474020	CHIP RESISTOR	1/10W 5.1kΩ-F

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
R 2N1	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 3A4	103P401060	CHIP RESISTOR	1/10W 180Ω-J
R 2P2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 3A5	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 2P3	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 3A6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 2P4	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 3A7	103P404050	CHIP RESISTOR	1/10W 47kΩ-J
R 2P5	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 3A8	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 2P6	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	R 3A9	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 2P7	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 3B0	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J
R 2P9	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 3B1	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J
R 2R0	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 3B2	103P474060	CHIP RESISTOR	1/10W 7.5kΩ-F
R 2R1	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 3B3	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J
R 2R2	103P40404C	CHIP RESISTOR	1/10W 39kΩ-J	R 3B4	103P401080	CHIP RESISTOR	1/10W 270Ω-J
R 2R4	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 3B6	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 2R5	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 3B7	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 2R6	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 4A1	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F
R 2R8	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 4A2	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F
R 2R9	103P403020	CHIP RESISTOR	1/10W 3.9kΩ-J	R 4A3	103P405010	CHIP RESISTOR	1/10W 1MΩ-J
R 2S3	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 4A4	103P474030	CHIP RESISTOR	1/10W 5.6kΩ-F
R 2S5	103P402020	CHIP RESISTOR	1/10W 560Ω-J	R 4A5	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 2S6	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 4A9	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 2T1	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J	R 4B1	103P401010	CHIP RESISTOR	1/10W 68Ω-J
R 2T3	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 4B2	103P475050	CHIP RESISTOR	1/10W 16kΩ-F
R 2T4	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	R 4B3	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 2T5	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 4B4	103P474090	CHIP RESISTOR	1/10W 10kΩ-F
R 2T6	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J	R 4B5	103P479030	CHIP METAL	1/10W 680kΩ-F
R 2T7	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 4B6	103P476070	CHIP RESISTOR	1/10W 56kΩ-F
R 311	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	R 4B7	103P476070	CHIP RESISTOR	1/10W 56kΩ-F
R 312	103P401080	CHIP RESISTOR	1/10W 270Ω-J	R 4B8	103P476010	CHIP RESISTOR	1/10W 33kΩ-F
R 313	103P401030	CHIP RESISTOR	1/10W 100Ω-J	R 4B9	103P477070	CHIP RESISTOR	1/10W 150K
R 314	103P405050	CHIP RESISTOR	1/10W 330kΩ-J	R 4C0	103P476010	CHIP RESISTOR	1/10W 220kΩ-F
R 315	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 4C1	103P477070	CHIP RESISTOR	1/10W 150K
R 316	103P406010	CHIP RESISTOR	1/10W 1MΩ-J	R 4C2	103P476050	CHIP RESISTOR	1/10W 330kΩ-F
R 317	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 4C3	103P476030	CHIP RESISTOR	1/10W 39kΩ-F
R 318	103P403080	CHIP RESISTOR	1/10W 12kΩ-J	R 4C5	103P474010	CHIP RESISTOR	1/10W 4.7kΩ-F
R 320	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 4C8	103P472030	CHIP RESISTOR	1/10W 820Ω-F
R 322	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4C9	103P405010	CHIP RESISTOR	1/10W 1MΩ-J
R 323	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 4D0	103P475020	CHIP METAL	1/10W 240kΩ-F
R 324	103P404050	CHIP RESISTOR	1/10W 47kΩ-J	R 4D1	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 325	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	R 4D2	103P404000	CHIP RESISTOR	1/10W 18kΩ-J
R 327	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J	R 4D3	103P473010	CHIP RESISTOR	1/10W 1.8kΩ-F
R 328	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 4D4	103P405070	CHIP RESISTOR	1/10W 470kΩ-J
R 330	103P404000	CHIP RESISTOR	1/10W 18kΩ-J	R 4D5	103P477010	CHIP RESISTOR	1/10W 82kΩ-F
R 331	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	R 4D6	103P474090	CHIP RESISTOR	1/10W 10kΩ-F
R 332	103P403090	CHIP RESISTOR	1/10W 15kΩ-J	R 4D7	103P403030	CHIP RESISTOR	1/10W 6.8kΩ-J
R 334	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 4D8	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 360	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4D9	103P474070	CHIP RESISTOR	1/10W 8.2kΩ-F
R 381	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E0	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 362	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E2	103P472070	CHIP RESISTOR	1/10W 1.2kΩ-F
R 363	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E3	103P472070	CHIP RESISTOR	1/10W 1.2kΩ-F
R 364	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E4	103P404020	CHIP RESISTOR	1/10W 27kΩ-J
R 365	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E5	103P473050	CHIP RESISTOR	1/10W 2.7kΩ-F
R 365	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E6	103P404020	CHIP RESISTOR	1/10W 27kΩ-J
R 367	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E7	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 368	103P409050	CHIP RESISTOR	1/10W 0Ω	R 4E8	103P473060	CHIP RESISTOR	1/10W 3kΩ-F
R 3A0	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 4E9	103P404020	CHIP RESISTOR	1/10W 27kΩ-J
R 3A3	103P401060	CHIP RESISTOR	1/10W 180Ω-J	R 4F1	103P476030	CHIP RESISTOR	1/10W 39kΩ-F

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
R 4F2	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J	R 5C7	103P403090	CHIP RESISTOR	1/10W 15kΩ-J
R 4F4	103P404000	CHIP RESISTOR	1/10W 18kΩ-J	R 5C8	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 4G0	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F	R 5D1	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 4G1	103P473070	CHIP RESISTOR	1/10W 3.3kΩ-F	R 5D2	103P405000	CHIP RESISTOR	1/10W 120kΩ-J
R 4G2	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F	R 5D3	103P403030	CRIP RESISTOR	1/10W 4.7kΩ-J
R 4C3	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F	R 5D4	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 4H0	103P475070	CHIP RESISTOR	1/10W 22kΩ-F	R 5D6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 4H1	103P475050	CHIP RESISTOR	1/10W 18kΩ-F	R 5D8	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 400	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5D9	103P405010	CHIP RESISTOR	1/10W 1MΩ-J
R 401	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5E1	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 402	103P409056	CHIP RESISTOR	1/10W 0Ω	R 5E2	103P473030	CHIP RESISTOR	1/10W 2.2kΩ-F
R 4R2	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5E3	103P474070	CHIP RESISTOR	1/10W 8.2kΩ-F
R 4S0	103P472050	CHIP RESISTOR	1/10W 1kΩ-F	R 5E4	103P401020	CHIP RESISTOR	1/10W 82Ω-J
R 4S1	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5E5	103P401070	CHIP RESISTOR	1/10W 220Ω-J
R 503	103P403080	CHIP RESISTOR	1/10W 12kΩ-J	R 5E6	103P470070	CHIP RESISTOR	1/10W 180Ω-F
R 505	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 5E7	103P471050	CHIP RESISTOR	1/10W 390Ω-F
R 506	103P402060	CHIP RESISTOR	1/10W 1.2kΩ-J [B]	R 5E8	103P402040	CHIP RESISTOR	1/10W 820Ω-J
R 506	103P472060	CHIP RESISTOR	1/10W 1.1kΩ-F[E, IR, Y]	R 5E9	103P402020	CHIP RESISTOR	1/10W 580Ω-J
R 508	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5F0	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 509	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 5F1	103P405070	CHIP RESISTOR	1/10W 470kΩ-J
R 510	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 5F2	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J
R 511	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J	R 5F4	103P405070	CHIP RESISTOR	1/10W 470kΩ-J
R 512	103P401090	CHIP RESISTOR	1/10W 330Ω-J	R 5F5	103P404050	CHIP RESISTOR	1/10W 47kΩ-J
R 513	103P401070	CHIP RESISTOR	1/10W 220Ω-J	R 5F6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 523	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 5F7	103P474090	CHIP RESISTOR	1/10W 10kΩ-F
R 527	103P404000	CHIP RESISTOR	1/10W 18kΩ-J	R 5F8	103P475070	CHIP RESISTOR	1/10W 22kΩ-F
R 528	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 5F9	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 530	103P409050	CHIP RESISTOR	1/10W 0Ω [B, IR]	R 5G0	103P404030	CHIP RESISTOR	1/10W 33kΩ-J
R 530	103P402000	CHIP RESISTOR	1/10W 390Ω-J [E, Y]	R 5G1	103P404070	CHIP RESISTOR	1/10W 68kΩ-J
R 532	103P403080	CHIP RESISTOR	1/10W 12kΩ-J [E, Y]	R 5G2	103P402020	CHIP RESISTOR	1/10W 560Ω-J
R 533	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 5G3	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 590	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5G4	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 591	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5G5	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 592	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5G6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 593	103P409050	CHIP RESISTOR	1/10W 0Ω	R 508	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 594	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5H0	103P473060	CHIP RESISTOR	1/10W 3kΩ-F
R 595	103P409050	CHIP RESISTOR	1/10W 0Ω	R 5H3	103P404090	CHIP RESISTOR	1/10W 100kΩ-J
R 5A0	103P398090	FUSE	1/2W 5.6Ω-J [B]	R 5H4	103P404040	CHIP RESISTOR	1/10W 39kΩ-J
R 5A3	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	R 5H5	103P472080	CHIP RESISTOR	1/10W 1.3kΩ-F
R 5A4	103P404070	CHIP RESISTOR	1/10W 68kΩ-J	R 5H6	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 5A5	103P402020	CHIP RESISTOR	1/10W 560Ω-J	R 5H7	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 5A6	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	R 5H8	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
R 5A7	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 5H9	103P405010	CHIP RESISTOR	1/10W 150kΩ-J
R 5A8	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 5J0	103P474010	CHIP RESISTOR	1/10W 4.7kΩ-F
R 5A9	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	R 5J1	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 5B0	103P401070	CHIP RESISTOR	1/10W 220Ω-J	R 5J2	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
R 5B1	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 5J3	103P404050	CHIP RESISTOR	1/10W 47kΩ-J
R 5B2	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	R 5J4	103P403050	CHIP RESISTOR	1/10W 6.8kΩ-J
R 5B3	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	R 5J7	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 5B4	103P474090	CHIP RESISTOR	1/10W 10kΩ-F	R 5J8	103P402030	CHIP RESISTOR	1/10W 680Ω-J [E, Y]
R 5B6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 5K0	103P404020	CHIP RESISTOR	1/10W 27kΩ-J
R 5B8	103P406010	CHIP RESISTOR	1/10W 1MΩ-J	R 5K1	103P403080	CHIP RESISTOR	1/10W 12kΩ-J
R 5C4	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	R 5K4	103P402000	CHIP RESISTOR	1/10W 390Ω-J
R 5C5	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J	R 5K5	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
R 5C6	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 5K6	103P403090	CHIP RESISTOR	1/10W 15kΩ-J [E, Y]

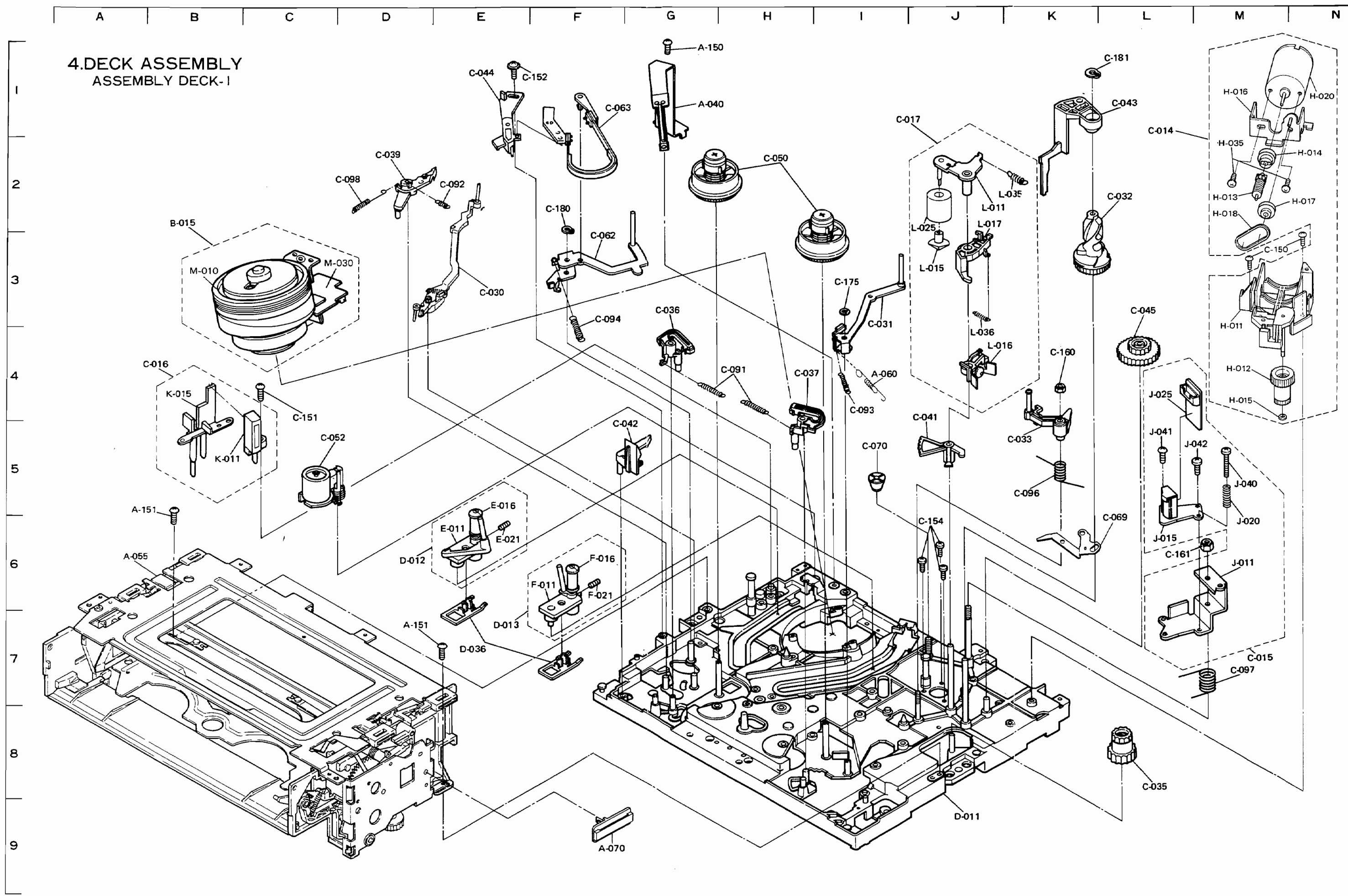
SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
R 5K7	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	R 5U2	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5K8	103P401070	CHIP RESISTOR	1/10W 220Ω-J	R 5U3	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5L0	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 5U4	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5L1	103P473090	CHIP RESISTOR	1/10W 3.9kΩ-F	R 651	103P404010	CHIP RESISTOR	1/10W 22kΩ-J [1R]
R 5L2	103P474030	CHIP RESISTOR	1/10W 5.6kΩ-F	R 652	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J [1R]
R 5L3	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	R 653	103P404000	CHIP RESISTOR	1/10W 18kΩ-J [1R]
R 5L4	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 655	103P404010	CHIP RESISTOR	1/10W 22kΩ-J [1R]
R 5L5	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	R 658	103P402070	CHIP RESISTOR	1/10W 1.5kΩ-J [1R]
R 5L6	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 657	103P402030	CHIP RESISTOR	1/10W 680Ω-J [1R]
R 5L7	103P405050	CHIP RESISTOR	1/10W 330kΩ-J	R 658	103P402030	CHIP RESISTOR	1/10W 680Ω-J [1R]
R 5L8	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 662	103P402050	CHIP RESISTOR	1/10W 1kΩ-J [1R]
R 5M2	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	R 902	109P052050	FUSE	1/4W 6.8Ω-J
R 5M3	103P403080	CHIP RESISTOR	1/10W 12kΩ-J	R 905	109P052010	FUSE	1/4W 100Ω-J
R 5M4	103P403080	CHIP RESISTOR	1/10W 12kΩ-J	RJ 1	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5M5	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	RJ 2	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5M6	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	RJ 3	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5M7	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	RJ 5	103P409050	CHIP RESISTOR	1/10W 0Ω
R 5N0	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	CAPACITORS AND TRIMMERS			
R 5N2	103P404090	CHIP RESISTOR	1/10W 100kΩ-J	C 01	141P139030	CHIP CAPACITOR	B25V 0.1μF-K
R 5N3	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	C 101	154P322080	CHIP CAPACITOR	SL50V 47pF-J
R 5N8	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J	C 102	154P322080	CHIP CAPACITOR	SL50V 47pF-J
R 5P0	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	C 103	141P139030	CHIP CAPACITOR	B25V 0.1μF-K
R 5P2	103P472080	CHIP RESISTOR	1/10W 1.3kΩ-F	C 108	141P132010	CHIP CAPACITOR	B50V 0.01μF-K
R 5P3	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J	C 109	141P139030	CHIP CAPACITOR	B25V 0.1μF-K
R 5P4	103P401080	CHIP RESISTOR	1/10W 270Ω-J	C 111	154P331030	CHIP CAPACITOR	CH50V 12pF-J
R 5P5	103P402080	CHIP RESISTOR	1/10W 1.8kΩ-J	C 115	154P322060	CHIP CAPACITOR	SL50V 39pF-J
R 5P6	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J	C 119	154P323060	CHIP CAPACITOR	SL50V 100pF-J [B]
R 5P7	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	C 119	154P324020	CHIP CAPACITOR	SL50V 180pF-J [E, IR]
R 5P8	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	C 119	154P326000	CHIP CAPACITOR	SL50V 390pF-J [Y]
R 5P9	103P404030	CHIP RESISTOR	1/10W 33kΩ-J	C 121	154P331010	CHIP CAPACITOR	CH50V 10pF-C [B, E, IR]
R 500	103P409050	CHIP RESISTOR	1/10W 0Ω	C 121	154P330080	CHIP CAPACITOR	CH50V 7pF-C [Y]
R 502	103P409050	CHIP RESISTOR	1/10W 0Ω	C 1N1	141P132010	CHIP CAPACITOR	B50V 0.01μF-K [B, E, IR]
R 504	103P409050	CHIP RESISTOR	1/10W 0Ω	C 201	154P322080	CHIP CAPACITOR	SL50V 47pF-J
R 506	103P409050	CHIP RESISTOR	1/10W 0Ω	C 202	154P322060	CHIP CAPACITOR	SL50V 39pF-J
R 508	103P409050	CHIP RESISTOR	1/10W 0Ω	C 207	154P323020	CHIP CAPACITOR	SL50V 68pF-J
R 5R3	103P409050	CHIP RESISTOR	1/10W 0Ω	C 209	141P139030	CHIP CAPACITOR	B25V 0.1μF-K
R 5R4	103P409050	CHIP RESISTOR	1/10W 0Ω	C 210	141P137080	CHIP CAPACITOR	B25V 0.047μF-K
R 5S0	103P409050	CHIP RESISTOR	1/10W 0Ω	C 211	141P137080	CHIP CAPACITOR	B25V 0.047μF-K
R 5S2	103P409050	CHIP RESISTOR	1/10W 0Ω	C 215	141P132010	CHIP CAPACITOR	B50V 0.01μF-K
R 5S3	103P409050	CHIP RESISTOR	1/10W 0Ω	C 220	154P322080	CHIP CAPACITOR	SL50V 47pF-J
R 5S4	103P409050	CHIP RESISTOR	1/10W 0Ω	C 221	141P132010	CHIP CAPACITOR	B50V 0.01μF-K
R 5S5	103P409050	CHIP RESISTOR	1/10W 0Ω	C 234	154P322020	CHIP CAPACITOR	SL50V 27pF-J
R 5S7	103P409050	CHIP RESISTOR	1/10W 0Ω	C 236	154P322060	CHIP CAPACITOR	SL50V 39pF-J
R 5S8	103P409050	CHIP RESISTOR	1/10W 0Ω	C 249	154P323040	CHIP CAPACITOR	SL50V 82pF-J
R 5S9	103P409050	CHIP RESISTOR	1/10W 0Ω	C 255	154P322040	CHIP CAPACITOR	SL50V 33pF-J
R 5T0	103P409050	CHIP RESISTOR	1/10W 0Ω	C 256	154P324020	CHIP CAPACITOR	SL50V 180pF-J
R 5T1	103P409050	CHIP RESISTOR	1/10W 0Ω	C 290	154P322080	CHIP CAPACITOR	SL50V 47pF-J
R 5T2	103P409050	CHIP RESISTOR	1/10W 0Ω	C 299	141P130090	CHIP CAPACITOR	B50V 1000pF-K
R 5T3	103P409050	CHIP RESISTOR	1/10W 0Ω	C 2C1	141P132000	CHIP CAPACITOR	B50V 8200pF-K
R 5T4	103P409050	CHIP RESISTOR	1/10W 0Ω	C 2C2	154P322050	CHIP CAPACITOR	SL50V 39pF-J
R 5T5	103P409050	CHIP RESISTOR	1/10W 0Ω	C 2C3	154P325000	CHIP CAPACITOR	SL50V 390pF-J
R 5T7	103P409050	CHIP RESISTOR	1/10W 0Ω	C 2C4	154P325020	CHIP CAPACITOR	SL50V 470pF
R 5U0	103P409050	CHIP RESISTOR	1/10W 0Ω	C 2C5	154P323020	CHIP CAPACITOR	SL50V 68pF-J
R 5U1	103P409050	CHIP RESISTOR	1/10W 0Ω	C 2C8	154P324000	CHIP CAPACITOR	SL50V 150pF-J

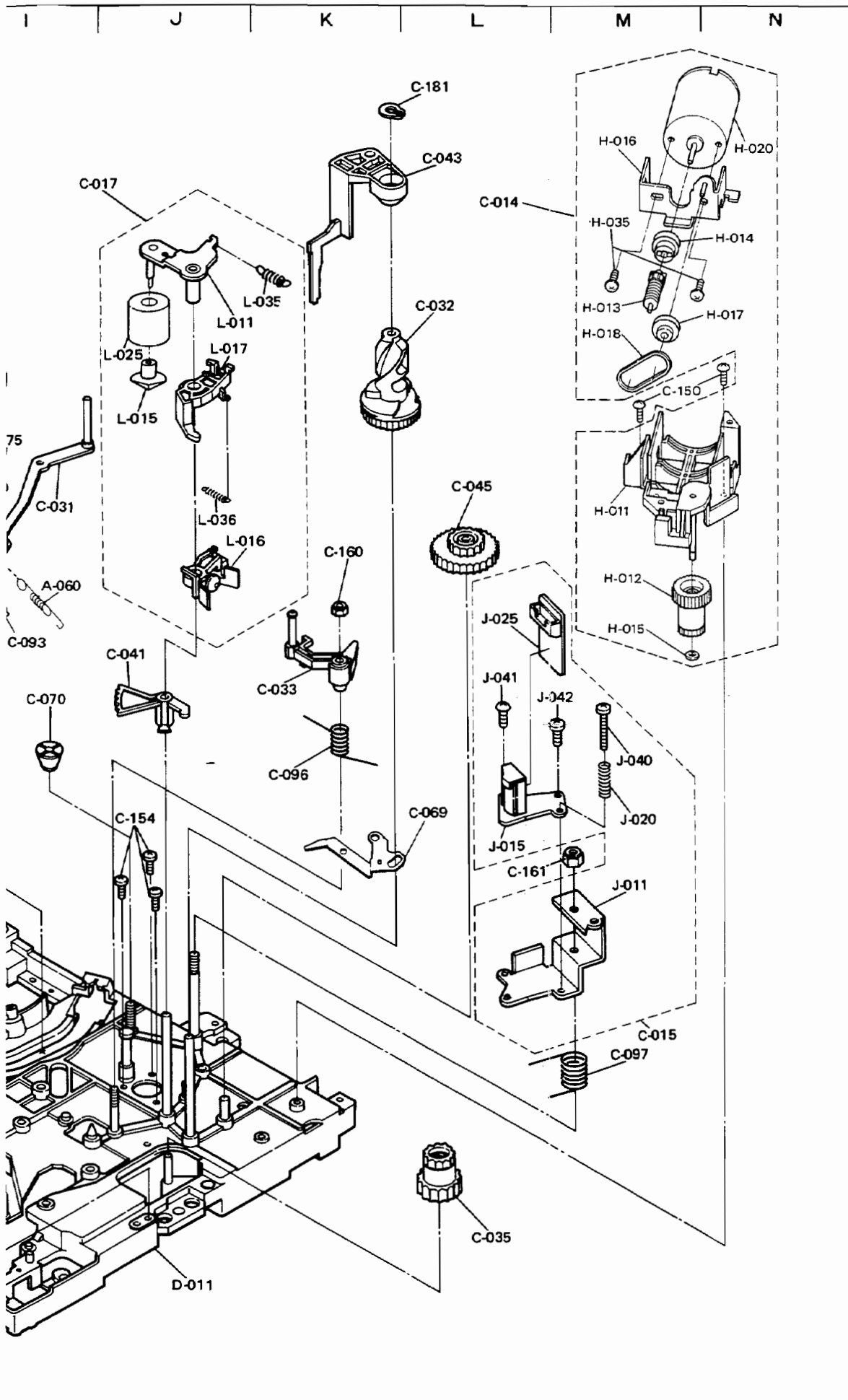
SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION		SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	
C 2C9	154P324000	CHIP CAPACITOR	SL50V 150pF-J		C 4G0	141P139030	CHIP CAPACITOR	B25V 0.1 μ F-K	
C 2D1	154P323020	CHIP CAPACITOR	SL50V 68pF-J		C 4G1	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K	
C 2D4	154P324040	CHIP CAPACITOR	SL50V 220pF-J		C 501	154P330060	CHIP CAPACITOR	CH50V 5pF-C	
C 2D7	154P325000	CHIP CAPACITOR	SL50V 390pF-J		C 502	154P330060	CHIP CAPACITOR	CH50V 5pF-C	
C 2E0	154P322080	CHIP CAPACITOR	SL50V 47pF-J		C 505	154P332010	CHIP CAPACITOR	CH50V 27pF-J	
C 2E1	154P322000	CHIP CAPACITOR	SL50V 22pF-J		C 507	154P332010	CHIP CAPACITOR	CH50V 27pF-J	
C 2E3	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 510	141P137080	CHIP CAPACITOR	B25V 0.047 μ F-K	
C 2E4	141P137040	CHIP CAPACITOR	B25V 0.022 μ F-K		C 512	141P133080	CHIP CAPACITOR	F50V 0.01 μ F-Z	
C 2F4	141P137080	CHIP CAPACITOR	B25V 0.047 μ F-K		C 514	141P133080	CHIP CAPACITOR	F50V 0.01 μ F-Z	
C 2F5	141P132000	CHIP CAPACITOR	B50V 8200pF-K	[1R]	C 524	141P131010	CHIP CAPACITOR	B50V 1500pF-K	
C 2F7	141P139030	CHIP CAPACITOR	B25V 0.1 μ F-K		C 525	154P322080	CHIP CAPACITOR	SL50V 47pF-J	[E, Y]
C 2G4	141P132000	CHIP CAPACITOR	B50V 8200pF-K	[1R]	C 5A0	141P131020	CHIP CAPACITOR	B50V 1800pF-K	
C 2G5	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 5A1	141P131030	CHIP CAPACITOR	B50V 2200pF-K	
C 2G7	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 5A3	141P133090	CHIP CAPACITOR	F50V 0.022 μ F-Z	
C 2H0	154P322020	CHIP CAPACITOR	SL50V 27pF-J		C 5A4	154P324060	CHIP CAPACITOR	SL50V 270pF-J	
C 2H1	154P322040	CHIP CAPACITOR	SL50V 33pF-J		C 5A5	154P331050	CHIP CAPACITOR	CH50V 15pF-J	
C 2H2	154P320080	CHIP CAPACITOR	SL50V 6pF-C		C 5A7	141P133080	CHIP CAPACITOR	F50V 0.01 μ F-Z	
C 2H3	154P322080	CHIP CAPACITOR	SL50V 47pF-J		C 5B0	154P332030	CHIP CAPACITOR	CH50V 33pF-J	
C 2H7	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 5E0	141P133090	CHIP CAPACITOR	F50V 0.022 μ F-Z	
C 2J9	154P323080	CHIP CAPACITOR	SL50V 120pF-J	[E, Y]	C 5E1	141P133090	CHIP CAPACITOR	F50V 0.022 μ F-Z	
C 2P2	154P322060	CHIP CAPACITOR	SL50V 39pF-J		C 5F8	141P133090	CHIP CAPACITOR	F50V 0.022 μ F-Z	
C 2P3	154P323020	CHIP CAPACITOR	SL50V 68pF-J		C 5F9	141P133090	CHIP CAPACITOR	F50V 0.022 μ F-Z	
C 2P5	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 5G1	141P132000	CHIP CAPACITOR	B50V 8200pF-K	
C 2P8	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 502	141P132000	CHIP CAPACITOR	B50V 8200pF-K	
C 2R0	154P322020	CHIP CAPACITOR	SL50V 27pF-J		C 5H1	141P133080	CHIP CAPACITOR	F50V 0.01 μ F-Z	
C 2R1	154P322000	CHIP CAPACITOR	SL50V 22pF-J		C 653	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K	[1R]
C 2R2	141P137040	CHIP CAPACITOR	B25V 0.022 μ F-K		C 656	141P132000	CHIP CAPACITOR	B50V 8200pF-K	[1R]
C 2R3	141P137080	CHIP CAPACITOR	B25V 0.047 μ F-K		C 660	141P132000	CHIP CAPACITOR	850V 8200pF-K	[1R]
C 2R4	154P323060	CHIP CAPACITOR	SL50V 100pF-J		C 661	141P132000	CHIP CAPACITOR	B50V 8200pF-K	[1R]
C 2R5	141P139030	CHIP CAPACITOR	B25V 0.1 μ F-K		C 662	141P132000	CHIP CAPACITOR	B50V 8200pF-K	[1R]
C 2R7	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 663	154P332090	CHIP CAPACITOR	CH50V 56pF-J	[1R]
C 310	141P132000	CHIP CAPACITOR	B50V 8200pF-K		C 664	154P332090	CHIP CAPACITOR	CH50V 56pF-J	[1R]
C 311	141P130080	CHIP CAPACITOR	B50V 820pF-K		C 905	185D065050	ELECTROLYTIC-C	H25V 3300M	
C 318	141P131050	CHIP CAPACITOR	B50V 3300pF-K		C 906	185D063040	ELECTROLYTIC-C	H25V 4700 μ F-M 105C	
C 328	141P130060	CHIP CAPACITOR	B50V 550pF-K		VC8A0	202P109020	TRIMMER CAPACITOR	4.2pF-20pF	
C 330	141P130090	CHIP CAPACITOR	B50V 1000pF-K		SWITCHES				
C 331	141P132000	CHIP CAPACITOR	B50V 8200pF-K		S 701	432P089040	KEY BOARD SWITCH	POWER	
C 3A1	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K		S 702	432P089040	KEY BOARD SWITCH	EJECT	
C 3A2	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K		S 704	431C099020	SLIDE SWITCH	INTELLIGENT PICTURE	
C 3A5	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K		S 8A3	432P089020	KEY BOARD SWITCH	CH-UP	
C 3A6	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K		S 8A5	432P089020	KEY BOARD SWITCH	REPEAT PLAY	
C 3A7	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K		S 8A6	432P089020	KEY BOARD SWITCH	PB	
C 3A9	141P132010	CHIP CAPACITOR	850V 0.01 μ F-K		S 8B3	432P089020	KEY BOARD SWITCH	CH-DOWN	
C 3B2	141P132010	CHIP CAPACITOR	B50V 0.01 μ F-K		S 8B4	432P089020	KEY BOARD SWITCH	TAPE SPEED	
C 3B3	154P325020	CHIP CAPACITOR	SL50V 470pF-J		S 8B5	432P089020	KEY BOARD SWITCH	S-OTR	
C 3B4	154P325020	CHIP CAPACITOR	SL50V 470pF-J		S 8B6	432P089020	KEY BOARD SWITCH	REC	
C 4B3	141P132000	CHIP CAPACITOR	B50V 8200pF-K		S 8B7	432P089020	KEY BOARD SWITCH	STOP	
C 4B4	141P132000	CHIP CAPACITOR	850V 8200pF-K		S 805	432P089020	KEY BOARD SWITCH	OTR	
C 4B5	141P139010	CHIP CAPACITOR	B25V 0.068 μ F-K		S 8C8	432P089020	KEY BOARD SWITCH	FF	
C 4B6	141P131030	CHIP CAPACITOR	B50V 2200pF-K		S 8C7	432P089020	KEY BOARD SWITCH	STILL/PAUSE	
C 4C4	141P130060	CHIP CAPACITOR	850V 580pF-K		S 8C8	432P089020	KEY BOARD SWITCH	REW	
C 4C9	141P130090	CHIP CAPACITOR	B50V 1000pF-K		S 8D3	432P089020	KEY BOARD SWITCH	DISPLAY	
C 4D5	141P130090	CHIP CAPACITOR	B50V 1000pF-K		S 8D5	432P089020	KEY BOARD SWITCH	ONE KEY PROGRAM	
C 4D8	141P131050	CHIP CAPACITOR	B50V 3300pF-K		S 8R0	432P089020	KEY BOARD SWITCH	RESET	
C 4E0	154P324020	CHIP CAPACITOR	SL50V 180pF-J						

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION		SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	
SW570	439P019010	MODE SELECT SWITCH		[B, E, Y]		928C789001	POWER SUB PCB ASSY		
SW570	439P019020	MODE SELECT SWITCH		[IR]		928D072020	TIMER PCB ASSY		[B]
SW571	439P020010	LIMIT SWITCH	SPP8-62			928D072030	TIMER PCB ASSY		[E]
MISCELLANEOUS						928D072040	TIMER PCB ASSY		[IR]
	242D297020	IF CABLE				928D072010	TIMER PCB ASSY		[Y]
CU 01	295P276020	RF CONVERTER	MDLK6B7	[B, IR]		928C792002	TUNER PCB ASSY		[B]
CU 01	295P276010	RF CONVERTER		[E, Y]		928C792003	TUNER PCB ASSY		[E]
DC CC	243C061020	CARD LEAD	9P L=150(DC-CC)			928C792004	TUNER PCB ASSY		[IR]
DM CM	243C061090	CARD LEAD	17P L150(DM-CM)			928C792001	TUNER PCB ASSY		[Y]
F 901	283D0460B0	FUSE	0. 63A-T						
F 902	283D047D50	FUSE	2. 5A-T						
F 903	283D047050	FUSE	2. 5A-T						
J 1N1	451P032010	PIN JACK		[B, E, IR]					
J 2A0	440C183010	PIN JACK(4P)							
J 2001	451C058020	CONNECTOR	21P						
J 7Y1	451P032010	PIN JACK		[B, E, IR]					
M 470	288P118010	CAPSTAN MOTOR	F2QKB76						
M 570	288P088040	DRUM MOTOR							
M 571	288D025010	LOADING MOTOR							
MF TF	243C022020	CARD LEAD							
MK TK	243C020010	CARD LEAD	(MK-TK)						
MR HR	243C077090	CARD LEAD	11P L130(MR-HR)						
MX PX	243C073010	CARD LEAD	9P L=130(MX-PX)						
T 370	460P060050	HEAD							
T 371	460P061020	FE HEAD							
TU 01	295P194030	TUNER	TERB1-054A	[B]					
TU 01	295P261020	TUNER	ENV-57819F1C	[E]					
TU 01	295P260030	TUNER	ENV-59808F2	[IR]					
TU 01	295P297010	TUNER	TERE1-0J9A	[Y]					
V 8A0	253P085020	TUBE FLUOR	FIP11AMW11						
X 2A0	285P083010	CRYSTAL RESONATOR	4. 43352MHz						
X 501	285P084010	CRYSTAL RESONATOR	17. 7345MHz						
X 7A0	285P091010	CRYSTAL RESONATOR	6. 552MHz	[B, IR]					
X 7A0	285P092010	CRYSTAL RESONATOR	5. 85MHz	[E]					
X 7A1	285P154010	CRYSTAL RESONATOR	11. 648MHz	[B, E, IR]					
X 7A2	285P094010	CRYSTAL RESONATOR	S3768	[B, E, IR]					
X 8A0	285P063040	CRYSTAL RESONATOR	4. 19430MHz						
X 8A1	285P054010	CRYSTAL RESONATOR	32. 768kHz						
Z 8A0	939P481020	PREAMP UNIT	HC-479M						
PRINTED CIRCUIT BOARD ASSY'S									
	928C595001	OECK PCB ASSY							
	927B441010	HEAD-AMP PCB ASSY		[B, IR]					
	927B441009	HEAD-AMP PCB ASSY		[E, Y]					
	927B583012	Hi-Fi PCB ASSY		[B]					
	927B583018	Hi-Fi PCB ASSY		[E]					
	927B583017	Hi-Fi PCB ASSY		[IR]					
	927B583011	Hi-Fi PCB ASSY		[Y]					
	928D071020	MAIN PCB ASSY		[B]					
	928D071030	MAIN PCB ASSY		[E]					
	928D071040	MAIN PCB ASSY		[IR]					
	928D071010	MAIN PCB ASSY		[Y]					
	927B585012	POWER PCB ASSY		[B]					
	927B585011	POWER PCB ASSY		[E, IR, Y]					

[MEMO]

4.DECK ASSEMBLY
ASSEMBLY DECK-I



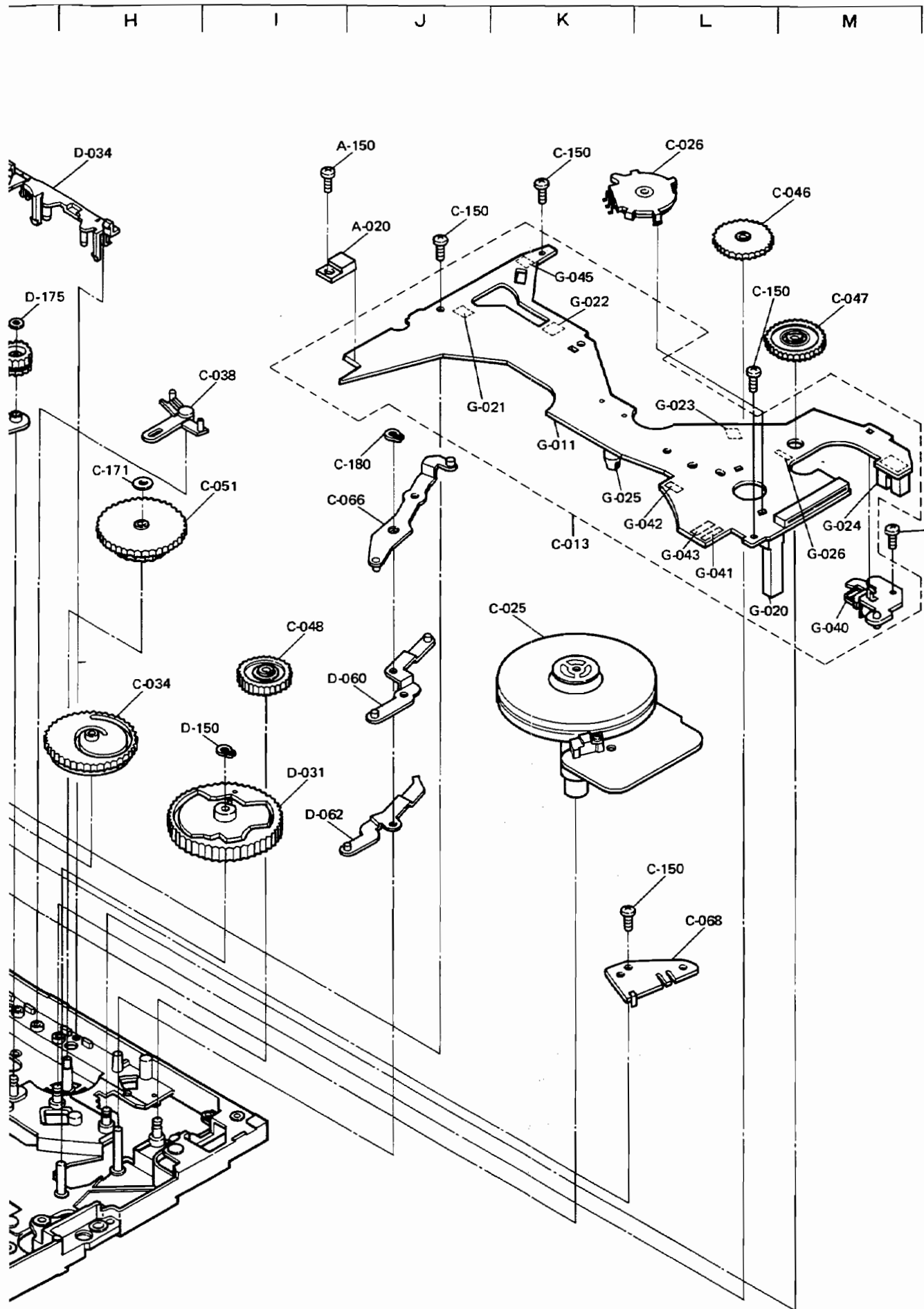


* Settled Service Parts

ITEM	PARTS No.	* ADDRESS	PARTS NAME	DESCRIPTION	Qt.
B-015	948B274018	○ B-2	ASSY-DRUM		01
M-010	928B984007	○ B-3	ASSY-UPPER-DRUM		01
M-030	288P088040	○ C-3	MOTOR-DRUM	M570	01
D-011	948A071020	○ J-9	ASSY-MAIN-PLATE		01
D-012	948D018040	○ D-6	ASSY-TAPE-GUIDE-S		01
D-012	948D018050	○ D-6	ASSY-TAPE-GUIDE-S		01
D-012	948D018060	○ D-6	ASSY-TAPE-GUIDE-S		01
E-011	6358059010	○ E-6	TAPE-GUIDE-S		01
E-011	6358059020	○ E-6	TAPE-GUIDE-S		01
E-011	6358059030	○ E-6	TAPE-GUIDE-S		01
E-016	522D177010	○ E-5	GUIDE-ROLLER		01
E-021	669D197020	○ E-6	SET-SCREW-F	M3 × 0.5-4	01
D-013	948D019040	○ E-7	ASSY-TAPE-GUIDE-T		01
D-013	948D019050	○ E-7	ASSY-TAPE-GUIDE-T		01
D-013	948D019060	○ E-7	ASSY-TAPE-GUIDE-T		01
F-011	6358060010	○ F-6	TAPE-GUIDE-T		01
F-011	6358060020	○ F-6	TAPE-GUIDE-T		01
F-011	6358060030	○ F-6	TAPE-GUIDE-T		01
F-016	522D177010	○ F-6	GUIDE-ROLLER		01
F-021	669D197020	○ F-6	SET-SCREW-F	M3 × 0.5-4	01
D-036	621D522010	○ E-7	SLIDER		02
C-014	928D031010	○ N-5	ASSY-LOAD-MOTOR		01
H-011	641B313010	○ 0-4	HOLDER-MOTOR		01
H-012	641C783010	○ N-4	GEAR-WHEEL		01
H-013	641C801010	○ N-2	GEAR-WORM		01
H-014	621D784010	○ 0-2	CUPLING-2		01
H-015	552C007030	○ N-4	CUT-WASHER	2.5	01
H-016	593C059010	○ N-1	PLATE-HOLDER-M2		01
H-017	621D793010	○ 0-2	PULLEY-L		01
H-018	521D074010	○ N-2	BELT-LM		01
H-020	288D025010	○ 0-1	MOTOR-LOADING	M571	01
H-035	650P300030	○ N-2	SCREW-F-FE-PAN	M3 × 0.5-3	02
C-015	928D032030	○ M-7	ASSY-AC-HEAD		01
J-011	592C760010	○ M-6	ARM-AC		01
J-015	460P060050	○ L-6	HEAD-AC	T370	01
J-020	570D593010	○ M-6	SPRING-AC		01
J-025	215C393010	○ L-4	PWB-AC-AF		01
J-040	650P261040	○ M-5	SCREW-F-FE-PAN	M2.6 × 0.45-14	01
J-041	669D227010	○ L-5	SCREW-TS	M2.6 × 6	01
J-042	669D206030	○ L-5	SCREW		01
C-016	928D033010	○ B-4	ASSY-FE-HEAD		01
K-011	460P061020	○ B-5	HEAD-FE	T371	01
K-015	641C870010	○ B-4	HOLDER-FE		01
C-017	948D020010	○ I-1	ASSY-ARM-PINCH		01
L-011	591B536010	○ J-2	ARM-PINCH		01
L-015	621D523010	○ J-3	CAP-ROLLER		01
L-016	641C797010	○ J-4	LEVER-CAM-PINCH		01
L-017	641C798010	○ J-2	LEVER-ARM-PINCH		01
L-025	522D174010	○ J-2	ROLLER-PINCH		01
L-035	572D314010	○ K-2	SPRING-PINCH		01
L-036	572D315010	○ J-4	SPRING-CAM-PINCH		01
C-030	641B368010	○ E-3	ARM-TENS-REG-S2		01
C-031	591B551020	○ I-3	ARM-TENS-REG-T		01
C-032	641B314020	○ L-2	CAM-PINCH		01
C-033	6358068010	○ K-5	ARM-TU-G		01
C-035	641C782010	○ L-8	GEAR-JOINT		01
C-036	641B527020	○ G-3	BRAKE-MAIN-S2		01
C-037	641B526020	○ H-4	BRAKE-MAIN-T2		01

* Settled Service Parts

ITEM	PARTS No.	* ADDRESS	PARTS NAME	DESCRIPTION	Qt.
C-039	641C796010	○ D-2	LEVER-TENS		01
C-041	641C991010	○ J-4	ARM-GEAR-TU-G2		01
C-042	641C804010	○ F-5	LEVER-REC-SAFETY		01
C-043	641C806010	○ L-1	CAP-ARM-PINCH		01
C-044	641C861010	○ E-1	HOLDER-T-BAND		01
C-045	621D509010	○ L-3	GEAR-1		01
C-050	522C076020	○ H-2	UNIT-REEL-DISK		02
C-052	641B319010	○ C-5	UNIT-IMP-ROLLER		01
C-062	591B547010	○ F-3	ARM-TENSION		01
C-063	591B552010	○ F-1	BELT-TENS-BRAKE		01
C-069	592C930010	○ L-6	LEVER-TENS-TU		01
C-070	635D063010	○ I-5	NUT-TAPER		01
C-091	572D309010	○ H-4	SPRING-M-B		02
C-092	572D391010	○ E-2	SPRING-TENS-REG-S2		01
C-093	572D390010	○ I-4	SPRING-TENS-REG-T2		01
C-094	572D312010	○ F-3	SPRING-TENS		01
C-096	572D317010	○ K-5	SPRING-TU-G		01
C-097	572D318010	○ M-7	SPRING-ARM-A/C		01
C-098	572D328010	○ D-2	SPRING-REC-SAFETY		01
C-150	669D227010	○ M-3	SCREW-TS	M2.6 × 6	02
C-151	669D227030	○ C-4	SCREW-TS	M2.6 × 10	01
C-152	669D228010	○ E-1	SCREW-TS-SEMS	M2.6 × 6	01
C-154	669D285040	○ J-6	SCREW-TB-PAN	M2.6 × 8	03
C-160	674D081020	○ K-4	NUT-NYLON	M3 × 0.5	01
C-161	674D100010	○ L-6	NUT-NYLON-S	M4 × 0.7	01
C-175	552C007030	○ I-3	CUT-WASHER	2.5	01
C-180	685C009010	○ F-2	GRIP-RING		01
C-181	685C009020	○ L-1	GRIP-RING		01
A-040	299C025010	○ G-1	BRUSH		01
A-055	590A256020	○ A-6	UNIT-F/L-F		01
A-060	572D401010	○ I-4	SPRING-RS		01
A-070	641C906010	○ F-9	HOLDER-CARD		01
A-150	669D227010	○ G-1	SCREW-TS	M2.6 × 6	01
A-151	669D227020	○ A-5	SCREW-TS	M2.6 × 8	02



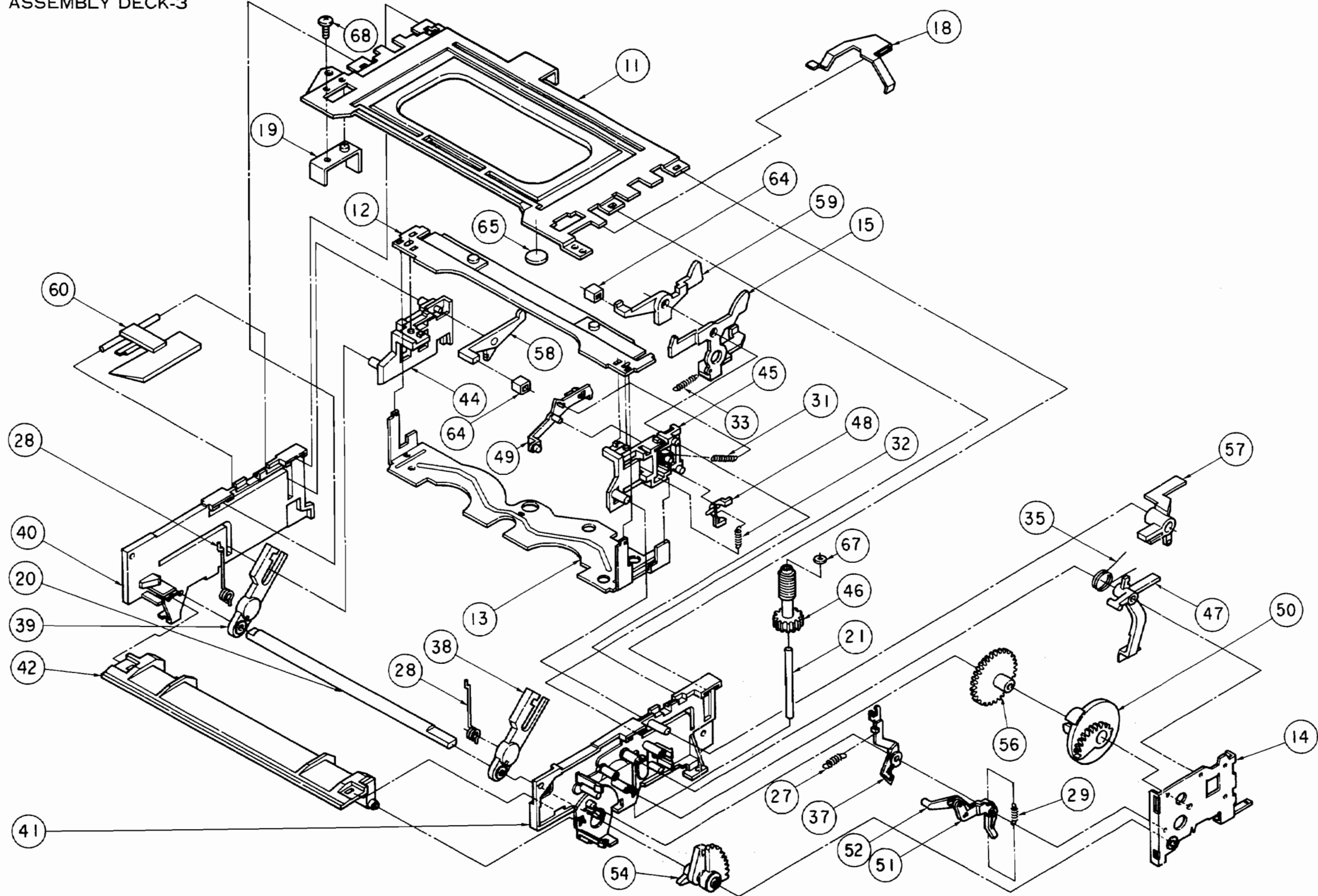
* Settled Service Parts

ITEM	PARTS No.	* ADDRESS	PARTS NAME	DESCRIPTION	Qt.
B-150	669D200040	E-4	SCREW-SEMS	M2. 6×0. 45-10	03
D-030	641B310010	○ E-2	UNIT-LEVER-SHIFT		01
D-031	641B323010	○ I-5	CAM-MAIN-1		01
D-032	641C789020	○ D-4	PULLEY-GEAR		01
D-033	641C790010	○ D-3	PULLEY-BELT		01
D-034	641C815010	○ H-1	HOLDER-P-CAM		01
D-035	621D516010	○ G-2	GEAR-F/L-1		01
D-040	522C077020	○ E-5	UNIT-GEAR-IDLER		01
D-041	522C083010	○ F-1	UNIT-GEAR-REEL-S		01
D-060	591B559010	○ I-5	LEVER-C		01
D-061	591B567010	○ G-3	LEVER-F/L-ID		01
D-062	592C830010	○ I-6	LEVER-RS		01
D-063	596D057010	○ D-5	WASHER-R	T=0. 3	01
D-090	572D306010	○ D-6	SPRING-SHIFT		01
D-150	685C009010	○ H-5	GRIP-RING		01
D-170	552C010040	○ D-4	WASHER-THRUST	6. 7×12×0. 13	01
D-175	552C007030	○ D-3	CUT-WASHER	2. 5	04
D-180	669D227010	○ G-2	F-1		
		○ E-2	SCREW-TS	M2. 6×6	01
C-013	928C595001	○ K-4	ASSY-PWB-DECK		01
G-011	240A750010	○ K-3	PWB-DECK		01
G-020	268P014020	○ L-4	TRANSISTOR	0571 PN205L-(NC)	01
G-021	268P014020	○ J-3	TRANSISTOR	0572 PN205L-(NC)	01
G-022	268P044010	○ K-2	PHOTO-INTERRUPTER	0573 ON2270-R	01
G-023	268P044010	○ L-3	PHOTO-INTERRUPTER	0574 ON2270-R	01
G-024	268P045010	○ M-4	PHOTO-INTERRUPTER	0575 GP1L52	01
G-025	264P307020	○ K-4	DIODE-LE	0570 GL-451	01
G-026	264P515010	○ M-4	DIODE	0571 MA165	01
G-040	299P124010	○ M-4	LATCH-MAGNET	L570	01
G-041	260P455010	○ L-4	TRANSISTOR	0581 DTC124EF	01
G-042	260P455010	○ L-4	TRANSISTOR	0582 DTC124EF	01
G-043	260P455010	○ L-4	TRANSISTOR	0583 DTC124EF	01
G-045	439P020010	○ K-2	SW-LIMIT	SW571	01
C-025	288P118010	○ K-4	MOTOR-CP	M470	01
C-026	439P019010	○ L-1	SW-MODE-SELECT-F	SW570	01
C-034	641B324010	○ H-5	CAM-MAIN-2		01
C-038	641C795010	○ I-3	LEVER-IDLER-S		01
C-040	641C800010	○ F-5	BRAKE-CP		01
C-046	621D517010	○ M-1	GEAR-F/L-2		01
C-047	621D518010	○ M-2	GEAR-F/L-3		01
C-048	621D519010	○ I-4	GEAR-F/L-4		01
C-051	522C078040	○ I-3	UNIT-GEAR-REEL		01
C-060	591B543010	○ A-5	ARM-LOAD-S		01
C-061	591B544010	○ B-6	ARM-LOAD-T		01
C-064	591B554010	○ B-3	PLATE-CAM-C		01
C-065	591B557010	○ F-4	ARM-GEAR-LOAD		01
C-066	591B558010	○ J-4	LEVER-B		01
C-067	592C949010	○ B-1	UNIT-PLATE-CAM-B3		01
C-068	596D186010	○ L-6	PLATE-SHIELD-F		01
C-075	521D062010	○ B-4	BELT-REEL		01
C-090	572D308020	○ F-6	SPRING-B-CP		01
C-095	572D313010	○ B-2	SPRING-CAM-C		01
C-150	669D227010	○ J-2	K-1		
		○ L-2	L-6		
		○ M-4			
C-171	552C006020	○ H-3	WASHER-THRUST	2. 0×0. 13	01
C-180	685C009010	○ A-1	F-4		
		○ J-3	GRIP-RING		04
C-182	552C009050	○ C-1	CUT-WASHER		01
A-020	260P630010	○ J-2	TRANSISTOR	0971 2SD2012	01
A-061	572D404010	○ B-1	SPRING-B-RS		01
A-071	641C928010	○ B-1	LEVER-B-RS		01
A-150	669D227010	○ I-1	SCREW-TS	M2. 6×6	01

A B C D E F G H I J K

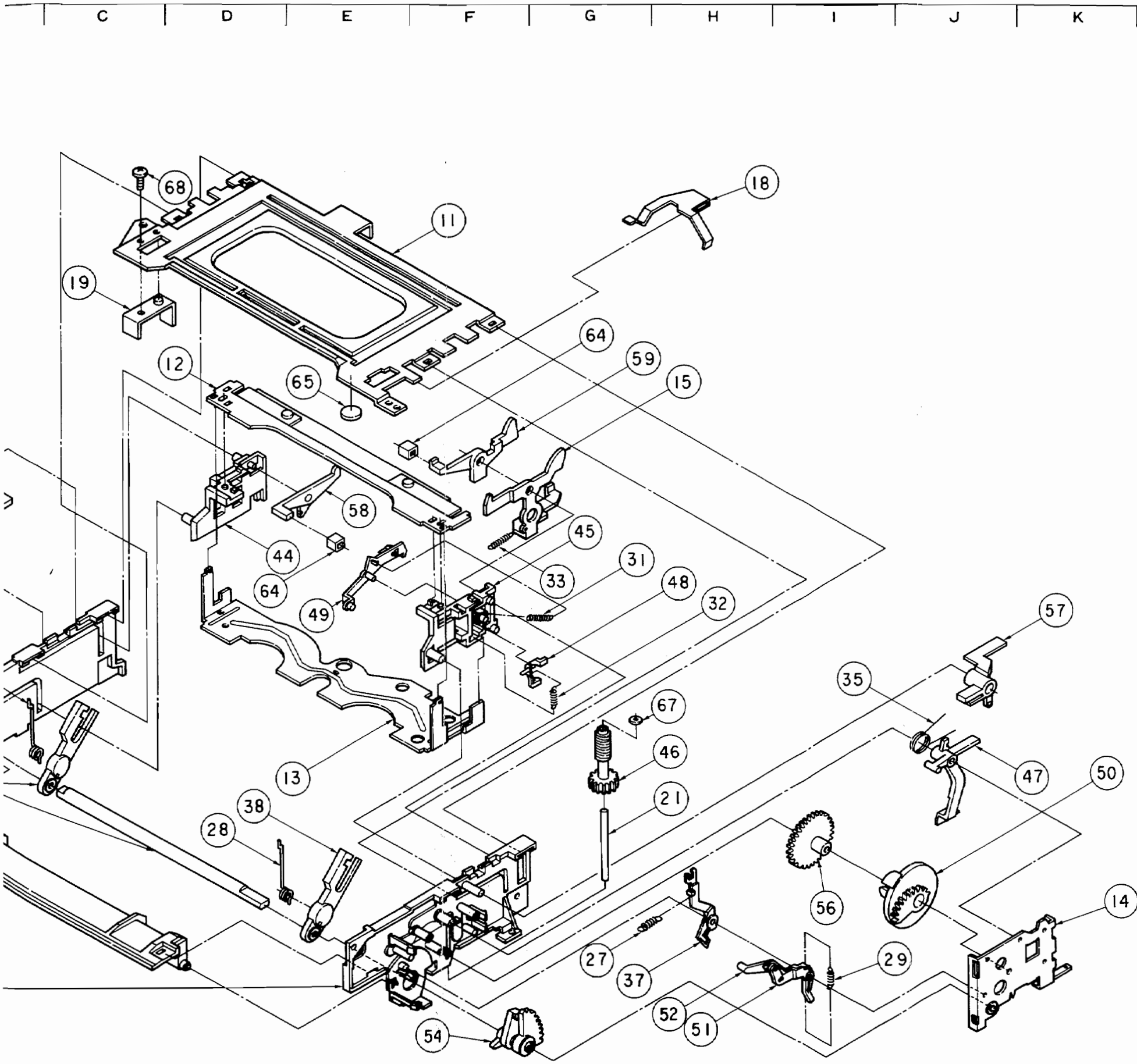
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ASSEMBLY DECK-3



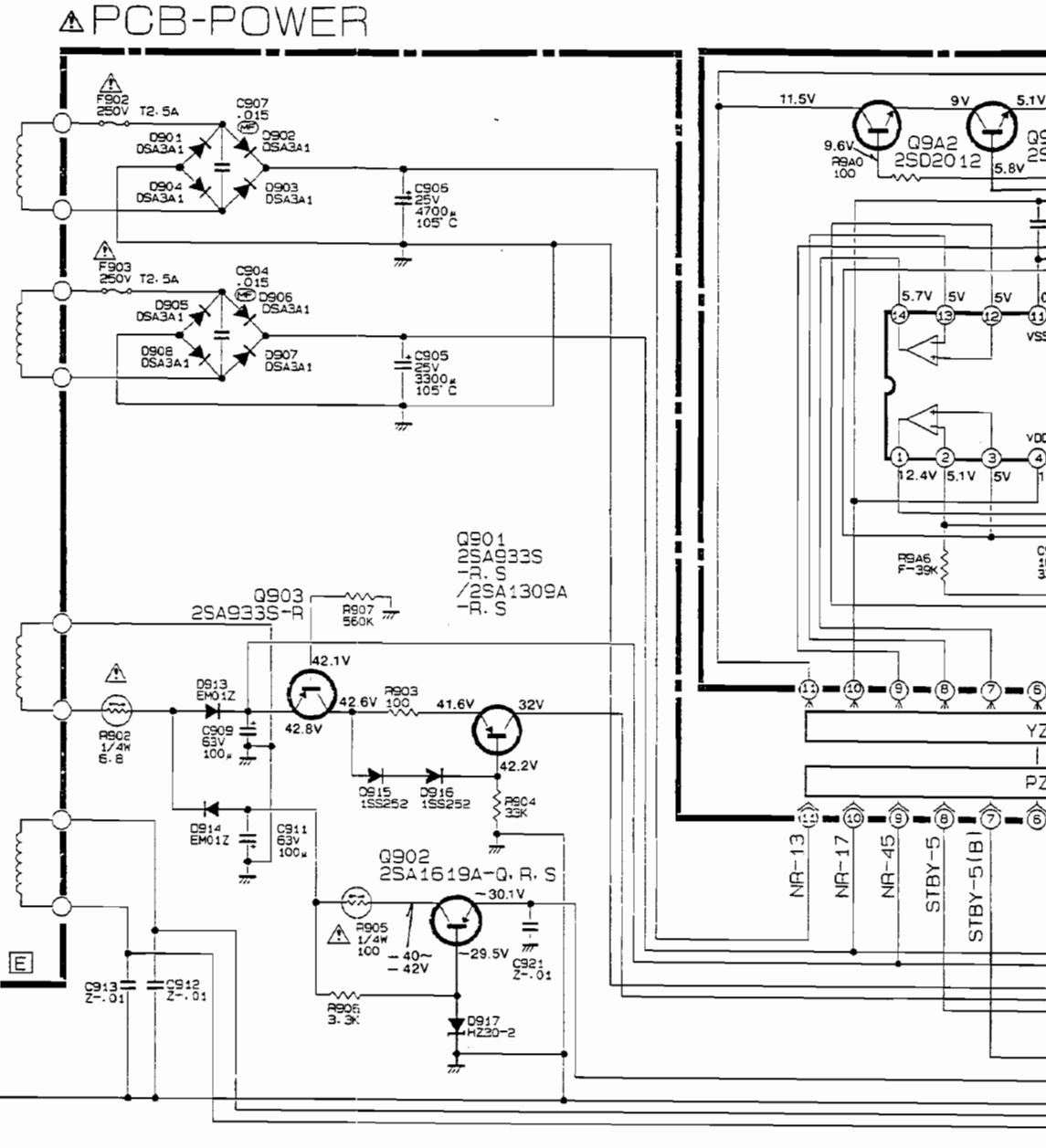
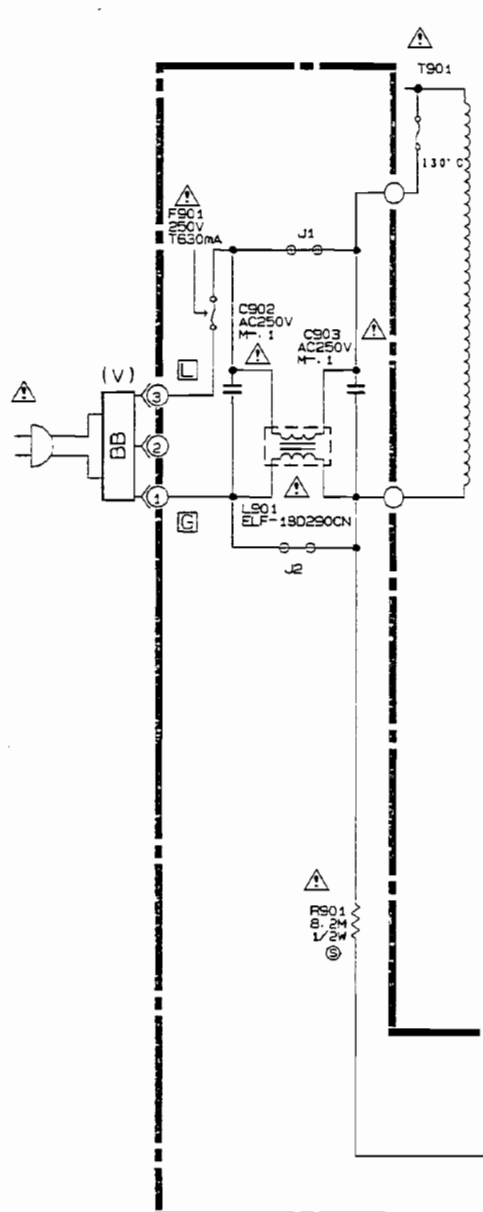
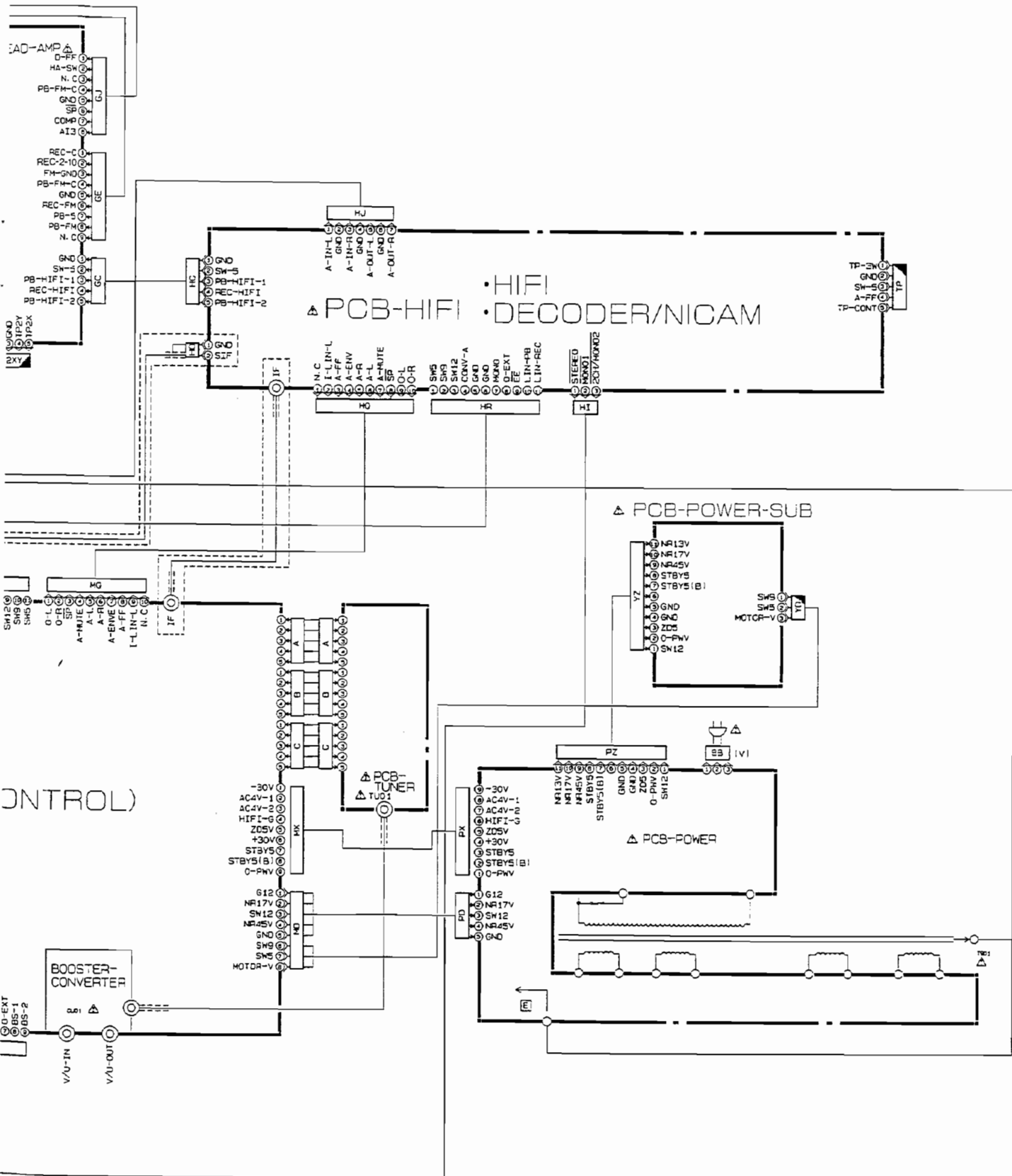
* Settled Service

ITEM	PARTS No.	#
11	591B545010	
12	592C758010	
13	591B546010	
14	591B542010	
15	592C851010	
18	596D150010	
19	596D217010	
20	631D134010	
21	631D135010	
27	(not used)	
28	572D301010	C
29	572D389010	C
31	572D304010	
32	572D305010	
33	572D380010	
35	572D367010	
37	(not used)	
38	641B315010	C
39	641B315020	C
40	641A110010	
41	641A109010	
42	641B306010	
44	641B309010	
45	641B307010	
46	621D513010	C
47	621D514010	C
48	621D515010	C
49	641C794010	
50	641C793010	C
51	641C897010	C
52	641C898010	C
54	641C858010	C
56	641C814010	C
57	641C857010	
58	621D585010	
59	621D586010	
60	641C878010	
64	642D494010	
65	(not used)	
67	552C001040	
68	-----	



* Settled Service Parts

ITEM	PARTS No.	* ADDRESS	PARTS NAME	DESCRIPTION	Qt.
11	5918545010	F-2	PLATE-ROOF		01
12	592C758010	D-3	PLATE-UPPER		01
13	5918546010	E-7	PLATE-BOTTOM		01
14	5918542010	K-8	PLATE-SIDE-TU		01
15	592C851010	H-3	LEVER-LOCK-FL		01
18	596D150010	H-2	PLATE-EARTH		01
19	596D217010	C-3	PLATE-GUARD		01
20	631D134010	A-6	SHAFT-FL		01
21	631D135010	H-7	SHAFT-WORM		01
27	(not used)	G-8			
28	572D301010	A-5	D-7 SPRING-FL		02
29	572D389010	J-8	SPRING-DOOR-SUB		01
31	572D304010	G-5	SPRING-OPENER-LID		01
32	572D305010	H-5	SPRING-JUT-FL		01
33	572D380010	G-5	SPRING-LEVER-LOCK		01
35	572D367010	I-6	SPRING-LEVER-SW		01
37	(not used)	G-8			
38	641B315010	D-7	ARM-FL		01
39	641B315020	A-7	ARM-FL		01
40	641A110010	A-6	HOLDER-SIDE-SP		01
41	641A109010	A-8	HOLDER-SIDE-TU		01
42	641B306010	A-7	GUIDE-INSERT		01
44	641B309010	D-5	HOUSING-CASSETTE-SP		01
45	641B307010	G-5	HOUSING-CASSETTE-TU		01
46	621D513010	H-6	GEAR-WORM-FL		01
47	621D514010	K-7	LEVER-SW-FL		01
48	621D515010	H-5	JUT		01
49	641C794010	E-5	OPENER-LID-CAS		01
50	641C793010	K-7	GEAR-DRIVE		01
51	641C897010	H-9	ARM-FL-DOOR-A		01
52	641C898010	H-9	ARM-FL-DOOR-B		01
54	641C858010	F-9	ARM-LOCK		01
56	641C814010	I-8	GEAR-W-H-F/L		01
57	641C857010	K-5	LEVER-PICK-CAS		01
58	621D585010	E-4	LEVER-CAS-SP		01
59	621D586010	G-3	LEVER-CAS-TU		01
60	641C878010	A-4	STOPPER-SP-FL		01
64	642D494010	D-5	G-3 RUBBER-FL		02
65	(not used)	E-3			
67	552C001040	H-6	WASHER-THRUST	3 TO. 25	01
68	-----	D-2	SCREW	2. 6-5	01



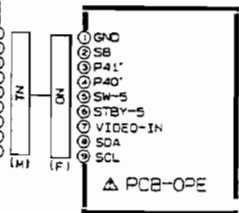
○: Employed ×: Not employed

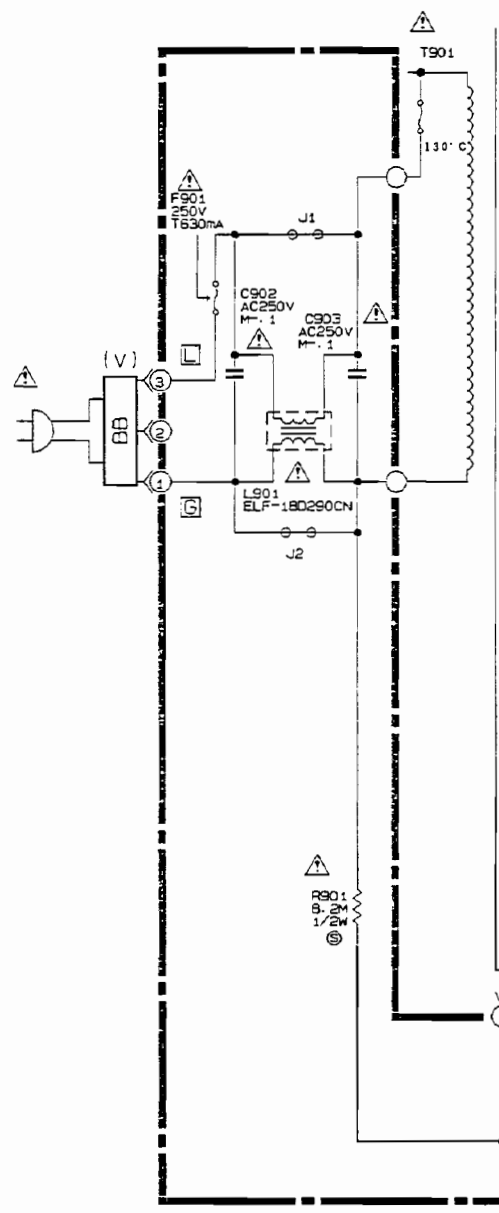
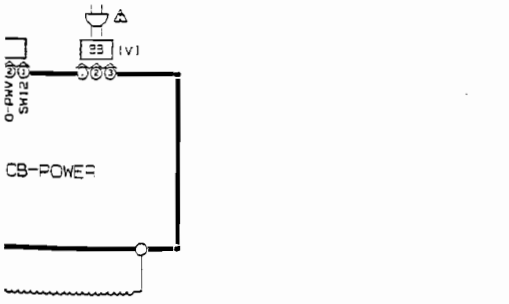
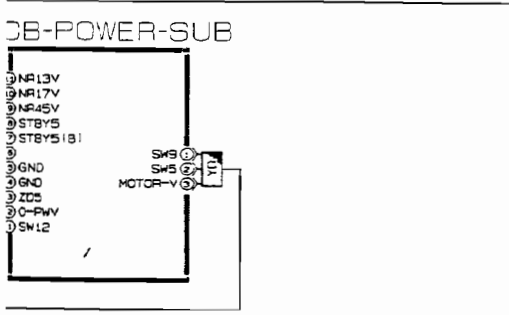
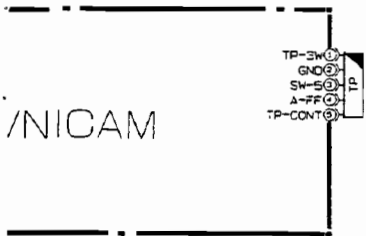
MODELS	SYMBOL NO.	L901	J1, J2	C902 C903
HS-M57(Y)(E)(R)(A)(NZ)		×	○	×
HS-M57(B)		×	○	×
HS-M57(G)		○	×	○

⚠️ SERVICING PRECAUTION

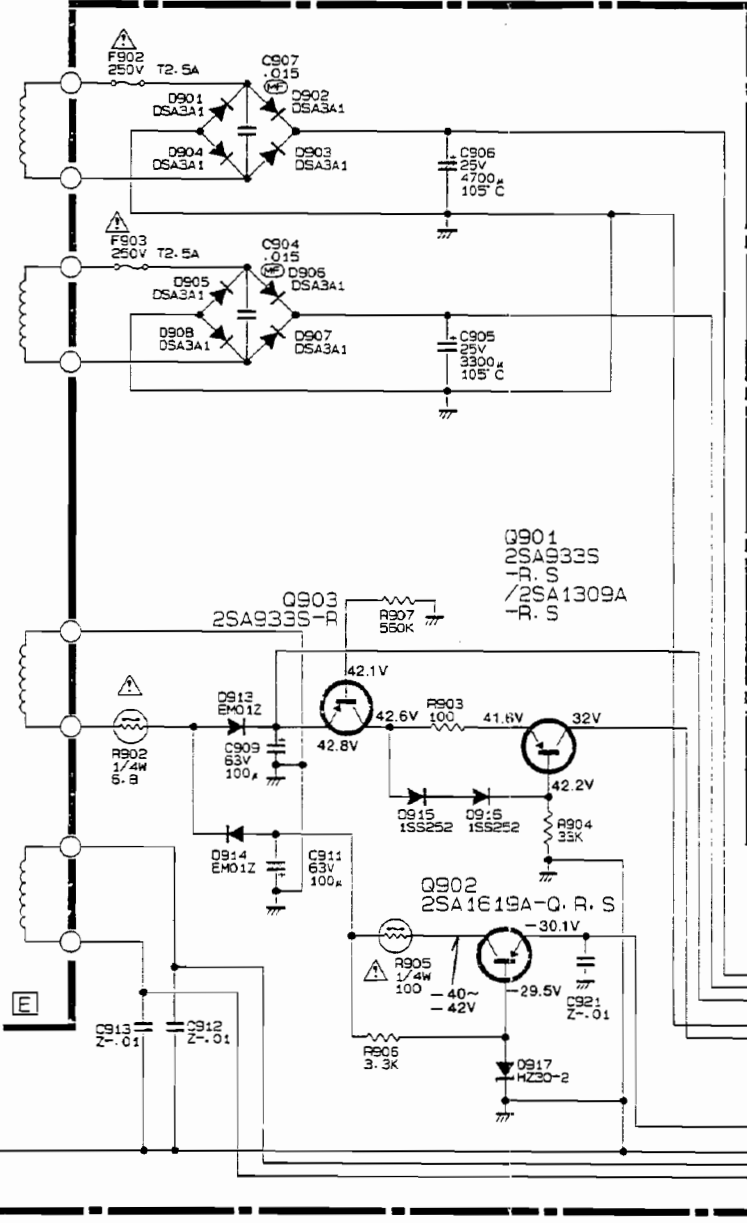
SYMBOLS INDICATE COMPONENTS HAVING SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY AND PERFORMANCE. THEREFOR REPLACEMENT OF ANY SAFETY PARTS SHOULD BE IDENTICAL IN VALUE AND CHARACTERISTICS.

DON'T DEGRADE THE SAFETY OF THE VCR THROUGH IMPROPER SERVICING.

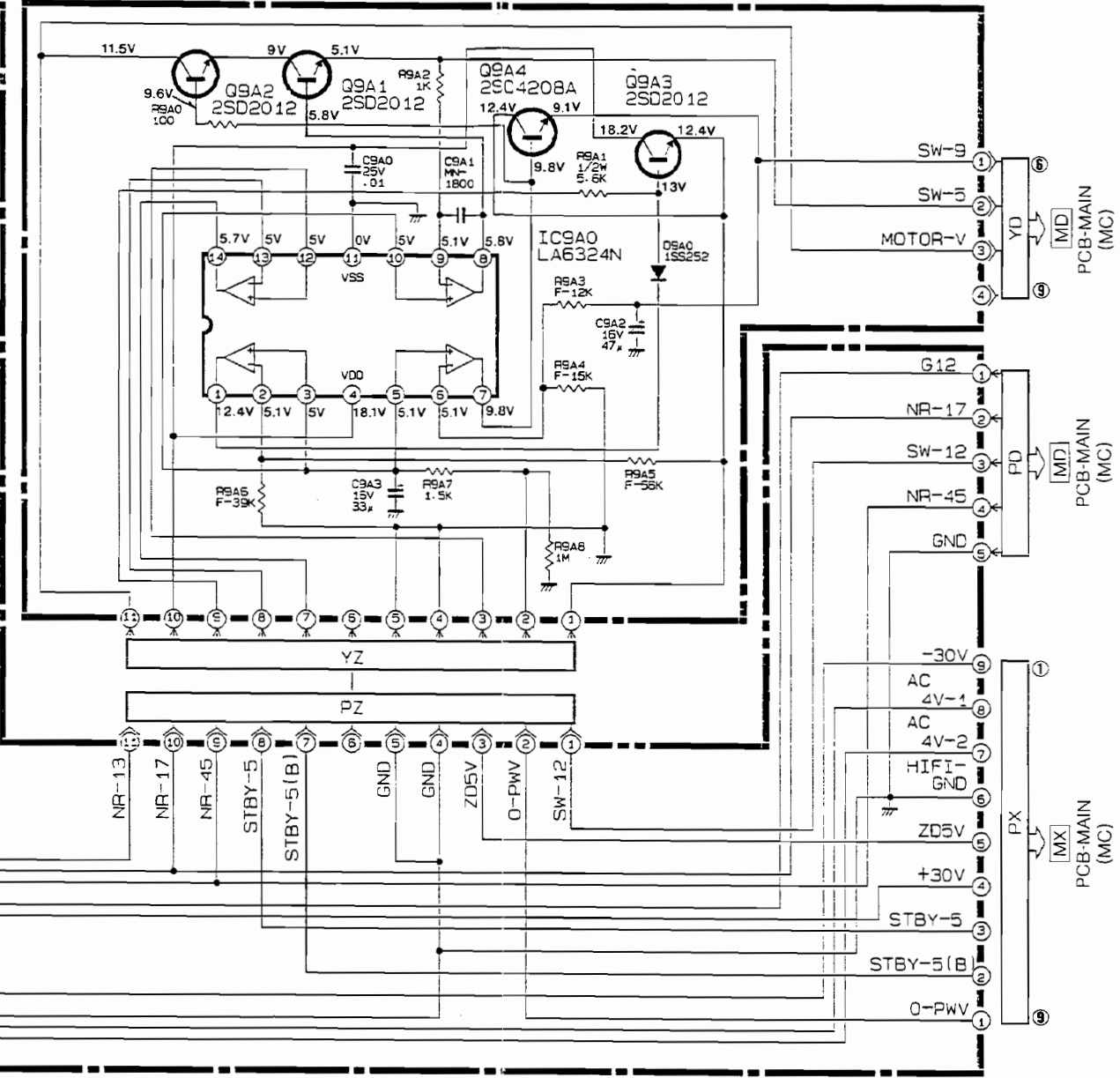




PCB-POWER



PCB-POWER-SUB



C: Employed x: Not employed

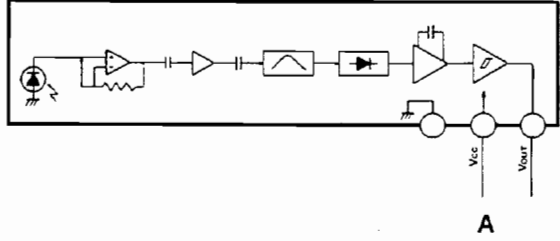
MODELS	SYMBOL NO.	L901	J1, J2	C902 C903
HS-M57(Y)(E)(IR)(A)(NZ)		x	o	x
HS-M57(B)		x	o	x
HS-M57(G)		o	x	o

⚠️ 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.

ZBA0
PREAMP-REMOTE CONTROL



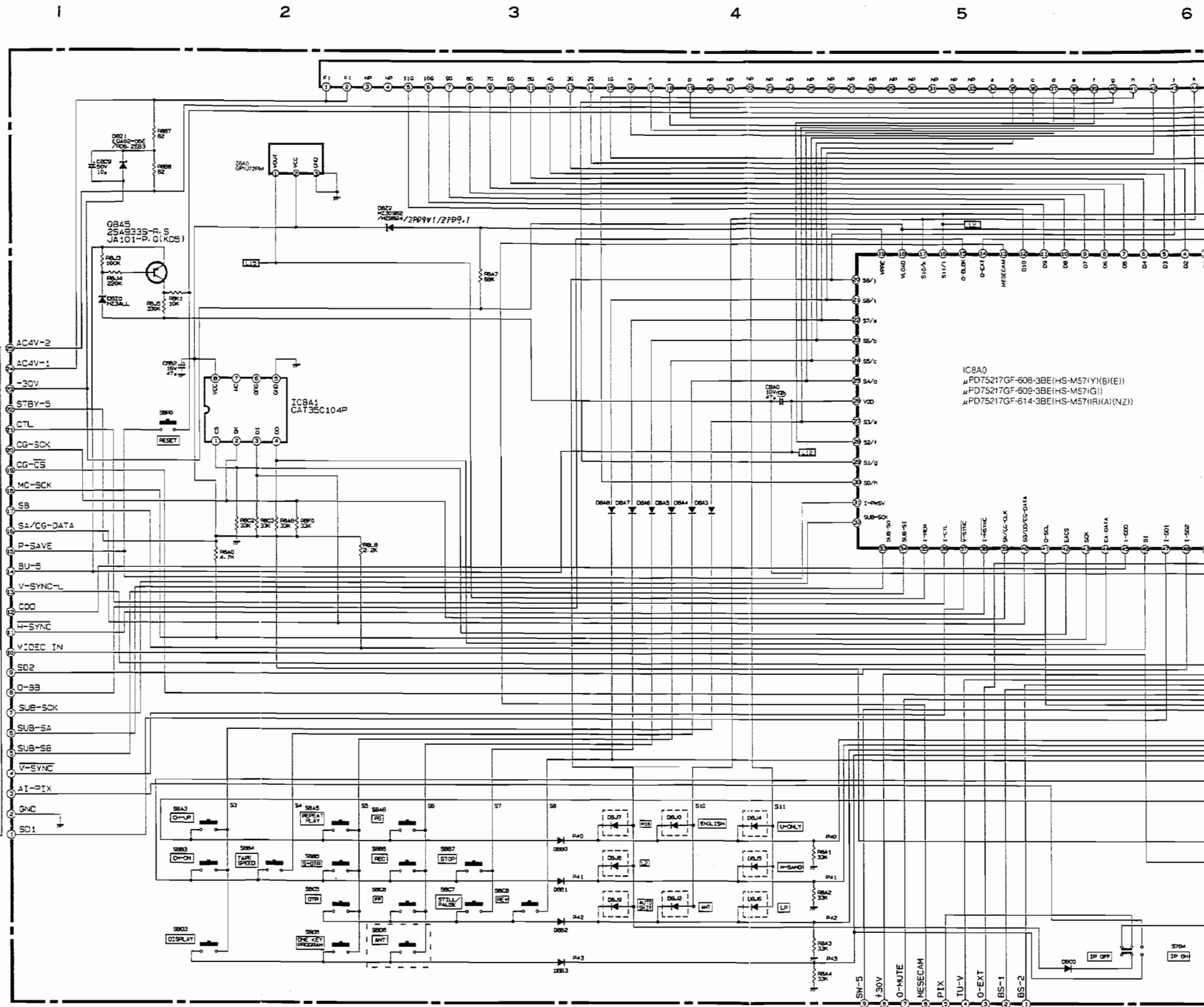
A

B

C

D

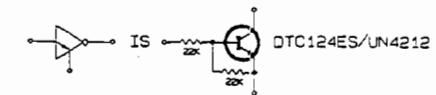
E



ICBA0
 μPD75217GF-608-3BE(HS-M57(Y)(B)(E))
 μPD75217GF-609-3BE(HS-M57(G))
 μPD75217GF-614-3BE(HS-M57(IR)(A)(NZ))

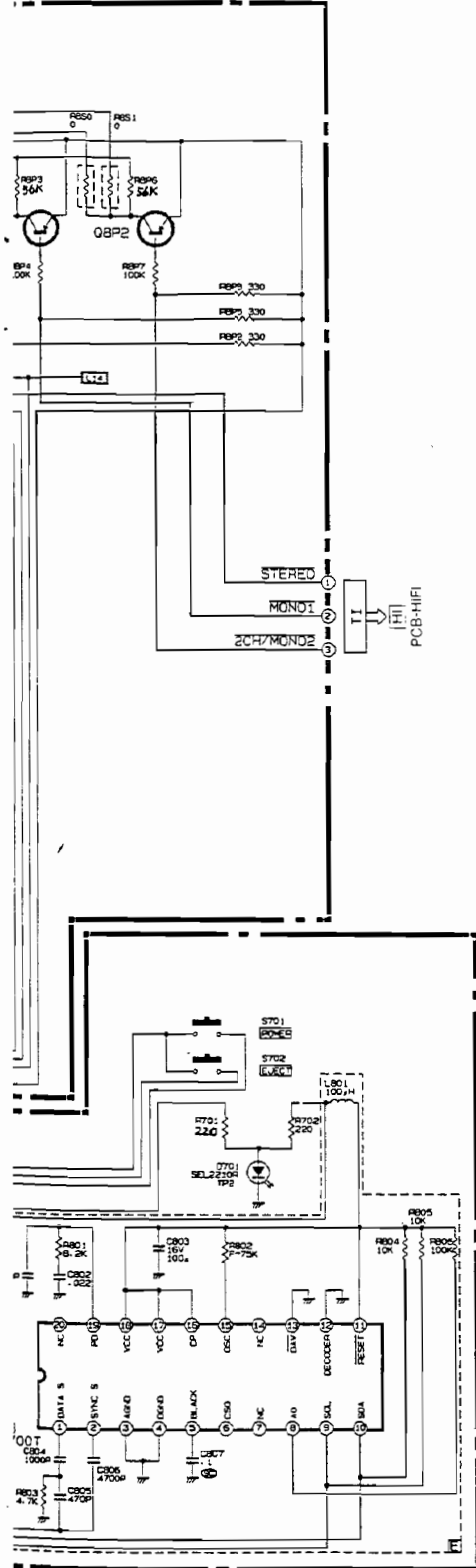
SYMBOL NO.	D8J0	D8J2	D8J4	D8J5	A AREA	B AREA	C AREA	SBD6	D8J9	RBS0	RBS1	E AREA
HS-M57(Y)	x	x	x	x	o	x	o	x	o	o	x	x
HS-M57(B)	o	x	o	x	x	o	x	x	x	x	o	x
HS-M57(G)	x	x	x	x	o	x	o	x	o	o	x	o
HS-M57(IR)	o	x	x	x	x	o	x	x	x	x	o	x
HS-M57(E)	x	x	x	o	o	x	o	x	x	x	o	x
HS-M57(A)	x	o	x	x	x	o	x	o	x	o	x	x
HS-M57(NZ)	x	o	x	x	x	o	o	o	x	x	o	x

o : Employ
 x : Not employ
 All PNP transistor are 2SA933S-R-S/JA101-P-0
 unless otherwise specified.
 All diodes are 1SS252/1N4531
 unless otherwise specified.

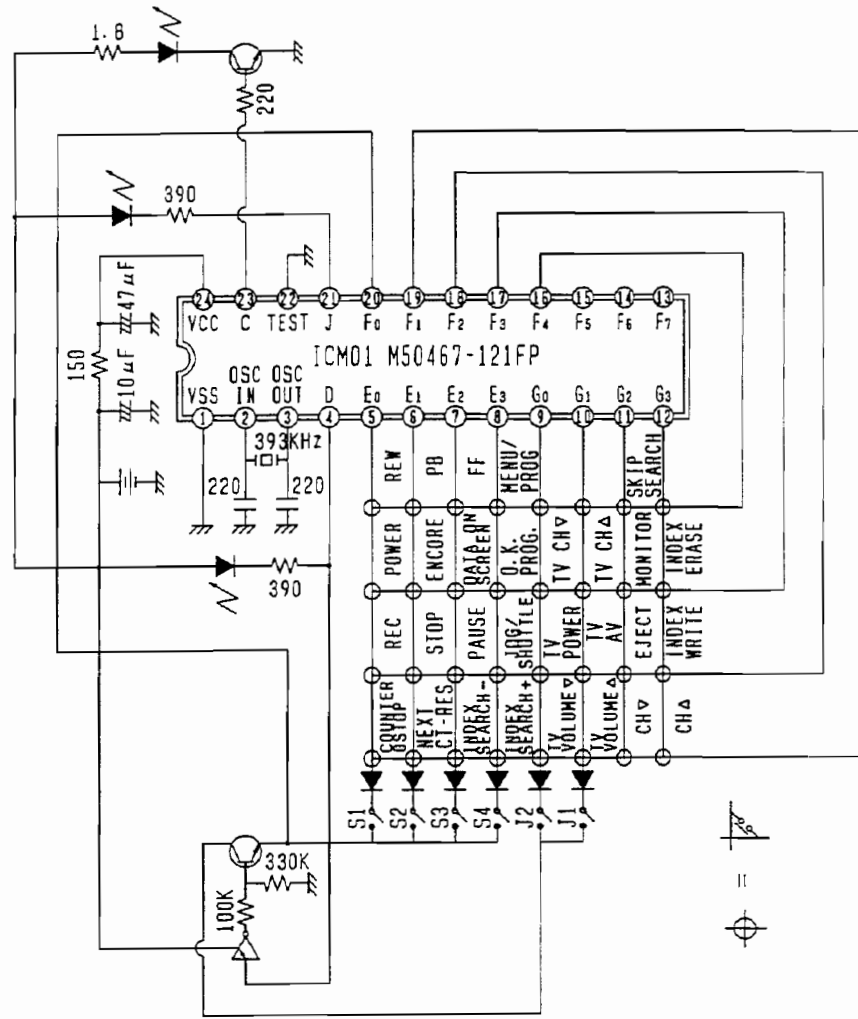


TF
 PCB-MAIN
 (V/C)

PCB-TIMER

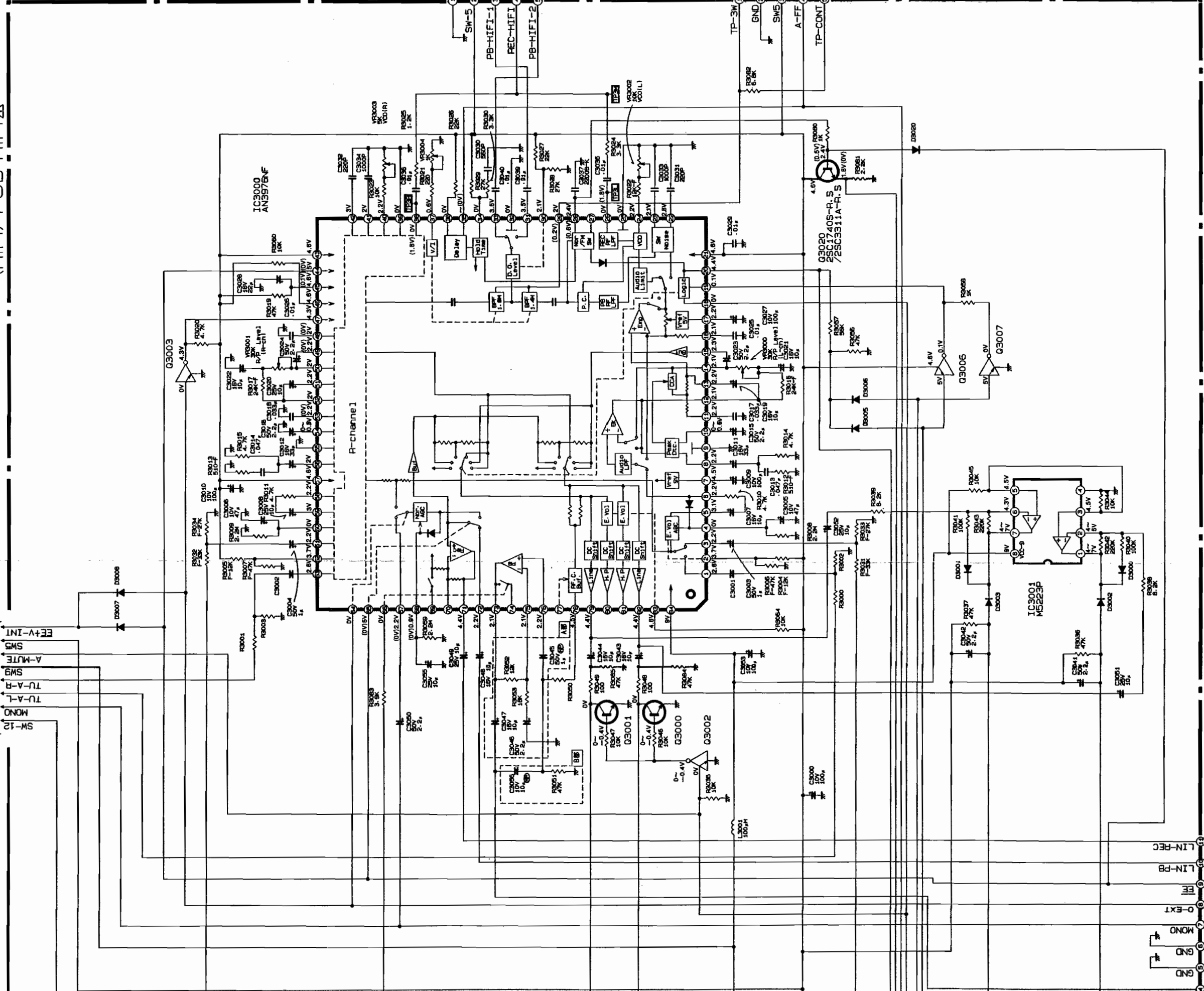


TRANSMITTER REMOTE CONTROL



(HIFI) PCB-HIFI/A

TO DECA/CAM
SW-12 MONO
TU-A-L
TU-A-R
SWS
A-MUTE
SWS
EFV-INT



TO PCB-MAIN (AUDIO)

○ : Employed
X : Not Employed

MODEL	R3000	R3001	R3002	R3003	R3050	C3001	C3002	A AREA	B AREA
HS-M57(Y)	10K	10K	6.8K	6.8K	10K	50V 1μ	50V 1μ	X	○
HS-M57(B)(R)	0Ω	0Ω	X	X	0Ω	50V 1μ NP	50V 1μ NP	○	X
HS-M57(G)	10K	10K	6.8K	6.8K	10K	50V 1μ	50V 1μ	X	○
HS-M57(A)	10K	10K	6.8K	6.8K	10K	50V 1μ	50V 1μ	X	○
HS-M57(NZ)	0Ω	0Ω	X	X	0Ω	50V 1μ NP	50V 1μ NP	○	X
HS-M57(E)	0Ω	0Ω	X	X	0Ω	50V 1μ NP	50V 1μ NP	○	X

HR

MONO

O-EXT

EF

LIN-PB

LIN-REC

TP-CONT

A-FF

SWS

GND

GND

TP-3H

REC-HIFI-2

REC-HIFI-1

SW-5

PCB-HEAD AMP

PCB-MAIN (MC)

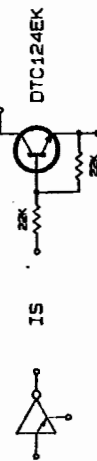
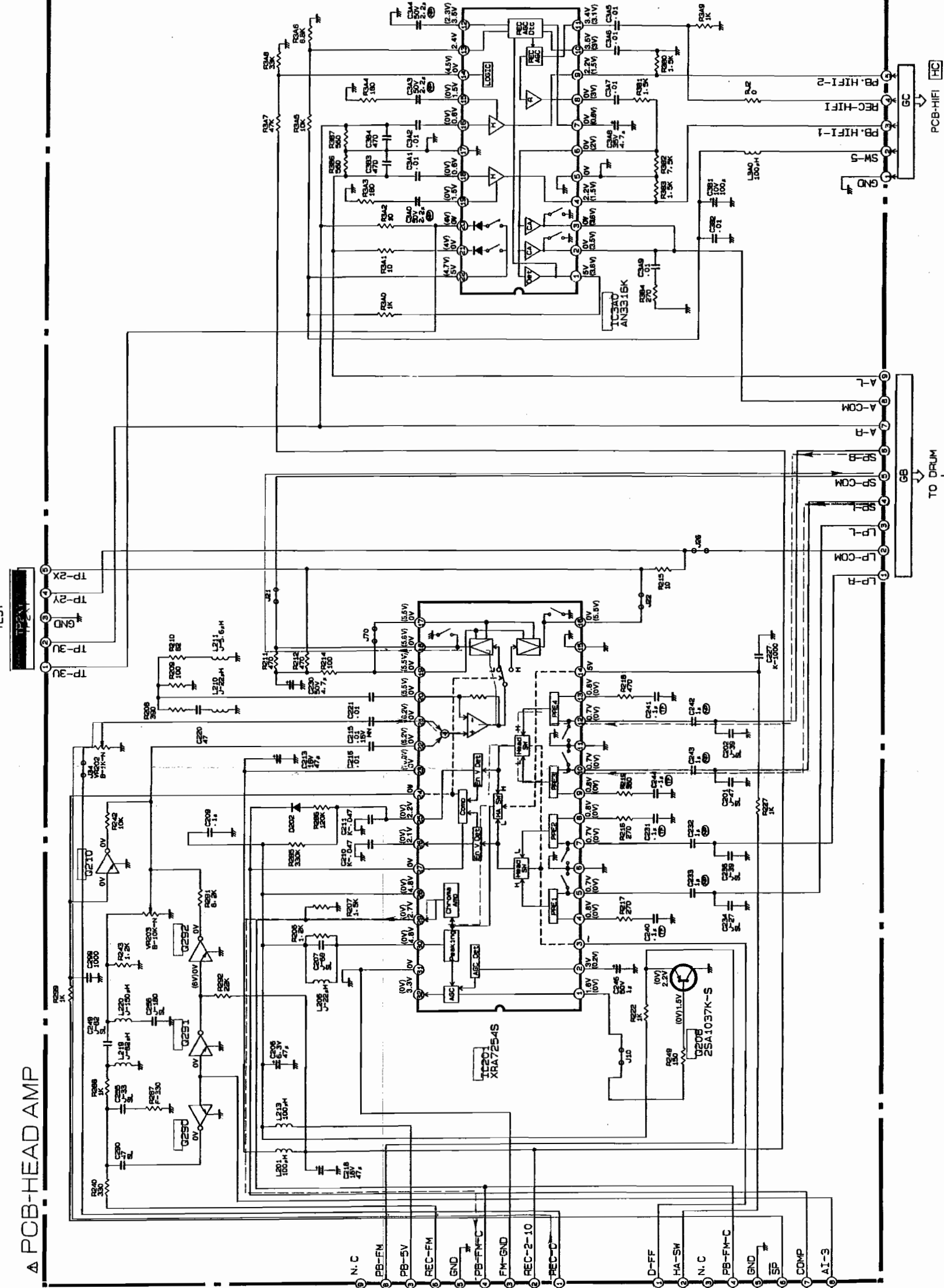
PCB-MAIN (Y/C)

ME

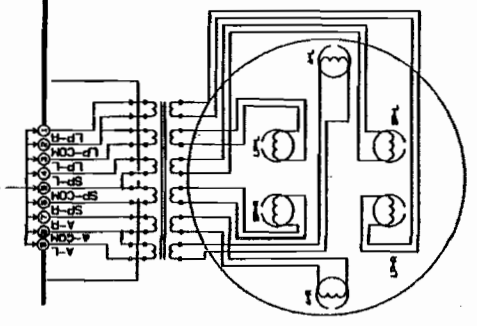
RE

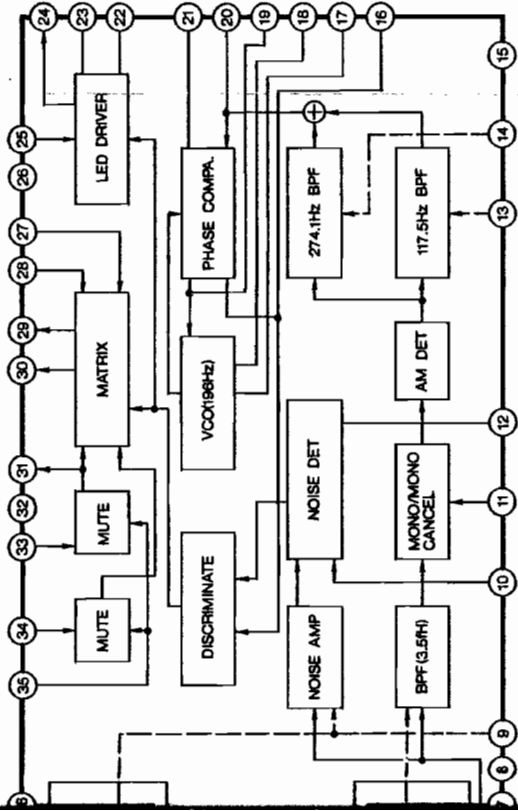
PCB-HEAD AMP

TEST

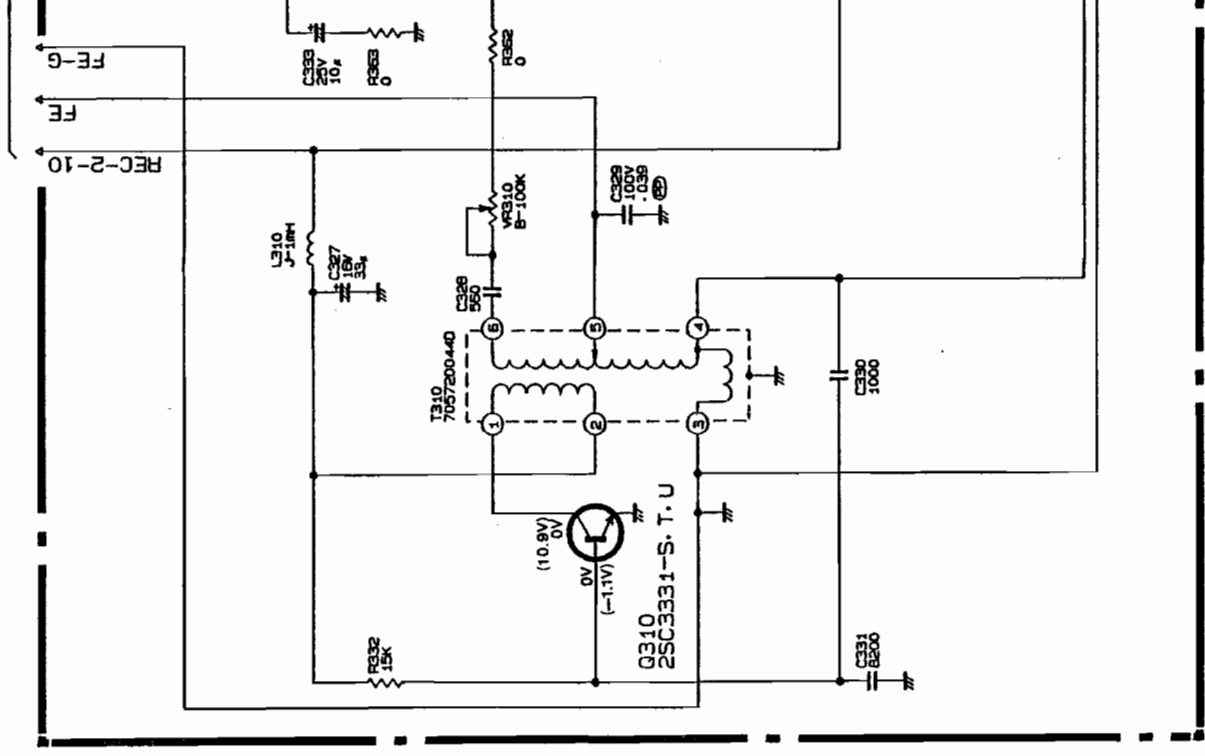


All Diodes are 1SS252 unless otherwise specified.



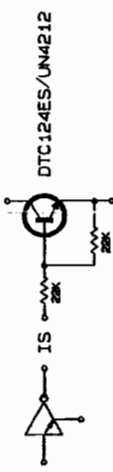
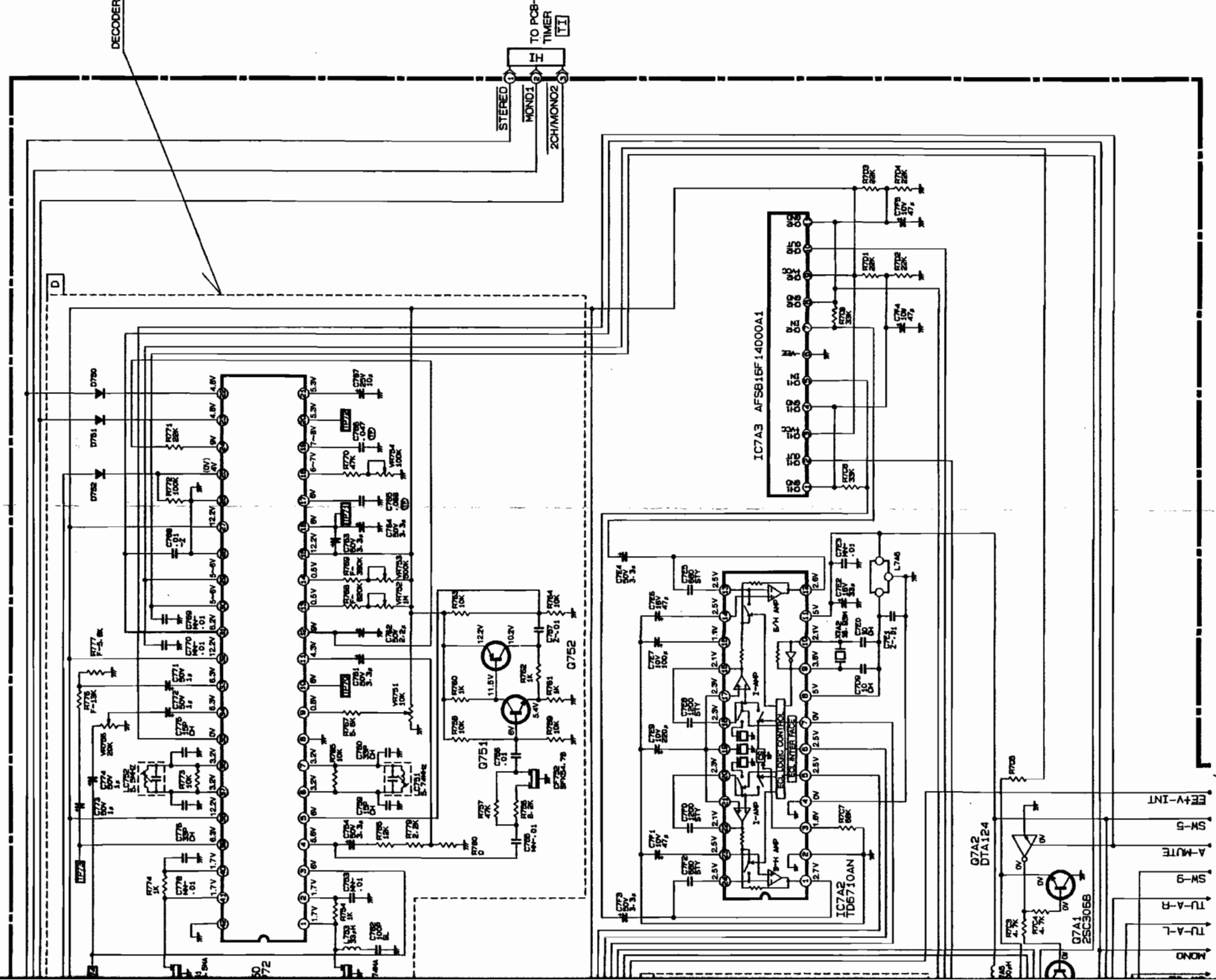


(AUDIO) PCB-MAIN



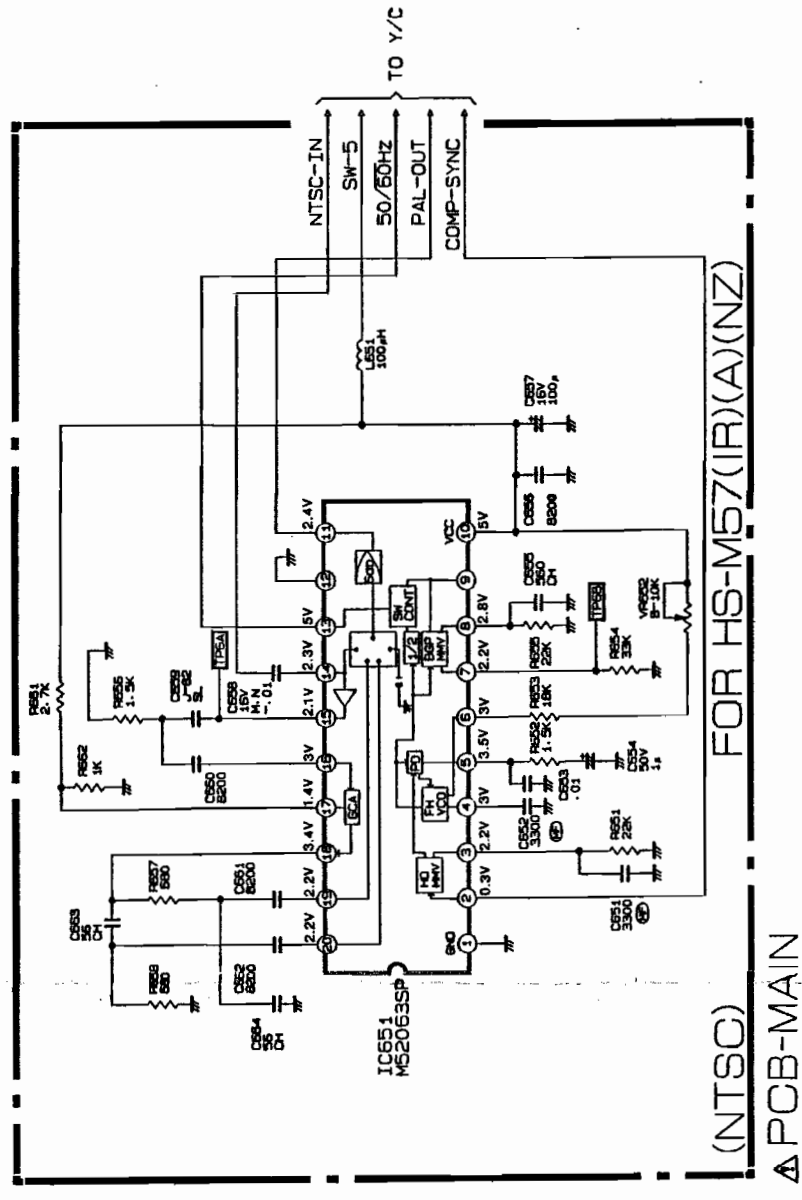
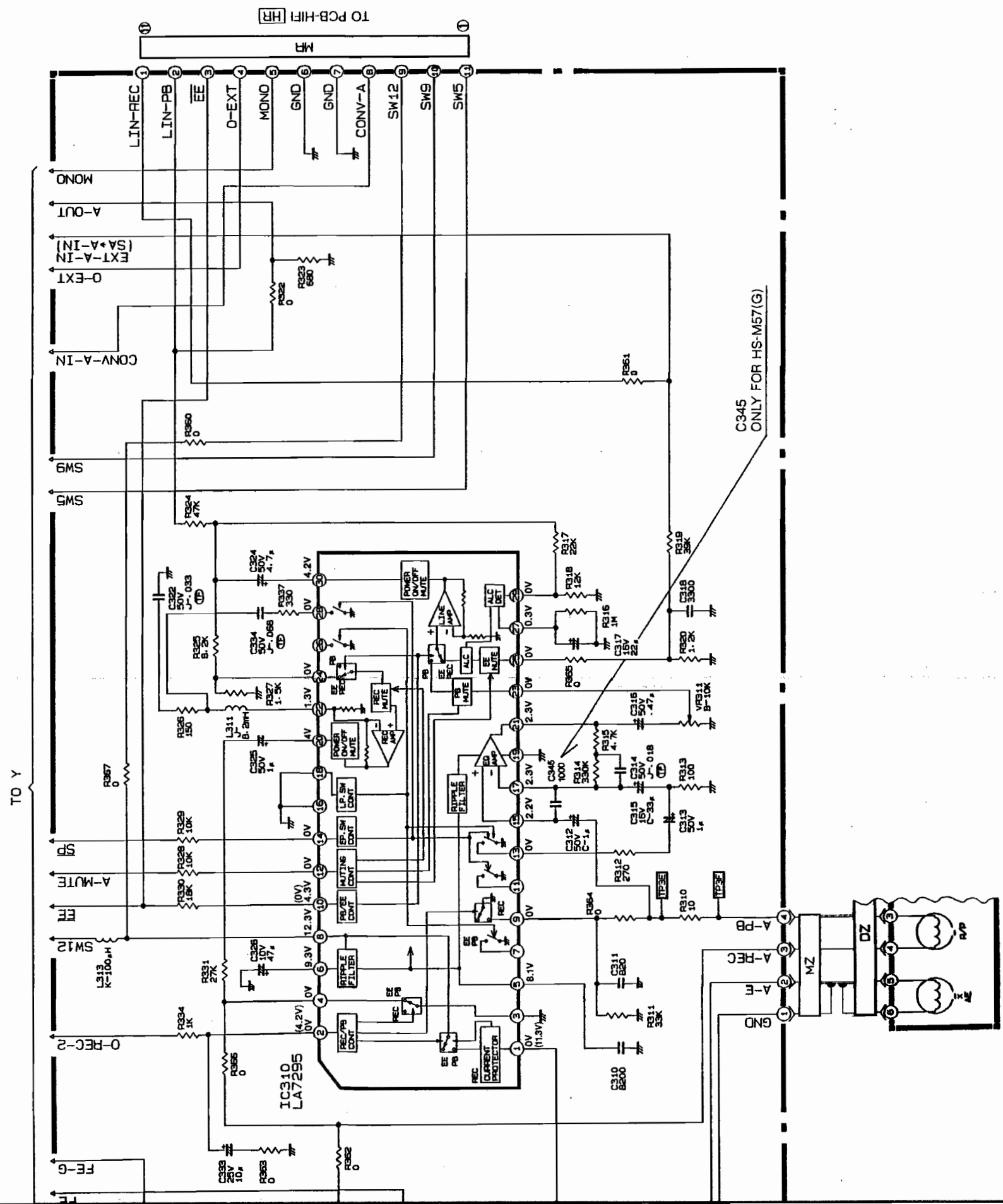
(Y) (A) (G) / (B) (E) (IR) (NZ) PCB-HIFI

(DECODER/NICAM)



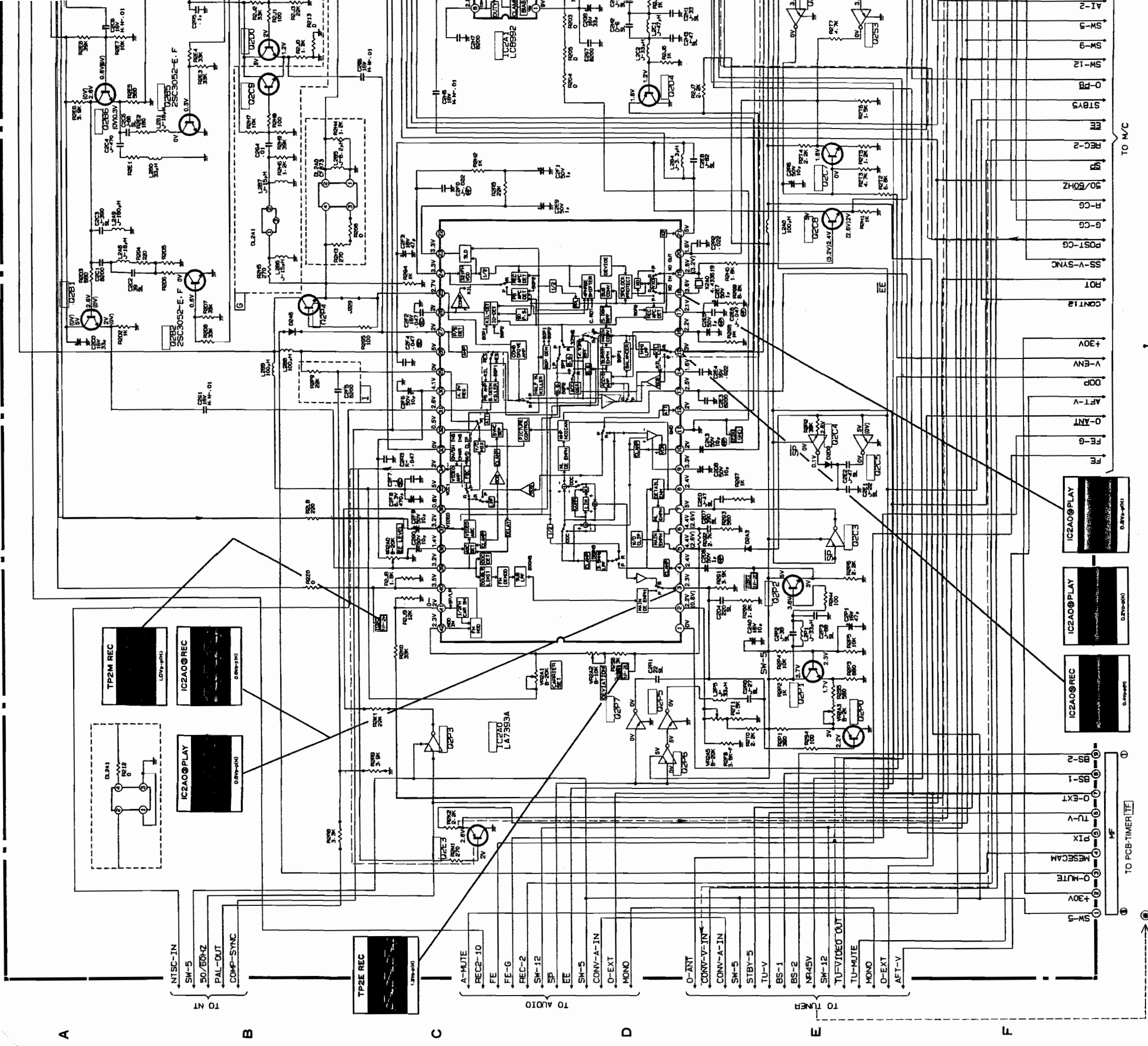
x: Not employed

Y1	R7D7	R7C5
	x	0.0
DE	00	22K
DA	00	22K
DE	00	22K
DA	00	22K

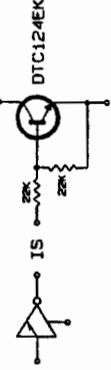
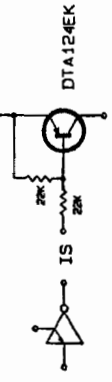


(Y/C) PCB-MAIN

I 2 3 4 5



All diodes are 1SS22 unless otherwise specified.
All NPN transistors are 2SC3053-C.D unless otherwise specified.
All PNP transistors are 2SA1235-E.F unless otherwise specified.



6

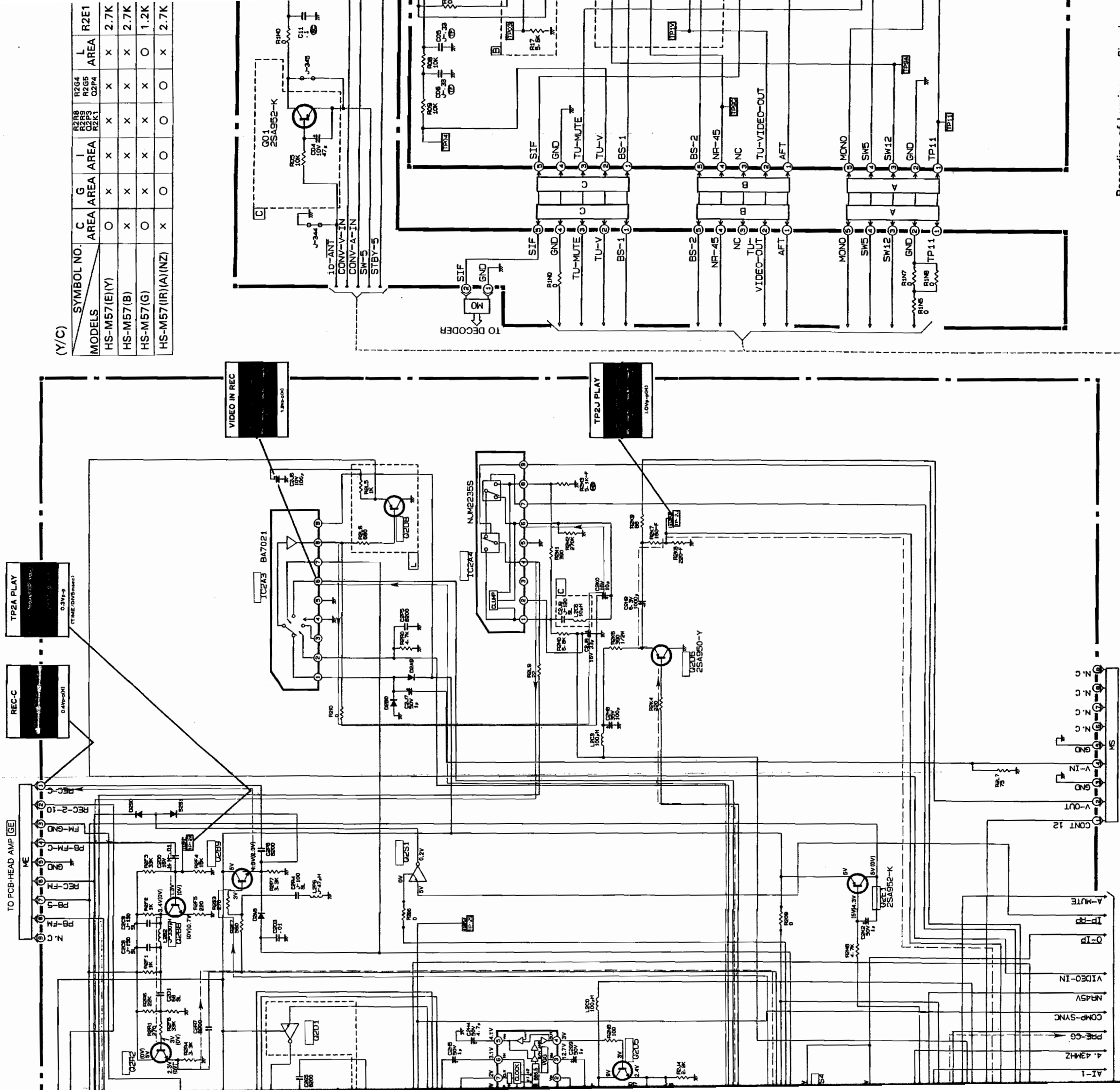
7

8

9

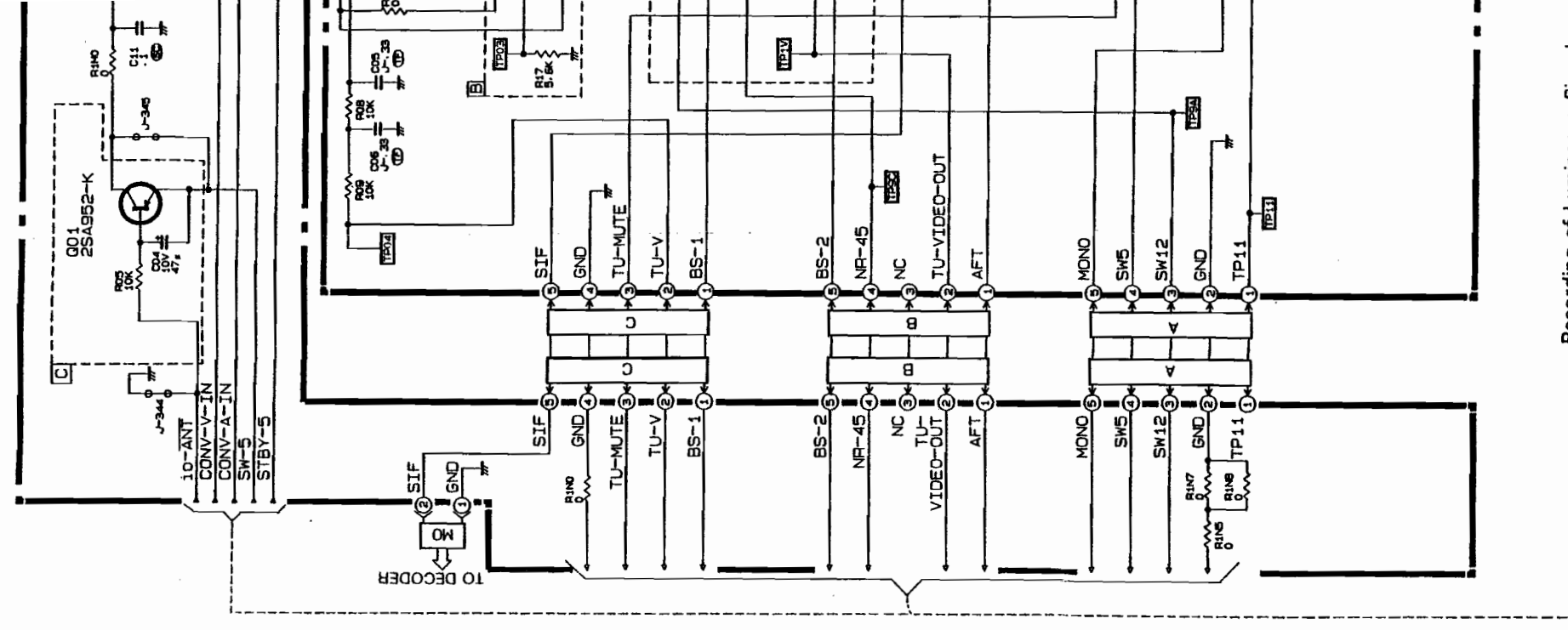
10

11



(Y/C)

SYMBOL NO.	C	G	I	R2R8	R2G4	L	R2E1
MODELS	AREA	AREA	AREA	R2R8	R2G4	AREA	R2E1
				R2R8	R2G4		R2E1
				R2R8	R2G4		R2E1
HS-M57(E)(Y)	O	X	X	X	X	X	2.7K
HS-M57(B)	X	X	X	X	X	X	2.7K
HS-M57(G)	O	X	X	X	X	O	1.2K
HS-M57(IR)(A)(NZ)	X	O	O	O	O	X	2.7K



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

TO 21PIN OR RCAJACK

5

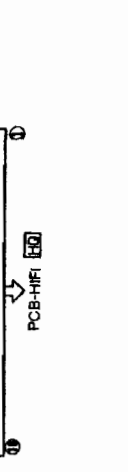
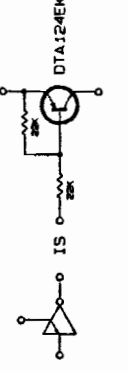
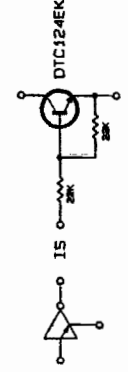
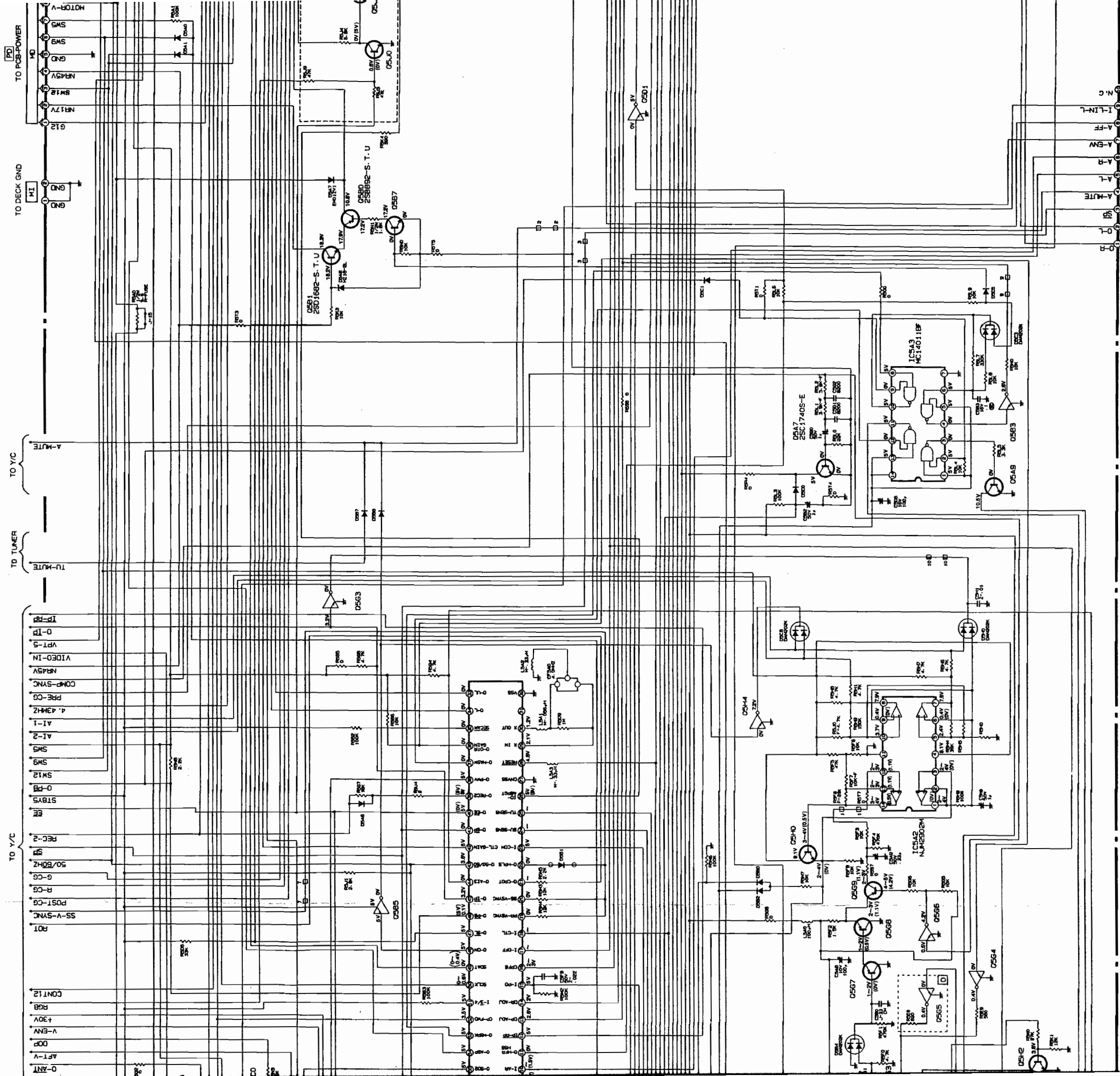
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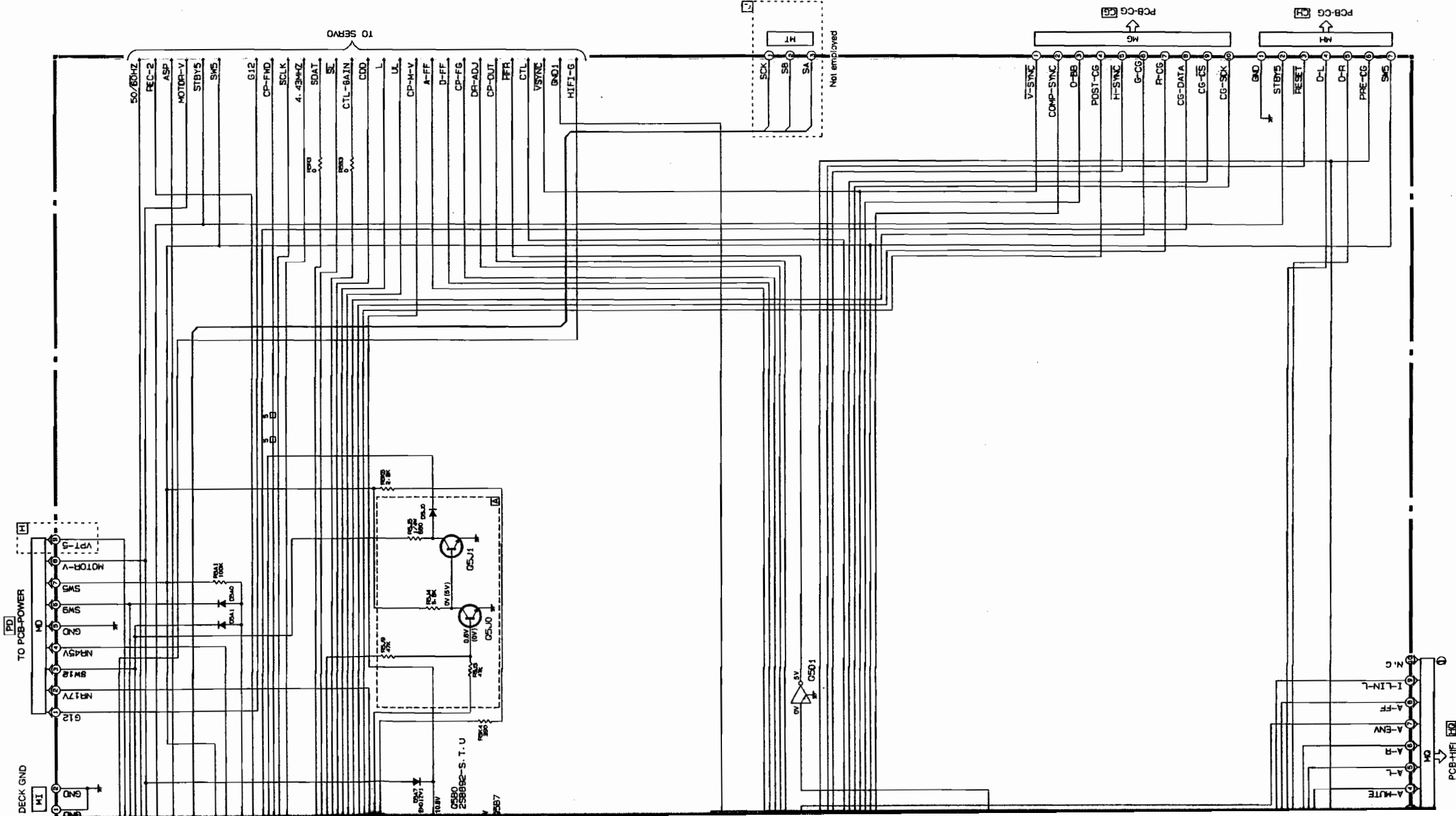
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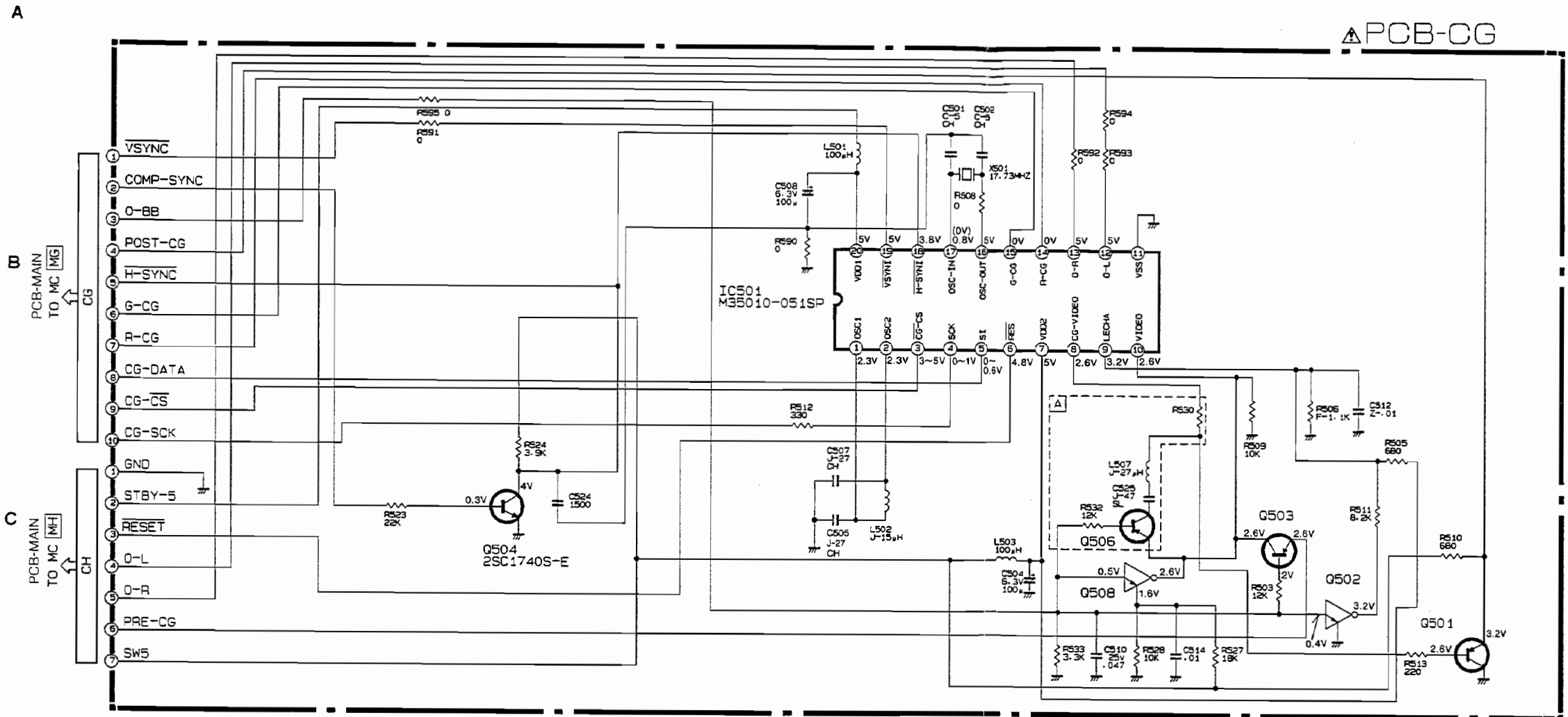
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9

10





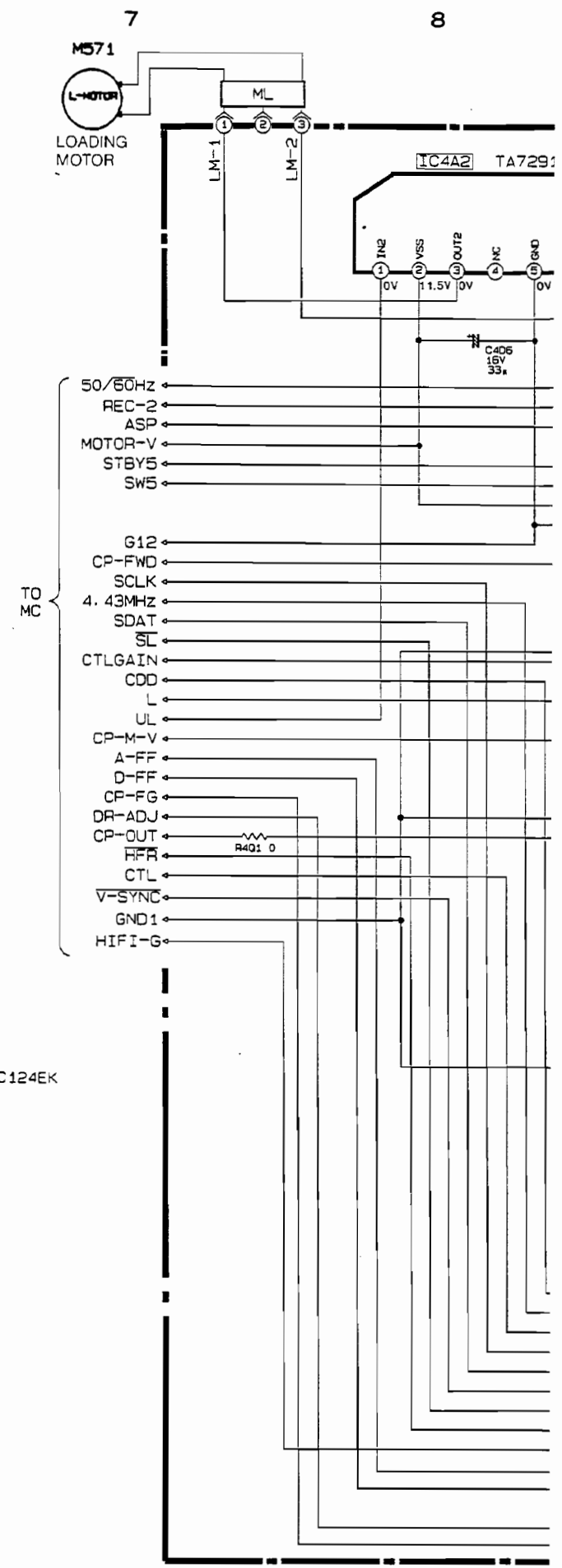
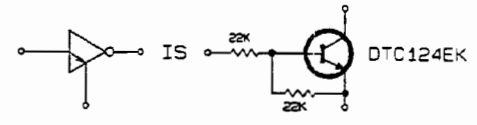


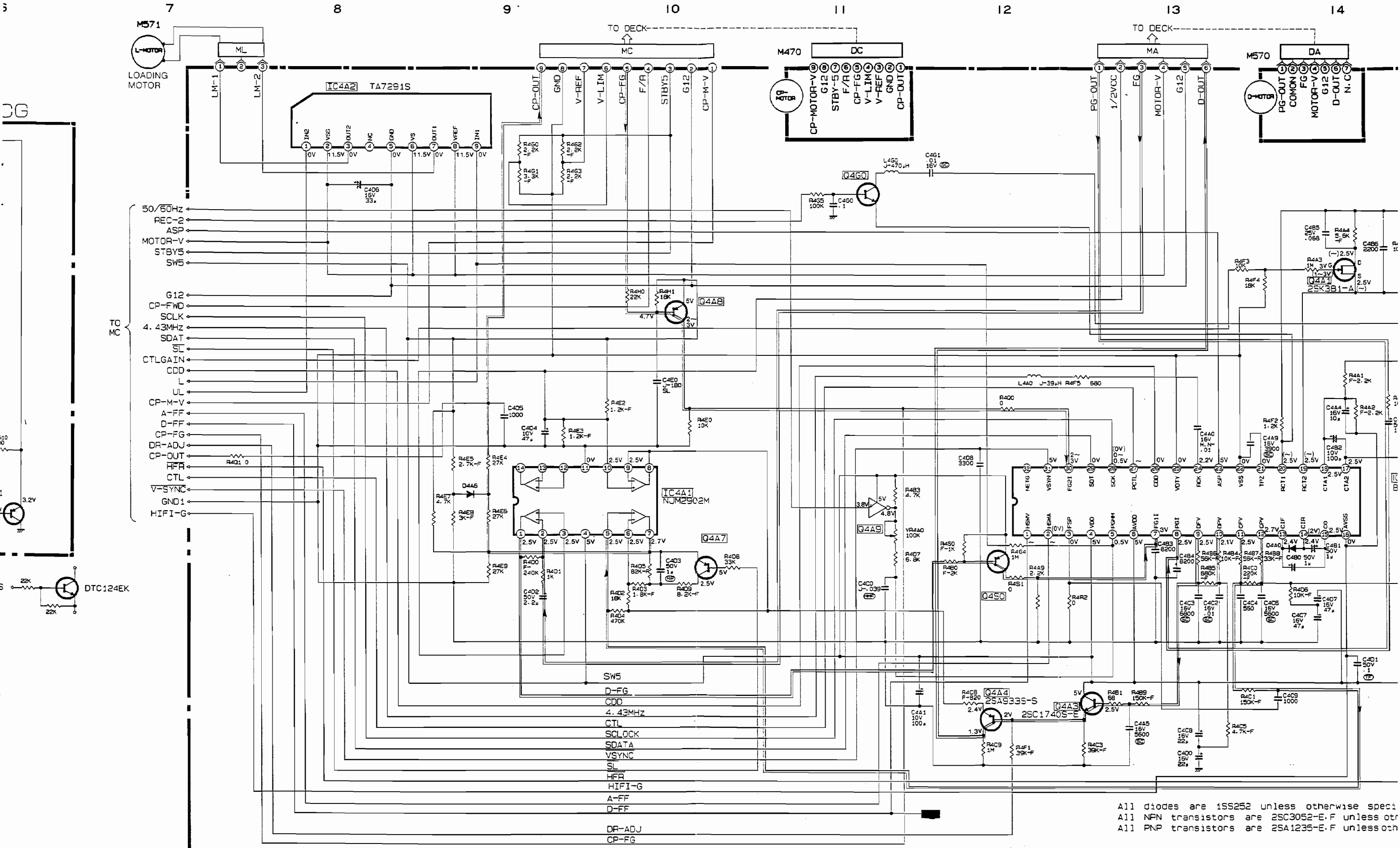
PCB-CG

O: Employed X: Not employed

MODELS	SYMBOL NO.	A AREA	R530
HS-M57(E)(Y)		○	390
HS-M57(B)(IR)(A)(NZ)		×	00
HS-M57(G)		○	390

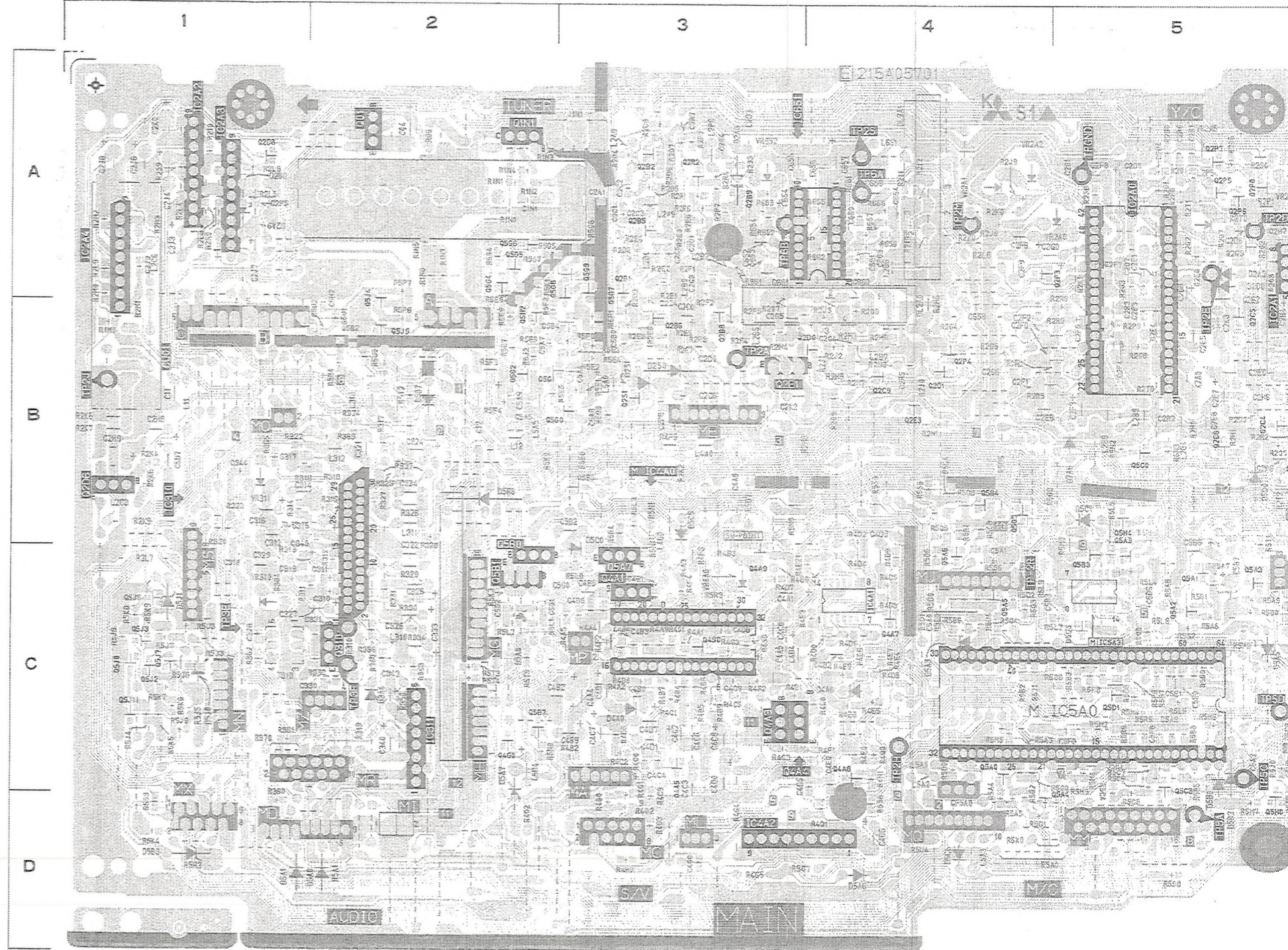
All diodes are 1SS252 unless otherwise specified.
 All NPN transistors are 2SC3052-E.F unless otherwise specified.
 All PNP transistors are 2SA1235-E.F unless otherwise specified.



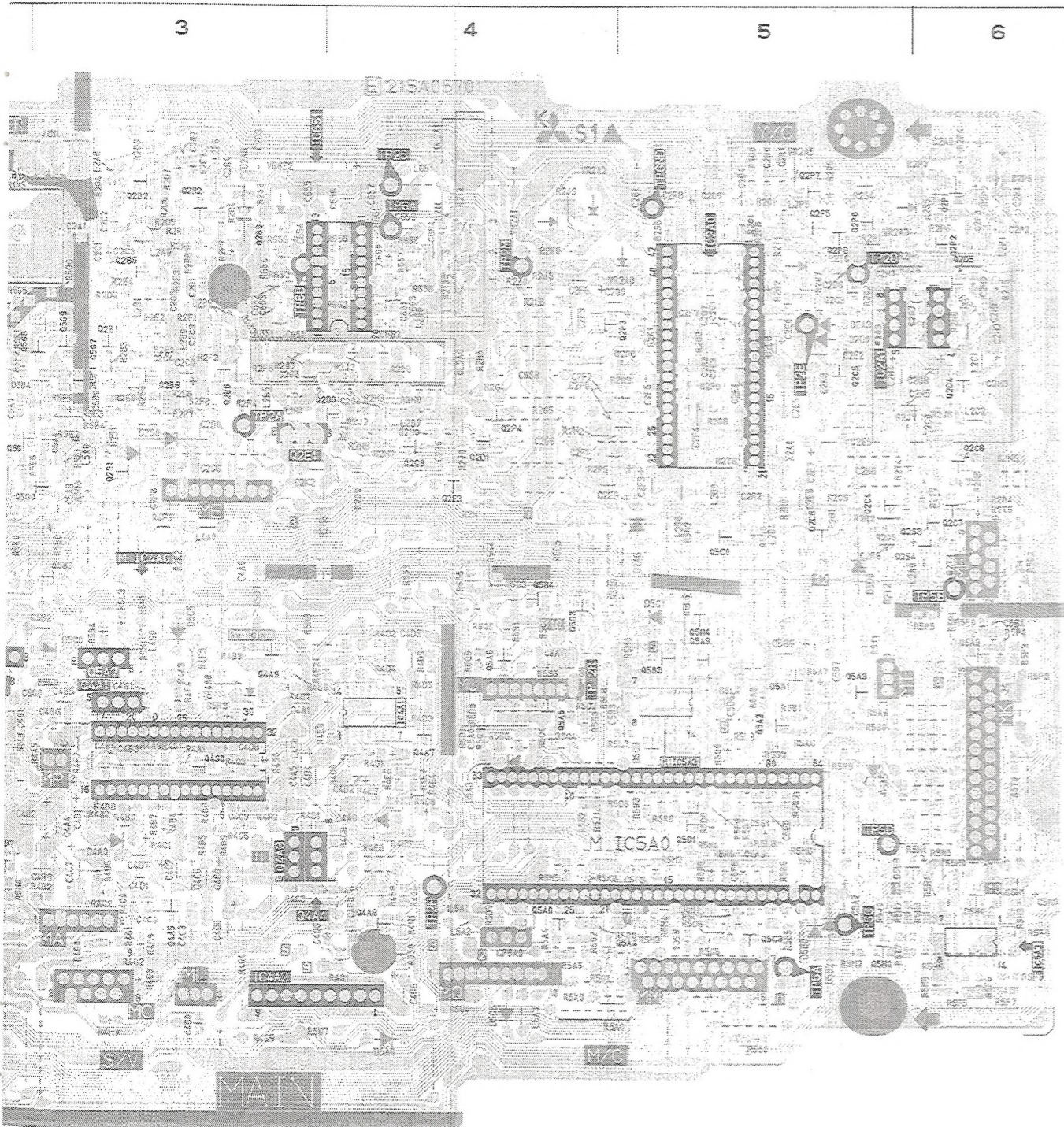


All diodes are 1SS252 unless otherwise speci
 All NPN transistors are 2SC3052-E.F unless oth
 All PNP transistors are 2SA1235-E.F unless oth

PCB MAIN



PCB MAIN



SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
C1N1	A-2	C5F9	C-5
C2C1	A-3	C5G1	C-2
C2C2	A-3	C5G2	C-2
C2C4	A-3	C5H1	D-6
C2C5	A-3	C5H2	A-2
C2C9	A-3	C653	A-3
C2D1	A-3	C656	A-4
C2D4	A-5	C661	A-4
C2D5	A-5	C663	A-4
C2D7	A-5		
C2E1	A-5	CF5A0	C-4
C2E3	B-5		
C2E4	B-5	CU01	B-1
C2F4	B-5		
C2F5	B-5	D2A3	A-5
C2F7	A-5	D2A6	B-5
C2G0	A-4	D2A8	A-3
C2G4	B-4	D2A9	A-1
C2H0	A-6	D2B0	A-1
C2H1	A-6	D2D0	A-5
C2H2	A-6	D2S0	B-3
C2H3	B-6	D2S1	B-3
C2J9	A-1	D3A4	C-2
C2P2	A-6	D4A0	C-3
C2P3	A-6	D4A6	C-4
C2P5	A-1	D5A0	D-1
C2P8	B-3	D5A1	D-1
C2R0	A-5	D5A3	C-4
C2R1	A-5	D5A5	C-5
C2R2	B-5	D5A6	D-4
C2R3	B-5	D5A7	C-2
C2R5	B-4	D5A8	C-2
C310	C-2	D5B0	C-5
C311	C-2	D5B1	C-5
C313	C-1	D5B2	C-5
C317	B-1	D5B4	B-2
C318	C-1	D5B7	B-2
C328	C-1	D5B8	B-2
C344	B-1	D5B9	D-1
C345	B-1	D5C0	B-3
C4B0	C-3	D5C1	B-5
C4B3	C-3	D5C3	C-5
C4B4	C-3	D5C5	B-3
C4B6	C-3	D5C6	D-4
C4C4	C-3	D5C8	C-5
C4C9	C-3	D5D0	B-5
C4D2	C-4	D5H0	C-6
C4D5	C-4	D5J0	C-1
C4D8	C-3	D5J1	C-1
C4G0	D-3		
C5A1	B-4	DL2A0	A-3
C5A3	C-5	DL2A1	A-4
C5A4	B-3		
C5A7	B-2	IC2A0	A-5
C5A9	B-2	IC2A1	A-5
C5B4	B-6	IC2A2	A-1
C5B7	C-5	IC2A3	A-1
C5E0	C-5	IC2A4	A-1
C5E1	C-5	IC310	B-1
C5F8	C-5	IC311	C-2

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
IC4A0	B-3	L11	B-1
IC4A1	C-4	L12	B-2
IC4A2	D-3	L2A0	B-5
IC5A0	C-4	L2A8	A-3
IC5A2	C-6	L2A9	A-3
IC5A3	C-5	L2B0	A-3
IC651	A-3	L2B1	A-3
		L2B2	A-3
		L2B4	B-5
		L2B5	B-3
		L2B6	A-4
		L2B7	B-4
		L2B8	B-5
		L2B9	B-5
		L2C0	B-6
		L2C1	A-6
		L2C2	B-6
		L2C3	B-1
		L2C6	A-1
		L2P1	A-6
		L2P5	A-5
		L2P6	A-3
		L310	C-2
		L311	B-2
		L312	B-2
		L313	B-2
		L4A0	B-3
		L4G0	B-3
		L5A0	B-3
		L5A1	C-4
		L5A2	C-4
		L5A3	D-4
		L5A5	B-2
		L651	A-4
		Q01	A-2
		Q1N1	A-2
		Q2B1	A-3
		Q2B2	A-3
		Q2B5	A-3
		Q2B6	B-3
		Q2B8	B-3
		Q2B9	A-3
		Q2C3	A-5
		Q2C4	B-5
		Q2C5	B-5
		Q2C6	B-6
		Q2C7	B-6
		Q2C8	B-5
		Q2C9	B-4
		Q2D0	B-3
		Q2D1	B-4

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
Q2D4	B-6	Q4A1	C-3
Q2D5	A-6	Q4A3	C-3
Q2D6	B-1	Q4A4	C-3
Q2D8	A-1	Q4A5	C-3
Q2E1	B-3	Q4A7	C-4
Q2E3	B-4	Q4A8	C-4
Q2P0	A-5	Q4A9	C-3
Q2P1	A-6	Q4G0	C-2
Q2P2	A-6	Q4S0	C-3
Q2P4	B-4	Q5A0	C-4
Q2P6	A-5	Q5A1	C-5
Q2P7	A-5	Q5A3	C-5
Q2R2	A-3	Q5A4	C-4
Q2S1	B-3	Q5A5	C-4
Q2S3	B-5	Q5A6	C-4
Q2S4	B-5	Q5A7	C-3
Q310	C-2	Q5A8	B-6
Q4A1	C-3	Q5A9	B-5
Q4A3	C-3	Q5B0	C-2
Q4A4	C-3	Q5B1	C-2
Q4A5	C-3	Q5B3	C-5
Q4A7	C-4	Q5B4	B-4
Q4A8	C-4	Q5B5	B-3
Q4A9	C-3	Q5B7	C-2
Q4G0	C-2	Q5C0	B-5
Q4S0	C-3	Q5C3	C-5
Q5A0	C-4	Q5D1	C-5
Q5A1	C-5	Q5G0	B-2
Q5A3	C-5	Q5G1	B-2
Q5A4	C-4	Q5G2	B-2
Q5A5	C-4	Q5G3	B-4
Q5A6	C-4	Q5G4	A-2
Q5A7	C-3	Q5G5	A-2
Q5A8	B-6	Q5G6	A-2
Q5A9	B-5	Q5G7	A-3
Q5B0	C-2	Q5G8	A-2
Q5B1	C-2	Q5G9	A-3
Q5B3	C-5	Q5H0	D-5
Q5B4	B-4	Q5H2	B-2
Q5B5	B-3	Q5H4	B-5
Q5B7	C-2	Q5J0	C-1
Q5C0	B-5	Q5J1	C-1
Q5C3	C-5	Q5J2	C-1
Q5D1	C-5		
Q5G0	B-2		
Q5G1	B-2		
Q5G2	B-2		
Q5G3	B-4		
Q5G4	A-2		
Q5G5	A-2		
Q5G6	A-2		
Q5G7	A-3		
Q5G8	A-2		
Q5G9	A-3		
Q5H0	D-5		
Q5H2	B-2		
Q5H4	B-5		
Q5J0	C-1		
Q5J1	C-1		
Q5J2	C-1		

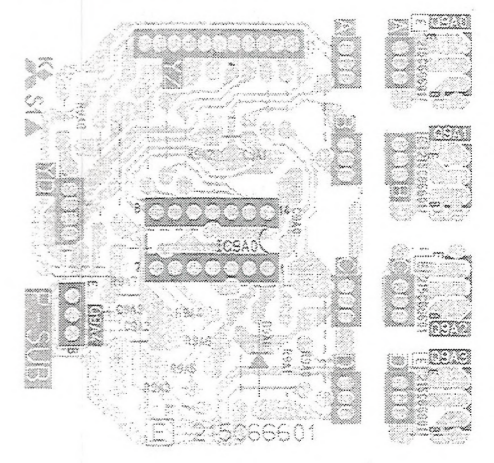
SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
Q5J3	C-1	R1M0	B-1
Q5J4	A-2	R1N0	A-2
Q5J5	B-2	R1N1	A-2
Q5J6	C-1	R1N2	A-2
Q5J7	C-1	R1N4	A-2
		R1N5	A-2
		R1N7	A-2
		R1N8	A-2
		R202	A-5
		R204	B-6
		R205	B-5
		R206	A-5
		R207	B-3
		R208	B-4
		R209	B-4
		R210	A-1
		R211	A-4
		R212	A-4
		R213	A-4
		R256	A-5
		R2D2	A-3
		R2D3	B-3
		R2D4	A-3
		R2D5	A-3
		R2D6	A-3
		R2D8	A-3
		R2E2	A-3
		R2E5	B-3
		R2E6	B-3
		R2E7	B-3
		R2E8	B-3
		R2F1	A-3
		R2F2	A-3
		R2F3	B-3
		R2F4	B-3
		R2F6	A-3
		R2F7	A-3
		R2G0	A-5
		R2G1	A-5
		R2G2	A-5
		R2G3	A-5
		R2G4	B-4
		R2G7	A-5
		R2G8	B-5
		R2G9	B-5
		R2H1	B-5
		R2H4	B-3
		R2H6	B-4
		R2H9	B-4
		R2J2	B-4
		R2J3	B-4
		R2J5	A-6
		R2J7	B-5

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
R2J8	A-4	R2P2	A-6
R2J9	A-4	R2P3	A-6
R2K0	A-4	R2P4	A-6
R2K1	A-5	R2P5	A-6
R2K4	B-1	R2P7	A-3
R2K6	B-1	R2P9	B-5
R2L3	A-1	R2R0	A-1
R2L6	A-1	R2R1	A-3
R2L9	A-1	R2R2	B-5
R2M0	A-1	R2R4	A-3
R2M2	A-1	R2R6	A-3
R2M3	A-1	R2R8	A-5
R2N5	B-6	R2T1	A-5
R2N6	B-6	R2T4	B-5
R2P2	A-6	R2T5	B-6
R2P3	A-6	R2T7	B-6
R2P4	A-6	R311	C-1
R2P5	A-6	R312	C-2
R2P7	A-3	R314	B-1
R2P9	B-5	R315	B-2
R2R0	A-1	R316	B-1
R2R1	A-3	R317	B-2
R2R2	B-5	R318	B-2
R2R4	A-3	R320	B-1
R2R6	A-3	R322	B-1
R2R8	A-5	R323	B-1
R2T1	A-5	R324	B-2
R2T4	B-5	R327	B-2
R2T5	B-6	R328	B-2
R2T7	B-6	R330	C-2
R311	C-1	R331	C-2
R312	C-2	R332	C-2
R314	B-1	R334	C-2
R315	B-2	R337	B-2
R316	B-1	R360	D-1
R317	B-2	R361	C-1
R318	B-2	R362	C-1
R320	B-1	R363	C-2
R322	B-1	R364	C-1
R323	B-1	R366	C-2
R324	B-2	R367	C-2
R327	B-2	R369	B-2
R328	B-2	R4A1	C-3
R330	C-2	R4A3	C-3
R331	C-2	R4A4	C-3
R332	C-2	R4A5	C-3
R334	C-2		
R337	B-2		
R360	D-1		
R361	C-1		
R362	C-1		
R363	C-2		
R364	C-1		
R366	C-2		
R367	C-2		
R369	B-2		

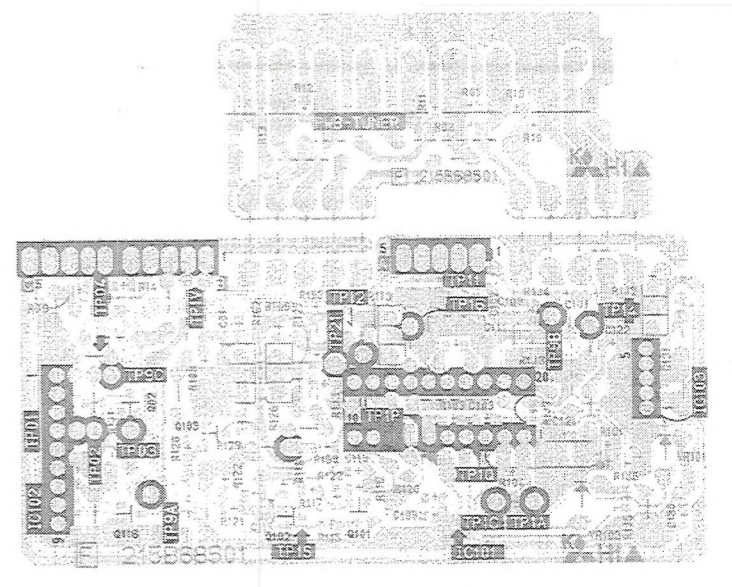
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R4A9	C-1	R4D1	C-1
R4B1	C-1	R4D2	B-1
R4B2	C-1	R4D3	C-1
R4B3	B-1	R4D4	C-1
R4B4	C-1	R4D5	C-1
R4B5	C-1	R4D6	C-1
R4B6	C-1	R4D7	C-1
R4B7	C-1	R4D8	C-1
R4C0	C-1	R4D9	C-1
R4C3	C-1	R4E0	C-1
R4C5	C-1	R4E3	C-1
R4C8	C-1	R4E4	C-1
R4C9	D-1	R4E5	C-1
R4D0	C-1	R4E6	C-1
R4D1	C-1	R4E7	C-1
R4D2	B-1	R4E8	C-1
R4D3	C-1	R4E9	C-1
R4D4	C-1	R4F1	C-1
R4D5	C-1	R4F2	C-1
R4D6	C-1	R4F4	C-1
R4D7	C-1	R4G0	D-1
R4D8	C-1	R4G1	D-1
R4D9	C-1	R4G2	D-1
R4E0	C-1	R4G3	D-1
R4E3	C-1	R4H0	D-1
R4E4	C-1	R4H1	C-1
R4E5	C-1	R4Q0	C-1
R4E6	C-1	R4Q1	D-1
R4E7	C-1	R4Q3	C-1
R4E8	C-1	R4R2	C-1
R4E9	C-1	R4S0	C-1
R4F1	C-1	R4S1	C-1
R4F2	C-1	R5A3	C-1
R4F4	C-1	R5A4	D-1
R4G0	D-1	R5A6	C-1
R4G1	D-1	R5A7	C-1
R4G2	D-1	R5A8	C-1
R4G3	D-1	R5A9	C-1
R4H0	D-1	R5B0	C-1
R4H1	C-1	R5B1	C-1
R4Q0	C-1	R5B2	C-1
R4Q1	D-1	R5B3	C-1
R4Q3	C-1	R5B4	B-1
R4R2	C-1	R5B7	C-1
R4S0	C-1	R5B8	C-1
R4S1	C-1	R5C4	C-1
R5A3	C-1		
R5A4	D-1		
R5A6	C-1		
R5A7	C-1		
R5A8	C-1		
R5A9	C-1		
R5B0	C-1		
R5B1	C-1		
R5B2	C-1		
R5B3	C-1		
R5B4	B-1		
R5B7	C-1		
R5B8	C-1		
R5C4	C-1		

SS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
5	IC4A0	B-3	Q2D4	B-6	Q5J3	C-1	R2J8	A-4	R4A9	C-3	R5C5	C-5	R5M5	C-4	TP2M	A-4
2	IC4A1	C-4	Q2D5	A-6	Q5J4	A-2	R2J9	A-4	R4B1	C-3	R5C6	C-5	R5M6	C-5	TP2R	C-4
2	IC4A2	D-3	Q2D6	B-1	Q5J5	B-2	R2K0	A-4	R4B2	C-3	R5C7	C-5	R5N0	C-2	TP2S	A-4
6	IC5A0	C-4	Q2D8	A-1	Q5J6	C-1	R2K1	A-5	R4B3	B-3	R5C8	B-4	R5N4	C-5	TP3E	C-2
2	IC5A2	C-6	Q2E1	B-3	Q5J7	C-1	R2K4	B-1	R4B4	C-3	R5D2	C-4	R5N8	B-3	TP3F	C-2
3	IC5A3	C-5	Q2E3	B-4			R2K6	B-1	R4B5	C-3	R5D3	B-4	R5P2	B-6	TP5A	D-5
4	IC651	A-3	Q2P0	A-5	R1M0	B-1	R2L3	A-1	R4B6	C-3	R5D4	C-4	R5P3	C-6	TP5B	B-6
4			Q2P1	A-6	R1N0	A-2	R2L6	A-1	R4B7	C-3	R5D6	C-5	R5P4	B-6	TP5C	C-5
4	L11	B-1	Q2P2	A-6	R1N1	A-2	R2L9	A-1	R4C0	C-3	R5D8	C-4	R5P5	B-6	TP5D	C-5
	L12	B-2	Q2P4	B-4	R1N2	A-2	R2M0	A-1	R4C3	C-3	R5D9	C-4	R5P6	B-2	TP6A	A-4
4	L2A0	B-5	Q2P6	A-5	R1N4	A-2	R2M2	A-1	R4C5	C-3	R5E2	B-3	R5P7	A-2	TP6B	A-3
	L2A8	A-3	Q2P7	A-5	R1N5	A-2	R2M3	A-1	R4C8	C-4	R5E3	B-3	R5P8	C-5	TPGND	A-5
1	L2A9	A-3	Q2R2	A-3	R1N7	A-2	R2N5	B-6	R4C9	D-3	R5E4	B-3	R5P9	C-5		
	L2B0	A-3	Q2S1	B-3	R1N8	A-2	R2N6	B-6	R4D0	C-4	R5E5	B-2	R5Q0	C-5	VR2A0	A-5
5	L2B1	A-3	Q2S3	B-5	R202	A-5	R2P2	A-6	R4D1	C-4	R5E6	B-2	R5Q2	B-6	VR2A1	A-4
5	L2B2	A-3	Q2S4	B-5	R204	B-6	R2P3	A-6	R4D2	B-4	R5E7	B-2	R5Q4	C-4	VR2A2	A-4
3	L2B4	B-5	Q310	C-2	R205	B-5	R2P4	A-6	R4D3	C-3	R5E9	B-2	R5Q5	B-4	VR2A3	A-5
1	L2B5	B-3	Q4A1	C-3	R206	A-5	R2P5	A-6	R4D4	C-4	R5F0	B-3	R5Q6	B-4	VR2A5	A-5
1	L2B6	A-4	Q4A3	C-3	R207	B-3	R2P7	A-3	R4D5	C-4	R5F1	B-3	R5Q8	B-3	VR310	C-1
5	L2B7	B-4	Q4A4	C-3	R208	B-4	R2P9	B-5	R4D6	C-3	R5F4	B-2	R5Q8	B-4	VR311	B-1
3	L2B8	B-5	Q4A5	C-3	R209	B-4	R2R0	A-1	R4D7	C-3	R5F5	D-6	R5Q9	C-5	VR4A0	C-3
3	L2B9	B-5	Q4A7	C-4	R210	A-1	R2R1	A-3	R4D8	C-4	R5F6	D-6	R5R1	B-4	VR652	A-3
2	L2C0	B-6	Q4A8	C-4	R211	A-4	R2R2	B-5	R4D9	C-4	R5F7	D-6	R5R3	C-3		
3	L2C1	A-6	Q4A9	C-3	R212	A-4	R2R4	A-3	R4E0	C-4	R5F8	D-6	R5R4	B-3	X2A0	B-5
4	L2C2	B-6	Q4G0	C-2	R213	A-4	R2R6	A-3	R4E3	C-3	R5F9	C-6	R5R5	C-5		
1	L2C3	B-1	Q4S0	C-3	R256	A-5	R2R8	A-5	R4E4	C-4	R5G0	C-5	R5R6	C-5		
1	L2C6	A-1	Q5A0	C-4	R2D2	A-3	R2T1	A-5	R4E5	C-4	R5G1	D-4	R5R8	C-5		
4	L2P1	A-6	Q5A1	C-5	R2D3	B-3	R2T4	B-5	R4E6	C-4	R5G2	D-4	R5S2	C-5		
5	L2P5	A-5	Q5A3	C-5	R2D4	A-3	R2T5	B-6	R4E7	C-4	R5G3	C-4	R5S3	B-4		
4	L2P6	A-3	Q5A4	C-4	R2D5	A-3	R2T7	B-6	R4E8	C-4	R5H0	D-6	R5S4	A-2		
2	L310	C-2	Q5A5	C-4	R2D6	A-3	R311	C-1	R4E9	C-4	R5H1	C-6	R5S5	B-4		
2	L311	B-2	Q5A6	C-4	R2D8	A-3	R312	C-2	R4F1	C-4	R5H3	D-6	R5S8	D-4		
5	L312	B-2	Q5A7	C-3	R2E2	A-3	R314	B-1	R4F2	C-3	R5H4	C-6	R5S9	D-1		
5	L313	B-2	Q5A8	B-6	R2E5	B-3	R315	B-2	R4F4	C-3	R5H5	D-6	R5T0	C-6		
5	L4A0	B-3	Q5A9	B-5	R2E6	B-3	R316	B-1	R4G0	D-3	R5H6	C-6	R5T1	B-5		
2	L4G0	B-3	Q5B0	C-2	R2E7	B-3	R317	B-2	R4G1	D-3	R5H7	C-5	R5T2	B-2		
2	L5A0	B-3	Q5B1	C-2	R2E8	B-3	R318	B-2	R4G2	D-3	R5H8	D-6	R5T3	C-2		
2	L5A1	C-4	Q5B3	C-5	R2F1	A-3	R320	B-1	R4G3	D-3	R5H9	D-6	R5T4	C-2		
1	L5A2	C-4	Q5B4	B-4	R2F2	A-3	R322	B-1	R4H0	D-3	R5J1	C-4	R5T5	C-2		
3	L5A3	D-4	Q5B5	B-3	R2F3	B-3	R323	B-1	R4H1	C-4	R5J2	B-2	R5T7	C-5		
5	L5A5	B-2	Q5B7	C-2	R2F4	B-3	R324	B-2	R4Q0	C-4	R5J3	C-1	R5U0	B-2		
5	L651	A-4	Q5C0	B-5	R2F6	A-3	R327	B-2	R4Q1	D-4	R5J4	C-1	R5U1	B-2		
3			Q5C3	C-5	R2F7	A-3	R328	B-2	R4Q3	C-3	R5J7	C-1	R5U2	B-2		
4	Q01	A-2	Q5D1	C-5	R2G0	A-5	R330	C-2	R4R2	C-3	R5J8	C-1	R5U3	C-1		
5	Q1N1	A-2	Q5G0	B-2	R2G1	A-5	R331	C-2	R4S0	C-3	R5J9	C-1	R5U4	D-4		
5	Q2B1	A-3	Q5G1	B-2	R2G2	A-5	R332	C-2	R4S1	C-3	R5K4	D-1	R652	A-3		
6	Q2B2	A-3	Q5G2	B-2	R2G3	A-5	R334	C-2	R5A3	C-4	R5K5	C-1	R653	A-3		
1	Q2B5	A-3	Q5G3	B-4	R2G4	B-4	R337	B-2	R5A4	D-4	R5K6	C-1	R655	A-4		
1	Q2B6	B-3	Q5G4	A-2	R2G7	A-5	R360	D-1	R5A6	C-5	R5K7	C-1	R655	A-4		
3	Q2B8	B-3	Q5G5	A-2	R2G8	B-5	R361	C-1	R5A7	C-5	R5K8	C-1	R657	A-4		
4	Q2B9	A-3	Q5G6	A-2	R2G9	B-5	R362	C-1	R5A8	C-5	R5L0	C-3	R658	A-4		
	Q2C3	A-5	Q5G7	A-3	R2H1	B-5	R363	C-2	R5A9	C-5	R5L1	C-2	R662	A-4		
	Q2C4	B-5	Q5G8	A-2	R2H4	B-3	R364	C-1	R5B0	C-5	R5L2	C-2				
5	Q2C5	B-5	Q5G9	A-3	R2H6	B-4	R366	C-2	R5B1	C-5	R5L3	B-3				
5	Q2C6	B-6	Q5H0	D-5	R2H7	B-4	R367	C-2	R5B2	C-4	R5L4	C-5				
1	Q2C7	B-6	Q5H2	B-2	R2H9	B-4	R369	B-2	R5B3	C-5	R5L6	C-5				
1	Q2C8	B-5	Q5H4	B-5	R2J2	B-4	R4A1	C-3	R5B4	B-2	R5M1	B-3	TP2A	B-3		
1	Q2C9	B-4	Q5J0	C-1	R2J3	B-4	R4A3	C-3	R5B7	C-5	R5M2	C-5	TP2D	A-5		
1	Q2D0	B-3	Q5J1	C-1	R2J5	A-6	R4A4	C-3	R5B8	C-5	R5M3	C-5	TP2E	A-5		
2	Q2D1	B-4	Q5J2	C-1	R2J7	B-5	R4A5	C-3	R5C4	C-5	R5M4	C-5	TP2H	C-4		

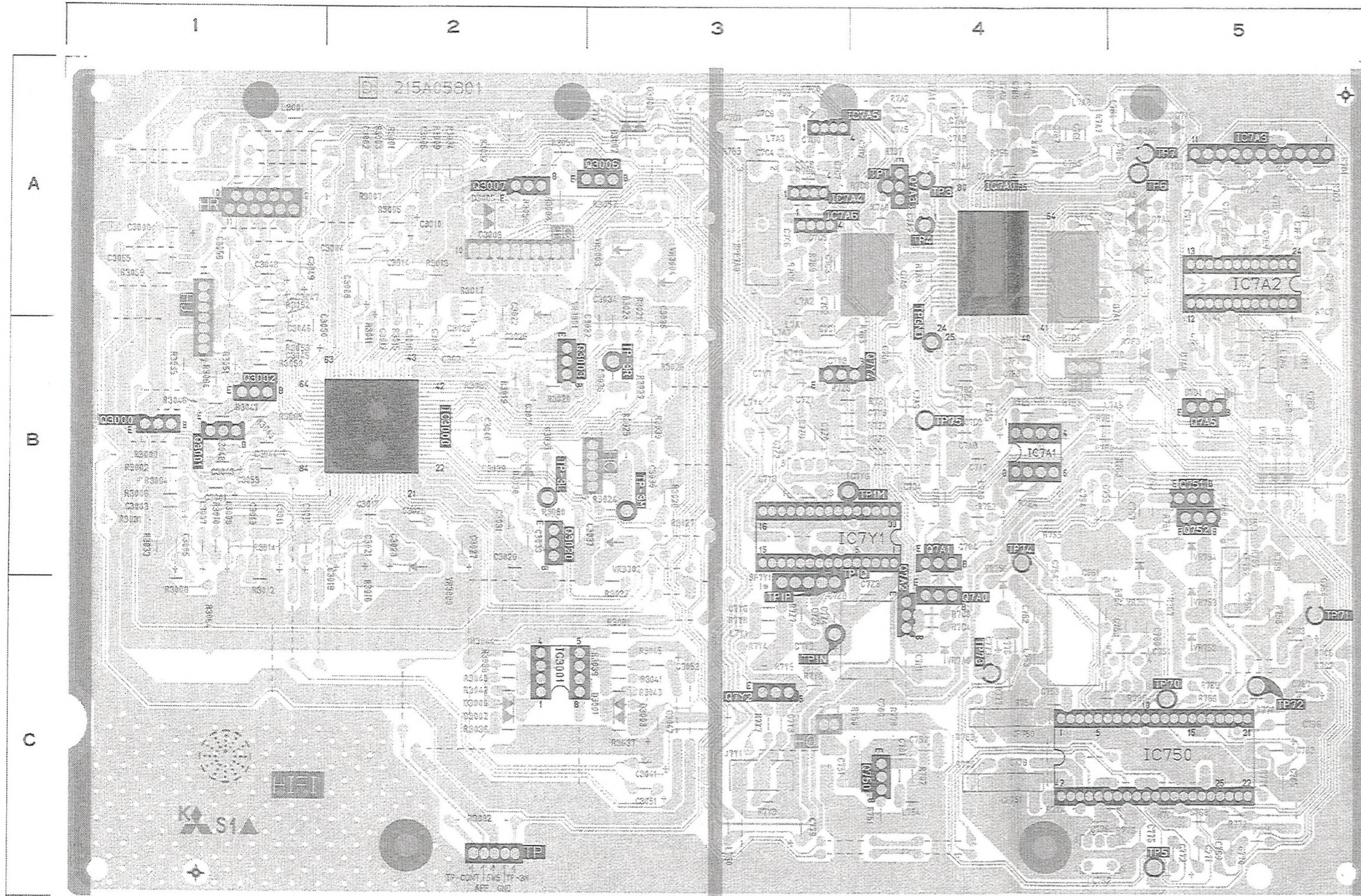
PCB POWER SUB



PCB TUNER



PCB HIFI



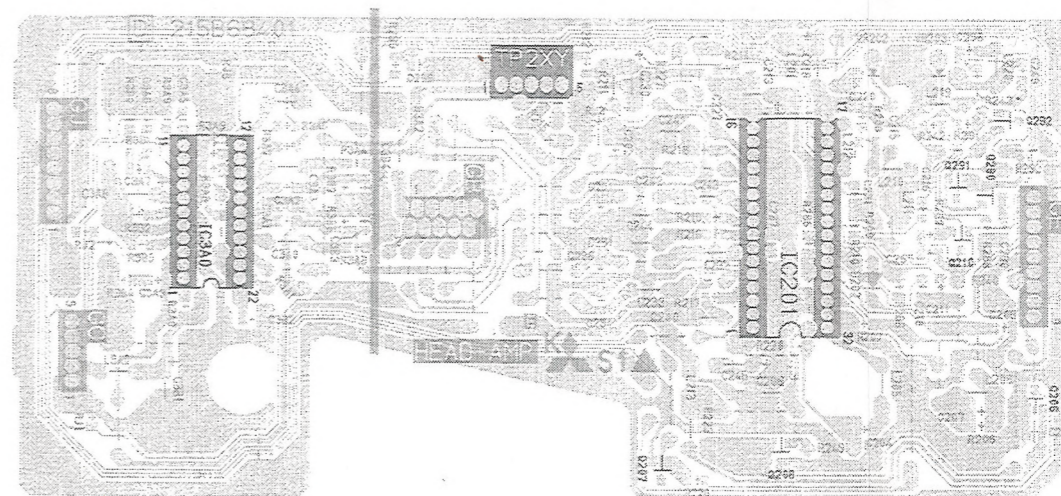
PCB HIFI

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
BPF7A0	A - 3	LC752	C - 4
CF750	C - 4	Q3000	B - 1
CF751	C - 4	Q3001	B - 1
CF752	B - 5	Q3002	B - 1
		Q3003	B - 2
D30005	A - 2	Q3006	A - 3
D3000	C - 2	Q3007	A - 2
D3001	C - 3	Q3020	B - 2
D3002	C - 2	Q750	C - 4
D3003	C - 3	Q751	B - 5
D3006	A - 2	Q752	B - 5
D3007	A - 3	Q7A0	B - 4
D3008	A - 3	Q7A1	B - 4
D3020	B - 2	Q7A2	C - 4
D750	B - 5	Q7A3	A - 4
D751	B - 5	Q7A5	B - 5
D752	B - 5	Q7Y2	C - 3
D7A0	A - 5	Q7Y4	B - 3
D7A1	A - 5		
D7A3	A - 5	SF7Y1	B - 3
D7A4	A - 5		
D7A5	A - 5	TP - 3L	B - 2
D7A6	A - 5	TP - 3M	B - 3
D7A8	B - 5	TP - 3R	B - 3
D7A9	B - 5	TP1M	B - 3
D7B0	B - 5	TP1N	C - 3
D7B1	B - 5	TP1P	B - 3
		TP1Q	B - 4
IC3000	B - 2	TP1	A - 4
IC3001	C - 2	TP3	A - 4
IC750	C - 5	TP4	A - 4
IC7A0	A - 4	TP5	C - 5
IC7A1	B - 4	TP6	A - 5
IC7A2	A - 5	TP70	C - 5
IC7A3	A - 5	TP71	C - 5
IC7A4	A - 3	TP72	C - 5
IC7A5	A - 3	TP73	C - 4
IC7A6	A - 3	TP74	B - 4
IC7Y1	B - 3	TP75	B - 4
		TP7	A - 5
L3001	A - 1	TPGND	B - 4
L750	C - 3	TP	C - 2
L753	C - 4		
L754	C - 4	VR3000	B - 2
L7A0	B - 4	VR3001	A - 2
L7A1	A - 3	VR3002	B - 3
L7A2	A - 3	VR300	A - 3
L7A3	A - 3	VR3004	A - 3
L7A4	B - 4	VR751	B - 5
L7A5	B - 5	VR752	C - 5
L7A6	B - 5	VR753	B - 5
L7A7	B - 3	VR754	B - 5
L7A8	A - 4	VR756	B - 4
L7Y1	C - 3	VR7A0	C - 4
L7Y2	A - 3		
L7Y3	B - 3	X7A0	A - 4
L7Y4	B - 3	X7A1	A - 4
		X7A2	A - 5
LC751	C - 5		

PCB HIFI

SYMBOL NO.	ADDRESS	SYMBOL NO.	ADDRESS
BPF7A0	A-3	LC752	C-4
CF750	C-4	Q3000	B-1
CF751	C-4	Q3001	B-1
CF752	B-5	Q3002	B-1
		Q3003	B-2
D30005	A-2	Q3006	A-3
D3000	C-2	Q3007	A-2
D3001	C-3	Q3020	B-2
D3002	C-2	Q750	C-4
D3003	C-3	Q751	B-5
D3006	A-2	Q752	B-5
D3007	A-3	Q7A0	B-4
D3008	A-3	Q7A1	B-4
D3020	B-2	Q7A2	C-4
D750	B-5	Q7A3	A-4
D751	B-5	Q7A5	B-5
D752	B-5	Q7Y2	C-3
D7A0	A-5	Q7Y4	B-3
D7A1	A-5		
D7A3	A-5	SF7Y1	B-3
D7A4	A-5		
D7A5	A-5	TP-3L	B-2
D7A6	A-5	TP-3M	B-3
D7A8	B-5	TP-3R	B-3
D7A9	B-5	TP1M	B-3
D7B0	B-5	TP1N	C-3
D7B1	B-5	TP1P	B-3
		TP1Q	B-4
IC3000	B-2	TP1	A-4
IC3001	C-2	TP3	A-4
IC750	C-5	TP4	A-4
IC7A0	A-4	TP5	C-5
IC7A1	B-4	TP6	A-5
IC7A2	A-5	TP70	C-5
IC7A3	A-5	TP71	C-5
IC7A4	A-3	TP72	C-5
IC7A5	A-3	TP73	C-4
IC7A6	A-3	TP74	B-4
IC7Y1	B-3	TP75	B-4
		TP7	A-5
L3001	A-1	TPGND	B-4
L750	C-3	TP	C-2
L753	C-4		
L754	C-4	VR3000	B-2
L7A0	B-4	VR3001	A-2
L7A1	A-3	VR3002	B-3
L7A2	A-3	VR300	A-3
L7A3	A-3	VR3004	A-3
L7A4	B-4	VR751	B-5
L7A5	B-5	VR752	C-5
L7A6	B-5	VR753	B-5
L7A7	B-3	VR754	B-5
L7A8	A-4	VR756	B-4
L7Y1	C-3	VR7A0	C-4
L7Y2	A-3		
L7Y3	B-3	X7A0	A-4
L7Y4	B-3	X7A1	A-4
		X7A2	A-5
LC751	C-5		

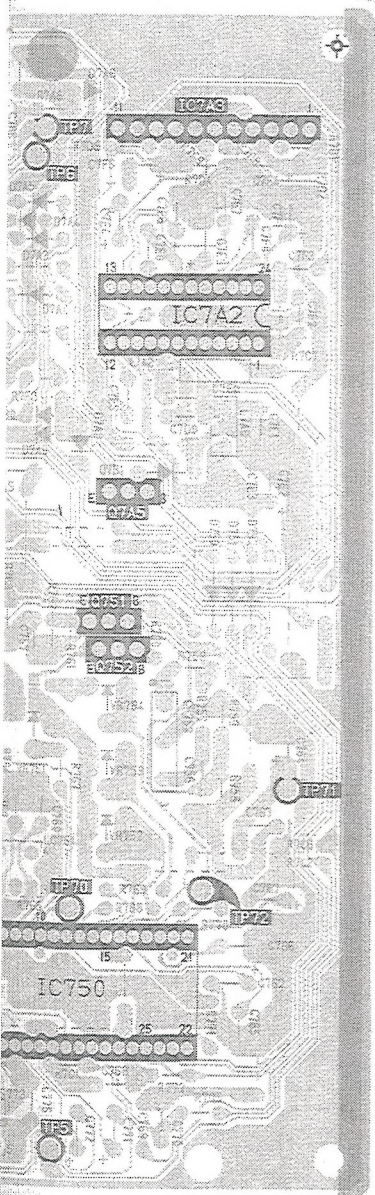
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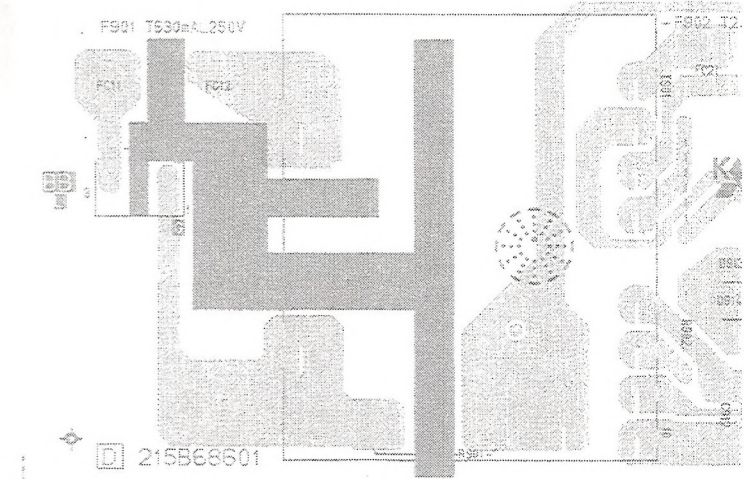
PCB C



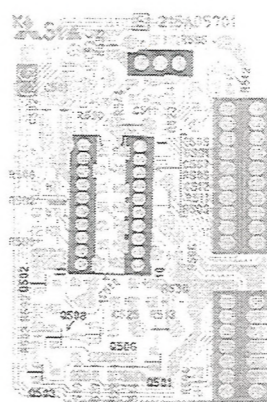
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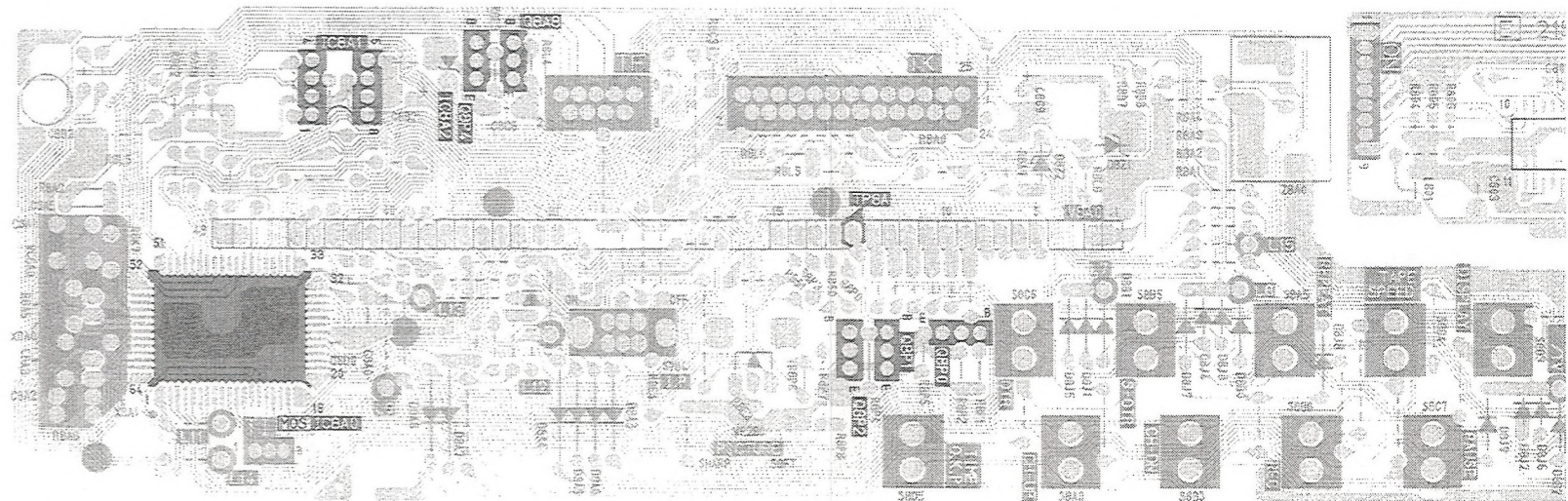
PCB POWER (Except(G))



PCB CG

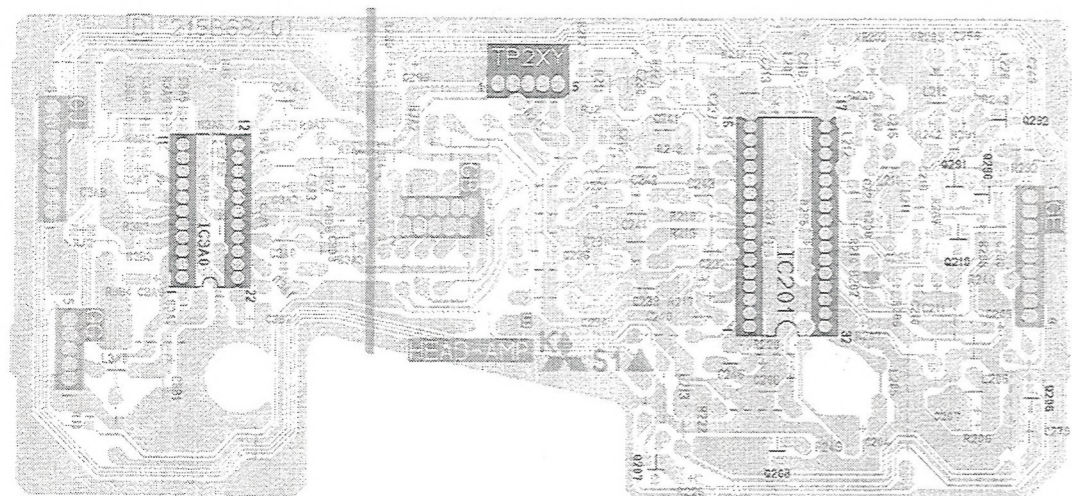


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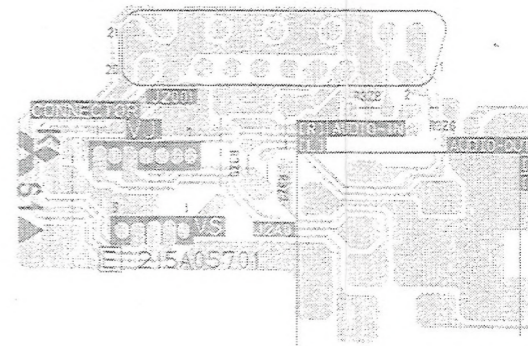


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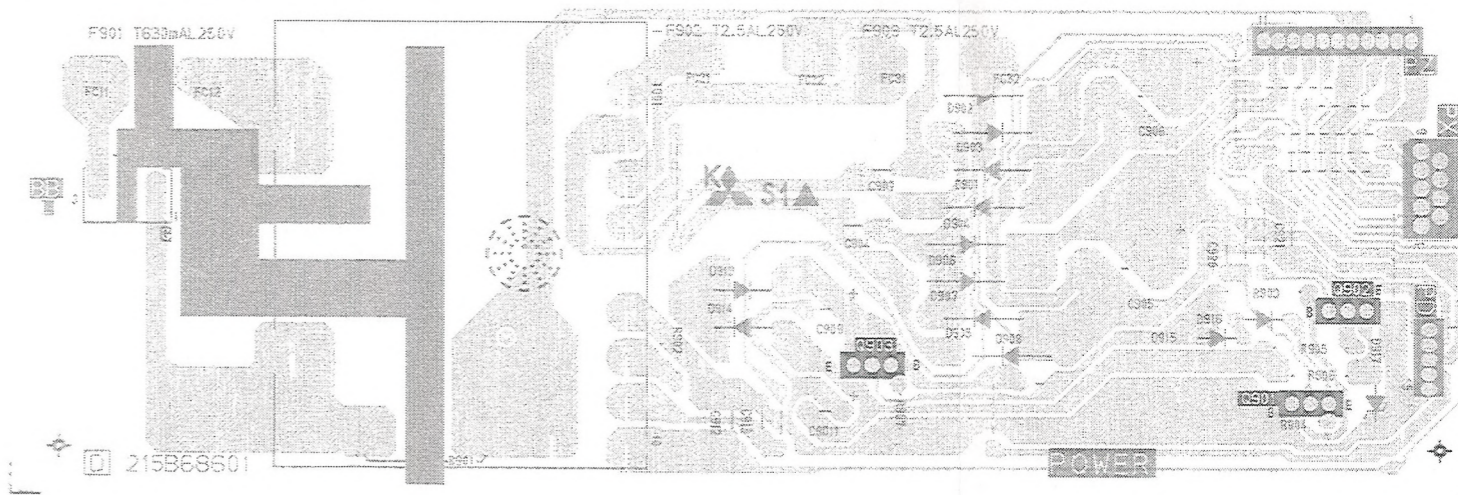
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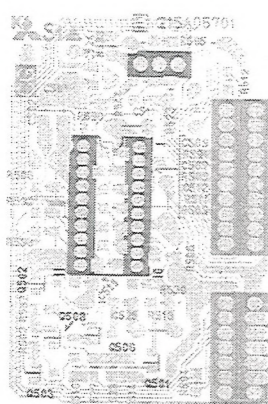
PCB CONNECTOR[(Y)(B)(E)(IR) only]



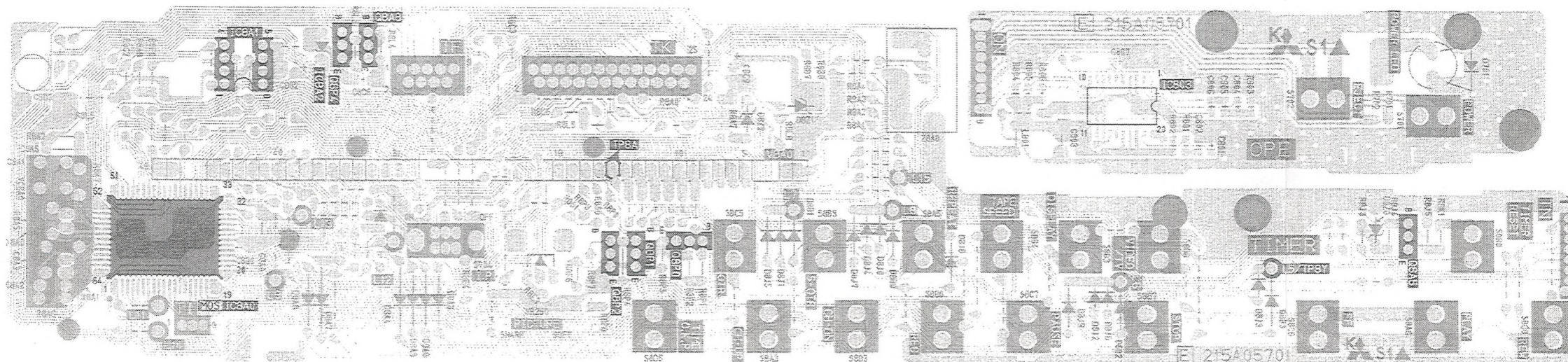
PCB POWER(Except(G))



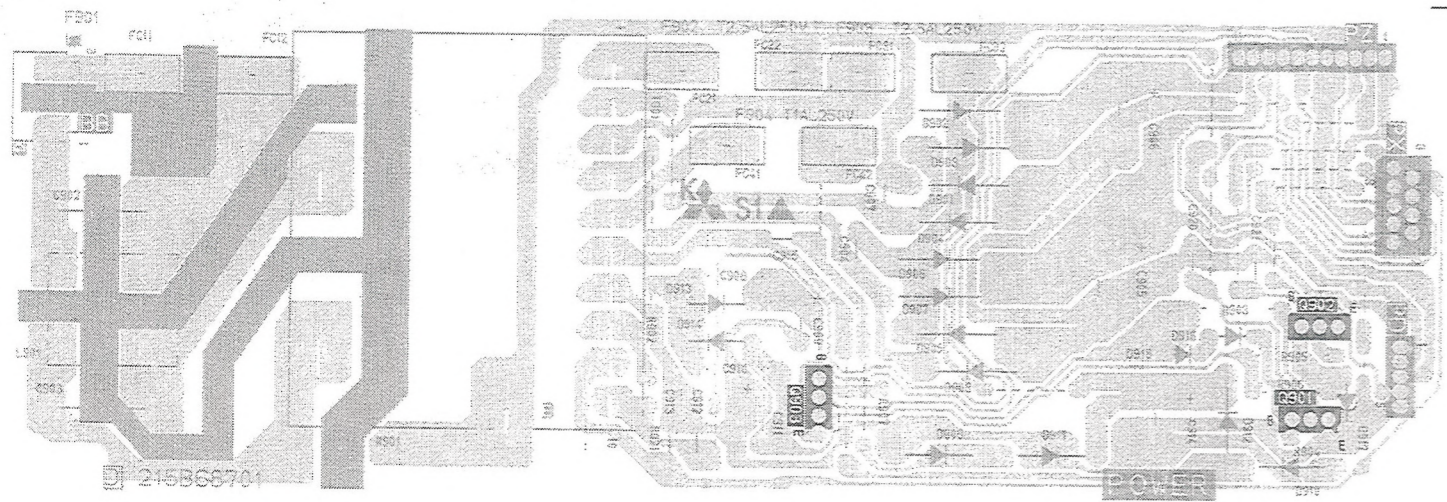
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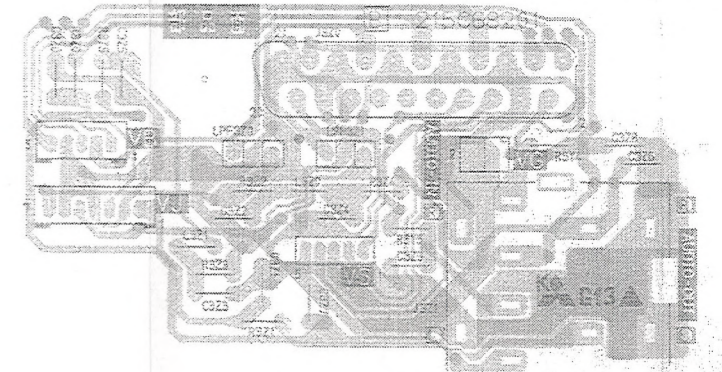
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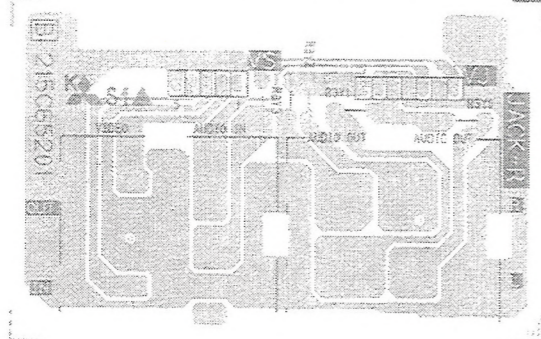
PCB POWER[(G) only]



PCB CONNECTOR(COMPONENT SIDE)[(G) only]



PCB CONNECTOR[(A)(NZ) only]



PCB CONNECTOR(SOLDER SIDE)[(G) only]

