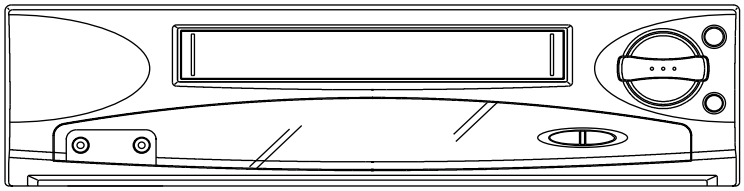
Memorex®

MVR2041

SERVICE MANUAL

VIDEO CASSETTE RECORDER



VHS

ORIGINAL
MFR'S VERSION A

SERVICING NOTICES ON CHECKING

1. KEEP THE NOTICES

As for the places which need special attentions, they are indicated with the labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.

2. USE THE DESIGNATED PARTS

The parts in this equipment have the specific characters of incombustibility and withstand voltage for safety. Therefore, the part which is replaced should be used the part which has the same character.
Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts as a ⚠ mark, the designated parts must be used.

3. PUT PARTS AND WIRES IN THE ORIGINAL POSITION AFTER ASSEMBLING OR WIRING

There are parts which use the insulation material such as a tube or tape for safety, or which are assembled in the condition that these do not contact with the printed board. The inside wiring is designed not to get closer to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.

4. PERFORM A SAFETY CHECK AFTER SERVICING

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

HOW TO ORDER PARTS

Please include the following informations when you order parts. (Particularly the VERSION LETTER.)

1. MODEL NUMBER and VERSION LETTER
   The MODEL NUMBER can be found on the back of each product and the VERSION LETTER can be found at the end of the SERIAL NUMBER.
2. PART NO. and DESCRIPTION
   You can find it in your SERVICE MANUAL.

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GENERAL SPECIFICATIONS

G-1	**VCR System**	System			VHS Player / Recorder
		Video System			NTSC
		Hi-Fi STEREO			No
		NTSC PB(PAL60Hz)			No
		Deck		DECK	OVD-6S
				Loading System	Front
				Motor	3
		Heads	Video Head		4Head
			FM Audio Head		No
			Normal Audio /Control		Mono
			Erase(Full Track Erase)		Yes
		Tape Speed	Rec	PAL	-
				NTSC	SP/SLP
			Play	PAL	-
				NTSC	SP/LP/SLP
		Fast Forward / Rewind Time (Approx.)			FF:4'50"/REW:2'30"
				with Cassette	T-120
		Forward/Reverse Picture Search		NTSC or PAL-M	SP/LP/SLP=3x,5x/7x,9x/9x,15x
				PAL or SECAM	-
		Frame Advance Slow Speed		Slow	1/10
				Variable Slow	1/10
G-2	**Tuning System**	Broadcasting System			US System M
		Tuner and Receive CH		System	1Tuner
				Destination	USA(w/CATV)
				Tuning System	F-Synth
				Input Impedance	VHF/UHF 75 OHM
				CH Coverage	2-69,4A,A-5~ A-1,A-1,J~ W W+1-W+84
		Intermediate Frequency		Picture(FP)	45.75MHz
				Sound(FS)	41.25MHz
				FP-FS	4.50MHz
		Preset CH			No
		RF Converter Output			Yes
			Channel		3 or 4 ch
			Level/Impedance		66dBu /75ohm
			Sound Selector		No
		Stereo/Dual TV Sound			No
G-3	**Power**	Power Source		AC	120V,60Hz
				DC	-
		Power Consumption		Power On(at AC)	8W at 120V 60Hz
				Stand by (at AC)	1.7W at 120V 60Hz
				Per Year	- kWh/Year
		Protector		Power Fuse	Yes
				Dew Sensor	No
G-4	**Signal**	Video Signal		Input Level	1 V p-p/75 ohm
				Output Level	1 V p-p/75 ohm
				S/N Ratio (Weighted)	50
				Horizontal Resolution at SP Mode	230Line
		Audio Signal (0dB=0.775Vrms)		Input Level	RCA-8dB/50Kohm
				Output Level	RCA-8dB/1Kohm
				S/N Ratio at SP (Weighted)	42dB
				Harmonic Distortion (1KHz)	1.5%
				Frequency Response at SP	100Hz - 10kHz
				at LP	100Hz - 6kHz
				at SLP	100Hz - 4kHz
		Hi-Fi Audio Signal		Dynamic Range : More than	-
				Frequency Response	-
				Wow And Flutter : Less than	-
				Channel Separation : More than	-
				Harmonic Distortion : Less than	-

GENERAL SPECIFICATIONS

G-5	Interface	Switch	Front	Power	Yes
				Play	Yes
				Pause/Still	No
				System Select	No
				One Touch Playback	No
				Channel Up	Yes
				Channel Down	Yes
				F.FWD/Cue	Yes
				Eject/Stop	Yes
				Main Power SW	No
				Volume Up	No
				Volume Down	No
				Rew/Rev	Yes
				Rec/OTR	Yes
			Rear	RF Output SW	No
		Indicator		Power	No
				Stand by	No
				Rec/OTR	No
				Repeat	No
				Tape In	No
				Kurupika Guide	No
				One Touch Playback	No
		Terminals	Front	Video Input	RCA
				Audio Input	RCA
				Other Terminal	No
			Rear	Video Input	No
				Audio Input	No
				Video Output	RCA
				Audio Output	RCA
				Euro Scart	No
				DC Jack 12V(Center +)	No
				VHF/UHF Antenna Input	F Type
				AC Inlet	No
G-6	Set Size			Approx. W x D x H (mm)	360 x 240 x 95
G-7	Weight			Net (Approx.)	3.2kg(7.1lbs)
				Gross (Approx.)	4.6kg(10.2lbs)
G-8	Regulation			Safety	UL
				Radiation	FCC
G-9	Temperature			Operation	5oC - 40oC
				Storage	-20oC - 60oC
G-10	Operating Humidity				Less then 80% RH
G-11	On Screen Display	Menu			Yes
			Menu Type		Character
			ATS		No
			Timer Rec Set		Yes
			Auto Repeat On/Off		Yes
			SAP On Off		No
			CH Set-Up		Yes
				TV/CATV	Yes
				Auto CH Memory	Yes
				Add/Delete	Yes
			Pin Code Registration		No
			System Set-Up		No
			Clock Set		Yes (Calendar 12H)
			Language		Yes
			No Noise Back Ground		Yes
		G-CODE(or SHOWVIEW or PLUSCODE)No. Entry			No
		NICAM 1/2,NICAM Off,Audio Output			No
		Stereo,Audio Output,SAP			No
		Play/Stop/FF/Rew/Rec/OTR/T-Rec/Pause/Eject/Tape In (Symbol Mark)			Yes
				CH/AV	Yes
				Clock	Yes
				Repeat	Yes
				Pin Code	No
				Tape Counter	Yes
				Index	No
				Hotel Lock	No
				Tape Speed	Yes
				Manual Tracking (Bar Setting)	No
				Hi-Fi	No
				S-Repeat/SR-R/SR-Play	No
				VPS	No
				PDC	No
G-12	OSD Language				English French Spanish
			OSD Language Setting		English

GENERAL SPECIFICATIONS

G-13	Display	Indicator		Yes
		Indicator Type		LED Module
			Clock/Counter,CH,Timer Rec,OTR, Play Rec,FF(Cue),Rew(Rev),Stop,ATR	Yes
			Pause("Rec"Flash)	Yes
			Still("Play"Flush)	Yes
			Eject(Tape Mark Flash)	Yes
			Slow	Yes
			WKL,Y.M.D,Start,End	No
			AFT	No
			Repeat	No
			A-DUB	No
			VCR	Yes
			Memory	No
			Index	No
			VPS	No
			PDC	No
			SP	No
			LP	No
			SLP	No
			AM	No
			PM	Yes
			F1,F2	No
			RF Output CH	Yes
			TAPE IN	Yes
G-14	Clock,Timer and Timer Back-up	Calendar		1990/1/1 ~ 2081/12/31
		Timer Events		8 prog/1 month
		One Touch Recording Max Time		5 Hours
		OTPB Valid Time		No
		Timer Back-up (at Power Off Mode)		5 sec.
G-15	Remote Control	Unit		RC-EA
		Glow in Dark Remocon		No
		Power Source	Voltage(D.C)	3V
			UM size x pcs	UM-4 x 2 pcs
		Total Keys		34 Keys
		Keys	Power	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
			6	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			CH Up	Yes
			CH Down	Yes
			Input Select	Yes
			Play	Yes
			F.Fwd	Yes
			Rew	Yes
			Pause/Still	Yes
			Stop	Yes
			Rec/OTR	Yes
			Eject	No
			Counter Reset	Yes
			Speed	Yes
			Timer Rec	Yes
			TV Monitor	No
			Quick View	No
			Program	No
			Slow	Yes
			Auto Tracking	Yes
			Set/Tracking+	Yes
			Set/ Tracking -	Yes
			Menu	Yes
			Enter	Yes
			Cancel	Yes
			Call	Yes
			TV/VCR	Yes
			Sleep Timer	No
			Muting	No
			Clock/Counter	Yes
			Zero Return	Yes
			CM Skip	No
			Audio Select	No

GENERAL SPECIFICATIONS

G-16	Features	Auto Head Cleaning			Yes
		Auto Tracking			Yes
		Index Search			No
		HQ (VHS Standard High Quality)			Yes
		Auto Power On, Auto Play, Auto Rewind, Auto Eject			Yes
		Auto Power Off			Yes
		Forward/Reverse Picture Search			Yes
		VIDEO PLUS+(SHOWVIEW,G-CODE)			No
		ATS			No
		PDC			No
		VPS			No
		One Touch Playback			No
		Picture Control			No
		Auto Preset			No
		Channel Lock			No
		Hotel Lock			No
		Anti Theft			No
		Audio Dubbing			No
		Remort Control Code 1/2			No
		SQPB			No
		CATV			Yes
		Energy Star			Yes
		MTS(SAP)			No
		CM Skip(30sec x 6 Times)			No
G-17	Accessories	Owner's Manual	Language		English/Spanish
			w/Guarantee Card		No
		Remote Control Unit			Yes
		Dew Cation Sheet			No
		Video Cassette Tape			No
		Battery			No
			UM size x pcs		UM-4 x 2 pcs
		Safety Tip			No
		Toll Free Insert Sheet			No
		Quick Set-Up Sheet			No
		Information Sheet (Buyer Supply)			No
		75 Ohm Coaxial Cable			Single shield
		Rod Antenna			No
			Poles		
			Terminal		
		Loop Antenna			No
			Terminal		
		U/V Mixer			No
		DC Car Cord (Center+)			No
		Guarantee Card			No
		Warning Sheet			No
		Circuit Diagram			No
		Antenna Change Plug			No
		Service Facility List			No
		Important Safeguard			No
		Dew/AHC Caution Sheet			No
		AC Plug Adapter			No
		Quick Set-up Sheet			No
		AC Cord			No
		AV Cord (2Pin-1Pin)			No
		Registration Card			Yes
		PTB Sheet			No
		Tape Rewinder(Buyer Supply)			No
		300 ohm to 75 ohm Antenna Adapter			No
G-18	Carton	Master Carton			No
			Content		-
			Material		-
			Dimensions W x D x H(mm)		-
			Description of Origin		-
		Gift Box			Yes
			Material		Single/White
			Dimensions W x D x H(mm)		430x310x165
			Design		As Per BUYER 's
			Description of Origin		Yes
		Drop Test		Natural Dropping At	1Corner / 3Edges / 6Surfaces
				Height (cm)	80
		Container Stuffing(40' container)			2,828Sets
G-19	Cabinet Material		Cabinet Front		PS 94V2

DISASSEMBLY INSTRUCTIONS

2. REMOVAL OF DECK PARTS

2-1: TOP BRACKET (Refer to Fig. 2-1)

1. Slide the 2 supports ① and remove the Top Bracket.

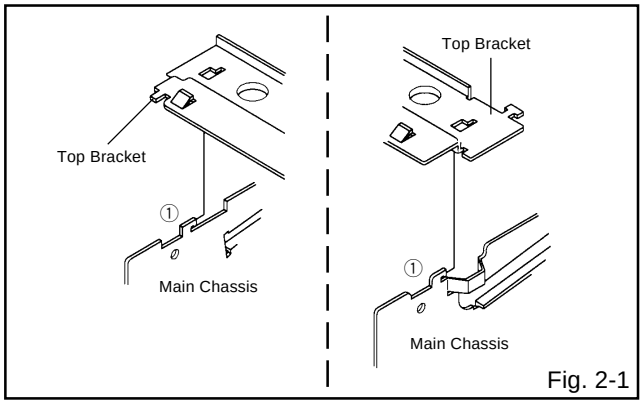


Fig. 2-1

2-2: FLAP LEVER (Refer to Fig. 2-2)

1. Move the Cassette Holder Ass'y to the back side.
2. Remove the Polyslider Washer ①.
3. Remove the Flap Lever.

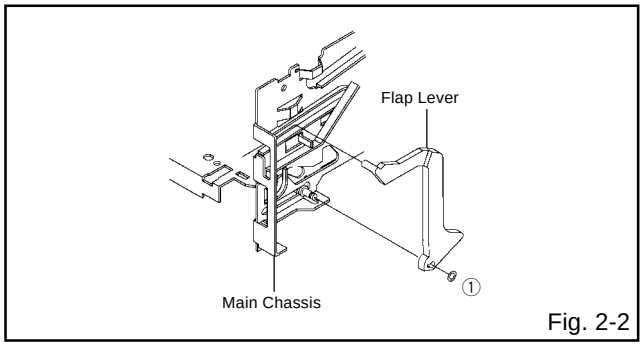
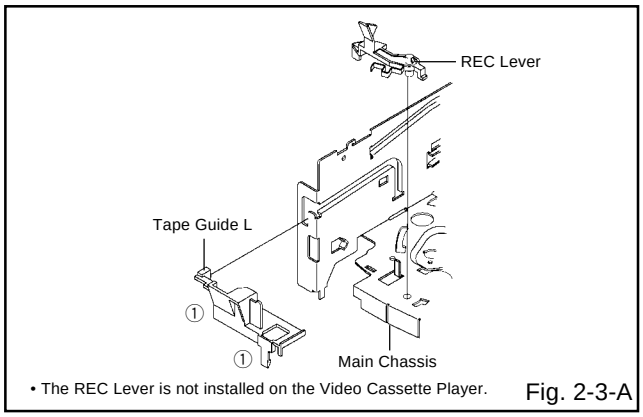


Fig. 2-2

2-3: TAPE GUIDE L (Refer to Fig. 2-3-A)

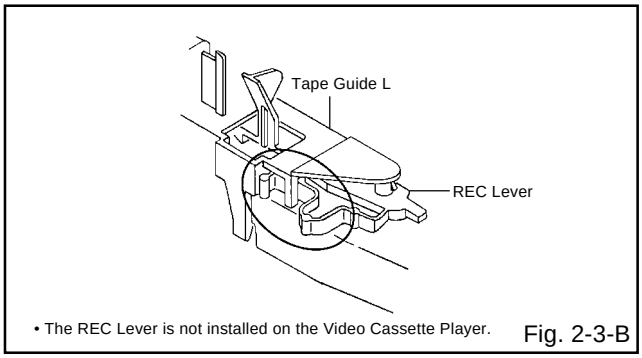
1. Move the Cassette Holder Ass'y to the back side.
2. Unlock the 2 supports ① and remove the Tape Guide L.
3. Remove the REC Lever. (Recorder only)



• The REC Lever is not installed on the Video Cassette Player.
Fig. 2-3-A

NOTE

When you install the Tape Guide L, install as shown in the circle of Fig. 2-3-B. **(Refer to Fig. 2-3-B)**



• The REC Lever is not installed on the Video Cassette Player.
Fig. 2-3-B

2-4: CASSETTE HOLDER ASS'Y (Refer to Fig. 2-4)

1. Move the Cassette Holder Ass'y to the front side.
2. Push the Locker R to remove the Cassette Side R.
3. Remove the Cassette Side L.

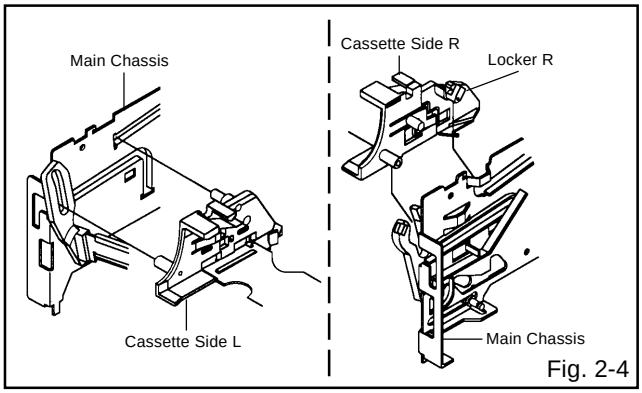


Fig. 2-4

2-5: CASSETTE SIDE L/R (Refer to Fig. 2-5)

1. Unlock the 4 supports ① and then remove the Cassette Side L/R.

NOTE

When you install the Cassette Side R, be sure to move the Locker R after installing.

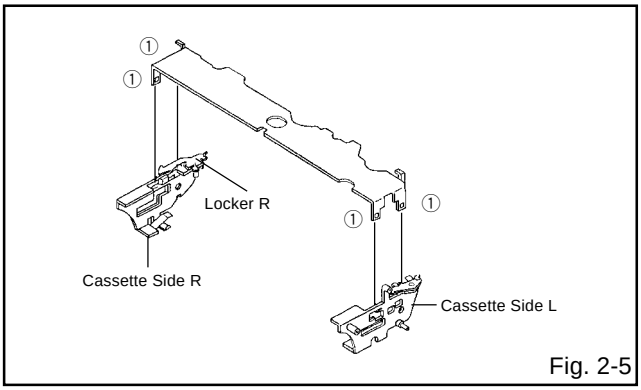


Fig. 2-5

DISASSEMBLY INSTRUCTIONS

2-6: LINK UNIT (Refer to Fig. 2-6)

1. Set the Link Unit to the Eject position.
2. Remove the (A) side of the Link Unit first, then remove the (B) side.

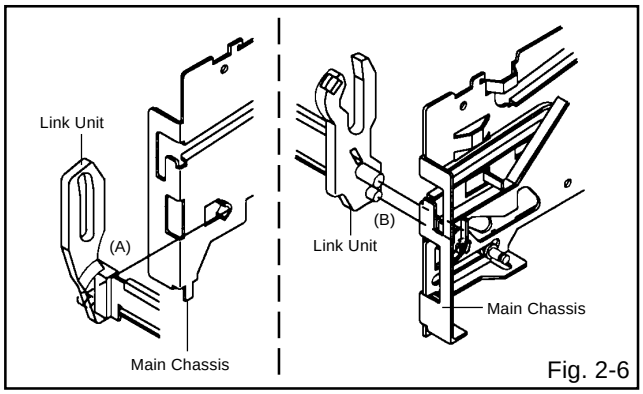


Fig. 2-6

2-7: LOADING MOTOR ASS'Y (Refer to Fig. 2-7)

1. Remove the Link Lever.
2. Remove the Dumper Spring.
3. Remove the 2 screws ①.
4. Unlock the support ② and remove the Loading Motor Ass'y.
5. Unlock the 2 supports ③ and remove the Deck PCB (BOT).

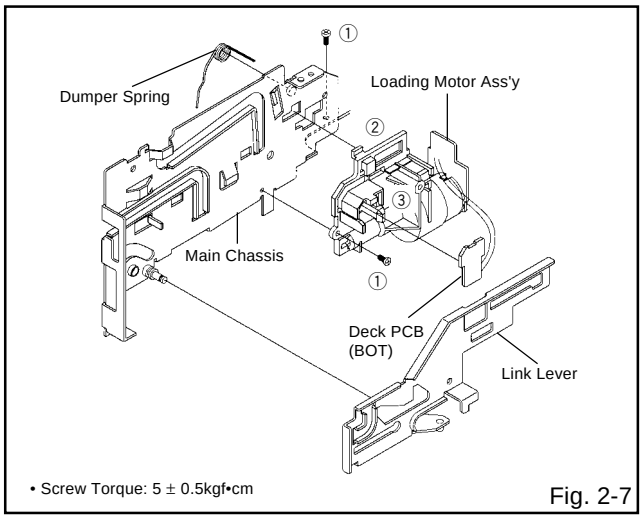


Fig. 2-7

2-8: TENSION ASS'Y (Refer to Fig. 2-8-A)

1. Move the Inclined S Ass'y to the back side.
2. Remove the Tension Spring.
3. Unlock the support ① and remove the Tension Arm Ass'y.
4. Remove the Tension Adjust.
5. Unlock the 2 supports ② and remove the Tension Band Ass'y.
6. Unlock the support ③ and remove the Tension Holder.
7. Remove the SS Brake Spring.
8. Remove the SS Arm Brake.

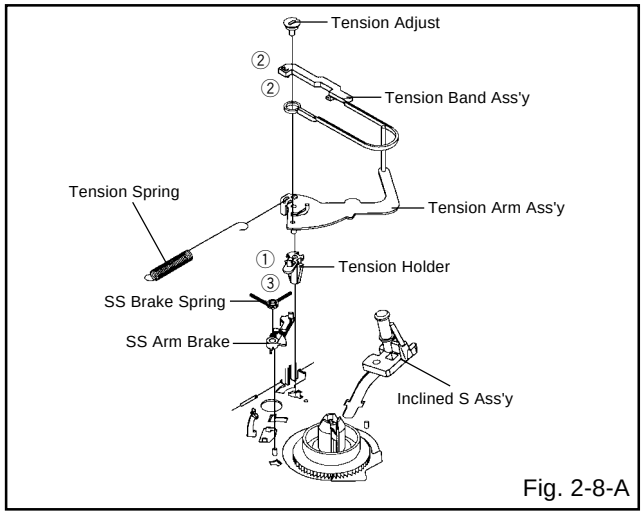


Fig. 2-8-A

NOTE

When you install the Tension Adjust, install as shown in Fig. 2-8-B. **(Refer to Fig. 2-8-B)**

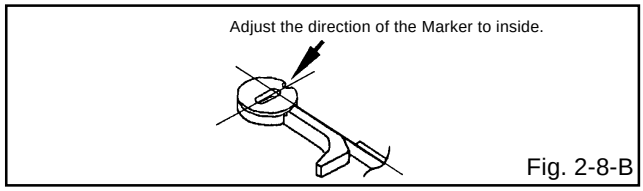


Fig. 2-8-B

2-9: T BRAKE ASS'Y (Refer to Fig. 2-9)

1. Remove the T Brake Spring.
2. Remove the T Brake Ass'y.

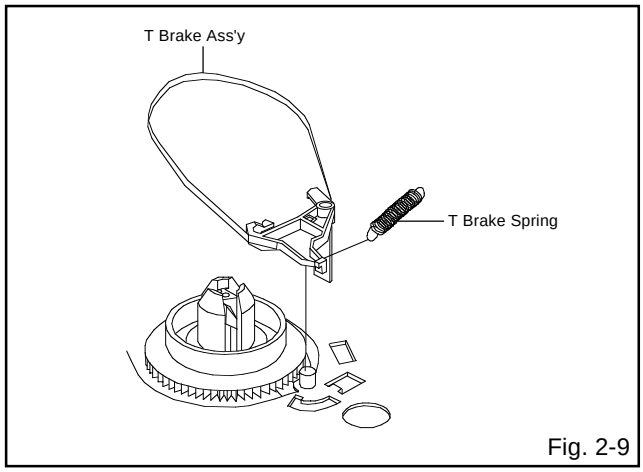


Fig. 2-9

DISASSEMBLY INSTRUCTIONS

2-10: S REEL/T REEL (Refer to Fig. 2-10)

1. Remove the S Reel and T Reel.
2. Remove the 2 Polyslider Washers ①.

NOTE

1. Take care not to damage the gears of the S Reel and T Reel.
2. The Polyslider Washer may be remained on the back of the reel.
3. Take care not to damage the shaft.
4. Do not touch the section "A" of S Reel and T Reel. (Use gloves.) **(Refer to Fig. 2-10)** Do not adhere the stains on it.
5. When you install the reel, clean the shaft and oil it (FL OIL #6115). (If you do not oil, noise may be heard in FF/REW mode.)
6. After installing the reel, adjust the height of the reel. **(Refer to MECHANICAL ADJUSTMENT)**

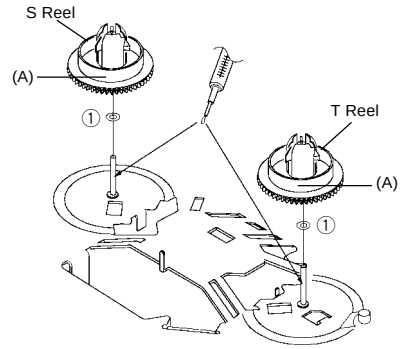
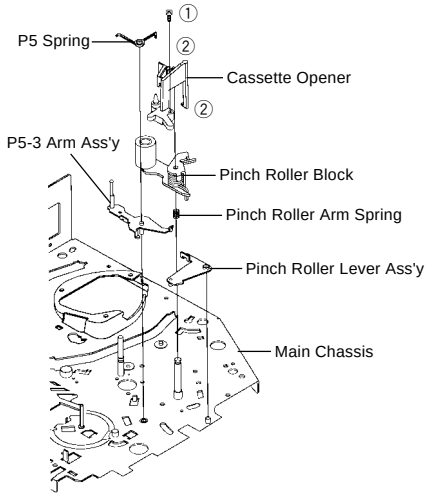


Fig. 2-10

2-11: PINCH ROLLER BLOCK/P5-3 ARM ASS'Y (Refer to Fig. 2-11-A)

1. Remove the P5 Spring.
2. Remove the screw ①.
3. Unlock the 2 supports ② and remove the Cassette Opener.
4. Remove the Pinch Roller Block, Pinch Roller Arm Spring, Pinch Roller Lever Ass'y and P5-3 Arm Ass'y.



• Screw Torque: 5 ± 0.5kgf•cm

Fig. 2-11-A

NOTE

1. Do not touch the Pinch Roller. (Use gloves.)
2. When you install the Pinch Roller Block, install as shown in the circle of Fig. 2-11-B. **(Refer to Fig. 2-11-B)**

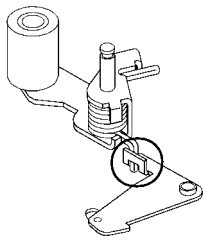


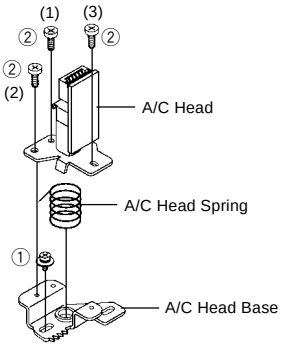
Fig. 2-11-B

2-12: A/C HEAD (Refer to Fig. 2-12-A)

1. Remove the screw ①.
2. Remove the A/C Head Base.
3. Remove the 3 screws ②.
4. Remove the A/C Head and A/C Head Spring.

NOTE

1. Do not touch the A/C Head. (Use gloves.)
2. When you install the A/C Head Spring, install as shown in Fig. 2-12-B. **(Refer to Fig. 2-12-B)**
3. When you install the A/C Head, tighten the screw (1) first, then tighten the screw (2), finally tighten the screw (3).



• Screw Torque: 5.0 ± 0.5kgf•cm (Screw ①)

Fig. 2-12-A

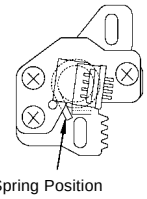
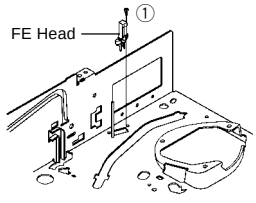


Fig. 2-12-B

2-13: FE HEAD (RECORDER ONLY) (Refer to Fig. 2-13)

1. Remove the screw ①.
2. Remove the FE Head.



• The FE Head is not installed on the Video Cassette Player.
• Screw Torque: 4 ± 0.5kgf•cm

Fig. 2-13

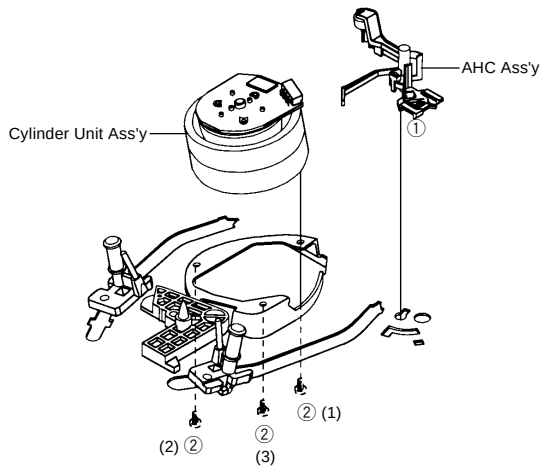
DISASSEMBLY INSTRUCTIONS

2-14: AHC ASS'Y/CYLINDER UNIT ASS'Y (Refer to Fig. 2-14)

1. Unlock the support ① and remove the AHC Ass'y.
2. Remove the 3 screws ②.
3. Remove the Cylinder Unit Ass'y.

NOTE

When you install the Cylinder Unit Ass'y, tighten the screws from (1) to (3) in order while pulling the Ass'y toward the left front direction.

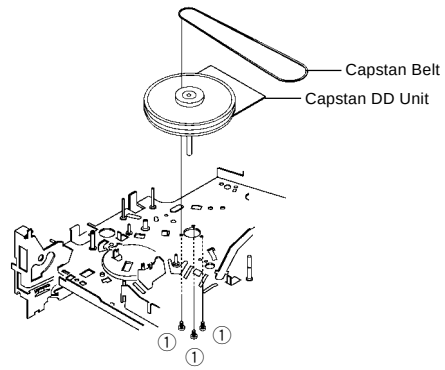


• Screw Torque: 3 ± 0.5kgf•cm

Fig. 2-14

2-15: CAPSTAN DD UNIT (Refer to Fig. 2-15)

1. Remove the Capstan Belt.
2. Remove the 3 screws ①.
3. Remove the Capstan DD Unit.



• Screw Torque: 5 ± 0.5kgf•cm

Fig. 2-15

2-16: MIDDLE GEAR/MAIN CAM (Refer to Fig. 2-16-A)

1. Remove the Polyslider Washer ①, then remove the Middle Gear.
2. Remove the E-Ring, then remove the Main Cam, P5 Cam, Pinch Roller Cam and Joint Gear.

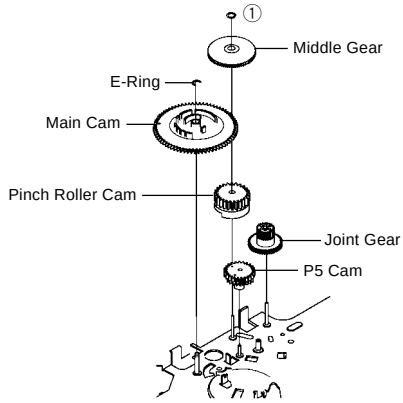


Fig. 2-16-A

NOTE

When you install the Pinch Roller Cam, P5 Cam and Main Cam, align each marker. **(Refer to Fig. 2-16-B)**

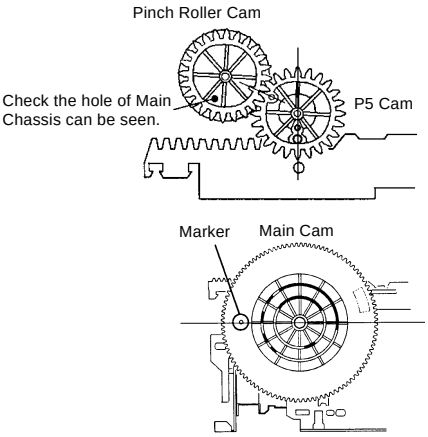


Fig. 2-16-B

2-17: CLUTCH ASS'Y (Refer to Fig. 2-17)

1. Remove the Polyslider Washer ①.
2. Remove the Clutch Ass'y, Ring Spring and Coupling Gear.
3. Unlock the 2 supports ② and remove the Clutch Lever.

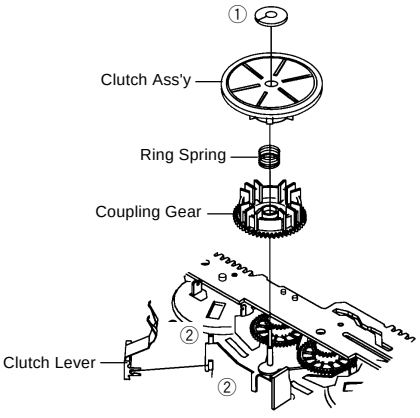


Fig. 2-17

DISASSEMBLY INSTRUCTIONS

2-18: LOADING GEAR S/T ASS'Y (Refer to Fig. 2-18-A)

1. Remove the E-Ring ① and remove the Main Loading Gear.
2. Remove the Capstan Brake Spring.
3. Slide the Main Rod and remove the Spring Holder.
4. Remove the Main Rod, Tension Lever, Clutch Actuator, Idler Arm Ass'y.
5. Remove the screw ②.
6. Remove the LED Reflecter.
7. Remove the Loading Arm S Ass'y and Loading Arm T Ass'y.
8. Remove the Loading Gear S and Loading Gear T.
9. Remove the Loading Gear Spring.

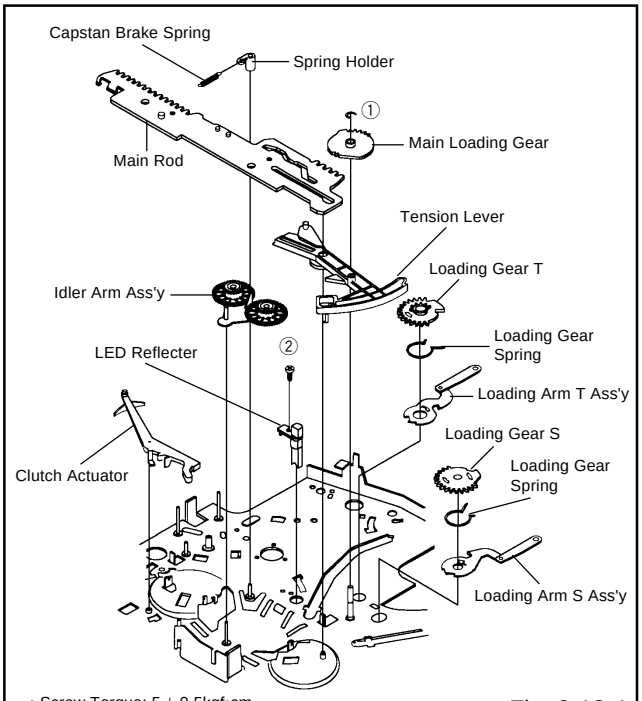


Fig. 2-18-A

NOTES

1. When you install the Loading Arm S Ass'y, Loading Arm T Ass'y and Main Loading Gear, align each marker. **(Refer to Fig. 2-18-B)**

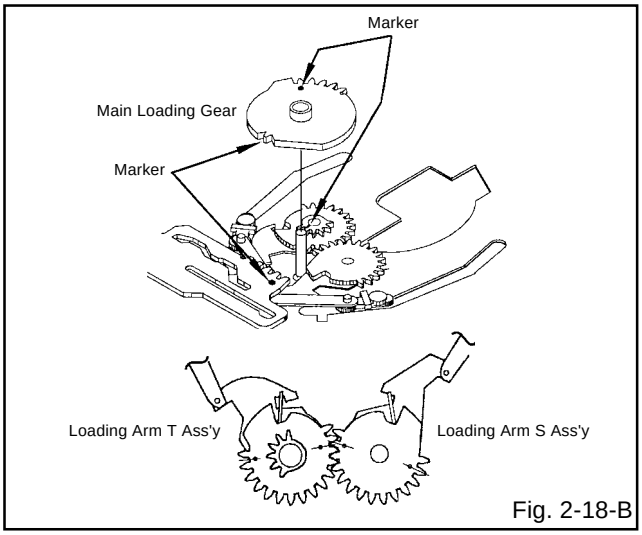


Fig. 2-18-B

2. When you install the Clutch Actuator, install as shown in the circle of Fig. 2-18-C. **(Refer to Fig. 2-18-C)**

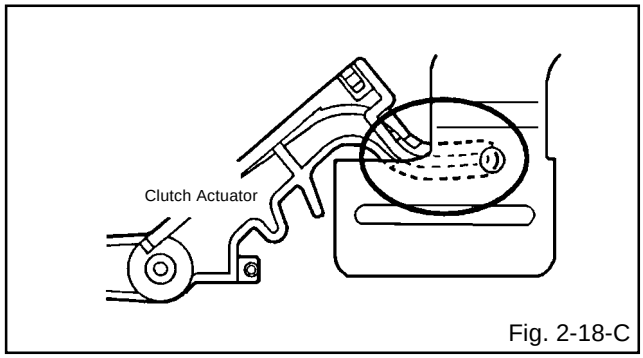


Fig. 2-18-C

2-19: INCLINED S/T ASS'Y (Refer to Fig. 2-19)

1. Remove the Cap P4.
2. Remove the screw ①.
3. Unlock the support ② and remove the Loading Gear Holder.
4. Remove the Inclined Base S Unit.
5. Remove the Inclined Base T Unit.

NOTE

Do not touch the roller of Guide Roller.

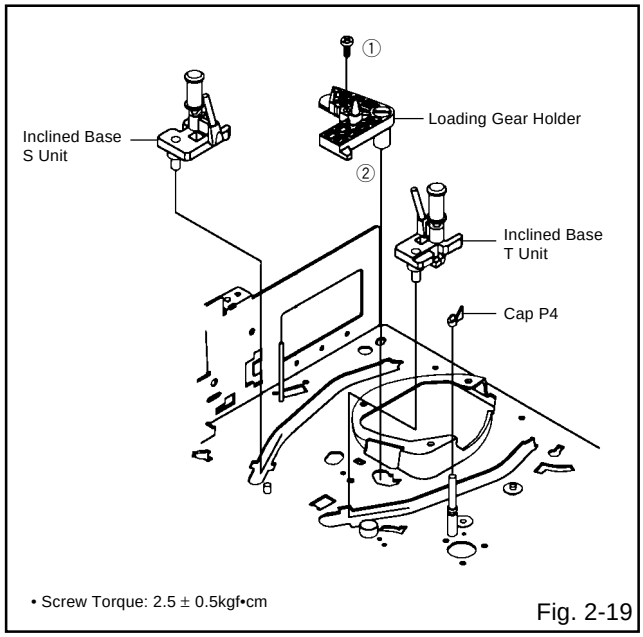


Fig. 2-19

KEY TO ABBREVIATIONS

A	**A/C**	:	Audio/Control
	ACC	:	Automatic Color Control
	AE	:	Audio Erase
	AFC	:	Automatic Frequency Control
	AFT	:	Automatic Fine Tuning
	AFT DET	:	Automatic Fine Tuning Detect
	AGC	:	Automatic Gain Control
	AMP	:	Amplifier
	ANT	:	Antenna
	A.PB	:	Audio Playback
	APC	:	Automatic Phase Control
	ASS'Y	:	Assembly
	AT	:	All Time
	AUTO	:	Automatic
	A/V	:	Audio/Video
B	**BGP**	:	Burst Gate Pulse
	BOT	:	Beginning of Tape
	BPF	:	Bandpass Filter
	BRAKE SOL	:	Brake Solenoid
	BUFF	:	Buffer
	B/W	:	Black and White
C	**C**	:	Capacitance, Collector
	CASE	:	Cassette
	CAP	:	Capstan
	CARR	:	Carrier
	CH	:	Channel
	CLK	:	Clock
	CLOCK (SY-	:	Clock (Syscon to Servo)
	SE)	:	Combination, Comb Filter
	COMB	:	Converter
	CONV	:	Capstan Motor
	CPM	:	Control
	CTL	:	Cylinder
	CYL	:	Cylinder-Motor
	CYL-M	:	Cylinder-Sensor
D	**CYL SENS**	:	Data (Syscon to Servo)
	DATA (SY-CE)	:	Decibel
	dB	:	Direct Current
	DC	:	Direct Drive Motor Unit
	DD Unit	:	Demodulator
	DEMOD	:	Detector
	DET	:	Deviation
E	**DEV**	:	Emitter
	E	:	Emitter Follower
	EF	:	Emphasis
	EMPH	:	Encoder
	ENC	:	Envelope
	ENV	:	End of Tape
	EOT	:	Equalizer
	EQ	:	External
F	**EXT**	:	Fuse
	F	:	Feed Back Clamp
	FBC	:	Full Erase
	FE	:	Fast Forward, Flipflop
	FF	:	Frequency Generator
	FG	:	Front Loading Switch
	FL SW	:	Frequency Modulation
	FM	:	Frequency Sub Carrier
	FSC	:	Forward
G	**FWD**	:	Generator
	GEN	:	Ground
H	**GND**	:	High Pass Filter
	H.P.F		
	H.SW	:	Head Switch
	Hz	:	Hertz
I	**IC**	:	Integrated Circuit
	IF	:	Intermediate Frequency
	IND	:	Indicator
	INV	:	Inverter
K	**KIL**	:	Killer
L	**L**	:	Left
	LED	:	Light Emitting Diode
	LIMIT AMP	:	Limiter Amplifier
	LM, LDM	:	Loading Motor
	LP	:	Long Play
	L.P.F	:	Low Pass Filter
	LUMI.	:	Luminance
M	**M**	:	Motor
	MAX	:	Maximum
	MINI	:	Minimum
	MIX	:	Mixer, mixing
	MM	:	Monostable Multivibrator
	MOD	:	Modulator, Modulation
	MPX	:	Multiplexer, Multiplex
	MS SW	:	Mecha State Switch
N	**NC**	:	Non Connection
	NR	:	Noise Reduction
O	**OSC**	:	Oscillator
	OPE	:	Operation
P	**PB**	:	Playback
	PB CTL	:	Playback Control
	PB-C	:	Playback-Chrominance
	PB-Y	:	Playback-Luminance
	PCB	:	Printed Circuit Board
	P. CON	:	Power Control
	PD	:	Phase Detector
	PG	:	Pulse Generator
	P-P	:	Peak-to Peak
R	**R**	:	Right
	REC	:	Recording
	REC-C	:	Recording-Chrominance
	REC-Y	:	Recording-Luminance
	REEL BRK	:	Reel Brake
	REEL S	:	Reel Sensor
	REF	:	Reference
	REG	:	Regulated, Regulator
	REW	:	Rewind
	REV, RVS	:	Reverse
	RF	:	Radio Frequency
	RMC	:	Remote Control
	RY	:	Relay
S	**S. CLK**	:	Serial Clock
	S. COM	:	Sensor Common
	S. DATA	:	Serial Data
	SEG	:	Segment
	SEL	:	Select, Selector
	SENS	:	Sensor
	SER	:	Search Mode
	SI	:	Serial Input
	SIF	:	Sound Intermediate Frequency
	SO	:	Serial Output
	SOL	:	Solenoid
	SP	:	Standard Play
	STB	:	Serial Strobe
	SW	:	Switch

KEY TO ABBREVIATIONS

S	**SYNC**	:	Synchronization
	SYNC SEP	:	Sync Separator, Separation
T	**TR**	:	Transistor
	TRAC	:	Tracking
	TRICK PB	:	Trick Playback
	TP	:	Test Point
U	**UNREG**	:	Unregulated
V	**V**	:	Volt
	VCO	:	Voltage Controlled Oscillator
	VIF	:	Video Intermediate Frequency
	VP	:	Vertical Pulse, Voltage Display
	V.PB	:	Video Playback
	VR	:	Variable Resistor
	V.REC	:	Video Recording
	VSF	:	Visual Search Fast Forward
	VSR	:	Visual Search Rewind
	VSS	:	Voltage Super Source
	V-SYNC	:	Vertical-Synchronization
	VT	:	Voltage Tuning
X	**X'TAL**	:	Crystal
Y	**Y/C**	:	Luminance/Chrominance

SERVICE MODE LIST

This unit provided with the following SERVICE MODES so you can repair, examine and adjust easily.

Method	Operations
Press the ATR button on the remote control for more than 2 seconds during PLAY.	Adjusting of the Tracking to the center position. Refer to the "MECHANICAL ADJUSTMENT" (GUIDE ROLLER) and "ELECTRICAL ADJUSTMENT" (PG SHIFTER).
Make the short circuit between the test point of SERVICE and the GND.	The EOT/BOT/Reel sensor do not work at this moment. Refer to the "PREPARATION FOR SERVICING"

PREVENTIVE CHECKS AND SERVICE INTERVALS

The following standard table depends on environmental conditions and usage. Unless maintenance is properly carried out, the following service intervals may be quite shortened as harmful effects may be had on other parts. Also, long term storage or misuse may cause transformation and aging of rubber parts.

Time / Parts Name	500 hours	1,000 hours	1,500 hours	2,000 hours	3,000 hours	Notes
Audio Control Head	■	■	■	■	■	Clean those parts in contact with the tape.
Full Erase Head (Recorder only)	■	■	■	■	■	
Capstan Belt			■	■	●	Clean the rubber, and parts which the rubber touches.
Pinch Roller	■	■	■	■	■ ●	
Capstan DD Unit					●	
Loading Motor					●	
Tension Band					●	
Capstan Shaft	■	■	■	■	■	
Tape Running Guide Post	■	■	■	■	■	Replace when rolling becomes abnormal.
Cylinder Unit	■	■	■	■	●	Clean the Head

■ : Clean
● : Replace

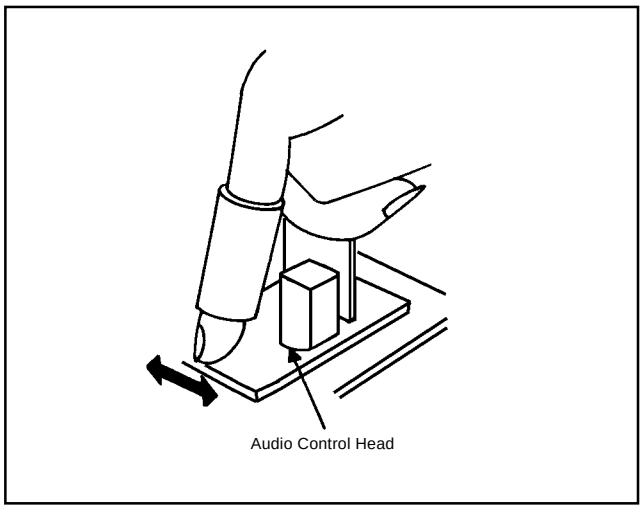
CLEANING

NOTE

After cleaning the heads with isopropyl alcohol, do not run a tape until the heads dry completely. If the heads are not completely dry and alcohol gets on the tape, damage may occur.

1. AUDIO CONTROL HEAD

Wrap a piece of chamois around your finger. Dip it in isopropyl alcohol and clean the audio control head by wiping it horizontally. Clean the full erase head in the same manner. **(Refer to the figure below.)**



2. TAPE RUNNING SYSTEM

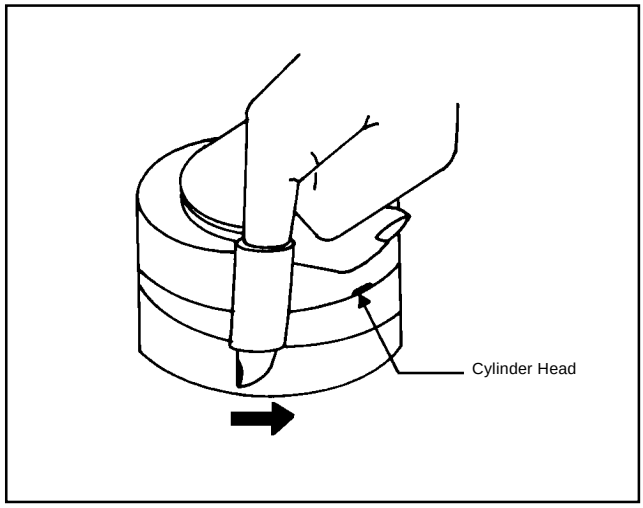
When cleaning the tape transport system, use the gauze moistened with isopropyl alcohol.

3. CYLINDER

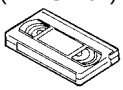
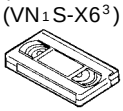
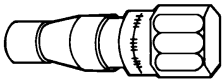
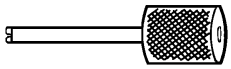
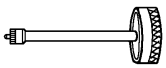
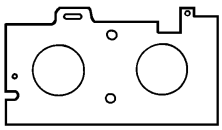
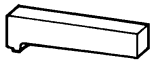
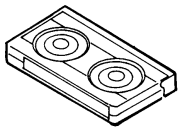
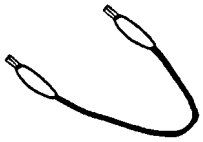
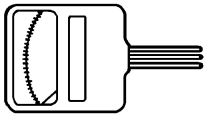
Wrap a piece of chamois around your finger. Dip it in isopropyl alcohol. Hold it to the cylinder head softly. Turn the cylinder head counterclockwise to clean it (in the direction of the arrow). **(Refer to the figure below.)**

NOTE

Do not exert force against the cylinder head. Do not move the chamois upward or downward on the head.
Use the chamois one by one.



SERVICING FIXTURES AND TOOLS

(For 2 heads model) VHS Alignment Tape JG001 (VN_2S-$LI6^3$) JG001A (VN_2S-$CO1^3$) JG001Q (VN_2S-$LI6^3H$) JG001T (VN_2S-$X6^3$) 	**(For 4 heads model)** VHS Alignment Tape JG001B (VN_1S-$LI6^3$) JG001I (VN_1S-$CO1^3$) JG001P (VN_1S-$LI6^3H$) JG001S (VN_1S-$X6^3$) 	JG002B Adapter JG002E Dial Torque Gauge (10~90gf•cm) JG002F (60~600gf•cm) 	JG005 Post Adjustment Screwdriver Part No. SV-TG0-030-000 (small) 
JG153 X Value Adjustment Screwdriver 	JG022 Master Plane 	JG024A Reel Disk Height Adjustment Jig 	JG100A Torque Tape (VHT-063) 
JG154 Cable 	Tentelometer 		

Ref. No.	Part No.	Remarks
JG001	APJG001000	Monoscope, 6KHz **(For 2 heads model)**
JG001A	APJG001A00	Color Bar, 1KHz **(For 2 heads model)**
JG001Q	APJG001Q00	Hi-Fi Audio **(For 2 heads Hi-Fi model)**
JG001T	APJG001T00	X Value Adjustment **(For 2 heads model)**
JG001B	APJG001B00	Monoscope, 6KHz **(For 4 heads model)**
JG001I	APJG001I00	Color Bar, 1KHz **(For 4 heads model)**
JG001P	APJG001P00	Hi-Fi Audio **(For 4 heads Hi-Fi model)**
JG001S	APJG001S00	X Value Adjustment **(For 4 heads model)**
JG002B	APJG002B00	VSR Torque, Brake Torque (S Reel/T Reel Ass'y)
JG002E	APJG002E00	Brake Torque (T Reel Ass'y)
JG002F	APJG002F00	VSR Torque, Brake Torque (S Reel)
JG005	APJG005000	Guide Roller Adjustment
JG153	APJG153000	X Value Adjustment
JG022/JG024A	APJG022000/APJG024A00	Reel Disk Height Adjustment
JG100A	APJG100A00	Playback Torque, Back Tension Torque During Playback
JG154	APJG154000	Used to connect the test point of SERVICE and GROUND

PREPARATION FOR SERVICING

1. Short circuit between **TP1001** and **Ground** with the cable JG154.
   (Refer to MAJOR COMPONENTS LOCATION GUIDE)
   The EOT, BOT and Reel Sensor do not work at this moment.
   At that time, the STOP/EJECT button is available to insert and eject the Cassette Tape.

MECHANICAL ADJUSTMENTS

1. CONFIRMATION AND ADJUSTMENT

Read the following NOTES before starting work.

- Place an object which weighs between 450g~500g on the Cassette Tape to keep it steady when you want to make the tape run without the Cassette Holder. (Do not place an object which weighs over 500g.)
- When you activate the deck without the Cassette Holder, short circuit between **TP1001** and **TP1002**. **(Refer to ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE)** In this condition the BOT/EOT/ Reel Sensor will not function.

1-1: CONFIRMATION AND ADJUSTMENT OF REEL DISK HEIGHT

1. Turn on the power and set to the STOP mode.
2. Set the master plane **(JG022)** and reel disk height adjustment jig **(JG024A**) on the mechanism framework, taking care not to scratch the drum, as shown in **Fig. 1-1-A**.
3. Confirm that "A" of the reel disk is lower than "B" of the reel disk height adjustment jig **(JG024A)** , and is higher than "C". If it is not enough height, adjust to 10(+0.2, -0) mm with the height adjustment washer.
4. Adjust the other reel in the same way.

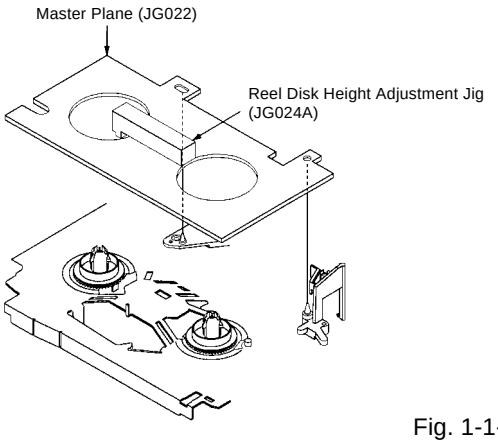


Fig. 1-1-A

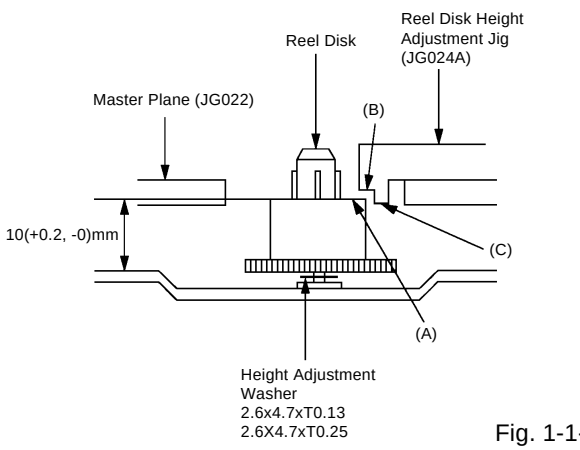


Fig. 1-1-B

1-2: CONFIRMATION AND ADJUSTMENT OF TENSION POST POSITION

1. Set to the PLAY mode.
2. Adjust the Tension Adjust until the edge of the Tension Arm is positioning within 0.5mm range from the standard line center of Main Chassis.
   After this adjustment, confirm that the cut position is located in "A" area as shown in **Fig. 1-2-B** If it is located in "B" area, adjust again.
3. While turning the S Reel clockwise, confirm that the edge of the Tension Arm is located in the position described above.

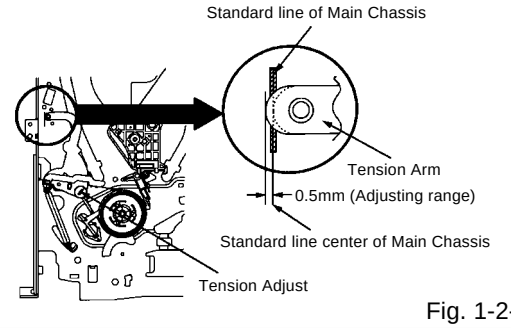


Fig. 1-2-A

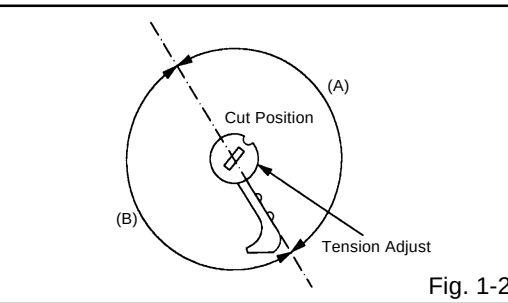


Fig. 1-2-B

1-3: CONFIRMATION OF PLAYBACK TORQUE AND BACK TENSION TORQUE DURING PLAYBACK

1. Load a video tape (T-120) recorded in standard speed mode. Set the unit to the PLAY mode.
2. Install the tentelometer as shown in **Fig. 1-3**. Confirm that the meter indicates 2 ± 2gf in the beginning of playback.

• USING A CASSETTE TYPE TORQUE TAP E **(JG100A)**

1. After confirmation and adjustment of Tension Post position **(Refer to item 1-2)**, load the cassette type torque tape **(JG100A)** and set to the PLAY mode.
2. Confirm that the right meter of the torque tape indicates 60~110gf•cm during playback in SP mode.
3. Confirm that the left meter of the torque tape indicates 25~40gf•cm during playback in SP mode.

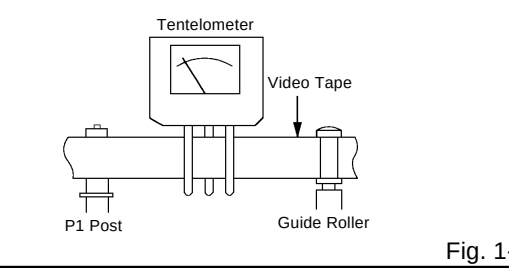


Fig. 1-3

MECHANICAL ADJUSTMENTS

1-4: CONFIRMATION OF VSR TORQUE

1. Operate within 4~5 seconds after the reel disk begins to turn.
2. Install the Torque Gauge **(JG002F)** and Adapter**(JG002B)** on the S Reel. Set to the Rewind mode **(Refer to Fig.1-4)**
3. Then, confirm that it indicates 120~180gf•cm.

NOTE

Install the Torque Gauge on the reel disk firmly. Press the REW button to turn the reel disk.

1-5: CONFIRMATION OF REEL BRAKE TORQUE

(S Reel Brake) **(Refer to Fig. 1-4)**

1. Set to the STOP mode.
2. Move the Idler Ass'y from the S Reel.
3. Install the Torque Gauge **(JG002F)** and Adapter **(JG002B)** on the S Reel. Turn the Torque Gauge **(JG002F)** clockwise.
4. Then, confirm that it indicates 60~100gf•cm.

(T Reel Brake)**(Refer to Fig. 1-4)**

1. Set to the STOP mode.
2. Move the Idler Ass'y from the T Reel.
3. Install the Torque Gauge **(JG002E)** and Adapter **(JG002B)** on the T reel. Turn the Torque Gauge **(JG002E)** counterclockwise.
4. Then, confirm that it indicates 45~70gf•cm.

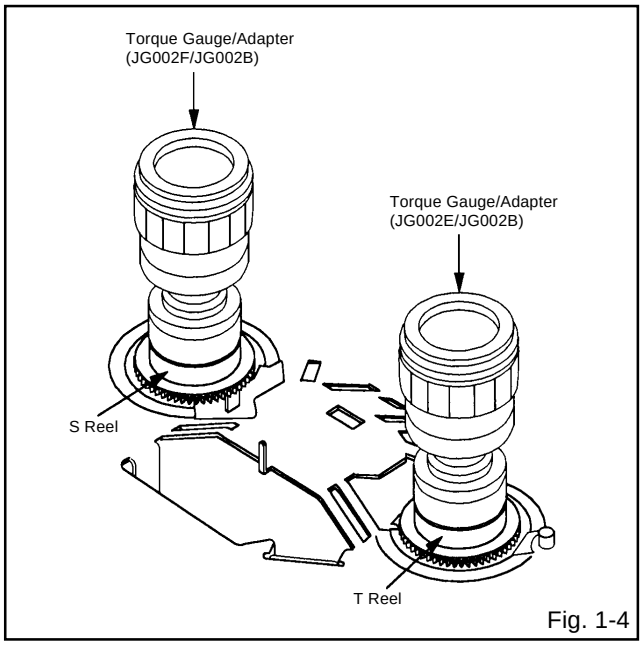


Fig. 1-4

NOTE

If the torque is out of the range, replace the following parts.

Check item	Replacement Part
1-4	Idler Ass'y/Clutch Ass'y
1-5	T Brake Spring/Tension Spring

2. CONFIRMATION AND ADJUSTMENT OF TAPE RUNNING MECHANISM

Tape Running Mechanism is adjusted precisely at the factory. Adjustment is not necessary as usual. When you replace the parts of the tape running mechanism because of long term usage or failure, the confirmation and adjustment are necessary.

2-1: GUIDE ROLLER

1. Playback the VHS Alignment Tape **(JG001 or JG001B)**. **(Refer to SERVICING FIXTURE AND TOOLS)**
2. Connect CH-1 of the oscilloscope **TP4001 (Envelope)** and CH-2 to **TP1002 (SW Pulse)**.
3. Press and hold the Tracking-Auto button on the remote control for more than 2 seconds to set tracking to center.
4. Trigger with SW Pulse and observe the envelope. **(Refer to Fig. 2-1-A)**
5. When observing the envelope, adjust the Adjusting Driver **(JG005)** slightly until the envelope will be flat. Even if you press the Tracking Button, adjust so that flatness is not moved so much.
6. Adjust so that the A : B ratio is better than 3 : 2 as shown in **Fig. 2-1-B**, even if you press the Tracking Button to move the envelope (The envelope waveform will begin to decrease when you press the Tracking Button).
7. Adjust the PG shifter during playback. **(Refer to the ELECTRICAL ADJUSTMENTS)**

NOTE

After adjustment, confirm and adjust A/C head. **(Refer to item 2-2)**

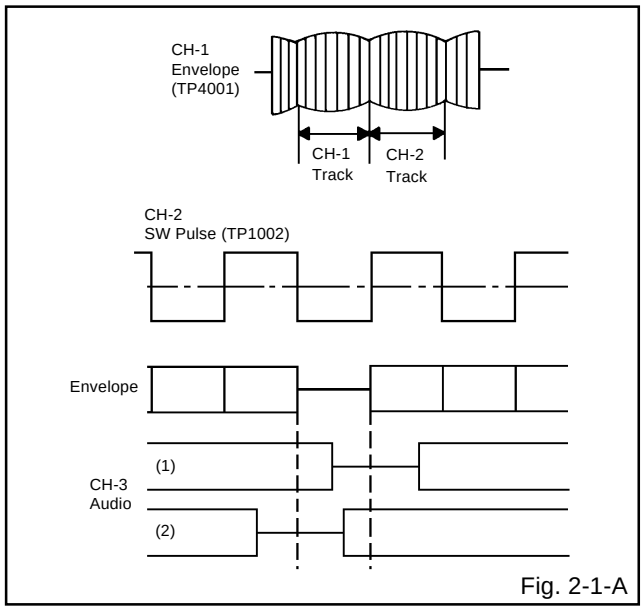


Fig. 2-1-A

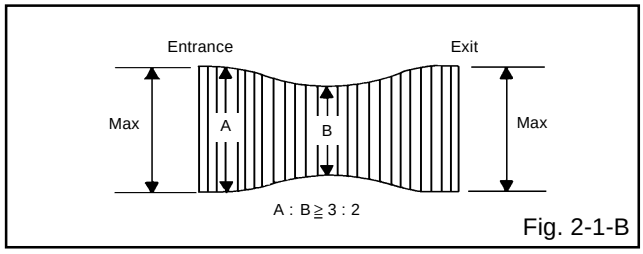


Fig. 2-1-B

MECHANICAL ADJUSTMENTS

2-2: CONFIRMATION AND ADJUSTMENT OF AUDIO/CONTROL HEAD

When the Tape Running Mechanism does not work well, adjust the following items.

1. Playback the VHS Alignment Tape **(JG001 or JG001B)** . **(Refer to SERVICING FIXTURE AND TOOLS)**
2. Confirm that the reflected picture of stamp mark is appeared on the tape prior to P4 Post as shown in **Fig. 2-2-A**.
   a) When the reflected picture is distorted, turn the screw ① clockwise until the distortion is disappeared.
   b) When the reflected picture is not distorted, turn the screw ① counterclockwise until little distortion is appeared, then adjust the a).
3. Turn the screw ② to set the audio level to maximum.
4. Confirm that the bottom of the Audio/ Control Head and the bottom of the tape is shown in **Fig. 2-2-C**.
   c) When the height is not correct, turn the s ③ to adjust the height. Then, adjust the 1~3 again.

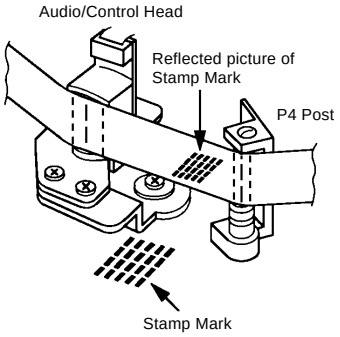


Fig. 2-2-A

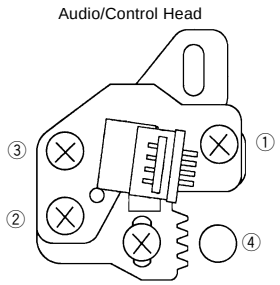


Fig. 2-2-B

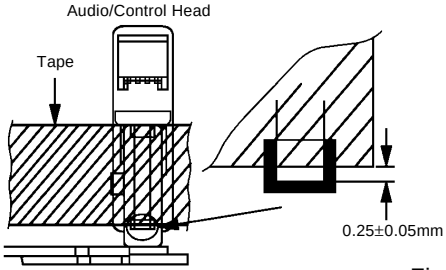


Fig. 2-2-C

2-3: TAPE RUNNING ADJUSTMENT (X VALUE ADJUSTMENT)

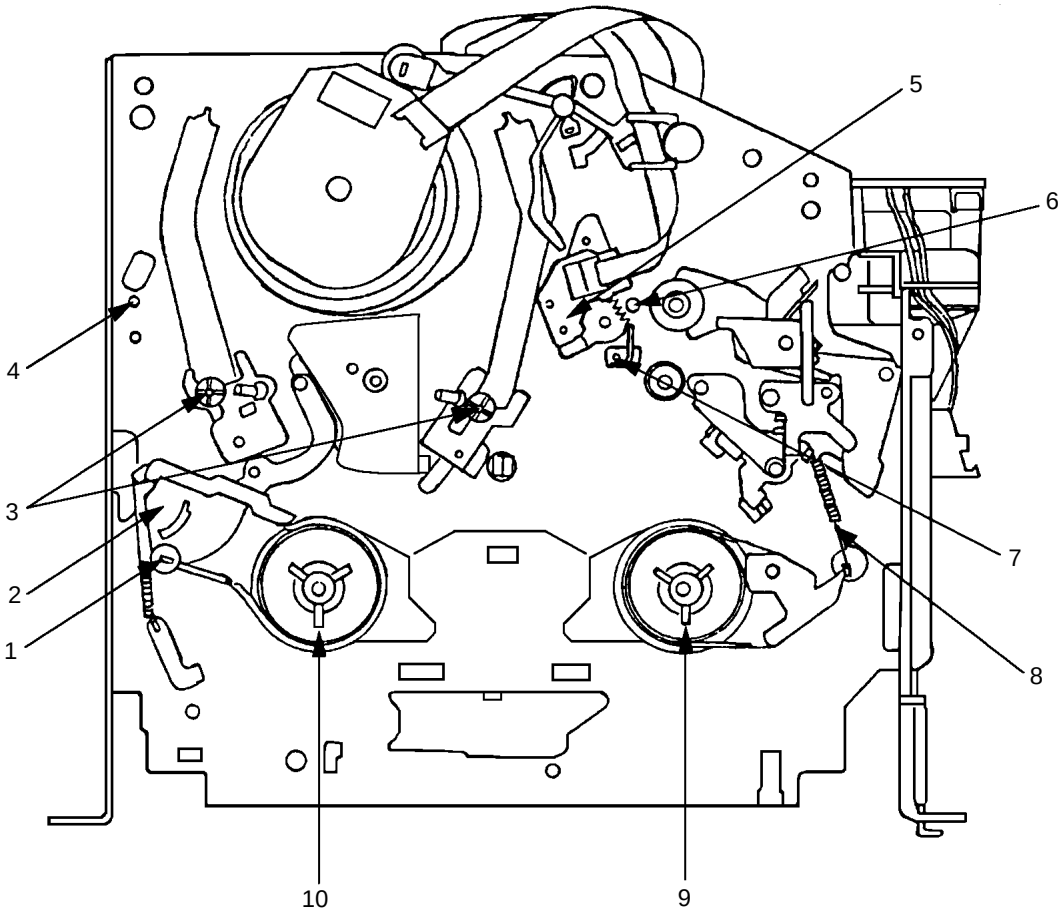
1. Confirm and adjust the height of the Reel Disk. **(Refer to item 1-1)**
2. Confirm and adjust the position of the Tension Post. **(Refer to item 1-2)**
3. Adjust the Guide Roller. **(Refer to item 2-1)**
4. Confirm and adjust the Audio/Control Head. **(Refer to item 2-2)**
5. Connect CH-1 of the oscilloscope to **TP4001**, CH-2 to **TP1002** and CH-3 to **HOT side of Audio Out Jack**.
6. Playback the VHS Alignment Tape **(JG001S or JG001T)** . **(Refer to SERVICING FIXTURE AND TOOLS)**
7. Press and hold the Tracking-Auto button on the remote control for more than 2 seconds to set tracking to center.
8. Set the X Value adjustment driver **(JG153)** to the ④ of **Fig. 2-2-B**. Adjust X value so that the envelope waveform output becomes maximum. Check if the relation between Audio and Envelope waveform becomes (1) or (2) of **Fig. 2-1-A**.

2-4: CONFIRM HI-FI AUDIO (Hi-Fi model only)

1. Connect CH-1 of the oscilloscope **TP4001**, CH-2 to **TP1002** and CH-3 to the **Hi-Fi Audio Out Jack**.
2. Playback the VHS Alignment Tape **(JG001P or JG001Q). (Refer to SERVICING FIXTURE AND TOOLS)**
3. Press and hold the Tracking-Auto button on the remote control for more than 2 seconds to set tracking to center.
4. Press the Tracking Up button and count number of steps which the audio output is changed from Hi-Fi (10KHz) to MONO (6KHz).
5. Press the Tracking Down button and count number of steps which the audio output is changed from Hi-Fi (10KHz) to MONO (6KHz).
6. Confirm that the difference between these counted steps number in the above items are within 2 steps. If the difference are more than 3 steps, do Tape Running Adjustment again. **(Refer to item 2-3)**

MECHANICAL ADJUSTMENTS

3. MECHANISM ADJUSTMENT PARTS LOCATION GUIDE



1. Tension Adjust
2. Tension Arm
3. Guide Roller
4. P1 Post
5. Audio/Control Head
6. X value adjustment driver hole
7. P4 Post
8. T Brake Spring
9. T Reel
10. S Reel

ELECTRICAL ADJUSTMENTS

Read and perform this adjustment when repairing the circuits or replacing electrical parts or PCB assemblies.

1. BASIC ADJUSTMENT

CAUTION

When replacing IC's or transistors, use only specified silicon grease **(YG6260M)**.
(To prevent the damage to IC's and transistors.)

1-1: PG SHIFTER

CONDITIONS

MODE-PLAYBACK
Input Signal-Alignment Tape **(JG001B)**

INSTRUCTIONS

1. Connect CH-1 on the oscilloscope to **TP1002** and CH-2 to **TP4201**.
2. Playback the alignment tape. **(JG001B)**
3. Press and hold the Tracking-Auto button on the remote control more than 2 seconds to set tracking to center.
4. Adjust the **VR1001** until the waveform of the oscilloscope measures 6.5 ± 0.5(H) at both leading and trailing edges. **(Refer to Fig. 1-1-A, B)**

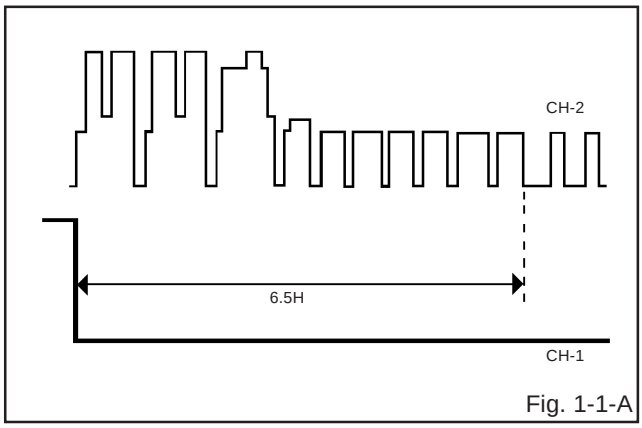


Fig. 1-1-A

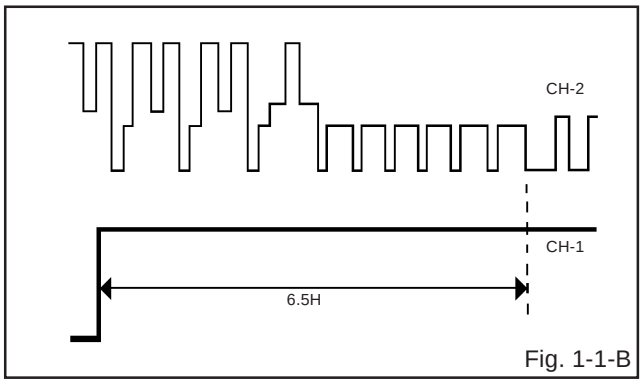
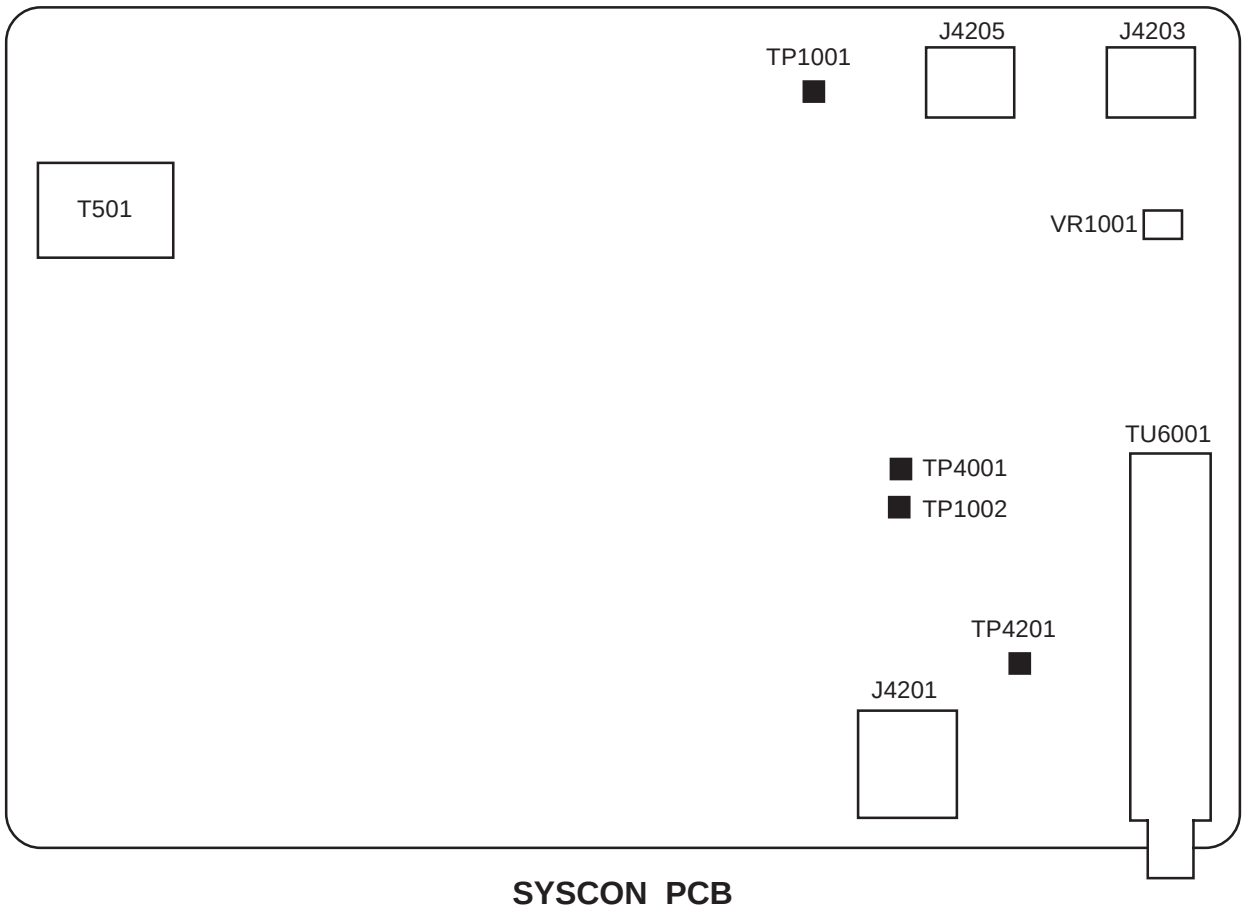


Fig. 1-1-B

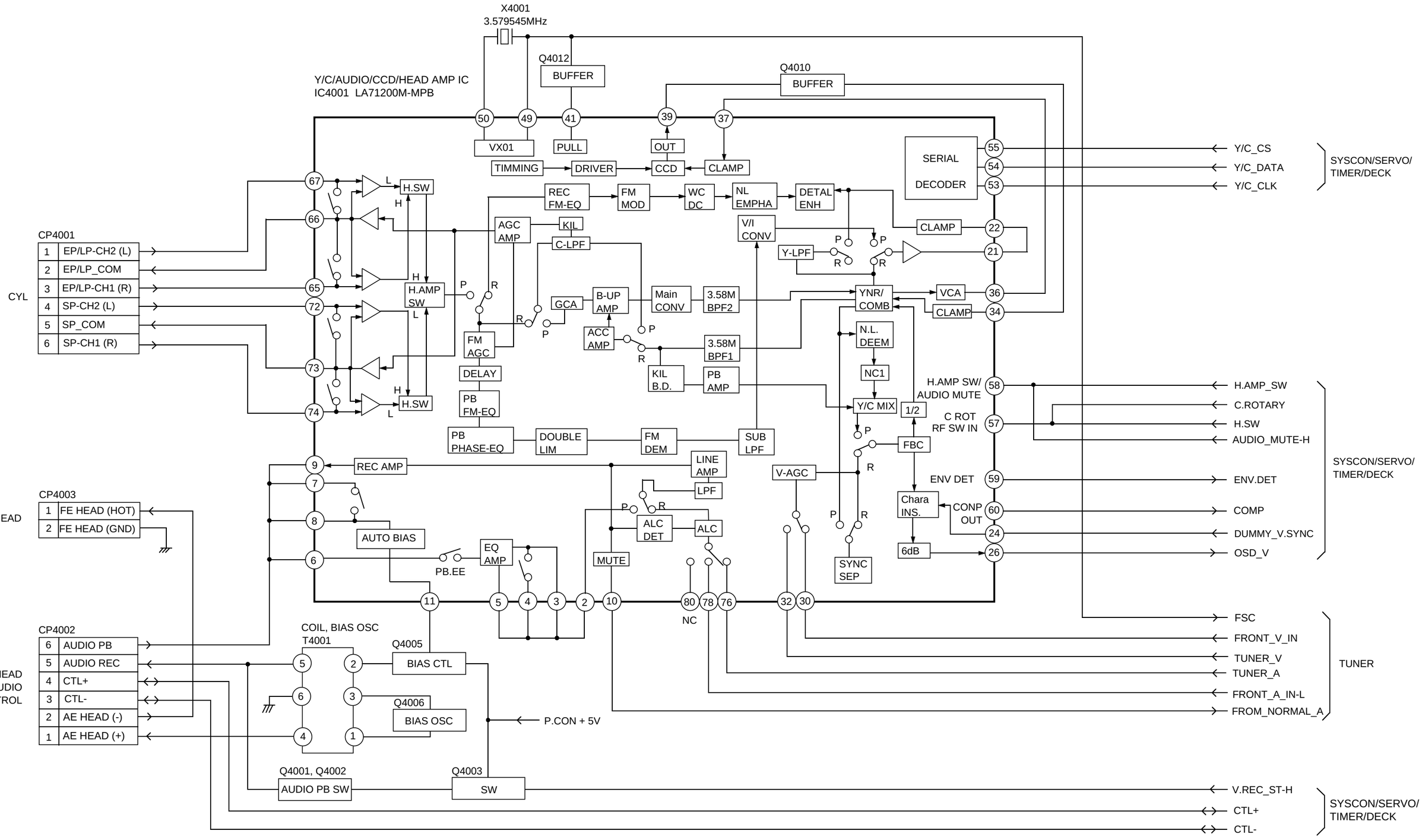
ELECTRICAL ADJUSTMENTS

2. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE

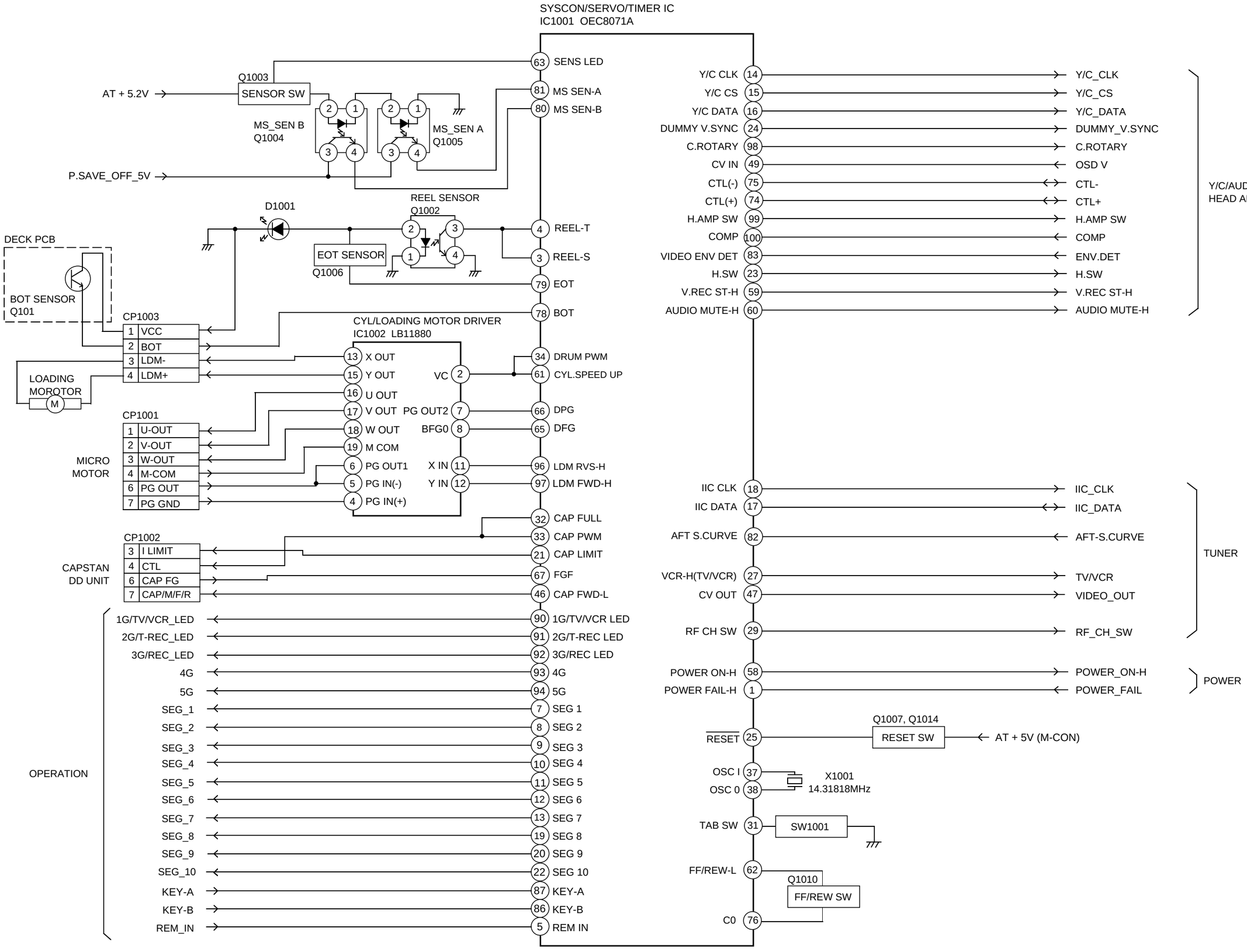


SYSCON PCB

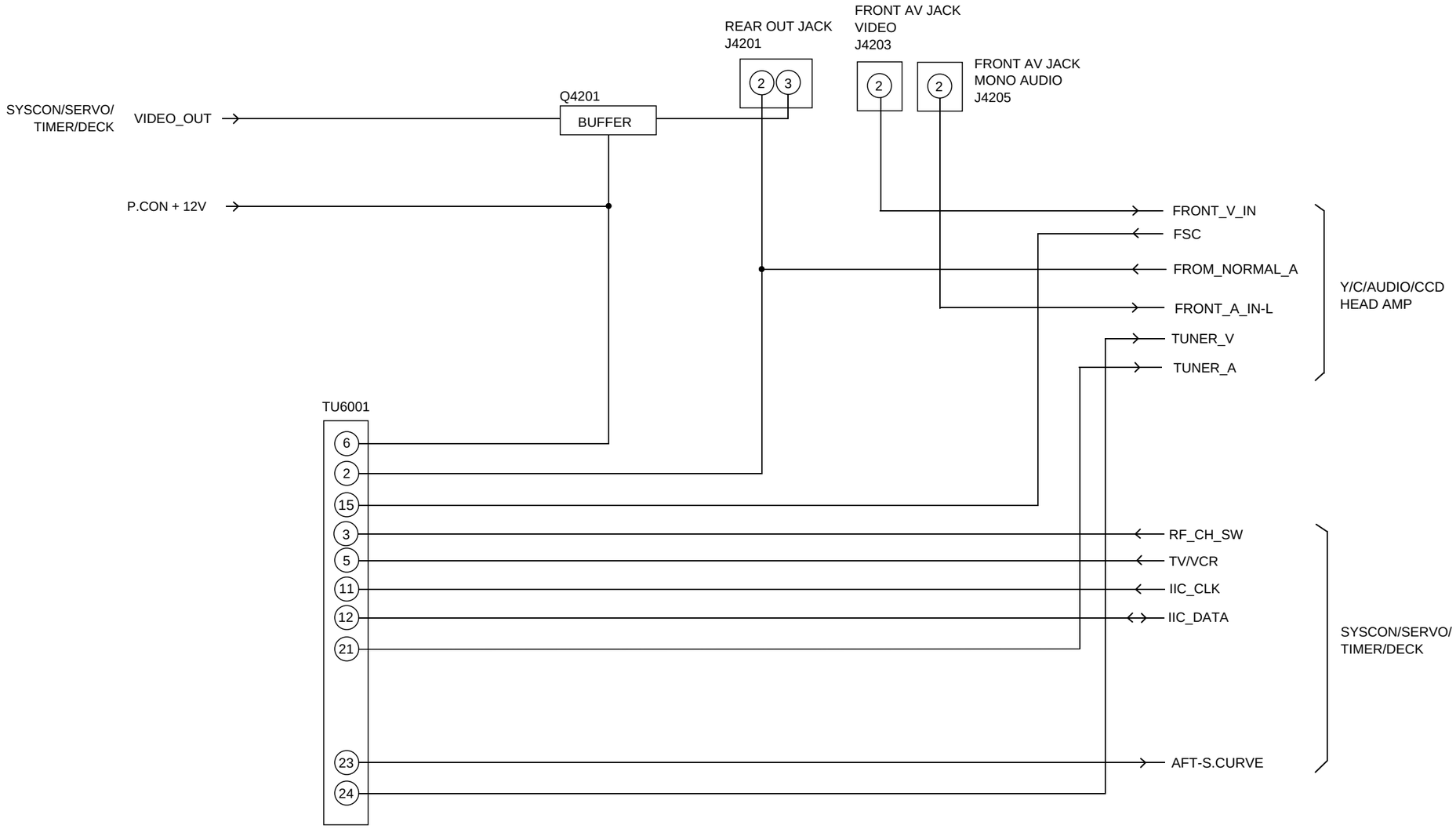
Y/C/AUDIO/CCD/HEAD AMP BLOCK DIAGRAM



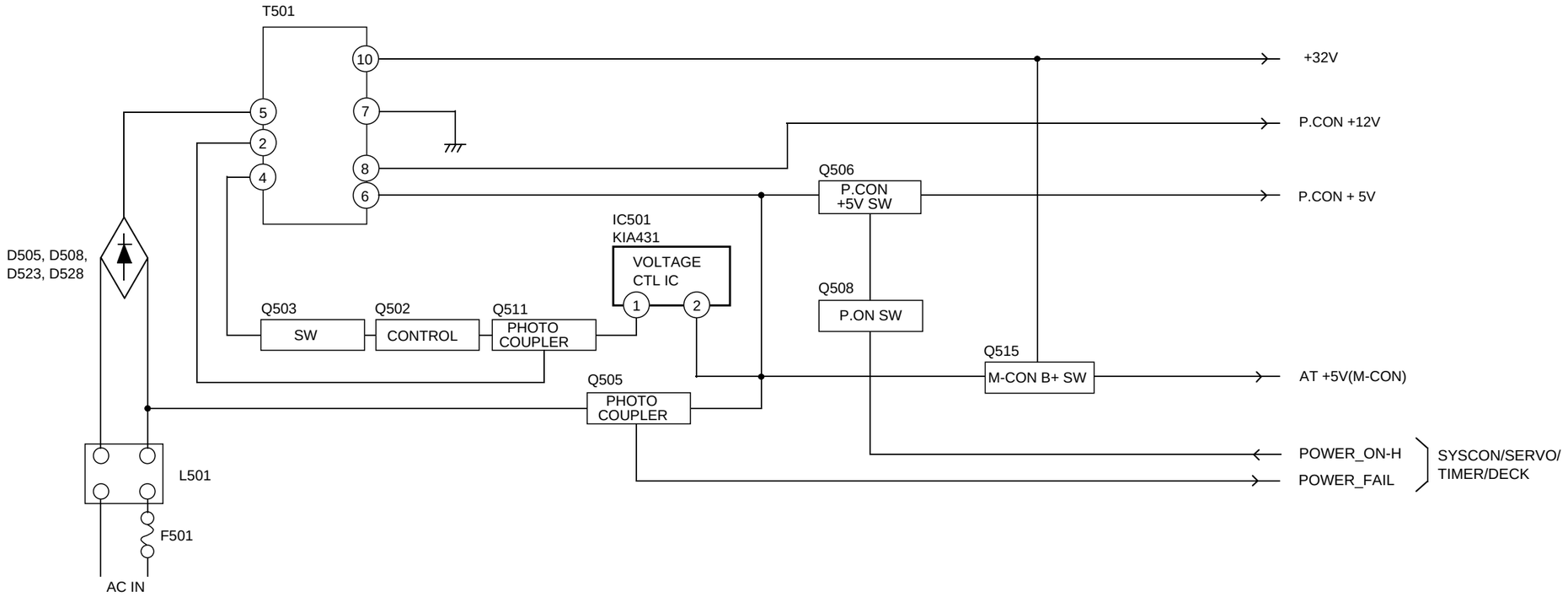
SYSTEM CONTROL/SERVO/TIMER/DECK BLOCK DIAGRAM



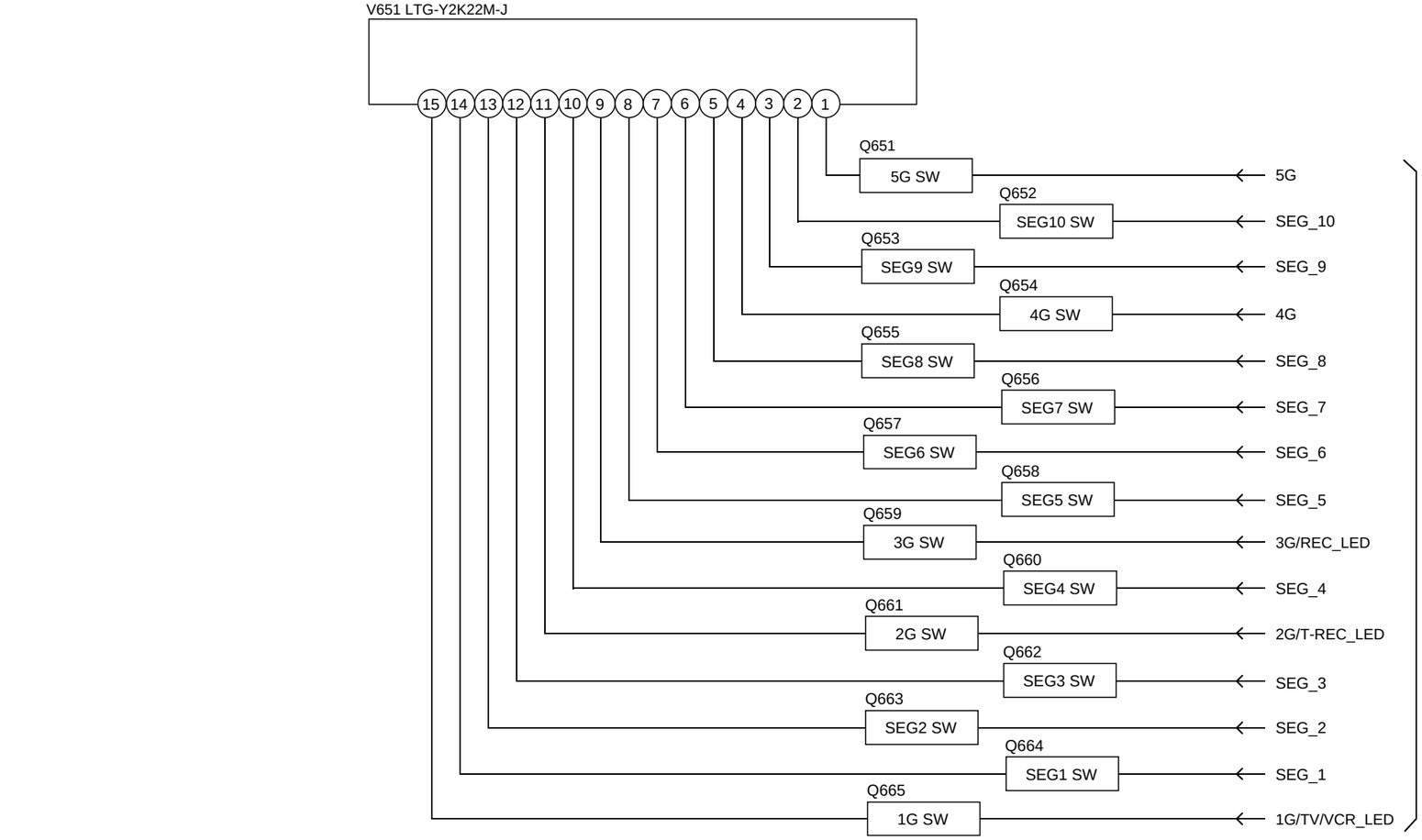
TUNER BLOCK DIAGRAM

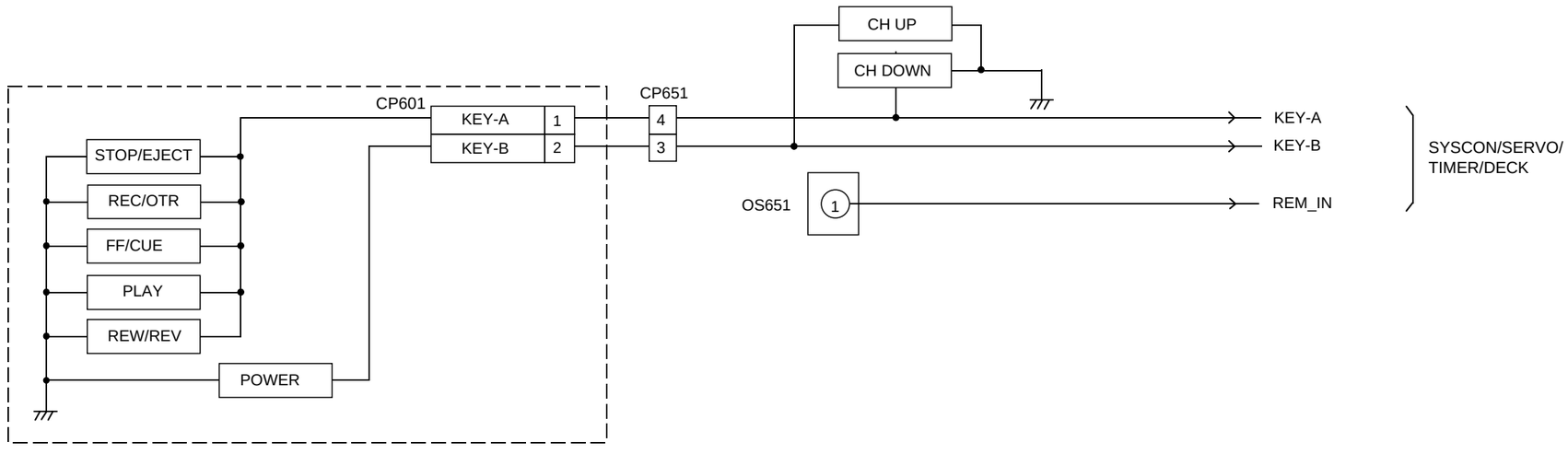


POWER BLOCK DIAGRAM



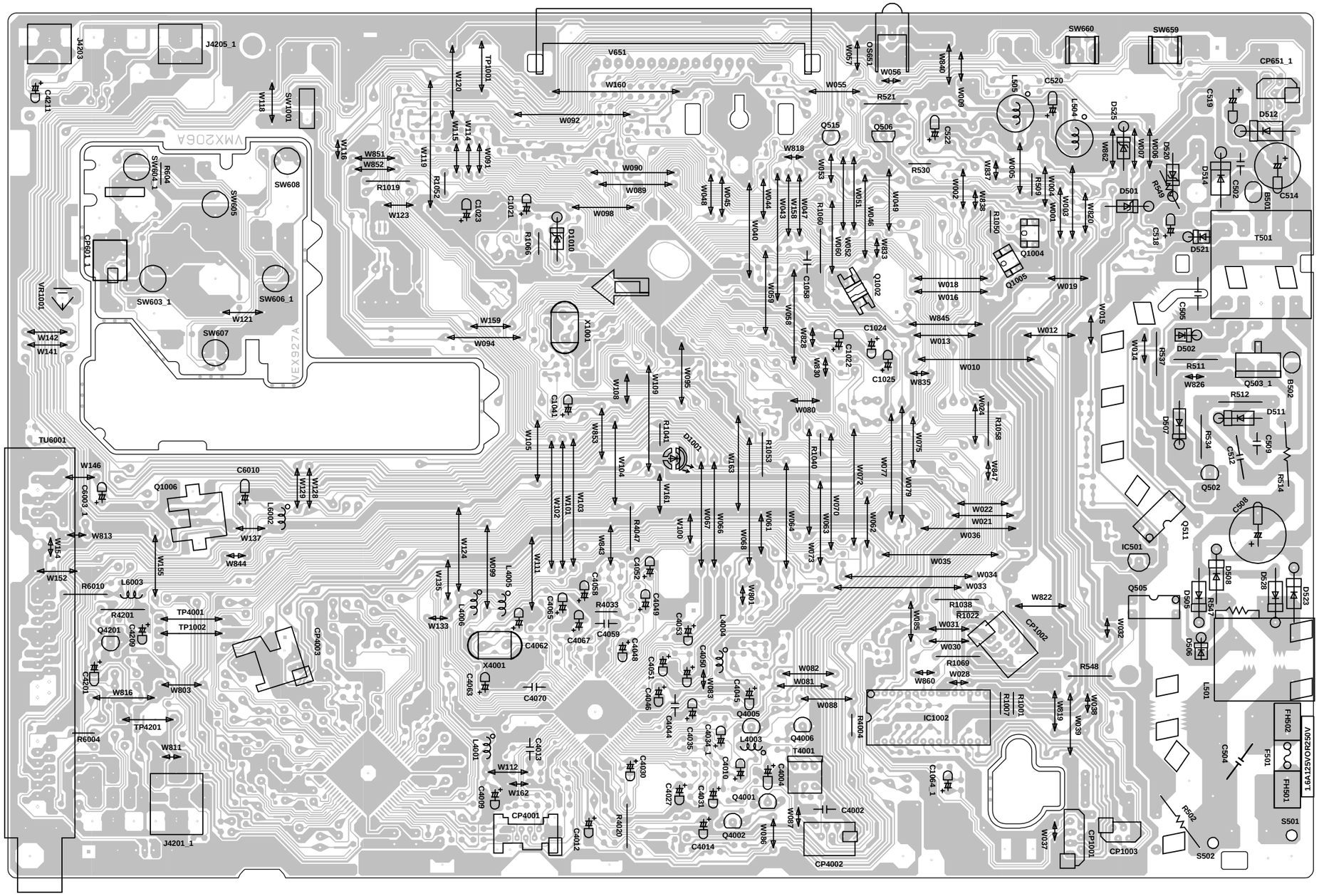
OPERATION BLOCK DIAGRAM



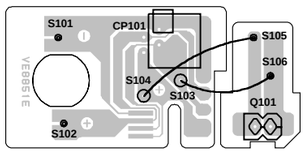


PRINTED CIRCUIT BOARDS

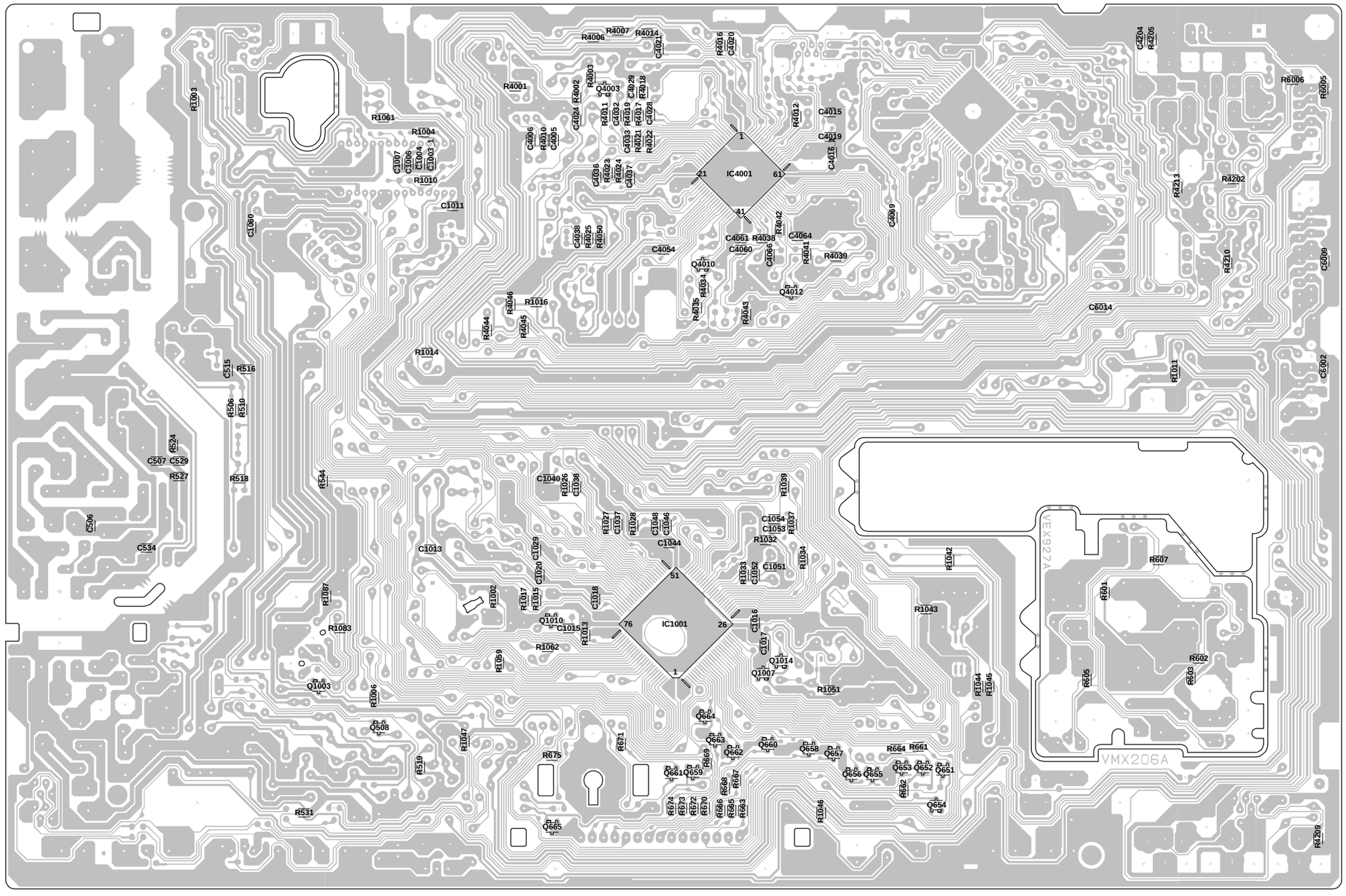
SYSCON/OPERATION (INSERTED PARTS)
SOLDER SIDE



DECK
SOLDER SIDE

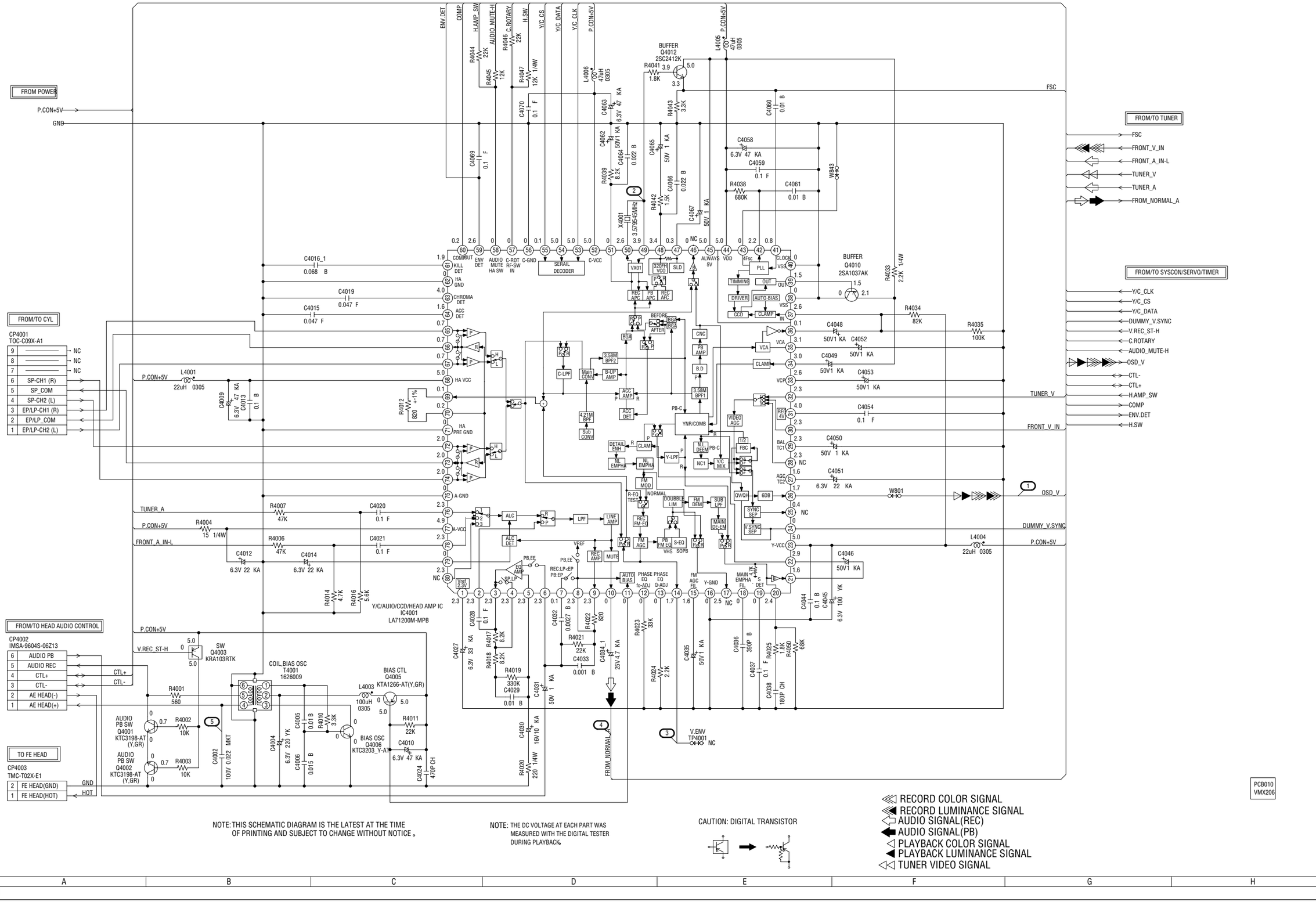


PRINTED CIRCUIT BOARDS
SYSCON (CHIP MOUNTED PARTS)
SOLDER SIDE



Y/C/AUDIO/CCD/HEAD AMP SCHEMATIC DIAGRAM

(SYSCON PCB)



SYSTEM CONTROL/SERVO/TIMER SCHEMATIC DIAGRAM

(SYSCON PCB)

FROM/TO POWER

P.CON+5V
AT+12.6_V
CAP_VCO
AT+5V[M-CON]
AT+5.2V
P.SAVE_OFF_5V
POWER_FAIL
MODE_VCC
POWER_ON-H
GND (S/S)
GND (CAP)
GND (CYL/LDM)

CYL/LOADING MOTOR DRIVER
IC1002 LB11880

GND
PC OUT
VCO IN
CX
C2
C1
W IN
V IN
U IN
VCC
RF
M COM
W OUT
V OUT
U OUT

FC
VC
VREG
PG IN(+)
PG IN(-)
PG OUT1
PG OUT2
BFGO
LVCC
VREF
X IN
Y IN
X OUT
LGND
Y OUT

C1011 0.1 F
CYL_DRIVE
P.CON+5V
PGIN+
PGIN-
CYL_PG
CYL_FG
W819 AT+12.6_V
LDM.R
LDM.F

R1004 560K
C1003_1 0.1 F
C1004 0.022 B
C1006 0.0022 Y
C1007 0.0022 Y
R1010 10K
R1001 1 1/4W
R1007 1 1/4W

FF/REW SW
Q1010
KRC103RTK

C1015 0.027 B
C1018 0.1 F
C1020 0.01 B
C1022 16V 10 KA
C1024 6.3V 33 KA
C1025 16V 10 KA
C1029 0.0056 B
C1058 0.01 TF

AT+5V[M-CON]
CTL+
CTL-
R1014 6.8K
C1013 0.001 Y
R1015 560
R1017 560
P.SAVE_OFF_5V
PG ADJ VR1001 470K
R1062 390K
R1013 22K
BOT
EOT
MS_SEN-B
MS_SEN-A
AFT-S.CURVE
ENV.DET
W833
W835
KEY-B
KEY-A
1G/TV/VCR_LED
2G/T-REC_LED
3G/REC_LED
4G
5G
LDM.R
LDM.F
C.ROTARY
H.AMP_SW
COMP

W830
CAP_FG
CYL_PG
CYL_FG
SEN_LED
R1022 1K 1/4W
W847
W860
CYL_SPEED_UP
AUDIO_MUTE-H
V.REC_ST-H
POWER_ON-H

C1038 0.0022 Y
R1026 100
C1040 0.01 B
C1041 6.3V 47 KA
C1037 1 F
C1044 0.1 F
R1027 2.2K
R1053 15 1/4W
C1048 100P CH
C1046 1 F
R1028 3.3K
OSD_V
VIDEO_OUT
CAP_F/R
R1032 47K

(11) (9) (8) (6)

(76) CO
(77) TPZ
(50) C.SYNC
(49) CV IN
(98) C.ROTARY
(99) H.AMP SW
(100) COMP
(28) SERVICE
(27) VCR-H(TV/VCR)
(26) Hi Fi H.SW

SYSCON/SERVO/TIMER IC
IC1001
OEC8071A

75	CTL(-)	2.5	
74	CTL(+)	2.5	
73	AVDD	5.1	
72	CTL_AMP	2.5	
71	AVSS	0	
70	VRI	2.5	
69	VRO	2.5	
68	CFG	0	
67	RGF	2.3	
66	DPG	0.1	
65	DFG	2.4	
64	PGMM	4.9	
63	SENS.LED	1.3	
62	FF/REW-L	0	
61	CYL.SPEED UP	0	
60	AUDIO MUTE-H	0	
59	V.REC ST-H	0	
58	POWER ON-H	5.1	
57	A_MUTE-H/P.OFF-H	0	
56	OTPB LED	NC 0	
55	4RSC LPF	NC 0	
54	4RSC IN	2.4	
53	AFC LPF	2.6	
52	AFC PC	4.8	
51	VDD2	2.5	
50	VSS2	1.8	
49	CV OUT	0	
48	CAP FWD-L	2.1	
47	VIDEO MUTE-H	0	
46	RENTAL-H	0	
45	CASSETTE IN-L	0	
44	SX 1	0	
43	X O	0	
42	X I	0	
41	VSS	0	
40	OSC O	2.5	
39	OSC I	2.6	
38	VDD	5.1	
37	TUNER-L	5.1	
36	DRUM PWM	2.6	
35	CAP PWM	2.7	
34	CAP FULL	2.7	
33	TAB SW	5.1	
32	AUDIO OUT MUTE L	5.1	
31	RF CH SW	4.4	
30	DUMMY V.SYNC	5.1	
29	RESET	5.1	
28		2.6	
27		NC	
26			

1	POWER FAIL-H	2.0	
2	JUST CLOCK	0	
3	REEL-S	NC 0	
4	REEL-T	5.1	
5	REM IN	5.1	
6	ACTIVE ON-L	0	
7	SEG 1	2.0	
8	SEG 2	NC 0	
9	SEG 3	4.0	
10	SEG 4	4.0	
11	SEG 5	3.0	
12	SEG 6	4.0	
13	SEG 7	0	
14	Y/C CLK	5.1	
15	Y/C CS	0.1	
16	Y/C DATA	5.1	
17	IIC DATA	5.1	
18	IIC CLK	5.1	
19	SEG 8	0	
20	SEG 9	4.0	
21	CAP LIMIT	3.5	
22	SEG 10	4.0	
23	H.SW	2.6	
24	DUMMY V.SYNC	0	
25	RESET	5.1	

X1001 14.31818MHz
C1051 10P CH
C1052 10P CH
C1016 0.1 F
R1035 4.7K 1W
AT+5V[M-CON]
R1037 56K
R1039 5.6K
CYL_DRIVE
R1034 56K
C1053 0.022 B
R1038 10K 1/4W
CONTROL_IN
R1040 1M 1/4W
CYL_SPEED_UP
C1054 0.1 F
REC SAFTY SW
SW1001 SPVF130100
SERVICE TP1001 NC
TV/VCR
R1042 47K
R1043 47K
H.SW TP1002 NC
R1016 56K
P.CON+5V

FROM/TO Y/C/AUDIO/CCD/HEAD AMP
Y/C_CLK
Y/C_CS
Y/C_DATA
DUMMY_V.SYNC
V.REC_ST-H
C.ROTARY
AUDIO_MUTE-H
OSD_V
CTL-
CTL+
H.AMP_SW
COMP
ENV.DET
H.SW

FROM/TO TUNER
IIC_CLK
IIC_DATA
AFT-S.CURVE
TV/VCR
VIDEO_OUT
RF_CH_SW

FROM/TO OPERATION
REM_IN
KEY-B
KEY-A
1G/TV/VCR_LED
2G/T-REC_LED
3G/REC_LED
4G
5G
SEG_1
SEG_2
SEG_3
SEG_4
SEG_5
SEG_6
SEG_7
SEG_8
SEG_9
SEG_10

FROM/TO DECK
CP1003
IMSA-9604S-04Z14
1 VCC
2 BOT
3 LDM-
4 LDM+
LM-
LM+
R1003 82K
P.CON+5V
BOT
R1060 12K 1/4W
R1047 10K
R1046 10K
R1059 10K
AT+5.2V

FROM/TO MICRO MOTOR
CP1001
IMSA-9604S-07Z14
1 U-OUT
2 V-OUT
3 W-OUT
4 M-COM
5 GND
6 PG OUT
7 PG GND
C1064_1 50V1 KA
R1061 1.5K
PGIN-
PGIN+

FROM/TO CAPSTAN DD UNIT
CP1002
TMC-J08P-B1
1 GND
2 MOTOR_GND
3 I LIMIT
4 CTL
5 VCO(12V)
6 CAP FG
7 CAP/M/F/R
8 VCC(5V)
CAP_LIMIT
CONTROL_IN
CAP_VCO
CAP_FG
CAP_F/R
R1069 1K 1/4W
W838 P.CON+5V
C1060 0.1 F

D1001 SID1050CM
EOT SENSOR Q1006 PNA2804M010R
SENSER SW Q1003 2SC2412K
MS_SEN A Q1005 RPI-352Q01R
MS_SEN B Q1004 RPI-352Q01R
REEL SENS Q1002 RPI-301
R1041 270 1/4W
R1011 2.2K
R1058 1K 1/4W
R1083 33K
R1050 100 1/4W
R1087 33K
R1002 180
R1006 47K
R1019 47K 1/4W
W845
RESET SW Q1007 2SC2412K
RESET SW Q1014 2SC2412K
R1066 470K 1/4W
R1045 3.3K
R1044 3.3K
C1023 6.3V 220 YK
R1051 56K
C1017 0.01 B
C1021 50V1 KA
D1010 MTZJ5.6B

PCB010
VMX206

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK。

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

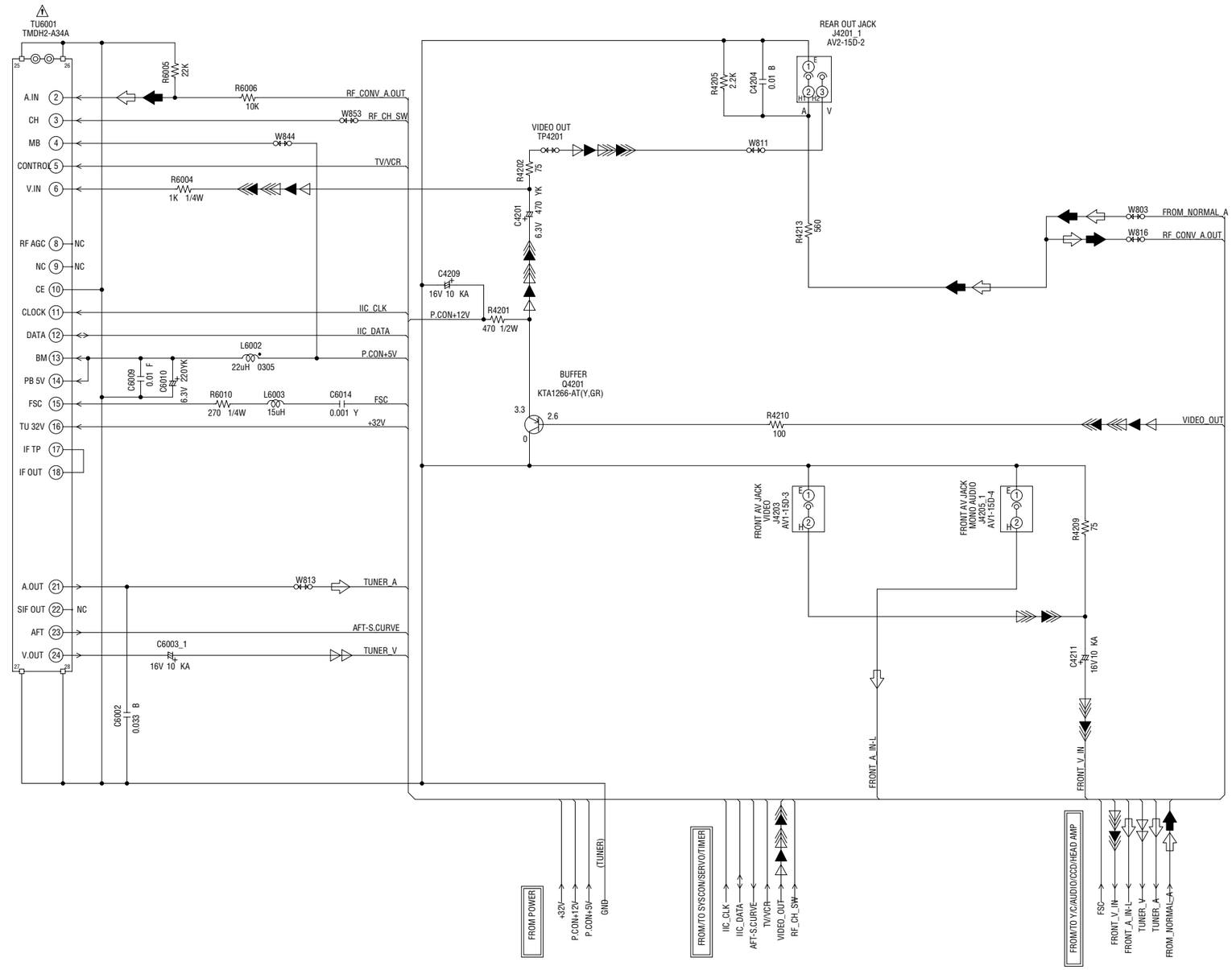
CAUTION: SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION: DIGITAL TRANSISTOR

RECORD COLOR SIGNAL
RECORD LUMINANCE SIGNAL
PLAYBACK COLOR SIGNAL
PLAYBACK LUMINANCE SIGNAL

TUNER SCHEMATIC DIAGRAM
(SYSCON PCB)



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

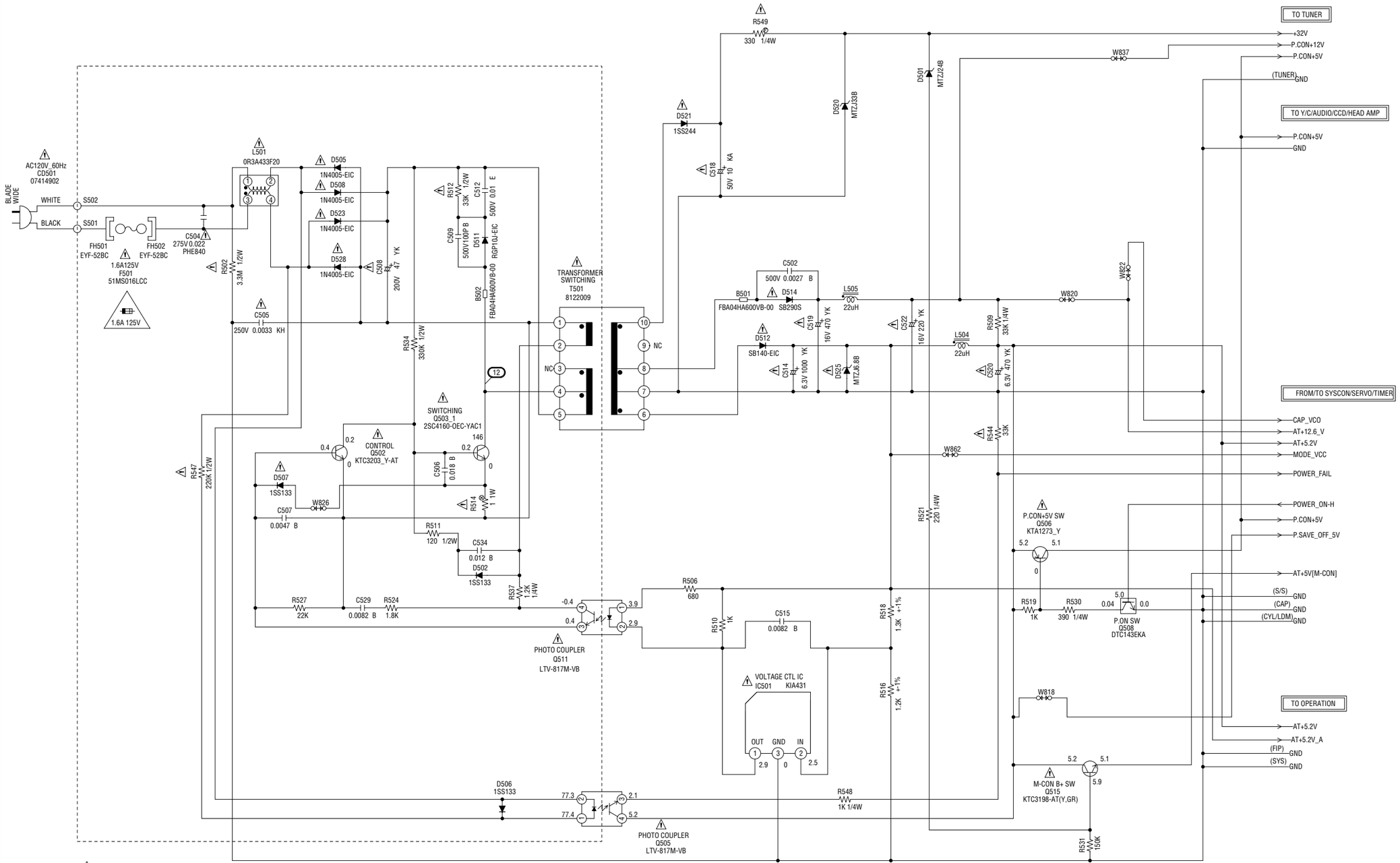
CAUTION: SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES.

- RECORD LUMINANCE SIGNAL
- RECORD COLOR SIGNAL
- AUDIO SIGNAL(REC)
- AUDIO SIGNAL(PB)
- TUNER VIDEO SIGNAL
- PLAYBACK LUMINANCE SIGNAL
- PLAYBACK COLOR SIGNAL

PCB010
VMX206

POWER SCHEMATIC DIAGRAM
(SYSCON PCB)



1.6A 125V

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE 1.6A 125V (F501).

ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 1.6A 125V (F501).

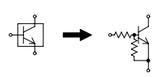
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK。

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

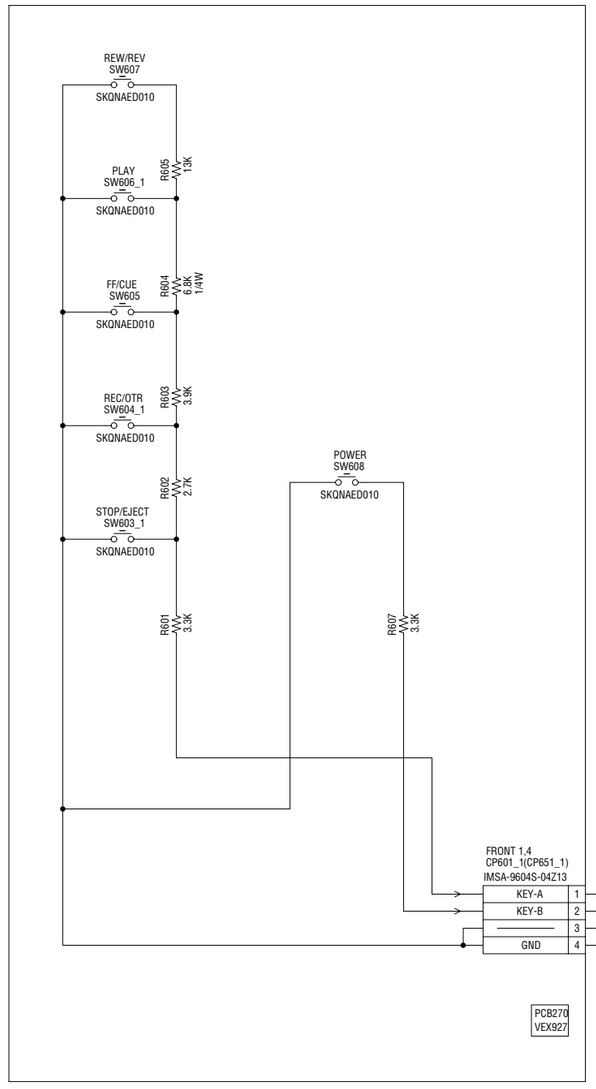
CAUTION: SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

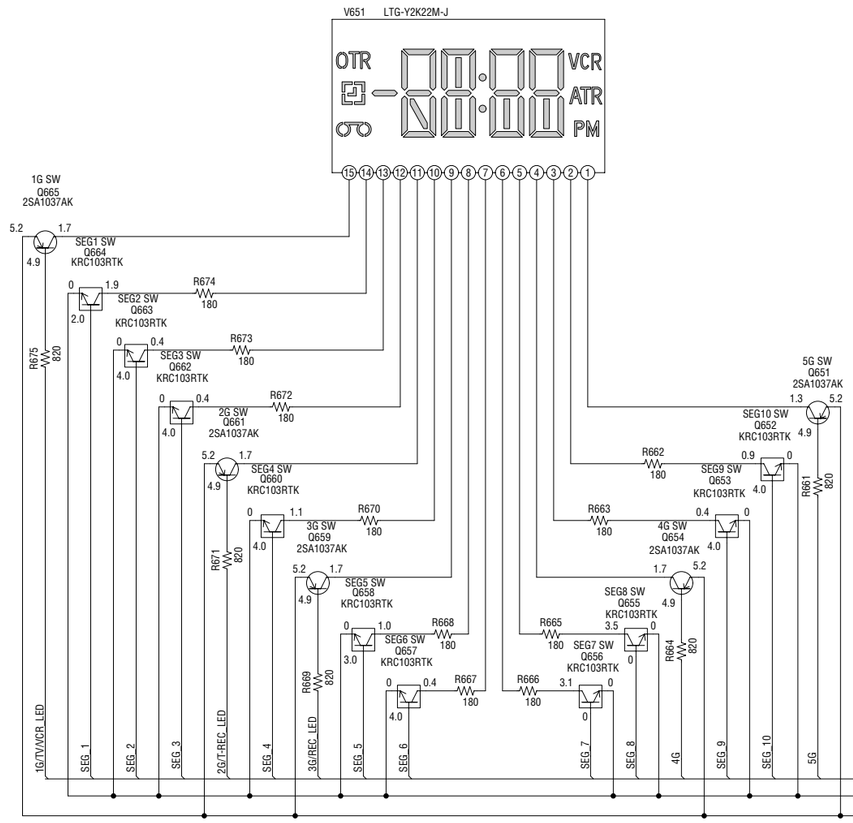
CAUTION: DIGITAL TRANSISTOR

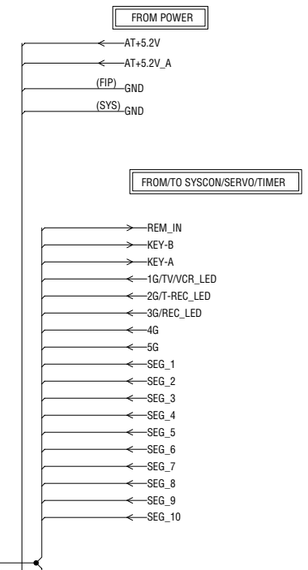


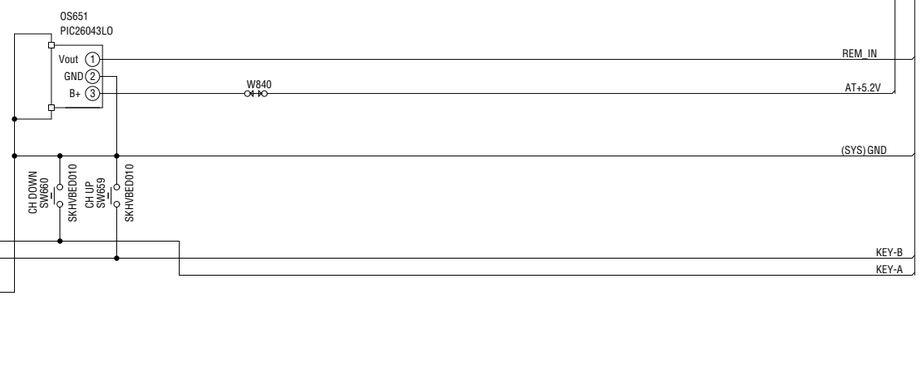
PCB010
VMX206

OPERATION SCHEMATIC DIAGRAM
(SYSCON PCB)





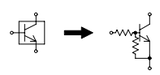




NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

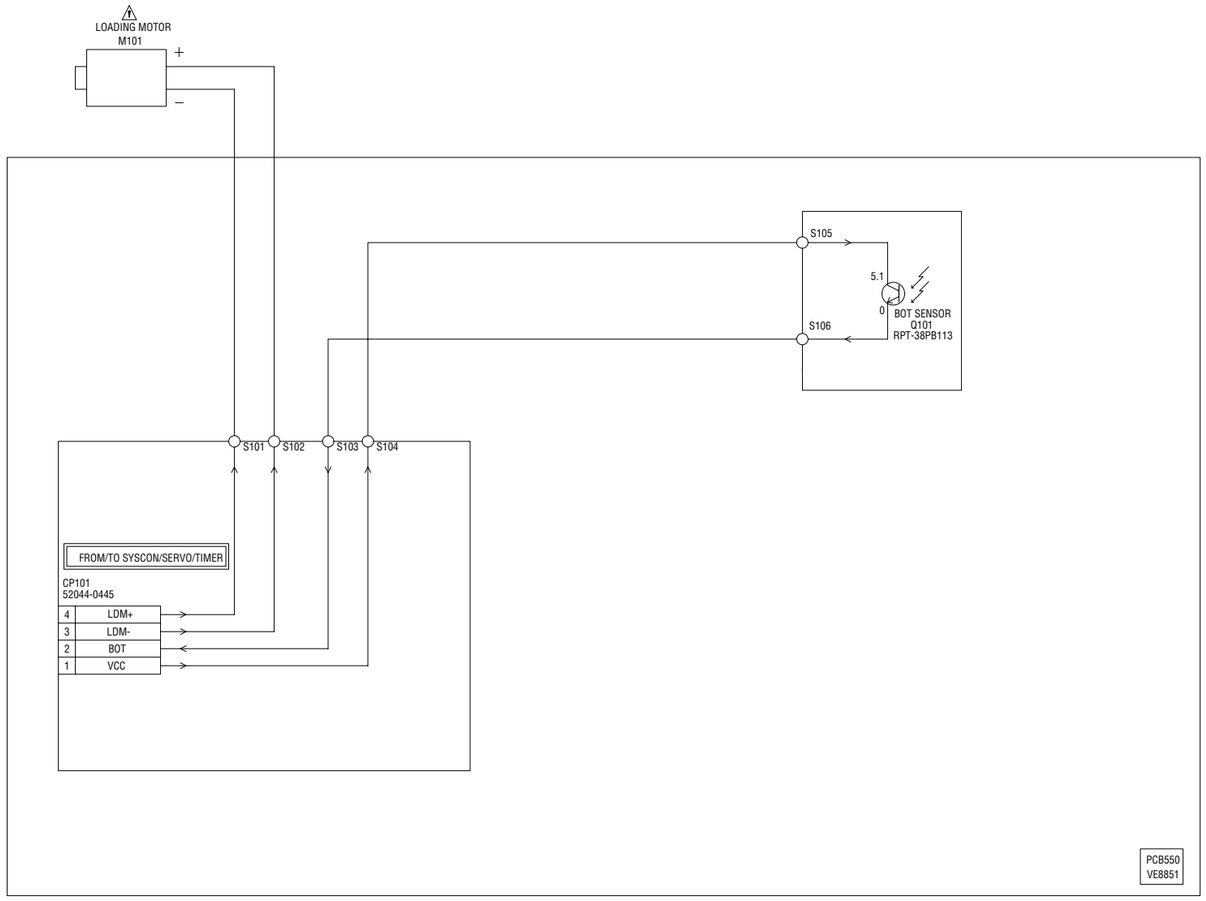
CAUTION: DIGITAL TRANSISTOR



PCB010
VMX206

DECK SCHEMATIC DIAGRAM

(DECK PCB)



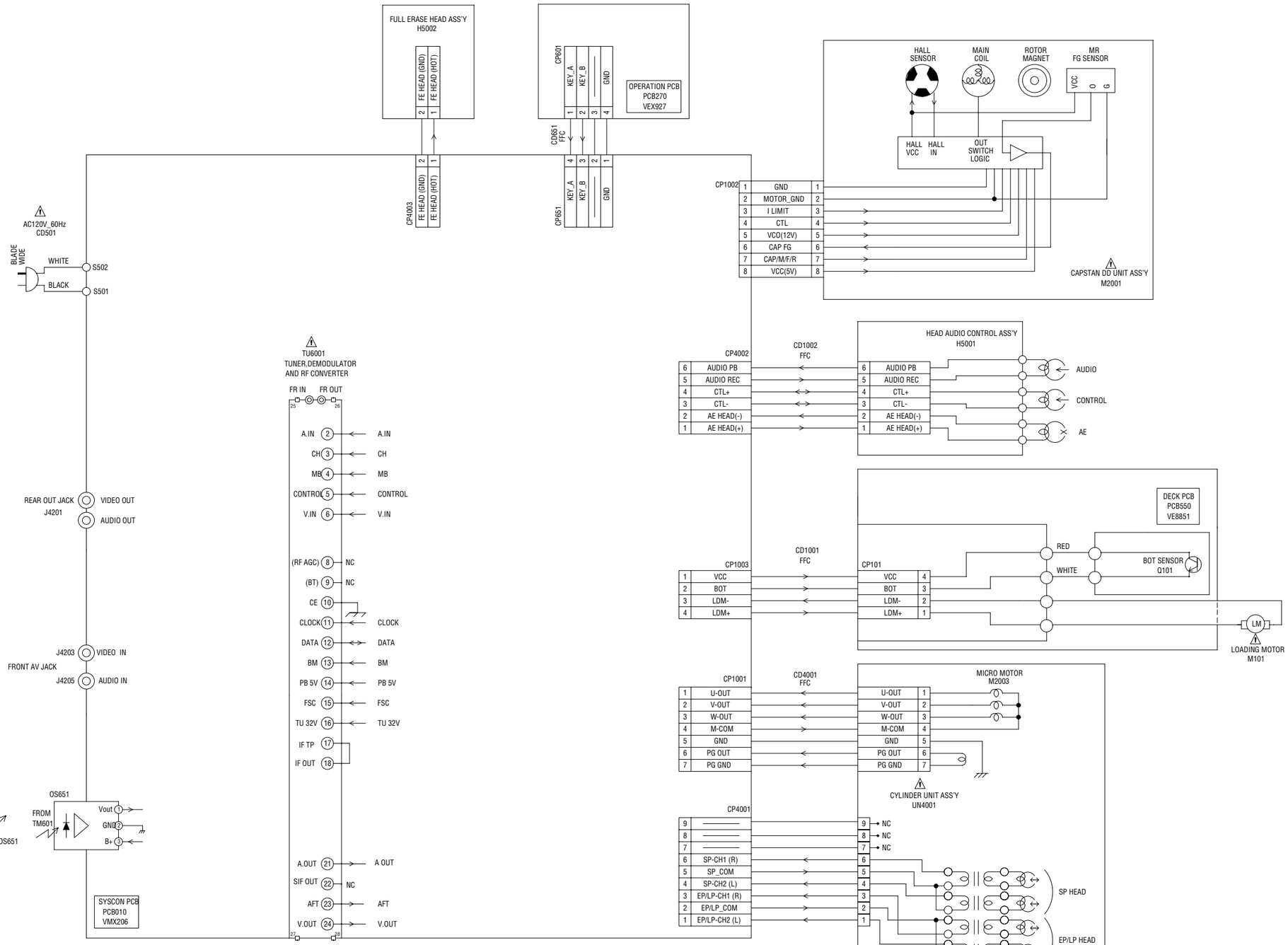
CAUTION: SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK。

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

INTERCONNECTION DIAGRAM



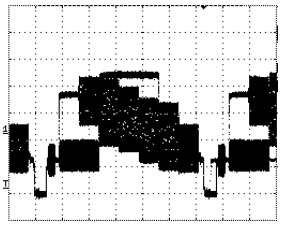
CAUTION: SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

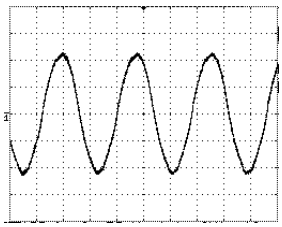
NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

WAVEFORMS

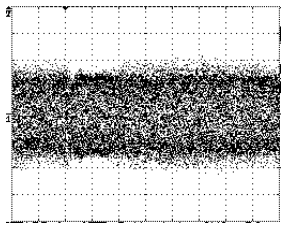
Y/C/AUDIO/CCD/HEAD AMP



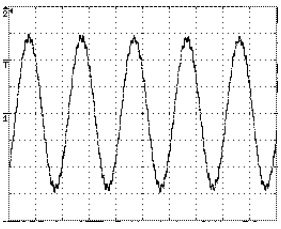
① POWER ON
10µs 500mV/div



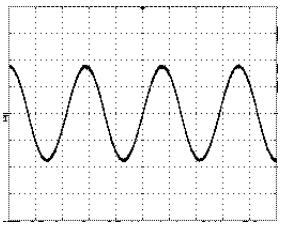
② POWER ON
100ns 100mV/div



③ PB
1ms 100mV/div

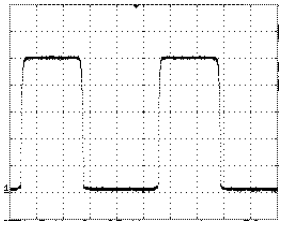


④ PB
500µs 200mV/div

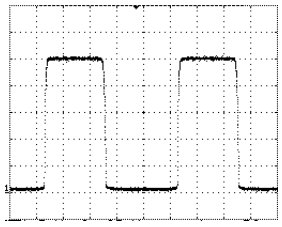


⑤ REC
5µs 20.0V/div

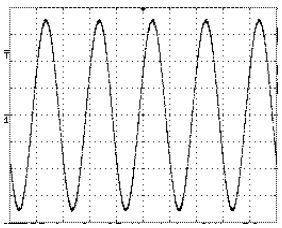
SYSCON/SERVO/TIMER



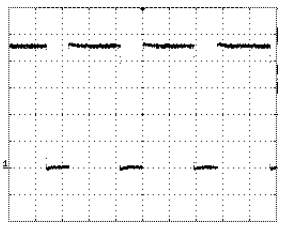
⑥ PB
200ms 1.0V/div



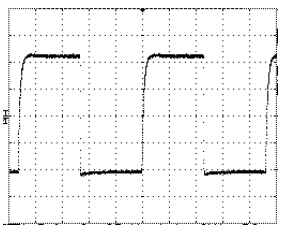
⑦ PB
200ms 1.0V/div



⑧ POWER ON
50ns 500mV/div

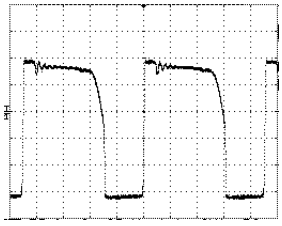


⑨ PB
500µs 1.0V/div



⑪ PB
200µs 1.0V/div

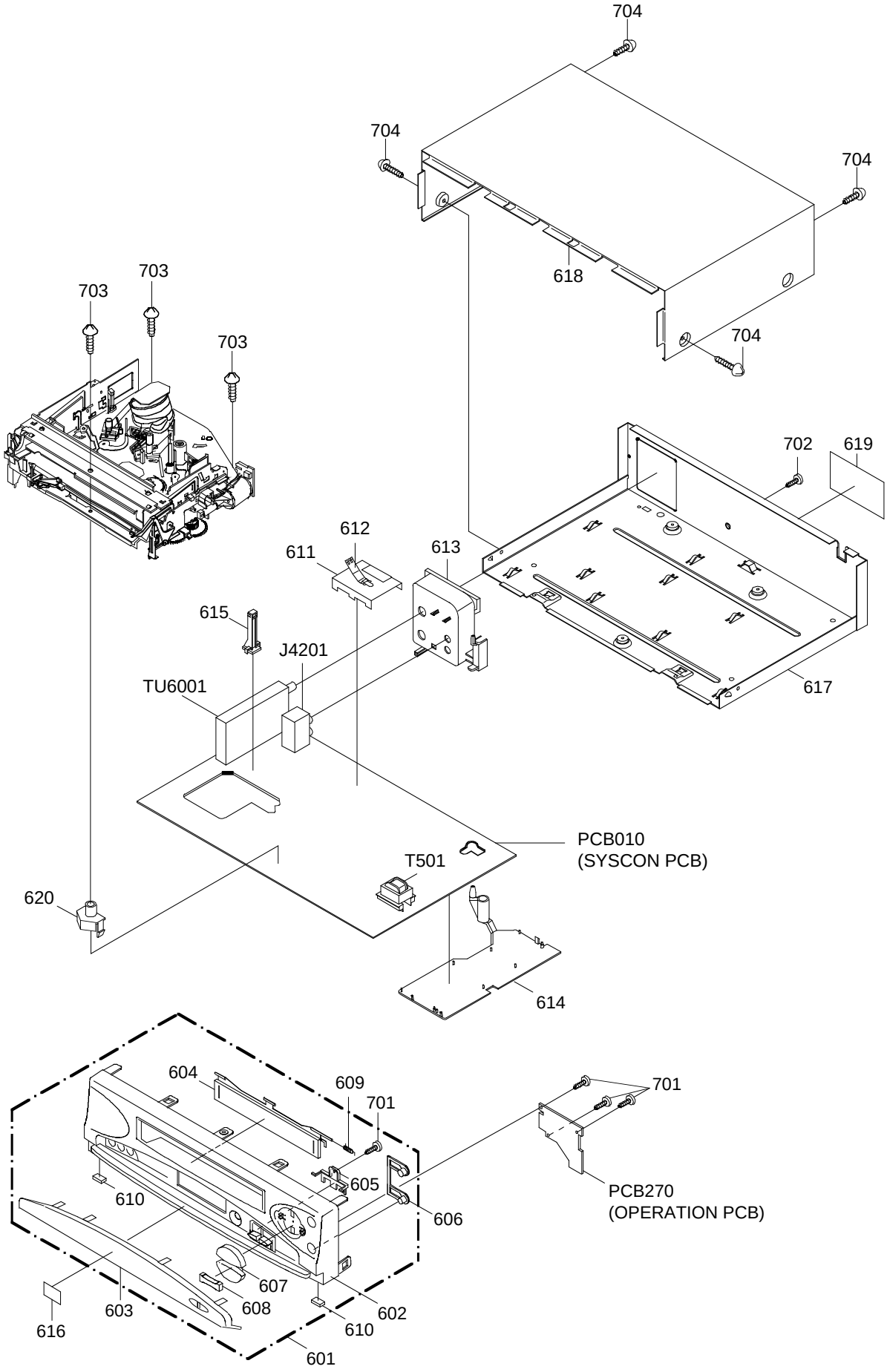
POWER



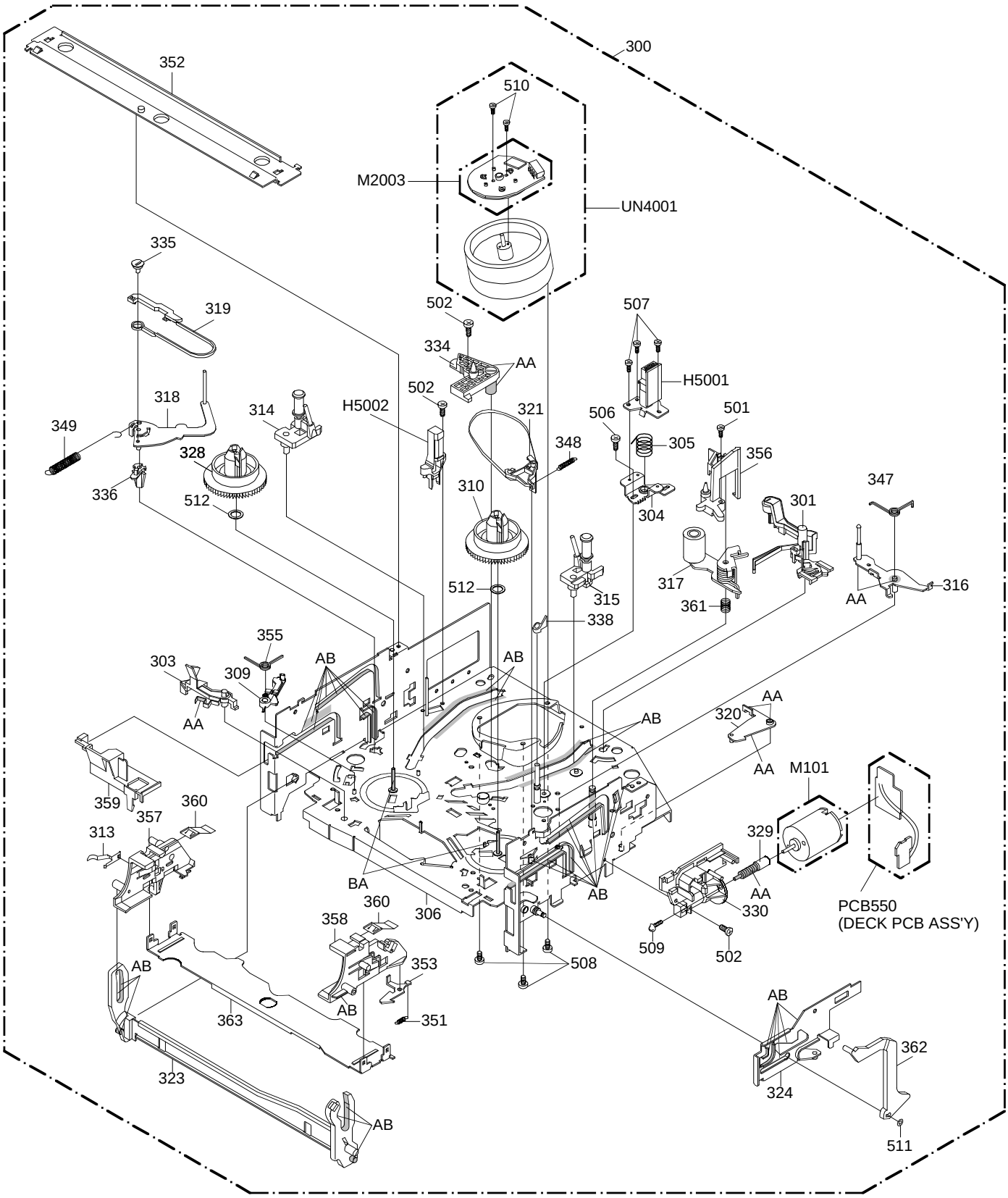
⑫ PB
2µs 50.0V/div

NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

MECHANICAL EXPLODED VIEW



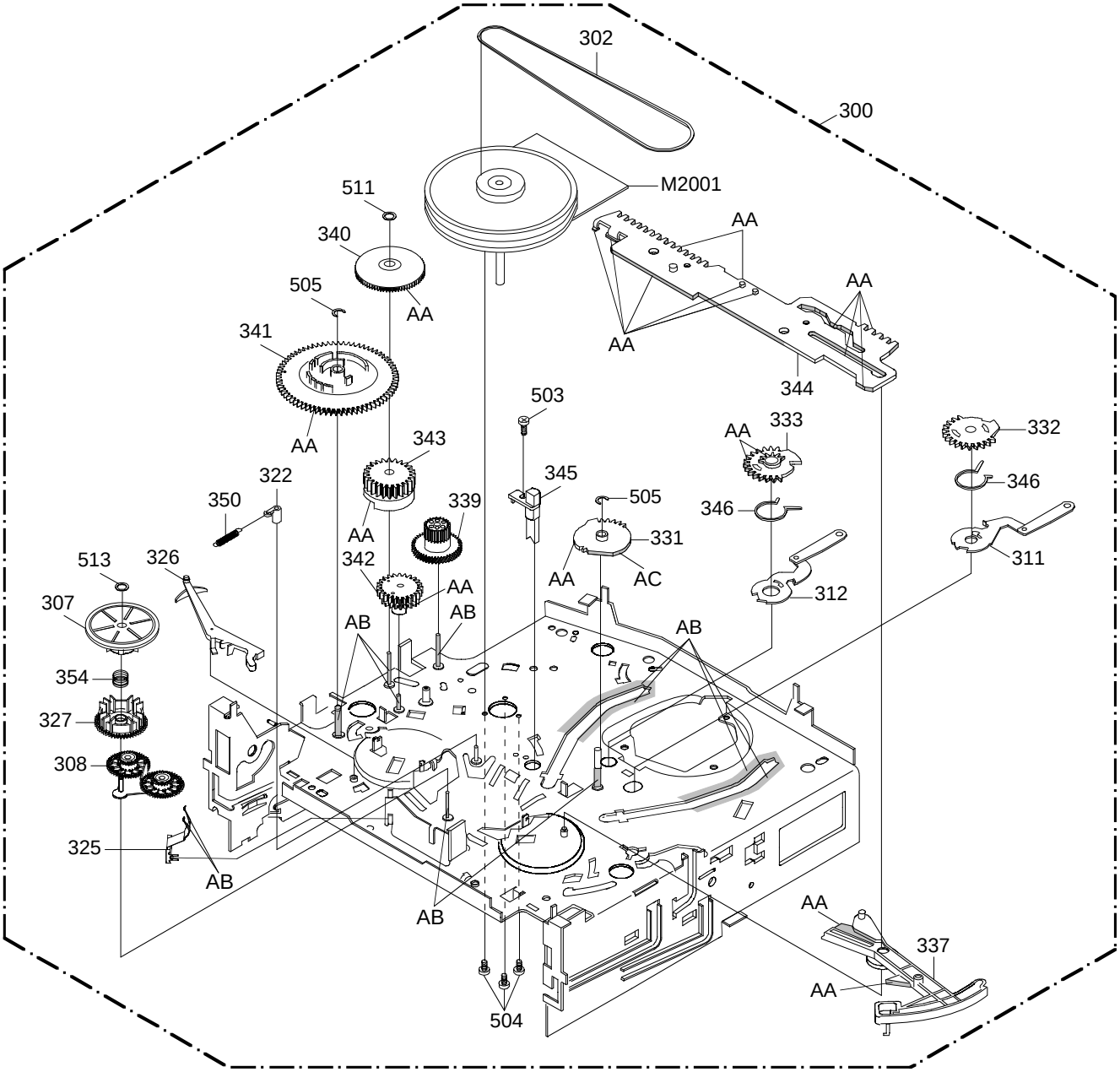
CHASSIS EXPLODED VIEW (TOP VIEW)



CLASS	PART NO.	MARK
GREASE	G-555G	AA
	MG-33	AB
	FL-721	AC
OIL	FL OIL No. 6115	BA

NOTE: Applying positions AA, AB, AC and BA for the grease or oil are displayed for this section. Check if the correct grease or oil is applied for each position.

CHASSIS EXPLODED VIEW (BOTTOM VIEW)



CLASS	PART NO.	MARK
GREASE	G-555G	AA
	MG-33	AB
	FL-721	AC
OIL	FL OIL No. 6115	BA

NOTE :Applying positions AA, AB, AC and BA for the grease or oil are displayed for this section. Check if the correct grease or oil is applied for each position.

MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
601	A4E315B720	CABINET,FRONT ASS'Y		
602	701WPJB115	CABINET,FRONT		
603	711WPDA266	PLATE,DISPLAY		
604	712WPJA810	FLAP		
605	735WPAA222	BUTTON,STOPPER		
606	735WPAA221	BUTTON,POWER		
607	735WPDA397	BUTTON 1		
608	735WPDA398	BUTTON 2		
609	743WKA0032	SPRING,FLAP		
610	800WFA0045	CUSHION,LEG		
611	752WSA0230	SHIELD,CASE HEAD AMP		
612	753WUAA006	SPRING,EARTH HEAD AMP		
613	702WPA0779	PLATE,JACK (2PIN)		
614	755WPA0019	PLATE,COVER POWER (VA)		
615	85OP700036	HOLDER,EOT SENSOR		
616	723000A698	SHEET,DISPLAY		
617	702WSA0077	PLATE,BOTTOM		
618	702WSB0015	CABINET,TOP		
619	722A08A079	SHEET,RATING		
620	701WPAA147	HOLDER,DECK		
701	8110226804	SCREW,TAP TITE (P)	BIND	2.6x8
702	8107226604	SCREW,TAP TITE (S)	BIND	2.6x6
703	8109140B94	SCREW,TAP TITE (B)R	PAN	4x29
704	8109230802	SCREW,TAP TITE (B)		3x8
---	JA5U0200	POLYBAG		
---	J4C80417	REGISTRATION CARD		
---	J4E30401	INSTRUCTION BOOK		
---	A4E304B975	INSTRUCTION BOOK KIT		
---	791WHA0095	GIFT SHEET		
---	792WHAA044	PACKAGE		
---	793WCDA977	GIFT BOX		

CHASSIS REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
300	A4E304C420K	DECK ASS'Y A4E304C420K	501	8107126A04	SCREW,TAP TITE(S) PAN 2.6x10
			502	8107226804	SCREW,TAP TITE(S) BIND 2.6x8
301	85OA500022	AHC ASS'Y	503	8107226604	SCREW,TAP TITE(S) BIND 2.6x6
302	85OP200290	BELT,CAPSTAN (S)	504	8109126604	SCREW,TAP TITE(B) PAN 2.6x6
303	85OP900710	LEVER,REC	505	83ETW30000	E-RING 3
304	85OP500083	BASE,AC HEAD	506	8107226404	SCREW,TAP TITE(S) BIND 2.6x4
305	85OP800324	SPRING,AC HEAD	507	8102120604	SCREW,PAN M2x6
306	85OA000449	MAIN CHASSIS ASS'Y (3V)	508	810A126504	SCREW/WASHER(A) M2.6x5
307	85OA200082	CLUTCH ASS'Y(S2)	509	810A130504	SCREW/WASHER(A) M3x5
308	85OA200088	ARM IDLER ASS'Y 3V			
309	85OP600556	ARM,SS BRAKE (S)	510	8107226504	SCREW,TAP TITE(S) BIND 2.6x5
			511	82P266005N	POLYSLIDER WASHER(CUT) 2.6x6.0xT0.5
310	85OP200292	REEL,T (S)	512	82Q2647C5N	POLYSLIDER WASHER 2.6x4.7xT0.25
311	85OA300061	LOADING ARM S ASS'Y	513	82P184505N	POLYSLIDER WASHER(CUT) 1.8x4.5xT0.5
312	85OA300062	LOADING ARM T ASS'Y			
313	85OP900696	SPRING,CASS EARTH	CP101	069R740018	CONNECTOR PCB SIDE 52044-0445
314	85OA400220	INCLINED BASE S UNIT 3V	H5001	1523Q91002	HEAD (AUDIO CONTROL) VTR-1X2RPE22-742
315	85OA400221	INCLINED BASE T UNIT 3V	H5002	1543Q02001	HEAD (FULL ERASE) VTR-1X2ERS11-143
316	85OA400199	P5-3 ARM ASS'Y(S)	⚠ M101	1596P78001	MOTOR (LOADING) MXN13FB11H
317	85OA400205	PINCH ROLLER BLOCK	⚠ M2001	1594S98001	CAPSTAN DD UNIT F2QSB36
318	85OA400175	TENSION ARM ASS'Y	⚠ M2003	1589S11015	MICRO MOTOR I2OAL01
319	85OA400216	TENSION BAND ASS'Y 3V	PCB550	A4C831B550	DECK PCB ASS'Y VE8851
			Q101	0000700320	TRANSISTOR,PHOTO RPT-38PB113
320	85OA400178	PINCH ROLLER LEVER ASS'Y	⚠ UN4001	A4E304B500	CYLINDER UNIT ASS'Y A4E304B500
321	85OA600197	BRAKE T ASS'Y 3V			
322	85OP500087	HOLDER SPRING(SV)			
323	85OA900223	LINK UNIT(SV)			
324	85OP900716	LEVER,LINK(SV)			
325	85OP200284	LEVER,CLUTCH (S)			
326	85OP200285	ACTUATOR,CLUTCH			
327	85OP200298	GEAR,COUPLING(S2)			
328	85OP200291	REEL,S (S)			
329	85OP600566	WORM(SV)			
330	85OP600567	BRACKET,MOTOR(SV)			
331	85OP300193	GEAR,MAIN LOADING			
332	85OP300179	GEAR,LOADING S			
333	85OP300180	GEAR,LOADING T			
334	85OP300189	HOLDER,LOADING GEAR (S-ZV)			
335	85OP400472	ADJUST,TENSION			
336	85OP400492	HOLDER,TENSION			
337	85OP400490	LEVER,TENSION			
338	85OP400520	CAP.P4			
339	85OP600543	GEAR,JOINT			
340	85OP600544	GEAR,MIDDLE			
341	85OP600572	CAM,MAIN(S)			
342	85OP600546	CAM P5			
343	85OP600565	CAM,PINCH ROLLER			
344	85OP600561	ROD,MAIN(S)			
345	85OP700035	REFLECTOR,LED			
346	85OP800318	SPRING LOADING GEAR			
347	85OP800334	SPRING,P5 (S)			
348	85OP800335	SPRING,BRAKE T (S)			
349	85OP800322	SPRING,TENSION			
350	85OP800336	SPRING,CAP BRAKE (S)			
351	85OP800342	SPRING,LOCKER (S)			
352	85OP900733	BRACKET TOP 3V			
353	85OP900713	LOCKER,R2			
354	85OP800330	SPRING,RING			
355	85OP800337	SPRING,SS BRAKE (S)			
356	85OP900680	OPENER,CASS			
357	85OP900722	CASS SIDE L(SV)			
358	85OP900734	CASS,SIDE R(3V)			
359	85OP900720	TAPE GUIDE L(SV)			
360	85OP900694	SPRING,PACK			
361	85OP800341	SPRING,P/R ARM			
362	85OP900721	LEVER,FLAP(SV)			
363	85OP900717	CASS HOLDER(SV)			

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
RESISTORS				
⚠ R502	R03102335J	RC	3.3M OHM 1/2W	
⚠ R512	R002T2333J	RC	33K OHM 1/2W	
⚠ R514	R3X181010J	R, METAL OXIDE	1 OHM 1W	
⚠ R544	R903N8333J	RC	33K OHM 1/8W	
⚠ R547	R002T2224J	RC	220 OHM 1/2W	
⚠ R549	R65584331J	R, FUSE	330 OHM 1/4W	
CAPACITORS				
⚠ C504	P2472B223M	CMP	0.022 UF 275V	
⚠ C505	CB3LE0ML3M	CC	0.0033UF 250V	
⚠ C508	E02LFC470M	CE	47 UF 200V	
C512	C0JFE0514M	CC	0.01 UF 500V E	
⚠ C514	E02LT0102M	CE	1000 UF 6.3V	
⚠ C518	E50HU5100M	CE	10 UF 50V	
⚠ C519	E02LT2471M	CE	470 UF 16V	
⚠ C520	E02LU0471M	CE	470 UF 6.3V	
⚠ C522	E02LU2221M	CE	220 UF 16V	
DIODES				
D501	D97U02401B	DIODE, ZENER	MTZJ24B T-77	
D502	D1VT001330	DIODE, SILICON	1SS133T-77	
⚠ D505	D2WXN40050	DIODE, SILICON	1N4005-EIC	
D506	D1VT001330	DIODE, SILICON	1SS133T-77	
⚠ D507	D1VT001330	DIODE, SILICON	1SS133T-77	
⚠ D508	D2WXN40050	DIODE, SILICON	1N4005-EIC	
D511	D2WXGP10J0	DIODE, RECTIFIER	RGP10J-EIC	
⚠ D512	D2WXSB1400	DIODE, SCHOTTKY	SB140-EIC	
⚠ D514	D2WXB290S0	DIODE, SILICON	SB290S	
D520	D97U03301B	DIODE, ZENER	MTZJ33B T-77	
⚠ D521	D17T002440	DIODE, SILICON	1SS244T-77	or
	D13TGMA020	DIODE, SILICON	GMA-02-BT	
⚠ D523	D2WXN40050	DIODE, SILICON	1N4005-EIC	
⚠ D525	D97U06R81B	DIODE, ZENER	MTZJ6.8B T-77	
⚠ D528	D2WXN40050	DIODE, SILICON	1N4005-EIC	
D1001	0010600060	LED	SID1050CM	
D1010	D97U05R61B	DIODE, ZENER	MTZJ5.6B T-77	
ICS				
⚠ IC501	I1KJ9A4310	IC	KIA431	
IC1001	I51F58071A	IC	OEC8071A	
⚠ IC1002	I03DQ18800	IC	LB11880	
IC4001	I03F3200M0	IC	LA71200M-MPB	
TRANSISTORS				
⚠ Q502	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT	or
	TC5T021204	TRANSISTOR, SILICON	2SC2120Y(TPE2)	
⚠ Q503	TCWQ4160E0	TRANSISTOR, SILICON	2SC4160-OEC-YAC1	
⚠ Q505	0002E00610	PHOTO COUPLER	LTV-817M-VB	
⚠ Q506	TAAT01273Y	TRANSISTOR, SILICON	KTA1273_Y	
Q508	TNYJA05001	COMPOUND TRANSISTOR	DTC143EKAT146	
⚠ Q511	0002E00610	PHOTO COUPLER	LTV-817M-VB	
⚠ Q515	TCATC31980	TRANSISTOR, SILICON	KTC3198-AT(Y,GR)	
Q651	T6YJ1037K0	TRANSISTOR, SILICON	2SA1037AKT146(R,S)	
Q652	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q653	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q654	T6YJ1037K0	TRANSISTOR, SILICON	2SA1037AKT146(R,S)	
Q655	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q656	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q657	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q658	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q659	T6YJ1037K0	TRANSISTOR, SILICON	2SA1037AKT146(R,S)	
Q660	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q661	T6YJ1037K0	TRANSISTOR, SILICON	2SA1037AKT146(R,S)	
Q662	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q663	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q664	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q665	T6YJ1037K0	TRANSISTOR, SILICON	2SA1037AKT146(R,S)	
Q1002	0002700590	PHOTO COUPLER	RPI-301	
Q1003	T8YJ2412K0	TRANSISTOR, SILICON	2SC2412KT146(R,S)	
Q1004	0002700530	PHOTO COUPLER	RPI-352Q01R	
Q1005	0002700530	PHOTO COUPLER	RPI-352Q01R	
Q1006	0000100380	PHOTO TRANSISTOR	PNA2604M010R	
Q1007	T8YJ2412K0	TRANSISTOR, SILICON	2SC2412KT146(R,S)	
Q1010	TNAAC05002	COMPOUND TRANSISTOR	KRC103RTK	
Q1014	T8YJ2412K0	TRANSISTOR, SILICON	2SC2412KT146(R,S)	
Q4001	TCATC31980	TRANSISTOR, SILICON	KTC3198-AT(Y,GR)	
Q4002	TCATC31980	TRANSISTOR, SILICON	KTC3198-AT(Y,GR)	
Q4003	TPAAC05002	COMPOUND TRANSISTOR	KRA103RTK	
Q4005	TAATA12660	TRANSISTOR, SILICON	KTA1266-AT(Y,GR)	
Q4006	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT	or
	TC5T021204	TRANSISTOR, SILICON	2SC2120Y(TPE2)	

REF. NO.	PART NO.	DESCRIPTION	
TRANSISTORS			
Q4010	T6YJ1037K0	TRANSISTOR, SILICON	2SA1037AKT146(R,S)
Q4012	T8YJ2412K0	TRANSISTOR, SILICON	2SC2412KT146(R,S)
Q4201	TAATA12660	TRANSISTOR, SILICON	KTA1266-AT(Y,GR)
COILS & TRANSFORMERS			
⚠ L501	029T000083	COIL, LINE FILTER	0R3A433F20
L504	021W7A220K	COIL	22 UH
L505	021W7A220K	COIL	22 UH
L4001	02167F220J	COIL	22 UH
L4003	02167F101J	COIL	100 UH
L4004	02167F220J	COIL	22 UH
L4005	02167F470J	COIL	47 UH
L4006	02167F470J	COIL	47 UH
L6002	02167F220J	COIL	22 UH
L6003	021LA6150K	COIL	15 UH
⚠ T501	0481220094	TRANSFORMER, SWITCHING	8122009
T4001	031626009R	COIL, BIAS OSC	1626009
JACKS			
J4201	060Q401074	RCA, JACK	AV2-15D-2
J4203	060Q401072	RCA, JACK	AV1-15D-3
J4205	060Q401073	RCA, JACK	AV1-15D-4
SWITCHES			
SW603	0504201T32	SWITCH, TACT	SKQNAED010
SW604	0504201T32	SWITCH, TACT	SKQNAED010
SW605	0504201T32	SWITCH, TACT	SKQNAED010
SW606	0504201T32	SWITCH, TACT	SKQNAED010
SW607	0504201T32	SWITCH, TACT	SKQNAED010
SW608	0504201T32	SWITCH, TACT	SKQNAED010
SW659	0504201T31	SWITCH, TACT	SKHVBED010
SW660	0504201T31	SWITCH, TACT	SKHVBED010
SW1001	0508221001	SWITCH (LEAF)	SPVF130100
VARIABLE RESISTOR			
VR1001	V1163Q5BTC	VOLUME, SEMI FIXED	EVNCYAA03BQ5
P.C.BOARD ASSEMBLIES			
PCB010	A4E315B01A	PCB ASS'Y	VMX206A
PCB270	A4E315B27A	PCB ASS'Y	VEX927A
PCB550	A4C831B550	SEE CHASSIS REPLACEMENT PARTS LIST	
MISCELLANEOUS			
B501	024JT035C1	CORE, BEADS	FBA04HA600VB-00
B502	024JT035C1	CORE, BEADS	FBA04HA600VB-00
⚠ CD501	1207414902	CORD, AC	7414902 or
	120R414901	CORD, AC	0R414901
CD651	122F040702	CORD, JUMPER	2F040702
CP601	069J740019	CONNECTOR PCB SIDE	IMSA-9604S-04Z13
CP651	069J740029	CONNECTOR PCB SIDE	IMSA-9604S-04Z14
CD1001	122F040702	CORD, JUMPER	2F040702
CD1002	122F061501	CORD, JUMPER	2F061501
CD4001	122F071901	CORD, JUMPER	2F071901
CD6002	06CQL02006	CABLE	SI-C108-40
CP1001	069J770029	CONNECTOR PCB SIDE	IMSA-9604S-07Z14
CP1002	0697280590	CONNECTOR PCB SIDE	TMC-J08P-B1
CP1003	069J740029	CONNECTOR PCB SIDE	IMSA-9604S-04Z14
CP4001	0697290620	CONNECTOR PCB SIDE	TOC-C09X-A1
CP4002	069J760019	CONNECTOR PCB SIDE	IMSA-9604S-06Z13
CP4003	0697120320	CONNECTOR PCB SIDE	TMC-T02X-E1
⚠ F501	081PC1R604	FUSE	51MS016LCC or
	081PC1R605	FUSE	51MS016L
FH501	06710T0006	HOLDER, FUSE	EYF-52BC
FH502	06710T0006	HOLDER, FUSE	EYF-52BC
OS651	077Q000018	REMOTE RECEIVER	PIC26043LO
TM601	076N0EA020	TRANSMITTER	RC-EA020
⚠ TU6001	0162600020	RF, UNIT	TMDH2-A34A or
	0162600018	RF, UNIT	TMDH2-A05A
V651	0040E94001	LED DISPLAY	LTG-Y2K22M-J
X1001	100CT01403	CRYSTAL HC-49/U-S	14.31818MHz
X4001	100CT3R508	CRYSTAL HC-49/U	3.579545MHz

ELECTRICAL REPLACEMENT PARTS LIST

RESISTOR

RC..... CARBON RESISTOR

CAPACITORS

CC..... CERAMIC CAPACITOR
CE.....ALUMI ELECTROLYTIC CAPACITOR
CP.....POLYESTER CAPACITOR
CPP..... POLYPROPYLENE CAPACITOR
CPL.....PLASTIC CAPACITOR
CMP.....METAL POLYESTER CAPACITOR
CMPL.....METAL PLASTIC CAPACITOR
CMPP..... METAL POLYPROPYLENE CAPACITOR

SPEC.NO.	M4E3-15B
O/R NO.	K144003

Memorex®

MVR2041

SERVICE MANUAL

VIDEO CASSETTE RECORDER

REVISION 1
MFR'S VERSION B

VHS

MFR'S VERSION	IC4001
A	LA71200M-MPB
B	LA71201M-MPB

Please file this revision with the original version.

Change of IC

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	MFR'S VERSION A		MFR'S VERSION B	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
IC4001	I03F3200M0	IC LA71200M-MPB	I03F3201M0	IC LA71201M-MPB
C4033	CS0RB0413K	CC 0.001 UF 50V B	CS0RB04B3K	CC 0.0012UF 50V B
R4021	R903N8223J	RC 22K OHM 1/8W	R903N8183J	RC 18K OHM 1/8W
R4050	R903N8683J	RC 68K OHM 1/8W		DEL
R4205	R903N8222J	RC 2.2K OHM 1/8W	R903N8103J	RC 10K OHM 1/8W
PCB010	A4E315B01A	SYSCON PCB ASS'Y VMX206A	A4E315B010	SYSCON PCB ASS'Y (VERSION B) VMX206A

SYSCON PCB's are interchangeable.

SPEC.NO.	M4E3-15B
O/R NO.	K154003