Memorex®

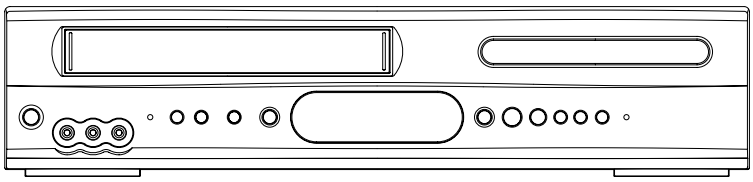
CLASS 1
LASER PRODUCT

MVD4541

SERVICE MANUAL

DVD VIDEO PLAYER & VHS VIDEO CASSETTE RECORDER

DVD VIDEO™ COMPACT disc DIGITAL AUDIO DOLBY DIGITAL MP3 DECODER HQ



VHS

ORIGINAL
MFR'S VERSION A

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-SE)	:	Clock (Syscon to Servo)
	COMB	:	Combination, Comb Filter
	CONV	:	Converter
	CPM	:	Capstan Motor
	CTL	:	Control
	CYL	:	Cylinder
	CYL-M	:	Cylinder-Motor
	CYL SENS	:	Cylinder-Sensor
D	**DATA (SY-CE)**	:	Data (Syscon to Servo)
	dB	:	Decibel
	DC	:	Direct Current
	DD Unit	:	Direct Drive Motor Unit
	DEMOD	:	Demodulator
	DET	:	Detector
	DEV	:	Deviation
E	**E**	:	Emitter
	EF	:	Emitter Follower
	EMPH	:	Emphasis
	ENC	:	Encoder
	ENV	:	Envelope
	EOT	:	End of Tape
	EQ	:	Equalizer
	EXT	:	External
F	**F**	:	Fuse
	FBC	:	Feed Back Clamp
	FE	:	Full Erase
	FF	:	Fast Forward, Flipflop
	FG	:	Frequency Generator
	FL SW	:	Front Loading Switch
	FM	:	Frequency Modulation
	FSC	:	Frequency Sub Carrier
	FWD	:	Forward
G	**GEN**	:	Generator
	GND	:	Ground
H	**H.P.F**	:	High Pass Filter
	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 is provided with the following SERVICE MODES so you can repair, examine and adjust easily.
To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit or on the main unit and on the remote control for more than standard time in the appropriate condition. (See below chart.)
In case of the main unit and remote control, press the remote control buttons first, then press the main unit buttons.

Set Condition	Set Key	Set Key	Standard Time	Operations
VCR mode	CH UP	FF	2 sec.	PLAY/REC total hours are displayed on the TV Monitor. Refer to the “PREVENTIVE CHECKS AND SERVICE INTERVALS” (CONFIRMATION OF HOURS USED). Can be checked of the INITIAL DATA of MEMORY IC. Refer to the “WHEN REPLACING EEPROM (MEMORY) IC”.
VCR mode	CH UP	PLAY	2 sec.	Initialization of factory VCR data. NOTE: Do not use this for normal servicing. If you set factory initialization, the memories are reset such as the clock setting, the channel setting, and PLAY/REC total hours.
VCR mode (Playback)	CH UP	STOP	2 sec.	Adjust the PG SHIFTER automatically. Refer to the “ELECTRICAL ADJUSTMENT”.
Power Off	CH DOWN	POWER	2 sec.	VCR operation mode at no connection of DVD. Refer to the “PREPARATION FOR SERVICING” NOTE: Although the DVD is connected, the DVD mode cannot be selected.

Set Condition	Set Key	Remocon Key	Standard Time	Operations
DVD mode (No disc)	REC/OTR	4	2 sec.	Initialization of factory DVD data. NOTE: Do not use this for normal servicing. This function will only work without the setting of DVD disc at DVD mode. While pressing the Remocon Key for more than 2 seconds, press the Set Key simultaneously.
DVD mode (No disc)	REC	6	2 sec.	DVD Write mode. Refer to the “RE-WRITE FOR DVD FIRMWARE”. NOTE: Do not use this for the nomal servicing. the function will only work at the DVD stop mode.
DVD mode (No disc)	STOP	1	3 sec.	Check for the firmware version. Refer to the “RE-WRITE FOR DVD FIRMWARE”. NOTE: Do not use this for the nomal servicing. the function will only work at the DVD stop mode.
DVD mode (No disc)	STOP	7	3 sec.	Releasing of PARENTAL LOCK. Refer to the “PARENTAL CONTROL - RATING LEVEL”. NOTE: The function will only work without the setting of DVD disc at DVD mode.

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 BOT, EOT, and the Reel Sensor do not work and the VCR deck can be operated without a cassette tape. Refer to the “PREPARATION FOR SERVICING”

PREVENTIVE CHECKS AND SERVICE INTERVALS

The following standard table depends on environmental conditions and usage.
Parts replacing time does not mean the life span for individual parts.
Also, long term storage or misuse may cause transformation and aging of rubber parts.
The following list means standard hours, so the checking hours depends on the conditions.

Time / Parts Name	500 hours	1,000 hours	1,500 hours	2,000 hours	2,500 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		●	●	●	●	
T Brake Band		●	●	●	●	
Clutch Ass'y		●	●	●	●	
Idler Arm Ass'y		●	●	●	●	
Capstan Shaft	■	■	■	■	■	
Tape Running Guide Post	■	■	■	■	■	Replace when rolling becomes abnormal.
Cylinder Unit	■	●	●	●	●	Clean the Head

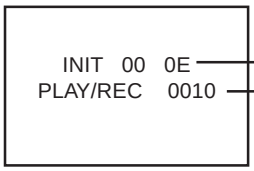
■ : Clean
● : Check it and if necessary, replace it.

CONFIRMATION OF HOURS USED

PLAY/REC total hours can be checked on the screen.
Total hours are displayed in 16 system of notation.

NOTE: If you set factory initialization, the total hours is reset to "0".

1. Connect the set to TV Monitor.
2. Turn on the POWER, and set to the VCR mode.
3. Press both CH UP button on the set and the FF button on the set for more than 2 seconds.
   The **Fig. 1** screen will appear on TV Monitor.
4. After the confirmation of using hours, turn off the power.



Initial setting content of MEMORY IC.
PLAY/REC total hours.
= (16 x 16 x 16 x thousands digit value)
+ (16 x 16 x hundreds digit value)
+ (16 x tens digit value)
+ (ones digit value)

Fig. 1

PREVENTIVE CHECKS AND SERVICE INTERVALS

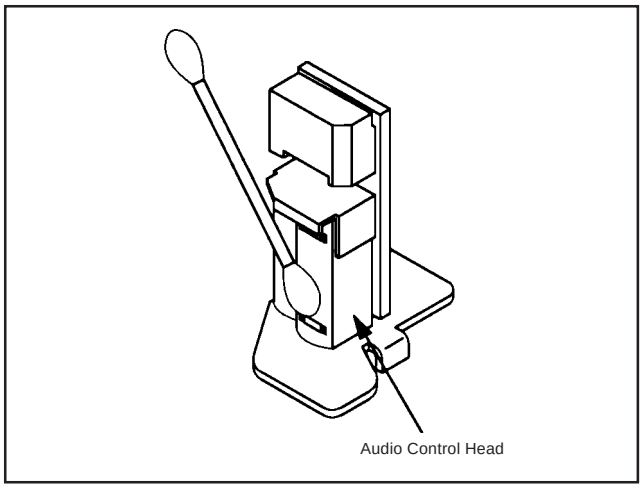
CLEANING

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

Clean the Audio Control Head with a cotton stick soaked by alcohol. Clean the full erase head in the same manner. **(Refer to the figure below.)**



2. TAPE RUNNING SYSTEM

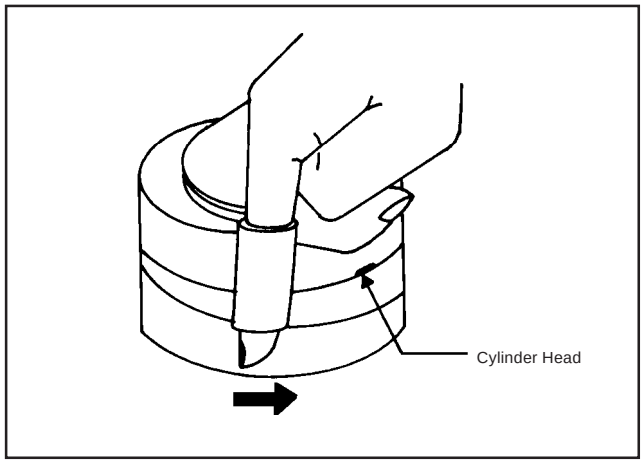
When cleaning the tape transport system, use gauze moistened with isopropyl alcohol.

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.



WHEN REPLACING EEPROM (MEMORY) IC

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to TABLE 1.

NOTE: No need to set data for after position INIT 31.

INIT	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
00	0E	10	FC	60	64	64	4A	86	0B	2B	86	32	0A	08	0A	01
10	AF	97	95	8A	A0	57	31	04	88	A5	9F	3A	00	10	BF	00
20	3A	11	22	70	61	29	3A	00	0B	00	40	C5	9A	B0	00	37
30	03	17														

Table 1

1. Connect the set to TV Monitor.
2. Turn on the POWER, and set to the VCR mode.
3. Press both CH UP button on the set and the FF button on the set for more than 2 seconds. ADDRESS and DATA will appear on TV Monitor as **Fig 1**.

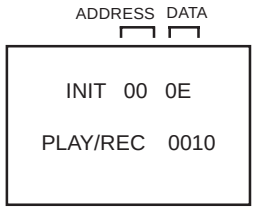


Fig. 1

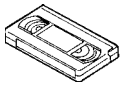
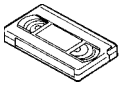
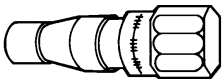
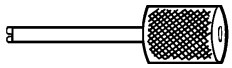
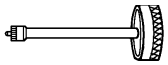
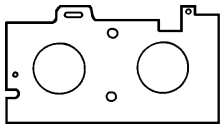
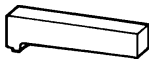
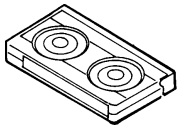
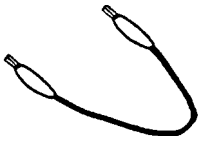
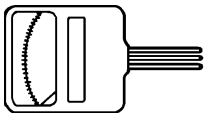
4. ADDRESS is now selected and should “blink”. Using the Tracking + or - button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press ENTER to select DATA. When DATA is selected, it will “blink”.
6. Again, step through the DATA using Tracking + or - button until required DATA value has been selected.
7. Pressing ENTER will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 7 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

After the data input, set to the initializing of shipping.

10. Turn on the POWER, and set to the VCR mode.
11. Press both CH UP button on the set and the PLAY button on the set for more than 2 seconds.
12. After the finishing of the initializing of shipping, the unit will turn off automatically.

The unit will now have the correct DATA for the new MEMORY IC.

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 	JG185 Tentelometer 		

Ref. No.	Part No.	Parts Name	Remarks
JG001	APJG001000	VHS Alignment Tape	Monoscope, 6KHz **(For 2 heads model)**
JG001A	APJG001A00	VHS Alignment Tape	Color Bar, 1KHz **(For 2 heads model)**
JG001Q	APJG001Q00	VHS Alignment Tape	Hi-Fi Audio **(For 2 heads model)**
JG001T	APJG001T00	VHS Alignment Tape	X Value Adjustment **(For 2 heads model)**
JG001B	APJG001B00	VHS Alignment Tape	Monoscope, 6KHz **(For 4 heads model)**
JG001I	APJG001I00	VHS Alignment Tape	Color Bar, 1KHz **(For 4 heads model)**
JG001P	APJG001P00	VHS Alignment Tape	Hi-Fi Audio **(For 4 heads model)**
JG001S	APJG001S00	VHS Alignment Tape	X Value Adjustment **(For 4 heads model)**
JG002B	APJG002B00	Adapter	VSR Torque, Brake Torque (S Reel/T Reel Ass'y)
JG002E	APJG002E00	Dial Torque Gauge (10~90gf•cm)	Brake Torque (T Reel Ass'y)
JG002F	APJG002F00	Dial Torque Gauge (60~600gf•cm)	VSR Torque, Brake Torque (S Reel)
JG005	APJG005000	Post Adjustment Screwdriver	Guide Roller Adjustment
JG153	APJG153000	X Value Adjustment Screwdriver	X Value Adjustment
JG022	APJG022000	Master Plane	Reel Disk Height Adjustment
JG024A	APJG024A00	Reel Disk Height Adjustment Jig	Reel Disk Height Adjustment
JG100A	APJG100A00	Torque Tape (VHT-063)	Playback Torque, Back Tension Torque During Playback
JG154	APJG154000	Cable	Used to connect the test point of SERVICE and GROUND
JG185	APJG185000	Tentelometer	Confirmation of Tape Tension on Playback

PREPARATION FOR SERVICING

1. While pressing the CH DOWN button on the set for more than 2 seconds, press the POWER button on the set simultaneously at the Power OFF. Although the DVD is connected, the DVD mode cannot be selected.
2. Short circuit between **TP3001** and **Ground** with the cable JG154.
   (The BOT, EOT, and the Reel Sensor do not work and the VCR deck can be operated without a cassette tape.)
3. In case of using a cassette tape, press the STOP/EJECT button to insert or eject a cassette tape.
   Turn on the power and re-check the cable before checking the trouble points.

When you servicing with connection of DVD, perform the operations above step 2 to step 3.

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.)

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. While turning the reel and confirm the following points. Check if the surface “A”of reel disk is lower than the surface “B”of reel disk height adjustment jig **(JG024A)** and is higher than the surface “C”. If it is not passed, place the height adjustment washers and adjust to 10(+2, -0)mm.
4. Adjust the other reel in the same way.

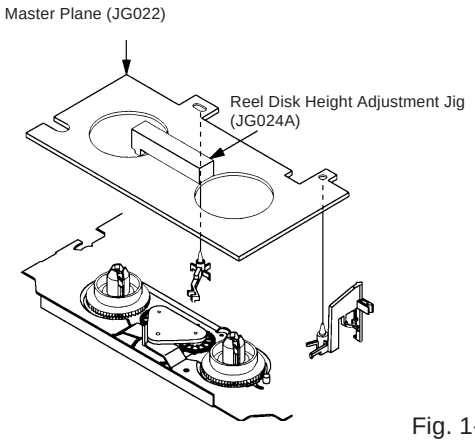


Fig. 1-1-A

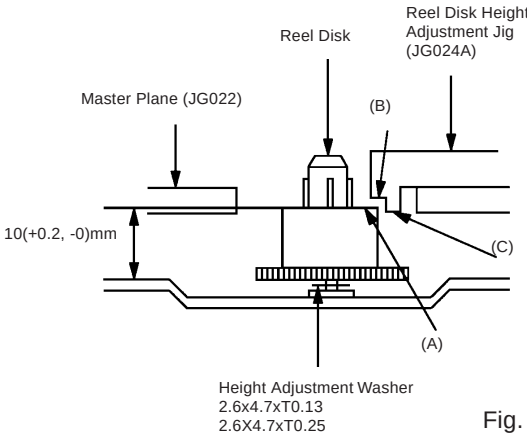


Fig. 1-1-B

1-2: CONFIRMATION AND ADJUSTMENT OF TENSION POST POSITION

1. Set to the PLAY mode.
2. Adjust the adjusting section for the Tension Arm position so that the Tension Arm top is within the standard line of Main Chassis.
3. While turning the S Reel clockwise, confirm that the edge of the Tension Arm is located in the position described above.

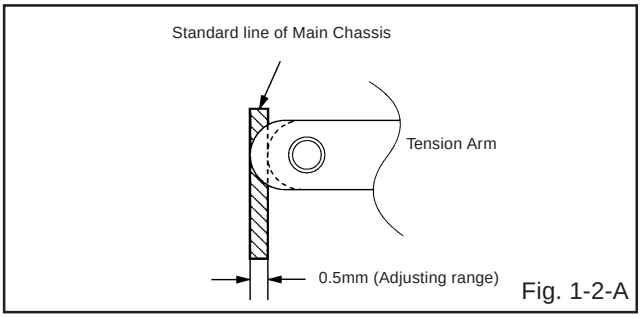


Fig. 1-2-A

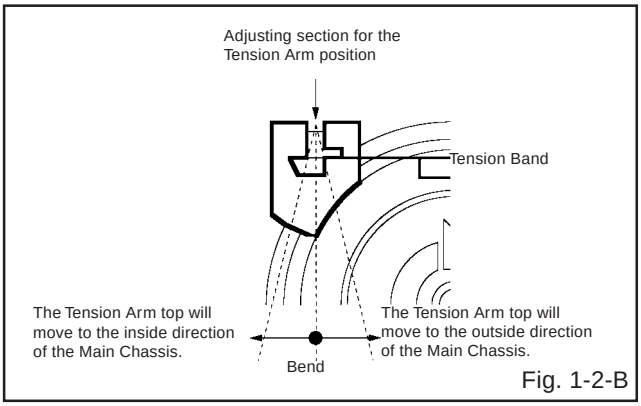


Fig. 1-2-B

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 **(JG185)** as shown in **Fig. 1-3.** Confirm that the meter indicates 20 ± 2gf in the beginning of playback.

- USING A CASSETTE TYPE TORQUE TAPE **(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 50~90gf•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.

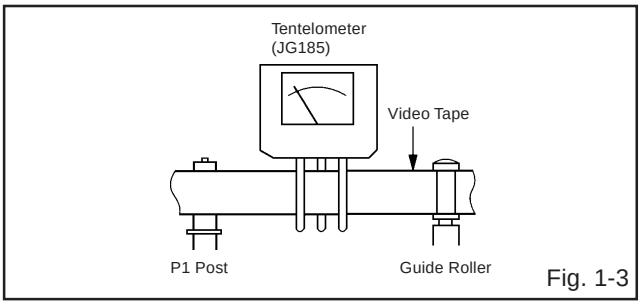


Fig. 1-3

MECHANICAL ADJUSTMENTS

1-4: CONFIRMATION OF VSR TORQUE

1. Install the Torque Gauge **(JG002F)** and Adapter **(JG002B)** on the S Reel. Set to the Picture Search (Rewind) mode. **(Refer to Fig.1-4-B)**
2. 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-B)**

1. Once set to the Fast Forward mode then set to the Stop mode. While, unplug the AC cord when the Pinch Roller Block is on the position of **Fig. 1-4-A.**
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-B)**

1. Once set to the Fast Forward mode then set to the Stop mode. While, unplug the AC cord when the Pinch Roller Block is on the position of **Fig. 1-4-A.**
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 30~50gf•cm.

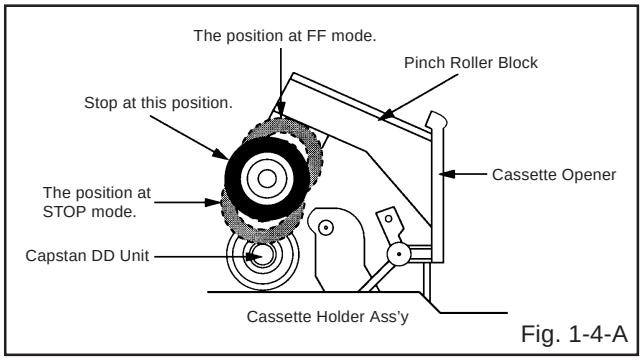


Fig. 1-4-A

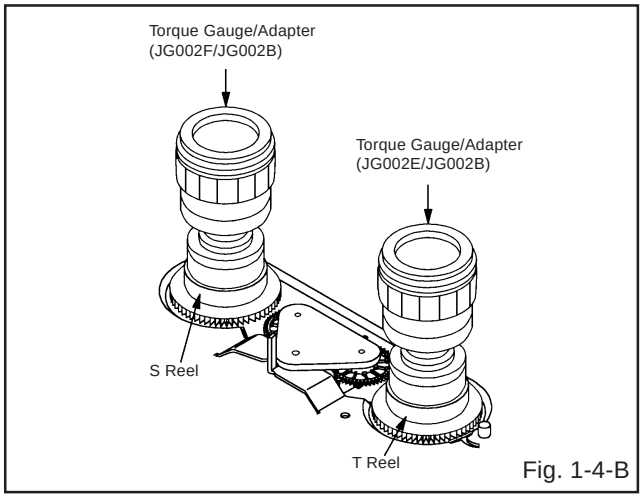


Fig. 1-4-B

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	S Reel side: S Reel/Tension Band/Tension Connect/Tension Arm Ass]y T Reel side: T Reel/T Brake Band//T Brake Spring/T Brake Arm

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 to **TP101 (Envelope)** and CH-2 to **TP3002 (SW Pulse).**
3. Press and hold the ATR button on the remote control 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)**

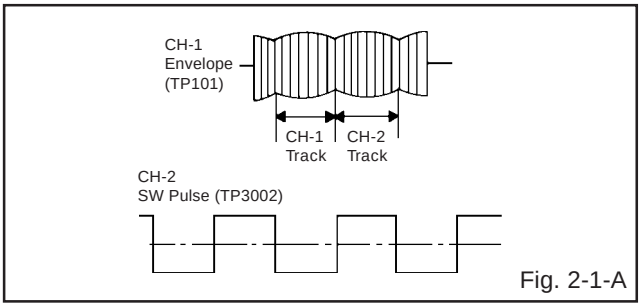


Fig. 2-1-A

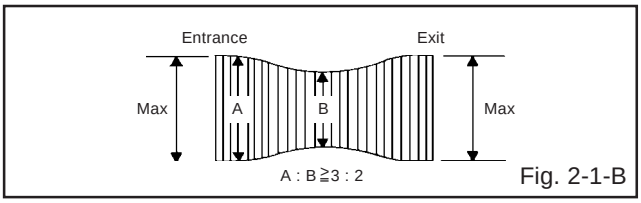


Fig. 2-1-B

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 screw **(3)** to adjust the height. Then, adjust the 1~3 again.

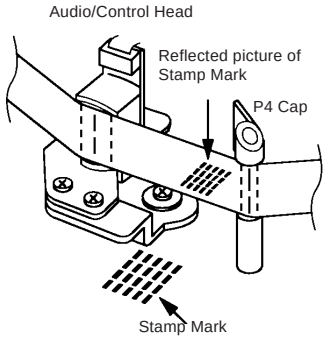


Fig. 2-2-A

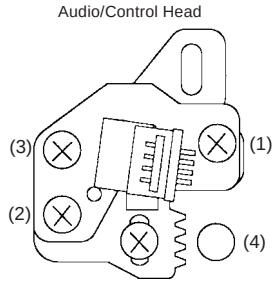


Fig. 2-2-B

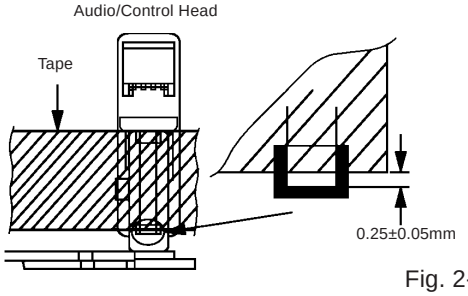


Fig. 2-2-C

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 **TP3002**, CH-2 to **TP101** 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 ATR button on the remote control 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. 2-3.**

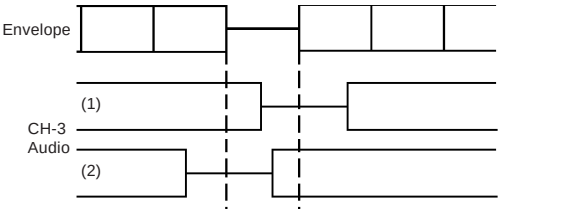


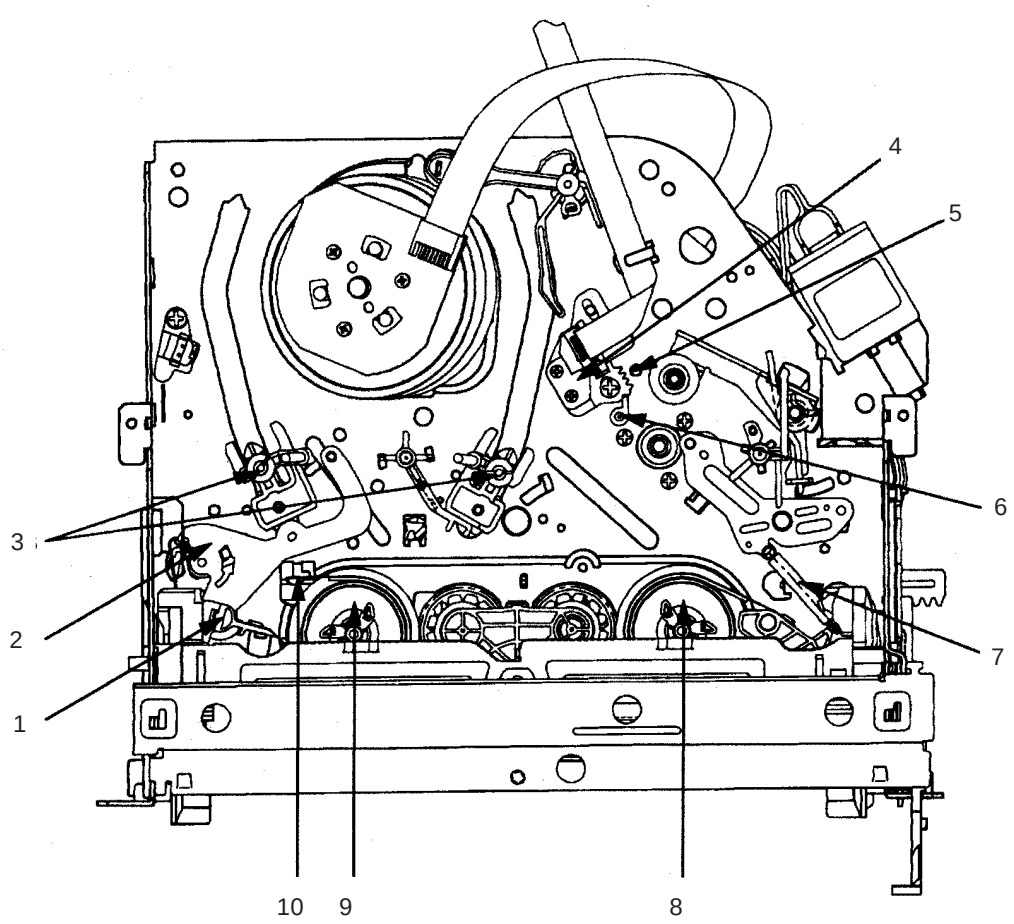
Fig. 2-3

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

1. Connect CH-1 of the oscilloscope to **TP101** and CH-2 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 ATR button on the remote control 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 and hold the ATR button on the remote control more than 2 seconds to set tracking to center.
6. Press the Tracking Down button and count number of steps which the audio output is changed from Hi-Fi (10KHz) to MONO (6KHz).
7. If the difference are more than 3 steps, set the X Value adjustment driver **(JG153)** to (4) of **Fig. 2-2-B.** Change the X Value and adjust it so that the value becomes within 2 steps.

MECHANICAL ADJUSTMENTS

3. MECHANISM ADJUSTMENT PARTS LOCATION GUIDE



1. Tension Connect
2. Tension Arm
3. Guide Roller
4. Audio/Control Head
5. X value adjustment driver hole
6. P4 Post
7. T Brake Spring
8. T Reel
9. S Reel
10. Adjusting section for the Tension Arm position

ELECTRICAL ADJUSTMENTS

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

1. BASIC ADJUSTMENT

CAUTION

- When you exchange IC and Transistor for a heat sink, apply the silicon grease **(YG6260M)** on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damages to the IC and Transistor.)

1-1: PG SHIFTER

CONDITIONS

MODE-PLAYBACK
Input Signal-Alignment Tape **(JG001P)**

INSTRUCTIONS

1. Connect CH-1 on the oscilloscope to **TP3002** and CH-2 to the **J8001(Video Out)**
2. Playback the alignment tape. **(JG001P)**
3. Press and hold the Tracking-Auto button on the remote control more than 2 seconds to set tracking to center.
4. Press both CH UP button on the set and the STOP button on the set for more than 2 seconds.

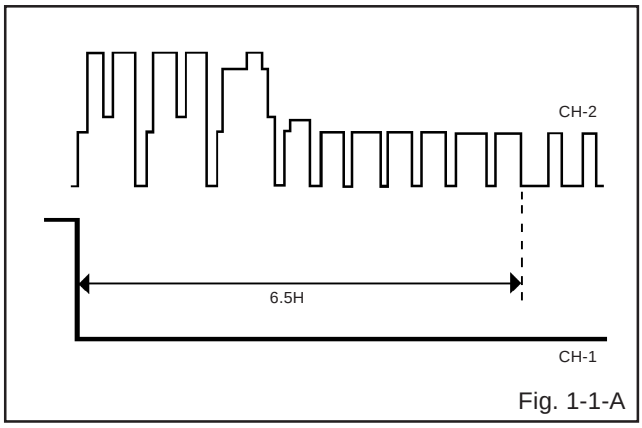


Fig. 1-1-A

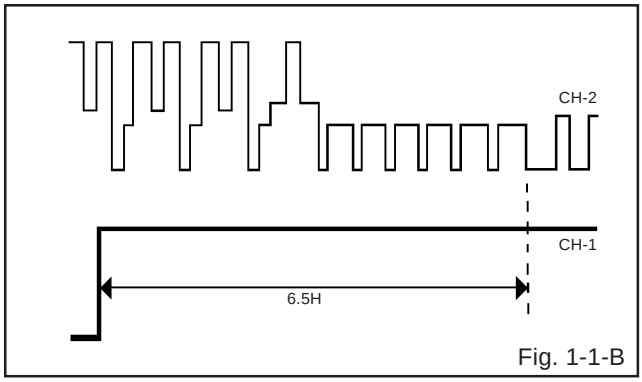
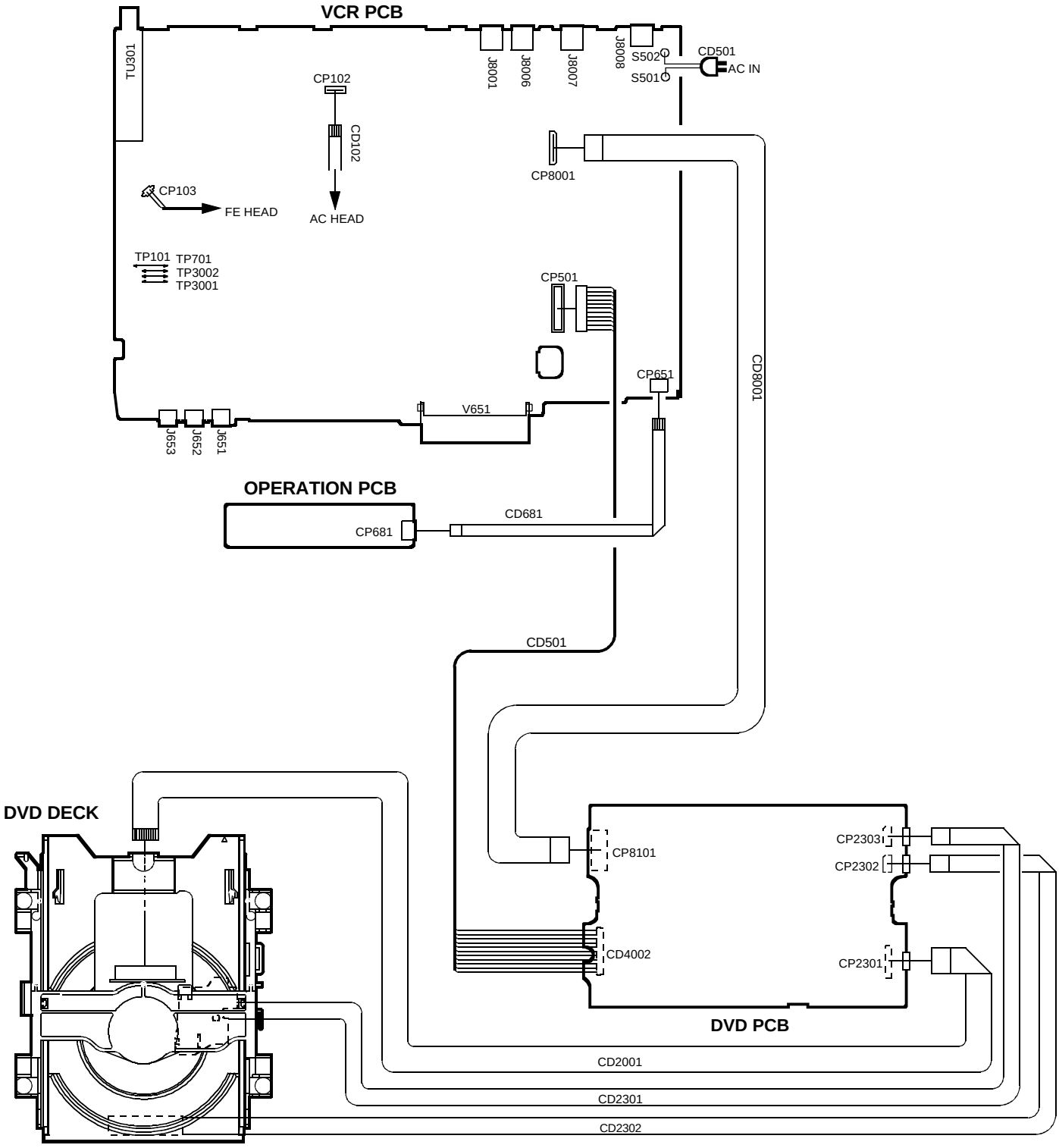


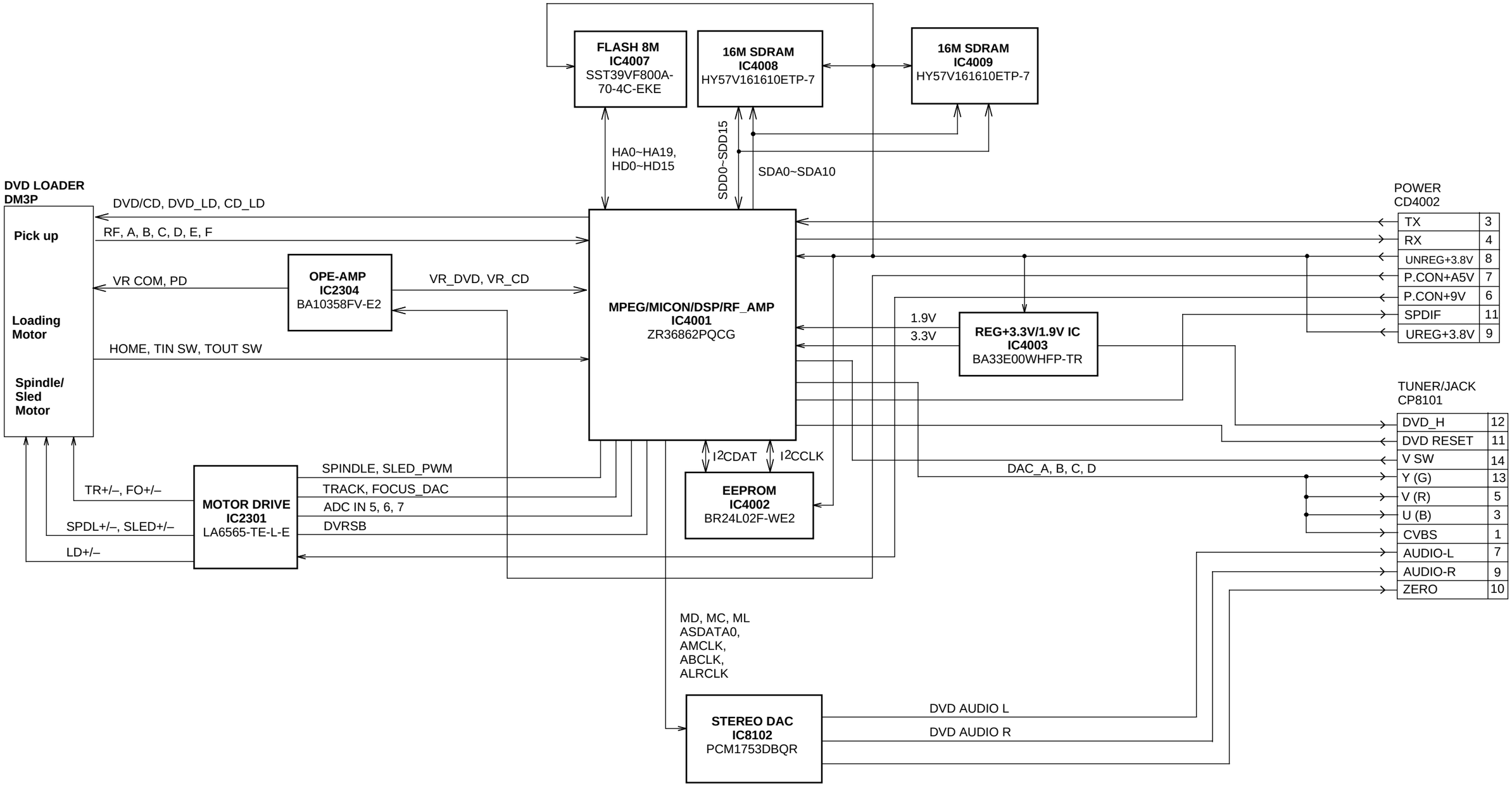
Fig. 1-1-B

ELECTRICAL ADJUSTMENTS

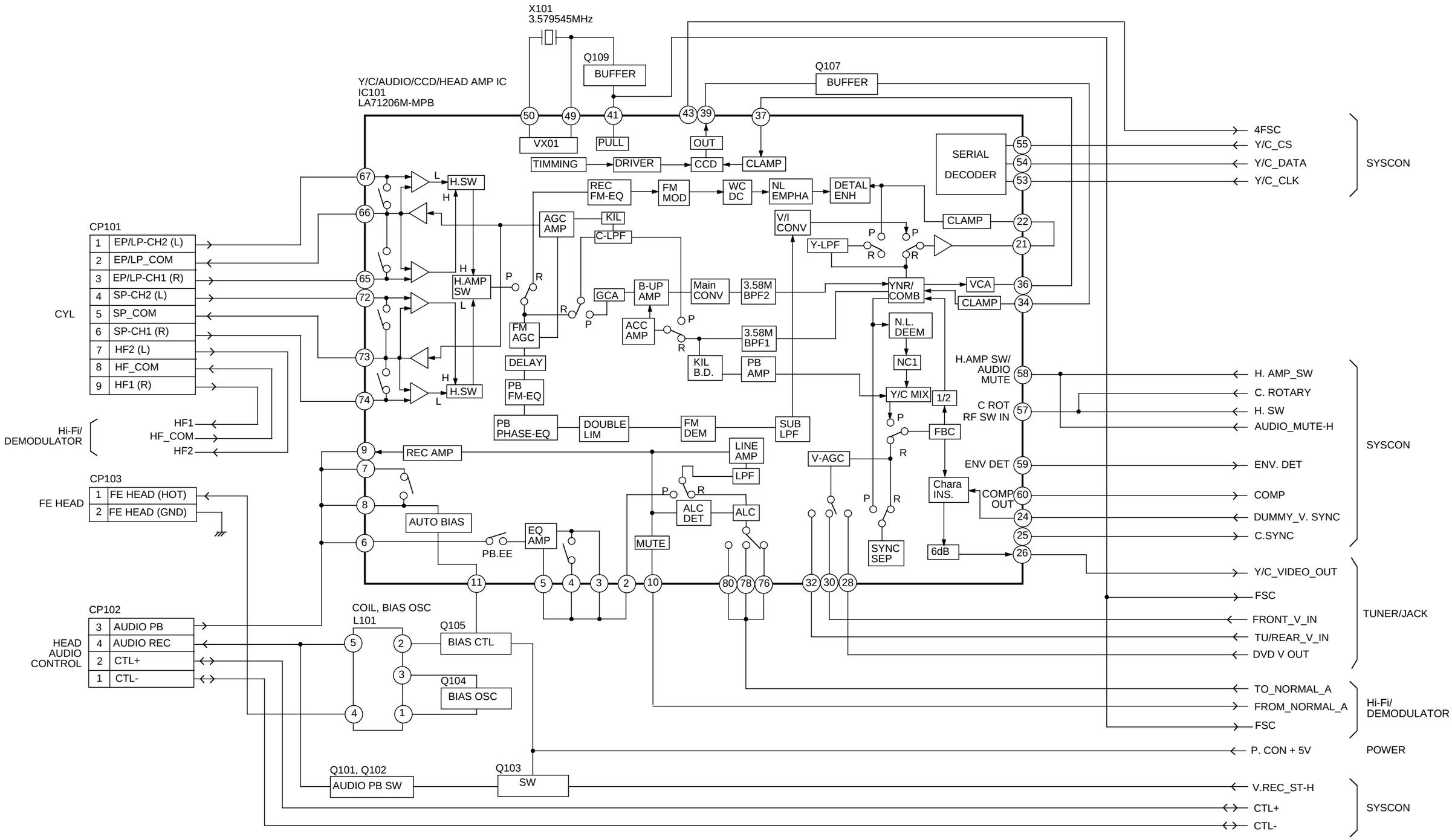
2. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



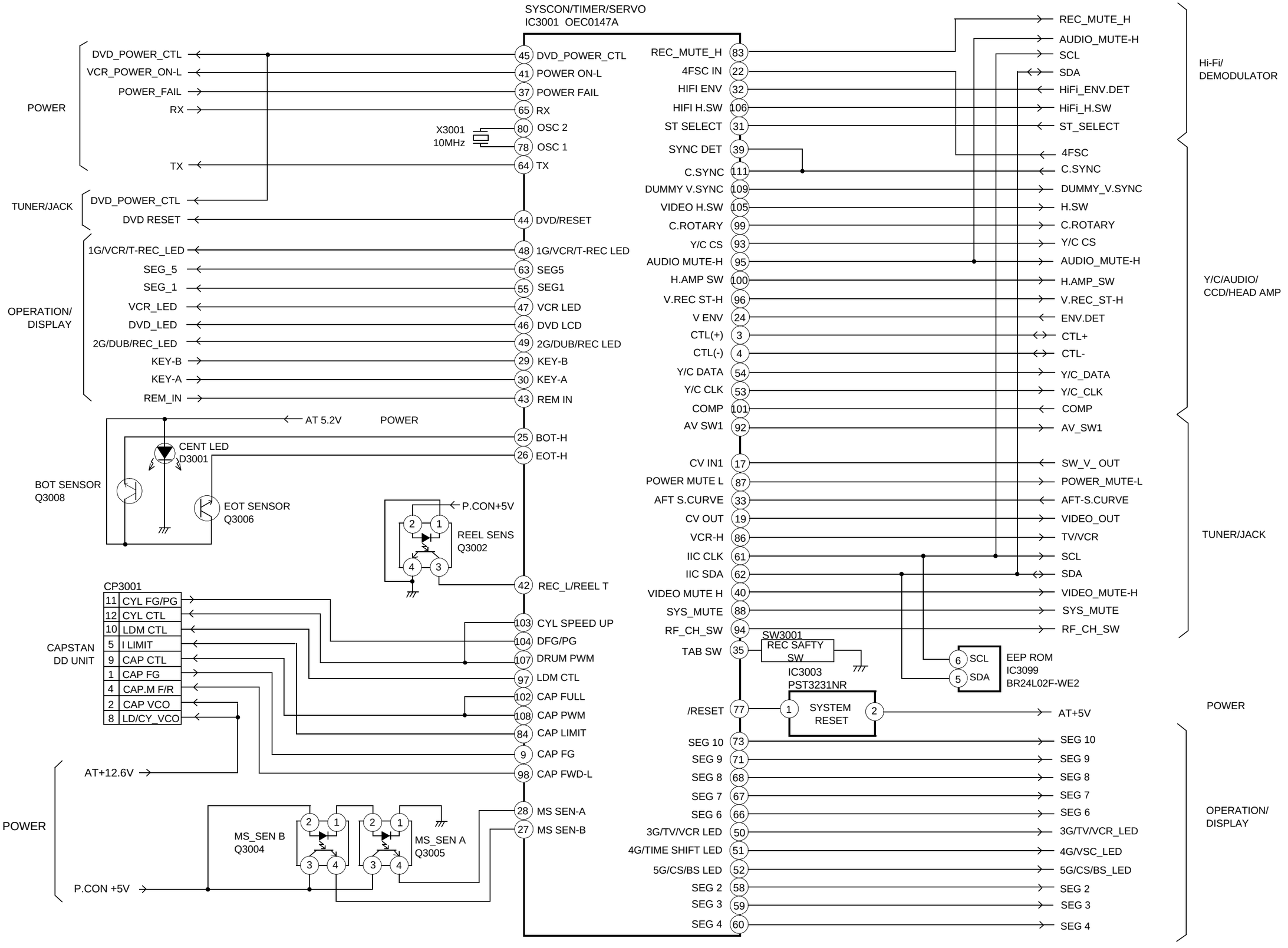
DVD BLOCK DIAGRAM



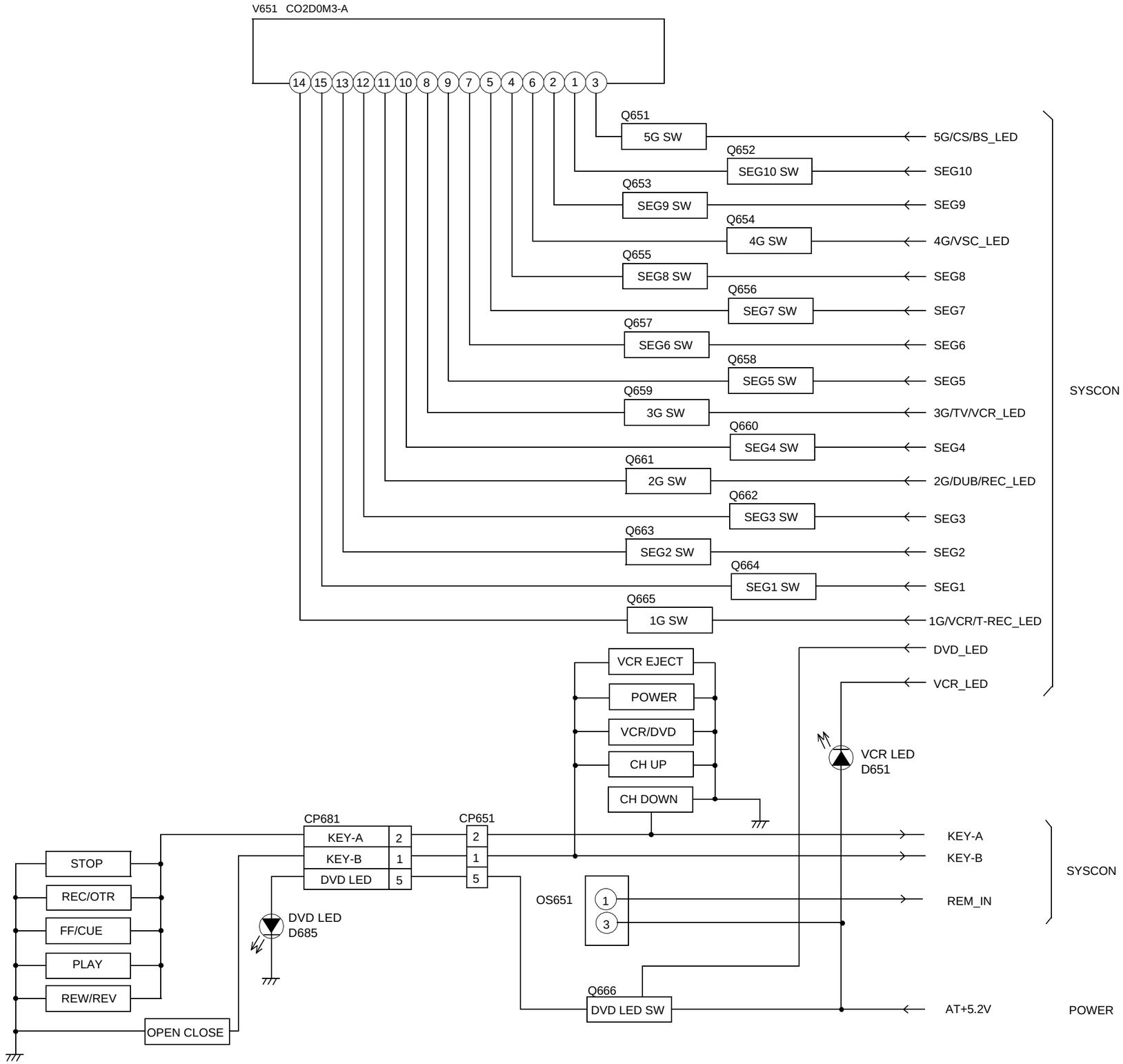
Y/C/AUDIO/CCD/HEAD AMP BLOCK DIAGRAM



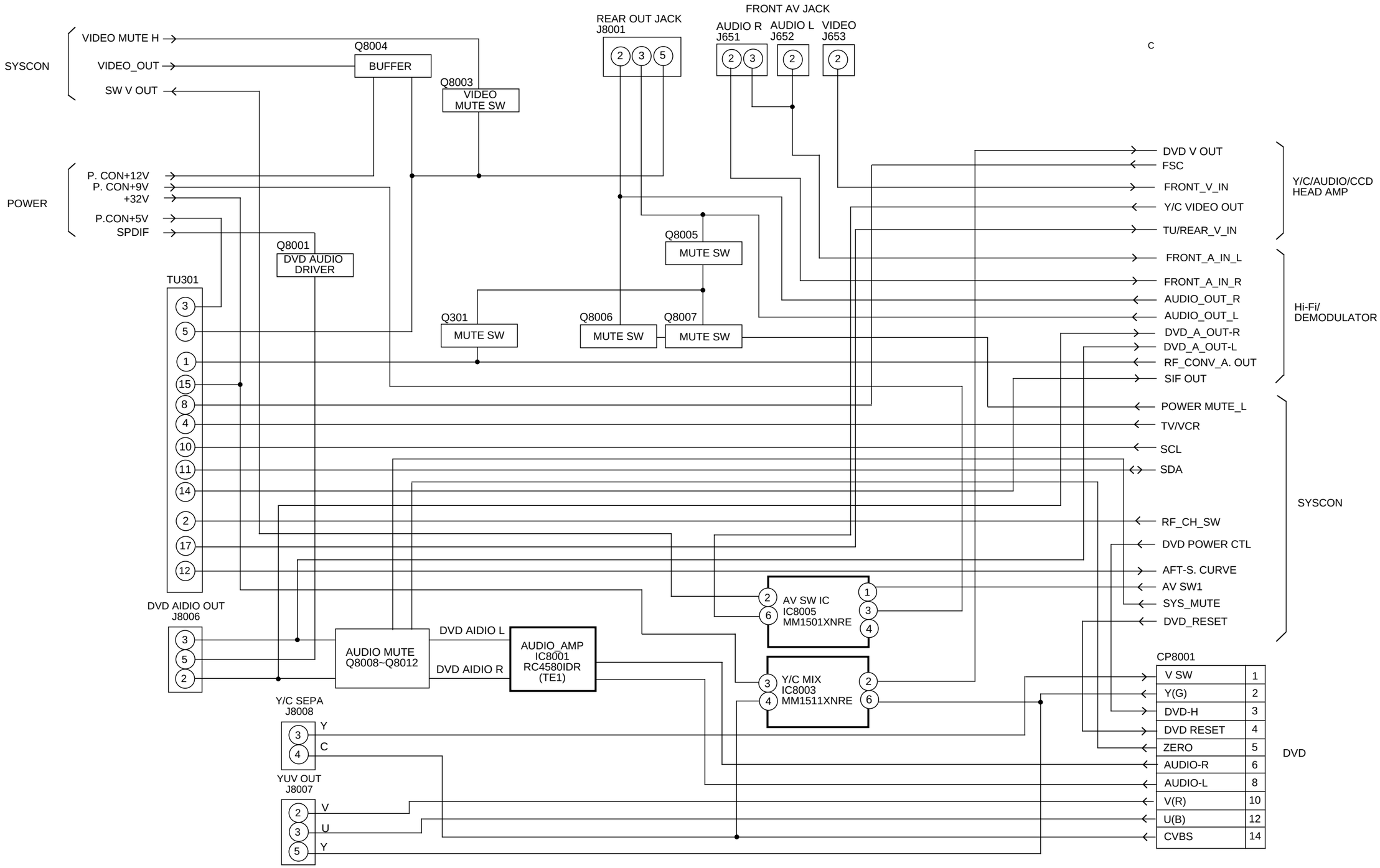
SYSCON BLOCK DIAGRAM



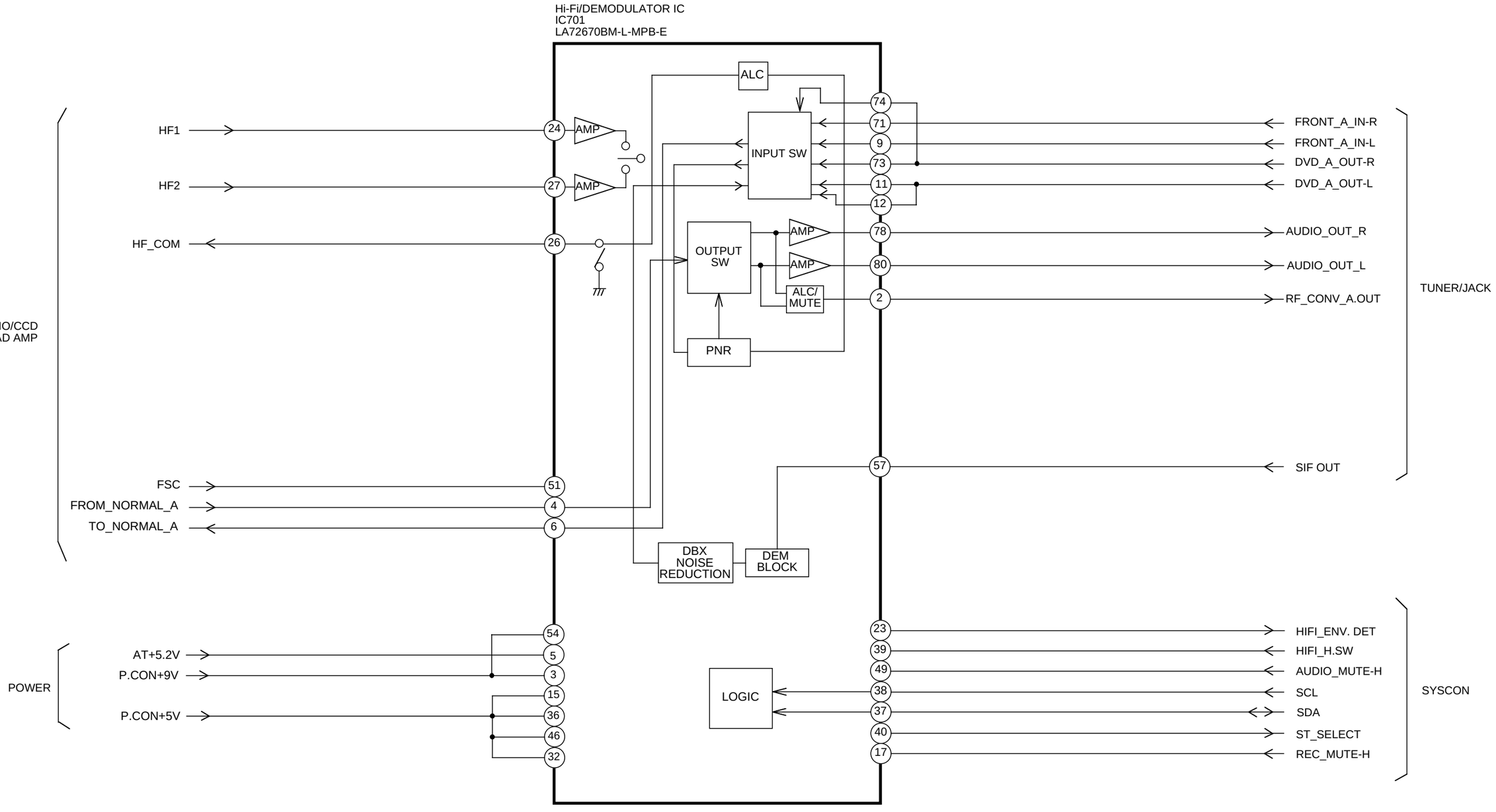
OPERATION/DISPLAY BLOCK DIAGRAM



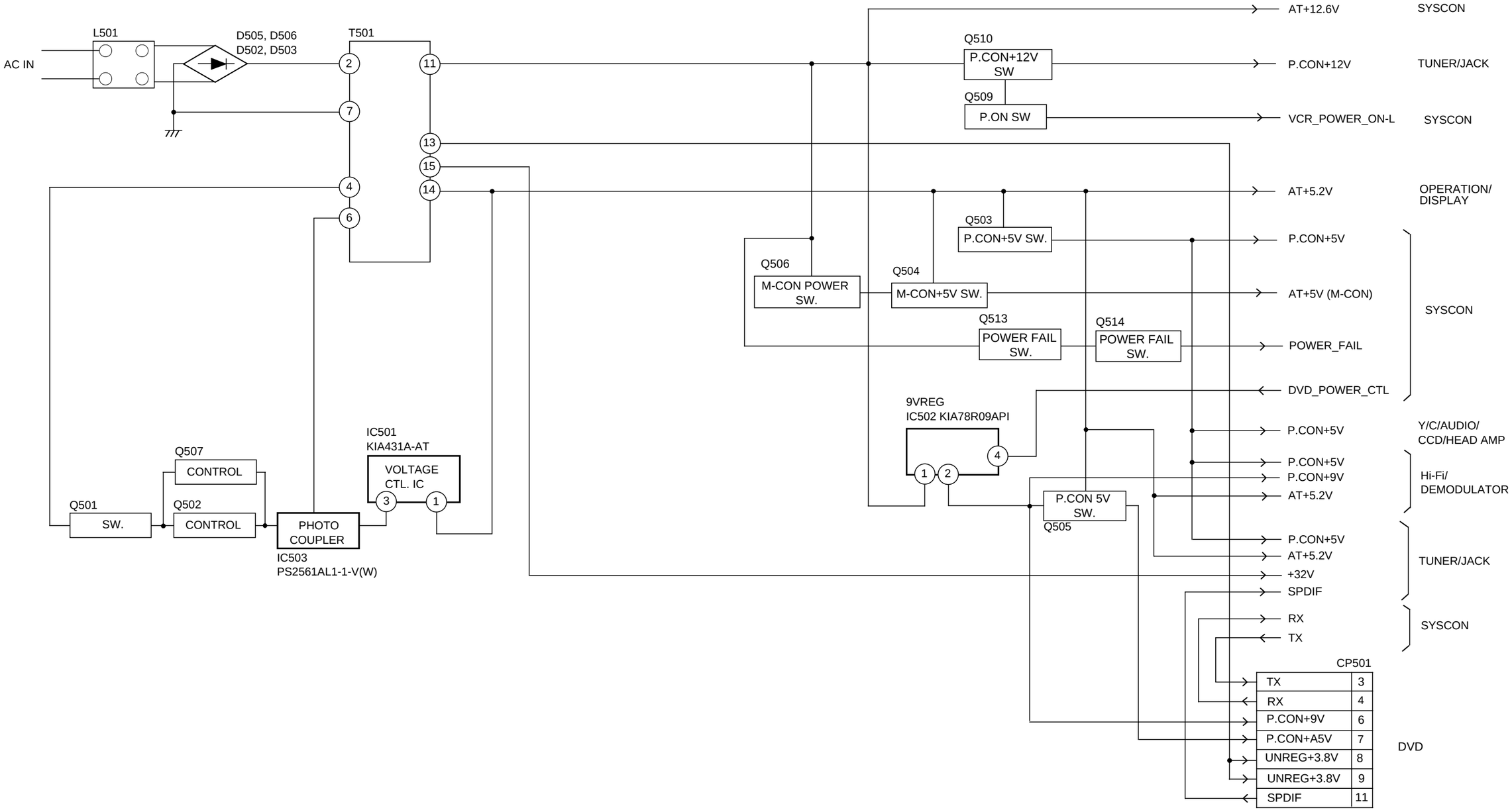
TUNER/JACK BLOCK DIAGRAM



Hi-Fi/DEMODULATOR BLOCK DIAGRAM

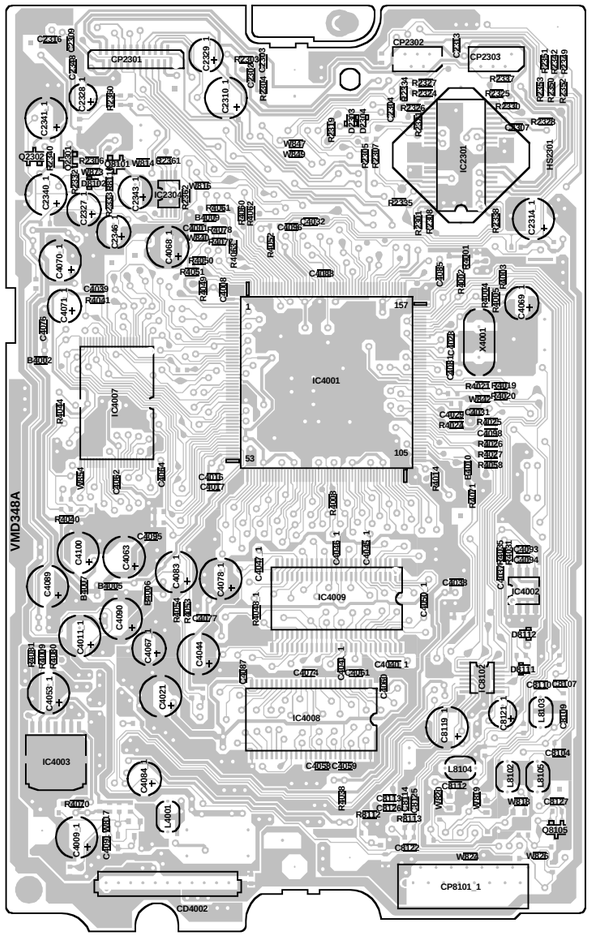


POWER BLOCK DIAGRAM

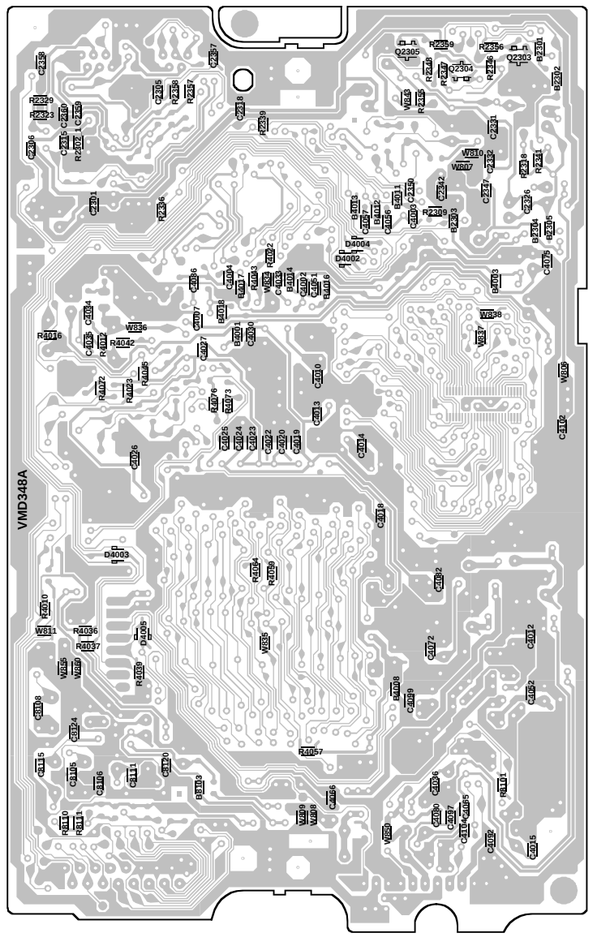


PRINTED CIRCUIT BOARDS

DVD (TOP SIDE)



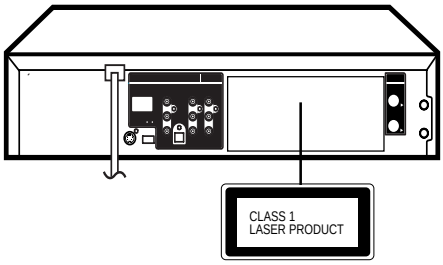
DVD (BOTTOM SIDE)



IMPORTANT WARNING

CAUTION:
DVD PLAYER IS A CLASS 1 LASER PRODUCT. HOWEVER THIS PLAYER USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE PLAYER CORRECTLY AS INSTRUCTED.

THE FOLLOWING CAUTION LABEL IS LOCATED ON THE REAR PANEL OF THE PLAYER.



(Printed on the Rear Panel)

WHEN THIS PLAYER IS PLUGGED TO THE WALL OUTLET, DO NOT PLACE YOUR EYES CLOSE TO THE OPENING OF THE DISC TRAY AND OTHER OPENINGS TO LOOK INTO THE INSIDE OF THIS PLAYER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

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.

WHEN REPLACING DVD DECK

[Removing the DVD Deck]

Before removing Pick Up PCB and DVD PCB connector, short circuit the position shown in **Fig. 1** using a soldering iron. If you remove the DVD Deck with no soldering, the Laser may be damaged.

[Installing the DVD Deck]

Remove all the soldering on the short circuit position after the connection of Pick Up PCB and DVD PCB connector.

NOTE

- Before your operation, please read "PREPARATION OF SERVICING".
- Use the Lead Free solder.
- Manual soldering conditions
  - Soldering temperature: 320 ± 20°C
  - Soldering time: Within 3 seconds
  - Soldering combination: Sn-3.0Ag-0.5Cu
- When Soldering/Removing of solder, use the drawing equipment over the Pick Up Unit to keep the Flux smoke from it.

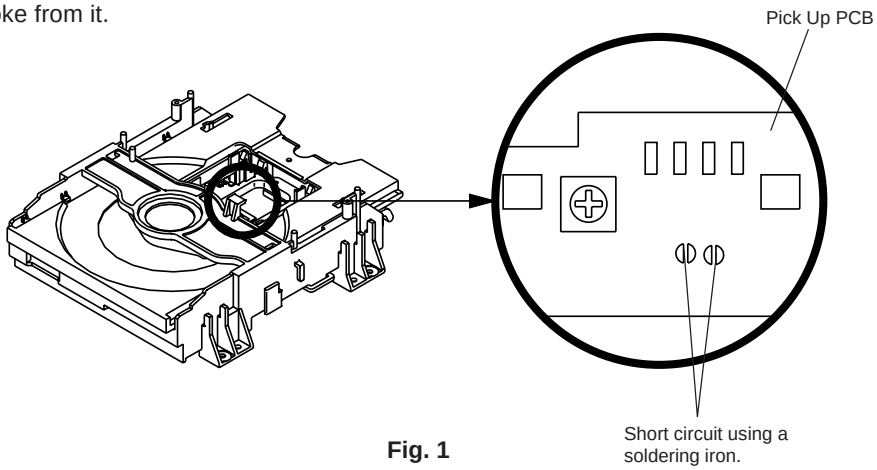


Fig. 1

PREPARATION OF SERVICING

The laser diode used for a pickup head may be destroyed with external static electricity. Moreover, even if it is operating normally after repair when static electricity discharge is received at the time of repair, the life of the product may be shortened.
Please perform the following measure against static electricity, be careful of destruction of a laser diode at the time of repair.

- Place the unit on a workstation equipped to protect against static electricity, such as conductive mat.
- Soldering iron with ground wire or ceramic type is used.
- A worker needs to use a ground conductive wrist strap for body.

TAPE REMOVAL METHOD AT NO POWER SUPPLY

1. Remove the Top Cabinet, Front Cabinet and DVD Block. **(Refer to item 1 of the DISASSEMBLY INSTRUCTIONS.)**
2. Remove the screw (1) of the Deck Chassis and remove the Loading Motor. **(Refer to Fig. 2)**
3. Rotate the Pinch Roller Cam in the direction of the arrow by hand to slacken the Video Tape.
4. Rotate the Clutch Ass'y either directions to wind the Video Tape in the Cassette Case.
5. Repeat steps 3~4. Then take out the Video Cassette from the Deck Chassis. Be careful not to scratch the tape.

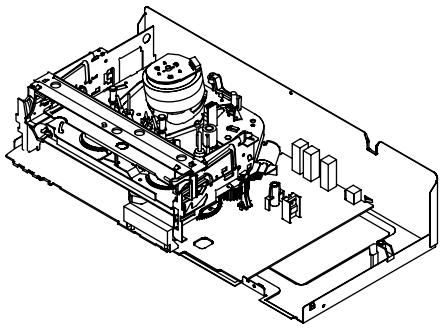


Fig. 1

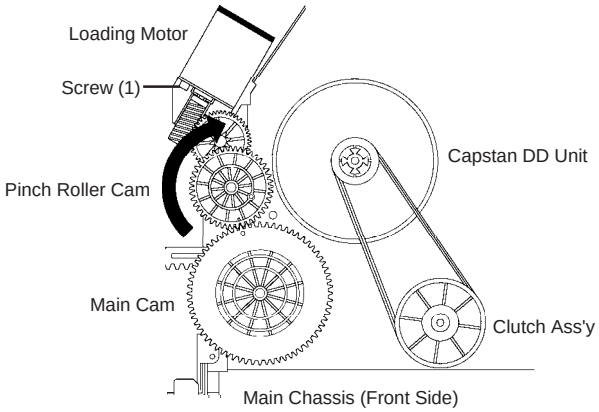


Fig. 2

DISC REMOVAL METHOD AT NO POWER SUPPLY

1. Remove the Back Cabinet and TV//DVD/VCR Block. **(Refer to item 1 of the DISASSEMBLY INSTRUCTIONS.)**
2. Rotate the Main Gear in the direction of the arrow by hand. **(Refer to Fig. 1)**
3. Manually open the Tray.

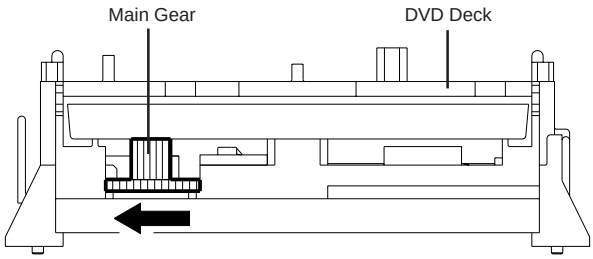


Fig. 1

PARENTAL CONTROL - RATING LEVEL

4 DIGIT PASSWORD CANCELLATION

If the stored 4 digit password in the Rating Level menu needs to be cancelled, please follow the steps below.

1. Turn Unit ON.
2. Press and hold the '7' key on the remote control unit.
3. Simultaneously press and hold the 'STOP' key on the front panel.
4. Hold both keys for more than 3 seconds.
5. The On Screen Display message 'PASSWORD CLEAR' will appear.
6. The 4 digit password has now been cleared

TABLE OF CONTENTS

GENERAL SPECIFICATIONS

G-1	**Outline of the product**				DVD VIDEO PLAYER & VHS Player / Recorder
G-2	**DVD System**	Color System			NTSC
		Disc			DVD, CD-DA, CD-R/RW
		Disc Diameter			120 mm , 80 mm
		Drive			DM3PA
		Search speed			Fwd 4 steps
				Actual	2-45 times (DVD)
					4-40 times (CD)
					Rev 4 steps
				Actual	2-45 times (DVD)
					4-40 times (CD)
		Slow speed			Fwd 1/7-1/2 times
				Actual	--
					Rev --
				Actual	--
G-3	**VCR**	System			VHS Player / Recorder
	System	Video System			NTSC
		Hi-Fi STEREO			Yes
		NTSC PB(PAL60Hz)			No
		Deck			OVD-7
		Heads	Video Head		4Head
			FM Audio Head		2Head
			Audio / Control		Mono/Yes
			Erase (Full Track Erase)		Yes
			Erase (Normal Audio Track Erase)		No
		Tape	Rec	PAL	-
		Speed		NTSC	SP/SLP
			Play	PAL	-
				NTSC	SP/LP/SLP
		Fast Forward / Rewind Time (Approx.) at 25°C			FF:4'50"/REW:2'30"
				with Cassette	T-120
		Forward/Reverse	NTSC or PAL-M		SP/LP/SLP = 3x,5x / 7x,9x / 9x,15x
		Picture Search	PAL or SECAM		-
		Frame Advance			Yes
		Slow Speed			1/10
G-4	**Tuning**	Broadcasting System			US System M
	System	Tuner and	System		1Tuner
		Receive CH	Destination		US (w/CABLE)
			CH Coverage		2-69,4A,A-5~ A-1,A~I,
					J~ W, W+1-W+84
		Intermediate	Picture (FP)		45.75 MHz
		Frequency	Sound (FS)		41.25 MHz
			FP-FS		4.50 MHz
		Preset CH			-
		RF Converter Output			Yes
			Channel		3 or 4 ch
			Level / Impedance		66 dBu / 75 Ohm
			Sound Selector		No
		Stereo / Dual TV Sound			US-ST
		Tuner Sound Muting			Yes
G-5	**Power**	Power Source	AC		120V 60Hz
			DC		-
		Power Consumption			18 W at 120V 60Hz
			Stand by		2 W at 120V 60Hz
			Per Year		-- W
		Protector	Power Fuse		Yes
			Safety Circuit		Yes
			IC Protector(Micro Fuse)		No
G-6	**Regulation**		Safety		UL
			Radiation		FCC
			Laser		DHHS
G-7	**Temperature**		Operation		5°C - 40°C
			Storage		-20°C - 60°C
G-8	**Operating Humidity**				Less than 80% RH
G-9	**Signal**	Video Signal	Output Level		1 V p-p/75 ohm (DVD,VCR)
			S/N Ratio (Weighted)		65 dB(DVD) 50 dB(VCR)
			Horizontal Resolution		500 Lines (DVD) 230 Lines(VCR Mode)
		RGB Signal	Output Level		-
		Audio Signal	Input Level Microphone		-
			Input Level Line		-8 dBm/ 50k ohm (VCR, 0dBm=0.775Vrms)
			Output Level Line		-8 dBm/ 1k ohm (VCR, 0dBm=0.775Vrms) -12dBm/ 1k ohm (DVD, -20dBFs 0dBFs=2.0Vrms)
			Digital Output Level		0.5 V p-p / 75 ohm(DVD)
			S/N Ratio at (Weighted)		90dB(DVD), 42dB(VCR at SP)
			Harmonic Distortion (1KHz) Typical		0.02% (1KHz) (DVD) , 1.5% (1KHz) (VCR)
			Frequency Response : DVD Mode at DVD		4 Hz - 22 KHz
				DVD Mode at VIDEO CD	-
				DVD Mode at CD	4 Hz - 20 KHz

GENERAL SPECIFICATIONS

					VCR Mode at SP	100Hz - 10 KHz
					VCR Mode at LP	-
					VCR Mode at SLP	100Hz - 4 KHz
		Hi-Fi Audio Signal		Dynamic Range : More than		90dB
				Frequency Response		20Hz ~20kHz
				Wow And Flutter : Less than		0.01 %Wrms
				Channel Separation : More than		60 dB
				Harmonic Distortion : Less than		0.01
G-10	**On Screen Display (DVD)**	Menu				Yes
			Menu Type			Icon
			Language			Yes
				Menu		Yes
				Subtitle		Yes
				Audio		Yes
				OSD Language (Set up Language)		Yes
			Video			Yes
				E.B.L. (Enhanced Black Level)		No
				TV Screen Size		Yes
				OSD Display On/Off		Yes
				Pictuer Mode(Video/Film/Auto)		Yes
				JPEG Interval		No
			Audio			Yes
				DRC (Dynamic Range Control)		Yes
				Dialogue On:DRC(TV)/ Off:DRC(Std)		No
				dts Decode		No
				Surround On/Off		No
			System			Yes
				Disc/Card Slot		No
				Password Lock/Unlock		Yes
				Rating Level		Yes
				Select Files		No
				HDMI(480p/1080i/720p)		No
				Output		Progressive/Interlace
			Open			Yes
			Close			Yes
			No disc			Yes
			Reading			Yes
			Play			Yes
			Still/Pause			Yes
			Stop			Yes
			PBC			No
			Prohibit Mark			Yes
			Step			Yes
			Skip (>>|)			Yes
			Skip (|<<)			Yes
			Random			Yes (CD, MP3)
			Repeat			Yes
			Slow+			Yes
			Slow-			No
			Search+			Yes
			Search-			Yes
			Jump			Yes
			Resume			Yes
			Title No.			Yes
			Chapter No.			Yes
			Track No.			Yes
			Time			Yes
			Subtitle No.			Yes
			Angle No.			Yes
			Vocal On/Off			No
			Audio No.			Yes
			Audio Stereo L/R			No
			Zoom			Yes
			Marker No.			Yes
			Surround On/Off			No
			Program Play Back			Yes (CD, MP3)
			MP3		Folder Name	Yes
					File Name	Yes
					File No	Yes
					Time	Yes
					Track No	Yes
			Progressive Scan Out ON/OFF			Yes
	On Screen Display(VCR)	Menu				Yes
			Menu Type			Character
			Timer Rec Set			Yes
			Auto Repeat On/Off			Yes
			SAP On/Off			Yes
			CH Set-Up			Yes
				TV/CABLE		Yes
				Auto CH Memory		Yes
				Add/Delete		Yes
			System Set Up			Yes
				Clock Set		Yes (Calendar 12H)

GENERAL SPECIFICATIONS

			Language		Yes
			No Noise Back Ground		Yes
			Auto Clock		Yes
			Standard Time		Yes
			Daylight Saving Time		Yes
		G-CODE(or SHOWVIEW or PLUSCODE)No. Entry			No
		Stereo, Audio Output, SAP			Yes
		Play/Stop/FF/Rew/Rec/OTR/Pause/Eject/Tape In/Repeat (Symbol Mark)			Yes
			CH/AV(LINE)		Yes
			Clock		Yes
			Repeat		Yes
			Tape Counter		Yes
			Index		Yes
			Tape Speed		Yes
			ATR / Manual Tracking		Yes
			ZERO Return		Yes
			Hi-Fi		Yes
G-11	**OSD Language**	DVD OSD			English / French / Spanish
		VCR OSD			English / French / Spanish
G-12	**Clock,Timer and Timer Back-up**	Calendar			1990/1/1 ~ 2081/12/31
		Timer Events			8 Program/ 1 Month
		One Touch Recording Max Time			6 Hours
		Timer Back-up (at Power Off Mode)			30min
G-13	**Display**	DISPLAY			Yes
			DISPLAY type		LED Module (Green, "Rec" &Timer symbol = Red)
			Clock/Counter,CH,Timer Rec,OTR, Play Rec,FF(Cue),Rew(Rev),Stop,ATR,Eject		No
			VCR		Yes
			DVD		Yes
			CD		Yes
			Clock		Yes (12h)
				AM	No
				PM	Yes
			Counter	VCR	Yes (hour:min)
				DVD	Yes (hour:min)
				CD	Yes (min:sec)
			Eject		Yes
			Counter Remain		No
			Play		Yes
			Stop		No
			Rec		Yes
			FF / Cue		No
			REW / Review		No
			Pause / Still		Yes
			OTR (ITR)		No
			T-Rec		Yes
			Chapter		No
			TITLE		No
			TRACK		Yes
			Repeat		No
			Hi-Fi		No
			SP		No
			LP		No
			SLP		No
			CH		Yes
			RF Output CH		Yes
			Tape In		Yes
			Remocon Custom Code		No
			Progressive Scan Out		Yes
G-14	**Remote Control**	Unit			RC-JN
		Glow in Dark Remocon			No
		Remocon Format			ORION
		Format			NEC
		Custom Code			71-8E
		Power Source	Voltage(D.C)		3V
			UM size x pcs		UM-4 x 2 pcs
		Total Keys			46 Keys
		Keys	Power		Yes
			DISPLAY		Yes
			1		Yes
			2		Yes
			3		Yes
			4		Yes
			5		Yes
			6		Yes
			7		Yes
			8		Yes
			9		Yes
			0		Yes
			Input Select		No
			Input Select / PROGRESSIVE		Yes
			UP/CH+		Yes

GENERAL SPECIFICATIONS

			DOWN/CH-	Yes	
			LEFT/ SET- / TRACKING-	Yes	
			RIGHT/ SET+ / TRACKING+	Yes	
			VCR/DVD	Yes	
			TV/VCR	Yes	
			DVD MENU	Yes	
			TOP MENU	Yes	
			SETUP MENU/VCR MENU	Yes	
			ENTER	Yes	
			CANCEL	Yes	
			RETURN	Yes	
			PLAY	Yes	
			STOP	Yes	
			PAUSE/STILL/STEP	Yes	
			FF(Cue)/SEARCH+	Yes	
			REW(Review)/SEARCH-	Yes	
			REC/OTR	Yes	
			SKIP+ / INDEX+	Yes	
			SKIP- / INDEX-	Yes	
			AUDIO / AUDIO SELECT	Yes	
			ANGLE/COUNTER RESET	Yes	
			SUBTITLE/ATR	Yes	
			PLAY MODE/SPEED	Yes	
			T-REC	Yes	
			CLOCK / COUNTER	Yes	
			JUMP/ZERO RETURN	Yes	
			ZOOM	Yes	
			REPEAT A-B	Yes	
			SLOW (Forward)	Yes	
			MARKER	Yes	
			OPEN/CLOSE	Yes	
			EJECT	Yes	
G-15	**Features (DVD)**	Auto Power Off			No
		Video CD Playback			No
		SVCD Playback			No
		MP3 Playback		Yes	
		WMA Playback			No
		JPEG Playback			No
		Progressive Scan Out		Yes	
		Digital Out	Dolby Digital	Yes	
			MPEG	Yes	
			PCM	Yes	
			DTS		No
		Down Mix Out	(Dolby Digital)	Yes	
			(DTS)		No
		Spatializer (N-2-2)			No
		Screen Saver			No
		Tray Lock			No
		Auto Stop			No
		Audio DAC		192kHz / 24bit	
		Closed Capti		Yes	
	Features (VCR)	Auto Head Cleaning		Yes	
		Auto Power Off			No
		Forward/Reverse Picture Search		Yes	
		VIDEO PLUS+ (SHOWVIEW, G-CODE)			No
		One Touch Playback			No
		Auto CH Memory		Yes	
		AREA CODE			No
		Auto Clock Set		Yes	
		Index Search		Yes	
		SQPB			No
		CABLE		Yes	
		Energy Star			No
		MTS (SAP)		Yes	
		CM Skip (30sec x 6 Times)			No
		Copy (Disc to Tape)			No
G-16	**Accessories**	Owner's Manual	Language	English / Spanish	
			w/Guarantee Card		No
		Remote Control Unit		Yes	
		Guarantee Card		Yes	
		Registration Card			No
		Warning Sheet			No
		Service Station List			No
		Important Tag			No
		AC Plug Adapter			No
		Quick Set-up Sheet			No
		Battery			No
			UM size x pcs	--	
		AC Cord			No
		AV Cord (1.2m)		Yes	
		75 Ohm Coaxial Cable (0.9m)		Yes	
		S-Video Cable			No
		21pin cable			No

GENERAL SPECIFICATIONS

		800 No Sticker			No
		Toll Free Insert Sheet			No
		Safety Tip			No
G-17	Interface	Switch	Front	Power	Yes
				Play	Yes
				Eject (VCR)	Yes
				Stop	Yes
				Rec/OTR	Yes
				Open/Close (DVD)	Yes
				CH +	Yes
				CH -	Yes
				FF/ Search(>>)	Yes
				Rew/Search(<<)	Yes
				Still/Pause	No
				Shuttle (Search/REV/FWD)	No
				DVD/VCR	Yes
				Main Power SW	No
			Rear	Attenuator	No
				S-Video/Component Video Selector	No
				RF Out (Slide SW)	No
				Main Power SW	No
		Terminals	Front	Video In	RCA x1 (Yellow)
				Audio In	RCA x 2 (Stereo, White/Red)
			Rear	Video Output	RCA x1 (Yellow) S-Video x 1 (DVD Signal Only) Component x1 (RCA 3pin,DVD Signal Only)
				Audio Output	RCA x 4 (Stereo, White/Red) Coaxial x 1 (Digital Audio,DVD Signal Only)
				Optical Out (Option)	No
				Video Input (Option)	No
				Audio Input (Option)	No
				RF Input / Output	Yes
				Euro Scart	No
				AC Inlet	No
		Indicator	LED	Power	No
				Rec	No
				T-Rec	No
				TV/VCR	No
				DVD	Yes (RED)
				VCR	Yes (RED)
				Surround	No
				Level Meter	No
G-18	Set Size			Approx. W x D x H (mm)	430 x 227 x 99
G-19	Weight			Net (Approx.)	3.5 kg(7.7lbs)
				Gross (Approx.)	4.5 kg(9.9lbs)
G-20	Carton		Master Carton		No
				Content	--- Sets
				Material	--- / ---
				Dimensions W x D x H(mm)	---
				Description of Origin	---
			Gift Box	Material	Double / Brown
				W/Color Photo Label	No
				Dimensions W x D x H(mm)	497 x 340 x 180
				Description of Origin	Yes
			Drop Test		Natural Dropping At 1 Corner / 3 Edges / 6 Surfaces
				Height (cm)	80 cm
			Container Stuffing		2,011 Sets/40' container
G-21	Material		Cabinet	Front	PS 94V2 or More / DECABROM
			PCB	Non-Halogen Demand	No
				Eyelet Demand	No
G-22	Environment		Environmental standard requirement (by buyer)		No
			Pb Free		No

DISASSEMBLY INSTRUCTIONS

1. REMOVAL OF MECHANICAL PARTS AND P.C. BOARDS

1-1: TOP CABINET, OPERATION PCB AND FRONT CABINET (Refer to Fig. 1-1)

1. Remove the 5 screws (1).
2. Remove the Top Cabinet in the direction of arrow (A).
3. Disconnect the following connector: **(CP651)**.
4. Unlock the 8 supports (2).
5. Remove the Front Cabinet in the direction of arrow (B).
6. Remove the 2 screws (3).
7. Remove the Operation PCB in the direction of arrow (C).

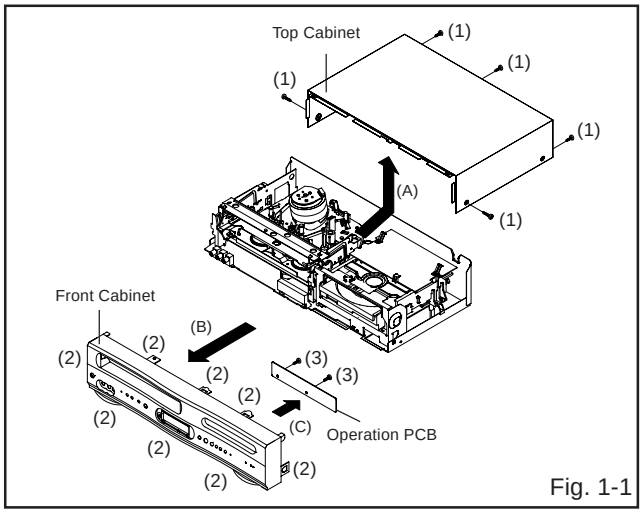


Fig. 1-1

1-2: FLAP (Refer to Fig. 1-2)

1. Open Flap to 90° and flex in direction of arrow (A), at the same time slide in direction of arrow (B).
2. Then lift in direction of arrow (C).

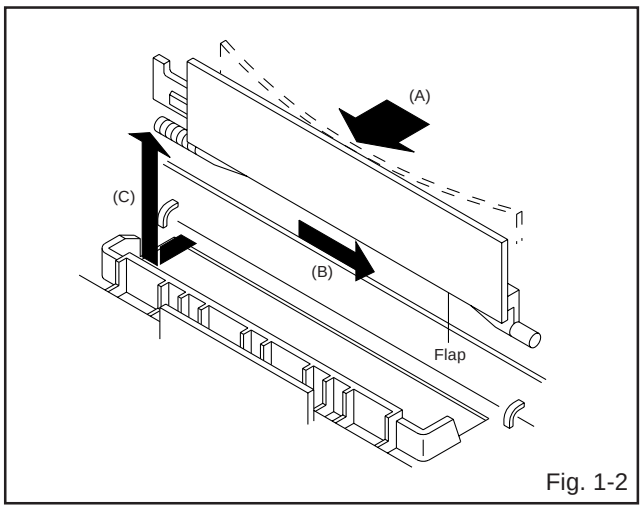


Fig. 1-2

1-3: DVD DECK/DVD PCB (Refer to Fig. 1-3)

1. Short circuit the position shown in **Fig. 1-3** using a soldering iron. If you remove the DVD Deck with no soldering, the Laser may be damaged.
2. Unlock the support (1) and remove the Deck Top Holder in the direction of arrow (A).
3. Remove the 2 screws (2).
4. Remove the 2 screws (3).
5. Disconnect the following connectors: **(CP501, CP8001)**.
6. Remove the DVD Deck in the direction of arrow (B).
7. Disconnect the following connectors: **(CP2301, CP2302 and CP2303)**.
8. Remove the 2 screws (4).
9. Remove the DVD PCB in the direction of arrow (C).
10. Remove the 3 screws (5).
11. Remove the Front Angle in the direction of arrow (D).

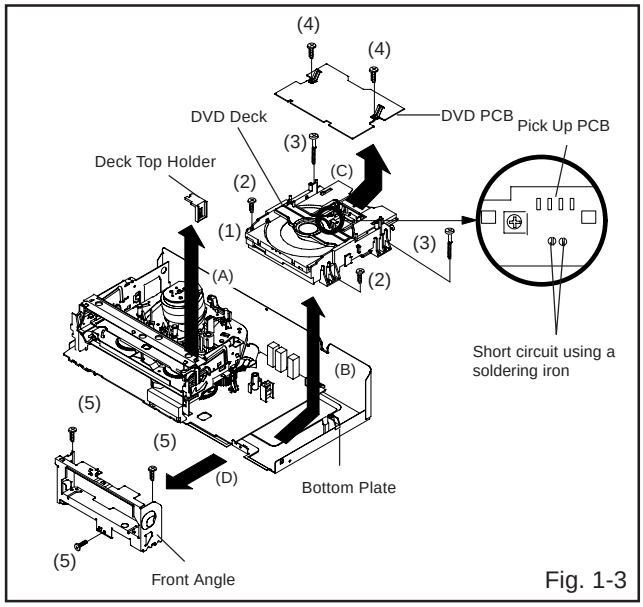


Fig. 1-3

NOTE

1. Use the Lead Free solder and the exclusive soldering
2. iron.
   Manual soldering conditions
   • Soldering temperature: 320 ± 20°C
   • Soldering time: Within 3 seconds
3. • Soldering combination: Sn-3.0Ag-0.5Cu
   When Soldering/Removing of solder, use the draw equipment over the Pick Up Unit to keep the Flux smoke away from it.
4. When installing of the DVD Deck, remove all the soldering on the short circuit position after the connection of Pick Up PCB and VCR PCB connector.

DISASSEMBLY INSTRUCTIONS

1-4: VCR DECK (Refer to Fig. 1-4)

NOTE

Do not remove the cable at the FE Head section. The FE Head may be damaged if you remove the cable by force.

1. Remove the screw (1).
2. Remove the FE Head.
3. Move the Cassette Holder Ass'y to the back side.
4. Remove the 3 screws (2).
5. Remove the 2 screws (3).
6. Disconnect the following connectors: **(CP101, CP102, CP103 and CP3001)**.
7. Remove the VCR Deck in the direction of arrow.

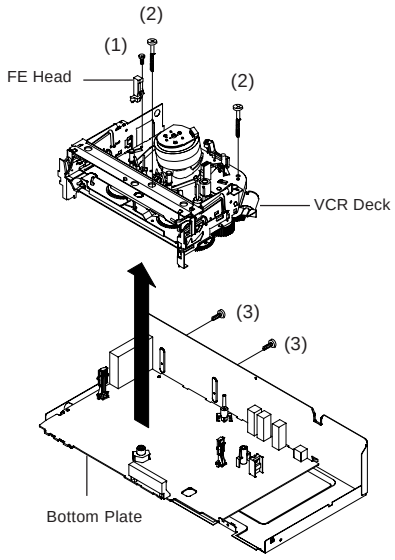


Fig. 1-4

1-5: VCR PCB (Refer to Fig. 1-5)

1. Remove the screw (1).
2. Remove the 4 screws (2).
3. Remove the 2 screws (3).
4. Remove the 3pin Shield.
5. Remove the VCR PCB in the direction of arrow.

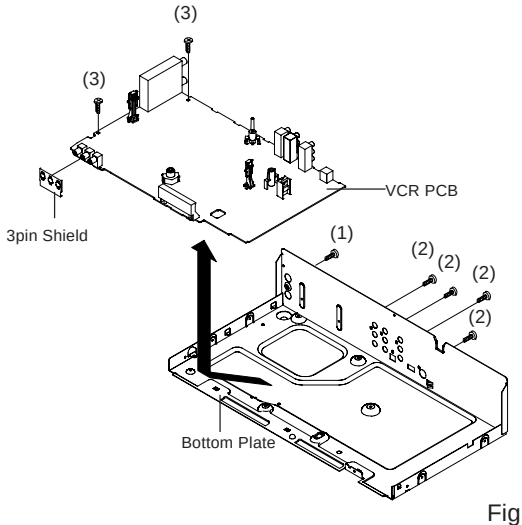


Fig. 1-5

DISASSEMBLY INSTRUCTIONS

2. REMOVAL OF VCR DECK PARTS

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

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

NOTE

1. After installation of the Top Bracket, bend the support ① so that the Top Bracket is fixed.

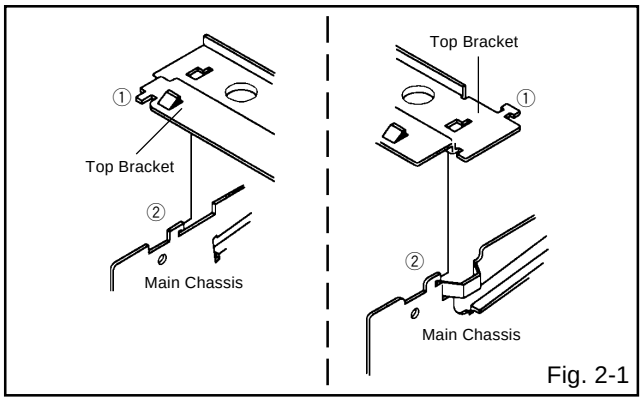


Fig. 2-1

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

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.

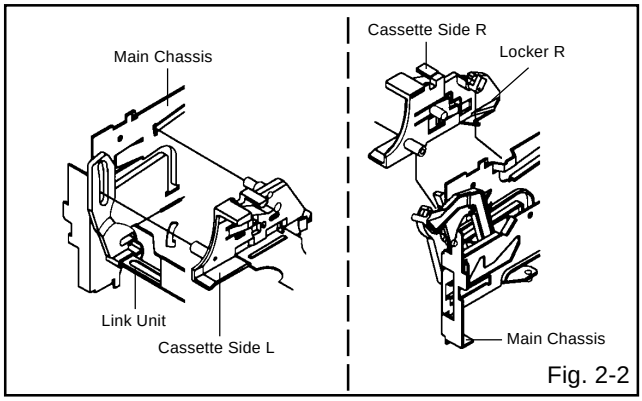


Fig. 2-2

2-3: LINK UNIT (Refer to Fig. 2-3)

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

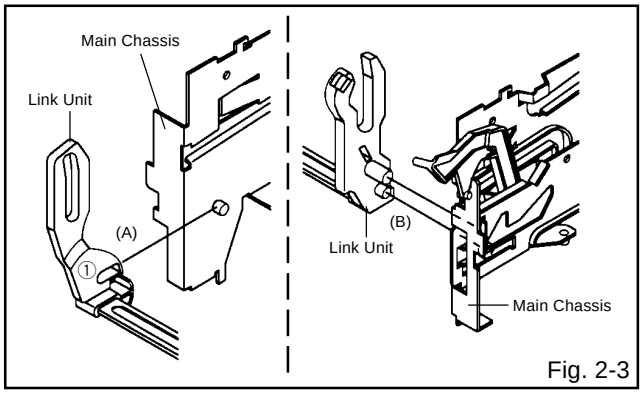


Fig. 2-3

2-4: LINK LEVER/FLAP LEVER (Refer to Fig. 2-4)

1. Extend the support ①.
2. Remove the Link Lever.
3. Remove the Flap Lever.

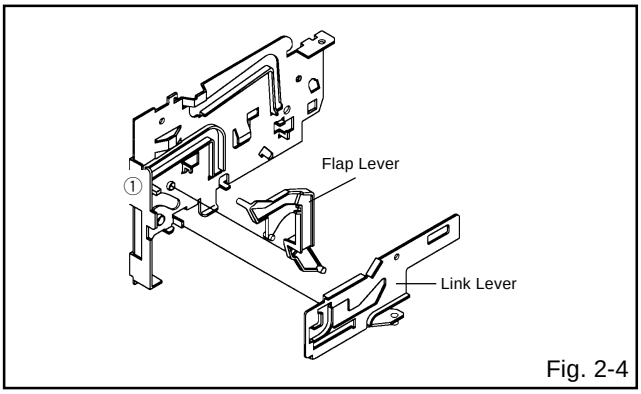


Fig. 2-4

2-5: LOADING MOTOR/WORM (Refer to Fig. 2-5-A)

1. Remove the screw ①.
2. Remove the Loading Motor.
3. Remove the Worm.

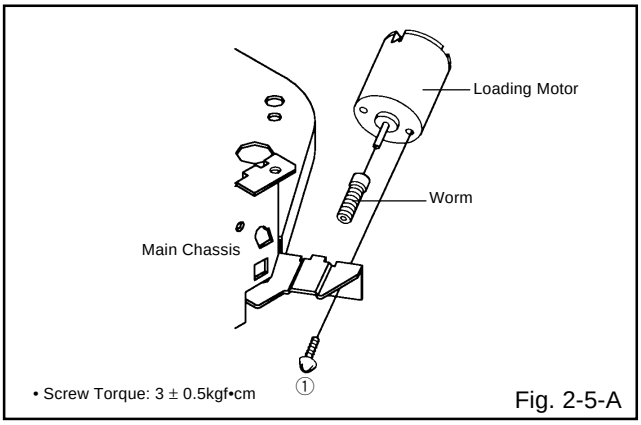


Fig. 2-5-A

NOTE

1. In case of the Worm installation, check if the value of the Fig. 2-5-B is correct.
2. In case of the Loading Motor installation, hook the wire on the Cassette Opener as shown Fig. 2-5-C.
3. When installing the wires between Capstan DD Unit and Loading Motor, connect them correctly as shown Fig. 2-5-D.

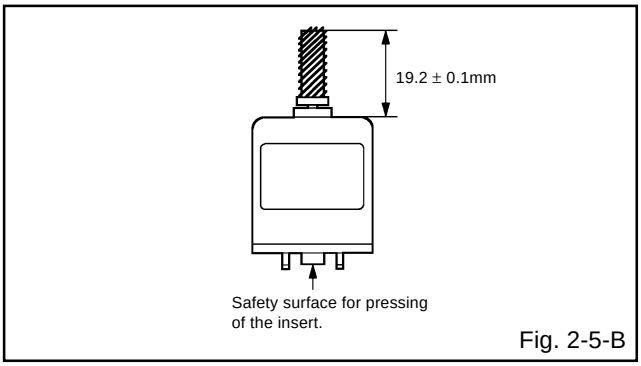


Fig. 2-5-B

DISASSEMBLY INSTRUCTIONS

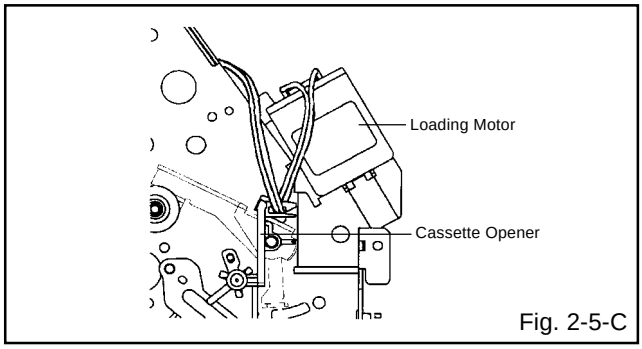


Fig. 2-5-C

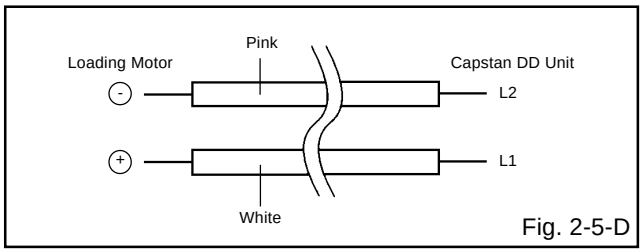


Fig. 2-5-D

2-6: TENSION ASS'Y (Refer to Fig. 2-6-B)

1. Turn the Pinch Roller Cam clockwise so that the Tension Holder hook is set to the position of Fig. 2-6-A to move the Tension Arm Ass'y.
2. Remove the Tension Spring.
3. Unlock the 2 supports ① and remove the Tension Band.
4. Unlock the support ② and remove the Tension Arm Ass'y.
5. Unlock the support ③ and remove the Tension Connect.
6. Float the hook ④ and turn it clockwise then remove the Tension Holder.

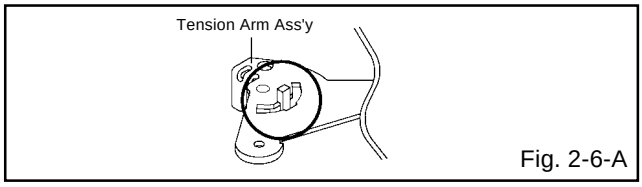


Fig. 2-6-A

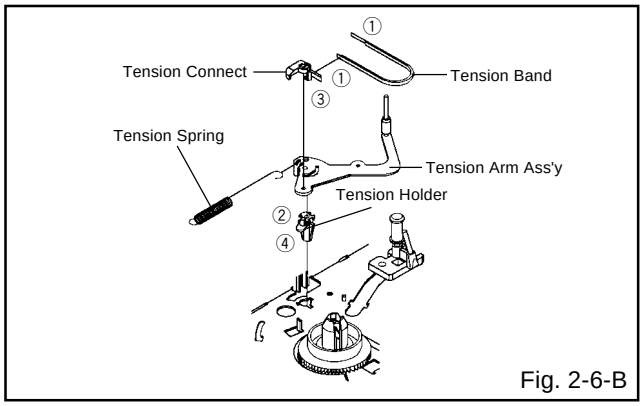


Fig. 2-6-B

NOTE

1. In case of the Tension Band installation, note the direction of the installation. **(Refer to Fig. 2-6-C)**
2. In case of the Tension Band installation, install correctly as Fig. 2-6-D.
3. In case of the Tension Connect installation, install as the circled section of Fig. 2-6-E.

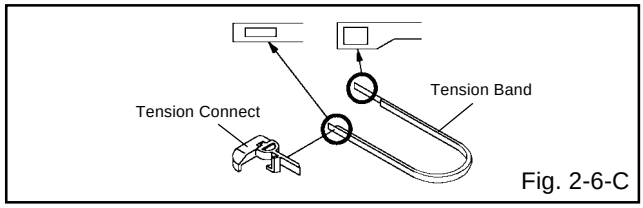


Fig. 2-6-C

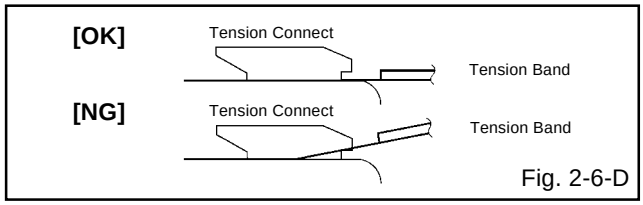


Fig. 2-6-D

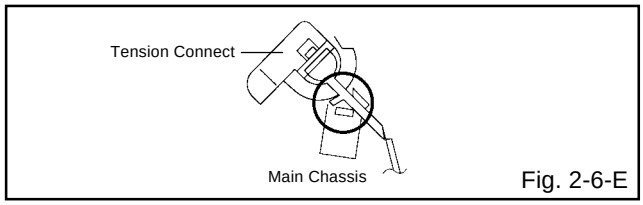


Fig. 2-6-E

2-7: T BRAKE ARM/T BRAKE BAND (Refer to Fig. 2-7-A)

1. Remove the T Brake Spring.
2. Turn the T Brake Arm clockwise and bend the hook section to remove it.
3. Unlock the 2 supports ① and remove the T Brake Band.

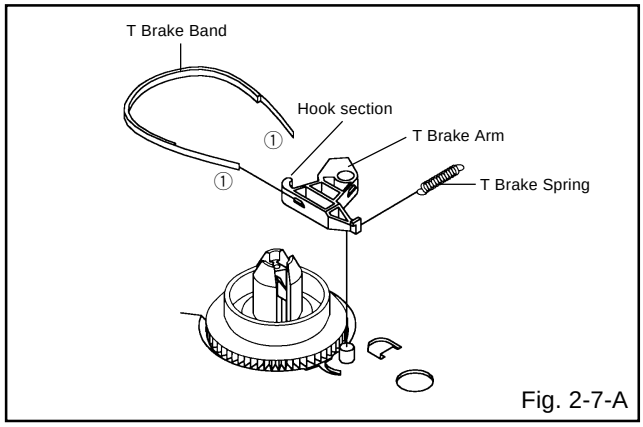


Fig. 2-7-A

NOTE

1. In case of the T Brake Band installation, install correctly as Fig. 2-7-B.

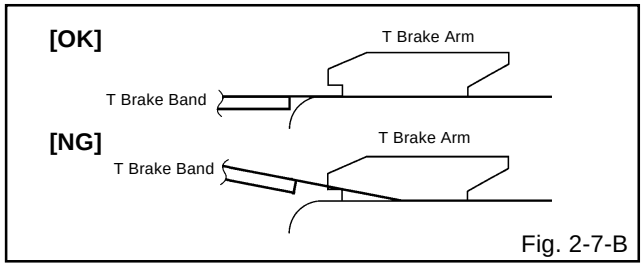


Fig. 2-7-B

DISASSEMBLY INSTRUCTIONS

2-8: S REEL/T REEL/IDLER ARM ASS'Y/IDLER GEAR (Refer to Fig. 2-8-A)

1. Remove the S Reel and T Reel.
2. Remove the 2 Polyslider Washers ①.
3. Remove the Idler Arm Ass'y and Idler Gear.

NOTE

1. Take care not to damage the gears of the S Reel and T Reel.
2. The Polyslider Washer may remain on the back of the reel.
3. Take care not to damage the shaft.
4. Do not touch section "A" of S Reel and T Reel. (Use gloves.) **(Refer to Fig. 2-8-A)** Touching may leave stains on section "A".
5. When you install the reel, clean the shaft and grease it (FG-84M). (If you do not grease, noise may be heard in FF/REW mode.)
6. After installing the reel, adjust the height of the reel. **(Refer to MECHANICAL ADJUSTMENT)**

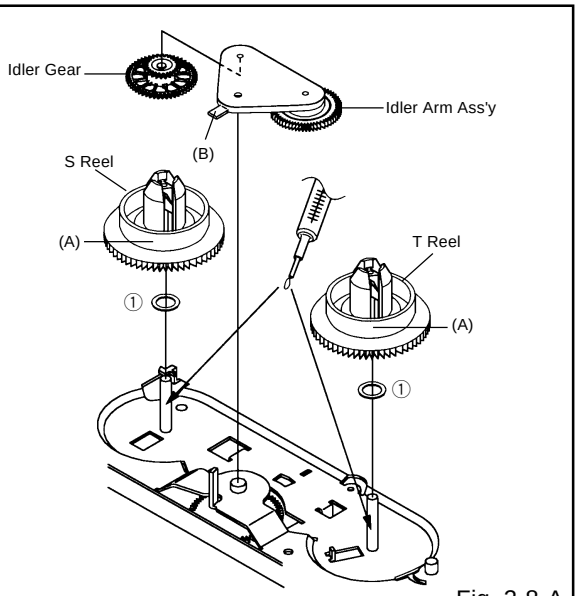


Fig. 2-8-A

NOTE

1. In case of the S Reel and T Reel installation, check if the correct parts are installed. **(Refer to Fig. 2-8-B)**
2. In case of the Idler Arm Ass'y installation, install correctly as Fig. 2-8-C. And also set it so that the section "B" of Fig. 2-8-A is placed under the Main Chassis tab.

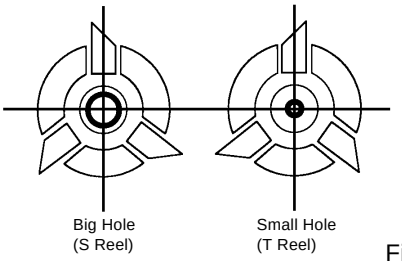


Fig. 2-8-B

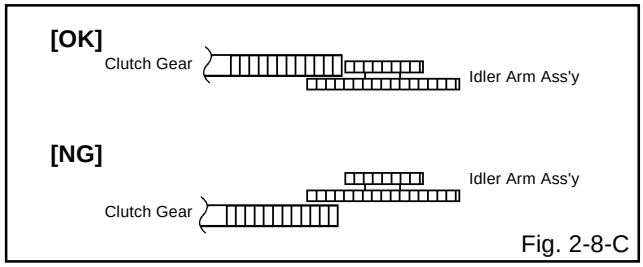


Fig. 2-8-C

2-9: CASSETTE OPENER/PINCH ROLLER BLOCK/ P5 ARM ASS'Y (Refer to Fig. 2-9-A)

1. Unlock the support ① and remove the Cassette Opener.
2. Remove the Pinch Roller Block and P5 Arm Ass'y.

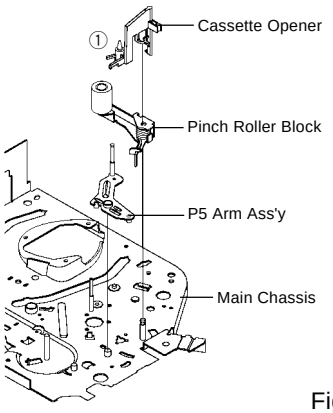


Fig. 2-9-A

NOTE

1. Do not touch the Pinch Roller. (Use gloves.)
2. In case of the Pinch Roller Block and the Pinch Roller Cam installation, install correctly as Fig. 2-9-B.

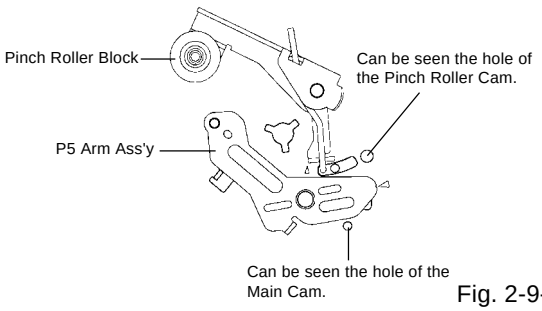


Fig. 2-9-B

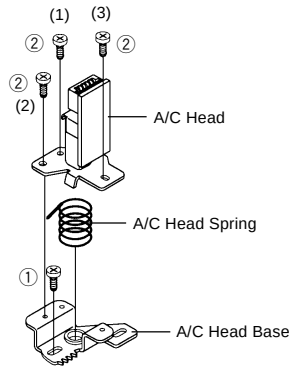
2-10: A/C HEAD (Refer to Fig. 2-10-A)

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. 2-10-B.
3. When you install the A/C Head, tighten the screw (1) first, then tighten the screw (2), finally tighten the screw (3).

DISASSEMBLY INSTRUCTIONS



• Screw Torque: 5 ± 0.5kgf•cm (Screw ①)

Fig. 2-10-A

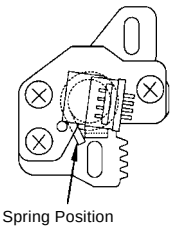
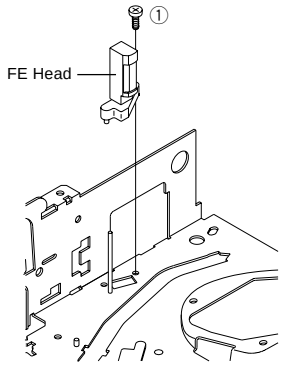


Fig. 2-10-B

2-11: FE HEAD (RECORDER ONLY) (Refer to Fig. 2-11)

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



• Screw Torque: 5 ± 0.5kgf•cm
• The FE Head is not installed on the Video Cassette Player.

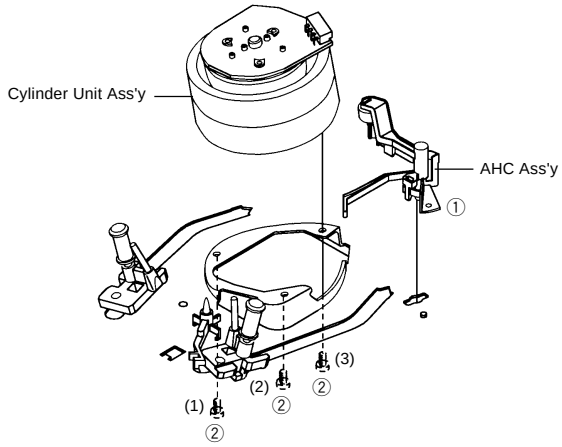
Fig. 2-11

2-12: AHC ASS'Y/CYLINDER UNIT ASS'Y (Refer to Fig. 2-12)

1. Unlock the support ① and remove the AHC Ass'y.
2. Disconnect the following connector: **(CD2001).**
3. Remove the 3 screws ②.
4. Remove the Cylinder Unit Ass'y.

NOTE

1. 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.

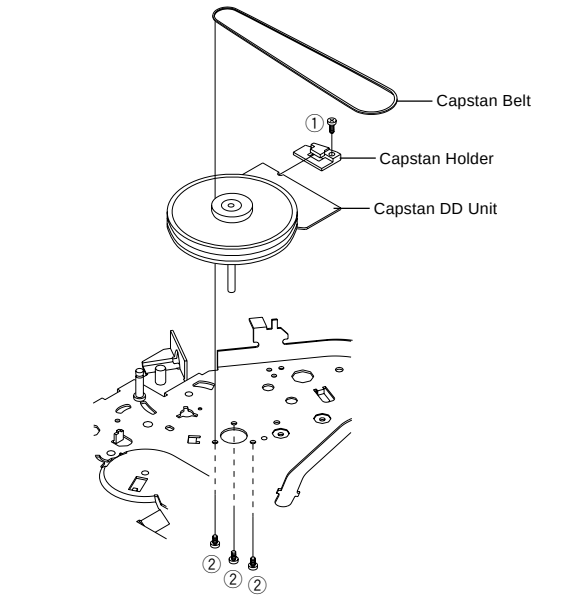


• Screw Torque: 3 ± 0.5kgf•cm

Fig. 2-12

2-13: CAPSTAN DD UNIT (Refer to Fig. 2-13)

1. Remove the Capstan Belt.
2. Remove the screw ①.
3. Remove the Capstan Holder.
4. Remove the 3 screws ②.
5. Remove the Capstan DD Unit.



• Screw Torque: 4 ± 0.5kgf•cm

Fig. 2-13

DISASSEMBLY INSTRUCTIONS

2-14: MAIN CAM/PINCH ROLLER CAM/JOINT GEAR (Refer to Fig. 2-14-A)

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

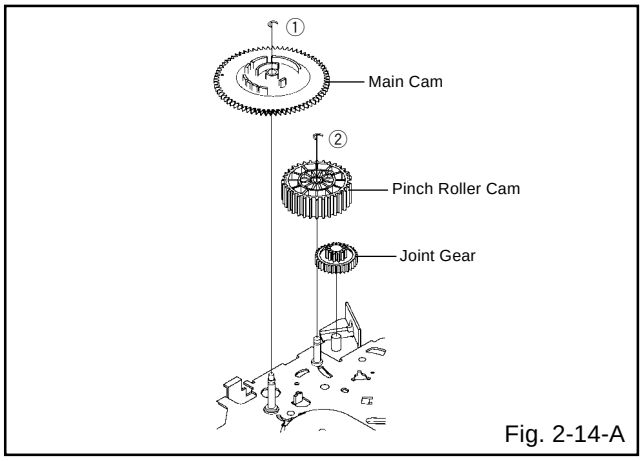


Fig. 2-14-A

NOTE

1. In case of the Pinch Roller Cam and Main Cam installation, install them as shown in the circled section of Fig. 2-14-B so that the markers meet. **(Refer to Fig. 2-14-B)**
   And also can be seen the Main Chassis hole through the Main Cam maker hole.

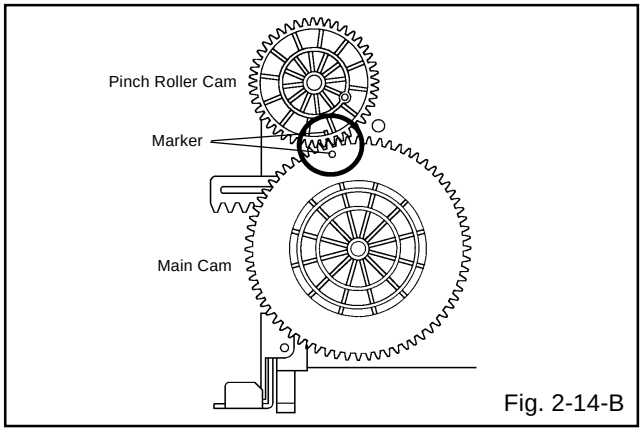


Fig. 2-14-B

2-15: LOADING GEAR S/T UNIT (Refer to Fig. 2-15-A)

1. Remove the E-Ring ① and remove the Main Loading Gear.
2. Remove the Main Rod, Tension Lever, Loading Arm S Unit and Loading Arm T Unit.

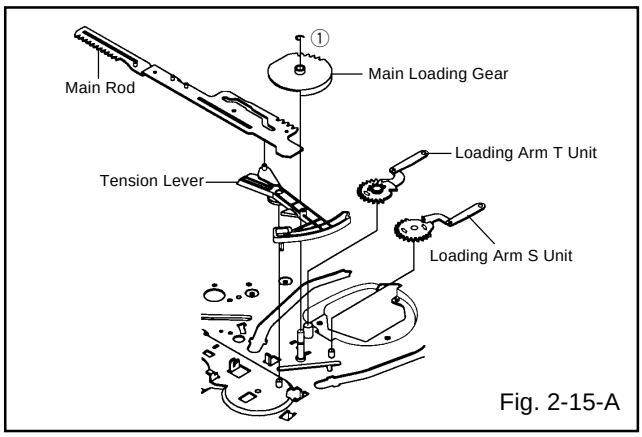


Fig. 2-15-A

NOTE

1. When you install the Loading Arm S Unit, Loading Arm T Unit and Main Loading Gear, align each marker. **(Refer to Fig. 2-15-B)**

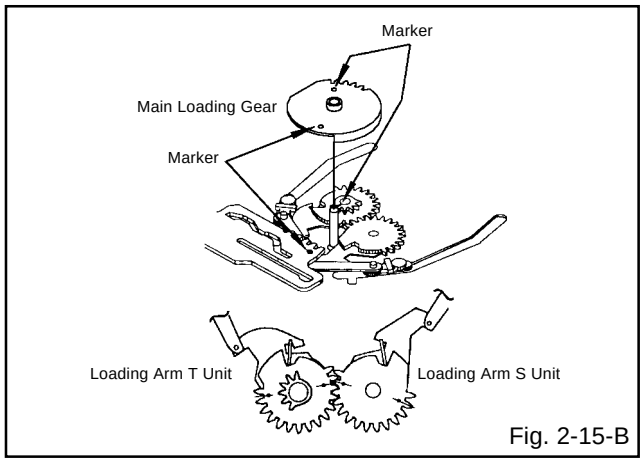


Fig. 2-15-B

2-16: CLUTCH ASS'Y/RING SPRING/CLUTCH LEVER/ CLUTCH GEAR (Refer to Fig. 2-16-A)

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

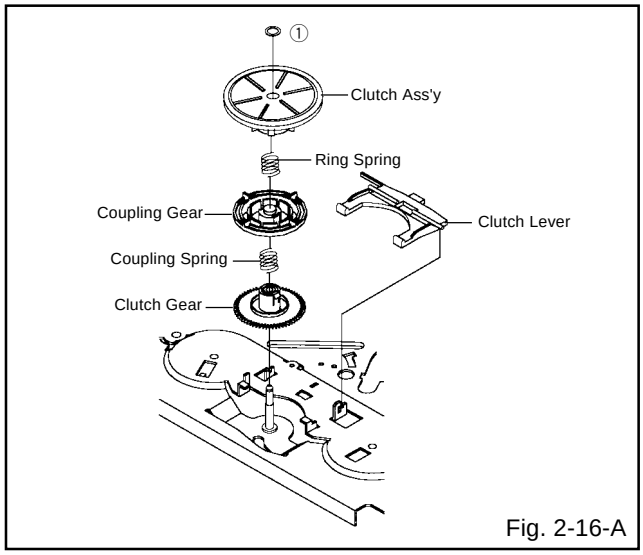


Fig. 2-16-A

NOTE

1. In case of the Clutch Ass'y installation, install it with inserting the spring of the Clutch Ass'y into the dent of the Coupling Gear. **(Refer to Fig. 2-16-B)**

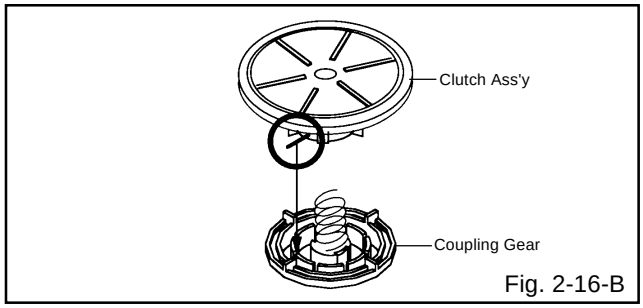


Fig. 2-16-B

DISASSEMBLY INSTRUCTIONS

2-17: CASSETTE GUIDE POST/INCLINED BASE S/T UNIT/P4 CAP/LED REFLECTOR (Refer to Fig. 2-17-A)

1. Remove the P4 Cap.
2. Unlock the support ① and remove the Cassette Guide Post.
3. Remove the Inclined Base S/T Unit.
4. Remove the screw ②.
5. Remove the LED Reflector.

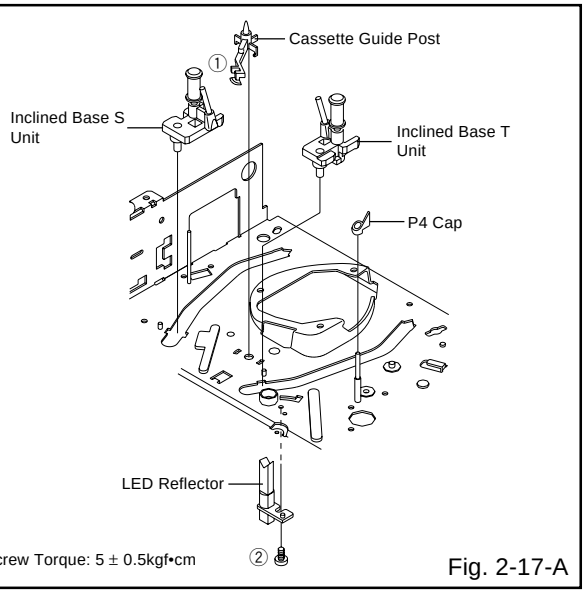


Fig. 2-17-A

NOTE

1. Do not touch the roller of Guide Roller.
2. In case of the P4 Cap installation, install it with parallel for "A" and "B" of Fig. 2-17-B.
3. In case of the Cassette Guide Post installation, install correctly as the circled section of Fig. 2-17-C.

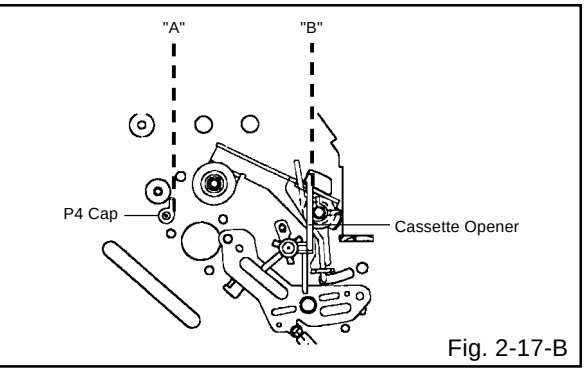


Fig. 2-17-B

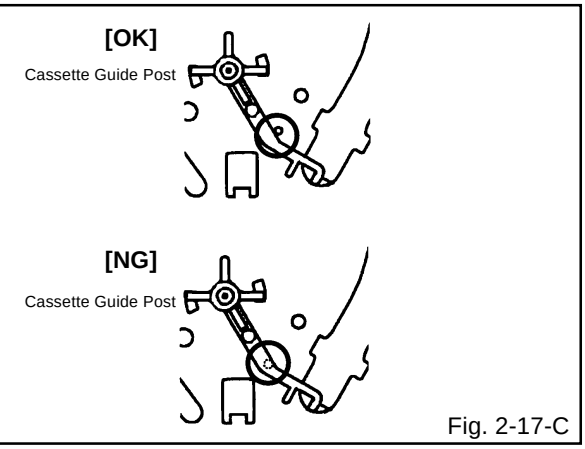


Fig. 2-17-C

DISASSEMBLY INSTRUCTIONS

3. REMOVAL OF DVD DECK PARTS

NOTE

1. Disassembly only the DVD DECK PARTS parts listed here. Minute adjustments are needed if the disassembly is done. If the repair is needed except listed parts, replace the DVD MECHA ASS'Y.

3-1: TRAY (Refer to Fig. 3-1-A)

1. Set the Tray opened. **(Refer to the DISC REMOVAL METHOD AT NO POWER SUPPLY)**
2. Unlock the 2 supports (1) and remove the Tray.

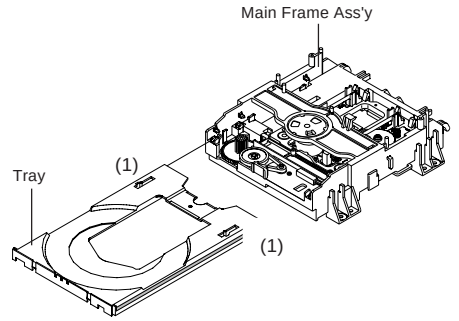


Fig. 3-1-A

NOTE

1. In case of the Tray installation, install them as the circled section of Fig. 3-1-B so that the each markers are met.

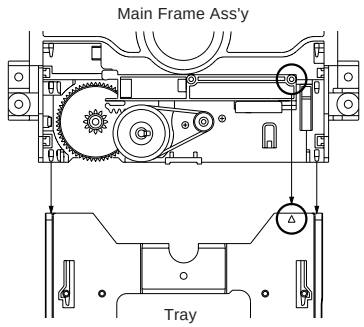
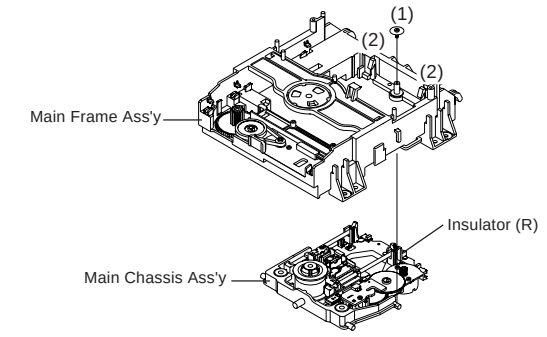


Fig. 3-1-B

3-2: MAIN CHASSIS ASS'Y (Refer to Fig. 3-2-A)

1. Remove the screw (1).
2. Unlock the 2 supports (2).
3. Remove the Insulator (R) from the Main Frame Ass'y.
4. Remove the Main Chassis Ass'y.



• Screw Torque: 2.0 ± 0.3kgf•cm

Fig. 3-2-A

NOTE

1. In case of the Main Chassis Ass'y, install it from (1) to (4) in order. **(Refer to Fig. 3-2-B)**
2. In case of the Main Chassis Ass'y installation, hook the wire on the Main Frame Ass'y as shown Fig. 3-2-C.

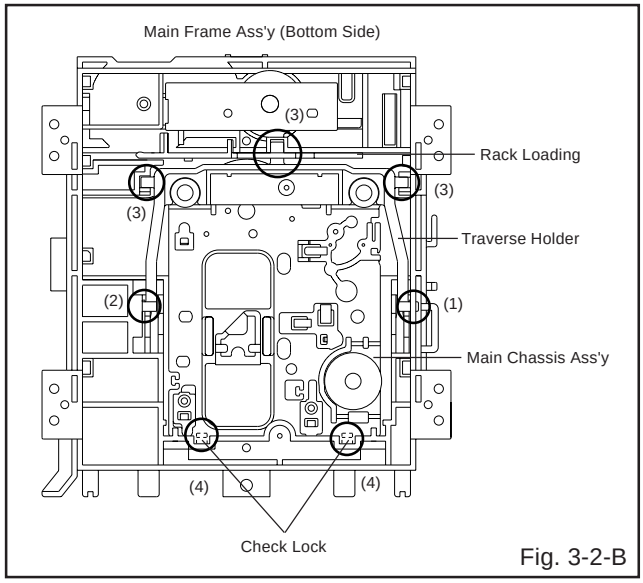


Fig. 3-2-B

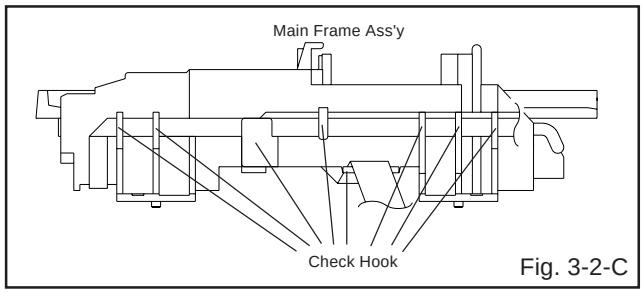
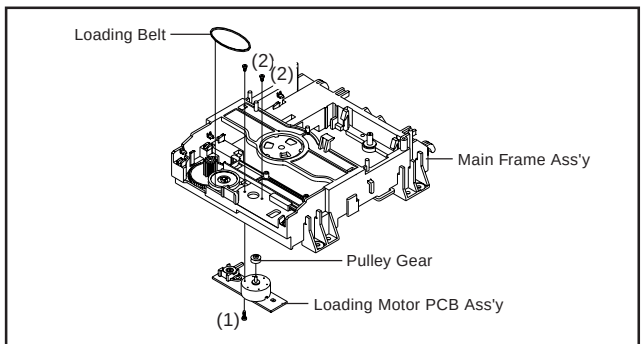


Fig. 3-2-C

3-3: LOADING MOTOR PCB ASS'Y/ LOADING BELT (Refer to Fig. 3-3-A)

1. Remove the Loading Belt.
2. Remove the screw (1).
3. Remove the 2 screws (2).
4. Remove the Loading Motor PCB Ass'y.
5. Remove the Pulley Gear.



• Screw Torque: 2.5 ± 0.3kgf•cm (Screw (1))
• Screw Torque: 1.0 ± 0.3kgf•cm (Screw (2))

Fig. 3-3-A

DISASSEMBLY INSTRUCTIONS

NOTE

1. In case of the Pulley Motor installation, check if the value of the Fig. 3-3-B is correct.
2. When installing the Loading Motor PCB Ass'y, install it correctly as Fig. 3-3-C.
3. In case of the Loading Motor PCB Ass'y installation, hook the wire on the Main Frame Ass'y as shown Fig. 3-3-C.

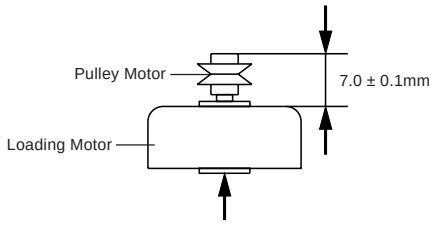


Fig. 3-3-B

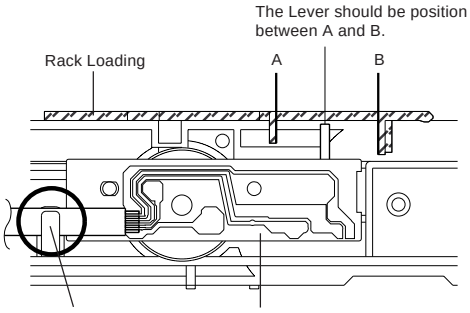


Fig. 3-3-C

3-4: RACK LOADING/MAIN GEAR/PULLEY GEAR (Refer to Fig. 3-4-A)

1. Press down the catcher (1) and slide the Rack Loading.
2. Unlock the support (2) and remove the Pulley Gear.
3. Remove the Main Gear.

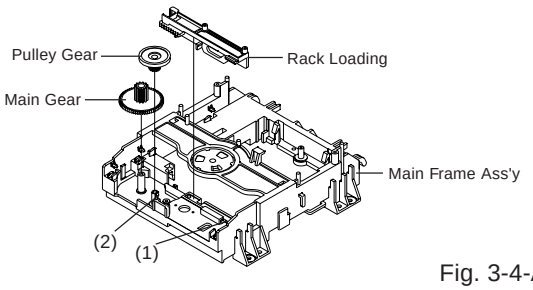


Fig. 3-4-A

NOTE

1. In case of the Rack Loading installation, do not mesh it to the Main Gear as shown the Fig. 3-4-B.

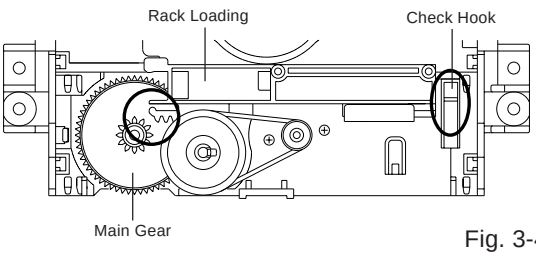


Fig. 3-4-B

3-5: CLAMPER ASS'Y (Refer to Fig. 3-5-A)

1. Press the Clamper and rotate the Clamper Plate clockwise, then unlock the 3 supports (1).
2. Remove the Clamper Plate, Clamper Magnet and Clamper.

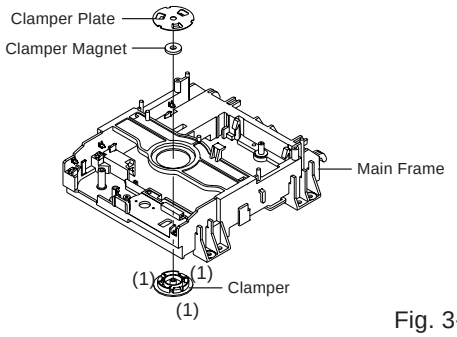


Fig. 3-5-A

NOTE

1. In case of the Clamper Ass'y installation, install correctly as Fig. 3-5-B.

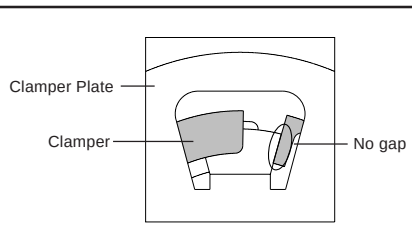


Fig. 3-5-B

3-6: TRAVERSE HOLDER/INSULATOR (F)/INSULATOR (R) (Refer to Fig. 3-6-A)

1. Remove the Traverse Holder.
2. Remove the 2 Insulator (F).
3. Remove the Insulator (R).

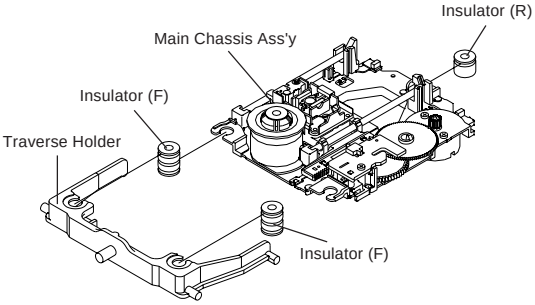


Fig. 3-6-A

NOTE

1. In case of the Insulator (F) installation, install correctly as Fig. 3-6-B.
2. In case of the Insulator (R) installation, install correctly as Fig. 3-6-C.

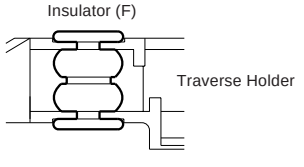


Fig. 3-6-B

DISASSEMBLY INSTRUCTIONS

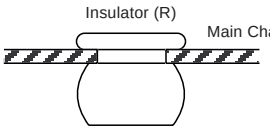
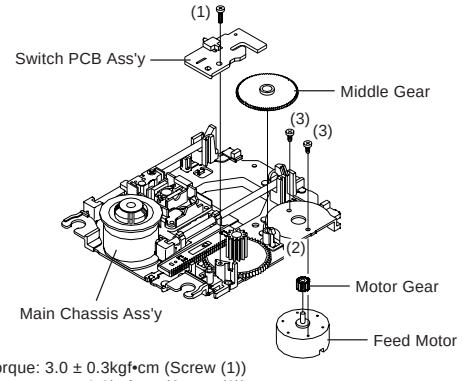


Fig. 3-6-C

3-7: SWITCH PCB ASS'Y/MIDDLE GEAR/FEED MOTOR (Refer to Fig. 3-7-A)

1. Remove the screw (1).
2. Remove the Switch PCB Ass'y.
3. Unlock the support (2).
4. Remove the Middle Gear.
5. Remove the 2 screws (3).
6. Remove the Feed Motor.
7. Remove the Motor Gear.



• Screw Torque: 3.0 ± 0.3kgf•cm (Screw (1))
• Screw Torque: 1.5 ± 0.3kgf•cm (Screw (3))

Fig. 3-7-A

NOTE

1. In case of the Motor Gear installation, check if the value of the Fig. 3-7-B is correct.
2. When installing the wire of the Switch PCB Ass'y, install it correctly as Fig. 3-7-C.
3. After the assembly of the Main Chassis Ass'y, hook the wire on the Main Chassis Ass'y as shown Fig. 3-7-D.

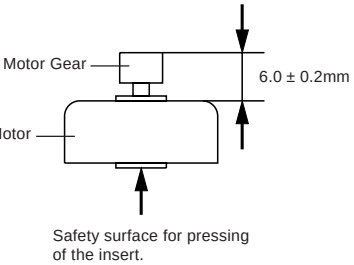


Fig. 3-7-B

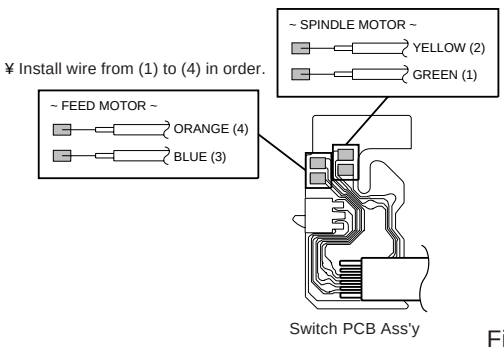
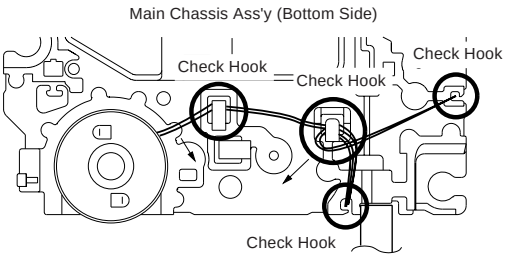


Fig. 3-7-C



• Loosen the wire in the direction of the arrow.

Fig. 3-7-D

3-8: FFC WIRE HANDLING

1. When installing the FFC, fold it correctly and install it as shown from Fig. 3-8-A to Fig. 3-8-C.

NOTE

1. Do not make the folding lines except the specified positions for the FFC.

[24 pin FFC]

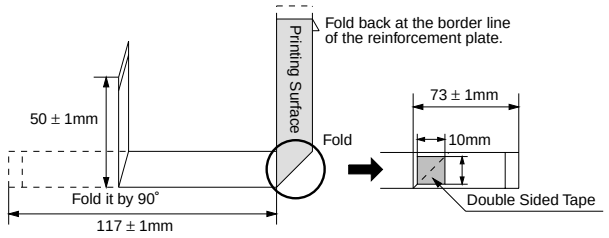
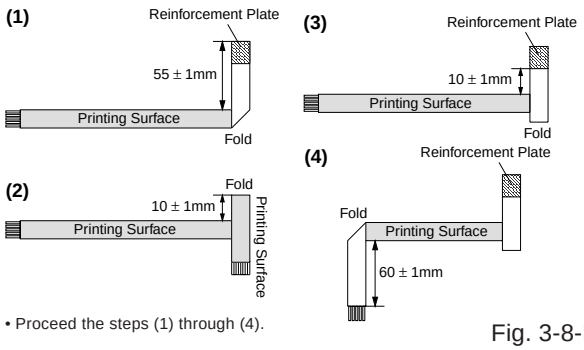


Fig. 3-8-A

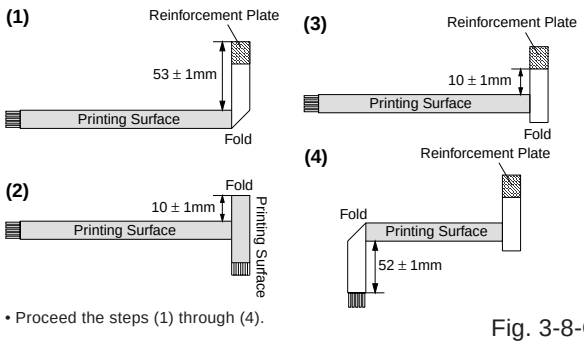
[5 pin FFC]



• Proceed the steps (1) through (4).

Fig. 3-8-B

[6 pin FFC]



• Proceed the steps (1) through (4).

Fig. 3-8-C

DISASSEMBLY INSTRUCTIONS

4. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. **(Refer to Fig. 4-1.)**

   NOTE

   Masking is carried out on all the parts located within 10 mm distance from IC leads.

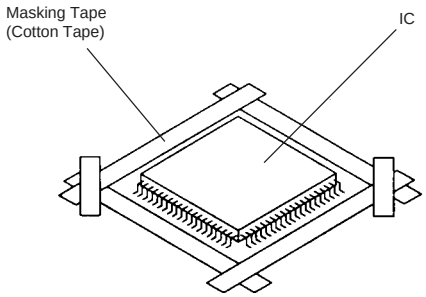


Fig. 4-1

2. Heat the IC leads using a blower type IC desoldering machine. **(Refer to Fig. 4-2.)**

   NOTE

   Do not rotate or move the IC back and forth until IC can move back and forth easily after desoldering the leads completely.

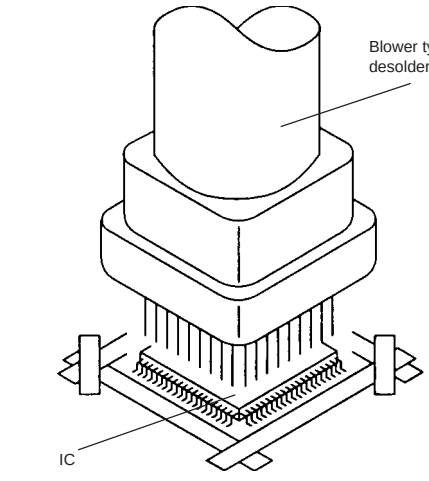


Fig. 4-2

3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using a tweezers and remove the IC by moving with the IC desoldering machine. **(Refer to Fig. 4-3.)**

   NOTE

   Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.

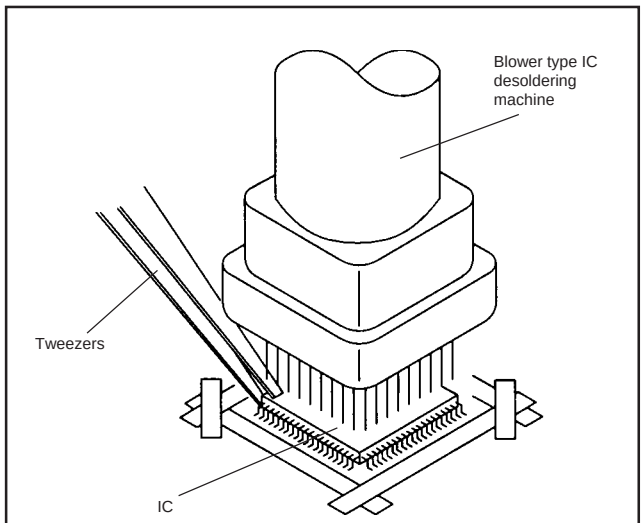


Fig. 4-3

4. Peel off the Masking Tape.
5. Absorb the solder left on the pattern using the Braided Shield Wire. **(Refer to Fig. 4-4.)**

   NOTE

   Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.

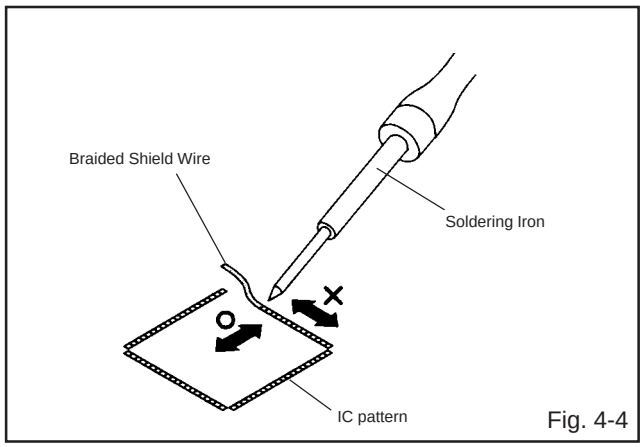


Fig. 4-4

DISASSEMBLY INSTRUCTIONS

INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. **(Refer to Fig. 4-5.)**

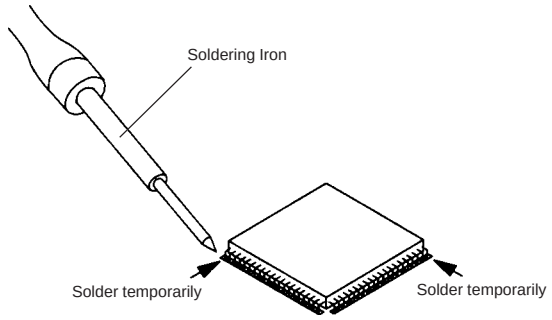


Fig. 4-5

2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. **(Refer to Fig. 4-6.)**

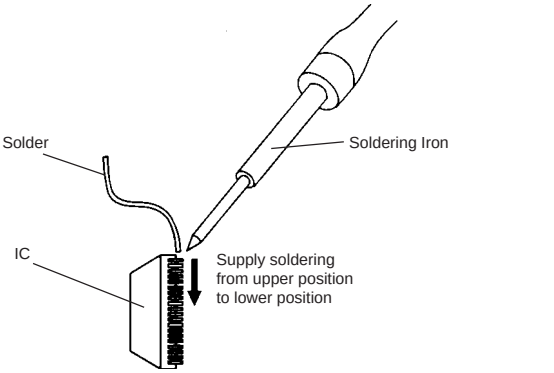


Fig. 4-6

3. Absorb the solder left on the lead using the Braided Shield Wire. **(Refer to Fig. 4-7.)**

   NOTE

   Do not absorb the solder to excess.

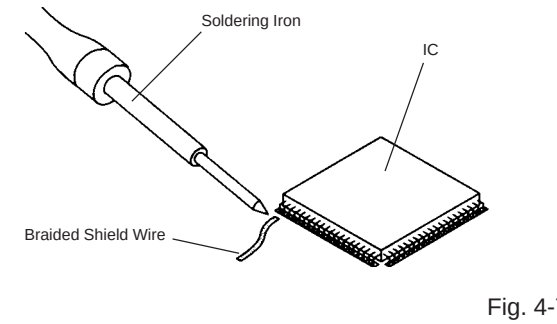


Fig. 4-7

4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. **(Refer to Fig. 4-8.)**

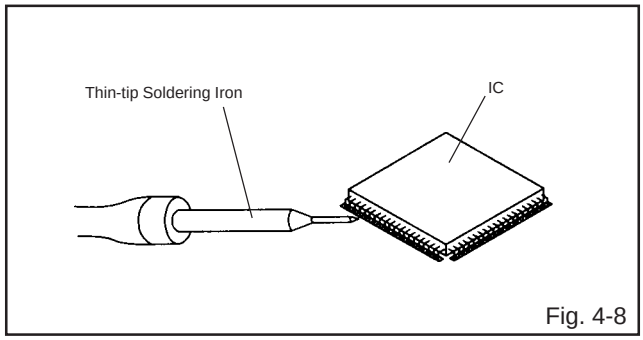


Fig. 4-8

5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass.
   Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

   NOTE

   When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, be always sure to replace the IC in this case.

MPEG/MICON/DSP SCHEMATIC DIAGRAM

(DVD PCB)

MPEG/MICON/DSP/RF_AMP
IC4001
ZR36862PQCG

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

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

DIGITAL AUDIO SIGNAL(PB)

FROM/TO MEMORY

FROM/TO AUDIO/VIDEO

FROM/TO MOTOR DRIVE

FROM/TO POWER

DVD/VR 130mm
DVD COMBO 250mm
CD4002 (CP8001)
C32B1103

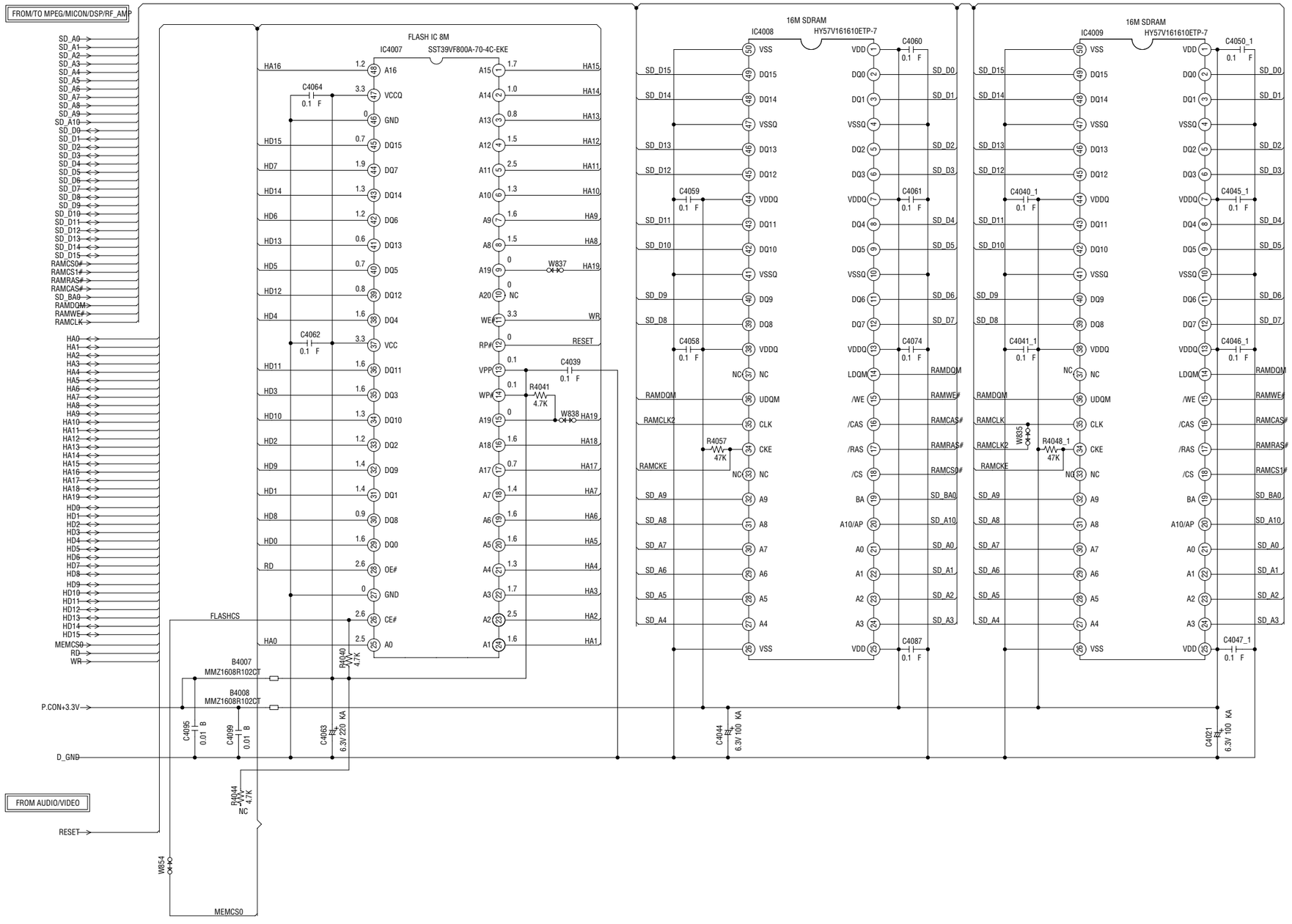
PCB130
VMD348

G-1

G-2

MEMORY SCHEMATIC DIAGRAM

(DVD PCB)

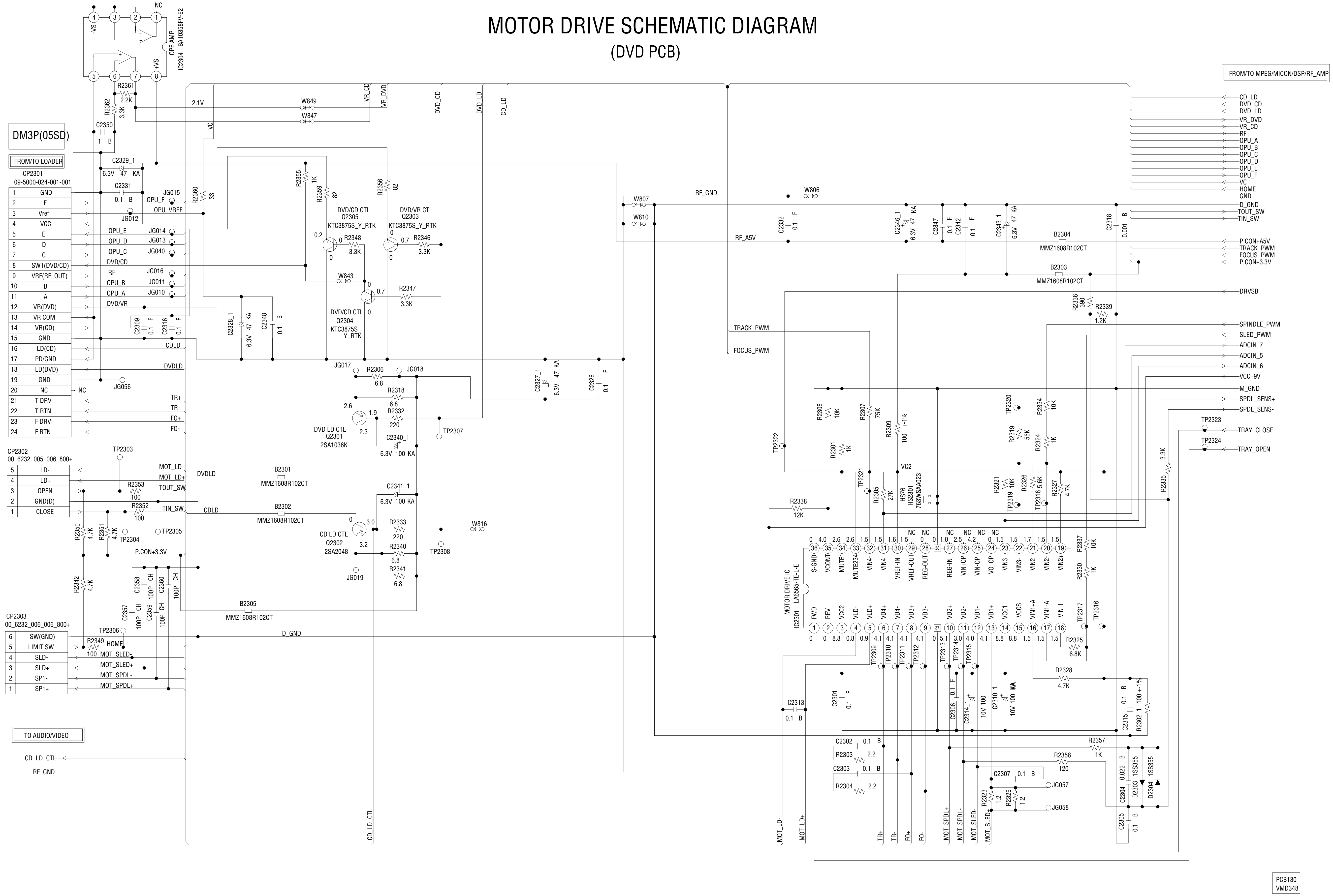


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

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

PCB130
VMD348

MOTOR DRIVE SCHEMATIC DIAGRAM
(DVD PCB)



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

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

AUDIO/VIDEO SCHEMATIC DIAGRAM

(DVD PCB)

	1	2	3	4
A	Y	G	CVBS	Y
B	V	R	Y	V
C	U	B	C	U
D	C	CVBS	CVBS	CVBS

FROM/TO MPEG/MICON/DSP/RF_AMP

P.CON+A5V
DAC_VIDEO_A
DAC_VIDEO_G
DAC_VIDEO_B
DAC_VIDEO_B
P.CON+5V

RESET
MG
MD
ML
AMCLK
ABCLK
ALRCLK
ASDATA0
P-H/I-L

DVD-H
SYS_MUTE
GND

W855 W860 W808 W809

D_GND

C8120 0.1 F
C8119_1 6.3V 100 KA
B8103 MMZ1608R102CT

TO MEMORY
RESET

FROM MOTOR DRIVE
CD_LD_CTL
RF_GND

P.CON+A5V
R8110 470
R8111 470

DAC_VIDEO_A
C8115 12P CH
C8124 150P CH
L8105 1uH 0305
C8127 150P CH
0.6
1.4
0
VIDEO_BUFFER
Q8105
2SA1037AKT146R,S

DAC_VIDEO_C
C8105 12P CH
C8104 150P CH
L8102 1uH 0305
C8106 150P CH

DAC_VIDEO_B
C8108 12P CH
C8107 150P CH
L8103 1uH 0305
C8109 150P CH
W819

DAC_VIDEO_D
C8111 12P CH
C8110 100P CH
L8104 1uH 0305
C8112 33P CH
W820

W818

CVBS/G/Y
C/B/U
Y/R/V
CVBS/C

8 DAC_A_VIDEO
9 DAC_C_VIDEO
10 DAC_B_VIDEO
5 DAC_D_DVD_VIDEO

C8114 1 B
C8125 1 B
R8113 470
6

C8113 1 B
C8126 1 B
R8112 470
7

STEREO DAC IC
IC8102 PCM1753DBQR

8	VOUTR	2.4
7	VOUTL	2.5
6	VCC	4.9
5	VDD	3.3
4	DGND	0
3	LRCK	1.6
2	DATA	1.1
1	BCK	1.6
9	AGND	0
10	VCOM	2.4
11	ZEROR/ZEROA	3.3
12	ZEROL/NA	0 NC
13	MD	0
14	MC	0
15	ML	3.3
16	SCK	1.7

NC

C8121_1 25V 10 KA

ZERO MD MC ML AMCLK ABCLK ASDATA0 ALRCLK

P.CON+A5V
CD_LD_CTL
D8102 1SS355
W873
R8116 470
0.2
0
3.1 W814
CD_LD_CTL
Q8101
DTC124EKAT146

DVD-H
P-H/I-L
R8101 1K
TP8101
TP8102
TP8103
NG
TP8104
TP8105
W811

DAC_A_VIDEO
RESET
ZERO
D8111 1SS355
R_AUDIO
L_AUDIO
DAC_B_VIDEO
DAC_C_VIDEO
DAC_D_DVD_VIDEO
SYS_MUTE
D8112 1SS355

TP8106 TP8107 TP8108 TP8109 TP8110 TP8111 TP8112 TP8113 TP8114
W826
W824

C8122 0.001 B

FROM/TO REGULATOR

CP8101_1
IMSA-9604S-14F

V SW	14
Y(G)	13
DVD-H	12
DVD RESET	11
ZERO	10
AUDIO-R	9
GND	8
AUDIO-L	7
GND	6
V(R)	5
GND	4
U(B)	3
GND	2
CVBS	1

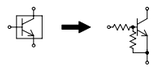
PCB130
VMD348

◀◀ R.SIGNAL+ COMPONENT SIGNAL(U)
≪ B.SIGNAL+ COMPONENT SIGNAL(V)
◀ AUDIO SIGNAL(PB)

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

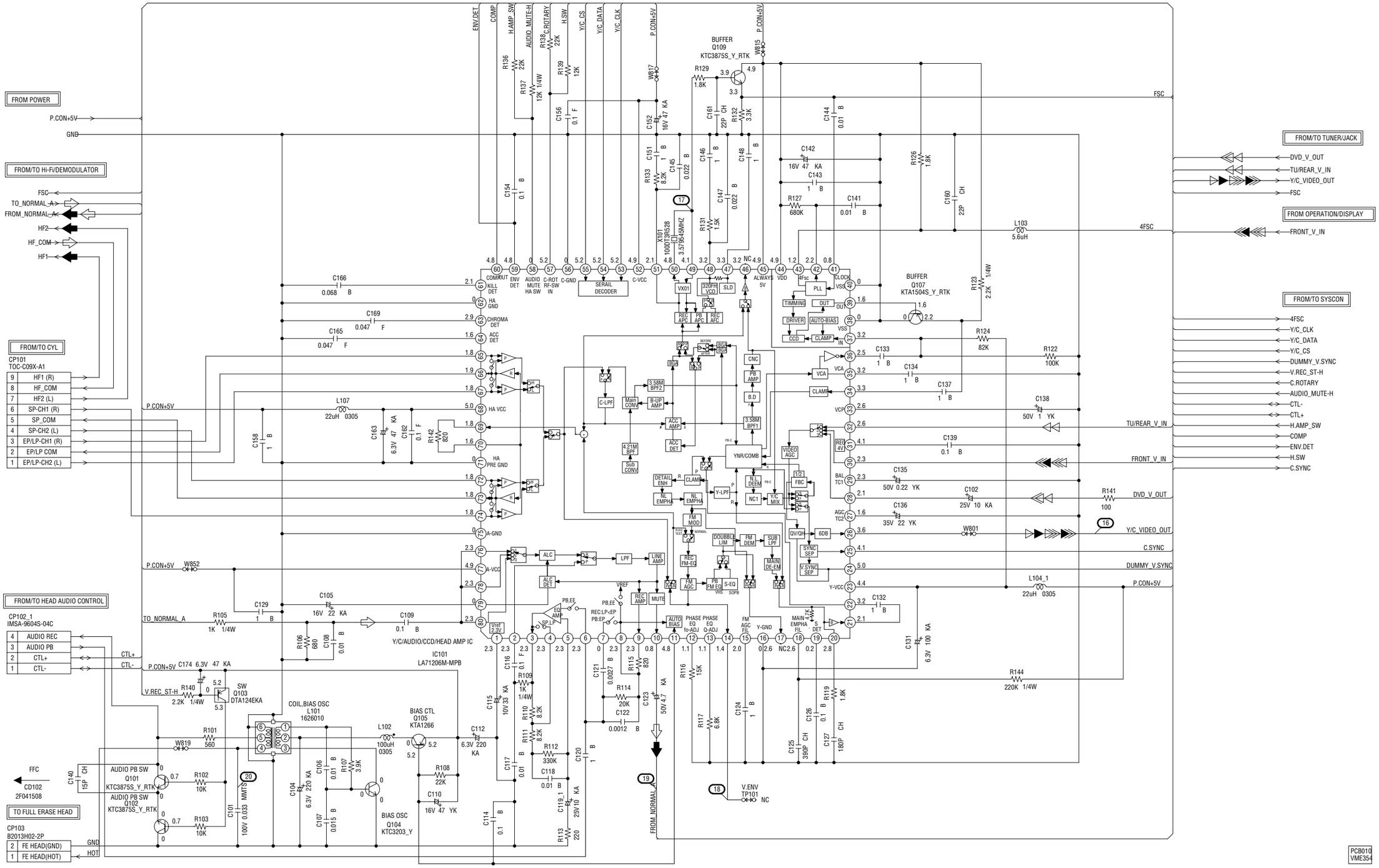
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR



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

(VCR PCB)



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

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

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

TUNER/JACK SCHEMATIC DIAGRAM

(VCR PCB)

FROM/TO AUDIO/VIDEO

CP8001 (CP8101)
IMSA-9604S-14C

1	PROGRE H
2	Y(G)
3	DVD-H
4	DVD RESET
5	ZERO
6	AUDIO-R
7	GND
8	AUDIO-L
9	GND
10	V(R)
11	GND
12	U(B)
13	GND
14	CVBS

FFC

CD8001
2F0E1001

TU301 115-V-HA35ARE

RF MUTE SW Q301 KTC3875S_Y_RTK

AUDIO AMP IC IC8001 RC-4580IDR

BUFFER Q8019 KTA1504S_Y_RTK

BUFFER Q8020 KTA1504S_Y_RTK

BUFFER Q8021 KTA1504S_Y_RTK

BUFFER Q8023 KTA1504S_Y_RTK

Y/C SEPA J8008 MDC-070V-B_LF

YUV OUT J8007 MSP-213V1-652_NI_LF

Y/C MIX IC IC8003 MM1511XNRE

AV SW IC IC8005 MM1501XNRE

SW Q8022 DTC124EKA

SW Q8024 DTC114EKA

D AUDIO DRIVER Q8001 KTC3875S_Y_RTK

MUTE SW Q8002 DTC144EKA

MUTE SW Q8010 DTA143EKA

MUTE SW Q8011 DTC124EKA

AUDIO MUTE Q8008 KTC3875S_Y_RTK

AUDIO MUTE Q8009 KTC3875S_Y_RTK

MUTE DET Q8012 KTC3875S_Y_RTK

DVD AUDIO OUT COAXIAL J8006 MSP-213V1-732_NI_LF

MUTE SW Q8007 DTA124EKA

MUTE SW Q8005 KTC3875S_Y_RTK

MUTE SW Q8006 KTC3875S_Y_RTK

REAR OUT JACK J8001 MSP-213V1-432_NI_LF

BUFFER Q8004 KTA1266

VIDEO MUTE SW Q8003 DTC124EKA

FROM/TO Y/C/AUDIO/CCD/HEAD AMP
- DVD_V_OUT
- FSC
- TU/REAR_V_IN
- Y/C_VIDEO_OUT

FROM/TO SYSCON
- DVD_POWER_CTL
- DVD_RESET
- SYS_MUTE
- SCL
- SDA
- AV_SW1
- TV/VCR
- RF_CH_SW
- AFT-S.CURVE
- POWER_MUTE-L
- VIDEO_MUTE-H
- VIDEO_OUT
- SW_V_OUT

FROM/TO Hi-Fi/DEMODULATOR
- DVD_A_OUT_R
- DVD_A_OUT_L
- SIF_OUT
- REAR_A_IN_L
- AUDIO_OUT_L
- AUDIO_OUT_R
- RF_CONV_A_OUT

FROM POWER
- GND
- +32V
- AT+5.2V
- P.CON+5V
- P.CON+12V
- SPDIF
- P.CON+9V

PCB010
VME354

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

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

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

CAUTION: DIGITAL TRANSISTOR

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

SYSCON SCHEMATIC DIAGRAM
(VCR PCB)

FROM/TO POWER

TX
RX
DVD_POWER_CTL
AT+12.6_V
P.CON+5V
AT+5V[M-CON]
VCR_POWER_ON-L
POWER_FAIL
AT+5.2V
GND
MOTOR_GND

FROM/TO DECK

CP3001
TMC-J12P-B2

1	CAP FG	CAP_FG
2	CAP VCO	AT+12.6_V
3	VCC	P.CON+5V
4	CAP.M/F/R	CAP_F/R
5	I LIMIT	CAP_LIMIT
6	MOTOR GND	
7	GND	
8	LD/CY VCO	AT+12.6_V
9	CAP CTL	CONTROL_IN
10	LDM CTL	LDM_CTL
11	CYL FG/PG	CYL_FG/PG
12	CYL CTL	CYL_DRIVE

SYSCON/TIMER/SERVO IC
IC3001
OEC0147A

FROM/TO Y/C/AUDIO/CCD/HEAD AMP

DUMMY_V.SYNC
C.SYNC
V.REC_ST-H
C.ROTARY
AUDIO_MUTE-H
CTL-
CTL+
H.AMP_SW
COMP
ENV.DET
H.SW
Y/C_CS
Y/C_DATA
Y/C_CLK
4FSC

FROM/TO TUNER/JACK

DVD_POWER_CTL
RF_CH_SW
SW_V_OUT
AV_SW1
SCL
SDA
AFT-S.CURVE
TV/VCR
VIDEO_OUT
POWER_MUTE-L
VIDEO_MUTE-H
DVD_RESET
SYS_MUTE

FROM/TO Hi-Fi/DEMODULATOR

REC_MUTE_H
HIFI_ENV.DET
HIFI_H.SW
AUDIO_MUTE-H
SCL
SDA
ST_SELECT

FROM/TO OPERATION1/DISPLAY

DVD_LED
VCR_LED
KEY-A
KEY-B
REM_IN
1G/VCR/T-REC_LED
2G/DUB/REC_LED
3G/TV/VCR_LED
4G/VSC_LED
5G/CS/BS_LED
SEG_1
SEG_2
SEG_3
SEG_4
SEG_5
SEG_6
SEG_7
SEG_8
SEG_9
SEG_10

JG3002 JG3003 JG3004 JG3005 JG3006 JG3007 JG3008
TX
MD0
RESET
FWE
AT+5V[M-CON]

RX DRIVE Q3003 DTA124EKA
RX DRIVE Q3007 DTC124EKA

BOT SENSOR Q3008 ST-304L
EOT SENSOR Q3006 ST-304L
D3001 LTE-3271T-012A-O
TAB SW SW3001 LSA-1145AU
MS_SEN B Q3004 RPI-352C40N
MS_SEN A Q3005 RPI-352C40N
REEL SENS Q3002 RPI-303
SYSTEM RESET IC IC3003 PST3231NR
EEP ROM IC IC3099_1 BR24L02F-WE2

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

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

CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

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

PCB010
VME354

OPERATION/DISPLAY SCHEMATIC DIAGRAM

(VCR PCB)

V651 CO2D0M3-A

VCR REC TRK P DVD CD PM

15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

SEG1 SW Q664 DTC124EKA — R674 180 — 1G SW Q665 KTA1504S_Y_RTK

SEG2 SW Q663 DTC124EKA — R673 180 — 2G SW Q661 KTA1504S_Y_RTK

SEG3 SW Q662 DTC124EKA — R672 180 — SEG4 SW Q660 DTC124EKA

SEG5 SW Q658 DTC124EKA — R670 180 — 3G SW Q659 KTA1504S_Y_RTK

SEG6 SW Q657 DTC124EKA — R668 180 — 4G SW Q654 KTA1504S_Y_RTK

SEG7 SW Q656 DTC124EKA — R667 180 — 5G SW Q651 KTA1504S_Y_RTK

SEG8 SW Q655 DTC124EKA — R665 180 — SEG9 SW Q653 DTC124EKA

SEG10 SW Q652 DTC124EKA — R663 180 — R662 180

R675 820 — R671 820 — R669 820 — R664 820 — R661 820

SEG_1 — 1G/VCR/T-REC_LED — SEG_2 — SEG_3 — 2G/DUB/REC_LED — SEG_4 — SEG_5 — 3G/TV/VCR_LED — SEG_6 — 4G/VSC_LED — SEG_7 — SEG_8 — 5G/CS/BS_LED — SEG_9 — SEG_10

FRONT AV JACK AUDIO R J651 MSP-281V31-A — C654 470P CH — FRONT_A_IN_R

FRONT AV JACK AUDIO L J652 MSP-281V40-B — C655 470P CH — FRONT_A_IN_L

FRONT AV JACK VIDEO J653 MSP-281V42-B — C656 25V 10 KA — FRONT_V_IN — R676 75

OS651 PIC-37043LO-H — Vout GND B+ — 4.9 0 5.1 — REM_IN — R651 100 1/4W — AT+5.2V — C652 10V 100 YK

FROM/TO SYSCON

DVD_LED
VCR_LED
1G/VCR/T-REC_LED
2G/DUB/REC_LED
3G/TV/VCR_LED
4G/VSC_LED
5G/CS/BS_LED
SEG_1
SEG_2
SEG_3
SEG_4
SEG_5
SEG_6
SEG_7
SEG_8
SEG_9
SEG_10
REM_IN
KEY-B
KEY-A

TO HI-FI/DEMODULATOR
FRONT_A_IN_L
FRONT_A_IN_R

TO Y/C/AUDIO/CCD/HEAD AMP
FRONT_V_IN

FROM POWER
LEM_VCC
P.CON+5V
AT+5.2V
GND

D656 1N4005-EIC

KEY-A — DVD_LED — VCR_LED

R653 330 1/4W — VCR_LED D651 LTL-1CHEE-002A

C653 10V 470 YK

DVD LED SW Q666 DTA124EKA — R683 560 — W802

AT+5.2V

KEY-A

FROM/TO OPERATION1/LED

CP651 (CP681) IMSA-9604S-05F

5	4	3	2	1
DVD LED	GND	NC	KEY-A	KEY-B

CH DOWN SW655 EVQ21505R — VCR EJECT SW651 EVQ21505R — POWER SW652 EVQ21505R — VCR/DVD(HDD) SW653 EVQ21505R — CH UP SW654 EVQ21505R

R657 2.7K — R658 1.8K — R659 1.5K

KEY-B

PCB010 VME354

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

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

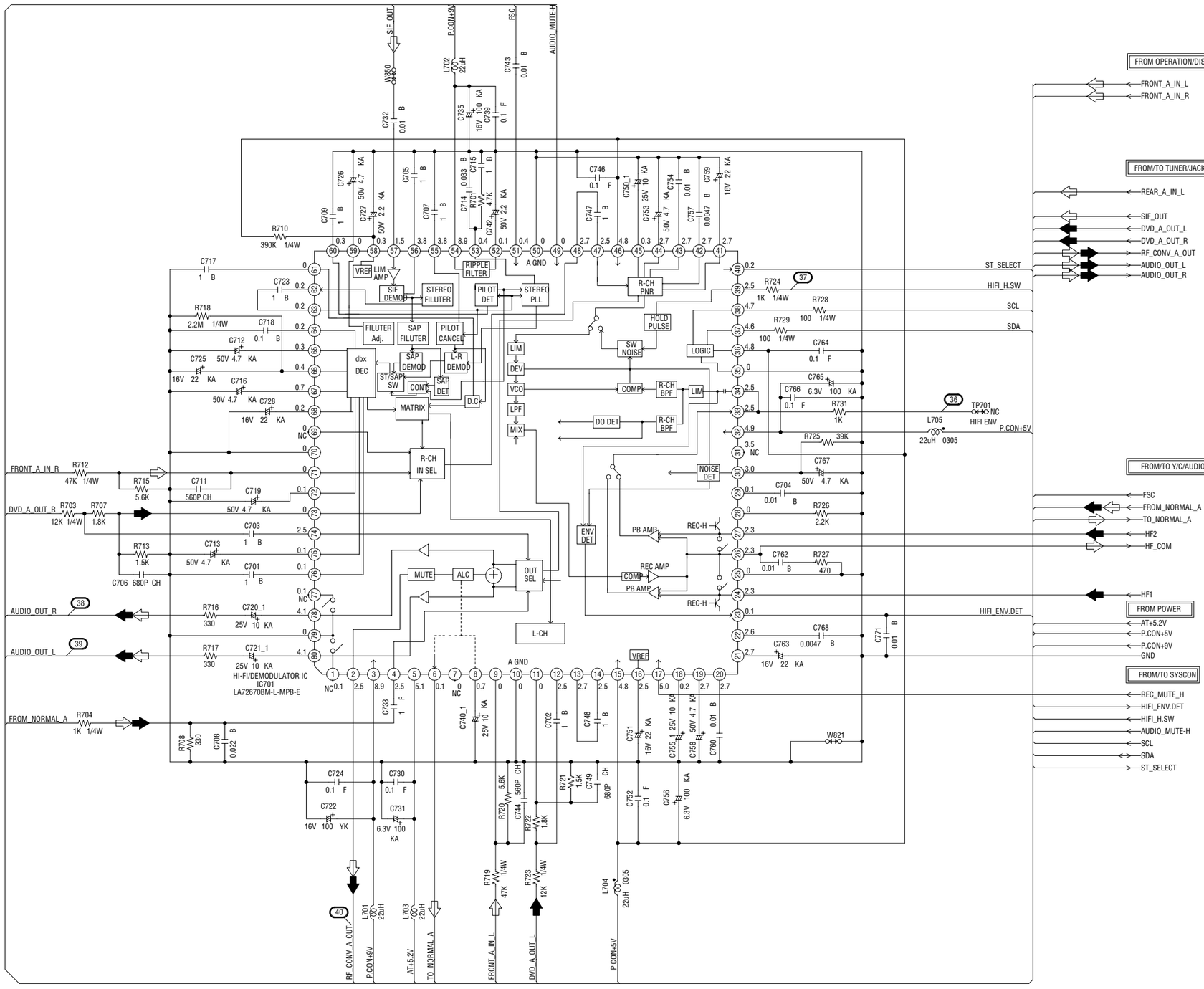
CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

AUDIO SIGNAL(REC)
RECORD COLOR SIGNAL
RECORD LUMINANCE SIGNAL

Hi-Fi/DEMODULATOR SCHEMATIC DIAGRAM

(VCR PCB)

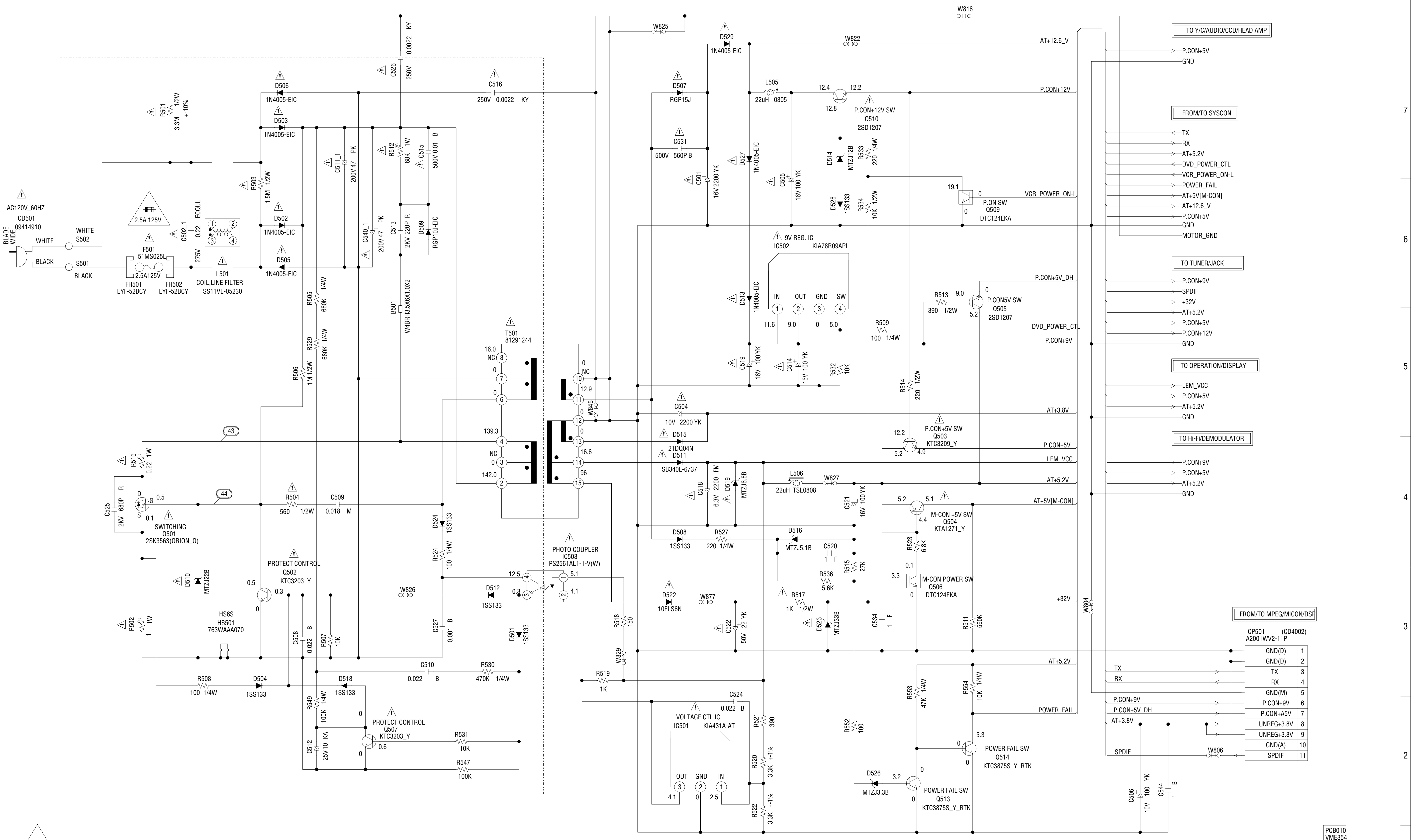


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

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

⇦ AUDIO SIGNAL(REC)
⬅ AUDIO SIGNAL(PB)

POWER SCHEMATIC DIAGRAM
(VCR PCB)



2.5A 125V

CAUTION :FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE 2.5A 125V(F501).

ATTENTION :POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 2.5A 125V(F501).

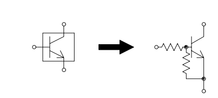
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

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

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

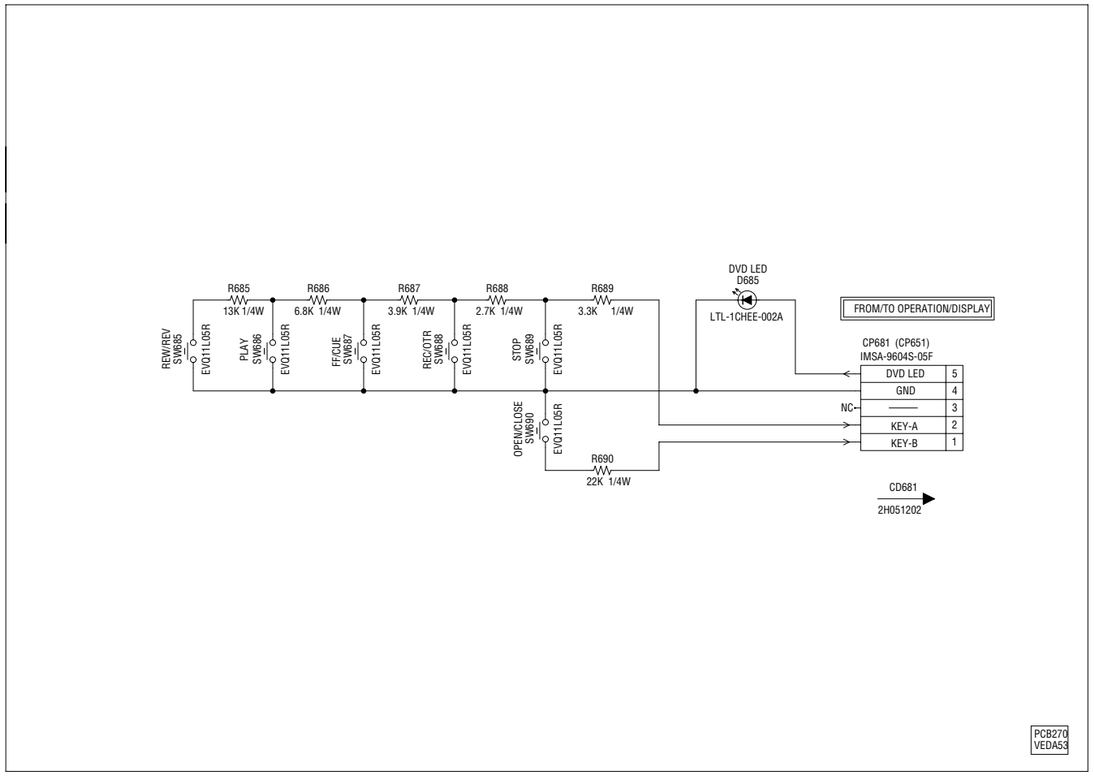
CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

CAUTION: DIGITAL TRANSISTOR



OPERATION/LED SCHEMATIC DIAGRAM

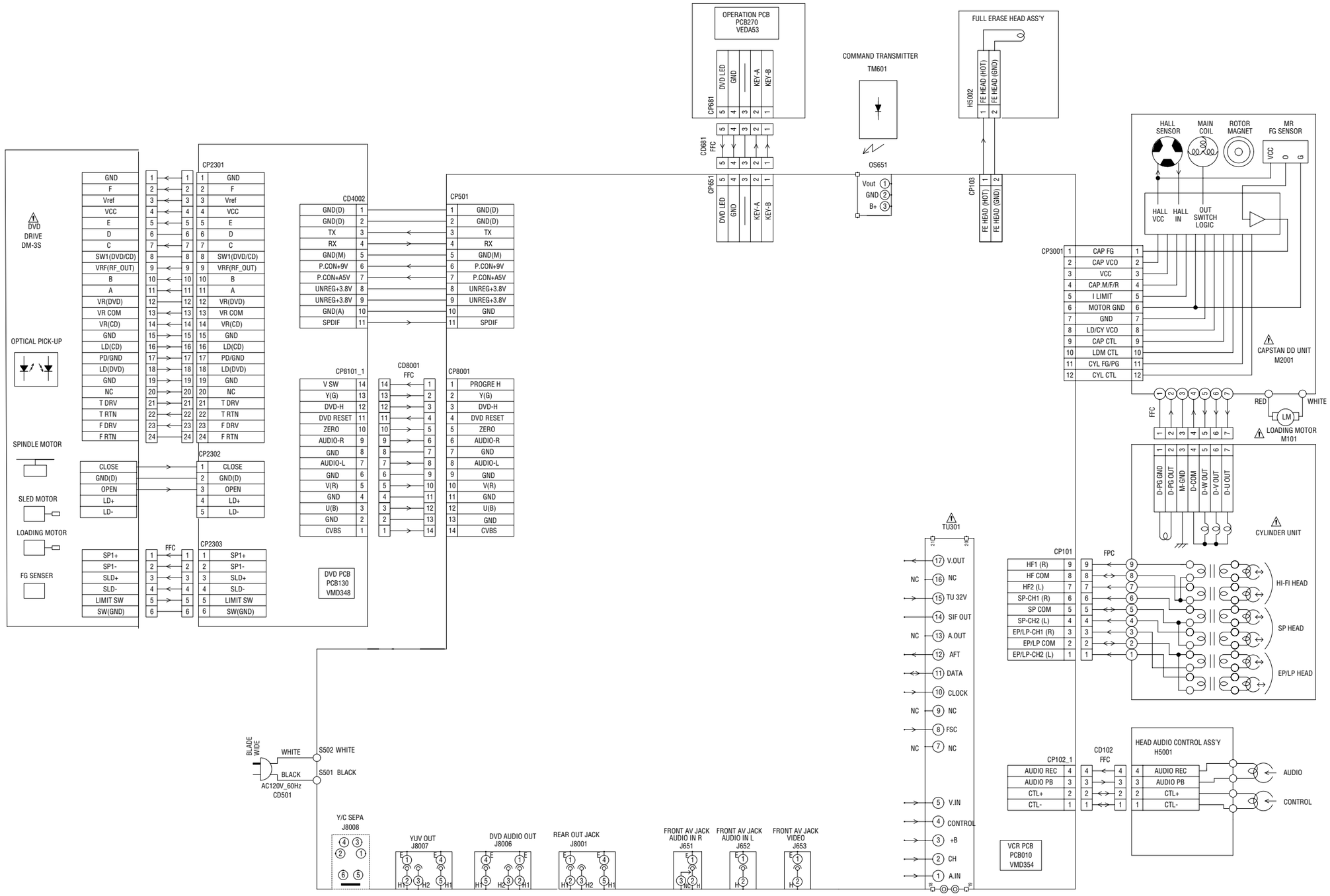
(OPERATION PCB)



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

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

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。

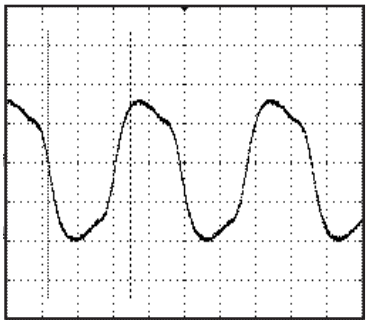
NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

WAVEFORMS

MPEG/MICON/DSP/RF_AMP

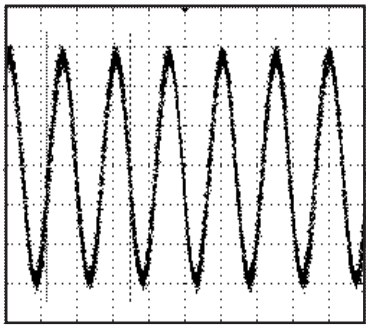
10ns
100mV

①



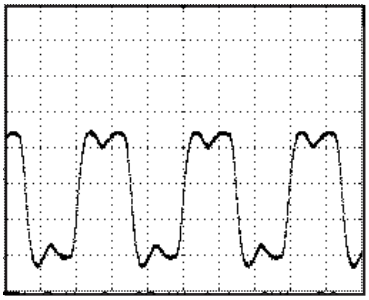
5ns
20mV

②



20ns
1.0V

③

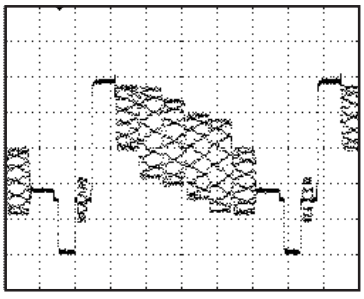


200ns
1.0V

④

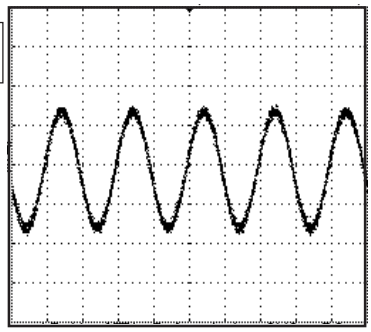
10µs
200mV

⑤



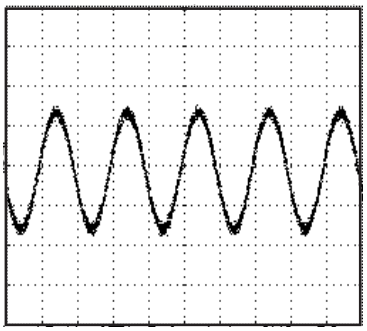
500µs
1.0V

⑥



500µs
1.0V

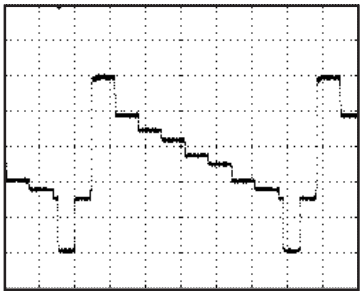
⑦



AUDIO/VIDEO

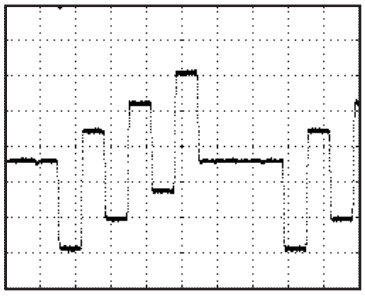
10µs
200mV

⑧



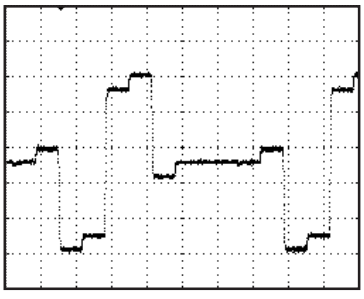
10µs
100mV

⑨



10µs
100mV

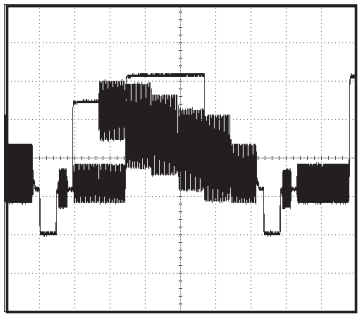
⑩



Y/C/AUDIO/CCD/HEAD AMP

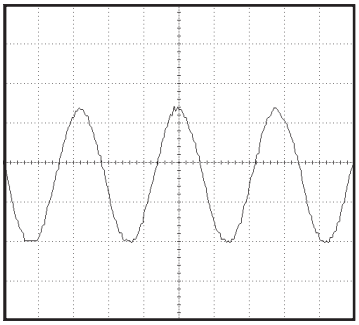
PB
10µs
500mV

⑯



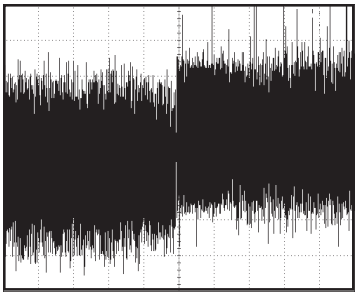
PB
100ns
100mV

⑰



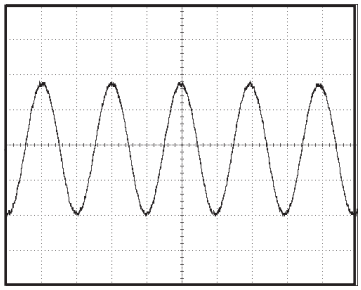
PB
1ms
100mV

⑱



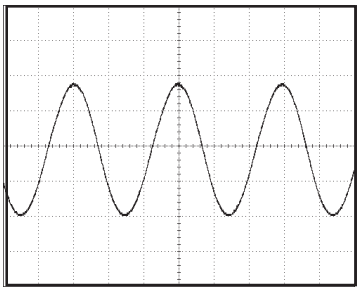
PB
200ms
500mV

⑲



REC
5µs
20V

⑳

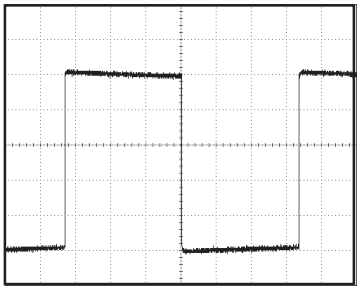


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

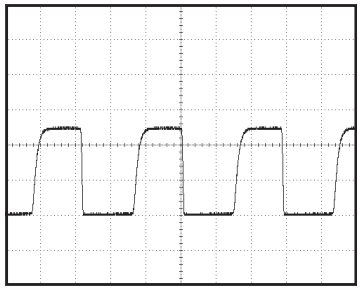
SYSCON

PB
5ms
1.0V



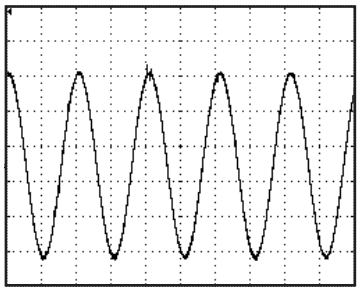
21

PB
5ms
2.0V



27

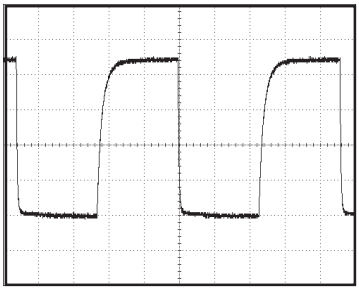
PB
500µs
200mV



39

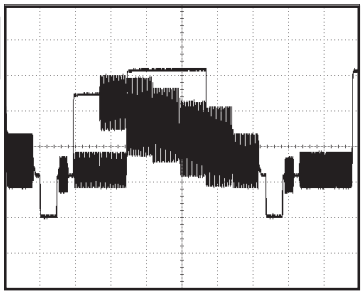
TUNER/JACK

PB
200µs
1.0V



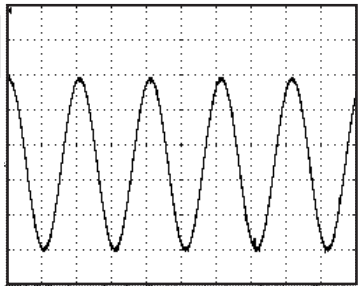
22

PB
10µs
200mV



32

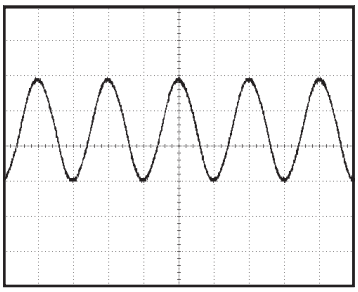
PB
500µs
200mV



40

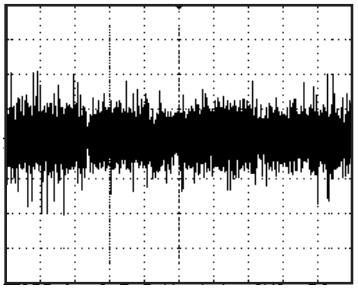
Hi-Fi/DEMODULATOR

POWER ON
50ns
1.0V



23

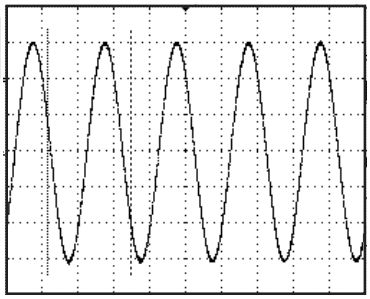
PB
10ms
1.0V



36

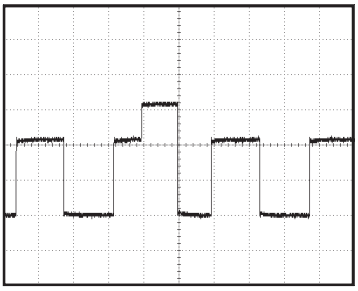
TUNER/JACK

PB
500µs
100mV



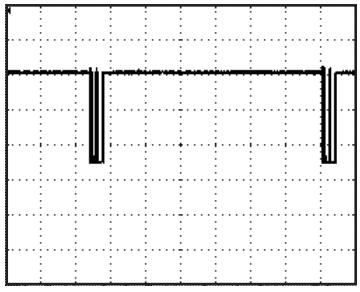
41

PB
500µs
1.0V



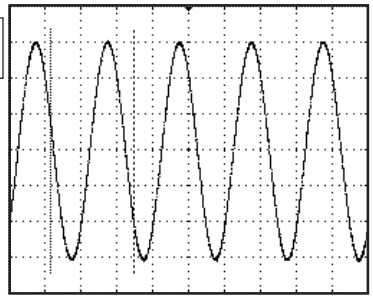
24

PB
1ms
2.0V



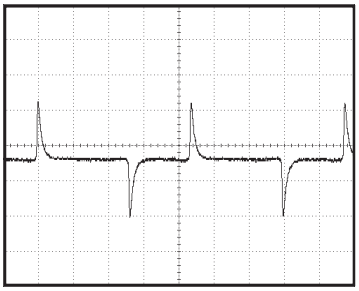
37

PB
500µs
100mV



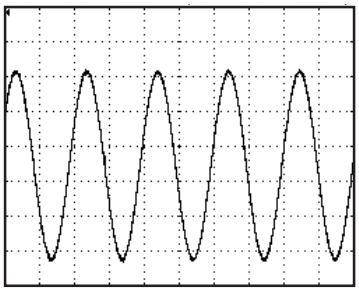
42

PB
5ms
500mV



25

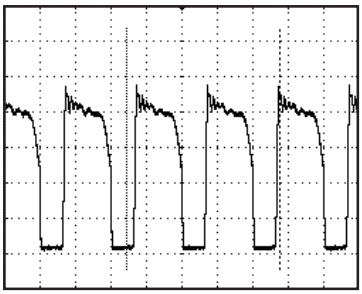
PB
500µs
200mV



38

POWER

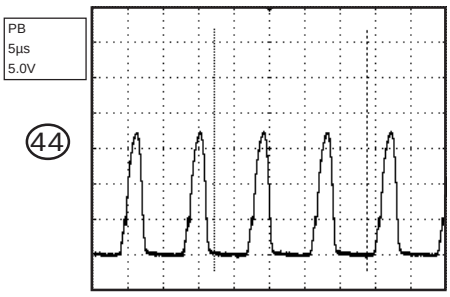
PB
5µs
500mV



43

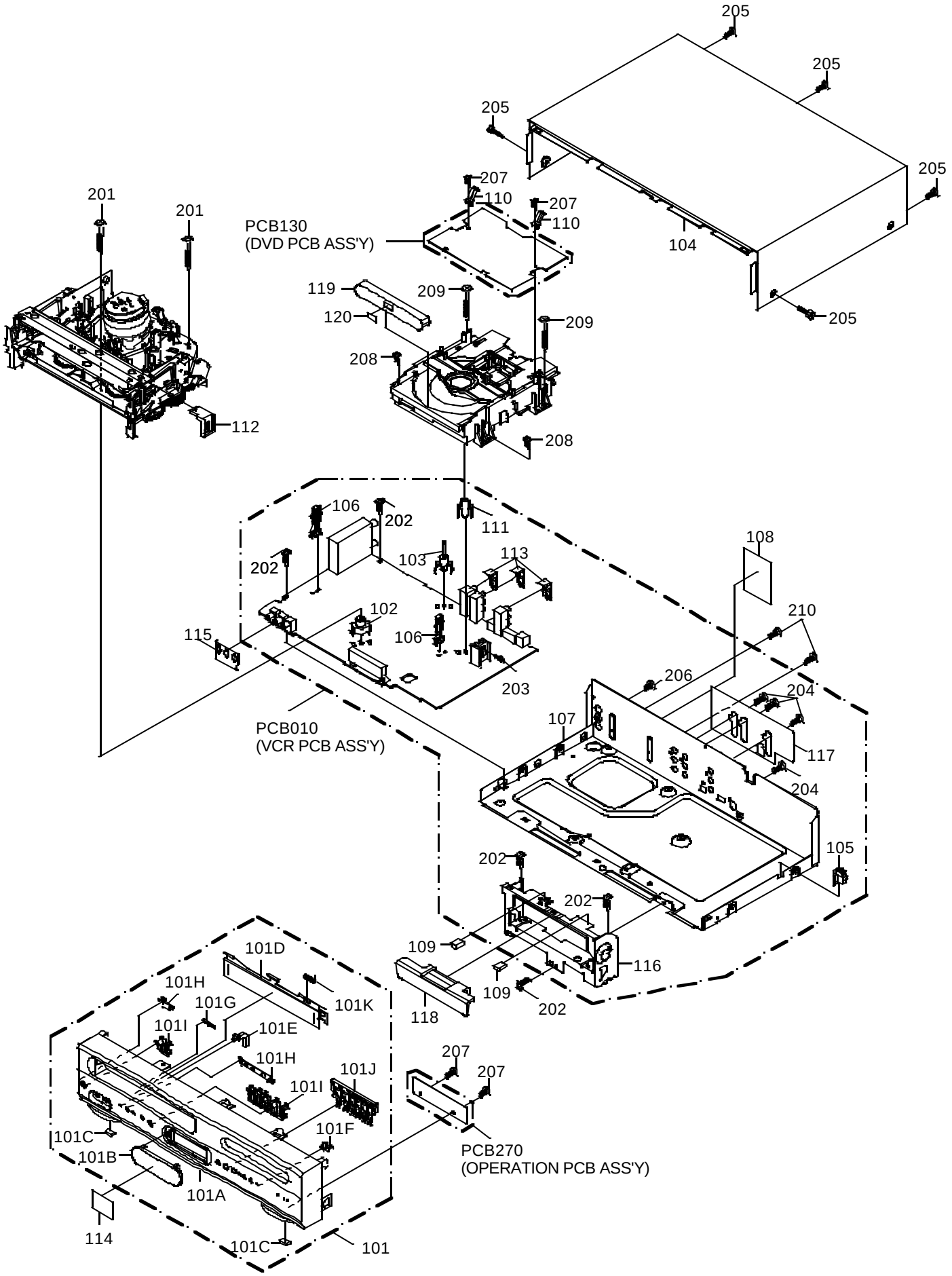
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

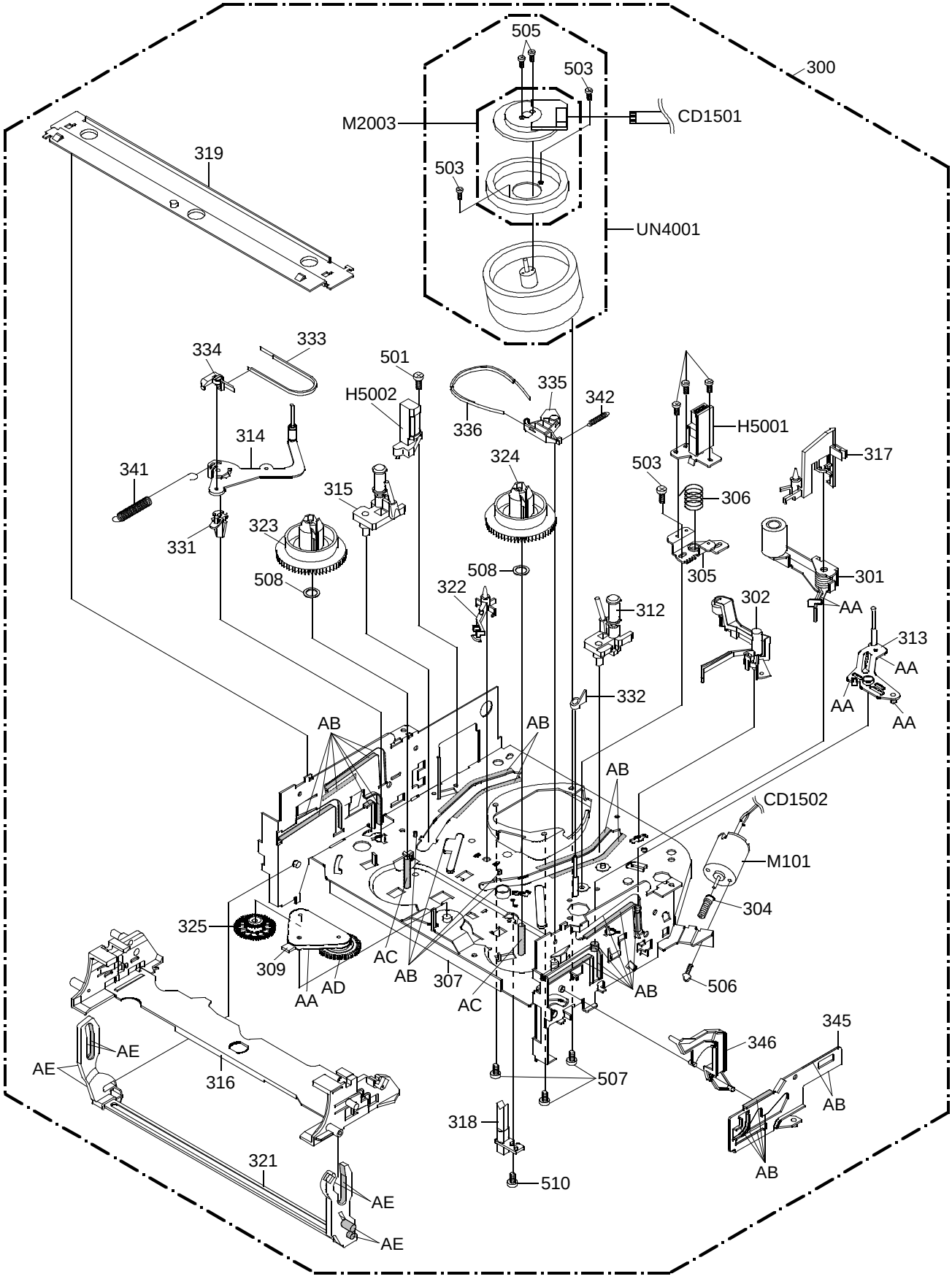


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

MECHANICAL EXPLODED VIEW



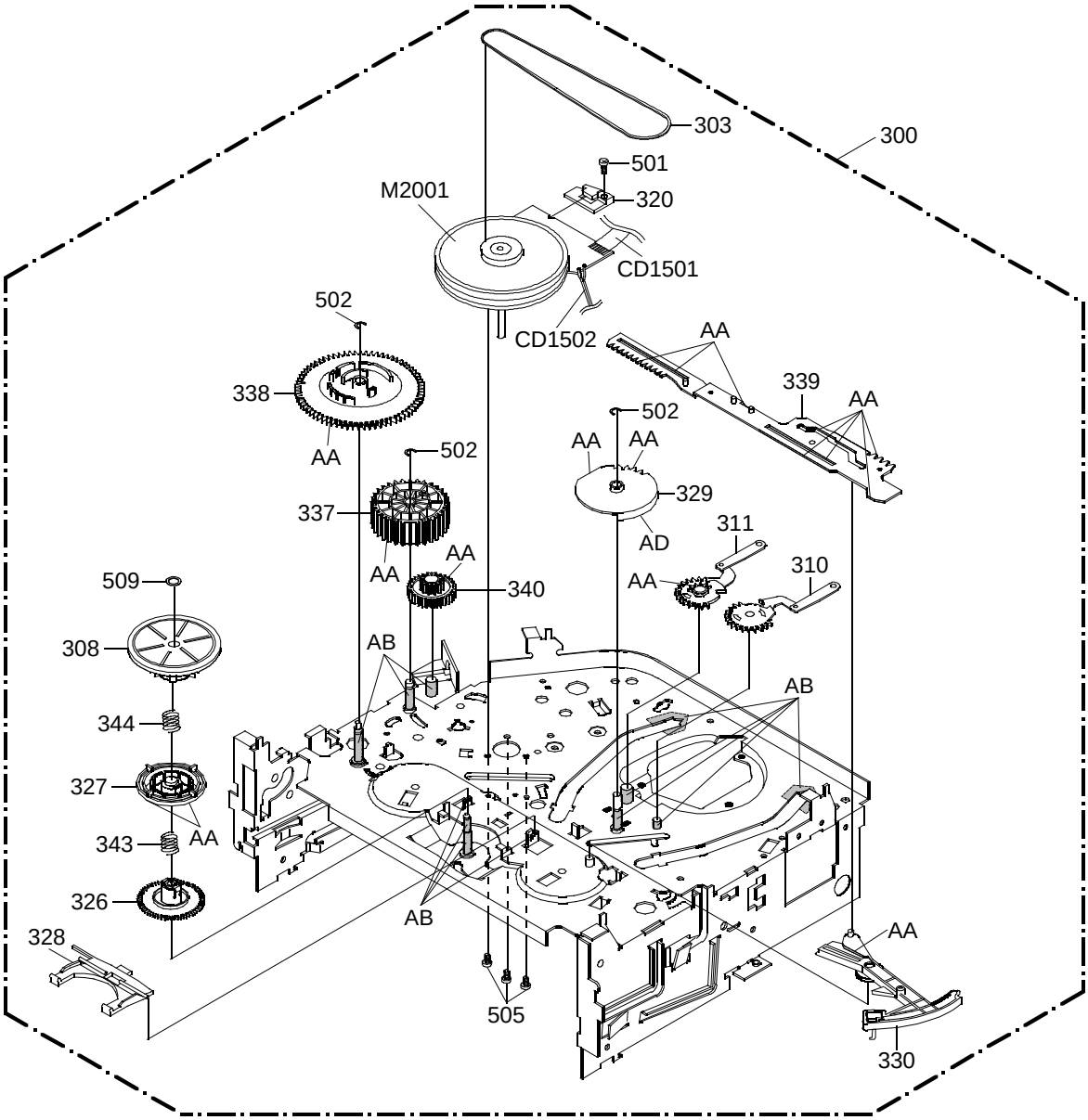
CHASSIS EXPLODED VIEW (TOP VIEW)



CLASS	PART NO.	PART NAME	MARK
GREASE	Y315061000	G-555G	AA
	Y315071000	MG-33	AB
	Y31D011000	FG-84M	AC
	Y315041000	FL-721	AD
	Y315141000	G-313Y	AE

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

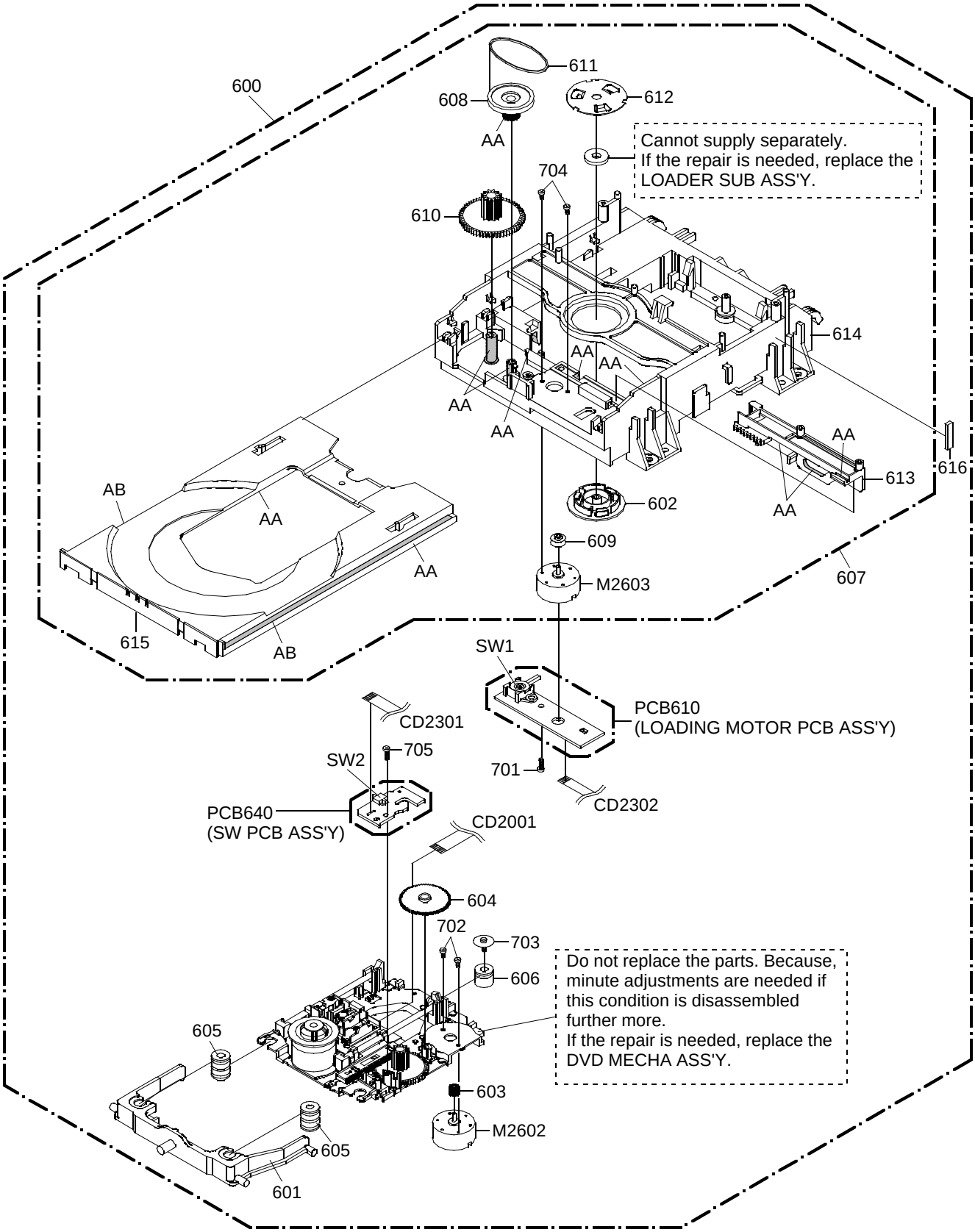
CHASSIS EXPLODED VIEW (BOTTOM VIEW)



CLASS	PART NO.	PART NAME	MARK
GREASE	Y315061000	G-555G	AA
	Y315071000	MG-33	AB
	Y31D011000	FG-84M	AC
	Y315041000	FL-721	AD
	Y315141000	G-313Y	AE

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

DVD DECK EXPLODED VIEW



CLASS	PART NO.	PART NAME	MARK
GREASE	Y315061000	G-555G	AA
	Y315121000	SF-112	AB

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

MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
101	7A701A377A	FRONT,CABI ASS'Y		
101A	701WPJC987	CABINET,FRONT		
101B	711WPAA092	PLATE,DISPLAY		
101C	800WFAA015	CUSHION,LEG		
101D	712WPJC127	FLAP		
101E	713WPAA105	GLASS,LED-VCR		
101F	713WPAA106	GLASS,LED-DVD		
101G	713WPAA107	COVER,FRONT		
101H	738WPAA029	BUTTON,HOLDER		
101I	738WPBA056	BUTTON,FRAME-VCR		
101J	738WPBA057	BUTTON,FRAME-DVD		
101K	743WKA0042	SPRING,FLAP		
102	701WPA0686	HOLDER,DECK		
103	701WPA0751	HOLDER,DECK		
104	702WSA0212	CABINET,TOP		
105	761WPA0261	HOLDER,DVD BR		
106	85OP700038	HOLDER,END SENSOR		
107	702WSAA142	PLATE,BOTTOM		
108	722A08A161	SHEET,RATING		
109	8965TS1010	CUSHION		65TS10-10(10x20x25)
110	753WUA0065	SPRING,EARTH		
111	761WPA0321	HOLDER,DVD BL		
112	761WPA0262	HOLDER,DECK TOP		
113	752WSA0290	SHIELD,COMPO		
114	723000A698	SHEET,DISPLAY		
115	752WUAA001	SHIELD,3PIN	.	
116	761WSAA025	ANGLE,FRONT		
117	723000C872	SHEET,JACK		
118	761WPA0296	HOLDER,DISC		
119	712WPB0167	PLATE,TRAY-FRONT		
120	7235630010	SHEET,DVD		
201	8109130B9U	SCREW,TAP TITE(B)R	PAN	3x29
202	810923070U	SCREW,TAP TITE(B) R	BIND	3x7
203	8109I30A0U	SCREW,TAP TITE(B)	WH7	3x10
204	810923080U	SCREW,TAP TITE(B)	BIND	3x8
205	8109K3060U	SCREW,TAP TITE(B)	BIND(3D)	3x6
206	810713040U	SCREW,TAP TITE(S)	PAN	3x4
207	811022680U	SCREW,TAP TITE(P)	BIND	2.6x8
208	810F13080U	SEMS(F)		3x8
209	8154D3033U	SCREW,TAP TITE(B)	WH8	3x33R
210	810722660U	SCREW,TAP TITE(S)	BIND	2.6x6
---	791WHA0100	GIFT,SHEET		
---	792WHA0558	PACKAGE,FRONT		
---	792WHAA117	PACKAGE,BACK		
---	793WCDC671	GIFT BOX		
---	795WCA0674	PAD,FLAT		
---	795WCAA224	PAD TYPE:B		
---	795WCAA225	PAD TYPE:C		
---	A2F3P4H975	INSTRUCTION BOOK KIT		
---	J2F3P421A	INSTRUCTION BOOK		
---	J5780102C	WARRANTY SHEET		
---	JB5KD200	POLYBAG,INSTRUCTION(RED CAUTION)		

CHASSIS REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
300	A2F3P4H420K	DECK ASSY	A2F3P4H420K	501	810722680U	SCREW,TAP TITE(S) BIND	M2.6x8
				502	83ETW3000U	E-RING	3
301	85OA400240	PINCH ROLLER BLOCK (VA)	or	503	810722640U	SCREW,TAP TITE(S) BIND	M2.6x4
	85OA400245	PINCH ROLLER BLOCK VA2		504	810212060U	SCREW,PAN	M2x6
302	85OA500026	AHC ASS'Y		505	810912660U	SCREW,TAP TITE(B) PAN	M2.6x6
303	85OP200290	BELT,CAPSTAN (S)		506	810A13040U	SCREW/WASHER(A)	M3x4
304	85OP600581	WORM		507	810A12650U	SCREW/WASHER(A)	M2.6x5
305	85OP500083	BASE,AC HEAD		508	82Q264713N	POLYSLIDER WASHER	2.6x4.7xT0.13
306	85OP800324	SPRING,AC HEAD		509	82P184505N	POLYSLIDER WASHER(CUT)	1.8x4.5xT0.5
307	85OA000528	MAIN CHASSIS ASS'Y					
308	85OA200089	CLUTCH ASS'Y		510	810722660U	SCREW,TAP TITE(S) BIND	2.6x6
309	85OA200092	ARM IDLER ASS'Y					
				CD1501	122H071704	CORD JUMPER	2H071704
310	85OA300068	LOADING ARM S UNIT		CD1502	122Y021902	CORD JUMPER	2Y021902
311	85OA300070	LOADING ARM T UNIT		H5001	1523Q91004	HEAD,AUDIO CONTROL	VTR-1X2RPE22-772
312	85OA400223	INCLINED BASE T UINT 3S		H5002	1543Q02014	HEAD (FULL ERASE)	VTR-1X2ERS11-154
313	85OA400249	P5 ARM ASS'Y 2		⚠ M101	1596S98002	MOTOR,LOADING	MDB2B66B
314	85OA400248	TENSION ARM ASS'Y 2		M2001	1510S98044	CAPSTAN DD UNIT	F2QVB73B
315	85OA400231	INCLINED BASE S UNIT		M2003	1589S11020	MICRO MOTOR	I2OAL34
316	85OA900234	CASS HOLDER ASS'Y		⚠ UN4001	A2F3P4H500	CYLINDER UNIT ASS'Y	A2F3P4H500
317	85OP900745	CASS,OPENER					
318	85OP700035	REFLECTOR,LED					
319	85OP900755	BRACKET,TOP 3V					
320	85OP400549	HOLDER,CAPSTAN					
321	85OA900233	LINK UNIT					
322	85OP000496	POST,CASS GUIDE					
323	85OP200316	REEL,S (S)					
324	85OP200317	REEL,T (S)					
325	85OP200308	GEAR,IDLER					
326	85OP200311	GEAR,CLUTCH					
327	85OP200312	GEAR,COUPLING					
328	85OP200313	LEVER,CLUTCH					
329	85OP300194	GEAR,MAIN LOADING					
330	85OP400490	LEVER,TENSION					
331	85OP400492	HOLDER,TENSION					
332	85OP400520	CAP.P4					
333	85OP400542	BAND,TENSION					
334	85OP400533	CONNECT,TENSION					
335	85OP600573	ARM,BRAKE T					
336	85OP600584	BAND,BRAKE T					
337	85OP600577	CAM,PINCH ROLLER					
338	85OP600578	CAM,MAIN					
339	85OP600585	ROD,MAIN					
340	85OP600582	GEAR,JOINT					
341	85OP800322	SPRING,TENSION					
342	85OP800360	SPRING,BRAKE T					
343	85OP800355	SPRING,COUPLING					
344	85OP800356	SPRING,RING					
345	85OP900754	LEVER,LINK					
346	85OP900744	LEVER,FLAP					

DVD DECK REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
⚠ 600	A2F3P4H650	DVD MECHA ASS'Y	A2F3P4H650
601	92P100109A	HOLDER,TRAVERSE	
602	92P100094A	CLAMPER	
603	92P100088A	GEAR,MOTOR	
604	92P100108A	GEAR,MIDDLE	
605	92P200013A	INSULATOR(F)	
606	92P200014A	INSULATOR(R)	
607	92SBB0030A	LOADER SUB ASS'Y	
608	92P100095A	GEAR,PULLEY	
609	92P100097A	PULLEY,MOTOR	
610	92P100096A	GEAR,MAIN	
611	92P200012A	BELT,LOADING	
612	92P000014A	PLATE,CLAMPER	
613	92P100093A	RACK,LOADING	
614	92P100091A	FRAME,MAIN	
615	92P100100A	TRAY	
616	800WFAA008	CUSHION C	
701	811022680U	SCREW,TAP TITE(P) BIND	2.6x8
702	814011723U	SCREW,PAN	M1.7x2.3 P3
703	816112080U	SEMS.TAP TITE(P) PAN	W10 2x8
704	814011730U	SCREW,PAN	M1.7x3 P3
705	811022080U	SCREW,TAP TITE(P) BIND	2x8
CD2001	122H0O1901	CORD JUMPER	2H0O1901
CD2301	122H062102	CORD JUMPER	2H062102
CD2302	122H052601	CORD JUMPER	2H052601
⚠ M2602	1515S98003	FEED MOTOR	BCZ3B03B
⚠ M2603	1596S18003	MOTOR,LOADING	BCZ3B52B
PCB610	A5R801V610	PCB ASS'Y	DED003A
PCB640	A2F401H640	PCB ASS'Y	DED012B
SW1	0515S32002	SWITCH	SSS-13-2
SW2	0500101037	PUSH SWITCH	ESE22MH24

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
		RESISTORS	
R501	R0G3K2335K	RC	3.3M OHM 1/2W
R502	R3X181010J	R,METAL OXIDE	1 OHM 1W
R512	R3X181683J	R,METAL OXIDE	68K OHM 1W
R516	R63581R22J	R,FUSE	0.22 OHM 1W
R8033	R00202471J	RC	470 OHM 1/2W
		CAPACITORS	
C501	E02LF2222M	CE	2200 UF 16V
C502	P2122B224M	CMP	0.22 UF 275V ECQUL
C504	E02LF1222M	CE	2200 UF 10V
C511	E62QFC470M	CE	47 UF 200V
C513	C03L0R7H2K	CC	220 PF 2KV R
C515	C0J0B0514K	CC	0.01 UF 500V B
C516	CC3LE0MH3M	CC	0.0022UF 250V
C518	E61FF0222D	CE	2200 UF 6.3V
C525	C03L0R7U2K	CC	680 PF 2KV R
C526	CC3LE0MH3M	CC	0.0022UF 250V
C540	E62QFC470M	CE	47 UF 200V
		DIODES	
D501	D1VT001330	DIODE,SILICON	1SS133T-77
D502	D2WXN40050	DIODE SILICON	1N4005-EIC
D503	D2WXN40050	DIODE SILICON	1N4005-EIC
D504	D1VT001330	DIODE,SILICON	1SS133T-77
D505	D2WXN40050	DIODE SILICON	1N4005-EIC
D506	D2WXN40050	DIODE SILICON	1N4005-EIC
D507	D23TGP15J0	DIODE SILICON	RGP15J-G23
D508	D1VT001330	DIODE,SILICON	1SS133T-77
D509	D2WXGP10J0	DIODE RECTIFIER	RGP10J-EIC
D510	D97U02201B	DIODE ZENER	MTZJ22B T-77
D511	D2LKB340L0	DIODE SCHOTTKY	SB340L-6737
D512	D1VT001330	DIODE,SILICON	1SS133T-77
D513	D2WXN40050	DIODE SILICON	1N4005-EIC
D514	D97U01201B	DIODE,ZENER	MTZJ12B T-77
D515	D28T21DQN4	DIODE SCHOTTKY	21DQ04N-TA2B1
D516	D97U05R11B	DIODE,ZENER	MTZJ5.1B T-77
D518	D1VT001330	DIODE,SILICON	1SS133T-77
D519	D97U06R81B	DIODE,ZENER	MTZJ6.8B T-77
D522	D28TELS6N6	DIODE RECTIFER	10ELS6N-TA1B2
D523	D97U03301B	DIODE,ZENER	MTZJ33B T-77
D524	D1VT001330	DIODE,SILICON	1SS133T-77
D526	D97U03R31B	DIODE,ZENER	MTZJ3.3B T-77
D527	D2WXN40050	DIODE SILICON	1N4005-EIC
D528	D1VT001330	DIODE,SILICON	1SS133T-77
D529	D2WXN40050	DIODE SILICON	1N4005-EIC
D651	0021E2Q140	LED	LTL-1CHEE-002A
D656	D2WXN40050	DIODE SILICON	1N4005-EIC
D685	0021E2Q140	LED	LTL-1CHEE-002A
D2303	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D2304	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D3001	0010E00330	INFRARED LED	LTE-3271T-012A-O
D3002	D1VT001330	DIODE,SILICON	1SS133T-77
D3007	D1VT001330	DIODE,SILICON	1SS133T-77
D3009	D1VT001330	DIODE,SILICON	1SS133T-77
D4002	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D4003	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D4004	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D4005	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D8004	D1VT001330	DIODE,SILICON	1SS133T-77
D8005	D1VT001330	DIODE,SILICON	1SS133T-77
D8006	D1VT001330	DIODE,SILICON	1SS133T-77
D8102	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D8111	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D8112	DD7R0S3550	DIODE SILICON	1SS355 TE-17
		ICS	
IC101	I03F3206M0	IC	LA71206M-MPB
⚠ IC501	I1KJ9A431A	IC	KIA431A-AT or
	I0CJ9AILP0	IC	TL431AILP
IC502	I1KA98R09A	IC	KIA78R09API
IC503	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)
IC701	I03F670BM0	IC	LA72670BM-L-MPB-E
IC2301	I03F065650	IC	LA6565-TE-L-E
IC2304	I07J003580	IC	BA10358FV-E2
IC3001	I54F50147A	IC	OEC0147A
IC3003	I9UF032310	IC	PST3231NR
IC3099	A2F3P4H015	INIT DATA	BR24L02F-WE2
IC4001	ICQK068620	IC	ZR36862PQCG
IC4002	I57J0L02F0	IC	BR24L02F-WE2
IC4003	I07F9E00W0	IC	BA33E00WHFP-TR

REF. NO.	PART NO.	DESCRIPTION	
		ICS	
IC4007	ICMJ0CEKE8	IC	SST39VF800A-70-4C-EKE
IC4008	ICLJ0610EX	IC	HY57V161610ETP-7 or
	IFLJ0622H6	IC	K4S161622H-UC60
IC4009	ICLJ0610EX	IC	HY57V161610ETP-7 or
	IFLJ0622H6	IC	K4S161622H-UC60
IC8001	I04J045800	IC	RC4580IDR
IC8003	I0UF015110	IC	MM1511XNRE
IC8005	I0UF015010	IC	MM1501XNRE
IC8102	I17F017530	IC	PCM1753DBQR
		TRANSISTORS	
Q101	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q102	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q103	TPYJC05001	COMPOUND TRANSISTOR	DTA124EKAT146
Q104	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q105	TAATA12660	TRANSISTOR,SILICON	KTA1266-AT(Y,GR)
Q107	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S
Q109	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q301	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q501	T25F035630	FET	2SK3563(ORION_Q)
Q502	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q503	TCAT03209Y	TRANSISTOR SILICON	KTC3209_Y-AT
Q504	TAAT012714	TRANSISTOR, SILICON	KTA1271_Y-AT
⚠ Q505	TD3T012070	TRANSISTOR,SILICON	2SD1207(S,T)-AE
Q506	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q507	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q509	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
⚠ Q510	TD3T012070	TRANSISTOR,SILICON	2SD1207(S,T)-AE
Q513	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q514	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q651	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S
Q652	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q653	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q654	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S
Q655	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q656	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q657	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q658	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q659	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S
Q660	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q661	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S
Q662	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q663	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q664	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q665	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S
Q666	TPYJC05001	COMPOUND TRANSISTOR	DTA124EKAT146
Q2301	T67J1036K0	TRANSISTOR SILICON	2SA1036KT146
Q2302	T67J048TL0	TRANSISTOR SILICON	2SA2048TL
Q2303	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q2304	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q2305	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q3002	0002700690	PHOTO COUPLER	RPI-303
Q3003	TPYJC05001	COMPOUND TRANSISTOR	DTA124EKAT146
Q3004	0002700680	PHOTO COUPLER	RPI-352C40N
Q3005	0002700680	PHOTO COUPLER	RPI-352C40N
Q3006	0000M00390	PHOTO TRANSISTOR	ST-304L
Q3007	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q3008	0000M00390	PHOTO TRANSISTOR	ST-304L
Q8001	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S
Q8002	TNYJD05001	COMPOUND TRANSISTOR	DTC144EKAT146
Q8003	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146
Q8004	TAATA12660	TRANSISTOR,SILICON	KTA1266-AT(Y,GR)

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
TRANSISTORS				
Q8005	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S	
Q8006	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S	
Q8007	TPYJC05001	COMPOUND TRANSISTOR	DTA124EKAT146	
Q8008	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S	
Q8009	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S	
Q8010	TPYJA05001	COMPOUND TRANSISTOR	DTA143EKAT146	
Q8011	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146	
Q8012	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	or
	T8YJ2412K0	TRANSISTOR SILICON	2SC2412KT146 R,S	
Q8019	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S	
Q8020	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S	
Q8021	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S	
Q8022	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146	
Q8023	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	or
	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S	
Q8024	TNYJB05001	COMPOUND TRANSISTOR	DTC114EKAT146	
Q8101	TNYJC05001	COMPOUND TRANSISTOR	DTC124EKAT146	
Q8105	T6YJ1037K0	TRANSISTOR,SILICON	2SA1037AKT146R,S	
COILS &TRANSFORMER				
L101	031626010R	COIL,BIAS OSC	1626010	
L102	02167F101J	COIL	100 UH	
L103	021LA65R6K	COIL	5.6 UH	
L104	02167F220J	COIL	22 UH	
L107	02167F220J	COIL	22 UH	
L301	02167F220J	COIL	22 UH	
L501	029X000117	COIL,LINE FILTER	SS11VL-05230	
L505	02167F220J	COIL	22 UH	
L506	02167E220K	COIL	22 UH	
L701	021LA6220J	COIL	22 UH	
L702	021LA6220J	COIL	22 UH	
L703	02167F220J	COIL	22 UH	
L704	02167F220J	COIL	22 UH	
L705	02167F220J	COIL	22 UH	
L3002	02167E220K	COIL	22 UH	
L3003	021LA6120J	COIL	12 UH	
L4001	02167F2R2J	COIL	2.2 UH	
L8001	021LA6R33M	COIL	0.33 UH	
L8002	021LA6R33M	COIL	0.33 UH	
L8006	02167F101J	COIL	100 UH	
L8007	02167F101J	COIL	100 UH	
L8009	02167F101J	COIL	100 UH	
L8010	02167F101J	COIL	100 UH	
L8102	02167F1R0K	COIL	1 UH	
L8103	02167F1R0K	COIL	1 UH	
L8104	02167F1R0K	COIL	1 UH	
L8105	02167F1R0K	COIL	1 UH	
T501	0481291244	TRANSFORMER,SWITCHING	81291244	
JACKS				
J651	060J421039	RCA JACK	MSP-281V31-A	
J652	060J401098	RCA JACK	MSP-281V40-B	
J653	060J401099	RCA JACK	MSP-281V42-B	
J8001	060J411031	RCA JACK	MSP-213V1-432_NI_LF	
J8006	060J411033	RCA JACK	MSP-213V1-732_NI_LF	
J8007	060J411032	RCA JACK	MSP-213V1-652_NI_LF	
J8008	063D700008	JACK	MDC-070V-B_LF	
SWITCHES				
SW651	0504101T34	SWITCH,TACT	EVQ21505R	
SW652	0504101T34	SWITCH,TACT	EVQ21505R	
SW653	0504101T34	SWITCH,TACT	EVQ21505R	
SW654	0504101T34	SWITCH,TACT	EVQ21505R	
SW655	0504101T34	SWITCH,TACT	EVQ21505R	
SW685	0504R01T38	SWITCH TACT	EVQ11L05R	
SW686	0504R01T38	SWITCH TACT	EVQ11L05R	
SW687	0504R01T38	SWITCH TACT	EVQ11L05R	
SW688	0504R01T38	SWITCH TACT	EVQ11L05R	
SW689	0504R01T38	SWITCH TACT	EVQ11L05R	
SW690	0504R01T38	SWITCH TACT	EVQ11L05R	
SW3001	0508S11001	SWITCH (LEAF)	LSA-1144EAU	
P.C.BOARD ASSEMBLIES				
PCB010	A2F3P4H010	PCB ASS'Y	VME354A	

REF. NO.	PART NO.	DESCRIPTION	
P.C.BOARD ASSEMBLIES			
PCB130	A2F3P4H130	PCB ASS'Y	VMD348A
PCB270	A2F3P7H270	PCB ASS'Y	VEEA53A
MISCELLANEOUS			
B501	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B2301	0246C51024	CORE,BEADS	MMZ1608R102CT
B2302	0246C51024	CORE,BEADS	MMZ1608R102CT
B2303	0246C51024	CORE,BEADS	MMZ1608R102CT
B2304	0246C51024	CORE,BEADS	MMZ1608R102CT
B2305	0246C51024	CORE,BEADS	MMZ1608R102CT
B4001	0246C51024	CORE,BEADS	MMZ1608R102CT
B4002	0246C51024	CORE,BEADS	MMZ1608R102CT
B4003	0246C51024	CORE,BEADS	MMZ1608R102CT
B4005	0246C51024	CORE,BEADS	MMZ1608R102CT
B4006	0246C51024	CORE,BEADS	MMZ1608R102CT
B4007	0246C51024	CORE,BEADS	MMZ1608R102CT
B4008	0246C51024	CORE,BEADS	MMZ1608R102CT
B4009	0246C51024	CORE,BEADS	MMZ1608R102CT
B4010	0246C51024	CORE,BEADS	MMZ1608R102CT
B4011	0246C51024	CORE,BEADS	MMZ1608R102CT
B4012	0246C51024	CORE,BEADS	MMZ1608R102CT
B4013	0246C51024	CORE,BEADS	MMZ1608R102CT
B4014	0246C51024	CORE,BEADS	MMZ1608R102CT
B4016	0246C51024	CORE,BEADS	MMZ1608R102CT
B4017	0246C51024	CORE,BEADS	MMZ1608R102CT
B4018	0246C51024	CORE,BEADS	MMZ1608R102CT
B8103	0246C51024	CORE,BEADS	MMZ1608R102CT
CD102	122F041508	CORD JUMPER	2F041508
⚠ CD501	1209414910	CORD AC BUSH	9414910
CD681	122H051202	CORD JUMPER	2H051202
CP101	0697290620	CONNECTOR PCB SIDE	TOC-C09X-A1
CP102	069J740599	CONNECTOR PCB SIDE	IMSA-9604S-04C
CP103	067U002019	WIRE HOLDER	B2013H02-2P
CP501	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P
CP651	069J750589	CONNECTOR PCB SIDE	IMSA-9604S-05F
CP681	069J750589	CONNECTOR PCB SIDE	IMSA-9604S-05F
CD4002	06C32B1103	CORD CONNECTOR	C32B1103
CD6002	06CPL02006	CABLE	CPL02006
CD6003	06CPBA2003	CORD,RCA PIN	TD-020301-3
CD8001	122F0E1001	CORD JUMPER	2F0E1001
CP2301	069GYOT119	CONNECTOR PCB SIDE	09-5000-024-001-001
CP2302	069EV53030	CONNECTOR PCB SIDE	00_6232_005_006_800+
CP2303	069EV63030	CONNECTOR PCB SIDE	00_6232_006_006_800+
CP3001	06972C0010	CONNECTOR PCB SIDE	TMC-J12P-B2
CP8001	069J7E0599	CONNECTOR PCB SIDE	IMSA-9604S-14C
CP8101	069J7E0589	CONNECTOR PCB SIDE	IMSA-9604S-14F
F501	081PC2R505	FUSE	51MS025L
FH501	06710T0009	HOLDER,FUSE	EYF-52BCY
FH502	06710T0009	HOLDER,FUSE	EYF-52BCY
OS651	077Q037009	REMOTE RECEIVER	PIC-37043LO-H
TM601	076R0JN01A	TRANSMITTER	R56-0532
TU301	0162300044	RF UNIT	115-V-HA35ARE
V651	0040H54010	LED DISPLAY	CO2D0M3-A
X101	100DT3R528	CRYSTAL	HC-49/U
X3001	100GT01006	CRYSTAL	B10000C001
X3002	100DA32R01	CRYSTAL	DT-26
X4001	100BT02701	CRYSTAL	HC-49U/S

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.	M2F3-P4H
O/R NO.	K522301

Memorex

MVD4541

SERVICE MANUAL

DVD VIDEO PLAYER&VIDEO CASSETTE RECORDER

REVISION 1
MFR'S VERSION B

MFR'S VERSION	PCB010	PCB130	PCB270
A	VME354A	VMD348A	VEEA53A
B	DME043A (PB FREE)	DME031A (PB FREE)	DEE057A (PB FREE)

Please file the revision with the original version

Change of PCB VERSION (PbF)

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	MFR'S VERSION A		MFR'S VERSION B	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
PCB010	A2F3P4H010	VCR MT PCB ASS'Y (VERSION A) VME354A	A2F3PGH010	VCR MT PCB ASS'Y (VERSION B) DME043A
PCB130	A2F3P4H130	DVD MT PCB ASS'Y (VERSION A) VMD348A	A2F3PGH130	DVD MT PCB ASS'Y (VERSION B) DME031A
PCB270	A2F3P7H270	OPERATION PCB ASS'Y (VERSION A) VEEA53A	A2F3PGH270	OPERATION PCB ASS'Y (VERSION B) DEE057A

VCR MT PCB's, DVD MT PCB's and OPERATION PCB's are not interchangeable.

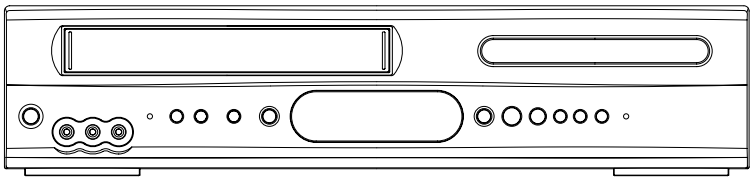
SPEC.NO.	M2F3-PGH
O/R NO.	K582305

Memorex®

MVD4541A

SERVICE MANUAL

DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER



VHS

SUPPLEMENT
MFR'S VERSION A

This SUPPLEMENT must be used together SERVICE MANUAL for MVD4541.
All other test and repair procedures are as shown in the ORIGINAL MANUAL.
Please file this SUPPLEMENT with the ORIGINAL VERSIONS.

MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	MVD4541		MVD4541A	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
108	722A08A161	SHEET RATING	722A08A165	SHEET RATING
121		————————	8965TS1017	CUSHION 65TS10-10(17.5*20*14)
---	791WHA0100	GIFT SHEET	793WCDD082	GIFT BOX
---	793WCDC671	GIFT BOX	791WHA0100	GIFT SHEET
---	795WCAA225	PAD TYPE:C	795WCAA223	PAD TYPE:A
---	JB5UD200	POLYBAG INSTRUCTION(RED CAUTION)	JB5ND200	POLYBAG INSTRUCTION(RED CAUTION)
---	J3J81702D	WARRANTY SHEET	J3T10902A	WARRANTY SHEET
---	J2F3P421B	INSTRUCTION BOOK	J2I0P021A	INSTRUCTION BOOK
---	A2F3P4H975	INSTRUCTION BOOK KIT	A2I0P0H975	INSTRUCTION BOOK KIT

CHASSIS REPLACEMENT PARTS LIST

REF. NO.	MVD4541		MVD4541A	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
300	A2F3P4H420K	DECK ASS'Y	A2I0P2H420K	DECK ASS'Y
302	85OA500026	AHC ASS'Y		DELETE

DVD DECK REPLACEMENT PARTS LIST

REF. NO.	MVD4541		MVD4541A	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
600	A2F3P4H250	DVD MECHA ASS'Y A2F3P4H650	A2I0P2H650	DVD MECHA ASS'Y A2I0P2H650
CD2001	122H0O1901	CORD JUMPER 2H0O1901	122H0O1905	CORD JUMPER 2H0O1905

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	MVD4541		MVD4541A	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
R305	R002T4102J	RC 1K OHM 1/4W		DELETE
⚠ R535		————————	R3X28B3R9J	R,METAL 3.9 OHM 3W
R653	R002T4331J	RC 330 OHM 1/4W	R002T4221J	RC 220 OHM 1/4W
R683	R803R9561J	RC 560 OHM 1/16W	R803R9391J	RC 390 OHM 1/16W
R8004	R002T4333J	RC 33K OHM 1/4W	R002T4223J	RC 22K OHM 1/4W
R8009	R002T2471J	RC 470 OHM 1/2W	R002T2331J	RC 330 OHM 1/2W
R8014	R803R9101J	RC 100 OHM 1/16W	R803R9271J	RC 270 OHM 1/16W
R8015	R803R9101J	RC 100 OHM 1/16W	R803R9271J	RC 270 OHM 1/16W
R8028	R002T2471J	RC 470 OHM 1/2W	R002T4561J	RC 560 OHM 1/4W
R8029	R002T2471J	RC 470 OHM 1/2W	R002T4561J	RC 560 OHM 1/4W
R8032	R803R9151J	RC 150 OHM 1/16W		DELETE
R8033	R00202471J	RC 470 OHM 1/2W	R002T4561J	RC 560 OHM 1/4W
R8034	R803R9152J	RC 1.5K OHM 1/16W	R803R9681J	RC 680 OHM 1/16W
R8035	R803R9103J	RC 10K OHM 1/16W	R803R9153J	RC 15K OHM 1/16W
R8052	R803R9103J	RC 10K OHM 1/16W	R803R9153J	RC 15K OHM 1/16W
R8055	R803R9152J	RC 1.5K OHM 1/16W	R803R9681J	RC 680 OHM 1/16W
R8056	R803R9151J	RC 150 OHM 1/16W		DELETE
C535		————————	E50HU3100M	CE 10 UF 25 V
C600		————————	CQGTF0415Z	CC 0.1 UF 50V F
C731	E50HU0101M	CE 100 UF 6.3V	E50HU0470M	CE 47 UF 6.3V
C756	E50HU0101M	CE 100 UF 6.3V	E50HU0470M	CE 47 UF 6.3V
C765	E50HU0101M	CE 100 UF 6.3V	E50HU0470M	CE 47 UF 6.3V
C3030	CS0PF0N16Z	CC 1 UF 10V F	CS0PF0315Z	CC 0.1 UF 25V F

ELECTRICAL REPLACEMENT PARTS LIST

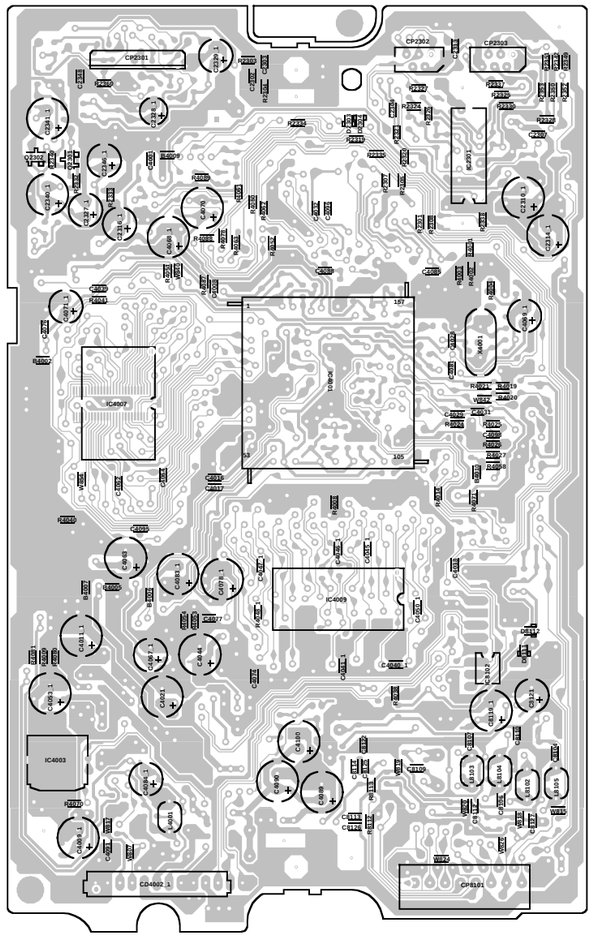
REF. NO.	MVD4541		MVD4541A	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
C3035		———	CS0PB0413K	CC 0.001 UF 50V B
C8011	E50HU0221M	CE 220 UF 6.3V		DELETE
C8048	E02LT2471M	CE 470 UF 16V	E02LT0102M	CE 1000 UF 6.3V
C8062	E02LT0102M	CE 1000 UF 6.3V	E02LT0471M	CE 470 UF 6.3V
C8063	E02LT0102M	CE 1000 UF 6.3V	E02LT0471M	CE 470 UF 6.3V
⚠ D507	D23TGP15J0	DIODE SILICON RGP15J-G23	D2LXFR1550	DIODE SILICON FR155-F
D509	D2WXGP10J0	DIODE RECTIFIER RGP10J-EIC	D2BXARS010	DIODE SILICON SARS01-V1
⚠ D510	D97U02201B	DIODE ZENER MTZJ22B T-77	D9WU02202B	DIODE ZENER MTZJ22B-EIC
⚠ D511	D2LKB340L0	DIODE SCHOTTKY SB340L-6737	D2LKSR3400	DIODE SCHOTTKY SR340-004
D513	D2WXN40050	DIODE SILICON 1N4005-EIC		DELETE
D514	D97U01201B	DIODE,ZENER MTZJ12B T-77	D97U01101B	DIODE,ZENER MTZJ11B T-77
⚠ D515	D28T21DQN4	DIODE SCHOTTKY 21DQ04N-TA2B1	D2LXSR2400	DIODE SCHOTTKY SR240-F
D516	D97U05R11B	DIODE,ZENER MTZJ5.1B T-77	D9WU05R12B	DIODE ZENER MTZJ5.1B-EIC
⚠ D519	D97U06R81B	DIODE,ZENER MTZJ6.8B T-77	D9WU06R82B	DIODE ZENER MTZJ6.8B-EIC
⚠ D523	D97U03301B	DIODE,ZENER MTZJ33B T-77	D9WU03302B	DIODE ZENER MTZJ33B-EIC
D526	D97U03R31B	DIODE,ZENER MTZJ3.3B T-77	D9WU03R32B	DIODE ZENER MTZJ3.3B-EIC
D528	D1VT001330	DIODE,SILICON 1SS133T-77		DELETE
D533		———	D2WXN40050	DIODE SILICON 1N4005-EIC
⚠ IC502	I1KA98R09A	IC KIA78R09API	I1KA98R06A	IC KIA78R06API
Q301	TCAA3875SY	TRANSISTOR SILICON KTC3875S_Y_RTK		DELETE
L3002	02167E220K	COIL 22 UH		DELETE
L8010	02167F101J	COIL 100 UH		DELETE
J652	060J401098	RCA JACK MSP-281V40-B	060R401120	RCA JACK RCA-109-02
J653	060J401099	RCA JACK MSP-281V42-B	060R401121	RCA JACK RCA-109-03
J8008	063D700008	JACK MDC-070V-B_LF	063R700013	JACK DIN-409A
SW652	0504101T34	SWITCH,TACT EVQ21505R		DELETE
SW656		———	0504101T34	SWITCH,TACT EVQ21505R
OS651	077Q037009	REMOTE RECEIVER PIC-37043LO-H	077A037013	REMOTE RECEIVER ROM-V338LO
⚠ TU301	0162300038	RF UNIT 115-V-H015ARE	0162300047	RF UNIT 115-V-HA35ARE G
V651	0040H54010	LED DISPLAY CO2D0M3-A	0040N54011	LED DISPLAY TOF-440EBHG-B16/B4
PCB010	A2F3PGH010	VCR MT PCB ASS'Y DME043A	A2I0P0H010	VCR MT PCB ASS'Y DME063A
R2313		———	R803R9472J	RC 4.7K OHM 1/16W
R2319	R803R9563J	RC 56K OHM 1/16W	R803R9333J	RC 33K OHM 1/16W
R2320		———	R803R9472J	RC 4.7K OHM 1/16W
R2321	R803R9103J	RC 10K OHM 1/16W	R803R9153J	RC 15K OHM 1/16W
R2322		———	R803R9472J	RC 4.7K OHM 1/16W
R2338	R803R9123J	RC 12K OHM 1/16W	R803R9472J	RC 4.7K OHM 1/16W
R2361	R803R9222J	RC 2.2K OHM 1/16W		DELETE
R2362	R803R9332J	RC 3.3K OHM 1/16W		DELETE
R4031	R803R9472J	RC 4.7K OHM 1/16W		DELETE
R4035	R803R9472J	RC 4.7K OHM 1/16W		DELETE
R4044	R803R9472J	RC 4.7K OHM 1/16W		DELETE
R4045	R803R9561J	RC 560 OHM 1/16W	R803R9472J	RC 4.7K OHM 1/16W
R4049	R803R9472J	RC 4.7K OHM 1/16W		DELETE
R4050	R803R9472J	RC 4.7K OHM 1/16W		DELETE
R4057	R803R9473J	RC 47K OHM 1/16W		DELETE
R4073	R803R9330J	RC 33 OHM 1/16W		DELETE
R4076	R803R9330J	RC 33 OHM 1/16W		DELETE
R4077	R803R9472J	RC 4.7K OHM 1/16W		DELETE
R4087		———	R803R9472J	RC 4.7K OHM 1/16W
R4088		———	R803R9472J	RC 4.7K OHM 1/16W
R4089		———	R803R9472J	RC 4.7K OHM 1/16W
R8110	R803R9471J	RC 470 OHM 1/16W		DELETE
R8111	R803R9471J	RC 470 OHM 1/16W		DELETE
R8116	R803R9561J	RC 560 OHM 1/16W		DELETE
R8121	R803R9561J	RC 560 OHM 1/16W		DELETE
C2309	CS0PF0415Z	CC 0.1 UF 50V F	CS0PB0316K	CC 1 UF 25V B
C2312		———	CS0PCH412J	CC 100 PF 50V CH
C2316	CS0PF0415Z	CC 0.1 UF 50V F	E50HU0470M	CE 47 UF 6.3V
C2318	CS0PB0413K	CC 0.001 UF 50V B		DELETE
C2342	CS0PF0415Z	CC 0.1 UF 50V F		DELETE

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	MVD4541		MVD4541A	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
C2343	E50HU0470M	CE 47 UF 6.3V		DELETE
C2348	CS0PB0315K	CC 0.1 UF 25V B	CS0PB0316K	CC 1 UF 25V B
C2350	CS0PB0N16K	CC 1 UF 10V B		DELETE
C2365		———	CS0PB0315K	CC 0.1 UF 25V B
C4001	CS0PB04B3K	CC 0.0012UF 50V B	CS0PB04N3K	CC 0.0039UF 50V B
C4034	CS0PCH450C	CC 5 PF 50V CH	CS0PCH460D	CC 6 PF 50V CH
C4035	CS0PCH4I1J	CC 24 PF 50V CH	CS0PCH4G1J	CC 18 PF 50V CH
C4037	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4051	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4058	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4059	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4060	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4061	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4087	CS0PF0415Z	CC 0.1 UF 50V F		DELETE
C4092	CS0PCH412J	CC 100 PF 50V CH		DELETE
C4093	CS0PCH412J	CC 100 PF 50V CH		DELETE
C4094	CS0PCH412J	CC 100 PF 50V CH		DELETE
C4102	CS0PB0413K	CC 0.001 UF 50V B		DELETE
C4104	CS0PB0413K	CC 0.001 UF 50V B		DELETE
C8121	E50HU3100M	CE 10 UF 25 V	E50HU0101M	CE 100 UF 6.3V
CD4002	06C32B1103	CORD CONNECTOR C32B1103	06CH2B1106	CORD CONNECTOR CH2B1106
D8101	DD7R0S3550	DIODE SILICON 1SS355 TE-17		DELETE
⚠ IC2301	I03F065650	IC LA6565-TE-L-E	I03FV65650	IC LA6565VR-TLM-E
IC2304	I07J003580	IC BA10358FV-E2		DELETE
IC4001	ICQK068620	IC ZR36862PQCG	ICQK068621	IC ZR36862PQCG-B
IC4002	I57J0L02F0	IC BR24L02F-WE2		DELETE
IC4007	ICMJ0CEKE8	IC SST39VF800A-70-4C-EKE	ICMJ016017	IC SST39VF1601-70-4C-EKE
IC4008	ICLJ0610EX	IC HY57V161610ETP-7		DELETE
Q8101	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146		DELETE
Q8105	T6YJ1037K0	TRANSISTOR,SILICON 2SA1037AKT146R,S		DELETE
B2303	0246C51024	CORE,BEADS MMZ1608R102CT		DELETE
B4004		———	0246C51024	CORE,BEADS MMZ1608R102CT
B4015		———	0246C51024	CORE,BEADS MMZ1608R102CT
B4017		———	0246C51024	CORE,BEADS MMZ1608R102CT
X4001	100BT02701	CRYSTAL HC-49U/S	100GT02720	CRYSTAL B27000C005
PCB130	A2F3PGH130	DVD MT PCB ASS'Y DME031B	A2I0P0H130	DVD MT PCB ASS'Y DME064A
R686	R002T4682J	RC 6.8K OHM 1/4W		DELETE
R689	R002T4332J	RC 3.3K OHM 1/4W		DELETE
R694		———	R002T4332J	RC 3.3K OHM 1/4W
R696		———	R002T4682J	RC 6.8K OHM 1/4W
D685	0021E2Q140	LED LTL-1CHEE-002A		DELETE
D687		———	0021E2Q140	LED LTL-1CHEE-002A
SW685	0504R01T38	SWITCH TACT EVQ11L05R		DELETE
SW686	0504R01T38	SWITCH TACT EVQ11L05R		DELETE
SW687	0504R01T38	SWITCH TACT EVQ11L05R		DELETE
SW688	0504R01T38	SWITCH TACT EVQ11L05R		DELETE
SW689	0504R01T38	SWITCH TACT EVQ11L05R		DELETE
SW690	0504R01T38	SWITCH TACT EVQ11L05R		DELETE
SW692		———	0504R01T38	SWITCH TACT EVQ11L05R
SW693		———	0504R01T38	SWITCH TACT EVQ11L05R
SW694		———	0504R01T38	SWITCH TACT EVQ11L05R
SW695		———	0504R01T38	SWITCH TACT EVQ11L05R
SW696		———	0504R01T38	SWITCH TACT EVQ11L05R
SW698		———	0504R01T38	SWITCH TACT EVQ11L05R
PCB270	A2F3PGH270	OPERATION PCB ASS'Y DEE057A	A2I0P0H270	OPERATION PCB ASS'Y DEE079A

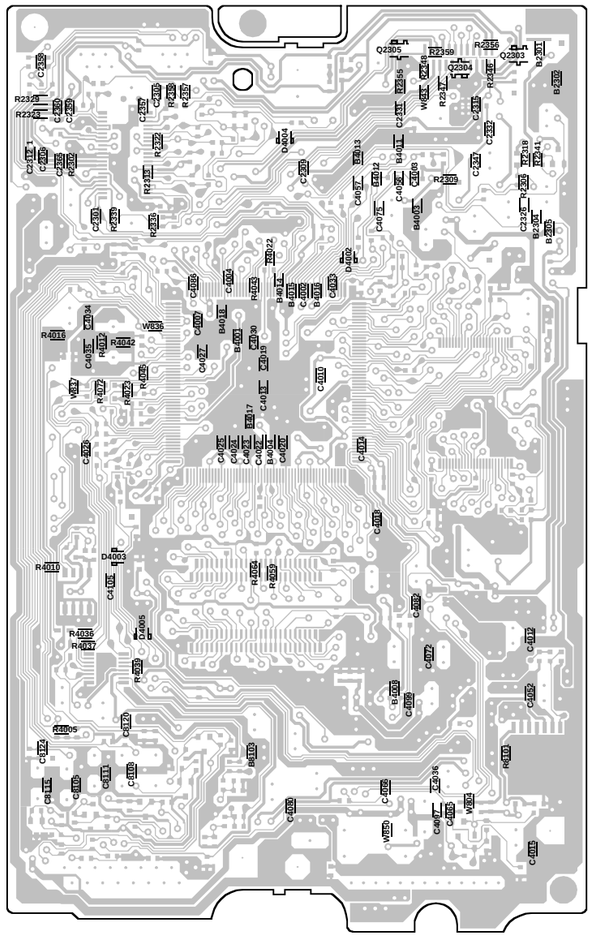
PRINTED CIRCUIT BOARDS
(MVD4541A)

DVD (TOP SIDE)



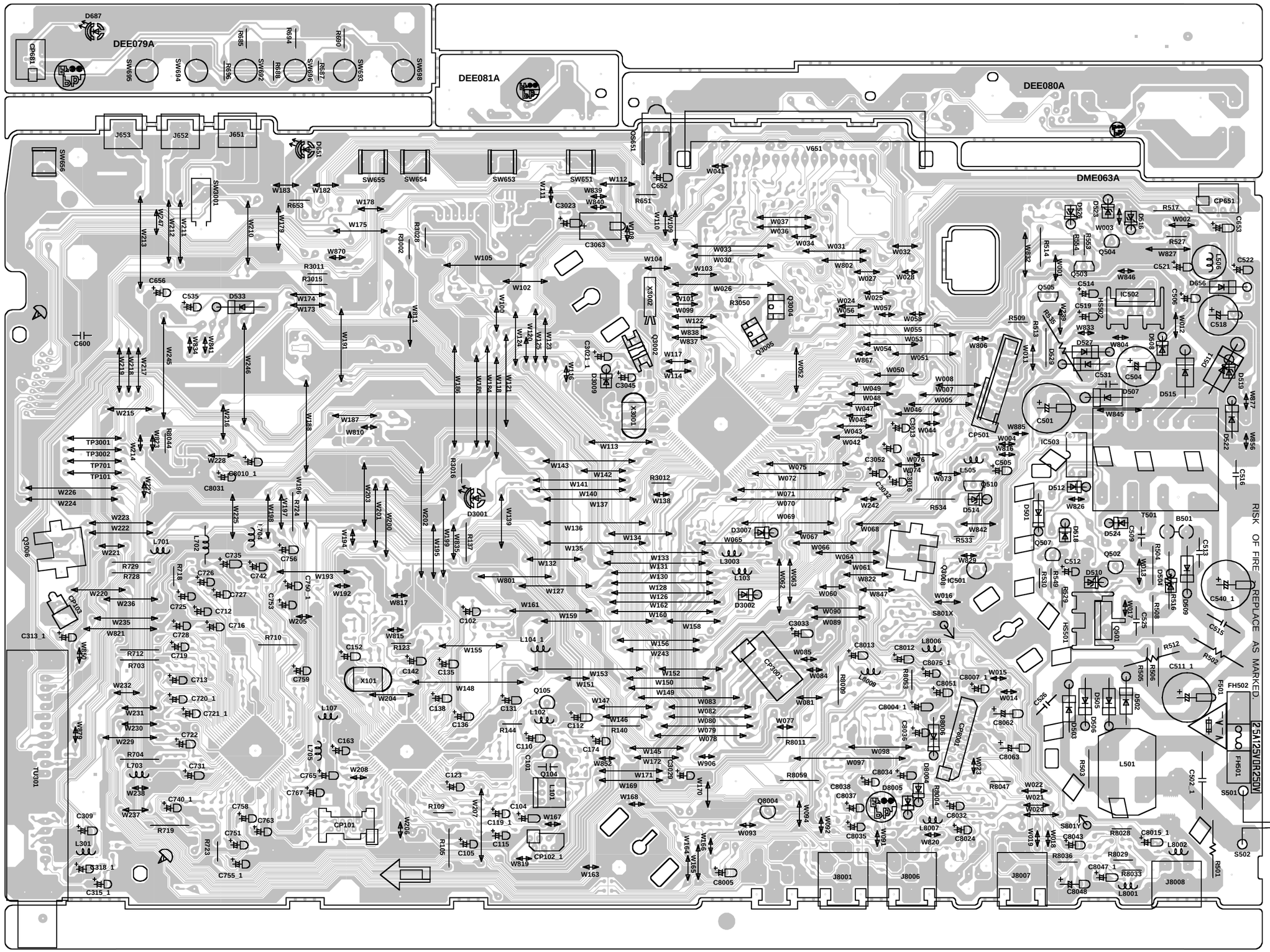
ADD R2320
R4087
R4088
R4089
W807
W815

DVD (BOTTOM SIDE)



ADD R2313
R2322
C2312
C2365
B4004
B4015
B4017
W837

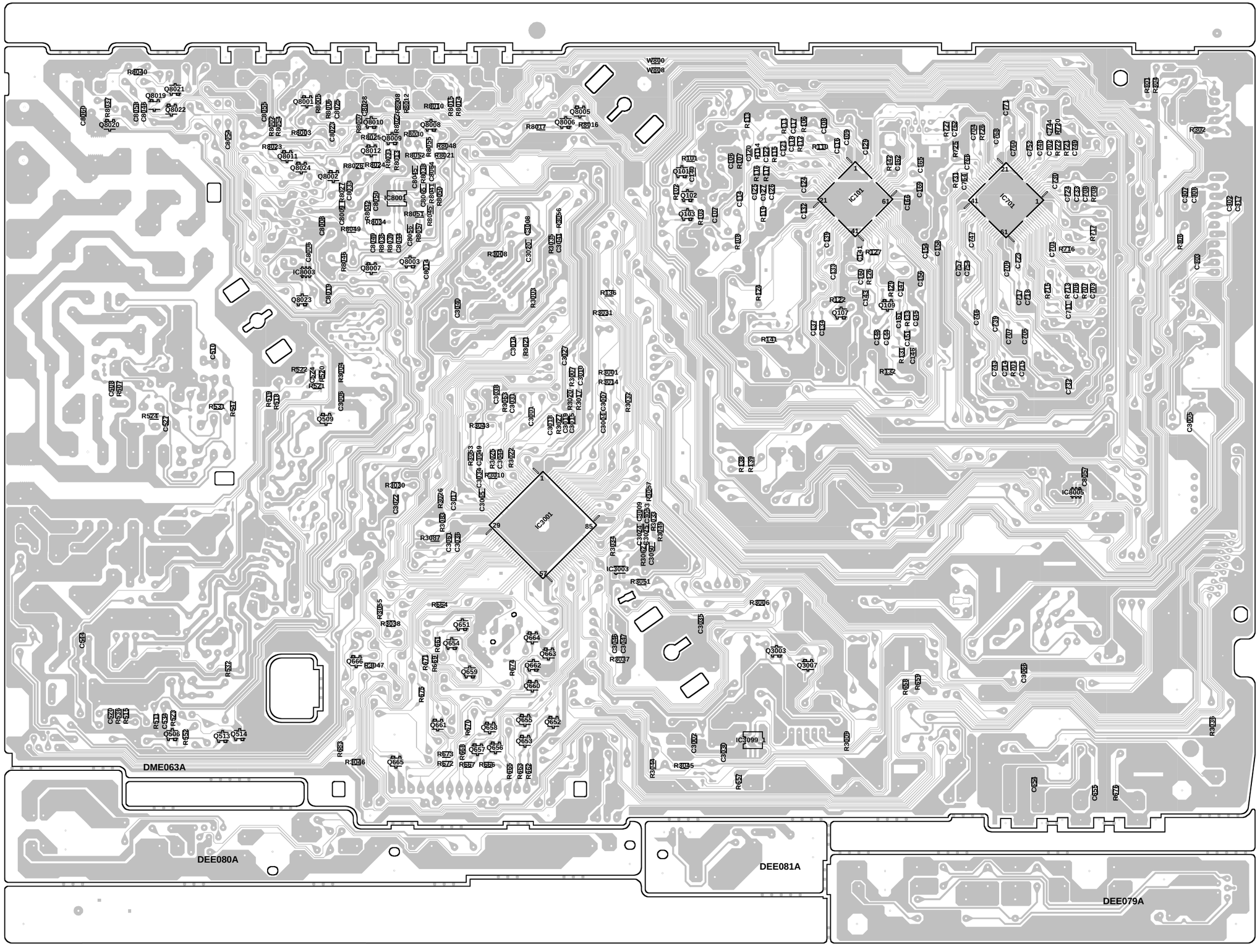
PRINTED CIRCUIT BOARDS
VCR/OPERATION (INSERTED PARTS)
SOLDER SIDE
(MVD4541A)



ADD R535
R694
R696
C535
C600
D533
D687
SW656
SW692
SW693
SW694
SW695
SW696
SW698
W832
W833
W834
W841
W842
W846
W847
W856
W870
W906

PRINTED CIRCUIT BOARDS
VCR (CHIP MOUNTED PARTS)
SOLDER SIDE
(MVD4541A)

ADD C3035
W800
W808



MPEG/MICON/DSP SCHEMATIC DIAGRAM

(DVD PCB) (MVD4541A)

MPEG/MICON/DSP/RF_AMP IC
IC4001
ZR36862PQCG-B

REG+3.3V +1.9V IC
IC4003 BA33E00WHFP

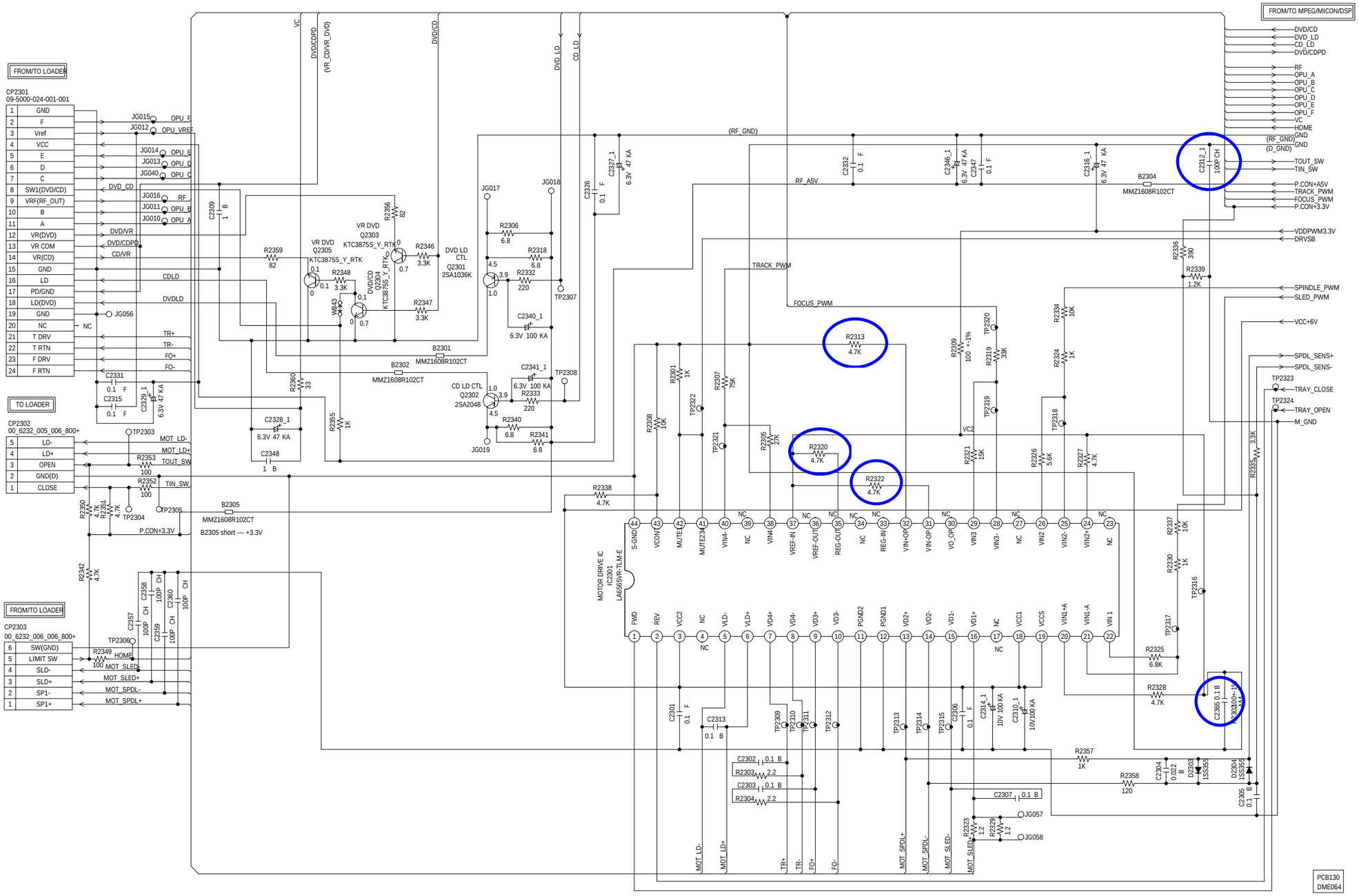
NOTE:THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

PCB130
DME064

MOTOR DRIVE SCHEMATIC DIAGRAM

(DVD PCB) (MVD4541A)



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

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

SYSCON SCHEMATIC DIAGRAM
(VCR PCB) (MVD4541A)

FROM/TO POWER
TX
RX
DVD_POWER_CTL
AT+12.6_V
P.CON+5V
AT+5V[M-CON]
VCR_POWER_ON-L
POWER_FAIL
AT+5.2V
GND
MOTOR_GND

FROM/TO DECK
CP3001
TMC-J12P-B2
1 CAP FG
2 CAP VCO
3 VCC
4 CAP.M/F/R
5 I LIMIT
6 MOTOR GND
7 GND
8 LD/CY VCO
9 CAP CTL
10 LDM CTL
11 CYL FG/PG
12 CYL CTL

SYSCON/TIMER/SERVO IC
IC3001
OEC0147A

SYSTEM RESET IC
IC3003
PST3231NR

EEP ROM IC
IC3099_1 BR24L02F-WE2

BOT SENSOR
Q3008
ST-304L

EOT SENSOR
Q3006
ST-304L

D3001
LTE-3271T-012A-O

TAB SW
SW3001
LSA-1144EAU

MS_SEN A
Q3005
RPI-352C40N

MS_SEN B
Q3004
RPI-352C40N

REEL SENS
Q3002
RPI-393

RX DRIVE
Q3003
DTA124EKA

RX DRIVE
Q3007
DTC124EKA

CAUTION: DIGITAL TRANSISTOR
CAUTION: DIGITAL TRANSISTOR

NOTE:THE DC VOLTAGE 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.

PCB010
DME063

FROM/TO Y/C/AUDIO/CCD/H.AMP
DUMMY_V.SYNC
C.SYNC
V.REC_ST-H
C.ROTARY
AUDIO_MUTE-H
CTL-
CTL+
H.AMP_SW
COMP
ENV.DET
H.SW
Y/C_CS
Y/C_DATA
Y/C_CLK
4FSC

FROM/TO TUNER/JACK
DVD_POWER_CTL
RF_CH_SW
SW_V_OUT
AV_SW1
SCL
SDA
AFT-S.CURVE
TV/VCR
VIDEO_OUT
POWER_MUTE-L
VIDEO_MUTE-H
DVD_RESET
SYS_MUTE

FROM/TO Hi-Fi/DEMODULATOR
REC_MUTE_H
HIFI_ENV.DET
HIFI_H.SW
AUDIO_MUTE-H
SCL
SDA
ST_SELECT

FROM/TO OPERATION1/DISPLAY
DVD_LED
VCR_LED
KEY-A
KEY-B
REM_IN
1G/VCR/T-REC_LED
2G/DUB/REC_LED
3G/TV/VCR_LED
4G/VSC_LED
5G/CS/BS_LED
SEG_1
SEG_2
SEG_3
SEG_4
SEG_5
SEG_6
SEG_7
SEG_8
SEG_9
SEG_10

TP3002 H.SW
NC

JG3002 JG3003 JG3004 JG3005 JG3006 JG3007 JG3008
TX
MD0
RESET
FWE
AT+5V[M-CON]

TUNER/JACK SCHEMATIC DIAGRAM

(VCR PCB) (MVD4541A)

FROM/TO AUDIO/JACK

CP8001 (CP8101)
IMSA-9604S-14C

1	PROGRE H(V SW)
2	Y(G)
3	DVD-H
4	DVD RESET
5	ZERO
6	AUDIO-R
7	GND
8	AUDIO-L
9	GND
10	V(R)
11	GND
12	U(B)
13	GND
14	CVBS

FFC

CD8001
2F0E1001

TU301 115-V-HA-35ARE_G

FROM/TO Y/C/AUDIO/CCD/HEAD AMP
DVD_V_OUT
FSC
TU/REAR_V_IN
Y/C_VIDEO_OUT

FROM/TO SYSCON
DVD_POWER_CTL
DVD_RESET
SYS_MUTE
SCL
SDA
AV_SW1
TV/VCR
RF_CH_SW
AFT-S.CURVE
POWER_MUTE-L
VIDEO_MUTE-H
VIDEO_OUT
SW_V_OUT

FROM/TO Hi-Fi/DEMODULATOR
DVD_A_OUT_R
DVD_A_OUT_L
SIF_OUT
P.CON+9V
REAR_A_IN_L
REAR_A_IN_R
AUDIO_OUT_L
AUDIO_OUT_R
RF_CONV_A_OUT

FROM POWER
GND
+32V
AT+5.2V
P.CON+5V
P.CON+12V
SPDIF
P.CON+6V
P.CON+9V

Y/C SEPA
J8008
DIN-409A

YUV OUT
J8007
MSP-213V1-652_NI_LF

REAR OUT JACK
J8001
MSP-213V1-432_NI_LF

Y/C MIX IC
IC8003
MM1511XNRE

AV SW IC
IC8005
MM1501XNRE

AUDIO_AMP IC
RC4580IDR
IC8001

SW
Q8024
DTC114EKA

SW
Q8022
DTC124EKA

BUFFER
Q8019
KTA1504S_Y_RTK

BUFFER
Q8020
KTA1504S_Y_RTK

BUFFER
Q8021
KTA1504S_Y_RTK

BUFFER
Q8023
KTA1504S_Y_RTK

MUTE SW
Q8002
DTC144EKA

MUTE SW
Q8010
DTA143EKA

MUTE SW
Q8011
DTC124EKA

MUTE SW
Q8007
DTA124EKA

MUTE SW
Q8005
KTC3875S_Y_RTK

MUTE SW
Q8006
KTC3875S_Y_RTK

MUTE DET
Q8012
KTC3875S_Y_RTK

AUDIO MUTE
Q8008
KTC3875S_Y_RTK

D AUDIO DRIVER
Q8001
KTC3875S_Y_RTK

BUFFER
Q8004
KTA1266

VIDEO
MUTE SW
Q8003
DTC124EKA

DVD AUDIO OUT
COAXIAL
J8006
MSP-213V1-732_NI_LF

CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

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

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

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。

PCB010
DME063

OPERATION/DISPLAY SCHEMATIC DIAGRAM
(VCR PCB) (MVD4541A)

V651
TOF-440EBHG-B16/B4

VCR
REC
TRK
P
DVD
CD
PM

C600 0.1 F
KEY-B

C654 470P B
FRONT AV JACK AUDIO R J651 MSP-281V31-A
FRONT_A_IN_R

C655 470P B
FRONT AV JACK AUDIO L J652 RCA-109-02
FRONT_A_IN_L

FRONT AV JACK VIDEO J653 RCA-109-03
C656 25V 10 KA
FRONT_V_IN
R676 AAV 75

SEG1 SW Q664 DTC124EKA — R674 180
1G SW Q665 KTA1504S_Y_RTK
SEG2 SW Q663 DTC124EKA — R673 180
SEG3 SW Q662 DTC124EKA — R672 180
2G SW Q661 KTA1504S_Y_RTK
SEG4 SW Q660 DTC124EKA — R670 180
SEG5 SW Q658 DTC124EKA — R668 180
3G SW Q659 KTA1504S_Y_RTK
SEG6 SW Q657 DTC124EKA — R667 180
4G SW Q654 KTA1504S_Y_RTK
SEG7 SW Q656 DTC124EKA — R665 180
5G SW Q651 KTA1504S_Y_RTK
SEG8 SW Q655 DTC124EKA — R663 180
SEG9 SW Q653 DTC124EKA — R662 180
SEG10 SW Q652 DTC124EKA

R675 820 — SEG_1 — 1G/ACRT-REC_LED
R671 820 — SEG_2 — 2G/DUB/REC_LED
R669 820 — SEG_3 — 3G/TV/VCR_LED
R664 820 — SEG_4 — 4G/VSC_LED
R661 820 — SEG_5 — 5G/CS/BS_LED
SEG_6
SEG_7
SEG_8
SEG_9
SEG_10

FROM/TO SYSCON
DVD_LED
VCR_LED
1G/VCR/T-REC_LED
2G/DUB/REC_LED
3G/TV/VCR_LED
4G/VSC_LED
5G/CS/BS_LED
SEG_1
SEG_2
SEG_3
SEG_4
SEG_5
SEG_6
SEG_7
SEG_8
SEG_9
SEG_10
REM_IN
KEY-B
KEY-A
VIDEO_MUTE-H

OS651 ROM-V338LO
Vout 4.9
GND 0
B+ 5.1
REM_IN
R651 100 1/4W
AT+5.2V

TO HI-FI/DEMODULATOR
FRONT_A_IN_L
FRONT_A_IN_R

TO Y/C/AUDIO/CCD/HEAD AMP
FRONT_V_IN

FROM POWER
LEM_VCC
P.CON+5V
AT+5.2V
GND

C652 10V 100 YK
D656 1N4005-EIC

KEY-A
DVD_LED
VCR_LED
R653 AAV 220 1/4W
C653 10V 470 YK
VCR_LED D651 LTL-1CHEE-002A
DVD LED SW Q666 DTA124EKA
R683 390
WB02
AT+5.2V

FROM/TO OPERATION1.2
CP165I(CP681) IMSA-9604S-05F
5 DVD LED
4 GND
3 NC
2 KEY-A
1 KEY-B
NC

VCR EJECT SW651 EVQ21505R
POWER SW656 EVQ21505R
VCR/DVD(REC) SW653 EVQ21505R
CH DOWN SW655 EVQ21505R
CH UP SW654 EVQ21505R
WB70
R657 2.7K
R658 1.8K
R659 1.5K
KEY-B

PCB010
DME063

CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

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

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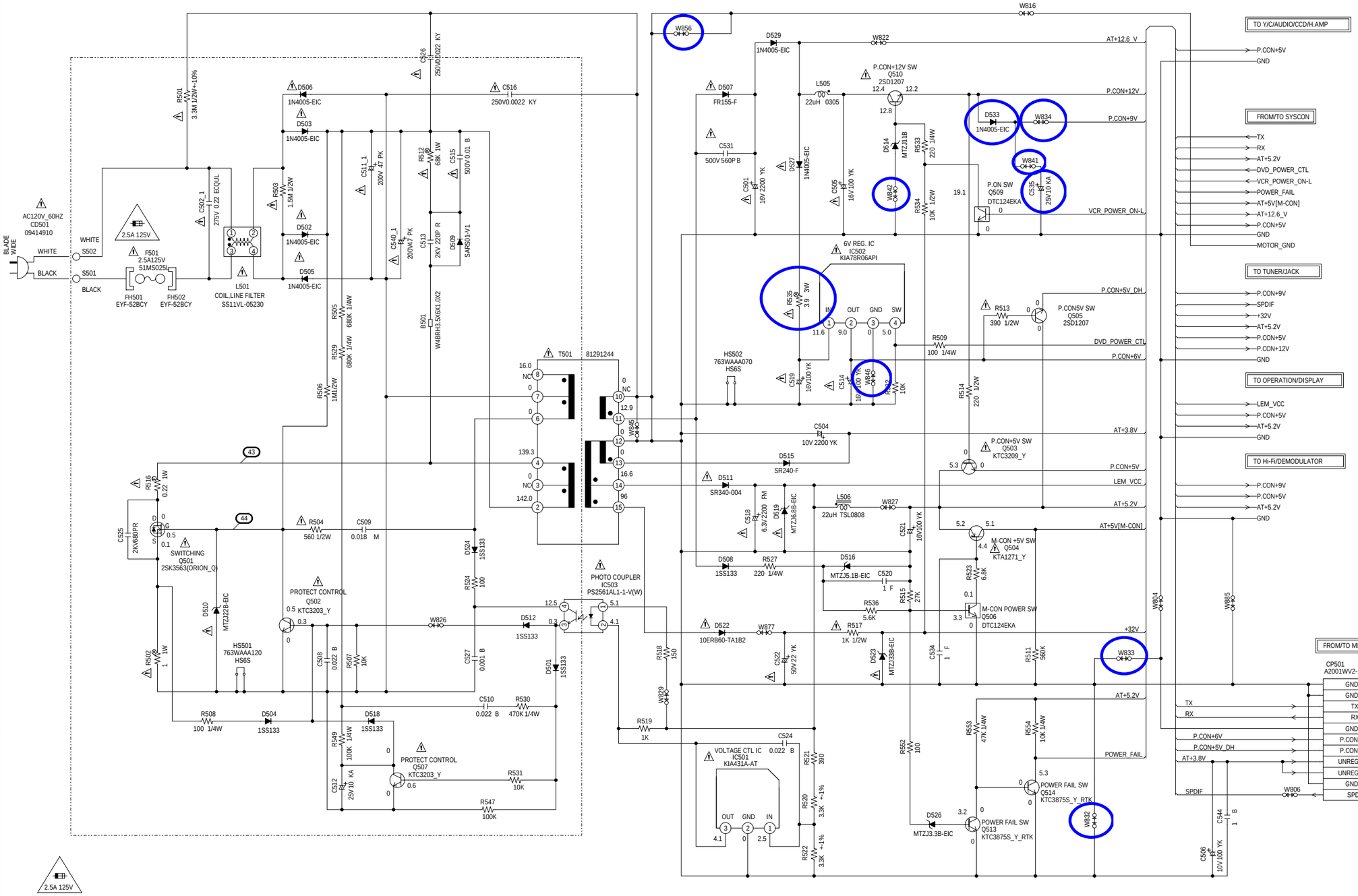
POWER SCHEMATIC DIAGRAM
(VCR PCB)(MVD4541A)



2.5A 125V

CAUTION :FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE2.5A 125V(F501).

ATTENTION :POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 2.5A 125V(F501).

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

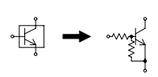
NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

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

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

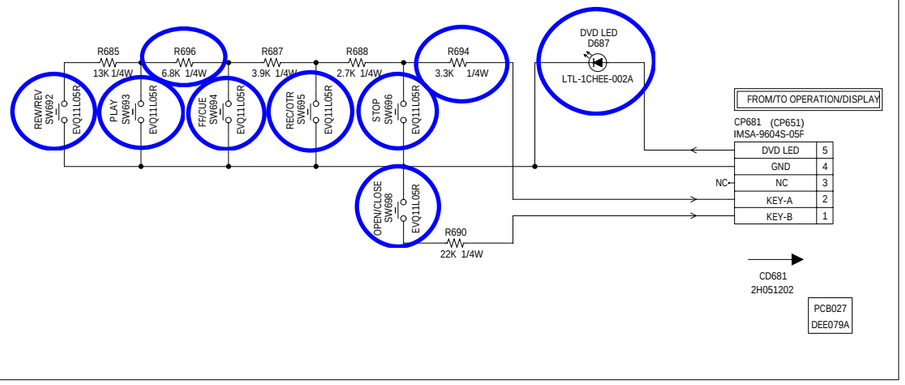


OPERATION/LED SCHEMATIC DIAGRAM

(OPERATION PCB) (MVD4541A)

OPERATION1

(OPERATION1 PCB)



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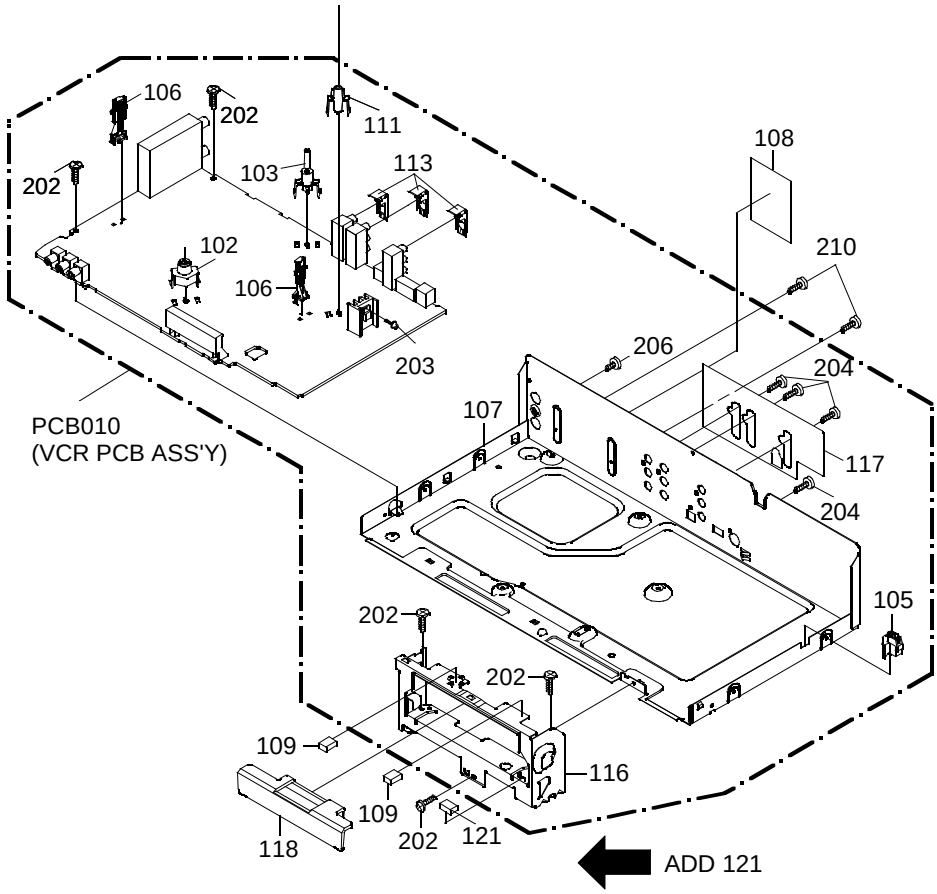
MECHANICAL EXPLODED VIEW
(MVD4541A)



SPEC.NO.	M2I0-P0H
O/R NO.	K5Z2302