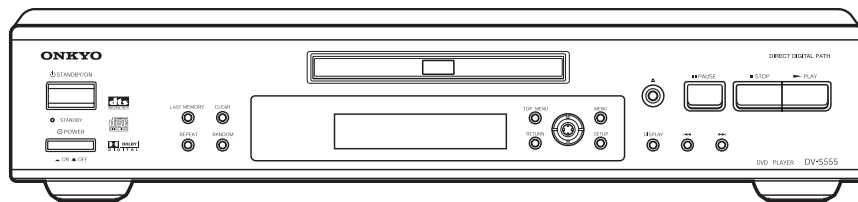
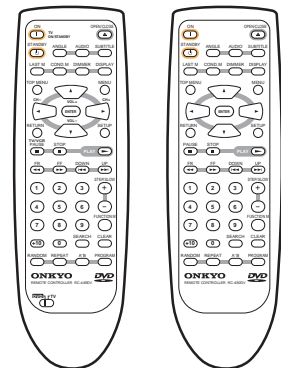



**ONKYO® SERVICE MANUAL****DVD Player  
DV-S555****Black, Silver and Golden models**RC-449DV  
U.S.A., Canadian  
models onlyRC-450DV  
Other models

BMDD	120V AC, 60Hz
BMUP, SMUP	230 -240V AC, 50/60Hz
BMUT, BMUS, GMUT, GMUR	100 - 240V AC, 50/60Hz

**SAFETY-RELATED COMPONENT  
WARNING!!**

COMPONENTS IDENTIFIED BY MARK  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

## SPECIFICATIONS

### DVD Player

Power supply	North American models: AC 120 V, 60 Hz Other models: AC 100 - 240 V, 50/60 Hz
Power consumption	North American models: 14 W Other models: 15 W
Weight	3.4 kg, 7.1 lbs.
External dimensions	435 x 91 x 312 mm (W/H/D), 17-1/8" x 3-9/16" x 12-5/16"
Signal system	PAL/NTSC
Regional restriction code	North American area: 1 Some Asian are: 3 South American area: 4 Chiness area: 6
Laser	Semiconductor laser , wavelength 650 nm
Frequency range (digital audio)	DVD linear sound: 48 kHz sampling 4 Hz to 22 kHz 96 kHz sampling 4 Hz to 44 kHz Audio CD: 4 Hz to 20 kHz
Signal-to-noise ratio (digital audio)	More than 100 dB
Audio dynamic range (digital audio)	More than 96 dB
Harmonic distortion (digital audio)	Less than 0.05 %
Wow and flutter	Below measurable level (less than +/- 0.001 % (W.PEAK))
Operating conditions	Temperature: 5° C to 35° C (41° F to 95° F), Operation status: Horizontal

### Outputs

Video output	1.0 V (p-p), 75 ohm, negative sync., pin jack x 1
S-video output	(Y) 1.0 V (p-p), 75 ohm , negative sync., Mini DIN 4-pin x 1 (C) 0.286 V (p-p), 75 ohm
Component video output	(Y) 1.0 V (p-p), 75 ohm , negative sync., pin jack x 1 (P <sub>B</sub> )/(P <sub>R</sub> ) 0.7 V (p-p), 75 ohm <MDD/MUS/MUT/MUR> RGB signal output, 0.7 V (p-p), 75 ohm, SCAR T socket x 1 <MUP>
Audio output (digital output Optical)	Optical connecter x 1
Audio output (digital output Coaxial)	0.5 V (p-p), 75 ohm, pin jack x 1
Audio output (2-Channel Audio)	2.0 V (rms), 320 ohm , pin jack (L, R, MONO) x 1
Audio output (analog audio)	2.0 V (rms), 470 ohm, pin jack (L, R. MONO) x 1

Specifications and features are subject to change without notice.

# SERVICE GUIDE 1






<p><b>WARNING:</b> TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.</p> <p><b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	 <p>The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p> <p>The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>
--	---

<p>This unit contains a semiconductor laser system and is classified as a "CLASS 1 LASER PRODUCT". So, to use this model properly, read this Instruction Manual carefully. In case of any trouble, please contact the store where you purchased the unit. To prevent being exposed to the laser beam, do not try to open the enclosure.</p> <p><b>CAUTION:</b> VISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. DO NOT STARE INTO BEAM.</p> <p><b>CAUTION:</b> THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.</p>	<p>The label on the right is applied on the rear panel except for USA and Canadian models.</p> <div style="border: 2px solid black; padding: 5px; text-align: center; width: fit-content; margin: 10px auto;"> <p><b>"CLASS 1 LASER PRODUCT"</b></p> </div> <ol style="list-style-type: none"> <li>1. This unit is a CLASS 1 LASER PRODUCT and employs a laser inside the cabinet.</li> <li>2. To prevent the laser from being exposed, do not remove the cover. Refer servicing to qualified personnel.</li> </ol>
--	---

## NOTES ON DISC

### Playable Disc

This DVD Player can playback the following discs.

	Disc mark
DVD videos	
VIDEO CDs	
Audio CDs	  

\*1 This unit can play CD-R and CD-RW discs recorded in CD Audio or Video CD format, or with MP3 audio files.

\*You cannot playback discs other than those listed above. You cannot play discs such as CD-ROM, DVD-RAM, DVD-RW, etc., even if the marks in the above table are labeled on those discs.

\*This DVD Player uses the PAL/NTSC color system, and cannot playback DVD videos recorded in any other color system (SECAM, etc.).

\*Avoid using heart-shaped or octagonal discs. Playing irregularly shaped discs may damage the internal mechanism of the DVD Player.

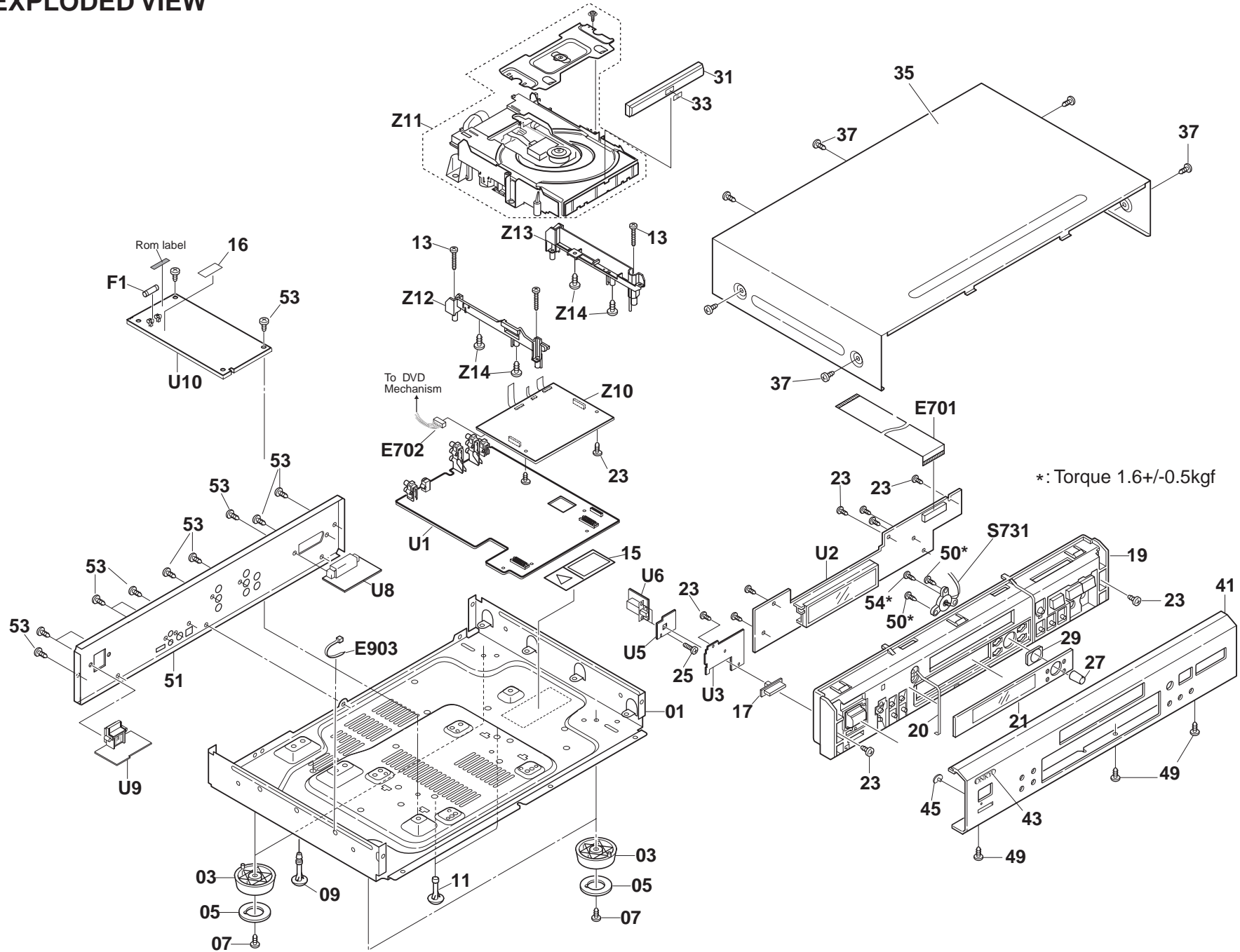
### About VIDEO CDs

This DVD Player supports VIDEO CDs equipped with the PBC (Version 2.0) function. (PBC is the abbreviation of Playback Control.) You can enjoy two playback variations depending on the type of disc.

\* **VIDEO CD not equipped with PBC function (Version 1.1)**  
Sound and movies can be played on this DVD Player in the same way as an audio CD.

\* **VIDEO CD equipped with PBC function (Version 2.0)**  
In addition to operation of the VIDEO CD not equipped with the PBC function, you can enjoy playback with interactive software and search function using the menu displayed on the TV screen (Menu Playback). Some of the functions described in this Instruction Manual may not work with some discs.

EXPLODED VIEW



\*: Torque 1.6+/-0.5kgf

**PARTS LIST**

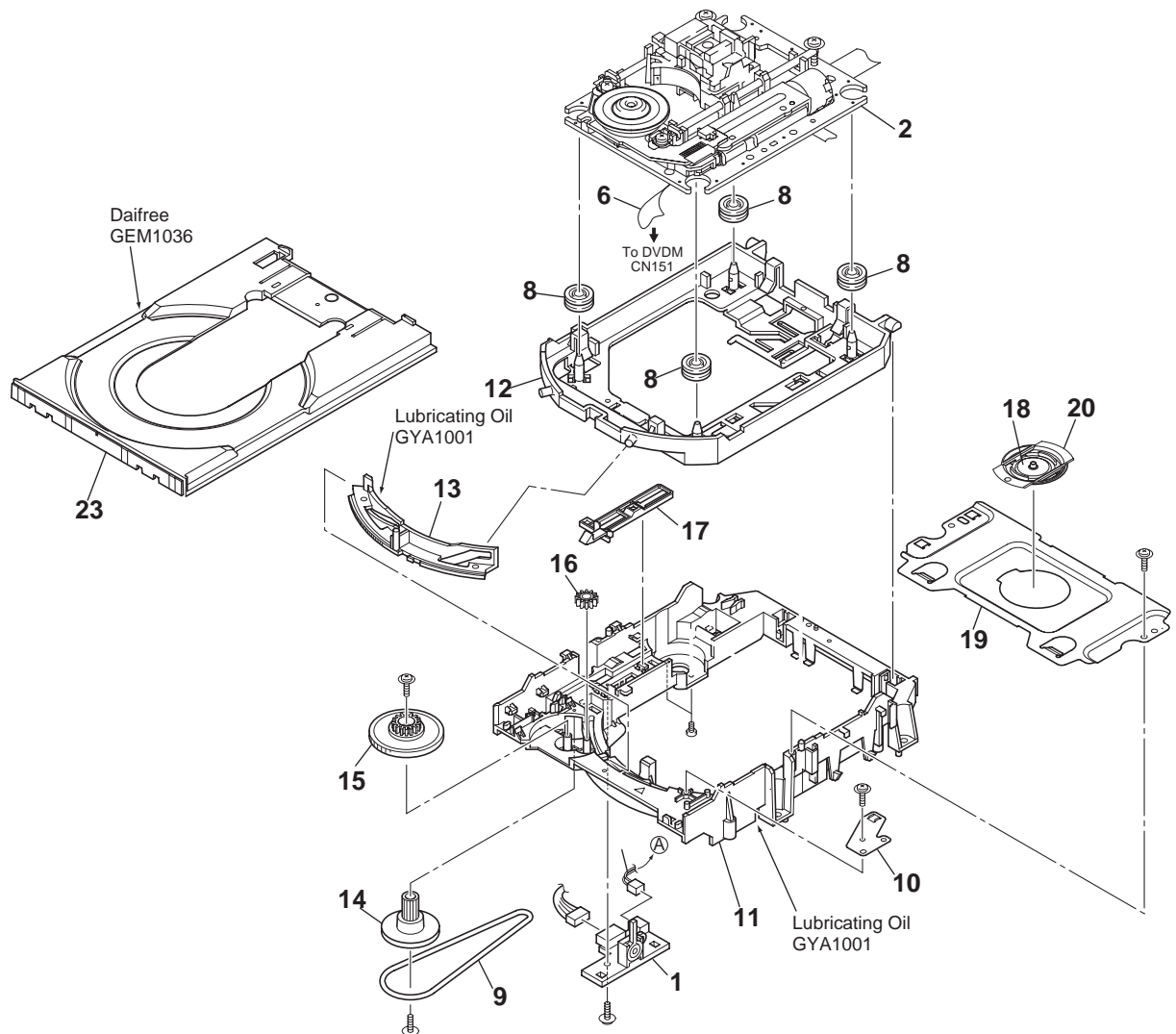
REF. NO.	PART NO.	DESCRIPTION	EF. NO.	PART NO.	DESCRIPTION
1	27100399A	Chassis	U1	1H464581A-1A	NAAR-7181A-1A, Output terminal
3	27175316B	Leg			PC board ass'y <MDD>
5	28141332	Cushion		1H464581A-1B	NAAR-7181A-1B, Output terminal
7	838130088	3TTB+8B, Self tapping screw			PC board ass'y <MUP2P>
9	27190428A	KGLS-10RF, Holder		1H464581A-1C	NAAR-7181A-1C, Output terminal
11	27191112	KGPS-6RF, Holder			PC board ass'y <MUT3P>
13	838130208	3TTB+20B, Self tapping screw		1H464581A-1D	NAAR-7181A-1D, Output terminal
15	△ 29362584	Label (DVD)			PC board ass'y <MUS4P>
16	29363012	Caution label, RISK		1H464581A-1E	NAAR-7181A-1E, Output terminal
17	28325497A	Knob, POWER			PC board ass'y <MUR6P>
19	27111229	Front bracket <B>	U2	1H46582A-1A	NADIS-7182A-1A, Display circuit
	27111230	Front bracket <S>			PC board ass'y <MDD>
	27111231	Front bracket <G>		1H46582A-1B	NADIS-7182A-1B, Display circuit
20	29110161	Tape			PC board ass'y <MUP2P>
21	28191926	Clear plate <B>		1H46582A-1C	NADIS-7182A-1C, Display circuit
	28191927	Clear plate <S/ G>			PC board ass'y <MUT3P>
23	838130088	3TTB+8B, Self tapping screw		1H46582A-1D	NADIS-7182A-1D, Display circuit
25	82143010	3P+10FN(BC), Special screw			PC board ass'y <MUS4P>
27	28325933	Knob, CRS <B>		1H46582A-1E	NADIS-7182A-1E, Display circuit
	28325934	Knob, CRS <S>			PC board ass'y <MUR6P>
	28325935	Knob, CRS <G>	U3	1H46583A-1A	NADIS-7183A-1A, Standby LED
29	27268041	Guide, CRS			PC board ass'y <MDD>
	27268042	Guide, CRS <S>		1H46583A-1B	NADIS-7183A-1B, Standby LED
	27268043	Guide, CRS <G>			PC board ass'y <MUP2P>
31	28148479	Door <B>		1H46583A-1C	NADIS-7183A-1C, Standby LED
	28148480	Door <S>			PC board ass'y <MUT3P>
	28148481	Door <G>		1H46583A-1D	NADIS-7183A-1D, Standby LED
33	27262651	Plate, DVD <B>			PC board ass'y <MUS4P>
	27262651	Plate, DVD <S>		1H46583A-1E	NADIS-7183A-1E, Standby LED
	27262651	Plate, DVD <G>			PC board ass'y <MUR6P>
35	28184808	Top cover <B>	U5	1H46585A-1A	NAETC-7185A-1A, Support PC board <MDD>
	28184779A	Top cover <S>		1H46585A-1B	NAETC-7185A-1B, Support PC board <MUP2P>
	28184780A	Top cover <G>		1H46585A-1C	NAETC-7185A-1C, Support PC board <MUT3P>
37	838430088	3TTB+8B(BC), Self tapping screw		1H46585A-1D	NAETC-7185A-1D, Support PC board <MUS4P>
	838930088	3TTB+8B(UN), Self tapping screw <S/G>		1H46585A-1E	NAETC-7185A-1E, Support PC board <MUR6P>
41	27212321	Front panel <B>	U6	1H46586A-1A	NASW-7186A-1A, Power switch
	27212322	Front panel <S>			PC board ass'y <MDD>
	27212323	Front panel <G>		1H46586A-1B	NASW-7186A-1B, Power switch
43	28135244	Badge <B>			PC board ass'y <MUP2P>
	28135245	Badge <S/G>		1H46586A-1C	NASW-7186A-1C, Power switch
45	28198906	Facet			PC board ass'y <MUT3P>
49	838430088	3TTB+8B(BC), Self tapping screw		1H46586A-1D	NASW-7186A-1D, Power switch
50	838126068	2.6TTB+6B(BC), Self tapping screw			PC board ass'y <MUS4P>
51	27122857	Rear panel <MDD>		1H46586A-1E	NASW-7186A-1E, Power switch
	27122858	Rear panel <MUP2P>			PC board ass'y <MUR6P>
	27122859	Rear panel <MUT3P>	U8	1H46587A-1B	NAETC-7187A-1B, SCART terminal
	27122860	Rear panel <MUS4P>			PC board ass'y <MUP2P>
	27122861	Rear panel <MUR6P>	U9	1H46512A-1A	NAPS-7212A-1A, AC inlet terminal
53	838430088	3TTB+8B(BC), Self tapping screw			PC board <MDD>
54	838426088	2.6TTB+8B(BC), Self tapping screw		1H46512A-1B	NAPS-7212A-1B, AC inlet terminal
E250	2047201512	Flexible flat cable <MUP2P>			PC board <MUP2P>
E701	2045222012	Flexible flat cable		1H46512A-1C	NAPS-7212A-1C, AC inlet terminal
E702	2009990691UL	NSAS-10P0959, Socket AS			PC board <MUT3P>
E903	260208	Wire tie		1H46512A-1D	NAPS-7212A-1D, AC inlet terminal
F1	△ 252252 or	1.6A-T/UL-ST2 or			PC board <MUS4P>
	△ 252147	1.6A-TSC, Fuse <MDD>		1H46512A-1E	NAPS-7212A-1E, AC inlet terminal
	△ 252273 or	1.6A-SE-TL250V or 1.6A-SE-EAK,			PC board <MUR6P>
	△ 252073	Fuse <MUP2P/MUS4P/MUR6P>	U10	24150020	NGPS-0020, Power supply
S731	25035710	NPS-115-S673, Rotary encoder AS			PC board ass'y <MDD>
Z1	24150019	DB-VPB301, Main PC board ass'y		24150021	NGPS-0021, Power supply PC board ass'y
Z11	24801010	DB-VLD301-006, DVD mechanism ass'y			<UP2P/UT3P/US4P/UR6P>
Z12	24840149	DB-VAC301, Adapter (L)	101	29362993	△ Fuse label, 1.6A/125V
Z13	24840150	DB-VAC302, Adapter (R)			Power supply unit <MDD,MJJ>
Z14	838130088	3TTB+8B, Self tapping screw		29361769	△ Fuse label, T1.6AL250V
					Power supply unit <MUP,MUT,MUS,MUR>

<MD> : North American area (Regional restriction code- 1)  
 <MUP>: European area (Regional restriction code- 2)  
 <MUT>: Some Asian area (Regional restriction code- 3)  
 <MUS>: South American area (Regional restriction code- 4)  
 <MUR>: Chinese area (Regional restriction code- 6)

<B>: Black color model  
 <G>: Golden color model  
 <S>: Silver color model

**NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.**

## EXPLODED VIEW (LOADING MECHANISM)

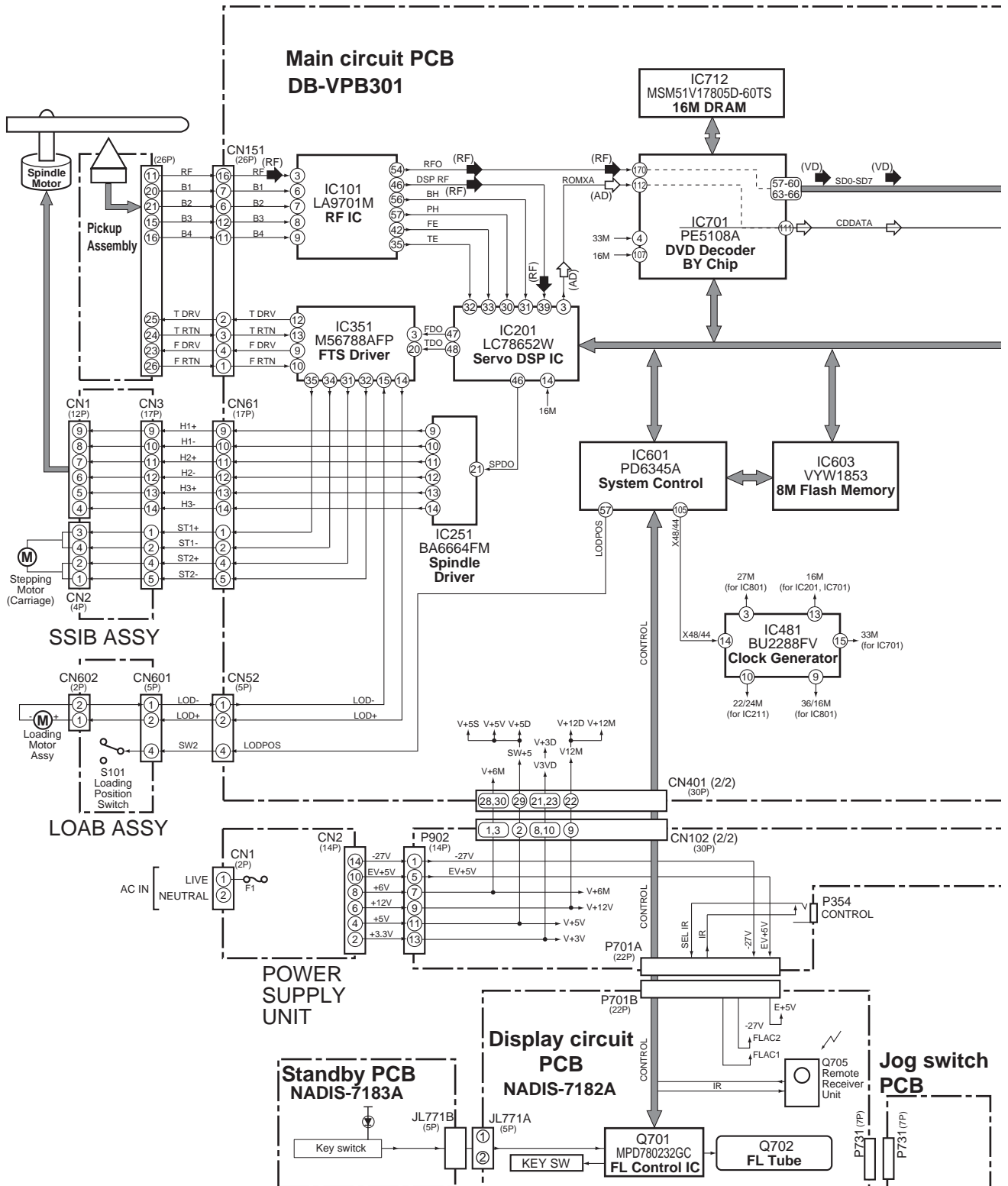


## LOADING MECHANISM ASSY PARTS LIST

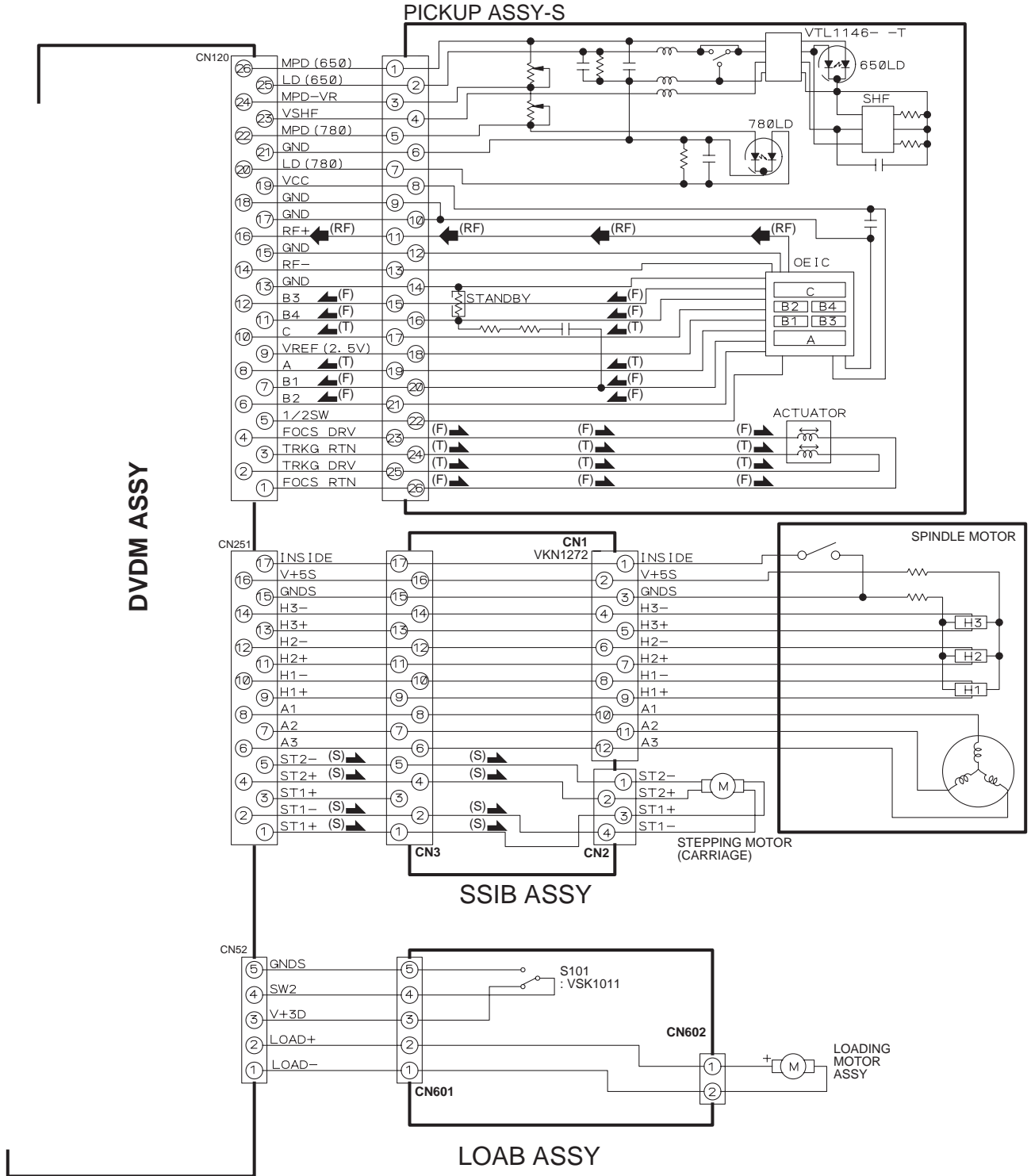
REF.NO	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
1	VNP1836	Loading PC board assy	12	VNL1918	Float base DVD
2	VXX2782	Traverse mechanism assy-S	13	VNL1919	Drive cam
6	VDA1864	Flexible cable 26P	14	VNL1921	Gear pulley
8	VEB1327	Float rubber	15	VNL1922	Loading gear
9	VEB1328	Belt	16	VNL1923	Drive gear
10	VNE2253	Stabilizer	17	VNL1925	SW lever
11	VNL1917	Loading base	18	VNE2251	Clamber plate
			19	VNE2252	Bridge
			20	VNL1924	Clamber
			23	VNL1920	Tray
			<b>Z1</b>	<b>VWS1495</b>	<b>DVD main PC board assy</b>

# BLOCK DIAGRAM

## Overall



**BLOCK DIAGRAM**  
Mechanism section

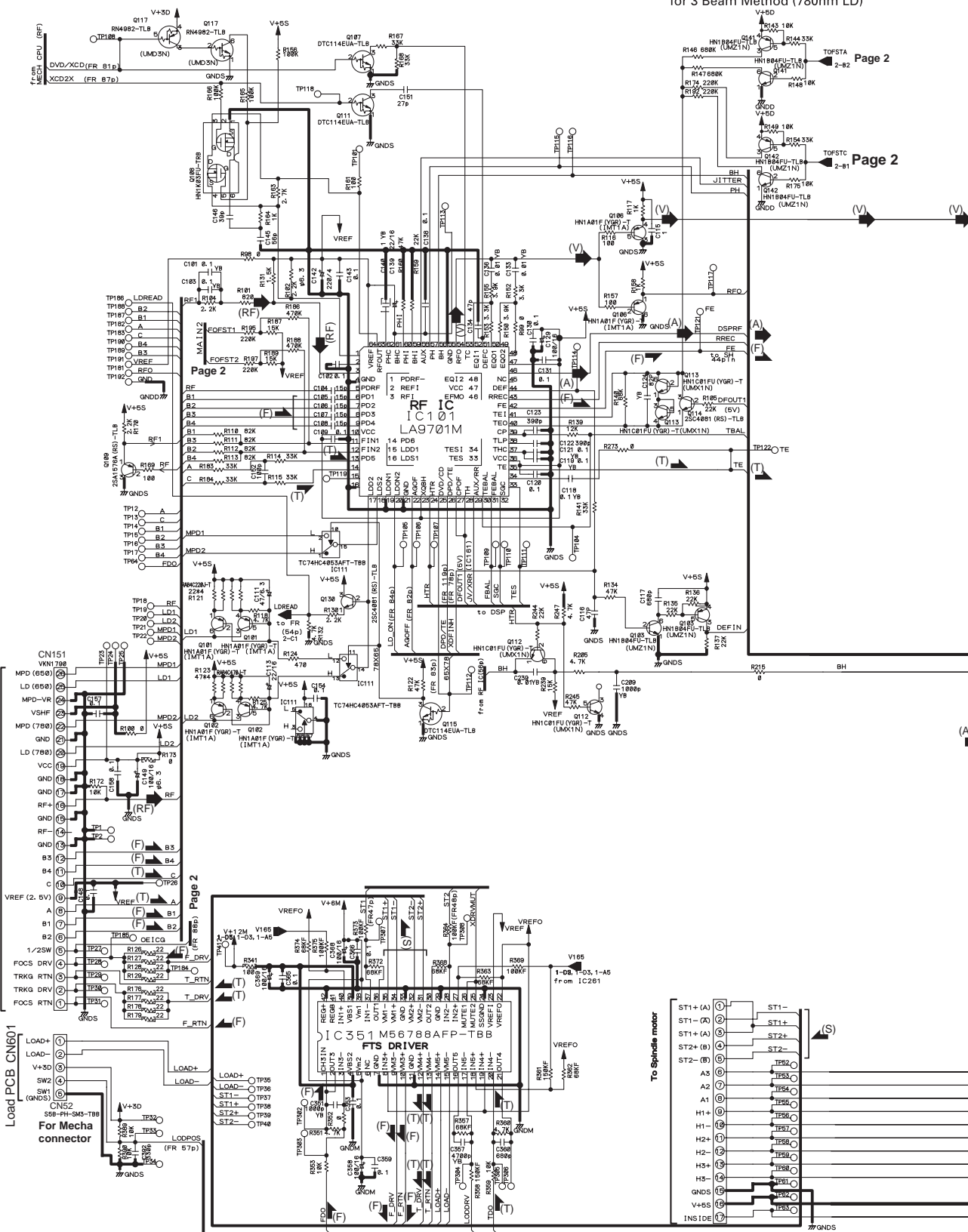




# SCHEMATIC DIAGRAM (Page 1)

## Main circuit PC board

Tracking Error Offset SW for 3 Beam Method (780nm LD)



Page 2

Page 2

PICKUP ASSY

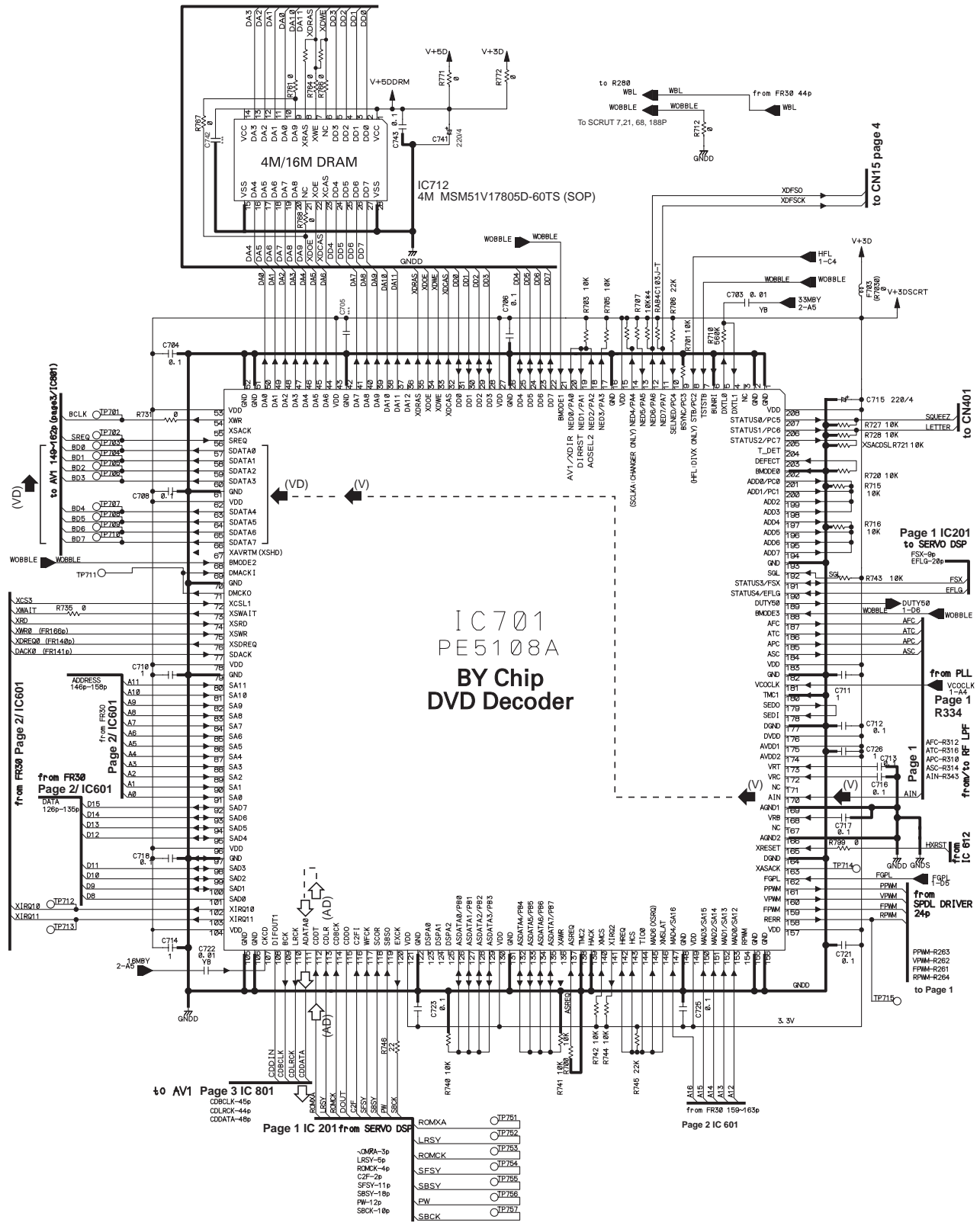
Load PCB CN601  
For Mecha connector

To Spindle motor

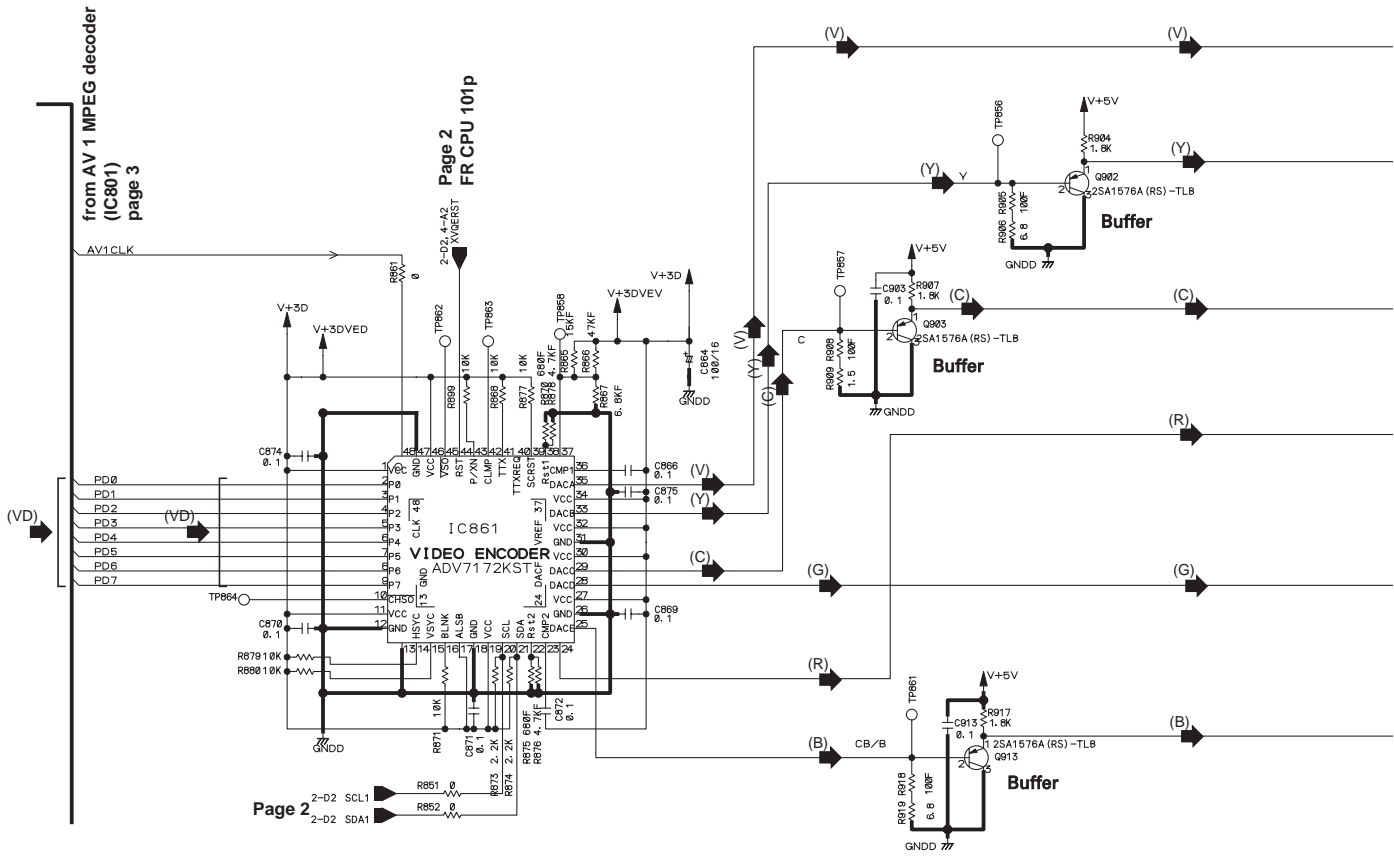
(A)



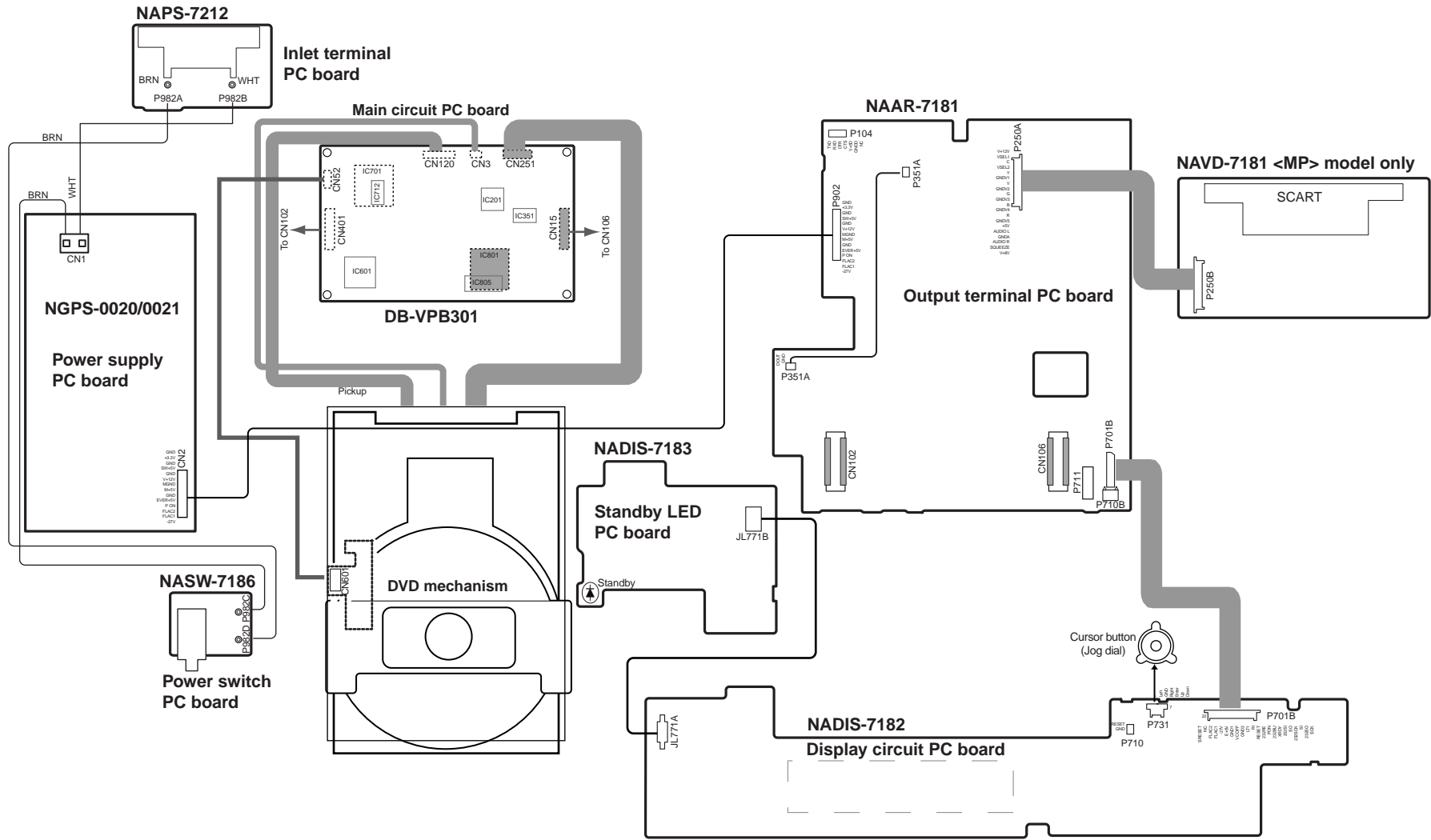
# SCHEMATIC DIAGRAM (Page 3)



SCHEMATIC DIAGRAM (Page 4)



# PC BOARD CONNECTION DIAGRAM



## PARTS LIST (1)

### DVD MAIN PC BOARD DB-VPB301

REF.NO.	PART NO.	DESCRIPTION
	<b>ICs</b>	
IC861	ADV7172KST	Video encoder
IC251	BA6664FM	Spindle driver
IC481	SM8707BV	Clock generator
IC101	LA9701M	RF amp.
IC201	LC78652W	DSP
IC351	M56788AFP	5ch BTL driver
IC801	M65774BFP	MPEG2 decoder
IC805,IC806	MB81F161622C-80FN	16M SDRAM
IC712	MNR4800DJ7	4M bit DRAM
IC601	PD6345A	System control CPU
IC701	PE5108A	DVD data processor
IC111,IC271	TC74HC4053AFT	Logic IC
IC612	TC74VHC125FT	Logic IC
IC608	TC74VHCT125AFT	Logic IC
IC603	VYW1833	Flash ROM
	<b>Coils</b>	
L304	LCYA1R5J2520	
L481	VTL1084	Chip core
	<b>Sockets</b>	
CN401,CN15	VKN1626	Board to board
CN120	VKN1787	FFC connector
CN251	VKN1795	12P FFC connector
CN52	S5B-PH-SM3	PH connector
CN3	DKN1223	4P FFC connector
	<b>Crystal resonators</b>	
X481	VSS1159	27.000MHz
X601	VSS1160	16.5MHz, Chip ceramic lock
	<b>Resistors</b>	
R257	VCN1127	1 ohm,1/4W
R258,R259	VCN1128	2.2 ohm,1/4W
	RAB4C0R0J	0 ohm,1/4W,+/-5%
	RAB4C103J	10k ohm x 4,Chip array
	RAB4C220J	220 ohm x 4,Chip array
	RAB4C470J	470 ohm x 4,Chip array
	<b>Crystal resonators</b>	
X481	VSS1159	27.000MHz
X601	VSS1160	16.5MHz, Chip ceramic lock
	<b>Capacitors</b>	
	CCSRCH150J50	15pF +/-5%,50V,Chip cera
	CCSRCH180J50	18pF +/-5%,50V,Chip cera
	CCSRCH270J50	27pF +/-5%,50V,Chip cera
	CCSRCH391J50	390pF +/-5%,50V,Chip cera
	CCSRCH560J50	56pF +/-5%,50V,Chip cera
	CCSRCH681J50	680pF +/-5%,50V,Chip cera
	CCSRCH820J50	68pF +/-5%,50V,Chip cera
	CCSRCH224J50	0.0022uF +/-5%,50V,Chip cera
	CKSRYF104Z25	0.01pF +80/-20%,25V,Chip cera

# Disassembly of the Traverse Mechanism Assy

- ① Remove the top cover and Tray Panel.
- ② Remove the Tray panel and Front Panel.
- ③ Remove the Bridge (Screw 1).
- ④ Pull out the Tray and remove it while unhooking a Hook.
- ⑤ Turn the Short SW to Short side.
- ⑥ Remove three connectors.

④ -1  
Hook

Bridge

③ -1

③ -2

⑥

⑥

④ -2

DVD main PC board assy

● RearView

DVD main PCB side

Short ↔ Open

⑤

Short SW

**Caution in the tray insertion**

In the Tray insertion, insert it after matching a triangle mark of the Loading Base and a position of pin of the Drive Cam.

Triangle mark

Loading Base

Pin

Drive Cam

- ⑦ Remove the Loading Mechanism Assy (Screws 4).
- ⑧ Remove a screw.

**Cautions:**  
Screw is locked with Silicone Adhesive.  
Please lock it with Silicone Adhesive when installs it.

- ⑨ Remove the FFC Holder with the state which Flexible Cable was attached.

Traverse Mechanism Assy

FFC Holder

● Bottom View

● When Removing The Traverse Mechanism Assy

- ⑩ Remove the Pickup Flexible Cable
- ⑪ Unhook (4)
- ⑫ Remove the Traverse Mechanism Assy

Traverse Mechanism Assy

Exchange

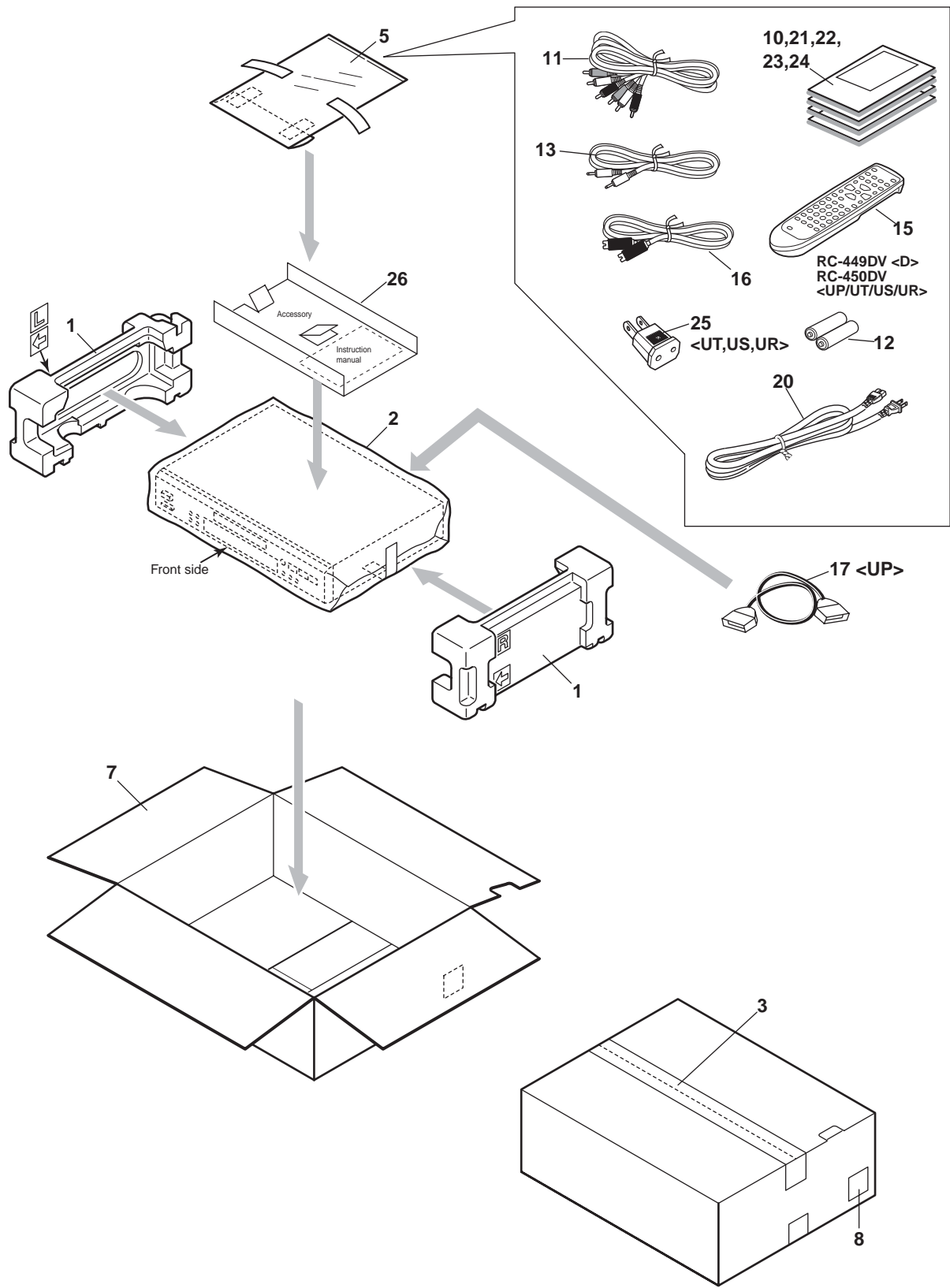
## MICROPROCESSOR TERMINAL DESCRIPTION

## MPD780232GC-041-8BT

Pin No.	Symbol	Function	I/O	Description	Pin No.	Symbol	Function	I/O	Description
1	Vdd1	Vdd1	—	Power supply, +5V	41	P45/FIP37	SMP192LED	O	Sampling rate 192 LED control pin
2	Vss1	Vss1	—	Ground pin	42	P44/FIP36	SMP96LED	O	Sampling rate 96 LED control pin
3	X2	X2	—	Main clock input pin (5MHz)	43	P43/FIP35	PLYLED	O	Play LED control output pin
4	X1	X1	—	Main clock input pin (5MHz)	44	P42/FIP34	STPLED	O	Stop LED control output pin
5	IC	GND	—	Ground pin	45	P41/FIP33	OPCLLED	O	Open/ close LED control pin
6	~RESET	RESET	—	Reset pin of microprocessor	46	P40/FIP32	LED0	O	General LED control pin
7	P27/~SCK1	XSCK	O	Clock output pin for writhing of flash ROM	47	P37/FIP31	未使用	O	Not used
8	P26/SI1	SI	I	Data input pin for writhing of flash ROM	48	P36/FIP30	未使用	O	Not used
9	P25/SO1	SO	O	Data output pin for writhing of flash ROM	49	P35/FIP29	未使用	O	Not used
10	P24/BUSY	XRDY	O	XRDY output pin	50	P34/FIP28	P15	O	FL segment (P15) control output pin
11	P23	PON	O	Power ON control signal output pin (Power ON: "H")	51	P33/FIP27	P14	O	FL segment (P14) control output pin
12	P22	SYSRESET	O	Reset control output pin	52	P32/FIP26	P13	O	FL segment (P13) control output pin
13	P21/SO3	未使用	I	Not used	53	P31/FIP25	P12	O	FL segment (P12) control output pin
14	P20/~SCK3	未使用	I	Not used	54	P30/FIP24	P11	O	FL segment (P11) control output pin
15	P00/INTP0	~IRIN	I	Remote control1 signal input pin.	55	FIP23	P10	—	FL segment (P10) control output pin
16	P01/INTP1	LT1	I	LT1 data input pin	56	FIP22	P9	—	FL segment (P9) control output pin
17	P02/TI	VCOFF	O	Video circuit off control output pin	57	FIP21	P8	—	FL segment (P8) control output pin
18	AVss	GND	—	Ground pin for D/A converter	58	FIP20	P7	—	FL segment (P7) control output pin
19	ANI3	INIT1	I	Initializing input pin (Analog signal)	59	Vdd2	Vdd2	—	Power supply pin (+5V)
20	ANI2	K2	I	Key input pin	60	Vload	Vload	—	FIP control pin to connect pull down resistor
21	ANI1	K1	I	Key input pin	61	FIP19	P6	—	FL segment (P6) control output pin
22	ANI0	K0	I	Key input pin	62	FIP18	P5	—	FL segment (P5) control output pin
23	Vss0	Vss0	—	Ground pin	63	FIP17	P4	—	FL segment (P4) control output pin
24	AVdd	+5V	—	Power supply pin of D/A converter, +5V	64	FIP16	P3	—	FL segment (P3) control output pin
25	Vdd0	Vdd0	—	Power supply, +5V	65	FIP15	P2	—	FL segment (P2) control output pin
26	P64/FIP52	~SYSIN	I	System buss input pin	66	FIP14	P1	—	FL segment (P1) control output pin
27	P63/FIP51	~SYSOUT	O	System buss output pin	67	FIP13	14G	—	FL grid (G14) output pin
28	P62/FIP50	R232REQ	I	REQ input pin from microprocessor of RS-232C driver	68	FIP12	13G	—	FL grid (G13) output pin
29	P61/FIP49	R232BUSY	I	BUSY input pin from microprocessor of RS-232C driver	69	FIP11	12G	—	FL grid (G12) output pin
30	P60/FIP48	R232SI	I	SI input pin from microprocessor of RS-232C driver	70	FIP10	11G	—	FL grid (G11) output pin
31	P57/FIP47	R232SCK	O	SCK input pin from microprocessor of RS-232C driver	71	FIP9	10G	—	FL grid (G10) output pin
32	P56/FIP46	R232SO	O	SO input pin from microprocessor of RS-232C driver	72	FIP8	9G	—	FL grid (G9) output pin
33	P55/FIP45	TEST	I	Testing pin	73	FIP7	8G	—	FL grid (G8) output pin
34	P54/FIP44	R232RES	O	Reset control output pin to microprocessor of RS-232C driver	74	FIP6	7G	—	FL grid (G7) output pin
35	P53/FIP43	FLON_OFF	O	FL filament on/off control output pin	75	FIP5	6G	—	FL grid (G6) output pin
36	P52/FIP42	MS0_2	I	Model select input pin 2	76	FIP4	5G	—	FL grid (G5) output pin
37	P51/FIP41	MS0_1	I	Model select input pin 1	77	FIP3	4G	—	FL grid (G4) output pin
38	P50/FIP40	MS0_0	I	Model select input pin 0	78	FIP2	3G	—	FL grid (G3) output pin
39	P47/FIP39	STBYLED	O	Standby LED control output pin	79	FIP1	2G	—	FL grid (G2) output pin
40	P46/FIP38	VCOFFLED	O	Video circuit off LED control output pin	80	FIP0	1G	—	FL grid (G1) output pin



PACKING VIEW



## PACKING PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	29091986	Pad ass'y	16	2010380	S cord
2	29100037-1A	Poly bag, 650 x 500	17	2010368 or 2010360	YAF11-0697 or TPX3000 RGB cord <MUP>
3	29110098	Tape, W50 3M NO 371	20	253296HIT	AC-UC-2, Power cord <MDD>
5	29100097-1A	Polybag, 320 x 250		253299HIT	AS-CEE, Power cord <MUP/MUT/MUS>
7	29053753	Caton box <MDD> <B>		253309HIT	AS-CCEE, Power cord <MUR>
	29053754	Caton box <MUP> <B>	21	29343107A	Instruction manual E <MDD/MUT/MUS/MUR>
	29053755	Caton box <MUT> <B>		29343108	Instruction manual E <MUP>
	29053756	Caton box <MUS> <B>	22	29343114	Instruction manual U2FS <MUP/MUS>
	29053757	Caton box <MUP> <S>		29343109	Instruction manual CS <MUR>
	29053758	Caton box <MUT> <G>	23	29343195	Instruction manual U2CtCs <MUT>
	29053759	Caton box <MUS> <G>		29343113	Instruction manual CT <MUR>
	29053760A	Caton box <MUR> <G>	24	29343194	Instruction manual U6 <MUP>
8	29362887	UPC label <B>	25	25055911	Conversion plug <MUT/MUS/MUR>
	29362885	EAN label <MUP/MUT/MUS> <B>	26	2909234	Pad, Top <MUP>
	29362888	EAN label <MUP> <S>			<B>: Black color model
	29362886	EAN label <MUT/MUS/MUR> <G>			<G>: Golden color model
10	29365090	Warranty card <MDD>			<S>: Silver color model
11	2010379	Audio video cable			<MD>: North American area (Regional restriction code- 1)
12	3010054	BATTERY UM-3			<MUP>: European area (Regional restriction code- 2)
13	2010200	RI cord			<MUT>: Some Asian area (Regional restriction code- 3)
14	29092034	Pad, Top <MUP>			<MUS>: South American area (Regional restriction code- 4)
15	24140449	RC-449DV, Remote controller <MDD>			<MUR>: Chinese area (Regional restriction code- 6)
	24140450	RC-450DV, Remote controller <MUP/MUT/MUS/MUS>			

## PARTS LIST (3)

## Display circuit PC board (NADIS-7182A-1A/1B/1C/1D/1E)

CIRCUIT NO.	PART NO.	DESCRIPTION
		<b>ICs</b>
Q701	22241727R3	MPD780232GC-045-8BT
Q706	22241713R2	BD4742G
		<b>FL tube</b>
Q702A	212219	14-BT-68GNK
		<b>Transistors</b>
Q704	2216230R2	KRA103S or RN2403
		<b>Remote sensor</b>
Q705	241336	PIC-37043TH2 or PIC-26043TH2
C701	355721019	100uF,6.3V,Elect.
C703	355782209	
C704	355721019	
		<b>Resonator</b>
X701	3010242	CST5.00MGW
		<b>Diodes</b>
D701	223234R2 or 223269R2	1SS352 or 1SS355, Chip
D702	224550560R2	UDZS5.6B, Zener
		<b>Sockets</b>
P701A	25052322 or 25051946 or 25052516	NSCT-22P2219 or NSCT-22P1733 or NSCT-22P2413
P701B	25052359 or 25051904 or 25052543	NSCT-22P2256 or NSCT-22P1691 or NSCT-22P2440
P731	25052344 or 25051889 or 25052528	NSCT-7P2241 or NSCT-7P1676 or NSCT-7P2425
JL771A	25051089	NSCT-5P876
		<b>Switches</b>
S701-S715	25035699	NPS-111-S662
		<b>FL holder</b>
Q702B	27191141	

## Standby LED PC board (NADIS-7183A-1A/1B/1C/1D/1E)

CIRCUIT NO.	PART NO.	DESCRIPTION
		<b>Transistors</b>
Q721	2216340R2	KRC107S or RN1407
		<b>LED</b>
D721	225290T	SEL4110R, Standby ind.
		<b>Switch</b>
S723	25035699	NPS-111-S662, Standby
		<b>Plug</b>
JL771B	25055626	NPLG-5P588

## AC inlet terminal PC board (NAPS-7212A-1A/1B/1C/1D/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
		<b>Terminal</b>
P981A	25056006	NPLG-2P956, inlet <MDD>
	25056027	NPLG-2P977, inlet <UP,UT,US,UR>
		<b>Socket AS</b>
P982B	2009990661U	NSAS-2P0921

## Power switch PC board (NASW-7186A-1A/1B/1C/1D/1E)

CIRCUIT NO.	PART NO.	DESCRIPTION
		<b>Capacitor</b>
C991	3500196S	RE275V-103M
		<b>Switch</b>
S991	25035703	NPS-111-L666P or
	25035550	NPS-111-L512P, Power SW
E101	25137181	NCAR-7181
E102	25137182	NCDIS-7182
E103	25137183	NCDIS-7183
E105	25137185	NCETC-7185
E106	25137186	NCSW-7186
E107	25137187	NCVD-7187
E108	25137188	NCETC-7188
E109	25137212	NCPS-7212

## Power supply unit (NGPS-0020, NGPS-0021)

CIRCUIT NO.	PART NO.	DESCRIPTION
		<b>Resistor</b>
R38	443621014	Metal oxide, 100 ohm 1W, +/-196I985% <MDD,MJJ>
		<b>Capacitor</b>
C12	354721029	1000uF 6.3V, Elect
24150020		NGPS-0020, Power supply PC board ass'y <MDD>
24150021		NGPS-0021, Power supply PC board ass'y <MUP/MUT/MUS/MUR>

&lt;MD&gt; : North American area (Regional restriction code- 1)

&lt;MUP&gt;: European area (Regional restriction code- 2)

&lt;MUT&gt;: Some Asian area (Regional restriction code- 3)


&lt;MUS&gt;: South American area (Regional restriction code- 4)

&lt;MUR&gt;: Chinese area (Regional restriction code- 6)

&lt;B&gt;: Black color model

&lt;G&gt;: Golden color model

&lt;S&gt;: Silver color model

**NOTE: THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.**

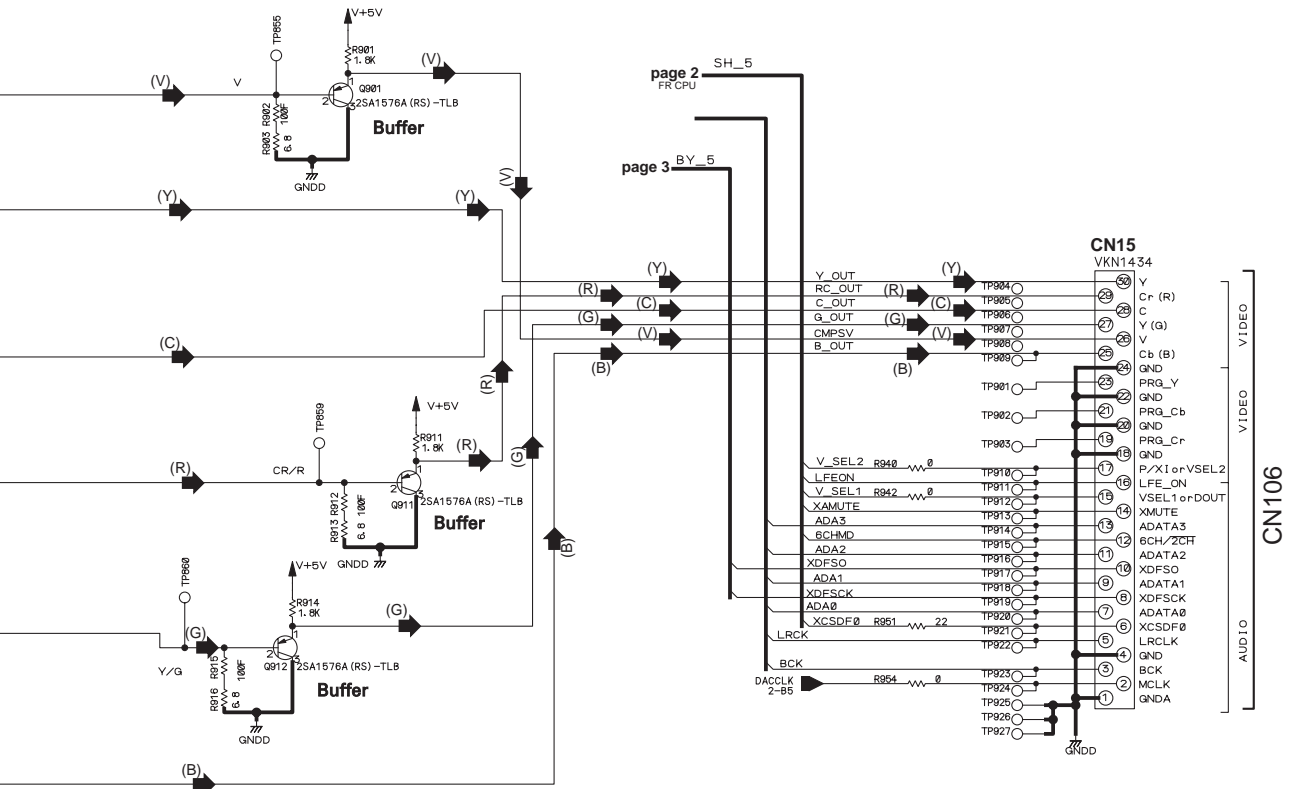
## PARTS LIST (2)

## Output terminal PC board (NAAR-7181A-1A/1B/1C/1D/1)

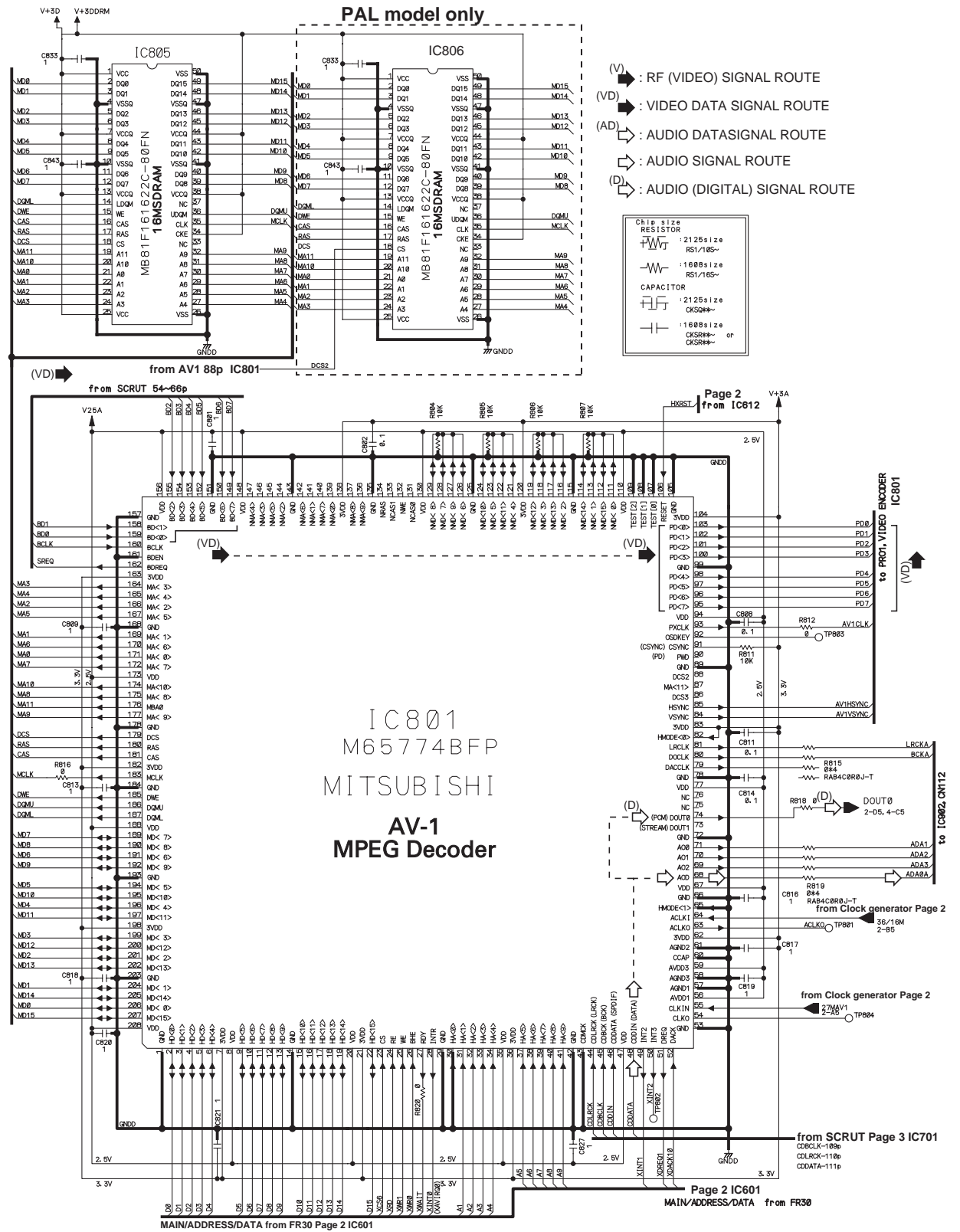
CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
		<b>ICs</b>			
Q201	22241623R2	MM1540BF	CN102,CN106	25052610	NSCT-30P-2507
Q251	222840531R2O	TC4053BF <MUP>	P104	25052344	NSCT-7P2241 or
Q252	222740007R2O	TC74HCT00AF <MUP>		25051889	NSCT-7P16761 or
Q301	22241617R2	DB-VCP301(PCM-1742KE)		25052528	NSCT-7P2425
Q351	22274004HR2O	TC74VHCU04FT	P250A,P250B	25052216	NSCT-20P2113 or
Q401,Q402	22240581R2	NJM4565M or		25051827	NSCT-20P1614 or
	22241383R2	NJM4565M-D		25052029	NSCT-20P1816 <MUP>
Q901	222780085	78M08HF	P251	25052279	NSCT-21P2176
Q902	22241515R2	PQ025EZ5MZP			<b>Sockets AS</b>
		<b>Transistors</b>	P902	2002A392815	NSAS-28P0742
Q202,Q204	2216340R2 or	KRC107S or	P351A	200BB19041	5 NSAS-4P0816
	2216260R2	RN1407			<b>Jacks</b>
Q203,Q205	2216230R2 or	KRA103Sb or	P201	25045656	NPJ-5PDBY456, S-Video
	2214540R2	RN2403	P203	25045654	NPJ-3PDGLR454, Component
Q253,Q255,	2216174R2 or	KTC3875-Y or			out <MUP,MUT,MUS,MUR>
Q256	2213144R2 or	2SC2712-Y or	P353	25045548	NPJ-1PDOR369, Coaxial
	2213145R2 or	2SC2712-GR or	P354	25045330	NPJ-2PDBL184 or
	2216175R2	KTC3875-GR <MUP>		25045481	NPJ-2PDBL299, RI remote
Q254	2214374R2 or	2SA1162-Y or	P401	25045655	NPJ-3PDBRW455, Analog out
	2214375R2 or	2SA1162-GR or			<b>Resistors</b>
	2216185R2	KTA1504-GR <MUP>	R287	443521514	150 ohm+/-5%, 1/2W, Metal oxide <MUP>
Q258	2216190R2 or	KRC102S or			<b>Capacitors</b>
	2214470R2	RN1402 <MUP>			
Q259,Q360	2211705 or	2SD655-E or	C201,C409	354741019	100uF,16V,Elect.
	2211706 or	2SD655-F or	C410, C911,		
	2216002	KTC2874-B <MUP>	C912,C210		
Q261,Q262	2213354 or	2SA933S-R or	C215,C913	354744709	47uF,16V,Elect.
	2213355 or	2SA933S-S or	C217,C218,	354724719	470uF,6.3V,Elect.
	2215995	KTA1267-GR <MUP>	C221,C222		
Q303,Q410	2216340R2 or	KRC107S or	C220	354721029	1000uF,6.3V,Elect. <MDD/MUT/MUS>
	2216260R2	RN1407			
Q403-Q405	2216141R2	HN1C03F-B	C251,C253	354741019	100uF,16V,Elect.<MUP>
Q412	2214373R2	2SA1162-O or	C254	354721019	100uF,6.3V,Elect.<MUP>
	2214374R2	2SA1162-Y or	C255-C258	354724719	470uF,6.3V,Elect. <MUP>
	2216183R2	KTA1504-O or	C301,C303,	354721019	100uF,6.3V,Elect.
	2216184R2	KTA1504-Y or	C305,C353 ,		
	2216185R2	KTA1504-GR	C358		
		<b>Photo coMUPler</b>	C401,C402,	354782209	22uF,50V,Elect.
Q352	24120093	JFJ3000	C411,C412,		
		<b>Diodes</b>	C415		
D251,D252	223266R2	1SS226 <MUP>	C902,C906	354742219	220uF,16V,Elect.
D402	223234R2 or	1SS352 or	C904,C908,	354722219	220uF,6.3V,Elect.
	223269R2	1SS355	C910		
D403	223163	1SS133	<b>Shield plate</b>		
D901	224550510R2	UDZS5.1B, Zener	E201B	27150455	<MUP>
		<b>Coils</b>			
L201-L203, L351-L353	230958R1	BK1608LM182-T			
L204,L205, L206	230958R1	BK1608LM182-T <MD,UT,US,UR>			
L251-L254	230958R1	BK1608LM182-T <MUP>			

- (VD) : VIDEO DATASIGNAL ROUTE
- (V) : V SIGNAL ROUTE
- (Y) : Y SIGNAL ROUTE
- (C) : C SIGNAL ROUTE
- (R) : R SIGNAL ROUTE
- (G) : G SIGNAL ROUTE
- (B) : B SIGNAL ROUTE
- ↪ : AUDIO SIGNAL ROUTE

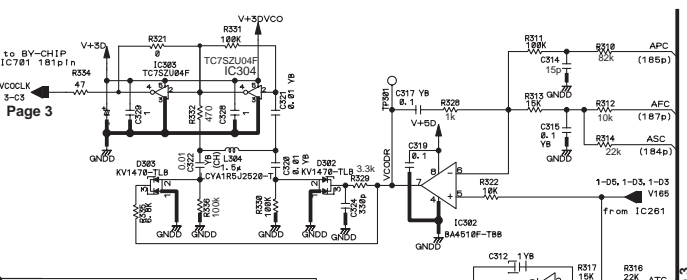
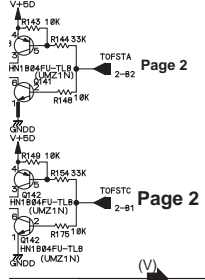
CHIP SIZE	
RESISTOR	
	: 2125size RS1/10S~
	: 1608size RS1/16S~
CAPACITOR	
	: 2125size CKSQ**~
	: 1608size CCSR**~ or CKSR**~



SCHEMATIC DIAGRAM (Page 3)



Offset SW method (780nm LD)



- (RF) : RF SIGNAL ROUTE
- (V) : RF (VIDEO) SIGNAL ROUTE
- (A) : RF (AUDIO) SIGNAL ROUTE
- (AD) : AUDIO DATA SIGNAL ROUTE
- (F) : FOCUS SERVO LOOP LINE
- (T) : TRACKING SERVO LOOP LINE
- (S) : SLIDER SERVO LOOP LINE

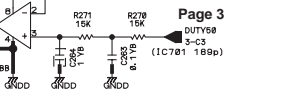
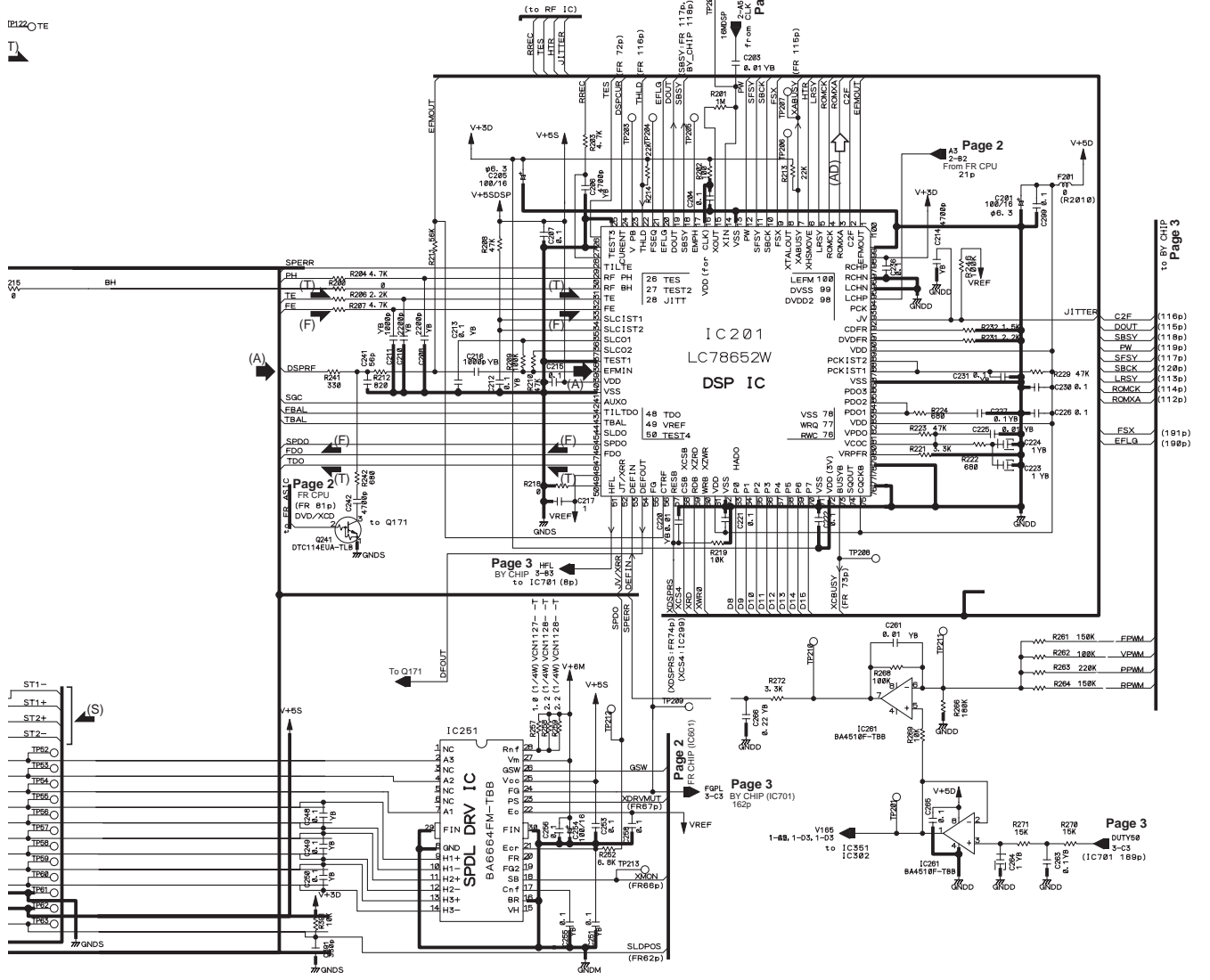
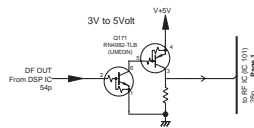
Chip size Resistor

Capacitor

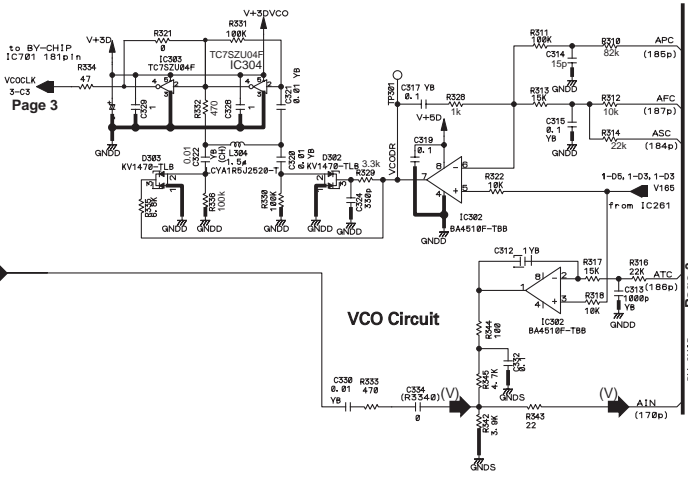
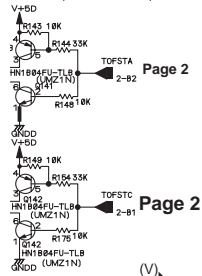
Chip size Resistor

Capacitor

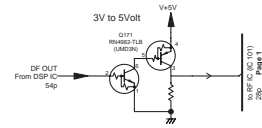
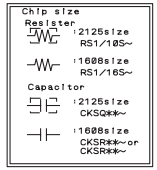
- (A)
- (F)
- TE
- (T)



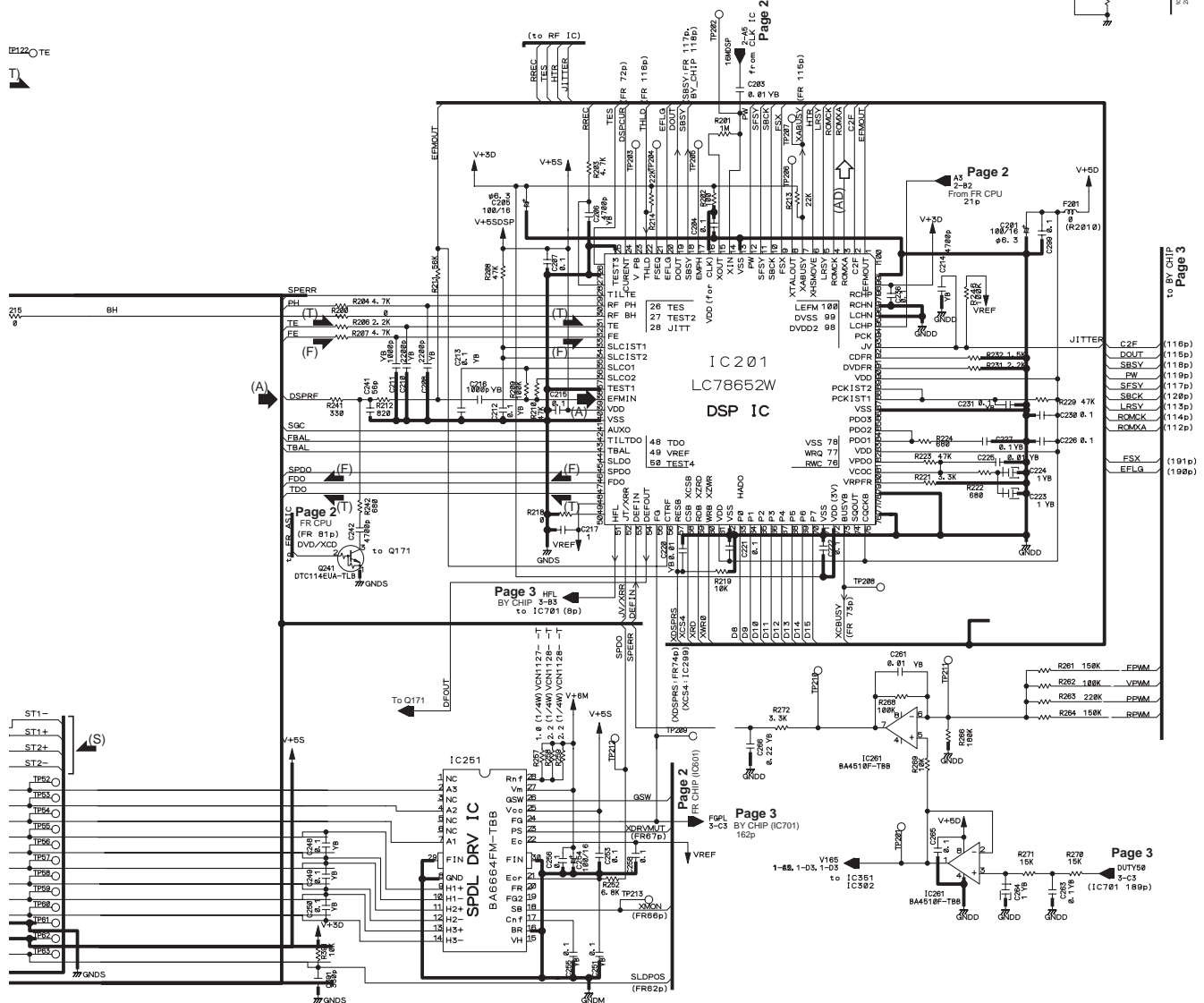
r Offset SW  
ethod (780nm LD)



- (RF) : RF SIGNAL ROUTE
- (V) : RF (VIDEO) SIGNAL ROUTE
- (A) : RF (AUDIO) SIGNAL ROUTE
- (AD) : AUDIO DATA SIGNAL ROUTE
- (F) : FOCUS SERVO LOOP LINE
- (T) : TRACKING SERVO LOOP LINE
- (S) : SLIDER SERVO LOOP LINE



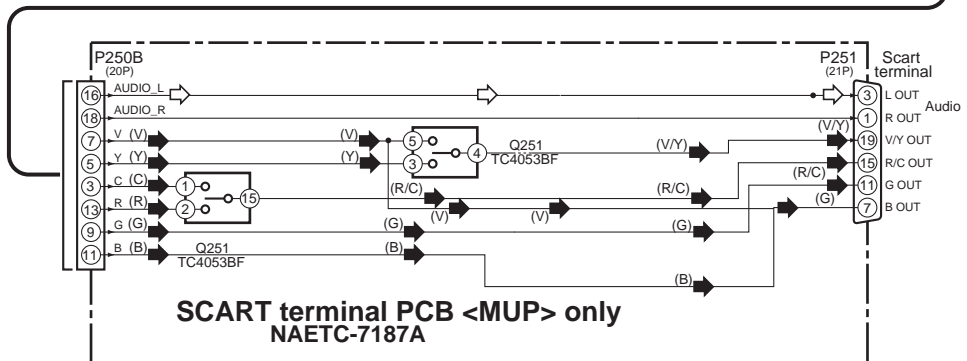
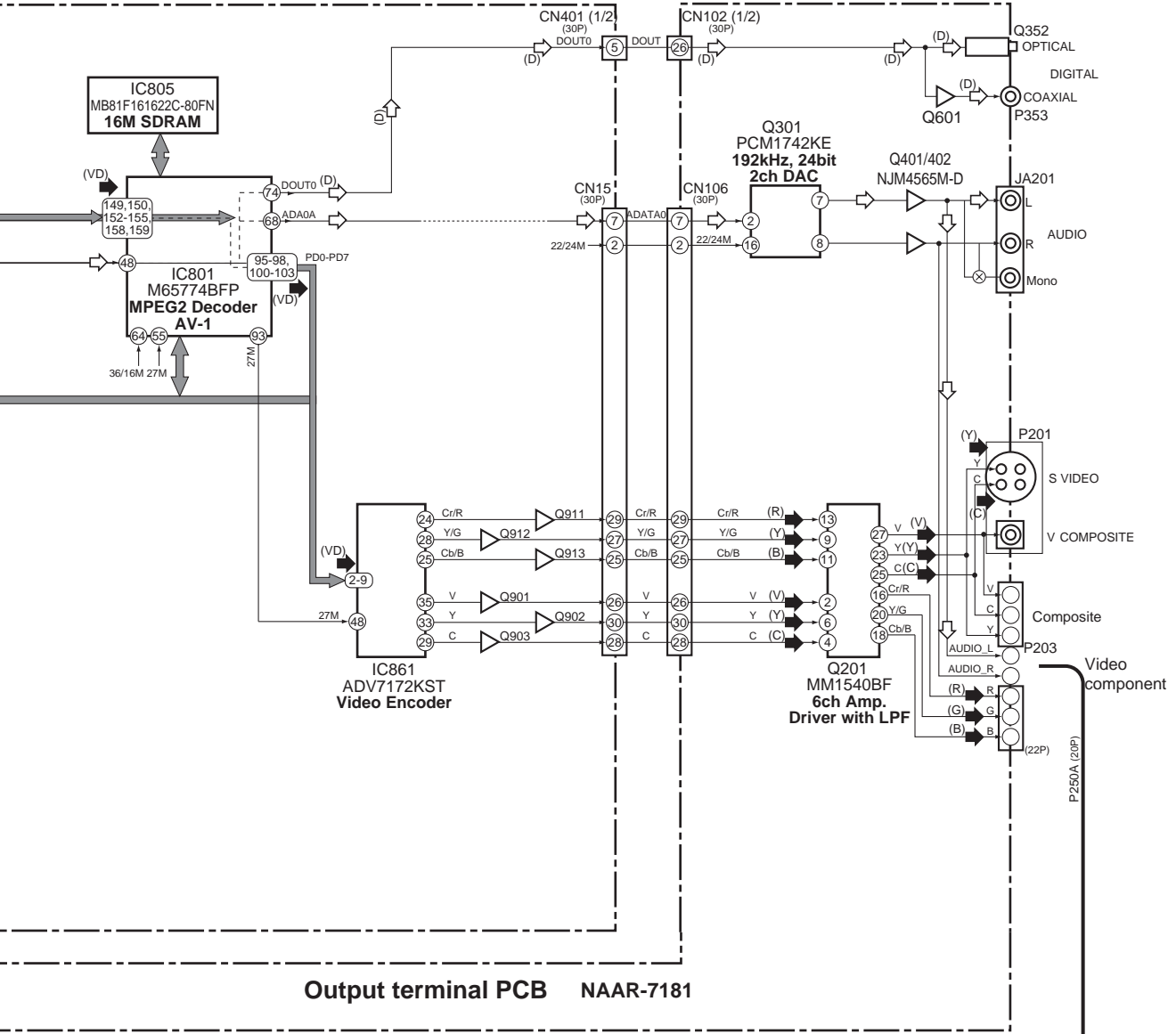
(F)22 TE



to BY CHIP Page 3



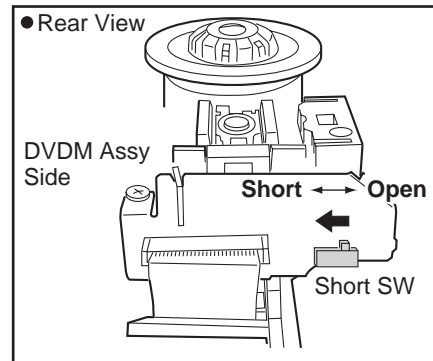
- (RF) : RF SIGNAL ROUTE
- (AD) : AUDIO DATA SIGNAL ROUTE
- ⊠ : AUDIO SIGNAL ROUTE
- (D) : AUDIO (DIGITAL) SIGNAL ROUTE
- (VD) : VIDEO DATA SIGNAL ROUTE
- ▶ : VIDEO SIGNAL ROUTE
- (V) : V SIGNAL ROUTE
- (Y) : Y SIGNAL ROUTE
- (C) : C SIGNAL ROUTE
- (R) : R SIGNAL ROUTE
- (G) : G SIGNAL ROUTE
- (B) : B SIGNAL ROUTE



## SERVICE GUIDE 2

### 1. Remove the solder of Laser Diode shorting

- 1-1 Connect Pickup and DVD main circuit PC board by FFC(3 pcs).
- 1-2 Fix it with the DVD Mecha
- 1-3 Remove the solder of Laser Diode shorting on Pickup.
- 1-4 Connect total unit of DVD Mechanism (DVD Main PCB + Mechanism) to output terminal.  
PC board (NCAR7181) at CN102 and CN106



### 2. Check the FL display

Press the [STOP] and [DISPLAY] keys at the same time .

FL display light up, and check the FL display.

To cancel this process, Please press the [STOP] and [DISPLAY] keys at the same time again.

### 3. Factory setting

3-1 Push the power switch "ON" (Mechanical switch)

3-2 Press the [STOP] and [POWER ON] keys at same time (Wait for until FL display "No Disc") .

3-3 Standby button is "OFF".