

TAD

Service Manual



TAD-D600

ORDER NO.
CRT4535

DISC PLAYER

TAD-D600

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
TAD-D600	U	AC 120 V	
TAD-D600	Y8	AC 230 V	



For details, refer to "Important Check Points for good servicing".

TECHNICAL AUDIO DEVICES LABORATORIES, INC.

4-15-3, Nishi-Shinjuku, Shinjuku-ku, Tokyo 160-0023, Japan

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SAFETY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

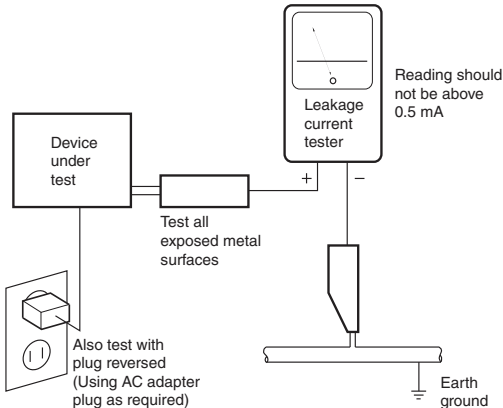
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

WARNING !

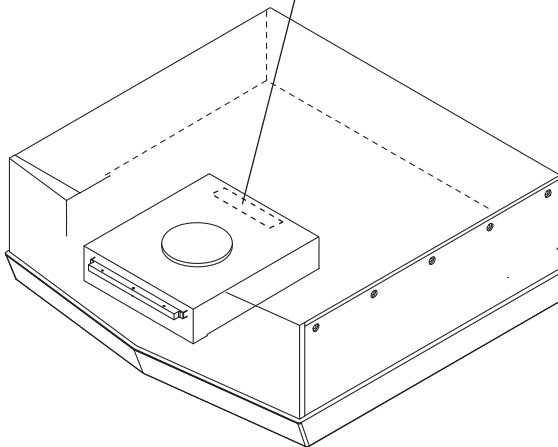
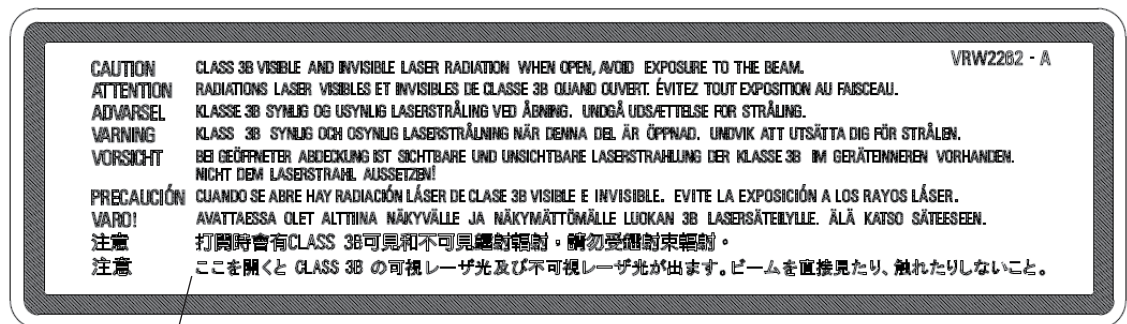
THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

LASER DIODE CHARACTERISTICS

FOR CD : MAXIMUM OUTPUT POWER : 7 mW
WAVELENGTH : 780 nm
FOR SACD: MAXIMUM OUTPUT POWER : 5 mW
WAVELENGTH : 650 nm)

LABEL CHECK

types : VRW2262



Additional Laser Caution

1. Laser Interlock Mechanism

- Loading switch (S101 on the LOAB Assy) is used for interlock mechanism of the laser.

When this switch turned ON in SW2 (CLOSE) side (OPEN signal is 0V and CLOSE signal is 3.5V), a laser becomes the status which can completely oscillation.

Furthermore, the laser completely oscillates in the disc judgment and disc playback.

When player is power ON state and laser diode is not completely oscillating, 780nm laser diode is always oscillating by half power.

- Laser diode is driving with Q307 (650nm LD) and Q308 (780nm LD) on the DVDM Assy.

Therefore, when short-circuit between the emitter and collector of these transistors or the base voltage is supplied for transistors turn on, the laser oscillates. (failure mode)

- In the test mode, there is the mode that the laser oscillates except for the disc judgment and playback. LD ON mode in the test mode oscillates with the laser forcibly.

The interlock mechanism mentioned above becomes invalid in this mode.

2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

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[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

A Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:

- Parts numbers of lead-free solder:
GYP1006 1.0 in dia.
GYP1007 0.6 in dia.
GYP1008 0.3 in dia.

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Model Type Disc player

Power:

 USA..... AC 120 V, 60 Hz

 EuropeAC 230 V, 50 Hz/60 Hz

Power consumption 37 W

(During standby)..... 0.5 W

External dimensions:

 Main unit450 mm (W) × 185 mm (H) × 440 mm (D)

 17 23/32 in. (W) × 7 9/32 in. (H) × 17 11/32 in. (D)

 Power unit220 mm (W) × 185 mm (H) × 430 mm (D)

 8 11/16 in. (W) × 7 9/32 in. (H) × 16 15/16 in. (D)

Weight:

 Main unit26.5 kg (58 lb 7oz)

 Power unit 13.0 kg (28 lb 11 oz)

Analog audio output (2 ch)

Audio output level (Load impedance 100 kΩ):

 Balanced output450 mVrms (1 kHz, -20 dB)

 Unbalanced output.....220 mVrms (1 kHz, -20 dB)

Output connectors:

 Balanced outputXLR stereo x 1

 Unbalanced output.....RCA stereo x 1

Frequency response (Load impedance 100 kΩ):

 CD4 Hz to 20 kHz

 SACD4 Hz to 40 kHz

S/N ratio:

 CD 115 dB

 SACD 110 dB

 Digital input (24 bit)..... 115 dB

Digital audio input/output

Input sampling frequency.....32 kHz to 192 kHz

Balanced inputXLR connector x 1

Coaxial input RCA connector x 1

Output sampling frrequency32 kHz to 96 kHz

Balanced outputXLR connector x 1

Accessories

Remote control unit.....	1
AAA/IEC R03 dry cell batteries.....	2
DC cords (75 cm/29.53 in.)	2
Power cord	1
Polishing cloth.....	1
Felts	2
Operating Instructions (This document)	

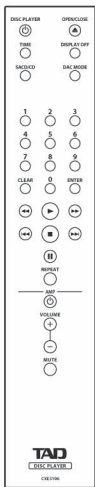
 **Note**

● Specifications and the design are subject to possible modifications without notice, due to improvements.

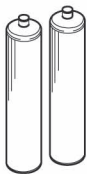
Checking what’s in the box

Please check that you have received the following supplied accessories in the accessory box.

- Remote control x 1
- AAA/IEC R03 dry cell batteries×2
- Power cord x 1
- Polishing cloth x 1
- Felts x 2
- Operating Instructions (this document)

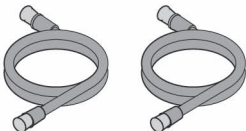


CXE3196



*VEM1049

- DC cords (CDE9205 75 cm/29.53 in.) x 2



2.2 USABLE DISCS

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Types of discs that can be played on this unit

Playable discs will feature one of the following marks either on the disc label, package, or jacket.

SACD

CD

CD-R

CD-RW



“Super Audio CD” is a registered trademark.

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About SACD play

SACD can be played in 2 channel sound only.

Copy control CDs

This player is designed to comply with music CD standards. No warranty is made for proper operation or performance when playing discs not in compliance with music CD standards.

About DualDisc playback

A DualDisc is a new two-sided disc, one side of which contains DVD content video, audio, etc. while the other side contains non-DVD content such as digital audio material. The non-DVD, audio side of the disc is not compliant with the CD Audio specification and therefore may not play. For more detailed information on the DualDisc specification, please refer to the disc manufacturer or disc retailer.

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Playing CD-R/CD-RW discs

The TAD-D600 can play CD-R/CD-RW discs formatted in music CD format and containing musical data. Depending on the disc, however, some may not be playable, or may exhibit noise or distortion. The TAD-D600 is a dedicated disc player, and cannot record on CD-R/CD-RW discs. CD-R/CD-RW discs that have not been finalized cannot be played on this player.

* For details, consult the operating instructions for your disc recorder.

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CAUTION

- Some CD-R/CD-RW discs recorded on a disc recorder or personal computer may not be playable on this player. Reasons may include disc characteristics, scratches, dirt, dirt on the player's lens, condensation, etc.
- Discs recorded on a personal computer may not be playable due to vagaries in the recording settings or system environment. Be sure to record discs with the correct format (for details, consult the vendor of your disc recording application).
- Discs recorded with packet-write format cannot be played on this player.

Discs that cannot be played on the TAD-D600:

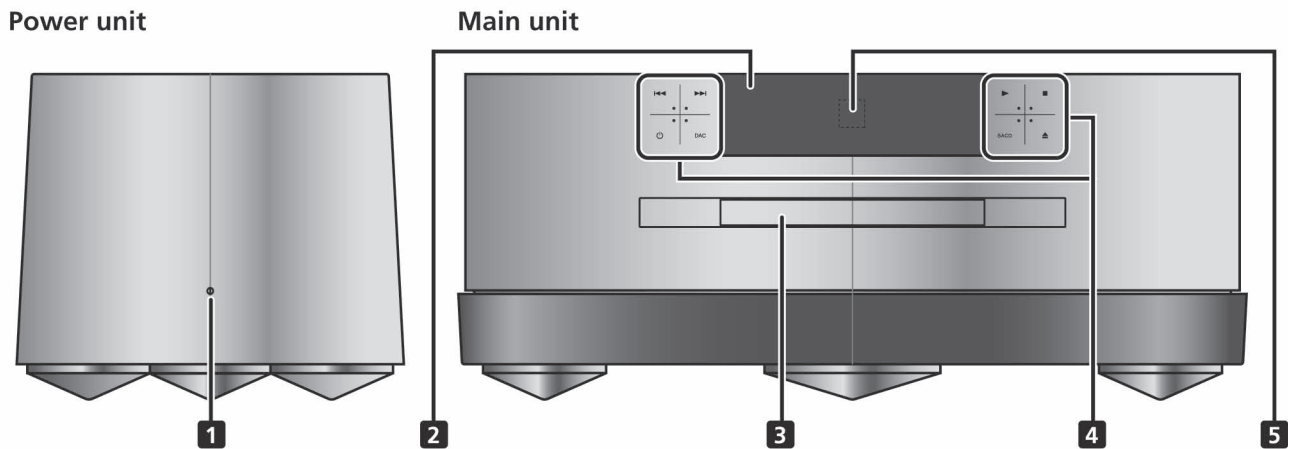
BD, BD-ROM, DVD, CD-G, video CD, 8 cm CD

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Power unit front panel / Main unit front panel



1 Power indicator

When power is in standby mode, the lamp lights red; when the unit is ON, the lamp lights orange.

2 Display

The display provides graphic information about the TAD-D600's many operations and functions.

3 Disc tray

4 Touch sensors / Action indicators

Touch the center of each character or icon to operate.

When the touch sensors are activated, the action indicator lights.

◀◀ – Return to beginning of currently playing track

▶▶ – Skip to beginning of next track.

⏻ – Set power to ON/standby. The indicator lights red when in the standby condition, and orange when ON.

DAC – Switch to digital/analog converter input.

▶ – Play. When pressed during playback, enters pause mode.

■ – Stops playback.

SACD – Switches play area of hybrid disc. The indicator lights when an SACD is inserted, or when the SACD layer of an SACD/CD hybrid disc is selected.

▲ – Open/Close disc tray.

5 Remote control sensor

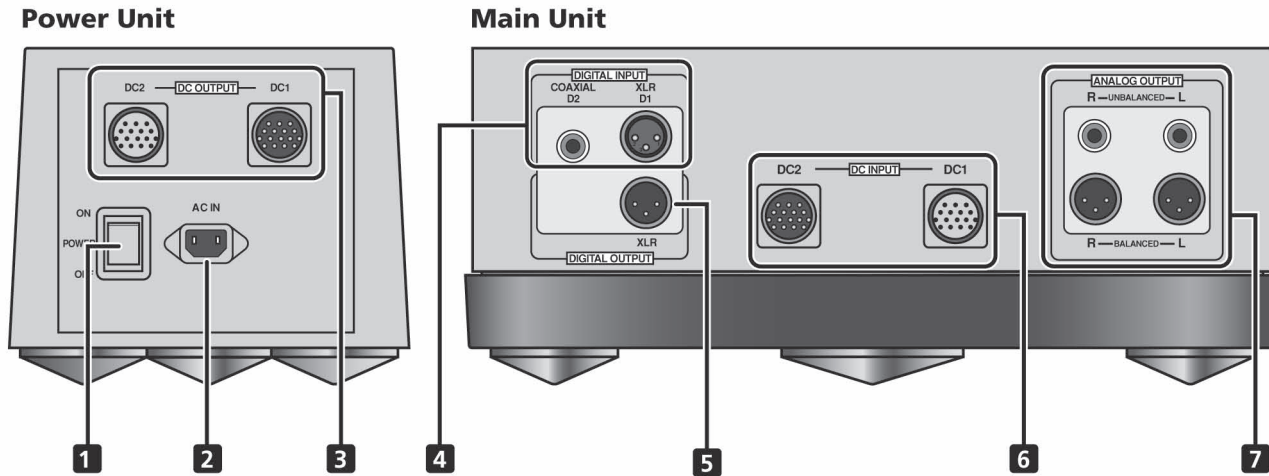
Point remote control unit at this sensor to operate. Effective distance is within about 7 meters.



Note

When a disc is stopped, repeat mode is canceled.

Power unit rear panel / Main unit rear panel



1 Main power switch (POWER ON/OFF)

Use to switch main power ON/OFF. Press upper side to turn power ON, then press the  button on the remote control or main unit to set the unit to standby/ON mode. Press the lower side of this switch to turn the main power OFF.

2 AC IN connector

Connect the supplied power cord here.

3 DC OUTPUT connectors (DC1/DC2)

Connect one end of the accessory DC cord here, and the other end of the cord to the main unit's DC 1/DC 2 INPUT connectors.

4 DIGITAL INPUT connectors

Connect to a component equipped with a digital output connector.

- XLR (balanced) type (D1)
- COAXIAL type (D2)

5 DIGITAL OUTPUT connector

Connect to a component equipped with a digital input connector.

- XLR (balanced) type

6 DC INPUT connectors (DC1/DC2)

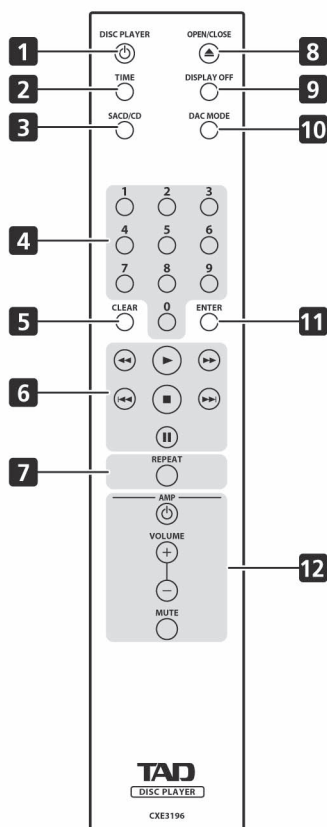
Connect one end of the accessory DC cord here, and the other end of the cord to the power unit's DC 1/DC 2 OUTPUT connectors.

7 ANALOG OUTPUT connectors

Connect to Pre-Amplifier

- UNBALANCED RCA type
- BALANCED XLR type

Remote Control Unit



1 DISC PLAYER button

Use to set power to ON/standby mode.

2 TIME button

Press to display the disc's elapsed and remaining playing time. Each time the button is pressed, the display alternates as follows: **"track remaining time" / "disc remaining time" / "elapsed time"**.

3 SACD/CD button

Press to switch between play areas of hybrid discs. Each time the button is pressed, the playing area alternates between **"CD area"** and **"SACD area"**.

4 Number buttons

Use to designate specific tracks for playback. Press the desired number button to select, followed by the **ENTER** button to confirm the selection.

5 CLEAR button

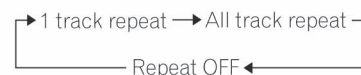
Press to cancel a currently input item. For example, this is useful when an improper track number has been input.

6 Play operation buttons

- ▶ – Play disc.
- – Stop disc play.
- ⏸ – When pressed during playback, pauses the disc play at its current position. Press the button again to resume playback.
- ◀◀ – Press during playback to perform quick reverse.
- ◀◀◀ – Press during playback to return to the beginning of the currently playing track.
- ▶▶ – Press during playback to perform fast forward.
- ▶▶▶ – Press to advance to beginning of next track.

7 REPEAT button

Each time the button is pressed the repeat play mode alternates in the following order:



8 OPEN/CLOSE button

Press to open and close the disc tray.

9 DISPLAY OFF button

Press to turn off display.

10 DAC MODE button

Press to switch DAC mode. Each time the button is pressed the mode alternates as follows:

"D1 input (XLR)" / "D2 input (coaxial)" / "Disc play mode"

11 ENTER button

Press to confirm settings and selections

12 Amplifier operation buttons

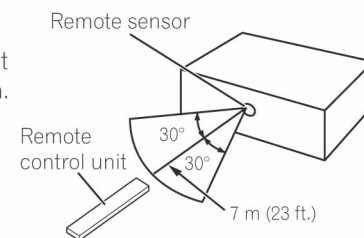
These buttons can be used to operate a Pioneer TAD amplifier.

- AMP** – Amplifier power ON/standby
- VOLUME** – Use to adjust sound volume.
- MUTE** – Press to temporarily mute the sound.

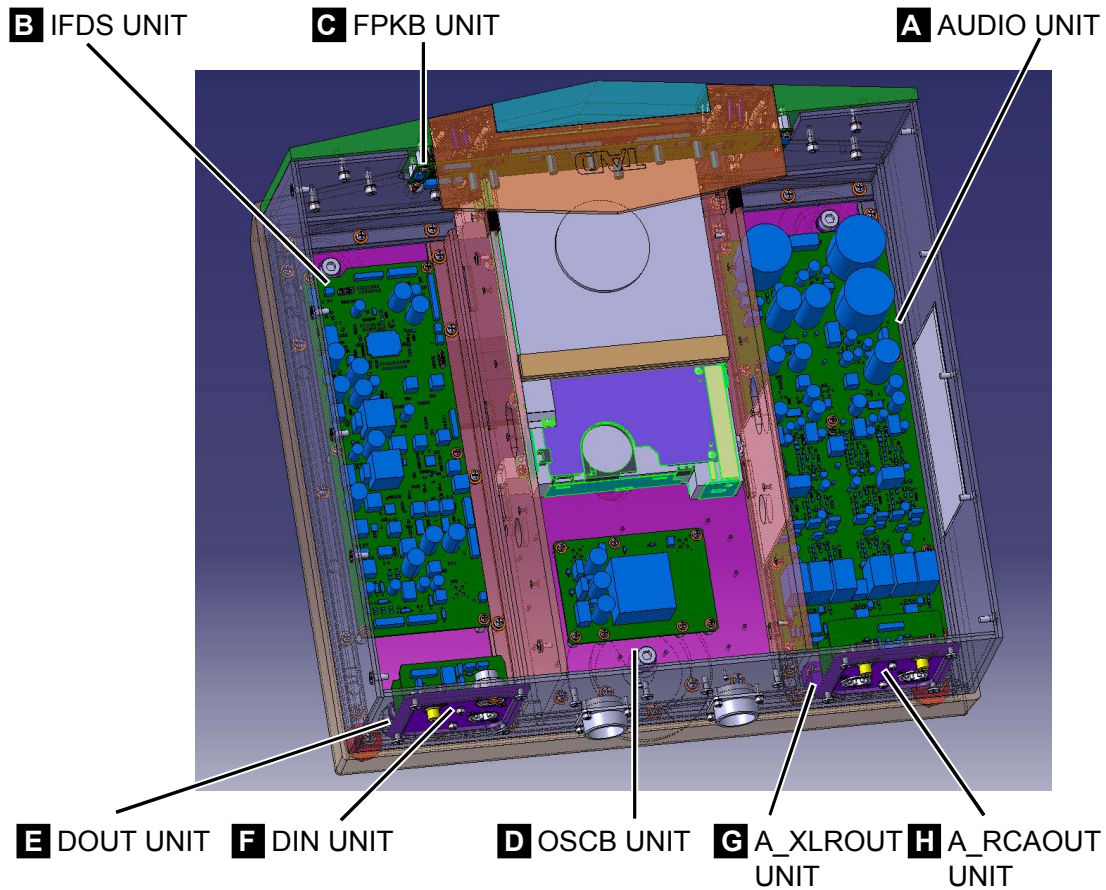
Remote control operating range

When using the remote control unit to operate the TAD-D600, point the remote control at the main unit's remote sensor within the ranges shown in the accompanying illustration.

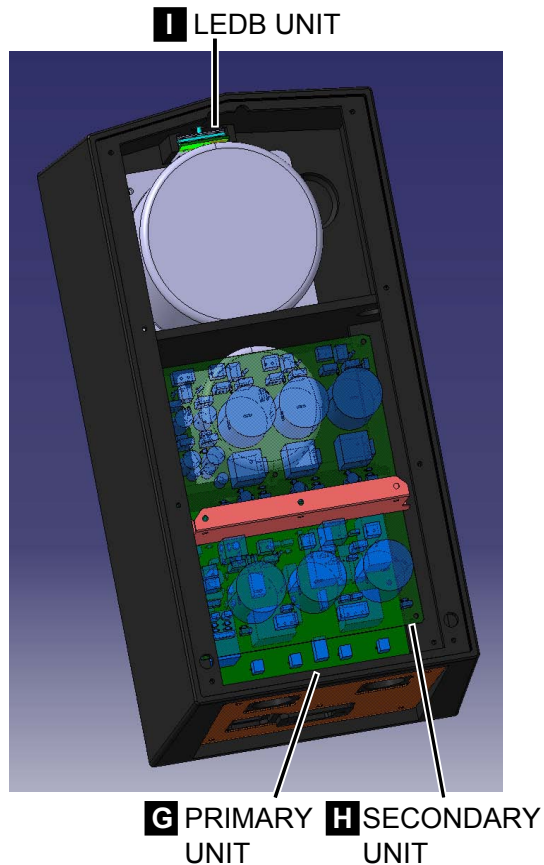
- The remote control may not operate properly if obstructions exist between the remote control unit and the remote sensor, or if the angle between the remote control and the remote sensor is poor.
- Malfunctions may occur if the TAD-D600 is used nearby other appliances that emit infrared light, or if remote control units for other devices utilizing infrared light are used nearby. Alternately, using this remote control unit near other appliances that also utilize infrared light may cause those appliances to malfunction.
- Replace the batteries when you notice a reduction in the operating range of the remote control unit.
- The remote control may not operate correctly if strong sunlight or light from fluorescent lamps is allowed to strike the remote sensor directly. In such cases, change the installation location, or remove the fluorescent lamps to a more distant location.



3.1 PCB LOCATIONS



Mark	No.	Description	Part No.
	1..		
	2..	DVDM ASSY	AWM8184
	1..	AUDIO UNIT	CWX3877
	1..	DIGITAL UNIT	CWX3876
	2..	IFDS UNIT	
	2..	FPKB UNIT	
	2..	DOUT UNIT	
	2..	LEDB UNIT	
	1..	POWER UNIT	CWX3878
	2..	PRIMARY UNIT	
	2..	SECONDARY UNIT	
	2..	OSCB UNIT	
	2..	DIN UNIT	
	2..	A_XLROUT UNIT	
	2..	A_RCAOUT UNIT	



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4. BLOCK DIAGRAM

4.1 OVERALL WIRING DIAGRAM

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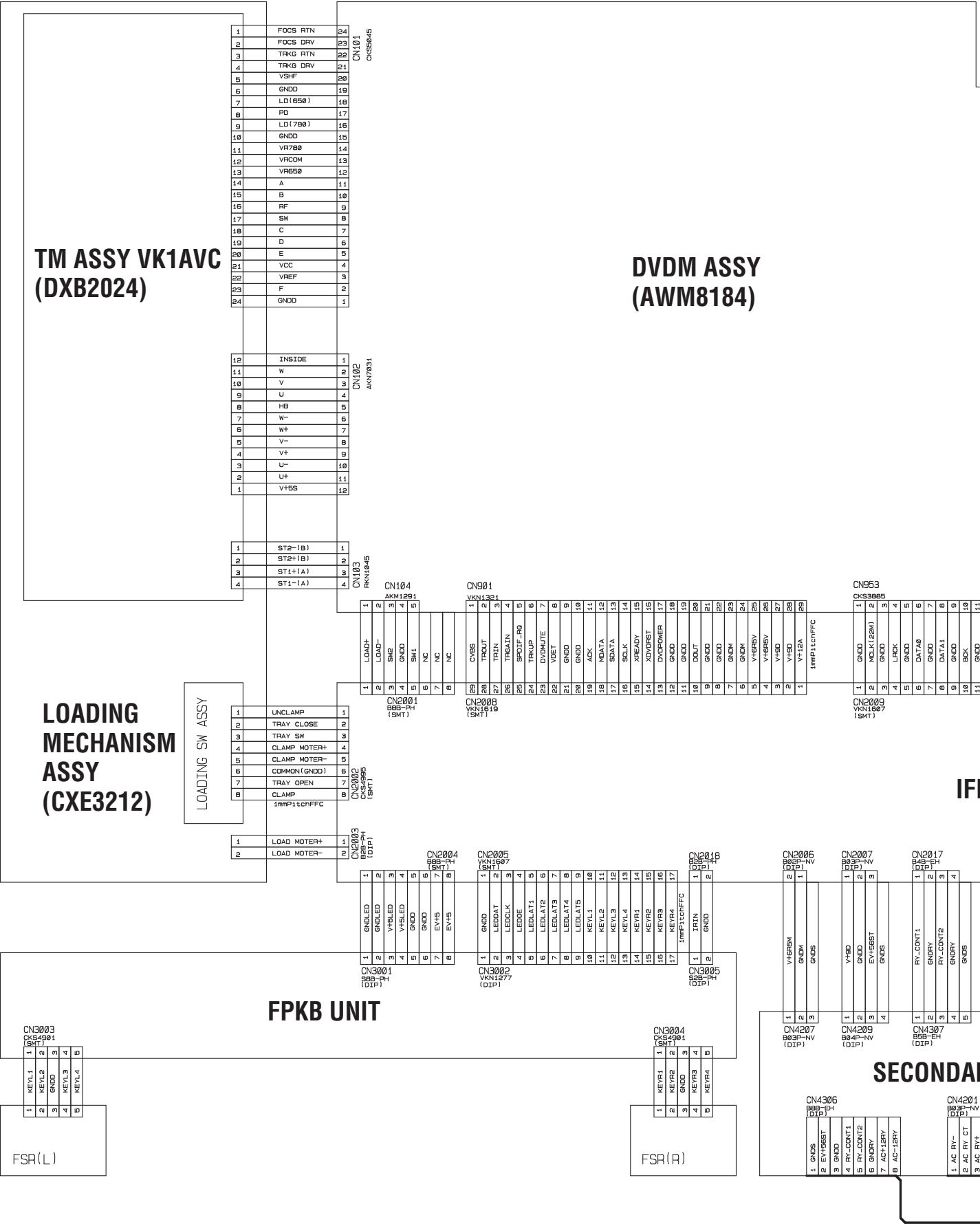
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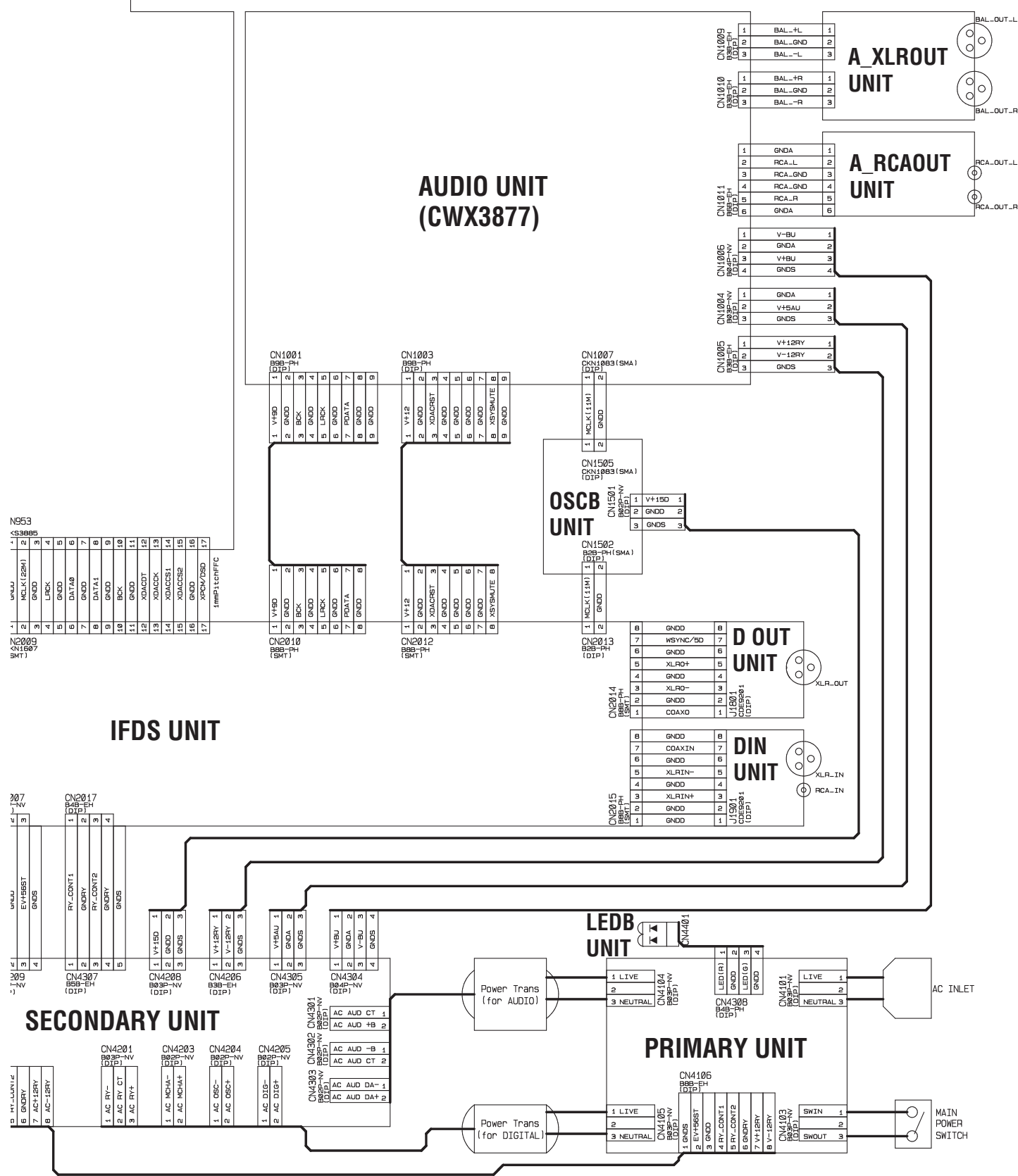
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- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
-  : The power supply is shown with the marked box.



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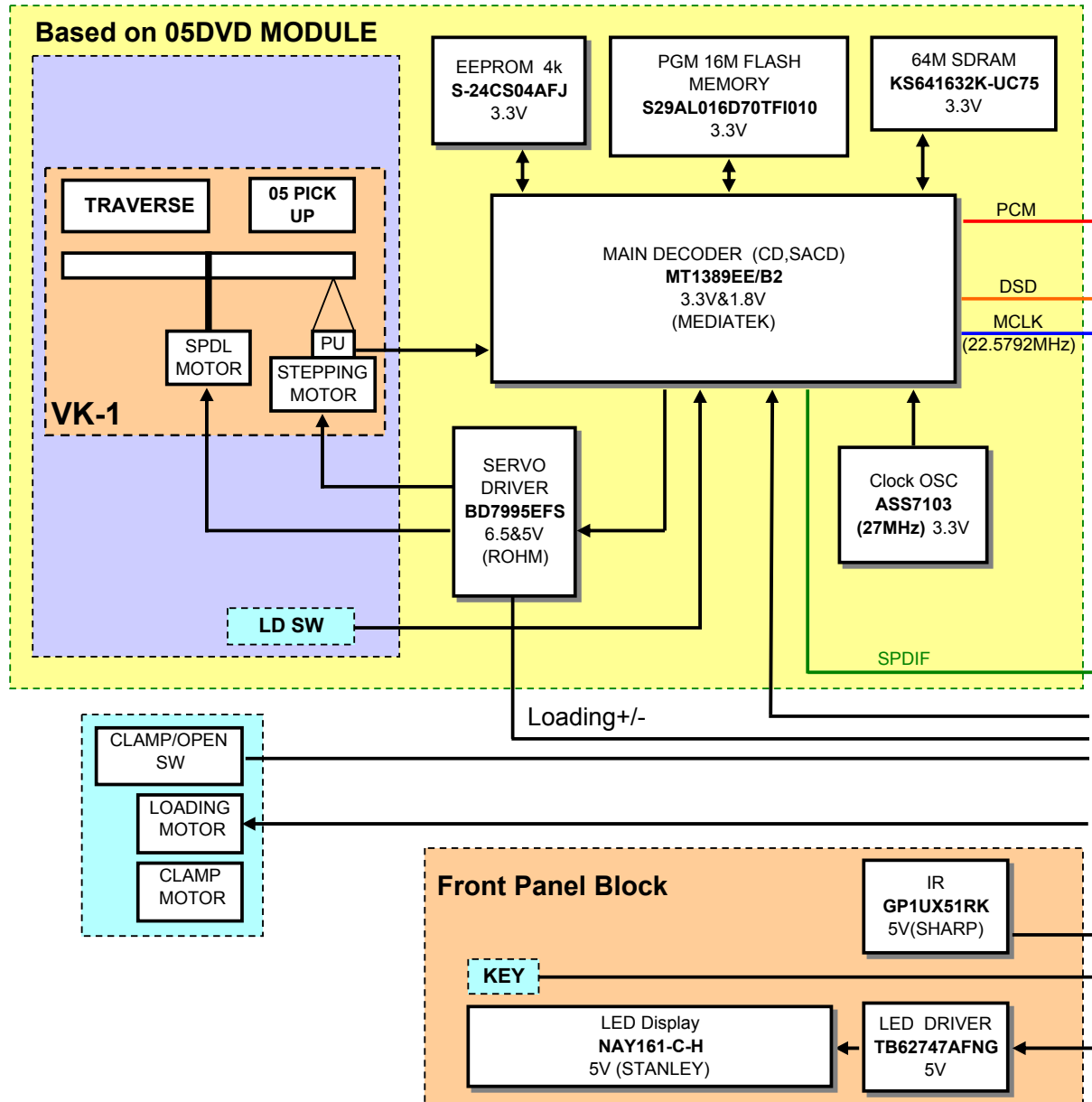
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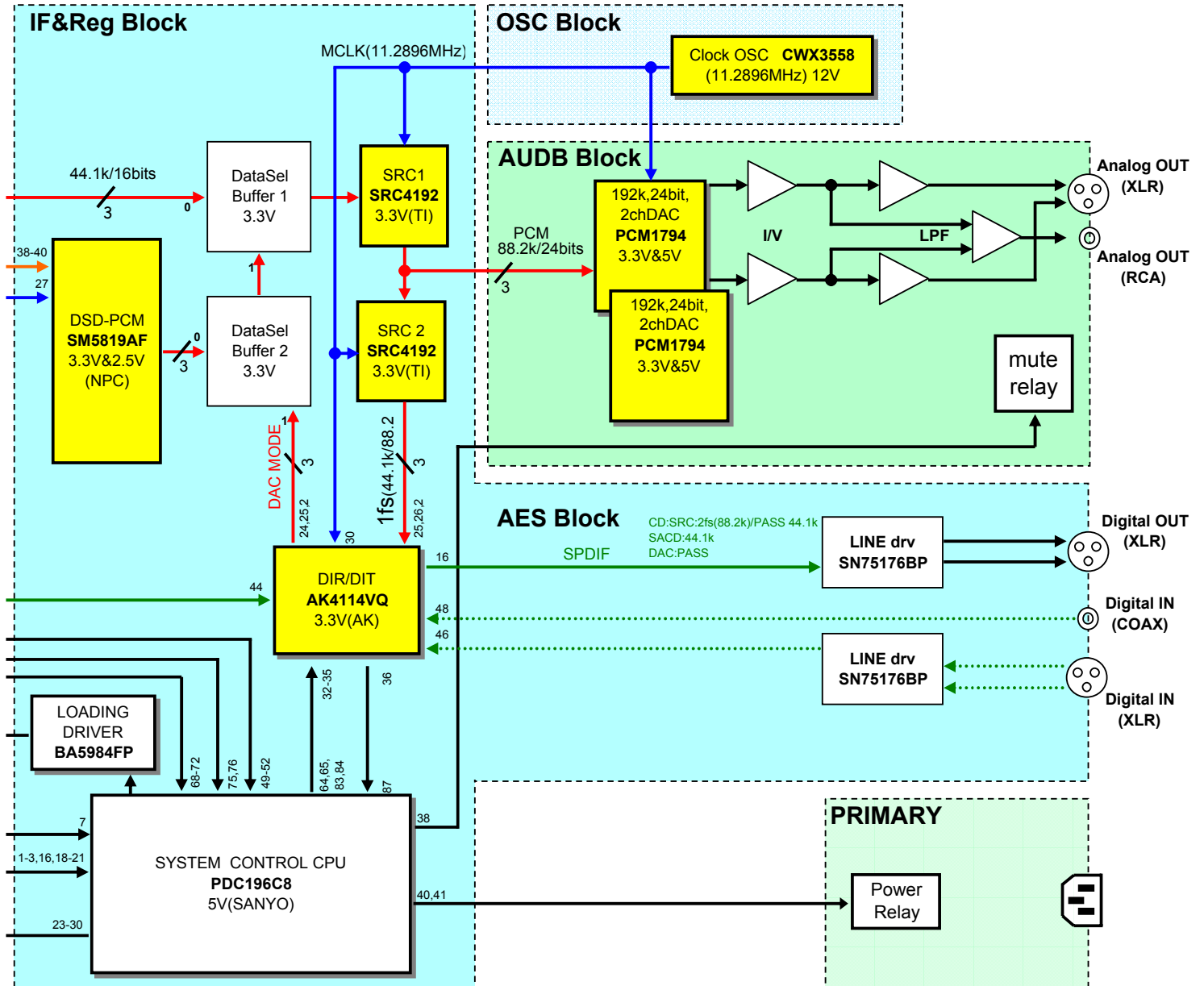
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4.2 OVERALL BLOCK DIAGRAM

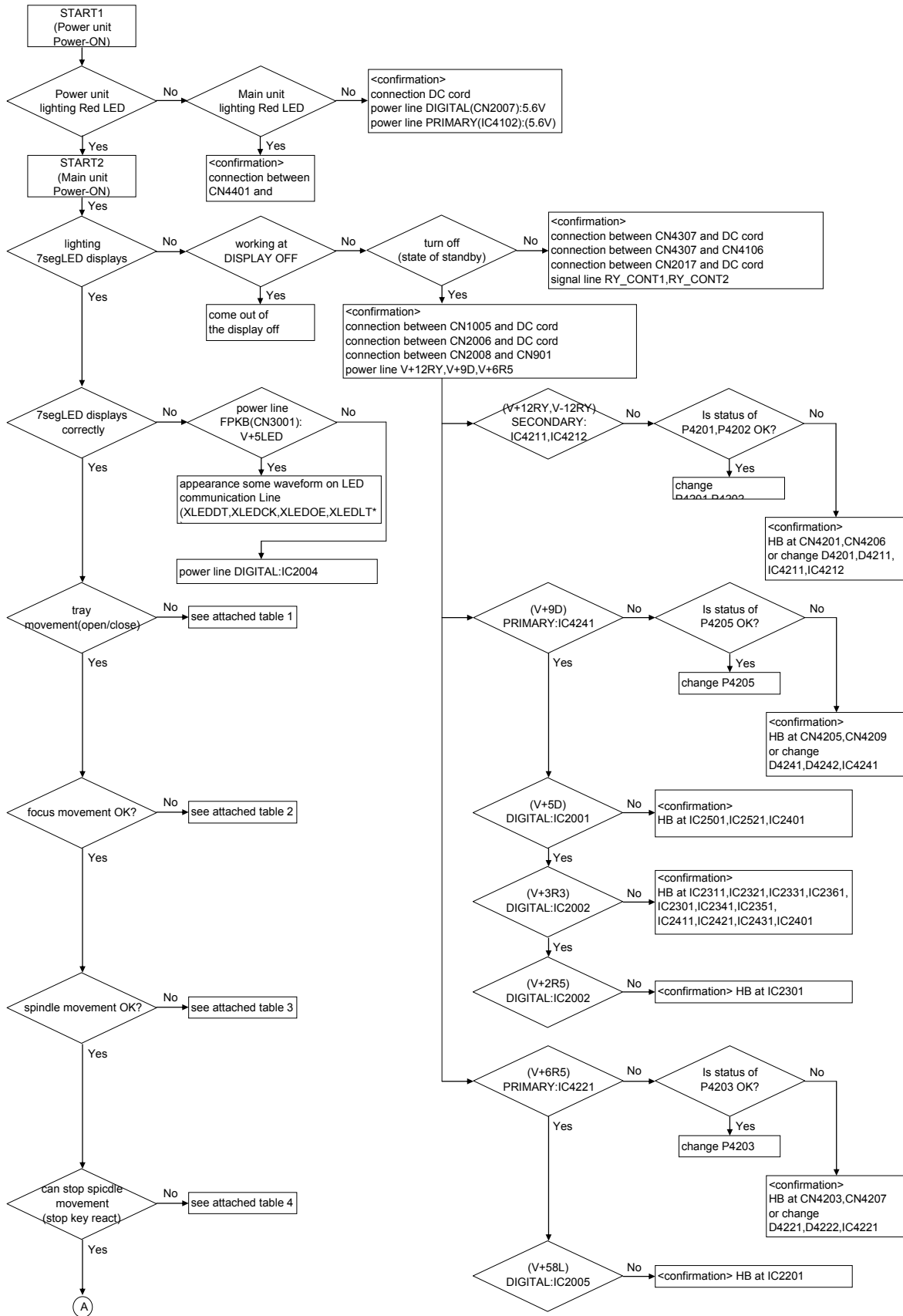
TD001 Block Diagram

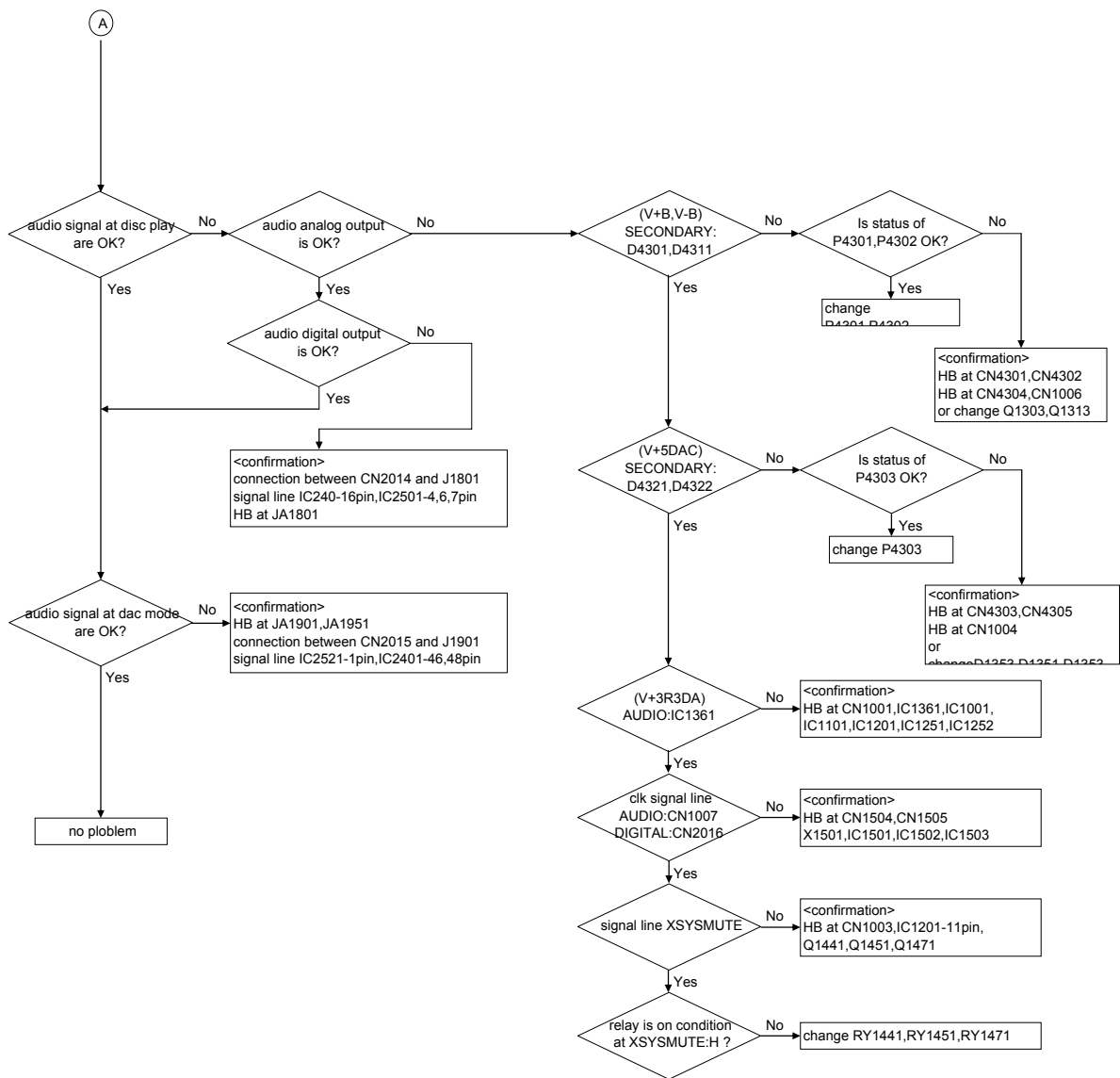




5. DIAGNOSIS

5.1 TROUBLESHOOTING





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No.	Symptoms	Diagnosis Contents	Possible Defective Points
1	The power is not turned on.	Are wires of output connector (POWER SUPPLY Unit) and CN901 (DVDM Assy) disconnected or damaged ? Check that the following voltage is output : + side of C739 : 3.3V	Connector / cable DVDM Assy 3.3V Regulator IC (IC341)
2	An opening screen is not displayed on the monitor (The FL display lights. The mechanism does not work.)	Are the signals output from IC201-pin 98 (MDATA) and pin 99 (SCLK) on the DVDM Assy ? (in the range of 0-3V) Are the signals input into IC2101-pin 50 (MDATA) and pin 51 (SCLK) on the IFDS Assy ? (in the range of 0-3V) Check that the following voltage are output : IC751-pin 1 on the DVDM Assy : 5V Is a resonator (X202: 27MHz) on the DVDM Assy oscillating ? • Is a signal input into IC203-pin26 (PCE#) on the DVDM Assy ? (Is a signal "H" for 80 mS and then "L" after the power is turned on ?) → Communication with flash ROM. • Are the signals input into IC202-pin 16 (DWE#), pin 19 (DCS#) and pin 38 (SDCLK) on the DVDM Assy ? (Is a signal fluctuating ?) → Communication with SDRAM Is a signal output from IC203-pin 28 (PRD#) on the DVDM Assy? (Is a signal fluctuating for several hundred mS after the power is turned on ?) Is a signal input into IC2101-pin 67 (DVD ACK) on the IFDS Assy ? (Is a signal fluctuating ?) → Communication with FL Control IC Is a signal output from IC2101-pin 36 (XREADY) on the IFDS Assy ? (Is a signal fluctuating in the range of 0-5V ?) Are the signals output from IC2101-pin 49 (SDATA) on the IFDS Assy ? (in the range of 0-5V) Are the signals of IC204-pin 5(SDA) and pin 6(SCL) on the DVDM Assy fluctuating for one or two seconds after the power is turned ?	DVDM Assy DVD IC (IC201) IFDS Assy UCOM (IC2101) DVDM Assy 5V Regulator IC (IC751) DVDM Assy Crystal resonator (X202) DVDM Assy DVD IC (IC201) Flash ROM (IC203) SDRAM (IC202) DVDM Assy Flash ROM (IC203) DVDM Assy DVD IC (IC201) IFDS Assy UCOM (IC2101) IFDS Assy UCOM (IC2101) DVDM Assy DVD IC (IC201) IFDS Assy UCOM (IC2101) DVDM Assy EEPROM (IC204)
3	A tray cannot be opened. (An opening screen is displayed on the monitor)	Does the voltage of CN104-pin 3 and pin 5 on the DVDM Assy change normally ? Pin 3 (SW2(TRIN)): Tray is fully closed: "L" Pin 5 (SW1(TROUT)): Tray is fully opened: "L" Is the signal input into IC101-pin 11 (TROPEN) on the DVDM Assy ? At open: 3.3V, At close: 0V Are the signals output from IC101-pin 1 and pin 2 (CN103-pin 1 and pin 2) on the DVDM Assy ? Pin 2: Approx. 6V during opening tray approx. 0V during closing tray. Pin 1: Approx. 0V during opening tray approx. 6V during closing tray. Are wires of CN104 and CN103 on the DVDM Assy disconnected or damaged ? Does the voltage of CN102-pin 1 on the DVDM Assy change to 0V by pressing the Inside switch.	DVDM Assy Tray SW (S101) DVDM Assy DVD IC (IC201) DVDM Assy FTS Driver IC (IC101) Connector / cable Inside switch

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No.	Symptoms	Diagnosis Contents	Possible Defective Points
4	Addendum No.2 Playback impossible (no focusing)	Are the signals output from IC101-pin 3 (FOCS_DRV) and pin 4 (FOCS_RTN) on the DVDM Assy ?	DVDM Assy FTS Driver IC (IC101)
		Does 650-nm LD emit light ? Does a pickup lens move up / down ? Does an actuator spring bend ?	Pickup
		Are plastic parts damaged ? Or is a shaft detached ? Is the turntable detached or tilted ?	Mechanism section (motor)
		Is flexible cable of CN101 on the DVDM Assy disconnected or damaged ?	Flexible cable / connector
		Is signal output from IC201-pin 42 (FOSO) on the DVDM Assy ? (Device control of about 1.4 V is output usually. It is fluctuated by about 250 mV with focus up / down.)	DVDM Assy DVD IC (IC201)
5	Addendum No.3 Playback impossible (Spindle does not turn)	Are the signals output from IC101-pin 30 (W), pin 33 (V) and pin 35 (U) on the DVDM Assy ? Is pin 26 (STBY) fixed LOW ? (pin 26 is High at playback: 3V)	DVDM Assy FTS Driver IC (IC101)
		Is there any part detached from the spindle motor ? Or Is there any foreign object lodged in it ?	Mechanism section (Spindle motor)
		Are wires of CN102 on the DVDM Assy disconnected or damaged ?	Flexible cable / connector
		Is signal output from IC201-pin 37 (DMSO) on the DVDM Assy ?	DVDM Assy DVD IC (IC201)
6	Addendum No.4 Playback impossible (Playback stops)	Does 650-nm LD deteriorate ? If the voltage at each both ends of R322 and R325 on the DVDM Assy is 0.4 V or more, the 650-nm LD is definitely deteriorated.	650-nm LD deteriorated. (When playback of a DVD is impossible)
		Does 780-nm LD deteriorate ? If the voltage at each both ends of R321 and R326 on the DVDM Assy is 0.4 V or more, the 780-nm LD is definitely deteriorated.	780-nm LD deteriorated. (When playback of a CD is impossible)
		Is there abnormality in FG waveform ? (IC201-pin 47)	DVDM Assy FG output : FTS Driver IC (IC101)
		Are there scratches or dirt on the disc ?	Disc

5.2 CIRCUIT DESCRIPTION

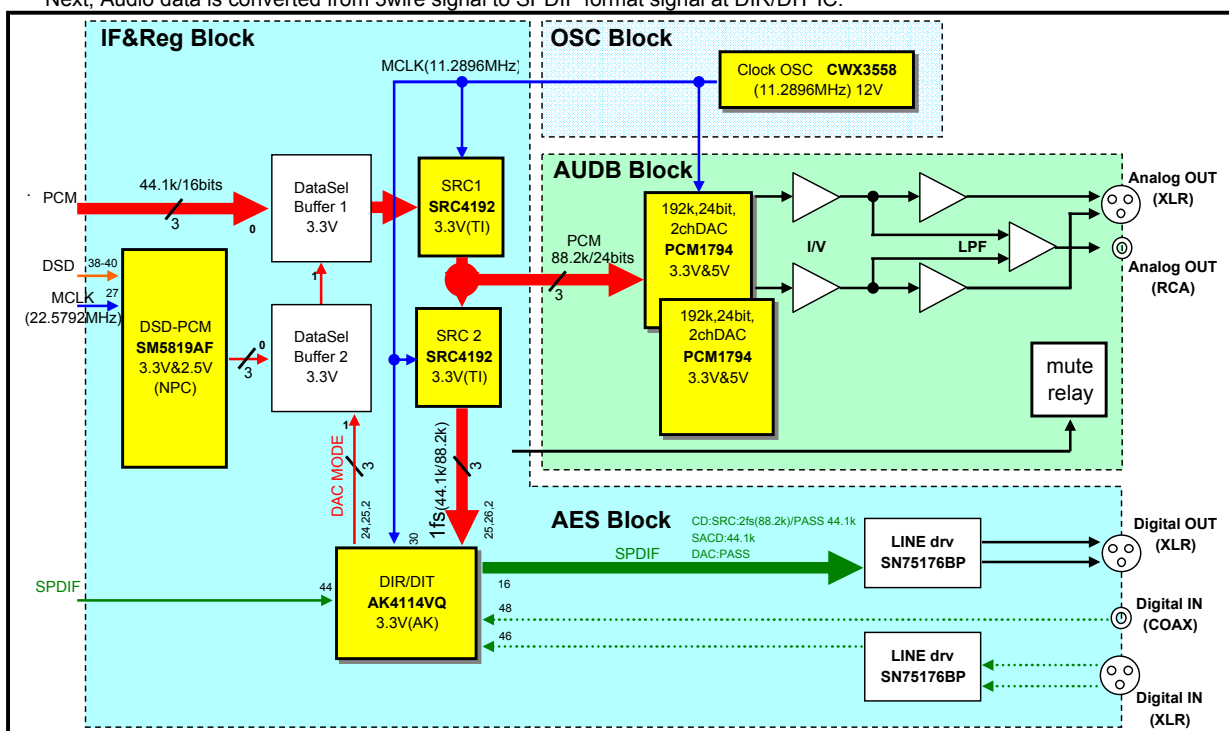
(1)Signal route for CD play(route to use SRC IC for digital output).

Analog output: Audio data is converted from 44.1kHz/16bits to 88.2kHz/24bits at SRC1 IC.

Next, Audio data is converted from digital to the analogue at D/A converter IC.

Digital output: Audio data(via SRC1 IC) is output as it is by 88.2kHz/bits via SRC2 IC

Next, Audio data is converted from 3wire signal to SPDIF format signal at DIR/DIT IC.



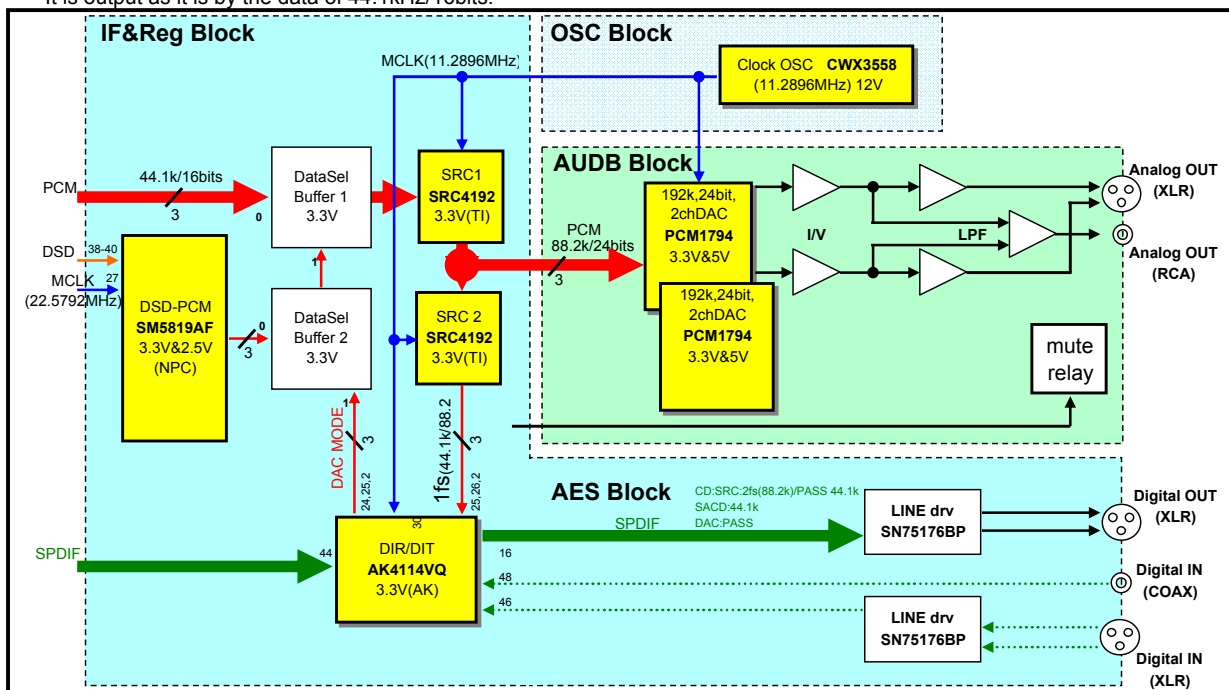
(2)Signal route for CD play(route to pass through for digital output).

Analog output: Audio data is converted from 44.1kHz/16bits to 88.2kHz/24bits at SRC1 IC.

Next, Audio data is converted from digital to the analogue at D/A converter IC.

Digital output: Audio data(from MAIN Unit) passes over the inside of DIR/DIT IC.

It is output as it is by the data of 44.1kHz/16bits.



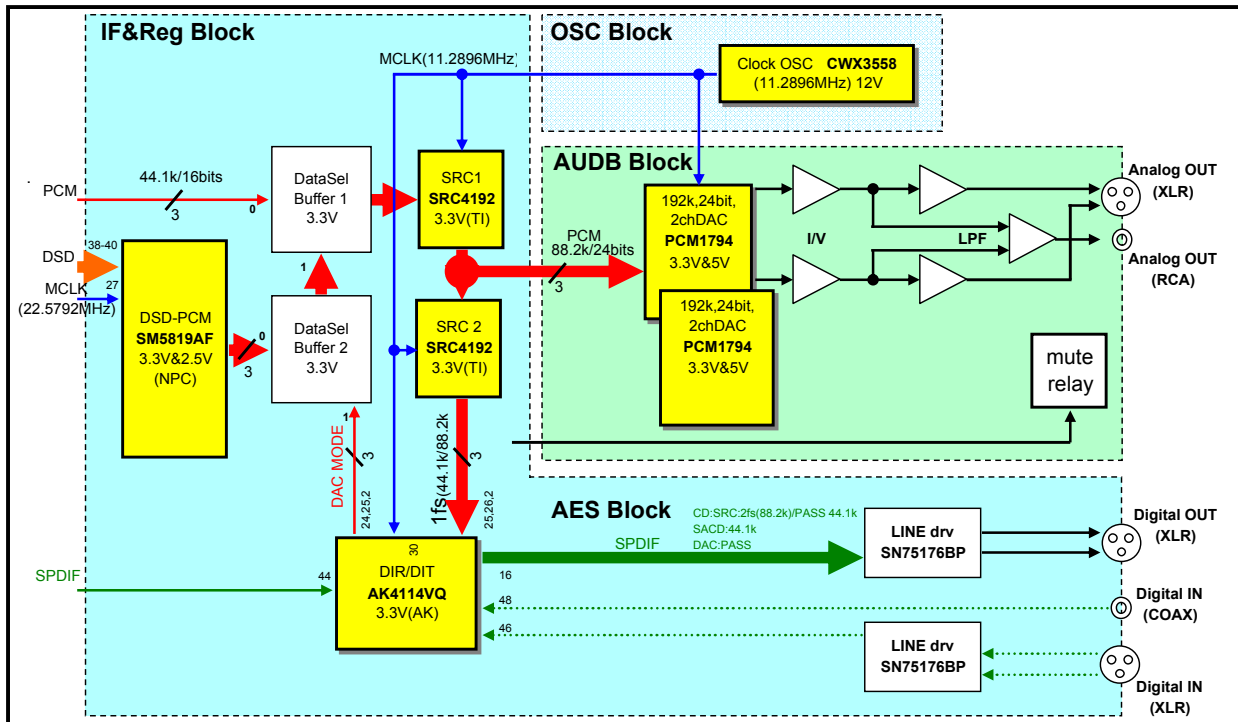
(3)Signal route for SACD play

Analog output: Audio data is converted into the PCM data with DSD-PCM IC.

Next, Audio data(Via the selector buffer IC and SRC1 IC) is converted from digital to the analogue at D/A converter IC.

Digital output: Audio data is converted to 44.1kHz/16bits at SRC2 IC.

Next, Audio data is converted from 3wire signal to SPDIF format signal at DIR/DIT IC.



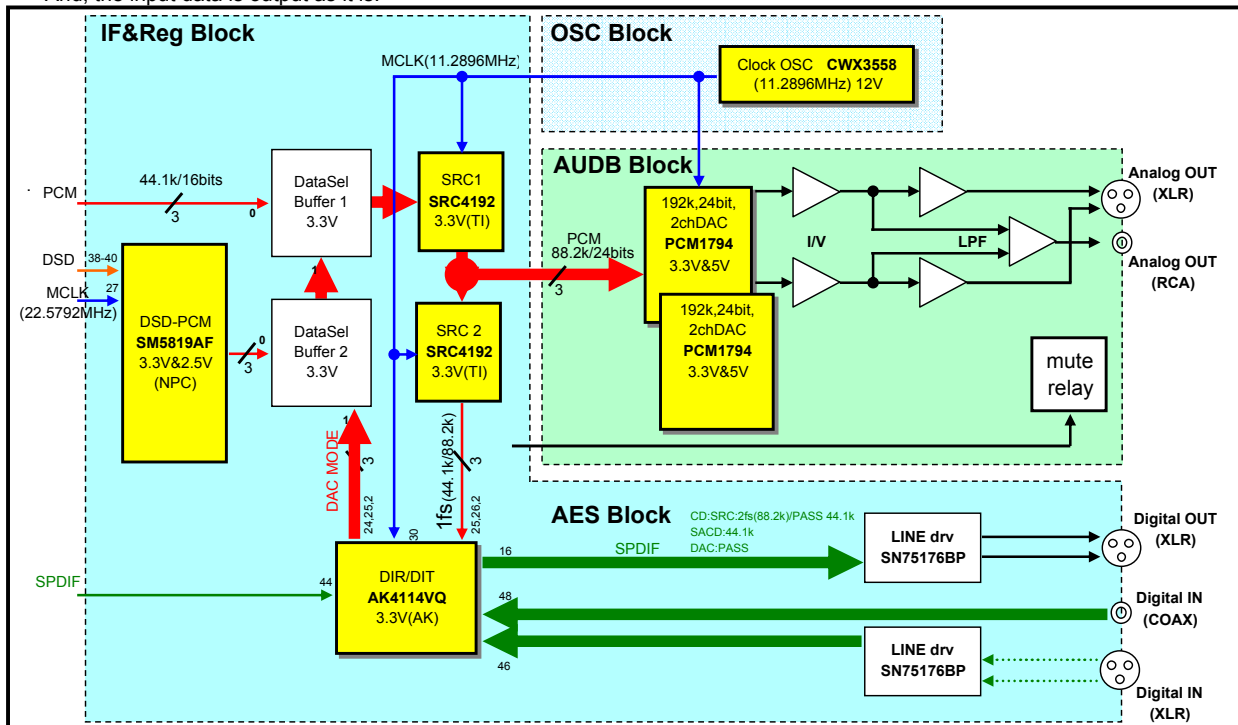
(4)Signal route for DAC mode

Analog output: Audio data is converted from SPDIF format to 3wire signal at DIR/DIT IC.

The data is converted to 88.2kHz/24bits as SRC1 IC and that is converted from digital to the analogue at D/A converter IC.

Digital output: Audio data(from Digital input) passes over the inside of DIR/DIT IC

And, the input data is output as it is.



6.SERVICE MODE

6.1TEST MODE

/Displaying the version of the system control computer

(1)Displaying the version of the system control computer

With the unit on, press and hold the [stop] key on the main unit for 8 seconds

The version (part number) of the system control computer will be displayed.

Similarly, Press the [ESC] then the [TIME] key on the remote control unit for DVD Test mode (GGF1381) to indicate the version of the system control computer about one second.

Ex.

1	9	6
---	---	---

		2	0	0
--	--	---	---	---

(2)Canceling version display

The version display will automatically disappear after a while.

/How to display the error rate

(1)Power-on in DVD mode

With the Standby, Press the [ESC] key on the remote control unit for DVD Test mode then the [play] key of the normal remote control unit

Note: When the unit is turned on in DVD mode, "-d_d-" is indicated on the LED Display

(2)DISC SET

Setting DVD test disc(GGV1025).

(3)TEST MODE: PLAY

Press the [play] key of the normal remote control unit

Press the [ESC] then the [5] key on the remote control unit for DVD Test mode(GGF1381)

The err rate will be displayed.

ex)

9	9	0
---	---	---

E	-	6		
---	---	---	--	--

The error rate is displayed as above.

But this means " 9.90E - 6 ".

(4)TEST MODE: OFF

Press the [ESC] key on the remote control unit

Press the [POWER] button to turn the unit off.

Even if you intend to continuously use the unit after displaying the error rate, be sure to turn the power off then back on.

/Lighting confirmation of LED.

(1)Lighting display of LED

With the Standby, Press the [stop], [play] and [power] key on the main unit

Lighting all LED on the main unit for 8 seconds.

Next, Eight 7segment LED lights one by one for 0.5 seconds.(a, b, c, d, e, f, g, Dp)

Similarly, With the DVD mode, Press the [ESC] then the [DISP] key on the remote control unit for DVD Test mode(GGF1381).

(2)TEST MODE: OFF

Press the [ESC] key on the remote control unit

Press the [POWER] button to turn the unit off.

Even if you intend to continuously use the unit after displaying the error rate, be sure to turn the power off then back on.

7.DISASSEMBLY

Note:

Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

- Be careful not to scratch or stain the cabinet during servicing ,because it may cause a serious complaint.
- As for this product, the main unit and the power supply unit are connected with DC cables. Please remove DC cables after power off the power switch in the power supply unit.
- In uniting the top panel and TAD plate, please note the scratch.
- As the product has conical feet,be very careful floor surfaces in the customer's home.

7.1 Main unit

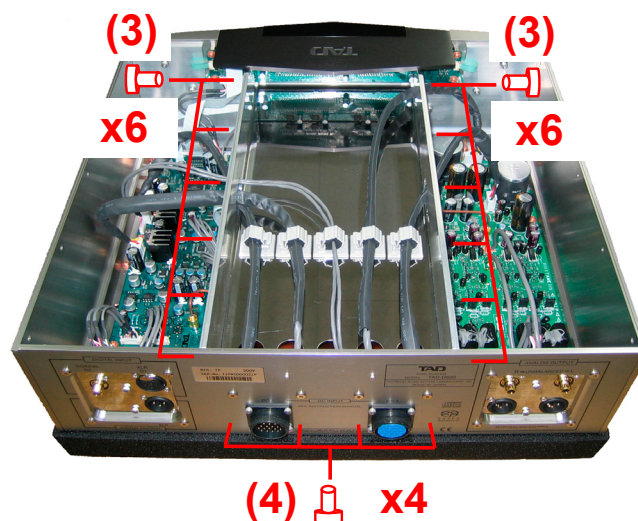
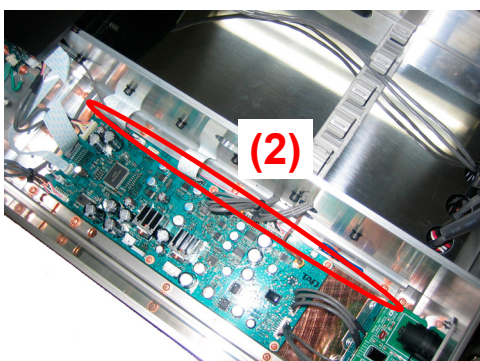
[1]Top panel(Exterior Section)

- (1) Remove the ten screws.
- (2) Remove the panel.



[2]Inside top cover

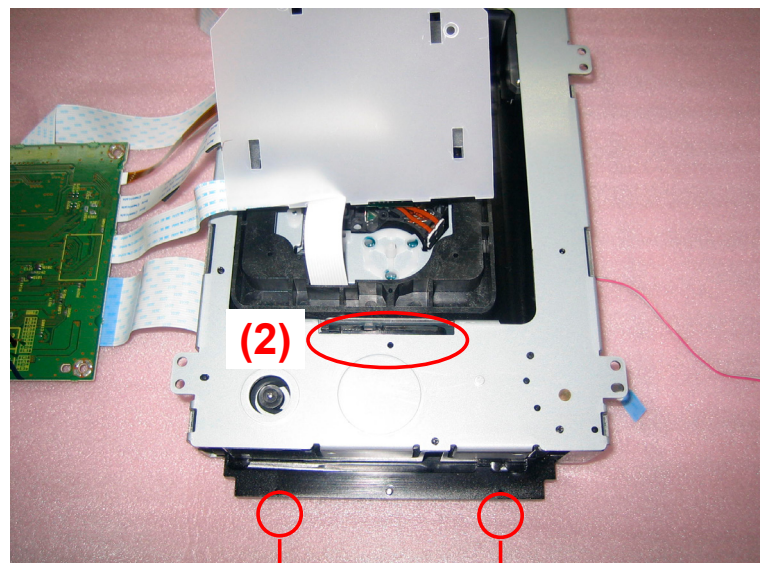
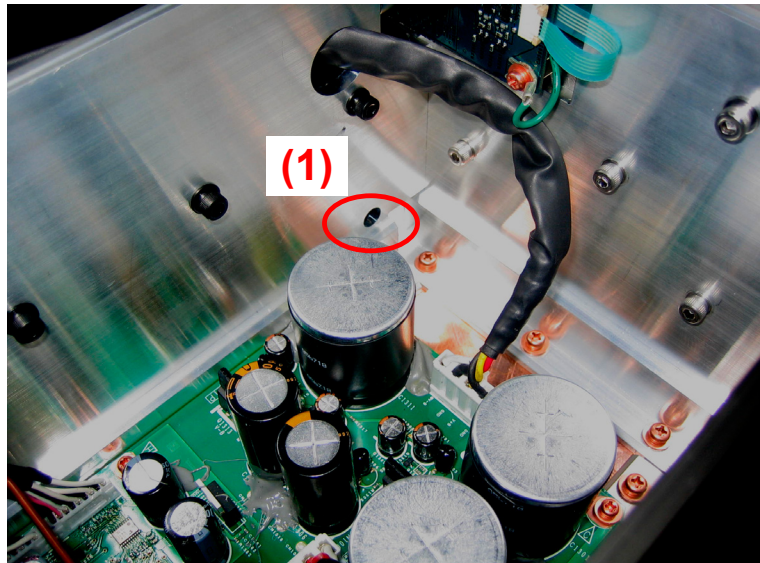
- (1) Release the wires from DC cables,as required.
- (2) To release the stress of the side panel, loosen the five screws.
- (3) Loosen the 12 screws from the front to rear side.
- (4) Remove the four screws supporting the cover.



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[3]Remove tray panel

- (1) Insert JIG stick into the hole. (Audio Unit side)
- (2) Along under mechanism, push the lever by the stick.
- (3) Draw the tray out after the lever is pushed, then remove two screws under the tray panel.

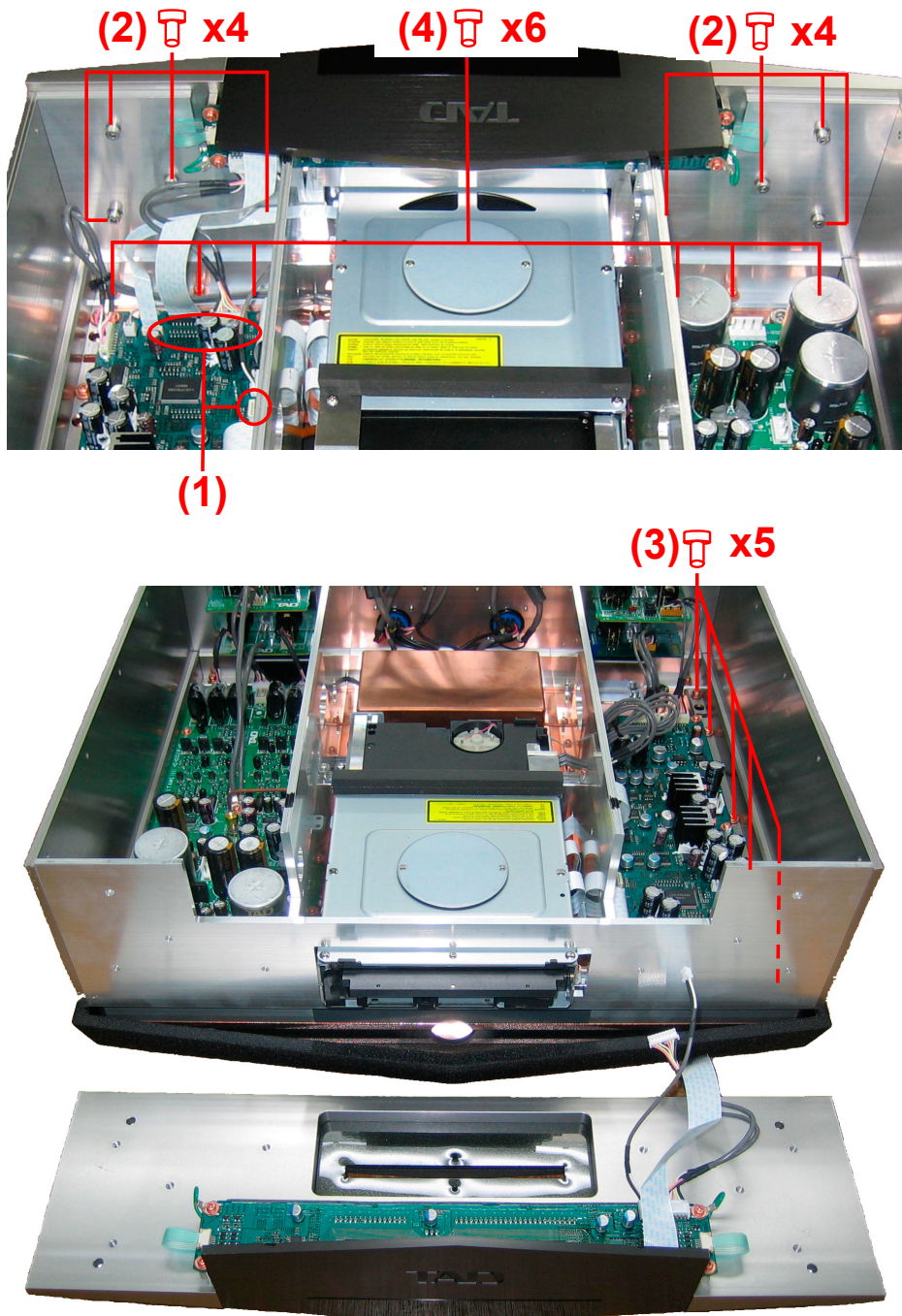


(3)  x2

TAD-D600

[4]Front panel(Exterior Section)

- (1) Release the 3 wires.(FPKB Unit - DIGITAL Unit)
- (2) Remove the 8 screws, and the front panel(Exterior) are removed.
- (3) To release the stress of the side panel, loosen the five screws.
- (4) Remove the 6 screws, and the front panel(inside) are removed.



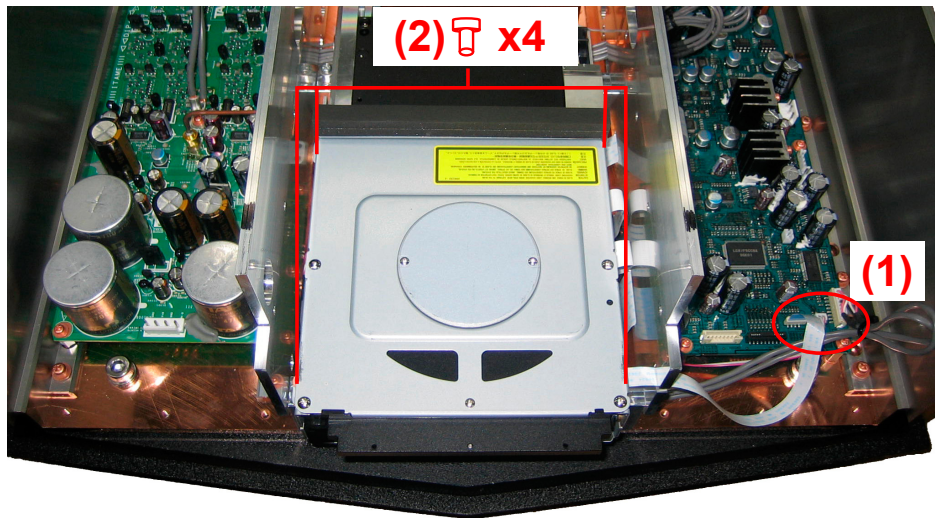
TAD-D600

[5]Remove the loading mechanism

(1) Release the 3 wires.(Loading mechanism - DIGITAL Unit)

(2) Remove the 4 screws.

Note that a washer is used at only one place.

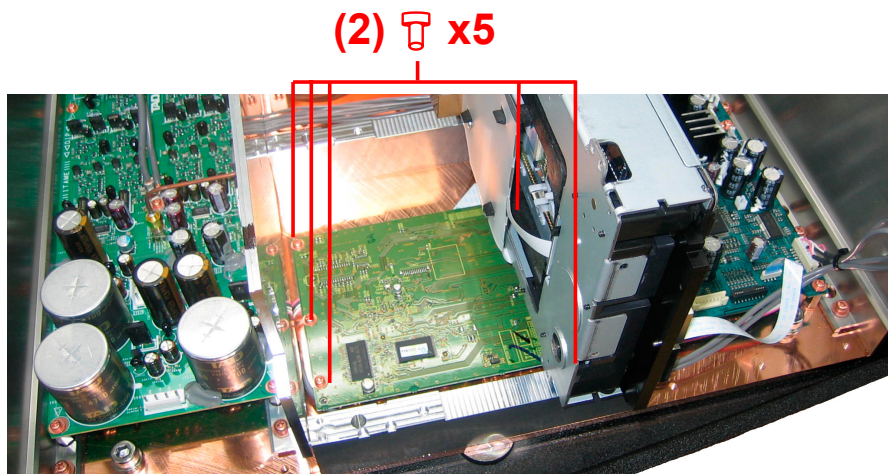


[6]Remove the DVDM Unit

(1) Release the 2 cables.(DVDM Unit - DIGITAL Unit)

(2) Remove the 5 screws.

Note that the stress should not be given in the cables between loading mechanism and DVDM Unit.

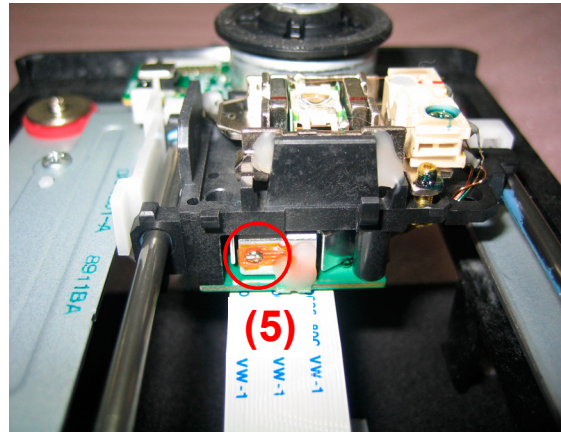
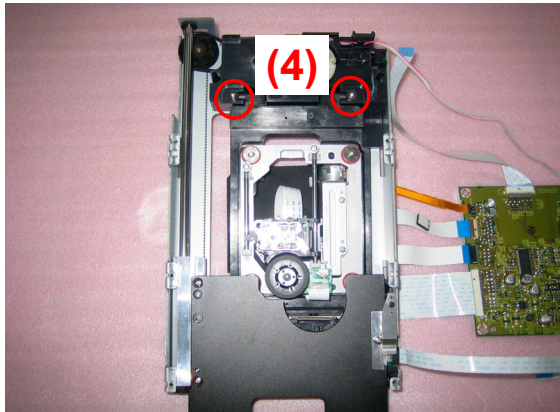
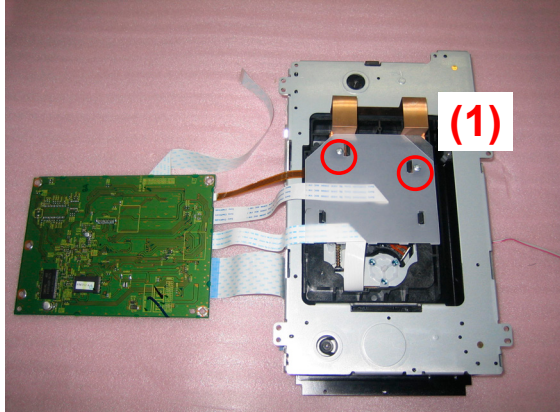


TAD-D600

[7]Remove the Traverse Mechanism Assy

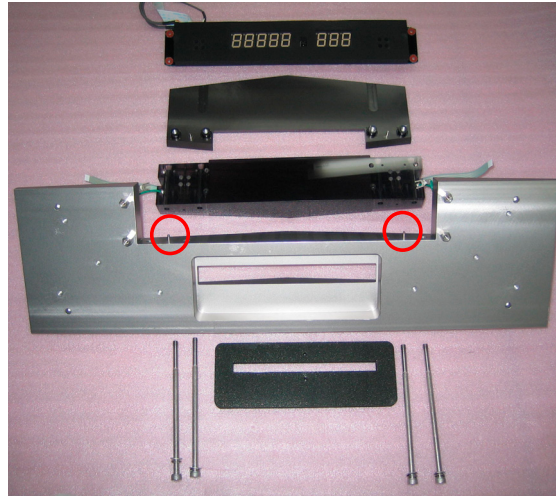
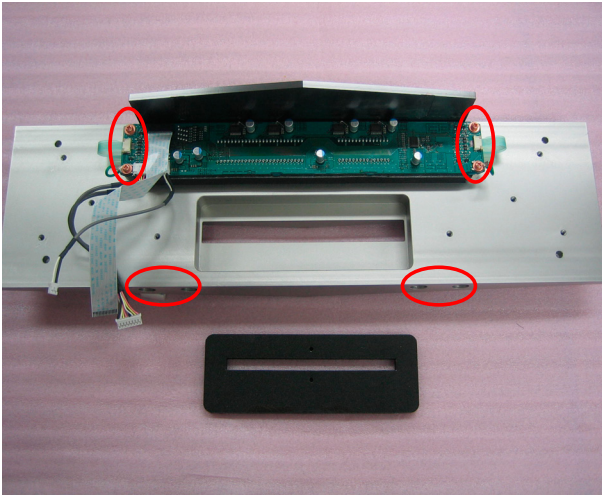
- (1) Upside down the loading Mechanism, and remove the 2 screws on the flexible cables spacer.
- (2) Remove the spacer from the 4 hooks of the Traverse Mechanism holder.
- (3) Remove the plate by pulling the hook.
- (4) Remove 2 screws of the Traverse Mechanism holder.
- (5) Short-circuit point by soldering.

Note that after replacement, connect the flexible cable for pickup, then remove the soldered joint(ope



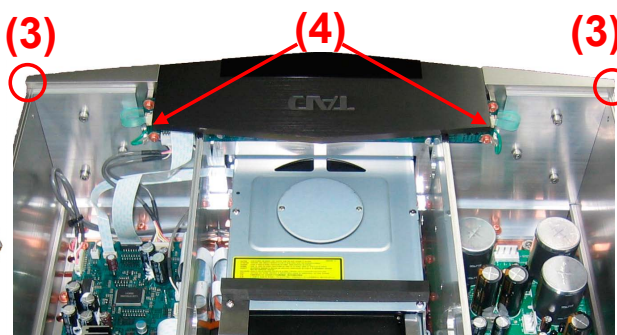
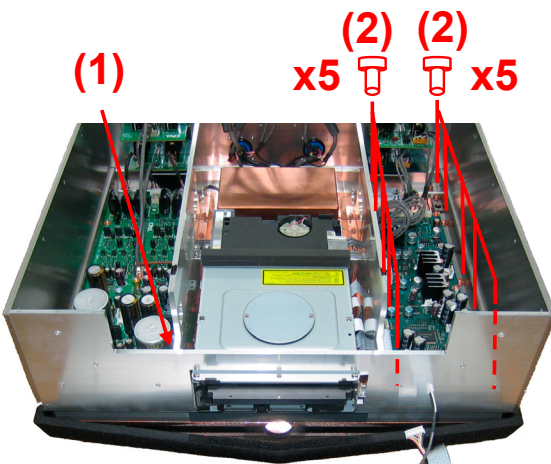
[8]Remove the front panel assy

- (1) Remove 2 FSRs from FPKB Unit.(CN3003,CN3004)
 - (2) Remove the 4 screws of the FPKB Unit.
 - (3) Remove the 4 screws for the Acrylic panel.
- Note that the 2 pins for positioning doesn't fall.



[9]Note: reassembling

- (1) Tighten the 6 screws of the front panel(inside) while holding the front panel internally.
 - (2) Tighten the 10 screws.
 - (3) Reassemble the front panel(Exterior).
- Note that tighten the 8 screws adjusting the panel(exterior) position to the center.
- (4) reassemble Top panel.
- Note don't damage the TAD plate.

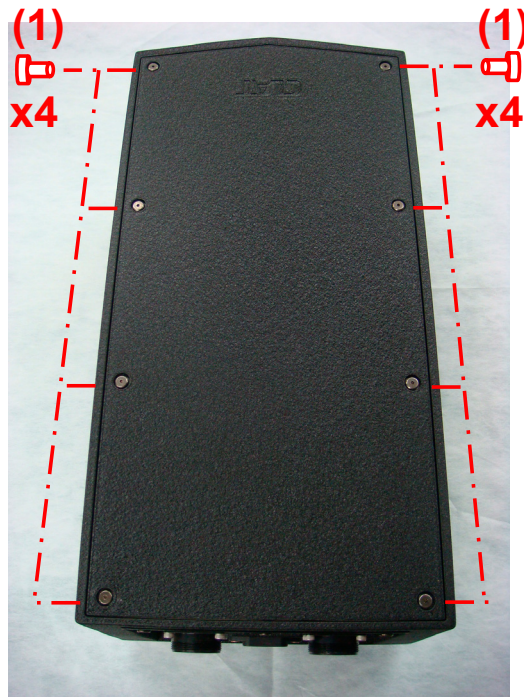


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7.2 POWER Unit

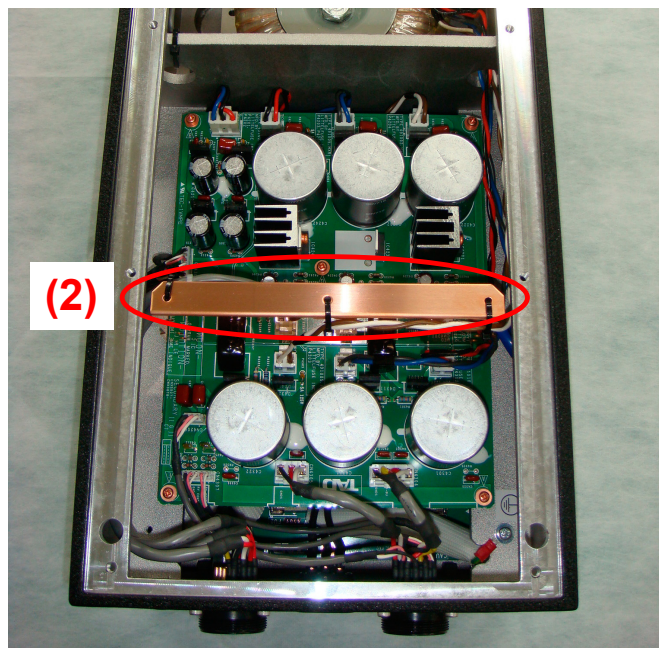
[1]Top Panel(Exterior)

- (1) Remove the 8 screws.
- (2) Remove the Top Panel.



[2]Remove SECONDARY Unit.

- (1) Release the wires from DC cables,as required.
- (2) Remove the 3 binders(ZCA-BK1).(need cut)
When reassemble it, Only the wire(CN4303) should be binded by the 2 binders(ZCA-BK1).
The wire(CN4301,CN4302) are held with the cord clamber(RNH1005).
To take the distance from the wire(CN4303).
- (3) Remove the 7 screws.



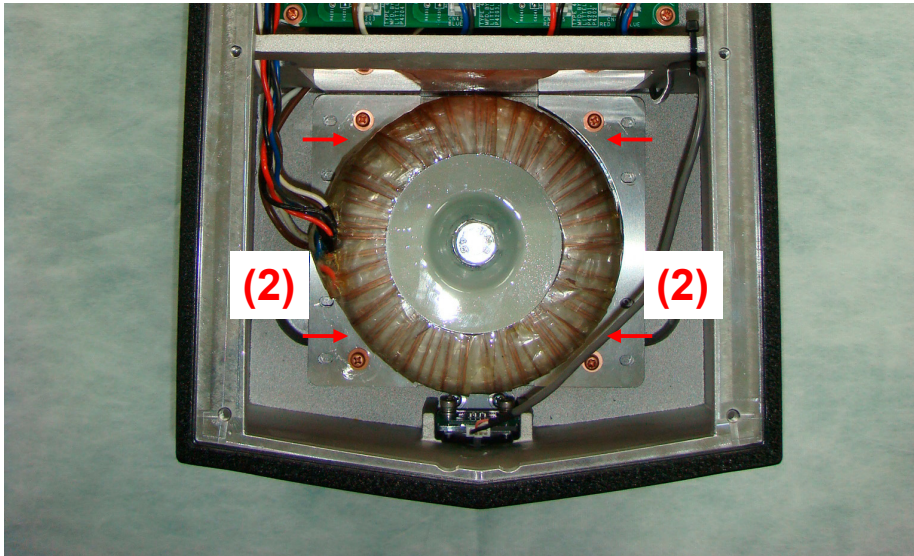
TAD-D600

[3]Remove Audio transformer

(1) Remove the wires, as required.

(2) Remove the 4 screws.

When reassemble it, The bracket(CND5818) is drawn to the center of the transformer.



8. EACH SETTING AND ADJUSTMENT

There is no information to be shown in this chapter.

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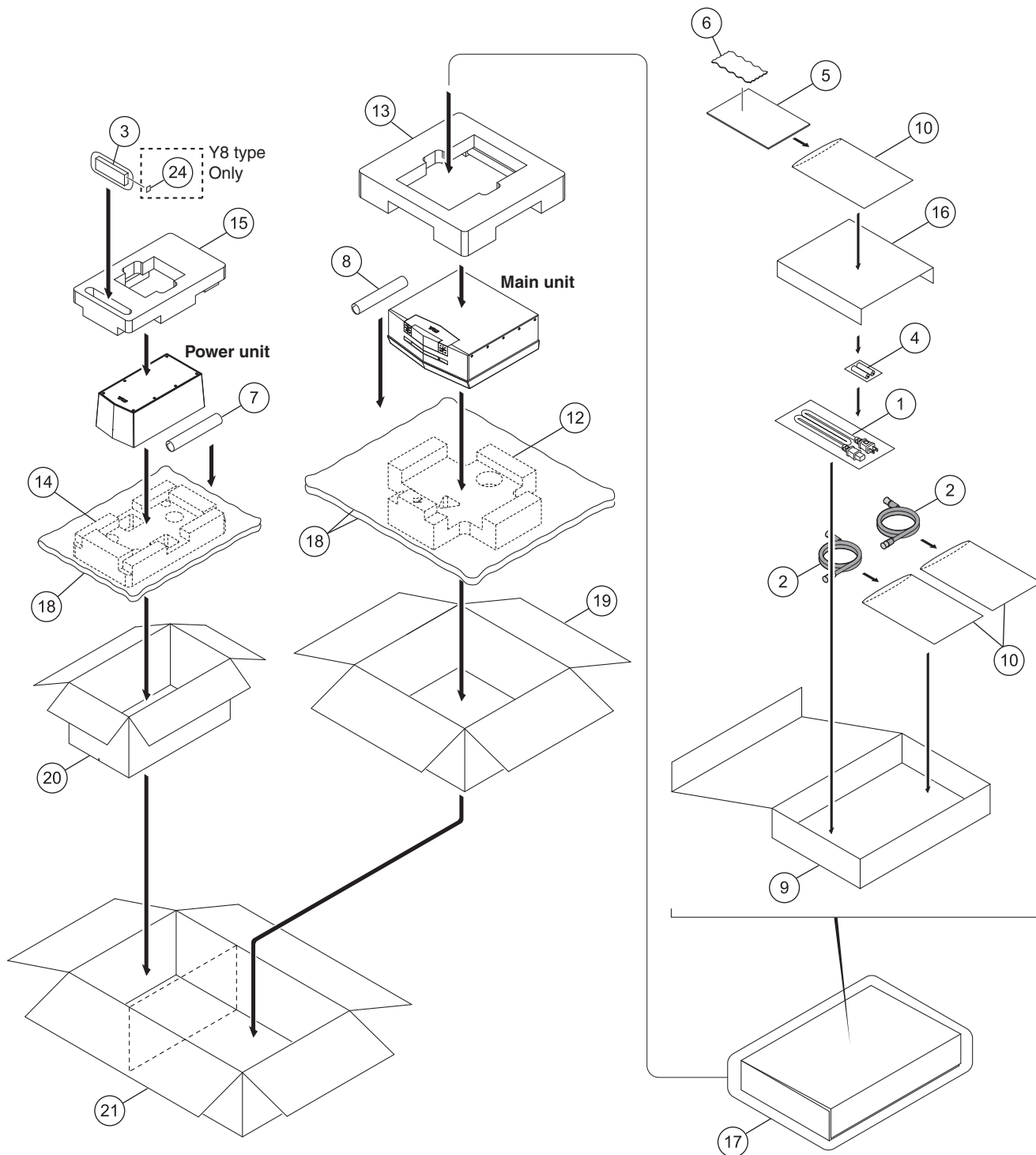
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TAD-D600

9. EXPLODED VIEWS AND PARTS LIST

- NOTES :
- Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.
 - The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screw adjacent to  mark on the product are used for disassembly.
 - For the applying amount of lubricants or glue, follow the instructions in this manual.
(In the case of no amount instructions, apply as you think it appropriate.)

9.1 PACKING SECTION



(1) PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
⚠	1 Power Cord	See Contrast table (2)	11	•••••		
	2 DC Cord (75 cm/29.53 in.)	CDE9205	12	Protector	CHP3980	A
	3 Remote Control	CXE3196	13	Protector	CHP3981	
	* 4 Dry Cell Battery (AAA/IEC R03)	VEM1049	14	Protector	CHP3982	
		CRD4438	15	Protector	CHP3983	
	6 Wiping cloth	AED1285	*	16 Partition	CHW2135	
	7 Felt	CNN3357		17 Sheet	CHV1006	■
	8 Felt	CNN3358		18 Sheet	CHV1005	
	9 Accessory Box	CHW2127		19 Unit Box	CHA3805	
	10 Polyethylene Bag	CEG1190		20 Unit Box	CHA3806	
			21	Unit Box	See Contrast table (2)	B
			22	•••••		
			23	•••••		
			24	Label (WEEE)	See Contrast table (2)	

(2) CONTRAST TABLE

TAD-D600/U and Y8 are constructed the same except for the following:

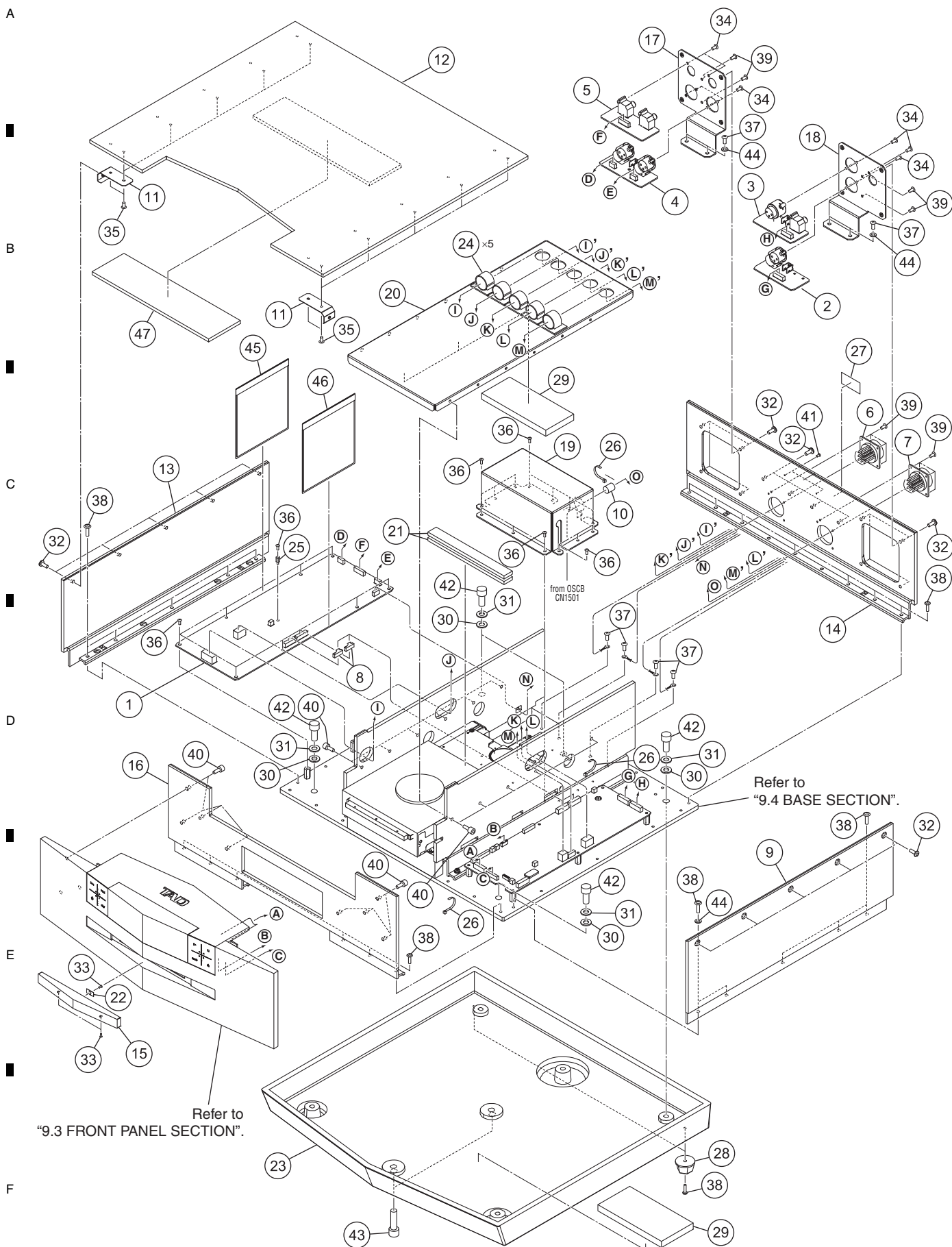
Mark	No.	Symbol and Description	TAD-D600/U	TAD-D600/Y8
⚠	1	Power Cord	ADG7061	ADG7062
	21	Unit Box	CHG7435	CHG7436
	24	Label (WEEE)	Not used	ARW7322

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9.2 EXTERIOR SECTION



EXTERIOR SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1	AUDIO Unit	CWX3877	
2	DIGITAL Unit (D OUT)	CXX2937	A
3	POWER Unit (DIN)	CXX2934	
4	POWER Unit (A_XLROUT)	CXX2933	
5	POWER Unit (A_RCAOUT)	CXX2932	
6	Cord	CDE9209	
7	Cord	CDE9210	■
8	Cord	CDE9198	
9	Panel	CNB3703	
10	Ferrite Core	VTH1051	
11	Spring	CBL1816	B
12	Panel	CNB3640	
13	Panel	CNB3641	
14	Panel	CNB3642	
15	Door	CNB3646	
16	Bracket	CND5547	■
17	Bracket	CND5551	
18	Bracket	CND5552	
19	Bracket	CND5553	
20	Cover	CND5554	C
21	Cushion	CNN3268	
22	Spring	CBL1819	
23	Chassis	CNR2058	
24	Clamp	CNW2037	
25	Stud	CLA4923	■
*	26 Binder (BK-1)	ZCA-BK1	
*	27 Label (Blank)	CAL8323	
	28 Foot	CNN3414	
	29 Cushion	CNN3334	
	30 Washer	WB80S	D
	31 Washer	WS80S	
	32 Screw	CBA2215	
	33 Screw	CMZ20P060FTC	
	34 Screw	CPZ30P080S	■
	35 Screw	PMA30P040FTC	
	36 Screw	PMB30P080FCC	
	37 Screw	PMB40P080FTC	
	38 Screw	PMB40P140FCC	E
	39 Screw	SMH30H100S	
	40 Screw	SMH40H120S	
	41 Screw	SMZ20H050S	
	42 Screw	SMZ80H180S	
	43 Screw	SMZ80H300FTB	■
	44 Washer	WG40FCC	
	45 Sheet	CNN3444	
	46 Sheet	CNN3445	
	47 Cushion	CNN3477	F

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9.3 FRONT PANEL SECTION

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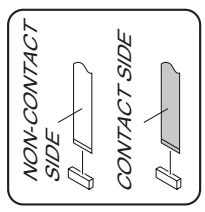
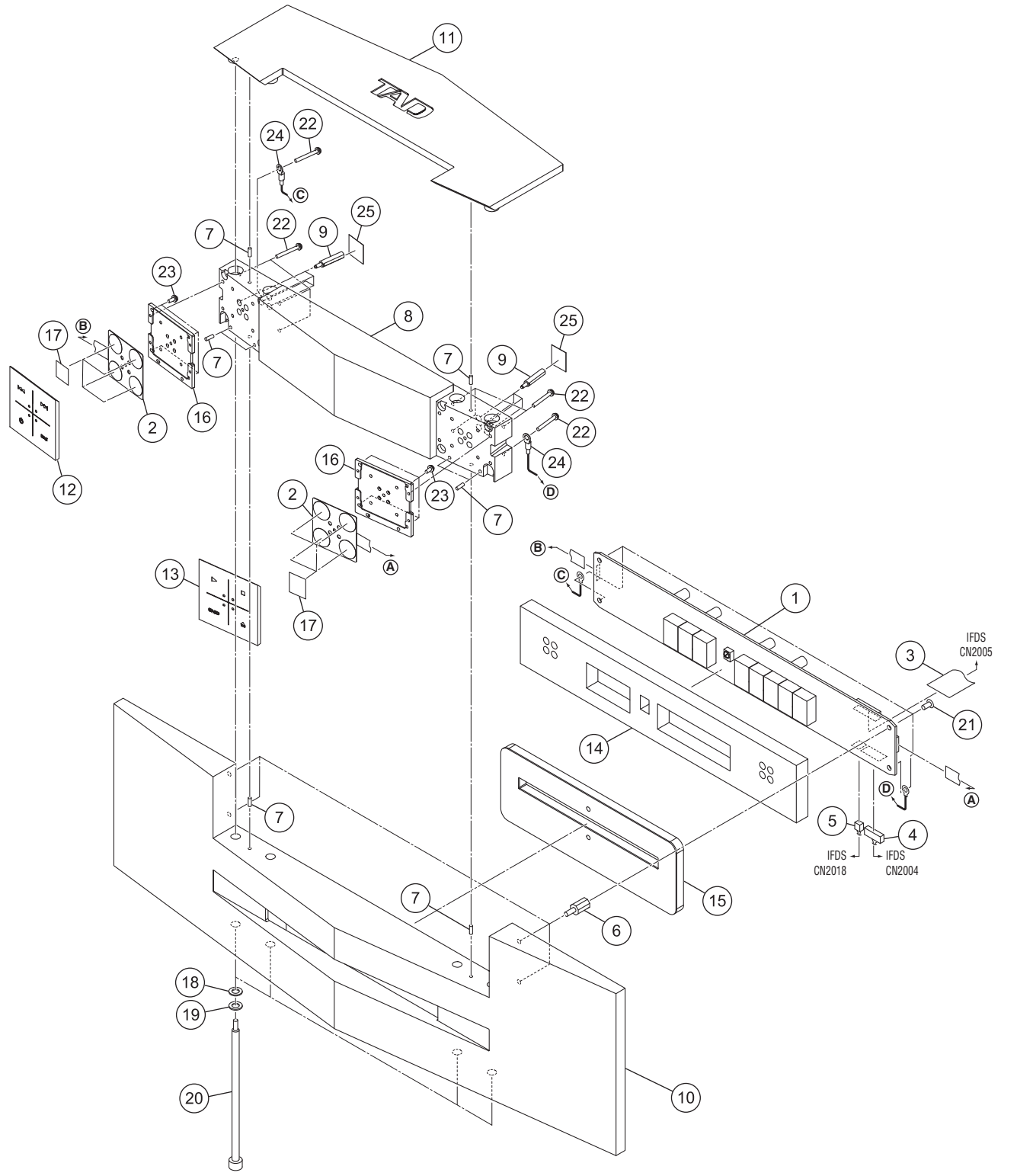
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FRONT PANEL SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	DIGITAL Unit (FPKB)	CXX2936
2	FSR	CCX1086
3	FFC	CDE9191
4	Cord	CDE9197
5	Cord	CDE9200
6	Stud	CLA4964
7	Pin	CLA4966
8	Lighting Conductor	CLM1014
9	Lens	CNW1980
10	Panel	CNB3639
11	Panel	CNB3662
12	Panel	CNB3663
13	Panel	CNB3664
14	Cushion	CNN3266
15	Sheet	CNN3269
16	Plate	CLA4981
17	Sheet	CNN3440
18	Washer	WB50S
19	Washer	WS50S
20	Screw	CBA2231
21	Screw	PMB30P080FCC
22	Screw	PMH20P180S
23	Screw	PMH20P050FTC
24	Cord	CDE9204
25	Sheet	CNN3465

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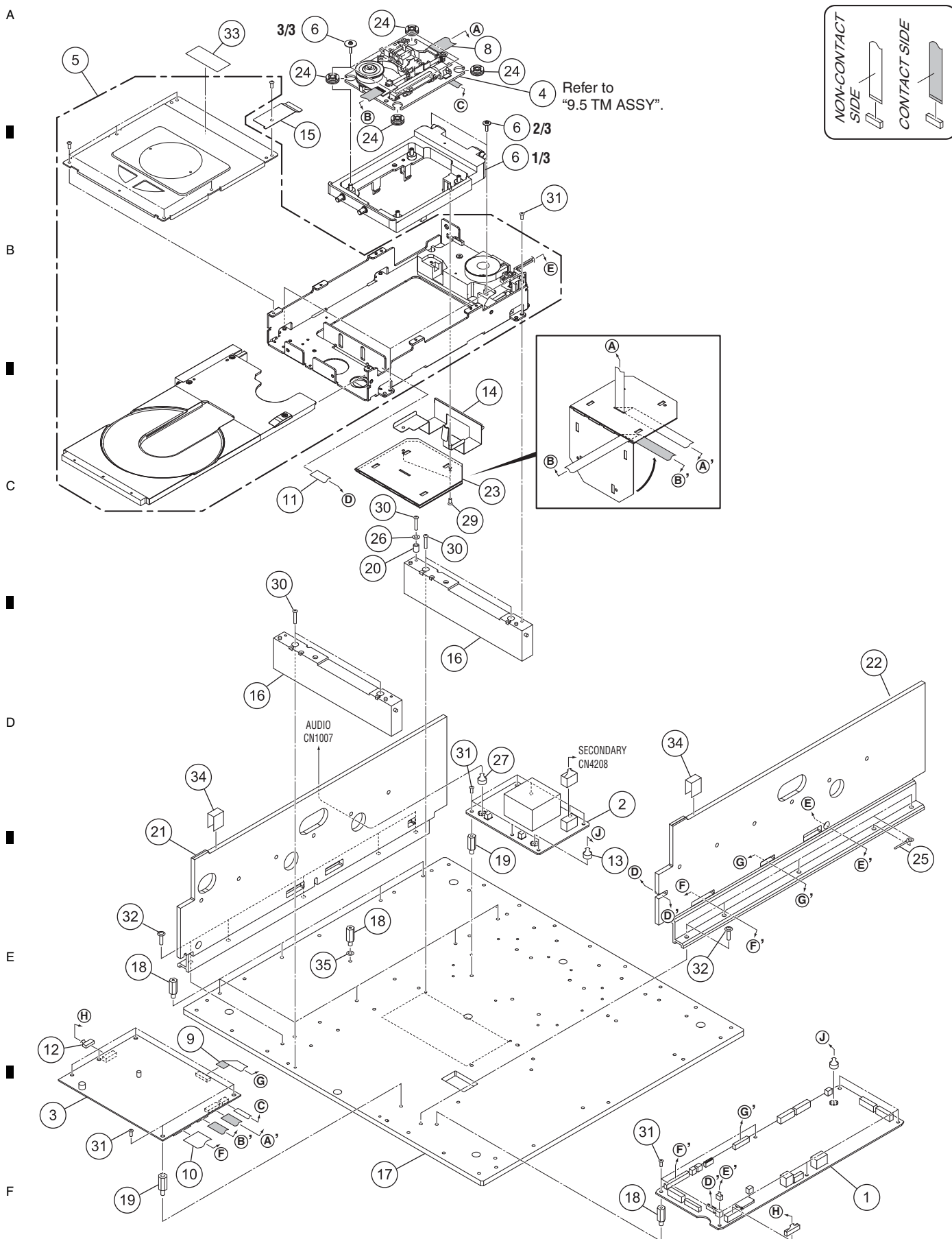
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9.4 BASE SECTION

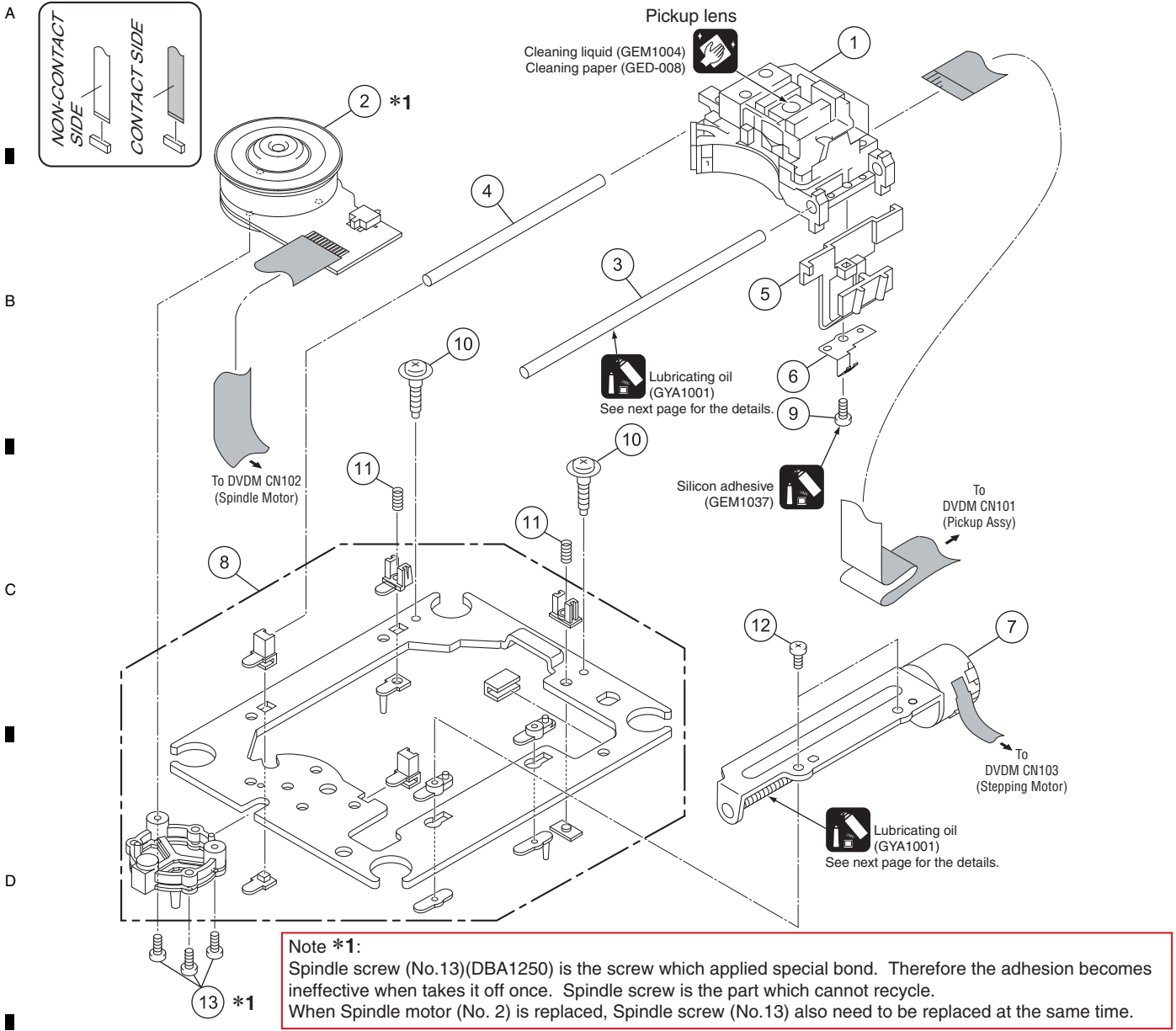


BASE SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1	DIGITAL Unit (IFDS)	CXX2935	
2	POWER Unit (OSCB)	CXX2931	A
3	DVDM Assy	AWM8184	
4	TM Assy VK1 AVC	DXB2024	
5	LOADING MECHANISM Assy	CXE3212	
6	LOADING PARTS Assy	CXE3213	
7	•••••		
8	Flexible Cable (24P)	ADD7546	
9	FFC	CDE9191	
10	FFC	CDE9188	
11	FFC	CDE9192	B
12	Cord	CDE9196	
13	Cord	CDE9311	
14	Spring	CBL1814	
15	Spring	CBL1815	
16	Bracket	CLA4938	
17	Base	CLA4941	
18	Stud	CLA4963	
19	Stud	CLA4964	
20	Spacer	CLA4965	C
21	Bracket	CND5549	
22	Bracket	CND5550	
23	Sheet	CNN3264	
24	Floating Rubber (SI)	VEB1351	
25	Cord Clamper (Steel)	RNH1005	
26	Washer	CBE1063	
27	Cord	CDE9296	
28	•••••		
29	Screw	BBZ26P080FTC	D
30	Screw	BMZ30P160FTC	
31	Screw	PMB30P080FCC	
32	Screw	PMB40P140FCC	
33	Laser Caution Label	VRW2262	
34	Cushion	CNN3215	
35	Washer	WG40FCC	

E

F



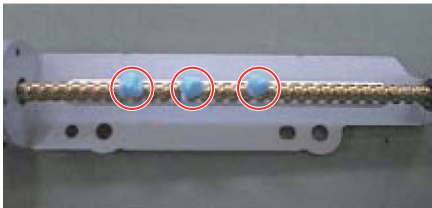
9.5 TM ASSY PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	05SD Pickup Assy R	OWY8075	11	Skew Spring VK1	DBH1516
2	Spindle Motor N200	DXM1197	* 12	Stepper Screw R7C	DBA1205
* 3	Guide Shaft VK1	DLA1940	13	Spindle Screw VK1	DBA1210
* 4	Sub Guide Shaft VK1	DLA1941			
* 5	Joint VK1B	DNK4272			
* 6	Joint Spring VK1	DBK1235			
7	Stepping Motor VK1	DXM1201			
* 8	Mechanism Frame VK1	DNK4160			
9	Precision Screw VK1	DBA1209			
10	Skew Screw VK1	DBA1211			

PRECAUTIONS WHEN REPLACING THE STEPPING MOTOR (DXM1201)

You must apply grease to the following locations when replacing the stepping motor. Follow the instructions below to apply grease to these locations.

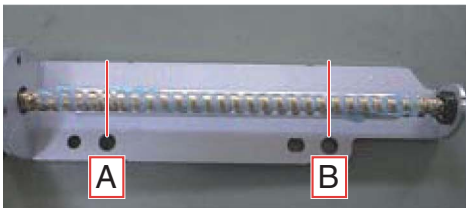
(1) Stepping motor feed screw



- Apply grease GYA1001 to the 3 locations shown in the picture
- Amount of grease: 3 ± 1 mg each for 3 locations

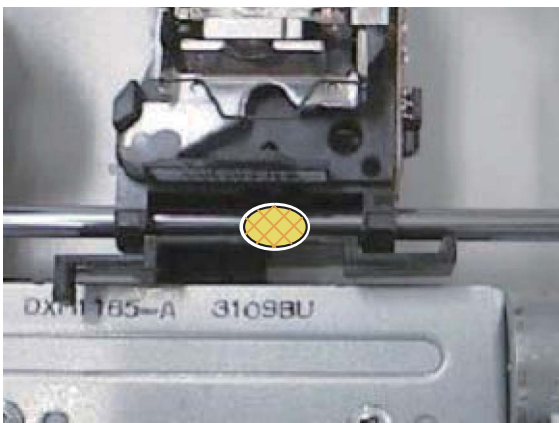


After applying GYA1001, smooth the grease evenly over the stepping motor feed screw, as shown in the picture. Take care not to scratch the shaft.



Spread the GYA1001 grease from screw hole A to B shown in the picture. Fibers or dirt in the grease have an adverse affect on operation and must be removed.

(2) Guide shaft



- Apply grease GYA1001 to the crosshatched area shown in the center of the picture
- Amount of grease: 2 ± 1 mg for 1 location

1 2 3 4

9.6 POWER UNIT

A

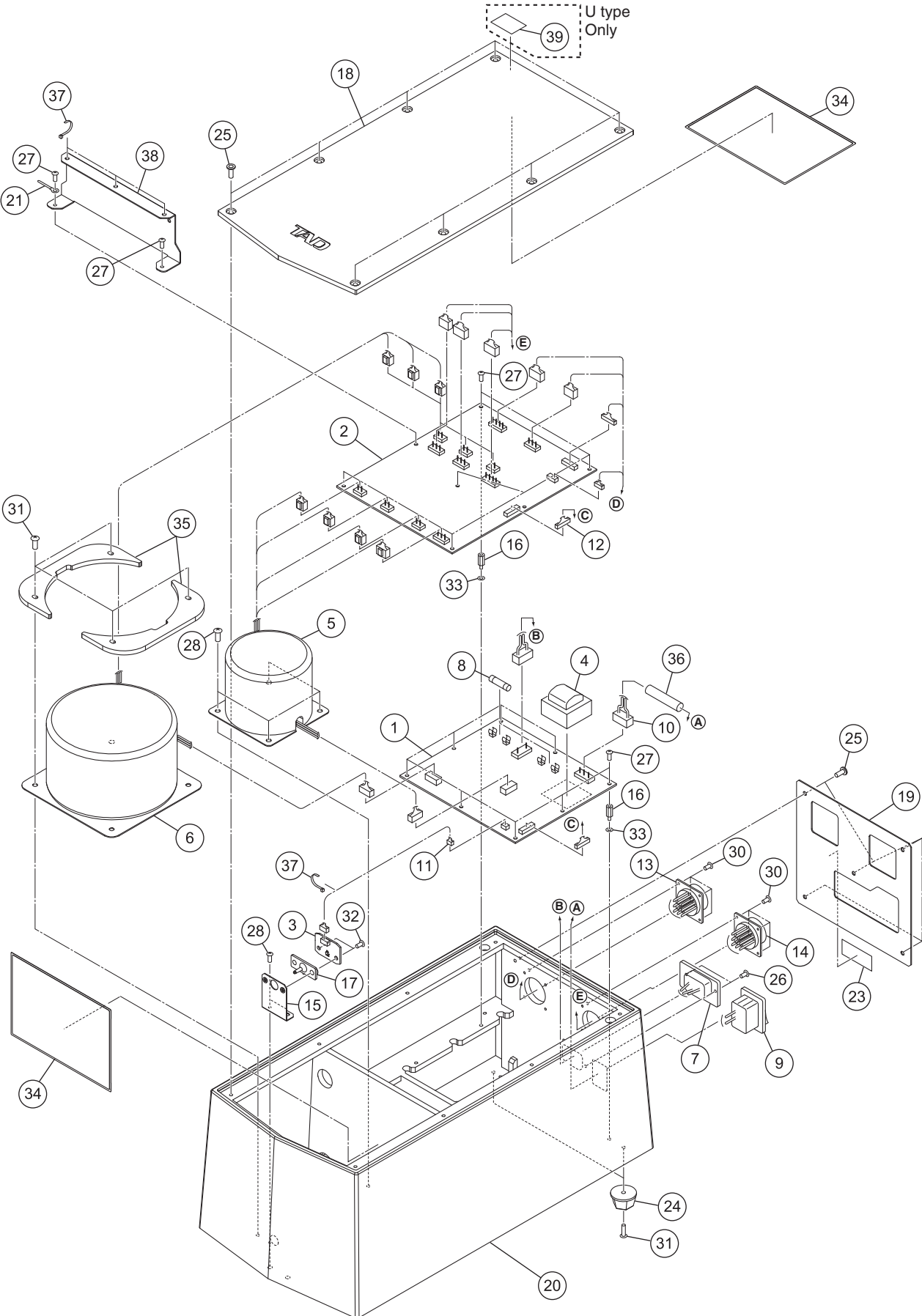
B

C

D

E

F



(1) POWER UNIT PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	1 POWER Unit (PRIMARY)	CXX2929	21	Cord Clamper (Steel)	RNH1005
	2 POWER Unit (SECONDARY)	CXX2930	22	•••••	
	3 DIGITAL Unit (LEDB)	CXX2938	*	23 Label (Blank)	CAL8323
⚠	4 Power Transformer (T4101)	See Contrast table (2)	24	Foot	CNN3414
⚠	5 Power Transformer (for DIGITAL)	See Contrast table (2)	25	Screw	CBA2230
⚠	6 Power Transformer (for AUDIO)	See Contrast table (2)	26	Screw	CBA2242
⚠	7 AC Inlet Assy	CDX1017	27	Screw	PMB30P080FCC
⚠	8 Fuse (FU1, FU2)	CEK1374	28	Screw	PMB40P080FTC
	9 Switch	CSH1076	29	•••••	
	10 Cord	CDE9193	30	Screw	SMH30H100S
	11 Cord	CDE9194	31	Screw	PMB40P140FCC
	12 Cord	CDE9195	32	Screw	SMH40P120S
	13 Cord	CDE9206	33	Washer	WG40FCC
	14 Cord	CDE9207	34	Sheet	CNN3444
	15 Bracket	CBL1818	35	Bracket	CND5818
	16 Stud	CLA4963	36	Tube	CNN3231
	17 Lens	CNW1976	*	37 Binder (BK-1)	ZCA-BK1
	18 Panel	CNB3643	38	Bracket	CND5840
	19 Panel	See Contrast table (2)	39	Label	See Contrast table (2)
	20 Chassis	CNR2059			

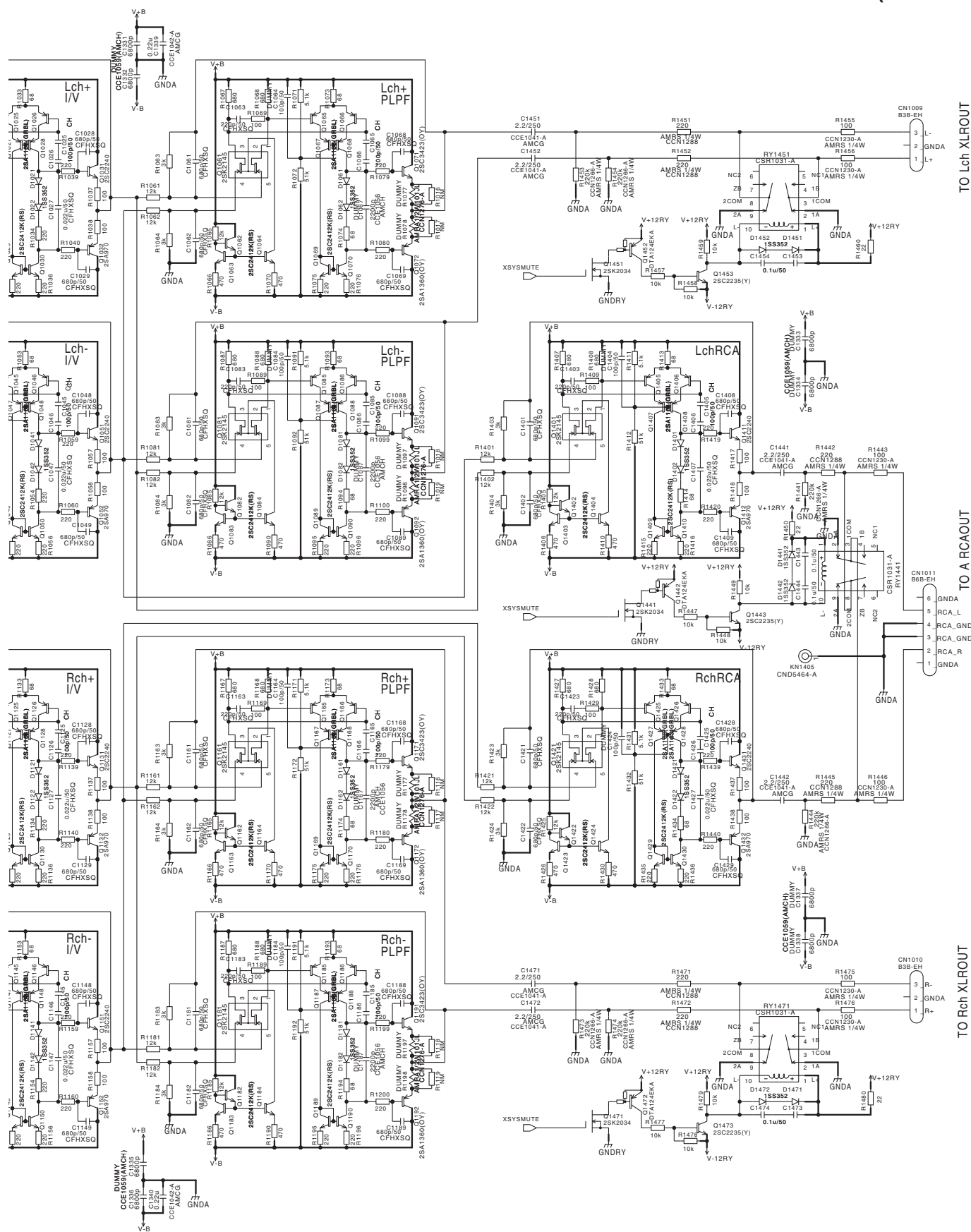
(2) CONTRAST TABLE

TAD-D600/U and Y8 are constructed the same except for the following:

<u>Mark</u>	<u>No.</u>	<u>Symbol and Description</u>	<u>TAD-D600/U</u>	<u>TAD-D600/Y8</u>
⚠	4	Power Transformer (T4101)	ATT7079	ATT7078
⚠	5	Power Transformer (for DIGITAL)	CTT1177	CTT1178
⚠	6	Power Transformer (for AUDIO)	CTT1180	CTT1181
	19	Panel	CNB3681	CNB3682
	39	Label	CAN6432	Not used

4

AUDIO UNIT (CWX3877)



4



A



10.3 IFDS UNIT (2/2)

A

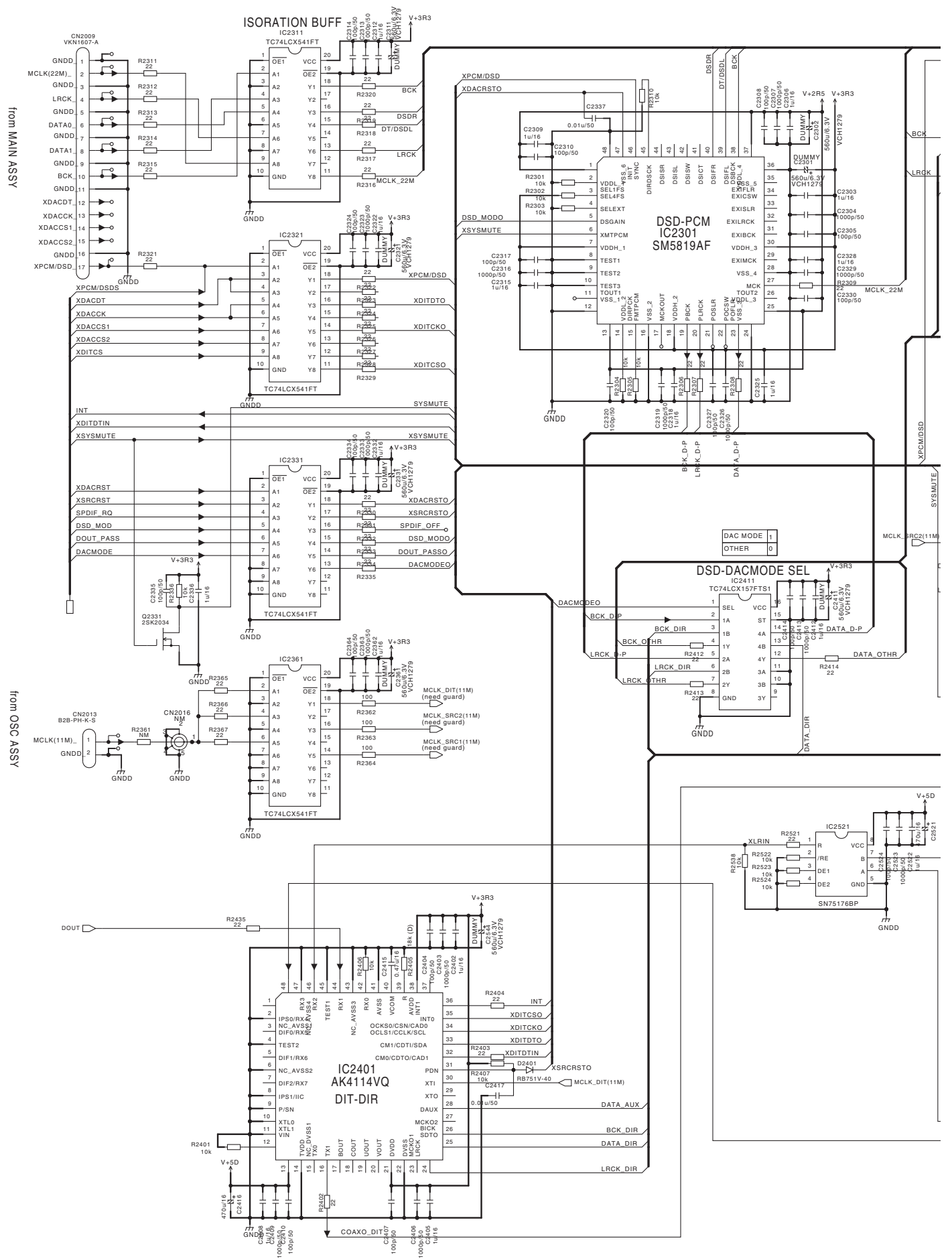
B

C

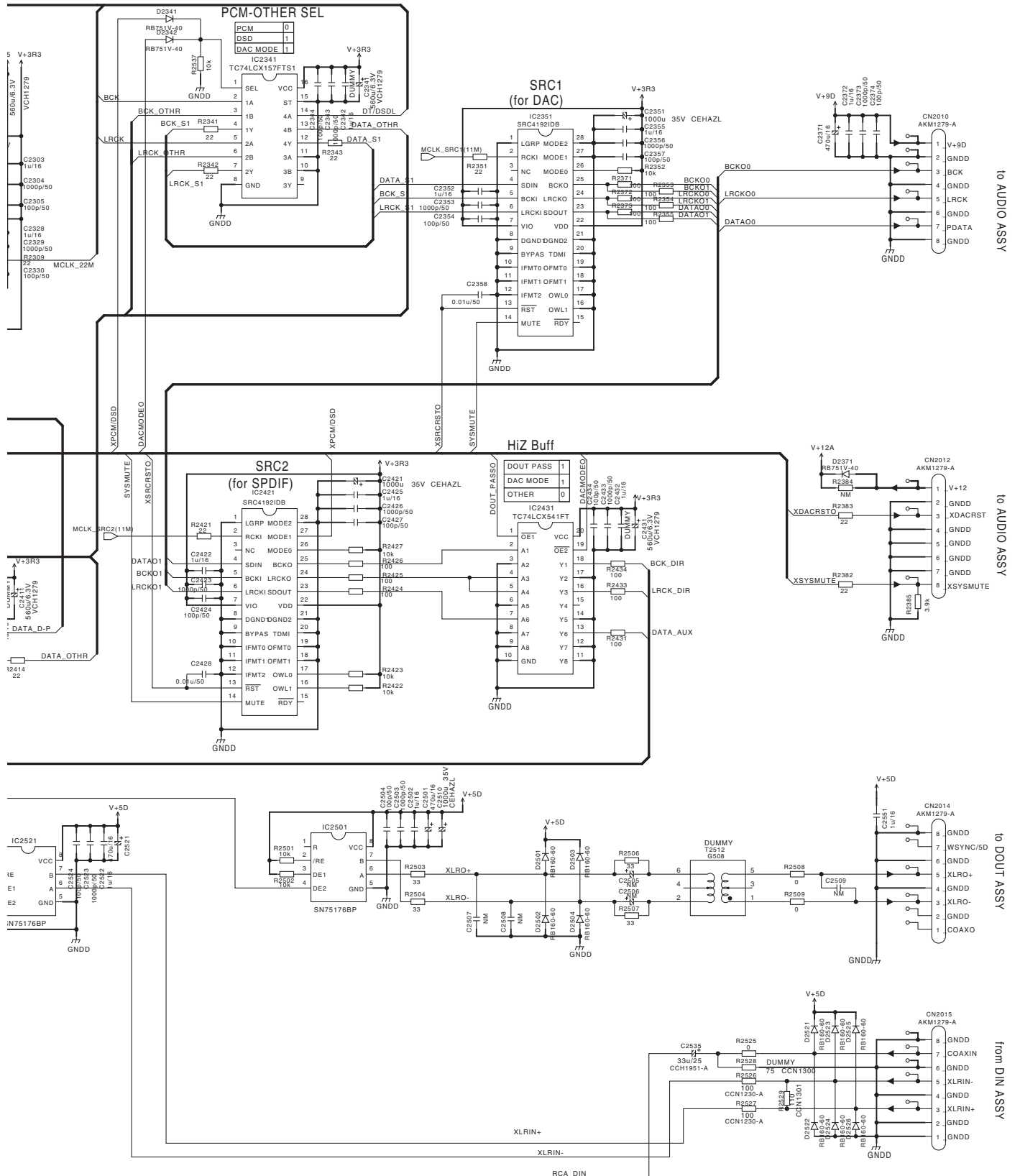
D

E

F



IFDS UNIT (2/2)



10.4 FPKB UNIT

A

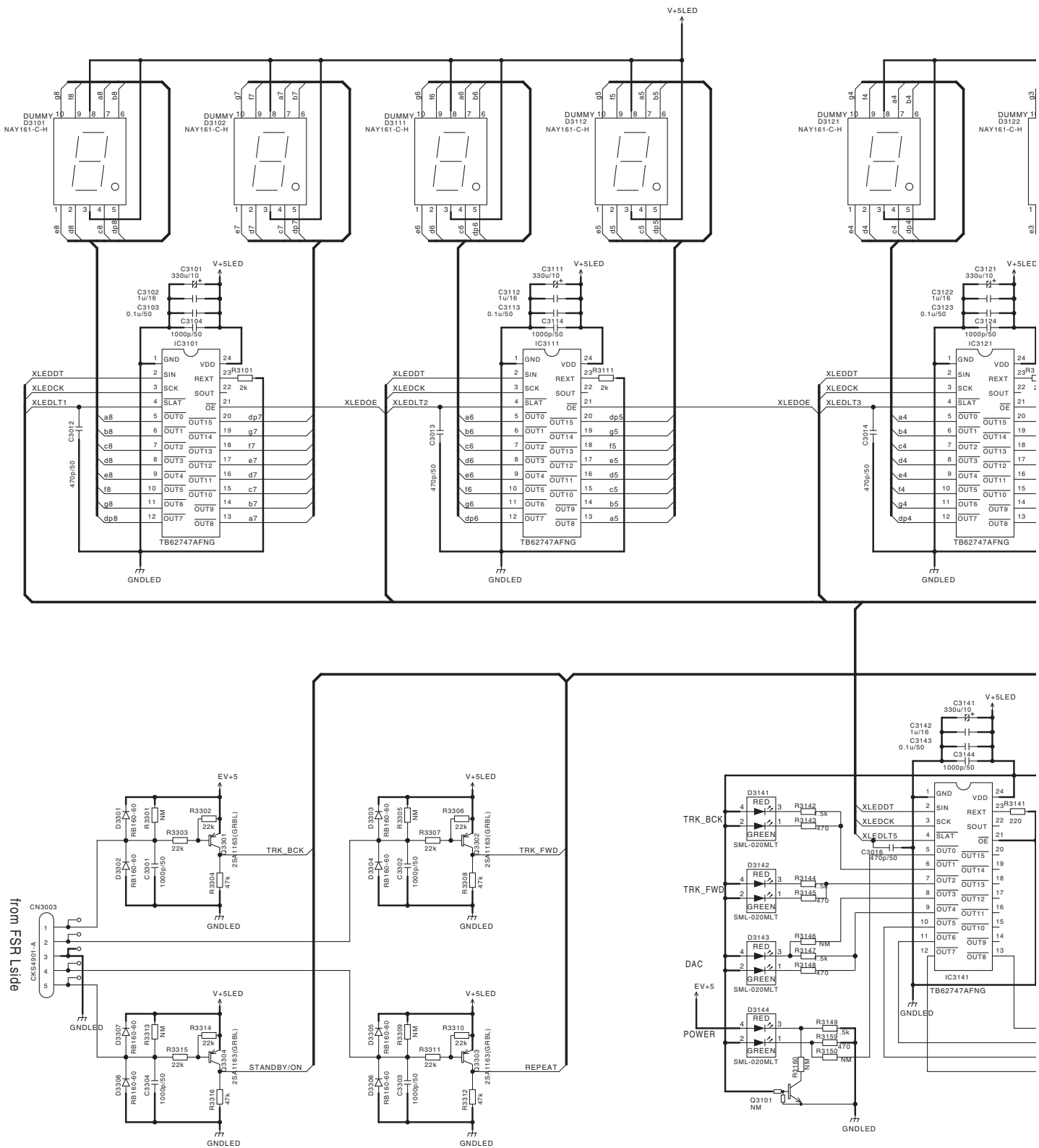
B

C

D

E

F



FPKB UNIT

A

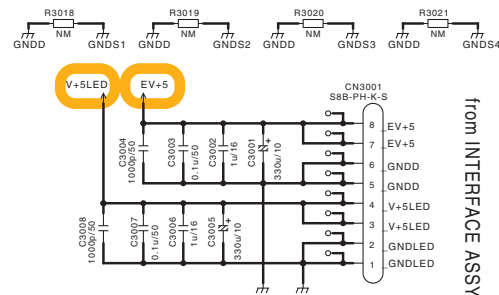
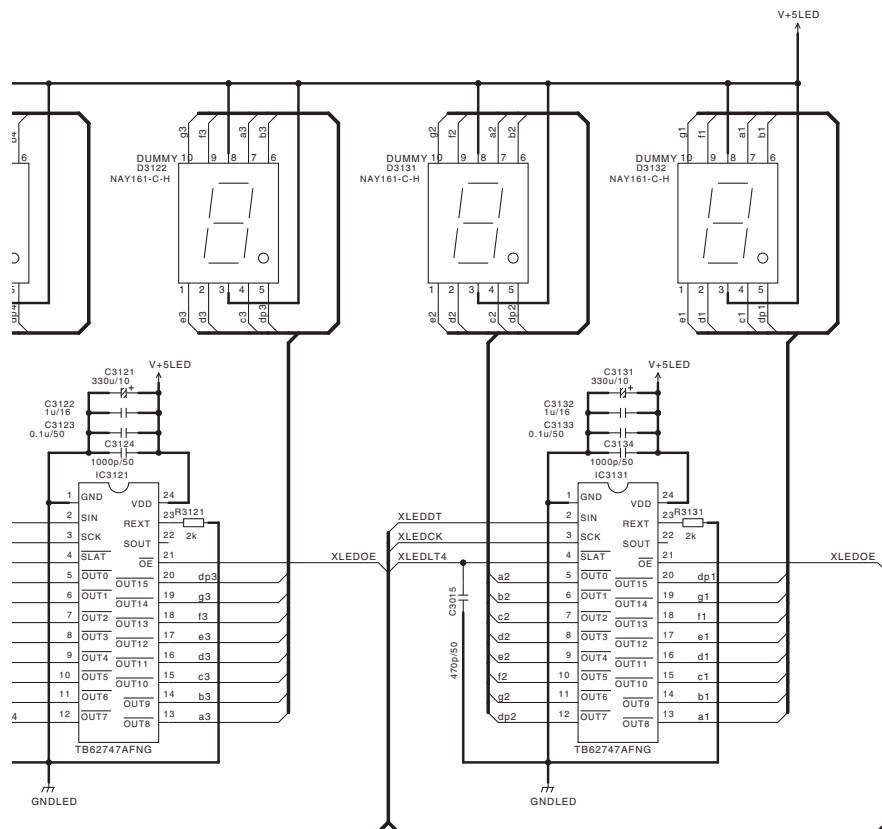
B

C

D

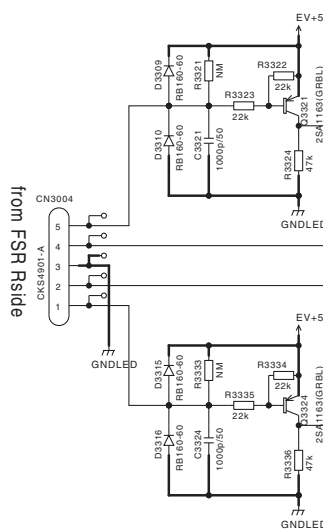
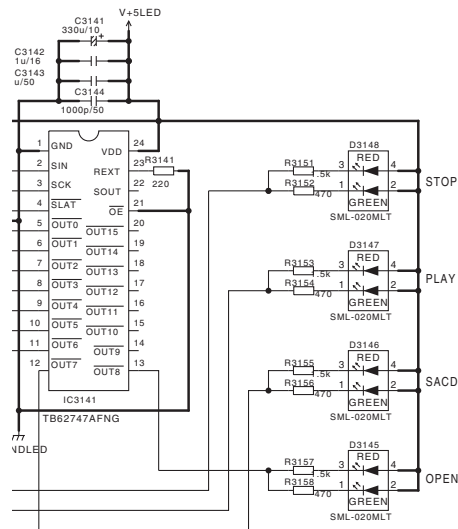
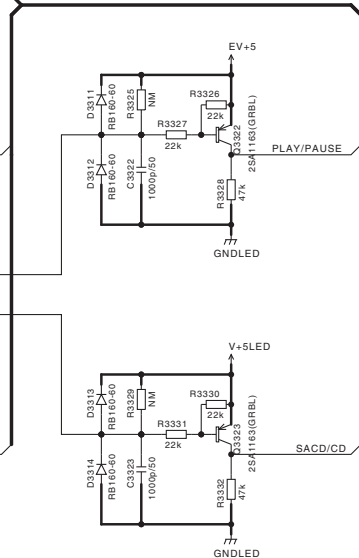
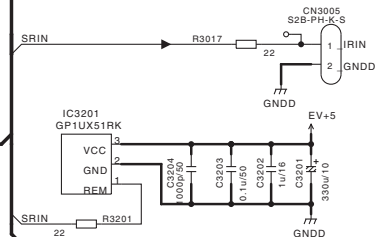
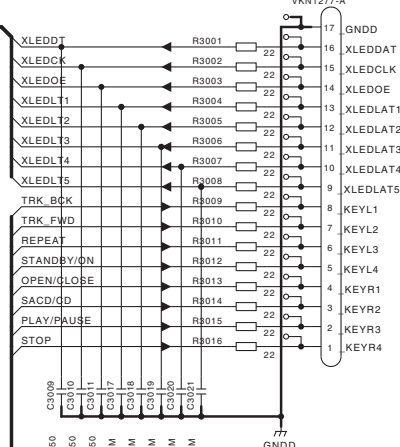
E

F



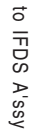
from INTERFACE ASSY

from INTERFACE ASSY

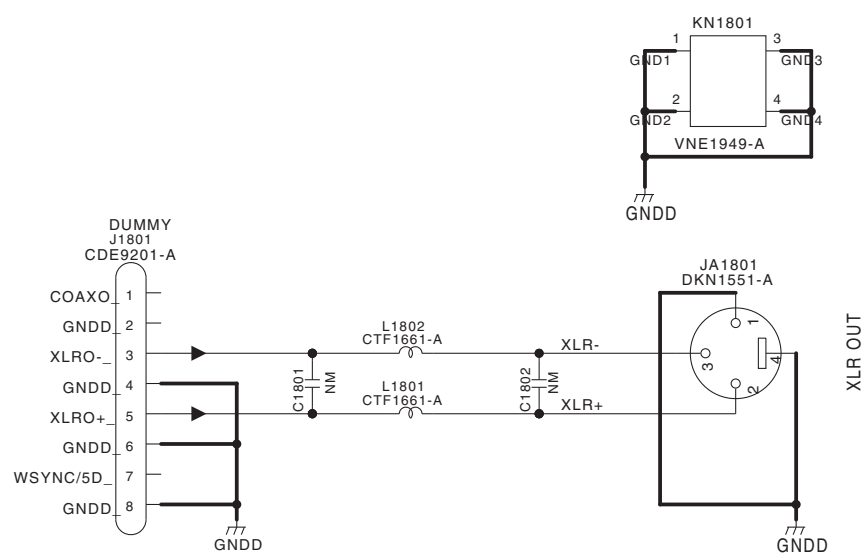


△

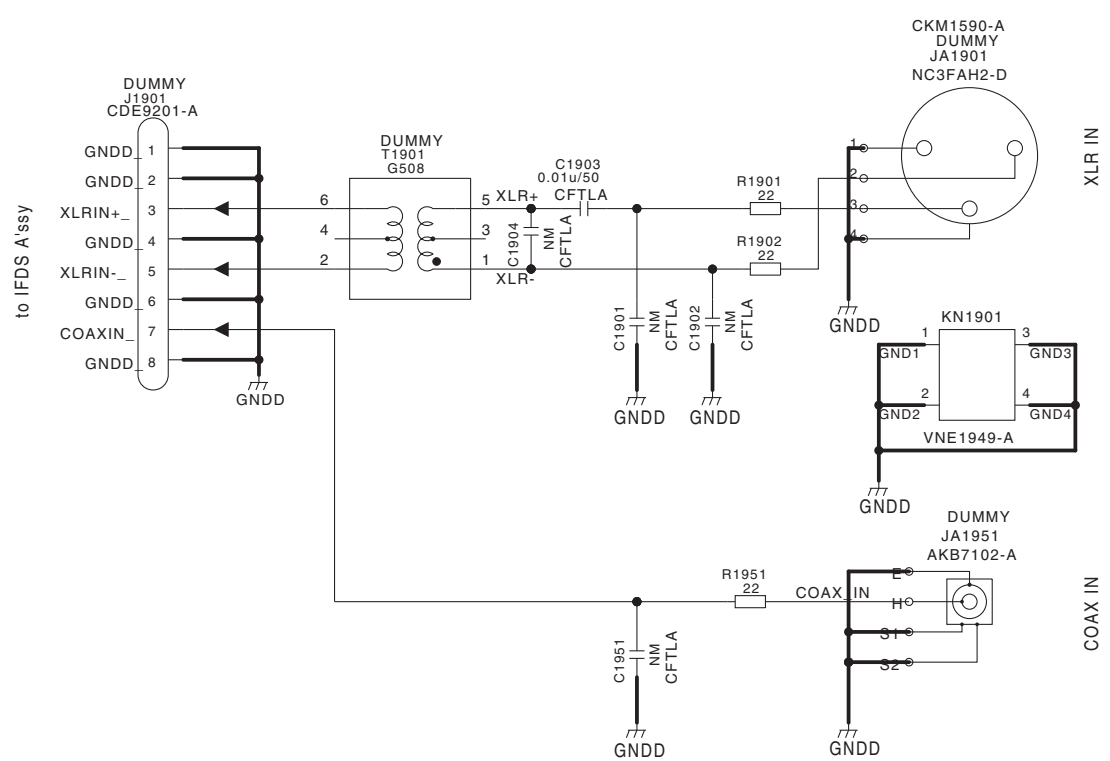
F



D OUT UNIT

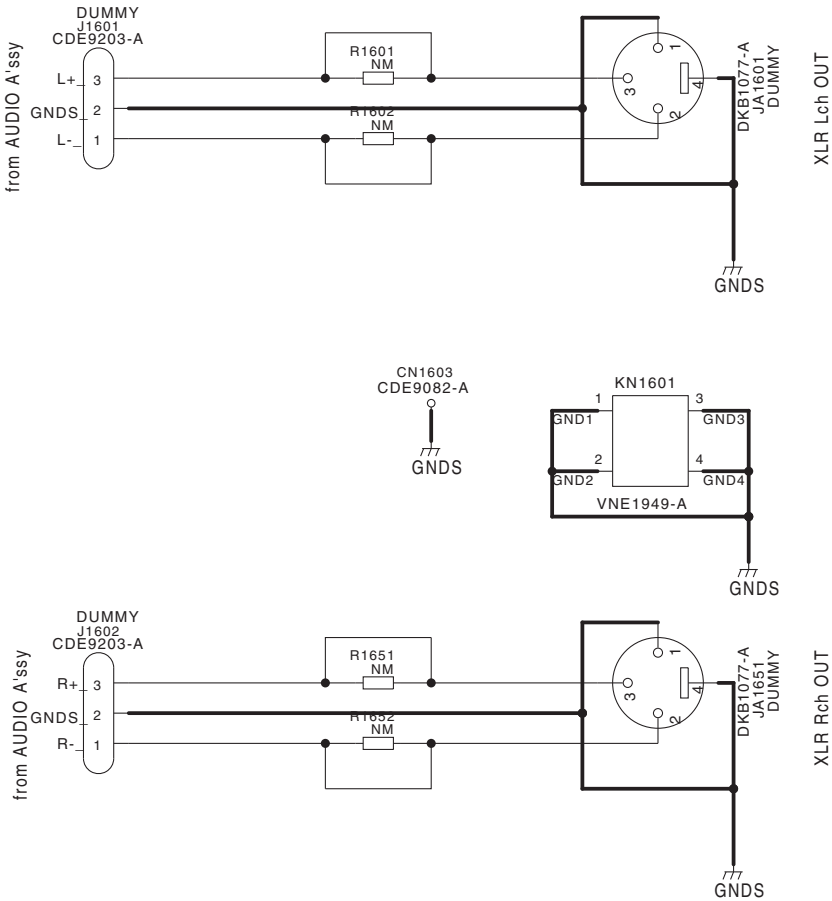


DIN UNIT

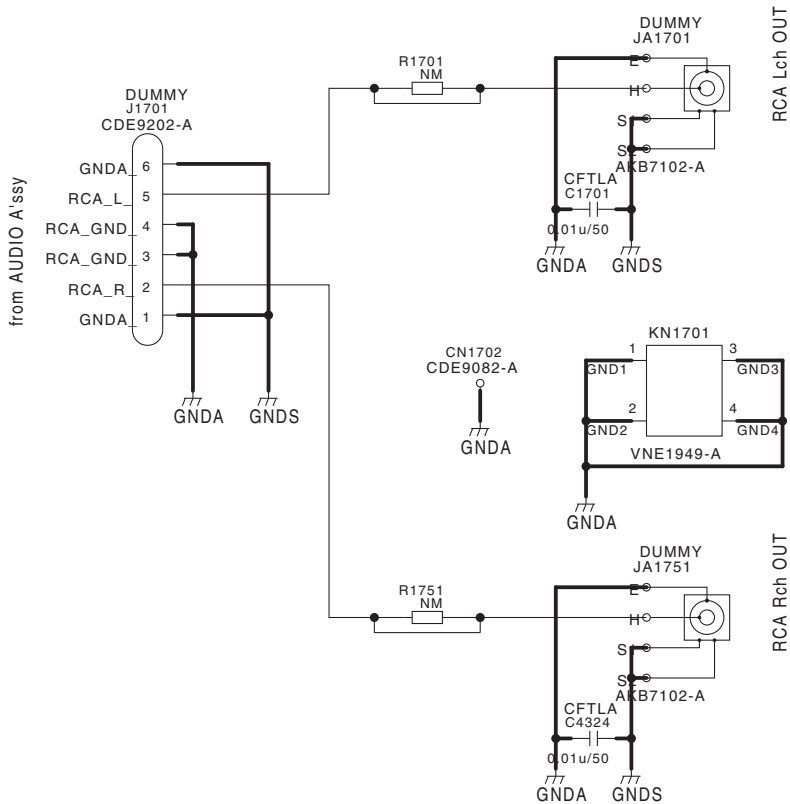


10.7 A_XLROUT and A_RCAOUT UNITS

A_XLROUT UNIT



A_RCAOUT UNIT



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A



F

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME TYPE NO. 491010 MFD. BY
LITTELFUSE INC. FOR P4301 and P4302.

△



PRIMARY UNIT

A

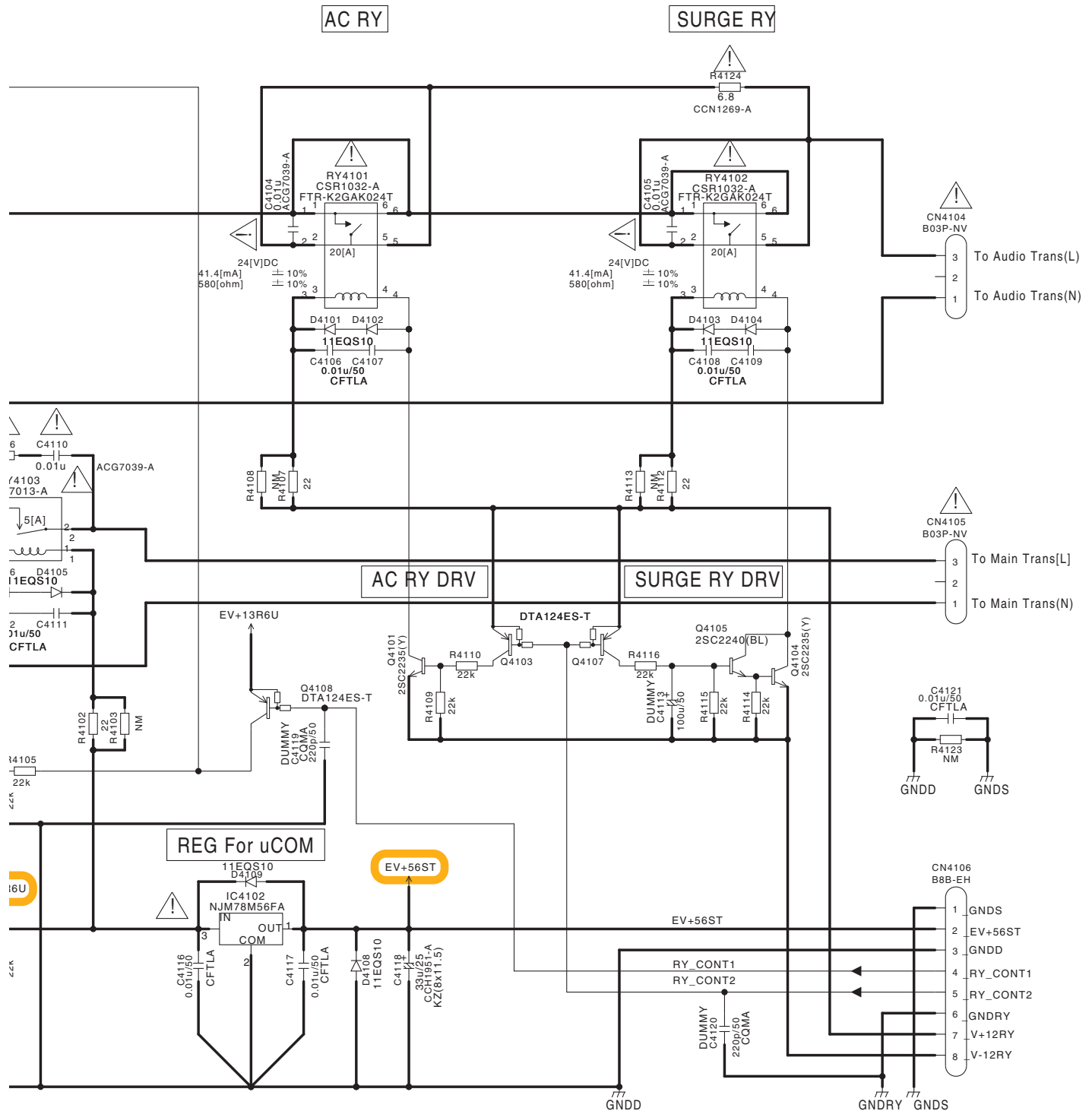
B

C

D

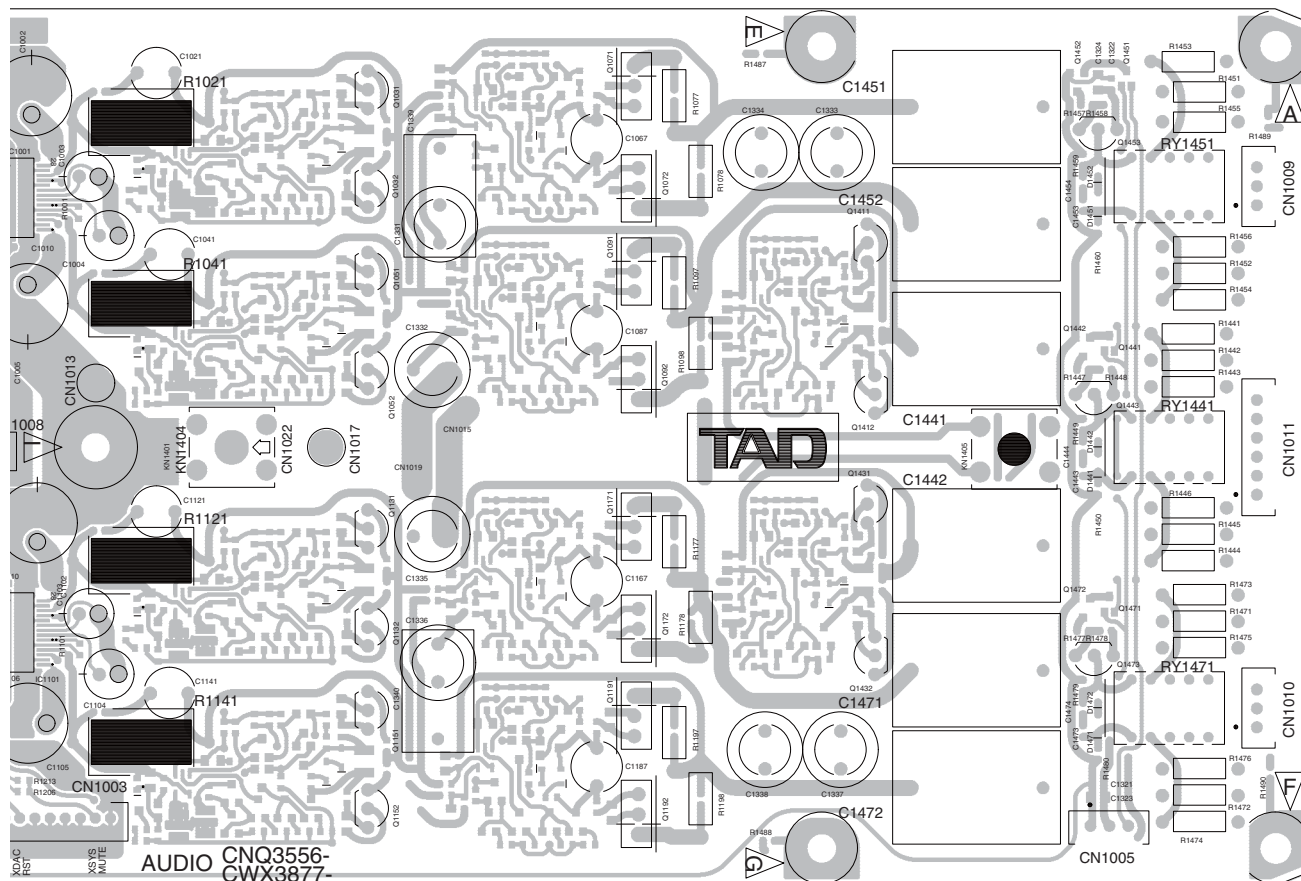
E

F



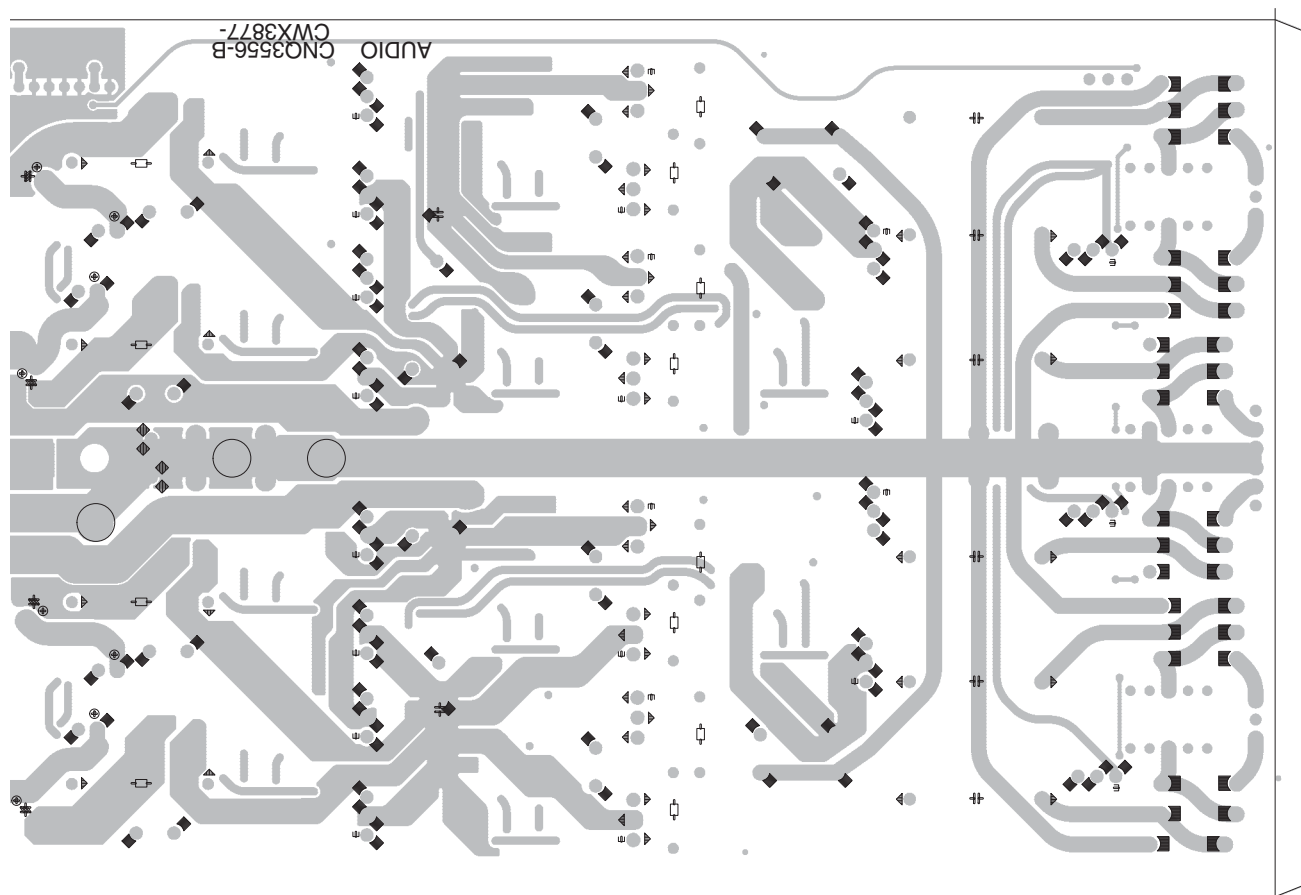
SIDE A

A



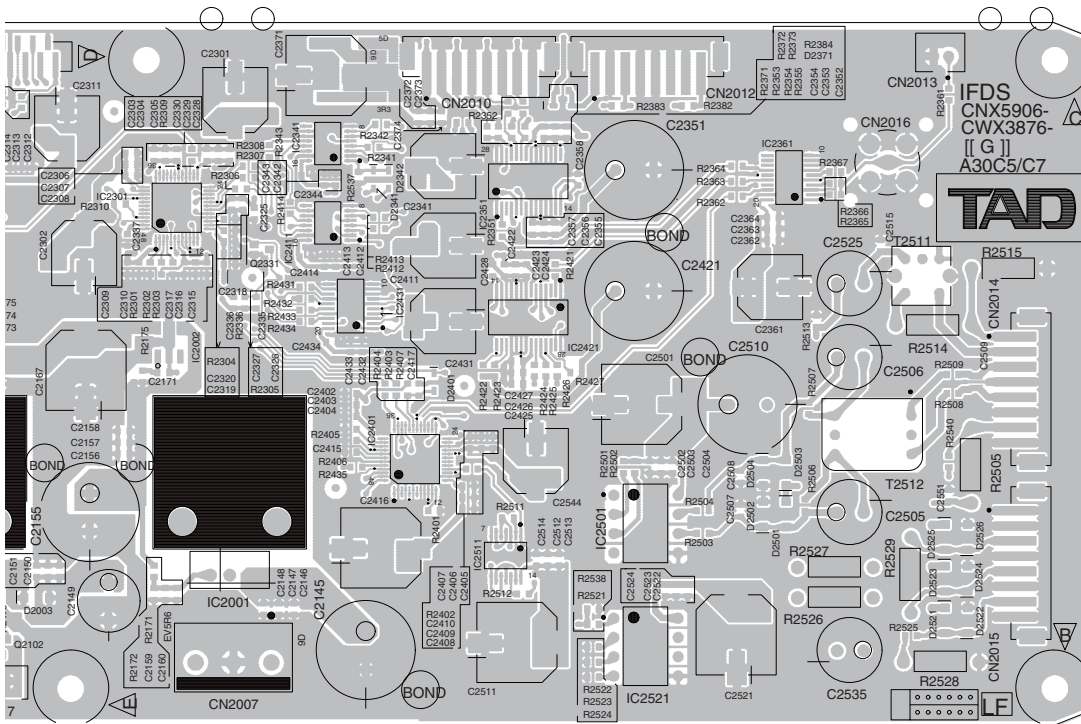
SIDE B

D



SIDE A

A

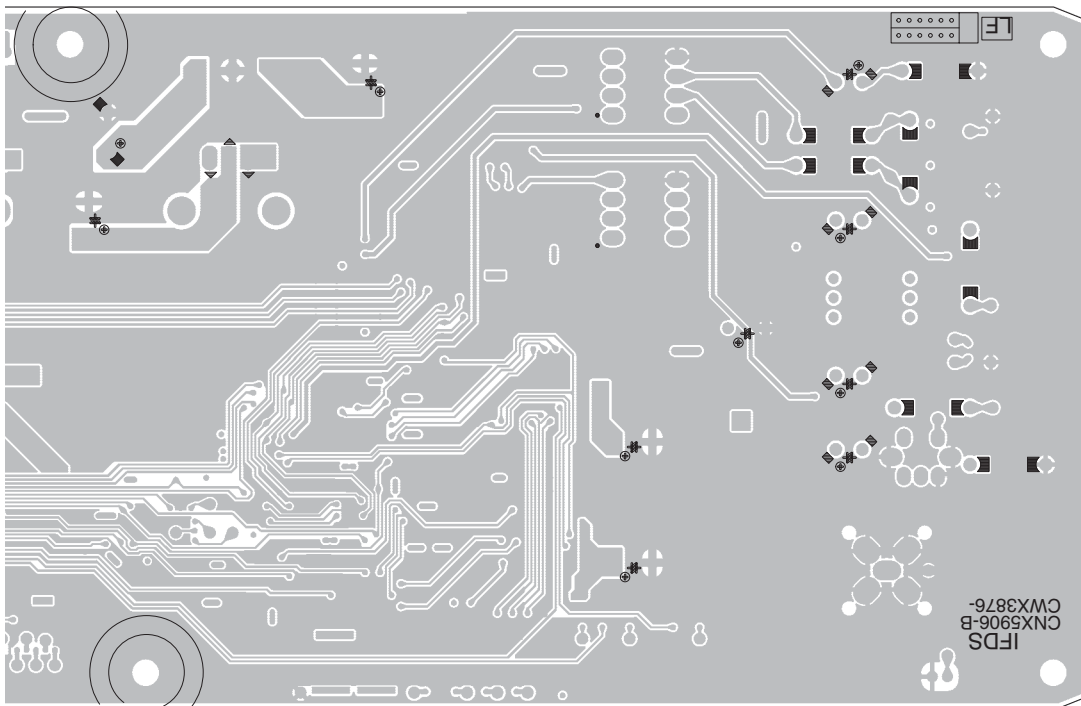


B

C

SIDE B

D



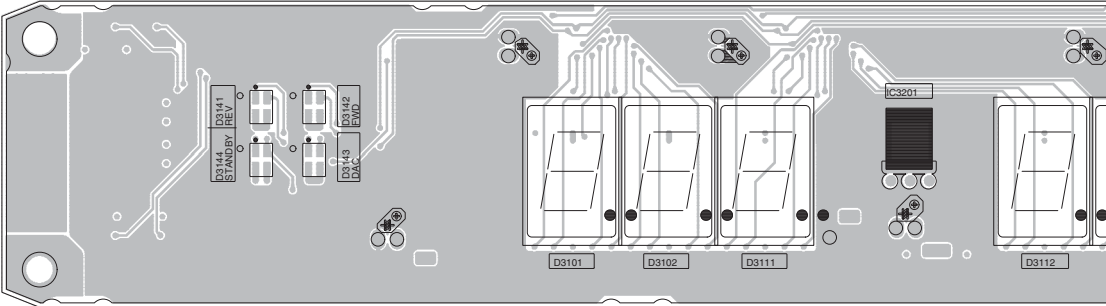
E

F

11.3 FPKB UNIT

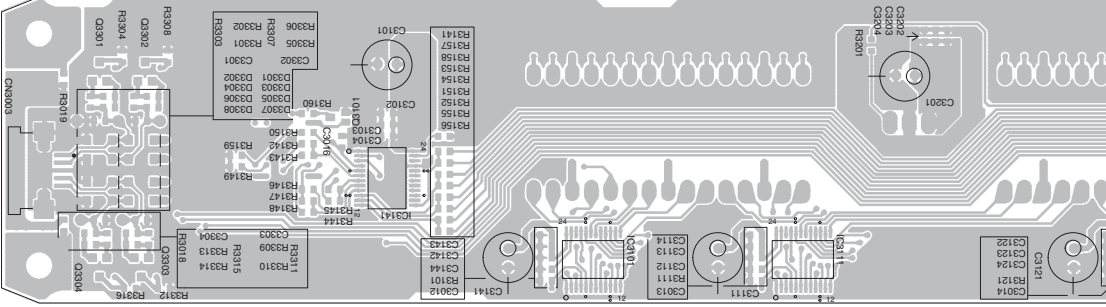
SIDE A

FPKB UNIT



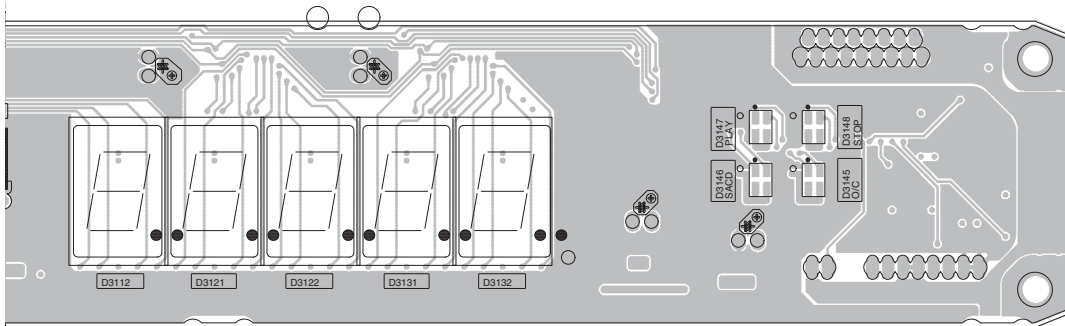
SIDE B

FPKB UNIT



SIDE A

A

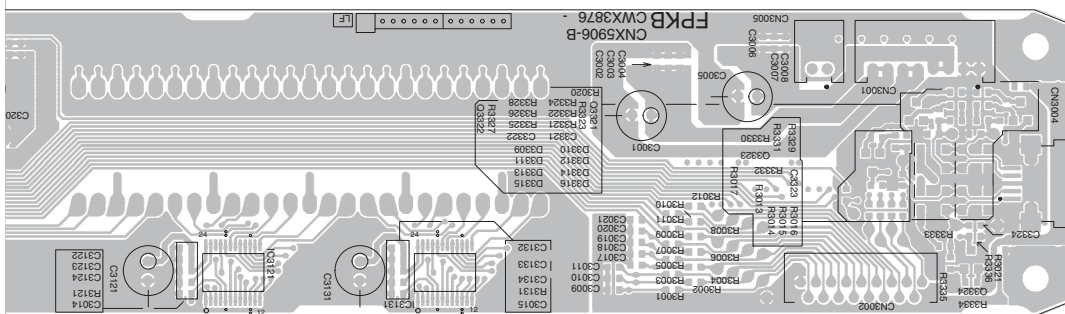


B

C

SIDE B

D



E

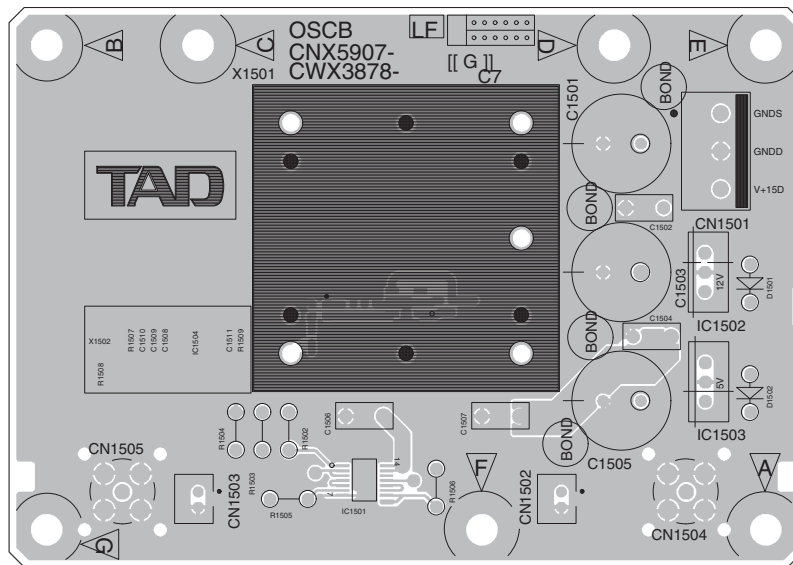
F

11.4 OSCB UNIT

SIDE A

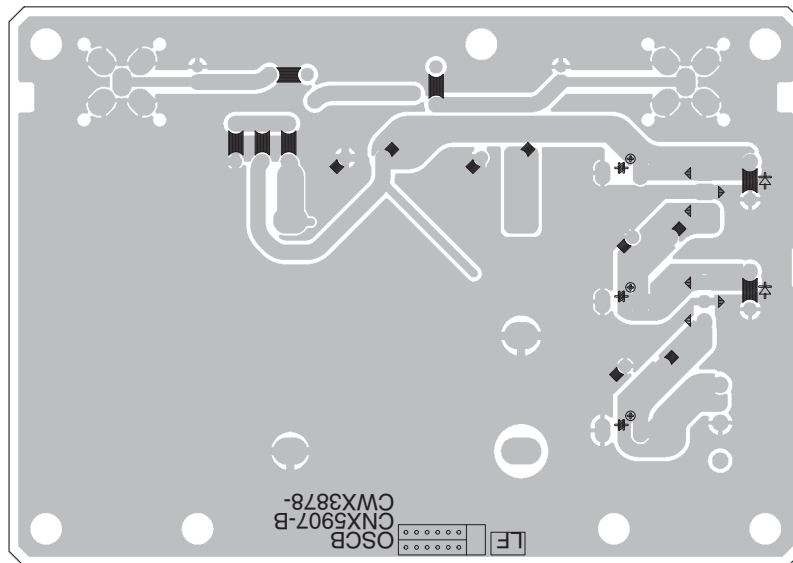
SIDE A

OSCB UNIT

**SIDE B**

SIDE B

OSCB UNIT



SIDE A

SIDE B

D OUT UNIT

D OUT UNIT

DIN UNIT

DIN UNIT

A_XLROUT UNIT

A_XLROUT UNIT

A_RCAOUT UNIT

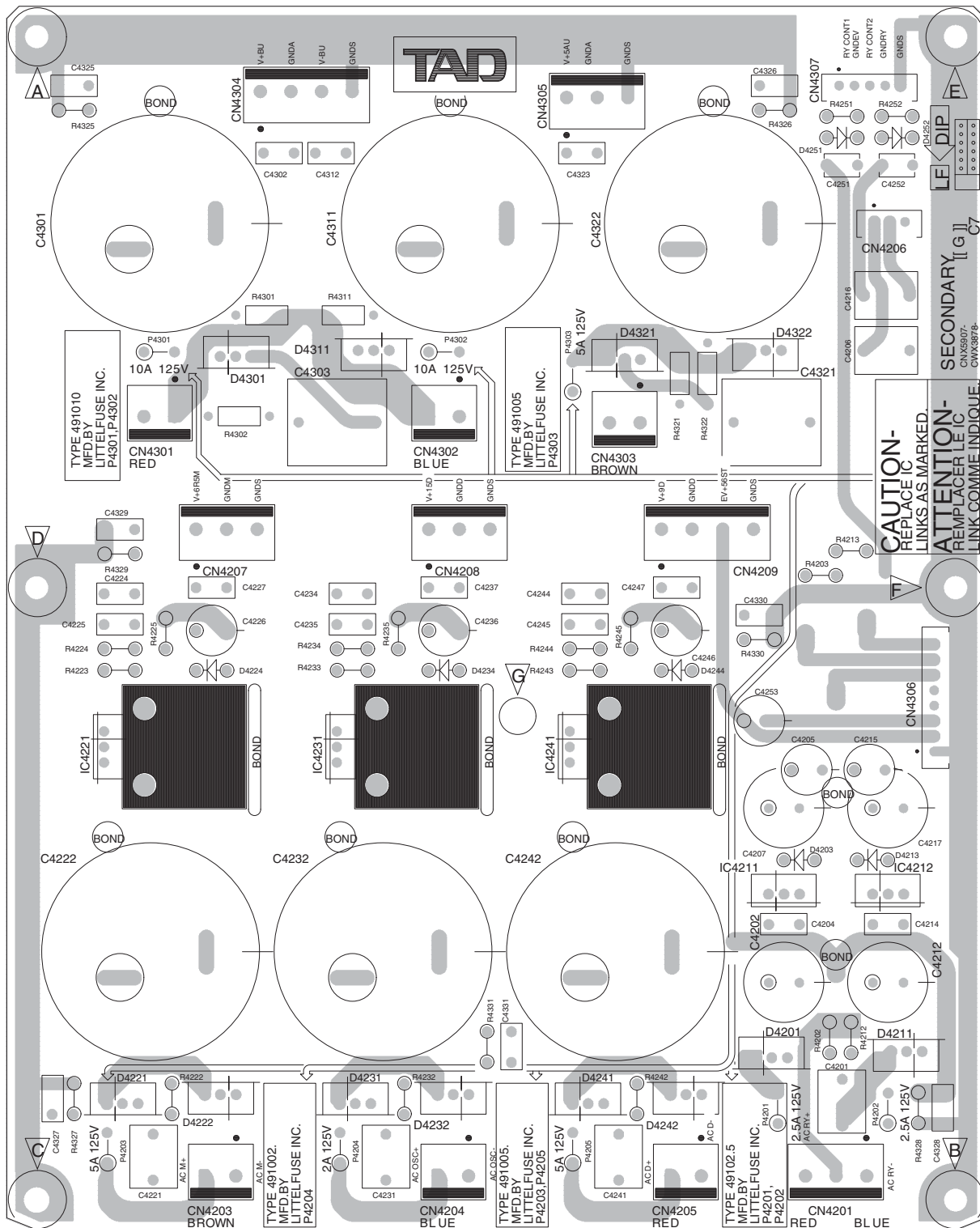
A_RCAOUT UNIT

11.6 SECONDARY UNIT

SIDE A

SIDE A

SECONDARY UNIT



SIDE B

SIDE B

A

SECONDARY UNIT

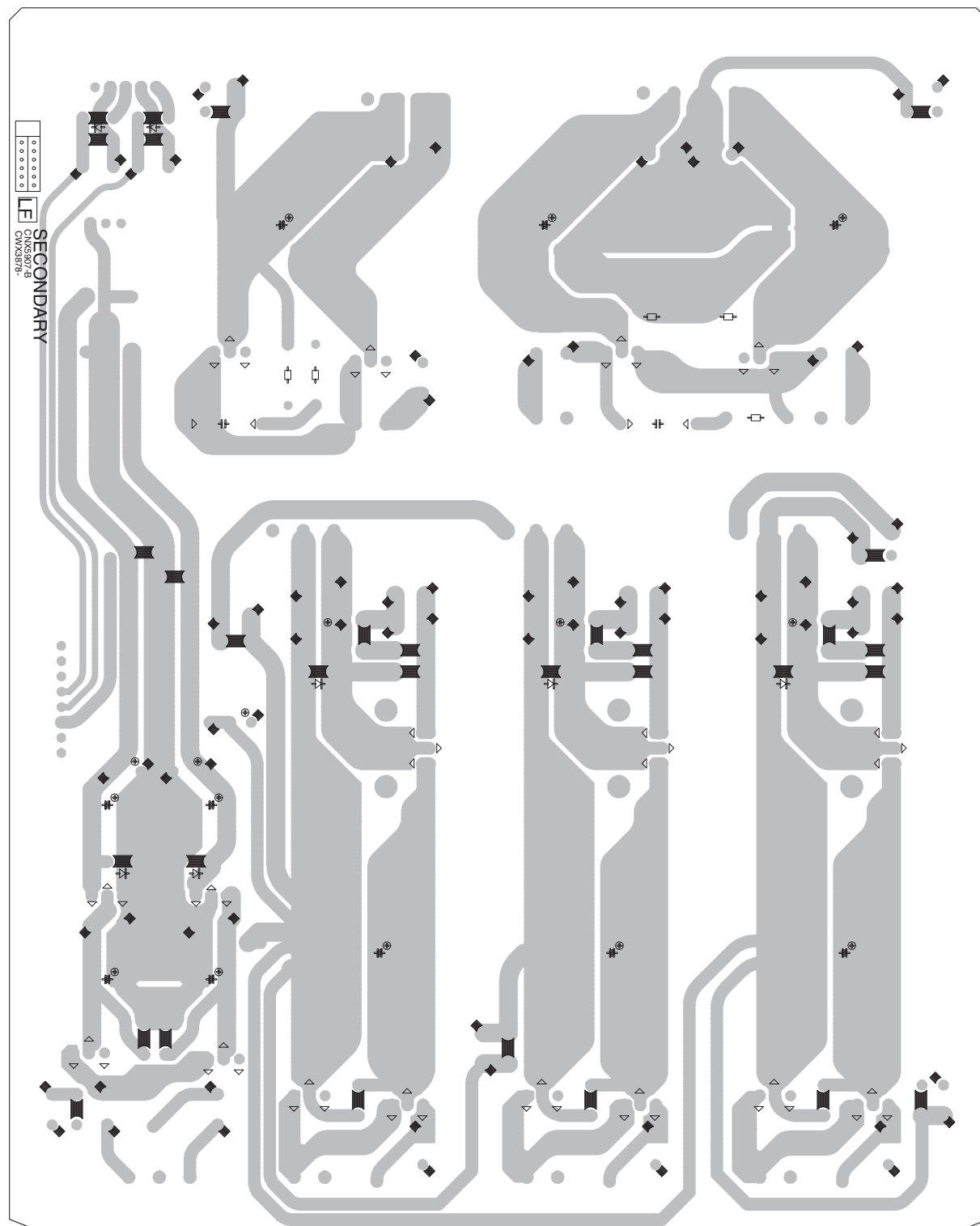
E

C

□

F

F



SIDE A

SIDE A

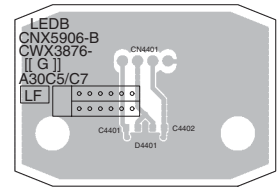
Diagram of the LEDB CNX5906-CWX3876 module. The component CN4401 is located on the bottom left of the module, below the A30C5/C7 component. The diagram shows the component's footprint and its connection to the module's internal circuitry.

[illegible]

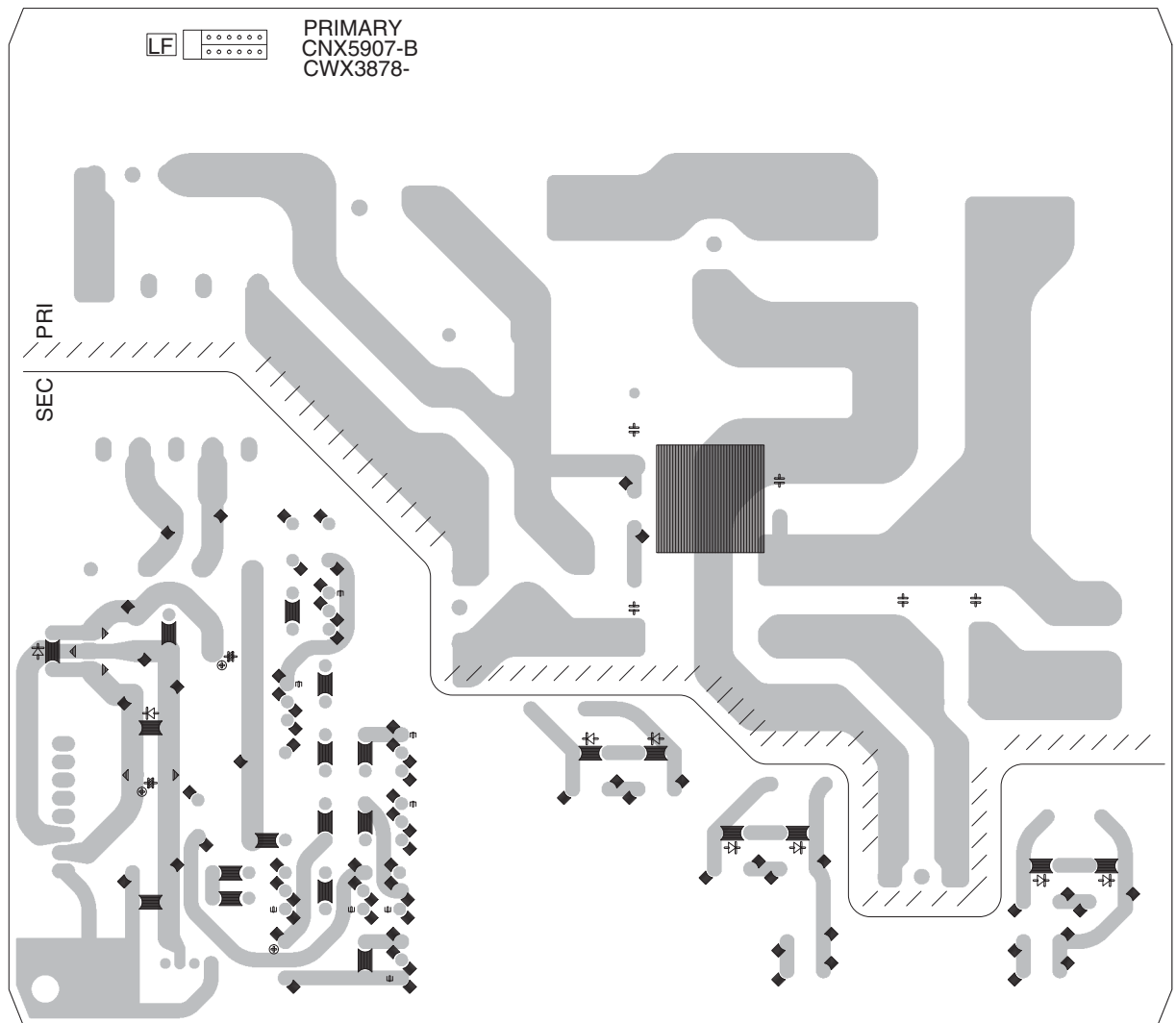
SIDE B

SIDE B

LED UNIT



PRIMARY UNIT



12. PCB PARTS LIST

NOTES: ● Parts marked by “ * ” are generally unavailable because they are not in our Master Spare Parts List.

● The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

● When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47 k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω $\rightarrow$ 56×10^1 $\rightarrow$ 561.....RD1/4PU $\begin{bmatrix} 5 \\ 6 \end{bmatrix} \begin{bmatrix} 1 \\ J \end{bmatrix}$

47 k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473.....RD1/4PU $\begin{bmatrix} 4 \\ 7 \end{bmatrix} \begin{bmatrix} 3 \\ J \end{bmatrix}$

0.5 Ω $\rightarrow$ R50.....RN2H $\begin{bmatrix} R \\ 5 \end{bmatrix} \begin{bmatrix} 0 \\ K \end{bmatrix}$

1 Ω $\rightarrow$ 1R0.....RS1P $\begin{bmatrix} 1 \\ R \end{bmatrix} \begin{bmatrix} 0 \\ K \end{bmatrix}$

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 k Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621.....RN1/4PC $\begin{bmatrix} 5 \\ 6 \end{bmatrix} \begin{bmatrix} 2 \\ 1 \end{bmatrix} F$

● Meaning of the figures and others in the parentheses in the parts list.

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
------	-----	-------------	----------	------	-----	-------------	----------

LIST OF ASSEMBLIES

* 1..BASE ASSY CWX3934

2..DVDM ASSY AWM8184

* 2..TM ASSY VK1AVC DXB2024

1..AUDIO UNIT CWX3877

1..DIGITAL UNIT CWX3876

* 2..IFDS UNIT

* 2..D OUT UNIT

* 2..LEDB UNIT

* 2..FPKB UNIT

* 1..DC POWER SUPPLY (TAD-D600/U) CWR1092

* 1..DC POWER SUPPLY (TAD-D600/Y8) CWR1091

2..POWER UNIT CWX3878

* 3..PRIMARY UNIT

* 3..OSCB UNIT

* 3..DIN UNIT

* 3..SECONDARY UNIT

* 3..A_XLROUT UNIT

* 3..A_RCAOUT UNIT

Q 732 RSQ035P03

Q 881 2SA1576A

D 731,733,821,851 1SS355

D 732 RSX201L-30

D 801 UDZS4R7(B)

D 852,861,862,881 1SS355

MISCELLANEOUS

L 201 CHIP SOLID INDUCTOR QTL1013

L 731 POWER INDUCTOR (22 U) DTL1099

L 732 POWER INDUCTOR ATH7011

L 751 INDUCTOR CTF1395

L 901 INDUCTOR CTF1334

L 931 INDUCTOR CTF1384

L 936-939 INDUCTOR CTF1389

X 202 CRYSTAL OSCILLATOR ASS7103

CN101 CONNECTOR CKS5045

CN102 12P CONNECTOR AKN7031

CN103 04P CONNECTOR RKN1045

CN104 CONNECTOR AKM1291

CN901 29P CONNECTOR VKN1321

CN953 CONNECTOR CKS3885

RESISTORS

R 131-136 RS1/8SQ4R7J

R 151,153 RS1/8SQ1R0J

R 152,154 RS1/8SQ1R8J

R 200,207-209,217 RS1/8SQ0R0J

R 225 RAB4C330J

R 279 RS1/10SR5600F

R 281,301-303,590 RS1/8SQ0R0J

R 732 RS1/8SQ100J

R 736 RS1/10SR1802F

R 737 RS1/10SR2702F

R 738 RS1/10SR1502F

R 765 RS1/8SQ0R0J

Other Resistors RS1/10SR###J

CAPACITORS

C 101,734,739,761 CEVW101M16

C 102-104,121,140 CKSRYB105K10

C 131,204,205,207 CKSRYB104K25

C 132 ACH7274

Mark	No.	Description	Part No.
------	-----	-------------	----------

DVDM ASSY

SEMICONDUCTORS

IC 101 BD7995EFS

IC 201 MT1389EE/B2-L

IC 202 K4S641632K-UC75

IC 203 AYW7212

IC 204 S-24CS04AFJ

IC 205 TC7SH08FUS1

IC 711 MM1661JH

IC 731 R1224N102H

IC 751 MM1565AF

Q 101,701,821,851 2SA1576A

Q 102,702,801 DTC124EUA

Q 304 2SC4081

Q 305 UM5K1N

Q 307,308 HN1A01F

Q 506 DTC114YUA

5

6

7

8

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	C	144-146,208,210	CKSRYB222K50		Q	1122-1124,1129,1130	2SC2412K
	C	151-153,226,250	CKSRYB103K50		Q	1125-1128,1145-1148	2SA1163
	C	161,230,267,296	CKSRYB102K50		Q	1142-1144,1149,1150	2SC2412K
	C	201,237,281,714	CEVW221M4		Q	1162-1164,1169,1170	2SC2412K
	C	202	VCH1234		Q	1165-1168,1185-1188	2SA1163
	C	203,206,215	CEVW470M16		Q	1182-1184,1189,1190	2SC2412K
					Q	1201,1301,1314,1351	2SA1163
	C	209,213,214,216	CKSRYB104K25		Q	1302,1352,1411,1431	2SC2240
	C	211,212	CCSRCH560J50				
	C	217,220,223	CKSRYB104K25		Q	1303,1353	2SC4883A
	C	219	CKSRYB152K50		Q	1304,1305,1311,1315	2SC2713
	C	222,235,236,241	CCSRCH102J50		Q	1312,1412,1432	2SA970
					Q	1313	2SA1859A
	C	224	CCSRCH101J50		Q	1354,1355	2SC2713
	C	225,228,234,592	CKSRYB103K25				
	C	227	CCSRCH221J50		Q	1401,1421	2SK2145
	C	231-233,239,240	CKSRYB104K25		Q	1402-1404,1409,1410	2SC2412K
	C	243,261,263,282	CKSRYB105K10		Q	1405-1408,1425-1428	2SA1163
					Q	1422-1424,1429,1430	2SC2412K
	C	244-246,249,253	CKSRYB104K25		Q	1441,1451,1471	2SK2034
	C	254	CCSRCH391J50				
	C	255	CKSRYB474K10		Q	1442,1452,1472	DTA124EKA
	C	256	CEVW100M16		Q	1443,1453,1473	2SC2235
	C	257,260,262,264	CKSRYB104K25		D	1001,1002,1101,1102	SML-310YT
					D	1021,1022,1041,1042	1SS352
	C	258,259	CKSRYB473K50		D	1061,1062,1081,1082	1SS352
	C	265	CCSRCH220J50				
	C	266,268,271,272	CKSRYB104K25		D	1121,1122,1141,1142	1SS352
	C	269	CKSRYB333K16		D	1161,1162,1181,1182	1SS352
	C	273,591	CCSRCH102J50		D	1301-1303,1311-1313	SML-310YT
					D	1351,1353	SML-310YT
	C	283,284,286-288	CKSRYB104K25		D	1401,1402,1421,1422	1SS352
	C	285	CCSRCH681J50				
	C	289,298,299	CKSRYB105K10		D	1441,1442,1451,1452	1SS352
	C	290,371,372,736	CKSRYB104K25		D	1471,1472	1SS352
	C	309,310,373,374	VCH1260				
					MISCELLANEOUS		
	C	343-347,711,751	CKSRYB105K10		KN	1401-1403 WRAPPING TERMINAL	VNF1084
	C	701	CKSQYB105K16		RY	1441,1451,1471 RELAY	CSR1031
	C	712,752	CCSRCH471J50		CN	1001,1003 PLUG (9P)	KM200NA9
	C	713,753	CKSQYB225K10		CN	1004 CONNECTOR	CKS6112
	C	732,733,735,738	DCH1165		CN	1005,1009,1010 3P TOP POST	B3B-EH
	C	737	CCSRCH121J50		CN	1006 CONNECTOR	CKS6113
	C	801	CKSRYB104K25		CN	1007 JACK	CKN1083
					CN	1011 CONNECTOR	B6B-EH
					RESISTORS		
					R	1001,1101,1305,1315	RN1/16SE1002D
					R	1007,1011,1108,1112	RN1/16SE3902D
					R	1008,1012,1029,1037	RN1/16SE1000D
					R	1009,1013,1026,1030	RN1/16SE4700D
					R	1010,1014,1111,1115	RN1/16SE3900D
					R	1021,1041,1121,1141	CCN1302
					R	1025,1045,1061,1062	RN1/16SE1202D
					R	1027,1028,1047,1048	RN1/16SE6800D
					R	1031,1051,1071,1091	RN1/16SE5101D
					R	1032,1052,1072,1092	RN1/16SE5102D
					R	1033,1053,1073,1093	RN1/16SC68R0D
					R	1034-1036,1039,1040	RN1/16SE2200D
					R	1038,1049,1057,1058	RN1/16SE1000D
					R	1046,1050,1066,1070	RN1/16SE4700D
					R	1054-1056,1059,1060	RN1/16SE2200D
					R	1063,1064,1083,1084	RN1/16SE3001D
					R	1065,1081,1082,1085	RN1/16SE1202D
					R	1067,1068,1087,1088	RN1/16SE6800D
					R	1069,1089,1109,1113	RN1/16SE1000D

AUDIO UNIT

SEMICONDUCTORS

IC	1001,1101	PCM1794ADB
IC	1201	TC74LCX541FTS1
IC	1251,1252	TC7SZU04FU
IC	1361	LM338T
Q	1001,1002,1025-1028	2SA1163
Q	1021,1041,1061,1081	2SK2145
Q	1022-1024,1029,1030	2SC2412K
Q	1031,1051,1131,1151	2SC2240
Q	1032,1052,1132,1152	2SA970
Q	1042-1044,1049,1050	2SC2412K
Q	1045-1048,1065-1068	2SA1163
Q	1062-1064,1069,1070	2SC2412K
Q	1071,1091,1171,1191	2SC3423
Q	1072,1092,1172,1192	2SA1360
Q	1082-1084,1089,1090	2SC2412K
Q	1085-1088,1101,1102	2SA1163
Q	1121,1141,1161,1181	2SK2145

Mark	No.	Description	Part No.
A	R	1074-1076,1079,1080	RN1/16SE2200D
	R	1077,1078,1097,1098	CCN1276
	R	1086,1090,1110,1114	RN1/16SE4700D
	R	1094-1096,1099,1100	RN1/16SE2200D
	R	1125,1145,1161,1162	RN1/16SE1202D
	R	1126,1130,1146,1150	RN1/16SE4700D
B	R	1127,1128,1147,1148	RN1/16SE6800D
	R	1129,1137,1138,1149	RN1/16SE1000D
	R	1131,1151,1171,1191	RN1/16SE5101D
	R	1132,1152,1172,1192	RN1/16SE5102D
	R	1133,1153,1173,1193	RN1/16SC68R0D
	R	1134-1136,1139,1140	RN1/16SE2200D
C	R	1154-1156,1159,1160	RN1/16SE2200D
	R	1157,1158,1169,1189	RN1/16SE1000D
	R	1163,1164,1183,1184	RN1/16SE3001D
	R	1165,1181,1182,1185	RN1/16SE1202D
	R	1166,1170,1186,1190	RN1/16SE4700D
	R	1167,1168,1187,1188	RN1/16SE6800D
D	R	1174-1176,1179,1180	RN1/16SE2200D
	R	1177,1178,1197,1198	CCN1276
	R	1194-1196,1199,1200	RN1/16SE2200D
	R	1301,1302,1311,1312	RN1/16SE3300D
	R	1303,1306,1313,1316	RN1/16SE4701D
	R	1304,1314	RN1/16SE1501D
E	R	1317	RN1/16SE4702D
	R	1351,1352	RN1/16SE3300D
	R	1353,1354,1356	RN1/16SE4701D
	R	1355	RN1/16SE2000D
	R	1357	RN1/16SE6801D
	R	1361	RN1/16SE1800D
F	R	1362	RN1/16SE3000D
	R	1401,1402,1405,1421	RN1/16SE1202D
	R	1403,1404,1423,1424	RN1/16SE3001D
	R	1406,1410,1426,1430	RN1/16SE4700D
	R	1407,1408,1427,1428	RN1/16SE6800D
	R	1409,1417,1418,1429	RN1/16SE1000D
G	R	1411,1431	RN1/16SE5101D
	R	1412,1432	RN1/16SE5102D
	R	1413,1433	RN1/16SC68R0D
	R	1414-1416,1419,1420	RN1/16SE2200D
	R	1422,1425	RN1/16SE1202D
	R	1434-1436,1439,1440	RN1/16SE2200D
H	R	1437,1438	RN1/16SE1000D
	R	1441,1444,1453,1454	CCN1266
	R	1442,1445,1451,1452	CCN1288
	R	1443,1446,1455,1456	CCN1230
	R	1471,1472	CCN1288
	R	1473,1474	CCN1266
I	R	1475,1476	CCN1230
	Other Resistors		RS1/10SR###J
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Mark	No.	Description	Part No.
A	C	1021,1041,1067,1087	CCE1056
	C	1023,1043,1063,1083	CFHXSQ221J50
	C	1027,1030,1031,1047	CFHXSQ223G50
	C	1028,1029,1048,1049	CFHXSQ681J50
	C	1044-1046,1064-1066	CCSRCH101J50
	C	1050,1051,1127,1130	CFHXSQ223G50
B	C	1061,1062,1068,1069	CFHXSQ681J50
	C	1081,1082,1088,1089	CFHXSQ681J50
	C	1084-1086,1124-1126	CCSRCH101J50
	C	1102,1105	VCH1288
	C	1121,1141,1167,1187	CCE1056
	C	1123,1143,1163,1183	CFHXSQ221J50
C	C	1128,1129,1148,1149	CFHXSQ681J50
	C	1131,1147,1150,1151	CFHXSQ223G50
	C	1134,1144-1146	CCSRCH101J50
	C	1161,1162,1168,1169	CFHXSQ681J50
	C	1164-1166,1184-1186	CCSRCH101J50
	C	1181,1182,1188,1189	CFHXSQ681J50
D	C	1203,1206,1253,1321	CCSRCH102J50
	C	1204,1205,1254	CCSRCH101J50
	C	1208,1363	CEHAZL102M35
	C	1252	CKSRYB105K16
	C	1301,1311,1351	CCH1956
	C	1302,1305,1312,1315	CCH1951
E	C	1303,1304,1313,1314	CCE1044
	C	1306,1316,1356	CCH1953
	C	1322,1361	CCSRCH102J50
	C	1323,1324	VCG1072
	C	1331-1338	CCE1059
	C	1352,1355	CCH1951
F	C	1353,1354	CCE1044
	C	1401,1402,1408,1409	CFHXSQ681J50
	C	1403,1423	CFHXSQ221J50
	C	1404-1406,1424-1426	CCSRCH101J50
	C	1407,1427	CFHXSQ223G50
	C	1421,1422,1428,1429	CFHXSQ681J50
G	C	1441,1442,1451,1452	CCE1041
	C	1443,1444,1453,1454	CKSRYB104K50
	C	1471,1472	CCE1041
	C	1473,1474	CKSRYB104K50
	C	2102	BD4850G
	C	2103	TC7SET04FUS1
H	C	2201	BA5984FP
	C	2301	SM5819AF
	C	2311,2321,2331,2361	TC74LCX541FTS1
	C	2341,2411	TC74LCX157FTS1
	C	2351,2421	SRC4192IDB
	C	2401	AK4114VQ
I	C	2431	TC74LCX541FTS1
	C	2501,2521	SN75176BP
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DIGITAL UNIT SEMICONDUCTORS

CAPACITORS

TAD-D600

Mark No. Description Part No.

Mark No. Description Part No.

POWER UNIT SEMICONDUCTORS

IC 1501 TC74VHC04FTS1
IC 1502,4211 NJM7812FA
IC 1503 NJM7805FA
IC 4102 NJM78M56FA
IC 4212 NJM7912FA

IC 4221,4231,4241 LM338T
Q 4101,4104 2SC2235
Q 4102,4105,4106 2SC2240
Q 4103,4107,4108 DTA124ES
D 1501,1502,4101-4106 11EQS10

D 4107 D3SBA20
D 4108,4109,4203,4213 11EQS10
D 4201,4221,4231,4241 FCH20A20
D 4211,4222,4232,4242 FRH20A20
D 4224,4234,4244,4251 11EQS10

D 4252 11EQS10
D 4301,4321 FCH20A20
D 4311,4322 FRH20A20

MISCELLANEOUS

H 4101-4104 FUSE HOLDER AKR7004
J 1601,1602 CORD CDE9203
J 1701 CORD CDE9202
J 1901 CORD CDE9201
JA 1601,1651 CANON CONNECTOR DKN1551

JA 1701,1751,1951 PIN JACK (1P) AKB7102
JA 1901 CONNECTOR CKM1590
KN 1601,1701,1901 SCREW TERMINAL VNE1949
RY 4101,4102 RELAY CSR1032
RY 4103 JOE LOWPOWER RELAY ASR7013

T 1901 COIL CTL1006
X 1501 OSCILLATOR CWX3885
CN 1501,4101,4103-4105 CONNECTOR CKS6112
CN 1504,1505 JACK CKN1083
CN 4106,4306 8P TOP POST B8B-EH

CN 4201,4207,4208,4305 CONNECTOR CKS6112
CN 4203-4205,4301-4303 CONNECTOR CKS6111
CN 4206 3P TOP POST B3B-EH
CN 4209,4304 CONNECTOR CKS6113
CN 4307 5P TOP POST B5B-EH

CN 4308 CONNECTOR B4B-PH-K-S
4335 HEAT SINK CLX1028
4336 SCREW PMH30P080FCC
4337 CORD CDE9325
P 4201,4202 PROTECTOR (2.5 A) AEK7014

P 4203,4205,4303 PROTECTOR (5 A) AEK7019
P 4204 PROTECTOR(2A) AEK7013
P 4301,4302 PROTECTOR (10 A) AEK7022

RESISTORS

R 4102,4106,4107,4112 RD1/4MUF220J
R 4124 CCN1269
R 4301,4311,4322 CCN1310
R 4302,4321 CCN1193
Other Resistors RD1/4PU###J

CAPACITORS

C 1501,1503,1505,4115 CEHAZL102M35

C 1502,1504,1506,1507 CFTLA103J50
C 1701,1903,4106-4109 CFTLA103J50
C 4101,4102 ACE7013
C 4104,4105,4110 ACG7039

C 4111,4112,4114,4116 CFTLA103J50
C 4113 CEHAT101M50
C 4117,4121,4204,4214 CFTLA103J50
C 4118 CCH1951
C 4119,4120,4251,4252 CQMA221J50

C 4201,4206,4216,4221 CFTLA225J50
C 4202,4207,4212,4217 CEHAZL102M35
C 4222,4232,4242,4301 CCH1956
C 4224,4225,4227,4234 CFTLA103J50
C 4226,4236,4246 ACH1482

C 4231,4241 CFTLA225J50
C 4235,4237,4244,4245 CFTLA103J50
C 4247,4302,4312 CFTLA103J50
C 4303,4321 CCE1040
C 4311,4322 CCH1956

C 4323-4328 CFTLA103J50