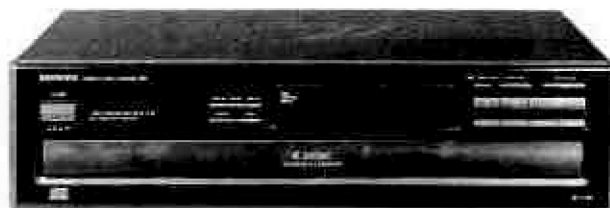


ONKYO SERVICE MANUAL

COMPACT DISC PLAYER

MODEL DX-C106

MODEL DX-C206



Black model

| | |
|-------------|----------------------|
| BHUD, BHUDN | 120V AC, 60Hz |
| BHUP | 230V AC, 50Hz |
| BHUW | 120/220V AC, 50/60Hz |
| BHUQA | 240V AC, 50Hz |

| | |
|-------------|---------------|
| BHUD, BHUDN | 120V AC, 60Hz |
|-------------|---------------|

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle 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

| | |
|----------------------------|----------------------------------------------------|
| Signal readout system: | Optical non-contact |
| Reading rotation: | About 500-200 r.p.m. (constant linear velocity) |
| Linear velocity: | 1.2-1.4m/s |
| Error correction system: | Cross interleave readsolomon code |
| Decoded bits: | 1 BIT PWM/ACCUPULSE D/A CONVERTER |
| Sampling frequency: | 332kHz (8 times oversampling) |
| Number of channels: | 2 (Stereo) |
| Frequency response: | 2Hz-20kHz |
| Total harmonic distortion: | 0.004% (at 1kHz) |
| Dynamic range: | 96dB (at 1kHz) |
| Signal to noise ratio: | 96dB (at 1kHz) |
| Channel separation: | 90dB (at 1kHz) |
| Wow and Flutter: | Below threshold of measurability |
| Power consumption: | 12 watts |
| Output level: | 2 volts r.m.s. |
| Dimensions(W×H×D): | 455×120×426mm 17-15/16"×4-3/4"×16-13/16" |
| Weight: | 7.7kg, 17.0lbs. |

Specifications are subject to change without notice.

ONKYO
AUDIO COMPONENTS

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SERVICE PROCEDURES

1. Safety-check out

After correcting the original service problem,perform the following safety check before releasing the set to the customer:

Connect the insulating-resistance tester between the plug of power supply cord and chassis.

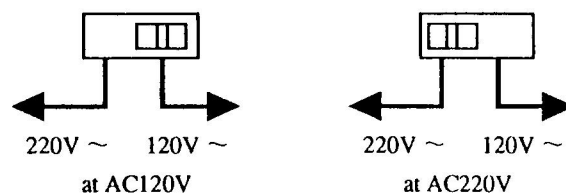
Specifications:More than 10Mohm at 500V.

2. Voltage Selector (Back panel)

Worldwide models are equipped with a voltage selector to conform with local power supplies.Be sure to set this switch to match the voltage of the power supply in user's area before turning the power switch on.

Voltage is changed by sliding the groove in the switch with a screw driver to the right or left.

Confirm that the switch has been moved all the way to the right or left before turning the power switch on.



CAUTION ON REPLACEMENT OF OPTICAL PICKUP

The laser diode in the optical pickup block is so sensitive to static electricity,surge current and etc, that the components are liable to be broken down or its reliability remarkably deteriorated.

During repair,carefulley take the following precautions. (The following precautions are included in the service parts.)

PRECAUTIONS

1.Ground for the work-desk.

Place a conductive sheet such as a sheet of copper (with inpedance lower than 10MΩ) on the work-desk and place the set on the conductive sheet so that the chassis.

2.Grounding for the test equipment and tools.

Test equipments and toolings should be grounded in order that their ground level is the same the ground of the power source.

3.Grounding for the human body.

Be sure to put on a wrist-strap for grounding whose other end is grounded.

Be particularly careful when the workers wear synthetic fiber clothes, or air is dry.

4.Select a soldering iron that permits no leakage and have the tip of the iron well-grounded.

5.Do not check the laser diode terminals with the probe of a circuit tester or oscilloscope.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

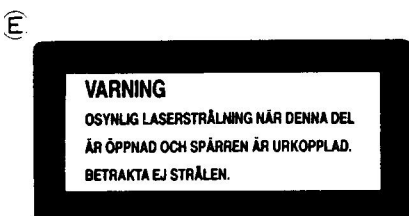
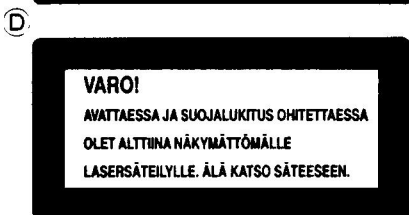
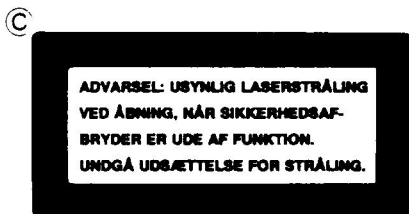
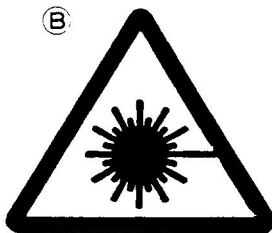
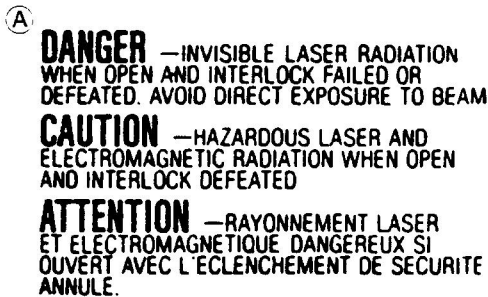
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

LASER WARNING LABEL

The label shown below are affixed.

1. Warning lable

This label is located on the arm of mechanism.



- A** : Danger label
B : Except 120V model
C : Except 120V model
D, E: Only 230V model

Laser Diode Properties

- Material: GaAS/GaAlAs
- Wavelength: 780nm
- Emission Duration: continuous
- Laser output: max. 0.5mW*

*This output is the value measured at a distance about 1.8mm from the objective lens surface on the Optical Pick-up Block.

2. Certification label (120V model)

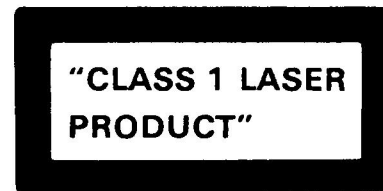
This label is located on the back panel.

PRODUCT IS CERTIFIED BY THE MANUFACTURER TO COMPLY WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT THE DATE OF MANUFACTURE

MANUFACTURED

3. Class 1 label (Except 120V model)

This label is located on the back panel.



LUOKAN 1 LASERLAITE

KLASS 1 LASER APPARAT

ADVARSEL

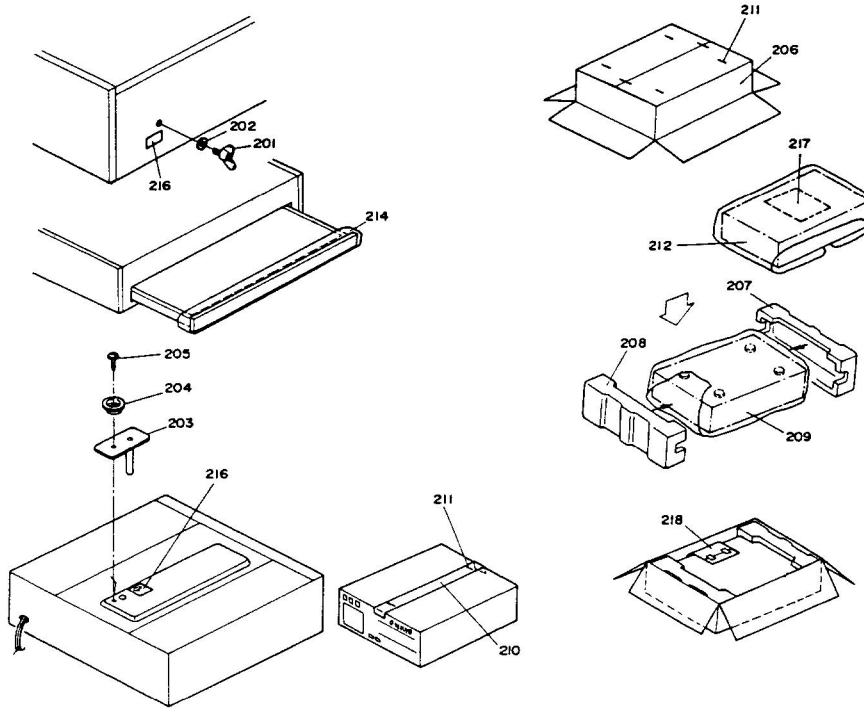
Denna mækning er anbragt på apparatets højre side og indikerer, at apparatet arbejder med laserstråler af klasse 1, hvilket betyder, at der anvendes laserstråler af svageste klasse, og at man ikke på apparatets yderside kan blive udsat for utilsigelig kraftig stråling.

APPARATET BØ/R KUN ÅBNES AF FAGFOLK MED SÉ RLIGT KENDSKAB TIL APPARATER MED LASERSTRÅLERI

Indvendigt i apparatet er anbragt den her gengivne advarselsmærkning, som advarer imod at foretage sådanne indgreb i apparatet, at man kan komme til at udsætte sig for laserstråling.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TASSÄ KÄYTTÖOHJEESSA MAINTULLA TAVALLA SAATTAÄ ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

PACKING VIEW



PARTS LIST

| REF.NO. | PART NO. | DESCRIPTION | PART NO. | DESCRIPTION |
|---------|------------|--------------------------------|-----------|---------------------------------------|
| 201 | 800306 | M5×20,Wing screw | | Accessory bag ass'y |
| 202 | 27270357 | 15×5×0.5,Spacer | 2010098A | Connection cord |
| 203 | 24822012 | Bracket,pin | 2010200 | Remote control cord |
| 204 | 27265155A | Ring,cover | 24140227 | RC-227C,Remote control unit <DX-C206> |
| 205 | 834430088 | 3TTS+8B(BC),Self-tapping screw | 3010054 | UM-3,Two batteries <DX-C206> |
| 206 | 29052400 | Master carton box <DX-C106> | 29341725 | Instruction manual <D> |
| | 29052401 | Master carton box <DX-C206> | 29341726 | Instruction manual <P/W/Q/C> |
| 207 | 29091562A | Pad L | 29365019A | Warranty card <N> |
| 208 | 29091563A | Pad R | 29358002J | Service station list <N> |
| 209 | 29100038A | Styrene bag | 25055040 | CV-K-2,Conversion plug <W> |
| 210 | 29110071 | Damp tape | 29100097 | 350×250,Styrene bag |
| 211 | 282301 | Sealing hook | | |
| 212 | 29095019-1 | 0.5×600×800,Protection sheet | | NOTE: <D>:120V model only |
| 214 | 29095654 | Protection sheet | | <P>:230V model only |
| 216 | 29361434 | Label | | <W>:Worldwide model only |
| 217 | 29361433 | Label | | <Q>:240V model only |
| | | | | <N>:U.S.A. model only |
| | | | | <C>:Canadian model only |

DX-C206(BH)UWX-D type is the same as the DX-C206(BH)UW with the exception of the following sections.

| Page | Ref. No. | Part Name | (BH)UWX-D | (BH)UW |
|------|----------|----------------------|-----------|----------|
| | | | Part No. | Part No. |
| 9 | 206 | Master carton box | 29052490 | 29052401 |
| 9 | | Warranty card | 29365021 | Not used |
| 9 | | Service station list | 29358002J | Not used |

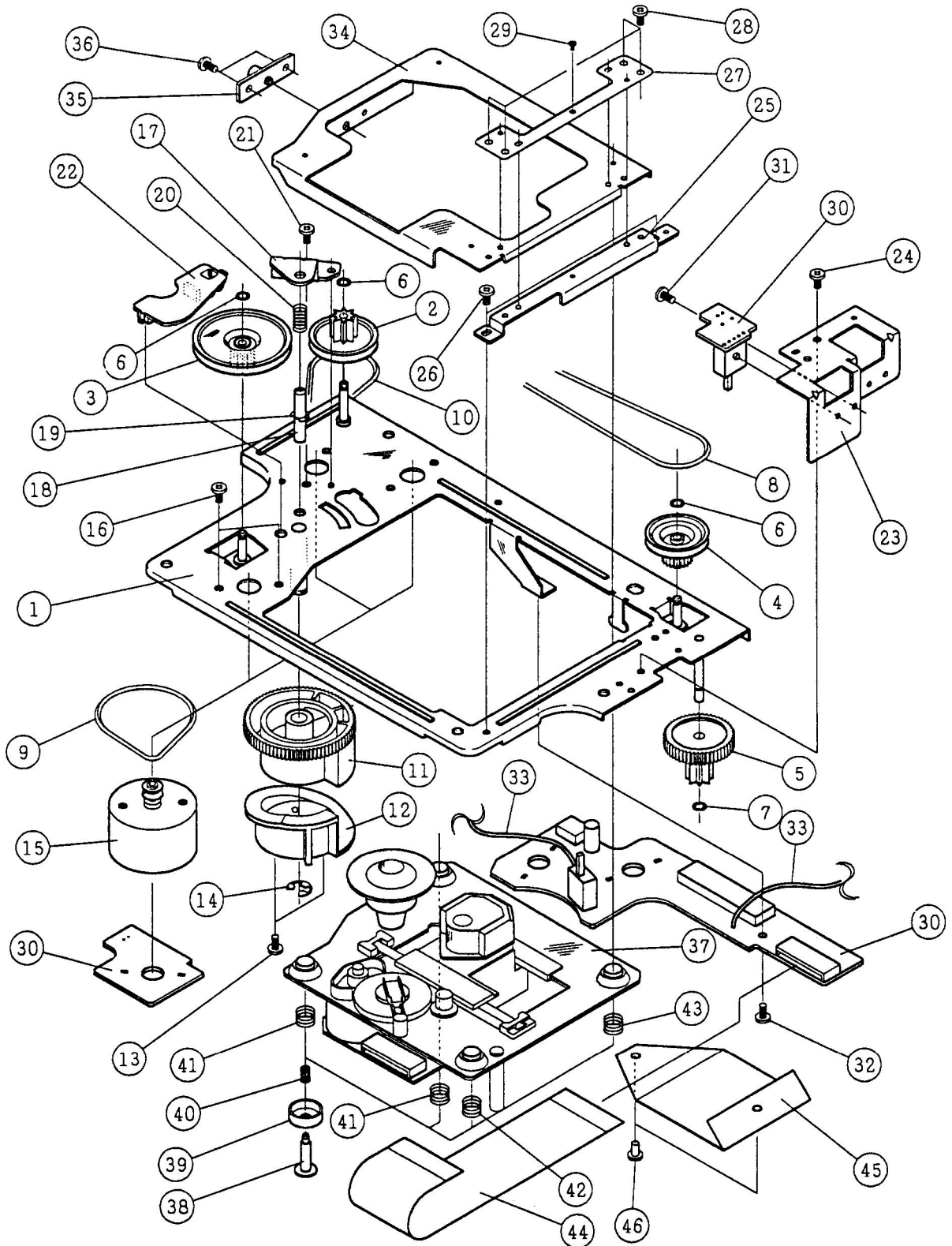
CAUTION:

How to lock the transport screw (when the tray opens)

- 1.Press the memory button.
- 2.Press the close button to close the tray.
- 3.Turn the power switch off after more than 3 seconds.

MECHANISM-EXPLODED VIEW

CHANGER MECHANISM(CMC-B)



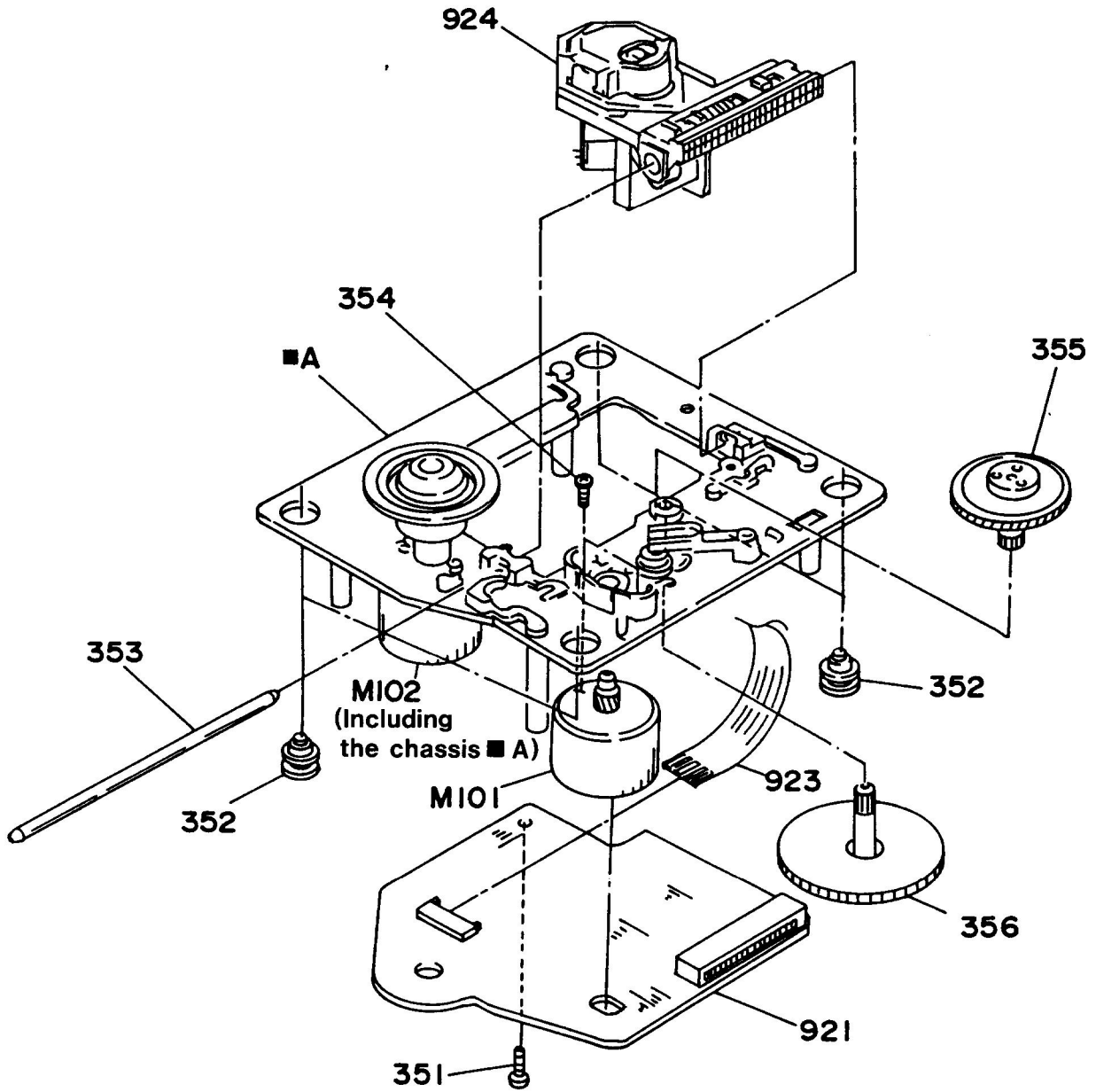
PARTS LIST**CMC-B**

| REF.NO. | PART NO. | DESCRIPTION |
|---------|----------|---------------------------|
| 1 | 24802004 | Chassis ass'y |
| 2 | 24810007 | Gear A |
| 3 | 24810008 | Gear B |
| 4 | 24810009 | Gear C |
| 5 | 24810010 | Gear D |
| 6 | 24834003 | Washer |
| 7 | 24840019 | E ring |
| 8 | 24816003 | Belt |
| 9 | 24816004 | Belt |
| 10 | 24816005 | Belt |
| 11 | 24810011 | Gear cam A |
| 12 | 24810012 | Gear cam B |
| 13 | 801502 | Self-tapping screw |
| 14 | 24840020 | E ring |
| 15 | 24804005 | Motor ass'y |
| 16 | 801503 | Pan head screw |
| 17 | 24822006 | Plate holder |
| 18 | 24828004 | Shaft |
| 19 | 24840021 | E ring |
| 20 | 24820004 | Spring |
| 21 | 801504 | Pan head screw |
| 22 | 24814002 | Arm switch |
| 23 | 24822007 | Plate switch |
| 24 | 801505 | Screw |
| 25 | 24822008 | Plate B |
| 26 | 801506 | Screw |
| 27 | 24822009 | Plate |
| 28 | 801507 | Screw |
| 29 | 801508 | Screw |
| 30 | 24840009 | Connector pc board ass'y |
| | 25065375 | NMS-1219,Switch |
| CN101 | 24840022 | Connector |
| CN102 | 24840012 | Connector |
| CN103 | 24840011 | Connector |
| 31 | 801506 | Screw |
| 32 | 801509 | Screw |
| 33 | 24840013 | Wire |
| 34 | 24802005 | Sub chassis |
| 35 | 24840014 | Lift lever |
| 36 | 801505 | Screw |
| 37 | 24506980 | BU-5BD3,Pickup drive unit |
| 38 | 801510 | Screw |
| 39 | 24840015 | Bush |
| 40 | 24820005 | Spring |
| 41 | 24820006 | Spring |
| 42 | 24820007 | Spring |
| 43 | 24820008 | Spring |
| 44 | 24840016 | Flexible wire |
| 45 | 24840017 | Vinyl sheet |
| 46 | 24840018 | Nylon rivert |

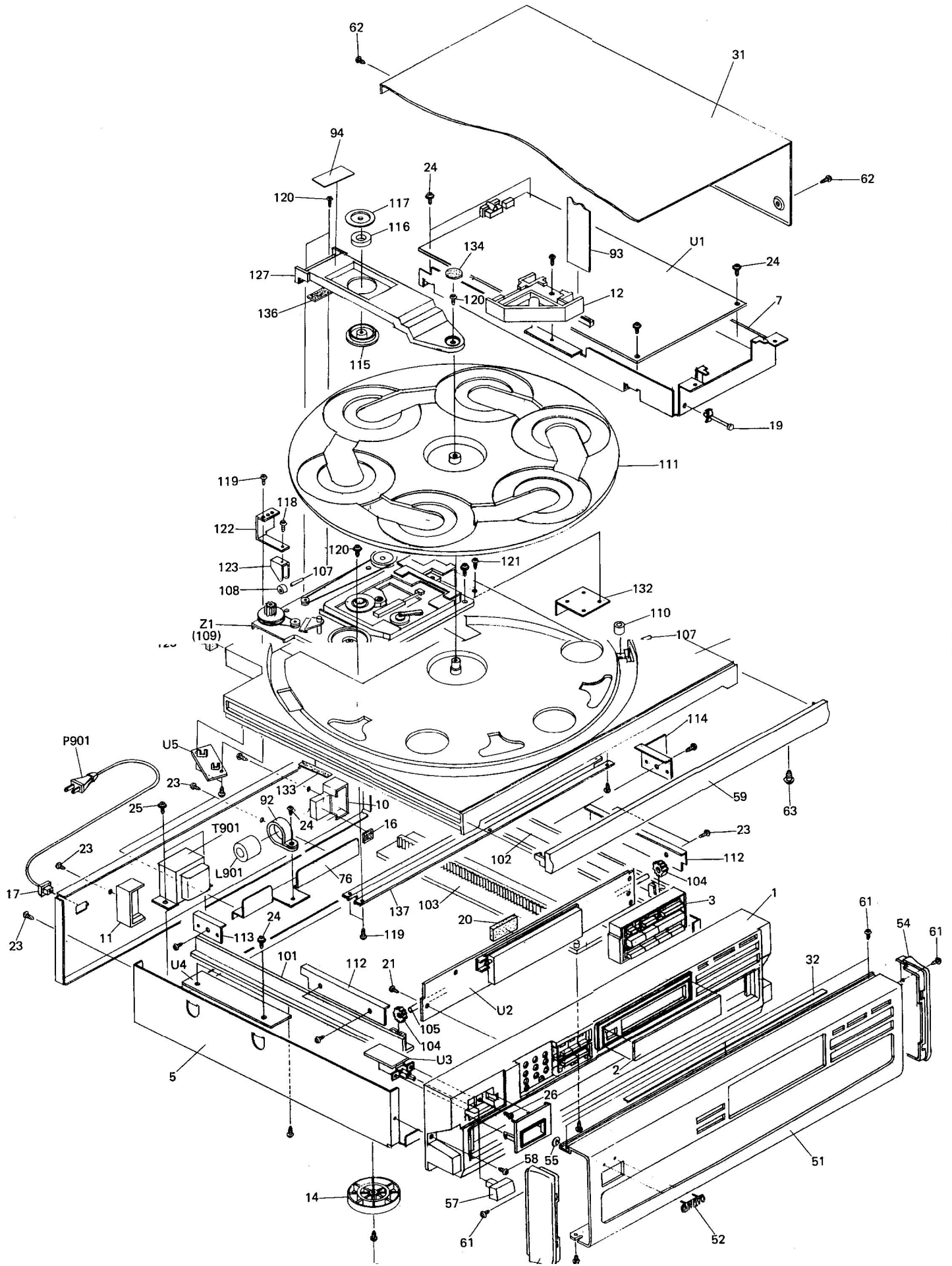
BU-5BD3

| REF. NO. | PART NO. | DESCRIPTION |
|----------|------------|----------------------------------|
| 351 | 838426088 | 2.6TTB+8B(BC),Self-tapping screw |
| 352 | 24818001 | Insulator A |
| 353 | 24828001 | Sled shaft |
| 354 | 82142003 | 2P+3F(BC),Pan head screw |
| 355 | 24810004 | Wheel |
| 356 | 24810005 | Wheel |
| 921 | 24505321 | AR-AS-1,RF/Servo pc board ass'y |
| 923 | 2043120010 | Flexible cable |
| 924 | 24110011 | KSS-240A,Optical pickup |
| M101 | 24804002 | Sled motor ass'y |
| M102 | 24804003 | Spindle motor ass'y |
| S101 | 25065446 | NLF-11022,Leaf switch |

PICK-UP DRIVE UNIT(BU-5BD3)



EXPLODED VIEW

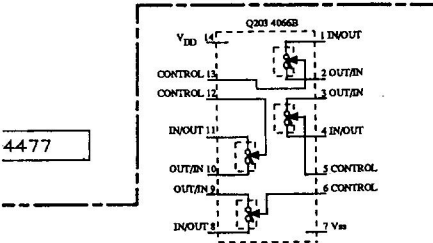
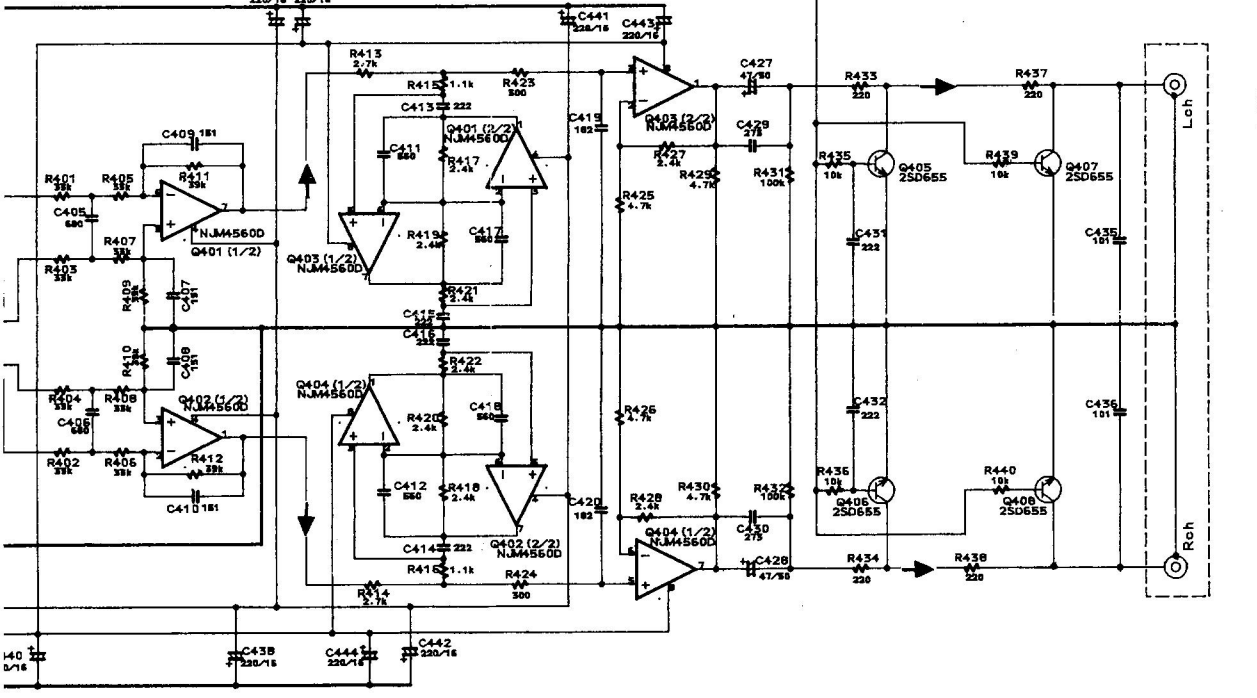
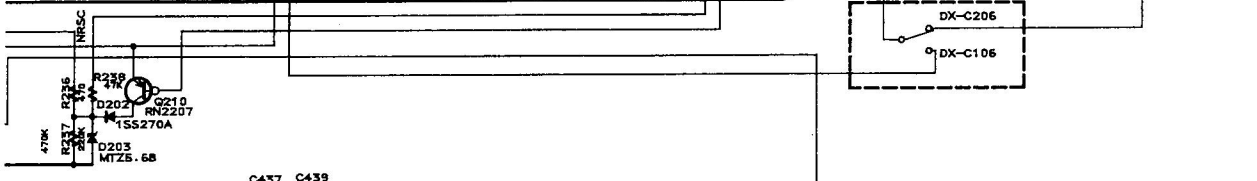
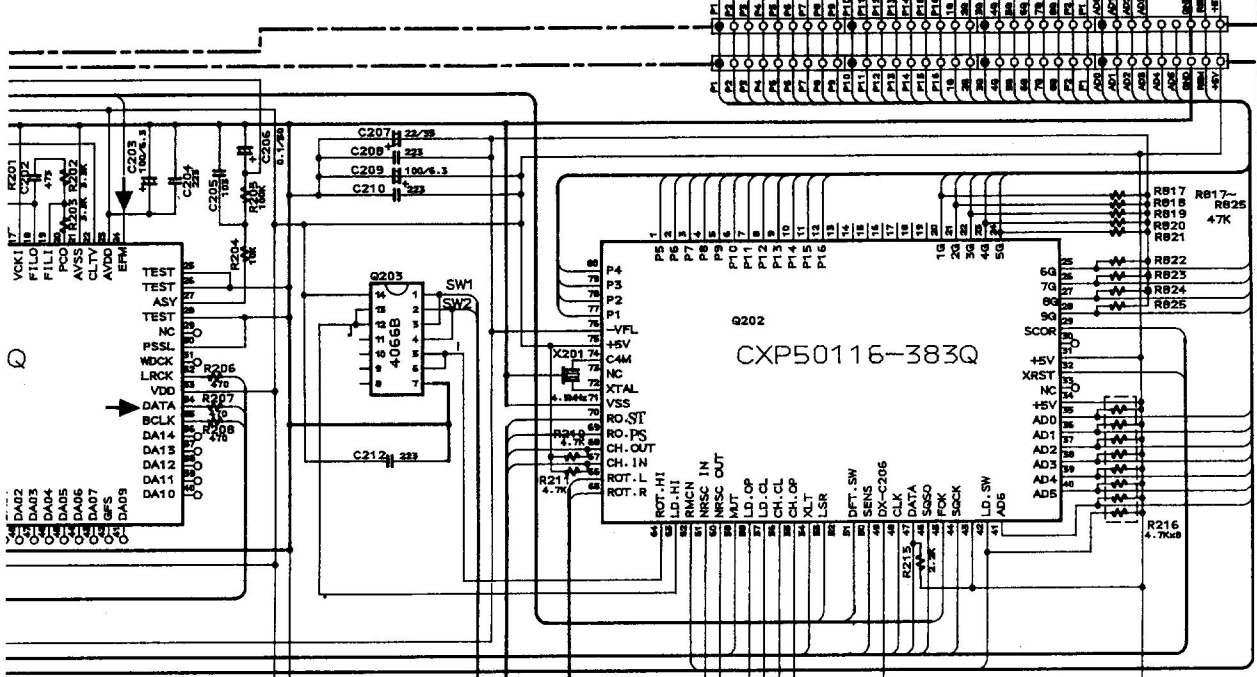
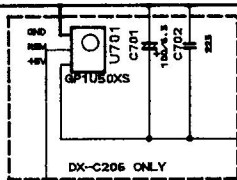


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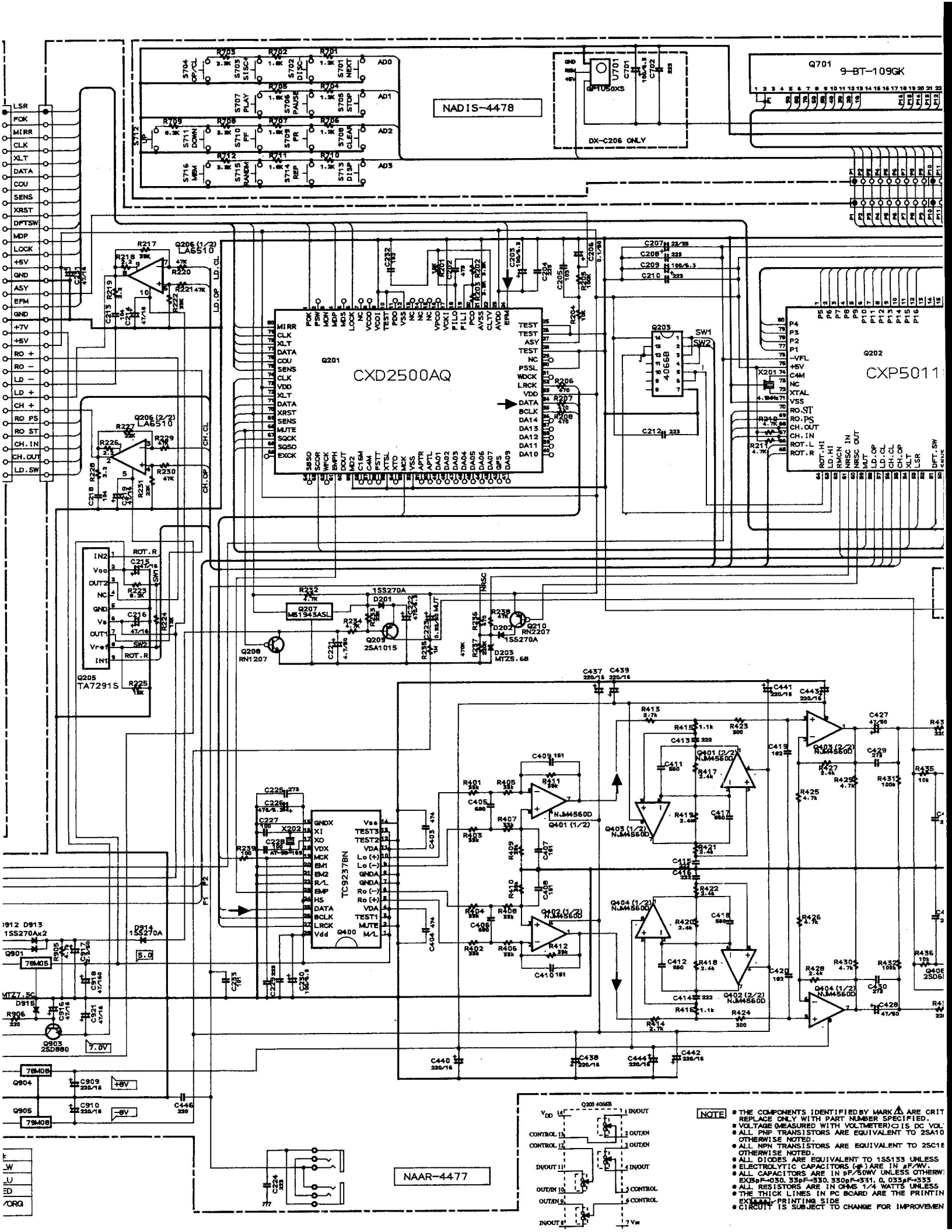
DX-C206
DX-C106
206
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NADIS-4478



- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - VOLTAGE MEASURED WITH VOLTMETER $\times 1.5$ DC VOLTAGE.
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1015-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS (μ) ARE IN μ F/W.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
 - EXB9P-030, 33P, 33Q, 330P, 331, Q, 035P, 333
 - ALL RESISTORS ARE IN OHMS 1/4 WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES IN PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
 - EXCEPT PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

4477



NADIS-4478

Q701 9-BT-109GK

Q201 CXD2500AQ

Q202 CXP5011

TC9237BN

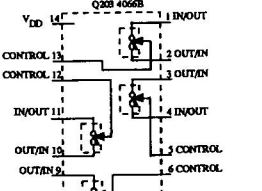
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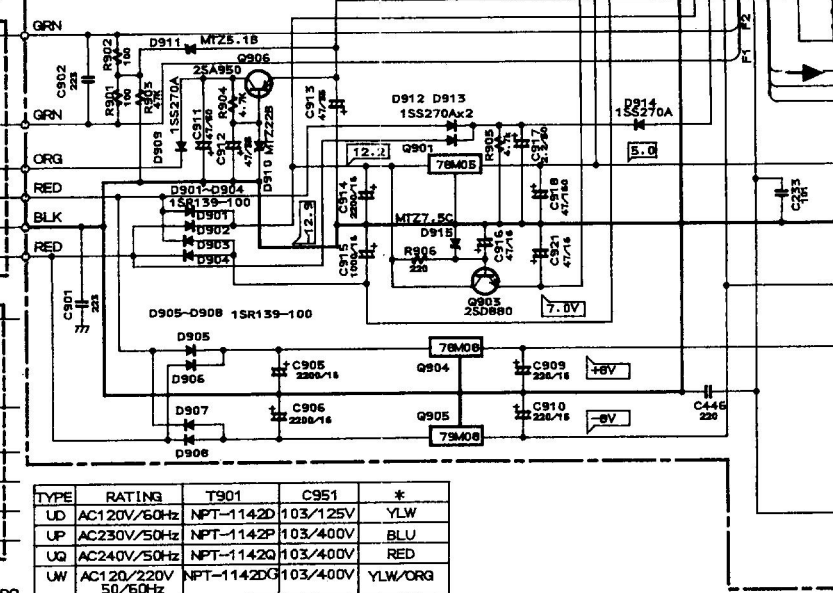
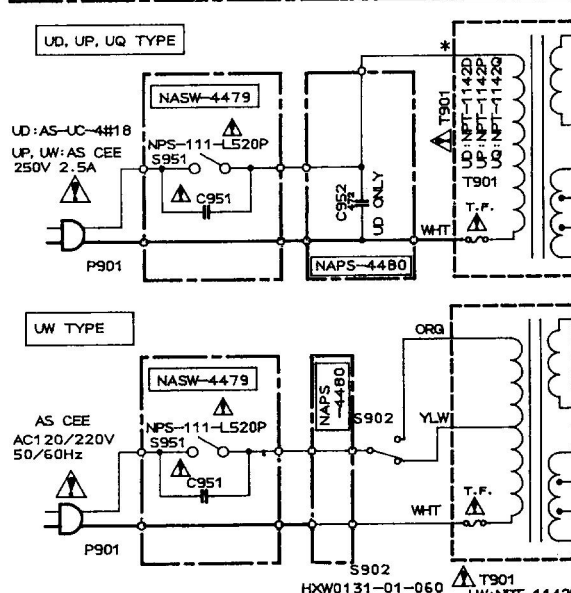
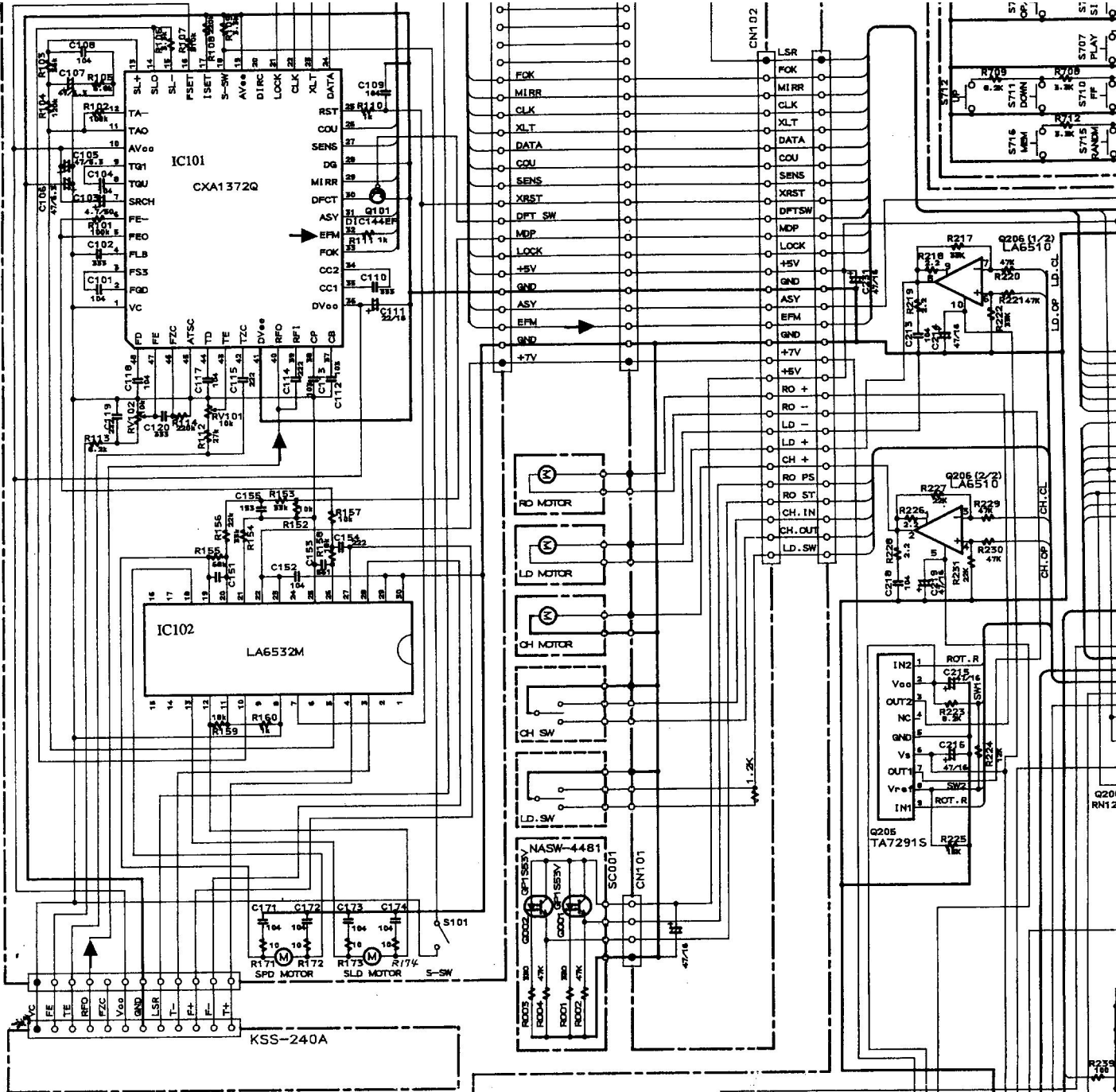
- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRIT REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOL.
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA10 OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC18 OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS (Φ) ARE IN μ F/WV.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
 - EXCEPT Φ -030, 33pF- Φ 30, 330pF- Φ 31, 0, 033 μ F- Φ 33
 - ALL RESISTORS ARE IN OHMS 1/4 WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES IN PCB ARE THE PRINTING EXTERNAL PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT

LSR
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MIRR
CLK
XLT
DATA
COU
SENS
XRST
DPTSW
MDP
LOCK
+5V
GND
ASY
EFM
GND
+7V
+5V
RO +
RO -
LD -
LD +
CH +
RO PS
RO ST
CH. IN
CH. OUT
LD. SW

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P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22

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| TYPE | RATING | T901 | C951 | * |
|------|-----------------------|-----------|----------|---------|
| UD | AC120V/60Hz | NPT-1142D | 103/125V | YLW |
| UP | AC230V/50Hz | NPT-1142P | 103/400V | BLU |
| UQ | AC240V/50Hz | NPT-1142Q | 103/400V | RED |
| LW | AC120/220V 50/60Hz | NPT-1142D | 103/400V | YLW/ORG |

PARTS LIST

MODEL DX-C106

| REF.NO. | PART NO. | DESCRIPTION |
|---------|-----------|----------------------------------|
| 1 | 27110694 | Front bracket |
| 2 | 28191624 | Clear plate |
| 3 | 28324583 | Knob,play |
| 5 | 27100257 | Chassis |
| 6 | 27121572A | Back panel |
| 7 | 27130684 | Bracket PC |
| 10 | 27190899 | Holder |
| 11 | 27190874 | Holder |
| 12 | 27190869 | Holder |
| 13 | 27190882 | K103G,Holder |
| 14 | 27175254 | Leg |
| 16 | 24836009 | Cushion |
| 17 | 27300750 | △ Bushing, cord |
| 19 | 27190902 | KGPS-16S,Holder |
| 20 | 28141197 | 3×30×20,Cushion |
| 21 | 838426088 | 2.6TTB+8B(BC),Self-tapping screw |
| 22 | 833430080 | 3TTP+8P(BC),Self-tapping screw |
| 23 | 834430088 | 3TTS+8B(BC),Self-tapping screw |
| 24 | 831130088 | 3TTW+8B,Self-tapping screw |
| 25 | 830440089 | 4TTC+8C(BC),Self-tapping screw |
| 26 | 82143006 | 3P+6FN(BC),Pan head screw |
| 27 | 833430127 | 3TTP+12S(BC),Self-tapping screw |
| 29 | 86213010 | WN3×10FN,Washer |
| 31 | 1H199901 | Top cover |
| 32 | 28140680 | 0.5×180×8,Cushion |
| 51 | 27211413 | Front panel |
| 52 | 28135199 | Badge |
| 53 | 28125248Y | End cap L |
| 54 | 28125249Y | End cap R |
| 55 | 8910301 | CS-3(SUS),Ring |
| 57 | 28324140 | Knob,power |
| 58 | 27267775Y | Guide |
| 59 | 27211414 | Tray panel |
| 61 | 833430080 | 3TTP+8P(BC),Self-tapping screw |
| 62 | 834430088 | 3TTS+8B(BC),Self-tapping screw |
| 63 | 833440120 | 4TTP+12P(BC),Self-tapping screw |

(MODEL DX-C106/C206)

| REF.NO. | PART NO. | DESCRIPTION |
|---------|-----------|---------------------------------|
| 101 | 27301472A | Guide rail L |
| 102 | 27301473 | Guide rail R |
| 103 | 27301476A | Rack |
| 104 | 27301470 | Gear |
| 105 | 27260309 | Shaft,gear |
| 106 | 27301461C | Tray |
| 107 | 27260308 | Shaft,roller |
| 108 | 27301465A | Roller |
| 109 | 24506981B | CMC-B,Changer mechanism |
| | 24506980 | BU-5BD3,Pickup drive unit |
| 110 | 24834001 | Tube |
| 111 | 27301460A | Carousel |
| 112 | 27267767A | Side plate F |
| 113 | 27267768 | Side plate R |
| 114 | 27267800 | Side plate RR |
| 115 | 27301474 | Cap CH |
| 116 | 28181019A | Magnet CH |
| 117 | 27301475 | Yoke CH |
| 118 | 838430068 | 3TTB+6B(BC),Self-tapping screw |
| 119 | 838430080 | 3TTP+8P(BC),Self-tapping screw |
| 120 | 831430100 | 3TTW+10P(BC),Self-tapping screw |
| 121 | 834430088 | 3TTS+8B(BC),Self-tapping screw |
| 122 | 24822002 | Bracket A |
| 123 | 24822003 | Bracket B |
| 125 | 24836006 | Cushion,tray |
| 127 | 24814001 | Arm |
| 132 | 24822010 | Bracket BT |
| 133 | 28140451 | Cushion |
| 134 | 24840005 | Cover seal |
| 135 | 831430088 | 3TTW+8B(BC),Self-tapping screw |
| 136 | 24836007 | Cushion |
| 137 | 24822011 | Bracket UT |
| 138 | 833430060 | 3TTP+6P(BC),Self-tapping screw |

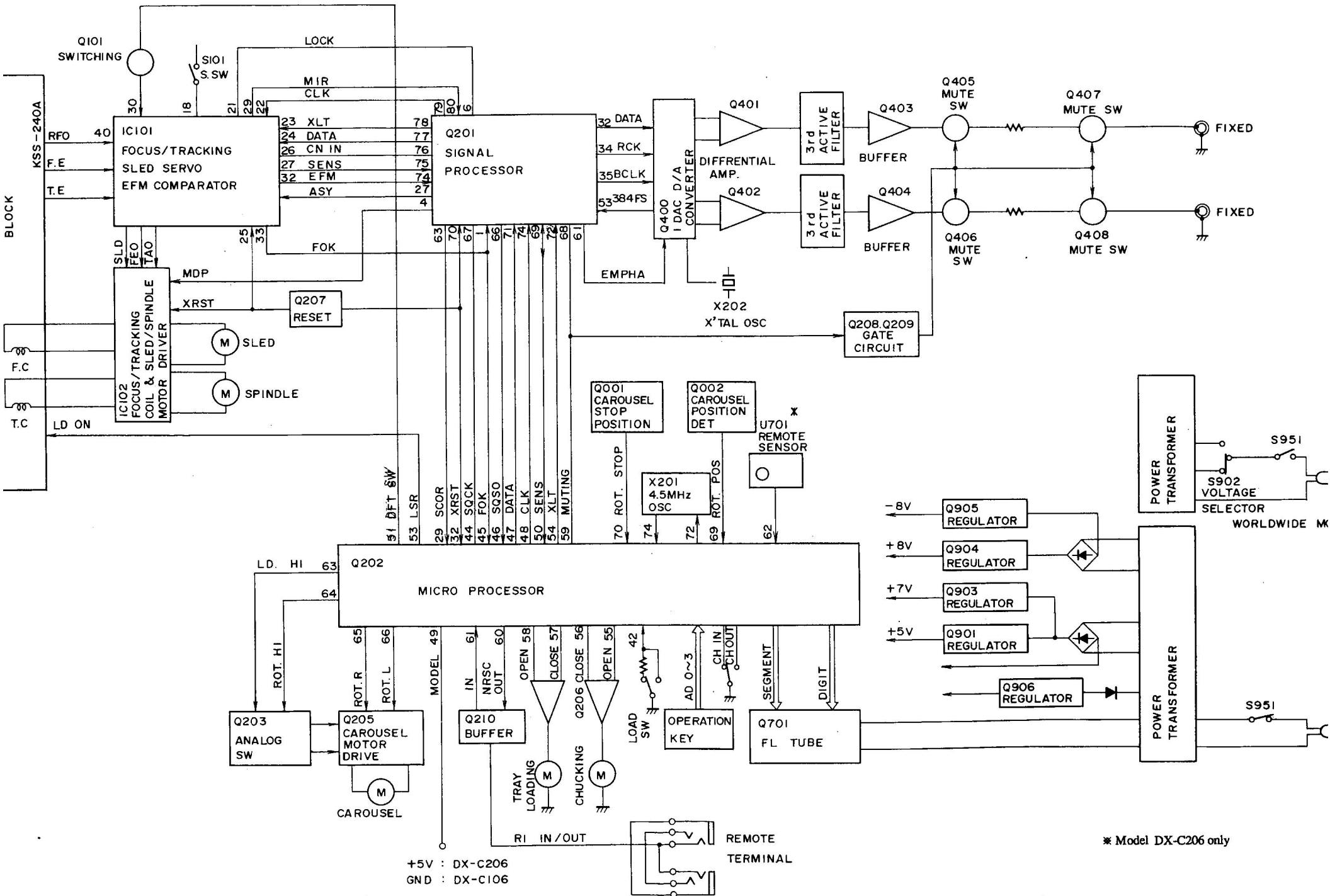
MODEL DX-C206

| REF.NO. | PART NO. | DESCRIPTION | REF.NO. | PART NO. | DESCRIPTION |
|---------|-----------|----------------------------------|---------|-------------|--------------------------------------------------------|
| 1 | 27110694 | Front bracket | 75 | 29360687 | Label,class 1 <P/W/Q> |
| 2 | 28191625A | Clear plate | 76 | 27141525 | Bracket T <W> |
| 3 | 28324583 | Knob,play | 91 | 260208 | Binder |
| 5 | 27100257 | Chassis | 92 | 260221 | NK-10N,Clamper |
| 6 | 27121573A | Back panel <D> | 93 | 2041294010 | NCFC1-294010,Flat cable |
| | 27121574A | Back panel <P> | 94 | 29360807 | Label,danger <P/W/Q> |
| | 27121575A | Back panel <W> | L901 | 230907 | △ TR-16-8-16,Core |
| | 27121648 | Back panel <Q> | P901 | 253168 or | △ AS-UC-6#18, |
| 7 | 27130684 | Bracket PC | | 253146 | Power supply cord <D> |
| 10 | 27190899 | Holder | | 253149 | △ AS-CEE,Power supply cord <P/W> |
| 11 | 27190874 | Holder | | 253118 or | △ AS-SAA, |
| 12 | 27190869 | Holder | | 253170 | Power supply cord <Q> |
| 13 | 27190882 | K103G,Holder <D/P/Q> | S902 | 25065123 | △ NSS-1258P,Voltage selector switch <W> |
| 14 | 27175254 | Leg | T901 | 2300789 | △ NPT-1142D,Power transformer <D> |
| 16 | 24836009 | Cushion | | 2300790 | △ NPT-1142P,Power transformer <P> |
| 17 | 27300750 | △ Bushing,cord | | 2300791 | △ NPT-1142DG,Power transformer <W> |
| 19 | 27190902 | KGPS-16S,Holder | | 2300792 | △ NPT-1142Q,Power transformer <Q> |
| 20 | 28141197 | 3×30×20,Cushion | U1 | 1H202577-2 | NAAR-4477-2,Main circuit pc board ass'y |
| 21 | 838426088 | 2.6TTB+8B(BC),Self-tapping screw | U2 | 1H202578-2 | NADIS-4478-2,Display circuit pc board ass'y |
| 22 | 833430080 | 3TTP+8P(BC),Self-tapping screw | U3 | 1H202579-2 | NASW-4479-2,Power switch pc board ass'y |
| 23 | 834430088 | 3TTS+8B(BC),Self-tapping screw | U4 | 1H202580-2 | NAPS-4480-2,Power supply circuit pc board ass'y <D> |
| 24 | 831130088 | 3TTW+8B,Self-tapping screw | | 1H202580-2A | NAPS-4480-2A,Power supply circuit pc board ass'y <W> |
| 25 | 830440089 | 4TTC+8C(BC),Self-tapping screw | | 1H202580-2B | NAPS-4480-2B,Power supply circuit pc board ass'y <P/Q> |
| 26 | 82143006 | 3P+6FN(BC),Pan head screw | U5 | 1H202581-2 | NASW-4481-2,Disc sensor pc board ass'y |
| 27 | 833430127 | 3TTP+12S(BC),Self-tapping screw | Z1 | | NCD-52S-C,CD changer mechanism |
| 29 | 86213010 | WN3×10FN,Washer | | | |
| 31 | 1H199901 | Top cover | | | |
| 32 | 28140680 | 0.5×180×8,Cushion | | | |
| 51 | 27211415 | Front panel | | | |
| 52 | 28135199 | Badge | | | |
| 53 | 28125248Y | End cap L | | | |
| 54 | 28125249Y | End cap R | | | |
| 55 | 8910301 | CS-3(SUS),Ring | | | |
| 57 | 28324140 | Knob,power | | | |
| 58 | 27267775Y | Guide | | | |
| 59 | 27211414 | Tray panel | | | |
| 61 | 833430080 | 3TTP+8P(BC),Self-tapping screw | | | |
| 62 | 834430088 | 3TTS+8B(BC),Self-tapping screw | | | |
| 63 | 833440120 | 4TTP+12P(BC),Self-tapping screw | | | |
| 71 | 29361218 | Label,laser <P/W/Q> | | | |
| 72 | 29360811A | Label <P> | | | |
| 73 | 29361298A | Label SEM <P> | | | |
| 74 | 29361342A | Label SEM/FIN <P> | | | |

NOTE: <D>:120V model only
 <P>:230V model only
 <W>:Worldwide model only
 <Q>:240V model only

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

BLOCK DIAGRAM

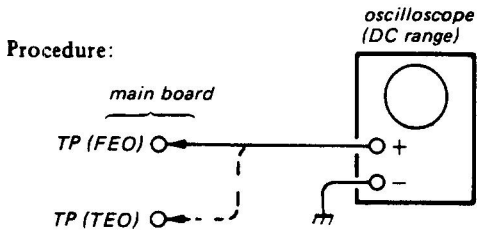


* Model DX-C206 only

The following is a simple adjustment method.

- Simple Adjustment -

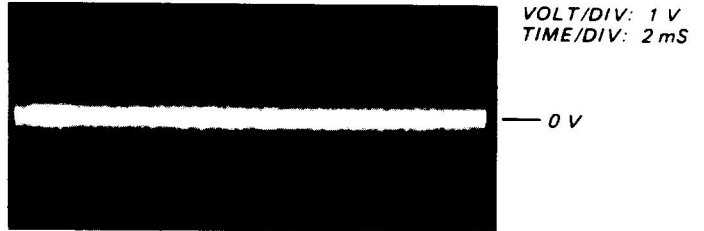
Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.



1. Keep the set horizontal.
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.)

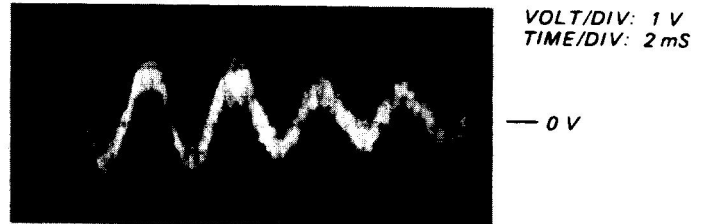
2. Insert disc (YEDS-18) and press ▷PLAY button.
3. Connect oscilloscope to RF/ Servo board TP (FE).
4. Adjust RV102 so that the waveform is as shown in the figure below. (focus gain adjustment)

5. Connect oscilloscope to RF/ Servo board TP (TE).
6. Adjust RV101 so that the waveform is as shown in the figure below. (tracking gain adjustment)

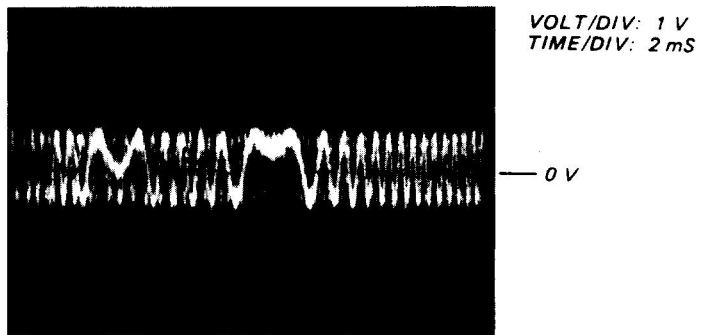


- Incorrect Examples (fundamental wave appears)

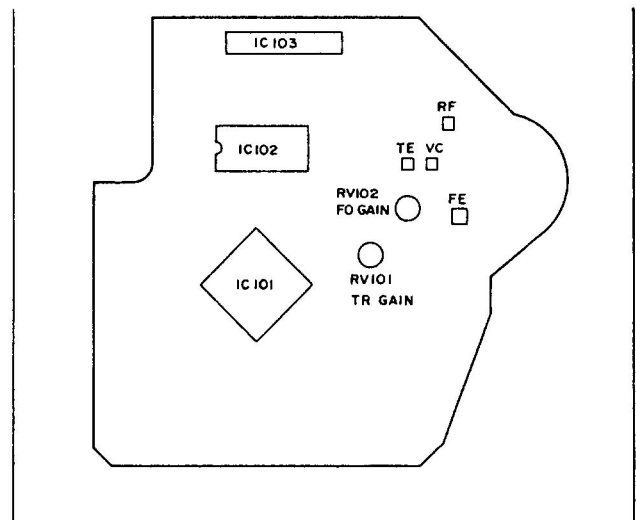
low tracking gain



*high tracking gain
(higher fundamental wave than for low gain)*



Adjustment Location: RF/ Servo board

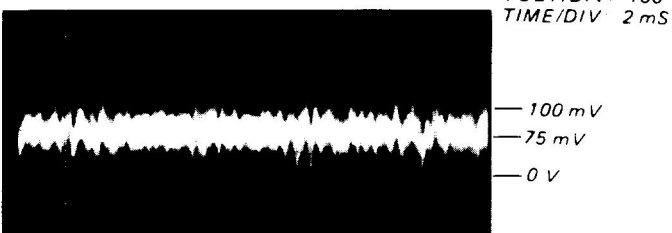


- Incorrect Examples (DC level changes more than on adjusted waveform)

low focus gain



high focus gain



PRINTED CIRCUIT BOARD – PARTS LIST

MAIN CIRCUIT PC BOARD(NAAR-4477-1/2)

| CIRCUIT NO. | PART NO. | DESCRIPTION | CIRCUIT NO. | PART NO. | DESCRIPTION |
|-------------|-----------------------|------------------------------------|------------------------|-------------------------|---------------------------------------------------|
| | | | | | ICs |
| Q201 | 22240487 | CXD2500AQ | C222 | 354724719 | 470 μ F,6.3V,Elect. |
| Q202 | 22240591A | CXP50116-383Q | C223 | 354782299 | 0.22 μ F,50V,Elect. |
| Q203 | 222840661TOS | 4066B | C226 | 354724719 | 470 μ F,6.3V,Elect. |
| Q205 | 22240239 | TA7291S | C230 | 354721019 | 100 μ F,6.3V,Elect. |
| Q206 | 22240034 | LA6510 | C231 | 354744709 | 47 μ F,16V,Elect. |
| Q207 | 22240018 | M51943ASL | C403,C404 | 374724744 | 0.47 μ F \pm 5%,50V,Plastic |
| Q400 | 22240535 | TC9237BN | C413-C416 | 374722224 | 2200pF \pm 5%,50V,Plastic |
| Q401-Q404 | 222579 | NJM4560D | C419,C420 | 374721824 | 1800pF \pm 5%,50V,Plastic |
| Q901 | 222780055MIT | M5F78M05 | C427,C428 | 393184707 | 47 μ F,50V,Elect. |
| Q904 | 222780085MIT | M5F78M08L | C429,C430 | 374722734 | 0.027 μ F \pm 5%,50V,Plastic |
| Q905 | 222790085MIT | M5F79M08L | C431,C432 | 374722224 | 2200pF \pm 5%,50V,Plastic |
| | | | | | Transistors |
| Q208 | 2213570 | RN1207 | C437-C444 | 393142217 | 220 μ F,16V,Elect. |
| Q209 | 2211454 or 2211455 | 2SA1015-Y or 2SA1015-GR | C905,C906 C909,C910 | 354742229 393142217 | 2200 μ F,16V,Elect. 220 μ F,16V,Elect. |
| Q210 | 2213590 | RN2207 | C911 | 354784709 | 47 μ F,50V,Elect. |
| Q405-Q408 | 2211705 or 2211706 | 2SD655-E or 2SD655-F | C912,C913 C914 | 354764709 354742229 | 47 μ F,35V,Elect. 2200 μ F,16V,Elect. |
| Q903 | 2201074 or 2201073 | 2SD880-Y or 2SD880-O | C915 C916 | 354741029 354744709 | 1000 μ F,16V,Elect. 47 μ F,16V,Elect. |
| Q906 | 2211504 or 2211503 | 2SA950-Y or 2SA950-O | C917 C918,C921 | 354780229 393144707 | 2.2 μ F,50V,Elect. 47 μ F,16V,Elect. |
| | | | | | Resistor |
| D201,D202 | 223205 | 1SS270A | R216 | 49163472408 | 4.7kohm \times 8,1/10W,Array |
| D203 | 224450562 | MTZ5.6B | | | Socket |
| D901-D908 | 22380032 | 1SR139-100 | P101 | 25050512 or 25050861 | NSCT-29P335 or NSCT-29P656 |
| D909 | 223205 | 1SS270A | | | Terminals |
| D910 | 224452202 | MTZ22B | P401 | 25045361 | NPJ-2PDBL207,Output |
| D911 | 224450512 | MTZ5.1B | P102 | 25045362 | LGY6502-0102,RI |
| D912-D914 | 223205 | 1SS270A | | | Radiator |
| D915 | 224450753 | MTZ7.5C | | 27160176 | RAD56 |
| | | | | | Ceramic oscillator |
| X201 | 3010188 | CTS4.50MGW040 | | 82143006 | 3P+6FN(BC) |
| | | | | | X'tal |
| X202 | 3010159 | AT-38-169 | | 27190751 | Holder |
| | | | | | Capacitors |
| C202 | 374724734 | 0.047 μ F \pm 5%,50V,Plastic | | 27141059 | Bracket |
| C203,C209 | 354721019 | 100 μ F,6.3V,Elect. | | | Ground |
| C205 | 374721034 | 0.01 μ F \pm 5%,50V,Plastic | | | Cord ass'y |
| C206 | 354781099 | 0.1 μ F,50V,Elect. | | 2065525100 | |
| C207 | 354762209 | 22 μ F,35V,Elect. | | 2065525080 | |
| C213,C218 | 374721044 | 0.1 μ F \pm 5%,50V,Plastic | | | |
| C214-C216 | 354744709 | 47 μ F,16V,Elect. | | | |
| C219 | 354744709 | 47 μ F,16V,Elect. | | | |
| C221 | 354780479 | 4.7 μ F,50V,Elect. | | | |

DISPLAY CIRCUIT PC BOARD(NADIS-4478-1/2)

| MARK | CIRCUIT NO. | PART NO. | DESCRIPTION |
|------|-------------|------------|-----------------------------|
| | Q701 | 212110 | 9-BT-109GK,FL tube |
| | S701-S716 | 25035548 | NPS-111-S510,Push switch |
| ○ | U701 | 24130007 | GP1U571X,Remote sensor |
| ○ | C701 | 353744709 | 47 μ F,16V,Elect. capacitor |
| | | 27190884AY | Holder,display |

POWER SWITCH PC BOARD(NASW-4479-1/2)

| MARK | CIRCUIT NO. | PART NO. | DESCRIPTION |
|------|-------------|----------|------------------------------------------|
| △ | C951 | 3500065A | DE7150FZ103PAC400V/ 125V,Capacitor IS |
| △ | S951 | 25035558 | NPS-111-L520P, Power switch |

POWER SUPPLY CIRCUIT PC BOARD(NAPS-4480-1/2/2A/2B)

| MARK | CIRCUIT NO. | PART NO. | DESCRIPTION |
|-------|-------------|----------|------------------------------|
| △/<D> | C952 | 3500077 | DE7150FZ472M Capacitor IS |
| | | 25060092 | NTM-1S33,Terminal |

DISC SENSOR PC BOARD(NASW-4481-1/2)

| MARK | CIRCUIT NO. | PART NO. | DESCRIPTION |
|------|-------------|-------------------------|----------------------------------------|
| | Q001,Q002 | 24190037 or 24190038 | GP1S53V or GP1S53,Photo interruptor |
| | SC001 | 2002390815 | NSAS-8P0309,Socket |

RF/SERVO PC BOARD

| MARK | CIRCUIT NO. | PART NO. | DESCRIPTION |
|------|-------------|----------|-----------------------|
| | IC101 | 22240394 | CXA1372Q,IC |
| | IC102 | 22240551 | LA6532M,IC |
| | Q101 | 2214290 | DTC144EF,Transistor |
| | CN101 | 25050669 | NSCT-22P473,Connector |
| | CN102 | 25050670 | NSCT-12P474,Connector |
| | S101 | 25065446 | NLF-11022,Leaf switch |

MARK: ○:DX-C206 only

<D>:120V model only

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

DISASSEMBLING PROCEDURES

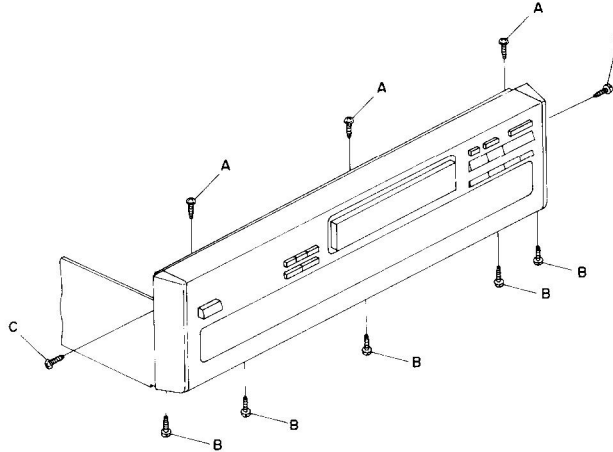
1. Front Panel

Remove the top cover.

Remove the three screws A and the five screws B.

Remove the two screws C.

Remove the two end caps and the front panel.



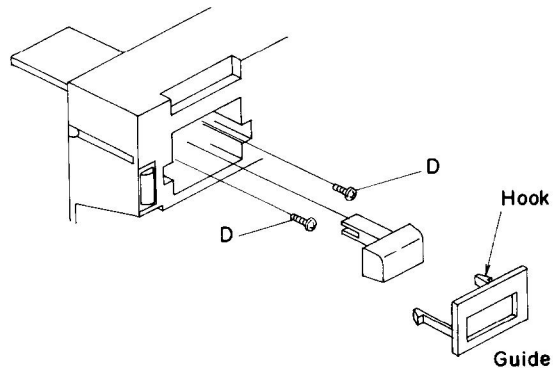
2. Power switch pc board

Remove the top cover and the front panel.

Press the hook of guide and remove the guide.

Pull the power knob.

Remove the two screws D to remove the power switch pc board.



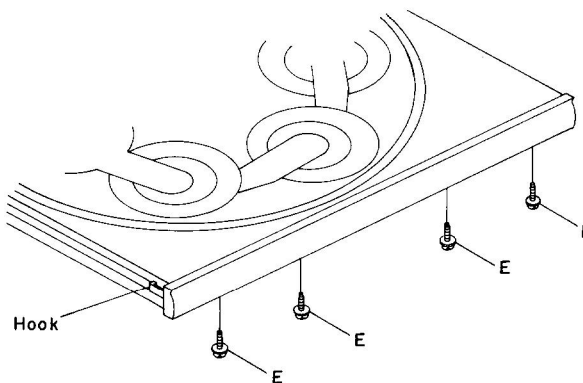
3. Tray panel

Remove the top cover.

Pull the tray ass'y to the front direction.

Remove the four screws E.

Remove the hook of tray to remove the tray panel.



4. Front Bracket

Remove the front panel, the power switch pc board, and the tray panel.

Remove the nine screws holding the front bracket and the chassis. (top:2 bottom:2 front:5)

5. Mechanism ass'y

Remove the front bracket. (Procedures: 1→2→3→4)

Remove the four screws F from the left and right sides.

Pull the tray ass'y to the front direction and lift up the mechanism ass'y.

