

# Service Manual

ORDER NO.  
RRV 1630

FILE-TYPE CD PLAYER

# PD-F1005 PD-F905

● Refer to the service manual RRV1582 for PD-F905/KU.

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



| Type  | Model    |         | Power Requirement       | The voltage can be converted by the following method. |
|-------|----------|---------|-------------------------|---|
|       | PD-F1005 | PD-F905 |                         |   |
| KU/CA | O        | -       | AC120V                  | _____   |
| RD    | O        | O       | AC110 - 127V/220 - 240V | With the voltage selector                             |
| WV    | -        | O       | AC220 - 240V            | _____   |
| WY    | -        | O       | AC220 - 240V            | _____   |

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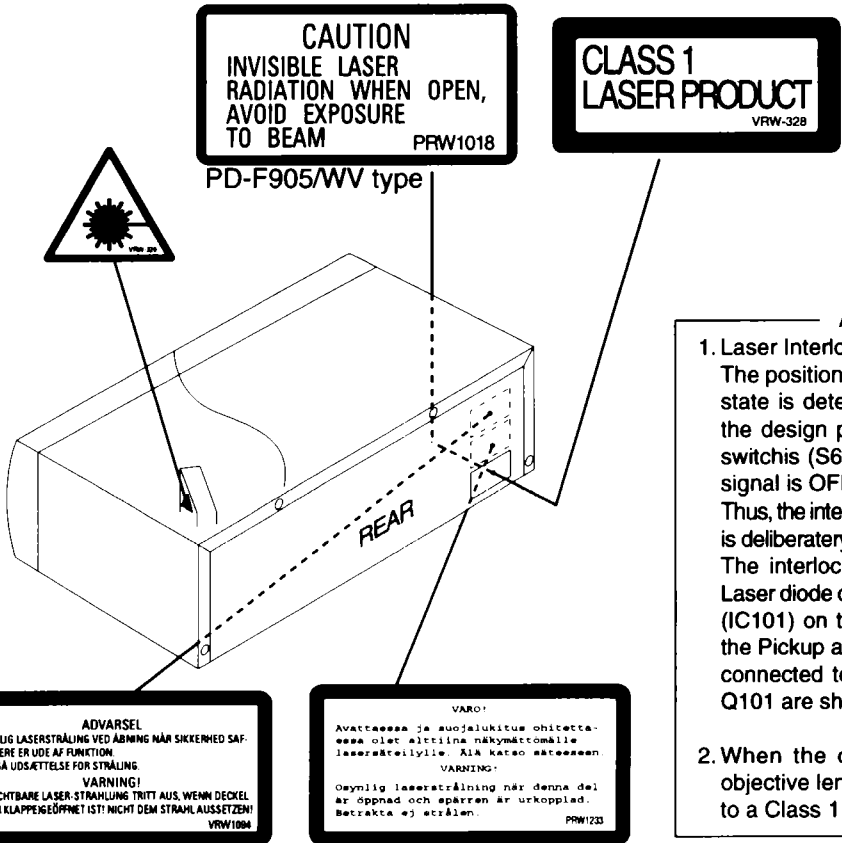
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# 1. SAFETY INFORMATION

|  |   |  |   |
|--|---|--|---|
| <p><b>VARO!</b><br/>AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.</p>     |  | <p><b>WARNING!</b><br/>DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.</p> |  |
| <p><b>ADVERSEL:</b><br/>USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNGDÅ UDSÆTTELSE FOR STRÅLING.</p> | <p>LASER<br/>Kuva 1<br/>Lasersäteilyn<br/>varoituserkki</p>                       | <p><b>IMPORTANT</b><br/>THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1. SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.</p>  | <p>LASER<br/>Picture 1<br/>Warning sign for<br/>laser radiation</p>                 |
| <p><b>VARNING!</b><br/>OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.</p>               |   | <p><b>LASER DIODE CHARACTERISTICS</b><br/>MAXIMUM OUTPUT POWER: 5 mw<br/>WAVELENGTH: 780-785 nm</p>  |   |

## LABEL CHECK (For PD-F905/WY and PD-F905/WV types)



**CAUTION**  
INVISIBLE LASER RADIATION WHEN OPEN,  
AVOID EXPOSURE TO BEAM  
PRW1018

**CLASS 1 LASER PRODUCT**  
VRW-328

**Additional Laser Caution**

- Laser Interlock Mechanism**  
The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on CLMP terminal side (CLMP signal is OFF or high level). Thus, the interlock will no longer function if the switch (S651) is deliberately set to CLMP terminal side. (low level) The interlock also does not function in the test mode\*. Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the Pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).
- When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

\* : Refer to page 32 on the service manual RRV1582.

**ADVERSEL**  
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNGDÅ UDSÆTTELSE FOR STRÅLING

**VARNING!**  
OSYNLIG LASERSTRÅLNING TRITTI AUS, WENN DECKEL (ODER KLAPPE)ÖPPNET IST. NICHT DEM STRÅHL AUSSETZEN!  
VRW1004

**VARO!**  
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

**VARNING!**  
Osynlig laserstråling när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.  
PRW1233

PD-F905/WV type

PD-F905/WY type

## 2. CONTRAST OF MISCELLANEOUS PARTS

### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  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.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- 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 47k ohm (tolerance is shown by J = 5%, and K = 10%).

|      |   |                      |       |     |       |         |      |
|------|---|----------------------|-------|-----|-------|---------|------|
| 560Ω | → | 56 × 10 <sup>1</sup> | →     | 561 | ..... | RD1/4PU | 561J |
| 47kΩ | → | 47 × 10 <sup>3</sup> | →     | 473 | ..... | RD1/4PU | 473J |
| 0.5Ω | → | 0R5                  | ..... |     |       | RN2H    | 0R5K |
| 1Ω   | → | 1R0                  | ..... |     |       | RS1P    | 1R0K |

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

|        |   |                       |   |      |       |         |       |
|--------|---|-----------------------|---|------|-------|---------|-------|
| 5.62kΩ | → | 562 × 10 <sup>1</sup> | → | 5621 | ..... | RN1/4PC | 5621F |
|--------|---|-----------------------|---|------|-------|---------|-------|

### CONTRAST OF PD-F1005/KU/CA, RD, PD-F905/WY, WV and RD

PD-F1005/KU/CA, RD, PD-F905/WY, WV, RD and PD-F905/KU have the same construction except for the following:

| Mark  | Symbol & Description           | Part No.    |                 |              |             |             |             | Remarks        |
|---|--------------------------------|-------------|-----------------|--------------|-------------|-------------|-------------|----------------|
|   |                                | PD-F905 /KU | PD-F1005 /KU/CA | PD-F1005 /RD | PD-F905 /WY | PD-F905 /WV | PD-F905 /RD |                |
| NSP   | Main Board Assy                | PWZ3207     | PWZ3211         | PWZ3212      | PWZ3208     | PWZ3209     | PWZ3210     | *1 No.1 and *2 |
|   | Display Board Assy             | PWZ3300     | PWZ3301         | PWZ3301      | PWZ3301     | PWZ3301     | PWZ3301     |                |
|   | Power Board Assy               | PWZ3221     | PWZ3224         | PWZ3225      | PWZ3222     | PWZ3222     | PWZ3223     |                |
|   | Switch Board Assy              | PWZ3305     | PWZ3306         | PWZ3306      | PWZ3306     | PWZ3306     | PWZ3306     |                |
| NSP   | Headphone Board Assy           | Not used    | PWZ3310         | PWZ3310      | PWZ3311     | PWZ3311     | PWZ3310     | *1 No.1 and *3 |
| GUI Board Assy  | Not used                       | PWX1479     | PWX1480         | Not used     | Not used    | Not used    |             |                |
| $\Delta$  | AC power cord                  | PDG1015     | PDG1015         | PDG1056      | PDG1003     | PDG1055     | PDG1056     | *1 No.2 and *3 |
|   | Fuse (T5A) (For AC power cord) | Not used    | Not used        | Not used     | Not used    | Not used    | Not used    |                |
|   | Strain relief                  | CM - 22C    | CM - 22C        | CM - 22B     | CM - 22B    | CM - 22B    | CM - 22B    | *1 No.3        |
|   | Rear Base                      | PNA2257     | PNA2283         | PNA2284      | PNA2281     | PNA2282     | PNA2280     |                |
|   | Foot Assy                      | AEC1531     | Not used        | Not used     | Not used    | Not used    | Not used    | *1 No.4        |
|   | Insulator                      | Not used    | PNW1912         | PNW1912      | PNW1912     | PNW1912     | PNW1912     |                |
|   | SR Angle                       | Not used    | PNB1192         | PNB1192      | Not used    | Not used    | Not used    | *1 No.5        |
|   | Rubber Sheet                   | AEB1111     | Not used        | Not used     | Not used    | Not used    | Not used    |                |
|   | Operation Panel                | PNW2636     | PNW2677         | PNW2677      | PNW2676     | PNW2676     | PNW2676     | *1 No.6        |
|   | Display Window                 | PAM1712     | PAM1712         | PAM1712      | PAM1711     | PAM1711     | PAM1712     |                |
| Knob  | Not used                       | PAC1707     | PAC1707         | PAC1707      | PAC1707     | PAC1707     | *1 No.7     |                |
| LED Lens  | Not used                       | PNW2019     | PNW2019         | PNW2019      | PNW2019     | PNW2019     |             |                |
| Name Plate  | PAM1704                        | VAM1032     | VAM1032         | PAM1704      | PAM1704     | PAM1704     | *1 No.8     |                |
| Caution Label (HE)  | Not used                       | Not used    | Not used        | PRW1233      | Not used    | Not used    |             |                |
| Caution Label (F)   | Not used                       | Not used    | Not used        | VRW - 328    | VRW - 328   | Not used    | *1 No.9     |                |
| Caution Label (G)   | Not used                       | Not used    | Not used        | VRW - 329    | VRW - 329   | Not used    |             |                |
| Caution Label   | Not used                       | Not used    | Not used        | Not used     | PRW1018     | Not used    | *1 No.10    |                |
| Caution Label   | Not used                       | Not used    | Not used        | VRW1094      | Not used    | Not used    |             |                |
| 65 Label  | ORW1069                        | ORW1069     | Not used        | Not used     | Not used    | Not used    | *1 No.11    |                |
| Vinyl Bag   | Not used                       | Not used    | Not used        | Not used     | Z21 - 013   | Not used    |             |                |
| Packing Case  | PHG2183                        | PHG2187     | PHG2187         | PHG2220      | PHG2221     | PHG2184     | *1 No.12    |                |
| Caution 220V Label  | Not used                       | Not used    | ARR7003         | Not used     | Not used    | ARR7003     |             |                |
| Rear Spacer   | Not used                       | Not used    | Not used        | Not used     | PHC1087     | Not used    | *1 No.13    |                |
| Operating instructions (English)  | PRB1237                        | PRB1241     | Not used        | Not used     | PRB1237     | Not used    |             |                |
| Operating instructions (English/Spanish/Chinese)  | Not used                       | Not used    | PRE1240         | Not used     | Not used    | PRE1234     | *1 No.14    |                |
| Operating instructions (English/French/German/Italian/Dutch/Swedish/Spanish/Portuguese) | Not used                       | Not used    | Not used        | PRE1239      | Not used    | Not used    |             |                |
| Battery (R6P, AA)   | VEM - 013                      | Not used    | Not used        | VEM - 013    | VEM - 013   | VEM - 013   | *1 No.15    |                |
| Battery (LR6, AA)   | Not used                       | AEX1007     | AEX1007         | Not used     | Not used    | Not used    |             |                |
| Remote Control Unit   | PWW1108                        | PWW1110     | PWW1110         | PWW1108      | PWW1108     | PWW1108     | *1 No.16    |                |
| Cord With Plug  | Not used                       | VDE1034     | Not used        | Not used     | Not used    | Not used    |             |                |
| Cord With mini Plug (SR cord)   | PDE1247                        | PDE1247     | PDE1247         | Not used     | Not used    | PDE1247     |             |                |

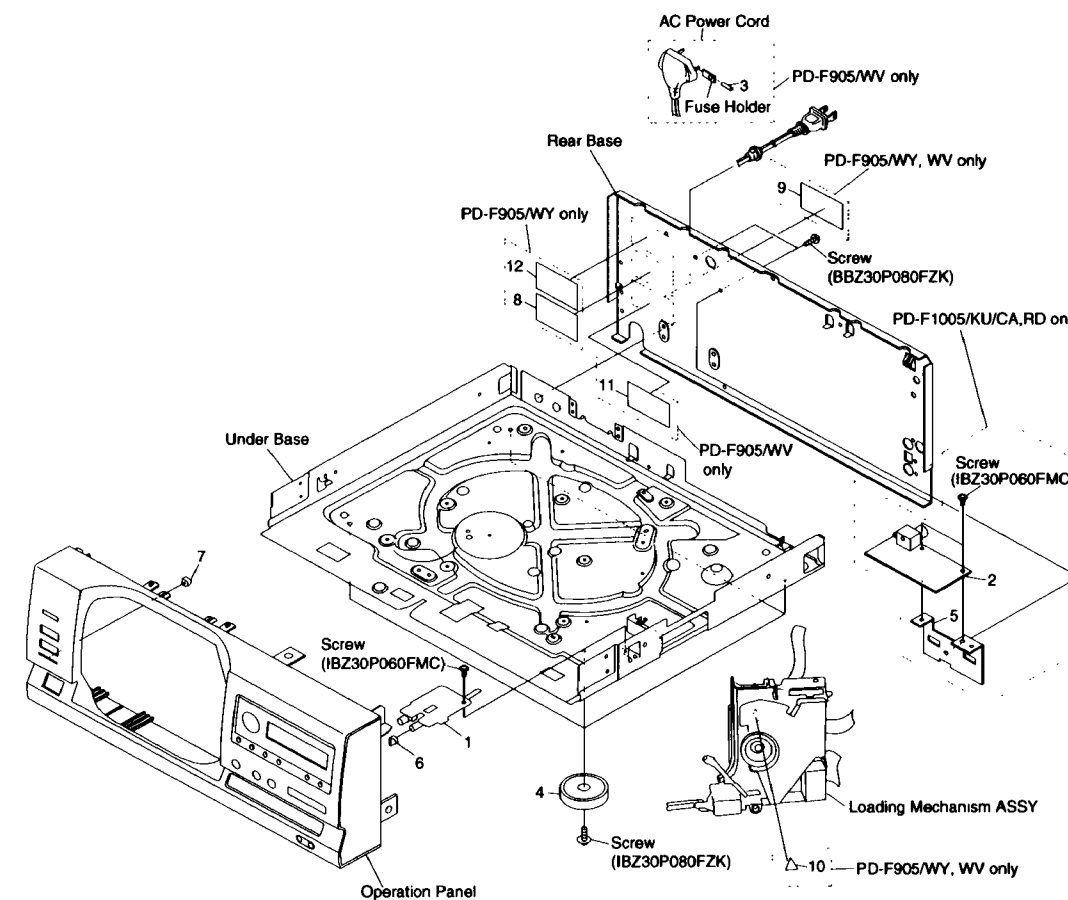
Note \*1 : The numbers in the remarks column correspond to the numbers on the exploded diagram. Refer to "EXPLODED VIEWS".

\*2 : Although PWZ3311 and PWZ3310 are different in part number, they consist of the same components.

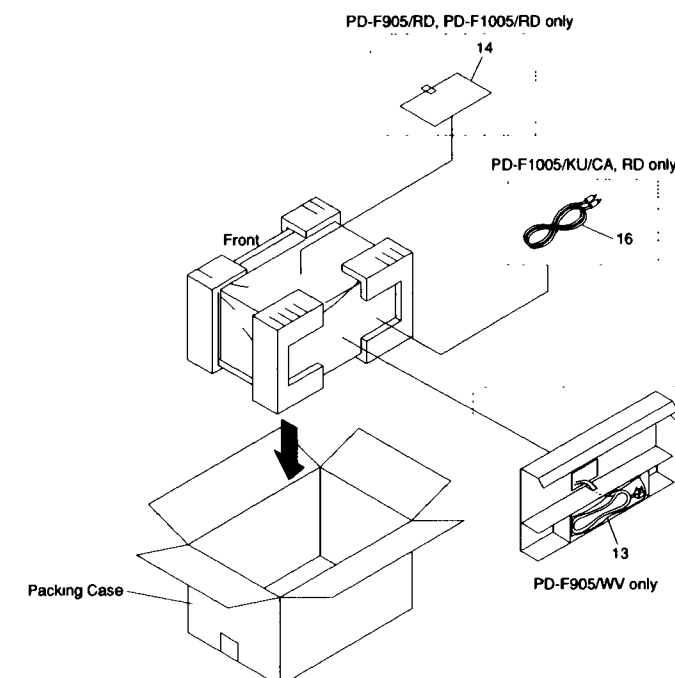
\*3 : Refer to "3. SCHEMATIC AND PCB DIAGRAMS".

### EXPLODED VIEWS

#### Exterior



#### Packing



■ CONTRAST OF PCB ASSEMBLIES

MAIN BOARD ASSY

PWZ3211, PZW3212, PWZ3208, PWZ3209, PWZ3210 and PWZ3207 have the same construction except for the following:

| Mark | Symbol & Description         | Part No.     |              |              |              |              |              | Remarks |
|------|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|      |                              | PWZ3207      | PWZ3211      | PWZ3212      | PWZ3208      | PWZ3209      | PWZ3210      |         |
|      | C392                         | Not used     | Not used     | Not used     | CGCYX104K25  | CGCYX104K25  | Not used     | *       |
|      | C305                         | Not used     | Not used     | Not used     | CKCYF473Z50  | CKCYF473Z50  | Not used     | *       |
|      | C371                         | CEAS010M50   | Not used     | Not used     | CEAS010M50   | CEAS010M50   | CEAS010M50   |         |
|      | C373 (0.047μF)               | ACH1246      | Not used     | Not used     | ACH1246      | ACH1246      | ACH1246      |         |
|      | C374                         | CEAS330M16   | Not used     | Not used     | CEAS330M16   | CEAS330M16   | CEAS330M16   |         |
|      | C375                         | CKCYF103Z50  | Not used     | Not used     | CKCYF103Z50  | CKCYF103Z50  | CKCYF103Z50  |         |
|      | C376                         | CEAS470M10   | Not used     | Not used     | CEAS470M10   | CEAS470M10   | CEAS470M10   |         |
|      | C393                         | CCCSL101J50  | CCCSL101J50  | CCCSL101J50  | Not used     | Not used     | CCCSL101J50  |         |
|      | C401                         | CEAS330M16   | CEAS471M6R3  | CEAS471M6R3  | CEAS330M16   | CEAS330M16   | CEAS330M16   |         |
|      | C405                         | Not used     | CKCYB101K50  | CKCYB101K50  | Not used     | Not used     | Not used     | *       |
|      | C475 - C477                  | Not used     | CKCYF103Z50  | CKCYF103Z50  | CKCYF103Z50  | CKCYF103Z50  | Not used     | *       |
|      | C1301 - C1304                | CKCYB101K50  | CKCYB101K50  | Not used     | Not used     | Not used     | Not used     |         |
|      | C1305                        | CKCYB101K50  | CKCYB101K50  | Not used     | CKCYB101K50  | Not used     | Not used     |         |
|      | C1307                        | CKCYF103Z50  | CKCYF103Z50  | Not used     | Not used     | Not used     | Not used     |         |
| △    | C1308                        | CKCYF103Z50  | CKCYF103Z50  | Not used     | CKCYF103Z50  | Not used     | Not used     |         |
|      | CN11                         | 52147 - 1310 | 52147 - 1210 | 52147 - 1210 | 52147 - 1310 | 52147 - 1310 | 52147 - 1310 |         |
|      | CN206                        | Not used     | 52147 - 0810 | 52147 - 0810 | Not used     | Not used     | Not used     | *       |
|      | CN401                        | Not used     | 52147 - 0310 | 52147 - 0310 | 52147 - 0310 | 52147 - 0310 | 52147 - 0310 | *       |
|      | D372, D373, D375             | 1SS254       | Not used     | Not used     | 1SS254       | 1SS254       | 1SS254       |         |
|      | D374                         | MTZJ3.3B     | Not used     | Not used     | MTZJ3.3B     | MTZJ3.3B     | MTZJ3.3B     |         |
|      | D391 - D394                  | 1SS254       | 1SS254       | 1SS254       | 1SS254       | Not used     | 1SS254       |         |
|      | D1301 - D1309, D1312 - D1314 | 1SS254       | 1SS254       | Not used     | 1SS254       | Not used     | Not used     |         |
|      | IC351                        | PD4718A      | PD4733A      | PD4733A      | PD4718A      | PD4718A      | PD4718A      |         |
| △    | IC371                        | NJM2930L05   | Not used     | Not used     | NJM2930L05   | NJM2930L05   | NJM2930L05   |         |
|      | IC406                        | Not used     | BA15218      | BA15218      | BA15218      | BA15218      | BA15218      | *       |
|      | JA391                        | RKN1004      | RKN1004      | RKN1004      | RKN1004      | Not used     | RKN1004      |         |
|      | JA392                        | RKN1004      | RKN1004      | RKN1004      | Not used     | Not used     | RKN1004      |         |
|      | JA394                        | DKN1035      | DKN1035      | Not used     | DKN1035      | Not used     | Not used     |         |
|      | L351, L375                   | Not used     | LAU100J      | LAU100J      | Not used     | Not used     | Not used     | *       |
|      | L392                         | Not used     | Not used     | Not used     | LAU010J      | LAU010J      | Not used     | *       |
| △    | L396                         | LAU010J      | LAU010J      | LAU010J      | LAU2R2J      | LAU2R2J      | LAU010J      |         |
|      | Q371, Q372                   | DTC124ES     | Not used     | Not used     | DTC124ES     | DTC124ES     | DTC124ES     |         |
|      | R371, R374                   | RD1/4PU103J  | Not used     | Not used     | RD1/4PU103J  | RD1/4PU103J  | RD1/4PU103J  |         |
|      | R372                         | RD1/4PU101J  | Not used     | Not used     | RD1/4PU101J  | RD1/4PU101J  | RD1/4PU101J  |         |
|      | R373                         | RD1/4PU471J  | Not used     | Not used     | RD1/4PU471J  | RD1/4PU471J  | RD1/4PU471J  |         |
|      | R375                         | RD1/4PU102J  | Not used     | Not used     | RD1/4PU102J  | RD1/4PU102J  | RD1/4PU102J  |         |
|      | R391                         | RD1/4PU244J  | RD1/4PU244J  | RD1/4PU244J  | RD1/4PU244J  | Not used     | RD1/4PU244J  |         |
|      | R392                         | RD1/4PU102J  | RD1/4PU102J  | RD1/4PU102J  | RD1/4PU102J  | Not used     | RD1/4PU102J  |         |
|      | R470, R471                   | Not used     | RD1/4PU470J  | RD1/4PU470J  | RD1/4PU470J  | RD1/4PU470J  | RD1/4PU470J  | *       |
|      | R472, R473                   | Not used     | RD1/4PU102J  | RD1/4PU102J  | RD1/4PU102J  | RD1/4PU102J  | RD1/4PU102J  | *       |
|      | R1301 - R1305, R1307         | RD1/4PU471J  | RD1/4PU471J  | Not used     | RD1/4PU471J  | Not used     | Not used     |         |
|      | R1310                        | RD1/4PU103J  | RD1/4PU103J  | Not used     | RD1/4PU103J  | Not used     | Not used     |         |

Note \* : Refer to "SCHEMATIC DIAGRAM".

DISPLAY BOARD ASSY

PWZ3301 and PWZ3300 have the same construction except for the following:

| Mark | Symbol & Description | Part No.    |             | Remarks |
|------|----------------------|-------------|-------------|---------|
|      |                      | PWZ3300     | PWZ3301     |         |
|      | J701                 | D20PWW0735E | D20PWW0835E |         |

POWER BOARD ASSY

PWZ3224, PWZ3225, PWZ3222, PWZ3223 and PWZ3221 have the same construction except for the following:

| Mark | Symbol & Description                          | Part No.    |             |             |             |             | Remarks |
|------|---|-------------|-------------|-------------|-------------|-------------|---------|
|      |   | PWZ3221     | PWZ3224     | PWZ3225     | PWZ3222     | PWZ3223     |         |
| △    | C31   | CEAS330M16  | Not used    | Not used    | CEAS330M16  | CEAS330M16  |         |
| △    | D31, D32                                      | S5688G      | Not used    | Not used    | S5688G      | S5688G      |         |
|      | IC31  | Not used    | Not used    | ICP - N10   | ICP - N10   | ICP - N10   | *       |
|      | J11   | D20PWY1335E | D20PWY1235E | D20PWY1235E | D20PWY1335E | D20PWY1335E |         |
|      | R31   | RD1/4PU102J | Not used    | Not used    | RD1/4PU102J | RD1/4PU102J |         |
| △    | S5 Voltage Selector (AC110 - 127V/220 - 240V) | Not used    | Not used    | PSB1006     | Not used    | PSB1006     | *       |
| △    | Power Transformer (AC120V)                    | PTT1318     | PTT1318     | Not used    | Not used    | Not used    |         |
| △    | Power Transformer (AC110 - 127V/220 - 240V)   | Not used    | Not used    | PTT1320     | Not used    | PTT1320     |         |
| △    | Power Transformer (AC220 - 240V)              | Not used    | Not used    | Not used    | PTT1317     | Not used    |         |

Note \* : Refer to "SCHEMATIC DIAGRAM".

SWITCH BOARD ASSY

PWZ3306 and PWZ3305 have the same construction except for the following:

| Mark | Symbol & Description | Part No. |             | Remarks |
|------|----------------------|----------|-------------|---------|
|      |                      | PWZ3305  | PWZ3306     |         |
|      | D751                 | Not used | PCX1019     | *       |
|      | R751                 | Not used | RD1/4PU471J | *       |

Note \* : Refer to "SCHEMATIC DIAGRAM".

GUI BOARD ASSY

PWX1480 and PWX1479 have the same construction except for the following:

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | PWX1479  | PWX1480 |         |
|      | S901                 | Not used | RSH1039 | *       |

Note \* : Refer to "SCHEMATIC DIAGRAM".

■ PCB PARTS LIST

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

**GUI BOARD ASSY (PWX1479)**

**SEMICONDUCTORS**

|       |  |               |
|-------|--|---------------|
| IC902 |  | LH5168N - 10L |
| IC904 |  | MM1031XS      |
| IC901 |  | PD4734A       |
| IC903 |  | PD6162A       |
| Q901  |  | 2SC1740S      |
| D901  |  | 1SS133X       |

**COILS AND FILTERS**

|      |  |         |
|------|--|---------|
| L901 |  | LFA100K |
| L911 |  | LFA220J |

**CAPACITORS**

|                   |  |              |
|-------------------|--|--------------|
| C913              |  | CCSQCH080D50 |
| C914              |  | CCSQCH150J50 |
| C916              |  | CCSQCH330J50 |
| C915              |  | CCSQCH470J50 |
| C911, C912, C921  |  | CEAS101M16   |
| C901              |  | CEAS331M6R3  |
| C923              |  | CEAS471M6R3  |
| C903 - C905       |  | CKSQYF103Z50 |
| C922              |  | CKSQYF104Z50 |
| C902 (0.1μF/5.5V) |  | PCH1106      |
| VC911             |  | PCM1001      |

**RESISTORS**

|               |  |             |
|---------------|--|-------------|
| All Resistors |  | RS1/10S□□□□ |
|---------------|--|-------------|

**OTHERS**

|       |                   |          |
|-------|-------------------|----------|
| X911  | CRYSTAL RESONATOR | ASS1056  |
| CN901 | PLUG 3 - P        | KM250MA3 |
| JA901 | JACK 1P           | VKB1063  |
| X901  | CERAMIC RESONATOR | VSS1028  |

**HEADPHONE BOARD ASSY (PWZ3310)**

**COILS AND FILTERS**

|                  |  |         |
|------------------|--|---------|
| L501, L504, L505 |  | LAU010J |
|------------------|--|---------|

**CAPACITORS**

|            |  |             |
|------------|--|-------------|
| C501, C502 |  | CKCYF223Z50 |
| C503, C504 |  | CKCYF473Z50 |

**RESISTORS**

|               |  |         |
|---------------|--|---------|
| VR501 (0.5kΩ) |  | PCS1003 |
|---------------|--|---------|

**OTHERS**

|       |      |         |
|-------|------|---------|
| JA501 | JACK | RKN1002 |
|-------|------|---------|

### 3. SCHEMATIC AND PCB DIAGRAMS

**NOTE FOR SCHEMATIC DIAGRAMS** (Type 4A)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

**3. RESISTORS:**

Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.  
 Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.  
 Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.

**4. CAPACITORS:**

Unit: p:pF or μ:μF unless otherwise noted.  
 Ratings: capacitor (μF)/voltage(V) unless otherwise noted.  
 Rated voltage: 50V except for electrolytic capacitors.

**5. COILS:**

Unit: m:mH or μ:μH unless otherwise noted.

**6. VOLTAGE AND CURRENT:**

or ← V:  
 DC voltage (V) in PLAY mode unless otherwise noted.  
 mA or ← mA:  
 DC current in PLAY mode unless otherwise noted.  
 Value in ( ) is DC current in STOP mode.

**7. OTHERS:**

- or : Adjusting point.
- : Measurement point.
- The mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

**8. SCH-□ ON THE SCHEMATIC DIAGRAM:**

• SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

**9. SWITCHES** (Underline indicates switch position):

DISPLAY BOARD ASSY

- |                   |                 |                |
|-------------------|-----------------|----------------|
| S703 : MODE       | S711 :          | S717 : CLEAR   |
| S704 : UNLOAD     | S712 :          | S718 : PROGRAM |
| S707 :            | S713 : BEST     | S719 : RANDOM  |
| S708 : OPEN/CLOSE | S714 : PREVIOUS | S720 : REPEAT  |
| S709 : ADLC       | S715 : DISC -   |                |
| S710 :            | S716 : DISC +   |                |

SWITCH BOARD ASSY

- S751 : SINGLE LOADER ACCESS  
 S752 : SINGLE LOADER PLAY  
 S753 : POWER STANDBY/ON

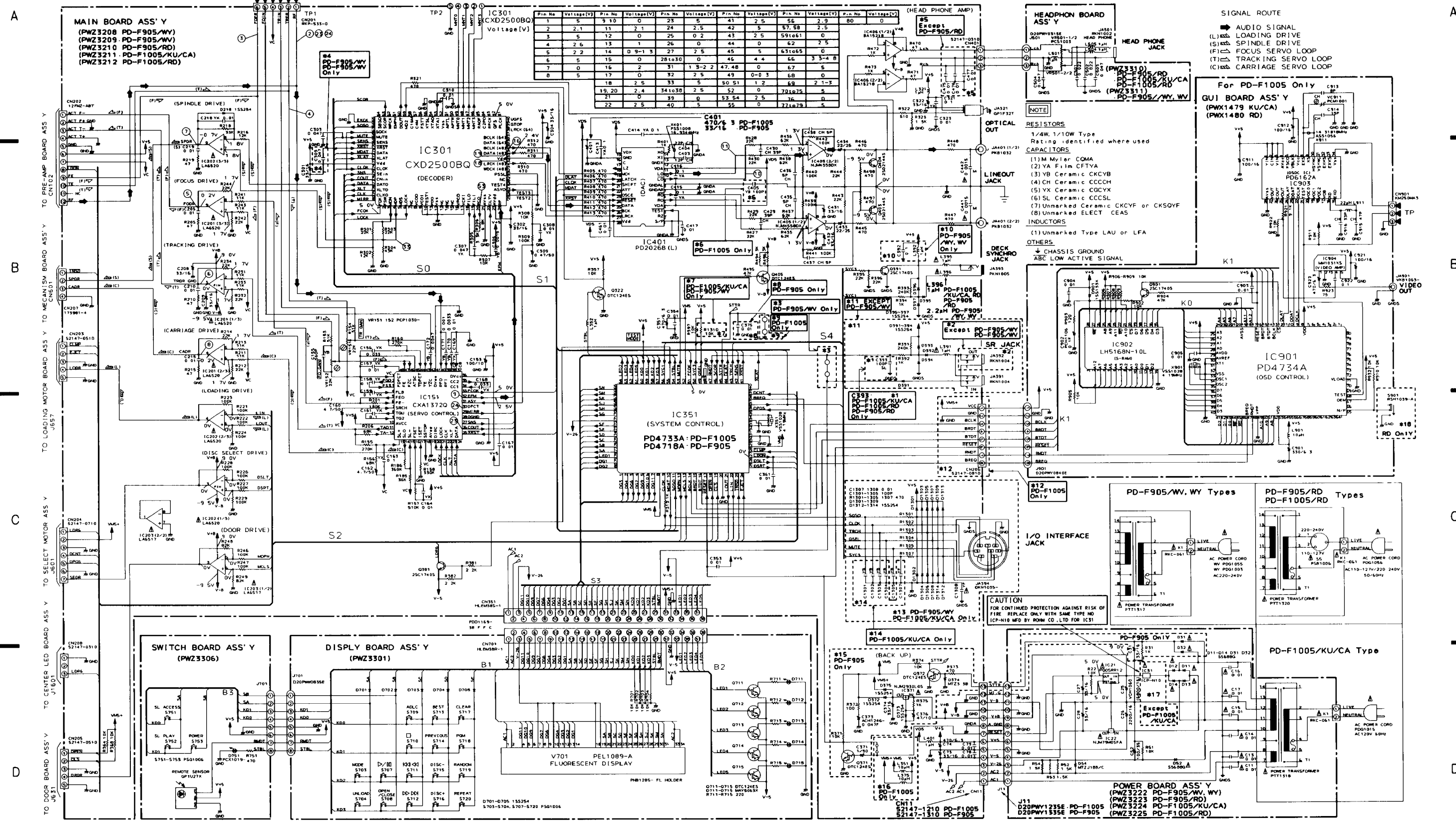
**NOTE FOR PCB DIAGRAMS**

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name                |
|------------------------|------------------------------|--------------------------|
|                        |                              | Transistor               |
|                        |                              | Transistor with resistor |
|                        |                              | Field effect transistor  |
|                        |                              | Resistor array           |
|                        |                              | 3-terminal regulator     |

3.1 SCHEMATIC DIAGRAM

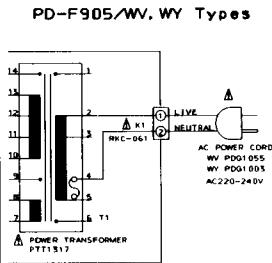
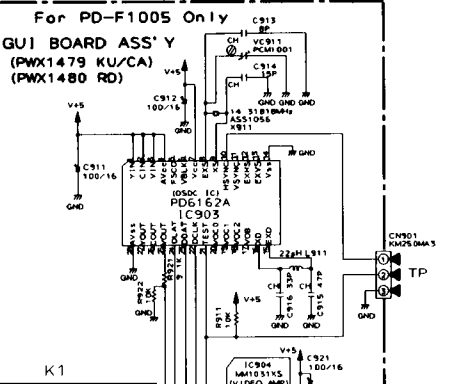
Note: The numbers marked with a circle show the number of each measuring point, which correspond to the number in the service manual PD-F905 (ORDER NO. RRV1582) on page 22.



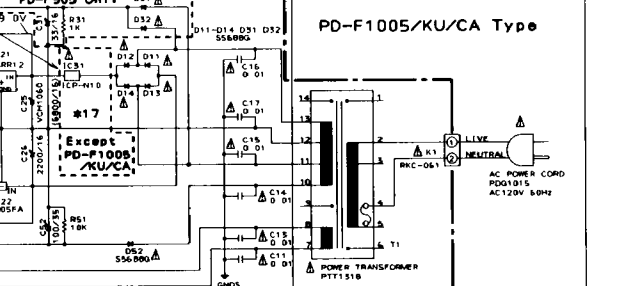
Pin No. Voltage[V] Pin No. Voltage[V] Pin No. Voltage[V] Pin No. Voltage[V] Pin No. Voltage[V] Pin No. Voltage[V] Pin No. Voltage[V] Pin No. Voltage[V]

- SIGNAL ROUTE
AUDIO SIGNAL
LOADING DRIVE
SPINDLE DRIVE
FOCUS SERVO LOOP
TRACKING SERVO LOOP
CARRIAGE SERVO LOOP

- RESISTORS
1/4W, 1/10W Type
Rating identified where used
CAPACITORS
(1) 1M Mylar CQMA
(2) YA Film CFTYA
(3) YX Ceramic CCKYB
(4) YB Ceramic CCCCH
(5) YX Ceramic CCCYK
(6) SL Ceramic CCCSL
(7) Unmarked Ceramic CCKYF or CKSOYF
(8) Unmarked ELECT CEAS
INDUCTORS
(1) Unmarked Type LAU or LFA
OTHERS
CHASSIS GROUND
ABC LOW ACTIVE SIGNAL



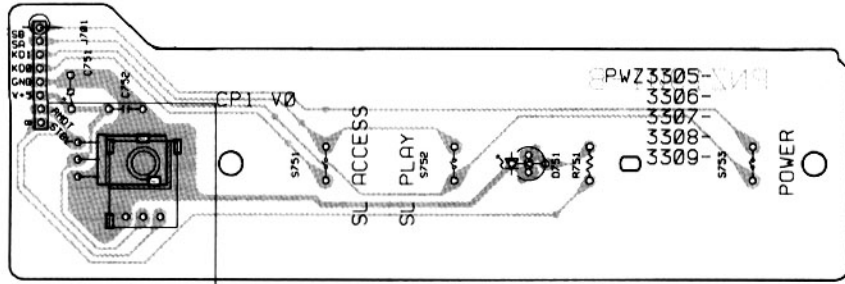
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE NO. ICP-N10 MFD BY ROHM CO., LTD FOR IC31



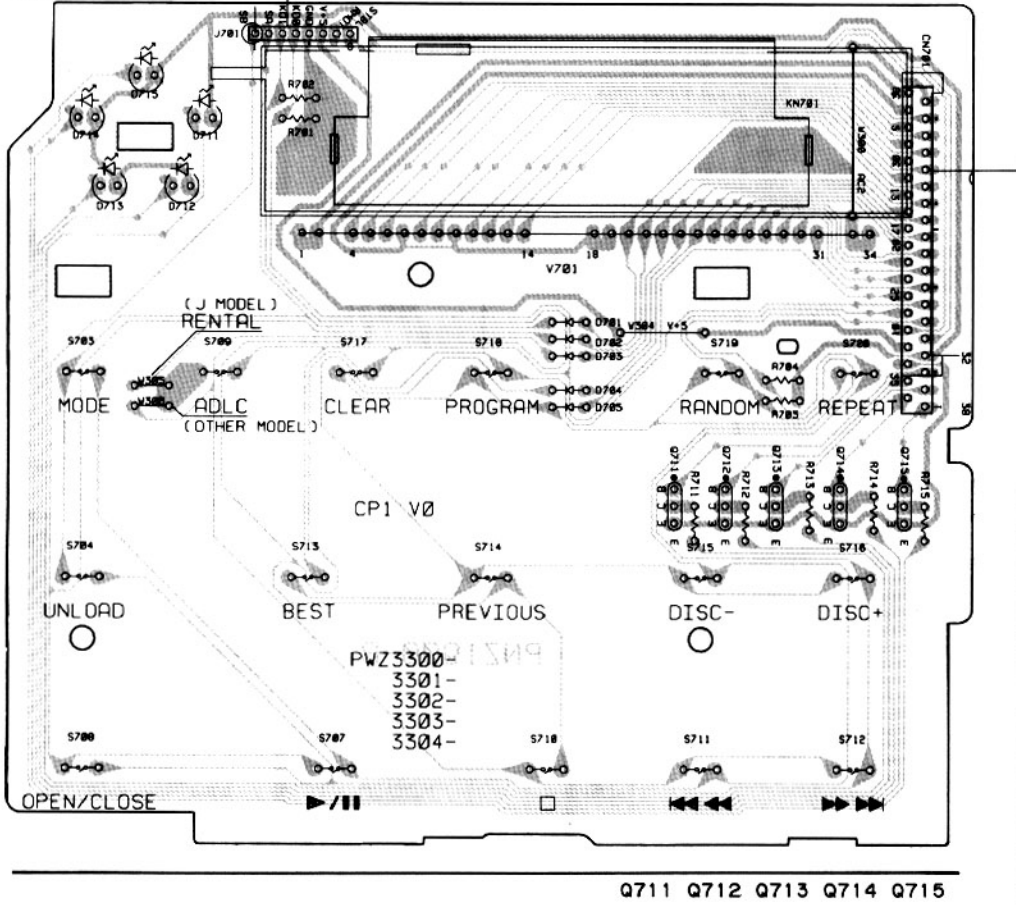
PCB DIAGRAMS

- This diagram is viewed from the mounted parts side.
- The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

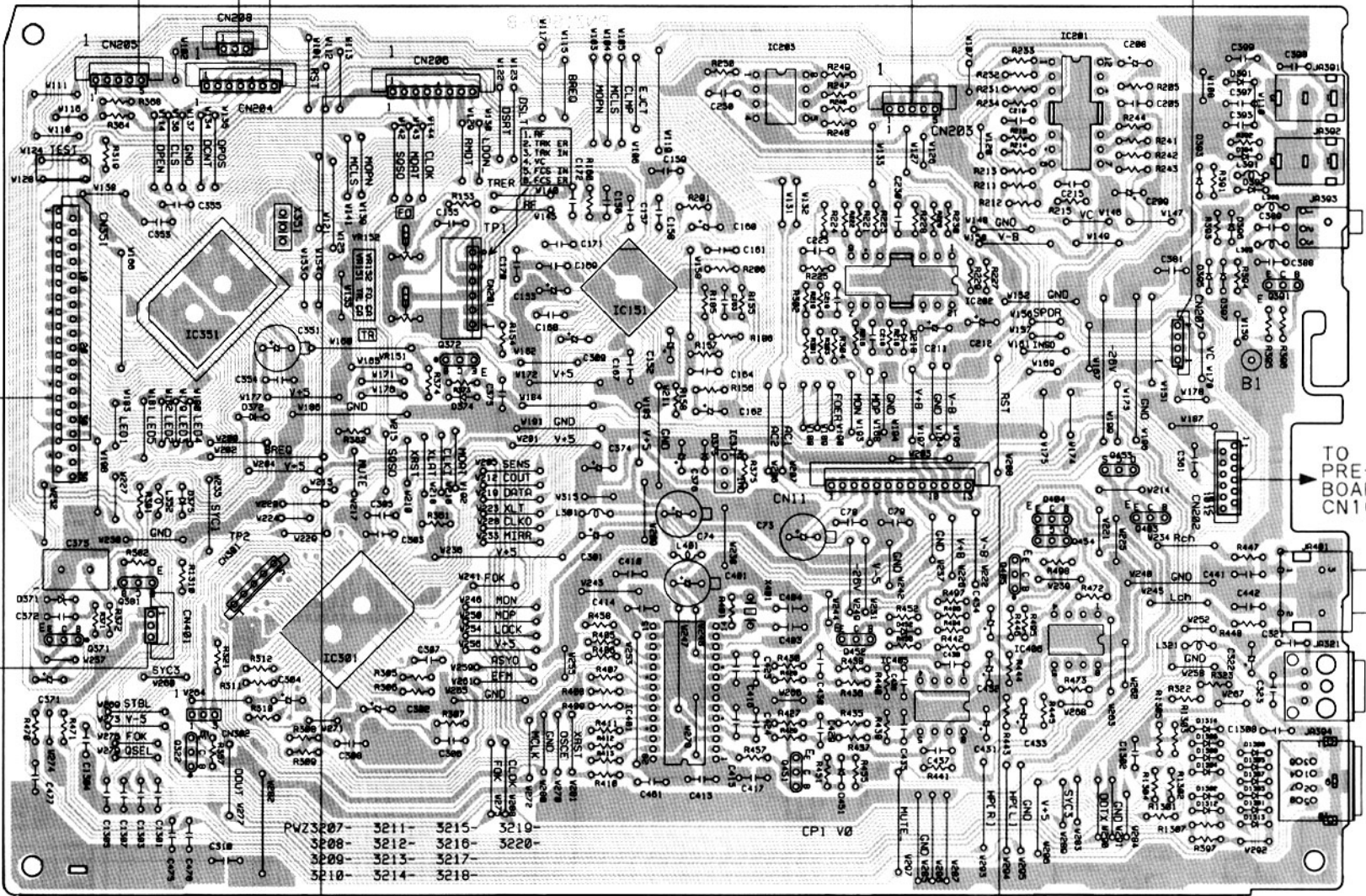
SWITCH BOARD ASSY



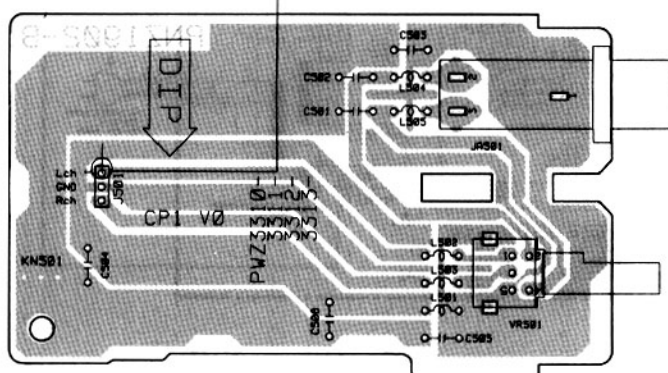
DISPLAY BOARD ASSY



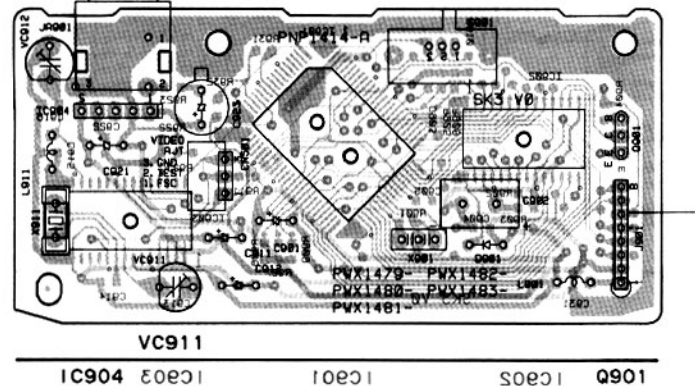
MAIN BOARD ASSY



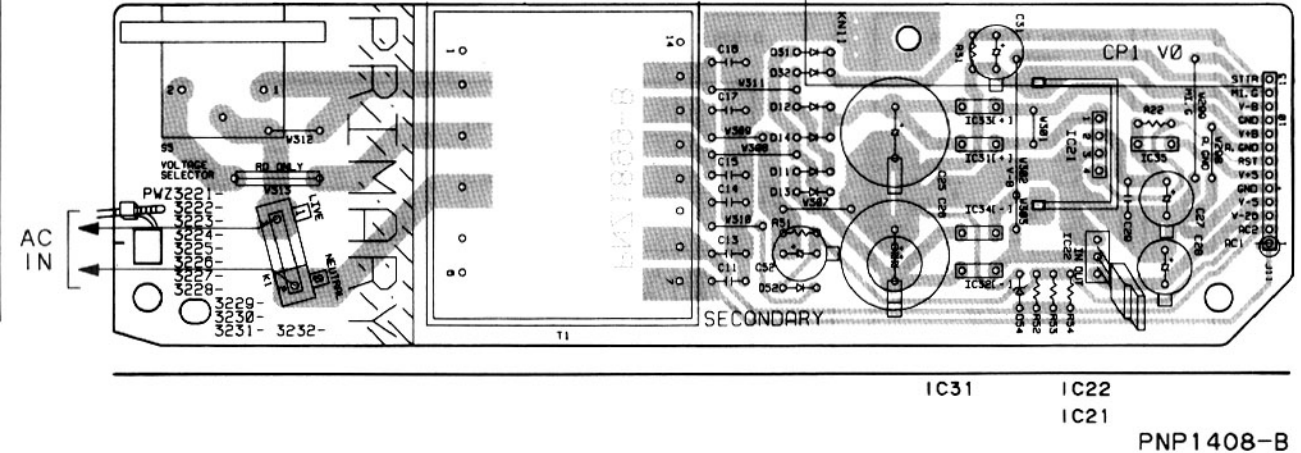
HEADPHONE BOARD ASSY



GUI BOARD ASSY



POWER BOARD ASSY





## 4. ADJUSTMENTS

Note : Adjustment of PF-F1005 is the same as that of PD-F905 except for the following.

### ■ CHROMA FREQUENCY ADJUSTMENT

Symptom when out of adjustment:

The TV picture is not in color (Black-and-white picture).

#### Procedure

1. Short-circuit pin 2 and pin 3 of connector CN501 of the GUI BOARD ASSY.
2. Connect a frequency counter to pin 1 of CN501.  
Adjust VC911 so that the frequency is within 3.579545 MHz  $\pm$  5 Hz.

