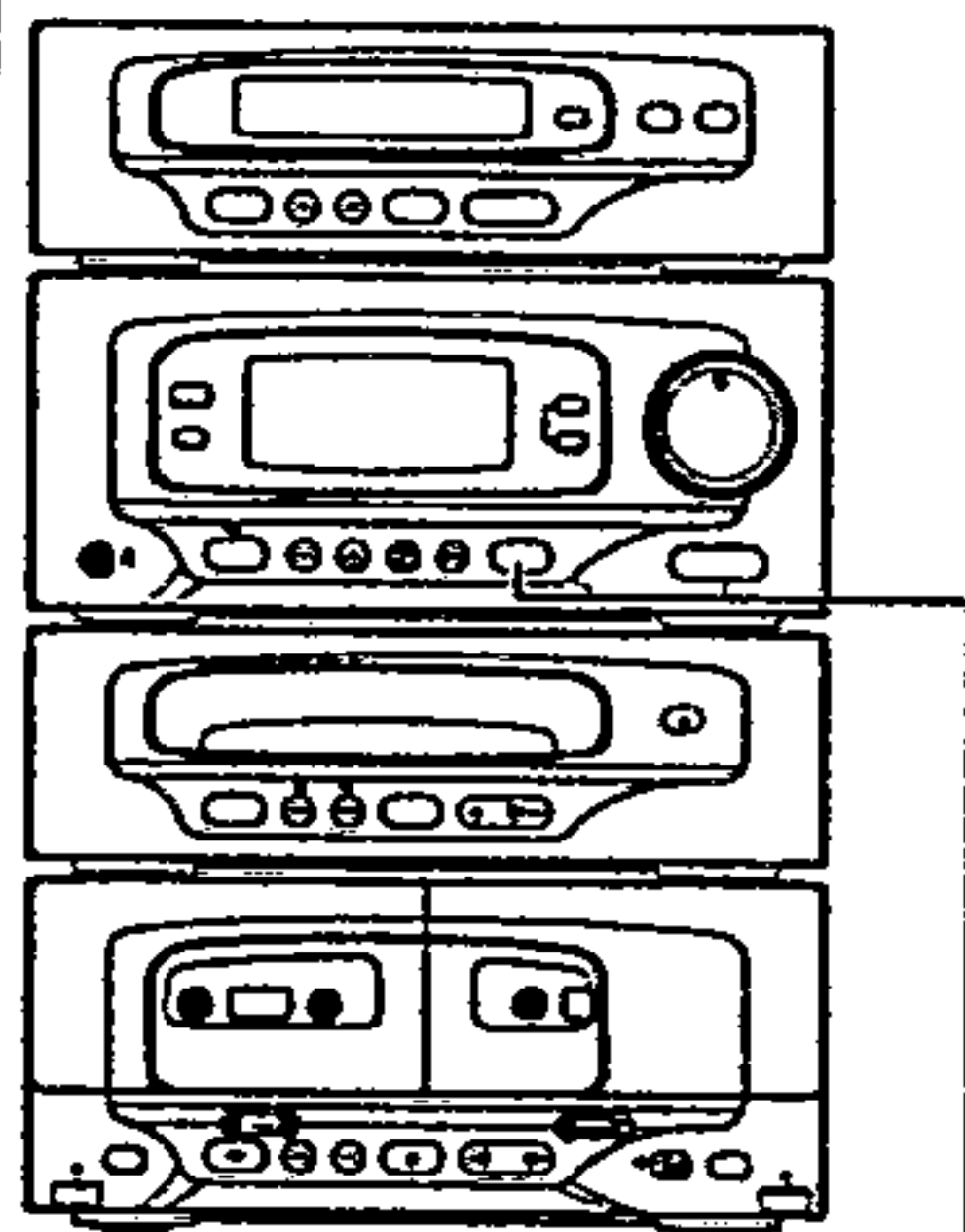


# Service Manual

**PIONEER®**  
The Art of Entertainment



DEMO

ORDER NO.  
RRV1256

SEPARATE MINI COMPONENT SYSTEM

# XS-P550

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

| Type      | Model   | Power Requirement | Remarks |
|-----------|---------|-------------------|---------|
|           | XS-P550 |                   |         |
| MEXK/EA   | ○       | AC220-230V        |         |
| MEXK/EB   | ○       | AC220-230V        |         |
| MEZIXK/DI | ○       | AC220-230V        |         |
| NB XK     | ○       | AC230V            |         |

- XS-P550 is a combination of the following components.

STEREO AMPLIFIER : A-P550  
FM/AM DIGITAL SYNTHESIZER TUNER : F-P550RDS  
COMPACT DISC PLAYER : PD-P550  
STEREO DOUBLE CASSETTE DECK : CT-P550WR

- This product does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.

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# 1. 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.

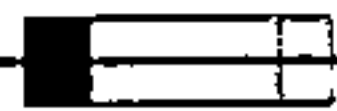
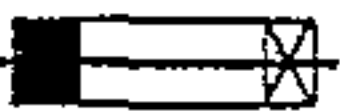
## WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

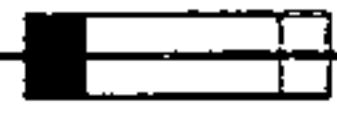
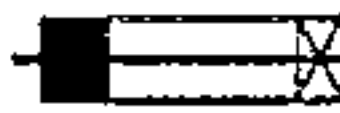
## NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

## REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

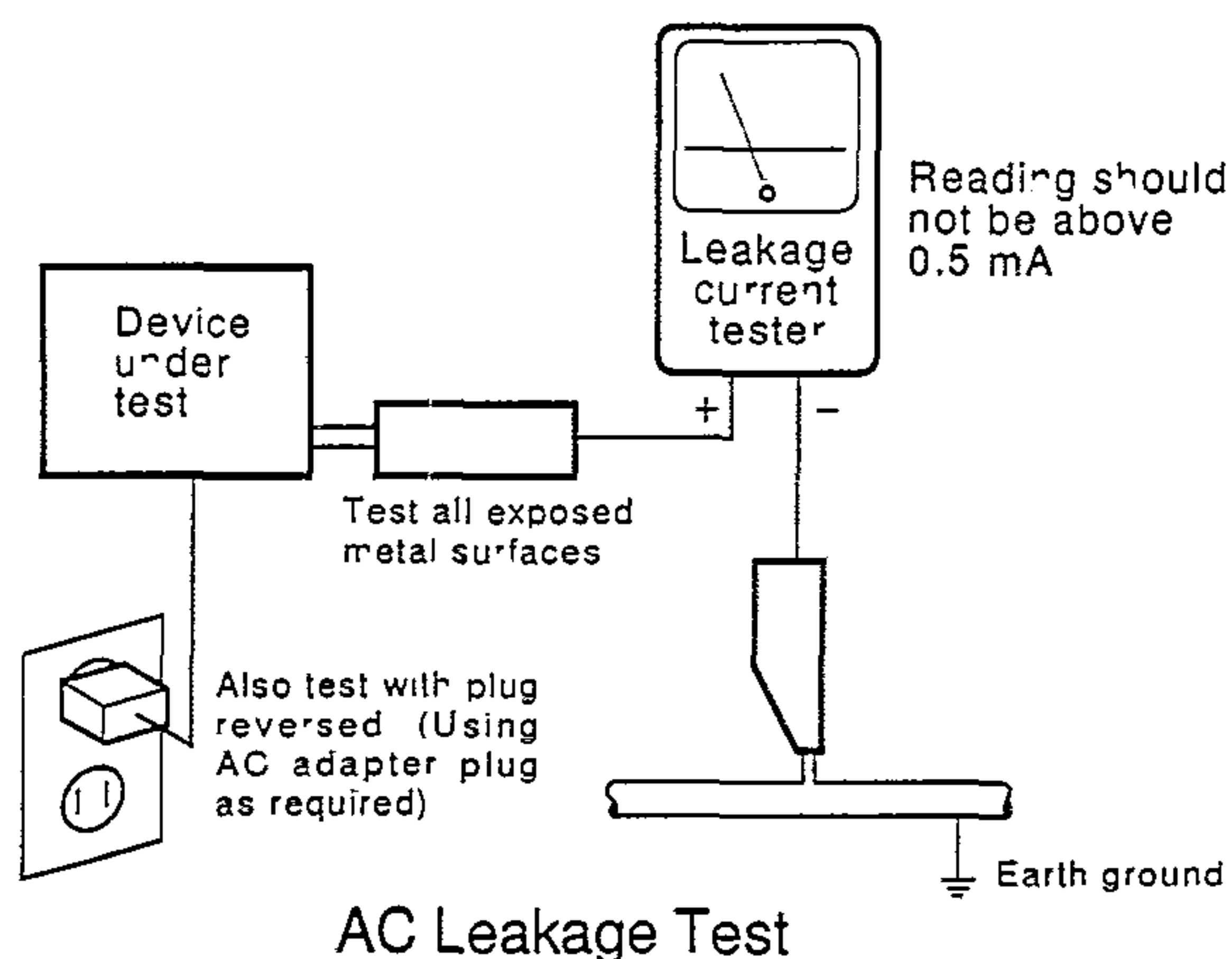
(FOR USA MODEL ONLY)

## 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.



**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.



## (FOR EUROPEAN MODEL ONLY)

## VARO!

AVATTAESSA JA SUOJALUKITUS  
OHITETTAESSA OLET ALTTIINA  
NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.  
ÄLÄ KATSO SÄTEESEEN.



LASER  
Kuva 1  
Lasersateilyn  
varoituserkki

## ADVERSEL:

USYNLIG LASERSTRÅLING VED ÅBNING  
NÅR SIKKERHEDSAFBRYDERE ER UDE AF  
FUNKTION UNDGA UDSÆTTELSE FOR  
STRÅLING.

## VARNING!

OSYNLIG LASERSTRÅLNING NÅR DENNA  
DEL ÄR ÖPPNAD OCH SPÄRREN  
ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

## WARNING!

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.



LASER  
Picture 1  
Warning sign for  
laser radiation

## IMPORTANT

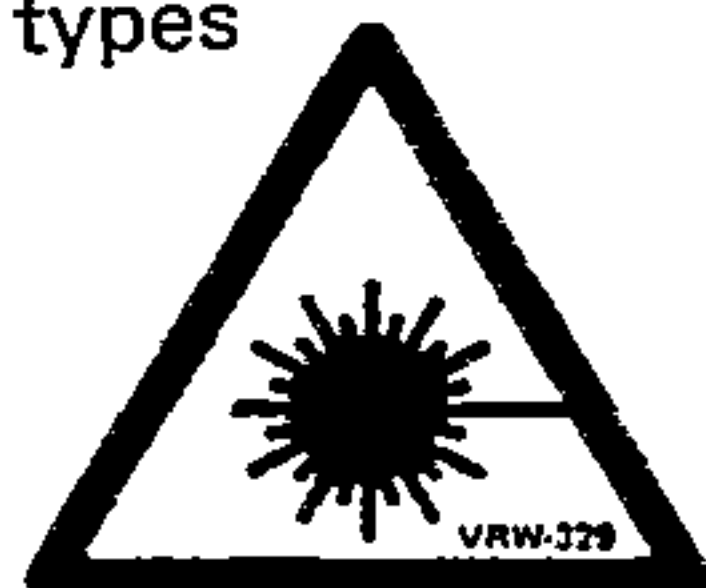
THIS PIONEER APPARATUS CONTAINS  
LASER OF CLASS 1.  
SERVICING OPERATION OF THE APPARATUS  
SHOULD BE DONE BY A SPECIALLY  
INSTRUTED PERSON.

## LASER DIODE CHARACTERISTICS

MAXIMUM OUTPUT POWER: 5 mw  
WAVELENGTH: 780 - 785 nm

## LABEL CHECK (PD - P550)

MEXK/EA, MEXK/EB,  
NBXK and MEZIXK/DI  
types

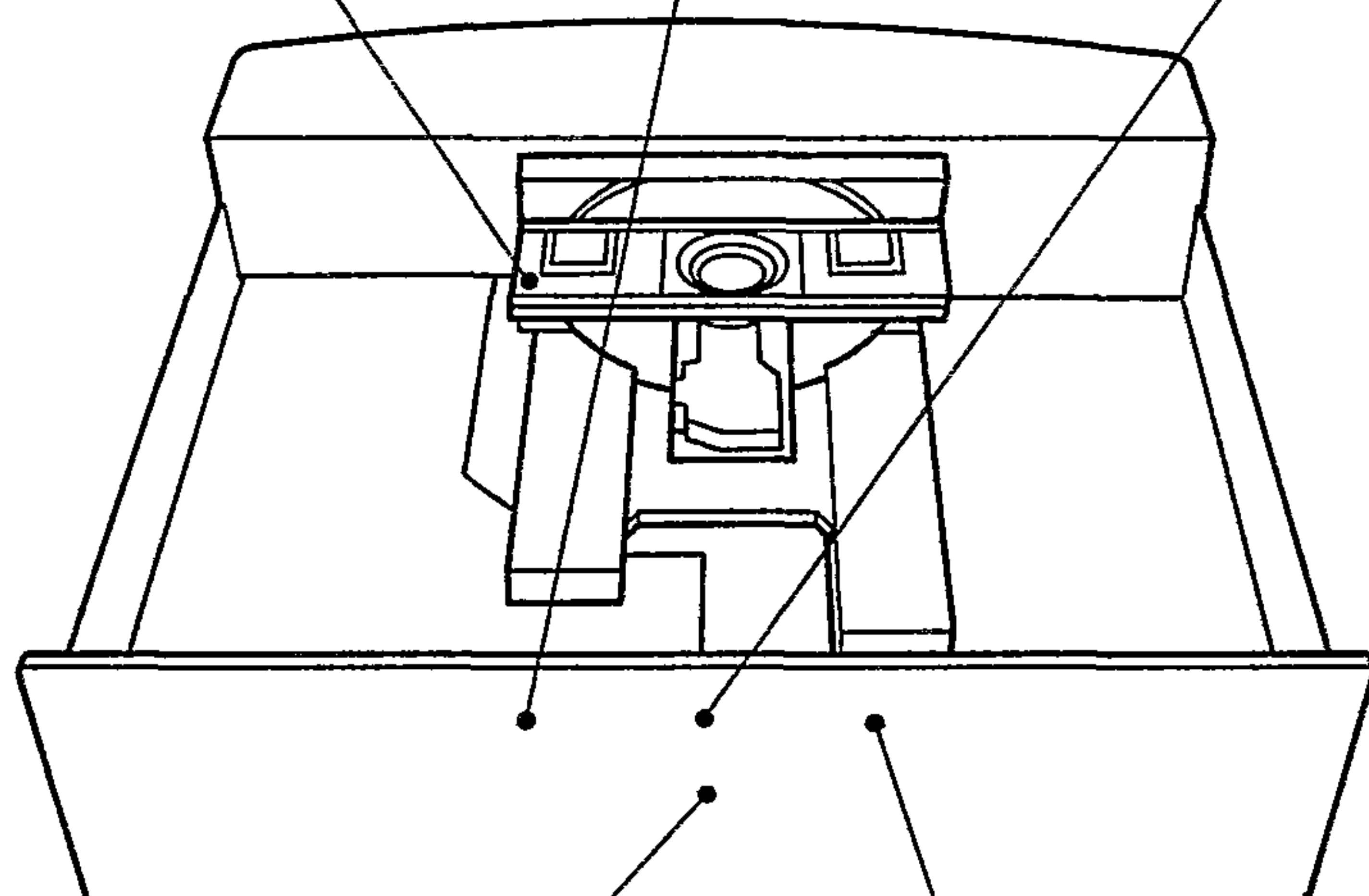


NBXK type

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

MEXK/EA, MEXK/EB and  
MEZIXK/DI types

**ADVARSEL**  
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHED SAF-  
BRYDERE ER UDE AF FUNKTION.  
UNDGA UDSÆTTELSE FOR STRÅLING.  
VORSICHT!  
UNSICHTBARE LASER-STRÅHLUNG TRIT AUS, WENN DECKEL  
(ODER KLAPPE) GEÖFFNET IST NICHT DEM STRAHL AUSSETZEN!  
VRW1094



## Additional Laser Caution

## 1. Laser Interlock Mechanism

The position of the switch (S601) for detecting loading completion is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S601) is not in CLMP terminal side (when the mechanism is not clamped and CLMP signal is high level.) Thus, the interlock will no longer function if the switch (S601) is deliberately set to CLMP terminal side (if CLMP signal is low level).

In the test mode\* the interlock mechanism will not function.

Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY loaded on the pickup assembly are 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).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

## VARO!

Avattaessa ja suojelukitus ohitetta-  
essa olet alttiina näkymättömälle  
lasersäteilylle. Älä katso säteeseen.  
VARNING!  
Osynlig laserstrålning när denna del  
är öppnad och spärren är urkopplad.  
Betrakta ej strålen.  
PRW1233

MEXK/EA, MEXK/EB and  
MEZIXK/DI types

**CLASS 1  
LASER PRODUCT**  
VRW-328

MEXK/EA, MEXK/EB, NBXK and  
MEZIXK/DI types

\* Refer to page 78.



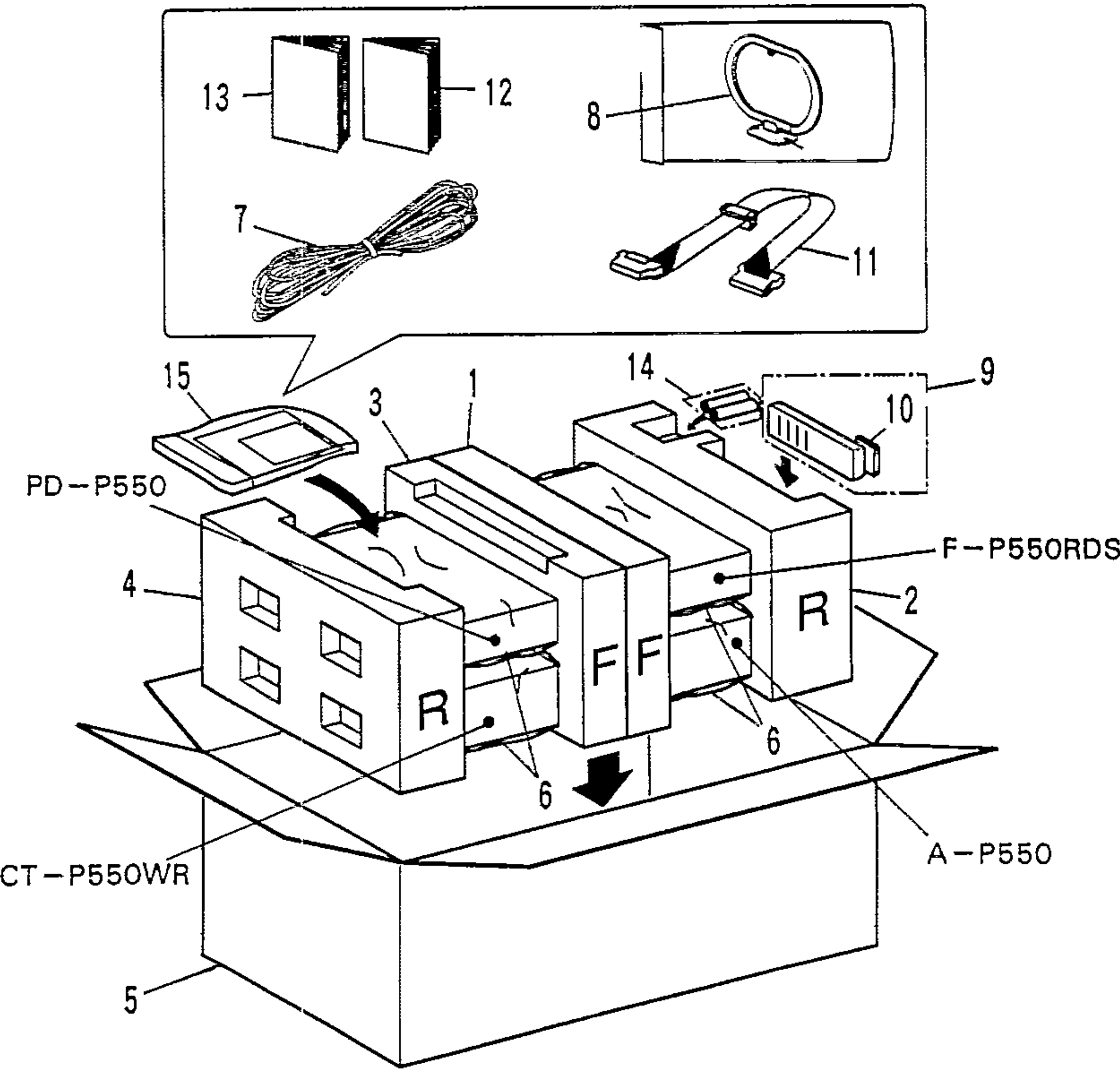
2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- Parts marked by “NSP” 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.
- Parts marked by “●” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

2.1 PACKING

| Mark | No. | Description                    | Parts No. | Mark | No. | Description                                                               | Parts No. |
|------|-----|--------------------------------|-----------|------|-----|---------------------------------------------------------------------------|-----------|
|      | 1   | PROTECTOR F                    | RHA1162   |      | 12  | OPERATING INSTRUCTIONS (German/Italian) (MEXK/EA and MEZIXK/DI types)     | RRD1162   |
|      | 2   | PROTECTOR R                    | RHA1163   |      | 12  | OPERATING INSTRUCTIONS (English) (MEXK/EB and NBXK types)                 | RRB1153   |
|      | 3   | PROTECTOR F                    | RHA1164   |      | 13  | OPERATING INSTRUCTIONS (French/Dutch) (MEXK/EA type)                      | RRD1163   |
|      | 4   | PROTECTOR R                    | RHA1165   |      | 13  | OPERATING INSTRUCTIONS (French/Swedish/Spanish/Portuguese) (MEXK/EB type) | RRD1164   |
|      | 5   | MASTER CARTON                  | RHG1625   | NSP  | 14  | BATTERY (R03, AAA)                                                        | VEM-022   |
|      | 6   | SHEET                          | VHL1006   |      | 15  | POLY. BAG (0.03 × 230 × 340)                                              | Z21-038   |
|      | 7   | FM ANTENNA ASSY                | ADH1019   |      |     |                                                                           |           |
|      | 8   | LOOP ANTENNA ASSY              | ATB1012   |      |     |                                                                           |           |
|      | 9   | REMOTE CONTROL UNIT (CU-XR015) | AXD7030   |      |     |                                                                           |           |
|      | 10  | BATTERY COVER                  | AZA7050   |      |     |                                                                           |           |
|      | 11  | CONTROL CORD ASSY              | RDE1041   |      |     |                                                                           |           |



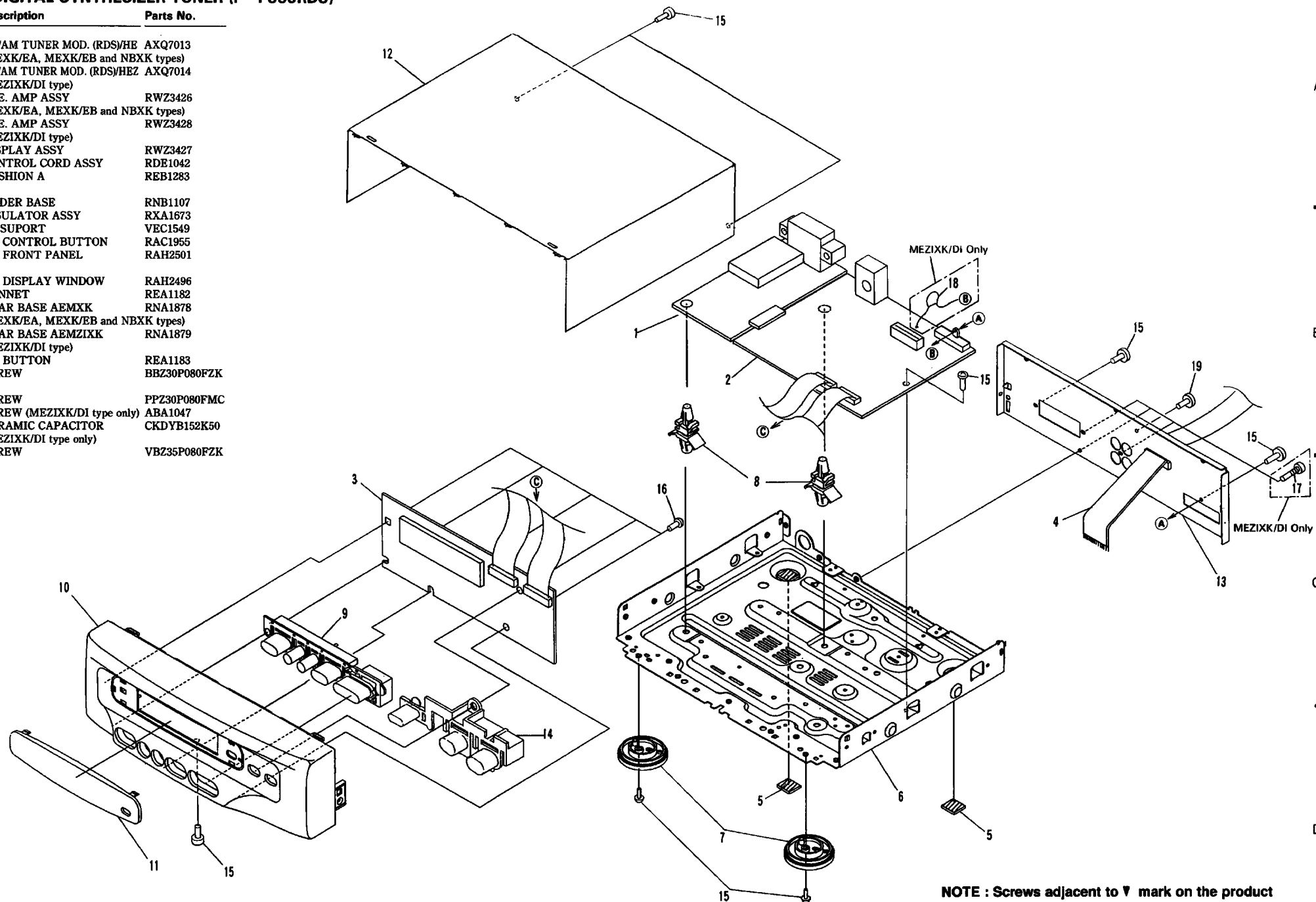


## 2.2 EXPLODED VIEWS

## 1. FM/AM DIGITAL SYNTHESIZER TUNER (F-P550RDS)

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

|       |    |                                                            |              |
|-------|----|------------------------------------------------------------|--------------|
| A     | 1  | FM/AM TUNER MOD. (RDS/HE (MEXK/EA, MEXK/EB and NBXK types) | AXQ7013      |
|       | 1  | FM/AM TUNER MOD. (RDS/HEZ (MEZIXK/DI type)                 | AXQ7014      |
|       | 2  | PRE. AMP ASSY (MEXK/EA, MEXK/EB and NBXK types)            | RWZ3426      |
|       | 2  | PRE. AMP ASSY (MEZIXK/DI type)                             | RWZ3428      |
|       | 3  | DISPLAY ASSY                                               | RWZ3427      |
| NSP   | 4  | CONTROL CORD ASSY                                          | RDE1042      |
|       | 5  | CUSHION A                                                  | REB1283      |
| NSP   | 6  | UNDER BASE                                                 | RNB1107      |
|       | 7  | INSULATOR ASSY                                             | RXA1673      |
| NSP   | 8  | PC SUPORT                                                  | VEC1549      |
|       | 9  | TU CONTROL BUTTON                                          | RAC1955      |
|       | 10 | TU FRONT PANEL                                             | RAH2501      |
| NSP   | 11 | TU DISPLAY WINDOW                                          | RAH2496      |
|       | 12 | BONNET                                                     | REA1182      |
| NSP   | 13 | REAR BASE AEMXK (MEXK/EA, MEXK/EB and NBXK types)          | RNA1878      |
| B NSP | 13 | REAR BASE AEMZIXK (MEZIXK/DI type)                         | RNA1879      |
|       | 14 | TU BUTTON                                                  | REA1183      |
|       | 15 | SCREW                                                      | BBZ30P080FZK |
|       | 16 | SCREW                                                      | PPZ30P080FMC |
|       | 17 | SCREW (MEZIXK/DI type only)                                | ABA1047      |
|       | 18 | CERAMIC CAPACITOR (MEZIXK/DI type only)                    | CKDYB152K50  |
|       | 19 | SCREW                                                      | VBZ35P080FZK |



NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

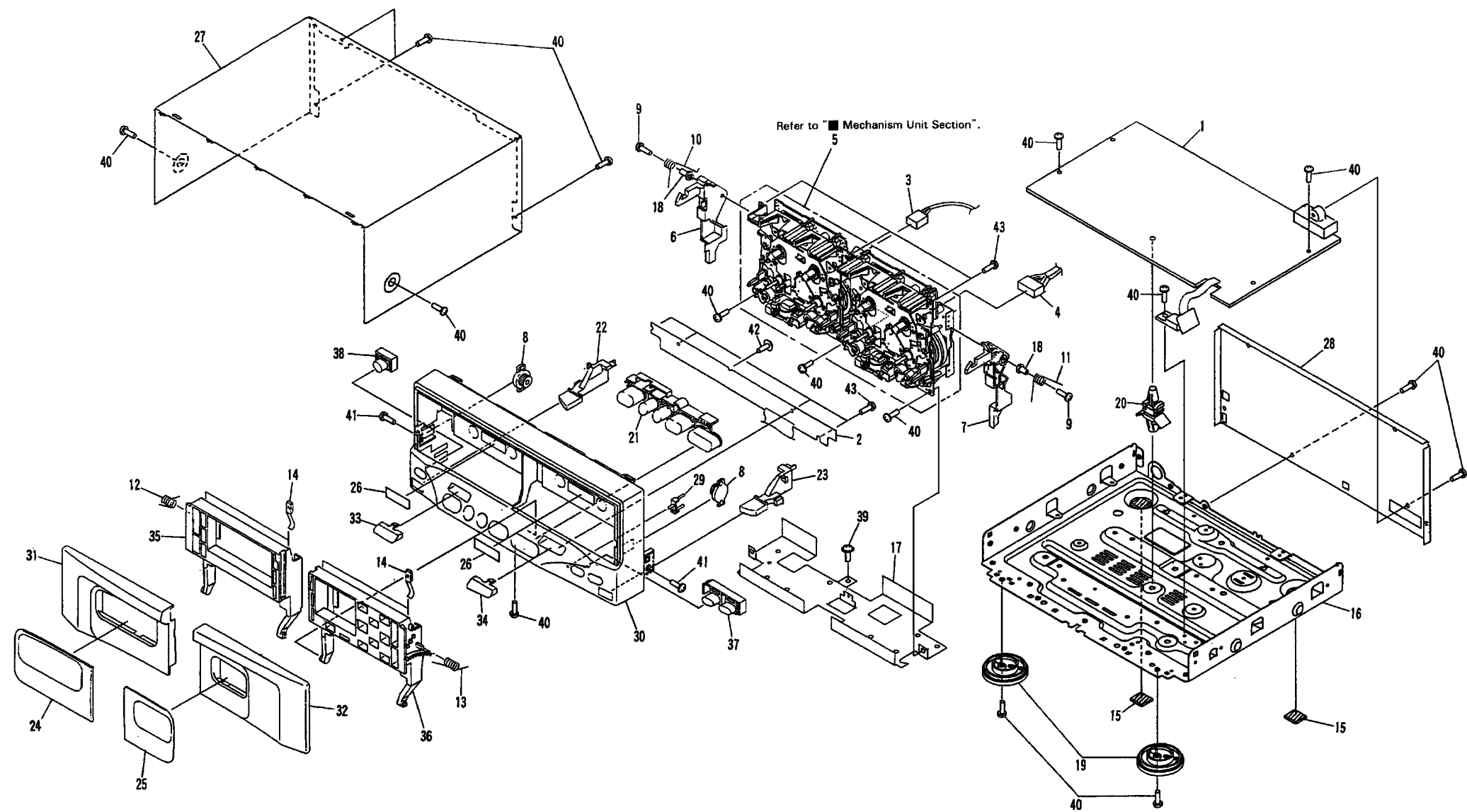
2. STEREO DOUBLE CASSETTE DECK (CT-P550WR)  
■ Exterior

A

B

C

D



A

B

C

D



| Mark | No. | Description       | Parts No.    |
|------|-----|-------------------|--------------|
| NSP  | 1   | TC. MAIN ASSY     | RWZ3440      |
|      | 2   | TC. FUNC ASSY     | RWZ3441      |
|      | 3   | CONNECTOR ASSY 3P | RKP1716      |
|      | 4   | CONNECTOR ASSY 5P | RKP1715      |
|      | 5   | MECHANISM UNIT    | RYM1235      |
|      | 6   | EJECT ARM L       | AMR7024      |
|      | 7   | EJECT ARM R       | AMR7025      |
|      | 8   | DAMPER ASSY       | AXA7021      |
|      | 9   | SCREW             | BSZ20P120FMC |
|      | 10  | EJECT SPRING (L)  | ABH7028      |
| NSP  | 11  | EJECT SPRING (R)  | ABH7029      |
|      | 12  | DOOR SPRING L     | RBH1422      |
|      | 13  | DOOR SPRING R     | RBH1423      |
|      | 14  | SPRING            | RBK1004      |
|      | 15  | CUSHION A         | REB1283      |
| NSP  | 16  | UNDER BASE        | RNB1107      |
| NSP  | 17  | SHIELD PLATE      | RNE1824      |
|      | 18  | COLLAR            | RNK2135      |
| NSP  | 19  | INSULATOR ASSY    | RXA1673      |
|      | 20  | PC SUPORT         | VEC1549      |
|      | 21  | TC CONTROL BUTTON | REA1163      |
|      | 22  | EJECT KNOB L      | RAC1952      |
|      | 23  | EJECT KNOB R      | RAC1953      |
|      | 24  | DOOR LENS L       | RAH2586      |
|      | 25  | DOOR LENS R       | RAH2587      |
| NSP  | 26  | INDICATOR         | REE1019      |
|      | 27  | BONNET            | REA1180      |
|      | 28  | REAR BASE AEM     | RNA1872      |
|      | 29  | LED LENS          | RNK2128      |
|      | 30  | TC FRONT PANEL    | REA1190      |
|      | 31  | DOOR PANEL L      | REA1158      |
|      | 32  | DOOR PANEL R      | REA1159      |
|      | 33  | AZIMUTH COVER L   | REA1160      |
|      | 34  | AZIMUTH COVER R   | REA1161      |
|      | 35  | DOOR POCKET L     | RNK2124      |
|      | 36  | DOOR POCKET R     | RNK2125      |
|      | 37  | TC BUTTON A       | REA1164      |
|      | 38  | TC BUTTON B       | REA1165      |
|      | 39  | SCREW             | BBZ30P060FMC |
|      | 40  | SCREW             | BBZ30P080FZK |
|      | 41  | SCREW             | CBZ30P080FZK |
|      | 42  | SCREW             | IPZ30P080FCU |
|      | 43  | SCREW             | PPZ30P080FMC |



■ Mechanism Unit Section

● Mechanism unit I and II (1/2)

| Mark | No. | Description   | Parts No.    |
|------|-----|---------------|--------------|
| NSP  | 1   | ASSY MOTOR    | RXM1080      |
|      | 2   | JUMPER WIRE   | RDD1012      |
|      | 3   | BRACKET MOTOR | RNE1830      |
|      | 4   | SPACER        | RNK1822      |
|      | 5   | SCREW         | RBA1100      |
|      | 6   | SCREW         | PCZ20P040FMC |

● Mechanism unit I and II (2/2)

| Mark | No. | Description           | Parts No. |
|------|-----|-----------------------|-----------|
|      | 1   | ASSY HOLDER HEAD (*1) | RXA1400   |
|      | 1   | ASSY HOLDER HEAD (*2) | RXA1664   |
|      | 2   | FRAME HEAD            | RNK1715   |
|      | 3   | LEVER HEAD            | RNK1716   |
|      | 4   | SPRING AZIMUTH        | RBK1006   |
|      | 5   | ASSY ARM ASSIST       | RXA1401   |
|      | 6   | GEAR ARM HEAD         | RNK1717   |
|      | 7   | SPRING CASSETTE       | RBK1039   |
|      | 8   | EJECT LOCK            | RNK1718   |
|      | 9   | CAP REEL              | RNK1719   |
|      | 10  | ASSY PINCH ARM L      | RXA1403   |
|      | 11  | CHASSIS HEAD          | RNE1437   |
|      | 12  | ASSY PINCH ARM R      | RXA1404   |
|      | 13  | ARM PLAY L            | RNK1866   |
|      | 14  | GEAR PLAY             | RNK1867   |
|      | 15  | ARM PLAY R            | RNK1868   |
|      | 16  | CHASSIS OS            | RXA1411   |
|      | 17  | ASSY SUB REEL L       | RXA1407   |
|      | 18  | SOLENOID              | RXP1020   |
|      | 19  | WIRE                  | RDC1006   |
|      | 20  | ARM RVS               | RNK1721   |
|      | 21  | GEAR FF               | RNK1723   |
|      | 22  | ASSY ARM FR           | RXA1412   |
|      | 23  | ASSY PULLEY FR        | RXA1413   |
|      | 24  | BELT FR               | REB1158   |
|      | 25  | METAL                 | RNG1048   |
|      | 26  | ASSY FLYWHEEL L (*1)  | RXA1666   |
|      | 26  | ASSY FLYWHEEL L2 (*2) | RXA1668   |
|      | 27  | METAL                 | RNG1005   |
|      | 28  | ARM BRAKE             | RNK1724   |
|      | 29  | ASSY SUB REEL R       | RXA1408   |
|      | 30  | ARM TRIGER            | RNK1722   |
|      | 31  | GEAR CAM              | RNK1725   |
|      | 32  | METAL                 | RNG1049   |
|      | 33  | ASSY FLYWHEEL R (*1)  | RXA1667   |
|      | 33  | ASSY FLYWHEEL R2 (*2) | RXA1669   |
|      | 34  | METAL                 | RNG1004   |
|      | 35  | .....                 |           |

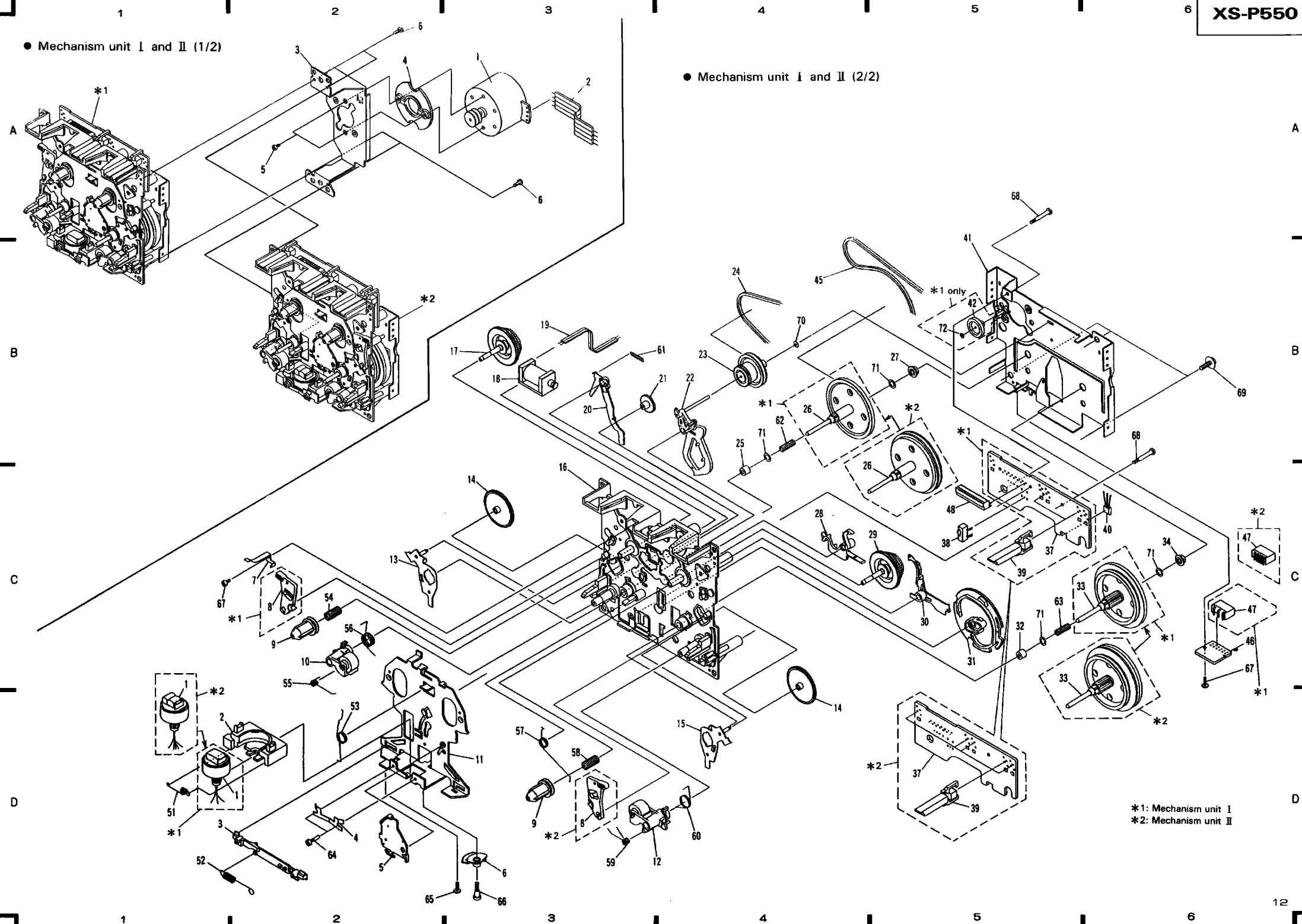
| Mark | No. | Description         | Parts No.    |
|------|-----|---------------------|--------------|
|      | 36  | .....               |              |
|      | 37  | P. C. BOARD         | RNP1610      |
|      | 38  | SWITCH MODE         | RSN1020      |
|      | 39  | SWITCH (LEAF)       | RSN1019      |
|      | 40  | HALL IC             | DN6851A      |
|      | 41  | ASSY BRACKET (*1)   | RXA1665      |
|      | 41  | BRACKET FW (*2)     | RNE1438      |
|      | 42  | PULLEY (*1 only)    | RNK2132      |
|      | 43  | .....               |              |
|      | 44  | .....               |              |
|      | 45  | BELT MAIN (*1)      | REB1273      |
|      | 45  | BELT MAIN (*2)      | REB1272      |
|      | 46  | P. C. BOARD         | RNP1348      |
|      | 47  | HOUSING (*1)        | RKP1396      |
|      | 47  | HOUSING (*2)        | RKP1397      |
|      | 48  | CONNECTOR (*1)      | RKP1713      |
|      | 48  | CONNECTOR (*2)      | RKP1714      |
|      | 49  | .....               |              |
|      | 50  | .....               |              |
|      | 51  | SPRING              | RBH1282      |
|      | 52  | SPRING              | RBH1283      |
|      | 53  | SPRING              | RBH1284      |
|      | 54  | SPRING              | RBH1286      |
|      | 55  | SPRING              | RBH1288      |
|      | 56  | SPRING              | RBH1291      |
|      | 57  | SPRING              | RBH1285      |
|      | 58  | SPRING              | RBH1287      |
|      | 59  | SPRING              | RBH1289      |
|      | 60  | SPRING              | RBH1290      |
|      | 61  | SPRING              | RBH1292      |
|      | 62  | FWP SP (SPRING)     | RBH1061      |
|      | 63  | SPRING              | RBH1325      |
|      | 64  | SCREW (FOR AZIMUTH) | RBA1023      |
|      | 65  | SCREW               | RBA1027      |
|      | 66  | SCREW               | RBA1030      |
|      | 67  | SCREW               | PCZ20P040FMC |
|      | 68  | SCREW               | RBA1093      |
|      | 69  | SCREW               | RBA1094      |
|      | 70  | WASHER              | RBH1046      |
|      | 71  | WASHER              | WA26D047D013 |
|      | 72  | WASHER (*1 only)    | WT13D030D025 |

Note)  
\*1: Mechanism Unit I  
\*2: Mechanism Unit II



● Mechanism unit I and II (1/2)

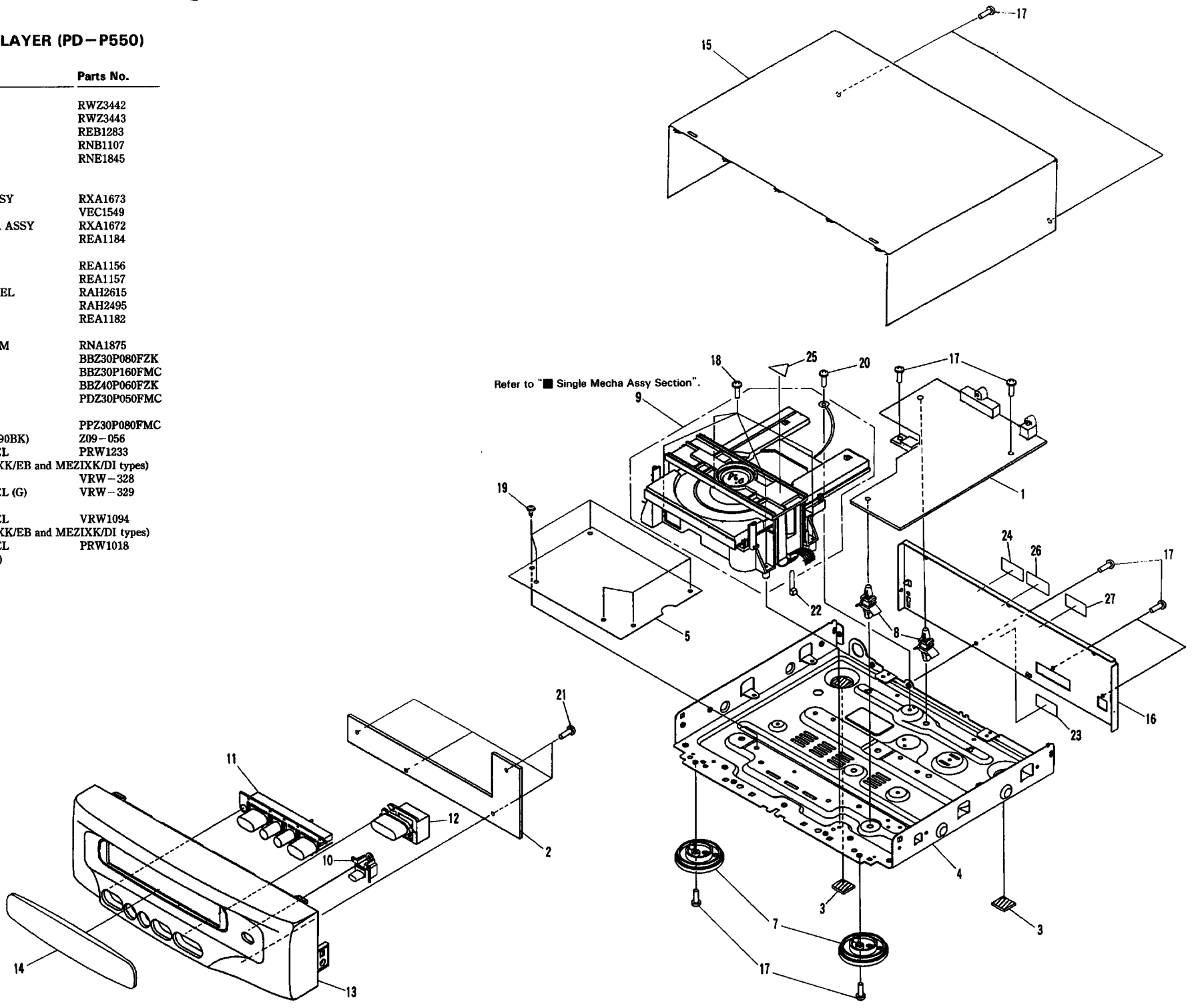
● Mechanism unit I and II (2/2)





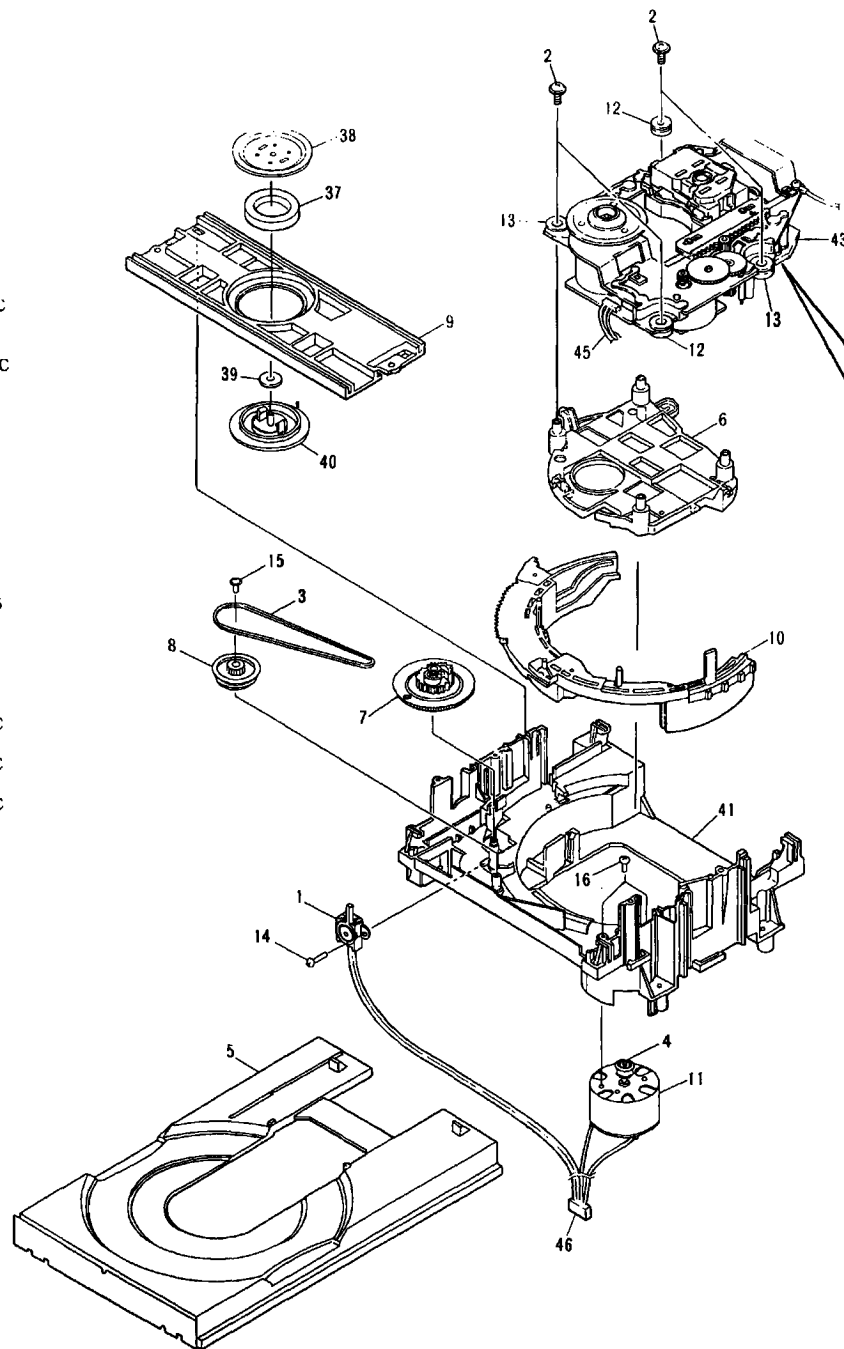
3. COMPACT DISC PLAYER (PD-P550)

| Exterior |     |                                                         |              |
|----------|-----|---------------------------------------------------------|--------------|
| Mark     | No. | Description                                             | Parts No.    |
| A        | 1   | CD. MAIN ASSY                                           | RWZ3442      |
|          | 2   | CD. FUNC ASSY                                           | RWZ3443      |
|          | 3   | CUSHION A                                               | REB1283      |
|          | 4   | UNDER BASE                                              | RNB1107      |
|          | 5   | SUB CHASSIS K                                           | RNE1845      |
| NSP      | 6   | .....                                                   |              |
|          | 7   | INSULATOR ASSY                                          | RXA1673      |
|          | 8   | PC SUPORT                                               | VEC1549      |
|          | 9   | SINGLE MECHA ASSY                                       | RXA1672      |
|          | 10  | CD BUTTTON A                                            | REA1184      |
| NSP      | 11  | CD CONTROL A                                            | REA1156      |
|          | 12  | CD CONTROL B                                            | REA1157      |
|          | 13  | CD FRONT PANEL                                          | RAH2615      |
|          | 14  | NAME PLATE                                              | RAH2495      |
|          | 15  | BONNET                                                  | REA1182      |
| NSP      | 16  | REAR BASE AEM                                           | RNA1875      |
|          | 17  | SCREW                                                   | BBZ30P080FZK |
|          | 18  | SCREW                                                   | BBZ30P160FMC |
|          | 19  | SCREW                                                   | BBZ40P060FZK |
|          | 20  | SCREW                                                   | PDZ30P050FMC |
| NSP      | 21  | SCREW                                                   | PPZ30P080FMC |
|          | 22  | BINDER (SKB-90BK)                                       | Z09-056      |
|          | 23  | CAUTION LABEL<br>(MEXK/EA, MEXK/EB and MEZIXK/DI types) | PRW1233      |
|          | 24  | LABEL (F)                                               | VRW-328      |
|          | 25  | CAUTION LABEL (G)                                       | VRW-329      |
| NSP      | 26  | CAUTION LABEL<br>(MEXK/EA, MEXK/EB and MEZIXK/DI types) | VRW1094      |
|          | 27  | CAUTION LABEL<br>(NBXK type only)                       | PRW1018      |



## Single Mecha Assy Section

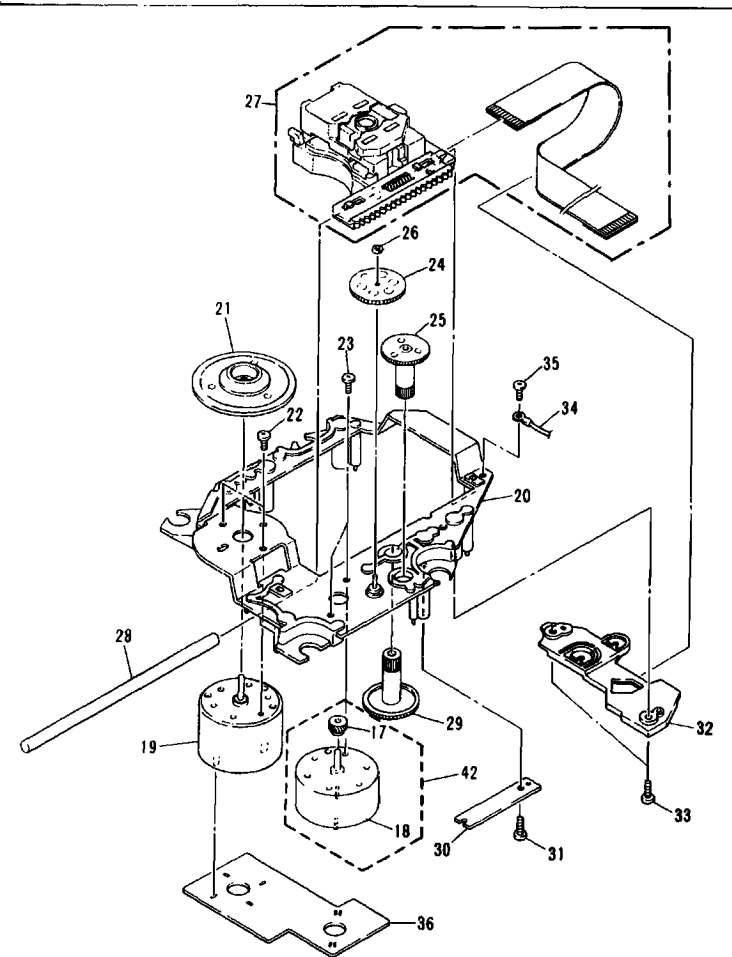
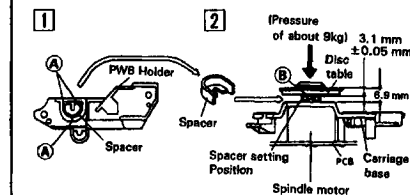
| Mark | No. | Description                | Parts No.    |
|------|-----|----------------------------|--------------|
| A    | 1   | LEVER SWITCH (CLAMP, S601) | DSK1003      |
|      | 2   | FLOAT SCREW                | PBA1048      |
|      | 3   | RUBBER BELT                | PEB1193      |
|      | 4   | MOTOR PULLEY               | PNW1634      |
|      | 5   | TRAY                       | PNW2455      |
|      | 6   | FROAT BASE                 | PNW2032      |
|      | 7   | DRIVE GEAR 2               | PNW2369      |
|      | 8   | GEAR PULLEY                | PNW2034      |
|      | 9   | CLAMPER BASE               | PNW2375      |
|      | 10  | CLAMP CAM                  | PNW2364      |
| NSP  | 11  | DC MOTOR/0.75W (LOADING)   | PXM1010      |
|      | 12  | FLOAT RUBBER B             | REB1287      |
|      | 13  | FLOAT RUBBER G             | REB1288      |
|      | 14  | SCREW                      | BPZ26P100FMC |
|      | 15  | SCREW                      | Z39-019      |
|      | 16  | SCREW                      | PMZ26P040FMC |
|      | 17  | PINION GEAR                | PNW2055      |
|      | 18  | DC MOTOR (CARRIAGE)        | PXM1027      |
|      | 19  | DC MOTOR ASSY (SPINDLE)    | PEA1235      |
|      | 20  | CARRIAGE BASE              | PNW2445      |
| B    | 21  | DISC TABLE                 | PNW1608      |
|      | 22  | SCREW                      | JFZ20P030FNI |
|      | 23  | SCREW                      | JFZ17P025FZK |
|      | 24  | GEAR 3                     | PNW2054      |
|      | 25  | GEAR 2                     | PNW2053      |
|      | 26  | WASHER                     | WT12D032D025 |
|      | 27  | PICKUP ASSY                | PEA1291      |
|      | 28  | GUIDE BAR                  | PLA1094      |
|      | 29  | GEAR 1                     | PNW2052      |
|      | 30  | GEAR STOPPER               | PNB1303      |
| NSP  | 31  | SCREW                      | BPZ20P060FMC |
|      | 32  | PWB HOLDER                 | PNW2057      |
|      | 33  | SCREW                      | BPZ26P100FMC |
|      | 34  | EARTH LEAD UNIT            | PDF1104      |
|      | 35  | SCREW                      | BBZ26P060FMC |
| C    | 36  | MECHANISM BOARD ASSY       | PWX1192      |
|      | 37  | CLAMP MAGNET               | PMF1014      |
|      | 38  | YOKE                       | PNB1216      |
|      | 39  | H RUBBER                   | PEB1249      |
|      | 40  | CLAMPER S                  | PNW1609      |
| NSP  | 41  | LOADING BASE               | PNW2376      |
|      | 42  | DC MOTOR ASSY (CARRIAGE)   | PEA1246      |
|      | 43  | SERVO MECHANISM ASSY SL    | AXA7017      |
|      | 44  | CONNECTOR ASSY (4P)        | RDE1043      |
|      | 45  | CONNECTOR ASSY (5P)        | PDE1239      |
|      | 46  | CONNECTOR ASSY (5P)        | PDE1239      |



## ● How to install the disc table

[1] Use nipper or other tool to cut the three sections marked (A) figure [1]. Then remove the spacer.

[2] While supporting the spindle motor shaft with the stopper, put spacer on top of the motor base (angled so it doesn't touch section (B)), and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



4. STEREO AMPLIFIER (A-P550)

A

B

C

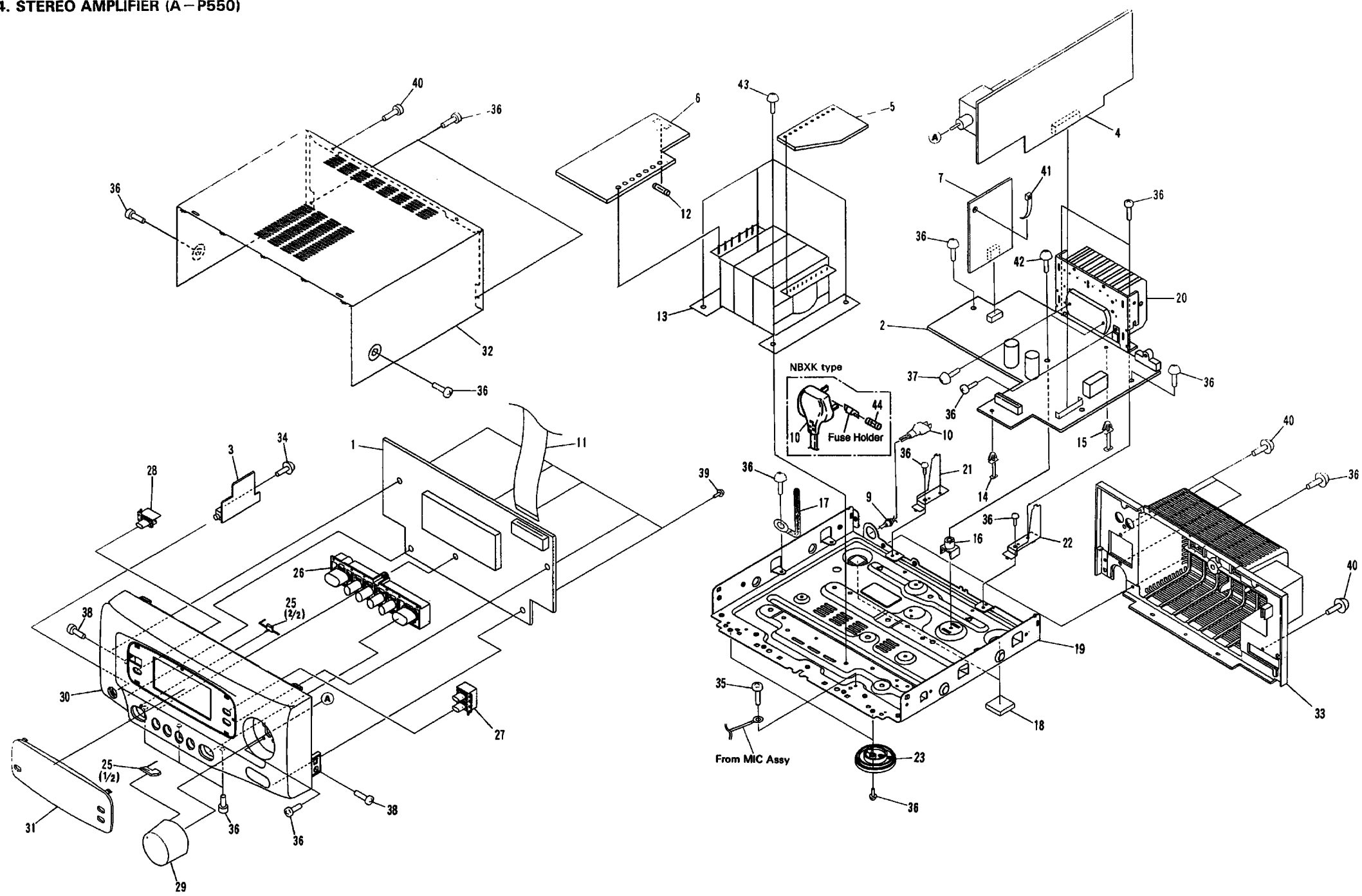
D

A

B

C

D



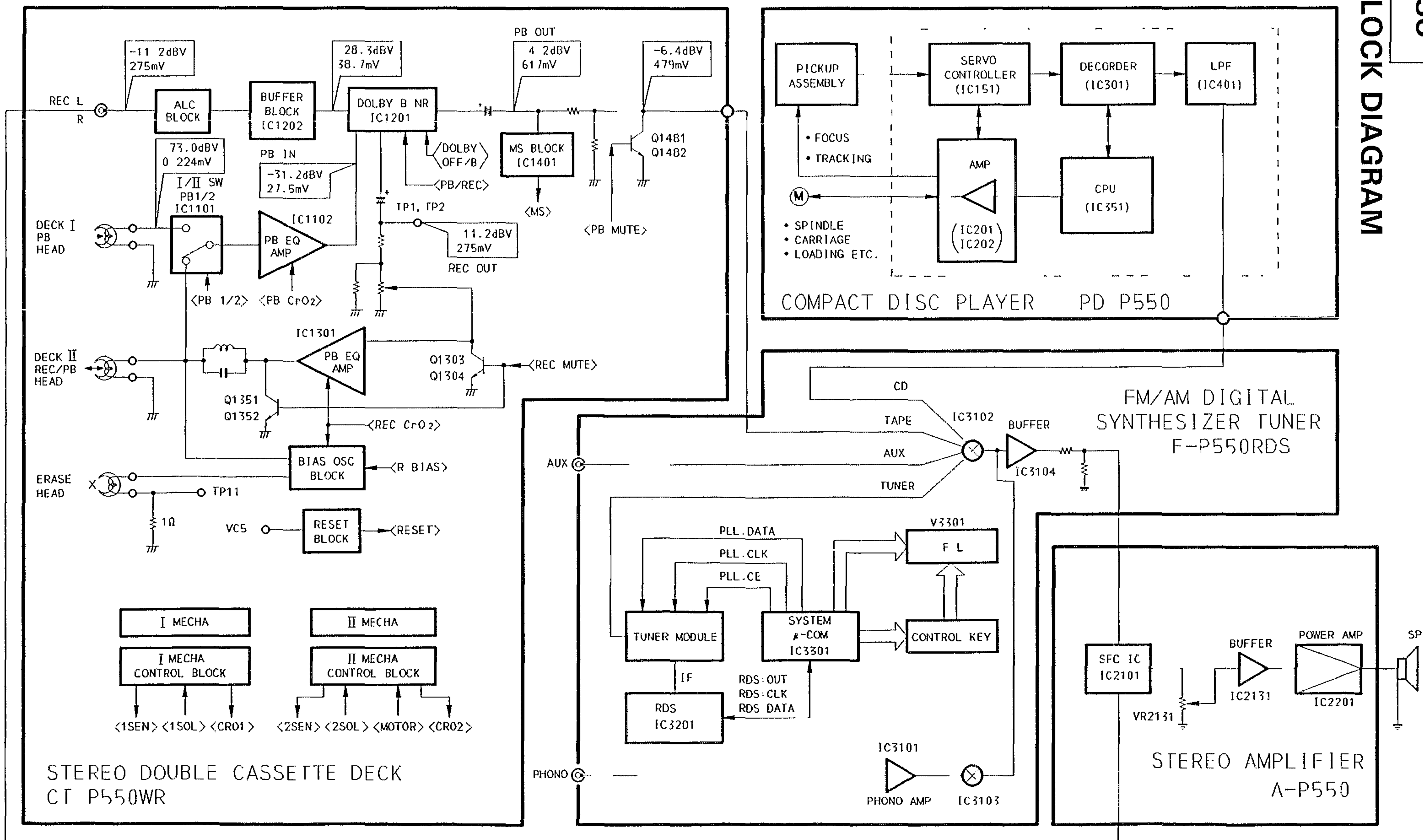


| Mark | No. | Description                            | Parts No.    |
|------|-----|----------------------------------------|--------------|
|      | 1   | DISPLAY ASSY                           | RWZ3411      |
|      | 2   | MAIN ASSY                              | RWZ3412      |
|      |     | (MEXK/EA, MEXK/EB and NBXK types)      |              |
|      | 2   | MAIN ASSY (MEZIXK/DI type)             | RWZ3418      |
| NSP  | 3   | H.P ASSY                               | RWZ3413      |
|      |     | (MEXK/EA, MEXK/EB and NBXK types)      |              |
| NSP  | 3   | H.P ASSY (MEZIXK/DI type)              | RWZ3419      |
|      | 4   | SFC ASSY                               | RWZ3414      |
|      |     | (MEXK/EA, MEXK/EB and NBXK types)      |              |
|      | 4   | SFC ASSY (MEZIXK/DI type)              | RWZ3420      |
| NSP  | 5   | CONNECT ASSY                           | RWZ3415      |
|      |     | (MEXK/EA, MEXK/EB and NBXK types)      |              |
| NSP  | 5   | CONNECT ASSY                           | RWZ3421      |
|      |     | (MEZIXK/DI type)                       |              |
|      | 6   | AC. CONNECT ASSY                       | RWZ3416      |
|      |     | (MEXK/EA, MEXK/EB and NBXK types)      |              |
|      | 6   | AC. CONNECT ASSY                       | RWZ3422      |
|      |     | (MEZIXK/DI type)                       |              |
| NSP  | 7   | SP. OUT ASSY                           | RWZ3417      |
|      |     | (MEXK/EA, MEXK/EB and NBXK types)      |              |
| NSP  | 7   | SP. OUT ASSY                           | RWZ3423      |
|      |     | (MEZIXK/DI type)                       |              |
|      | 8   | .....                                  |              |
| △    | 9   | STRAIN RELEIF                          | CM-22B       |
| △    | 10  | POWER CORD WITH PLUG                   | PDG1003      |
|      |     | (MEXK/EA, MEXK/EB and MEZIXK/DI types) |              |
| △    | 10  | POWER CORD WITH PLUG                   | PDG1055      |
|      |     | (NBXK type)                            |              |
|      | 11  | 22P F • F • C/30V                      | RDD1323      |
| △    | 12  | FUSE (T1A, FU2001)                     | AEK1054      |
| △    | 13  | POWER TRANSFORMER                      | RTT1285      |
| NSP  | 14  | PCB SPACER (3 × 8)                     | AEC1371      |
|      | 15  | PCB SPACER (3 × 12)                    | AEC1372      |
| NSP  | 16  | PCB MOULD                              | AMR2115      |
| NSP  | 17  | CORD HOLDER                            | DNF1128      |
| NSP  | 18  | CUSHION A                              | REB1283      |
| NSP  | 19  | UNDER BASE                             | RNB1107      |
| NSP  | 20  | HEAT SINK                              | RNE1825      |
| NSP  | 21  | JOINT L                                | RNE1826      |
| NSP  | 22  | JOINT R                                | RNE1827      |
|      | 23  | INSULATOR ASSY                         | RXA1673      |
|      | 24  | .....                                  |              |
|      | 25  | STA. LENS                              | AAK7118      |
|      | 26  | AM CONTROL BUTTON                      | RAC1956      |
|      | 27  | AM BUTTON A                            | REA1166      |
|      | 28  | AM BUTTON B                            | REA1167      |
|      | 29  | VOLUME KNOB                            | AAB7046      |
|      | 30  | AM FRONT PANEL                         | RAH2502      |
|      | 31  | AM DISPLAY WINDOW                      | RAH2503      |
|      | 32  | BONNET                                 | REA1181      |
|      | 33  | REAR PANEL                             | RNK2131      |
|      | 34  | SCREW                                  | ABA1005      |
|      | 35  | SCREW                                  | BBZ30P060FMC |

| Mark | No. | Description       | Parts No.    |
|------|-----|-------------------|--------------|
|      | 36  | SCREW             | BBZ30P080FZK |
|      | 37  | SCREW             | BBZ30P160FMC |
|      | 38  | SCREW             | CBZ30P080FZK |
|      | 39  | SCREW             | PPZ30P080FMC |
|      | 40  | SCREW             | PPZ30P100FZK |
|      | 41  | BINDER (SKB-90BK) | Z09-056      |
|      | 42  | SCREW             | ABA1024      |
|      | 43  | SCREW             | ABA1184      |
| △    | 44  | FUSE (T5A)        | PEK1003      |



## 3. BLOCK DIAGRAM

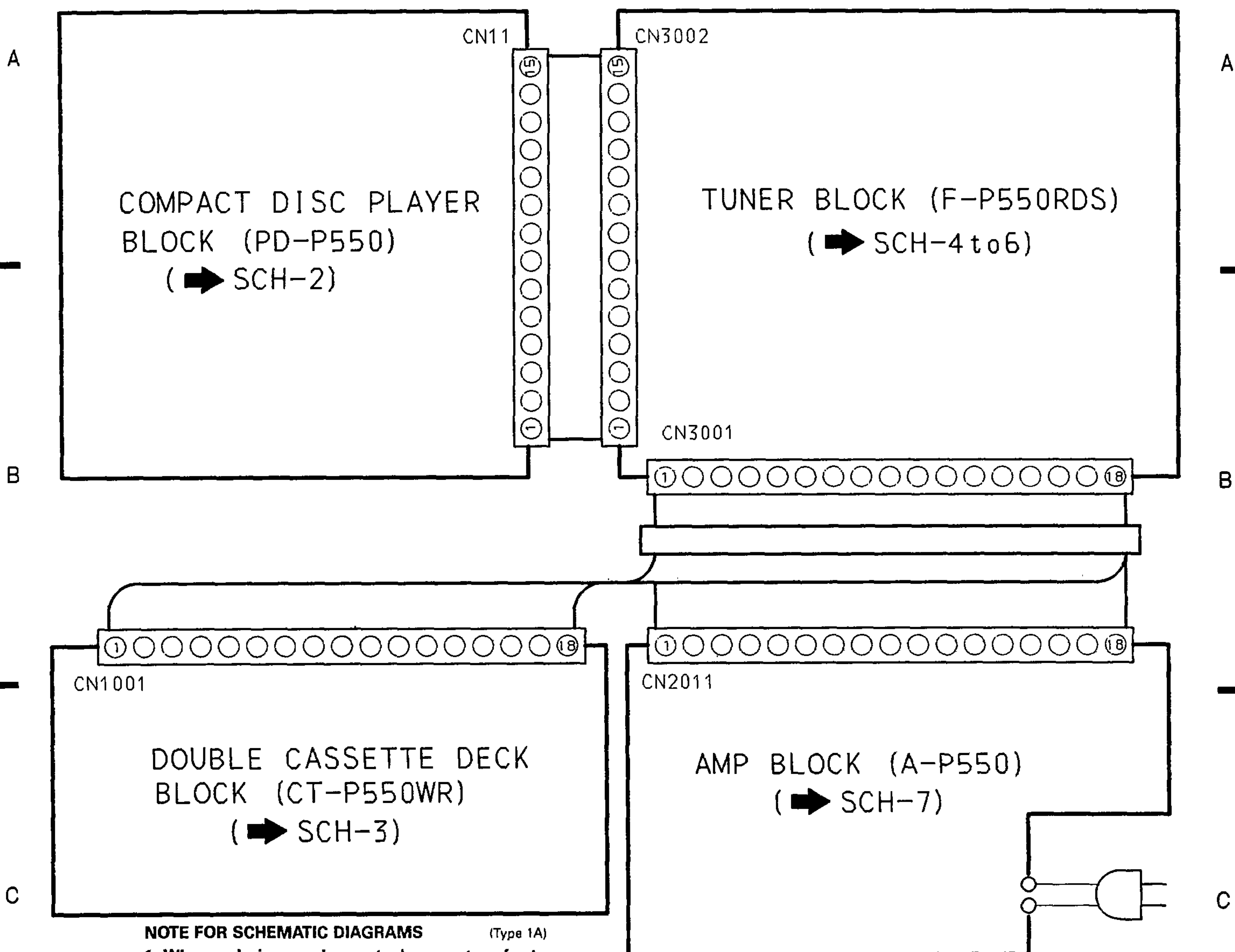




# 4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

## 4.1 OVERALL SCHEMATIC DIAGRAM

SCH-1



### NOTE FOR SCHEMATIC DIAGRAMS

(Type 1A)

- When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".
- Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
- RESISTORS:**  
Unit: k: k $\Omega$ , M: M $\Omega$ , or  $\Omega$  unless otherwise noted.  
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.  
Tolerance: (F):  $\pm 1\%$ , (G):  $\pm 2\%$ , (K):  $\pm 10\%$ , (M):  $\pm 20\%$  or  $\pm 5\%$  unless otherwise noted.
- CAPACITORS:**  
Unit: p: pF or  $\mu$ F unless otherwise noted.  
Ratings: capacitor ( $\mu$ F)/ voltage (V) unless otherwise noted.  
Rated voltage: 50V except for electrolytic capacitors.
- COILS:**  
Unit: m: mH or  $\mu$ H unless otherwise noted.
- VOLTAGE AND CURRENT:**  

V : Signal voltage at rated output.  
or - V :  
DC voltage (V) at no input signal unless otherwise noted.  
Value in ( ) is DC voltage at rated power.  
mA or - mA :  
DC current at no input signal unless otherwise noted.
- OTHERS:**
  - ⊙ or ○ : Adjusting point.
  - ⋄ : Measurement point.
  - The  $\Delta$  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.
- 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):

- |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>F-P550RDS<br/>DISPLAY ASSY</li> <li>S3301 - (TUNING)</li> <li>S3302 + (TUNING)</li> <li>S3303 STATION</li> <li>S3304 FUNCTION</li> <li>S3304 FUNCTION (TUNER → TAPE → CD → PHONO-VIDEO)</li> <li>S3306 AM</li> <li>S3307 DISPLAY</li> <li>S3308 STATION MEMORY</li> <li>S3309 MONO</li> </ul> | <ul style="list-style-type: none"> <li>PD-P550<br/>CD.FUNC ASSY</li> <li>S501 <math>\Rightarrow</math></li> <li>S502 <math>\Rightarrow</math></li> <li>S503 <math>\Rightarrow</math></li> <li>S504 <math>\Rightarrow</math></li> <li>S505 <math>\Rightarrow</math></li> <li>S506 PGM/EDIT</li> <li>S507 RANDOM</li> </ul>                                                                                   |
| <ul style="list-style-type: none"> <li>A-P550<br/>DISPLAY ASSY</li> <li>S2501 WAKE-UP</li> <li>S2502 REC (TIMER)</li> <li>S2503 SFC MODE</li> <li>S2504 ST WIDE</li> <li>S2505 P. BASS</li> <li>S2506 + (CLOCK)</li> <li>S2507 - (CLOCK)</li> <li>S2508 POWER</li> <li>S2509 SLEEP</li> </ul>                                        | <ul style="list-style-type: none"> <li>CT-P550WR<br/>TC.FUNC ASSY</li> <li>S1901 <math>\Rightarrow</math></li> <li>S1902 <math>\Rightarrow</math></li> <li>S1903 REC/PAUSE</li> <li>S1904 SELECTOR (DECK I • II)</li> <li>S1905 <math>\Rightarrow</math></li> <li>S1906 <math>\Rightarrow</math></li> <li>S1907 <math>\Rightarrow</math></li> <li>S1951 ASES/COPY</li> <li>S1952 DOLBY NR ON/OFF</li> </ul> |

OVERALL SCHEMATIC DIAGRAM

SCH-1

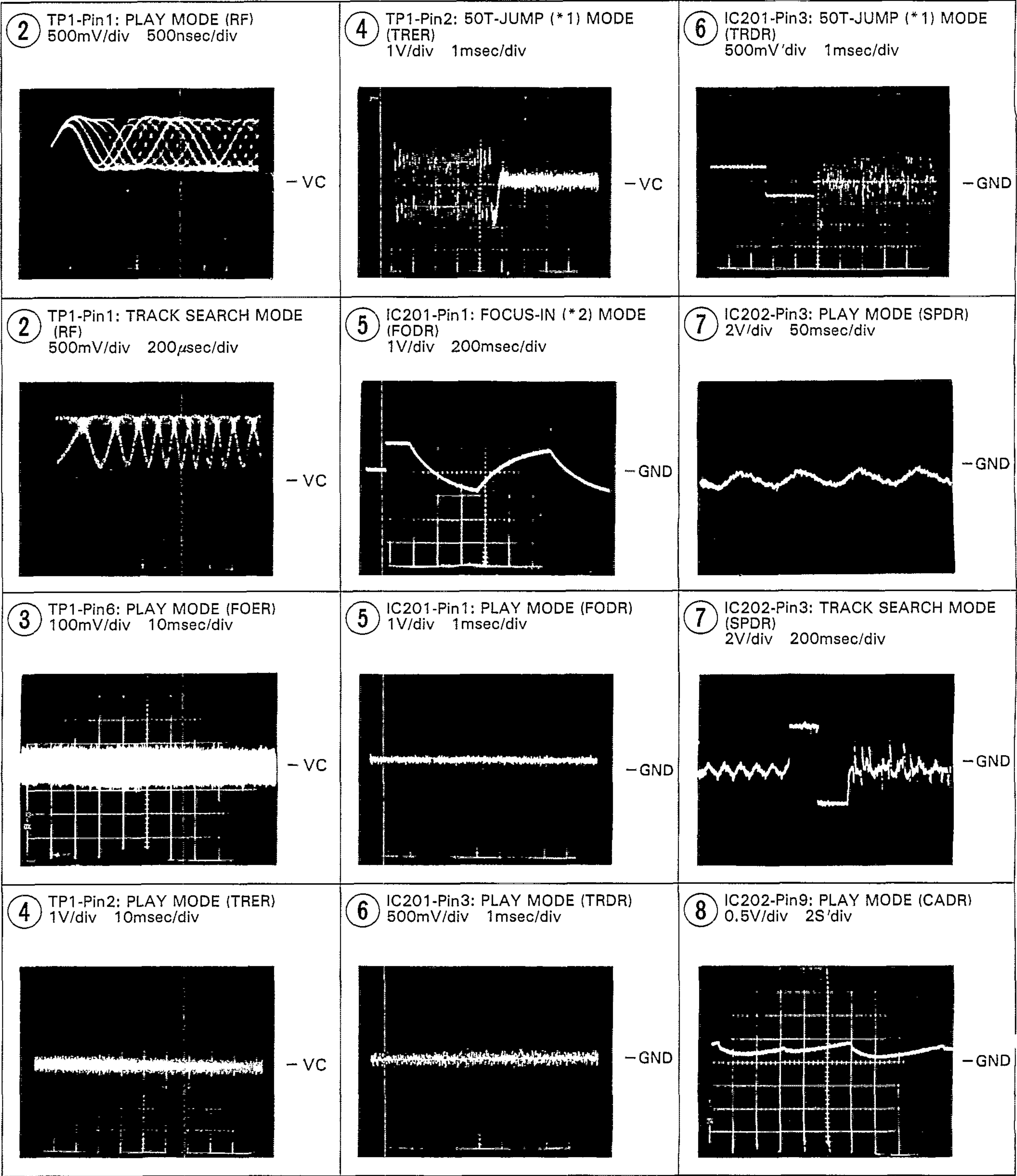


4.2 COMPACT DISC PLAYER (PD – P550)  
■ CD. MAIN ASSY, CD. FUNC ASSY AND SINGLE MECHA ASSY

Waveforms

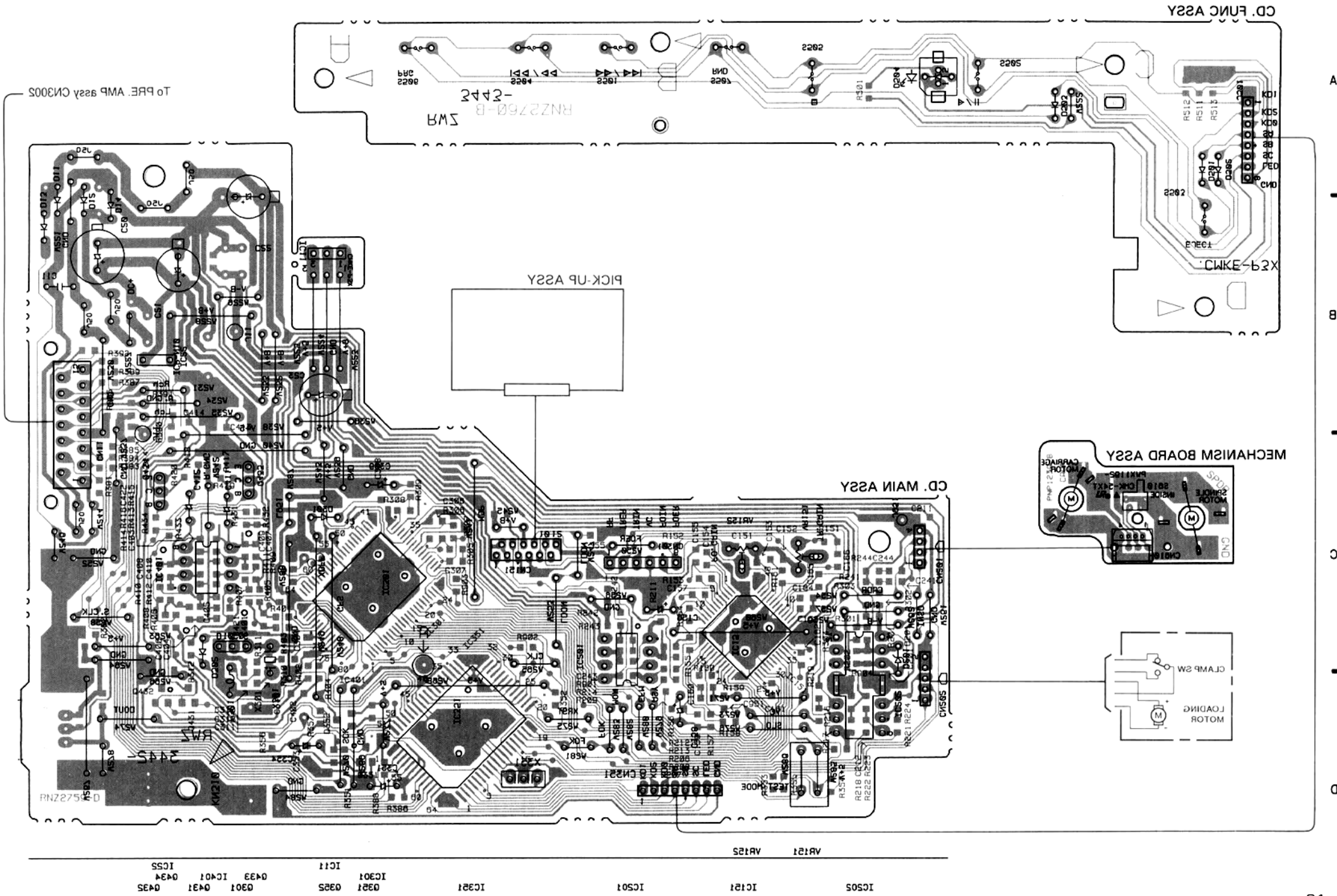
Note: The encircled numbers denote measuring point in the schematic diagram.

\*1 50T-JUMP: After switching to the pause mode, press the manual search key.  
\*2 FOCUS-IN: Press the key without loading a disc.





• This diagram is viewed from the foil side.

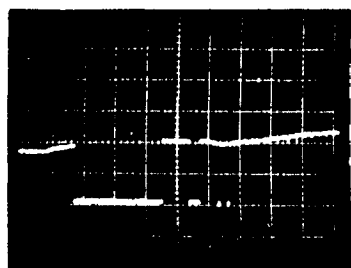


To PRE. AMP assy CN3002



C

- ⑧ IC202-Pin9: TRACK SEARCH MODE (CADR)  
2V/div 200msec/div



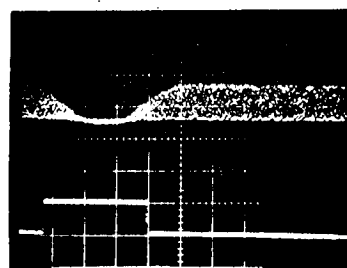
-GND

- ⑪ IC301-Pin70: PLAY MODE (1kHz) (LPWM) (D/A DATA OUT)  
2V/div 500μsec/div



-GND

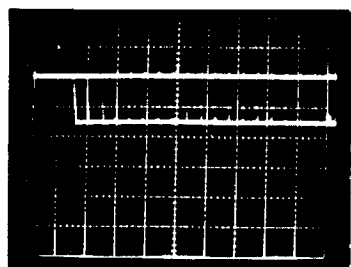
- ②④ : PLAY MODE  
Upper: TP1-Pin1 (RF) 1V/div  
Lower: IC151-Pin30 (DFCT)  
5V/div 200μsec/div



-GND

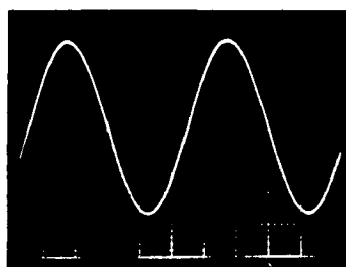
-GND

- ⑨ IC151-Pin32: PLAY MODE (EFM)  
2V/div 500nsec/div



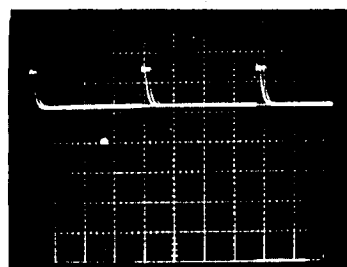
-GND

- ②① CN11-Pin8: PLAY MODE (1kHz) (CDL)  
1V/div 200μsec/div



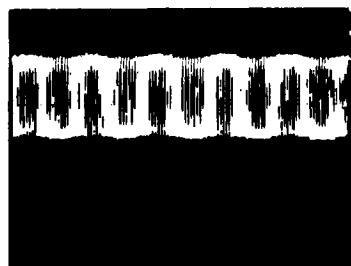
-GND

- ③③ IC301-Pin25: PLAY MODE (MDP)  
2V/div 2μsec/div



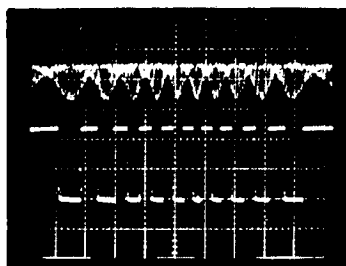
-GND

- ⑩ IC301-Pin69: PLAY MODE (1kHz) (NLPWM) (D/A DATA OUT)  
2V/div 500μsec/div



-GND

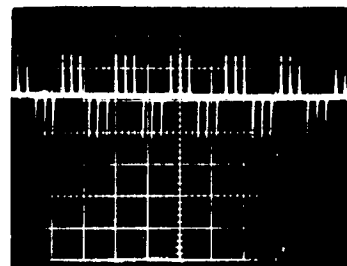
- ②③ : TRACK SEARCH MODE  
Upper: TP1-Pin1 (RF) 1V/div  
Lower: IC151-Pin29 (MIRR)  
2V/div 200μsec/div



-VC

-GND

- ⑤③ IC301-Pin31: PLAY MODE (PCO)  
2V/div 10μsec/div

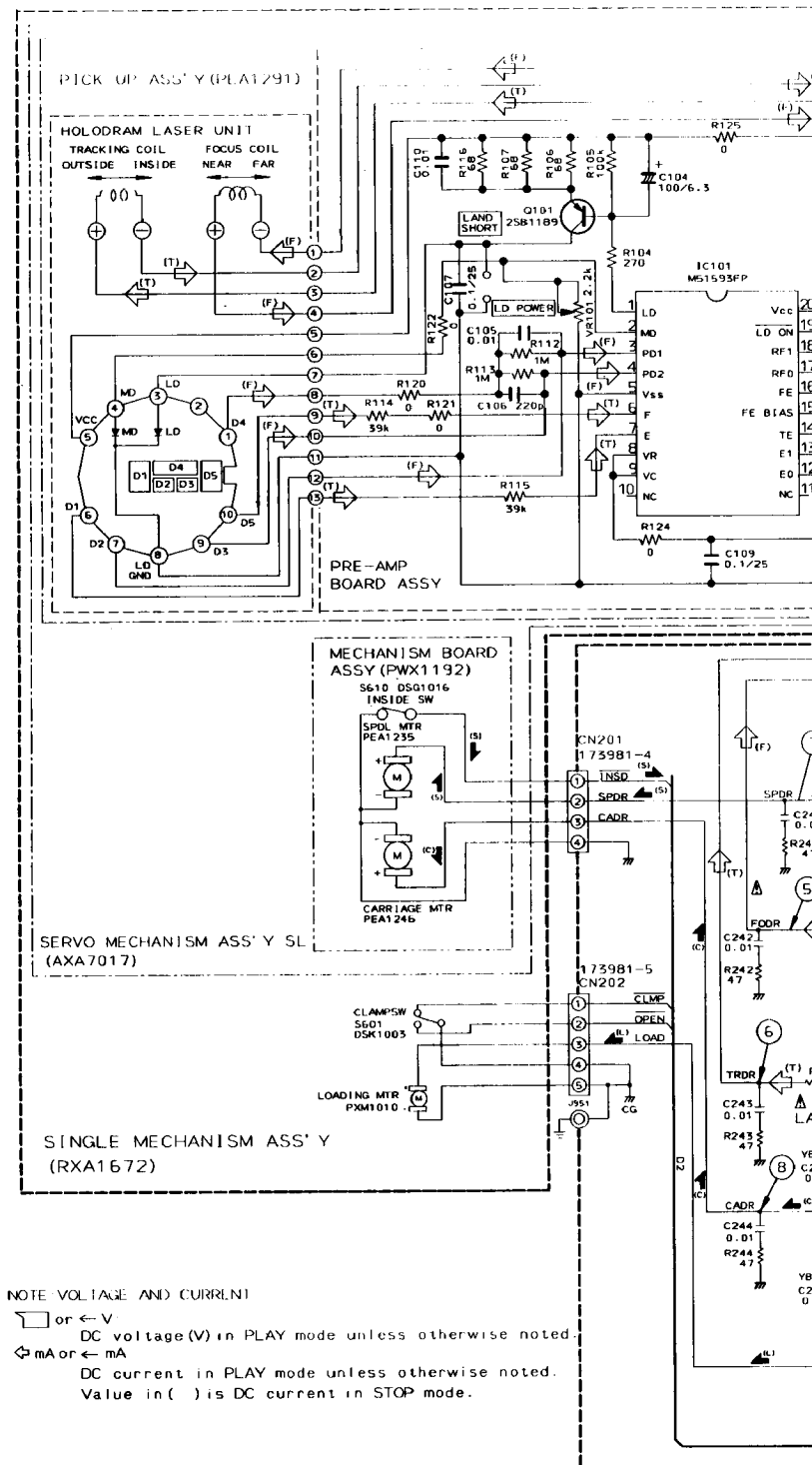


-GND

D

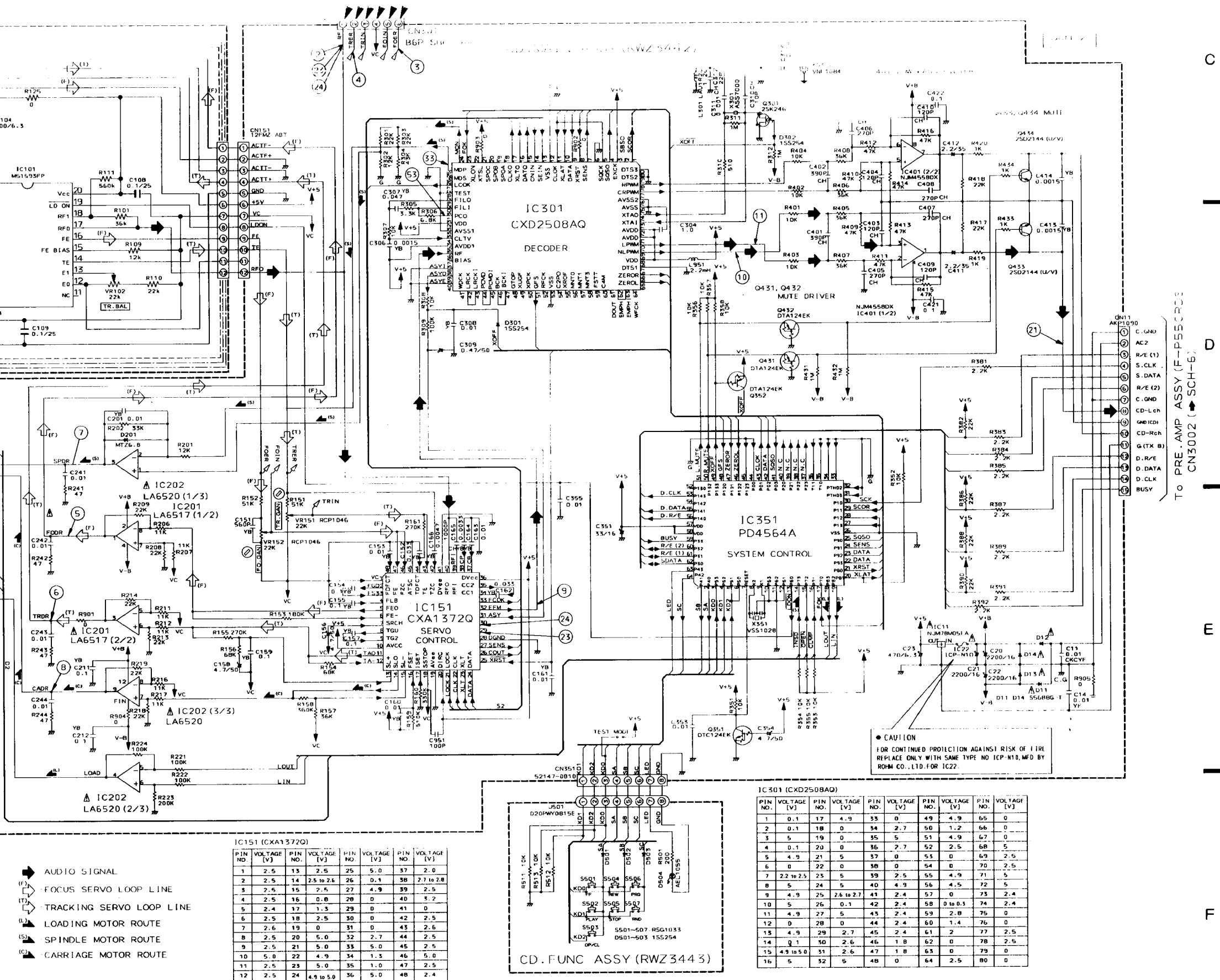
E

F



SCH-2

COMPACT DISC PLAYER (PD-P550)  
(CD. MAIN ASSY, CD. FUNC ASSY,  
SINGLE MECHA ASSY)

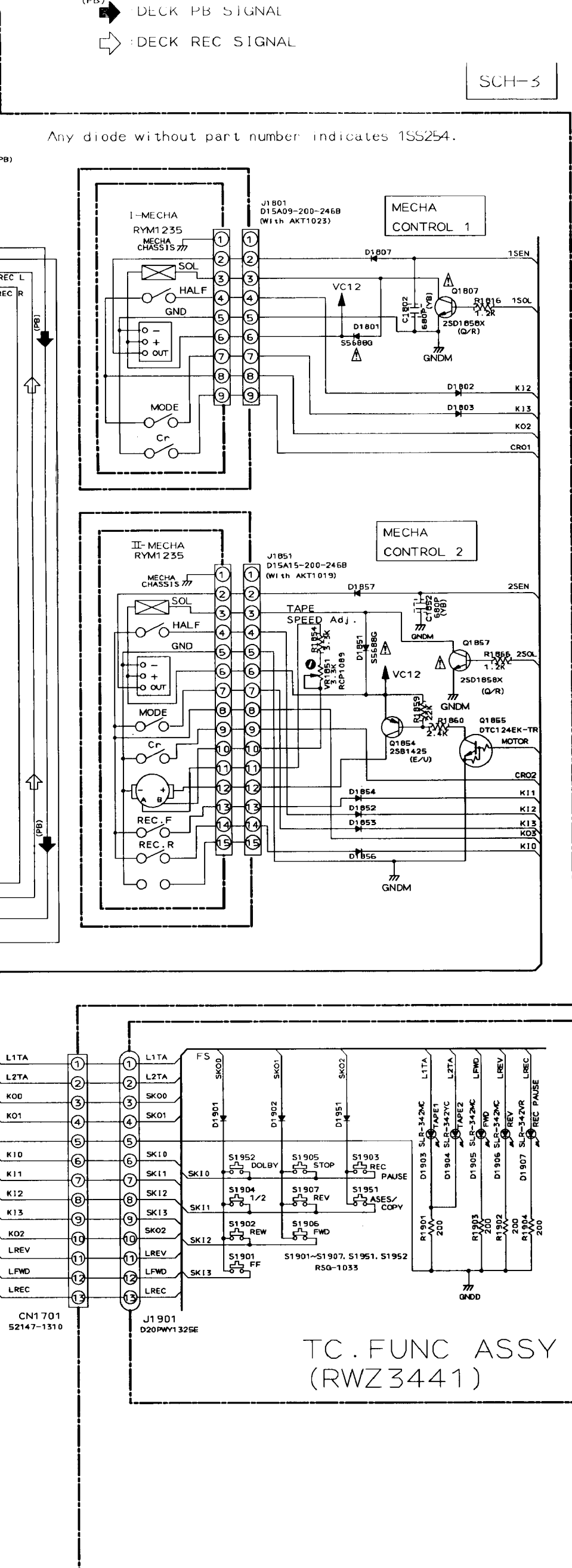


COMPACT DISC PLAYER (PD-P550)  
(CD. MAIN ASSY, CD. FUNC ASSY,  
SINGLE MECHA ASSY)

**SCH-2**







STEREO DOUBLE CASSETTE DECK (CT-P550WR)  
(TC. MAIN ASSY, TC. FUNC ASSY,  
MECHANISM UNIT)

**SCH-3**









## 4.4 FM/AM DIGITAL SYNTHESIZER TUNER (F-P550RDS)

■ FM/AM TUNER MOD. (RDS)/HE (Except MEZIXK/DI)

FM/AM TUNER MOD. (RDS)/HE

Q6101

Q6204

Q6102 Q6214

Q6103  
Q6104

IC6202

IC6201

Q6217

Q6202

Q6201

Q6203 VR6202

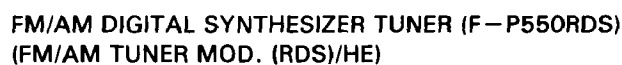
VR6201

To PRE. AMP assy CN3103

PIONEER

• This diagram is viewed from the mounted parts side.

Q8102 : MIX AMP



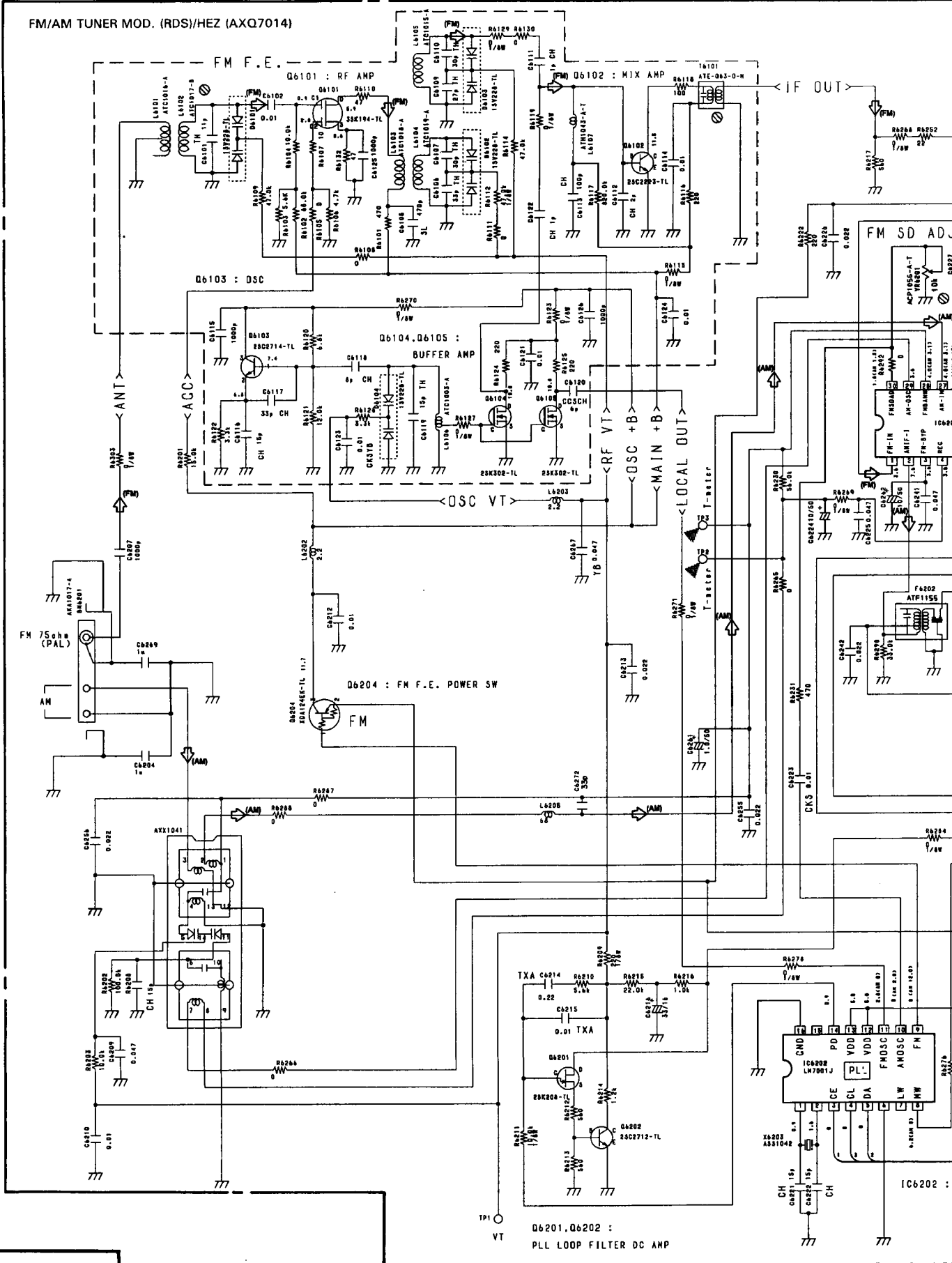


40



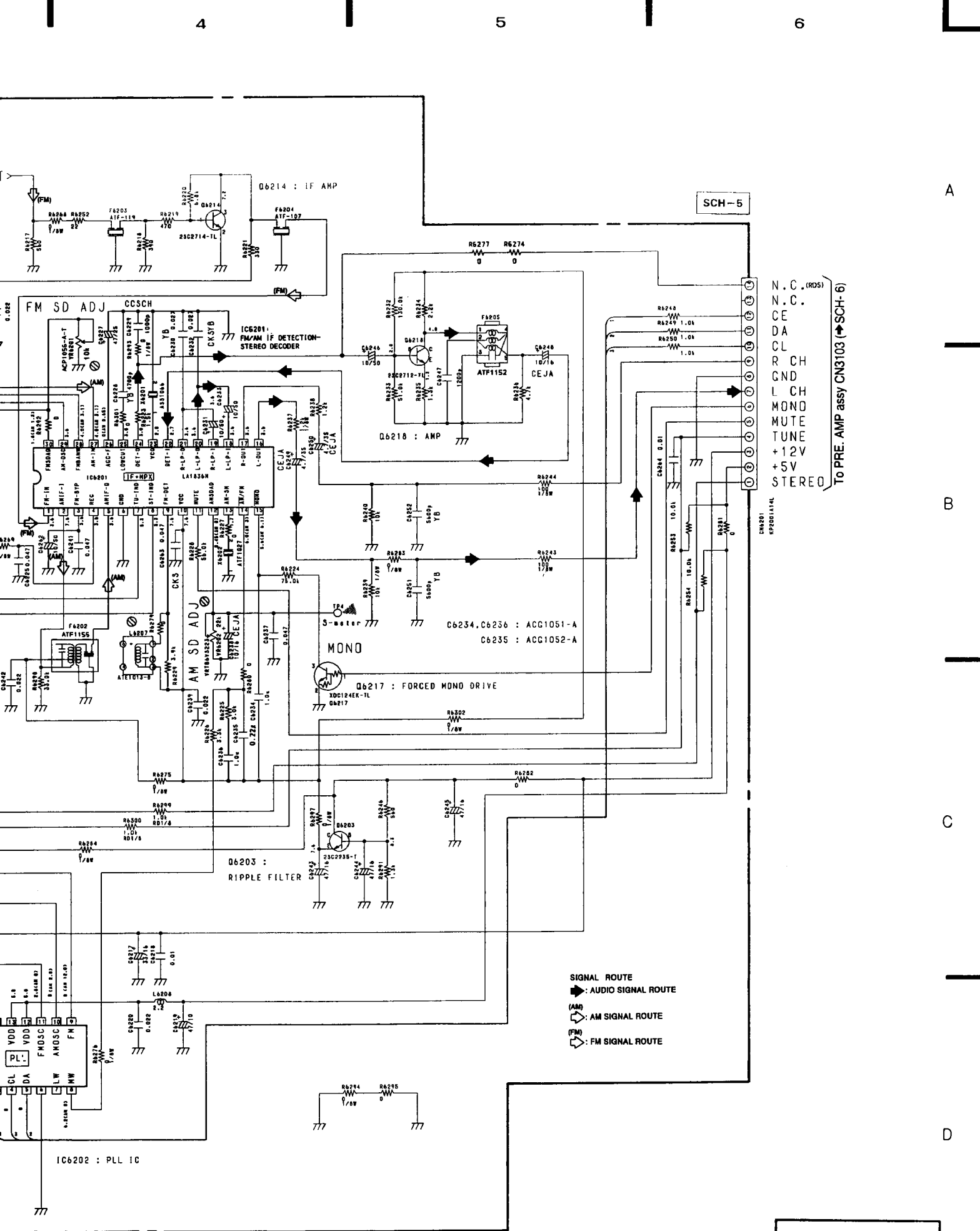
# FM/AM TUNER MOD. (RDS)/HEZ (MEZIXK/DI type)

FM/AM TUNER MOD. (RDS)/HEZ (AXQ7014)



## SCH-5

FM/AM DIGITAL SYNTHESIZER TUNER (F-P550RDS)  
(FM/AM TUNER MOD. (RDS)/HEZ)



FM/AM DIGITAL SYNTHESIZER TUNER (F-P550RDS)  
(FM/AM TUNER MOD. (RDS)/HEZ)

SCH-5

## FM/AM TUNER MOD. (RDS)/HEZ

A

A

Q6101

B

B

Q6204

Q6102

Q6214

Q6104

Q6103

Q6105

C

C

IC6202

VR6201

IC6201

Q6217

Q6202

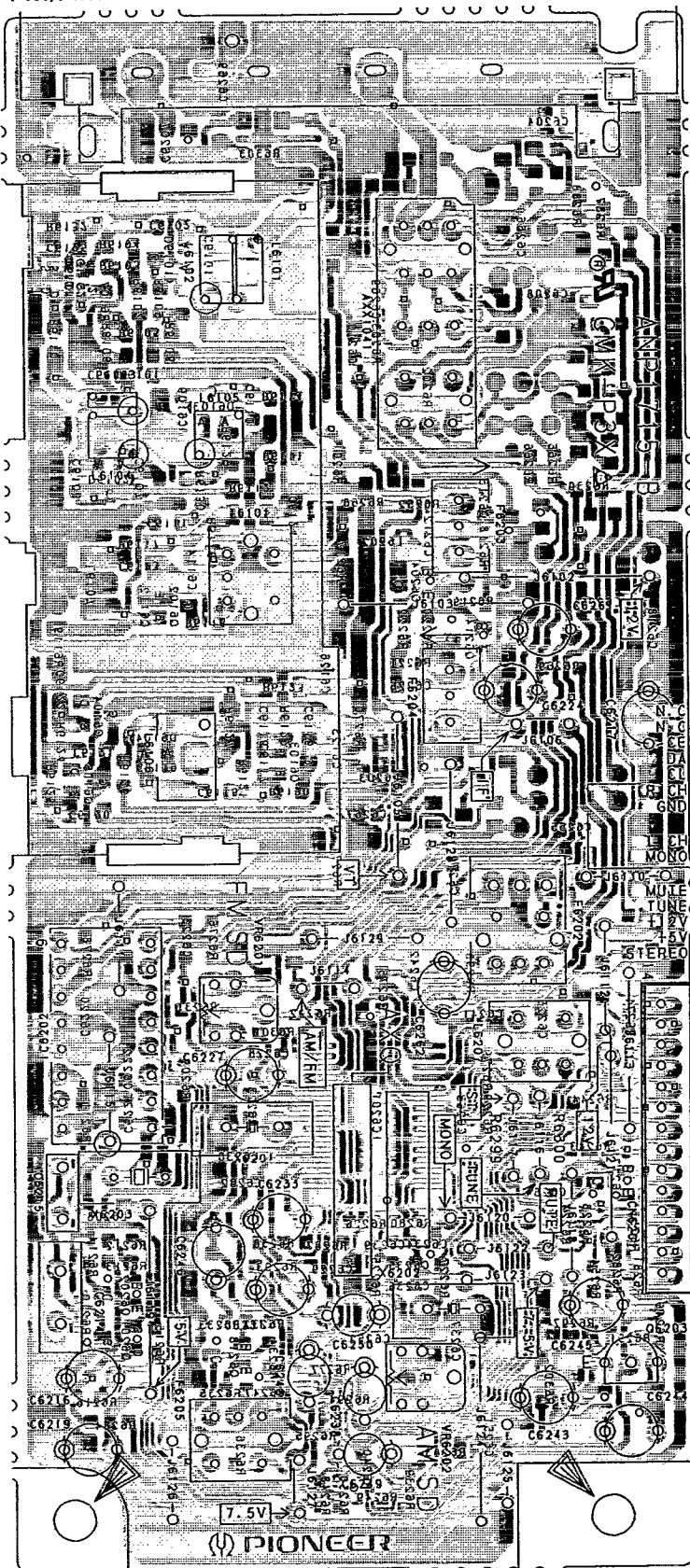
Q6201

Q6218 Q6203

VR6202

D

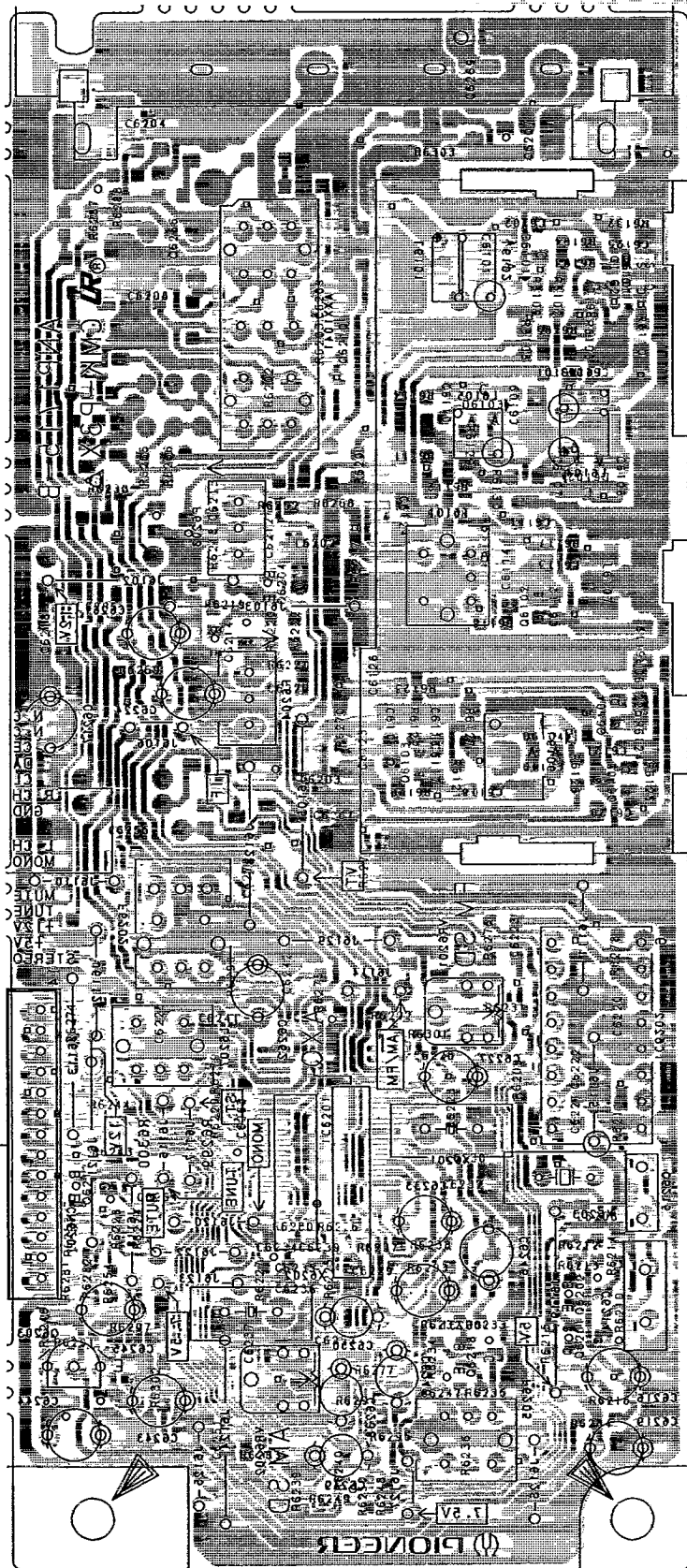
D



To PRE. AMP assy CN3103

• This diagram is viewed from the mounted parts side.

FM\AM TUNER MOD. (RDS)\HEZ



To PRE. AMP assay CN3103

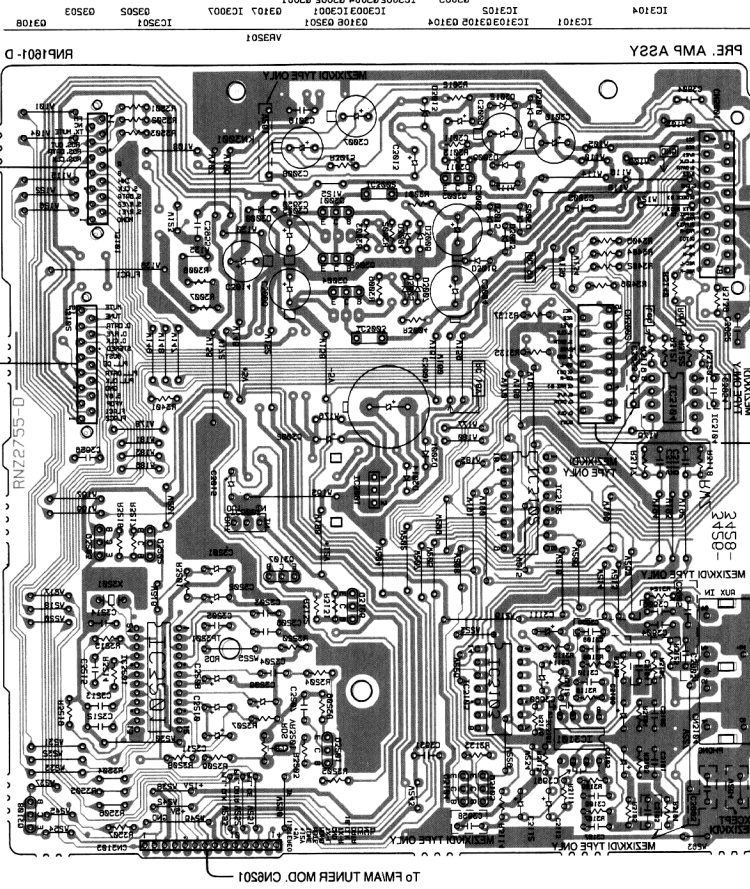
- This diagram is viewed from the foil side.



PRE. AMP ASSY AND DISPLAY ASSY

To CD. MAIN Assy CNI 1

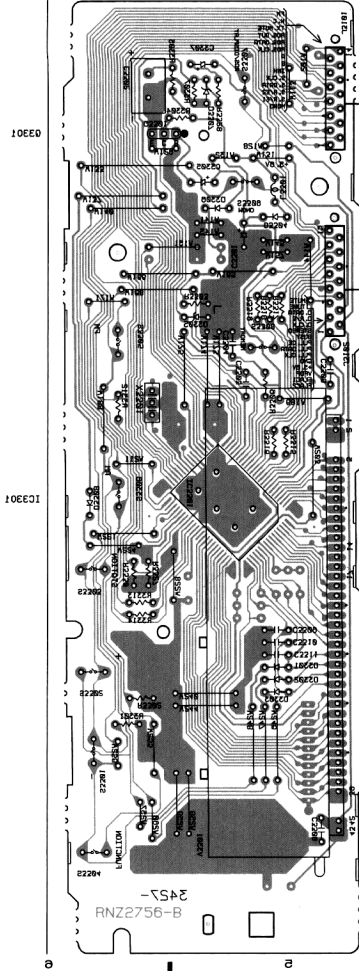
To MAIN assay CNS01 and TC MAIN assay CNS1001



— TO FMAM TUNER MOD. C16501

- This diagram is viewed from the front side.

DISPLAY ASSY

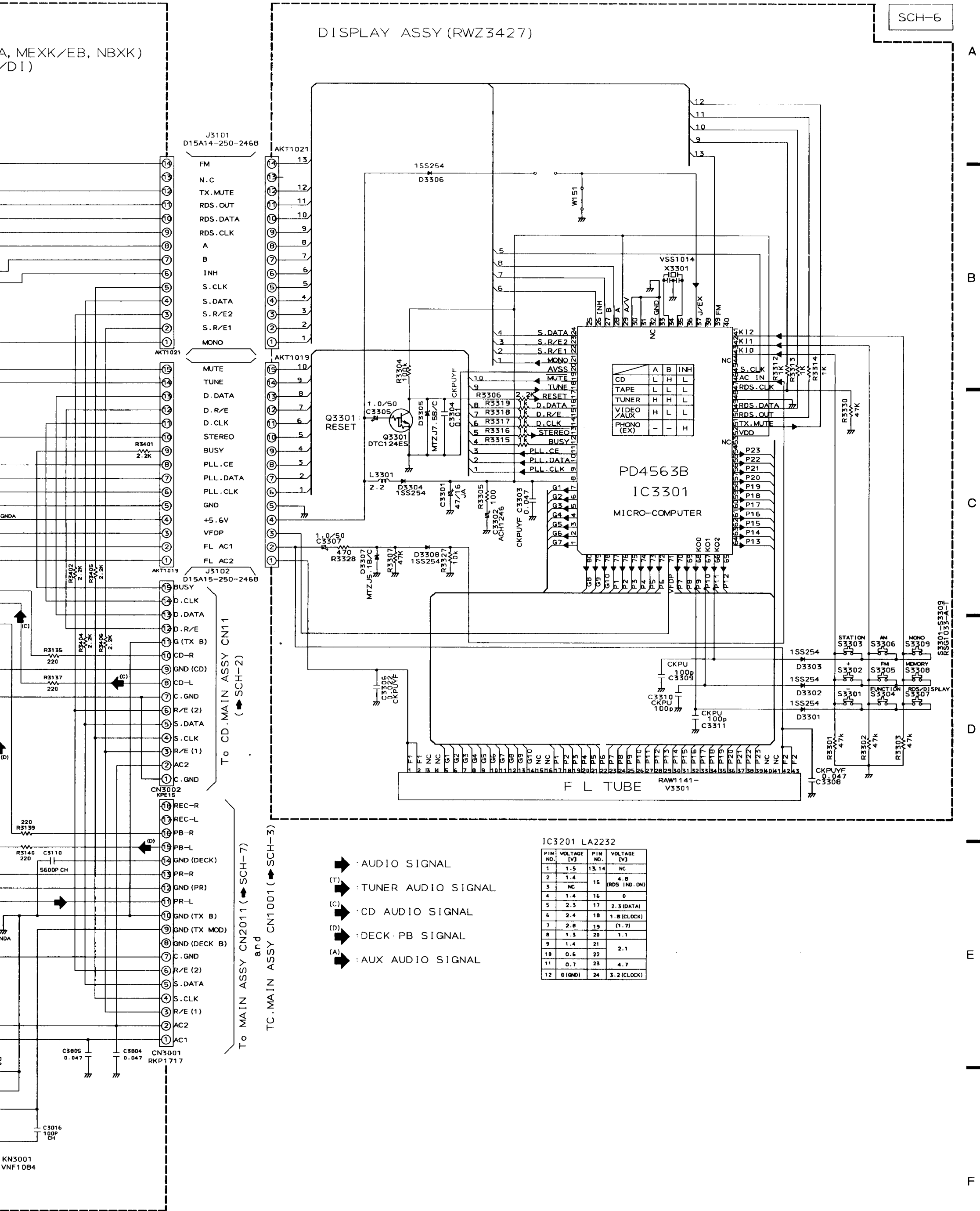


RNZ2756-B





SCH-6

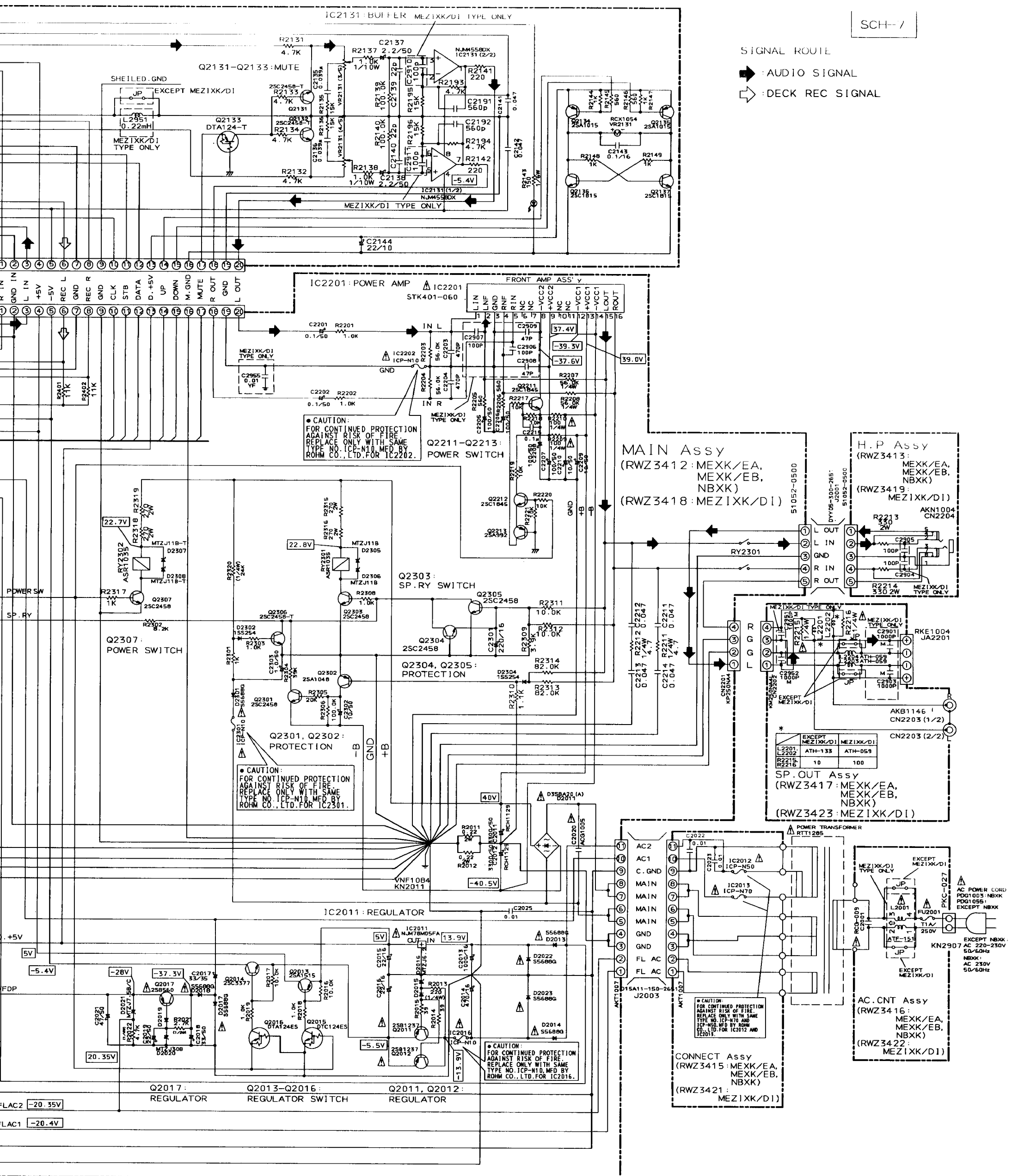


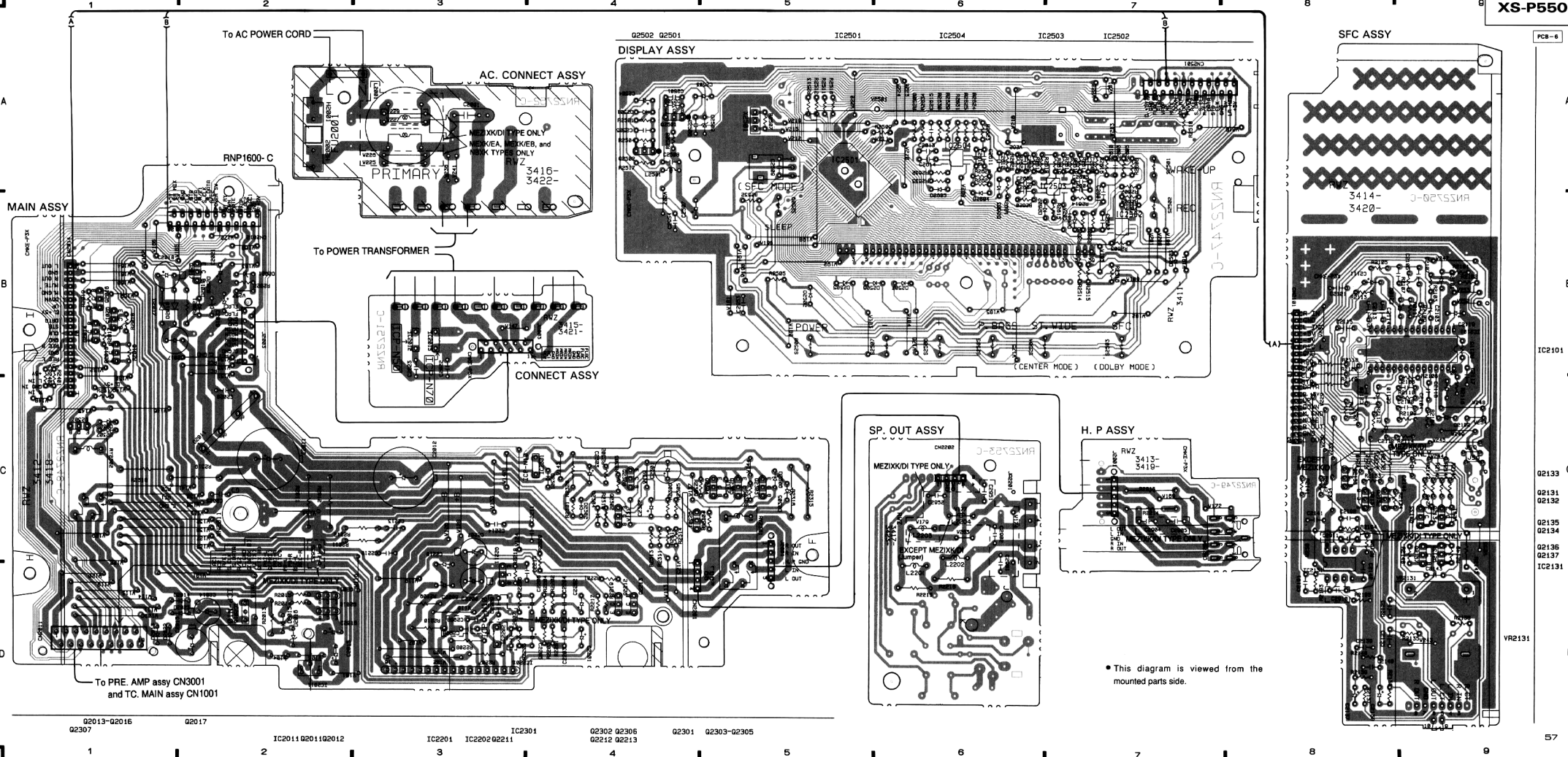
■ DISPLAY ASSY, MAIN ASSY, H. P ASSY, SFC ASSY, CONNECT ASSY, AC. CONNECT ASSY AND SP. OUT ASSY



52







A

B

C

D

IC2101

Q2133

Q2131

Q2132

Q2135

Q2134

Q2136

Q2137

IC2131





## 5. PCB PARTS LIST

### NOTES :

- Parts marked by "NSP" 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.
- 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%).

560 $\Omega$   $\rightarrow$  56  $\times$  10<sup>1</sup>  $\rightarrow$  561 ..... RD1/8PM  $\boxed{5}$   $\boxed{6}$   $\boxed{1}$  J

47k $\Omega$   $\rightarrow$  47  $\times$  10<sup>3</sup>  $\rightarrow$  473 ..... RD1/4PS  $\boxed{4}$   $\boxed{7}$   $\boxed{3}$  J

0.5 $\Omega$   $\rightarrow$  0R5 ..... RN2H  $\boxed{0}$   $\boxed{R}$   $\boxed{5}$  K

1 $\Omega$   $\rightarrow$  010 ..... RS1P  $\boxed{0}$   $\boxed{1}$   $\boxed{0}$  K

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

5.62k $\Omega$   $\rightarrow$  562  $\times$  10<sup>1</sup>  $\rightarrow$  5621 ..... RM1/4PC  $\boxed{5}$   $\boxed{6}$   $\boxed{2}$   $\boxed{1}$  F

## LIST OF WHOLE PCB ASSEMBLIES

| Mark | Symbol & Description                          | Part No. |          |           |          | Remarks |
|------|-----------------------------------------------|----------|----------|-----------|----------|---------|
|      |                                               | MEXK/EA  | MEXK/EB  | MEZIXK/DI | NBXK     |         |
| NSP  | STEREO AMPLIFIER (A – P550)                   | RXF1031  | RXF1038  | RXF1033   | RXF1027  |         |
| NSP  | └ SFC. AMP assy                               | RWM1782  | RWM1782  | RWM1783   | RWM1782  |         |
|      | └ DISPLAY assy                                | RWZ3411  | RWZ3411  | RWZ3411   | RWZ3411  |         |
|      | └ MAIN assy                                   | RWZ3412  | RWZ3412  | RWZ3418   | RWZ3412  |         |
| NSP  | └ H. P assy                                   | RWZ3413  | RWZ3413  | RWZ3419   | RWZ3413  |         |
|      | └ SFC assy                                    | RWZ3414  | RWZ3414  | RWZ3420   | RWZ3414  |         |
| NSP  | └ CONNECT assy                                | RWZ3415  | RWZ3415  | RWZ3421   | RWZ3415  | *1      |
|      | └ AC. CONNECT assy                            | RWZ3416  | RWZ3416  | RWZ3422   | RWZ3416  |         |
| NSP  | └ SP. OUT assy                                | RWZ3417  | RWZ3417  | RWZ3423   | RWZ3417  |         |
| NSP  | FM/AM DIGITAL SYNTHESIZER TUNER (F – P550RDS) | RXF1028  | RXF1028  | RXF1034   | RXF1028  |         |
|      | └ FM/AM TUNER MOD. (RDS)/HE                   | AXQ7013  | AXQ7013  | Not used  | AXQ7013  |         |
|      | └ FM/AM TUNER MOD. (RDS)/HEZ                  | Not used | Not used | AXQ7014   | Not used | *2      |
| NSP  | └ PRE. TX assy                                | RWM1786  | RWM1786  | RWM1787   | RWM1786  |         |
|      | └ PRE. AMP assy                               | RWZ3426  | RWZ3426  | RWZ3428   | RWZ3426  |         |
|      | └ DISPLAY assy                                | RWZ3427  | RWZ3427  | RWZ3427   | RWZ3427  |         |
| NSP  | STEREO DOUBLE CASSETTE DECK (CT – P550WR)     | RXF1030  | RXF1030  | RXF1030   | RXF1030  |         |
|      | └ MECHANISM UNIT                              | RYM1235  | RYM1235  | RYM1235   | RYM1235  |         |
| NSP  | COMPACT DISC PLAYER (PD – P550)               | RXF1032  | RXF1032  | RXF1032   | RXF1029  |         |
| NSP  | └ SINGLE MECHA ASSY                           | RXA1672  | RXA1672  | RXA1672   | RXA1672  |         |
| NSP  | └ SERVO MECHANISM ASSY SL                     | AXA7017  | AXA7017  | AXA7017   | AXA7017  |         |
| NSP  | └ MECHANISM BOARD assy                        | PWX1192  | PWX1192  | PWX1192   | PWX1192  |         |
| NSP  | DECK. CD assy                                 | RWM1789  | RWM1789  | RWM1789   | RWM1789  |         |
|      | └ TC. MAIN assy (For CT – P550WR)             | RWZ3440  | RWZ3440  | RWZ3440   | RWZ3440  |         |
| NSP  | └ TC. FUNC assy (For CT – P550WR)             | RWZ3441  | RWZ3441  | RWZ3441   | RWZ3441  |         |
|      | └ CD. MAIN assy (For PD – P550)               | RWZ3442  | RWZ3442  | RWZ3442   | RWZ3442  |         |
| NSP  | └ CD. FUNC assy (For PD – P550)               | RWZ3443  | RWZ3443  | RWZ3443   | RWZ3443  |         |

Notes)

\*1: Although RWZ3415 and RWZ3421 are different in part number, they consist of the same component.

\*2: For AXQ7014, refer to page 68.



■ CONTRAST OF PCB ASSEMBLIES

MAIN Assy

RWZ3412 and RWZ3418 have the same construction except for the following :

| Mark | Symbol & Description                | Part No.             |                            | Remarks |
|------|-------------------------------------|----------------------|----------------------------|---------|
|      |                                     | RWZ3412              | RWZ3418                    |         |
|      | C2907, C2958<br>C2908, C2909, C2955 | Not used<br>Not used | CCCSL101J50<br>CKCYF103Z50 |         |

H. P Assy

RWZ3413 and RWZ3419 have the same construction except for the following :

| Mark | Symbol & Description | Part No. |             | Remarks |
|------|----------------------|----------|-------------|---------|
|      |                      | RWZ3413  | RWZ3419     |         |
|      | C2904, C2905         | Not used | CCCSL101J50 |         |

SFC Assy

RWZ3414 and RWZ3420 have the same construction except for the following :

| Mark | Symbol & Description         | Part No.             |                            | Remarks |
|------|------------------------------|----------------------|----------------------------|---------|
|      |                              | RWZ3414              | RWZ3420                    |         |
|      | L2951                        | Not used             | LAUR22J                    |         |
|      | C2191, C2192<br>C2910, C2911 | Not used<br>Not used | CKCYB561K50<br>CCCSL101J50 |         |

AC. CONNECT Assy

RWZ3416 and RWZ3422 have the same construction except for the following :

| Mark | Symbol & Description | Part No. |           | Remarks |
|------|----------------------|----------|-----------|---------|
|      |                      | RWZ3416  | RWZ3422   |         |
|      | L2001                | Not used | ATF – 151 |         |

SP. OUT Assy

RWZ3417 and RWZ3423 have the same construction except for the following :

| Mark | Symbol & Description         | Part No.              |                        | Remarks |
|------|------------------------------|-----------------------|------------------------|---------|
|      |                              | RWZ3417               | RWZ3423                |         |
|      | L2201, L2202<br>L2203, L2204 | ATH – 133<br>Not used | ATH – 059<br>ATH – 059 |         |
|      | C2901, C2902, C2951, C2952   | Not used              | CQMA102J50             |         |
|      | R2215, R2216                 | RD1/4PMFL100J         | RD1/4PMFL101J          |         |



**PRE. AMP Assy**

RWZ3426 and RWZ3428 have the same construction except for the following :

| Mark | Symbol & Description                                                                                                    | Part No.                                                                                   |                                                                                                            | Remarks |
|------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------|
|      |                                                                                                                         | RWZ3426                                                                                    | RWZ3428                                                                                                    |         |
|      | C3101, C3102<br>C3103, C3104, C3953, C3954<br>C3958, C3959<br>C3115, C3116<br>C3803<br><br>C3903, C3905<br>C3904, C3906 | CKCYB391K50<br>Not used<br>Not used<br>CCCCH101J50<br>Not used<br><br>Not used<br>Not used | CKCYB102K50<br>CKCYB102K50<br>CKCYB102K50<br>CKCYB102K50<br>CFTXA184J50<br><br>CKCYB391K50<br>CKPUYB391K50 |         |

**■ PARTS LIST FOR MEXK/EA TYPE**

| Mark                                 | No.                               | Description  | Parts No. | Mark                       | No.                        | Description  | Parts No. |
|--------------------------------------|-----------------------------------|--------------|-----------|----------------------------|----------------------------|--------------|-----------|
| <b>■ STEREO AMPLIFIER (A – P550)</b> |                                   |              |           | <b>MAIN ASSY</b>           |                            |              |           |
| <b>DISPLAY ASSY</b>                  |                                   |              |           | <b>SEMICONDUCTORS</b>      |                            |              |           |
| <b>SEMICONDUCTORS</b>                |                                   |              |           | △                          | IC2016, IC2202, IC2301     | ICP – N10    |           |
|                                      | IC2502 – IC2504                   | NJM4558M     |           | △                          | IC2011                     | NJM78M05FA   |           |
|                                      | IC2501                            | PDC023B      |           | △                          | IC2201                     | STK401 – 060 |           |
|                                      | Q2502                             | 2SC2458      |           |                            | Q2302                      | 2SA1048      |           |
|                                      | Q2501                             | DTC124ES     |           |                            | Q2013                      | 2SA1515      |           |
|                                      | D2501, D2503, D2505 – D2507       | 1SS254       |           |                            | Q2213                      | 2SA992       |           |
|                                      | D2601 – D2605                     | 1SS254       |           | △                          | Q2011, Q2012               | 2SB1237X     |           |
|                                      | D2502                             | BR3371XJ30A  |           |                            | Q2017                      | 2SB560       |           |
|                                      | D2508, D2509                      | MTZJ6.2B/C   |           |                            | Q2211, Q2212               | 2SC1845      |           |
| <b>COILS AND FILTERS</b>             |                                   |              |           |                            | Q2301, Q2303 – Q2307       | 2SC2458      |           |
|                                      | L2501                             | LAU101J      |           |                            | Q2014                      | 2SC3377      |           |
| <b>SWITCHES AND RELAYS</b>           |                                   |              |           |                            | Q2016                      | DTA124ES     |           |
|                                      | S2501 – S2509                     | RSG1033      |           |                            | Q2015                      | DTC124ES     |           |
| <b>CAPACITORS</b>                    |                                   |              |           | △                          | D2015, D2019, D2302, D2304 | 1SS254       |           |
|                                      | C2503, C2504                      | CEAS010M50   |           |                            | D2011                      | D3SBA20 (B)  |           |
|                                      | C2507                             | CEAS470M10   |           |                            | D2305 – D2308              | MTZJ11B      |           |
|                                      | C2505                             | CFTXA224J50  |           |                            | D2020                      | MTZJ30B      |           |
|                                      | C2509                             | CKPUYB101K50 |           | △                          | D2016                      | MTZJ6.2B/C   |           |
|                                      | C2506                             | CKPUYB102K50 |           |                            | D2021                      | MTZJ7.5B/C   |           |
|                                      | C2613, C2614                      | CKPUYB471K50 |           | △                          | D2013, D2014, D2017, D2018 | S5688G       |           |
|                                      | C2603, C2606                      | CKPUYF103Z25 |           | △                          | D2022, D2023, D2301        | S5688G       |           |
|                                      | C2953, C2954                      | CKPUYF103Z25 |           | <b>SWITCHES AND RELAYS</b> |                            |              |           |
|                                      | C2604, C2605                      | CKPUYF223Z25 |           |                            | RY2301, RY2302             | ASR1035      |           |
|                                      | C2501, C2508, C2601, C2602, C2609 | CKPUYF473Z50 |           | <b>CAPACITORS</b>          |                            |              |           |
|                                      | C2612, C2615                      | CKPUYF473Z50 |           | △                          | C2020 (0.01μF/150V)        | ACG1005      |           |
|                                      | C2610, C2611                      | CKPUYX152M16 |           |                            | C2017                      | CEANP330M35  |           |
|                                      | C2607, C2608                      | CKPUYX472M16 |           |                            | C2209, C2210, C2302        | CEAS100M50   |           |
| <b>RESISTORS</b>                     |                                   |              |           |                            | C2205 – C2208              | CEAS101M50   |           |
|                                      | All Resistors                     | RD1/6PM□□□J  |           |                            | C2013                      | CEAS102M16   |           |
| <b>OTHERS</b>                        |                                   |              |           |                            | C2015, C2016               | CEAS220M16   |           |
|                                      | CN2501 22P CONNECTOR              | 52044 – 2245 |           |                            | C2019                      | CEAS220M50   |           |
|                                      | REMOTE RECEIVER UNIT              | GP1U27X      |           |                            | C2301                      | CEAS221M16   |           |
|                                      | V2501 FL INDICATOR TUBE           | RAW1142      |           |                            | C2303                      | CEAS2R2M50   |           |
|                                      | X2501 (6.00MHZ)                   | VSS1045      |           |                            | C2018                      | CEAS330M50   |           |



| Mark           | No.                        | Description  | Parts No.     |
|----------------|----------------------------|--------------|---------------|
|                | C2021                      |              | CEAS470M50    |
|                | C2014                      |              | CEAS471M16    |
|                | C2201, C2202               |              | CEASR15M50    |
|                | C2215                      |              | CGCYX104M16   |
|                | C2203, C2204               |              | CKCYB471K50   |
|                | C2025                      |              | CKCYF103Z50   |
|                | C2211-C2214                |              | CKCYF473Z50   |
|                | C2011, C2012               | (3300μF/50V) | RCH1129       |
| RESISTORS      |                            |              |               |
|                | R2021                      |              | RD1/2PM272J   |
|                | R2013                      |              | RD1/4PM221J   |
|                | R2320                      |              | RD1/4PM243J   |
|                | R2211, R2212               |              | RD1/4PM4R7J   |
| △              | R2209, R2210               |              | RD1/4PMFL101J |
|                | R2315, R2316, R2318, R2319 |              | RS2LMF271J    |
|                | R2011, R2012               |              | RS2LMFR22J    |
|                | Other Resistors            |              | RD1/6PM□□□J   |
| OTHERS         |                            |              |               |
|                | CABLE HOLDER (5P)          |              | 51052-0500    |
| CN2012         | 22P CONNECTOR              |              | 52045-2245    |
|                | CABLE HOLDER               |              | AKT1007       |
| CN2014         | 20P PLUG                   |              | KM2001A20     |
| CN2201         | SOCKET 4-P                 |              | KP250NA4      |
| CN2011         | SOCKET (18P)               |              | RKP1717       |
| KN2011         | EARTH METAL FITTING        |              | VNF1084       |
| H. P ASSY      |                            |              |               |
| RESISTORS      |                            |              |               |
|                | R2213, R2214               |              | RS2LMF331J    |
| OTHERS         |                            |              |               |
|                | CABLE HOLDER (5P)          |              | 51052-0500    |
| CN2204         | JACK                       |              | AKN1004       |
| SFC ASSY       |                            |              |               |
| SEMICONDUCTORS |                            |              |               |
|                | IC2131                     |              | NJM4558D-D    |
|                | IC2101                     |              | PM0006A       |
|                | Q2134, Q2135               |              | 2SA1015       |
|                | Q2136, Q2137               |              | 2SC1815       |
|                | Q2131, Q2132               |              | 2SC2458       |
|                | Q2133                      |              | DTA124ES      |
| CAPACITORS     |                            |              |               |
|                | C2139, C2140               |              | CCCSL220J50   |
|                | C2101, C2102, C2109-C2112  |              | CEAS100M50    |
|                | C2118, C2119               |              | CEAS100M50    |
|                | C2144                      |              | CEAS220M10    |
|                | C2137, C2138               |              | CEAS2R2M50    |
|                | C2113-C2115, C2143         |              | CGCYX104M16   |
|                | C2141, C2142               |              | CKCYF473Z50   |
|                | C2120, C2121               |              | CKPUYB471K50  |
|                | C2106, C2108               |              | CQMA102J50    |
|                | C2103, C2104               |              | CQMA103J50    |
|                | C2135, C2136               |              | CQMA393J50    |
|                | C2117                      |              | CQMA562J50    |
|                | C2105, C2107               |              | CQMA683J50    |
| RESISTORS      |                            |              |               |
|                | VR2131 (100K-B×2)          |              | RCX1054       |
|                | R2143                      |              | RD1/6PM151J   |
|                | Other Resistors            |              | RD1/6PM□□□J   |

| Mark                                        | No.                               | Description | Parts No.    |
|---------------------------------------------|-----------------------------------|-------------|--------------|
| CONNECT ASSY                                |                                   |             |              |
| SEMICONDUCTORS                              |                                   |             |              |
| △                                           | IC2012                            |             | ICP-N50      |
| △                                           | IC2013                            |             | ICP-N70      |
| CAPACITORS                                  |                                   |             |              |
|                                             | C2202, C2203                      |             | CKCYF103Z50  |
| OTHERS                                      |                                   |             |              |
|                                             | CABLE HOLDER                      |             | AKT1007      |
| AC. CONNECT ASSY                            |                                   |             |              |
| AC. CONNECT ASSY has no service part.       |                                   |             |              |
| SP. OUT ASSY                                |                                   |             |              |
| COILS AND FILTERS                           |                                   |             |              |
|                                             | L2201, L2202 (1UH)                |             | ATH-133      |
| RESISTORS                                   |                                   |             |              |
| △                                           | All Resistors                     |             | RD1 4PM□□□J  |
| OTHERS                                      |                                   |             |              |
| JA2201                                      | SPEAKER TERMINAL 4-P              |             | RKE1004      |
| FM/AM DIGITAL SYNTHESIZER TUNER (F-P550RDS) |                                   |             |              |
| FM/AM TUNER MOD. (RDS)/HE                   |                                   |             |              |
| SEMICONDUCTORS                              |                                   |             |              |
|                                             | IC6201                            |             | LA1836M      |
|                                             | IC6202                            |             | LM7001J      |
|                                             | Q6102                             |             | 2SC2223      |
|                                             | Q6203                             |             | 2SC2235      |
|                                             | Q6202                             |             | 2SC2712      |
|                                             | Q6103, Q6214                      |             | 2SC2714      |
|                                             | Q6201                             |             | 2SK208       |
|                                             | Q6104                             |             | 2SK302       |
|                                             | Q6101                             |             | 3SK194       |
|                                             | Q6204                             |             | XDA124EK     |
|                                             | Q6217                             |             | XDC124EK     |
|                                             | D6101, D6102                      |             | 1T33         |
| COILS AND FILTERS                           |                                   |             |              |
|                                             | L6104                             |             | ATC1003      |
|                                             | L6101                             |             | ATC1020      |
|                                             | L6102                             |             | ATC1021      |
|                                             | T6101                             |             | ATE-063      |
|                                             | L6207                             |             | ATE1013      |
|                                             | F6203, F6204                      |             | ATF-119      |
|                                             | F6101                             |             | ATF-155      |
|                                             | F6202 (450KHZ)                    |             | ATF1155      |
|                                             | L6103                             |             | ATH1043      |
|                                             | L6202, L6203, L6208               |             | LCTA2R2J3225 |
| CAPACITORS                                  |                                   |             |              |
|                                             | C6234, C6236, C6270 (1μF/16V)     |             | ACG1051      |
|                                             | C6107                             |             | CCSCH010C50  |
|                                             | C6229                             |             | CCSCH821J50  |
|                                             | C6110                             |             | CCSQCH020C50 |
|                                             | C6101                             |             | CCSQCH050C50 |
|                                             | C6108, C6203, C6269               |             | CCSQCH101J50 |
|                                             | C6111, C6116, C6208, C6221, C6222 |             | CCSQCH150J50 |
|                                             | C6115                             |             | CCSQCH330J50 |
|                                             | C6114                             |             | CCSQRH080D50 |
|                                             | C6113                             |             | CCSQRH180J50 |



| Mark | No.                               | Description | Parts No.    |
|------|-----------------------------------|-------------|--------------|
|      | C6105                             |             | CCSQTH150J50 |
|      | C6261                             |             | CEAS010M50   |
|      | C6224, C6246, C6262               |             | CEAS100M50   |
|      | C6216, C6217                      |             | CEAS330M16   |
|      | C6231, C6233                      |             | CEAS3R3M50   |
|      | C6219                             |             | CEAS470M10   |
|      | C6243 – C6245                     |             | CEAS470M16   |
|      | C6227                             |             | CEAS470M25   |
|      | C6238                             |             | CEJA100M16   |
|      | C6249, C6250                      |             | CEJA4R7M35   |
|      | C6215                             |             | CFTXA103J50  |
|      | C6214                             |             | CFTXA224J50  |
|      | C6103, C6106, C6112, C6204        |             | CKSQYB102K50 |
|      | C6102, C6109, C6117, C6210, C6264 |             | CKSQYB103K50 |
|      | C6213                             |             | CKSQYB223K50 |
|      | C6230                             |             | CKSQYB273K50 |
|      | C6228                             |             | CKSQYB472K50 |
|      | C6209, C6237, C6265, C6267        |             | CKSQYB473K50 |
|      | C6252                             |             | CKSQYB822K50 |
|      | C6212, C6218                      |             | CKSQYF103Z50 |
|      | C6220, C6226, C6239, C6242, C6255 |             | CKSQYF223Z50 |
|      | C6235                             |             | CKSQYF224Z25 |
|      | C6225, C6241, C6266               |             | CKSQYF473Z50 |
|      | C6232                             |             | CKSYB273K50  |
|      | C6251                             |             | CKSYB822K50  |
|      | C6223                             |             | CKSYF103Z50  |
|      | C6263                             |             | CKSYF473Z50  |

## RESISTORS

|                                    |             |
|------------------------------------|-------------|
| VR6201 (10k)                       | ACP1056     |
| VR6202                             | VRTB6VS223  |
| R6299, R6300                       | RD1/8PM102J |
| R6113, R6116, R6118, R6268 – R6271 | RS1/8S000J  |
| R6275, R6276, R6278, R6283, R6284  | RS1/8S000J  |
| R6290, R6293, R6294, R6297         | RS1/8S000J  |
| R6243, R6244                       | RS1/8S101J  |
| R6211                              | RS1/8S103J  |
| R6237                              | RS1/8S182J  |
| R6209                              | RS1/8S221J  |
| R6239                              | RS1/8S332J  |
| R6101                              | RS1/8S470J  |
| Other Resistors                    | RS1/10S□□□J |

## OTHERS

|        |                         |         |
|--------|-------------------------|---------|
| BN6201 | TERMINAL 2 – P WITH PAL | AKA1017 |
| X6203  | CRYSTAL RESONATOR       | ASS1042 |
| X6201  | CRYSTAL RESONATOR       | ASS1066 |
| X6202  | CERAMIC RESONATOR       | ATF1027 |
|        | AM RF TUNING BLOCK      | AXX1041 |

## PRE. AMP ASSY

### SEMICONDUCTORS

|   |                |              |
|---|----------------|--------------|
|   | IC3102         | BU4052BC     |
|   | IC3103         | BU4066BC     |
| △ | IC3003         | ICP – N10    |
| △ | IC3002         | ICP – N15    |
|   | IC3201         | LA2232       |
|   | IC3101, IC3104 | NJM4558D – D |
| △ | IC3001         | NJM7812FA    |
| △ | IC3007         | NJM78L05A    |
|   | Q3202          | 2SA1048      |
|   | Q3106          | 2SA1515      |

| Mark | No.                          | Description | Parts No.  |
|------|------------------------------|-------------|------------|
| △    | Q3004                        |             | 2SB1237X   |
|      | Q3005                        |             | 2SB560     |
|      | Q3201                        |             | 2SC2668    |
| △    | Q3001, Q3002                 |             | 2SD1858X   |
|      | Q3108                        |             | DTA114ES   |
|      | Q3104                        |             | DTA124ES   |
|      | Q3105, Q3107, Q3203          |             | DTC124ES   |
|      | D3004, D3005, D3011          |             | 1SS254     |
|      | D3012                        |             | MTZJ30B    |
|      | D3013                        |             | MTZJ5.1B/C |
|      | D3007                        |             | MTZJ6.2B/C |
|      | D3006                        |             | MTZJ6.8B   |
| △    | D3001 – D3003, D3008 – D3010 |             | S5688G     |
| △    | D3014 – D3016                |             | S5688G     |

## CAPACITORS

|                                   |              |
|-----------------------------------|--------------|
| C3016, C3115, C3116, C3952        | CCCCH101J50  |
| C3960, C3961                      | CCCCH101J50  |
| C3204                             | CCCCH271J50  |
| C3956                             | CCPUSL470J50 |
| C3013, C3208, C3210               | CEAS100M50   |
| C3007, C3008                      | CEAS101M35   |
| C3003                             | CEAS102M16   |
| C3011, C3202                      | CEAS220M50   |
| C3001                             | CEAS222M35   |
| C3105, C3106, C3113, C3114        | CEAS2R2M50   |
| C3009, C3010                      | CEAS330M50   |
| C3002, C3006, C3015, C3111, C3112 | CEAS470M16   |
| C3005, C3014                      | CEAS471M10   |
| C3004                             | CEAS471M16   |
| C3201, C3209, C3211               | CEAS4R7M50   |
| C3804, C3805                      | CGCYX473M25  |
| C3950                             | CKCYB102K50  |
| C3205                             | CKCYB103K50  |
| C3107, C3108                      | CKCYB152K50  |
| C3203, C3206                      | CKCYB332K50  |
| C3101, C3102                      | CKCYB391K50  |
| C3109, C3110                      | CKCYB562K50  |
| C3215                             | CKCYB682K50  |
| C3951, C3955                      | CKCYF103Z50  |
| C3212                             | CKCYF223Z50  |
| C3207                             | CKCYX103M16  |
| C3213, C3214                      | CKCYX333M16  |

## RESISTORS

|                 |             |
|-----------------|-------------|
| VR3201 (4.7K)   | RCP1020     |
| R3013           | RD1/2VM272J |
| R3001, R3004    | RD1/2VM821J |
| R3007, R3008    | RD1/2VM8R2J |
| R3132           | RD1/4VM222J |
| R3012           | RD1/4VM472J |
| Other Resistors | RD1/6PM□□□J |

## OTHERS

|                |                           |             |
|----------------|---------------------------|-------------|
| CN3103         | CONNECTOR (14P)           | 9176B – 14L |
| CN3104         | PIN JACK (4P) (PHONO/AUX) | AKB1124     |
|                | HEAT SINK                 | ANH – 575   |
| X3201 (456KHZ) |                           | ASS7001     |
| CN3002         | CONNECTOR (15P)           | KPE15       |
| CN3001         | SOCKET (18P)              | RKP1717     |
| KN3001         | EARTH METAL FITTING       | VNF1084     |



| Mark                | No.                       | Description | Parts No.    |
|---------------------|---------------------------|-------------|--------------|
| DISPLAY ASSY        |                           |             |              |
| SEMICONDUCTORS      |                           |             |              |
|                     | IC3301                    |             | PD4563B      |
|                     | Q3301                     |             | DTC124ES     |
|                     | D3301-D3304, D3306, D3308 |             | 1SS254       |
|                     | D3307                     |             | MTZJ5.1B/C   |
|                     | D3305                     |             | MTZJ7.5B/C   |
| COILS AND FILTERS   |                           |             |              |
|                     | L3301                     |             | LAU2R2J      |
| SWITCHES AND RELAYS |                           |             |              |
|                     | S3301-S3309               |             | RSG1033      |
| CAPACITORS          |                           |             |              |
|                     | C3302                     |             | ACH1246      |
|                     | C3305, C3307              |             | CEAS010M50   |
|                     | C3301                     |             | CEJA470M16   |
|                     | C3309-C3311               |             | CKPUYB101K50 |
|                     | C3304                     |             | CKPUYF103Z25 |
|                     | C3306                     |             | CKPUYF223Z25 |
|                     | C3303, C3308              |             | CKPUYF473Z50 |
| RESISTORS           |                           |             |              |
|                     | All Resistors             |             | RD1/6PM□□□J  |
| OTHERS              |                           |             |              |
|                     | V3301 FL INDICATOR TUBE   |             | RAW1141      |
|                     | X3301 (4.19MHZ)           |             | VSS1014      |

■ STEREO DOUBLE CASSETTE DECK  
(CT-P550WR)

TC. MAIN ASSY  
SEMICONDUCTORS

|   |                                   |  |            |
|---|-----------------------------------|--|------------|
|   | IC1101                            |  | BU4066BCF  |
|   | IC1201                            |  | CXA1101P   |
| △ | IC1011, IC1012                    |  | ICP-N10    |
|   | IC1202, IC1401                    |  | NJM4558D-D |
|   | IC1102, IC1301                    |  | NJM4558M   |
| △ | IC1004                            |  | NJM7812FA  |
|   | IC1701                            |  | PD6153A    |
|   | Q1008                             |  | 2SA1048    |
| △ | Q1006, Q1007                      |  | 2SB1237X   |
| △ | Q1503                             |  | 2SB1238X   |
|   | Q1854                             |  | 2SB1425    |
|   | Q1009, Q1101, Q1102, Q1252-Q1255  |  | 2SC2458    |
|   | Q1301, Q1302, Q1772               |  | 2SC2458    |
|   | Q1501, Q1502, Q1504               |  | 2SD1302    |
| △ | Q1003-Q1005, Q1807, Q1857         |  | 2SD1858X   |
|   | Q1303, Q1304, Q1351, Q1352        |  | 2SD2144S   |
|   | Q1481, Q1482                      |  | 2SD2144S   |
|   | Q1151, Q1152                      |  | 2SK373     |
|   | Q1305, Q1483, Q1761-Q1764         |  | DTA124EK   |
|   | Q1751-Q1754                       |  | DTA124ES   |
|   | Q1181-Q1184, Q1505, Q1765, Q1855  |  | DTC124EK   |
|   | Q1755                             |  | DTC124ES   |
|   | Q1771                             |  | DTC124TS   |
|   | D1151-D1156, D1181, D1182         |  | 1SS254     |
|   | D1251, D1252, D1401, D1402        |  | 1SS254     |
|   | D1761, D1762, D1802, D1803, D1807 |  | 1SS254     |
|   | D1852-D1854, D1856, D1857         |  | 1SS254     |
|   | D1012                             |  | MTZJ3.6B   |
|   | D1006, D1009                      |  | MTZJ6.8B   |
| △ | D1001-D1003, D1010, D1011         |  | S5688G     |
| △ | D1013-D1015, D1801, D1851         |  | S5688G     |

| Mark              | No.                                 | Description | Parts No.    |
|-------------------|-------------------------------------|-------------|--------------|
| COILS AND FILTERS |                                     |             |              |
|                   | L1951                               |             | LAU010J      |
|                   | L1303, L1304 [3.3MH (252KHZ)]       |             | RTF1019      |
|                   | L1181, L1182                        |             | RTF1099      |
|                   | L1301, L1302                        |             | RTF1102      |
|                   | F1201, F1202                        |             | RTF1208      |
| TRANSFORMERS      |                                     |             |              |
|                   | T1501                               |             | ATX-043      |
| CAPACITORS        |                                     |             |              |
|                   | C1509, C1510                        |             | CCCSL101K500 |
|                   | C1301, C1302                        |             | CCCSL221K500 |
|                   | C1151, C1152                        |             | CCSQCH100D50 |
|                   | C1953, C1954                        |             | CCSQCH101J50 |
|                   | C1401, C1403                        |             | CCSQCH560J50 |
|                   | C1253, C1254                        |             | CCSQSL151J50 |
|                   | C1303, C1304                        |             | CCSQSL681J50 |
|                   | C1103, C1104                        |             | CEANL100M16  |
|                   | C1183, C1184, C1217, C1218          |             | CEAS010M50   |
|                   | C1283, C1284, C1317, C1318          |             | CEAS010M50   |
|                   | C1009, C1019                        |             | CEAS100M16   |
|                   | C1219, C1252, C1402, C1507          |             | CEAS100M50   |
|                   | C1211                               |             | CEAS101M10   |
|                   | C1005                               |             | CEAS102M16   |
|                   | C1010                               |             | CEAS102M6R3  |
|                   | C1771                               |             | CEAS220M50   |
|                   | C1006, C1007                        |             | CEAS221M10   |
|                   | C1014                               |             | CEAS221M16   |
|                   | C1004                               |             | CEAS222M35   |
|                   | C1305 C1306                         |             | CEAS2R2M50   |
|                   | C1105, C1106, C1311, C1312          |             | CEAS330M16   |
|                   | C1319, C1320, C1505, C1506          |             | CEAS330M16   |
|                   | C1109, C1110, C1281, C1282, C1701   |             | CEAS470M16   |
|                   | C1011                               |             | CEAS471M16   |
|                   | C1203, C1204, C1215, C1216          |             | CEAS4R7M50   |
|                   | C1251                               |             | CEASR33M50   |
|                   | C1213, C1214                        |             | CEASR68M50   |
|                   | C1209, C1210, C1503, C1504          |             | CFTXA103J50  |
|                   | C1501                               |             | CFTXA123J50  |
|                   | C1502                               |             | CFTXA152J50  |
|                   | C1113, C1114                        |             | CFTXA681J50  |
|                   | C1107, C1108                        |             | CFTXA682J50  |
|                   | C1307, C1308                        |             | CFTXA823J50  |
|                   | C1601-C1604                         |             | CKCYB561K50  |
|                   | C1001, C1002, C1020, C1021          |             | CKCYF473Z50  |
|                   | C1951, C1952, C1955-C1958           |             | CKSQYB102K50 |
|                   | C1703, C1772                        |             | CKSQYB103K50 |
|                   | C1404                               |             | CKSQYB104K25 |
|                   | C1309, C1310                        |             | CKSQYB182K50 |
|                   | C1313-C1316                         |             | CKSQYB333K25 |
|                   | C1181, C1182                        |             | CKSQYB391K50 |
|                   | C1101, C1102                        |             | CKSQYB561K50 |
|                   | C1111, C1153, C1154, C1802, C1852   |             | CKSQYB681K50 |
|                   | C1702                               |             | CKSQYF473Z50 |
|                   | C1212                               |             | CQMA104J50   |
|                   | C1511                               |             | CQPA162J100  |
| RESISTORS         |                                     |             |              |
|                   | VR1181-VR1184, VR1301, VR1302 (22K) |             | RCP1046      |
|                   | VR1501, VR1502 (220K)               |             | RCP1049      |
|                   | VR1851 (3.3K)                       |             | RCP1089      |
|                   | R1203, R1204 (22K, W=1/6)           |             | RCN1023      |
| △                 | R1501                               |             | RD1 2LMF010J |



| Mark | No.                               | Description | Parts No.   |
|------|-----------------------------------|-------------|-------------|
|      | R1505                             |             | RD1/2VM121J |
|      | R1504                             |             | RD1/2VM4R7J |
|      | R1506                             |             | RD1/2VM680J |
|      | R1014, R1015                      |             | RD1/2VM821J |
|      | R1121                             |             | RD1/6PM103J |
|      | R1119, R1120, R1212, R1321, R1322 |             | RD1/6PM820J |
|      | Other Resistors                   |             | RS1/10S□□□J |

OTHERS

|        |                      |            |
|--------|----------------------|------------|
| CN1701 | 13P JUMPER CONNECTOR | 52147-1310 |
|        | CABLE HOLDER         | AKT1023    |
| CN1103 | 2P TOP POST          | B2B-EH     |
| CN1102 | 3P TOP POST          | B3B-EH     |
| CN1101 | 3P TOP POST          | B3B-EH-R   |
| CN1001 | SOCKET (18P)         | RKP1717    |
|        | PCB BINDER           | VEF1008    |
| KN1001 | EARTH METAL FITTING  | VNF1084    |
| X1701  | (4.19MHZ)            | ASS1022    |

TC. FUNC ASSY

SEMICONDUCTORS

|                     |              |
|---------------------|--------------|
| D1901, D1902, D1951 | 1SS254       |
| D1903, D1905, D1906 | SLR-342MCT31 |
| D1907               | SLR-342VRT31 |
| D1904               | SLR-342YCT31 |

SWITCHES AND RELAYS

|                           |         |
|---------------------------|---------|
| S1901-S1907, S1951, S1952 | RSG1033 |
|---------------------------|---------|

RESISTORS

|               |             |
|---------------|-------------|
| All Resistors | RD1/6PM□□□J |
|---------------|-------------|

COMPACT DISC PLAYER (PD-P550)

MECHANISM BOARD ASSY

SWITCHES AND RELAYS

|      |         |
|------|---------|
| S610 | DSG1016 |
|------|---------|

OTHERS

|       |                 |          |
|-------|-----------------|----------|
| CN610 | MT CONNECTOR 4P | 173979-4 |
|-------|-----------------|----------|

CD. MAIN ASSY

SEMICONDUCTORS

|                  |            |
|------------------|------------|
| IC151            | CXA1372Q   |
| IC301            | CXD2508AQ  |
| △ IC22           | ICP-N10    |
| △ IC201          | LA6517     |
| △ IC202          | LA6520     |
| IC401            | NJM4558D-D |
| △ IC11           | NJM78M05FA |
| IC351            | PD4564A    |
| Q433, Q434       | 2SD2144S   |
| Q301             | 2SK246     |
| Q352, Q431, Q432 | DTA124EK   |
| Q351             | DTC124EK   |
| D301, D302       | 1SS254     |
| D201             | MTZJ6.8B   |
| △ D11-D14        | S5688G     |

COILS AND FILTERS

|      |         |
|------|---------|
| L301 | LAU1R2J |
| L951 | LAU2R2J |

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

CAPACITORS

|                              |              |
|------------------------------|--------------|
| C310                         | CCSQCH100D50 |
| C165                         | CCSQCH102J50 |
| C403, C404, C409, C410       | CCSQCH121J50 |
| C312                         | CCSQCH220J50 |
| C405-C408                    | CCSQCH271J50 |
| C401, C402                   | CCSQCH391J50 |
| C411, C412                   | CEALNP2R2M35 |
| C20-C22                      | CEAS222M16   |
| C351                         | CEAS330M16   |
| C23                          | CEAS471M6R3  |
| C156, C158, C354             | CEAS4R7M50   |
| C309                         | CEASR47M50   |
| C11                          | CKCYF103Z50  |
| C951                         | CKSQYB102K50 |
| C153, C160, C161, C163, C201 | CKSQYB103K50 |
| C308                         | CKSQYB103K50 |
| C154, C155, C157, C159       | CKSQYB104K25 |
| C211, C212                   | CKSQYB104K25 |
| C306, C413, C414             | CKSQYB152K50 |
| C164                         | CKSQYB332K50 |
| C152, C162                   | CKSQYB333K25 |
| C166                         | CKSQYB472K50 |
| C307                         | CKSQYB473K25 |
| C151                         | CKSQYB561K50 |
| C311                         | CKSQYF102Z50 |
| C14, C241-C244, C353, C355   | CKSQYF103Z50 |
| C421, C422                   | CKSQYF104Z25 |
| C313                         | CKSQYF473Z50 |
| C304                         | CKSYF105Z16  |

RESISTORS

|                    |             |
|--------------------|-------------|
| VR151, VR152 (22K) | RCP1046     |
| Other Resistors    | RS1/10S□□□J |

OTHERS

|                          |                     |             |
|--------------------------|---------------------|-------------|
| CN151                    | CONNECTOR           | 12FMZ-ABT   |
| CN201                    | MT CONNECTOR (4P)   | 173981-4    |
| CN202                    | MT CONNECTOR (5P)   | 173981-5    |
| CN351                    | 8P JUMPER CONNECTOR | 52147-0810  |
| CN11                     | SOCKET (15P)        | AKP1090     |
| X301 (33.8688MHZ±700PPM) |                     | ASS7000     |
| CN301                    | TOP POST (6P)       | B6P-SHF-1AA |
|                          | PCB BINDER          | VEF1008     |
| KN310                    | EARTH METAL FITTING | VNF1084     |
| X351 (4.19MHZ)           |                     | VSS1014     |

CD. FUNC ASSY

SEMICONDUCTORS

|           |         |
|-----------|---------|
| D501-D503 | 1SS254  |
| D504      | AEL1055 |

SWITCHES AND RELAYS

|           |         |
|-----------|---------|
| S501-S507 | RSG1033 |
|-----------|---------|

RESISTORS

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



## ● Parts List for MEZIXK/DI Type

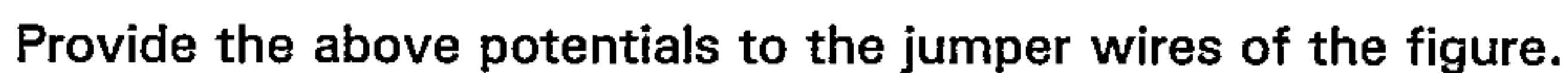
| Mark                                        | No.                                 | Description | Parts No.    |
|---------------------------------------------|-------------------------------------|-------------|--------------|
| <b>FM/AM TUNER MOD. (RDS)/HEZ (AXQ7014)</b> |                                     |             |              |
| <b>SEMICONDUCTORS</b>                       |                                     |             |              |
|                                             | IC6201                              |             | LA1836M      |
|                                             | IC6202                              |             | LM7001J      |
|                                             | Q6102                               |             | 2SC2223      |
|                                             | Q6203                               |             | 2SC2235      |
|                                             | Q6202, Q6218                        |             | 2SC2712      |
|                                             | Q6103, Q6214                        |             | 2SC2714      |
|                                             | Q6201                               |             | 2SK208       |
|                                             | Q6104, Q6105                        |             | 2SK302       |
|                                             | Q6101                               |             | 3SK194       |
|                                             | Q6204                               |             | XDA124EK     |
|                                             | Q6217                               |             | XDC124EK     |
|                                             | D6101 - D6104                       |             | 1SV228       |
| <b>COILS AND FILTERS</b>                    |                                     |             |              |
|                                             | L6106                               |             | ATC1003      |
|                                             | L6105                               |             | ATC1015      |
|                                             | L6101                               |             | ATC1016      |
|                                             | L6102                               |             | ATC1017      |
|                                             | L6103                               |             | ATC1018      |
|                                             | L6104                               |             | ATC1019      |
|                                             | L6207 (10.7MHZ)                     |             | ATE1013      |
|                                             | F6204                               |             | ATF-107      |
|                                             | F6203                               |             | ATF-119      |
|                                             | F6205                               |             | ATF1152      |
|                                             | F6202 (450KHZ)                      |             | ATF1155      |
|                                             | L6107 (2.2μH)                       |             | ATH1043      |
|                                             | L6202, L6203, L6208                 |             | LCTA2R2J3225 |
|                                             | L6205                               |             | LCTA680J3225 |
| <b>CAPACITORS</b>                           |                                     |             |              |
|                                             | C6204, C6234, C6236, C6269 (105/16) |             | ACG1051      |
|                                             | C6120                               |             | CCSCH060D50  |
|                                             | C6229                               |             | CCSCH102J50  |
|                                             | C6111, C6122                        |             | CCSQCH010C50 |
|                                             | C6112                               |             | CCSQCH020C50 |
|                                             | C6118                               |             | CCSQCH080D50 |
|                                             | C6113                               |             | CCSQCH101J50 |
|                                             | C6116, C6208, C6221, C6222          |             | CCSQCH150J50 |
|                                             | C6117                               |             | CCSQCH330J50 |
|                                             | C6272                               |             | CCSQSL330J50 |
|                                             | C6105                               |             | CCSQSL471J50 |
|                                             | C6101                               |             | CCSQTH110J50 |
|                                             | C6119                               |             | CCSQTH150J50 |
|                                             | C6109                               |             | CCSQTH270J50 |
|                                             | C6107, C6110                        |             | CCSQTH300J50 |
|                                             | C6106                               |             | CCSQTH330J50 |
|                                             | C6261                               |             | CEAS010M50   |
|                                             | C6224, C6231, C6233, C6246, C6262   |             | CEAS100M50   |
|                                             | C6216, C6217                        |             | CEAS330M16   |
|                                             | C6219                               |             | CEAS470M10   |
|                                             | C6243 - C6245                       |             | CEAS470M16   |
|                                             | C6227                               |             | CEAS470M25   |
|                                             | C6238, C6248                        |             | CEJA100M16   |
|                                             | C6249, C6250                        |             | CEJA4R7M35   |
|                                             | C6215                               |             | CFTXA103J50  |
|                                             | C6214                               |             | CFTXA224J50  |
|                                             | C6115, C6125, C6126, C6207          |             | CKSQYB102K50 |
|                                             | C6102, C6114, C6121, C6124, C6210   |             | CKSQYB103K50 |
|                                             | C6264                               |             | CKSQYB103K50 |
|                                             | C6247                               |             | CKSQYB122K50 |

| Mark             | No.                                 | Description | Parts No.    |
|------------------|-------------------------------------|-------------|--------------|
|                  | C6213                               |             | CKSQYB223K50 |
|                  | C6230                               |             | CKSQYB273K50 |
|                  | C6228                               |             | CKSQYB472K50 |
|                  | C6209, C6237, C6267                 |             | CKSQYB473K50 |
|                  | C6251, C6252                        |             | CKSQYB562K50 |
|                  | C6212, C6218                        |             | CKSQYF103Z50 |
|                  | C6220, C6226, C6239, C6242          |             | CKSQYF223Z50 |
|                  | C6255, C6256                        |             | CKSQYF223Z50 |
|                  | C6235                               |             | CKSQYF224Z25 |
|                  | C6225, C6241                        |             | CKSQYF473Z50 |
|                  | C6123                               |             | CKSYB103K50  |
|                  | C6232                               |             | CKSYB273K50  |
|                  | C6223                               |             | CKSYF103Z50  |
|                  | C6263                               |             | CKSYF473Z50  |
| <b>RESISTORS</b> |                                     |             |              |
|                  | VR6201 (10K)                        |             | ACP1056      |
|                  | VR6202                              |             | VRTB6VS223   |
|                  | R6299, R6300                        |             | RD1/6PM102J  |
|                  | R6115, R6119, R6123, R6127, R6129   |             | RS1/8S000J   |
|                  | R6268 - R6271, R6275, R6276, R6278  |             | RS1/8S000J   |
|                  | R6283, R6284, R6293, R6294, R6297   |             | RS1/8S000J   |
|                  | R6302, R6303                        |             | RS1/8S000J   |
|                  | R6243, R6244                        |             | RS1/8S101J   |
|                  | R6211, R6239                        |             | RS1/8S103J   |
|                  | R6237                               |             | RS1/8S122J   |
|                  | R6209                               |             | RS1 8S221J   |
|                  | R6112                               |             | RS1/8S473J   |
|                  | Other Resistors                     |             | RS1/10S□□□J  |
| <b>OTHERS</b>    |                                     |             |              |
|                  | BN6201 2P ANTENNA TERMINAL WITH PAL |             | AKA1017      |
|                  | X6203 (7.200MHZ)                    |             | ASS1042      |
|                  | X6201 (456KHZ)                      |             | ASS1066      |
|                  | X6202 (450KHZ)                      |             | ATF1027      |



- As this product is a system product, operation with assembled components.
- When single operation can not be avoided, supply power etc. according to the following method.  
The Stereo amplifier (A – P550) operates by itself.

### 3. STEREO DOUBLE CASSETTE DECK (CT-P550WR)



CD. MAIN ASSY



The schematic diagram illustrates the internal circuitry of the TC MAIN ASSY. Key components and connections include:

- Power Section:** At the bottom, three power sources are shown: +9 V, +16 V, and -9 V. The +16 V line is connected to a 777 timer. A large arrow labeled "Front" points downwards from the top of the diagram.
- FER (Front End Receiver) Section:** Located at the top left, it includes components like V204, V205, V206, V207, V208, V209, V210, V211, V212, V213, V214, V215, V216, V217, V218, V219, V220, V221, V222, V223, V224, V225, V226, V227, V228, V229, V230, V231, V232, V233, V234, V235, V236, V237, V238, V239, V240, V241, V242, V243, V244, V245, V246, V247, V248, V249, V250, V251, V252, V253, V254, V255, V256, V257, V258, V259, V260, V261, V262, V263, V264, V265, V266, V267, V268, V269, V270, V271, V272, V273, V274, V275, V276, V277, V278, V279, V280, V281, V282, V283, V284, V285, V286, V287, V288, V289, V290, V291, V292, V293, V294, V295, V296, V297, V298, V299, V300, V301, V302, V303, V304, V305, V306, V307, V308, V309, V310, V311, V312, V313, V314, V315, V316, V317, V318, V319, V320, V321, V322, V323, V324, V325, V326, V327, V328, V329, V330, V331, V332, V333, V334, V335, V336, V337, V338, V339, V340, V341, V342, V343, V344, V345, V346, V347, V348, V349, V350, V351, V352, V353, V354, V355, V356, V357, V358, V359, V360, V361, V362, V363, V364, V365, V366, V367, V368, V369, V370, V371, V372, V373, V374, V375, V376, V377, V378, V379, V380, V381, V382, V383, V384, V385, V386, V387, V388, V389, V390, V391, V392, V393, V394, V395, V396, V397, V398, V399, V400, V401, V402, V403, V404, V405, V406, V407, V408, V409, V410, V411, V412, V413, V414, V415, V416, V417, V418, V419, V420, V421, V422, V423, V424, V425, V426, V427, V428, V429, V430, V431, V432, V433, V434, V435, V436, V437, V438, V439, V440, V441, V442, V443, V444, V445, V446, V447, V448, V449, V450, V451, V452, V453, V454, V455, V456, V457, V458, V459, V460, V461, V462, V463, V464, V465, V466, V467, V468, V469, V470, V471, V472, V473, V474, V475, V476, V477, V478, V479, V480, V481, V482, V483, V484, V485, V486, V487, V488, V489, V490, V491, V492, V493, V494, V495, V496, V497, V498, V499, V500, V501, V502, V503, V504, V505, V506, V507, V508, V509, V510, V511, V512, V513, V514, V515, V516, V517, V518, V519, V520, V521, V522, V523, V524, V525, V526, V527, V528, V529, V530, V531, V532, V533, V534, V535, V536, V537, V538, V539, V540, V541, V542, V543, V544, V545, V546, V547, V548, V549, V550, V551, V552, V553, V554, V555, V556, V557, V558, V559, V560, V561, V562, V563, V564, V565, V566, V567, V568, V569, V570, V571, V572, V573, V574, V575, V576, V577, V578, V579, V580, V581, V582, V583, V584, V585, V586, V587, V588, V589, V590, V591, V592, V593, V594, V595, V596, V597, V598, V599, V600, V601, V602, V603, V604, V605, V606, V607, V608, V609, V610, V611, V612, V613, V614, V615, V616, V617, V618, V619, V620, V621, V622, V623, V624, V625, V626, V627, V628, V629, V630, V631, V632, V633, V634, V635, V636, V637, V638, V639, V640, V641, V642, V643, V644, V645, V646, V647, V648, V649, V650, V651, V652, V653, V654, V655, V656, V657, V658, V659, V660, V661, V662, V663, V664, V665, V666, V667, V668, V669, V670, V671, V672, V673, V674, V675, V676, V677, V678, V679, V680, V681, V682, V683, V684, V685, V686, V687, V688, V689, V690, V691, V692, V693, V694, V695, V696, V697, V698, V699, V700, V701, V702, V703, V704, V705, V706, V707, V708, V709, V710, V711, V712, V713, V714, V715, V716, V717, V718, V719, V720, V721, V722, V723, V724, V725, V726, V727, V728, V729, V730, V731, V732, V733, V734, V735, V736, V737, V738, V739, V740, V741, V742, V743, V744, V745, V746, V747, V748, V749, V750, V751, V752, V753, V754, V755, V756, V757, V758, V759, V760, V761, V762, V763, V764, V765, V766, V767, V768, V769, V770, V771, V772, V773, V774, V775, V776, V777, V778, V779, V780, V781, V782, V783, V784, V785, V786, V787, V788, V789, V790, V791, V792, V793, V794, V795, V796, V797, V798, V799, V800, V801, V802, V803, V804, V805, V806, V807, V808, V809, V810, V811, V812, V813, V814, V815, V816, V817, V818, V819, V820, V821, V822, V823, V824, V825, V826, V827, V828, V829, V830, V831, V832, V833, V834, V835, V836, V837, V838, V839, V840, V841, V842, V843, V844, V845, V846, V847, V848, V849, V850, V851, V852, V853, V854, V855, V856, V857, V858, V859, V860, V861, V862, V863, V864, V865, V866, V867, V868, V869, V870, V871, V872, V873, V874, V875, V876, V877, V878, V879, V880, V881, V882, V883, V884, V885, V886, V887, V888, V889, V890, V891, V892, V893, V894, V895, V896, V897, V898, V899, V900, V901, V902, V903, V904, V905, V906, V907, V908, V909, V910, V911, V912, V913, V914, V915, V916, V917, V918, V919, V920, V921, V922, V923, V924, V925, V926, V927, V928, V929, V930, V931, V932, V933, V934, V935, V936, V937, V938, V939, V940, V941, V942, V943, V944, V945, V946, V947, V948, V949, V950, V951, V952, V953, V954, V955, V956, V957, V958, V959, V960, V961, V962, V963, V964, V965, V966, V967, V968, V969, V970, V971, V972, V973, V974, V975, V976, V977, V978, V979, V980, V981, V982, V983, V984, V985, V986, V987, V988, V989, V990, V991, V992, V99

Provide the above potentials to the jumper wires of the figure.



## 7. ADJUSTMENTS

### 7.1 FM/AM DIGITAL SYNTHESIZER TUNER SECTION (F – P550RDS)

#### ■ FM Tuner Section

- Set the FM/AM selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

- For MEXK/EA, MEXK/EB and NBXK types (AXQ7013)

| Step No. | Adjustment Title                 | FM SG (1kHz. $\pm 75$ kHz dev.) |                     | Reception Frequency Display | Adjustment Location | Specifications                                                                                                               |
|----------|----------------------------------|---------------------------------|---------------------|-----------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------|
|          |                                  | Frequency (MHz)                 | Level (dB $\mu$ V)  |                             |                     |                                                                                                                              |
| 1        | Center Adjustment                | 98 Non Modulation               | 80 or more          | 98.0 MHz                    | L6207               | Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or $\oplus$ leads of C6224 and C6261) becomes $0V \pm 50mV$ . |
| 2        | Front-end Sensitivity Adjustment | 98                              | Low input (0 to 30) | 98 MHz                      | L6102<br>T6101      | Adjust so that the DC voltage between IC6201-Pin 12 and GND (or $\oplus$ leads of C6238 and GND) becomes at maximum level.   |
| 3        | Stereo Distortion                | 98                              | 80                  | 98 MHz                      | T6101               | Minimize the distortion with 1/8 rotation of the core.                                                                       |
| 4        | TUNED IND. Lighting Level        | 98                              | 15 ( $\pm 2$ dB)    | 98.0 MHz                    | VR6201              | Adjust so that the indicator of TUNED IND. starts to light up.                                                               |

#### Notes:

- Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.
- Make indicator adjustments in order of AM  $\rightarrow$  FM.
- Adjustment sequence: L6102 T6101

- For MEZIXK/DI type (AXQ7014)

| Step No. | Adjustment Title                 | FM SG (1kHz, $\pm 75$ kHz dev.) |                     | Reception Frequency Display | Adjustment Location              | Specifications                                                                                                                                                              |
|----------|----------------------------------|---------------------------------|---------------------|-----------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |                                  | Frequency (MHz)                 | Level (dB $\mu$ V)  |                             |                                  |                                                                                                                                                                             |
| 1        | Center Adjustment                | 98                              | 80                  | 98 MHz                      | L6207                            | Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or $\oplus$ leads of C6224 and C6261) becomes $0V \pm 50mV$ .                                                |
| 2        | Front End Sensitivity Adjustment | 106                             | Low input (0 to 30) | 106MHz                      | L6104<br>L6105<br>L6102<br>T6101 | After adjusting L6104 and L6105 so that the DC voltage between IC6201-Pin 12 and GND (or $\oplus$ leads of C6238 and GND) becomes at maximum level, adjust T6101 and L6102. |
| 3        | Stereo Distortion                | 98                              | 80                  | 98 MHz                      | T6101                            | Minimize the distortion with 1/8 rotation of the core.                                                                                                                      |
| 4        | TUNED IND. Lighting Level        | 98                              | 15 ( $\pm 2$ dB)    | 98MHz                       | VR6201                           | Adjust so that the indicator of TUNED IND. starts to light up.                                                                                                              |

#### Notes:

- Before adjusting, make sure there is no gap between L6101 and L6102 and between L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.
- Make indicator adjustments in order of AM  $\rightarrow$  FM.
- Adjustment sequence : L6104  $\rightarrow$  L6105  $\rightarrow$  L6102  $\rightarrow$  T6101



# AM Tuner Section

- Set the FM/AM selector to AM BAND.
- Connect the wiring as shown in Fig. 1-1.

| Step No. | Adjustment Title          | AM SG (400Hz, 30% Mod.) |                      | Reception Frequency Display | Adjustment Location | Specifications                                                 |
|----------|---------------------------|-------------------------|----------------------|-----------------------------|---------------------|----------------------------------------------------------------|
|          |                           | Frequency (kHz)         | Level (dB $\mu$ V/m) |                             |                     |                                                                |
| 1        | TUNED IND. Lighting Level | 999*1                   | 47 ( $\pm 2$ dB)     | 999 kHz*1                   | VR6202              | Adjust so that the indicator of TUNED IND. starts to light up. |

\*1: For the area using 10 kHz step, frequencies should be 1000 kHz.

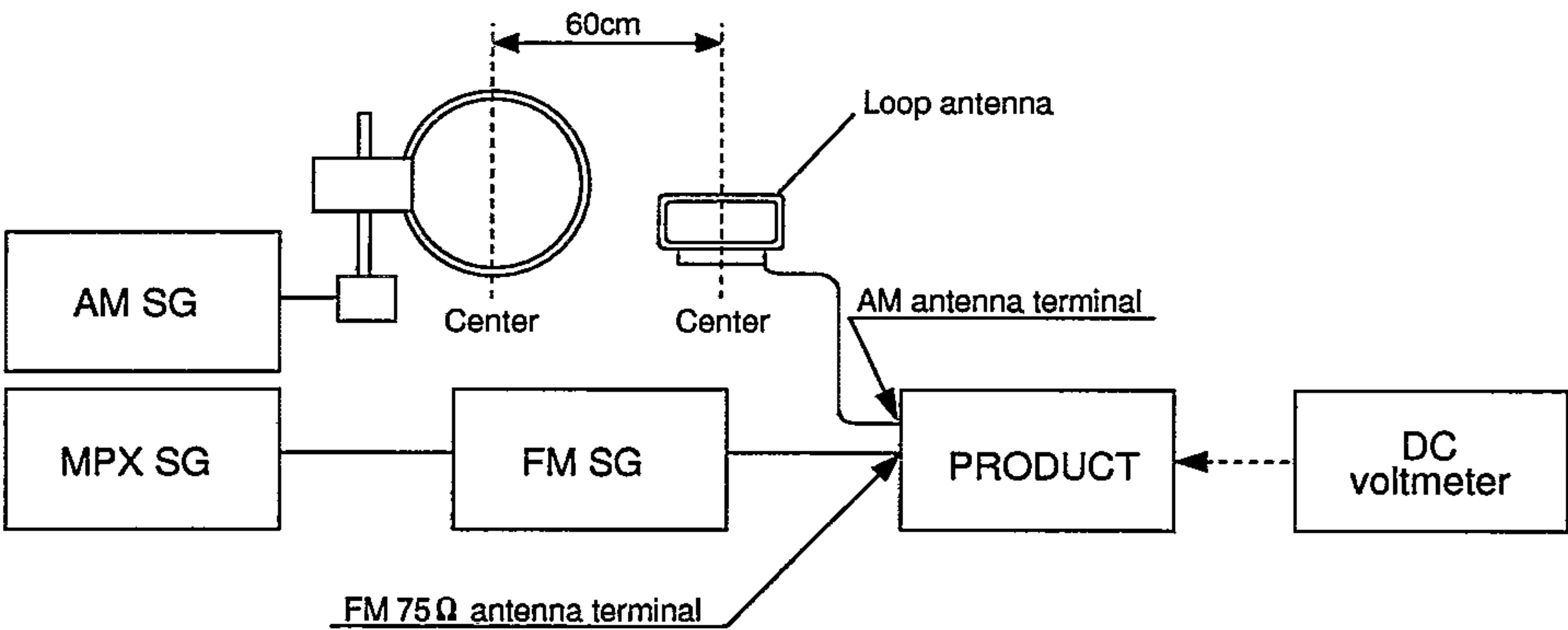
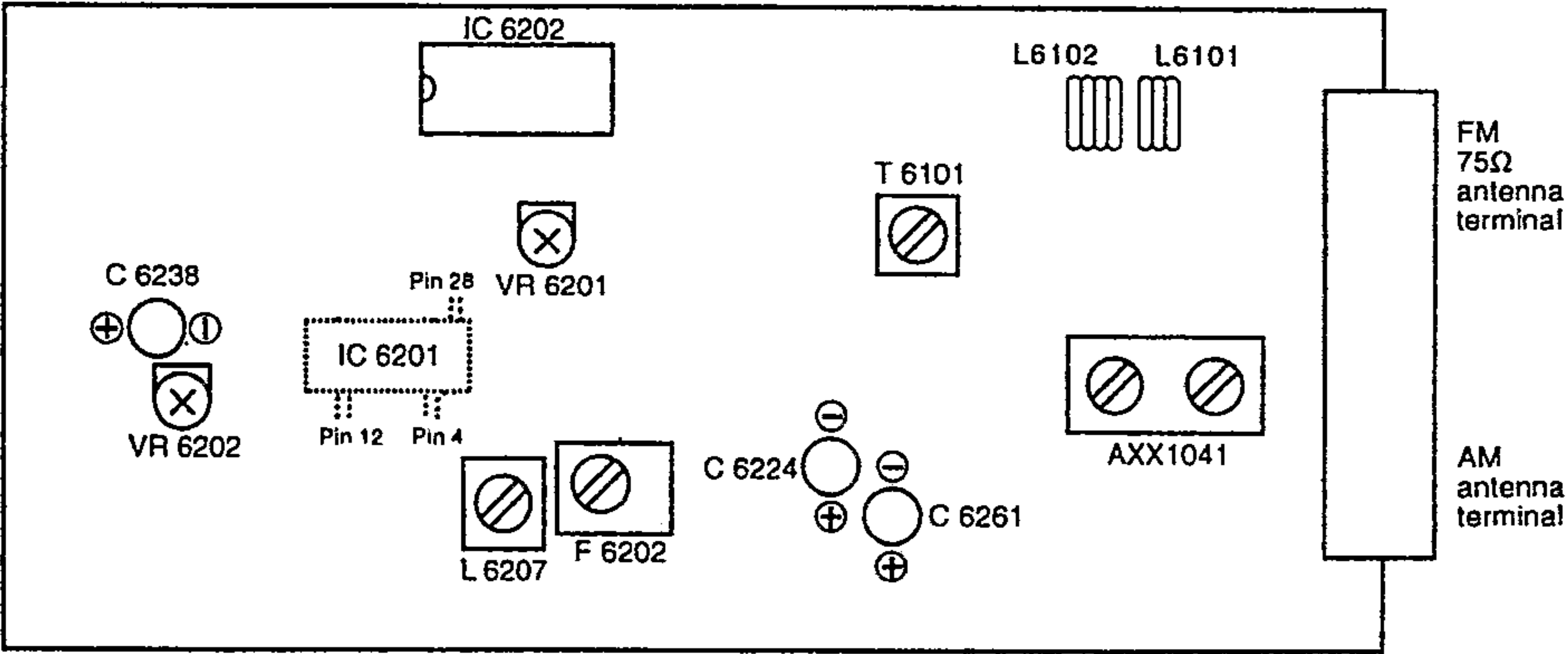


Fig. 1-1 AM and FM Adjustment Wiring Diagram

## FM/AM TUNER MOD. (RDS)/HE (AXQ7013)



## FM/AM TUNER MOD. (RDS)/HEZ (AXQ7014)

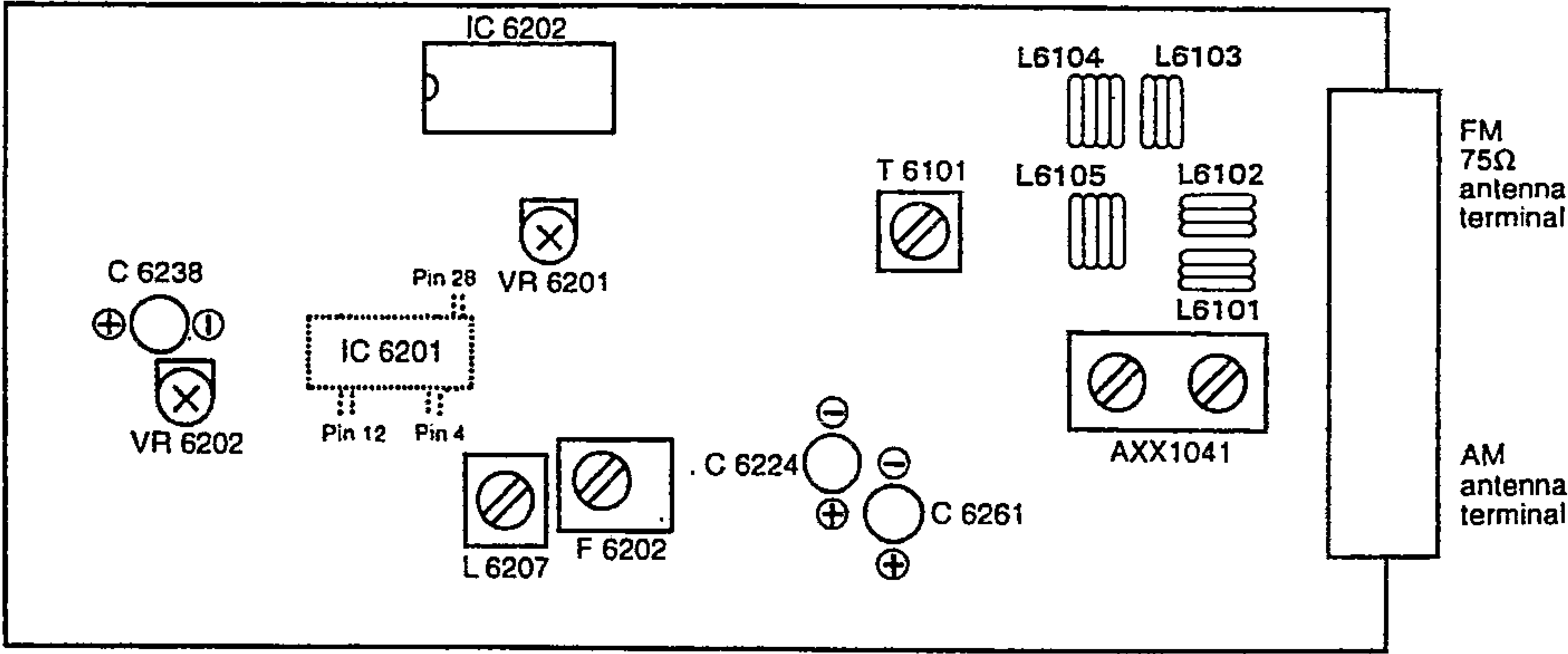


Fig. 1-2 Adjustment Points



RDS Adjustment

- Setting the RDS-Signal generator (\*1).
- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1-3

Note \*1 : Audio Main 1kHz, 85 %  
Pilot 10 % RDS 1.6 %  
SK 4.7 %

| Step No. | Adjustment Title                     | FM/AM SG        |              | Reception Frequency Display | Adjustment Location | Specifications                                                            |
|----------|--------------------------------------|-----------------|--------------|-----------------------------|---------------------|---------------------------------------------------------------------------|
|          |                                      | Frequency (MHz) | Level (dBμV) |                             |                     |                                                                           |
| 1        | RDS (BPF) Level                      | 88              | 60           | 88MHz                       | VR3201              | Adjust so that the Waveform of TP3201 (RDS) becomes at maximum. (Photo 1) |
| 2        | RDS IND. Lighting Level Verification | 88              | 60           | 88MHz                       | —                   | Confirm that the RDS IND. to light up.                                    |

Note: Entry into RDS mode is done by switching to the FM band and entering an RDS signal from FM (RDS) SG to the FM 75Ω antenna terminal.

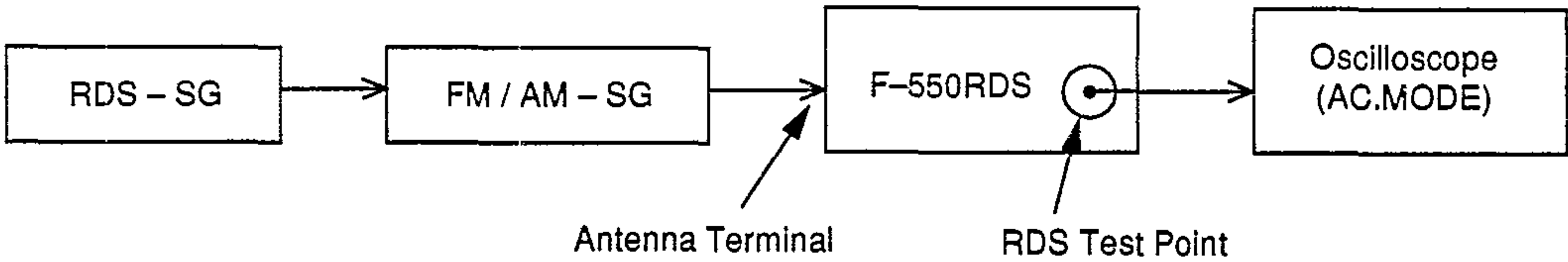


Fig. 1-3 RDS Adjustment Wiring Diagram

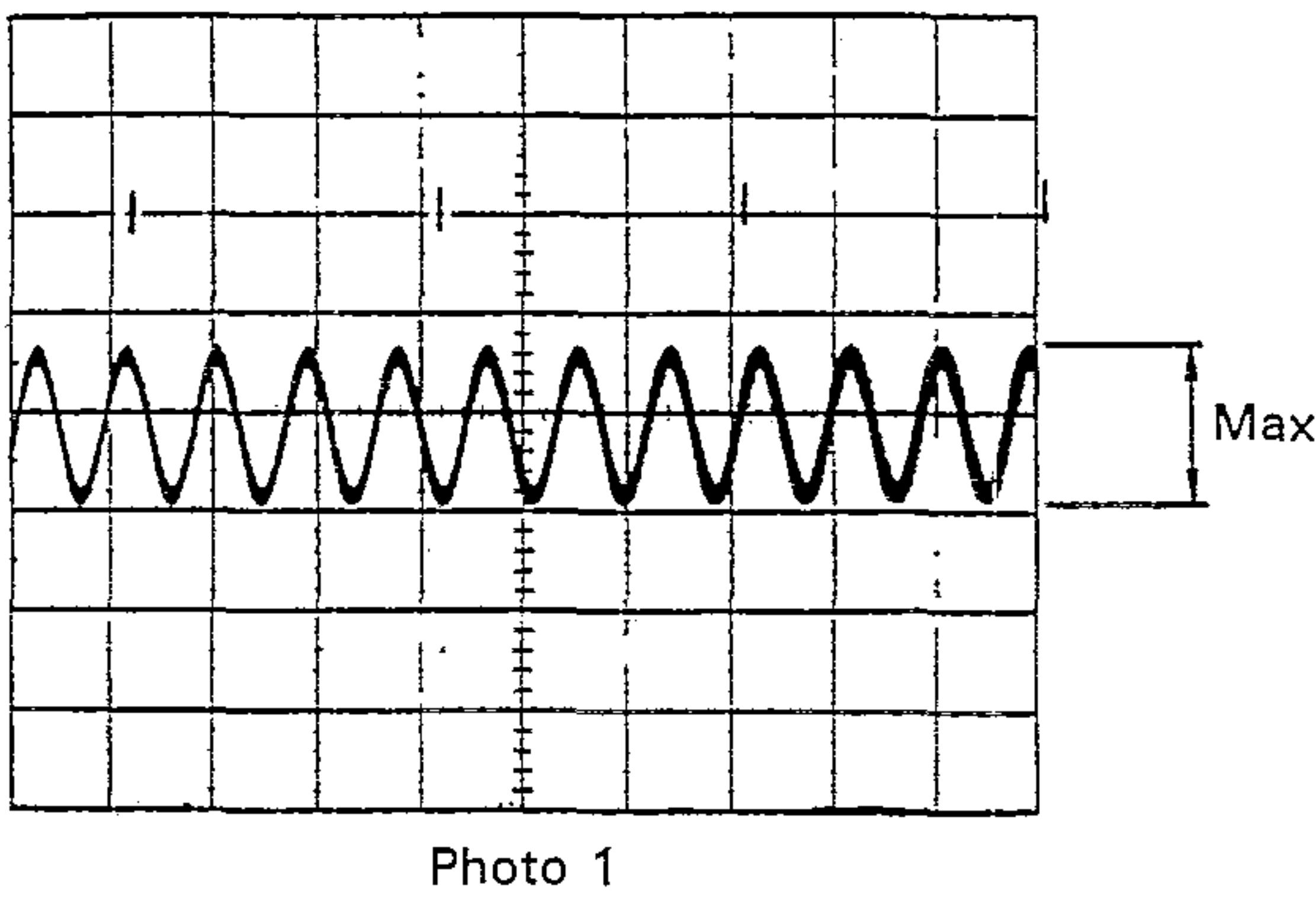


Photo 1

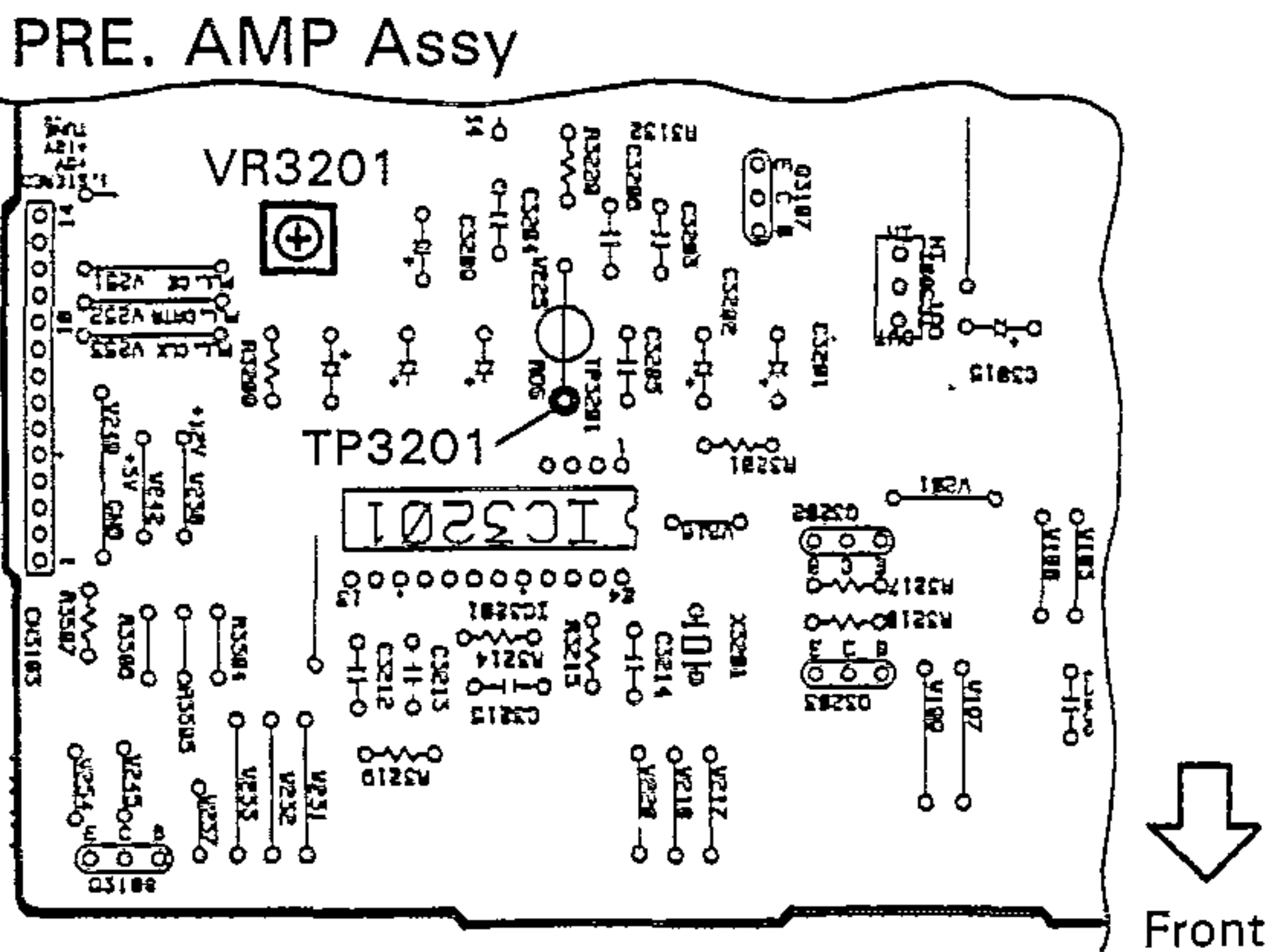


Fig. 1-4 Adjustment Points



7.2 STEREO DOUBLE CASSETTE DECK SECTION (CT-P550WR)

- Adjustment points and test points are shown in Fig. 2-3 and Fig. 2-4.

1. Test Mode

(1). Test mode outline

The test modes are the test mode 1 for execution of special operations and the test mode 2 with MUTE operation in the same way as for a single cassette deck.

(2). Test mode 1

■ Entry into test mode 1

Switch on the power supply while short-circuit the jumper wires JP1 and JP2 in the TC. MAIN assy (refer to Fig. 2-4), and afterwards disconnect the jumper wires.

■ Operation in test mode 1

- The REC LED flashes during test mode 1.
- Flashing of the I/II KEY SEL indication shows the operating mechanism.
- LINE MUTE opens in the same way as for the single cassette deck also during REC and REC PAUSE.
- The mechanism can operate independent of the presence or absence of tape.
- When the tape type detection switch for the mechanism on the side where the I/II KEY SEL indication does not flash is set to ON, the I/II KEY SEL for that side will light.

■ Cancellation method for test mode 1

When the ASSES/COPY key is pressed twice with both mechanisms in STOP condition, test mode 1 is cancelled and normal operation will be executed.  
However, when this key is pressed once, the mode shifts from test mode 1 to test mode 2.

(3). Test mode 2

■ Entry into test mode 2

Press the ASSES/COPY key once in the test mode 1 with both mechanisms in STOP condition.

■ Operation in test mode 2

- The REC LED flashes. (The flashing is more rapid than in test mode 1.)
  - In REC and REC PAUSE condition, LINE MUTE opens in the same way as for the single cassette deck.
- Otherwise, normal operation and indication are executed.

■ Cancellation method for test mode 2

Press the ASSES/COPY key or switch off the power supply.

2. Mechanical Adjustment

- Please execute this adjustment in test mode 1.
- Test tape: STD-301 (3kHz, 30min).
- The ground at the time of adjustment shall be W204 (refer to Fig. 2-4).

■ Tape Speed Adjustment

| No. | Mode | Test Tape                      | Adjusting Points        | Measurement Points                                  | Adjustment Procedure                                                                                         | Remarks |
|-----|------|--------------------------------|-------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------|
| 1   | PLAY | STD-301<br>(Playback:<br>3kHz) | TC. MAIN Assy<br>VR1851 | CN1001-Pin15 (L)<br>or Pin16 (R)<br>(TC. MAIN Assy) | Set the test tape to mechanism unit II, press the PLAY SW and adjust so that the reading becomes 3000Hz±5Hz. |         |

### 3. Electrical Adjustment

- Please execute this adjustment in test mode 2.
- The ground at the time of adjustment shall be W204 (refer to Fig. 2-4).

#### Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. When A-P550 and F-P550 are not connected to CN1001, connect load resistors of 22k $\Omega$  each (21k $\Omega$  to 23k $\Omega$ ) to pin 15 and pin 16.
5. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.  
STD-331E: For playback adjustment  
STD-631: Normal blank tape
6. Provide yourself with the following measuring devises:
  - AC millivoltmeter
  - Low-frequency oscillator
  - Attenuator
  - Oscilloscope
7. Adjust both right and left channels unless otherwise specified.
8. Turn the DOLBY NR switch off unless otherwise specified.
9. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
10. Always follow the indicated adjustment order.  
Otherwise, a complete adjustment may not be achieved.

#### Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

#### Recording Adjustment (Deck II)

1. Recording Bias Adjustment
2. Recording Level Adjustment.

*\*As the reference recording level is 250nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

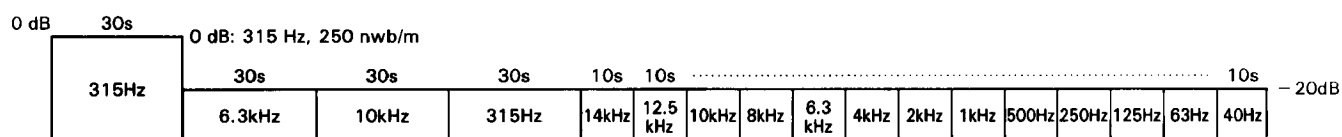
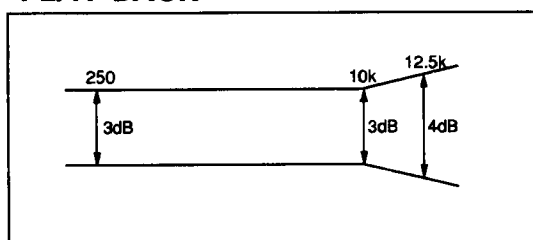


Fig. 2-1 STD-331E Test Tape

#### PLAY BACK



#### RECORDING

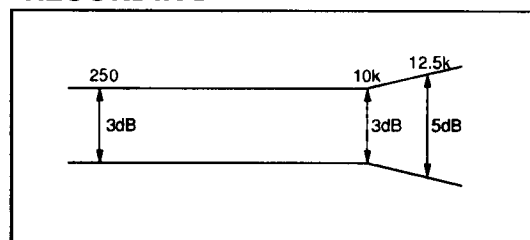


Fig. 2-2 Frequency Characteristics

Before Adjustment

Removal of the azimuth covers (L), (R)

- 1. Open the door panels (L) and (R).
- 2. Press the section ① (recessed part) on the inside of the door panels (L) and (R) with a flat screwdriver as shown in the figure.
- 3. Confirm that the azimuth covers (L) and (R) have come a little to the front, and then close the door panels (L) and (R).
- 4. Insert a flat screwdriver at the lower side of the azimuth covers (L) and (R) and pull them to the front.

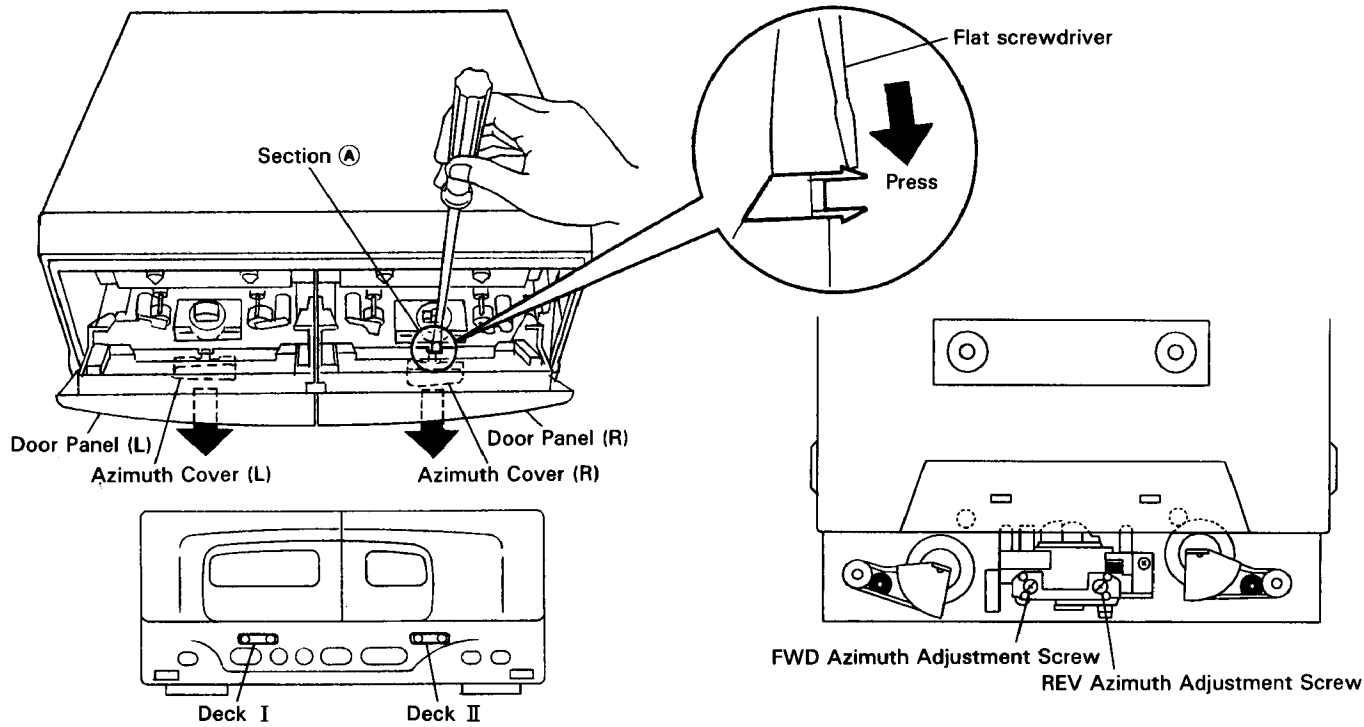


Fig. 2-3 Head Azimuth Adjustment

Playback Adjustment

1. Head Azimuth Adjustment

| Step | Tape Selector (AUTO) | Mode | Input Signal/<br>Test Tape                  | Adjusting Points |                                          | Measurement Points                            | Adjustment Value           | Remarks                                                                    |
|------|----------------------|------|---------------------------------------------|------------------|------------------------------------------|-----------------------------------------------|----------------------------|----------------------------------------------------------------------------|
| 1    | NORMAL               | PLAY | STD-331E test tape (Playback: 10kHz, -20dB) | Deck I           | Head azimuth adjustment screw (Fig. 2-3) | CN1001 Pin15 (L) or Pin16 (R) (TC. MAIN Assy) | Max. playback signal level | After adjustment, apply silicon bond to the head azimuth adjustment screw. |
|      |                      |      |                                             | Deck II          |                                          |                                               |                            |                                                                            |

2. Playback Level Adjustment

Since this adjustment determines playback Dolby NR level, perform it carefully.

| Step | Tape Selector (AUTO) | Mode | Input Signal/<br>Test Tape                         | Adjusting Points |                              | Measurement Points                        | Adjustment Value | Remarks |
|------|----------------------|------|----------------------------------------------------|------------------|------------------------------|-------------------------------------------|------------------|---------|
| 1    | NORMAL               | PLAY | STD-331E<br>test tape<br>(Playback: 315Hz,<br>0dB) | Deck I           | VR1181 (Lch)<br>VR1182 (Rch) | TP1 (Lch)<br>TP2 (Rch)<br>(TC. MAIN Assy) | -11.2 dBV        |         |
|      |                      |      |                                                    | Deck II          | VR1183 (Lch)<br>VR1184 (Rch) |                                           |                  |         |

Recording Adjustment

After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

1. Recording Bias Adjustment

| Step | Tape Selector (AUTO) | Mode       | Input Signal/ Test Tape                                                                          | Adjusting Points   | Measurement Points                             | Adjustment Value | Remarks                                                                                                     |
|------|----------------------|------------|--------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| 1    | NORMAL               | REC/ PAUSE | Input a 315Hz signal to the VIDEO/AUX terminal and set the input selector to VIDEO.              | Input Signal Level | CN1001 Pin15 (L) and Pin16 (R) (TC. MAIN Assy) | -26.0 dBV        |                                                                                                             |
| 2    | NORMAL               | REC → PLAY | Load the STD-631 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below) | Deck I<br>Deck II  | VR1501 (Lch)<br>VR1502 (Rch)                   |                  | Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal. |

Note: Set the 10 kHz input signal level to the same value as the 315 Hz input signal level of step 1.

2. Recording Level Adjustment

| Step | Tape Selector (AUTO) | Mode       | Input Signal/ Test Tape                                                             | Adjusting Points   | Measurement Points                     | Adjustment Value | Remarks                                                                                              |
|------|----------------------|------------|-------------------------------------------------------------------------------------|--------------------|----------------------------------------|------------------|------------------------------------------------------------------------------------------------------|
| 1    | NORMAL               | REC/ PAUSE | Input a 315Hz signal to the VIDEO/AUX terminal and set the input selector to VIDEO. | Input Signal Level | TP1 (Lch)<br>TP2 (Rch) (TC. MAIN Assy) | -11.2 dBV        |                                                                                                      |
| 2    | NORMAL               | REC → PLAY | STD-631 test tape and record/playback the 315Hz signal.                             | Deck I<br>Deck II  | VR1301 (Lch)<br>VR1302 (Rch)           |                  | Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes -11.2dBV. |

TC. MAIN Assy

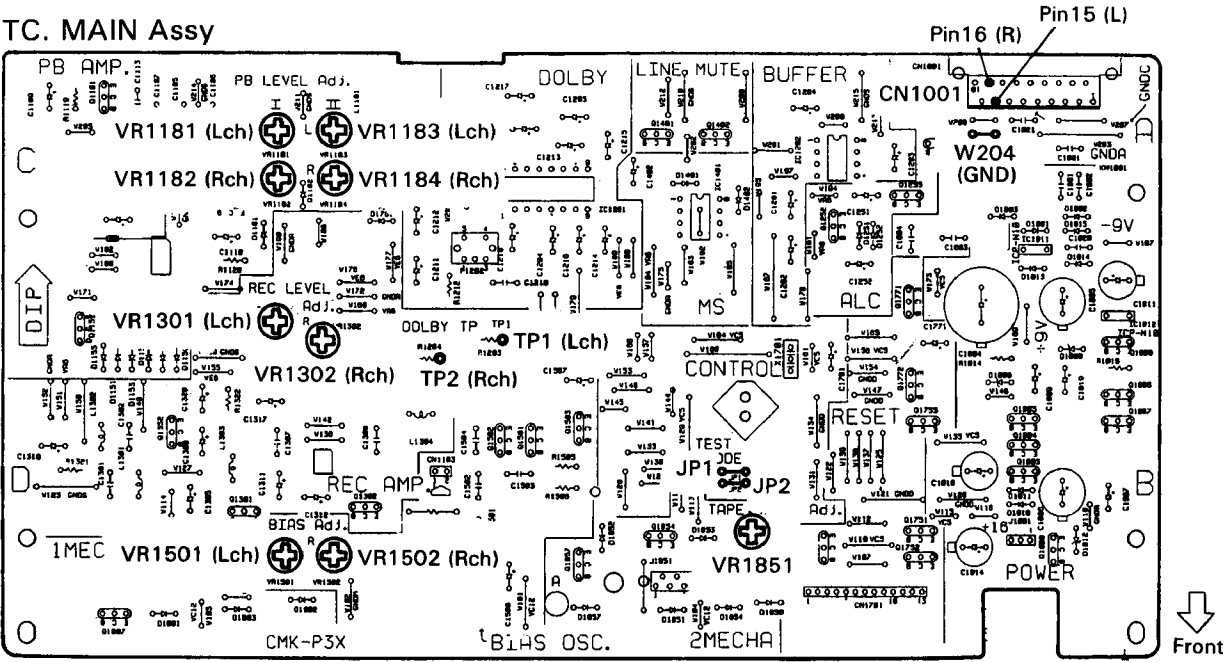


Fig. 2-4 Adjustment and Measurement Points



## ● Recording Adjustment

### 1. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

| Step | Tape Selector (AUTO) | Mode       | Input Signal/ Test Tape                                                                          | Adjusting Points   |                              | Measurement Points                                      | Adjustment Value                                                                                                   | Remarks |
|------|----------------------|------------|--------------------------------------------------------------------------------------------------|--------------------|------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------|
| 1    | NORMAL               | REC/ PAUSE | Input a 315Hz signal to the VIDEO/AUX terminal and set the input selector to VIDEO.              | Input Signal Level |                              | CN1001<br>Pin15 (L) and<br>Pin16 (R)<br>(TC. MAIN Assy) | -26.0 dBV                                                                                                          |         |
| 2    | NORMAL               | REC → PLAY | Load the STD-631 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below) | Deck I             | —                            |                                                         | Repeat adjustment until playback level of the 10kHz signal is within $0 \pm 0.5$ dB from that of the 315Hz signal. |         |
|      |                      |            |                                                                                                  | Deck II            | VR1501 (Lch)<br>VR1502 (Rch) |                                                         |                                                                                                                    |         |

Note: Set the 10 kHz input signal level to the same value as the 315 Hz input signal level of step 1.

### 2. Recording Level Adjustment

| Step | Tape Selector (AUTO) | Mode       | Input Signal/ Test Tape                                                             | Adjusting Points   |                              | Measurement Points                        | Adjustment Value                                                                                     | Remarks |
|------|----------------------|------------|-------------------------------------------------------------------------------------|--------------------|------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------|---------|
| 1    | NORMAL               | REC/ PAUSE | Input a 315Hz signal to the VIDEO/AUX terminal and set the input selector to VIDEO. | Input Signal Level |                              | TP1 (Lch)<br>TP2 (Rch)<br>(TC. MAIN Assy) | -11.2 dBV                                                                                            |         |
| 2    | NORMAL               | REC → PLAY | STD-631 test tape and record/playback the 315Hz signal.                             | Deck I             | —                            |                                           | Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes -11.2dBV. |         |
|      |                      |            |                                                                                     | Deck II            | VR1301 (Lch)<br>VR1302 (Rch) |                                           |                                                                                                      |         |

TC. MAIN Assy

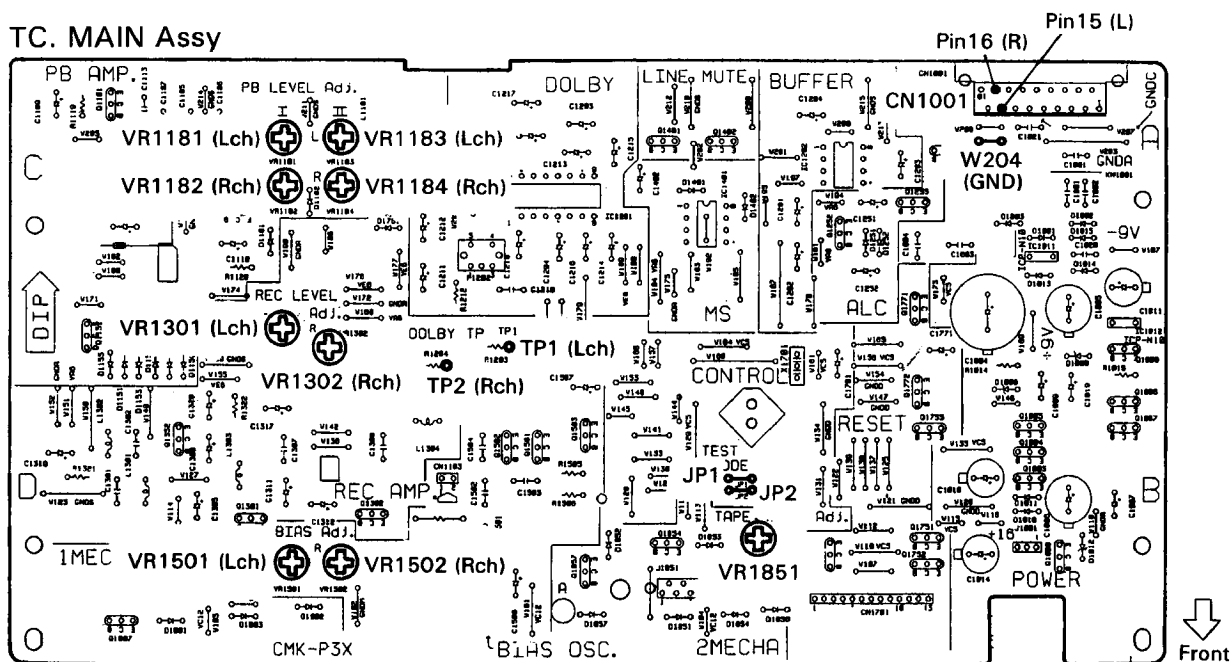


Fig. 2-4 Adjustment and Measurement Points



## 7.3 COMPACT DISC PLAYER SECTION (PD – P550)

### ■ Adjustment Methods

If a disc player is adjusted incorrectly or inadequately, it may malfunction or not work at all even though there is nothing at all wrong with the pickup or the circuitry. Adjust correctly following the adjustment procedure.

### ● Adjustment Items/Verification Items and Order

If the specified values cannot be obtained or no adjustment is possible by performing the verifications or adjustments described in steps 1–4, the pickup block may be defective.

| Step | Item                                               | Test Point                                  | Adjustment Location                                               |
|------|----------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------|
| 1    | Focus offset verification                          | TP1, Pin6 (FCS. ERR)                        | None                                                              |
| 2    | Tracking error balance verification                | TP1, Pin2 (TRK.ERR)                         | None                                                              |
| 3    | Pickup radial/tangential direction tilt adjustment | TP1, Pin1 (RF)                              | Radial tilt adjustment screw,<br>Tangential tilt adjustment screw |
| 4    | RF level verification                              | TP1, Pin1 (RF)                              | None                                                              |
| 5    | Focus servo loop gain adjustment                   | TP1, Pin5 (FCS. IN)<br>TP1, Pin6 (FCS. ERR) | VR152 (FCS. GAN)                                                  |
| 6    | Tracking servo loop gain adjustment                | TP1, Pin3 (TRK. IN)<br>TP1, Pin2 (TRK. ERR) | VR151 (TRK. GAN)                                                  |

### Abbreviation Table

|          |                  |
|----------|------------------|
| FCS. ERR | : Focus Error    |
| TRK. ERR | : Tracking Error |
| FCS. GAN | : Focus Gain     |
| TRK. GAN | : Tracking Gain  |
| FCS. IN  | : Focus In       |
| TRK. IN  | : Tracking In    |

### ● Measuring Instruments and Tools

1. Dual trace oscilloscope (10 : 1 probe)
2. Low-frequency oscillator
3. Test disc (YEDS-7)
4. Low pass filter (39k $\Omega$  + 0.001 $\mu$ F)
5. Resistor (100k $\Omega$ )
6. 8 cm disc (With at least about 20 minutes of recording)
7. Ball point hexagon wrench (GGK1002)
8. Standard tools



## ● Test Point and Adjustment Variable Resistor Positions

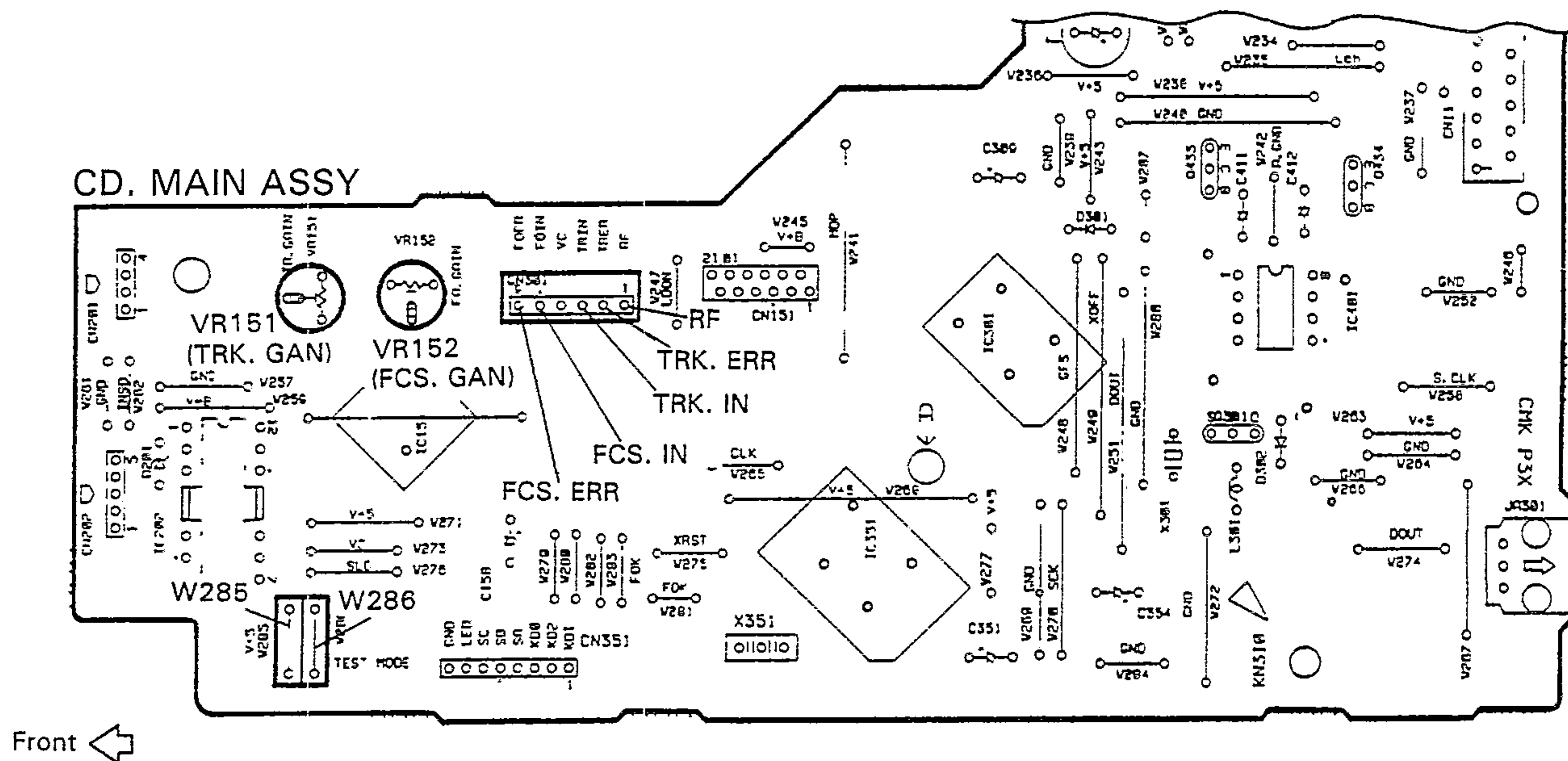


Fig. 3-1 Adjustment Location

## ● Notes

1. Use a 10 : 1 probe for the oscilloscope.
2. All the knob positions (settings) for the oscilloscope in the adjustment procedures are for when a 10 : 1 probe is used.
3. GND of the oscilloscope connect to TP1, pin4 (VC). If GND is shorted to the ground of the player, the player should be damaged.

## ● Test Mode

These models have a test mode so that the adjustment and checks required for service can be carried out easily. When these models are in test mode, the keys on the front panel work differently from normal. Adjustments and checks can be carried out by operating these keys with the correct procedure. For these models, all adjustments are carried out in test mode.

### [Setting these models to test mode]

How to set this model into test mode.

1. Unplug the power cord from the AC socket.
2. Short-circuit jumper wires (W285 and W286) for the test mode (See Fig. 3-1).
3. Plug the power cord back into the AC socket.

When the test mode is set correctly, the display is different from what it usually is when the power is turned on. If the display is still the same as usual, test mode has not been set correctly, so repeat Steps 1-3.



### [Release from test mode]

Here is the procedure for releasing the test mode:

1. Press the STOP key and stop all operations.
2. Turn off the power switch.

### [Operations of the keys in test mode]

| Code | Key Name   | Function in Test Mode     | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------|------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | PGM/EDIT   | Focus servo close         | <p>The laser diode is lit up and the focus actuator is lifted up, then lowered slowly and the focus servo is closed at the point where the objective lens is focused on the disc.</p> <p>With the player in this state, if you lightly rotate the stopped disc by hand, you can hear the sound the focus servo.</p> <p>If you can hear this sound, the focus servo is operating correctly. If you press this key with no disc mounted, the laser diode lights up, the focus actuator is pulled up, then the actuator is lowered and raised three times and returned to its original position.</p>                                                                                                         |
| ▶/■  | PLAY/PAUSE | Spindle servo ON          | <p>Starts the spindle motor in the clockwise direction and when the disc rotation reaches the prescribed speed (about 500rpm at the inner periphery), sets the spindle servo in a closed loop.</p> <p>Be careful. Pressing this key when there is no disc mounted makes the spindle motor run at the maximum speed.</p> <p>If the focus servo does not go correctly into a closed loop or the laser light shines on the mirror section at the outermost periphery of the disc, the same symptom is occurred.</p>                                                                                                                                                                                          |
|      |            | Tracking servo close/open | <p>Pressing this key when the focus servo and spindle servo are operating correctly in closed loops puts the tracking servo into a closed loop, displays the track number being played back and the elapsed time on the front panel, and outputs the playback signal.</p> <p>If the elapsed time is not displayed or not counted correctly or the audio is not played back correctly, it may be that the laser is shining on the section with no sound recorded at the outer edge of the disc, that something is out of adjustment, or that there is some other problem.</p> <p>This key is a toggle key and open/close the tracking servo alternately. This key has no effect if no disc is mounted.</p> |

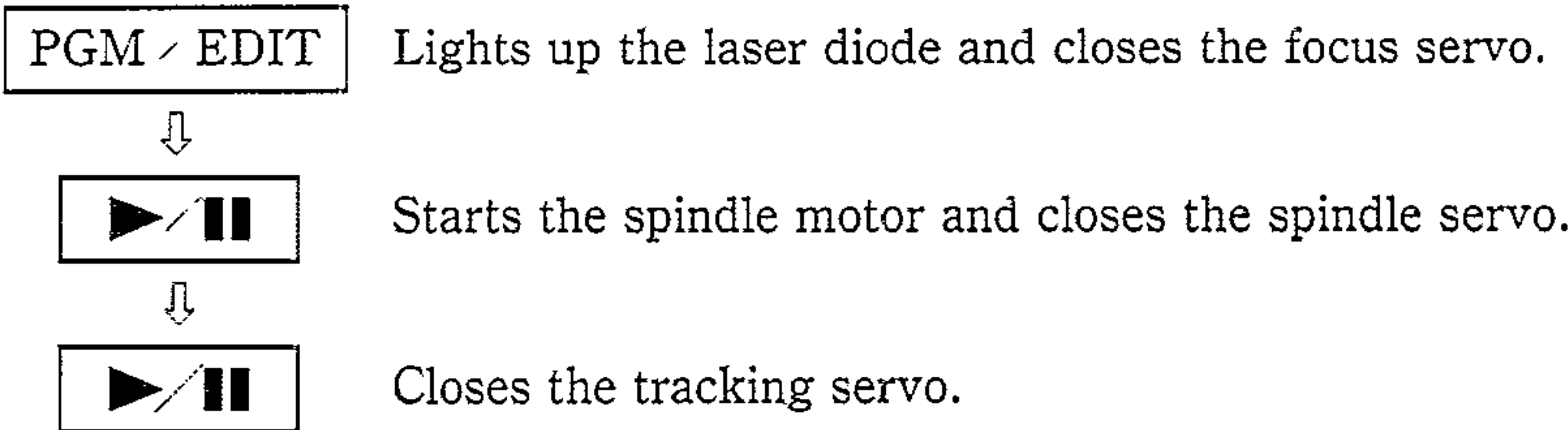


| Code                                                                                | Key Name                           | Function in Test Mode          | Explanation                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | MANUAL /<br>TRACK<br>SEARCH<br>REV | Carriage reverse<br>(inwards)  | Moves the pickup position toward the inner diameter of the disc. When this key is pressed with the tracking servo in a closed loop, the tracking servo automatically goes into an open loop. Since the motor does not automatically stop at the mechanical end point in test mode, be careful with this operation. |
|    | MANUAL /<br>TRACK<br>SEARCH<br>FWD | Carriage forward<br>(outwards) | Moves the pickup position toward the outer diameter of the disc. When this key is pressed with the tracking servo in a closed loop, the tracking servo automatically goes into an open loop. Since the motor does not automatically stop at the mechanical end point in test mode, be careful with this operation. |
|  | STOP                               | Stop                           | Initializes and the disc rotation stops.<br>The pickup and disc remain where they are when this key is pressed.                                                                                                                                                                                                    |
|  | EJECT                              | Disc Load in / Load out        | Load in / Load out the disc. This key is a toggle key and load in / load out alternately.<br>Pressing this key when the disc is turning stops the disc, then load out the disc.<br>This key operation does not affect the position of the pick-up.                                                                 |

[How to playback a disc in test mode]

In test mode, since the servos operate independently, playing back a disc requires that you operate the keys in the correct order to close the servos.

Here is the key operation sequence for playing back a disc in test mode.



Wait at least 2–3 seconds between each of these operations.

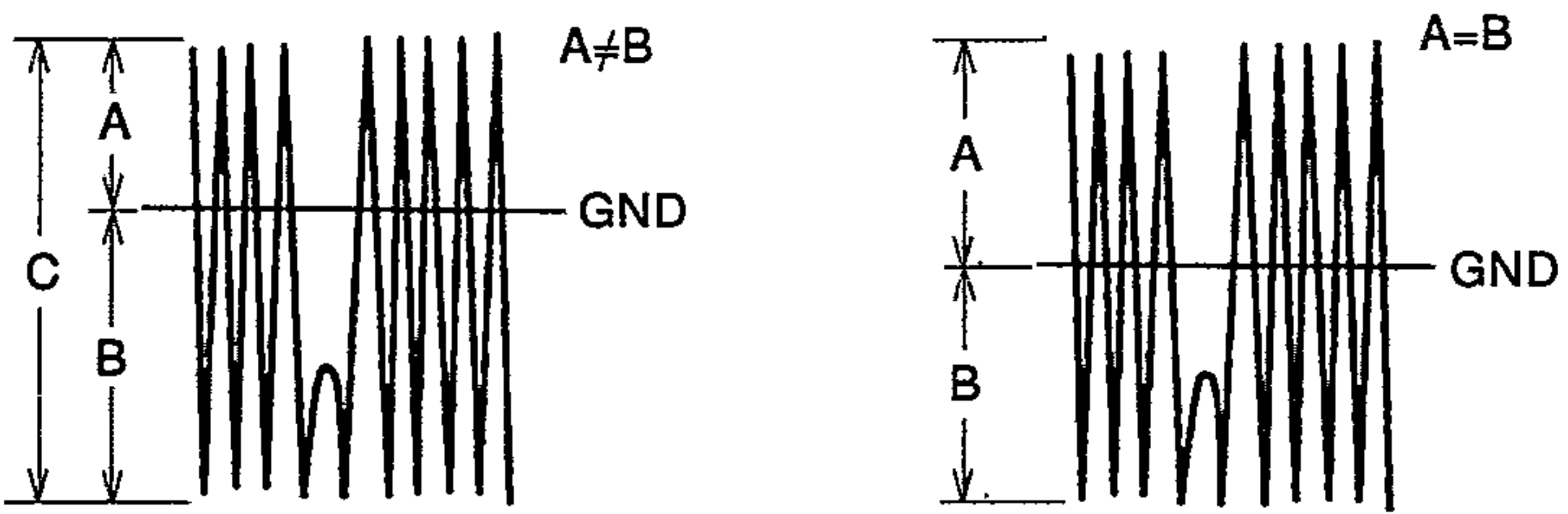


### 1. Focus Offset Verification

|                                                                                              |                                                                                                                                       |                                                           |                                                                                 |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------|
| ● Objective                                                                                  | Verify the DC offset for the focus error amp.                                                                                         |                                                           |                                                                                 |
| ● Symptom when out of adjustment                                                             | The model does not focus in and the RF signal is dirty.                                                                               |                                                           |                                                                                 |
| ● Measurement Instrument Connections                                                         | Connect the oscilloscope to TP1, Pin6 (FCS. ERR) and GND is to TP1, Pin4 (VC).<br>[Settings] 5mV/division<br>10ms/division<br>DC mode | ● Player State<br><br>● Adjustment Location<br><br>● Disc | Test mode, stopped<br>(just the Power switch on)<br><br>None<br><br>None needed |
| <b>[Procedure]</b><br>Verify the DC voltage at TP1, Pin6 (FCS. ERR) is $0 \pm 50\text{mV}$ . |                                                                                                                                       |                                                           |                                                                                 |

*Note: If the specified values cannot be obtained or no adjustment is possible by performing the verifications or adjustments described in adjustment items 1–4, the pickup block may be defective.*

### 2. Tracking Error Balance Verification

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                       |                                                                                                                          |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| ● Objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | To verify that there is no variation in the sensitivity of the tracking photo diode.                                                                                                  |                                                                                                                          |                                                                                               |
| ● Symptom when out of adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Play does not start or track search is impossible.                                                                                                                                    |                                                                                                                          |                                                                                               |
| ● Measurement Instrument Connections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Connect the oscilloscope to TP1, Pin2 (TRK. ERR) and GND is to TP1, Pin4 (VC). (This connection may be via a low pass filter.)<br>[Settings] 50mV/division<br>5ms/division<br>DC mode | ● Player State<br><br>● Adjustment Location<br><br>● Disc                                                                | Test mode, focus and spindle servos closed and tracking servo open.<br><br>None<br><br>YEDS–7 |
| <b>[Procedure]</b><br>1. Move the pickup to midway across the disc (R=35mm) with the MANUAL/TRACK SEARCH FWD ►►•►►► key or REV ◄◄◄•◄◄◄ key.<br>2. Press the PGM/EDIT key, then the PLAY/PAUSE ►/◄ key in that order to close the focus servo then the spindle servo.<br>3. Line up the bright line (ground) at the center of the oscilloscope screen and put the oscilloscope into DC mode.<br>4. Supposing that the positive amplitude of the tracking error signal at TP1, pin2 (TRK. ERR) is (A) and the negative amplitude is (B), the following expression is satisfied. |                                                                                                                                                                                       |                                                                                                                          |                                                                                               |
| When $A \geq B$ , $\frac{A-B}{C} \times \frac{1}{2} \leq 0.1$<br>When $A < B$ , $\frac{B-A}{C} \times \frac{1}{2} \leq 0.1$                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                       |  <p>When there is a DC component</p> |                                                                                               |



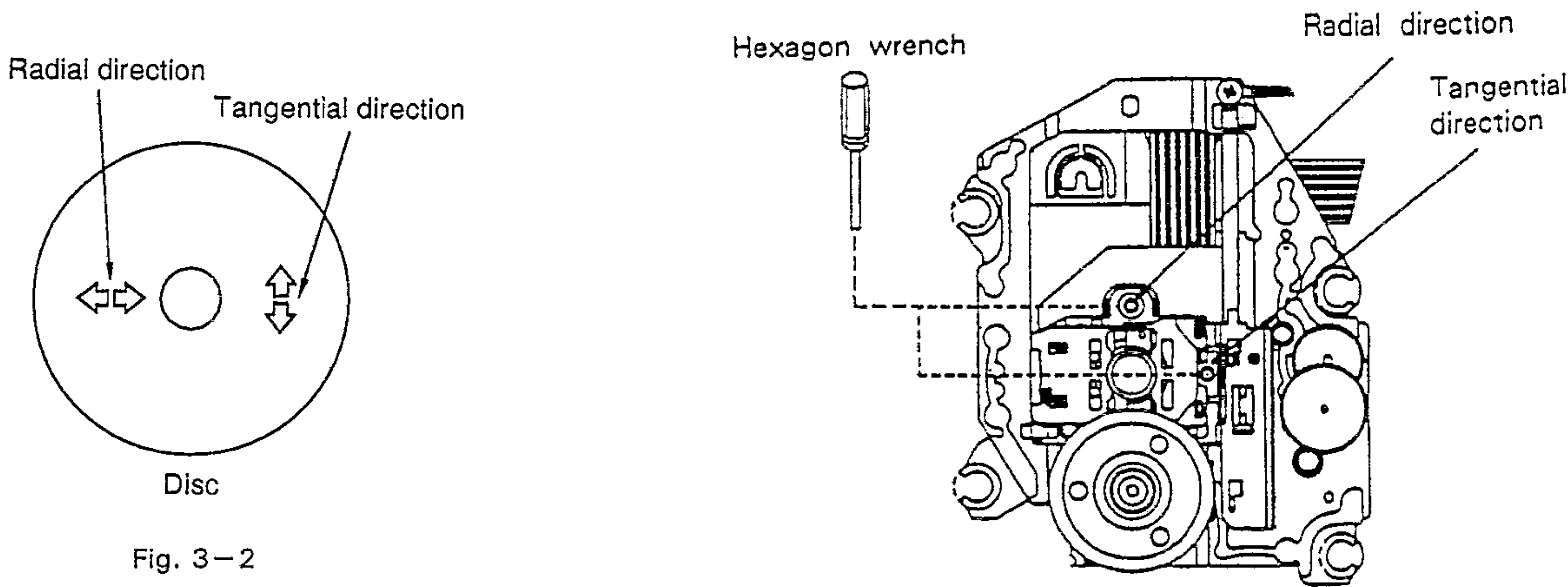
3. Pickup Radial/Tangential Tilt Adjustment

|                                      |                                                                                                                                                               |                                                           |                                                                                                                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ● Objective                          | To adjust the angle of the pickup relative to the disc so that the laser beams are shone straight down into the disc for the best read out of the RF signals. |                                                           |                                                                                                                                                                                   |
| ● Symptom when out of adjustment     | Sound broken; some discs can be played but not others.                                                                                                        |                                                           |                                                                                                                                                                                   |
| ● Measurement Instrument Connections | Connect the oscilloscope to TP1, Pin1 (RF) and GND is to TP1, Pin4 (VC).<br><br>[Settings] 20mV/division<br>200ns/division<br>AC mode                         | ● Player State<br><br>● Adjustment Location<br><br>● Disc | Test mode, play<br><br>Pickup radial tilt adjustment screw and tangential tilt adjustment screw<br><br>8 cm disc<br>[However, those with approx. 20 min of audio signal (music).] |

[Procedure]

1. Press the MANUAL/TRACK SEARCH FWD ►► • ►► key or REV ◀◀ • ◀◀ key to move the pickup to the external circumference of the disc.  
Press the PGM/EDIT key, the PLAY/PAUSE ►/▮ key twice in that order to close the respective servos and put the player into play mode.
2. First, adjust the radial tilt adjustment screw with the hexagon wrench (GGK1002) so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly.
3. Next, adjust the tangential tilt adjustment screw with the hexagon wrench (GGK1002) so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly (Fig. 3-3).  
※ The ball-point type hexagonal wrench is used because the disc will get in the way if a normal hexagonal wrench is used.
4. Adjust the radial tilt adjustment screw and the tangential tilt adjustment screw again so that the eye pattern can be seen the most clearly. As necessary, adjust the two screws alternately so that the eye pattern can be seen the most clearly.
5. When the adjustment is completed, lock the radial and tangential adjustment screw.

Note: Radial and tangential mean the directions relative to the disc shown in Fig. 3-2.





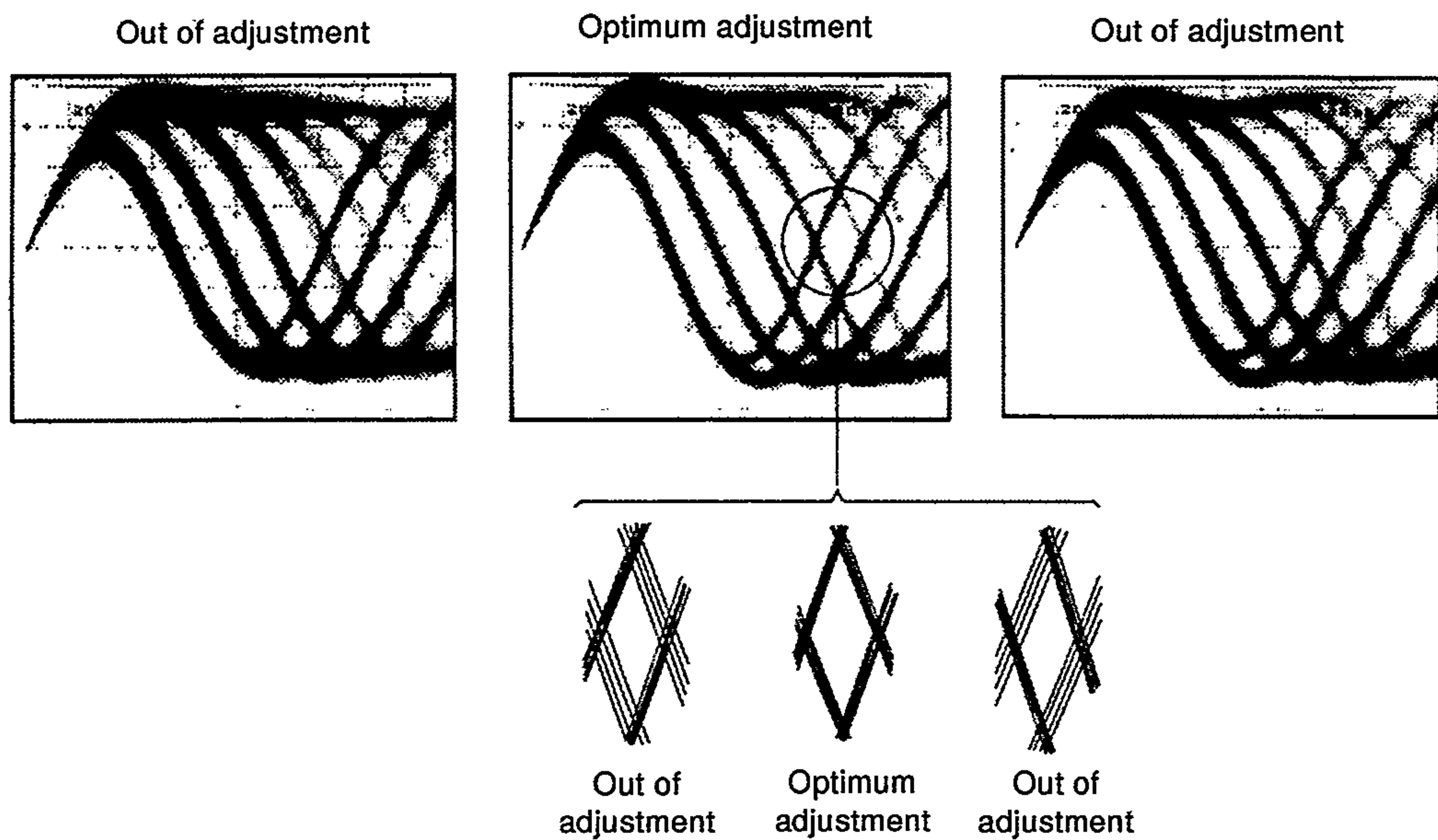


Fig. 3-3 Eye Pattern

#### 4. RF Level Verification

|                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                  |                                                   |                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------|
| ● Objective                                                                                                                                                                                                                                                                                                                                  | To verify the playback RF signal amplitude.                                                                                      |                                                   |                                   |
| ● Symptom when out of adjustment                                                                                                                                                                                                                                                                                                             | No play or no search                                                                                                             |                                                   |                                   |
| ● Measurement Instrument Connections                                                                                                                                                                                                                                                                                                         | Connect the oscilloscope to TP1, Pin1 (RF) and GND is to TP1, Pin4 (VC).<br>[Settings] 50mV/division<br>10ms/division<br>AC mode | ● Player State<br>● Adjustment Location<br>● Disc | Test mode, play<br>None<br>YEDS-7 |
| <b>[Procedure]</b><br>1. Move the pickup to midway across the disc (R=35mm) with the MANUAL/TRACK SEARCH FWD ►►►•►►► key or REV ◄◄◄•◄◄◄ key, then press the PGM/EDIT key, the PLAY/PAUSE ►◄◄ key twice in that order to close the respective servos and put the player into play mode.<br>2. Verify the RF signal amplitude is 1.2Vp-p±0.2V. |                                                                                                                                  |                                                   |                                   |



5. Focus Servo Loop Gain Adjustment

|                                      |                                                                                            |                                                           |                                                       |
|--------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------|
| ● Objective                          | To optimize the focus servo loop gain.                                                     |                                                           |                                                       |
| ● Symptom when out of adjustment     | Playback does not start or focus actuator noisy.                                           |                                                           |                                                       |
| ● Measurement Instrument Connections | See Fig. 3-4.<br><br>[Settings]<br>CH1<br>20mV/division<br>X-Y mode<br>CH2<br>5mV/division | ● Player State<br><br>● Adjustment Location<br><br>● Disc | Test mode, play<br><br>VR152 (FCS. GAN)<br><br>YEDS-7 |

[Procedure]

- 1. Set the AF generator output to 1.2kHz and 1Vp-p.
- 2. Press the MANUAL/ TRACK SEARCH FWD ►►►•►►► key or REV ◀◀◀•◀◀◀ key to move the pickup to halfway across the disc (R=35mm), then press the PGM/EDIT key, the PLAY/PAUSE ►/◼ key twice in that order to close the corresponding servos and put the player into play mode.
- 3. Adjust VR152 (FCS. GAN) so that the Lissajous waveform is symmetrical about the X axis and the Y axis.

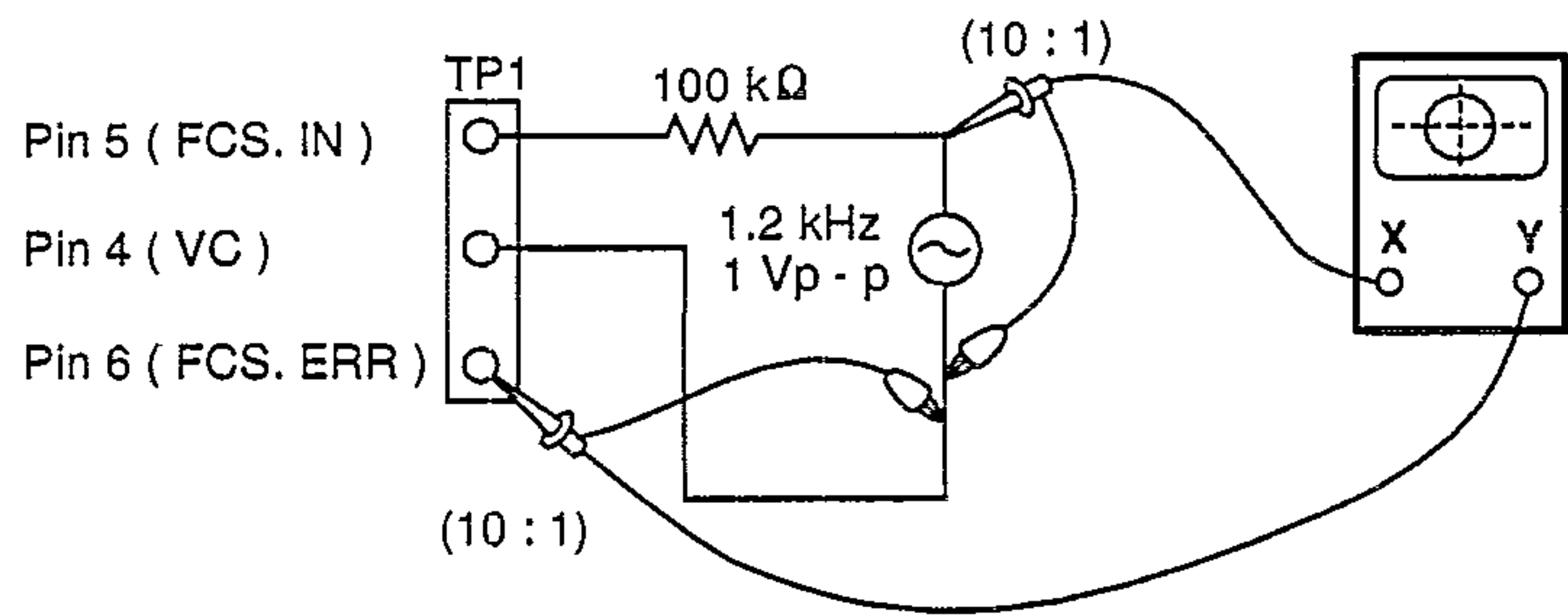
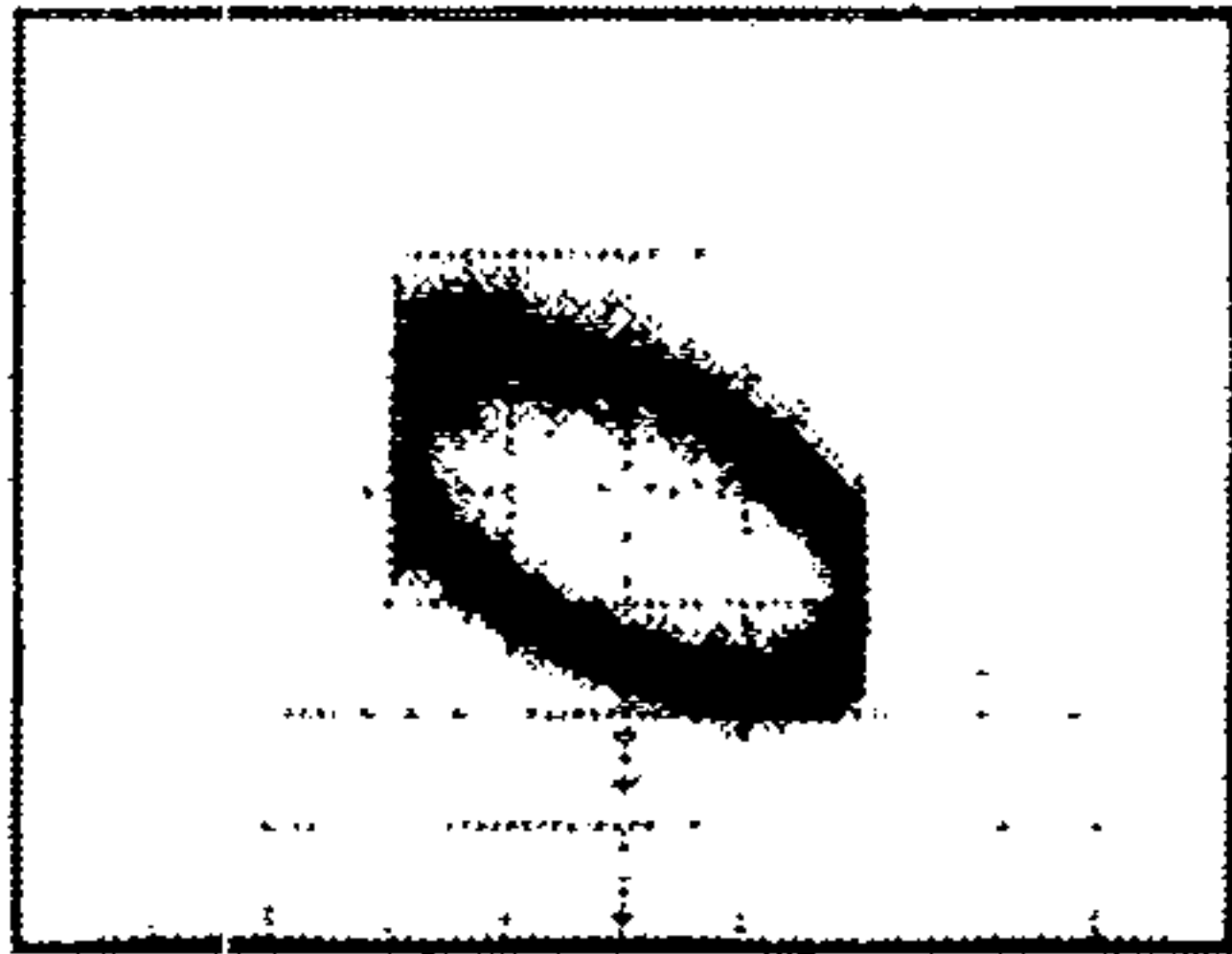
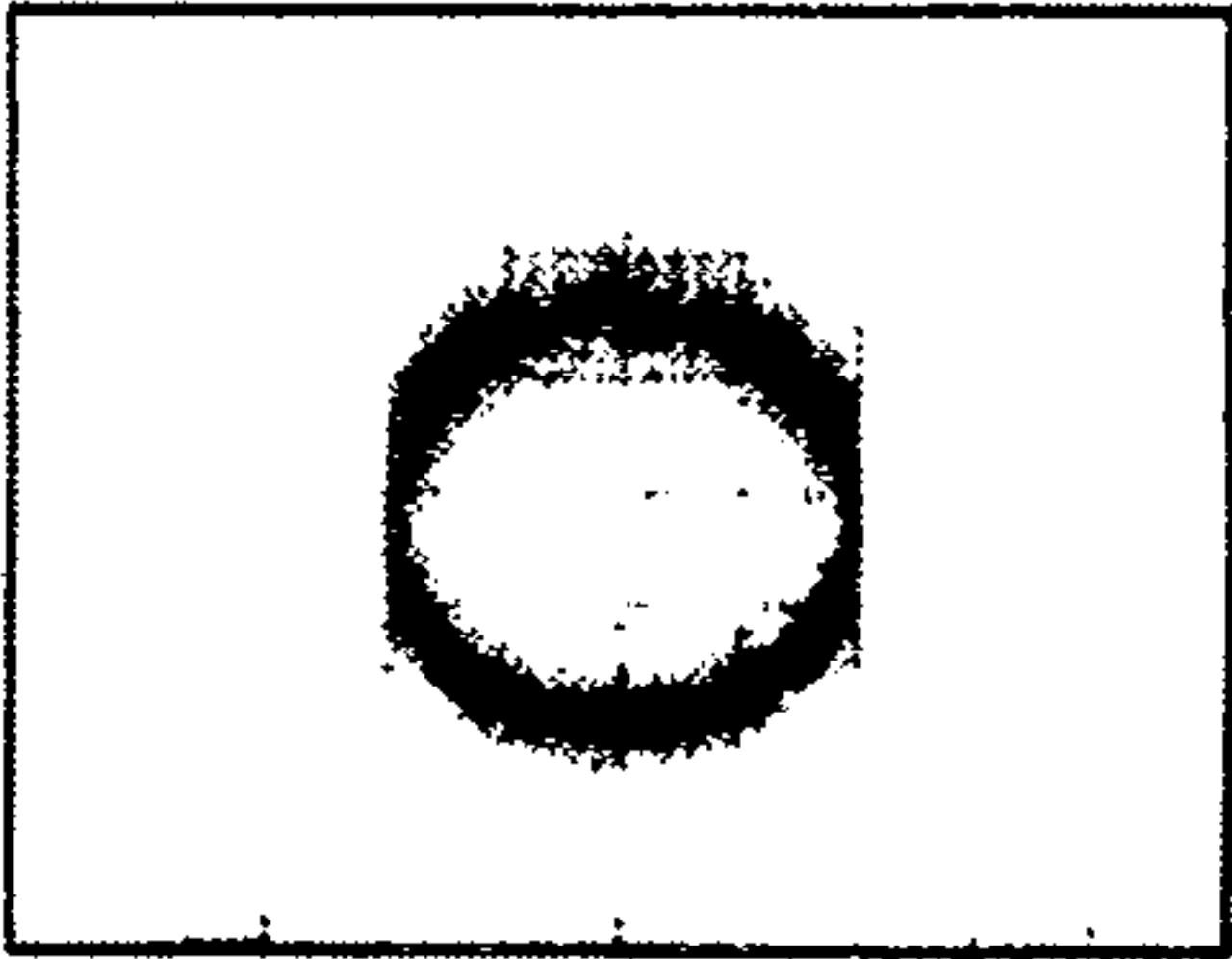


Fig. 3-4

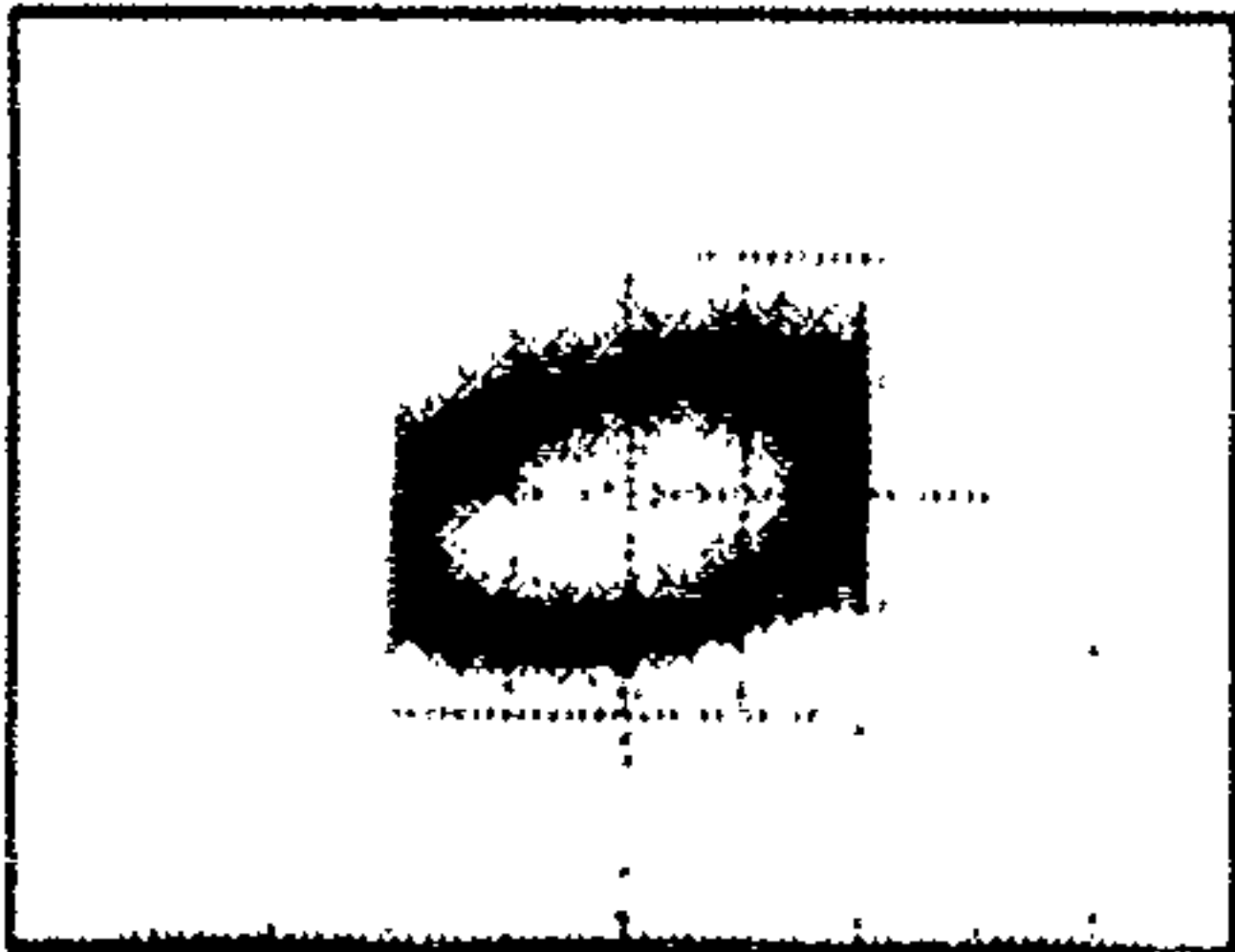
Focus Gain Adjustment



Higher gain



Optimumr gain



Lower gain



6. Tracking Servo Loop Gain Adjustment

|                                      |                                                                                             |                                                           |                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------|
| ● Objective                          | To optimize the tracking servo loop gain.                                                   |                                                           |                                                       |
| ● Symptom when out of adjustment     | Playback does not start, during searches the actuator is noisy, or tracks are skipped.      |                                                           |                                                       |
| ● Measurement Instrument Connections | See Fig. 3-5.<br><br>[Settings]<br>CH1<br>50mV/division<br>X-Y mode<br>CH2<br>20mV/division | ● Player State<br><br>● Adjustment Location<br><br>● Disc | Test mode, play<br><br>VR151 (TRK. GAN)<br><br>YEDS-7 |

[Procedure]

- 1. Set the AF generator output to 1.2kHz and 2Vp-p.
- 2. Press the MANUAL/TRACK SEARCH FWD ►►► key or REV ◄◄◄ key to move the pickup to halfway across the disc (R=35mm), then press the PGM/EDIT key, the PLAY/PAUSE ►/■ key twice in that order to close the corresponding servos and put the player into play mode.
- 3. Adjust VR151 (TRK. GAN) so that the Lissajous waveform is symmetrical about the X axis and the Y axis.

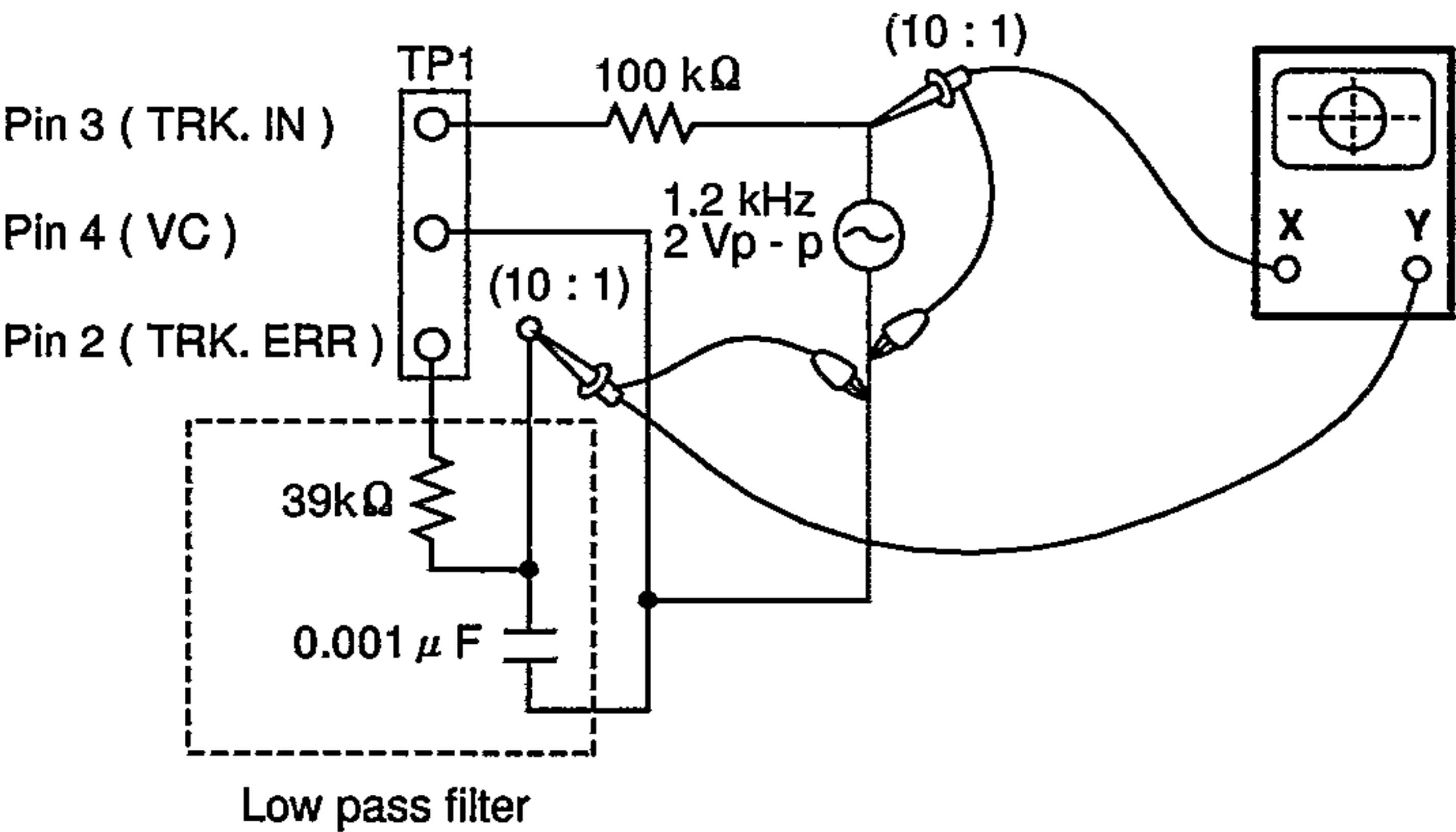
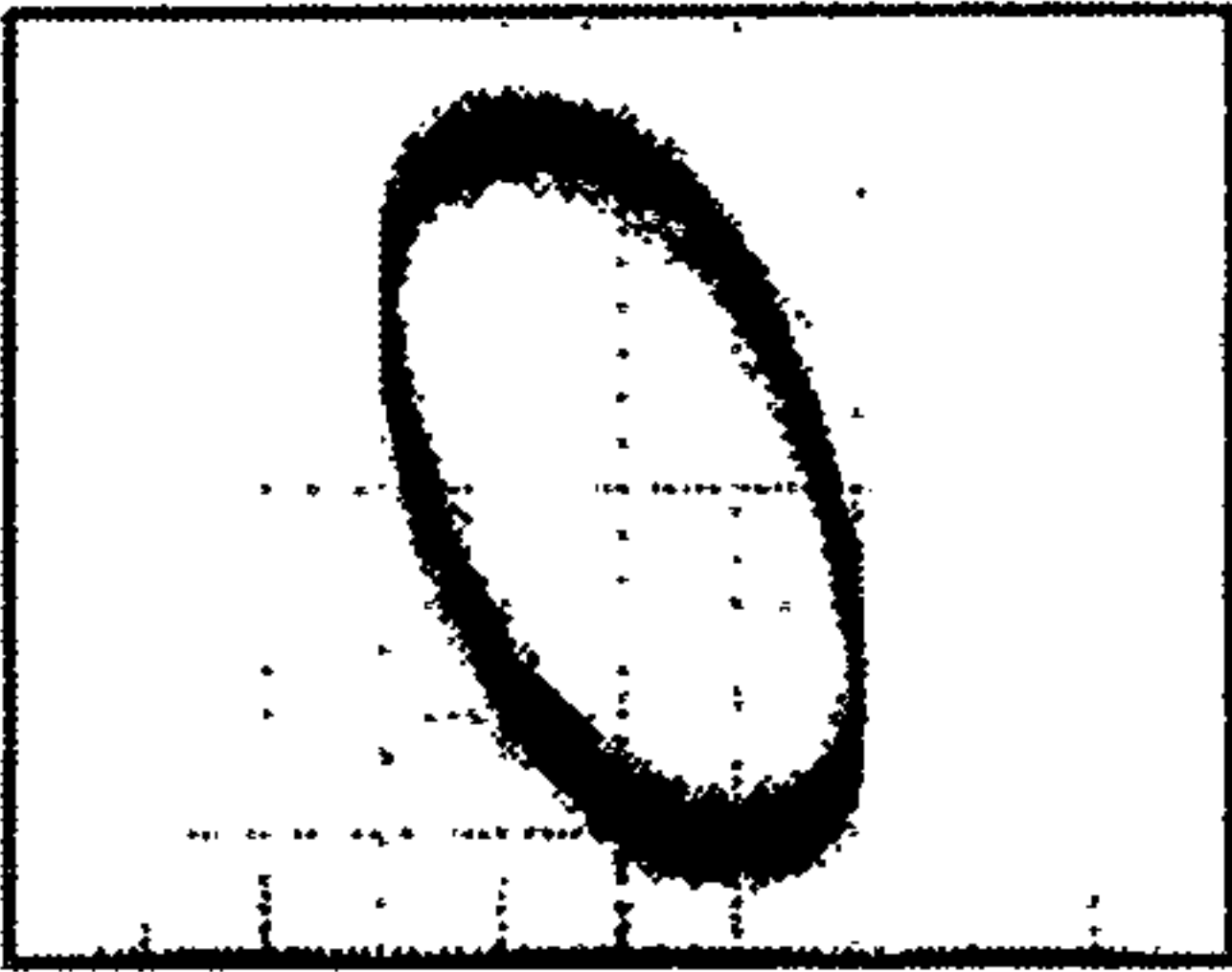


Fig. 3-5

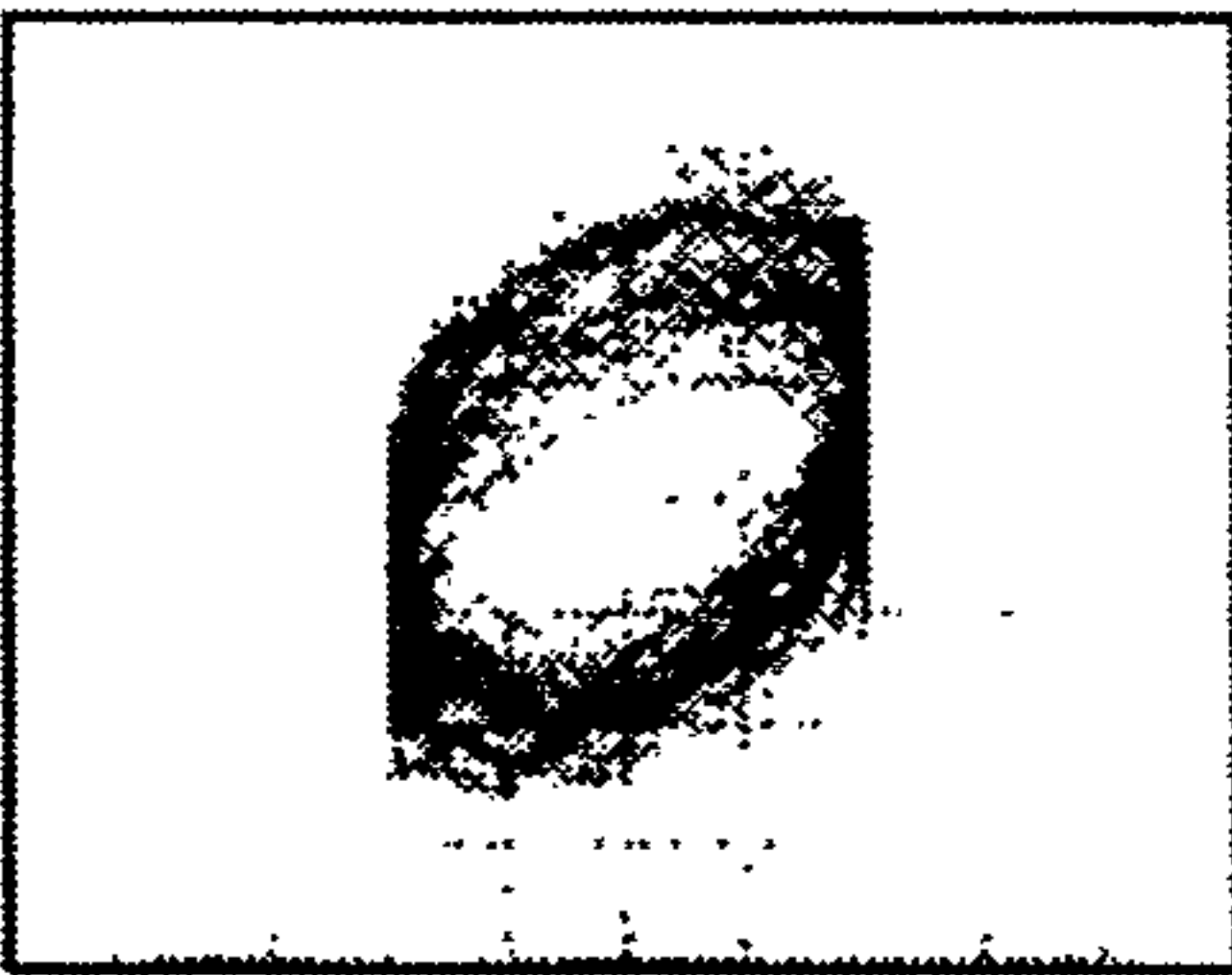
Tracking Gain Adjustment



Higher gain



Optimum gain



Lower gain

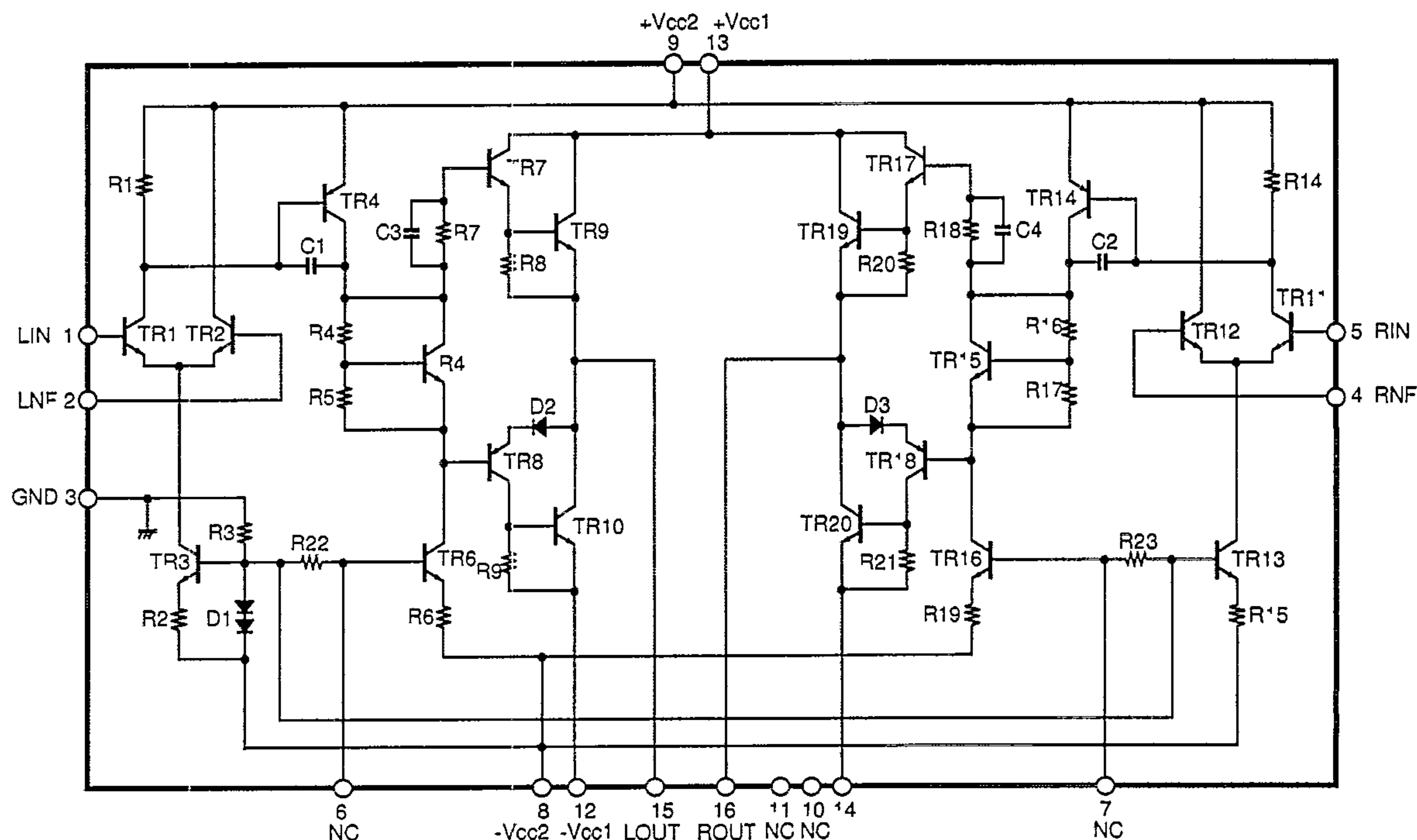


## 8. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

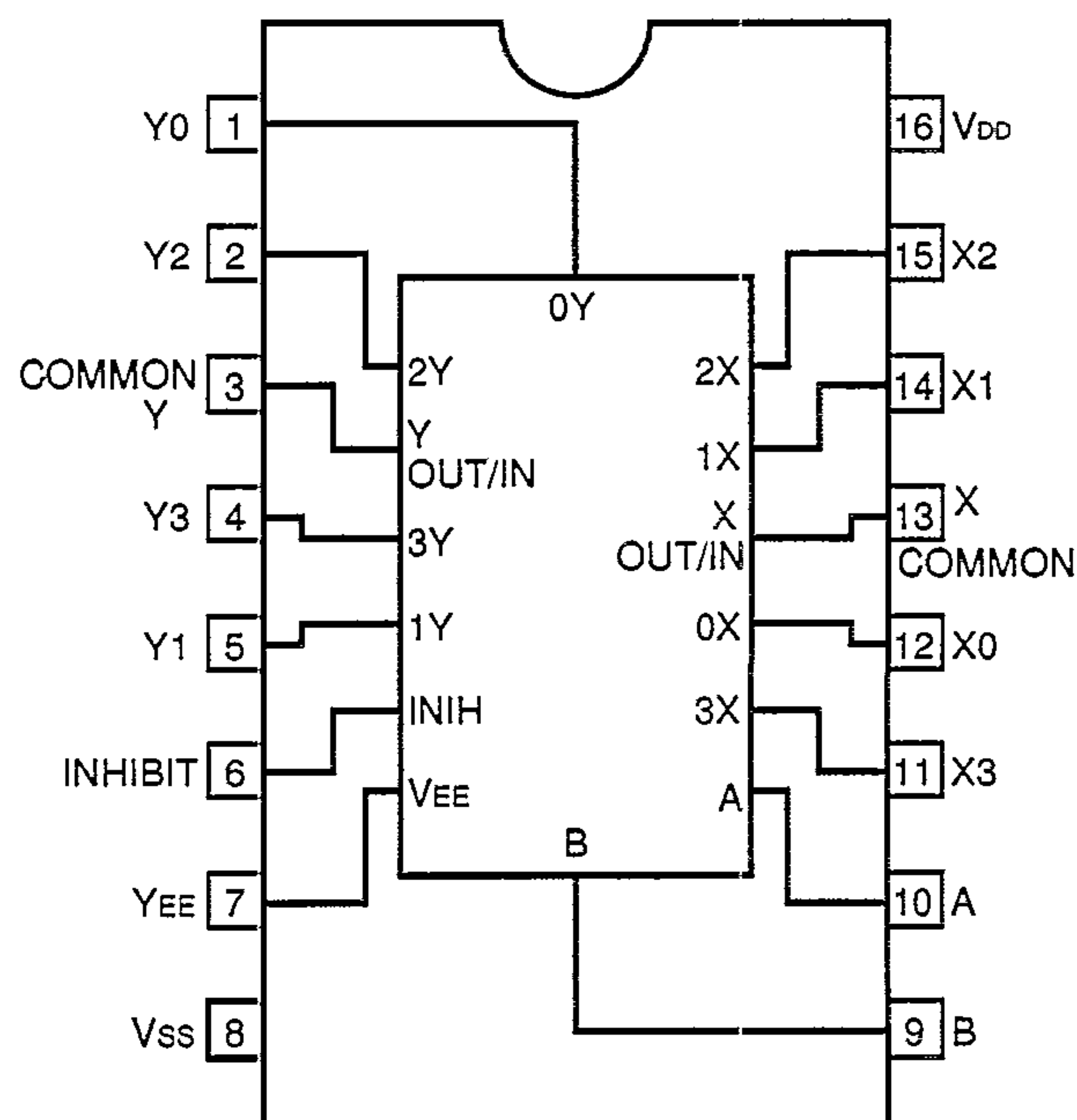
■ STK401-060 [IC2201 : MAIN ASSY (A-P550)]

- 2-ch AF power amplifier
- Block Diagram



**BU4052BC [IC3102 : PRE. AMP ASSY (F – P550RDS)]**

- Dual 4-ch analog multiplexer
- Block Diagram (Top View)



- ### ● Truth Table

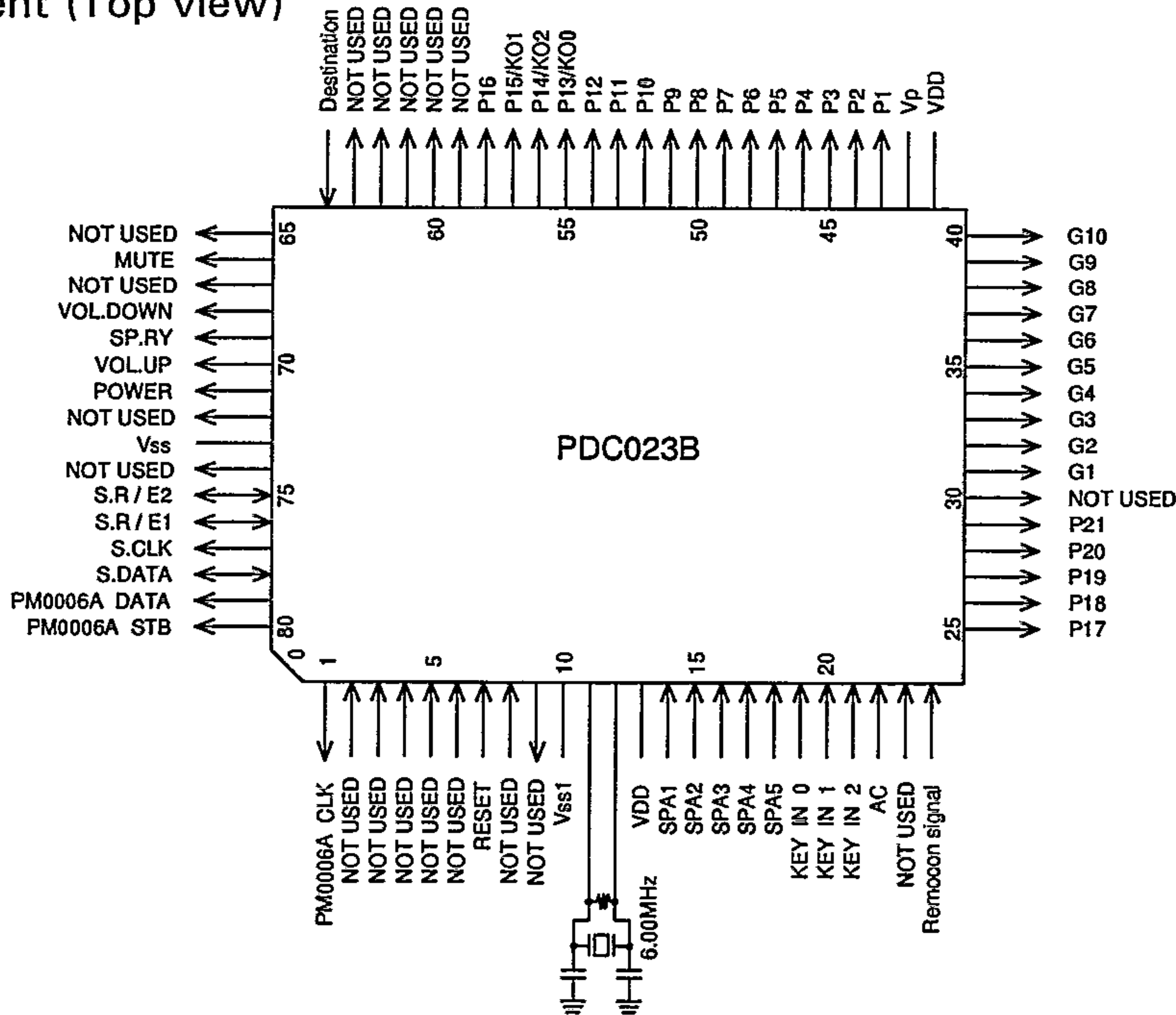
| INHIBIT | A | B | ON SWITCH |
|---------|---|---|-----------|
| L       | L | L | X0 Y0     |
| L       | H | L | X1 Y1     |
| L       | L | H | X2 Y2     |
| L       | H | H | X3 Y3     |
| H       | X | X | NONE      |

X : Don't Care



# PDC023B [IC2501 : DISPLAY ASSY (A – P550)]

- System Control Micro-computer
- Pin Assignment (Top view)



## Pin Function

| No.         | Pin Name                     | Pin Function | I/O | Description                                              | Act. |
|-------------|------------------------------|--------------|-----|----------------------------------------------------------|------|
| 1           | P17/PWM0                     | PM0006A CLK  | O   | PM0006A clock output                                     |      |
| 2<br> <br>5 | P30<br> <br>P33              | NOT USED     | I   | Connected to Vss.                                        |      |
| 6           | P70/INT0                     | NOT USED     | I   | Not connect (internal pull-up)                           |      |
| 7           | $\overline{\text{RES}}$      | RESET        | I   | Reset input                                              |      |
| 8           | XT1/ $\overline{\text{P74}}$ | NOT USED     | I   | Connected to VDD.                                        |      |
| 9           | XT2/P75                      | NOT USED     | I   | Connected to Vss.                                        |      |
| 10          | Vss1                         | —            | —   | Connected to GND.                                        |      |
| 11          | CF1                          | —            | —   | Main system clock (6MHz) Connected to crystal resonator. |      |
| 12          | CF2                          |              |     |                                                          |      |
| 13          | VDD1                         | —            | —   | Connected to +5V.                                        |      |
| 14          | P80/AN0                      | SPA1         | I   | Spectrum analyzer input (analog) 10kHz                   |      |
| 15          | P81/AN1                      | SPA2         | I   | Spectrum analyzer input (analog) 3.3kHz                  |      |
| 16          | P82/AN2                      | SPA3         | I   | Spectrum analyzer input (analog) 1kHz                    |      |
| 17          | P83/AN3                      | SPA4         | I   | Spectrum analyzer input (analog) 330Hz                   |      |



| No. | Pin Name      | Pin Function   | I/O | Description                                      | Act. |
|-----|---------------|----------------|-----|--------------------------------------------------|------|
| 18  | P84/AN4       | SPA5           | I   | Spectrum analyzer input (analog) 100Hz           |      |
| 19  | P85/AN5       | KI0            | I   | Key scan • Key return signal input               |      |
| 21  | P87/AN7       | KI2            |     |                                                  |      |
| 22  | P71/INT1      | AC             | I   | AC input                                         |      |
| 23  | P72/INT2/T0IN | NOT USED       | I   | Not connect (Pull-up at inside)                  |      |
| 24  | P73/INT3/T0IN | Remocon signal | I   | Remote control signal input                      |      |
| 25  | S0/T0         | P17            | O   | FL control segment output                        |      |
| 29  | S4/T4         | P21            |     |                                                  |      |
| 30  | S5/T5         | NOT USED       | O   | Not connect                                      |      |
| 31  | S6/T6         | G1             | O   | FL control digit output                          |      |
| 40  | S15/T15       | G10            |     |                                                  |      |
| 41  | VDD2          | —              | —   | Connected to +5V.                                |      |
| 42  | VP            | —              | —   | Connected to power supply (−30V) for FDP.        |      |
| 43  | S16/PC0       | P1             | O   | FL control segment output                        |      |
| 50  | S23/PC7       | P8             |     |                                                  |      |
| 51  | S24/PD0       | P9             | O   | FL control segment output                        |      |
| 54  | S27/PD3       | P12            |     |                                                  |      |
| 55  | S28/PD4       | P13/KO1        | O   | FL control segment output/Key scan strobe output |      |
| 56  | S29/PD5       | P14/KO2        |     |                                                  |      |
| 57  | S30/PD6       | P15/KO0        |     |                                                  |      |
| 58  | S31/PD7       | P16            | O   | FL control segment output                        |      |
| 59  | S32/PE0       | NOT USED       | O   | Not connect                                      |      |
| 63  | S36/PE4       |                |     |                                                  |      |
| 64  | S37/PE5       | Destination    | I   | Destination input (J/ $\overline{\text{EX}}$ .)  |      |
| 65  | PO0           | NOT USED       | O   | Not connect                                      |      |
| 66  | PO1           | MUTE           | O   | Line Mute output                                 | H    |
| 67  | PO2           | NOT USED       | O   | Not connect                                      |      |
| 68  | PO3           | VOL. DOWN      | O   | Motor volume control output (VOL DOWN)           | L    |
| 69  | PO4           | SP. RY         | O   | Speaker relay control output                     | H    |
| 70  | PO5           | VOL. UP        | O   | Motor volume control output (VOL UP)             | L    |

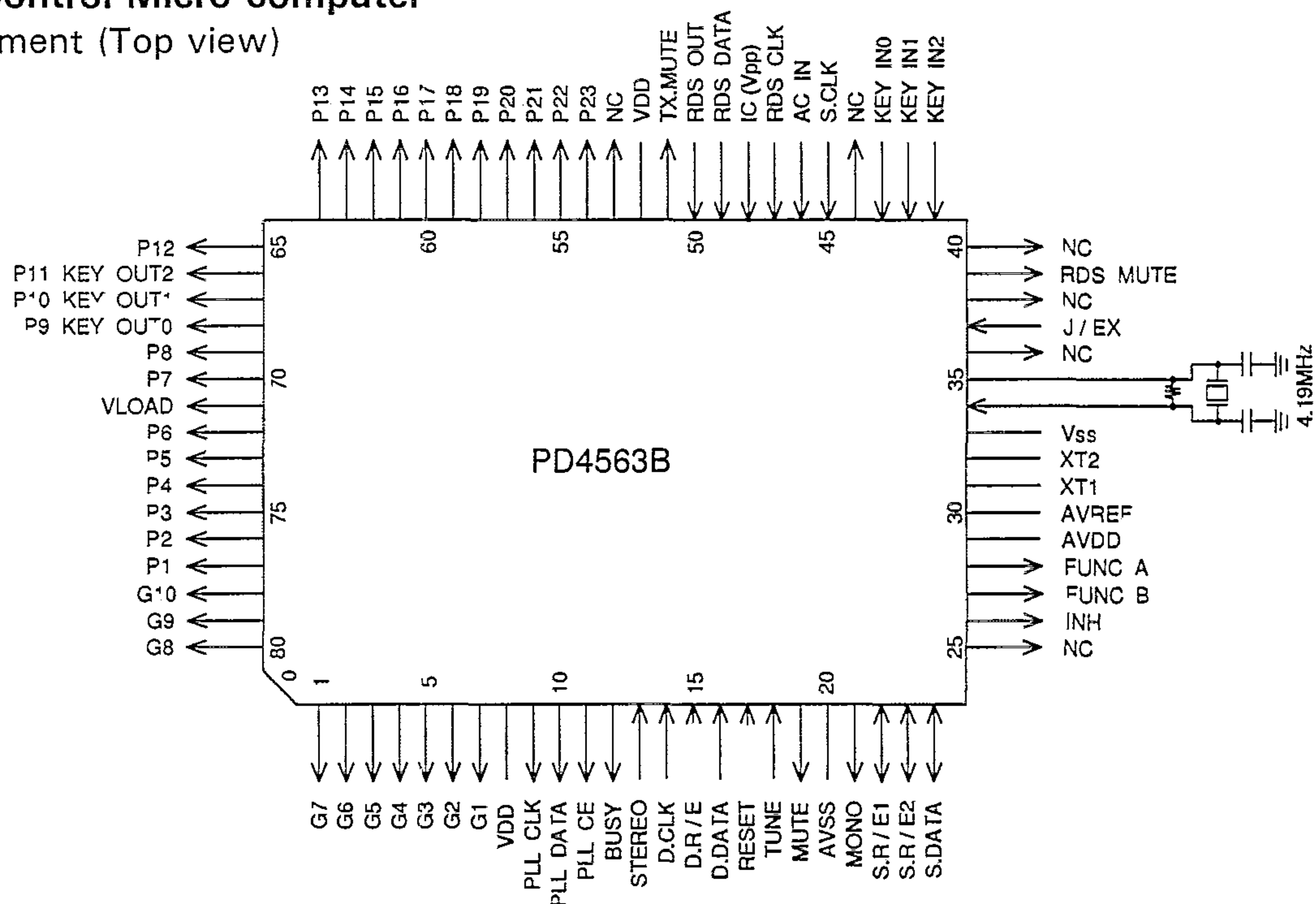


| No. | Pin Name    | Pin Function | I/O | Description                                                                  | Act. |
|-----|-------------|--------------|-----|------------------------------------------------------------------------------|------|
| 71  | PO6         | POWER        | O   | Power control output                                                         | H    |
| 72  | PO7         | NOT USED     | O   | Not connect                                                                  |      |
| 73  | Vss         | —            | —   | Connected to GND.                                                            |      |
| 74  | P10/SO0     | NOT USED     | O   | Not connect                                                                  |      |
| 75  | P11/SI0/SB0 | S.R/E2       | I/O | Communication request/enable input and output 2 for system bus communication |      |
| 76  | P12/SCK0    | S.R/E1       | I/O | Communication request/enable input and output 1 for system bus communication |      |
| 77  | P13/SO1     | S. CLK       | O   | Clock input and output for system bus communication                          |      |
| 78  | P14/SI1/SB1 | S. DATA      | I/O | Data input and output for system bus communication                           |      |
| 79  | P15/SCK1    | PM0006A DATA | O   | PM0006A data output                                                          |      |
| 80  | P16/BUZ     | PM0006A STB  | O   | PM0006A strobe output                                                        |      |



■ PD4563B [IC3301 : DISPLAY ASSY (F – P550RDS)]

- System Control Micro-computer
- Pin Assignment (Top view)



● Pin Function

| No. | Pin Name    | Pin Function | I/O | Description                                                    | Act. |
|-----|-------------|--------------|-----|----------------------------------------------------------------|------|
| 1   | P94/FIP6    | G7           | O   | FL control digit output                                        |      |
| 5   | P90/FIP2    | G3           | O   |                                                                |      |
| 6   | P81/FIP1    | G2           | O   |                                                                |      |
| 7   | P80/FIP0    | G1           | O   | FL control digit output                                        |      |
| 8   | VDD         | —            | —   | Connected to +5V.                                              |      |
| 9   | P27/SCK0    | PLL CLK      | O   | PLL LM7001 CLOCK output                                        |      |
| 10  | P26/SO0/SB1 | PLL DATA     | O   | PLL LM7001 DATA output                                         |      |
| 11  | P25/SI0/SB0 | PLL CE       | O   | PLL LM7001 CE output                                           |      |
| 12  | P24/BUSY    | BUSY         | O   | Busy output for system bus communication                       |      |
| 13  | P23/STB     | STEREO       | I   | TUNER receive status discrimination                            | L    |
| 14  | P22/SCK1    | D. CLK       | I   | Clock input for CD display data communication.                 |      |
| 15  | P21/SO1     | D. R/E       | I   | Communication request input for CD display data communication. |      |
| 16  | P20/SI1     | D. DATA      | I   | Data input for CD display data communication.                  |      |
| 17  | RESET       | —            | I   | System reset input                                             |      |
| 18  | P74         | TUNE         | I   | TUNER tuning status discrimination                             | L    |



| No.      | Pin Name                | Pin Function    | I/O | Description                                                                   | Act. |
|----------|-------------------------|-----------------|-----|-------------------------------------------------------------------------------|------|
| 19       | P73                     | MUTE            | O   | LINE MUTE output                                                              | L    |
| 20       | AVSS                    | —               | —   | Connected to GND.                                                             |      |
| 21       | P17/ANI7                | MONO            | O   | MONO output                                                                   | H    |
| 22       | P16/ANI6                | S. R/E1         | I/O | Communication request/enable input and output 1 for system bus communication. |      |
| 23       | P16/ANI5                | S. R/E2         | I/O | Communication request/enable input and output 2 for system bus communication. |      |
| 24       | P14/ANI4                | S. DATA         | I/O | Data input and output for system bus communication.                           |      |
| 25       | P13/ANI3                | NOT USED        | O   | Not connect                                                                   |      |
| 26       | P12/ANI2                | INH             | O   | MC14052B output (INH)                                                         |      |
| 27       | P11/ANI1                | FUNC B          | O   | MC14052B output (B)                                                           |      |
| 28       | P10/ANI0                | FUNC A          | O   | MC14052B output (A)                                                           |      |
| 29       | AVDD                    | —               | —   | Connected to VDD.                                                             |      |
| 30       | AVREF                   | —               | —   | Connected to GND.                                                             |      |
| 31       | P04/XT1                 | NOT USED        | —   | Connected to GND.                                                             |      |
| 32       | XT2                     | NOT USED        | —   | Not connect                                                                   |      |
| 33       | VSS                     | —               | —   | Connected to GND.                                                             |      |
| 34       | X1                      | —               | —   | Main system clock (4.19 MHz) Connected to crystal resonator.                  |      |
| 35       | X2                      | —               | —   |                                                                               |      |
| 36       | P37                     | NOT USED        | O   | Not connect                                                                   |      |
| 37       | P36/BUZ                 | J/EX            | I   | Destination (J/ $\overline{\text{EX}}$ ) discrimination input                 |      |
| 38       | P35/PCL                 | NOT USED        | O   | Not connect                                                                   |      |
| 39       | P34/T12                 | RDS MUTE        | O   | RDS circuit ON/OFF                                                            | H    |
| 40       | P33/T11                 | NOT USED        | O   | Not connect                                                                   |      |
| 41<br>43 | P32/TO2<br> <br>P30/TO0 | KI2<br> <br>KI0 | I   | Key scan • Key return signal input                                            |      |
| 44       | P03/INTP3/CI0           | NOT USED        | O   | Not connect                                                                   |      |
| 45       | P02/INTP1               | S. CLK          | I   | Data input and output for system bus communication.                           |      |
| 46       | P01/INTP1               | AC IN           | I   | AC clock input                                                                |      |
| 47       | P00/INTP0/TI0           | RDS CLK         | I   | RDS clock input                                                               |      |
| 48       | IC (VPP)                | —               | I   | Connected to GND.                                                             |      |

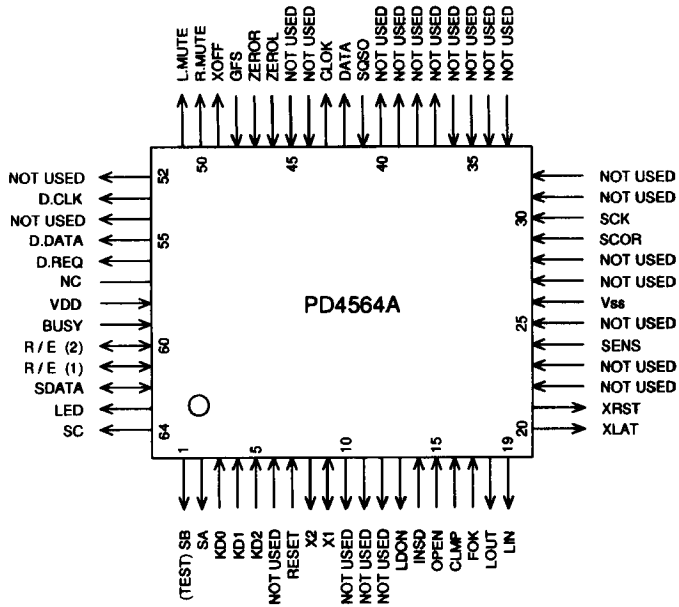


| No.      | Pin Name                 | Pin Function | I/O | Description                                      | Act. |
|----------|--------------------------|--------------|-----|--------------------------------------------------|------|
| 49       | P72                      | RDS DATA     | I   | RDS data input                                   |      |
| 50       | P71                      | RDS OUT      | I   | RDS receive descimation                          |      |
| 51       | P70                      | TX MUTE      | O   | Tuner module power ON/OFF                        |      |
| 52       | VDD                      | —            | —   | Connected to +5V.                                |      |
| 53       | P127/FIP33               | NOT USED     | I   | Not connect                                      |      |
| 54<br>60 | P126/FIP32<br>P120/FIP26 | P23<br>P17   | O   | FL control segment output                        |      |
| 61<br>65 | P117/FIP25<br>P113/FIP21 | P16<br>P12   | O   | FL control segment output                        |      |
| 66<br>68 | P112/FIP20<br>P110/FIP18 | P11<br>P9    | O   | FL control segment output/key scan strobe output |      |
| 69<br>70 | P107/FIP17<br>P106/FIP16 | P8<br>P7     | O   | FL control segment output                        |      |
| 71       | VLOAD                    | —            | —   |                                                  |      |
| 72<br>77 | P105/FIP15<br>P100/FIP10 | P6<br>P1     | O   | FL control segment output                        |      |
| 78<br>80 | P97/FIP9<br>P95/FIP7     | G10<br>G8    | O   | FL control digit output                          |      |

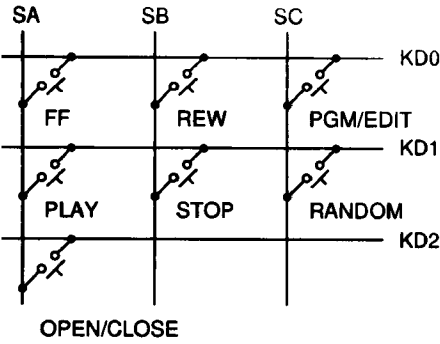
■ PD4564A [IC351 : CD. MAIN ASSY (PD – P550)]

● System Control Micro-computer

● Pin Assignment (Top view)



● Key Matrix



● Pin Function

| No.           | Pin Name        | Pin Function    | I/O | Description                                | Act. |
|---------------|-----------------|-----------------|-----|--------------------------------------------|------|
| 1             | P41             | SB (TEST)       | O   | Key scan strobe output (TEST MODE)         | H    |
| 2             | P40             | SA              | O   | Key scan strobe output                     | H    |
| 3<br> <br>5   | P53<br> <br>P51 | KD0<br> <br>KD2 | I   | Key scan/key return signal input           |      |
| 6             | P50             | NOT USED        | I   | Connected to pin 5.                        |      |
| 7             | RESET           | RESET           | I   | Micro-computer reset input                 | L    |
| 8             | X2              | —               | —   | Connected to ceramic resonator (4.19 MHz). |      |
| 9             | X1              | —               |     |                                            |      |
| 10<br> <br>12 | P63<br> <br>P61 | NOT USED        | O   | Connected to GND.                          | L    |
| 13            | P60             | LDON            | O   | Laser diode output                         | L    |
| 14            | P73             | INSD            | I   | Slider inside SW input                     | L    |
| 15            | P72             | OPEN            | I   | Disc tray OPEN SW input                    | L    |
| 16            | P71             | CLMP            | I   | Disc tray CLMP SW input                    | L    |

| No.      | Pin Name   | Pin Function | I/O | Description                                | Act. |
|----------|------------|--------------|-----|--------------------------------------------|------|
| 17       | P70        | FOK          | I   | Focus OK input                             | H    |
| 18       | P83        | LOUT         | O   | Disc tray OUT output                       | L    |
| 19       | P82        | LIN          | O   | Disc tray IN output                        | L    |
| 20       | P81        | XLAT         | O   | CXD2508A latch pulse output                | L    |
| 21       | P80        | XRST         | O   | CXD2508A reset pulse output                | L    |
| 22       | P93        | NOT USED     | I   | Connected to pin 42.                       |      |
| 23       | P92        |              |     |                                            |      |
| 24       | P91        | SENS         | I   | CXD2508A operating status multi-mode input |      |
| 25       | P90        | NOT USED     | I   | Connected to pin 41.                       |      |
| 26       | VSS        | VSS          | I   | Connected to GND.                          |      |
| 27       | P13/INT3   | NOT USED     |     |                                            |      |
| 28       | P12/INT2   |              |     |                                            |      |
| 29       | P11/INT1   | SCOR         | I   | Sub cord sync SI+SO input                  |      |
| 30       | P10/INT0   | SCK          | I   | System bus clock input                     |      |
| 31       | PTH03      | NOT USED     | I   | Connected to GND.                          |      |
| 32       | PTH02      |              |     |                                            |      |
| 33       | PTH01      |              |     |                                            |      |
| 34       | PTH00      |              |     |                                            |      |
| 35       | TI0        |              |     |                                            |      |
| 36       | TI1        |              |     |                                            |      |
| 37<br>40 | P23<br>P20 | NOT USED     | O   | OPEN                                       |      |
| 41       | P03        | SQSO         | I   | Sub code Q data serial input               |      |
| 42       | P02        | DATA         | O   | CXD2508A control data serial output        |      |
| 43       | P01        | CLOK         | O   | CXD2508A control serial clock output       |      |
| 44       | P00        | NOT USED     | I   | Connected to GND.                          |      |
| 45       | P123       | NOT USED     | I   | Connected to GND. (internal pull-up)       |      |
| 46       | P122       | ZEROL        | I   | Non audio signal detecting input (Lch)     | L    |
| 47       | P121       | ZEROR        | I   | Non audio signal detecting input (Rch)     | L    |
| 48       | P120       | GFS          | I   | Frame sync lock OK input                   | H    |



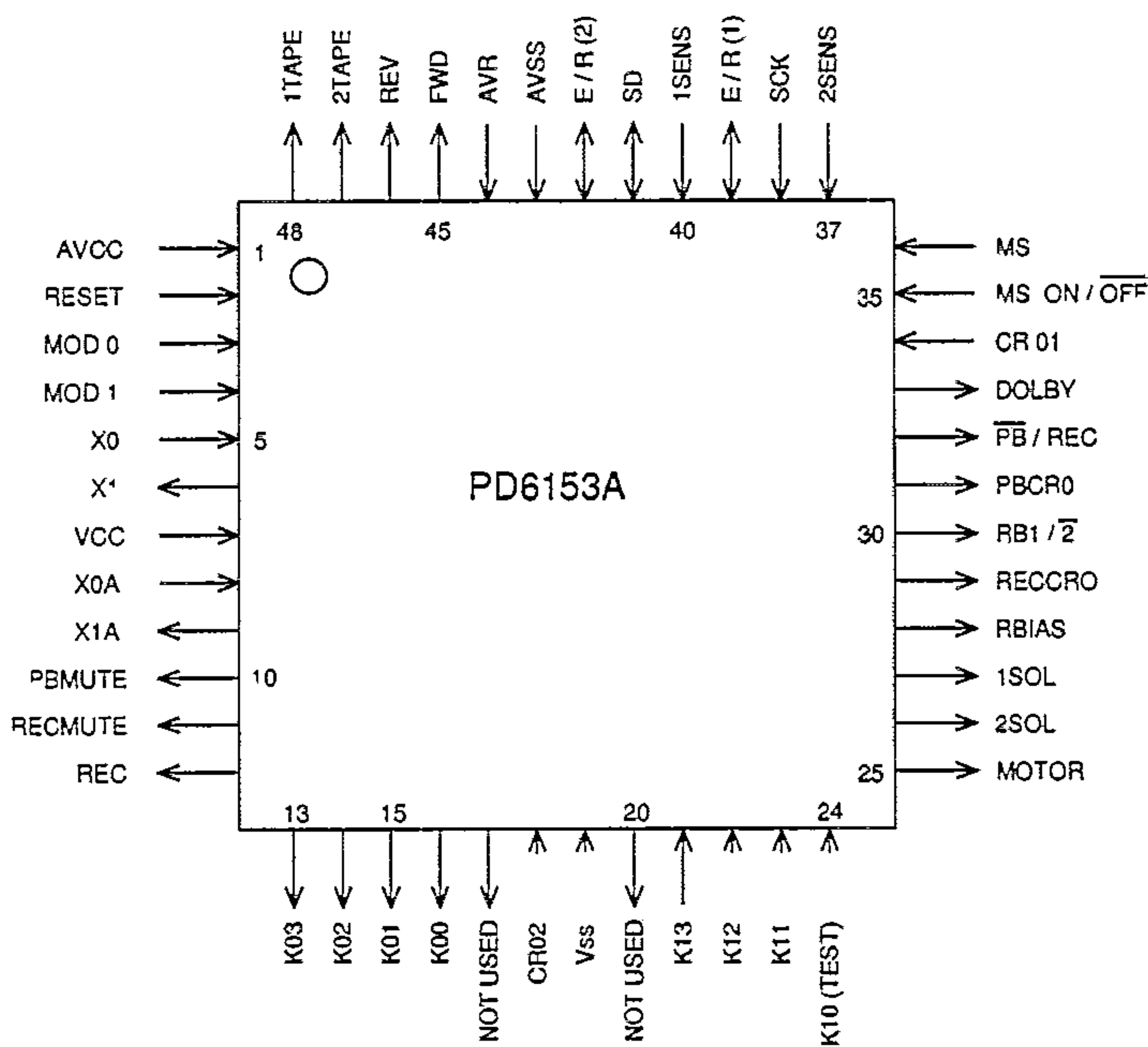
| No. | Pin Name | Pin Function | I/O | Description                                            | Act. |
|-----|----------|--------------|-----|--------------------------------------------------------|------|
| 49  | P133     | XOFF         | O   | CXD2508A oscillation control output (internal pull-up) | H    |
| 50  | P132     | R. MUTE      | O   | Muting (Rch) output                                    | H    |
| 51  | P131     | L. MUTE      | O   | Muting (Lch) output                                    | H    |
| 52  | P130     | NOT USED     | O   | OPEN (internal pull-up)                                | L    |
| 53  | P143     | D. CLK       | O   | Display data clock output                              |      |
| 54  | P142     | NOT USED     | O   | OPEN (internal pull-up)                                | L    |
| 55  | P141     | D. DATA      | O   | Display data output                                    |      |
| 56  | P140     | D. REQ       | O   | Display data transmission request output               |      |
| 57  | NC       | NOT USED     | —   | Connected to +5V.                                      |      |
| 58  | VDD      | VDD          |     |                                                        |      |
| 59  | P33      | BUSY         | I   | System bus talker enable input                         | H    |
| 60  | P32      | R/E (2)      | I/O | System bus request/enable 2 input and output           | H    |
| 61  | P31      | R/E (1)      | I/O | System bus request/enable 1 input and output           | L    |
| 62  | P30      | SDATA        | I/O | System bus data input and output                       |      |
| 63  | P43      | LED          | O   | Display LED control output                             | H    |
| 64  | P42      | SC           | O   | Key scan strobe output                                 | H    |



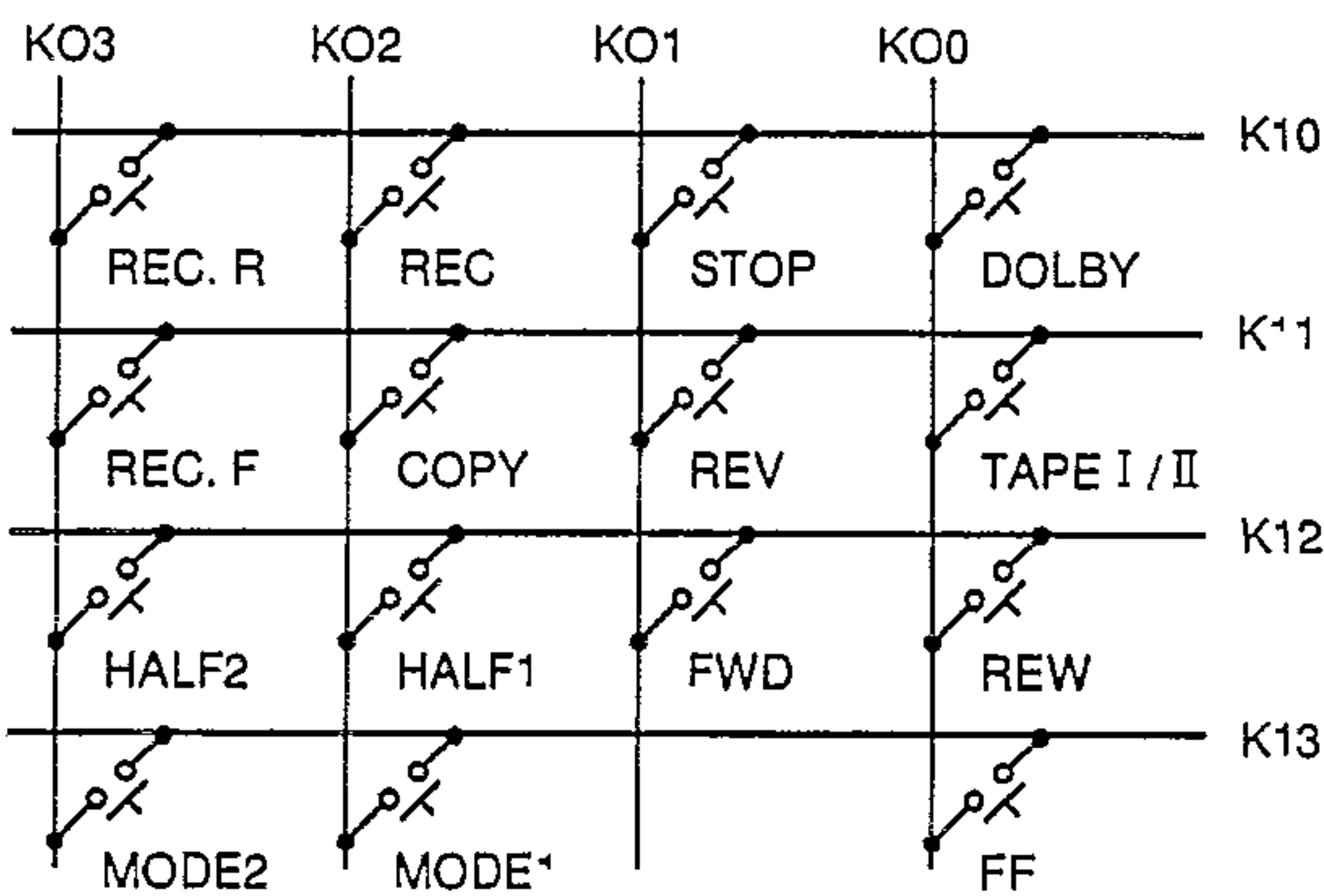
■ PD6153A [IC1701 : TC. MAIN ASSY (CT – P550WR)]

● System Control Micro-computer

● Pin Assignment (Top view)



● Key Matrix



● Pin Function

| No. | Pin Name | Pin Function | I/O | Description                                | Act. |
|-----|----------|--------------|-----|--------------------------------------------|------|
| 1   | AVCC     | VCC          | —   | Connected to +5V.                          |      |
| 2   | RST      | —            | —   | Micro-computer reset input                 |      |
| 3   | MOD0     | —            | —   | Connected to GND.                          |      |
| 4   | MOD1     | —            |     |                                            |      |
| 5   | X0       | —            | —   | Connected to Ceramic resonator (4.19 MHz). |      |
| 6   | X1       | —            |     |                                            |      |
| 7   | VCC      | —            | —   | Connected to +5V.                          |      |
| 8   | X0A      | —            | —   | Connected to GND.                          |      |
| 9   | X1A      | —            | —   | OPEN                                       |      |
| 10  | P27      | PBMUTE       | O   | PB MUTE output                             | H    |
| 11  | P26      | RECMUTE      | O   | REC MUTE output                            | H    |
| 12  | P25      | REC (LED)    | O   | REC LED output                             | H    |
| 13  | P24      | KO3          | O   | Key scan strobe output                     | H    |
| 16  | P21      | KO0          |     |                                            |      |
| 17  | P20      | NOT USED     | O   | OPEN                                       | L    |



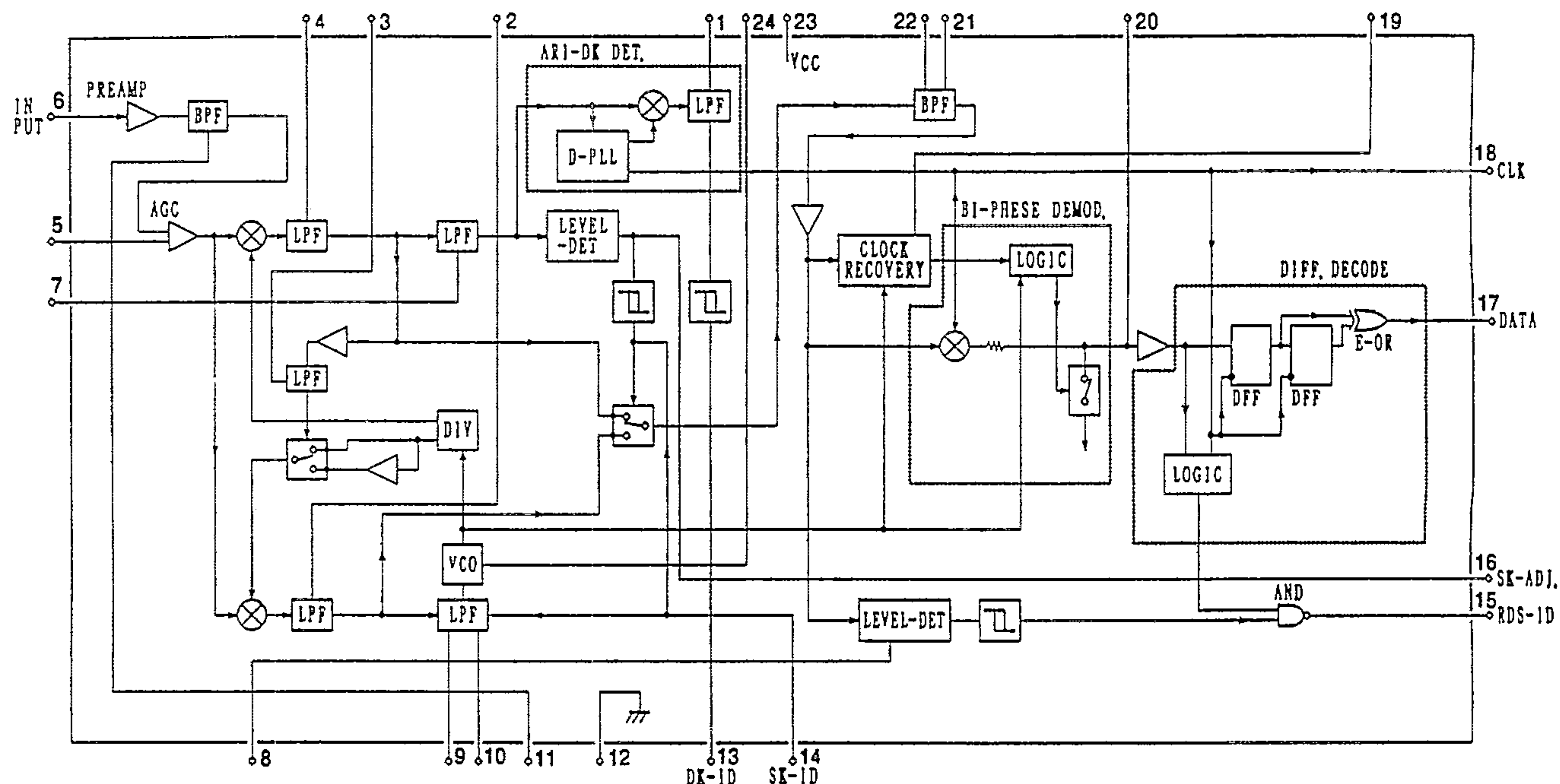
| No.           | Pin Name        | Pin Function                   | I/O | Description                                                   | Act. |
|---------------|-----------------|--------------------------------|-----|---------------------------------------------------------------|------|
| 18            | P17             | CRO2                           | I   | Mecha II tape type input (internal pull-up)                   | H    |
| 19            | VSS             | GND                            | —   | Connected to GND.                                             |      |
| 20            | P16             | NOT USED                       | O   | OPEN                                                          |      |
| 21<br> <br>23 | P15<br> <br>P13 | KI3<br>.<br>KI1                | I   | Key scan/key return signal input                              |      |
| 24            | P12             | KI0 (TEST)                     | I   | Key scan/key return signal input (TEST MODE)                  |      |
| 25            | P11             | MOTOR                          | O   | Motor ON output                                               | H    |
| 26            | P10             | 2SOL                           | O   | Mecha II solenoid ON output                                   | H    |
| 27            | P07             | 1SOL                           | O   | Mecha I solenoid ON output                                    | H    |
| 28            | P06             | RBIAS                          | O   | Recording bias ON output                                      | H    |
| 29            | P05             | RECCRO                         | O   | CrO2 tape type detecting output when recording.               | H    |
| 30            | P04             | PB $1\bar{2}$                  | O   | Switching playback $1\bar{2}$ output                          |      |
| 31            | P03             | PBCRO                          | O   | CrO2 tape type detecting output when playback.                | L    |
| 32            | P02             | PB/REC                         | O   | Switching playback/recording output                           |      |
| 33            | P01             | DOLBY                          | O   | Switching Dolby NR output                                     | H    |
| 34            | P00             | CRO1                           | I   | Mecha I tape type input (internal pull-up)                    | H    |
| 35            | P37/BZ          | MS ON/ $\overline{\text{OFF}}$ | I   | Switching MS ON/ $\overline{\text{OFF}}$ input (pull-up: +5V) |      |
| 36            | P36/INT2        | MS                             | I   | Audio signal input when MS                                    | H    |
| 37            | P35/INT1        | 2SENS                          | I   | Mecha II reel pulse input                                     | H    |
| 38            | P34/INT0        | SCK                            | I   | System bus clock input                                        |      |
| 39            | P33             | E/R (2)                        | I/O | System bus REQ/ENA 1 input and output                         |      |
| 40            | P32             | 1SENS                          | I   | Mecha I reel pulse input                                      | H    |
| 41            | P31             | SD                             | I/O | System bus data input and output                              |      |
| 42            | P30             | E/R (1)                        | I/O | System bus REQ/ENA 2 input and output                         |      |
| 43            | AVSS            | VSS                            | —   | Connected to GND.                                             |      |
| 44            | AVR             | VCC                            | —   | Connected to +5V.                                             |      |
| 45            | P43             | 1FWD (LED)                     | O   | FWD LED output                                                | L    |
| 46            | P42             | 1REV (LED)                     | O   | REV LED output                                                | L    |
| 47            | P41             | 2TAPE (LED)                    | O   | TAPE II LED output                                            | L    |
| 48            | P40             | 1TAPE (LED)                    | O   | TAPE I LED output                                             | H    |



# LA2232 [IC3201 : PRE. AMP ASSY (F—P550RDS)]

## ● RDS Signal Demodulator

## ● Block Diagram



## ● Pin Function

| No. | Pin Name          | I/O | Description                                       |
|-----|-------------------|-----|---------------------------------------------------|
| 1   | DK filter         | —   | Low pass filter for DK detection                  |
| 2   | Q—DET             | —   | Low pass filter for Quadrature detection          |
| 3   | NC                | —   | OPEN, Low pass filter for remodulation comparison |
| 4   | I—DET             | —   | Low pass filter for Synchronous detection         |
| 5   | BYPASS            | —   | Band pass filter check terminal                   |
| 6   | RDS input         | I   | RDS input terminal                                |
| 7   | SK filter         | —   | Low pass filter for SK detection                  |
| 8   | RDS filter        | —   | Low pass filter for RDS detection                 |
| 9   | PLL loop filter   | —   | Remodulation comparison method PLL loop filter    |
| 10  |                   |     |                                                   |
| 11  | Filter adjustment | —   | Band pass filter (57kHz) adjustment terminal      |
| 12  | GND               | —   | GND                                               |
| 13  | ARI-DK display    | O   | ARI-DK display terminal                           |

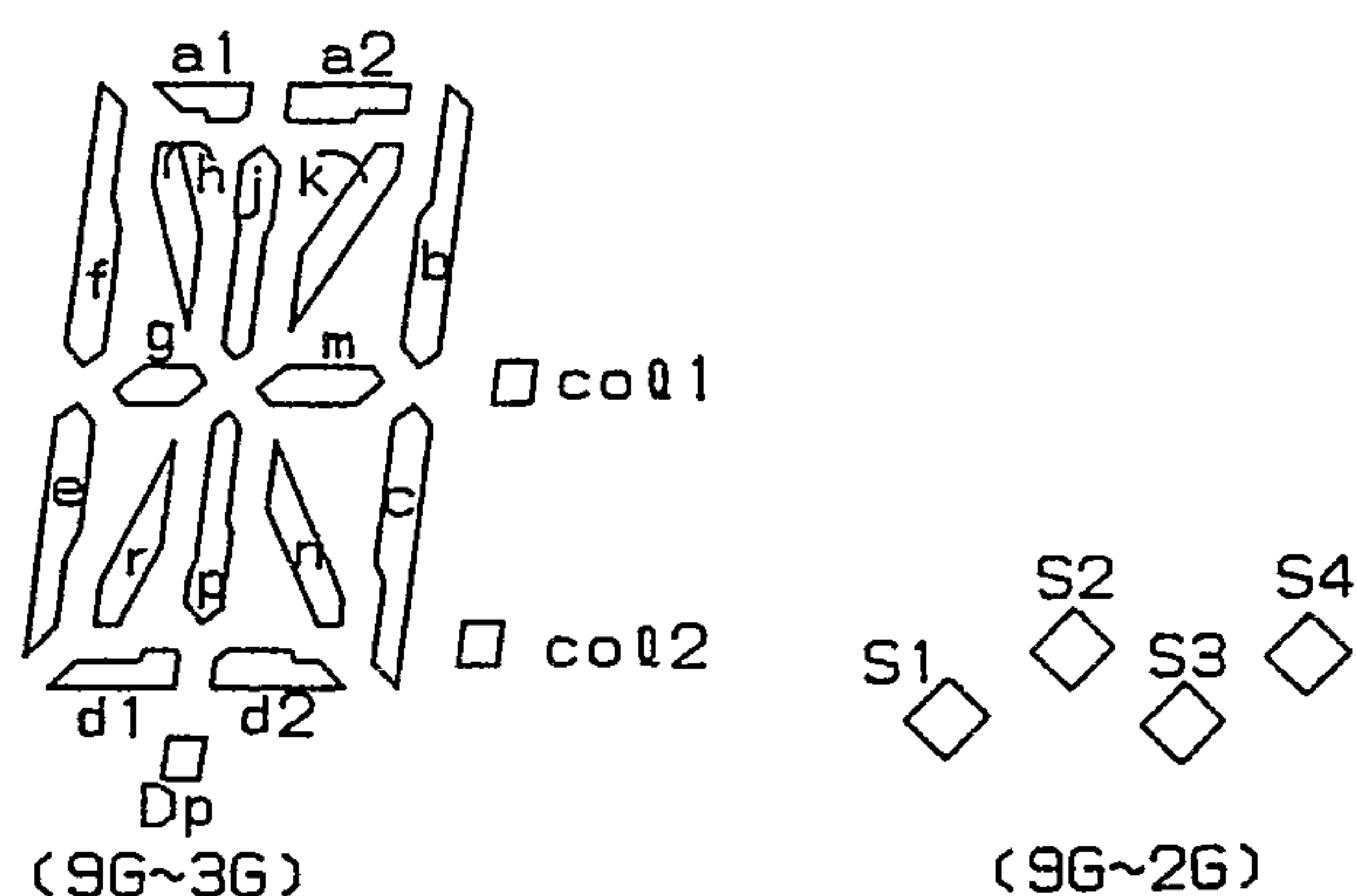
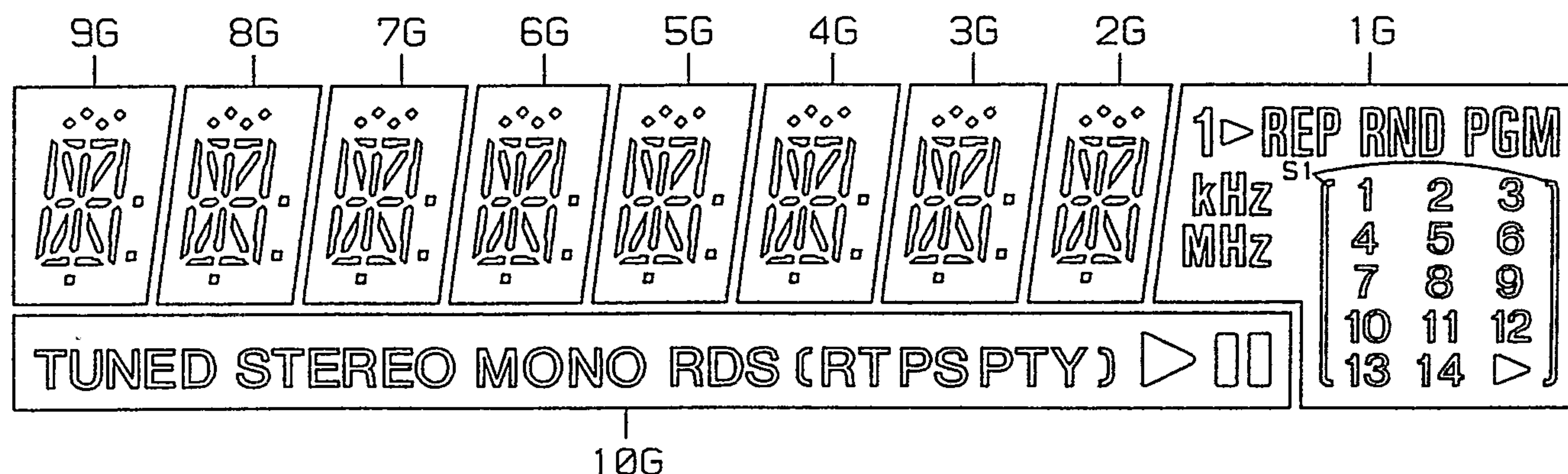
| No. | Pin Name                  | I/O | Description                                        |
|-----|---------------------------|-----|----------------------------------------------------|
| 14  | ARI-SK display            | O   | ARI-SK display terminal                            |
| 15  | RDS display               | O   | RDS display terminal                               |
| 16  | SK sensitivity adjustment | —   | SK sensitivity adjustment terminal                 |
| 17  | DATA                      | O   | DATA output terminal                               |
| 18  | CLK                       | O   | Clock signal output terminal                       |
| 19  | D—PLL                     | —   | Low pass filter for digital PLL for clock playback |
| 20  | INTEG/D                   | —   | Capacitor for integration damp                     |
| 21  | B. E. F.                  | —   | Band pass filter for RDS detection                 |
| 22  |                           |     |                                                    |
| 23  | Vcc                       | —   | Vcc +5V                                            |
| 24  | VCO                       | —   | 456 kHz oscillation circuit                        |



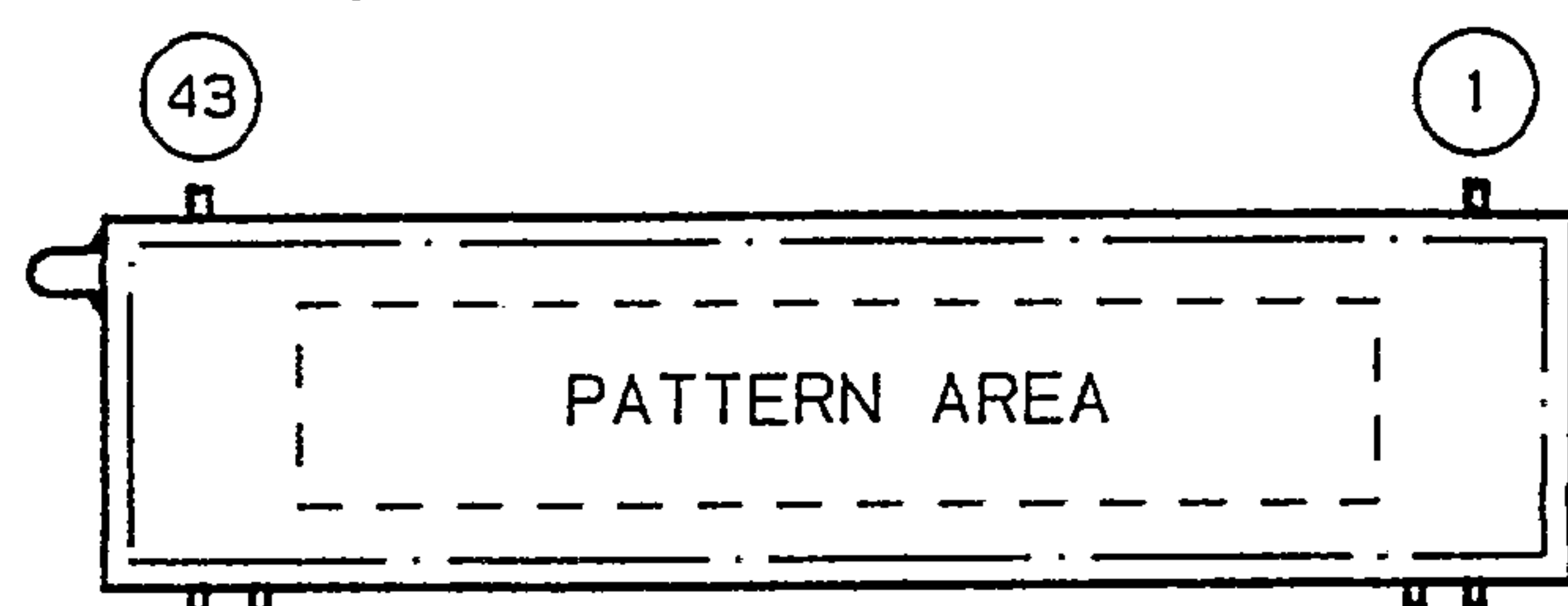
## 9. FL INFORMATION

## RAW1141 [V3301 : DISPLAY ASSY (F-P550RDS)]

- **FL Tube**
- **Grid Assignment**



- Pin Assignment



### ● Pin Connection

NOTE    1) F1,F2 ---- Filament  
         2) NP ----- No pin  
         3) DL ----- Datum Line  
         4) 1G~10G ---- Grid

- Anode Connection

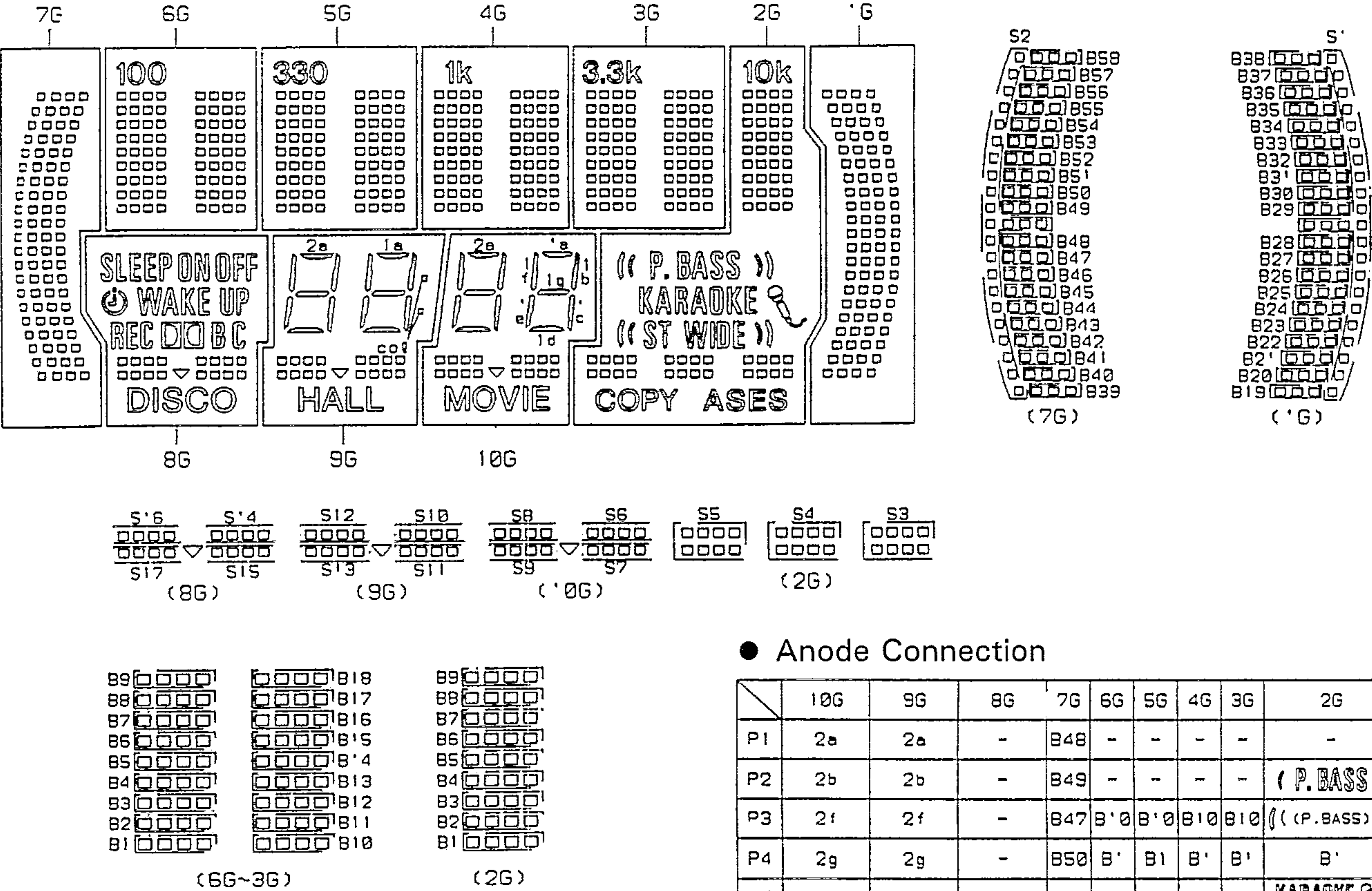
|     | 10G    | 9G~3G | 2G | 1G  |
|-----|--------|-------|----|-----|
| P1  | -      | S2    | S2 | 1▷  |
| P2  | -      | S4    | S4 | REP |
| P3  | -      | S1    | S1 | RND |
| P4  | -      | S3    | S3 | PGM |
| P5  | -      | a1    | a1 | S1  |
| P6  | -      | a2    | a2 | 1   |
| P7  | -      | h     | h  | 2   |
| P8  | -      | j     | j  | 3   |
| P9  | -      | k     | k  | 4   |
| P10 | -      | b     | b  | 5   |
| P11 | -      | f     | f  | 6   |
| P12 | -      | m     | m  | 7   |
| P13 | -      | g     | g  | 8   |
| P14 | -      | coll  | -  | kHz |
| P15 | STEREO | c     | c  | 9   |
| P16 | TUNED  | e     | e  | 10  |
| P17 | MONO   | r     | r  | 11  |
| P18 | PTY    | p     | p  | 12  |
| P19 | PS     | n     | n  | 13  |
| P20 | RT     | coll2 | -  | MHz |
| P21 | RDS C  | d1    | d1 | 14  |
| P22 | ▷      | d2    | d2 | ▷   |
| P23 |        | Dp    | Dp | -   |

[illegible]

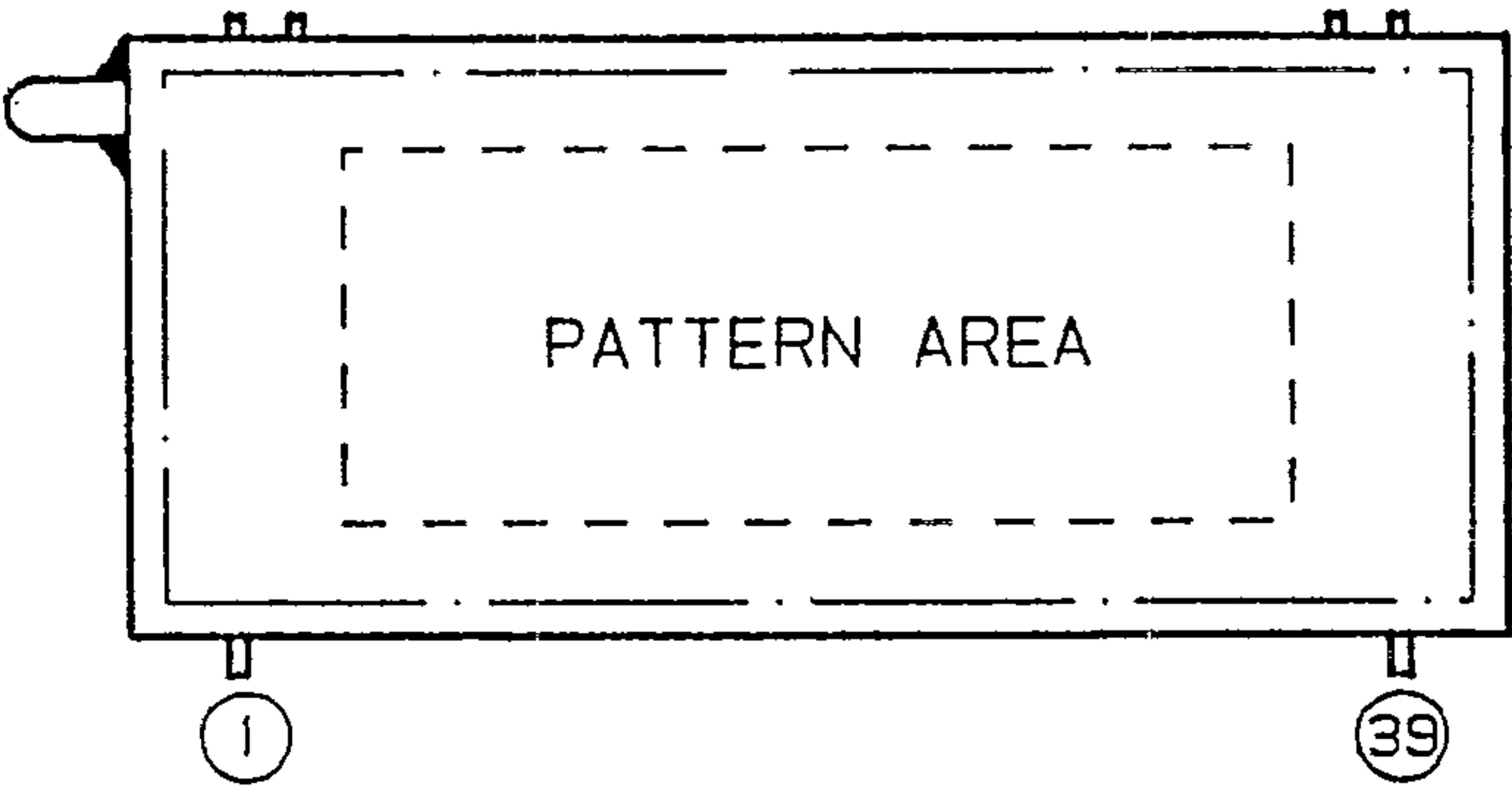


RAW1142 [V2501 : DISPLAY ASSY (A – P550)]

- FL Tube
- Grid Assignment



● Pin Assignment



● Pin Connection

- NOTE
- 1) F1, F2 --- Filament
  - 2) NP ----- No pin
  - 3) DL ----- Datum Line
  - 4) 1G~10G --- Grid

● Anode Connection

|     | 10G   | 9G   | 8G      | 7G  | 6G  | 5G  | 4G  | 3G   | 2G              | 1G  |
|-----|-------|------|---------|-----|-----|-----|-----|------|-----------------|-----|
| P1  | 2a    | 2a   | -       | B48 | -   | -   | -   | -    | -               | B28 |
| P2  | 2b    | 2b   | -       | B49 | -   | -   | -   | -    | (( P. BASS ))   | B29 |
| P3  | 2f    | 2f   | -       | B47 | B'0 | B'0 | B'0 | B'0  | (( (P. BASS) )) | B27 |
| P4  | 2g    | 2g   | -       | B50 | B'  | B'  | B'  | B'   | B'              | B30 |
| P5  | 2c    | 2c   | -       | B46 | B'' | B'' | B'' | B''  | KARAOKE         | B26 |
| P6  | 2e    | 2e   | -       | B51 | B2  | B2  | B2  | B2   | B2              | B31 |
| P7  | 2d    | 2d   | OFF     | B45 | B'2 | B'2 | B'2 | B'2  | (( ST WIDE ))   | B25 |
| P8  | -     | col  | ON      | B52 | B3  | B3  | B3  | B3   | B3              | B32 |
| P9  | 1a    | 1a   | SLEEP   | B44 | B'3 | B'3 | B'3 | B'3  | (( (ST WIDE) )) | B24 |
| P10 | 1b    | 1b   | WAKE UP | B53 | B4  | B4  | B4  | B4   | B4              | B33 |
| P11 | 1'    | 1'   | WAKE UP | B43 | B'4 | B'4 | B'4 | B'4  | S3              | B23 |
| P12 | 1g    | 1g   | REC     | B54 | B5  | B5  | B5  | B5   | B5              | B34 |
| P13 | 1c    | 1c   | DO      | B42 | B'5 | B'5 | B'5 | B'5  | S4              | B22 |
| P14 | 1e    | 1e   | B       | B55 | B6  | B6  | B6  | B6   | B6              | B35 |
| P15 | 1d    | 1d   | C       | B41 | B'6 | B'6 | B'6 | B'6  | S5              | B21 |
| P16 | S8    | S12  | S16     | B56 | B7  | B7  | B7  | B7   | B7              | B36 |
| P17 | S6    | S10  | S14     | B40 | B'7 | B'7 | B'7 | B'7  | ASES            | B20 |
| P18 | ▽     | ▽    | ▽       | B57 | B8  | B8  | B8  | B8   | B8              | B37 |
| P19 | S9    | S'3  | S17     | B39 | B'8 | B'8 | B'8 | B'8  | COPY            | B19 |
| P20 | S7    | S11  | S'5     | B58 | B9  | B9  | B9  | B9   | B9              | B38 |
| P21 | MOVIE | HALL | DISCO   | S2  | 100 | 330 | 1k  | 3.3k | 10k             | S1  |

| PIN NO.    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONNECTION | F | F | F | N | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | 1 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | N | F | F | F |
|            | 1 | 1 | 1 | P | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | G | G | G | G | G | G | G | G | G | G | 1 | 0 | 9 | 8 | 7 | P | 2 | 2 | 2 |   |

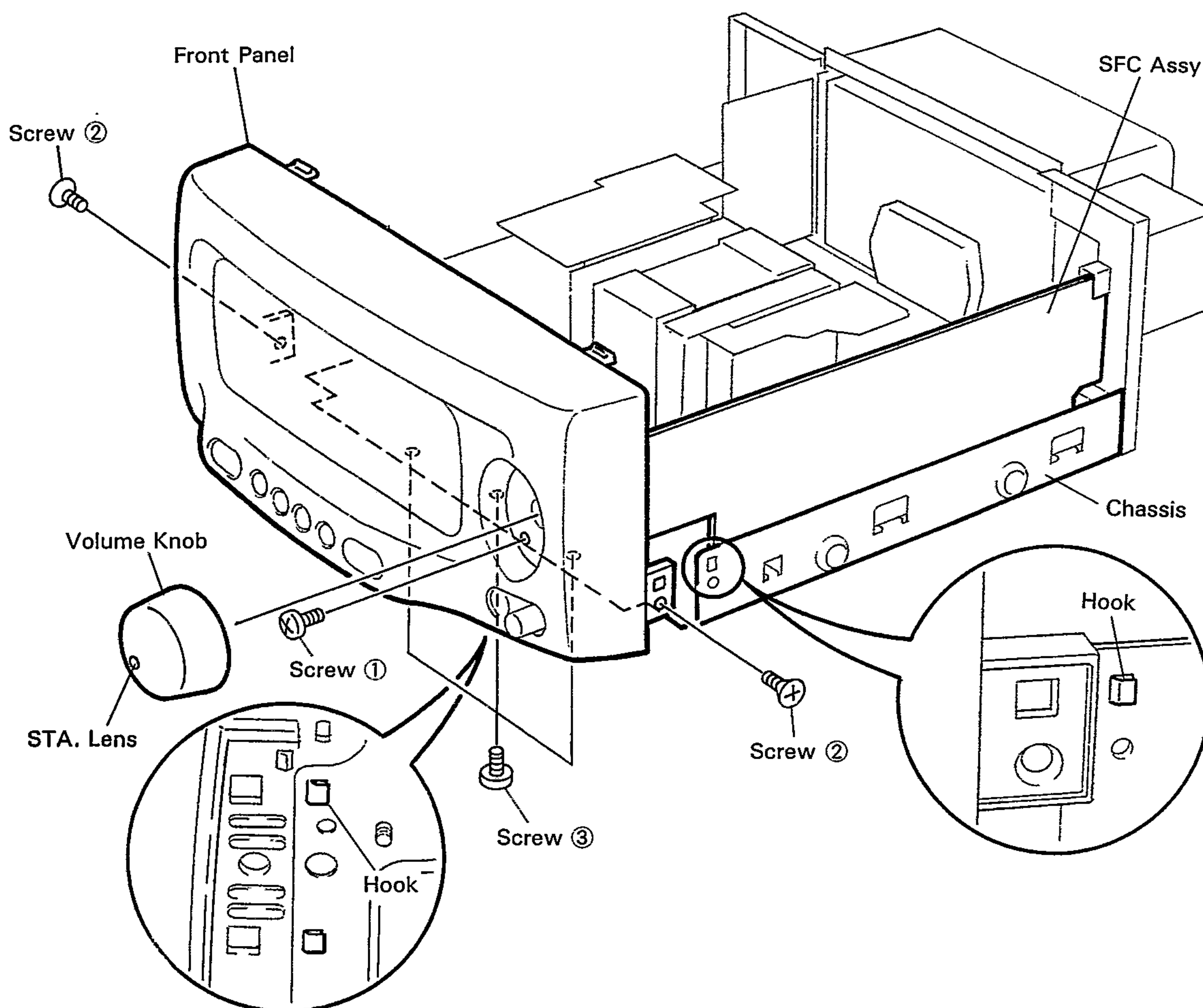


## 10. DISASSEMBLY

### ■ STEREO AMPLIFIER (A – P550)

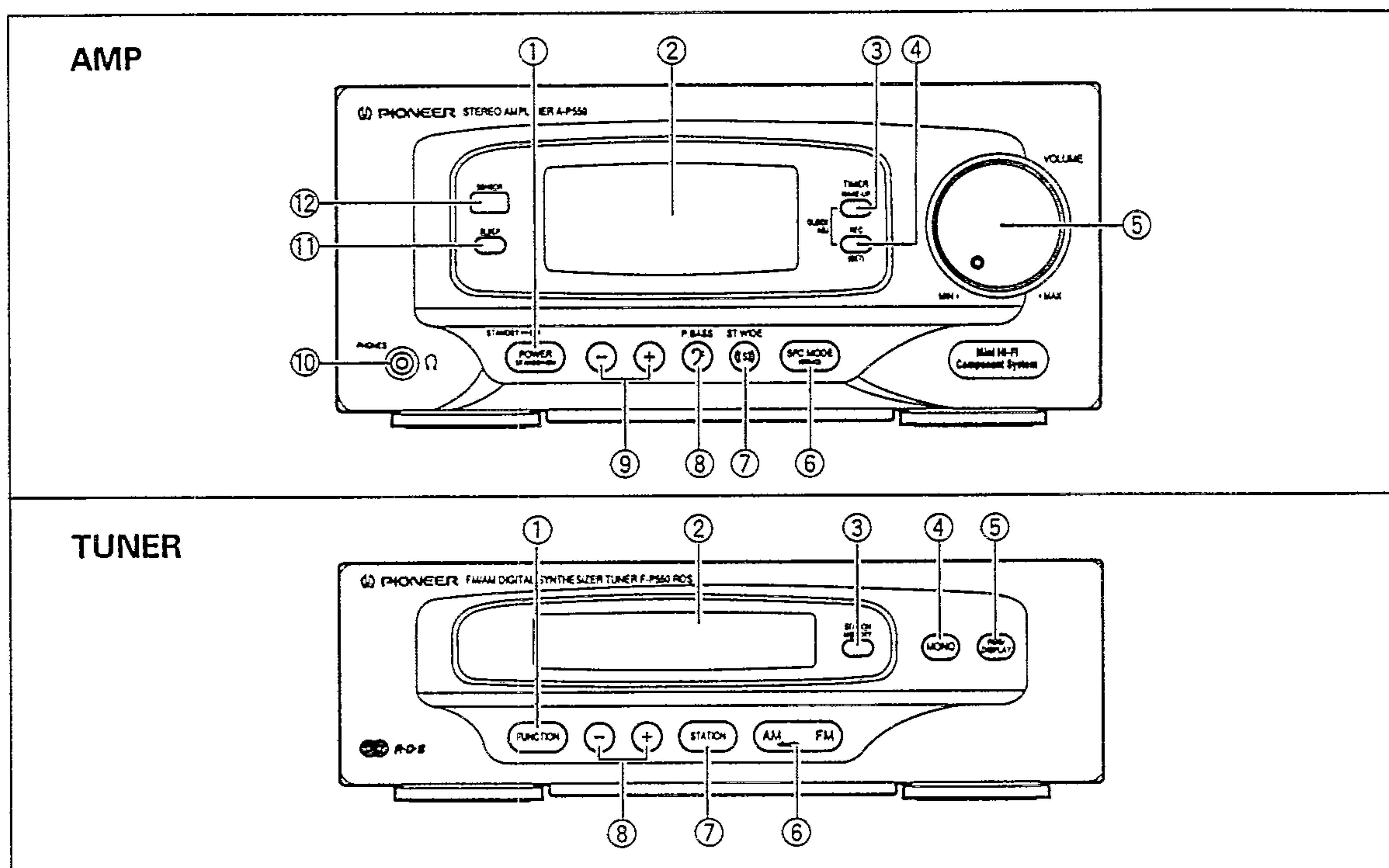
#### ● Removal of the Front Panel

1. Remove the bonnet.
2. Remove the volume knob.  
(Please be careful, as the STA. LENS is in the volume knob.)
3. Remove the screw ① holding the SFC assy.
4. Remove the left and right screw ② (each one) fixing the front panel to chassis.
5. Remove the three screws ③ at the lower side of the front panel.
6. Disengage the left and the right hook of the front panel (refer to figure) and the hook at the lower part, and then remove the front panel from the chassis.





## 11. PANEL FACILITIES



### AMP

#### ① POWER STANDBY/ON switch and STANDBY indicator

This is the switch for electric power.

**ON:** When set to the ON position, power is supplied and the unit becomes operational.

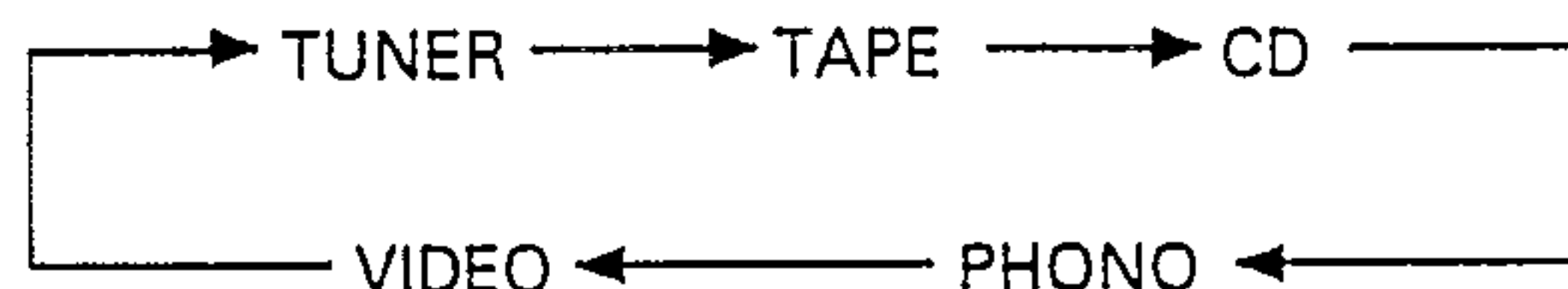
**STANDBY:** When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

- ② Display
- ③ TIMER WAKE-UP button
- ④ Timer REC (SET) button
- ⑤ VOLUME control
- ⑥ SFC MODE (DEMO) button
- ⑦ ST WIDE button
- ⑧ P. BASS button
- ⑨ Clock adjust (+, -) buttons
- ⑩ Headphones jack (PHONES)
- ⑪ SLEEP button
- ⑫ Remote sensor (SENSOR)

### TUNER

#### ① FUNCTION button

Each time this button is pressed, the function changes in the following sequence (The selected function is displayed in the display window and indicator.):



#### ■ AUTO FUNCTION

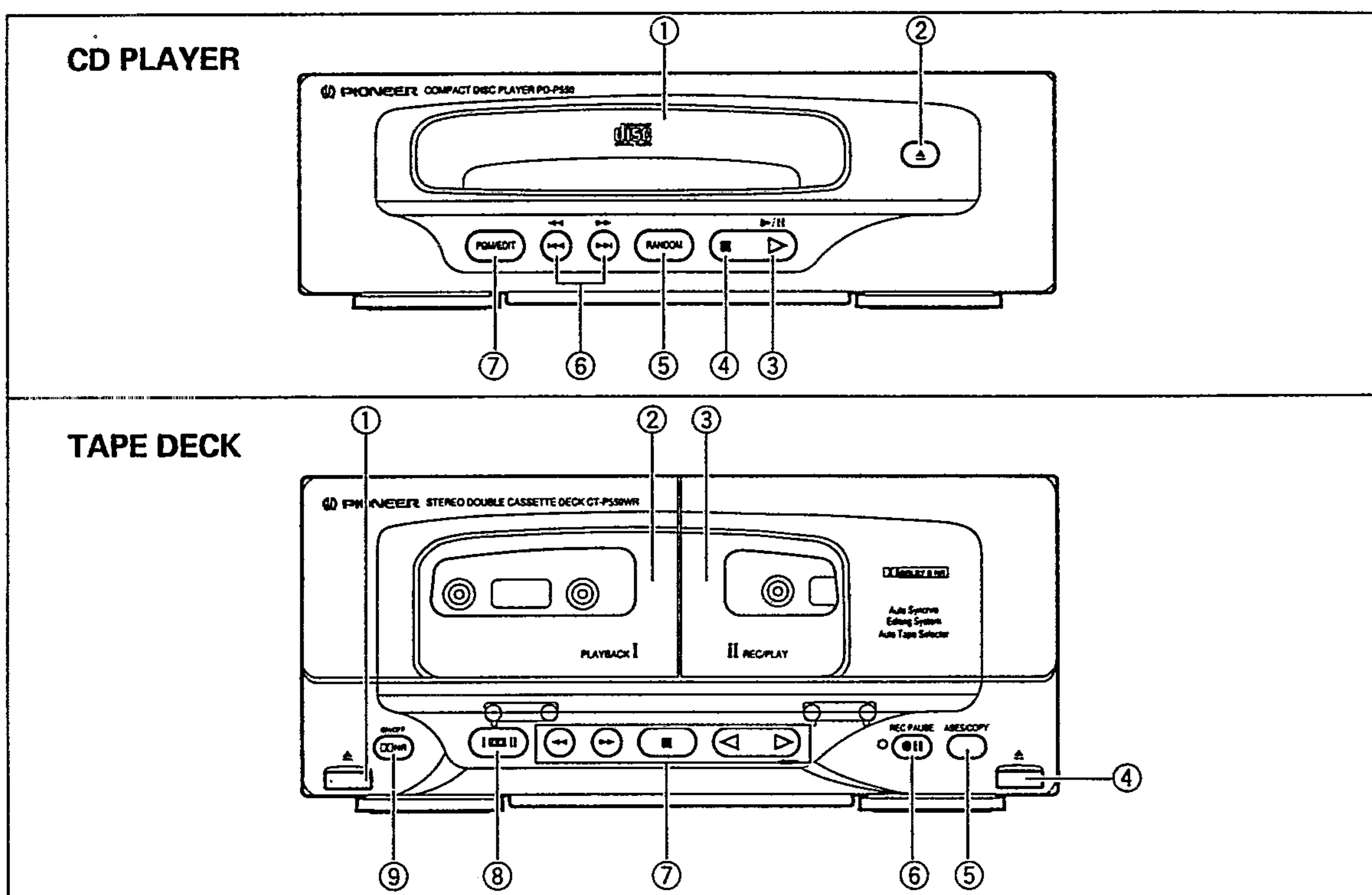
This system has an auto tuning function which automatically switches the input source when tape playback, CD play or tuner operation (FM/AM selection) is started.

#### NOTE:

The function cannot be switched during recording and tape copying.

- ② Display
- ③ STATION MEMORY button
- ④ MONO button
- ⑤ RDS/DISPLAY button
- ⑥ AM/FM button
- ⑦ STATION button
- ⑧ Tuning (+, -) buttons





### CD PLAYER

- ① Disc tray
- ② Open/close button (▲)
- ③ Play/pause button (▶/II)
- ④ Stop button (■)
- ⑤ RANDOM button
- ⑥ Manual/track search buttons  
(|◀◀ ◀▶▶ ▶▶|)
- ⑦ PGM (Program)/EDIT button

### TAPE DECK

- ① Tape I eject button (▲)
- ② Tape I cassette door
- ③ Tape II cassette door
- ④ Tape II eject button (▲)
- ⑤ ASES (Auto Synchro Editing System)/COPY button
- ⑥ REC PAUSE button (●II)
- ⑦ Tape operation buttons  
(Fast◀◀ ▶▶▶, Stop■, Play◀ ▶)
- ⑧ Tape I/II selector button
- ⑨ Dolby\* NR (Dolby NR) ON/OFF button  
Each time this button is pressed, Dolby NR system turns ON and OFF.

\*

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
- "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.



