# Service Manual

PIONEER®
*The Art of Entertainment*

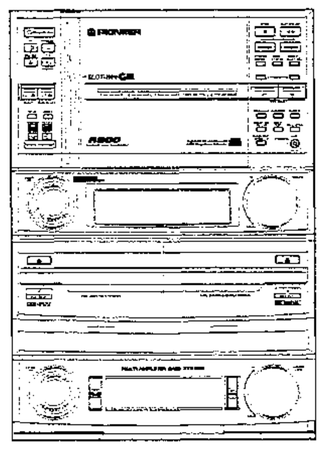

Illustration shows model XR-A800

ORDER NO.
**ARP2972**

## STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

# XR-A800

# XR-A700

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

| Type | Model | | Power Requirement | The voltage can be converted by the following method |
|---|---|---|---|---|
| | XR-A800 | XR-A700 | | |
| DDXJ | ○ | ○ | AC110-127V/220-230V/240V | With the voltage selector |
| DXJ/NC | ○ | ○ | AC110-127V/220-230V/240V | With the voltage selector |
| DLXJ/NC | ○ | ○ | AC110-120V/220-230V/240V | With the voltage selector |

## CONTENTS


1. SAFETY INFORMATION ..... 2
2. EXPLODED VIEWS AND PARTS LIST ..... 4
3. SCHEMATIC DIAGRAM ..... 20
4. PCB CONNECTION DIAGRAM ..... 41
5. PCB PARTS LIST ..... 56
6. ADJUSTMENT ..... 65
7. GENERAL INFORMATION ..... 75
   - 7.1 PARTS ..... 75
   - 7.1.1 IC ..... 75
   - 7.1.2 DISPLAY ..... 78
   - 7.2 DIAGNOSIS ..... 79
   - 7.2.1 DISASSEMBLY ..... 79
   - 7.2.2 PCB LOCATIONS ..... 81
   - 7.3 BLOCK DIAGRAM ..... 82
8. PANEL FACILITIES AND SPECIFICATIONS ... 84



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O – SZG OCT. 1997 Printed in Belgium

# 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.

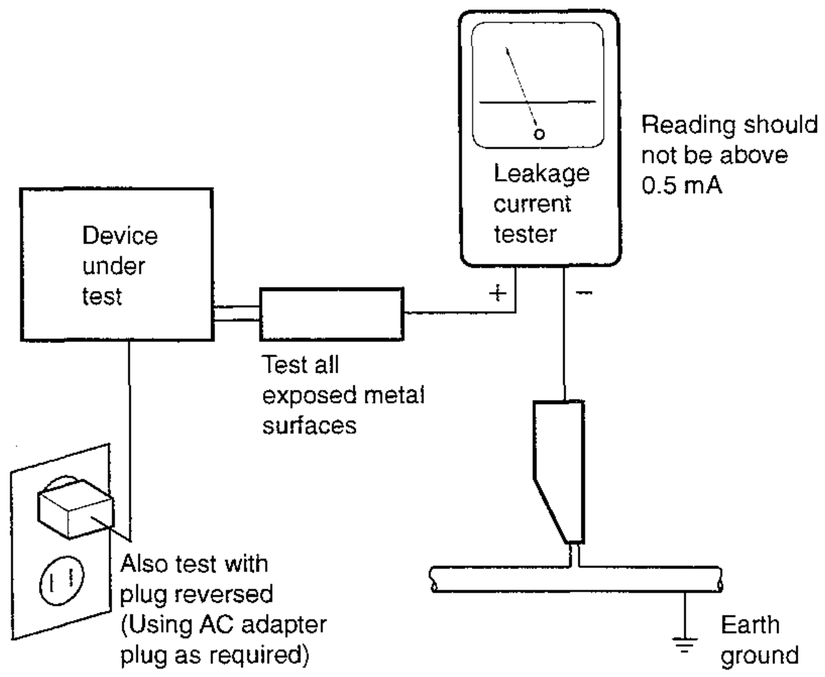
## (FOR USA MODEL ONLY)

### 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.




AC Leakage Test

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

### 2. PRODUCT SAFETY NOTICE

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

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

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

# LABEL CHECK (for DLXJ/NC type)

**XR-A700/DLXJ/NC**

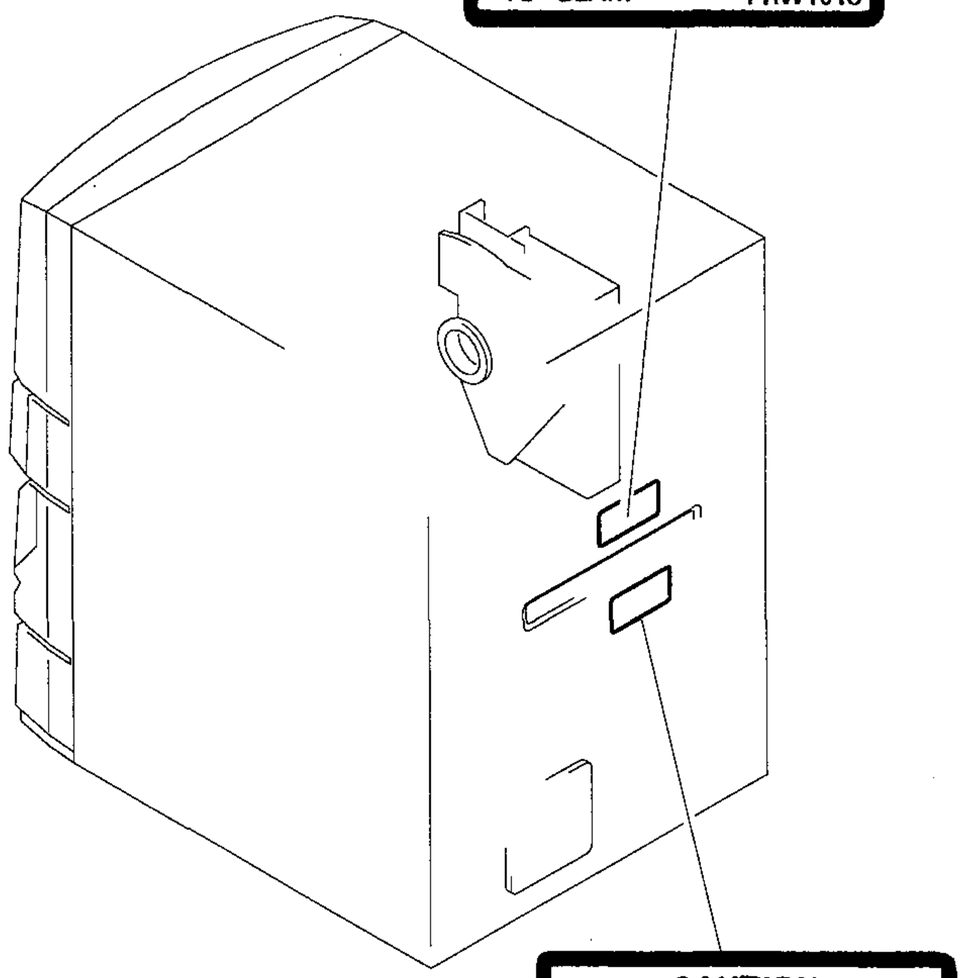
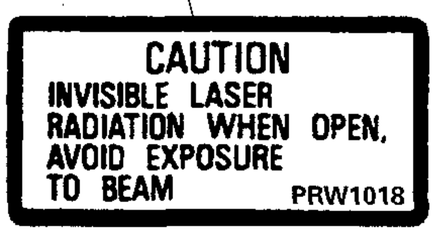



Illustration shows model XR-A800




**XR-A800/DLXJ/NC**

Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level.) Thus, the interlock will no longer function if the switch (S651) is deliberately set to $\overline{\text{CLMP}}$ terminal side. (low level)
   The interlock also does not function in the test mode*. Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

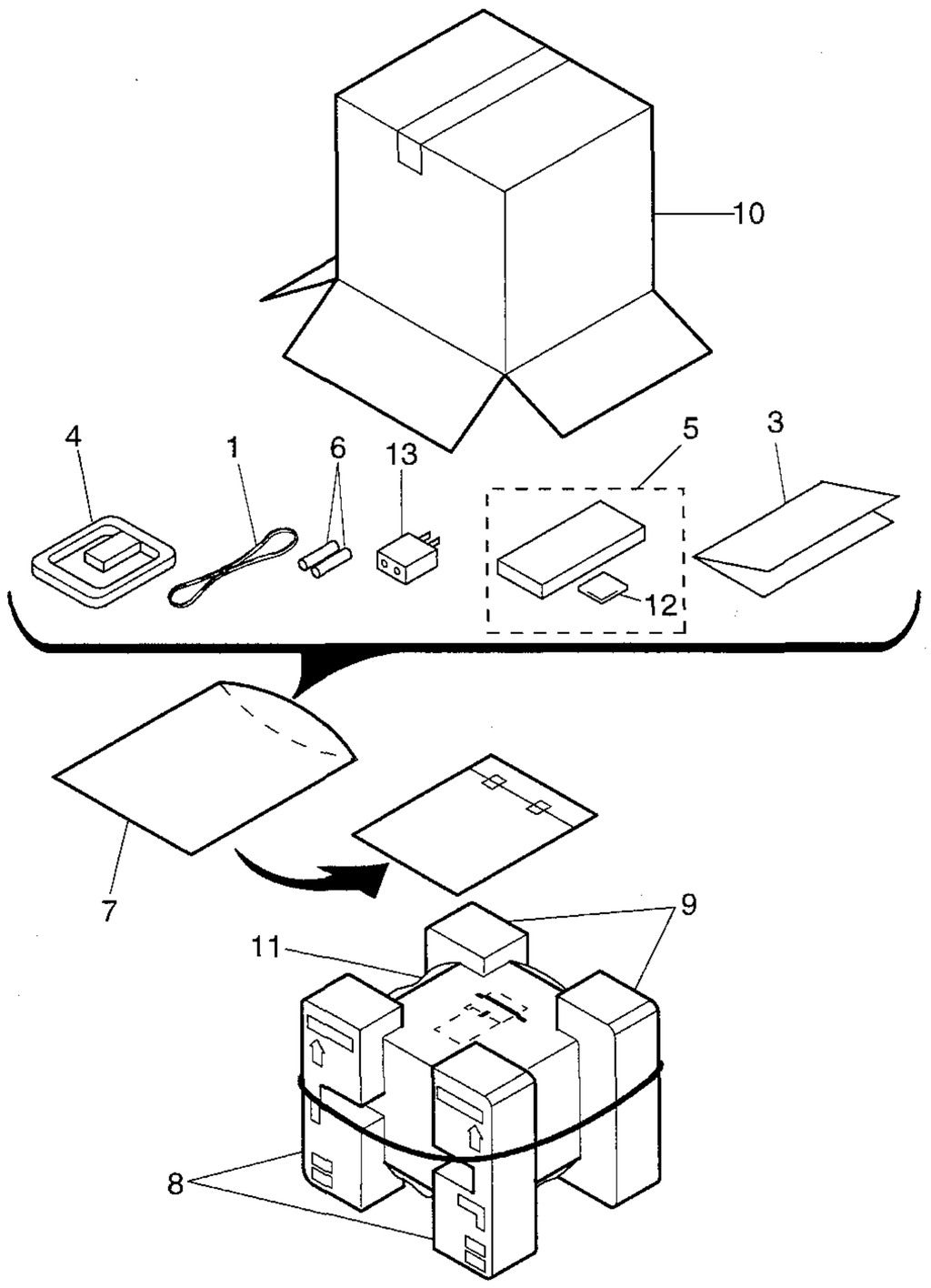
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

*Refer to page 71.

# 2. EXPLODED VIEWS 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.*
● *Screws adjacent to ▼ mark on product are used for disassembly.*

## 2.1 PACKING




### (1) PACKING PARTS LIST

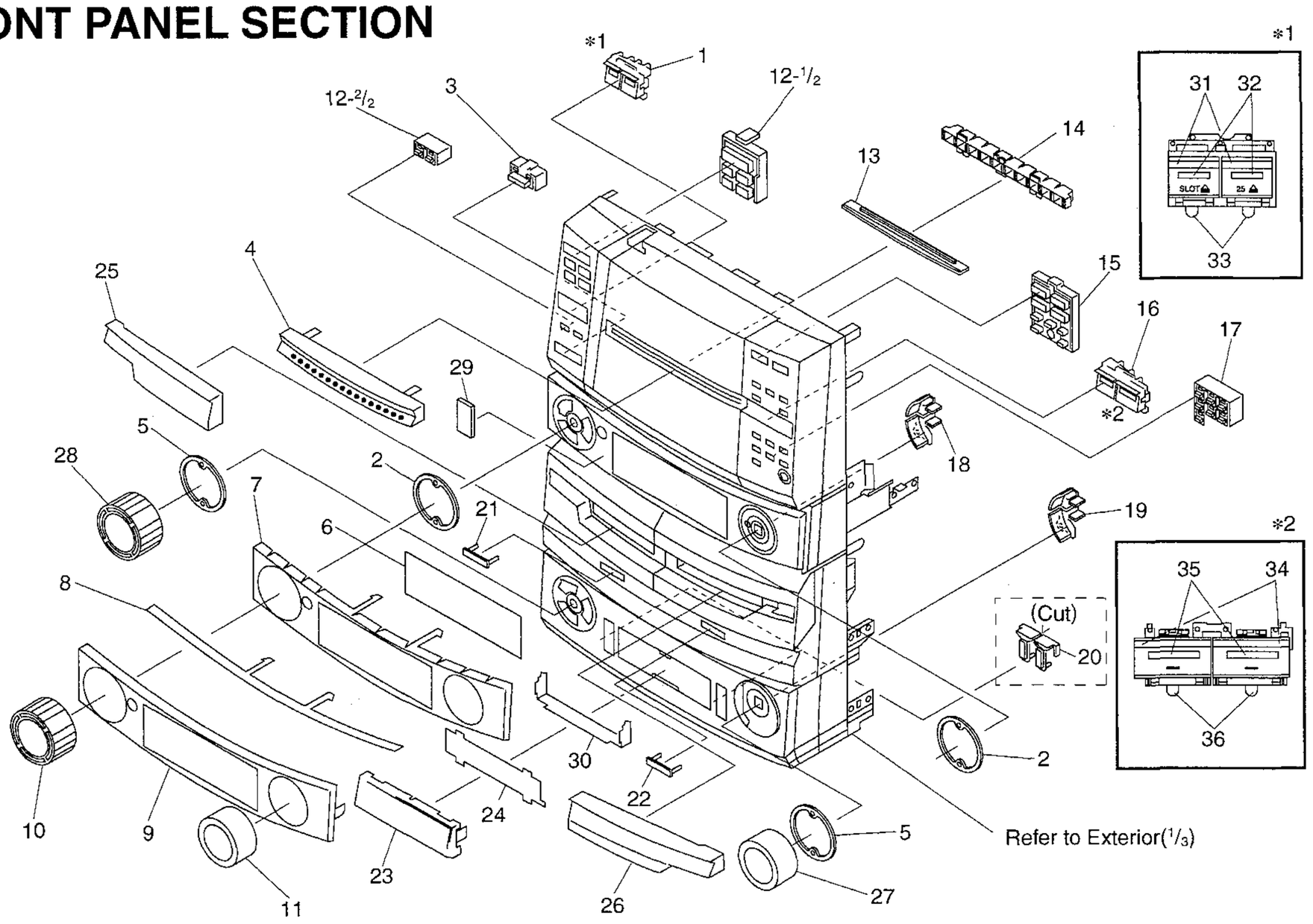
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | FM Antenna | ADH7007 |
| | 2 | ..... | |
| | 3 | Operating Instructions | See Contrast table (2) |
| | 4 | AM Loop Antenna | ATB7007 |
| | 5 | Remote Control Unit | See Contrast table (2) |
| NSP | 6 | AA/R6P Dry Cell Batteries | VEM-013 |
| NSP | 7 | Vinyl Bag | See Contrast table (2) |
| | 8 | Front Pad | See Contrast table (2) |
| | 9 | Rear Pad | See Contrast table (2) |
| | 10 | Packing Case | See Contrast table (2) |
| | 11 | Packing Sheet | AHG7049 |
| | 12 | Battery Cover | AZA7281 |
| | 13 | Power-cord Plug Conversion Adaptor | See Contrast table (2) |

### (2) CONTRAST TABLE

XR-A800/DDXJ, DXJ/NC, DLXJ/NC, XR-A700/DDXJ, DXJ/NC and DLXJ/NC types are constructed the same except for the following :

| Mark | No. | Symbol and Description | Part No. | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | XR-A800 | | | XR-A700 | | | |
| | | | DDXJ | DXJ/NC | DLXJ/NC | DDXJ | DXJ/NC | DLXJ/NC | |
| | 3 | Operating Instructions (English/Spanish/Chinese) | ARE7145 | Not used | Not used | ARE7145 | Not used | Not used | |
| | 3 | Operating Instructions (English/Spanish/Portuguese) | Not used | ARE7151 | Not used | Not used | ARE7151 | Not used | |
| | 3 | Operating Instructions (English/Chinese) | Not used | Not used | ARE7150 | Not used | Not used | ARE7150 | |
| | 5 | Remote Control Unit (CU-XR045) | AXD7147 | AXD7147 | AXD7147 | Not used | Not used | Not used | |
| | 5 | Remote Control Unit (CU-XR044) | Not used | Not used | Not used | AXD7146 | AXD7146 | AXD7146 | |
| NSP | 7 | Vinyl Bag | AHG7037 | AHG7037 | AHG7037 | AHG7038 | AHG7038 | AHG7038 | |
| | 8 | Front pad | AHA7193 | AHA7193 | AHA7193 | AHA7177 | AHA7177 | AHA7177 | |
| | 9 | Rear pad | AHA7194 | AHA7194 | AHA7194 | AHA7178 | AHA7178 | AHA7178 | |
| | 10 | Packing Case | AHD7523 | AHD7524 | AHD7524 | AHD7518 | AHD7519 | AHD7519 | |
| | 13 | Power-cord Plug Conversion Adaptor | Not used | VKX1007 | Not used | Not used | VKX1007 | Not used | |

## 2.2 FRONT PANEL SECTION




## (1) FRONT PANEL SECTION PARTS LIST

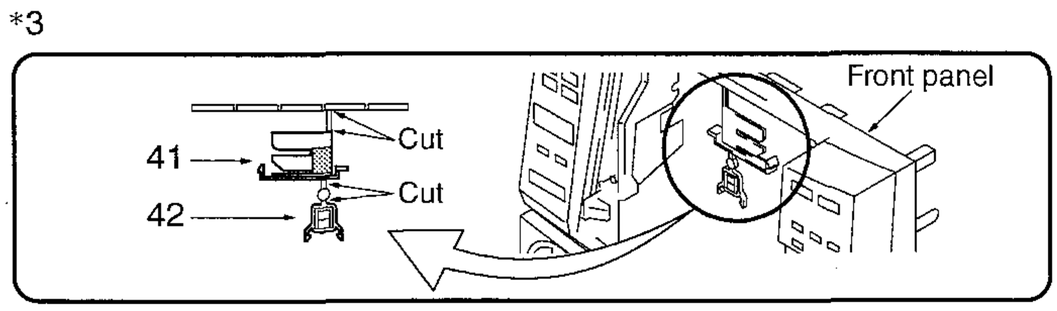
| Mark | No. | Description | Part No. |
|---|---|---|---|
| NSP | 1 | Disc Button Assy L | AXG7054 |
| | 2 | Knob Spacer | AAK7498 |
| | 3 | SOUND Button | AAD7428 |
| | 4 | 25 Window | AAK7482 |
| | 5 | Knob Spacer (BASS SYNTH) | See Contrast table (2) |
| | 6 | FL Filter | AAK7485 |
| | 7 | FL Cover A | AAK7519 |
| | 8 | FL Cover B | AAK7530 |
| | 9 | FL Window | AAK7481 |
| | 10 | Jog knob Assy | AXG7051 |
| | 11 | Volume Knob | AAB7134 |
| | 12 | Power Button | AAD7427 |
| | 13 | 25 Lens | AAK7489 |
| | 14 | LED Holder | AMR7196 |
| | 15 | Play Button | AAD7426 |
| NSP | 16 | Disc Button Assy R | AXG7055 |
| | 17 | Program Button | AAD7425 |
| | 18 | VOL. Ring | AAK7488 |
| | 19 | VOL. Ring (BASS SYNTH) | See Contrast table (2) |
| | 20 | Bass Button (P.BASS, BASS SYNTH) | See Contrast table (2) |
| | 21 | Azimuth Cover L | AAK7527 |
| | 22 | Azimuth Cover R | AAK7528 |
| | 23 | EQ Window | See Contrast table (2) |
| | 24 | EQ Filter | See Contrast table (2) |
| | 25 | Deck Door Lens L | AAK7459 |
| | 26 | Deck Door Lens R | AAK7460 |
| | 27 | Volume Knob (WOOFER LEVEL) | See Contrast table (2) |
| | 28 | Jog knob Assy (P.BASS JOG) | See Contrast table (2) |
| | 29 | FL Spacer | AEB7108 |
| | 30 | EQ Cover | See Contrast table (2) |
| | 31 | Disc Button Cap L | AAK7487 |
| | 32 | Disc Lens L | AAK7491 |
| | 33 | Disc Button L | AAD7429 |
| | 34 | Disc Button Cap R | AAK7522 |
| | 35 | Disc Lens R | AAK7493 |
| | 36 | Disc Button R | AAD7433 |

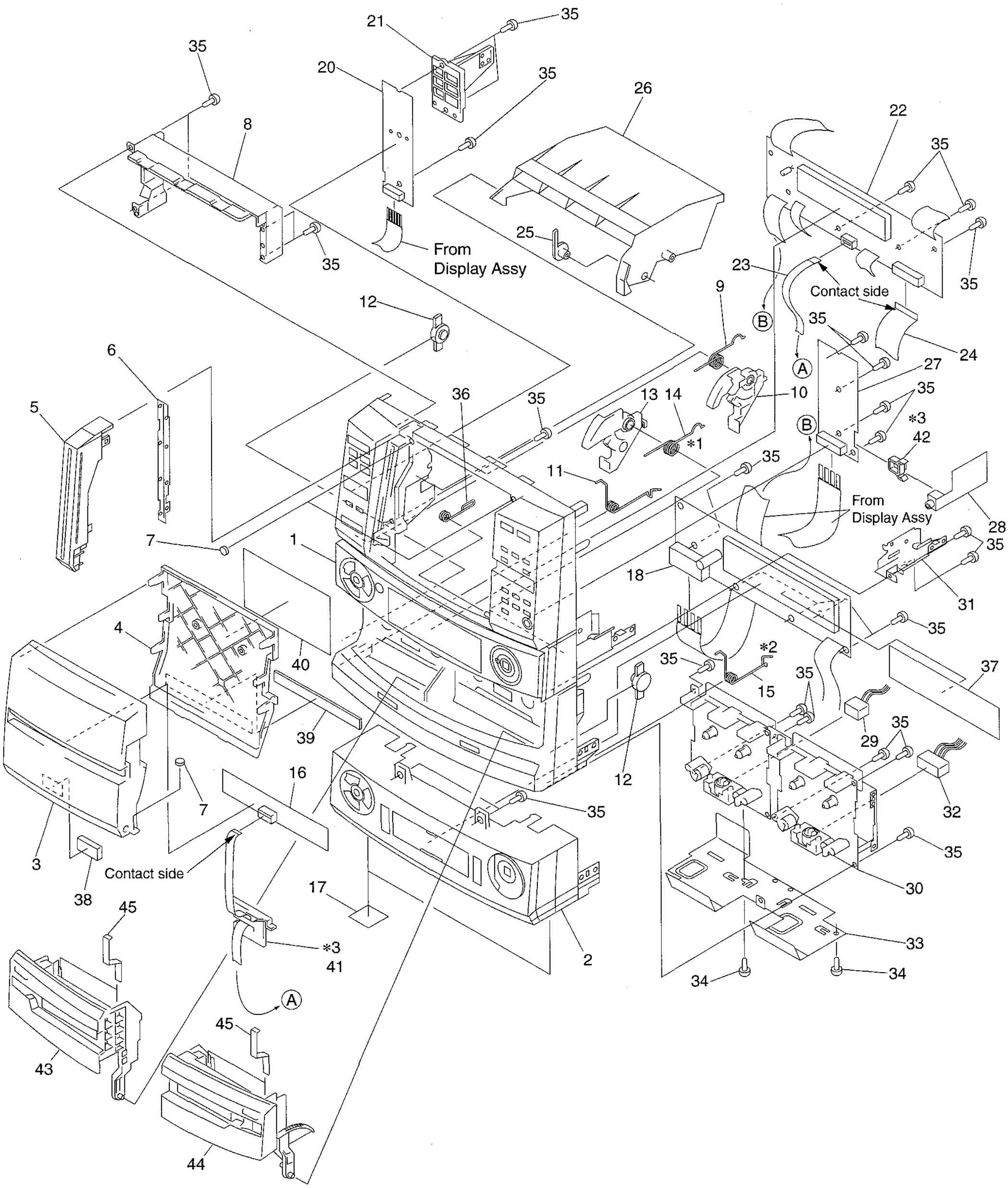
## (2) CONTRAST TABLE

XR-A800/DDXJ, DXJ/NC, DLXJ/NC, XR-A700/DDXJ, DXJ/NC and DLXJ/NC types are constructed the same except for the following :

| Mark | No. | Symbol and Description | Part No. | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | XR-A800 | | | XR-A700 | | | |
| | | | DDXJ | DXJ/NC | DLXJ/NC | DDXJ | DXJ/NC | DLXJ/NC | |
| | 5 | Knob Spacer (BASS SYNTH) | AAK7498 | AAK7498 | AAK7498 | Not used | Not used | Not used | |
| | 19 | VOL. Ring (BASS SYNTH) | AAK7488 | AAK7488 | AAK7488 | Not used | Not used | Not used | |
| | 20 | Bass Button (P.BASS, BASS SYNTH) | AAD7424 | AAD7424 | AAD7424 | Not used | Not used | Not used | |
| | 23 | EQ Window | AAK7483 | AAK7483 | AAK7483 | Not used | Not used | Not used | |
| | 24 | EQ Filter | AAK7546 | AAK7546 | AAK7546 | Not used | Not used | Not used | |
| | 27 | Volume Knob (WOOFER LEVEL) | AAB7134 | AAB7134 | AAB7134 | Not used | Not used | Not used | |
| | 28 | Jog knob Assy (P.BASS JOG) | AXG7051 | AXG7051 | AXG7051 | Not used | Not used | Not used | |
| | 30 | EQ Cover | AAK7547 | AAK7547 | AAK7547 | Not used | Not used | Not used | |

## 2.3 EXTERIOR (1/3) SECTION



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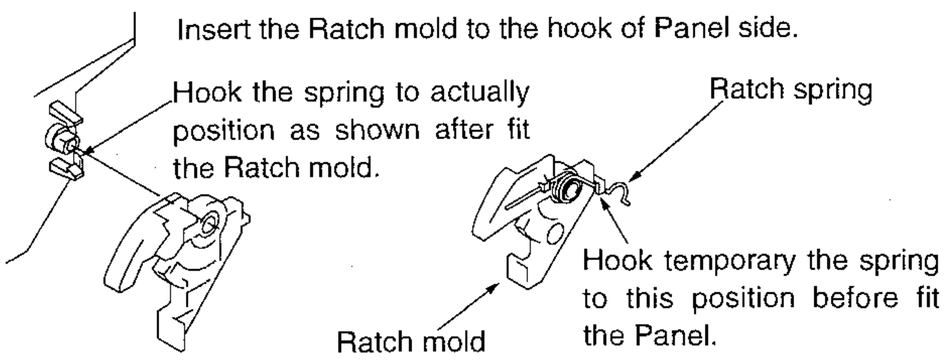
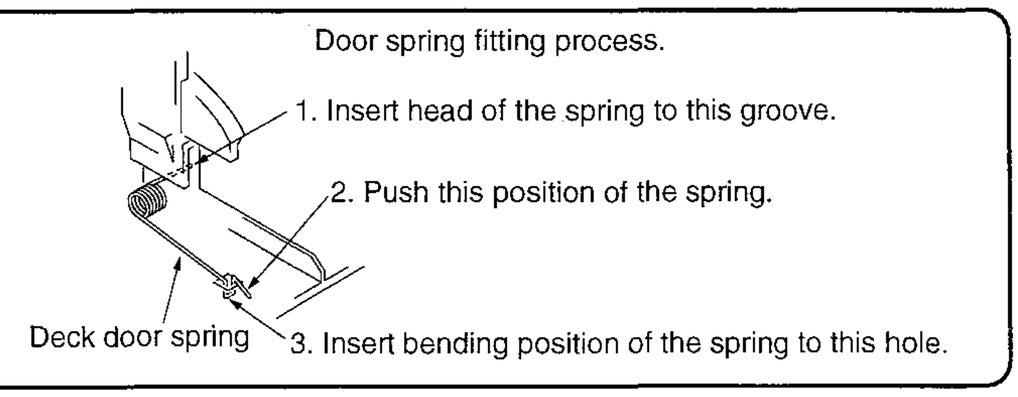



*2




## (1) EXTERIOR (1/3) SECTION PARTS LIST

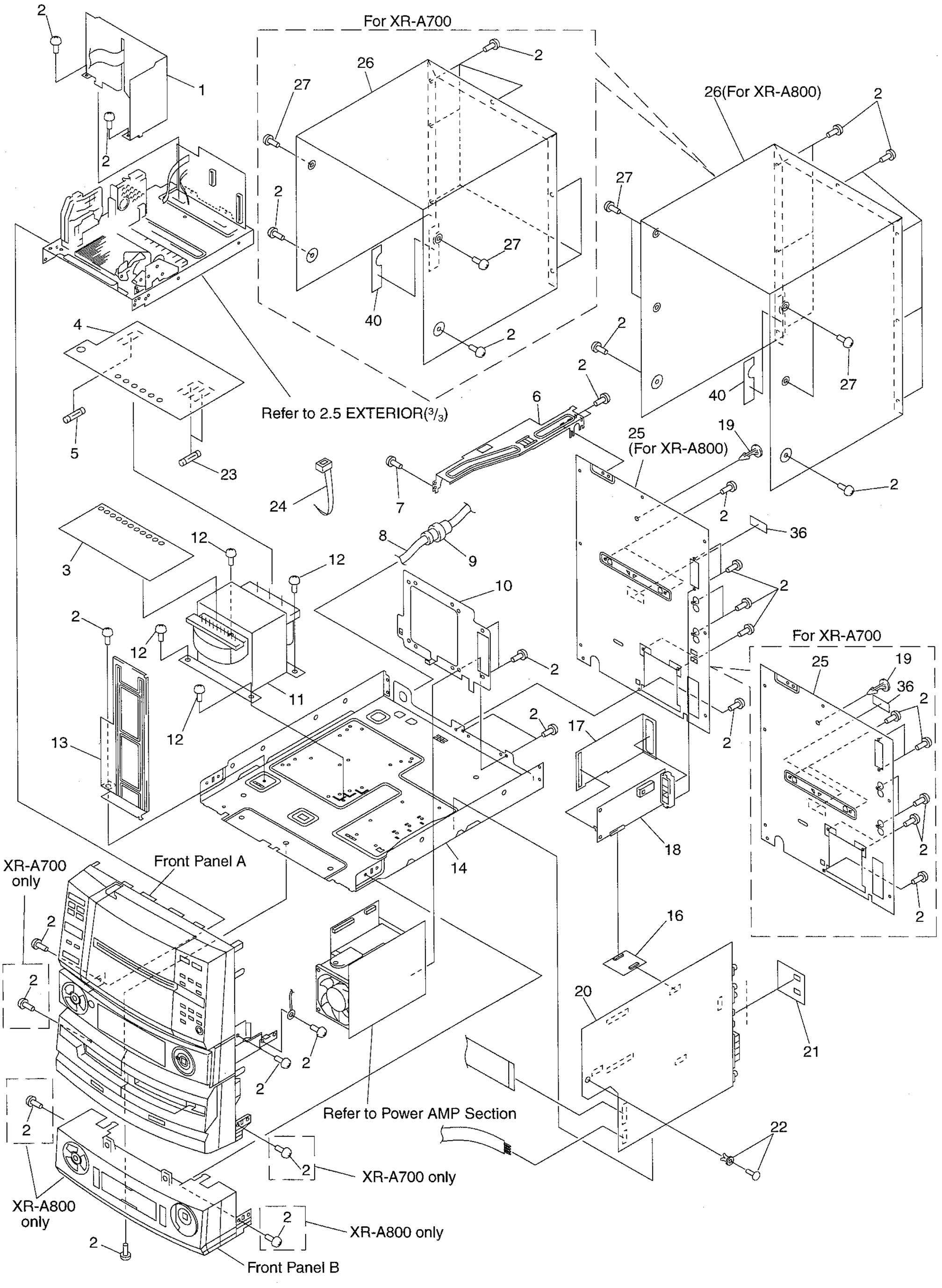
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | Front Panel A | See Contrast table (2) |
| | 2 | Front Panel B | See Contrast table (2) |
| | 3 | CD Door (PLS) | See Contrast table (2) |
| | 4 | CD Door Cover (PLS) | AAK7496 |
| | 5 | Slot Cover | AAK7486 |
| | 6 | Slot Sheet | AWL7028 |
| | 7 | Cushion Rubber | AEB7068 |
| | 8 | Sub Panel (MTL) | ANG7164 |
| | 9 | Ratch Spring L | ABH7130 |
| | 10 | Ratch Mold L | AMR7128 |
| | 11 | Deck Door Spring L | ABH7155 |
| | 12 | Damper Assy | AXA7057 |
| | 13 | Ratch Mold R | AMR7129 |
| | 14 | Ratch Spring R | ABH7131 |
| | 15 | Deck Door Spring R | ABH7156 |
| NSP | 16 | DOOR LED ASSY | AWZ8971 |
| | 17 | Rubber Sheet | AEB1111 |
| | 18 | SUB DISPLAY ASSY | See Contrast table (2) |
| | 19 | ..... | |
| NSP | 20 | LEFT SW ASSY | AWZ8969 |
| | 21 | PCB Mold | AMR7191 |
| | 22 | DISPLAY ASSY | See Contrast table (2) |
| | 23 | 7P F.F.C/30V | ADD7075 |
| | 24 | 28P F.F.C/60V | ADD7076 |
| | 25 | Rink Holder (PLS) | AMR7142 |
| | 26 | Barrier (PLS) | AMR7135 |
| NSP | 27 | RIGHT SW ASSY | AWZ8968 |
| NSP | 28 | HP ASSY | See Contrast table (2) |
| | 29 | Connector Assy 3P | RKP1683 |
| | 30 | Mechanism Unit | AYM7002 |
| | 31 | Earth Plate (MTL) | ANG7161 |
| | 32 | Connector Assy 5P | RKP1682 |
| | 33 | Mecha. Shield | See Contrast table (2) |
| | 34 | Screw | BCZ30P080FZK |
| | 35 | Screw | BPZ30P080FMC |
| | 36 | CD Door Spring | ABH7157 |
| | 37 | EQ Sheet | See Contrast table (2) |
| | 38 | FFC Spacer | AEB7104 |
| | 39 | Disc Rack Plate | AAK7251 |
| | 40 | Caution Label | ARW7024 |
| | 41 | FFC Cover | AZA7279 |
| | 42 | Jack Holder | AZA7278 |
| | 43 | Deck Door L | AAN7168 |
| | 44 | Deck Door R | AAN7169 |
| | 45 | Spring | RBK1004 |

## (2) CONTRAST TABLE

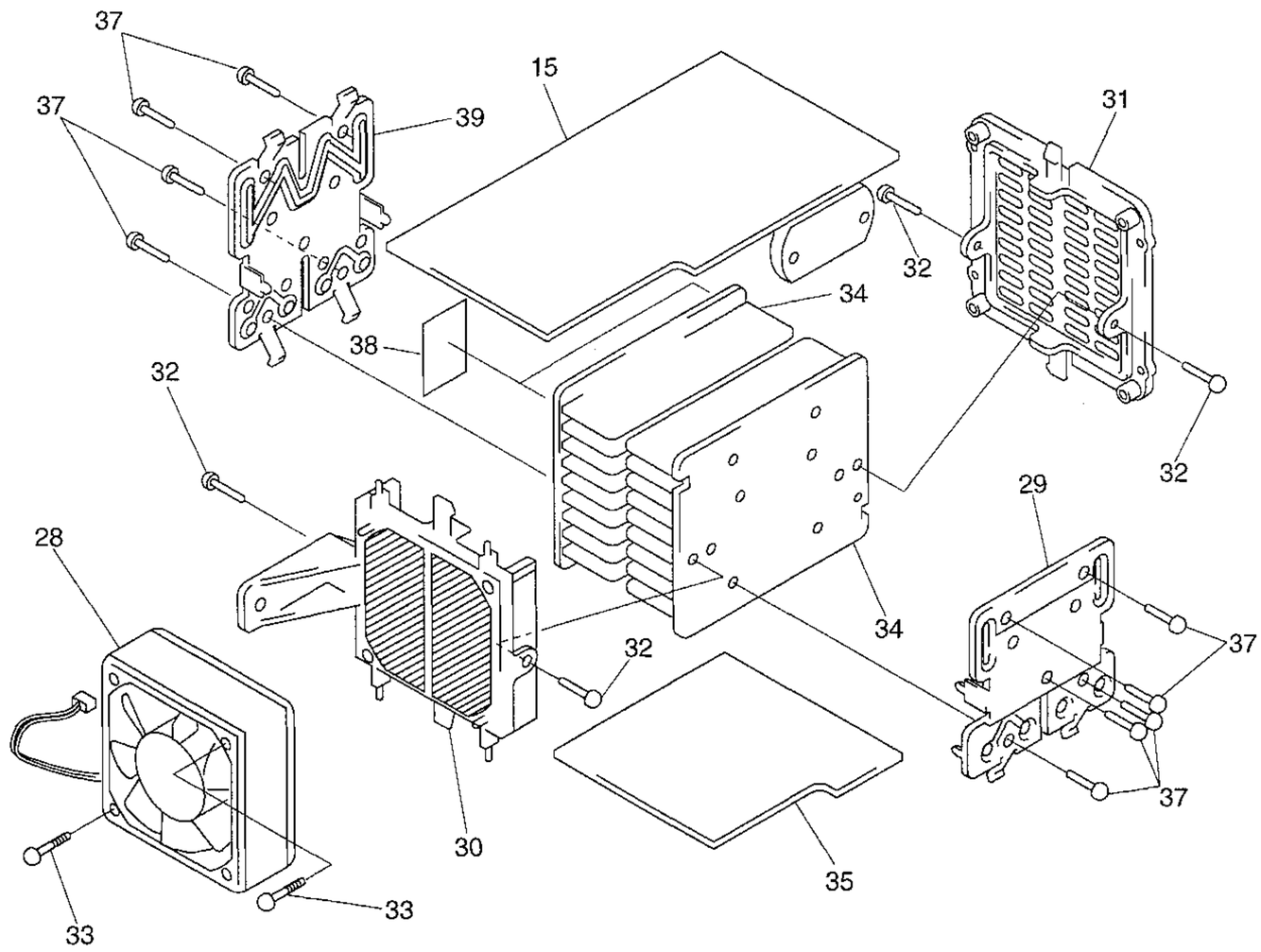
XR-A800/DDXJ, DXJ/NC, DLXJ/NC, XR-A700/DDXJ, DXJ/NC and DLXJ/NC types are constructed the same except for the following :

| Mark | No. | Symbol and Description | Part No. | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | XR-A800 | | | XR-A700 | | | |
| | | | DDXJ | DXJ/NC | DLXJ/NC | DDXJ | DXJ/NC | DLXJ/NC | |
| | 1 | Front Panel A | AMB7482 | AMB7482 | AMB7482 | AMB7465 | AMB7465 | AMB7465 | |
| | 2 | Front Panel B | AMB7466 | AMB7466 | AMB7466 | Not used | Not used | Not used | |
| | 3 | CD Door | AAK7502 | AAK7502 | AAK7502 | AAK7495 | AAK7495 | AAK7495 | |
| | 18 | SUB DISPLAY ASSY | AWP7017 | AWP7017 | AWP7017 | Not used | Not used | Not used | |
| | 22 | DISPLAY ASSY | AWP7015 | AWP7015 | AWP7015 | AWP7013 | AWP7013 | AWP7013 | |
| NSP | 28 | HP ASSY | AWZ8967 | AWZ8967 | AWZ8967 | AWZ8965 | AWZ8965 | AWZ8965 | |
| | 33 | Mecha. Shield | ANK7036 | ANK7036 | ANK7036 | Not used | Not used | Not used | |
| | 37 | EQ Sheet | AAK7548 | AAK7548 | AAK7548 | Not used | Not used | Not used | |

## 2.4 EXTERIOR (2/3) AND POWER AMP SECTION



## ● POWER AMP SECTION




## (1) EXTERIOR (2/3) AND POWER AMP SECTION PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | CD Cover (MTL) | ANG7165 |
| | 2 | Screw | BBZ30P080FZK |
| NSP | 3 | SECONDARY ASSY | See Contrast table (2) |
| NSP | 4 | PRIMARY ASSY | See Contrast table (2) |
| ⚠ | 5 | Fuse (T4A/250V, FU1) | AEK1060 |
| | 6 | Home Lock Stay (MTL) | AND7030 |
| | 7 | Screw | BPZ30P120FZK |
| ⚠ | 8 | AC Power Cord | See Contrast table (2) |
| | 9 | Strain Rerief | CM-22B |
| | 10 | AF Hold Plate | ANG7160 |
| ⚠ | 11 | Power Transformer (T1) | See Contrast table (2) |
| | 12 | Screw | BBZ40P080FZK |
| | 13 | Front Stay (MTL) | See Contrast table (2) |
| NSP | 14 | Chassis (MTL) | ANA7034 |
| | 15 | AMP ASSY | See Contrast table (2) |
| NSP | 16 | TX CONNECT ASSY | AWZ8972 |
| | 17 | TX Cover | AAK7501 |
| | 18 | FM/AM TUNER MODULE | AXQ7061 |
| | 19 | Locking Card Spacer | VEC1596 |
| | 20 | AF ASSY | See Contrast table (2) |

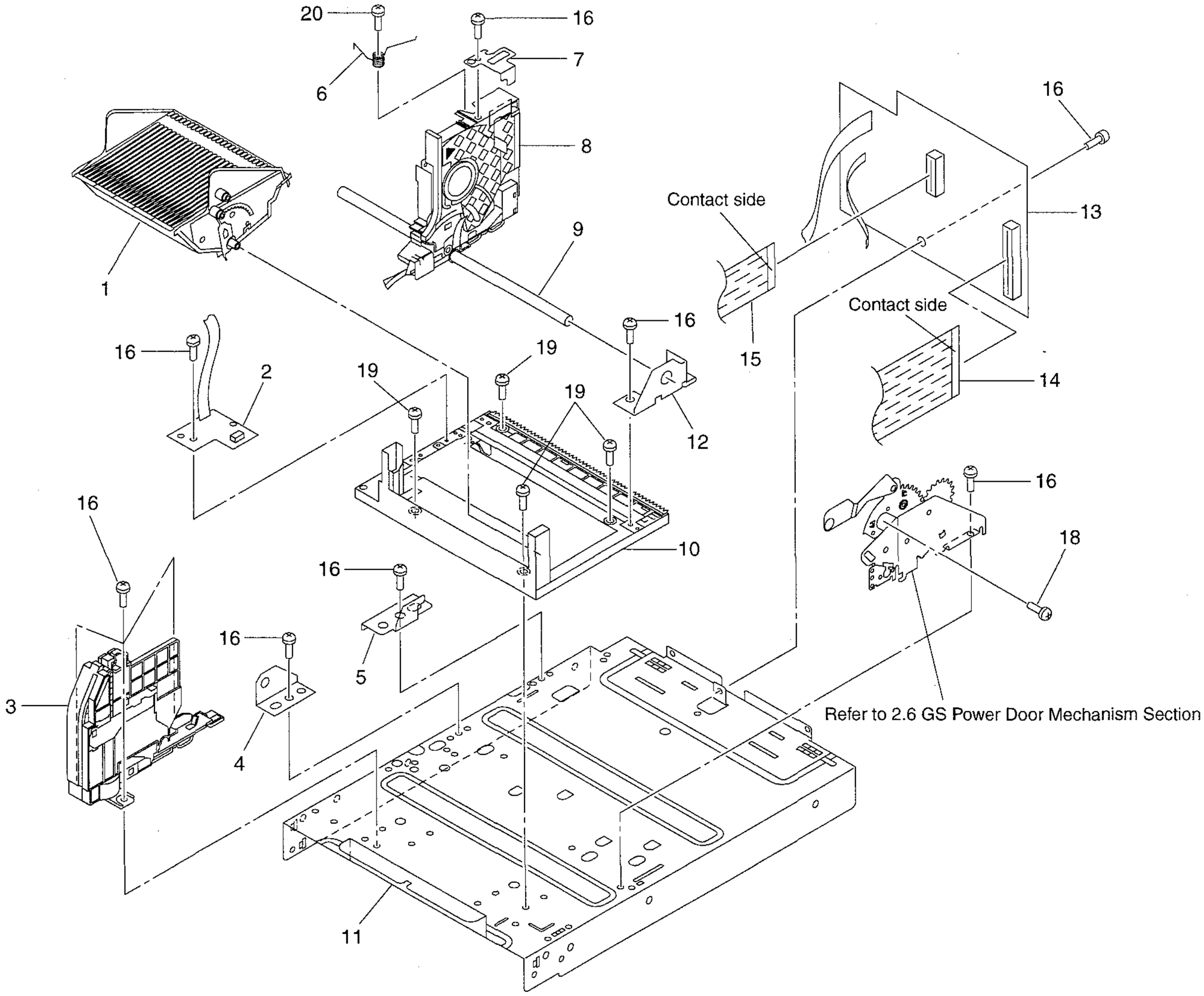
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 21 | Tweeter Cover | See Contrast table (2) |
| | 22 | Push Rivet | AEC7069 |
| ⚠ | 23 | Fuse (T2A/250V, FU2, FU3) | AEK1057 |
| | 24 | Binder | ZCA-SKB90BK |
| | 25 | Rear Panel | See Contrast table (2) |
| | 26 | Bonnet Case | See Contrast table (2) |
| | 27 | Screw | VPZ30P100FZK |
| | 28 | DC Fan Motor | AXM7003 |
| | 29 | Power Pac Holder | ANG7109 |
| | 30 | Mold A | AMR7005 |
| | 31 | Mold B | AMR7006 |
| | 32 | Screw | ABA1021 |
| | 33 | Screw | BPZ30P350FZK |
| | 34 | Heat Sink | ANH7058 |
| | 35 | POWER SUPPLY ASSY | See Contrast table (2) |
| | 36 | Caution Label | See Contrast table (2) |
| | 37 | Screw | BBZ30P180FMC |
| | 38 | Mica Wafer | AEE7018 |
| | 39 | Holder | ANG7009 |
| | 40 | Resistor Cover | AAK7558 |

## (2) CONTRAST TABLE

XR-A800/DDXJ, DXJ/NC, DLXJ/NC, XR-A700/DDXJ, DXJ/NC and DLXJ/NC types are constructed the same except for the following :

| Mark | No. | Symbol and Description | Part No. | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | XR-A800 | | | XR-A700 | | | |
| | | | DDXJ | DXJ/NC | DLXJ/NC | DDXJ | DXJ/NC | DLXJ/NC | |
| NSP | 3 | SECONDARY ASSY | AWZ8956 | AWZ8956 | AWZ8956 | AWZ8953 | AWZ8953 | AWZ8953 | |
| NSP | 4 | PRIMARY ASSY | AWZ8981 | AWZ8981 | AWZ8981 | AWZ8977 | AWZ8977 | AWZ8977 | |
| ⚠ | 8 | AC Power Cord | ADG1157 | PDG1058 | PDG1043 | ADG1157 | PDG1058 | PDG1043 | |
| ⚠ | 11 | Power Transformer (AC110-127V/220-230V/240V) | ATS7196 | ATS7196 | ATS7196 | ATS7199 | ATS7199 | ATS7199 | |
| | 13 | Front Stay | AND7029 | AND7029 | AND7029 | AND7028 | AND7028 | AND7028 | |
| | 15 | AMP ASSY | AWZ8944 | AWZ8944 | AWZ8944 | AWZ8941 | AWZ8941 | AWZ8941 | |
| | 20 | AF ASSY | AWZ8939 | AWZ8939 | AWZ8939 | AWZ8937 | AWZ8937 | AWZ8937 | |
| | 21 | Tweeter Cover | AAK7520 | AAK7520 | AAK7520 | Not used | Not used | Not used | |
| | 25 | Rear Panel | ANC7604 | ANC7612 | ANC7613 | ANC7603 | ANC7606 | ANC7607 | |
| | 26 | Boonet Case | ANE7178 | ANE7178 | ANE7178 | ANE7177 | ANE7177 | ANE7177 | |
| | 35 | POWER SUPPLY ASSY | AWZ8950 | AWZ8950 | AWZ8950 | AWZ8947 | AWZ8947 | AWZ8947 | |
| | 36 | Caution Label | Not used | Not used | PRW1018 | Not used | Not used | PRW1018 | |

## 2.5 EXTERIOR (3/3) SECTION




## (1) EXTERIOR (3/3) SECTION PARTS LIST

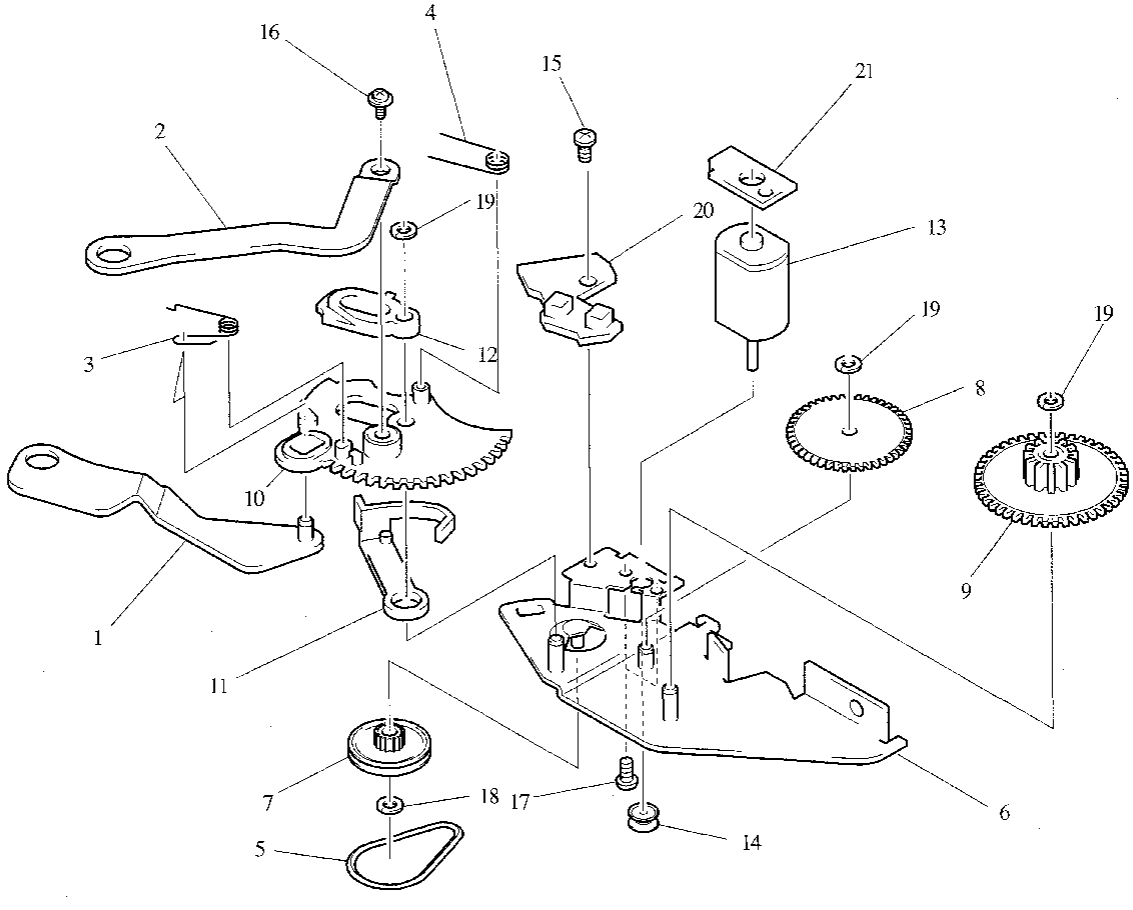
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | Disc Rack | ANW7069 |
| NSP | 2 | HOME SW ASSY | AWZ8975 |
| NSP | 3 | GS Slot-In Mechanism Assy | AXA7044 |
| | 4 | Shaft Holder GS | ANB7094 |
| | 5 | Lock Angle 2 (MTL) | ANG7117 |
| | 6 | Earth Spring | ABH7159 |
| | 7 | Assist Angle 2 | ANB7065 |
| NSP | 8 | GS Mechanism Assy | AXA7047 |
| | 9 | Guide Shaft S | ALA7008 |
| | 10 | Rack Base SP | ANW7118 |
| | 11 | Sub Chassis | ANA7057 |
| | 12 | Shaft Holder | ANB7021 |
| | 13 | GM-CD ASSY | See Contrast table (2) |
| | 14 | 35P F.F.C/30V | ADD7050 |
| | 15 | 22P F.F.C/30V | ADD7016 |
| | 16 | Screw | BBZ30P080FZK |
| | 17 | ..... | |
| | 18 | Screw | IPZ30P080FMC |
| | 19 | Screw C | PBA1106 |
| | 20 | Screw | IPZ20P080FMC |

## (2) CONTRAST TABLE

XR-A800/DDXJ, DXJ/NC, DLXJ/NC, XR-A700/DDXJ, DXJ/NC and DLXJ/NC types are constructed the same except for the following :

| Mark | No. | Symbol and Description | Part No. | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | XR-A800 | | | XR-A700 | | | |
| | | | DDXJ | DXJ/NC | DLXJ/NC | DDXJ | DXJ/NC | DLXJ/NC | |
| | 13 | GM-CD ASSY | AWZ8962 | AWZ8962 | AWZ8962 | AWZ8959 | AWZ8959 | AWZ8959 | |

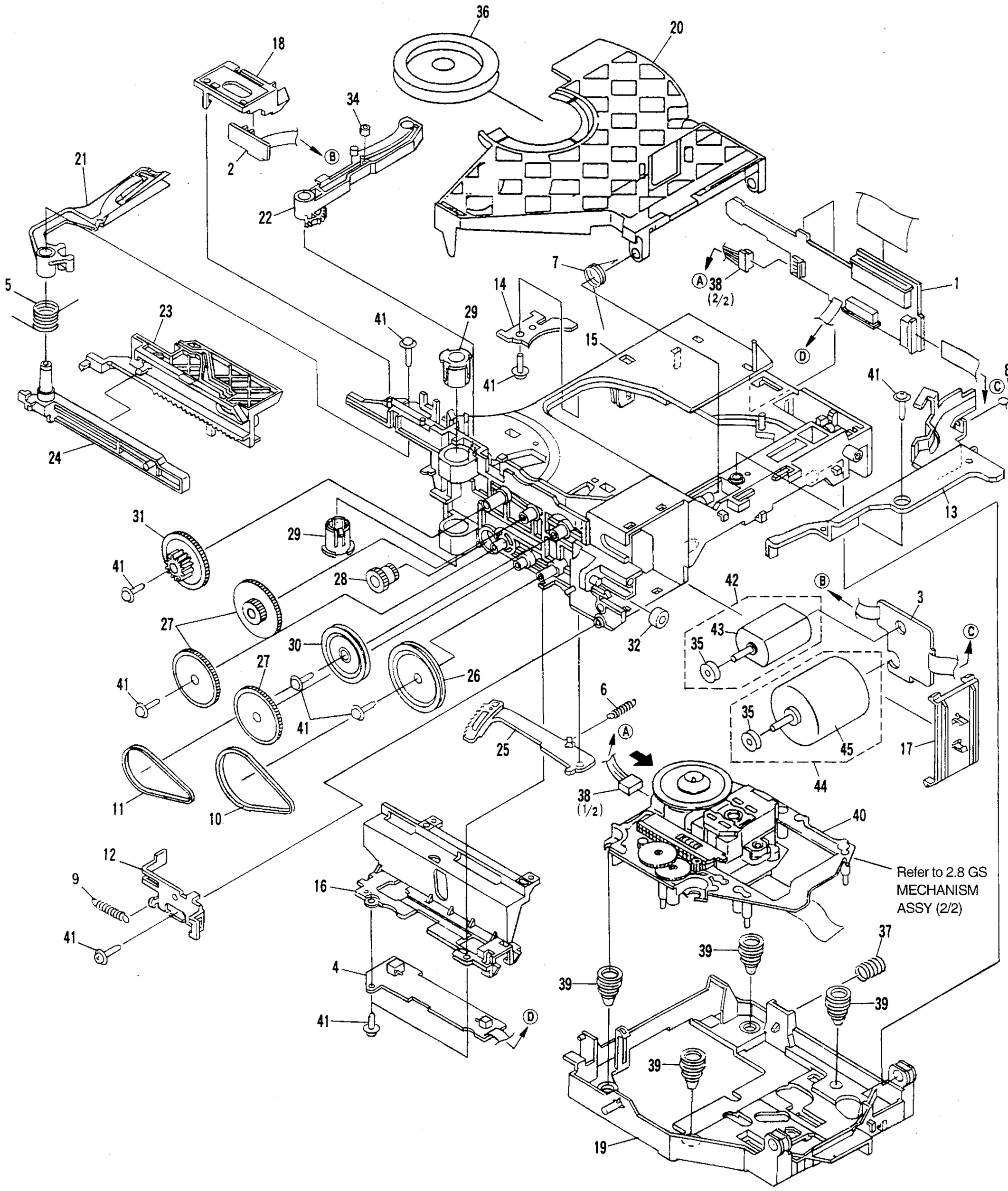
## 2.6 GS POWER DOOR MECHANISM SECTION




### GS POWER DOOR MECHANISM SECTION PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | Link A (MTL) | ANG7163 |
| | 2 | Link B (MTL) | ANG7115 |
| | 3 | Door Spring | ABH7144 |
| | 4 | Rack Spring | ABH7145 |
| | 5 | Door Belt | AEB7067 |
| | 6 | Base Plate (SECC) | ANB7081 |
| | 7 | Gear Pulley (POM) | ANW7103 |
| | 8 | Gear B (POM) | ANW7104 |
| | 9 | Gear A (POM) | ANW7105 |
| | 10 | Drive Gear (ABS/PC) | ANW7115 |
| | 11 | SW Lever (ABS) | ANW7107 |
| | 12 | Push Plate (ABS) | ANW7108 |
| NSP | 13 | Motor | AXM7010 |
| | 14 | Motor Pulley (POM) | PNW1634 |
| | 15 | Screw | BBZ20P060FMC |
| | 16 | Screw | IPZ20P080FMC |
| | 17 | Screw | PMA20P030FMC |
| | 18 | Washer | WT26D060D025 |
| | 19 | Washer | WT36D072D025 |
| NSP | 20 | Door SW Assy | AWZ8970 |
| NSP | 21 | Door Motor Assy | AWZ8973 |

## 2.7 GS MECHANISM ASSY (1/2)



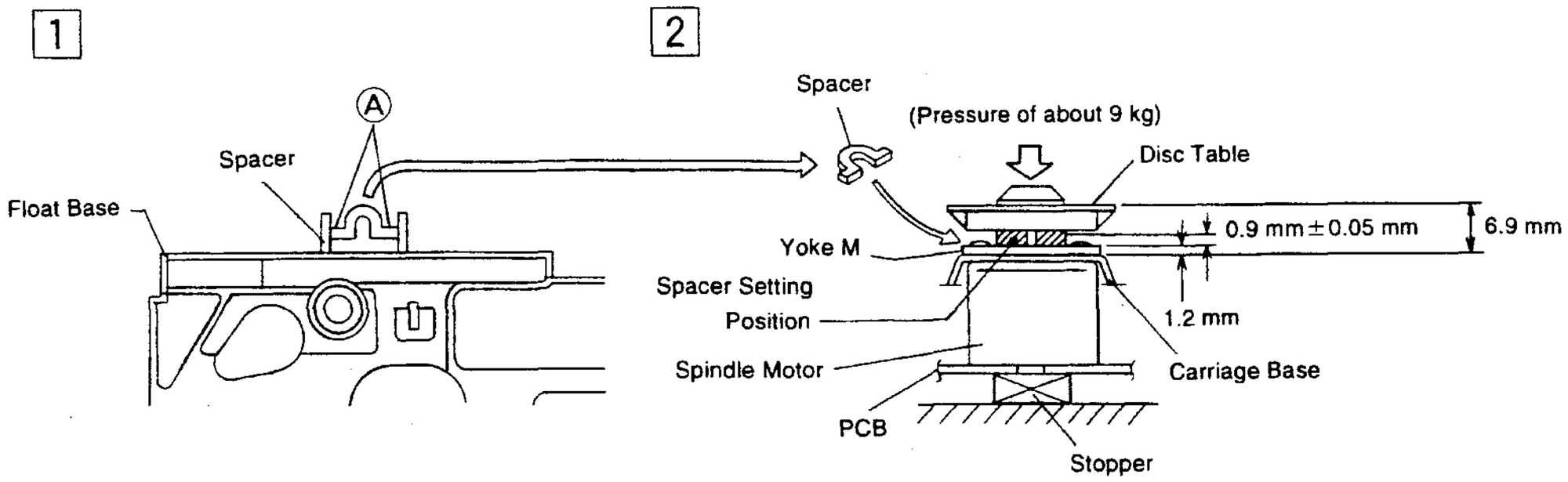
# GS MECHANISM ASSY (1/2) PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| NSP | 1 | MECHA PCB ASSY | AWZ8802 |
| NSP | 2 | SENSOR PCB ASSY | AWZ7836 |
| NSP | 3 | MOTOR PCB ASSY | AWZ7837 |
| NSP | 4 | SW PCB ASSY | AWZ7838 |
| | 5 | ARM A SPRING 2 | ABH7124 |
| | 6 | GEAR PLATE SPRING | ABH7051 |
| | 7 | CLAMP SPRING | ABH7107 |
| | 8 | LOCK LEVER SPRING B | ABH7142 |
| | 9 | LOCK ANGLE SPRING 2 | ABH7123 |
| | 10 | LOADING BELT | AEB7029 |
| | 11 | BELT | AEB7030 |
| NSP | 12 | LOCK ANGLE | ANB7027 |
| NSP | 13 | LOCK LEVER | ANB7038 |
| NSP | 14 | SERVO STOPPER S | ANB7047 |
| | 15 | LOADING BASE | ANW7086 |
| | 16 | CAM COVER | ANW7052 |
| | 17 | MOTOR HOLDER | ANW7053 |
| | 18 | SENSOR HOLDER | ANW7054 |
| | 19 | FLOAT BASE | ANW7080 |
| | 20 | CLAMPER HOLDER | ANW7117 |
| | 21 | ARM (A) | ANW7057 |
| | 22 | ARM (B) | ANW7058 |
| | 23 | DRIVE PLATE | ANW7059 |
| | 24 | ARM PLATE | ANW7060 |
| | 25 | GEAR PLATE | ANW7082 |
| | 26 | GEAR PULLEY (B) | ANW7062 |
| | 27 | GEAR A | ANW7063 |
| | 28 | DRIVE GEAR | ANW7064 |
| | 29 | BEARING | ANW7065 |
| | 30 | GEAR PULLEY A | ANW7066 |
| | 31 | SELECT GEAR | ANW7067 |
| | 32 | ROLLER | ANW7068 |
| | 33 | ..... | |
| | 34 | ROLLER B | ANW7075 |
| | 35 | MOTOR PULLEY | PNW1634 |
| | 36 | CLAMPER | PNW2692 |
| | 37 | FLOAT SPRING | ABH7049 |
| | 38 | CONNECTOR ASSY (4P) | ADE7006 |
| | 39 | FLOAT RUBBER | AEB7028 |
| NSP | 40 | SERVO MECHANISM ASSY GM | AXA7028 |
| | 41 | SCREW | IPZ20P080FMC |
| | 42 | MOTOR ASSY (SELECT) | AEA7005 |
| NSP | 43 | MOTOR | PXM1002 |
| | 44 | MOTOR ASSY | AEA7006 |
| | 45 | LOADING MOTOR | VXM1034 |
| | | FROIL (for service) | GYA1001 |
| | | HA NARL (for service) | GEM1016 |

## ● How to install the disc table

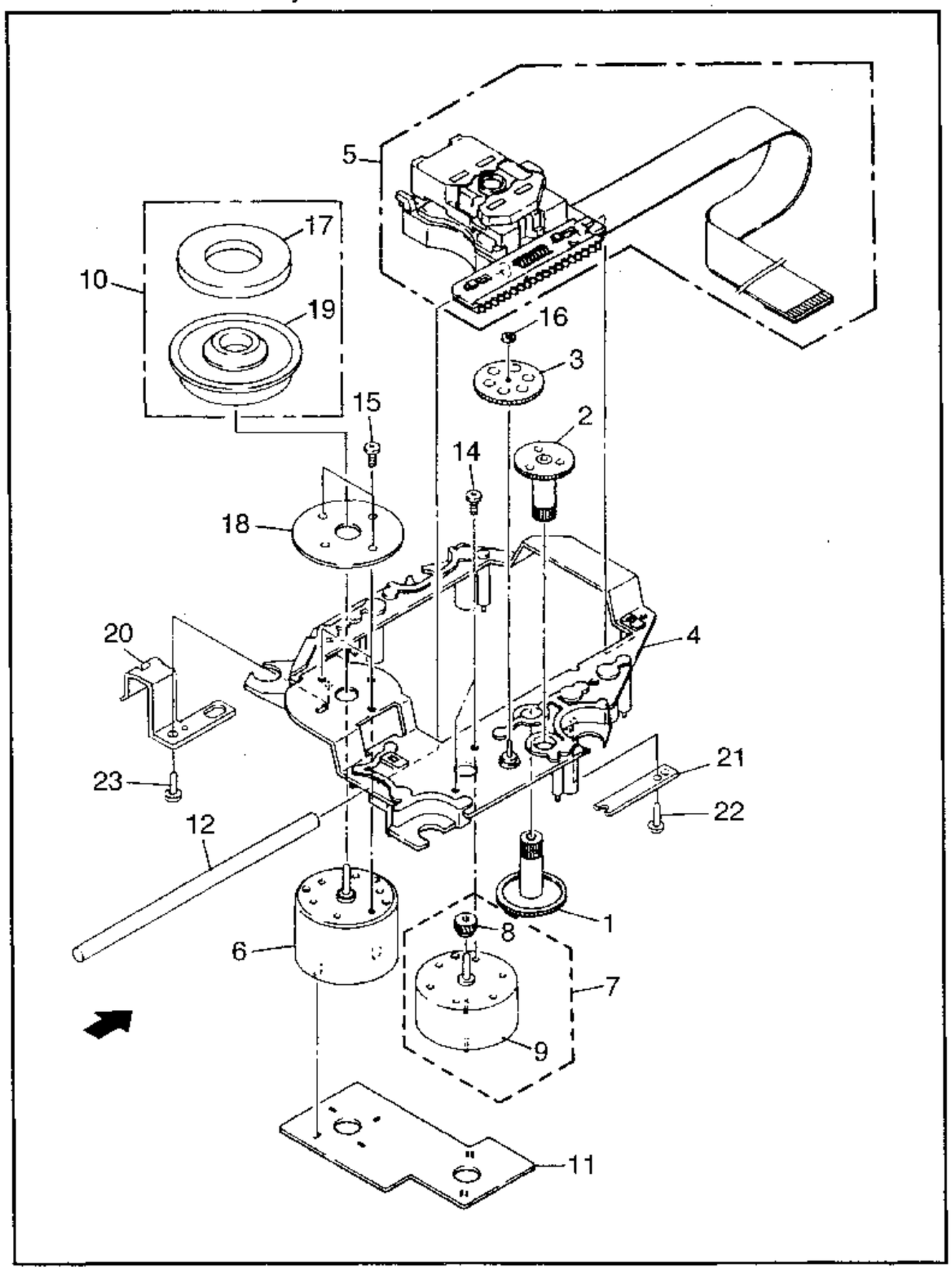
[1] Use nipper or other tool to cut the two sections marked Ⓐ figure [1].
Then remove the spacer.

[2] While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



## 2.8 GS MECHANISM ASSY (2/2)

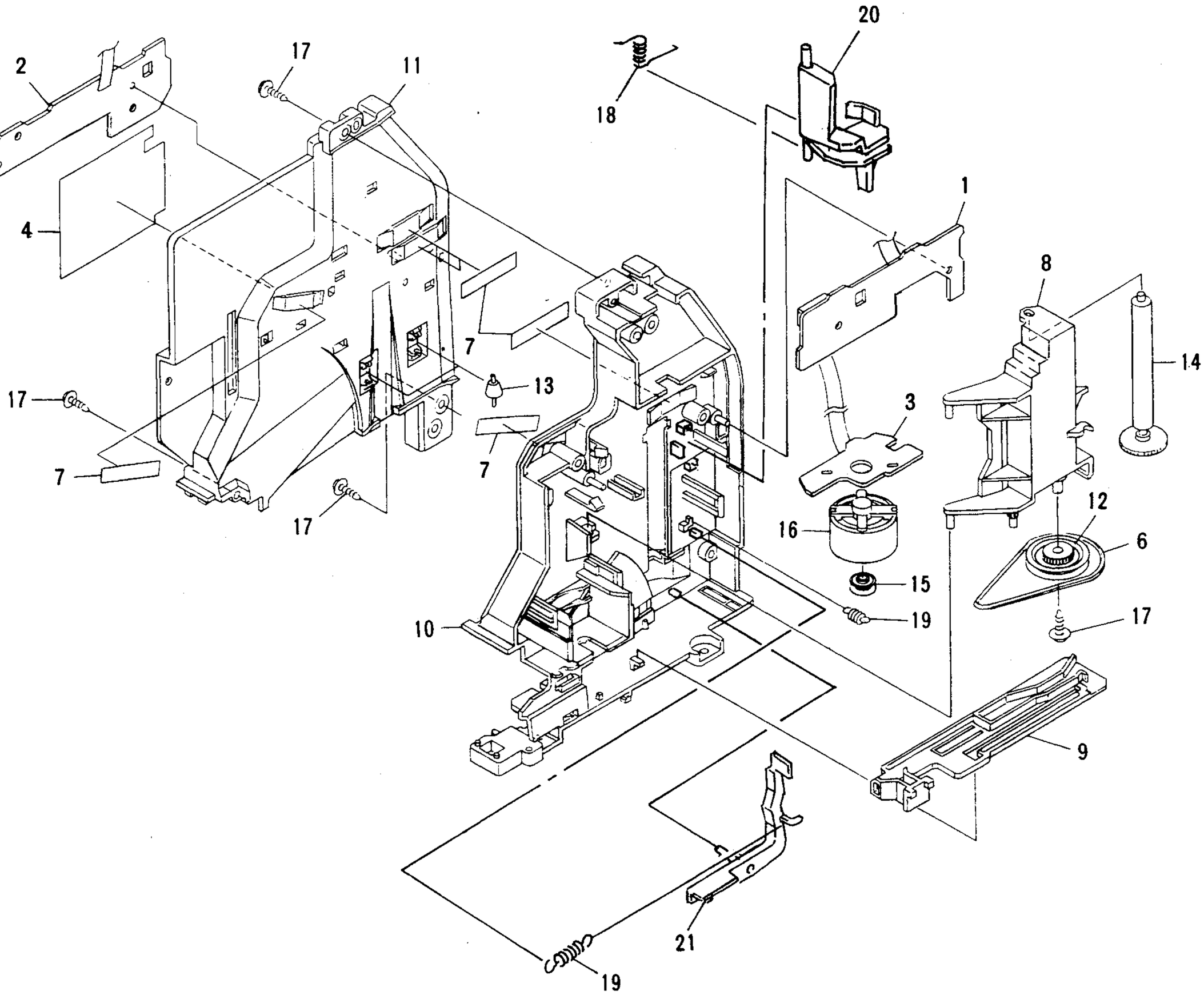
Servo Mechanism Assy GM




## GS MECHANISM ASSY (2/2) PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | GEAR 1 | PNW2052 |
| | 2 | GEAR 2 | PNW2053 |
| | 3 | GEAR 3 | PNW2054 |
| | 4 | CARRIAGE BASE | PNW2699 |
| | 5 | PICKUP ASSY | AEA7004 |
| | 6 | D.C. MOTOR ASSY (SPDL) | PEA1235 |
| | 7 | CARRIAGE DC MOTOR ASSY | PEA1246 |
| | 8 | PINION GEAR | PNW2055 |
| NSP | 9 | CARRIAGE DC MOTOR/0.3W | PXM1027 |
| | 10 | DISC TABLE ASSY | PEA1314 |
| | 11 | MECHANISM BOARD ASSY | PWX1192 |
| | 12 | GUIDE BAR | PLA1094 |
| | 13 | ..... | |
| | 14 | SCREW | JFZ17P025FZK |
| | 15 | SCREW | JFZ20P040FMC |
| | 16 | WASHER | WT12D032D025 |
| | 17 | CLAMP MAGNET | PMF1014 |
| | 18 | YOKE M | PNB1312 |
| NSP | 19 | DISC TABLE | PNW2410 |
| NSP | 20 | FLOAT ANGLE | ANB7020 |
| | 21 | GEAR STOPPER | PNB1303 |
| | 22 | SCREW | BPZ20P060FMC |
| | 23 | SCREW | BPZ26P100FMC |

## 2.9 GS SLOT-IN MECHANISM ASSY

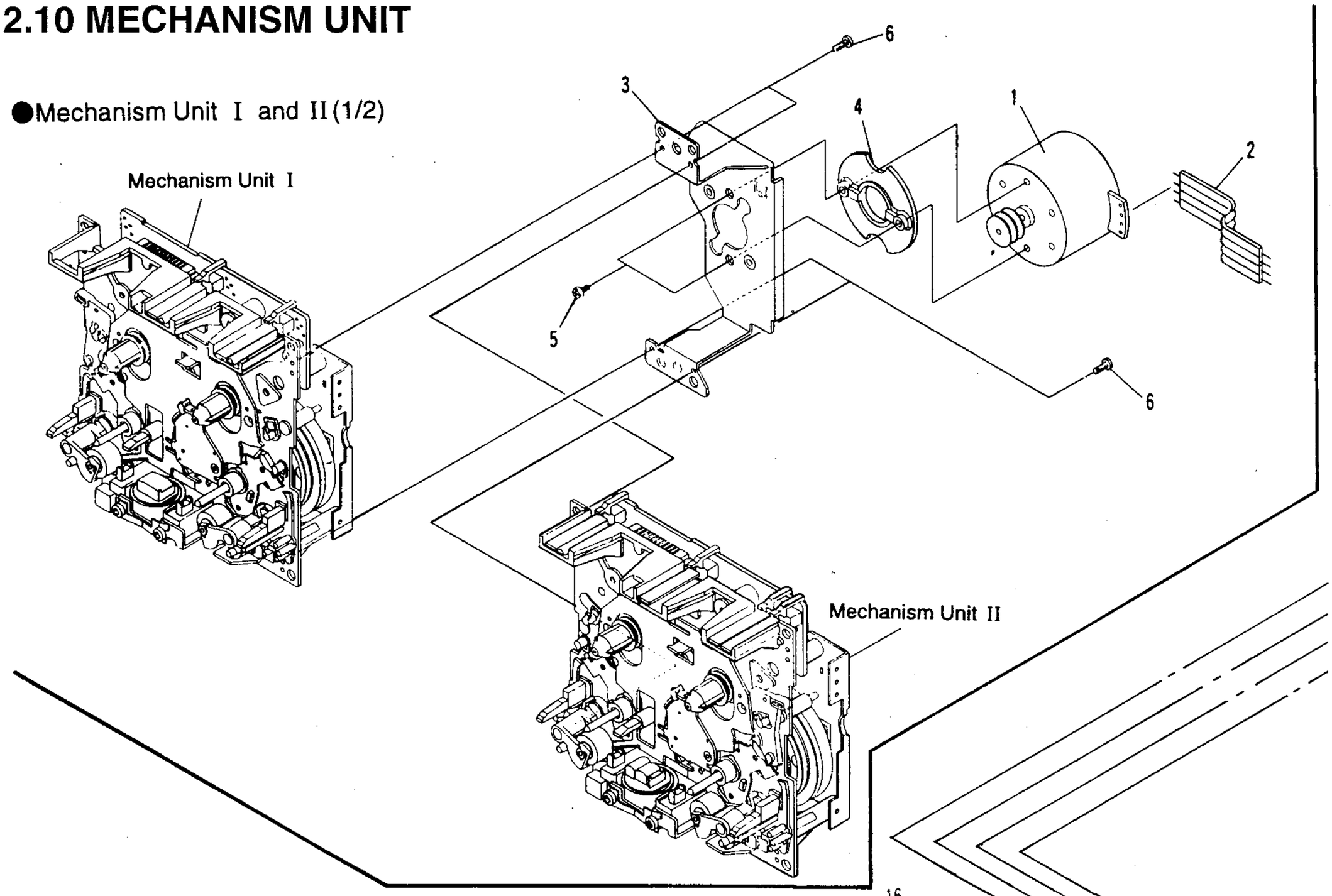



## GS SLOT-IN MECHANISM ASSY PARTS LIST

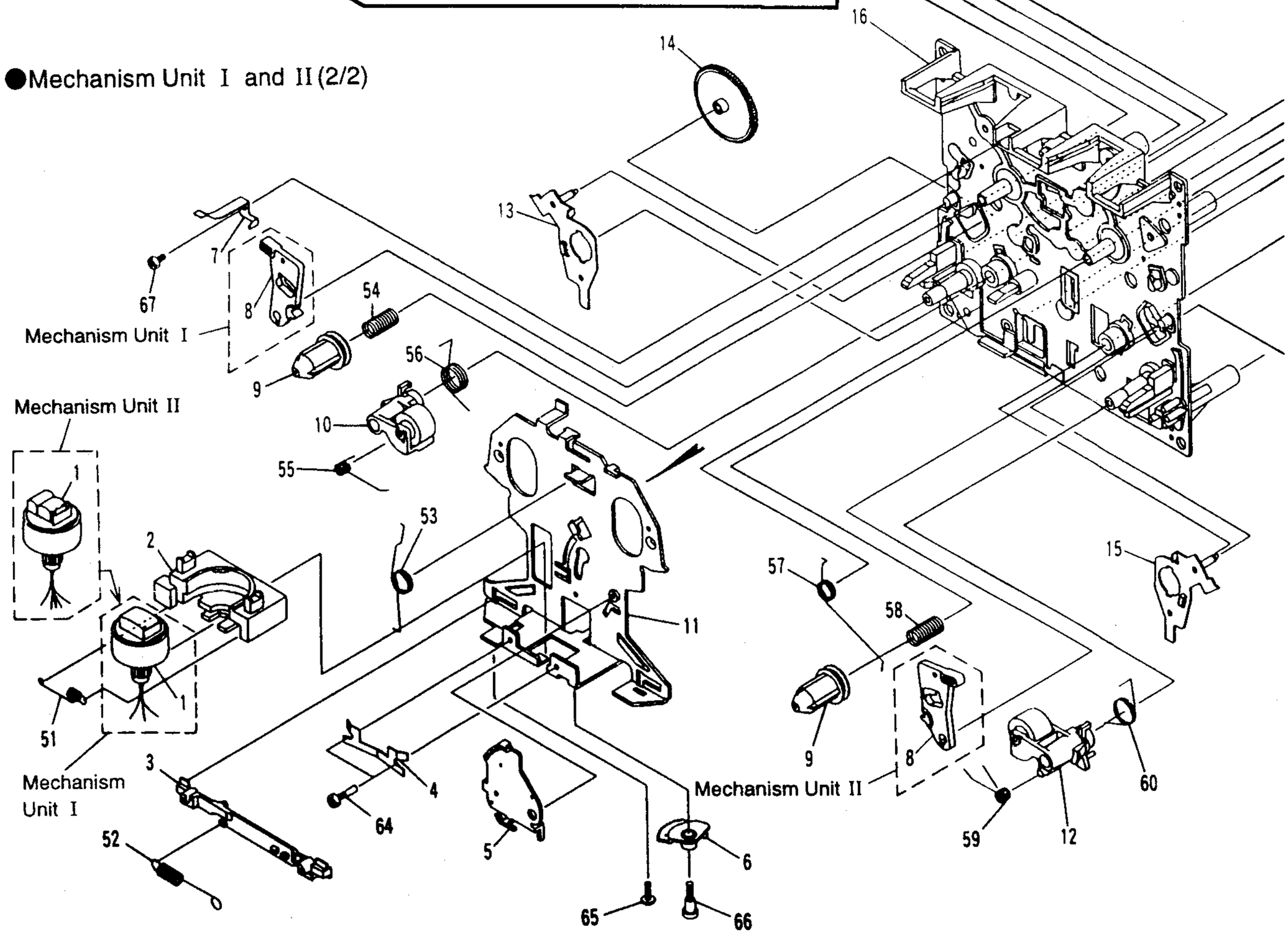
| Mark | No. | Description | Part No. |
|---|---|---|---|
| NSP | 1 | Sensor Board Assy | AWZ8560 |
| NSP | 2 | LED Board Assy | AWZ8561 |
| NSP | 3 | Motor Board Assy | AWZ8744 |
| | 4 | Blind | AAK7219 |
| | 5 | ..... | |
| | 6 | Belt | AEB7033 |
| | 7 | Ecsaine | AED7004 |
| | 8 | Gear Holder | ANW7110 |
| | 9 | Slide Plate | ANW7048 |
| | 10 | Case (M) | ANW7101 |
| | 11 | Case (S) | ANW7102 |
| | 12 | Gear Pulley A | ANW7066 |
| | 13 | Guide Roller | ANW7076 |
| | 14 | Roller Assy | AXA7029 |
| | 15 | Motor Pulley | PNW1634 |
| | 16 | DC Motor/0.75W | PXM1010 |
| | 17 | Screw | IPZ20P080FMC |
| | 18 | Shutter Spring | ABH7136 |
| | 19 | P.B Spring | ABH7137 |
| | 20 | Shutter | ANW7099 |
| | 21 | Lever | ANW7100 |

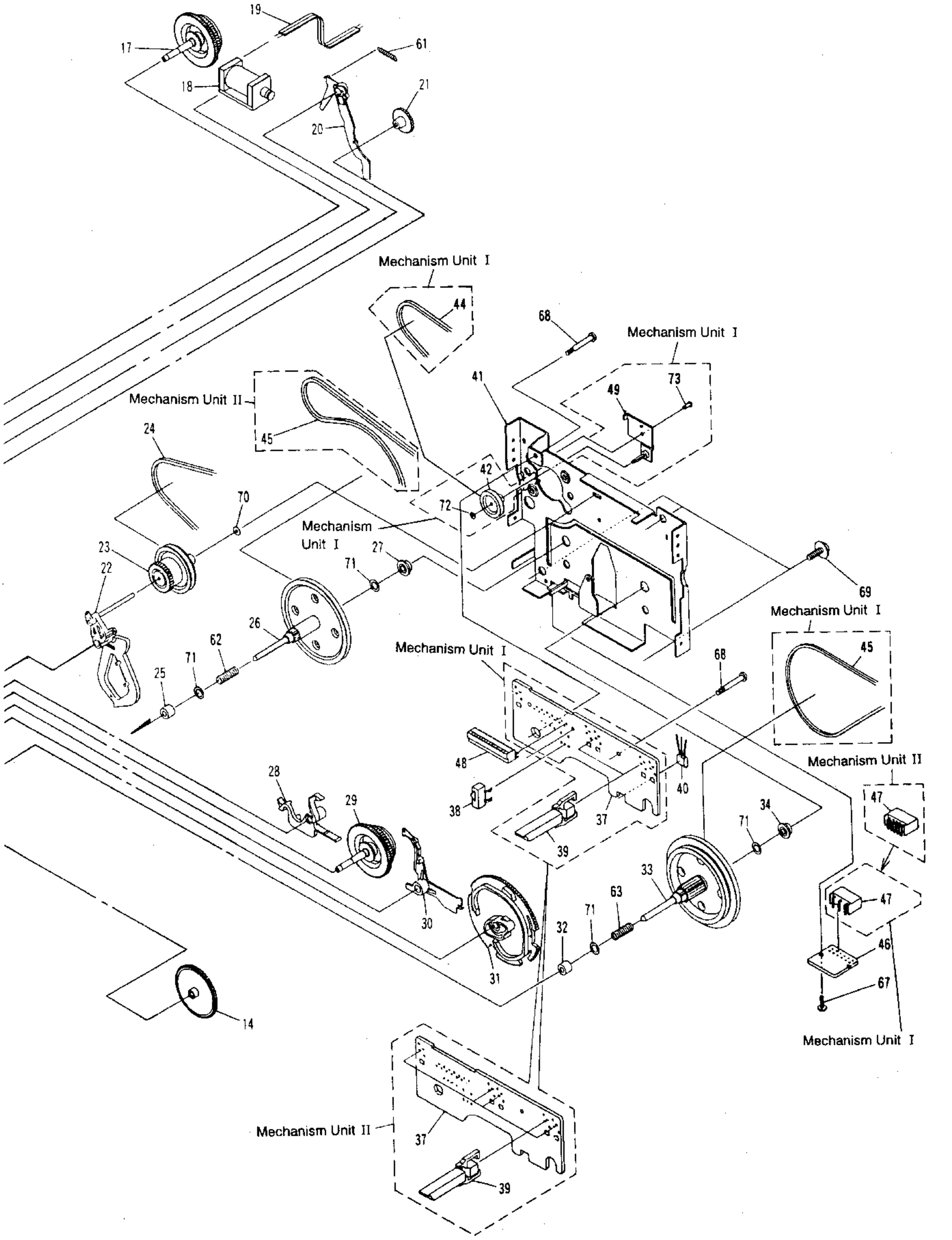
# 2.10 MECHANISM UNIT

●Mechanism Unit I and II (1/2)




●Mechanism Unit I and II (2/2)




19
17
61
18
21
20
Mechanism Unit I
44
68
Mechanism Unit I
Mechanism Unit II
41
49
73
45
24
42
70
72
Mechanism
Unit I
23
27
22
71
69
Mechanism Unit I
26
62
Mechanism Unit I
71
25
68
45
48
Mechanism Unit II
28
40
38
37
34
29
71
39
47
33
63
30
32
47
46
31
67
14
Mechanism Unit II
37
39
Mechanism Unit I

# MECHANISM UNIT PARTS LIST

## ■ Mechanism unit I and II (1/2)

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

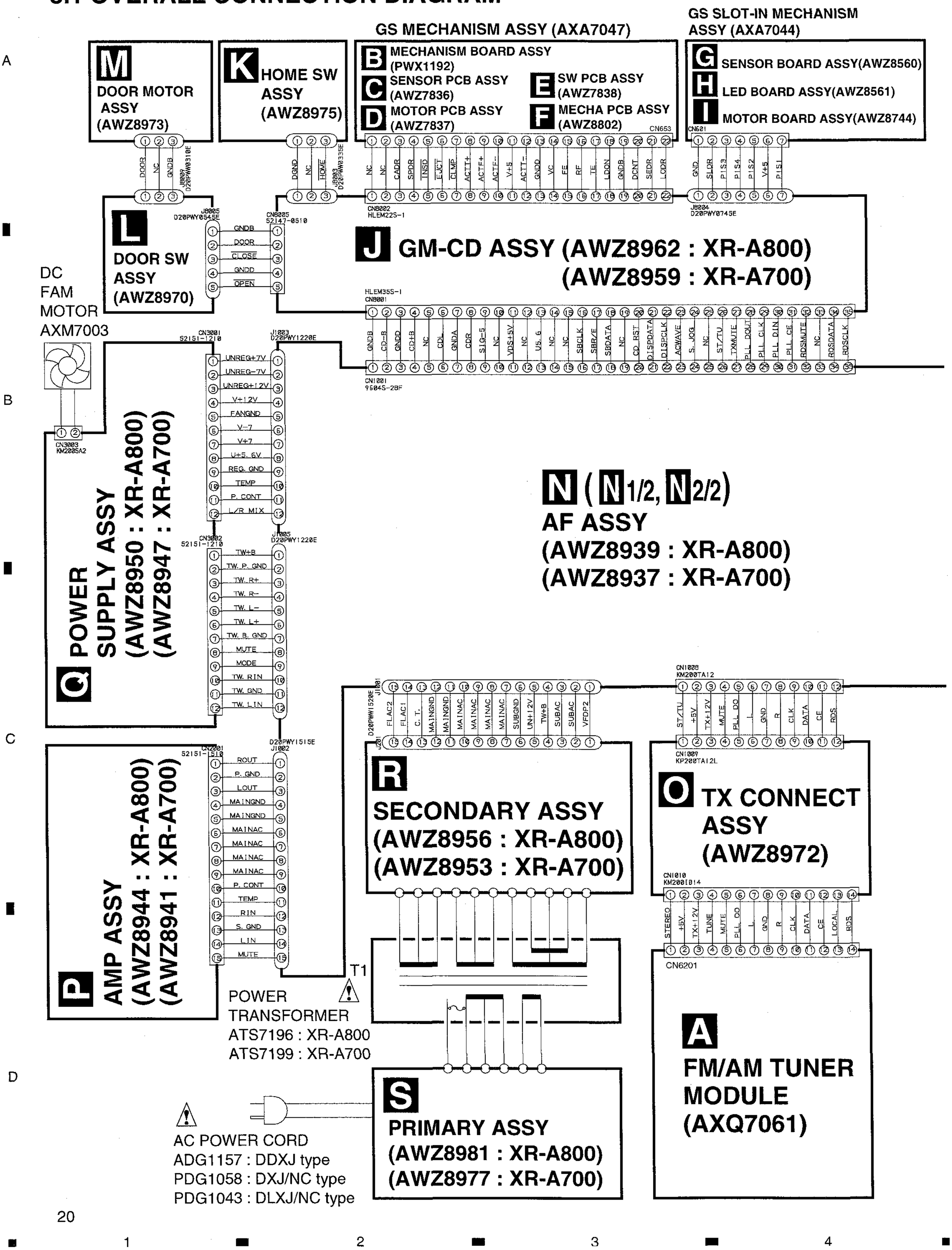
## ■ Mechanism unit I and II (2/2)

| Mark | No. | Description | Part 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 | REB1292 |
| | 25 | METAL | RNG1048 |
| | 26 | ASSY FLYWHEEL L | RXA1690 |
| | 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 | RXA1691 |
| | 34 | METAL | RNG1004 |
| | 35 | ..... | |
| | 36 | ..... | |
| | 37 | P. C. BOARD | RNP1610 |
| | 38 | SWITCH MODE | RSN1020 |
| | 39 | SWITCH (LEAF) | RSN1019 |
| | 40 | HALL IC | DN6851A |
| | 41 | BRACKET FW (*1) | RNE1854 |
| | 41 | BRACKET FW (*2) | RNE1438 |
| | 42 | PULLEY (*1 only) | RNK2132 |
| | 43 | ..... | |
| | 44 | BELT FW (*1 only) | REB1291 |
| | 45 | BELT MAIN (* 1) | REB1290 |
| | 45 | BELT MAIN (* 2) | REB1289 |
| | 46 | P. C. BOARD | RNP1348 |
| | 47 | HOUSING (*1) | RKP1396 |
| | 47 | HOUSING (*2) | RKP1397 |
| | 48 | CONNECTOR (*1) | RKP1713 |
| | 48 | CONNECTOR (*2) | RKP1714 |
| | 49 | ASSY HOLDER (*1 only) | RXA1689 |
| | 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 | RBF1046 |
| | 71 | WASHER | WA26D047D013 |
| | 72 | WASHER (*1 only) | WT13D030D025 |
| | 73 | SCREW (*1 only) | RBA1118 |

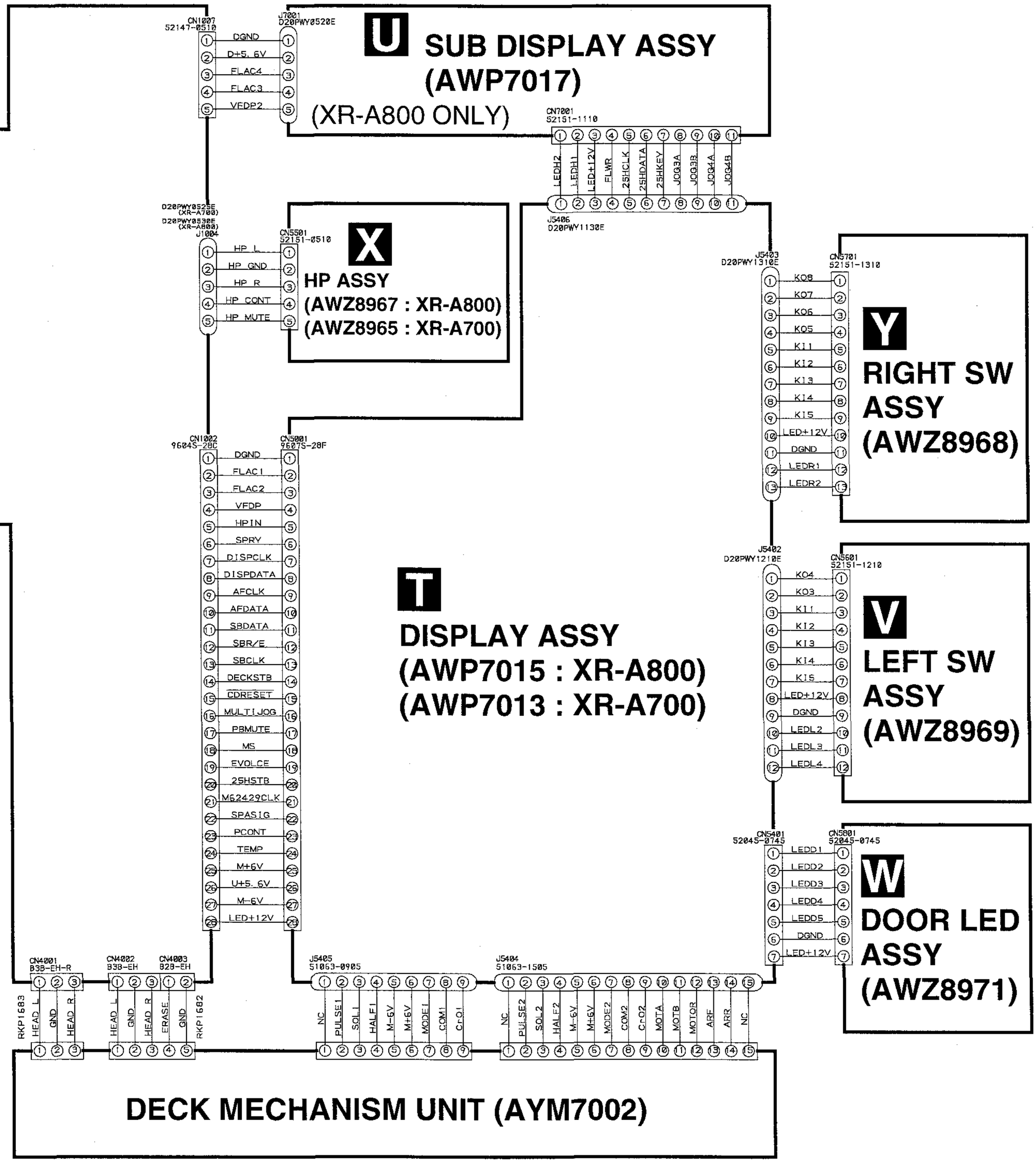
*Note)* **1: Mechanism Unit I*
**2: Mechanism Unit II*

# 3. SCHEMATIC DIAGRAM

## 3.1 OVERALL CONNECTION DIAGRAM



Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

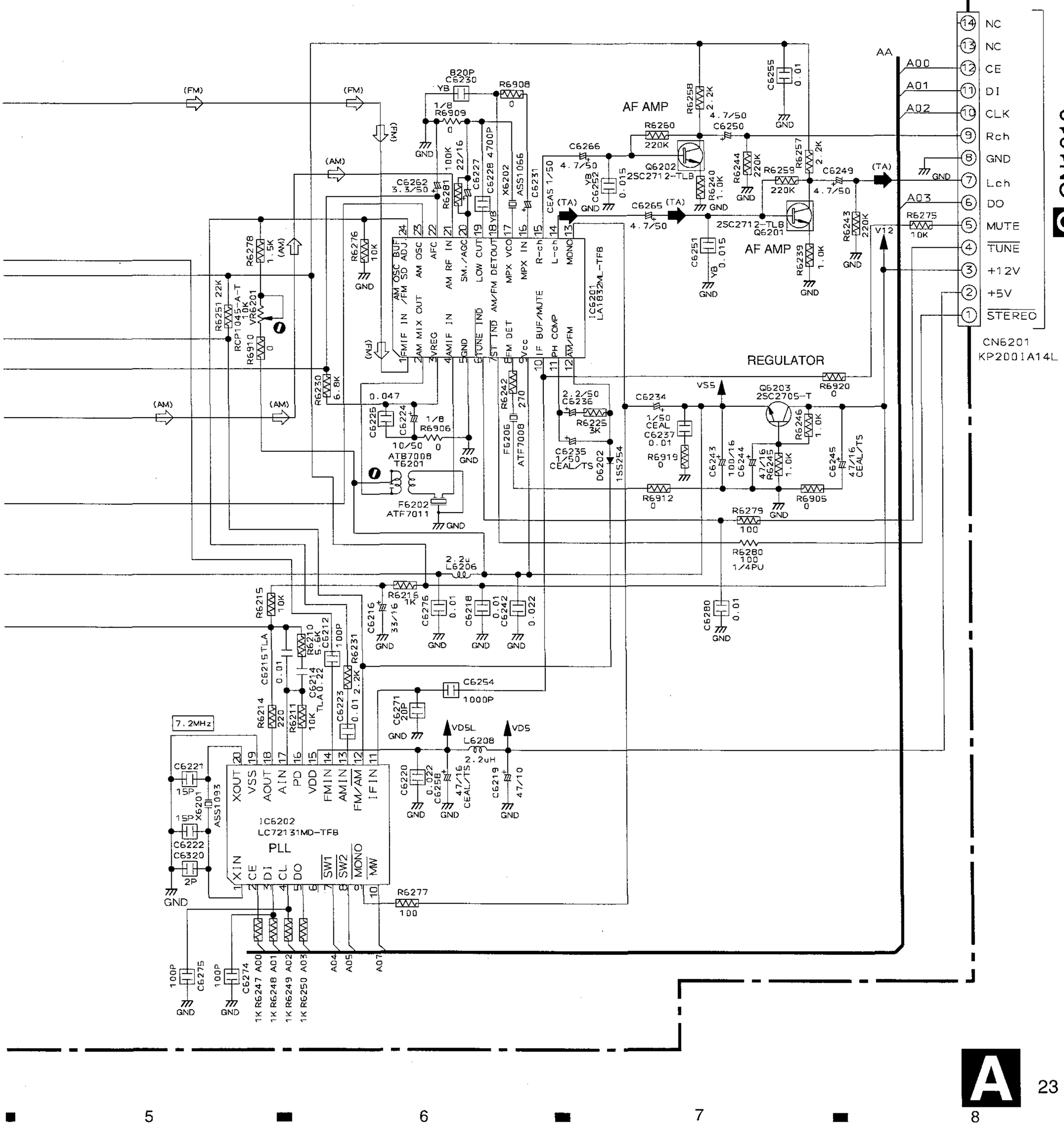


# 3.2 FM/AM TUNER MODULE

## A FM/AM TUNER MODULE (AXQ7061)

## Notes

1. RESISTORS
   Indicated in Ω, 1/10W±5% Tolerance unless otherwise noted K:KΩ, M:MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P:PF.
3. DIODES
   No mark diode is 1SS254.



# 3.3 GS MECHANISM ASSY AND GS SLOT-IN MECHANISM ASSY

## GS MECHANISM ASSY (AXA7047)

### PICKUP ASSY (AEA7004)

HOLOGRAM LASER UNIT

TRACKING COIL: OUTSIDE INSIDE

FOCUS COIL: FAR NEAR

PRE-AMP BOARD ASSY

C110 0.01
R116 68
R107 68
R106 68
R105 100k
R125 0
C104 100/6.3
Q101 2SB1189
LAND SHORT
R104 270
R126 0
LD POWER
VR101 2.2k
C107 0.1/25
R122 0
C105 0.01
R112 1M
R113 1M
C106 220p
R120 0
R114 39k
R121 0
R115 39k
R124 0
C109 0.1/25
C108 0.1/25
R111 560k
R101 36k
R109 12k
R110 22k
VR102 22k
TR.BAL

IC101 M51593FP

| | | | |
|---|---|---|---|
| 1 | LD | Vcc | 20 |
| 2 | MD | LD ON | 19 |
| 3 | PD1 | RF1 | 18 |
| 4 | PD2 | RF0 | 17 |
| 5 | Vss | FE | 16 |
| 6 | F | FE BIAS | 15 |
| 7 | E | TE | 14 |
| 8 | VR | E1 | 13 |
| 9 | VC | E0 | 12 |
| 10 | NC | NC | 11 |

CN102

| | |
|---|---|
| 1 | ACTF− |
| 2 | ACTF+ |
| 3 | ACTT− |
| 4 | ACTT+ |
| 5 | GND |
| 6 | V+5 |
| 7 | VC |
| 8 | LDON |
| 9 | FE |
| 10 | TE |
| 11 | NC |
| 12 | RF |

MD, LD, VCC, D1, D2, D3, D4, D5, LD GND

### B MECHANISM BOARD ASSY (PWX1192)

S610 DSG1016
INSIDE SW

SPDL MTR PEA1235

CARRIAGE MTR PEA1246

| | |
|---|---|
| 1 | INSD |
| 2 | SPDR |
| 3 | CADR |
| 4 | GND |

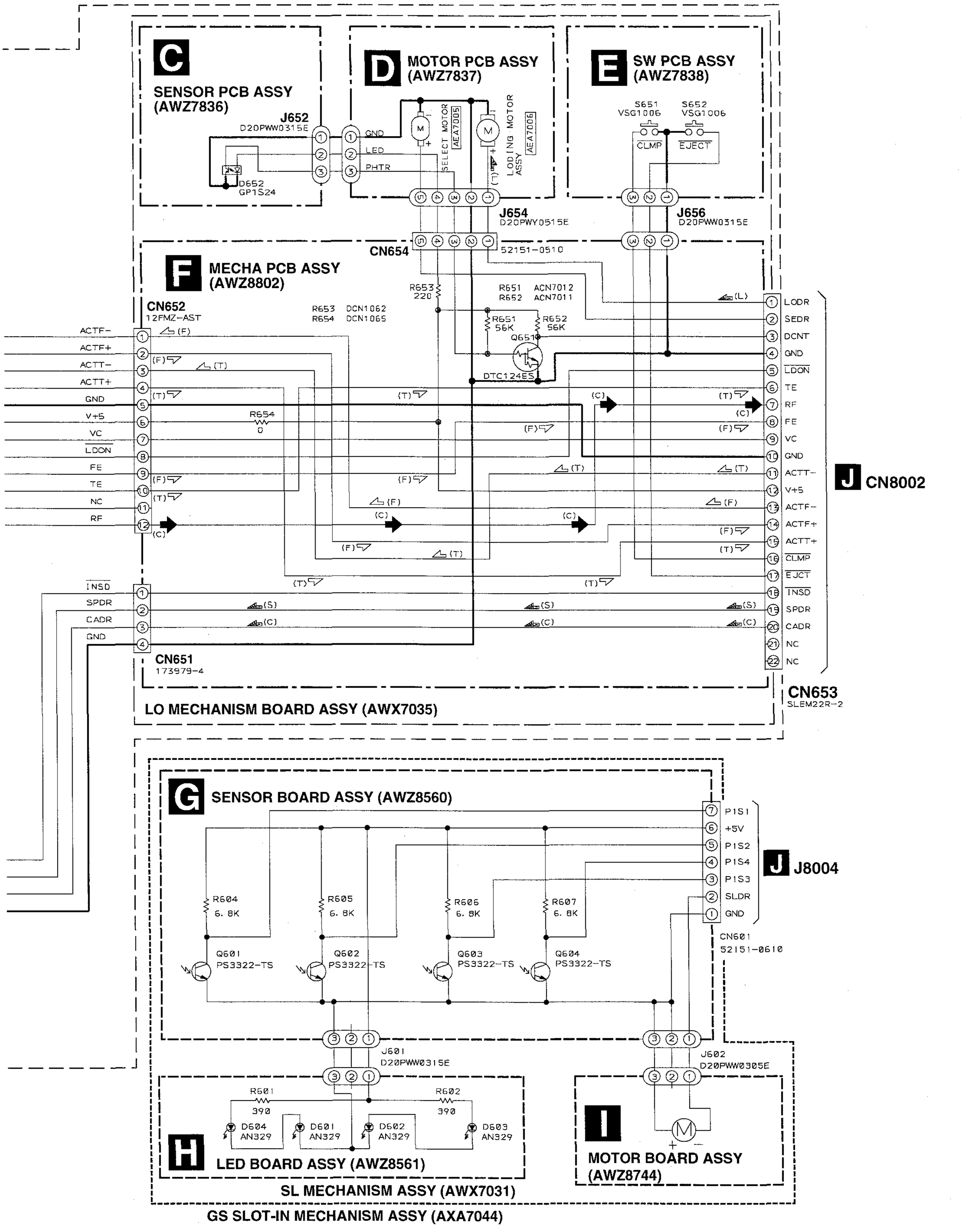
CN610

173979-4

### SERVO MECHANISM ASSY GM (AXA7028)

**SIGNAL ROUTE**

(C): CD AUDIO SIGNAL ROUTE
(F): FOCUS SERVO LOOP LINE
(T): TRACKING SERVO LOOP LINE
(L): LOADING MOTOR ROUTE
(S): SPINDLE MOTOR ROUTE
(C): CARRIAGE MOTOR ROUTE

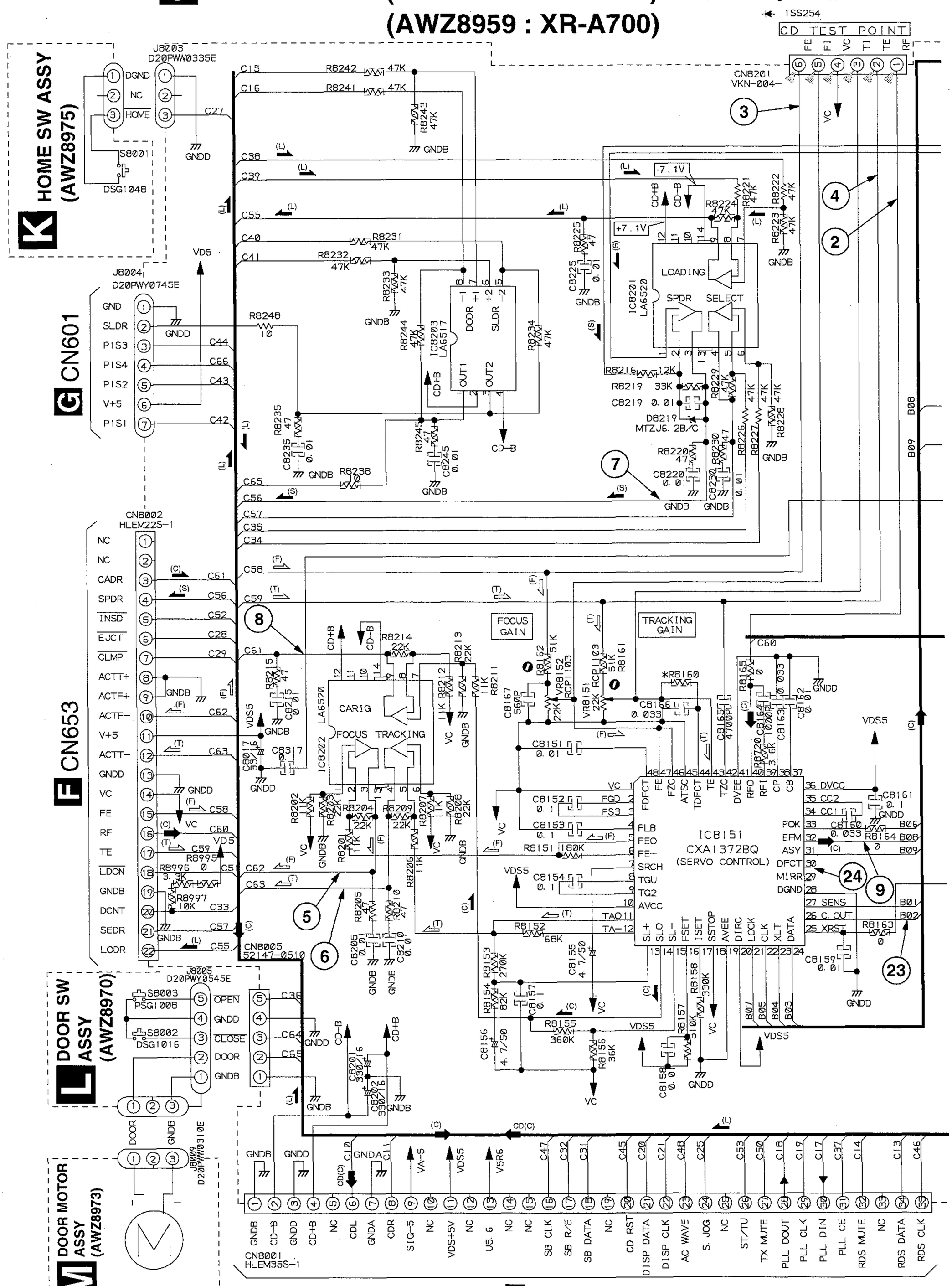

C
SENSOR PCB ASSY
(AWZ7836)
J652
D20PWW0315E
GND
LED
PHTR
D652
GP1S24
D MOTOR PCB ASSY
(AWZ7837)
SELECT MOTOR
AEA7005
LODING MOTOR
ASSY
AEA7006
E SW PCB ASSY
(AWZ7838)
S651
VSG1006
S652
VSG1006
CLMP
EJECT
J654
D20PWY0515E
J656
D20PWW0315E
CN654
52151-0510
F MECHA PCB ASSY
(AWZ8802)
CN652
12FMZ-AST
R653 DCN1062
R654 DCN1065
R653
220
R651 ACN7012
R652 ACN7011
R651
56K
R652
56K
Q651
DTC124ES
R654
0
ACTF-
ACTF+
ACTT-
ACTT+
GND
V+5
VC
LDON
FE
TE
NC
RF
LODR
SEDR
DCNT
GND
LDON
TE
RF
FE
VC
GND
ACTT-
V+5
ACTF-
ACTF+
ACTT+
CLMP
EJCT
INSD
SPDR
CADR
NC
NC
J CN8002
INSD
SPDR
CADR
GND
CN651
173979-4
CN653
SLEM22R-2
LO MECHANISM BOARD ASSY (AWX7035)
G SENSOR BOARD ASSY (AWZ8560)
R604
6.8K
R605
6.8K
R606
6.8K
R607
6.8K
Q601
PS3322-TS
Q602
PS3322-TS
Q603
PS3322-TS
Q604
PS3322-TS
P1S1
+5V
P1S2
P1S4
P1S3
SLDR
GND
J J8004
CN601
52151-0610
J601
D20PWW0315E
J602
D20PWW0305E
R601
390
R602
390
D604
AN329
D601
AN329
D602
AN329
D603
AN329
H LED BOARD ASSY (AWZ8561)
I
MOTOR BOARD ASSY
(AWZ8744)
SL MECHANISM ASSY (AWX7031)
GS SLOT-IN MECHANISM ASSY (AXA7044)

# XR-A800, XR-A700

## 3.4 GM-CD ASSY, HOME SW ASSY, DOOR SW ASSY AND DOOR MOTOR ASSY

### J GM-CD ASSY (AWZ8962 : XR-A800)
### (AWZ8959 : XR-A700)

If the parts are not identified, the followings are used.



SIGNAL ROUTE
(C) and CD(C): CD AUDIO SIGNAL
(F): FOCUS SERVO LOOP LINE
(T): TRACKING SERVO LOOP LINE
(L): LOADING MOTOR ROUTE
(S): SPINDLE MOTOR ROUTE
(C): CARRIAGE MOTOR ROUTE

Note : For the waveforms,refer to page 40.

IC8301
CXD2519Q
(DECODER+DAC+LPF)

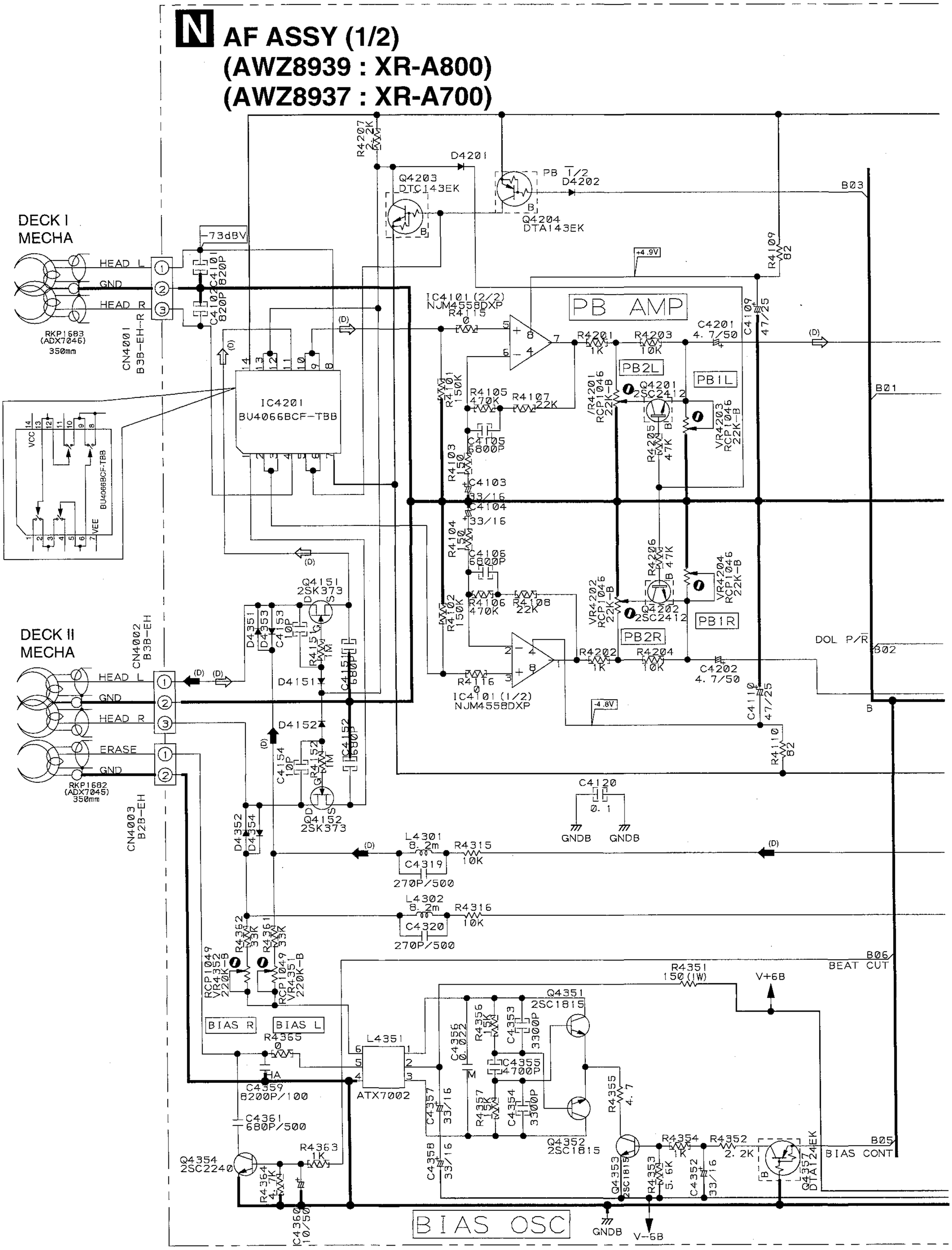
IC8001
PD4859A
(CD, TX CONTROL)

SYSTEM CONTROL

# XR-A800, XR-A700

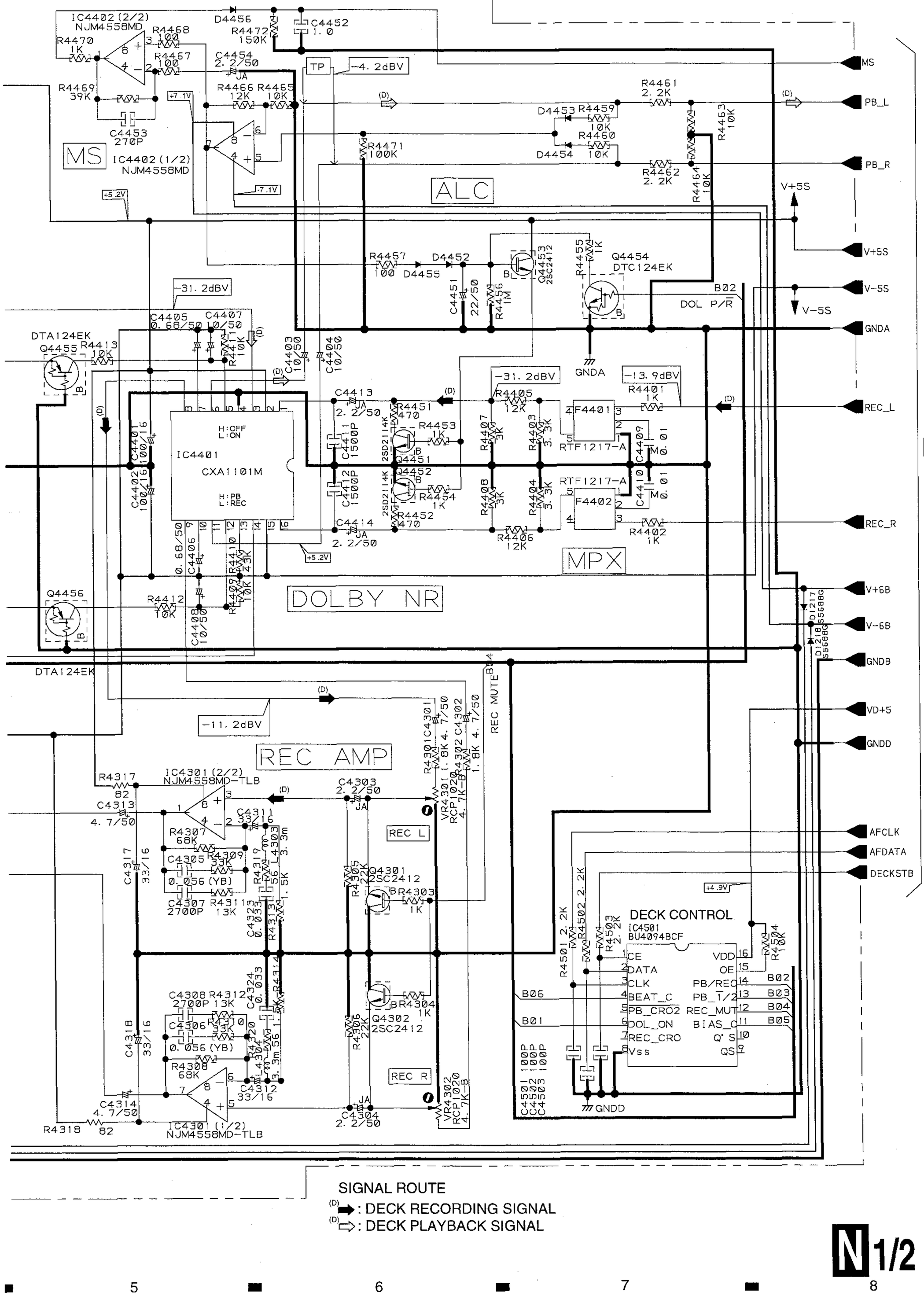
## 3.5 AF ASSY (1/2)

### N AF ASSY (1/2)
### (AWZ8939 : XR-A800)
### (AWZ8937 : XR-A700)

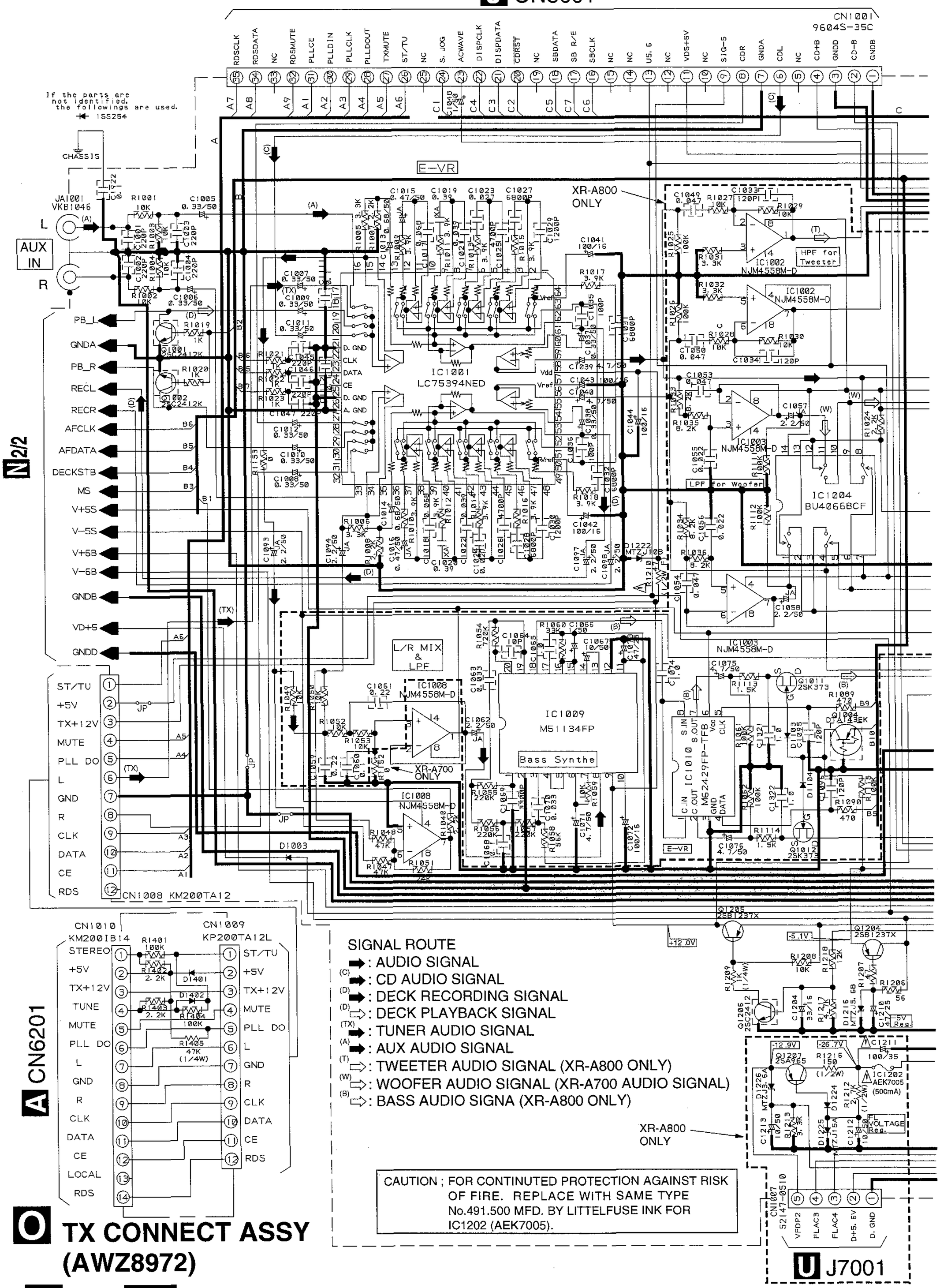



If the parts are not identified, the following are used.

ISS254-T


MS
PB_L
PB_R
V+5S
V+5S
V-5S
V-5S
GNDA
REC_L
REC_R
V+6B
V-6B
GNDB
VD+5
GNDD
AFCLK
AFDATA
DECKSTB
MS
ALC
MPX
DOLBY NR
REC AMP
DECK CONTROL
IC4402 (2/2) NJM4558MD
IC4402 (1/2) NJM4558MD
IC4401 CXA1101M
IC4301 (2/2) NJM4558MD-TLB
IC4301 (1/2) NJM4558MD-TLB
IC4501 BU4094BCF
Q4454 DTC124EK
Q4455 DTA124EK
Q4456 DTA124EK
Q4453 2SC2412
Q4451 2SD2114K
Q4452 2SD2114K
Q4301 2SC2412
Q4302 2SC2412
F4401 RTF1217-A
F4402 RTF1217-A
REC MUTE
B01
B02
B03
B04
B05
B06
DOL P/R
-4. 2dBV
-31. 2dBV
-13. 9dBV
-11. 2dBV
+7. 1V
-7. 1V
+5. 2V
+4. 9V
H:OFF L:ON
H:PB L:REC
REC L
REC R
SIGNAL ROUTE
(D): DECK RECORDING SIGNAL
(D): DECK PLAYBACK SIGNAL

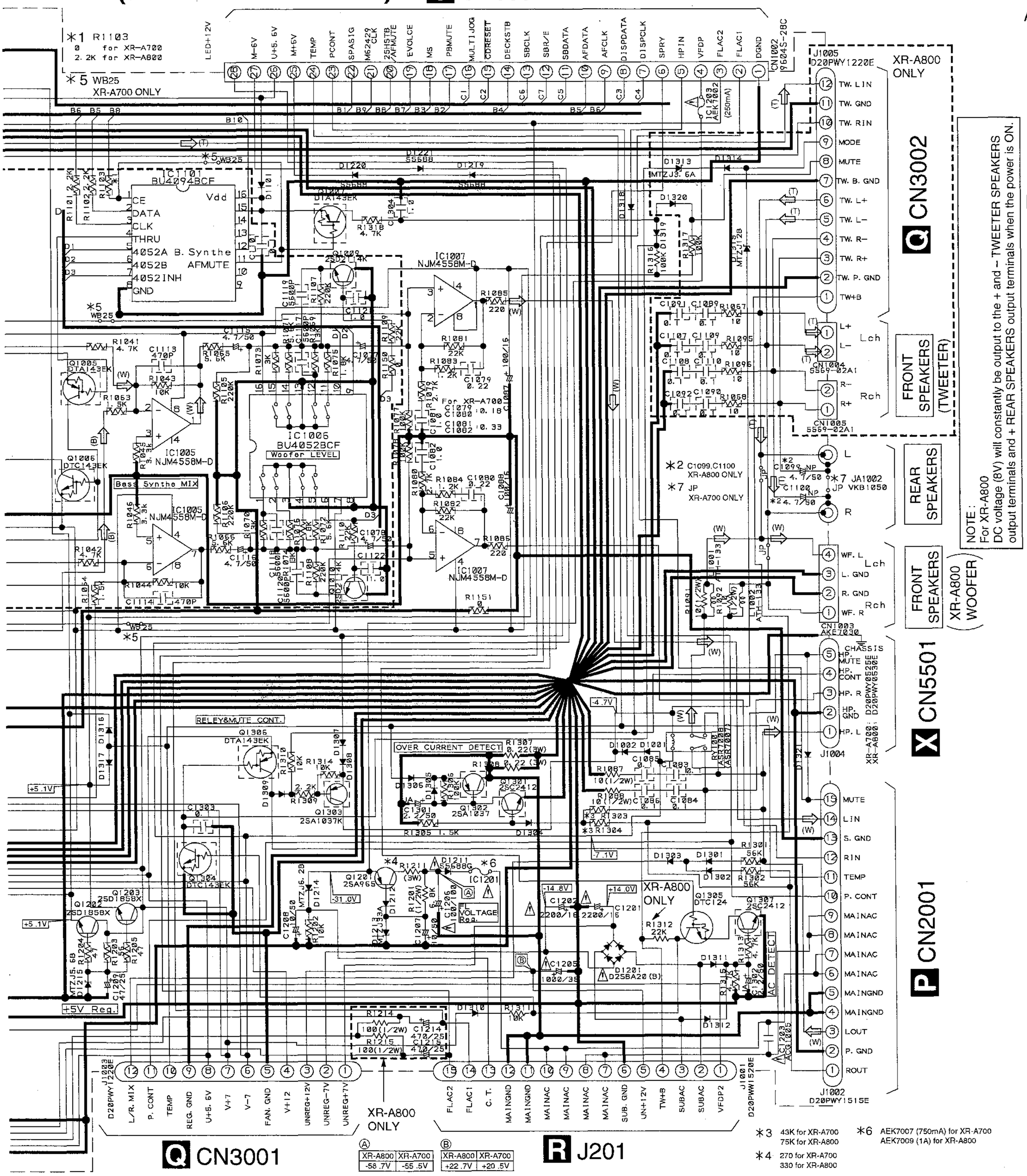
# XR-A800, XR-A700
# 3.6 AF ASSY (2/2) AND TX CONNECT ASSY



# N AF ASSY (2/2)
# (AWZ8939 : XR-A800)
# (AWZ8937 : XR-A700)

T CN5001

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No. 491250 MFD. BY LITTELFUSE INK FOR IC1203 (AEK7002).




CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.491.750 MFD. BY LITTELFUSE INK FOR IC1201 (AEK7007 ; XR-A700).

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.491001 MFD. BY LITTELFUSE INK FOR IC1201 (AEK7009 ; XR-A800).

# 3.7 AMP ASSY, POWER SUPPLY ASSY, SECONDARY ASSY AND PRIMARY ASSY

## P AMP ASSY (AWZ8944 : XR-A800) (AWZ8941 : XR-A700)

If the parts are not identified, the followings are used.
→← ISS254

*2

| | XR-A800 | XR-A700 |
|---|---|---|
| D2007, 2008 | MTZJ27C | MTZJ24B |
| R2007, 2008 | 8.2K (1%) | 7.5K (1%) |
| R2011, 2012 | 2.7K (1%) | 2.4K (1%) |

*4

| | XR-A800 | XR-A700 |
|---|---|---|
| Ⓐ | +46.0V | +44.0V |
| Ⓑ | +38.0V | +36.0V |
| Ⓒ | -46.0V | -44.0V |
| Ⓓ | -38.0V | -36.0V |

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE No. ICP-N25, MFD BY ROHM CO., LTD. FOR IC2002 .

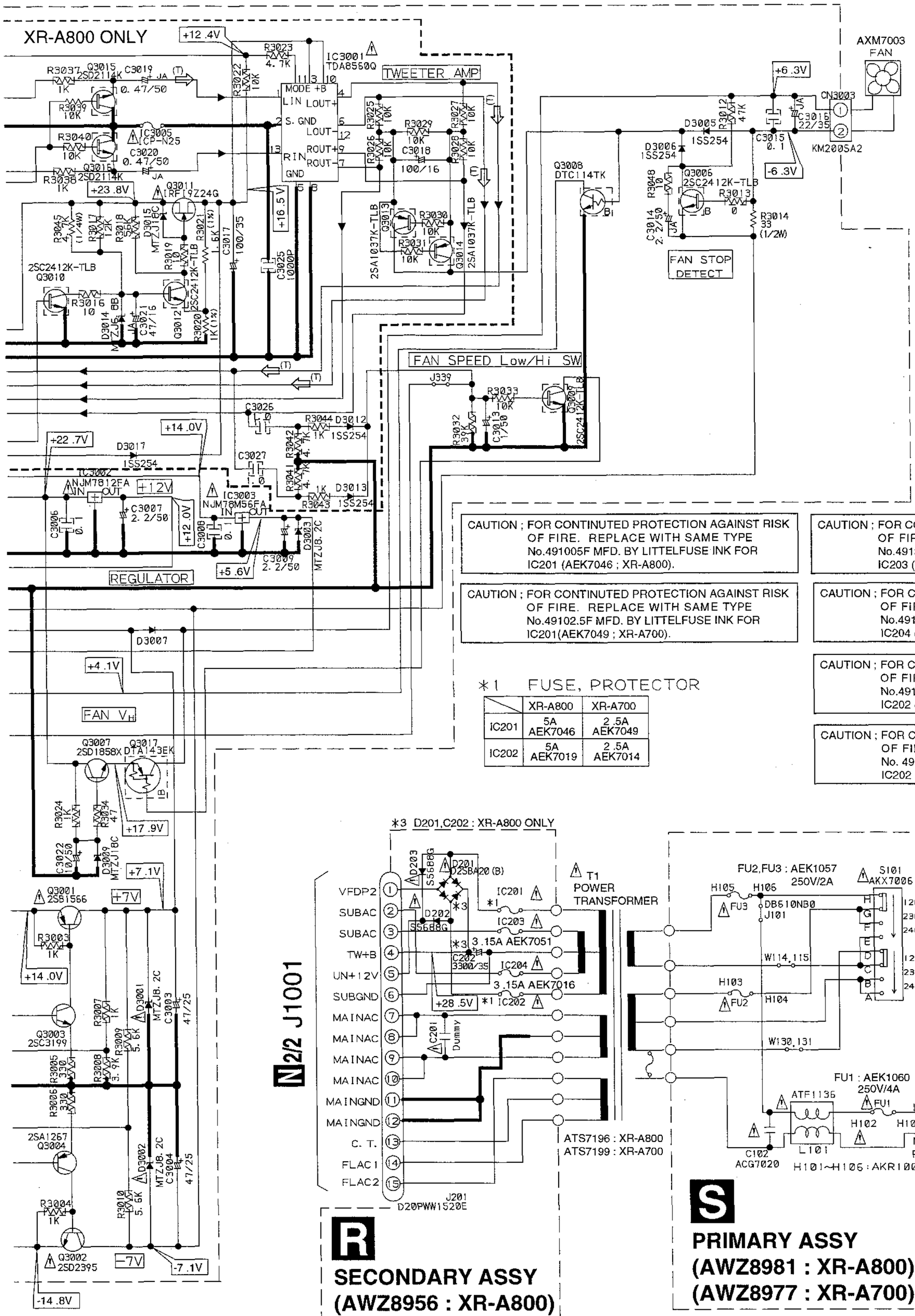
CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No. 49102.5 MFD. BY LITTELFUSE INK FOR IC2004 (AEK7014).

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No. 491001 MFD. BY LITTELFUSE INK FOR IC2003 (AEK7009).

# Q POWER SUPPLY ASSY (AWZ8950 : XR-A800)
# (AWZ8947 : XR-A700)

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE No. ICP-N25, MFD BY ROHM CO., LTD. FOR IC3005 .

SIGNAL ROUTE
(W) ⇨ : WOOFERAUDIO SIGNAL
(T) ⇨ : TWEETERAUDIO SIGNAL




CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.491005F MFD. BY LITTELFUSE INK FOR IC201 (AEK7046 ; XR-A800).

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.4913.15F MFD. BY LITTELFUSE INK FOR IC203 (AEK7051).

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.49102.5F MFD. BY LITTELFUSE INK FOR IC201(AEK7049 ; XR-A700).

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.4913.15 MFD. BY LITTELFUSE INK FOR IC204 (AEK7016).

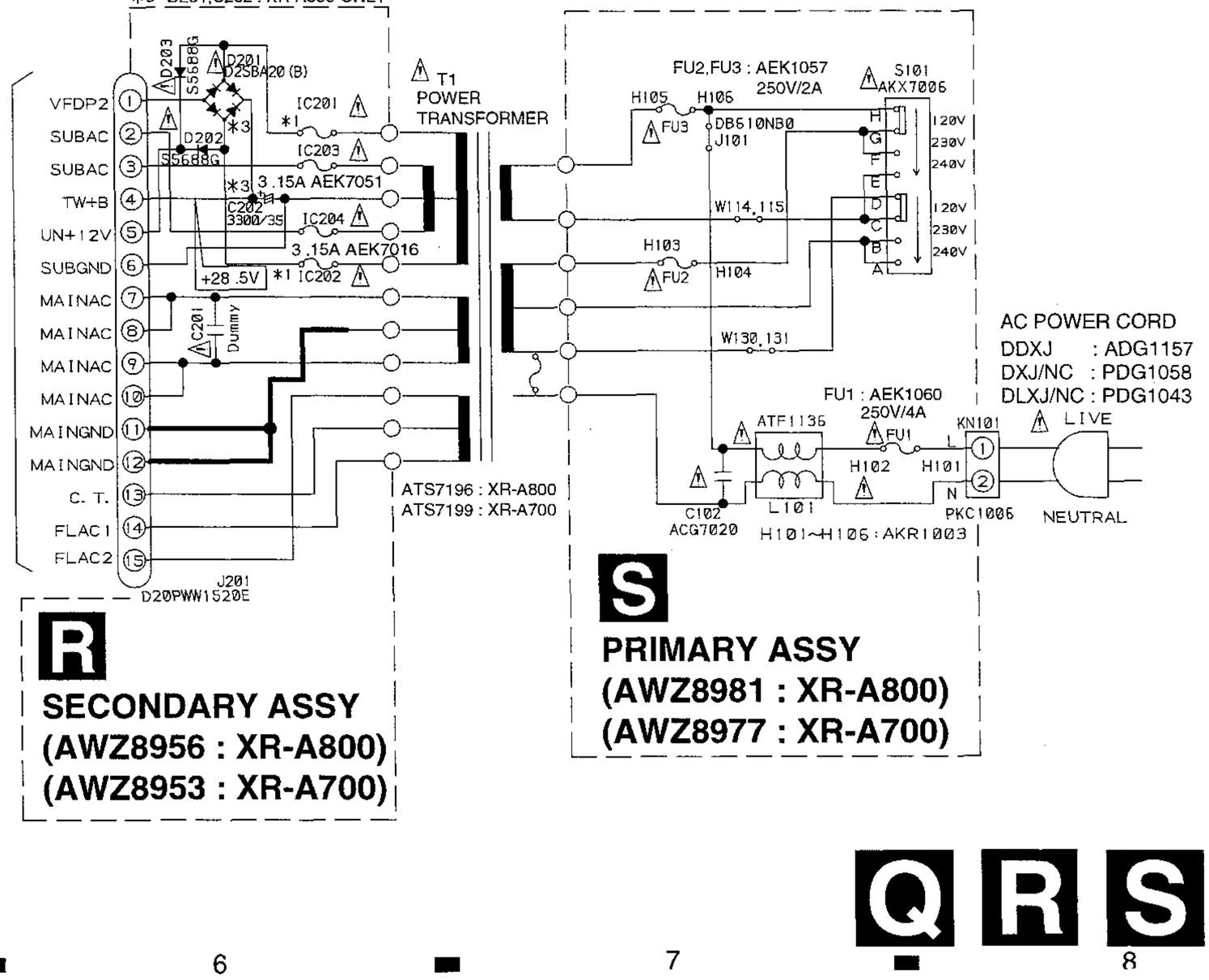
CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No.491005 MFD. BY LITTELFUSE INK FOR IC202 (AEK7019 ; XR-A800).

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE No. 49102.5 MFD. BY LITTELFUSE INK FOR IC202 (AEK7014 ; XR-A700).

*1 FUSE, PROTECTOR

| | XR-A800 | XR-A700 |
|---|---|---|
| IC201 | 5A AEK7046 | 2.5A AEK7049 |
| IC202 | 5A AEK7019 | 2.5A AEK7014 |

*3 D201,C202 : XR-A800 ONLY

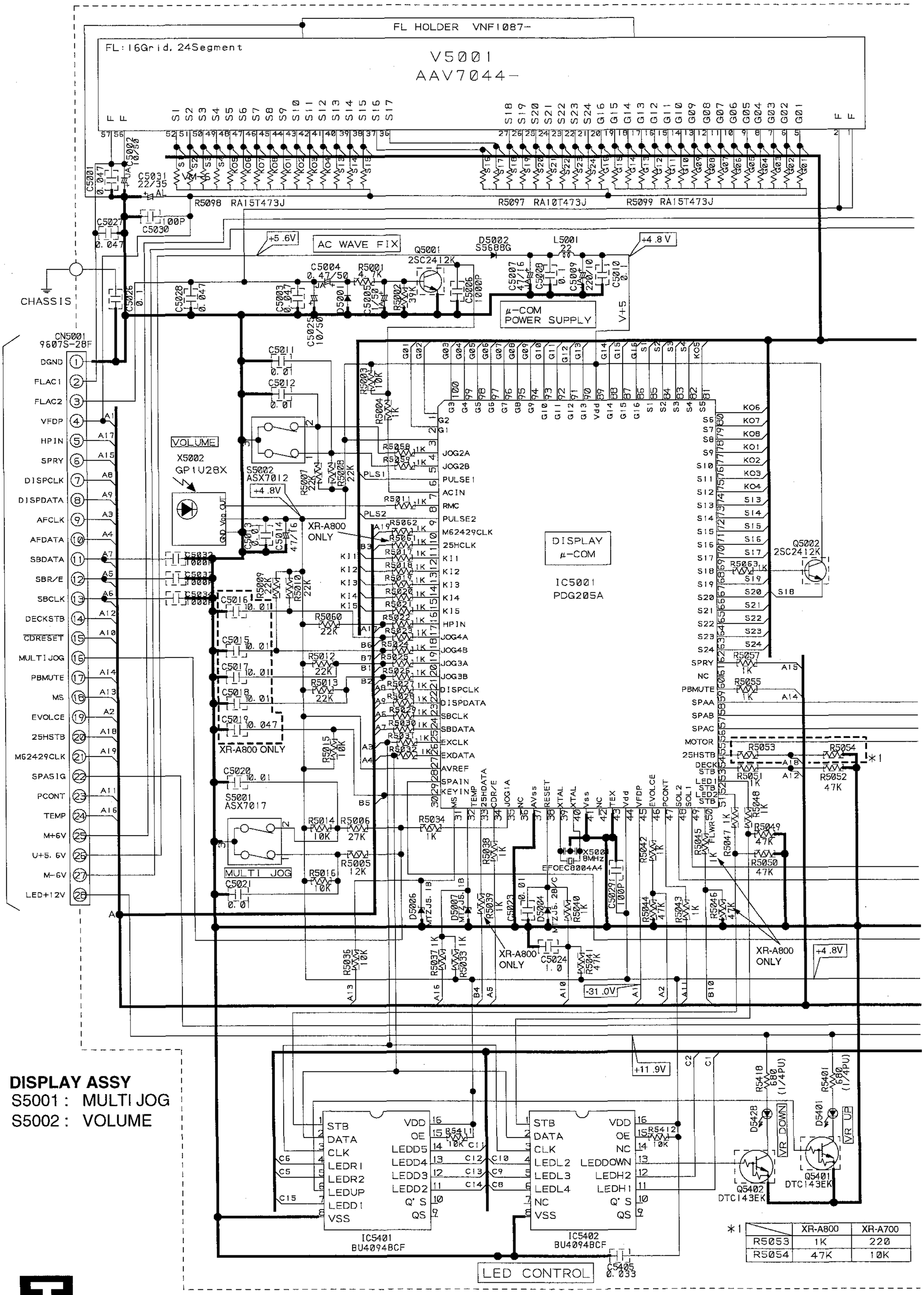



AC POWER CORD
DDXJ : ADG1157
DXJ/NC : PDG1058
DLXJ/NC : PDG1043

**R**
**SECONDARY ASSY**
**(AWZ8956 : XR-A800)**
**(AWZ8953 : XR-A700)**

**S**
**PRIMARY ASSY**
**(AWZ8981 : XR-A800)**
**(AWZ8977 : XR-A700)**

# 3.8 DISPLAY ASSY

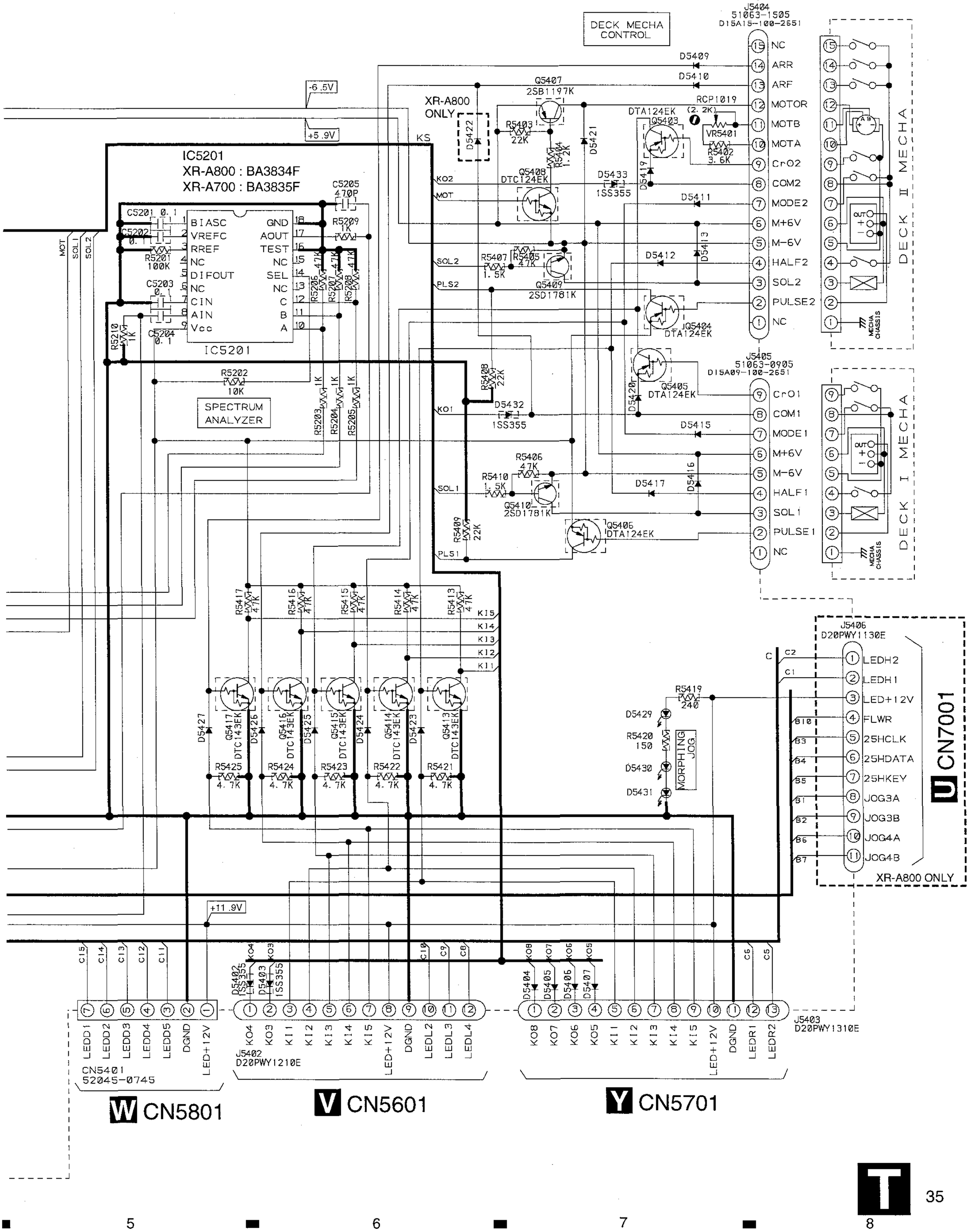



| *1 | XR-A800 | XR-A700 |
|---|---|---|
| R5053 | 1K | 220 |
| R5054 | 47K | 10K |

If the parts art not identified, the followings are used.

- 1SS254
- SLP7118C51H-TS

# T DISPLAY ASSY (AWP7015 : XR-A800) (AWP7013 : XR-A700)



# 3.9 SUB DISPLAY ASSY

## U SUB DISPLAY ASSY (AWP7017 : XR-A800 ONLY)

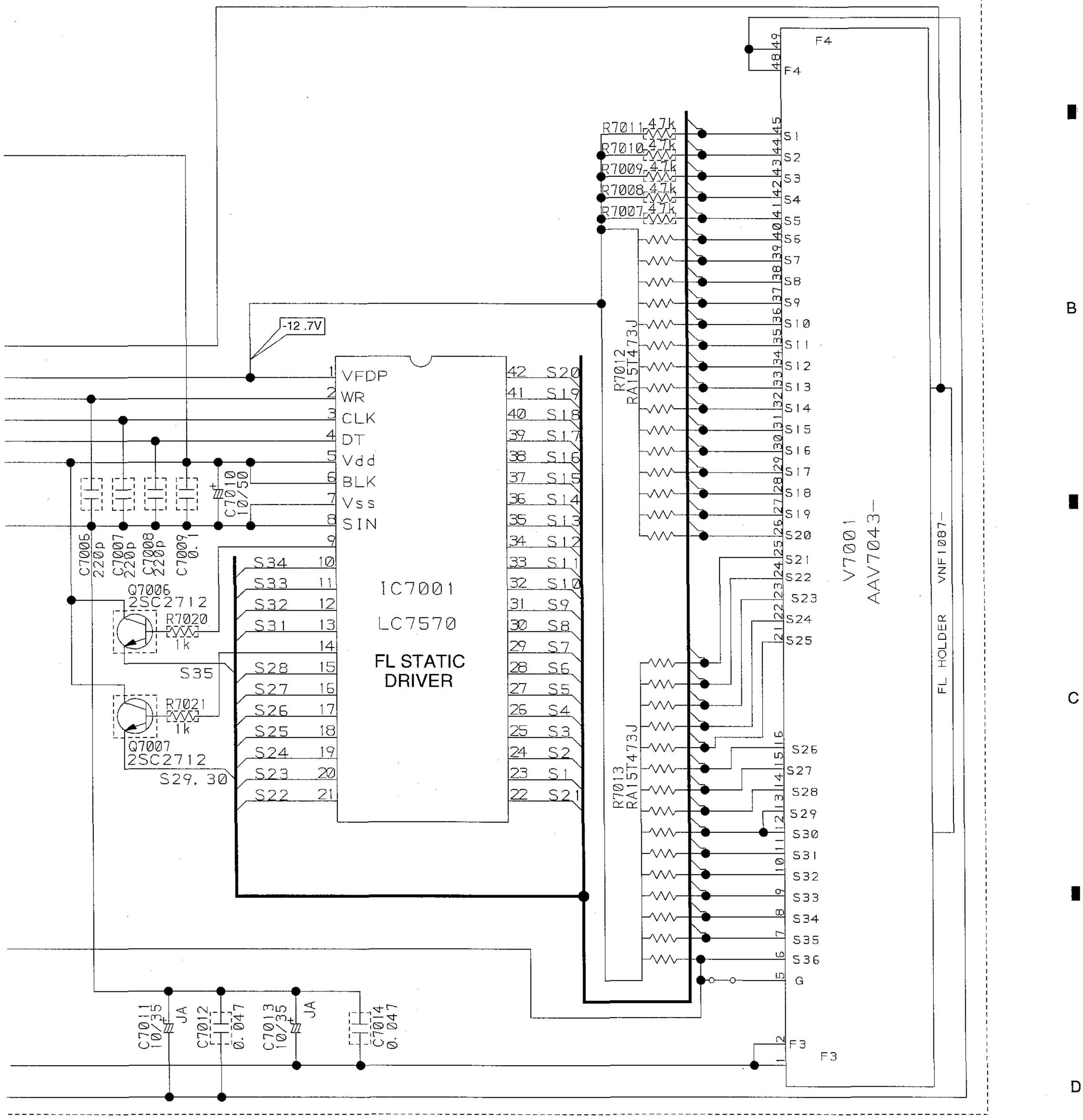



If the parts are not identified, the followings are used.

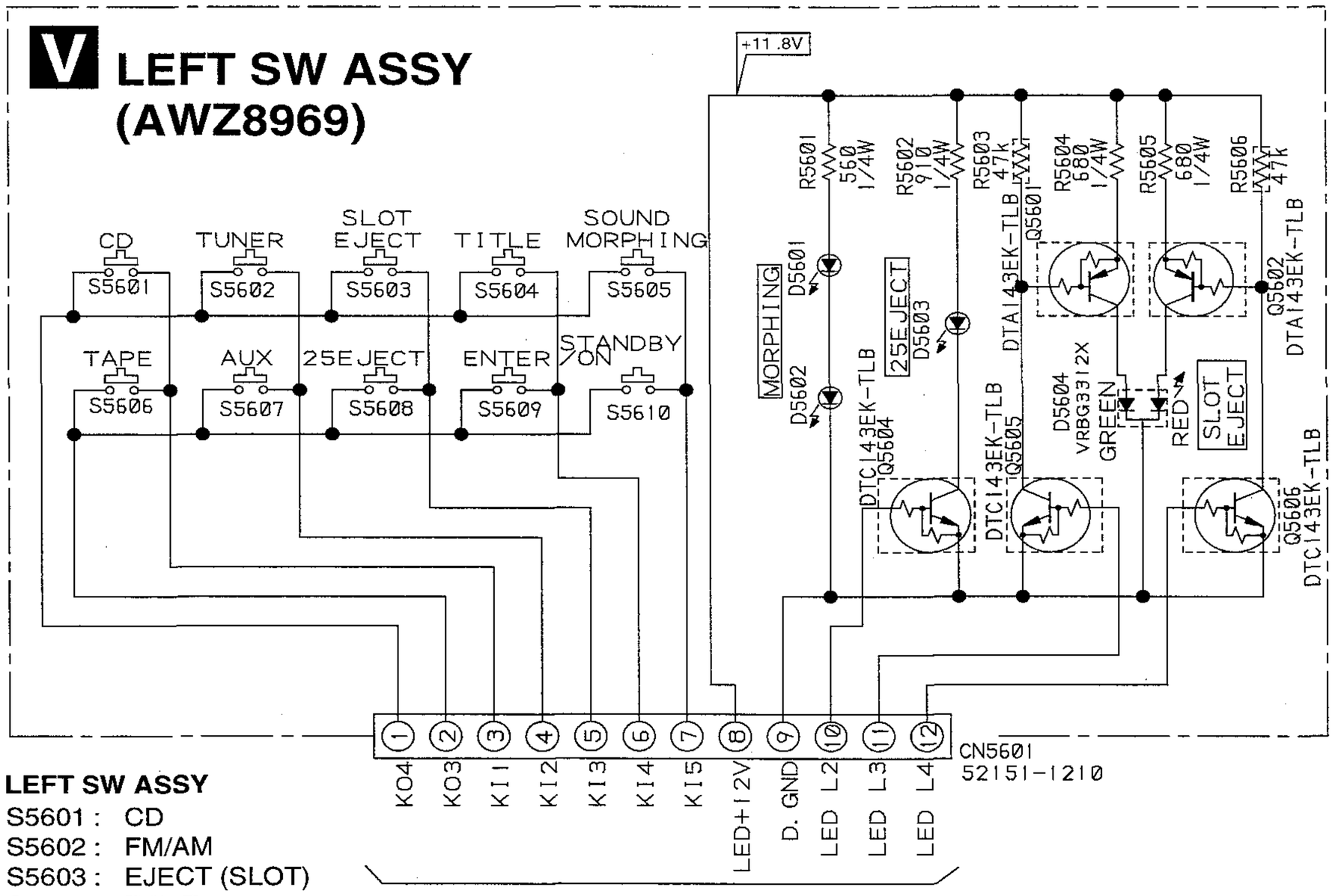
SLP7118C51H-TS

**SUB DISPLAY ASSY**

S7001 : P.BASS JOG
S7002 : P.BASS
S7003 : WOOFER LEVEL
S7004 : BASS SYNTH

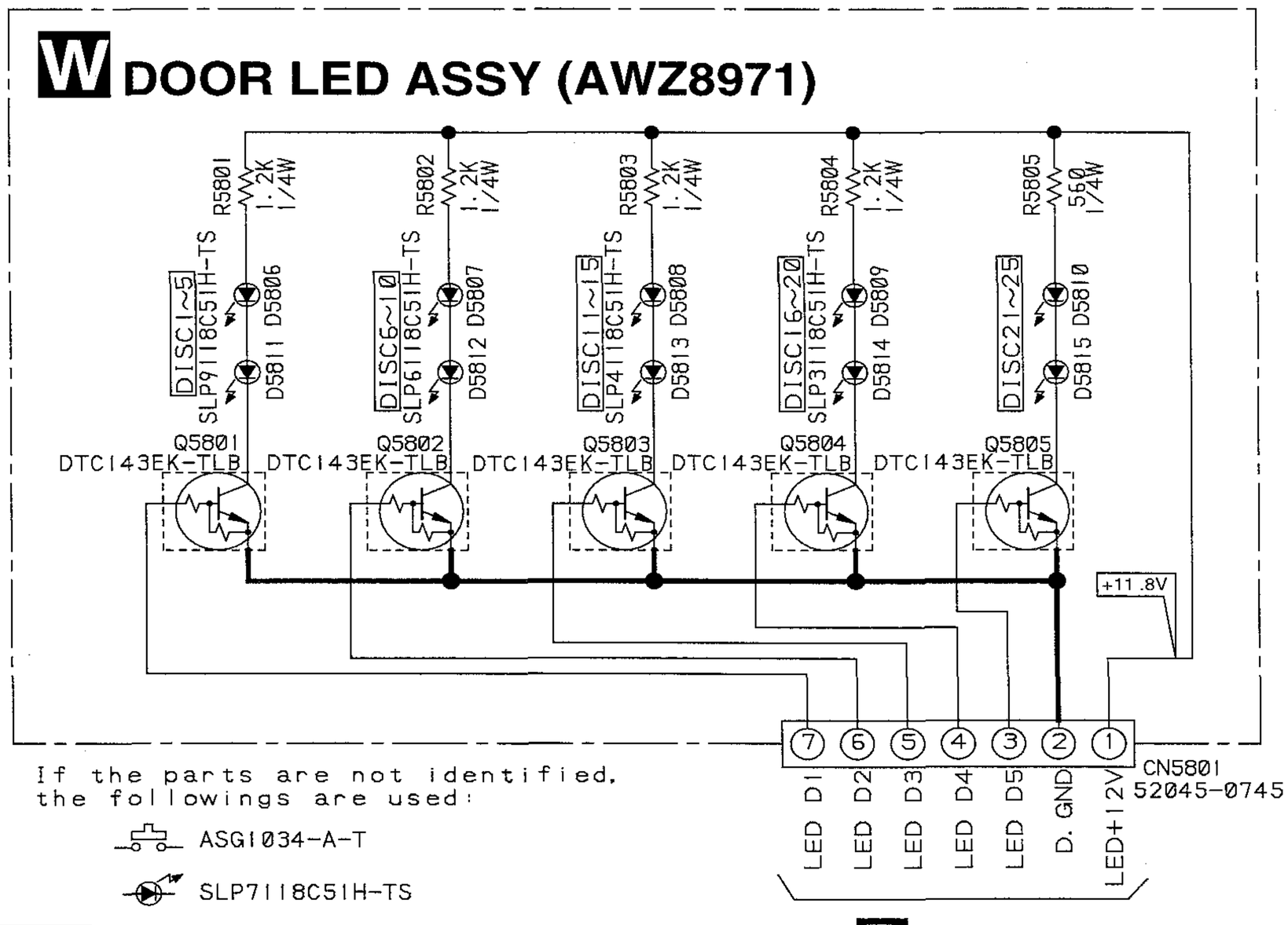

F4
F4
R7011 47k
R7010 47k
R7009 47k
R7008 47k
R7007 47k
R7012 RA15T473J
R7013 RA15T473J
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
S36
G
F3
F3
V7001
AAV7043-
FL HOLDER VNF1087-
-12.7V
VFDP
WR
CLK
DT
Vdd
BLK
Vss
SIN
IC7001
LC7570
FL STATIC DRIVER
C7006 220p
C7007 220p
C7008 220p
C7009 0.1
C7010 10/50
Q7006 2SC2712
R7020 1k
Q7007 2SC2712
R7021 1k
S35
S29, 30
C7011 10/35 JA
C7012 0.047
C7013 10/35 JA
C7014 0.047

## 3.10 LEFT SW ASSY AND DOOR LED ASSY




**LEFT SW ASSY**

S5601 : CD
S5602 : FM/AM
S5603 : EJECT (SLOT)
S5604 : TITLE
S5605 : SOUND MORPHING
S5606 : TAPE I / II
S5607 : AUX (DEMO)
S5608 : OPEN/CLOSE (25)
S5609 : ENTER
S5610 : STANDBY/ON

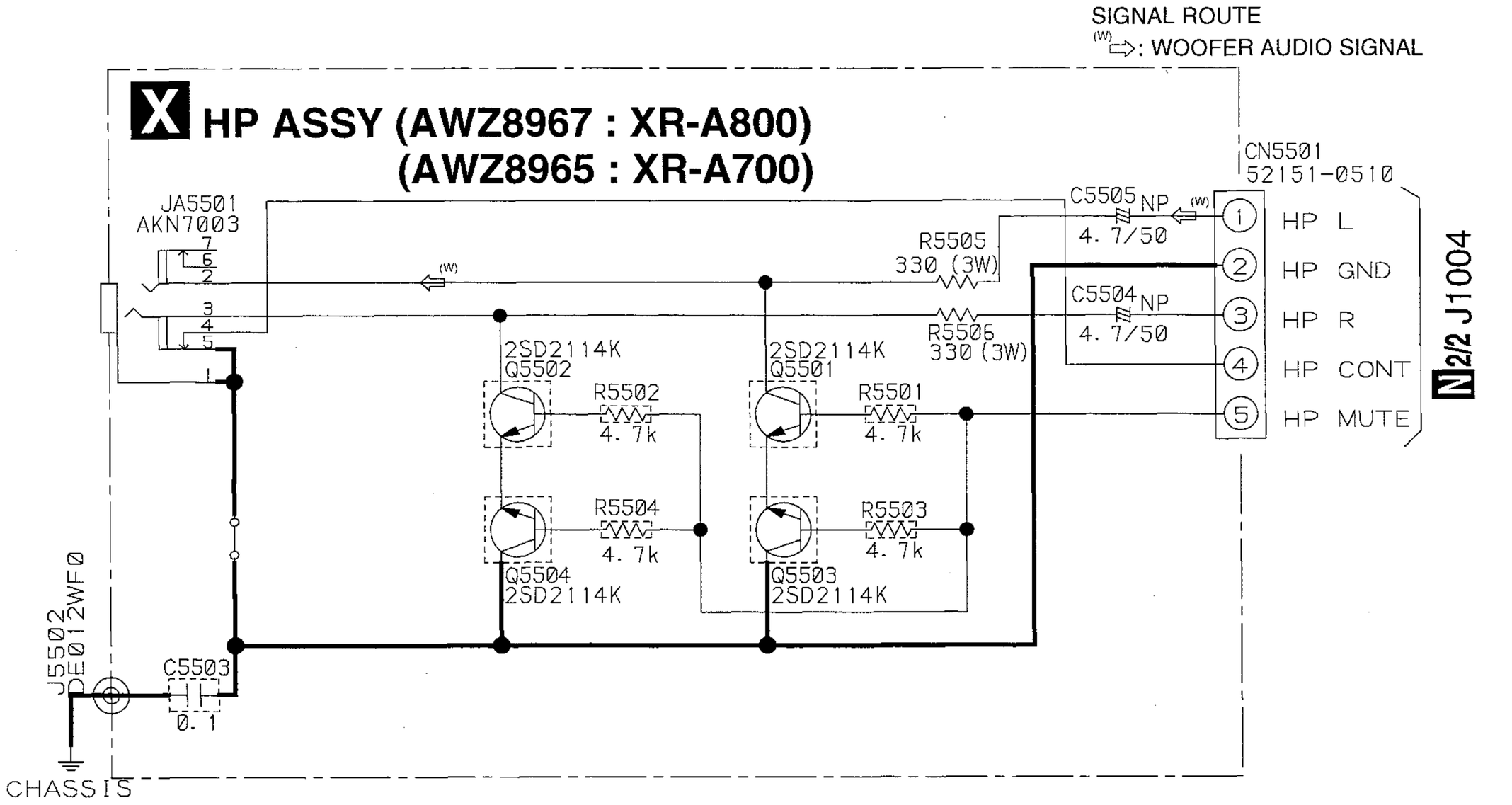



If the parts are not identified, the followings are used:

ASG1034-A-T

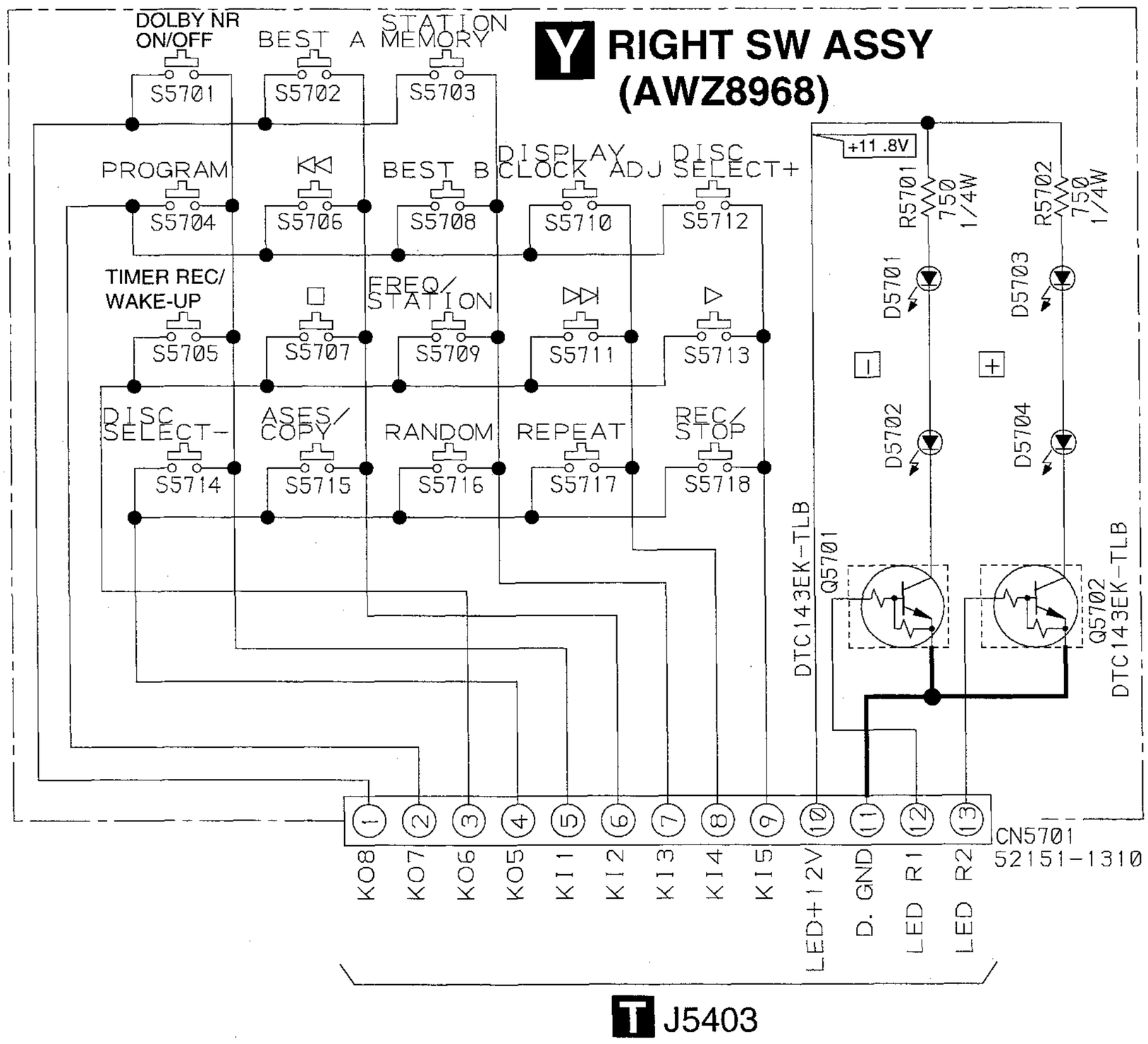
SLP7118C51H-TS

## 3.11 HP ASSY AND RIGHT SW ASSY




**RIGHT SW ASSY**

- S5701 : DOLBY NR ON/OFF
- S5702 : BEST A
- S5703 : STATION MEMORY
- S5704 : PROGRAM
- S5705 : TIMER REC/WAKE-UP
- S5706 : TUNING – / ⏮ ◀◀
- S5707 : STOP
- S5708 : BEST B
- S5709 : FREQ/STATION
- S5710 : DISPLAY/CLOCK ADJ TIMER REC/WAKE-UP
- S5711 : TUNING + / ▶▶ ⏭
- S5712 : DISC SELECT +
- S5713 : PLAY/PAUSE
- S5714 : DISC SELECT –
- S5715 : ASES/COPY
- S5716 : RANDOM
- S5717 : REPEAT
- S5718 : REC/STOP



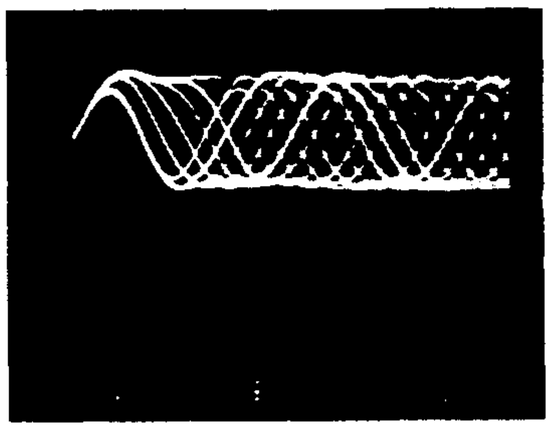
# XR-A800, XR-A700

## WAVEFORMS

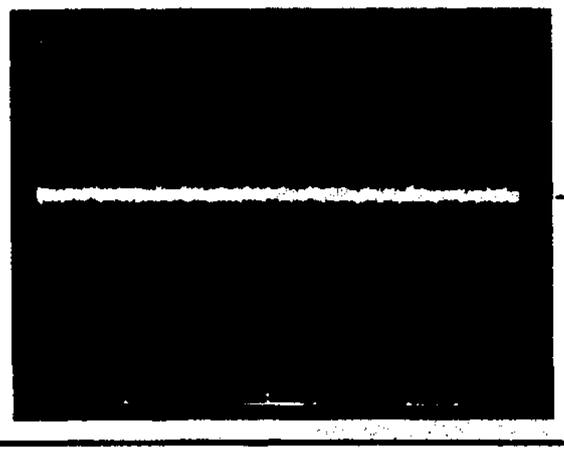
**Note :** The encircled numbers denote measuring points in the schematic diagram.

*1 FOCUS-IN : Press the key without loading a disc.

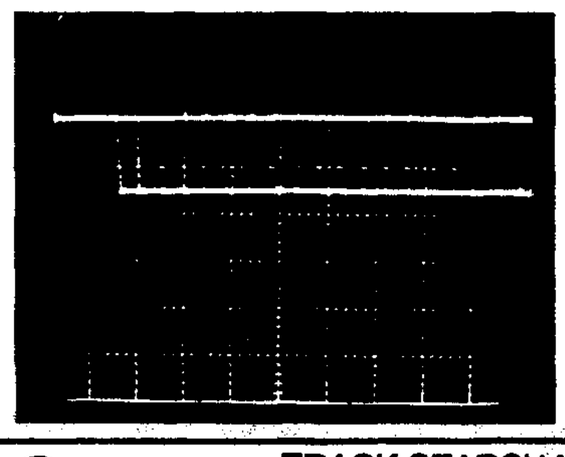
② TP1-Pin 1 : PLAY MODE
(RF)
500mV/div 500nsec/div



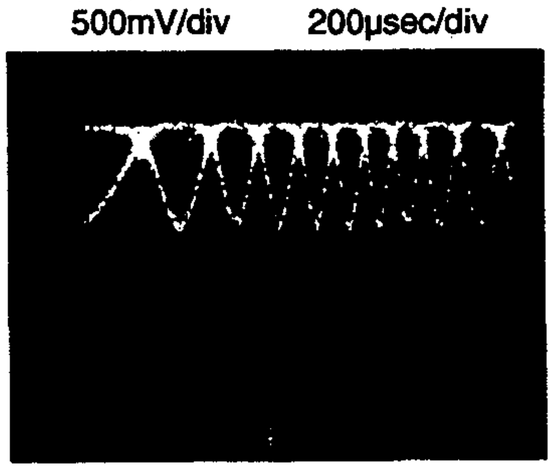

⑤ IC8202-Pin 3 : PLAY MODE
(FODR)
1V/div 1msec/div



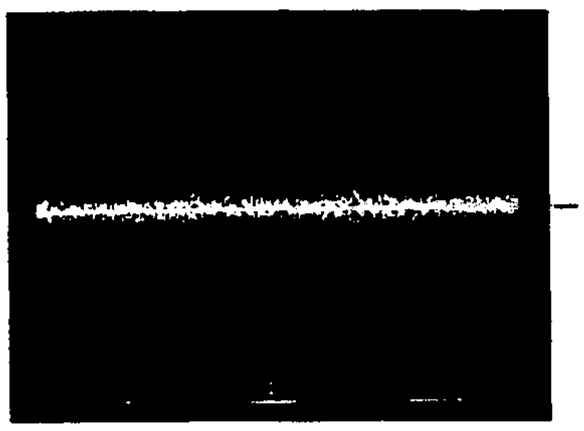

⑨ IC8151-Pin 32 : PLAY MODE
(EFM)
2V/div 500nsec/div



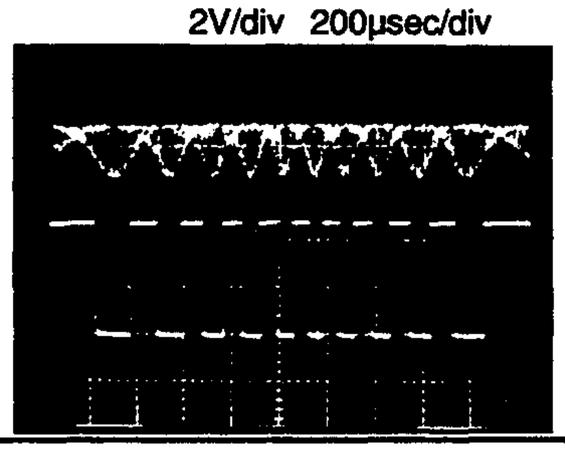

② TP1-Pin 1 : TRACK SEARCH MODE
(RF)
500mV/div 200µsec/div



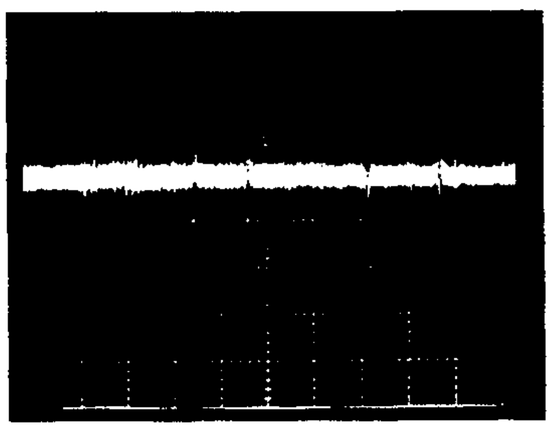

⑥ IC8202-Pin 4 : PLAY MODE
(TRDR)
500mV/div 1msec/div



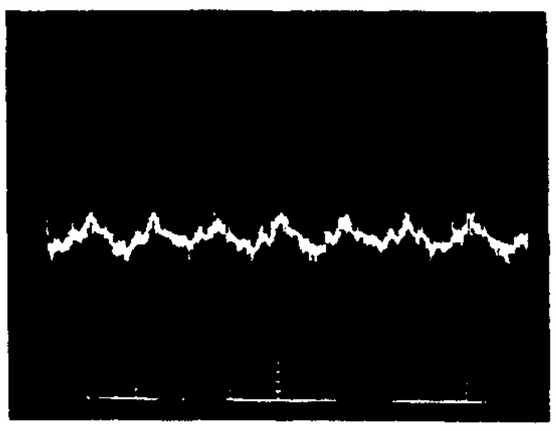

㉓ : TRACK SEARCH MODE
Upper : TP1-Pin 1 (RF) 1V/div
Lower : IC8151-Pin 26 (MIRR)
2V/div 200µsec/div



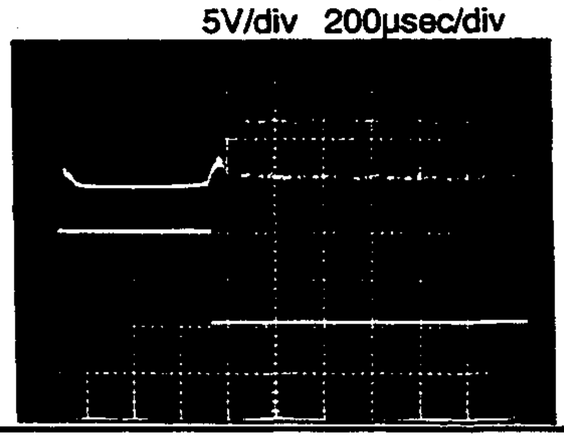

③ TP1-Pin 6 : PLAY MODE
(FOER)
100mV/div 10msec/div



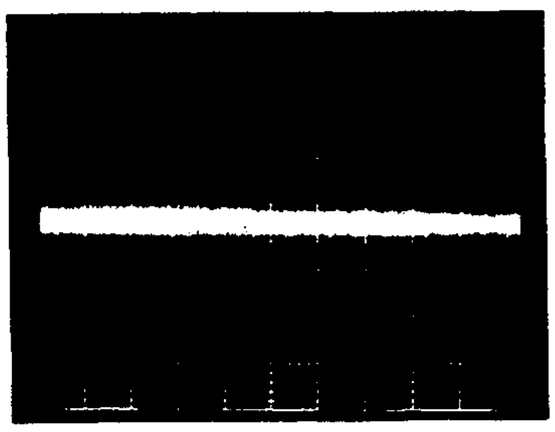

⑦ IC8201-Pin 3 : PLAY MODE
(SPDR)
1V/div 50msec/div



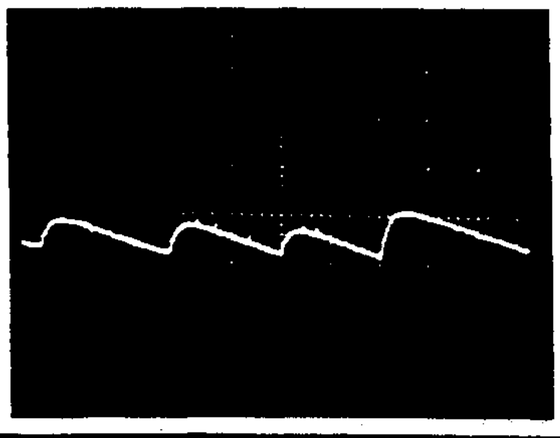

㉔ : PLAY MODE
Upper : TP1-Pin 1 (RF) 1V/div
Lower : IC8151-Pin 30 (DFCT)
5V/div 200µsec/div



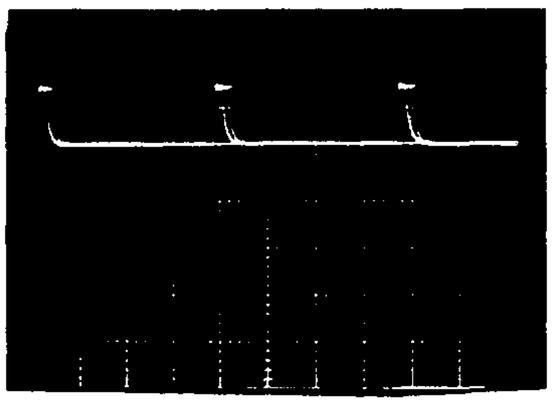

④ TP1-Pin 2 : PLAY MODE
(TRER)
1V/div 10msec/div



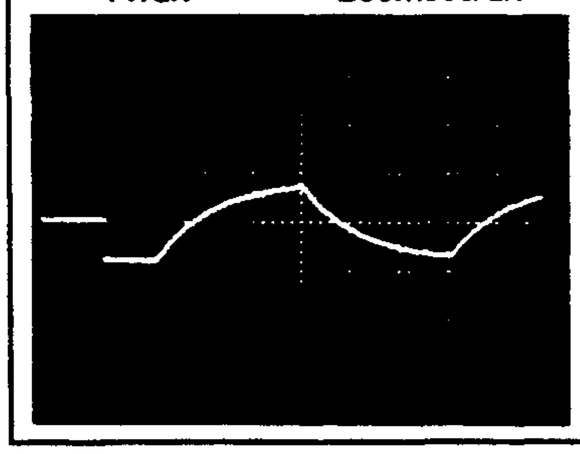

⑧ IC8202-Pin 9 : PLAY MODE
(CADR)
1V/div 2S/div



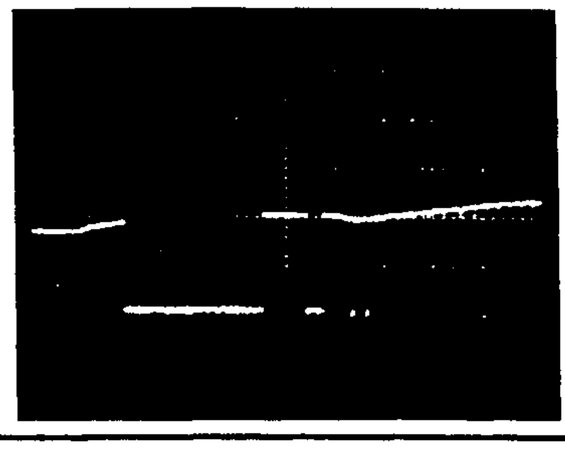

㉝ IC8301-Pin 27 : PLAY MODE
(MDP)
2V/div 2µsec/div




⑤ IC8202-Pin 3 : FOCUS-IN (*1) MODE
(FODR)
1V/div 200msec/div




⑧ IC8202-Pin 9 : TRACK SEARCH MODE
(CADR)
2V/div 200msec/div



# 4. PCB CONNECTION DIAGRAM

## 4.1 HP ASSY AND RIGHT SW ASSY

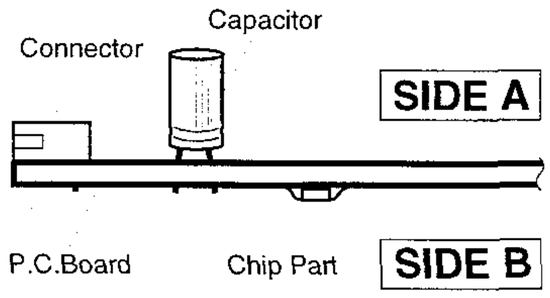
**NOTE FOR PCB DIAGRAMS:**

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

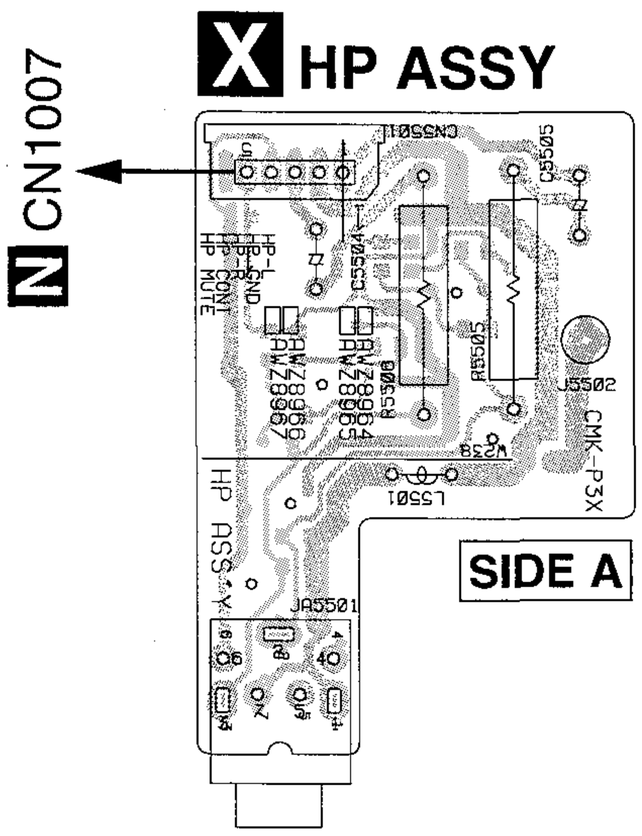
| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name |
|---|---|---|
| B C E | B C E B C E | Transistor |
| B C E | B C E B C E | Transistor with resistor |
| D G S | D G S D G S | Field effect transistor |
| | | Resistor array |
| | | 3-terminal regulator |

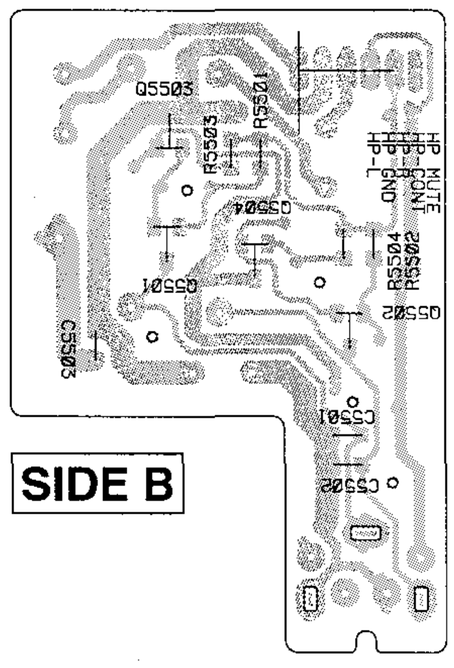
3. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.

4. Viewpoint of PCB diagrams



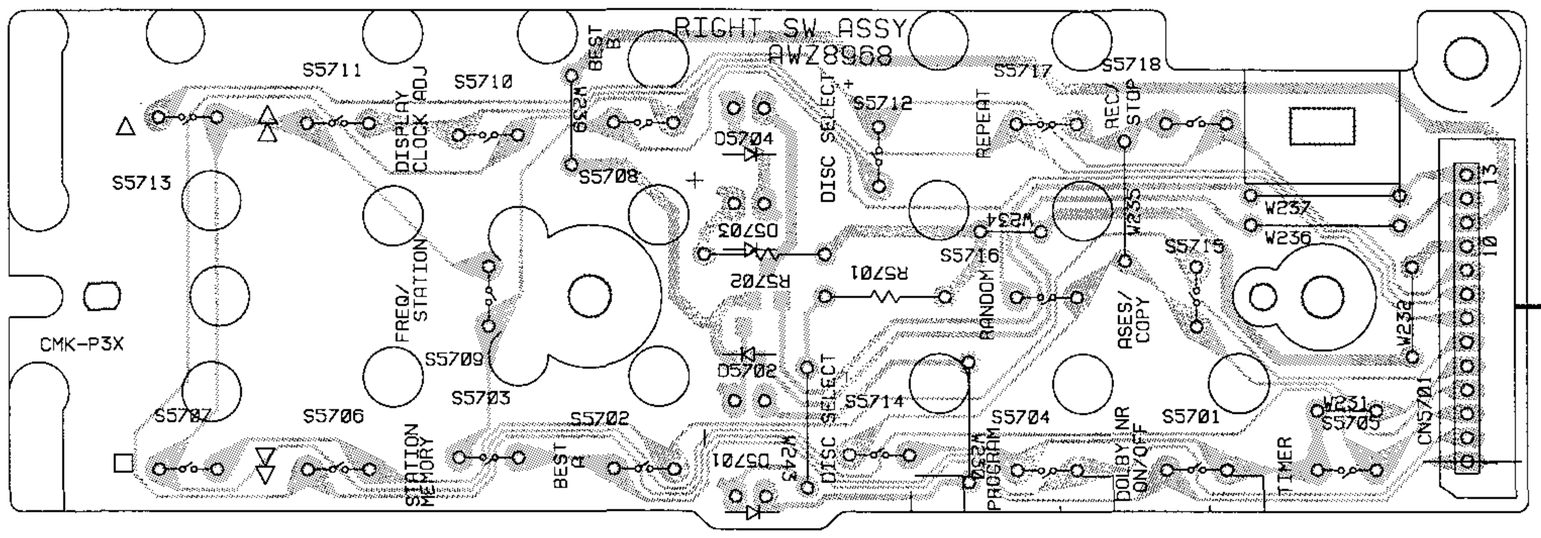

**X HP ASSY**



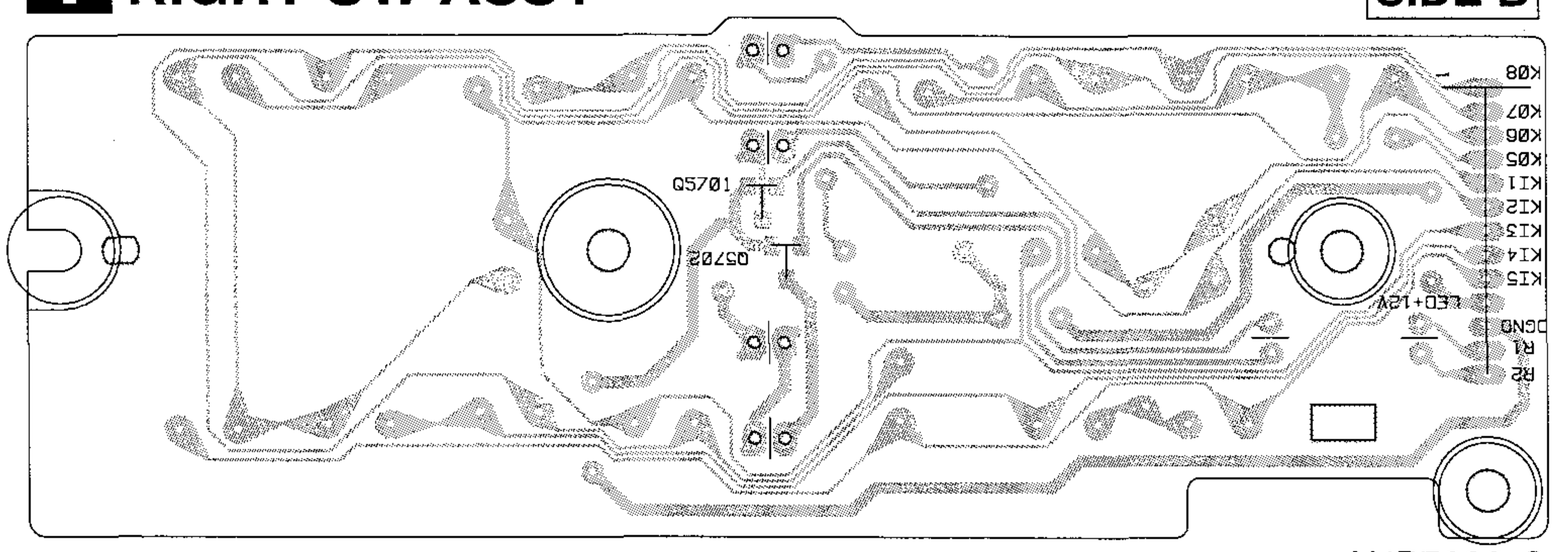




Q5503 Q5502
Q5501
Q5504

**Y RIGHT SW ASSY**




**Y RIGHT SW ASSY**



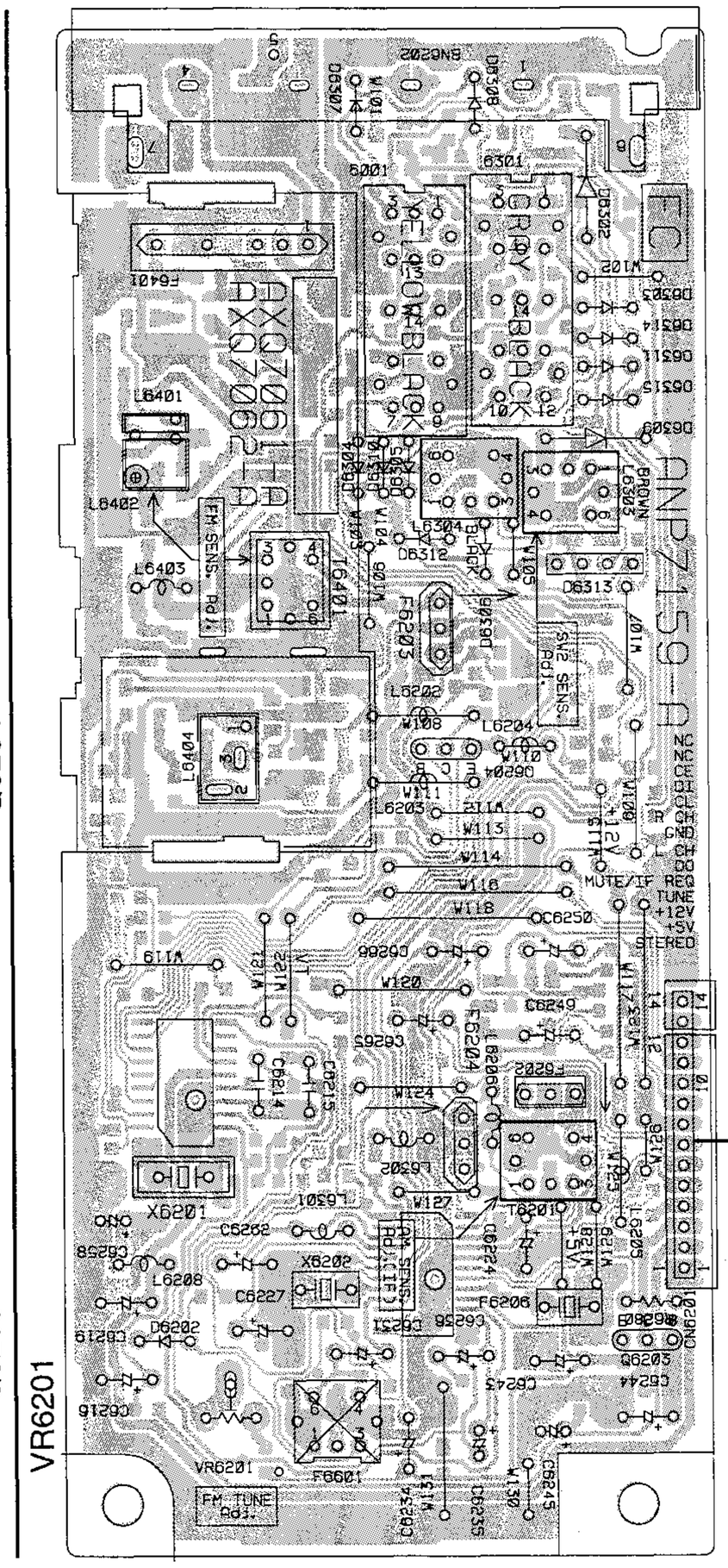

ANP7223-C

Q5701
Q5702

# 4.2 FM/AM TUNER MODULE

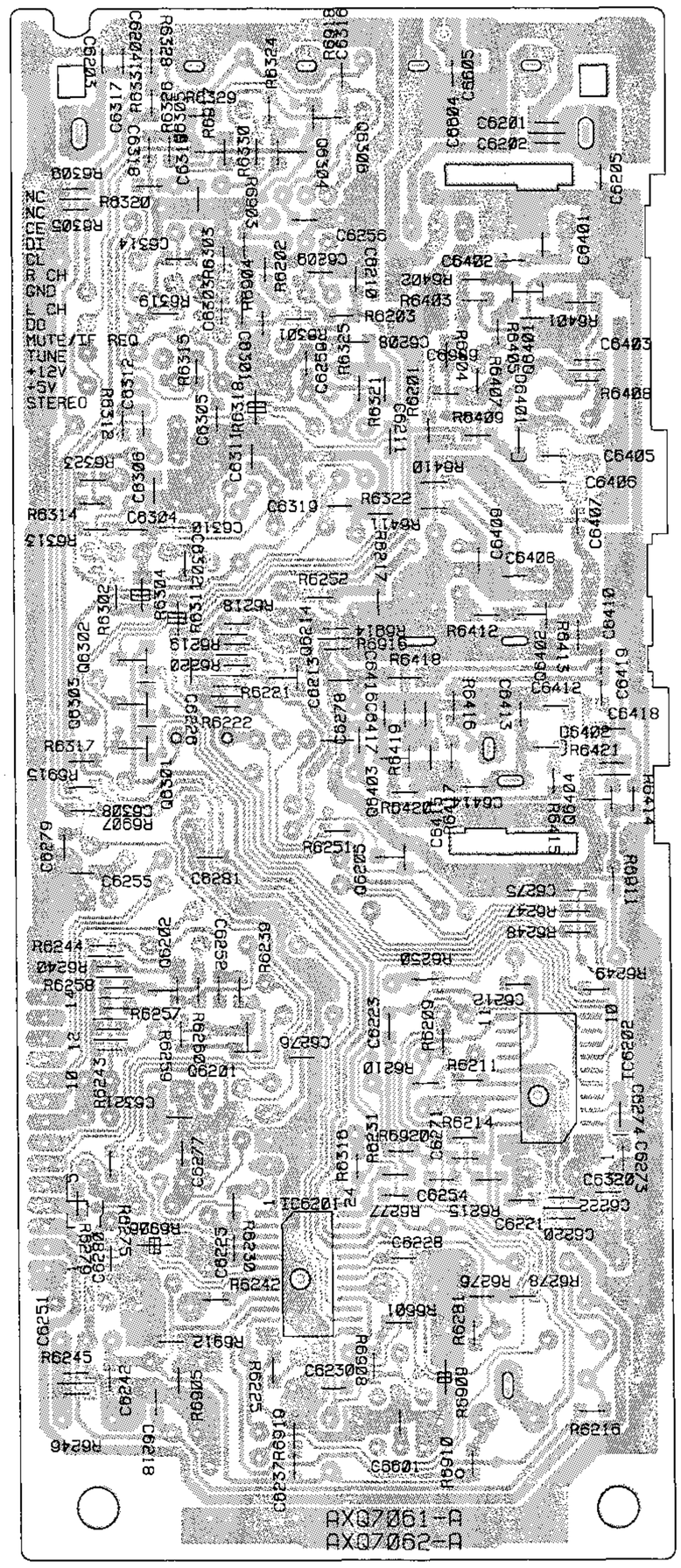
SIDE A

## A FM/AM TUNER MODULE




SIDE B

## A FM/AM TUNER MODULE

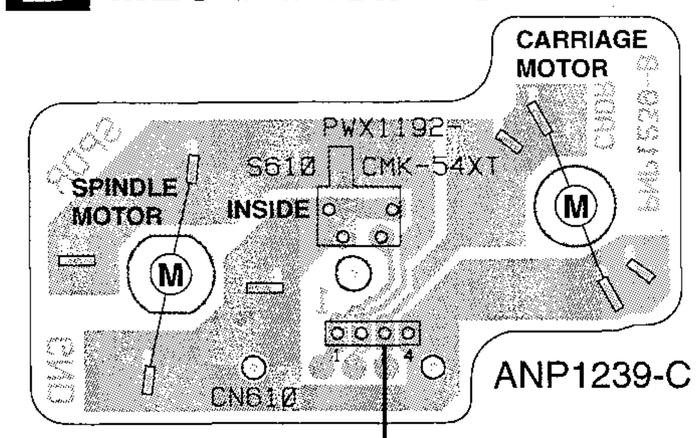


# 4.3 GS MECHANISM ASSY AND GS SLOT-IN MECHANISM ASSY

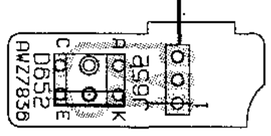
## GS MECHANISM ASSY

SIDE A

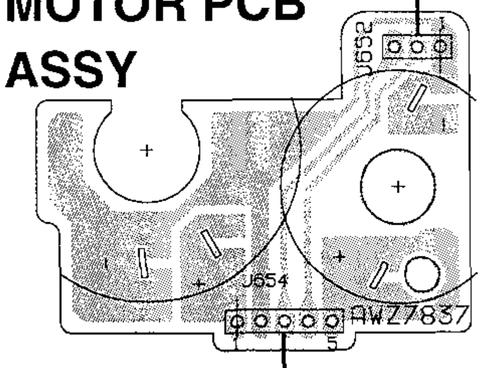
**B** MECHANISM BOARD ASSY




**C** SENSOR PCB ASSY

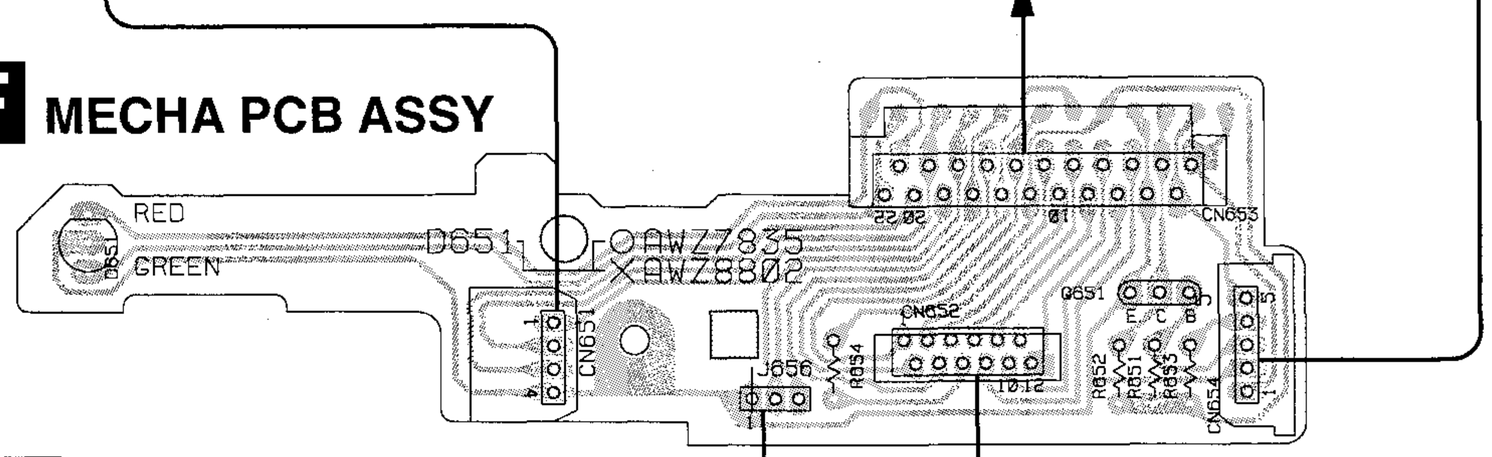



**D** MOTOR PCB ASSY

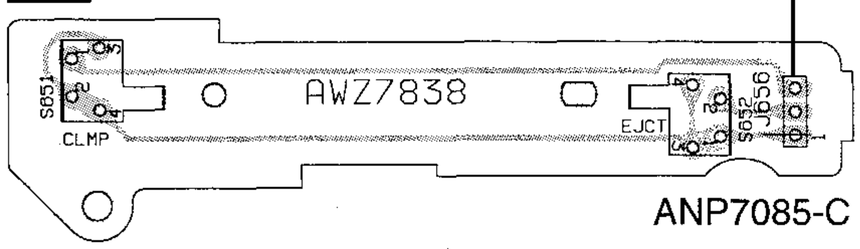



**J** CN8002

**F** MECHA PCB ASSY




**E** SW PCB ASSY



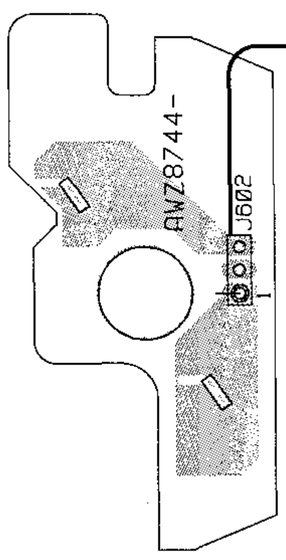

TO PICKUP ASSY

## GS SLOT-IN MECHANISM ASSY

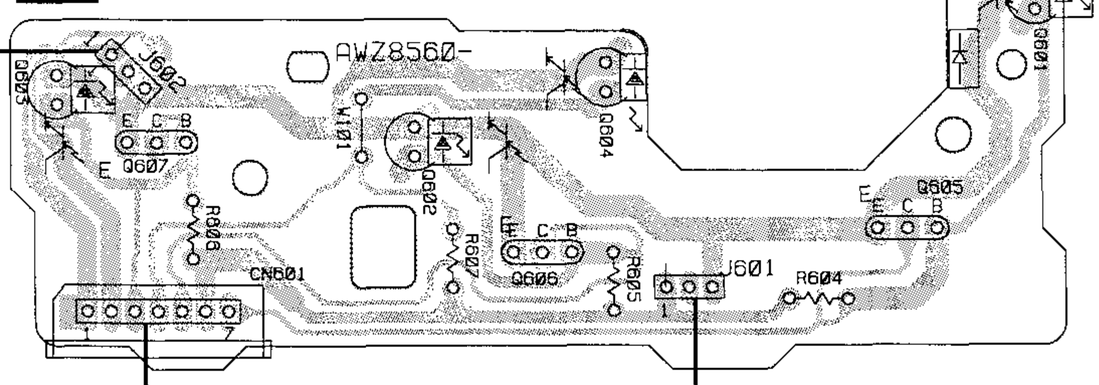
SIDE A

Q903 Q607 Q602 Q606 Q604 Q605 Q601

**I** MOTOR BOARD ASSY

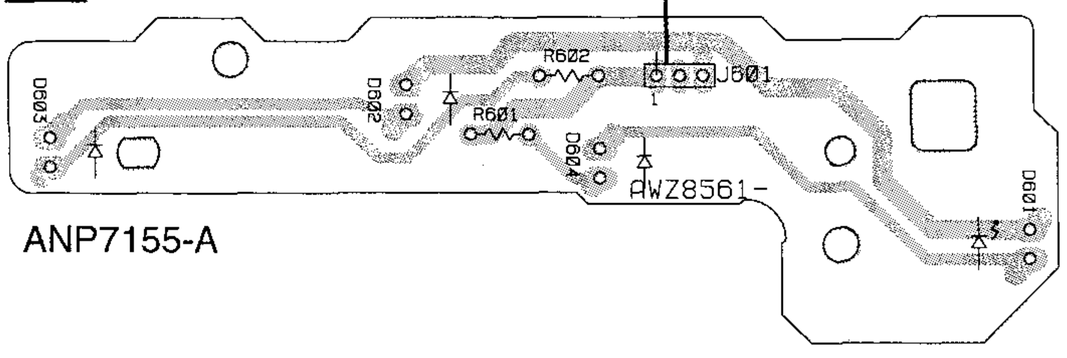



**G** SENSOR BOARD ASSY




**J** J8004

**H** LED BOARD ASSY



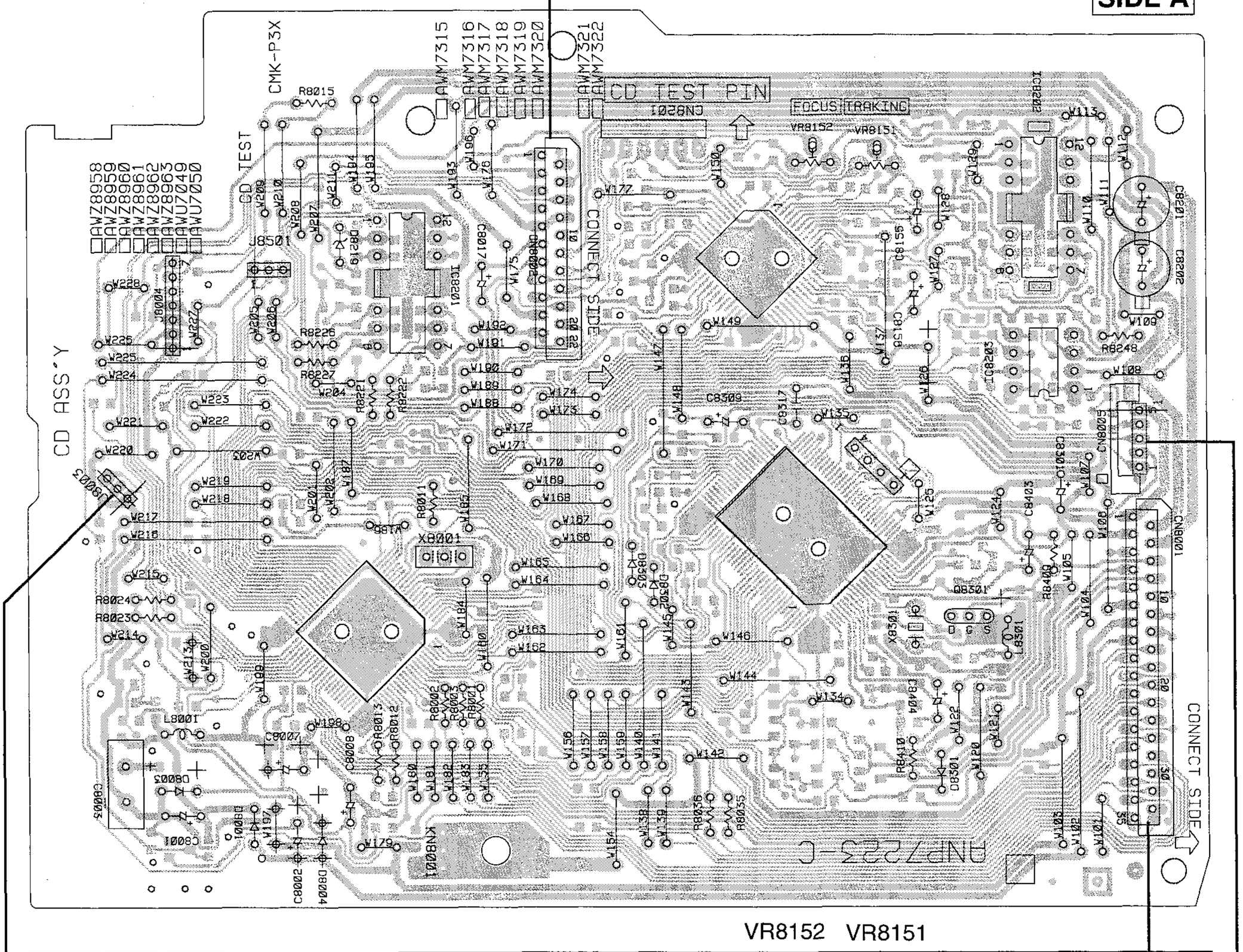

ANP7155-A

# 4.4 GM-CD ASSY, HOME SW ASSY, DOOR SW ASSY AND DOOR MOTOR ASSY

**J GM-CD ASSY**

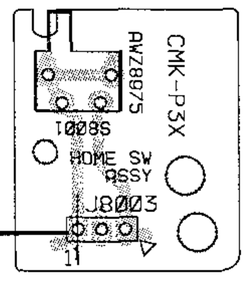
**F** CN653

SIDE A

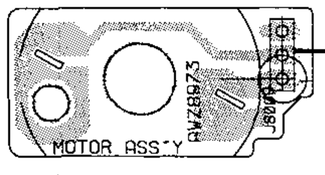



**N** CN1001

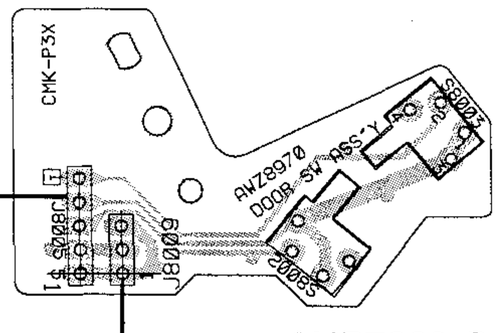
**K HOME SW ASSY**




**M DOOR MOTOR ASSY**



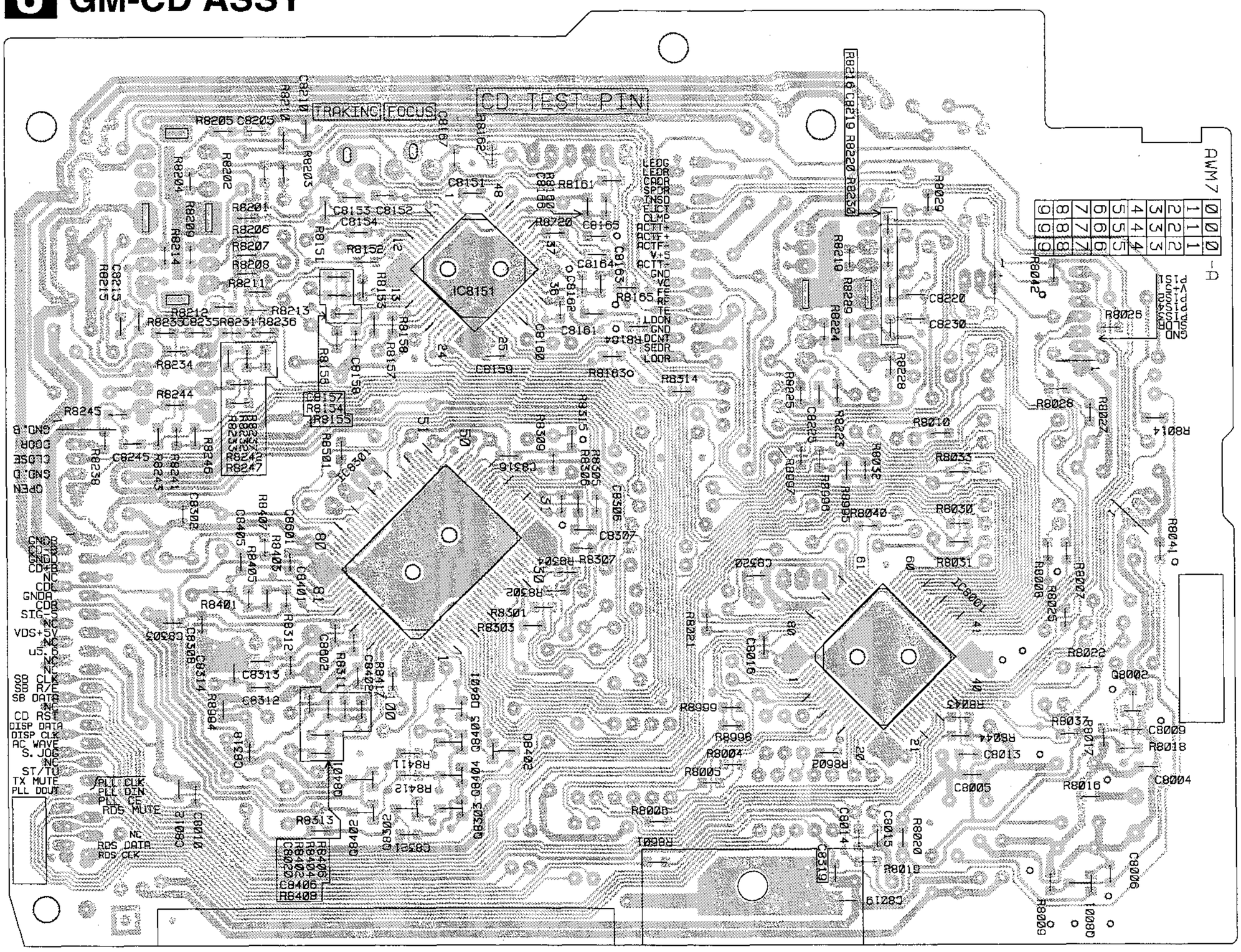

**L DOOR SW ASSY**




ANP7223-C

# J GM-CD ASSY

SIDE B




IC8151
IC8001
Q8002
IC8301
Q8001
Q8403
Q8401
Q8404
Q8402
Q8303
Q8302

# 4.5 AF ASSY AND TX CONNECT ASSY

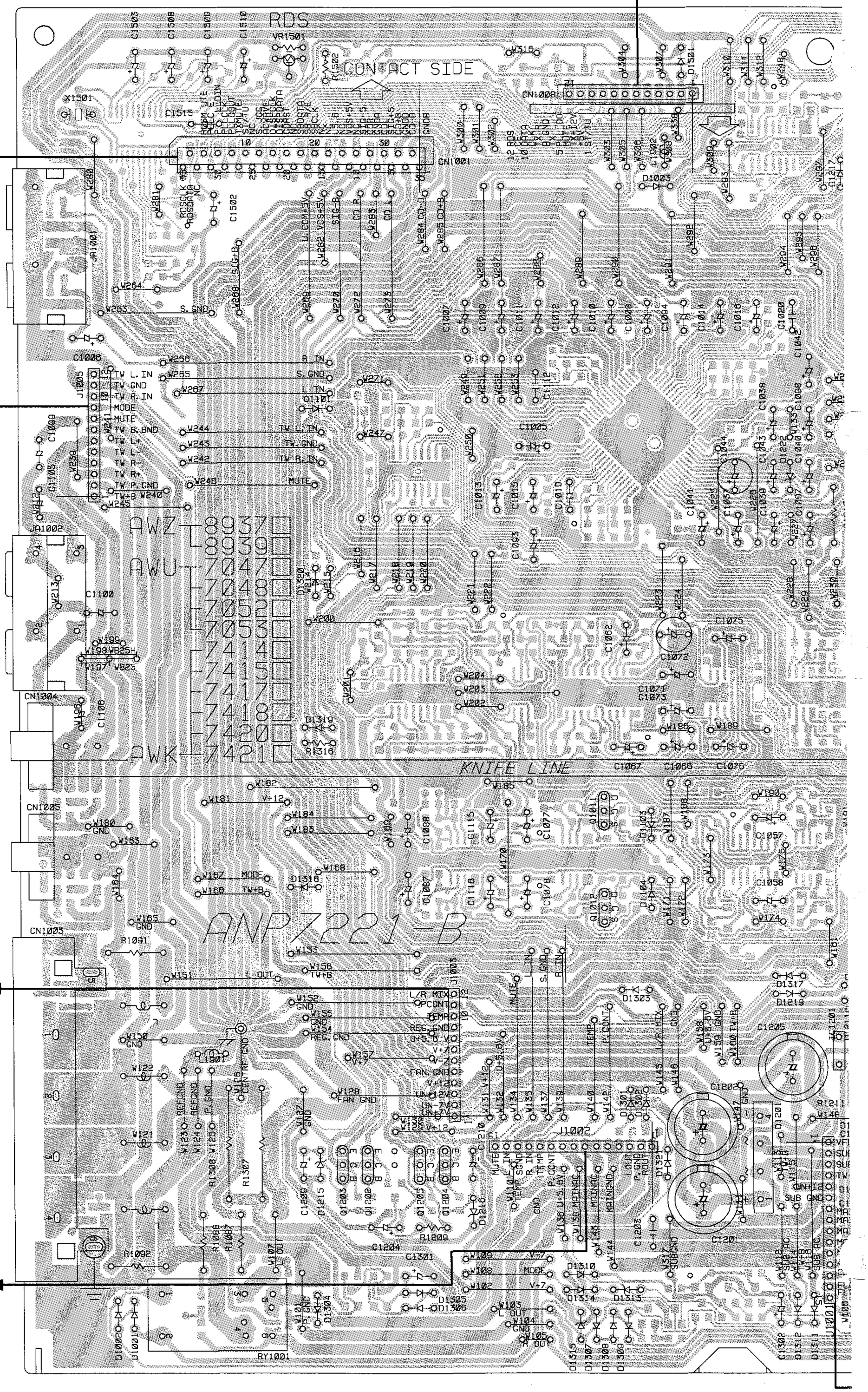
**N** AF ASSY

**J** CN8001

**Q** CN3002

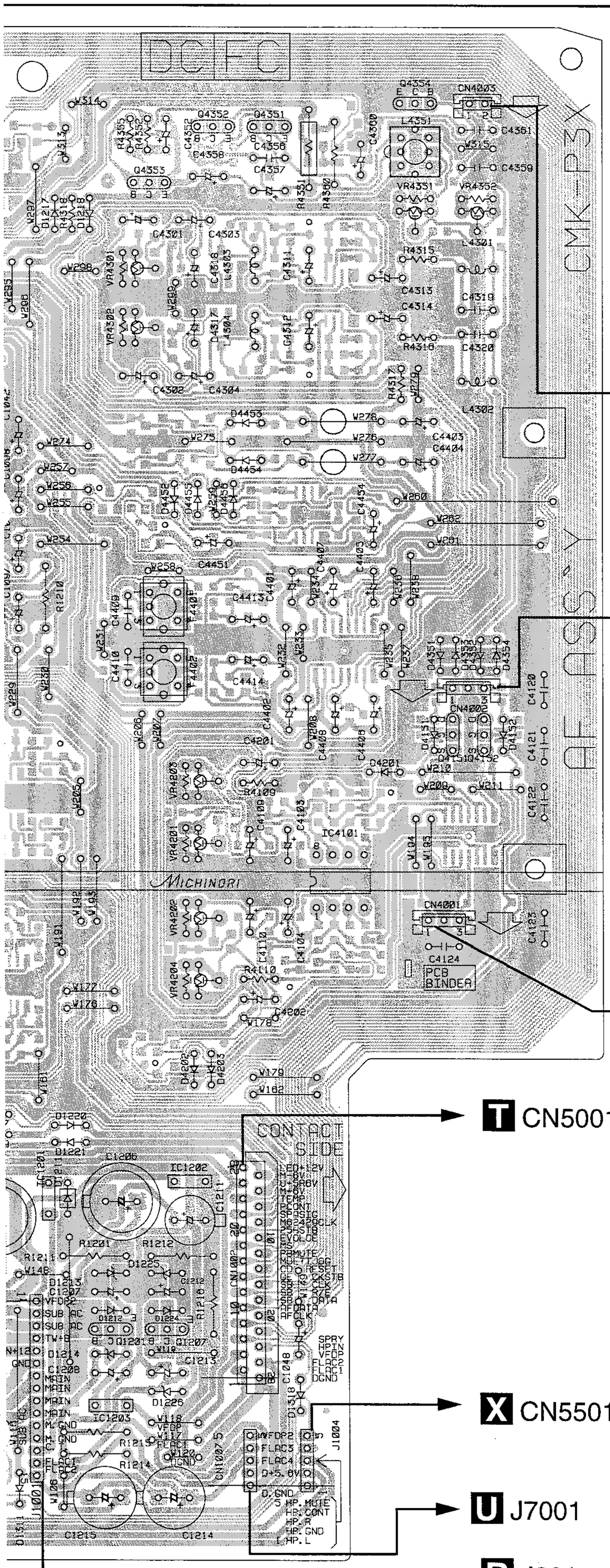
**Q** CN3001

**P** CN2001

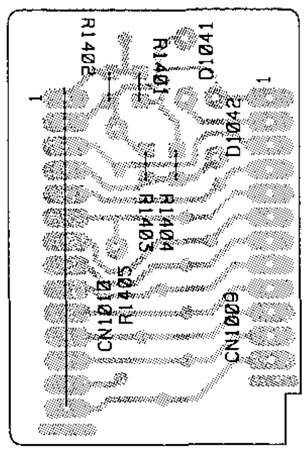





**N**

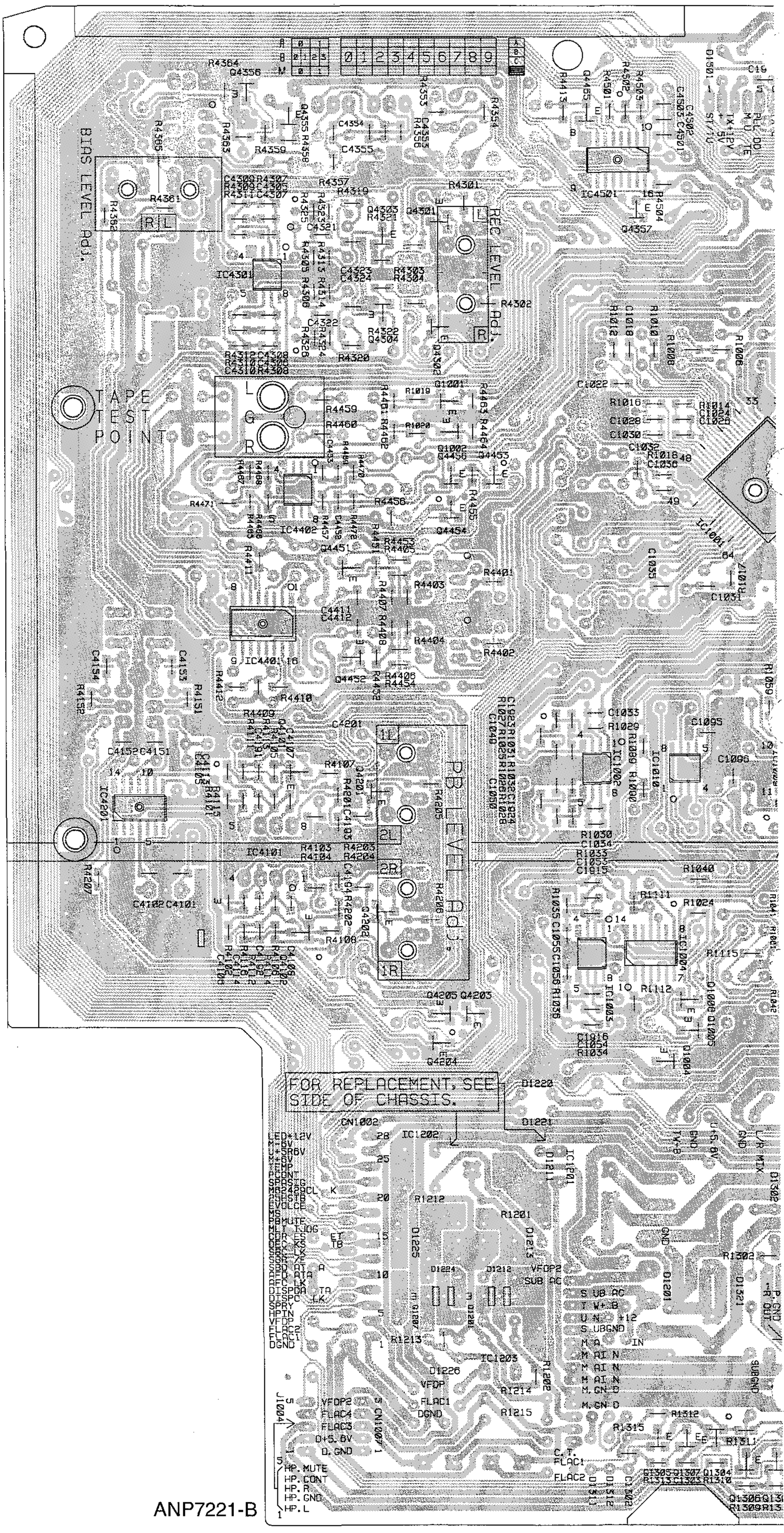

CMK-P3X
MICHINORI
CONTACT SIDE
TO ERASE HEAD ON DECK II
VR1501
VR4301 VR4351 VR4352
VR4302
Q4352 Q4351 Q4354
Q4353
SIDE A
TX CONNECT ASSY
ANP7223-C
A CN6201
TO R/P HEAD ON DECK II
VR4203 VR4201
VR4202 VR4204
Q4151 Q4152
Q1011 IC4101
TO PB HEAD ON DECK I
T CN5001
IC1201 IC1012
Q1012
Q1203 Q1202 Q1205 Q1204 Q1201 Q1207
IC1203
X CN5501
U J7001
R J201

## O TX CONNECT ASSY



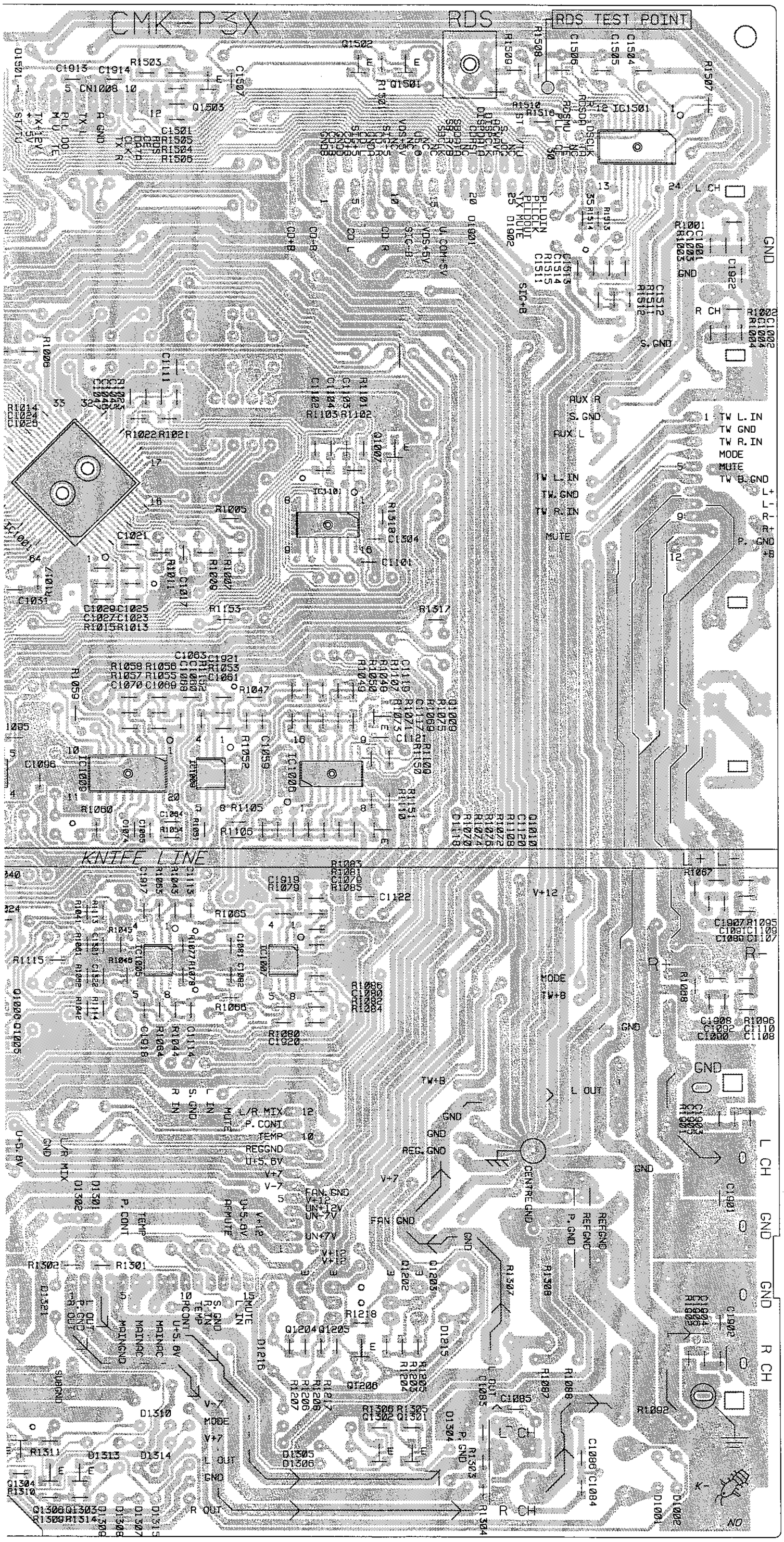
ANP7223-C

## N AF ASSY




ANP7221-B

# XR-A800, XR-A700

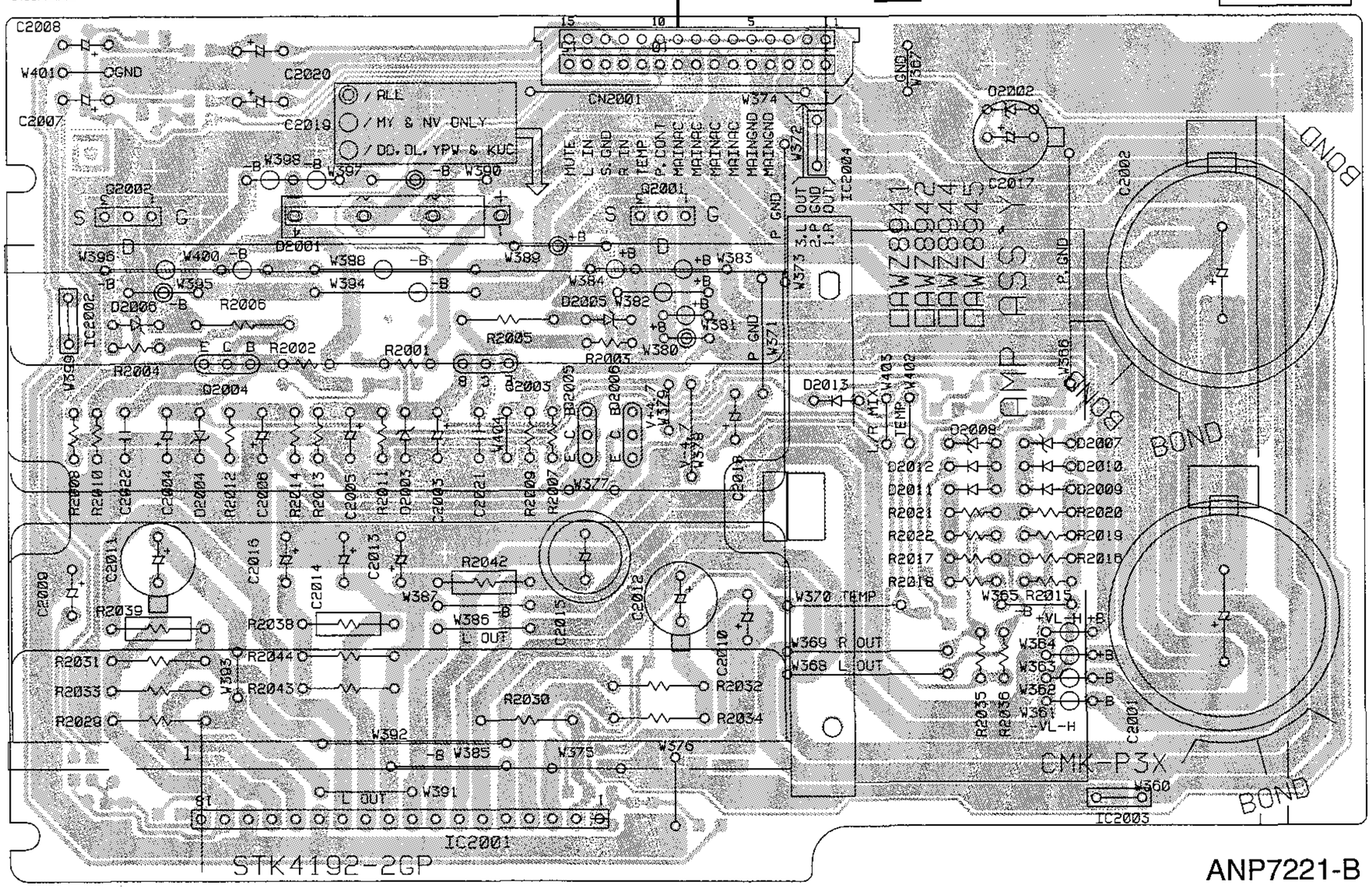


## 4.6 AMP ASSY

### P AMP ASSY

N J1002

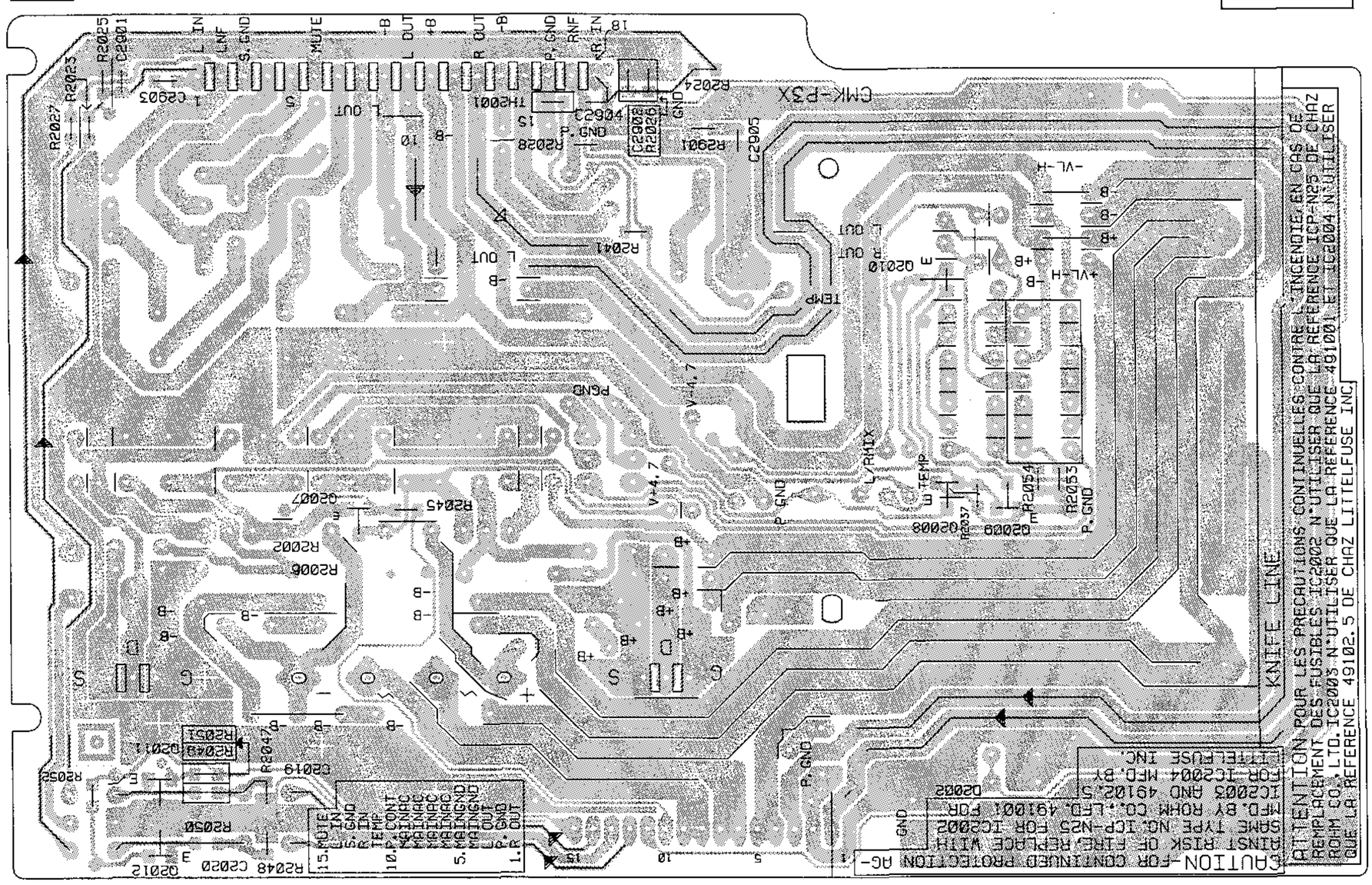
SIDE A




Q2002 Q2003 Q2001 IC2004 IC2003
IC2002 Q2004 IC2001 Q2005
Q2006

### P AMP ASSY

SIDE B

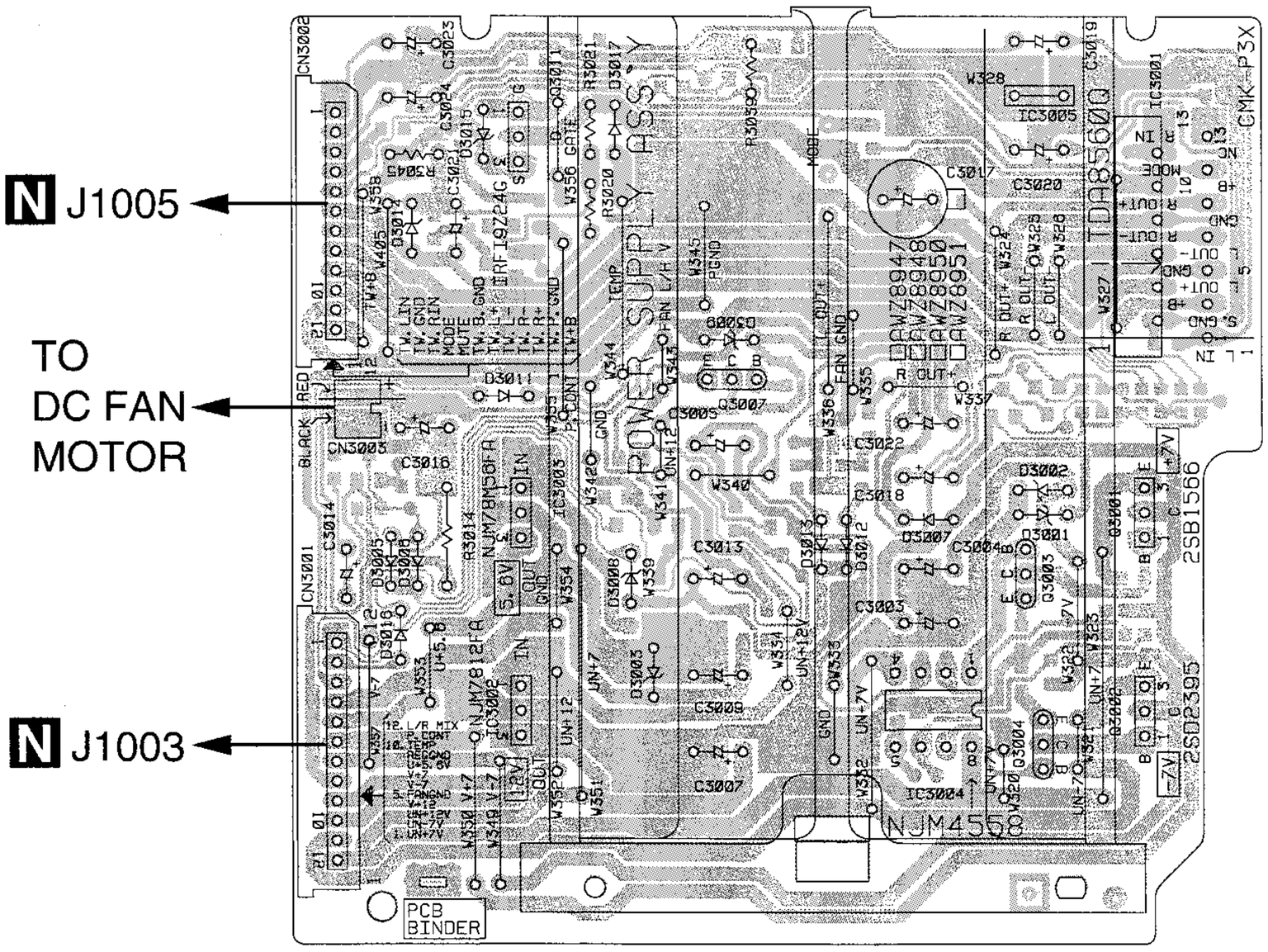



Q2011 Q2007 Q2010
Q2012 Q2008 Q2009

# 4.7 POWER SUPPLY ASSY

## Q POWER SUPPLY ASSY

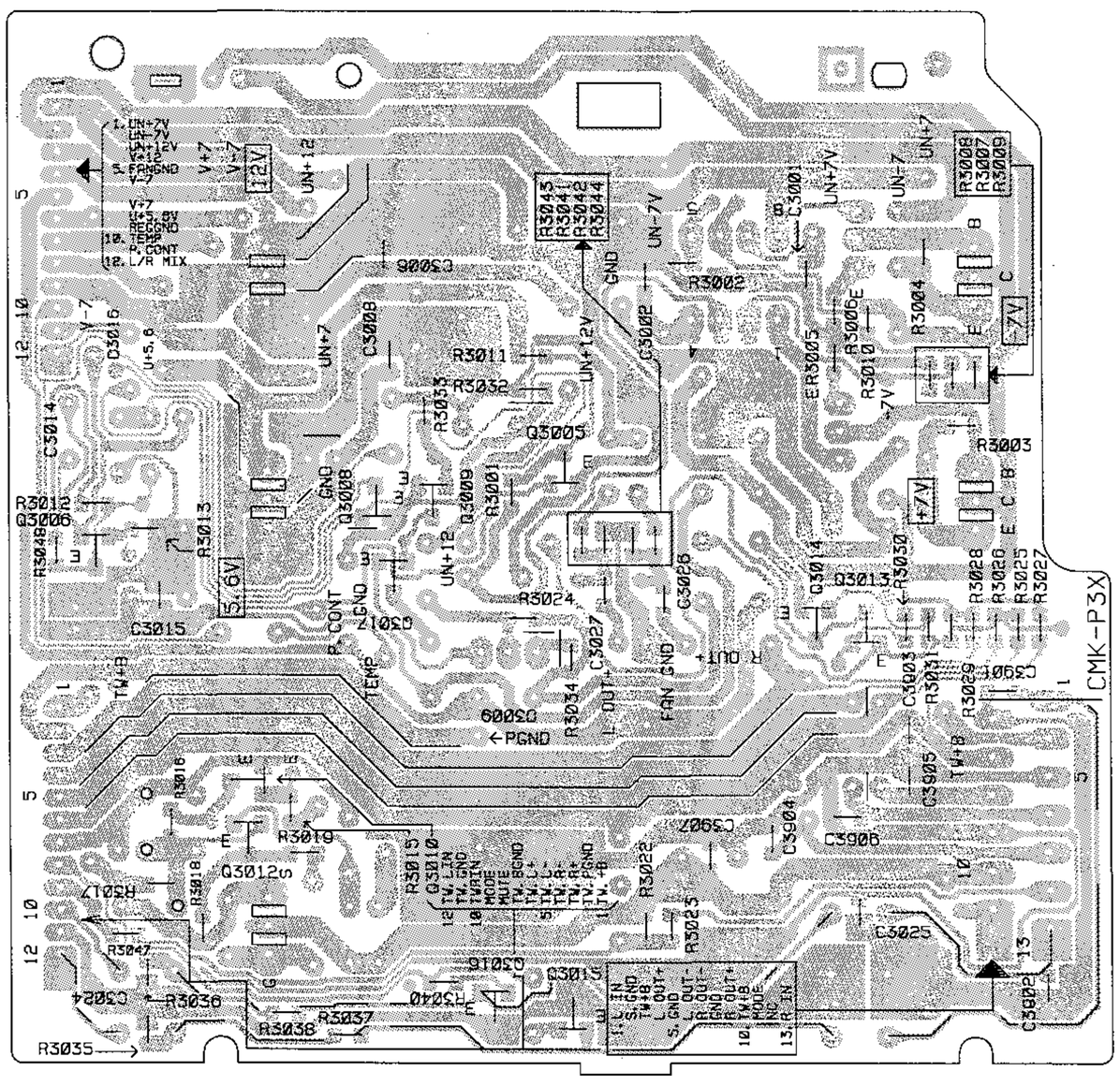
SIDE A




ANP7221-B

## Q POWER SUPPLY ASSY

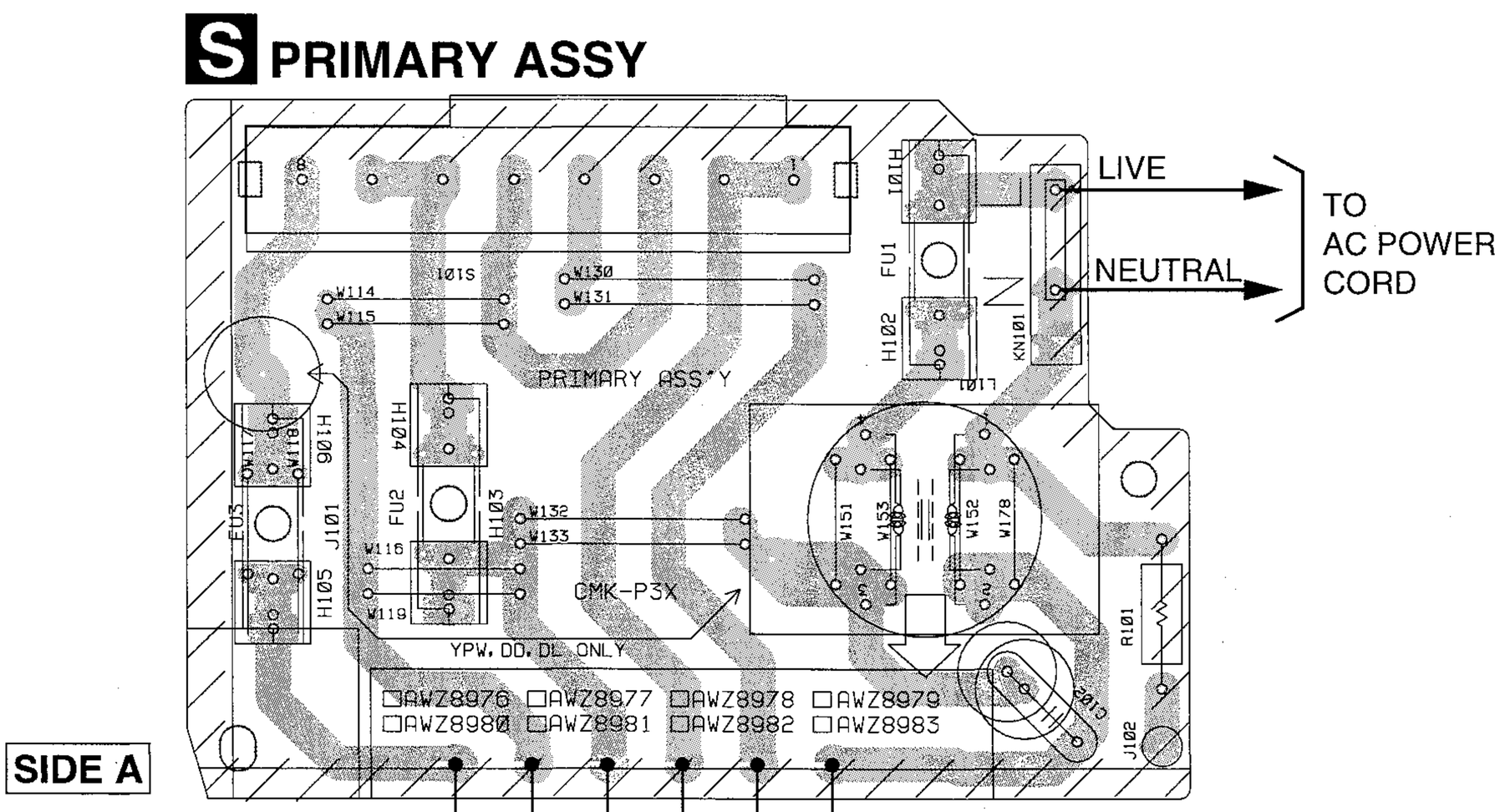
SIDE B




Q3006 Q3010 Q3008 Q3005 Q3014
Q3012 Q3009 Q3015 Q3013
Q3017 Q3016

# 4.8 SECONDARY ASSY AND PRIMARY ASSY

**S** PRIMARY ASSY



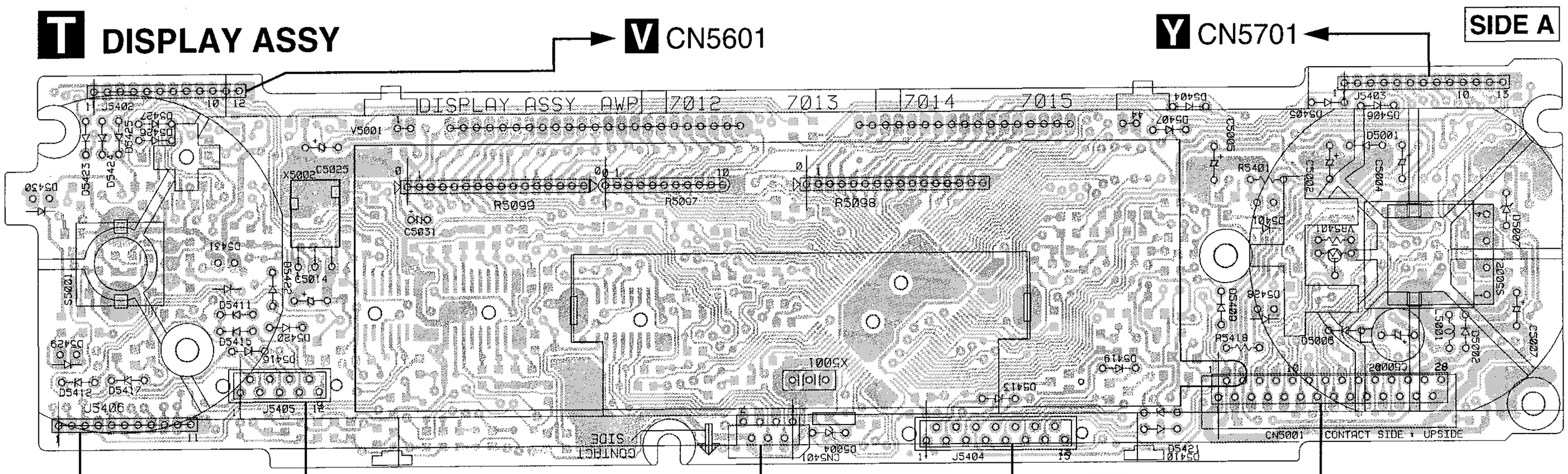




**R** SECONDARY ASSY

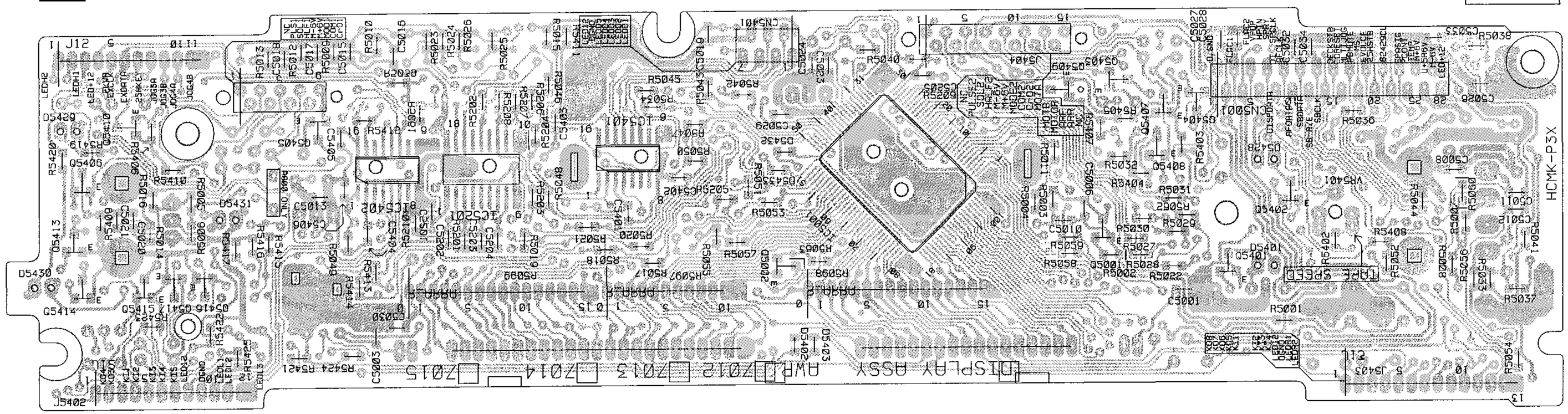
**N** J1001

## T DISPLAY ASSY




VR5401

## T DISPLAY ASSY




Q5410 Q5416
Q5406 Q5417
Q5413 Q5415
Q5414

Q5405 IC5402 IC5201

IC5401

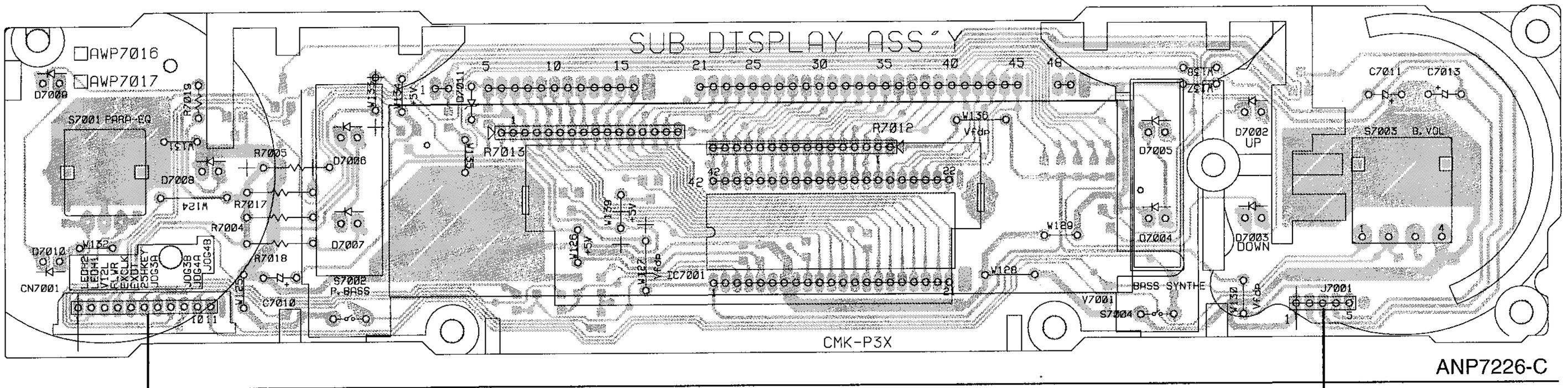
Q5002

IC5001

Q5409 Q5407 Q5401
Q5403 Q5404 Q5402
Q5408
Q5001

## U SUB DISPLAY ASSY (XR-A800 ONLY)

SIDE A

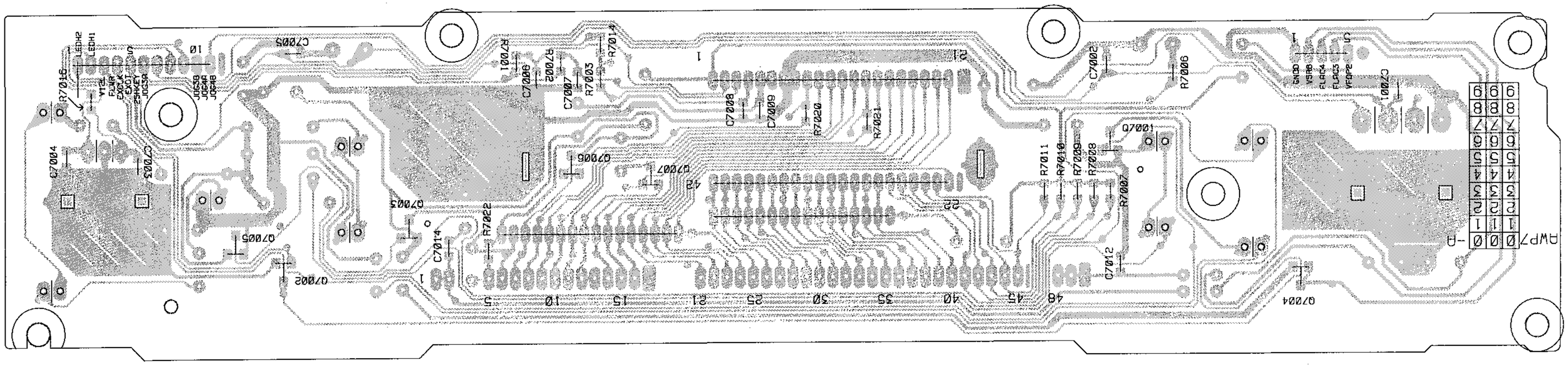



IC7001

T J5406

N CN1007

SIDE B



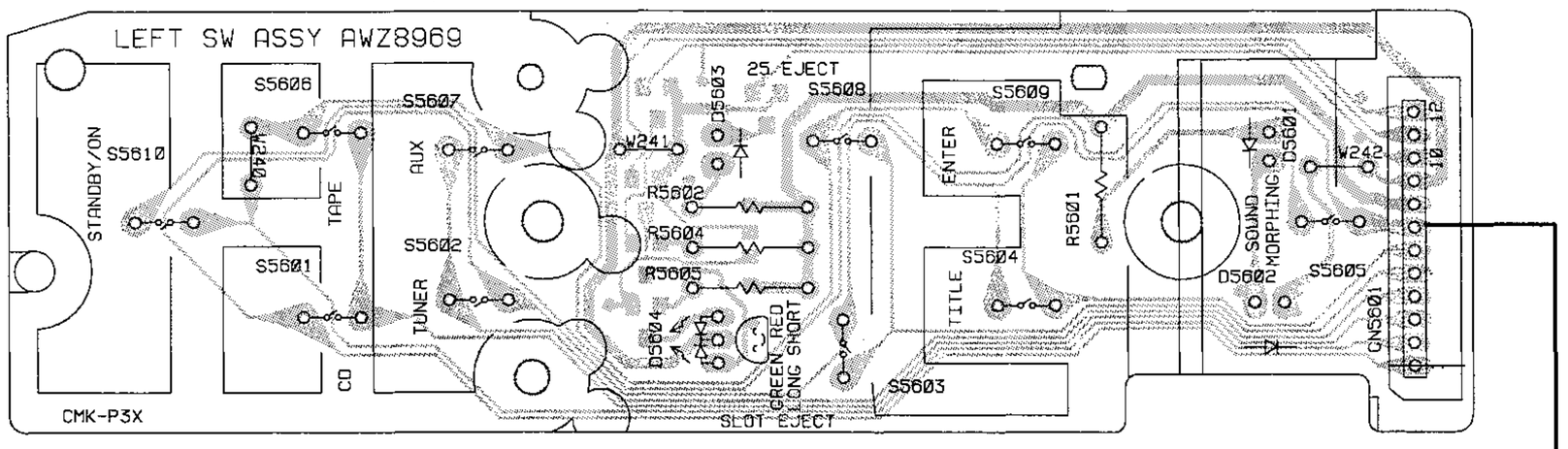

Q7005 Q7003 Q7006 Q7007 Q7001 Q7004

Q7002

# 4.11 LEFT SW ASSY AND DOOR LED ASSY

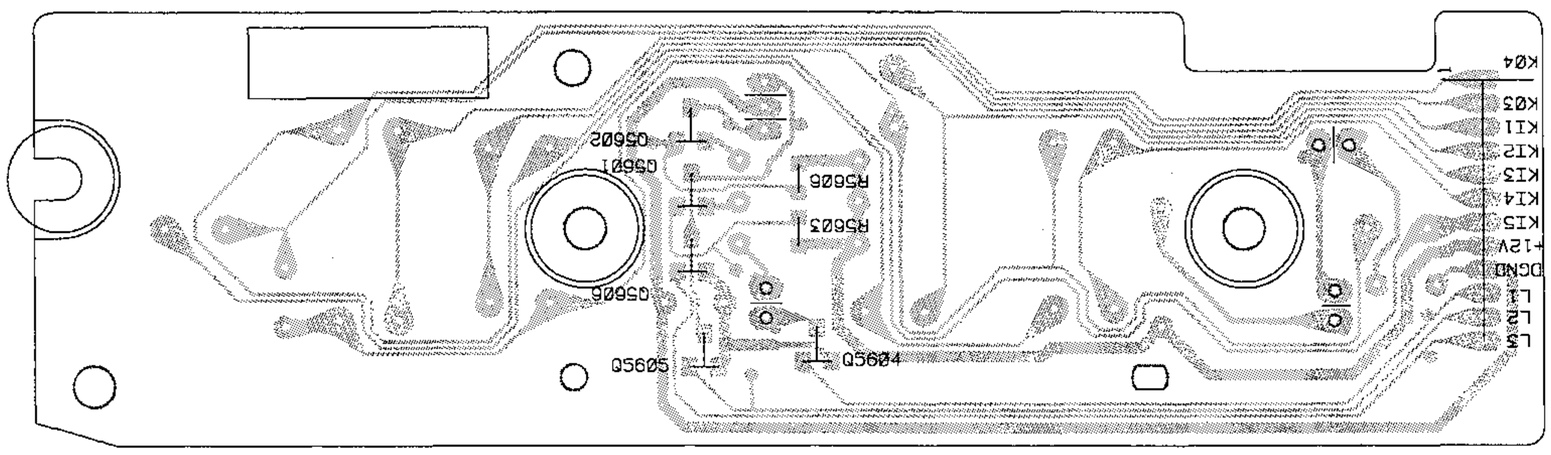
## V LEFT SW ASSY

SIDE A




T J5402

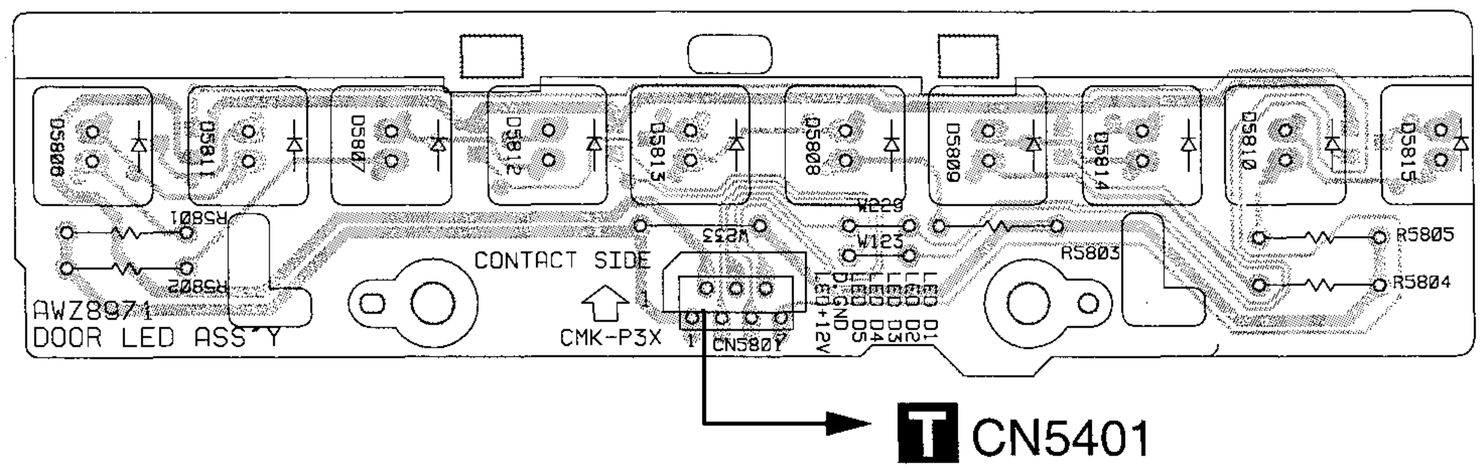
SIDE B




Q5602 Q5604
Q5601
Q5606
Q5605

## W DOOR LED ASSY

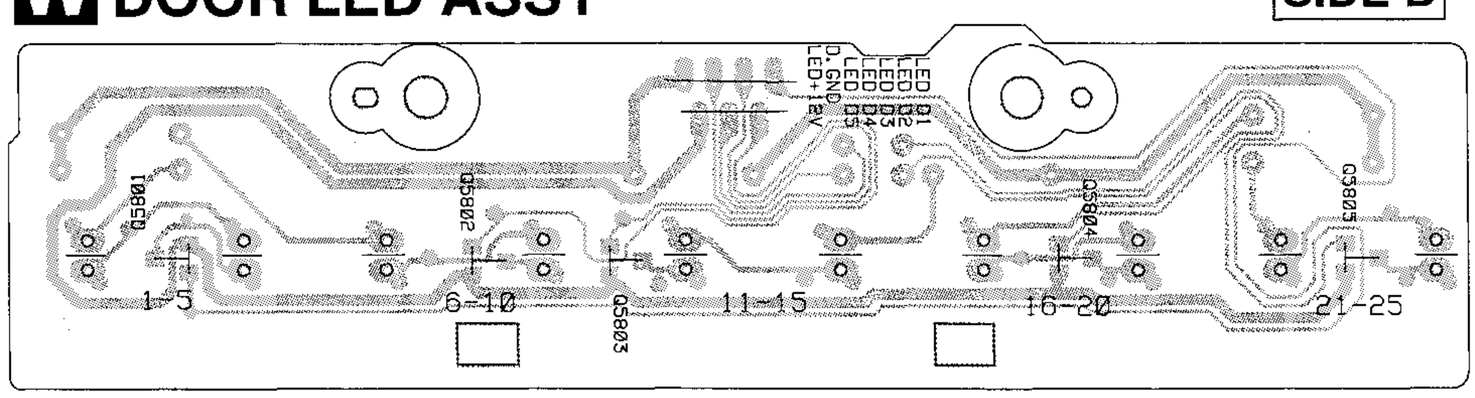
SIDE A




T CN5401

## W DOOR LED ASSY

SIDE B




ANP7223-C

Q5801 Q5802 Q5803 Q5804 Q5805

# 5. PCB 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.*
- *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* | → *56 x $10^1$* → | *561* | *RD1/4PU 5 6 1 J* |
| *47k* | → *47 x $10^3$* → | *473* | *RD1/4PU 4 7 3 J* |
| *0.5* | → *R50* | | *RN2H R 5 0 K* |
| *1* | → *1R0* | | *RS1P 1 R 0 K* |

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

| | | | |
|---|---|---|---|
| *5.62k* | → *562 x $10^1$* → | *5621* | *RN1/4PC 5 6 2 1 F* |

## LIST OF ASSEMBLIES

| Mark | No. | Description | Part No. |
|---|---|---|---|
| NSP | | MAIN ASSY (for XR-A800) | AWK7417 |
| NSP | | MAIN ASSY (for XR-A700) | AWK7414 |
| | | ├ AF ASSY (for XR-A800) | AWZ8939 |
| | | ├ AF ASSY (for XR-A700) | AWZ8937 |
| | | ├ AMP ASSY (for XR-A800) | AWZ8944 |
| | | ├ AMP ASSY (for XR-A700) | AWZ8941 |
| | | ├ POWER SUPPLY ASSY (for XR-A800) | AWZ8950 |
| | | ├ POWER SUPPLY ASSY (for XR-A700) | AWZ8947 |
| NSP | | ├ SECONDARY ASSY (for XR-A800) | AWZ8956 |
| NSP | | └ SECONDARY ASSY (for XR-A700) | AWZ8953 |
| NSP | | COMPLEX ASSY (for XR-A800) | AWM7320 |
| NSP | | COMPLEX ASSY (for XR-A700) | AWM7316 |
| | | ├ GM-CD ASSY (for XR-A800) ┐*1 | AWZ8962 |
| | | ├ GM-CD ASSY (for XR-A700) ┘ | AWZ8959 |
| NSP | | ├ HP ASSY (for XR-A800) ┐*2 | AWZ8967 |
| NSP | | ├ HP ASSY (for XR-A700) ┘ | AWZ8965 |
| NSP | | ├ RIGHT SW ASSY | AWZ8968 |
| NSP | | ├ LEFT SW ASSY | AWZ8969 |
| NSP | | ├ DOOR SW ASSY | AWZ8970 |
| NSP | | ├ DOOR LED ASSY | AWZ8971 |
| NSP | | ├ TX CONNECT ASSY | AWZ8972 |
| NSP | | ├ DOOR MOTOR ASSY | AWZ8973 |
| NSP | | ├ HOME SW ASSY | AWZ8975 |
| NSP | | ├ PRIMARY ASSY (for XR-A800) ┐*3 | AWZ8981 |
| NSP | | └ PRIMARY ASSY (for XR-A700) ┘ | AWZ8977 |
| | | DISPLAY ASSY (for XR-A800) | AWP7015 |
| | | DISPLAY ASSY (for XR-A700) | AWP7013 |
| | | SUB DISPLAY ASSY (XR-A800 only) | AWP7017 |
| | | FM/AM TUNER MODULE | AXQ7061 |
| NSP | | GS SLOT-IN MECHANISM ASSY | AXA7044 |
| NSP | | └ SL MECHANISM ASSY | AWX7031 |
| NSP | | ├ SENSOR BOARD ASSY | AWZ8560 |
| NSP | | ├ LED BOARD ASSY | AWZ8561 |
| NSP | | └ MOTOR BOARD ASSY | AWZ8744 |
| NSP | | GS MECHANISM ASSY | AXA7047 |
| NSP | | ├ LO MECHANISM BOARD ASSY | AWX7035 |
| NSP | | ├ SENSOR PCB ASSY | AWZ7836 |
| NSP | | ├ MOTOR PCB ASSY | AWZ7837 |
| NSP | | ├ SW PCB ASSY | AWZ7838 |
| NSP | | ├ MECHA PCB ASSY | AWZ8802 |
| NSP | | └ SERVO MECHANISM ASSY GM | AXA7028 |
| NSP | | └ MECHANISM BOARD ASSY | PWX1192 |

## N AF ASSY (for XR-A800)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| ⚠ | IC1203 | PROTECTOR (250mA) | AEK7002 |
| ⚠ | IC1202 | PROTECTOR (500mA) | AEK7005 |
| ⚠ | IC1201 | PROTECTOR (1A) | AEK7009 |
| | IC1006 | | BU4052BCF |
| | IC1004, IC4201 | | BU4066BCF |
| | IC1101, IC4501 | | BU4094BCF |
| | IC4401 | | CXA1101M |
| | IC1001 | | LC75394NED |
| | IC1009 | | M51134FP |
| | IC1010 | | M62429FP |
| | IC4101 | | NJM4558DXP |
| | IC1002, IC1003, IC1005, IC1007, IC1008 | | NJM4558MD |
| | IC4301, IC4402 | | NJM4558MD |
| | Q1302, Q1303 | | 2SA1037K |
| | Q1201, Q1207 | | 2SA965 |
| | Q1204, Q1205 | | 2SB1237X |
| | Q4351-Q4353 | | 2SC1815 |
| | Q4354 | | 2SC2240 |
| | Q1001, Q1002, Q1206, Q1301, Q1307 | | 2SC2412K |
| | Q4201, Q4202, Q4301, Q4302, Q4453 | | 2SC2412K |
| | Q1202, Q1203 | | 2SD1858X |
| | Q1009, Q1010, Q4451, Q4452 | | 2SD2114K |
| | Q1011, Q1012, Q4151, Q4152 | | 2SK373 |
| | Q4357, Q4455, Q4456 | | DTA124EK |
| | Q1004, Q1005, Q1007, Q1306, Q4204 | | DTA143EK |
| | Q1305, Q4454 | | DTC124EK |
| | Q1006, Q1304, Q4203 | | DTC143EK |
| | D1001-D1003, D1101, D1103, D1104 | | 1SS254 |
| | D1212, D1224, D1301-D1312, D1314 | | 1SS254 |
| | D1316-D1321, D4151, D4152 | | 1SS254 |
| | D4201, D4202, D4351-D4354 | | 1SS254 |
| | D4452-D4456 | | 1SS254 |
| ⚠ | D1201 | | D2SBA20(B) |
| | D1222 | | MTZJ10B |
| | D1315 | | MTZJ12B |

**NOTE** *1: Although AWZ8959 and AWZ8962 are different in part number, they have the same service parts.
*2: Although AWZ8965 and AWZ8967 are different in part number, they have the same service parts.
*3: Although AWZ8977 and AWZ8981 are different in part number, they have the same service parts.

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | D1225 | | MTZJ15A |
| | D1226, D1313 | | MTZJ3.6A |
| | D1213 | | MTZJ33A |
| | D1215, D1216 | | MTZJ5.6B |
| | D1214 | | MTZJ6.2B |
| ⚠ | D1211 | | S5688G |
| | D1217-D1221 | | S5688G |

## COILS AND FILTERS

| | | |
|---|---|---|
| L1001, L1002 (1µH) | | ATH-133 |
| L4351 | | ATX7002 |
| L4303, L4304 | | LTA332J |
| L4301, L4302 | | LTA822J |
| F4401, F4402 | | RTF1217 |

## SWITCHES AND RELAYS

| | | |
|---|---|---|
| RY1001 | | ASR7008 |

## CAPACITORS

| | | |
|---|---|---|
| ⚠ | C1203 (0.01µF/AC150V) | ACG1005 |
| | C4319, C4320 | CCCSL271K2H |
| | C1064, C4153, C4154 | CCSQCH100D50 |
| | C1035, C1036, C4501-C4503 | CCSQCH101J50 |
| | C1033, C1034, C1095, C1096 | CCSQCH121J50 |
| | C1001-C1004, C1045-C1047 | CCSQCH221J50 |
| | C4453 | CCSQCH271J50 |
| | C1113, C1114 | CCSQCH471J50 |
| | C4151, C4152 | CCSQCH681J50 |
| | C4101, C4102 | CCSQCH821J50 |
| | C1099, C1100 | CEANP4R7M50 |
| | C1013, C1014, C4405, C4406 | CEASR68M50 |
| | C1067, C1207, C1208, C1212, C1213 | CEAT100M50 |
| | C4360, C4403, C4404, C4407, C4408 | CEAT100M50 |
| | C1041-C1044, C1072, C1087, C1088 | CEAT101M16 |
| | C4401, C4402 | CEAT101M16 |
| ⚠ | C1206 | CEAT101M2A |
| ⚠ | C1211 | CEAT101M35 |
| ⚠ | C1205 | CEAT102M35 |
| | C1048, C1066 | CEAT1R0M50 |
| | C4451 | CEAT220M50 |
| ⚠ | C1201, C1202 | CEAT222M16 |
| | C1204, C4103, C4104, C4311, C4312 | CEAT330M16 |
| | C4317, C4318, C4352, C4357, C4358 | CEAT330M16 |
| | C1073, C1209, C1210, C4109, C4110 | CEAT470M25 |
| | C1214, C1215 | CEAT471M25 |
| | C1039, C1040, C1071, C1075-C1078 | CEAT4R7M50 |
| | C1115, C1116, C4201, C4202 | CEAT4R7M50 |
| | C4301, C4302, C4313, C4314 | CEAT4R7M50 |
| | C1005-C1012, C1037, C1038 | CEATR33M50 |
| | C1057, C1058, C1062, C1093, C1094 | CEJA2R2M50 |
| | C1097, C1098, C1301, C1302 | CEJA2R2M50 |
| | C4303, C4304, C4413, C4414, C4454 | CEJA2R2M50 |
| | C1015, C1016 | CEJAR47M50 |
| | C1019, C1020 | CFTYA394J50 |
| | C1112, C4120 | CGCYX104M25 |
| | C4361 | CKCYB681K2H |
| | C1029, C1030 | CKSQYB122K50 |
| | C4411, C4412 | CKSQYB152K50 |
| | C1055, C1056 | CKSQYB223K25 |
| | C1079, C1080 | CKSQYB224K16 |
| | C4307, C4308 | CKSQYB272K50 |
| | C1023, C1024 | CKSQYB273K50 |
| | C1069, C4353, C4354 | CKSQYB332K50 |
| | C1063, C1070, C4323, C4324 | CKSQYB333K50 |
| | C1021, C1022 | CKSQYB393K50 |
| | C1025, C1026, C4355 | CKSQYB472K50 |
| | C1049, C1050, C1053, C1054 | CKSQYB473K25 |
| | C1117-C1120 | CKSQYB562K50 |
| | C4305, C4306 | CKSQYB563K25 |
| | C1027, C1028, C1031, C1032 | CKSQYB682K50 |
| | C4105, C4106 | CKSQYB682K50 |
| | C1017, C1018 | CKSQYB683K25 |
| | C1060, C1089-C1092 | CKSQYF104Z25 |
| | C1068, C1083-C1086, C1101 | CKSQYF104Z50 |
| | C1107-C1111, C1303, C1922 | CKSQYF104Z50 |
| | C1065, C1074, C1081, C1082 | CKSQYF105Z16 |
| | C1121, C1122, C1304, C1321, C1322 | CKSQYF105Z16 |
| | C4452 | CKSQYF105Z16 |
| | C1059, C1061 | CKSQYF224Z25 |
| | C4359 | CQHA822J2A |
| | C4409, C4410 | CQMA103J50 |
| | C4356 | CQMA223J50 |

## RESISTORS

| | | |
|---|---|---|
| | R1087, R1088, R1091, R1092 | RD1/2PM100J |
| | R1214, R1215 | RD1/2PM101J |
| | R1216 | RD1/2PM151J |
| | R1212 | RD1/2PM272J |
| | R1201 | RD1/2PM682J |
| ⚠ | R1210 | RD1/2PMF470J |
| | R1209 | RD1/4PU102J |
| | R4315, R4316 | RD1/4PU103J |
| | R1316 | RD1/4PU104J |
| | R4352 | RD1/4PU222J |
| | R4355 | RD1/4PU4R7J |
| | R4109, R4110, R4317, R4318 | RD1/4PU820J |
| | R4351 | RS1LMF151J |
| | R1211 | RS3LMF331J |
| | R1307, R1308 | RS3LMFR22J |
| | VR4301, VR4302 (4.7kΩ) | RCP1020 |
| | VR4201-VR4204 (22kΩ) | RCP1046 |
| | VR4351, VR4352 (220kΩ) | RCP1049 |
| | Other Resistors | RS1/10S□□□J |

## OTHERS

| | | |
|---|---|---|
| | CN1007 5P JUMPER CONNECTOR | 52147-0510 |
| | CN1004, CN1005 2P CONNECTOR | 5569-02A1 |
| | CN1002 CONNECTOR 28P | 9604S-28C |
| | CN1001 CONNECTOR 35P | 9604S-35C |
| | CN1003 SPEAKER TERMINAL 4P | AKE7030 |
| | CN4003 2P TOP POST (EH) | B2B-EH |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN4002 | 3P TOP POST (EH) | B3B-EH |
| | CN4001 | 3P TOP POST (RED) | B3B-EH-R |
| | CN1008 | 12P PLUG | KM200TA12 |
| | JA1001 | 2P JACK | VKB1046 |
| | JA1002 | 2P JACK | VKB1050 |

## N AF ASSY (for XR-A700)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| ⚠ | IC1203 | PROTECTOR (250mA) | AEK7002 |
| ⚠ | IC1201 | PROTECTOR (750mA) | AEK7007 |
| | IC4201 | | BU4066BCF |
| | IC4501 | | BU4094BCF |
| | IC4401 | | CXA1101M |
| | IC1001 | | LC75394NED |
| | IC4101 | | NJM4558DXP |
| | IC1007, IC1008, IC4301, IC4402 | | NJM4558MD |
| | Q1302, Q1303 | | 2SA1037K |
| | Q1201 | | 2SA965 |
| | Q1204, Q1205 | | 2SB1237X |
| | Q4351-Q4353 | | 2SC1815 |
| | Q4354 | | 2SC2240 |
| | Q1001, Q1002, Q1206, Q1301, Q1307 | | 2SC2412K |
| | Q4201, Q4202, Q4301, Q4302, Q4453 | | 2SC2412K |
| | Q1202, Q1203 | | 2SD1858X |
| | Q4451, Q4452 | | 2SD2114K |
| | Q4151, Q4152 | | 2SK373 |
| | Q4357, Q4455, Q4456 | | DTA124EK |
| | Q1007, Q1306, Q4204 | | DTA143EK |
| | Q1305, Q4454 | | DTC124EK |
| | Q1304, Q4203 | | DTC143EK |
| | D1001-D1003, D1101, D1212 | | 1SS254 |
| | D1301-D1312, D1316-D1321 | | 1SS254 |
| | D4151, D4152, D4201, D4202 | | 1SS254 |
| | D4351-D4354, D4452-D4456 | | 1SS254 |
| ⚠ | D1201 | | D2SBA20(B) |
| | D1222 | | MTZJ10B |
| | D1213 | | MTZJ33A |
| | D1215, D1216 | | MTZJ5.6B |
| | D1214 | | MTZJ6.2B |
| ⚠ | D1211 | | S5688G |
| | D1217-D1221 | | S5688G |

### COILS AND FILTERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L1001, L1002 (1µH) | | ATH-133 |
| | L4351 | | ATX7002 |
| | L4303, L4304 | | LTA332J |
| | L4301, L4302 | | LTA822J |
| | F4401, F4402 | | RTF1217 |

### SWITCHES AND RELAYS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | RY1001 | | ASR7008 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| ⚠ | C1203 | (0.01µF/AC150V) | ACG1005 |
| | C4319, C4320 | | CCCSL271K2H |
| | C4153, C4154 | | CCSQCH100D50 |
| | C1035, C1036, C4501-C4503 | | CCSQCH101J50 |
| | C1001-C1004, C1045-C1047 | | CCSQCH221J50 |
| | C4453 | | CCSQCH271J50 |
| | C4151, C4152 | | CCSQCH681J50 |
| | C4101, C4102 | | CCSQCH821J50 |
| | C1013, C1014, C4405, C4406 | | CEASR68M50 |
| | C1207, C1208, C4360, C4403, C4404 | | CEAT100M50 |
| | C4407, C4408 | | CEAT100M50 |
| | C1041-C1044, C1087, C1088 | | CEAT101M16 |
| | C4401, C4402 | | CEAT101M16 |
| ⚠ | C1206 | | CEAT101M2A |
| ⚠ | C1205 | | CEAT102M35 |
| | C1048 | | CEAT1R0M50 |
| | C4451 | | CEAT220M50 |
| ⚠ | C1201, C1202 | | CEAT222M16 |
| | C1204, C4103, C4104, C4311, C4312 | | CEAT330M16 |
| | C4317, C4318, C4352, C4357, C4358 | | CEAT330M16 |
| | C1209, C1210, C4109, C4110 | | CEAT470M25 |
| | C1039, C1040, C4201, C4202 | | CEAT4R7M50 |
| | C4301, C4302, C4313, C4314 | | CEAT4R7M50 |
| | C1005-C1012, C1037, C1038 | | CEATR33M50 |
| | C1093, C1094, C1097, C1098 | | CEJA2R2M50 |
| | C1301, C1302, C4303, C4304 | | CEJA2R2M50 |
| | C4413, C4414, C4454 | | CEJA2R2M50 |
| | C1015, C1016 | | CEJAR47M50 |
| | C1019, C1020 | | CFTYA394J50 |
| | C1112, C4120 | | CGCYX104M25 |
| | C4361 | | CKCYB681K2H |
| | C1029, C1030 | | CKSQYB122K50 |
| | C4411, C4412 | | CKSQYB152K50 |
| | C1079, C1080 | | CKSQYB184K16 |
| | C4307, C4308 | | CKSQYB272K50 |
| | C1023, C1024 | | CKSQYB273K50 |
| | C4353, C4354 | | CKSQYB332K50 |
| | C4323, C4324 | | CKSQYB333K50 |
| | C1021, C1022 | | CKSQYB393K50 |
| | C1025, C1026, C4355 | | CKSQYB472K50 |
| | C4305, C4306 | | CKSQYB563K25 |
| | C1027, C1028, C1031, C1032 | | CKSQYB682K50 |
| | C4105, C4106 | | CKSQYB682K50 |
| | C1017, C1018 | | CKSQYB683K25 |
| | C1083-C1086, C1111, C1303, C1922 | | CKSQYF104Z50 |
| | C1304, C4452 | | CKSQYF105Z16 |
| | C1081, C1082 | | CKSQYF334Z16 |
| | C4359 | | CQHA822J2A |
| | C4409, C4410 | | CQMA103J50 |
| | C4356 | | CQMA223J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R1087, R1088, R1091, R1092 | | RD1/2PM100J |
| | R1201 | | RD1/2PM682J |
| ⚠ | R1210 | | RD1/2PMF470J |
| | R1209 | | RD1/4PU102J |
| | R4315, R4316 | | RD1/4PU103J |
| | R1316 | | RD1/4PU104J |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R4352 | | RD1/4PU222J |
| | R4355 | | RD1/4PU4R7J |
| | R4109, R4110, R4317, R4318 | | RD1/4PU820J |
| | R4351 | | RS1LMF151J |
| | R1211 | | RS3LMF271J |
| | R1307, R1308 | | RS3LMFR22J |
| | VR4301, VR4302 (4.7kΩ) | | RCP1020 |
| | VR4201-VR4204 (22kΩ) | | RCP1046 |
| | VR4351, VR4352 (220kΩ) | | RCP1049 |
| | Other Resistors | | RS1/10S□□□J |

## OTHERS

| | | | |
|---|---|---|---|
| | CN1002 | CONNECTOR 28P | 9604S-28C |
| | CN1001 | CONNECTOR 35P | 9604S-35C |
| | CN1003 | SPEAKER TERMINAL 4P | AKE7030 |
| | CN4003 | 2P TOP POST (EH) | B2B-EH |
| | CN4002 | 3P TOP POST (EH) | B3B-EH |
| | CN4001 | 3P TOP POST (RED) | B3B-EH-R |
| | CN1008 | 12P PLUG | KM200TA12 |
| | JA1001 | 2P JACK | VKB1046 |
| | JA1002 | 2P JACK | VKB1050 |

# P AMP ASSY

## SEMICONDUCTORS

| | | | |
|---|---|---|---|
| ⚠ | IC2003 | PROTECTOR (1A) | AEK7009 |
| ⚠ | IC2004 | PROTECTOR (2.5A) | AEK7014 |
| ⚠ | IC2002 | IC PROTECTOR | ICP-N25 |
| ⚠ | IC2001 | | STK4192-2GP |
| | Q2009 | | 2SA1037K |
| | Q2004, Q2006 | | 2SA992 |
| | Q2003, Q2005 | | 2SC1845 |
| | Q2007, Q2008, Q2010 | | 2SC2412K |
| | Q2011, Q2012 | | 2SD2114K |
| ⚠ | Q2002 | | IRF540A |
| ⚠ | Q2001 | | IRF9540A |
| | D2009-D2013 | | 1SS254 |
| ⚠ | D2001 | | D3SBA20(B) |
| ⚠ | D2005, D2006 | | MTZJ18C |
| | D2007, D2008 (for XR-A800) | | MTZJ27C |
| | D2007, D2008 (for XR-A700) | | MTZJ24B |
| | D2003, D2004 | | MTZJ4.7B |
| | D2002 | | MTZJ5.6B |
| | TH2001 | | AEX7002 |

## CAPACITORS

| | | | |
|---|---|---|---|
| ⚠ | C2001, C2002 (3300µF/71V) | | ACH7076 |
| | C2015 | | CEANP470M50 |
| | C2013, C2014, C2016 | | CEAT100M50 |
| | C2003-C2006, C2018 | | CEAT101M16 |
| | C2011, C2012, C2017 | | CEAT101M35 |
| | C2009, C2010 | | CEAT220M50 |
| | C2007, C2008, C2019, C2020 | | CEJA2R2M50 |
| | C2021, C2022 | | CKCYB102K2H |
| | C2901, C2902 | | CKSQYB272K50 |

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

## RESISTORS

| | | | |
|---|---|---|---|
| | R2031-R2034 | | RD1/2PM332J |
| | R2029, R2030 | | RD1/2PM563J |
| ⚠ | R2043, R2044 | | RD1/2PMF222J |
| ⚠ | R2039, R2042 | | RD1/4LMF101J |
| ⚠ | R2038 | | RD1/4LMF102J |
| ⚠ | R2005, R2006 | | RFA1/4PS101J |
| | R2009, R2010 | | RN1/4PC1001F |
| | R2011, R2012 (for XR-A800) | | RN1/4PC2701F |
| | R2011, R2012 (for XR-A700) | | RN1/4PC2401F |
| | R2007, R2008 (for XR-A800) | | RN1/4PC8201F |
| | R2007, R2008 (for XR-A700) | | RN1/4PC7501F |
| | R2023, R2024 | | RS1/10S0R0J |
| | R2041, R2045, R2049, R2050 | | RS1/10S102J |
| | R2051, R2052 | | RS1/10S103J |
| | R2047, R2048 | | RS1/10S104J |
| | R2037 | | RS1/10S183J |
| | R2027, R2028 | | RS1/10S561J |
| | R2025, R2026 | | RS1/10S563J |
| | Other Resistors | | RD1/4PU□□□J |

# Q POWER SUPPLY ASSY (for XR-A800)

## SEMICONDUCTORS

| | | | |
|---|---|---|---|
| ⚠ | IC3005 | IC PROTECTOR | ICP-N25 |
| | IC3004 | | NJM4558DXP |
| ⚠ | IC3002 | | NJM7812FA |
| ⚠ | IC3003 | | NJM78M56FA |
| ⚠ | IC3001 | | TDA8560Q |
| | Q3013, Q3014 | | 2SA1037K |
| | Q3004 | | 2SA1267 |
| ⚠ | Q3001 | | 2SB1566 |
| | Q3006, Q3009, Q3010, Q3012 | | 2SC2412K |
| | Q3003 | | 2SC3199 |
| | Q3007 | | 2SD1858X |
| | Q3015, Q3016 | | 2SD2114K |
| ⚠ | Q3002 | | 2SD2395 |
| | Q3017 | | DTA143EK |
| | Q3008 | | DTC114EK |
| | Q3005 | | DTC124EK |
| ⚠ | Q3011 | | IRFI9Z24G |
| | D3005-D3007, D3011-D3013 | | 1SS254 |
| | D3016, D3017 | | 1SS254 |
| | D3009, D3015 | | MTZJ18C |
| | D3014 | | MTZJ6.8B |
| | D3001 | | MTZJ8.2C |
| ⚠ | D3002, D3003 | | MTZJ8.2C |

## CAPACITORS

| | | | |
|---|---|---|---|
| | C3022 | | CEAT100M50 |
| | C3018 | | CEAT101M16 |
| | C3017 | | CEAT101M35 |
| | C3005, C3013 | | CEAT1R0M50 |
| | C3003, C3004 | | CEAT470M25 |
| | C3016 | | CEJA220M35 |
| | C3007, C3009, C3014 | | CEJA2R2M50 |
| | C3021 | | CEJA470M16 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C3019, C3020 | | CEJAR47M50 |
| | C3025 | | CKSQYB102K50 |
| | C3006, C3008, C3015 | | CKSQYF104Z50 |
| | C3026, C3027 | | CKSQYF105Z16 |
| | C3001, C3002 | | CKSQYF473Z50 |
| | C3023, C3024 | | CQMA103J50 |

### RESISTORS

| | | |
|---|---|---|
| R3014 | | RD1/2PM330J |
| R3039 | | RD1/4PU103J |
| R3045 | | RD1/4PU472J |
| R3020 | | RN1/4PC1001F |
| R3021 | | RN1/4PC1601F |
| Other Resistors | | RS1/10S□□□J |

### OTHERS

| | | |
|---|---|---|
| | PCB BINDER | DEF1012 |

## Q POWER SUPPLY ASSY (for XR-A700)

### SEMICONDUCTORS

| Mark | | |
|---|---|---|
| | IC3004 | NJM4558DXP |
| ⚠ | IC3002 | NJM7812FA |
| ⚠ | IC3003 | NJM78M56FA |
| | Q3004 | 2SA1267 |
| ⚠ | Q3001 | 2SB1566 |
| | Q3006, Q3009 | 2SC2412K |
| | Q3003 | 2SC3199 |
| | Q3007 | 2SD1858X |
| ⚠ | Q3002 | 2SD2395 |
| | Q3017 | DTA143EK |
| | Q3008 | DTC114EK |
| | Q3005 | DTC124EK |
| | D3005-D3007, D3016 | 1SS254 |
| | D3009 | MTZJ18C |
| | D3001 | MTZJ8.2C |
| ⚠ | D3002, D3003 | MTZJ8.2C |

### CAPACITORS

| | | |
|---|---|---|
| | C3022 | CEAT100M50 |
| | C3005, C3013 | CEAT1R0M50 |
| | C3003, C3004 | CEAT470M25 |
| | C3016 | CEJA220M35 |
| | C3007, C3009, C3014 | CEJA2R2M50 |
| | C3006, C3008, C3015 | CKSQYF104Z50 |
| | C3001, C3002 | CKSQYF473Z50 |

### RESISTORS

| | | |
|---|---|---|
| | R3014 | RD1/2PM330J |
| | Other Resistors | RS1/10S□□□J |

### OTHERS

| | | |
|---|---|---|
| | PCB BINDER | DEF1012 |

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

## R SECONDARY ASSY

### SEMICONDUCTORS

| | | | |
|---|---|---|---|
| ⚠ | IC204 | PROTECTOR (3.15A) | AEK7016 |
| ⚠ | IC202 | PROTECTOR (5A) (for XR-A800) | AEK7019 |
| ⚠ | IC202 | PROTECTOR (2.5A) (for XR-A700) | AEK7014 |
| ⚠ | IC201 | PROTECTOR (5A) (for XR-A800) | AEK7046 |
| ⚠ | IC201 | PROTECTOR (2.5A) (for XR-A700) | AEK7049 |
| ⚠ | IC203 | PROTECTOR (3.15A) | AEK7051 |
| ⚠ | D201 | (XR-A800 only) | D2SBA20(B) |
| ⚠ | D202, D203 | | S5688G |

### CAPACITORS

| | | | |
|---|---|---|---|
| ⚠ | C202 | (XR-A800 only) | CEAT332M35 |

## J GM-CD ASSY

### SEMICONDUCTORS

| | | |
|---|---|---|
| IC8151 | | CXA1372BQ |
| IC8301 | | CXD2519Q |
| IC8203 | | LA6517 |
| IC8201, IC8202 | | LA6520 |
| IC8001 | | PD4859A |
| Q8002 | | 2SC2712 |
| Q8401, Q8402 | | 2SD2114K |
| Q8301 | | 2SK373 |
| Q8302 | | DTA124EK |
| Q8403, Q8404 | | DTA143EK |
| Q8001, Q8303 | | DTC143EK |
| D8001, D8003, D8004, D8301-D8303 | | 1SS254 |
| D8401, D8402 | | DAN202K |
| D8219 | | MTZJ6.2B/C |

### COILS AND FILTERS

| | |
|---|---|
| L8301 | LAU1R2J |
| L8001 | LAU220J |

### CAPACITORS

| | |
|---|---|
| C8003 (0.047F/5.5V) | ACH1246 |
| C8313 | CCSQCH100D50 |
| C8009, C8014-C8016, C8319, C8321 | CCSQCH101J50 |
| C8401, C8402 | CCSQCH151J50 |
| C8314 | CCSQCH220J50 |
| C8167 | CCSQCH561J50 |
| C8002 | CEAT100M50 |
| C8007 | CEAT221M6R3 |
| C8403, C8404 | CEAT2R2M50 |
| C8017 | CEAT330M16 |
| C8201, C8202 | CEAT331M16 |
| C8001 | CEAT470M16 |
| C8301 | CEAT471M6R3 |
| C8155, C8156 | CEAT4R7M50 |
| C8008, C8309 | CEATR47M50 |
| C8317 | CGCYF104Z25 |
| C8010, C8012, C8164, C8312, C8320 | CKSQYB102K50 |
| C8151, C8158, C8162, C8316, C8602 | CKSQYB103K50 |
| C8306 | CKSQYB152K50 |
| C8160, C8163, C8166 | CKSQYB333K50 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C8165 | | CKSQYB472K50 |
| | C8004-C8006, C8307 | | CKSQYB473K50 |
| | C8405, C8406 | | CKSQYB681K50 |
| | C8159, C8205, C8210, C8215 | | CKSQYF103Z50 |
| | C8219, C8220, C8225, C8230, C8235 | | CKSQYF103Z50 |
| | C8245 | | CKSQYF103Z50 |
| | C8019, C8152-C8154, C8157, C8161 | | CKSQYF104Z50 |
| | C8303, C8318 | | CKSQYF104Z50 |
| | **RESISTORS** | | |
| | R8248 | | RD1/4PU100J |
| | R8001-R8003, R8011-R8013 | | RD1/4PU102J |
| | R8035, R8036 | | RD1/4PU102J |
| | R8015 | | RD1/4PU203J |
| | R8409, R8410 | | RD1/4PU221J |
| | R8023, R8024, R8221, R8222 | | RD1/4PU473J |
| | R8226, R8227 | | RD1/4PU473J |
| | VR8151, VR8152 | | RCP1103 |
| | Other Resistors | | RS1/10S□□□J |
| | **OTHERS** | | |
| | CN8005 | 5P JUMPER CONNECTOR | 52147-0510 |
| | CN8002 | CONNECTOR 22P | HLEM22S-1 |
| | CN8001 | CONNECTOR 35P | HLEM35S-1 |
| | CN8201 | 6P JACK | VKN-004 |
| | KN8001 | EARTH METAL FITTING | VNF1084 |
| | X8301 | CRYSTAL RESONATOR (33.8688MHz) | ASS7000 |
| | X8001 | CERAMIC RESONATOR (4.19MHz) | VSS1014 |
| | **X HP ASSY** | | |
| | **SEMICONDUCTORS** | | |
| | Q5501-Q5504 | | 2SD2114K |
| | **CAPACITORS** | | |
| | C5504, C5505 | | CEANP4R7M50 |
| | C5503 | | CKSQYF104Z50 |
| | **RESISTORS** | | |
| | R5505, R5506 | | RS3LMF331J |
| | Other Resistors | | RS1/10S□□□J |
| | **OTHERS** | | |
| | JACK | | AKN7003 |
| | **Y RIGHT SW ASSY** | | |
| | **SEMICONDUCTORS** | | |
| | Q5701, Q5702 | | DTC143EK |
| | D5701-D5704 LED (PURE GREEN) | | SLP7118C51H |
| | **SWITCHES AND RELAYS** | | |
| | S5701-S5718 | | ASG1034 |
| | **RESISTORS** | | |
| | All Resistors | | RD1/4PM□□□J |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | **OTHERS** | | |
| | CN5701 | 13P JUMPER CONNECTOR | 52151-1310 |
| | **V LEFT SW ASSY** | | |
| | **SEMICONDUCTORS** | | |
| | Q5601, Q5602 | | DTA143EK |
| | Q5604-Q5606 | | DTC143EK |
| | D5601-D5603 LED (PURE GREEN) | | SLP7118C51H |
| | D5604 LED (RED/GREEN) | | VRBG3312X |
| | **SWITCHES AND RELAYS** | | |
| | S5601-S5610 | | ASG1034 |
| | **RESISTORS** | | |
| | R5603, R5606 | | RS1/10S473J |
| | Other Resistors | | RD1/4PM□□□J |
| | **L DOOR SW ASSY** | | |
| | **SWITCHES AND RELAYS** | | |
| | S8002 | | DSG1016 |
| | S8003 | | PSG1008 |
| | **W DOOR LED ASSY** | | |
| | **SEMICONDUCTORS** | | |
| | Q5801-Q5805 | | DTC143EK |
| | D5809, D5814 LED (GREEN) | | SLP3118C51H |
| | D5808, D5813 LED (YELLOW) | | SLP4118C51H |
| | D5807, D5812 LED (ORANGE) | | SLP6118C51H |
| | D5810, D5815 LED (PURE GREEN) | | SLP7118C51H |
| | D5806, D5811 LED (RED) | | SLP9118C51H |
| | **RESISTORS** | | |
| | All Resistors | | RD1/4PM□□□J |
| | **OTHERS** | | |
| | CN5801 | CONNECTOR 7P | 52045-0745 |
| | **O TX CONNECT ASSY** | | |
| | **SEMICONDUCTORS** | | |
| | D1401, D1402 | | 1SS254 |
| | **RESISTORS** | | |
| | R1405 | | RD1/4PM473J |
| | Other Resistors | | RS1/10S□□□J |
| | **OTHERS** | | |
| | CN1010 | 14P PLUG | KM200IB14 |
| | CN1009 | 12P SOCKET | KP200TA12L |
| | **M DOOR MOTOR ASSY** | | |
| | **OTHERS** | | |
| | J8009 | 3P JUMPER WIRE | D20PWW0310E |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| **K** | | **HOME SW ASSY** | |
| | | **SWITCHES AND RELAYS** | |
| | S8001 | | DSG1048 |
| **S** | | **PRIMARY ASSY** | |
| | | **COILS AND FILTERS** | |
| ⚠ | L101 | | ATF1136 |
| | | **SWITCHES AND RELAYS** | |
| ⚠ | S101 | | AKX7006 |
| | | **CAPACITORS** | |
| ⚠ | C102 (0.01µF/AC250V) | | ACG7020 |
| | | **OTHERS** | |
| | H101-H106 | FUSE CLIP | AKR1004 |
| **T** | | **DISPLAY ASSY** | |
| | | **SEMICONDUCTORS** | |
| | IC5201 (for XR-A800) | | BA3834F |
| | IC5201 (for XR-A700) | | BA3835F |
| | IC5401, IC5402 | | BU4094BCF |
| | IC5001 | | PDG205A |
| | Q5407 | | 2SB1197K |
| | Q5001, Q5002 | | 2SC2412K |
| | Q5409, Q5410 | | 2SD1781K |
| | Q5403-Q5406 | | DTA124EK |
| | Q5408 | | DTC124EK |
| | Q5401, Q5402, Q5413-Q5417 | | DTC143EK |
| | D5001, D5404-D5407, D5409-D5413 | | 1SS254 |
| | D5422 (XR-A800 only) | | 1SS254 |
| | D5415-D5417, D5419-D5421 | | 1SS254 |
| | D5423-D5427 | | 1SS254 |
| | D5402, D5403, D5432, D5433 | | 1SS355 |
| | D5006, D5007 | | MTZJ5.1B |
| | D5004 | | MTZJ6.2B |
| | D5002 | | S5688G |
| | D5401, D5428-D5431 | | SLP7118C51H |
| | | **COILS AND FILTERS** | |
| | L5001 | | LAU220J |
| | | **SWITCHES AND RELAYS** | |
| | S5002 | | ASX7012 |
| | S5001 | | ASX7017 |
| | | **CAPACITORS** | |
| | C5029, C5030 | | CCSQCH101J50 |
| | C5205 | | CCSQCH471J50 |
| | C5031 | | CEAL220M35 |
| | C5025 | | CEAT100M50 |
| | C5002 | | CEJA100M50 |
| | C5005 | | CEJA1R0M50 |
| | C5009 | | CEJA221M10 |
| | C5007, C5014 | | CEJA470M16 |
| | C5004 | | CEJAR47M50 |
| | C5006, C5032-C5034 | | CKSQYB102K50 |
| | C5015-C5018 (XR-A800 only) | | CKSQYB103K50 |
| | C5011-C5013 | | CKSQYB103K50 |
| | C5020, C5021, C5023 | | CKSQYB103K50 |
| | C5403, C5405 | | CKSQYB333K50 |
| | C5019 (XR-A800 only) | | CKSQYB473K50 |
| | C5001, C5003, C5027, C5028 | | CKSQYB473K50 |
| | C5008, C5010, C5026, C5201-C5204 | | CKSQYF104Z50 |
| | C5024 | | CKSQYF105Z16 |
| | | **RESISTORS** | |
| | R5097 | | RA10T473J |
| | R5098, R5099 | | RA15T473J |
| | R5401, R5418 | | RD1/4PU681J |
| | VR5401 (2.2kΩ) | | RCP1019 |
| | Other Resistors | | RS1/10S□□□J |
| | | **OTHERS** | |
| | | CABLE HOLDER 9P | 51063-0905 |
| | | CABLE HOLDER 15P | 51063-1505 |
| | CN5401 | CONNECTOR 7P | 52045-0745 |
| | CN5001 | CONNECTOR 28P | 9607S-28F |
| | V5001 | FL TUBE | AAV7044 |
| | X5001 | CERAMIC RESONATOR (8MHz) | EFOEC8004A4 |
| | | REMOTE RECEIVER UNIT | GP1U28X |
| | | FL HOLDER | VNF1087 |
| **U** | | **SUB DISPLAY ASSY (XR-A800 only)** | |
| | | **SEMICONDUCTORS** | |
| | IC7001 | | LC7570 |
| | Q7004, Q7006, Q7007 | | 2SC2712 |
| | Q7003 | | DTA143EK |
| | Q7005 | | DTC124EK |
| | Q7001, Q7002 | | DTC143EK |
| | D7004-D7007 | | MBG5074X |
| | D7002, D7003, D7008-D7010 | | SLP7118C51H |
| | | **SWITCHES AND RELAYS** | |
| | S7002, S7004 | | ASG1034 |
| | S7003 | | ASX7012 |
| | S7001 | | ASX7017 |
| | | **CAPACITORS** | |
| | C7006-C7008 | | CCSQCH221J50 |
| | C7010 | | CEAT100M50 |
| | C7011, C7013 | | CEJA100M35 |
| | C7001-C7005 | | CKSQYB102K50 |
| | C7012, C7014 | | CKSQYB473K50 |
| | C7009 | | CKSQYF104Z50 |
| | | **RESISTORS** | |
| | R7012, R7013 | | RA15T473J |
| | R7017, R7018 | | RD1/4PM561J |
| | R7004, R7005 | | RD1/4PM681J |
| | R7019 | | RD1/4PU391J |
| | Other Resistors | | RS1/10S□□□J |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| **OTHERS** | | | |
| | V7001 | FL TUBE | AAV7043 |

## A FM/AM TUNER MODULE

### SEMICONDUCTORS

| | |
|---|---|
| IC6201 | LA1832ML |
| IC6202 | LC72131MD |
| Q6402 | 2SC2223 |
| Q6203 | 2SC2705 |
| Q6201, Q6202 | 2SC2712 |
| Q6214, Q6403 | 2SC2714 |
| Q6404 | 2SK302 |
| Q6401 | 3SK194 |
| Q6204 | DTA124ES |
| Q6205 | DTC124EK |
| D6202 | 1SS254 |
| D6401, D6402 | 1T363 |

### COILS AND FILTERS

| | |
|---|---|
| L6404 | ATC1003 |
| L6401 | ATC1020 |
| L6402 | ATC1021 |
| F6204 | ATF-107 |
| F6203 | ATF-119 |
| F6401 | ATF-155 |
| F6206 | ATF7008 |
| F6202 | ATF7011 |
| L6206, L6208, L6403 | LAU2R2J |

### TRANSFORMERS

| | |
|---|---|
| T6201 | ATB7008 |
| T6401 | ATE7002 |

### CAPACITORS

| | |
|---|---|
| C6208 | CCSQCH100D50 |
| C6212, C6274, C6275, C6408 | CCSQCH101J50 |
| C6221, C6222, C6416 | CCSQCH150J50 |
| C6271 | CCSQCH200J50 |
| C6415 | CCSQCH330J50 |
| C6401, C6419 | CCSQCH5R0C50 |
| C6407 | CCSQCK1R0C50 |
| C6410 | CCSQCK2R0C50 |
| C6413 | CCSQPH220J50 |
| C6414 | CCSQPH8R0D50 |
| C6405 | CCSQTH180J50 |
| C6234, C6235 | CEAL1R0M50 |
| C6245 | CEAL470M16 |
| C6224 | CEAS100M50 |
| C6243 | CEAS101M16 |
| C6231 | CEAS1R0M50 |
| C6227 | CEAS220M16 |
| C6236 | CEAS2R2M50 |
| C6216 | CEAS330M16 |
| C6262 | CEAS3R3M50 |
| C6219 | CEAS470M10 |
| C6244 | CEAS470M16 |
| C6249, C6250, C6265, C6266 | CEAS4R7M50 |
| C6258 | CEJA470M16 |
| C6215 | CFTLA103J50 |
| C6214 | CFTLA224J50 |
| C6211, C6254, C6403, C6406, C6412 | CKSQYB102K50 |
| C6201, C6205, C6210, C6213, C6237 | CKSQYB103K50 |
| C6276, C6278, C6280, C6281, C6402 | CKSQYB103K50 |
| C6409, C6417, C6418 | CKSQYB103K50 |
| C6251, C6252 | CKSQYB153K50 |
| C6203, C6259 | CKSQYB223K50 |
| C6228 | CKSQYB472K50 |
| C6209 | CKSQYB473K50 |
| C6230 | CKSQYB821K50 |
| C6218, C6223, C6255 | CKSQYF103Z50 |
| C6220, C6226, C6242, C6256 | CKSQYF223Z50 |
| C6225 | CKSQYF473Z50 |

### RESISTORS

| | |
|---|---|
| R6280 | RD1/4PU101J |
| R6413, R6416, R6418, R6906, R6909 | RS1/8S0R0J |
| R6401 | RS1/8S470J |
| VR6201 (10kΩ) | RCP1045 |
| Other Resistors | RS1/10S□□□J |

### OTHERS

| | | |
|---|---|---|
| BN6202 | TERMINAL 4P | AKE7025 |
| X6202 | CERAMIC RESONATOR (456kHz) | ASS1066 |
| X6201 | CRYSTAL RESONATOR (7.2000MHz) | ASS1093 |
| CN6201 | 14P SOCKET | KP200IA14L |
| | AM RF TUNING BLOCK | AXX7041 |

## G SENSOR BOARD ASSY

### SEMICONDUCTORS

| | |
|---|---|
| Q601-Q604 | PS3322 |

### RESISTORS

| | |
|---|---|
| All Resistors | RD1/4PU□□□J |

### OTHERS

| | | |
|---|---|---|
| CN601 | 7P JUMPER WIRE | 52151-0710 |

## H LED BOARD ASSY

### SEMICONDUCTORS

| | |
|---|---|
| D601-D604 | AN329 |

### RESISTORS

| | |
|---|---|
| All Resistors | RD1/4PU□□□J |

### OTHERS

| | | |
|---|---|---|
| J601 | 3P JUMPER WIRE | D20PWW0315E |

## I MOTOR BOARD ASSY

### OTHERS

| | | |
|---|---|---|
| J602 | 3P JUMPER WIRE | D20PWW0305E |

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

## C SENSOR PCB ASSY

### SEMICONDUCTORS

| | | |
|---|---|---|
| D652 | | GP1S24 |

### OTHERS

| | | |
|---|---|---|
| J652 | 3P JUMPER WIRE | D20PWW0315E |

## D MOTOR PCB ASSY

### OTHERS

| | | |
|---|---|---|
| | LOADING MOTOR | VXM1034 |

## E SW PCB ASSY

### SWITCHES AND RELAYS

| | | |
|---|---|---|
| S651, S652 | | VSG1006 |

### OTHERS

| | | |
|---|---|---|
| J656 | 3P JUMPER WIRE | D20PWW0315E |

## F MECHA PCB ASSY

### SEMICONDUCTORS

| | | |
|---|---|---|
| Q651 | | DTC124ES |

### RESISTORS

| | | |
|---|---|---|
| R651, R652 (56kΩ) | | ACN7012 |
| R653 (220Ω) | | DCN1062 |
| R654 (0Ω) | | DCN1065 |

### OTHERS

| | | |
|---|---|---|
| CN652 | 12P CONNECTOR | 12FMZ-AST |
| CN651 | 4P CONNECTOR | 173979-4 |
| CN653 | 22P CONNECTOR | SLEM22R-2 |

## B MECHANISM BOARD ASSY

### SWITCHES AND RELAYS

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

### OTHERS

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

# 6. ADJUSTMENT

## 6.1 TUNER SECTION

### ■ FM Tuner Section

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

| Step No. | Adjustment Title | FM SG (1kHz, ±75kHz dev.) | | Reception Frequency Display | Adjustment Location | Specifications |
|---|---|---|---|---|---|---|
| | | Frequency (MHz) | Level (dBμV) | | | |
| 1 | Front End Sensitivity | 98 | 0–30 | 98MHz | L6402 T6401 | Adjust so that the DC voltage between the IC6201-Pin 20 and GND becomes at maximum level. |
| 2 | TUNED IND. Lighting Level | 98 | 18±2 | 98MHz | VR6201 | Adjust so that the indicator of TUNED IND. starts to light up. |

*Notes:*

- *Before adjusting, make sure there is no gap between L6401 and L6402. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*

### ■ AM Tuner Section

- Set the mode 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 (dBμV/m) | | | |
| 1 | AM Front and Sensitivity Adjustment | 999*1 | 35–45 | 999kHz*1 | T6201 | Adjust so that the DC voltage between the IC6201-Pin 20 and GND becomes at maximum level. |

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

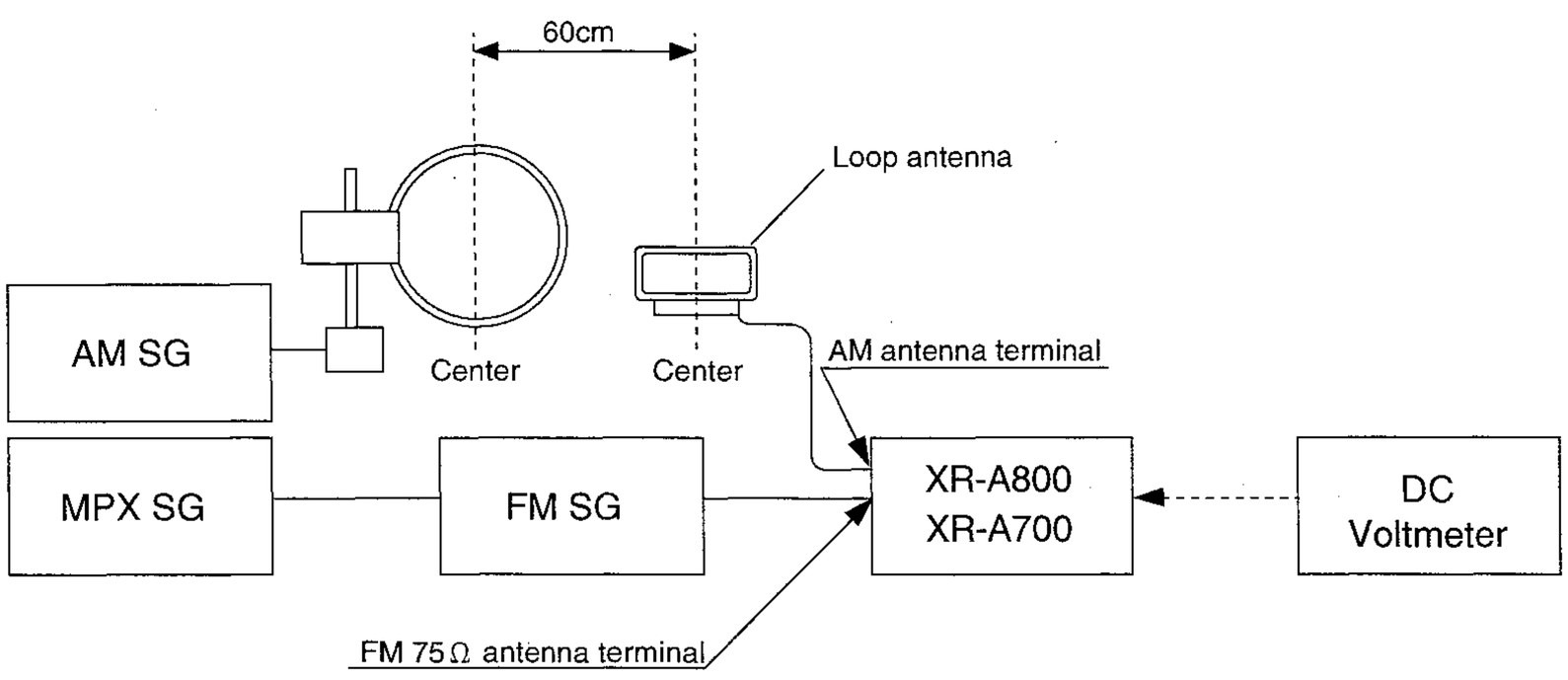



Fig. 1–1 AM and FM Adjustment Wiring Diagram

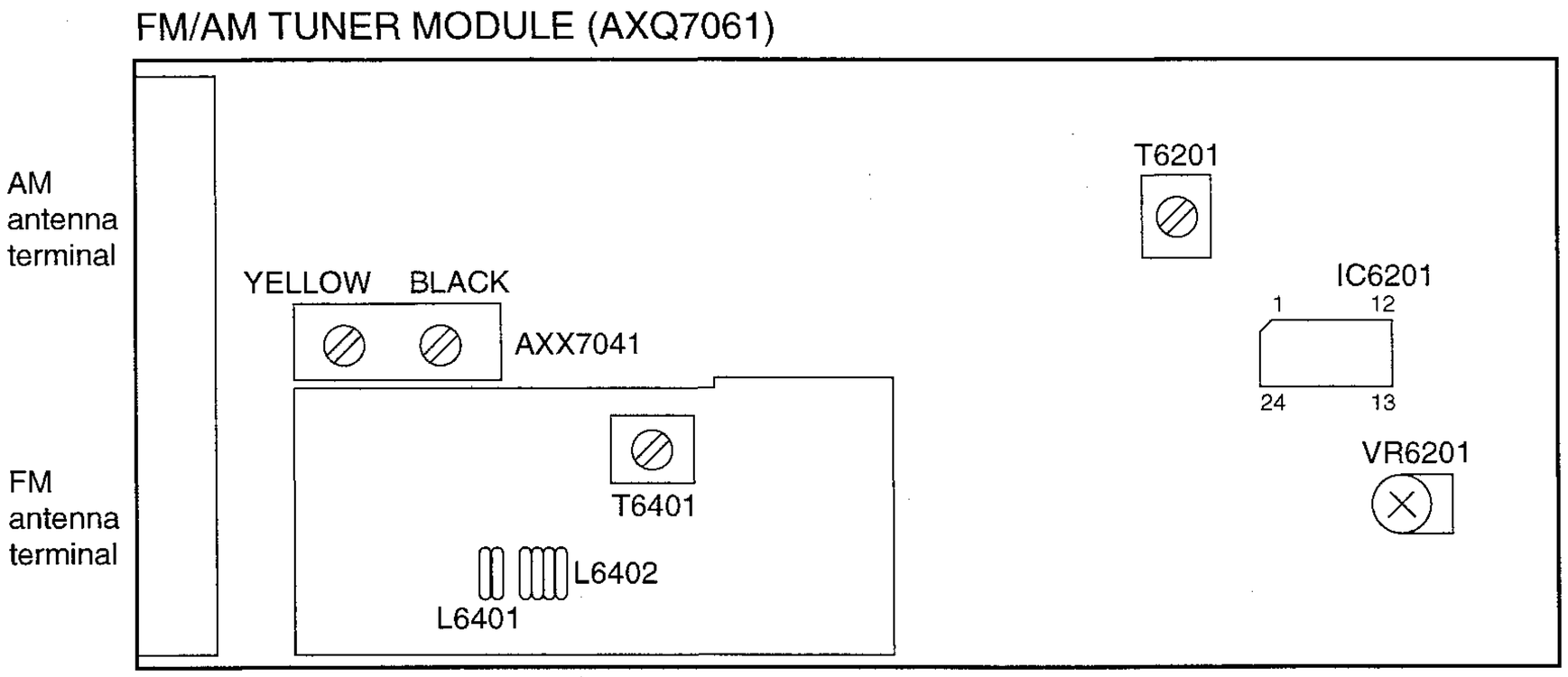


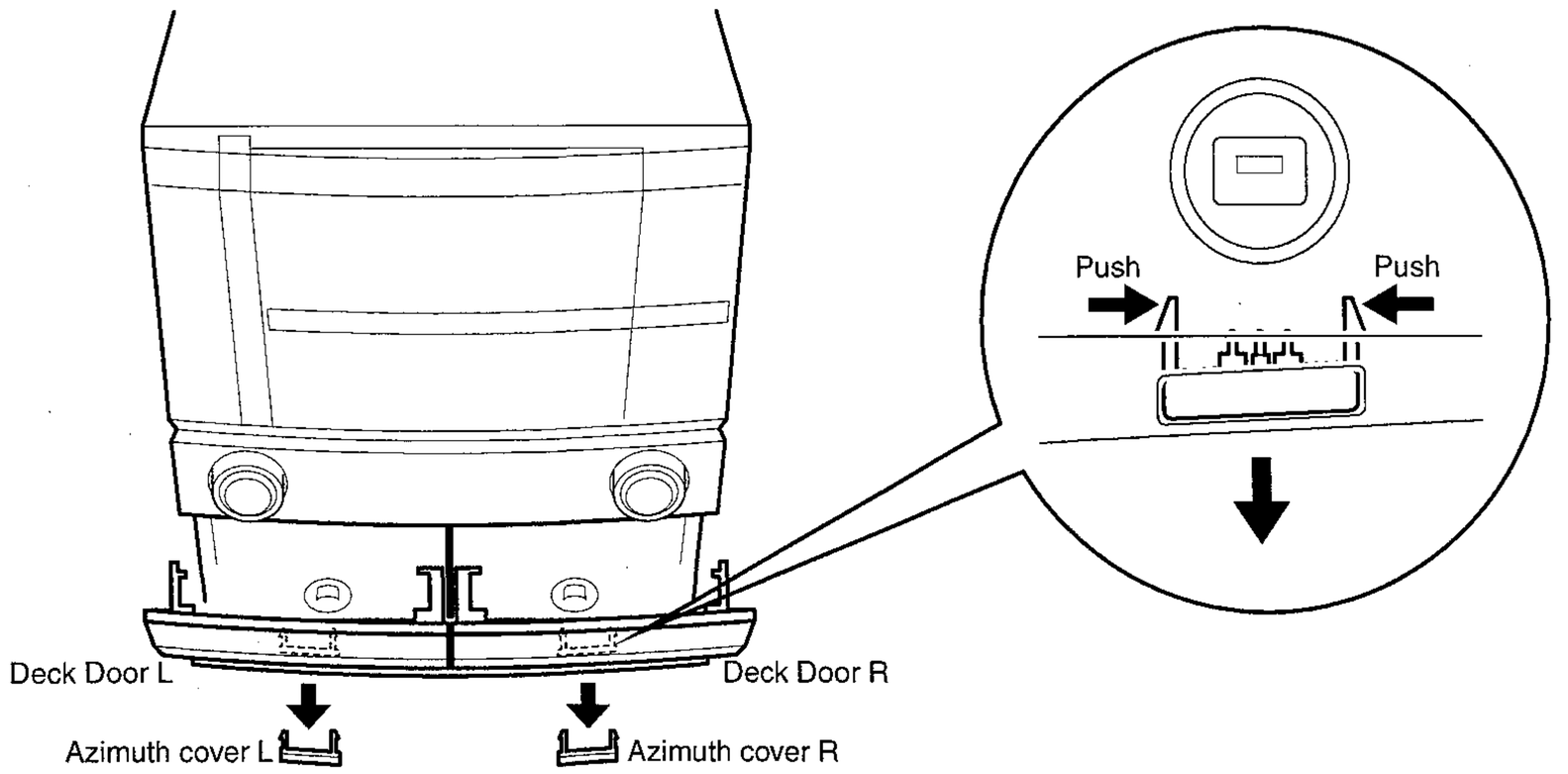

Fig. 1–2 Adjustment Points

# 6.2 CASSETTE DECK SECTION

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

## ■ Before Adjustment

1. For execution of head angle adjustment, first remove the Azimuth cover (L) and (R).
2. Open the cassette doors (L) and (R).
3. Insert your fingers into the cassette door, push down the two hooks at the upper side of the Azimuth cover, and push them slightly out to the front. Excessive pushing at this time may make it impossible to close the cassette door.
4. Confirm that the Azimuth cover (L) and (R) have been pushed out a little to the front, and then close the cassette doors (L) and (R) and remove the Azimuth cover.




## ■ Mechanical Adjustment

● Test tape: NCT-111 (3kHz, 30min).

### 1. Tape Speed Adjustment

Remove the VOLUME KNOB to adjust tape spend.

| No. | Mode | Test Tape | Adjusting Points | Measurement Points | Adjustment Procedure | Remarks |
|---|---|---|---|---|---|---|
| 1 | Deck I PLAY | NCT-111 (Playback: 3kHz) | DISPLAY Assy VR5401 | TAPE TEST POINT (Rch) (AF Assy) | Press the PLAY SW and adjust so that the reading becomes 3000Hz ±20Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3000Hz ±60Hz). | |

## ■ Electrical Adjustment

### 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. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD-331E: For playback adjustment
   STD-632: Normal blank tape
5. Provide yourself with the following measuring devides:
   - AC millivoltmeter
   - Low-frequency oscillator
   - Attenuator
   - Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. 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.
9. 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. Bias Oscillation Frequency Adjustment
2. Recording Bias Adjustment
3. Recording Level Adjustment.
4. ALC Operation Check

* *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.*



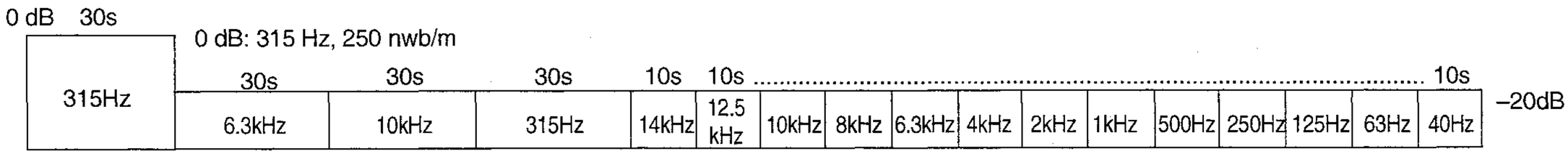



Fig. 2–1 STD-331E Test Tape

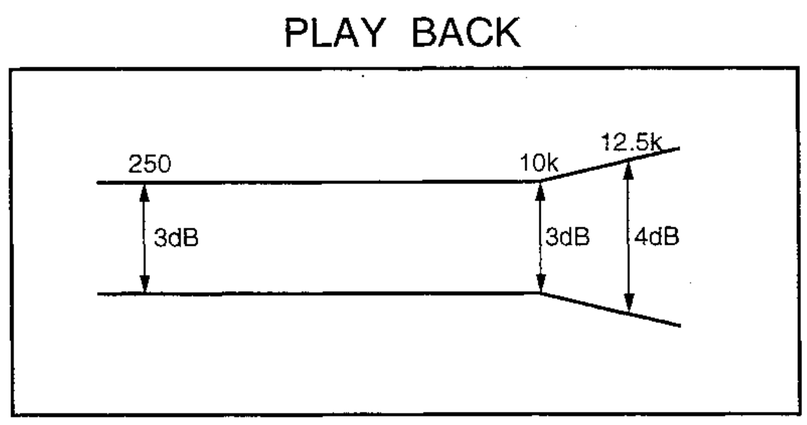



Fig. 2–2 Frequency Characteristics

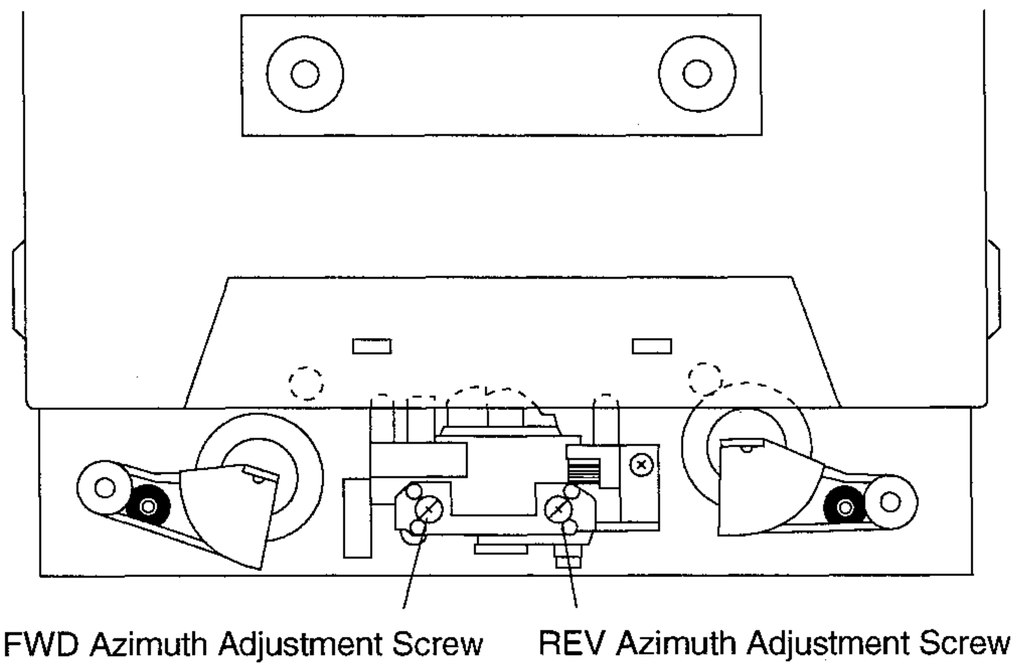



Fig. 2–3 Head Azimuth Adjustment

## ■ Playback Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

### 1. Head Azimuth Adjustment

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

### 2. Playback Level Adjustment

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

| Step | Tape Selector (AUTO) | Mode | Input Signal/ Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | AUTO (NORMAL) | PLAY | STD-331E test tape (Playback: 315Hz, 0dB) | Deck I | VR4203 (Lch) VR4204 (Rch) | TAPE TEST POINT (L, Rch) (AF Assy) | – 4.2 dBV | |
| | | | | Deck II | VR4201 (Lch) VR4202 (Rch) | | | |

*Note: Please execute playback level adjustment always in the order of deck I → deck II*
*When deck I has been adjusted, always adjust deck II also.*

## ■ Recording Adjustment

### 1. Bias Oscillation Frequency Adjustment

| Step | Tape Selector (AUTO) | Mode | Input Signal/ Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | AUTO (NORMAL) | REC | Load the STD–632 test tape and set the recording mode. | Deck I | ———— | ———— | Oscillation frequency to be 105.0kHz ±2kHz. | When the power is turned ON while the MEMORY button is depressed, the frequency will decrease 2 – 3 kHz. |
| | | | | Deck II | L4351 | Between Ⓐ point in Fig. 2-4 and GND. | | |

### 2. Recording Bias Adjustment

| Step | Tape Selector (AUTO) | Mode | Input Signal/Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | AUTO (NORMAL) | REC | Input a 315Hz signal to the AUX terminal and set the input selector to AUX. | Deck I | —— | TAPE TEST POINT (L, Rch) (AF Assy) | – 24.2 dBV | |
| | | | | Deck II | Input signal level | | | |
| 2 | AUTO (NORMAL) | REC→ PLAY | Load the STD-632 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below) | Deck I | —— | TAPE TEST POINT (L, Rch) (AF Assy) | Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal. | |
| | | | | Deck II | VR4351 (Lch) VR4352 (Rch) | | | |

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

### 3. Recording Level Adjustment

| Step | Tape Selector (AUTO) | Mode | Input Signal/Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | AUTO (NORMAL) | REC | Input a 315Hz signal to the AUX terminal and set the input selector to AUX. | Deck I<br>Deck II | Input signal level | TAPE TEST POINT (L, Rch) (AF Assy) | – 8.2 dBV | |
| 2 | AUTO (NORMAL) | REC → PLAY | STD-632 test tape and record/ playback the 315Hz signal. | Deck I<br>Deck II | ——<br>VR4301 (Lch) VR4302 (Rch) | TAPE TEST POINT (L, Rch) (AF Assy) | Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes –8.2dBV. | |

### 4. ALC Operation Check

| Step | Tape Selector (AUTO) | Mode | Input Signal/Test Tape | Adjusting Points | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | AUTO (NORMAL) | REC | Input a 315Hz signal to the AUX terminal and set the input selector to AUX. | Input signal level | TAPE TEST POINT (L, Rch) (AF Assy) | – 8.2 dBV | |
| 2 | | | | Set to a level +6 dB above the input level at step 1. | | Confirm that the reading is –3.2±2.5dBV. | |

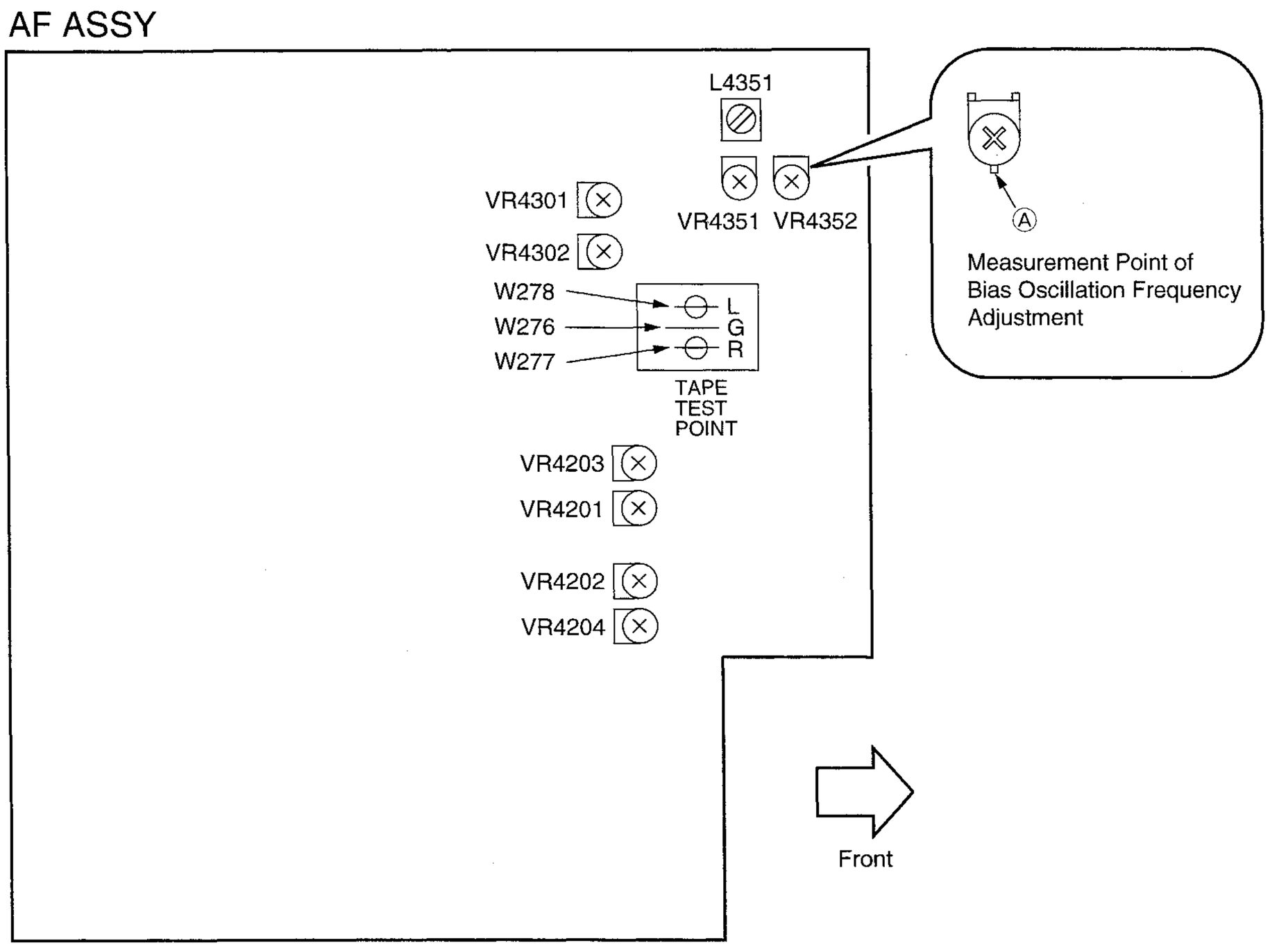
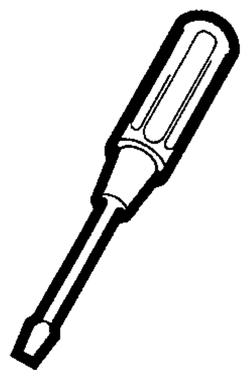
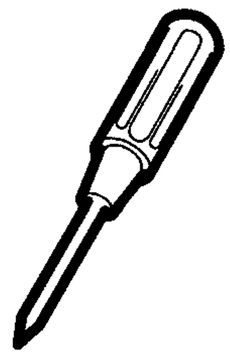
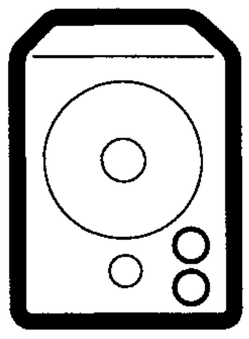
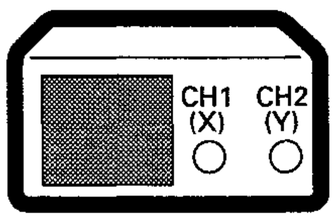
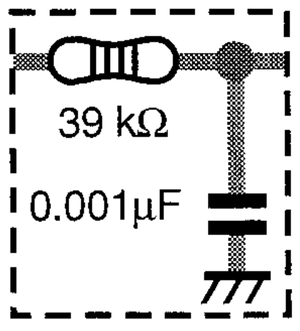



Fig. 2–4 Adjustment and Measurement points

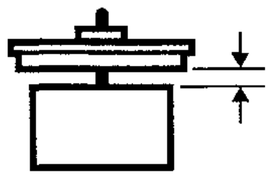
# 6.3 CD SECTION (CD 部の調整)

## 1. PREPARATIONS (準備)

### 1.1 Jigs and Measuring Instruments (使用測定器 / 治工具類)

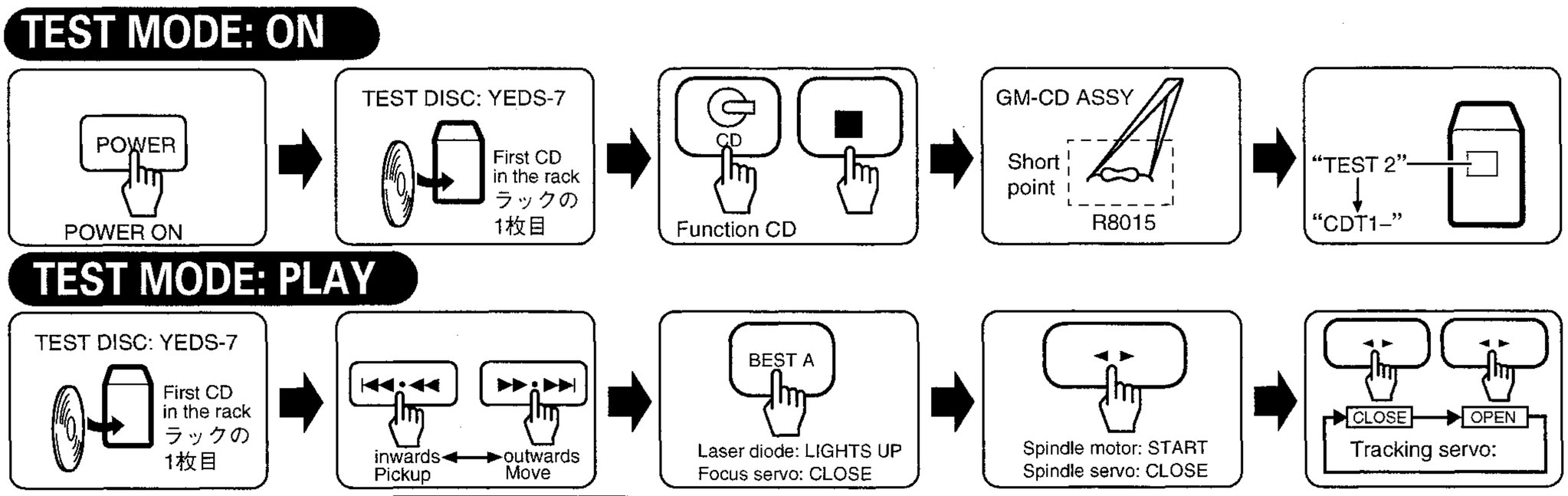
| | | | |
|---|---|---|---|
|  <br>CD TEST DISC<br>(YEDS-7) |  <br>⊖ Precise screwdriver |  <br>⊖ screwdriver (small) |  <br>⊕ screwdriver (medium) |
|  <br>⊕ screwdriver (large) |  <br>Low-frequency oscillator |  <br>Dual-trace oscilloscope (10 : 1 probe) |  <br>Low pass filter (39 kΩ + 0.001μF) |

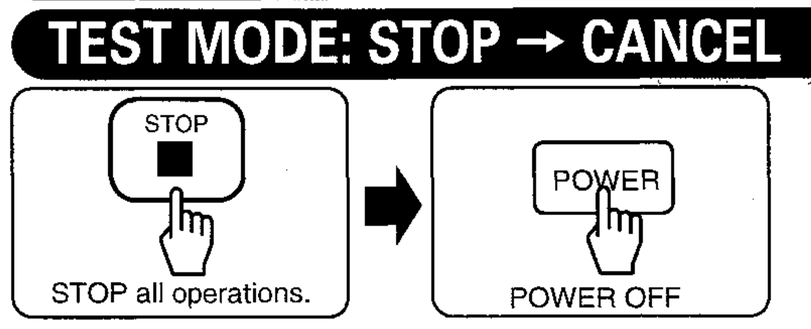
### 1.2 Necessary Adjustment Points (調整に必要な項目)

| When (このような時) | Adjustment points |
|---|---|
| Exchange<br>PICKUP<br>(ピックアップを交換した時) | 1.2.3.4.5.6. → Page 72—74 |
| Exchange<br>CD ASSY<br>(CD ASSYを交換した時) | 1.2.3.4.5.6. → Page 72—74 |
| Exchange<br>SERVO MECH ASSY<br>(サーボメカ ASSYを交換した時) | 1.2.3.4.5.6. → Page 72—74 |
| Exchange<br>SPINDLE MOTOR<br>(スピンドルモーターを交換した時) |  ADJ → Page 13 |

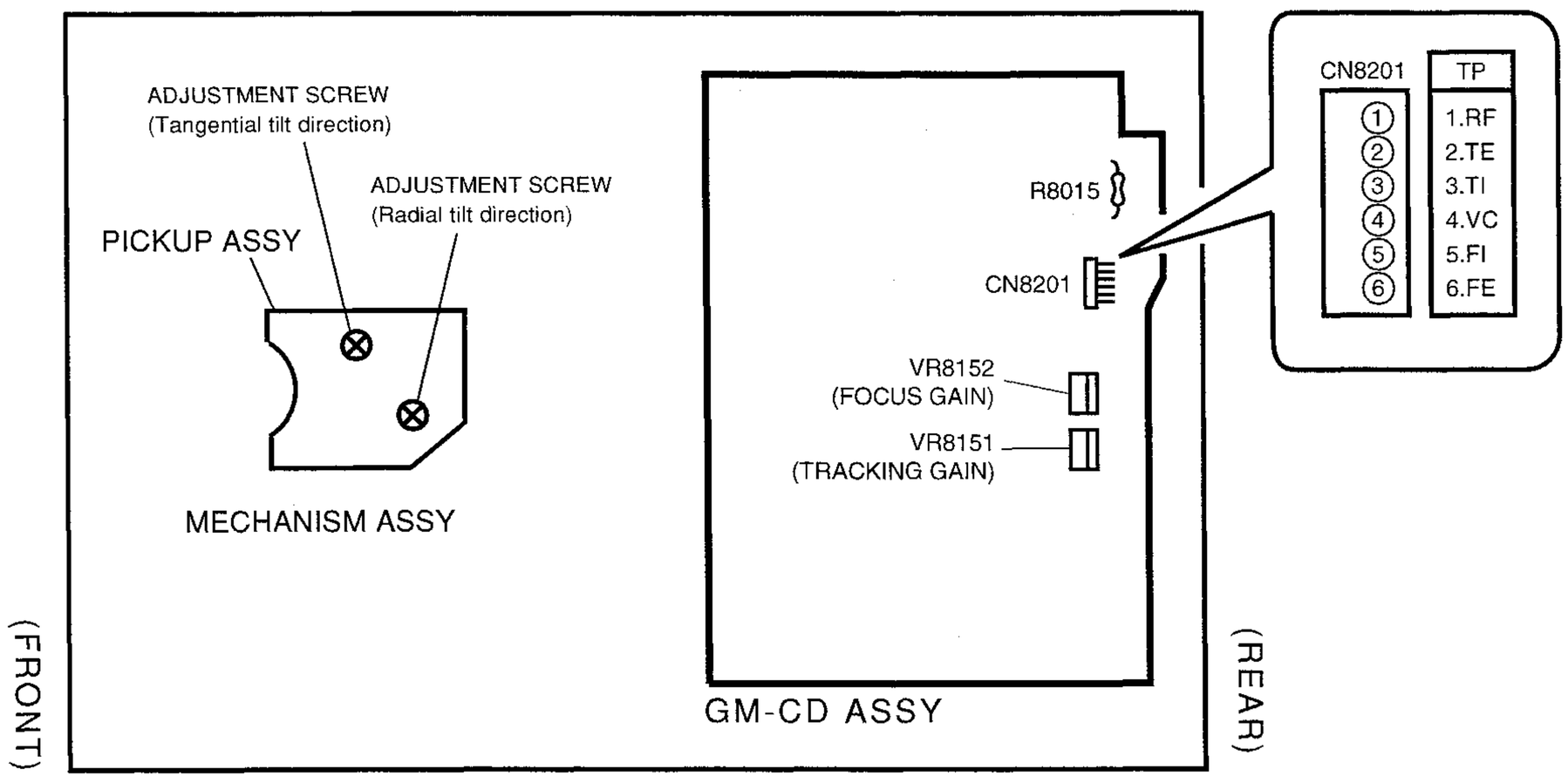
# 2. ADJUSTMENT (調整)

## 2.1 How to Start/Cancel Test Mode （テストモードの設定 / 解除）



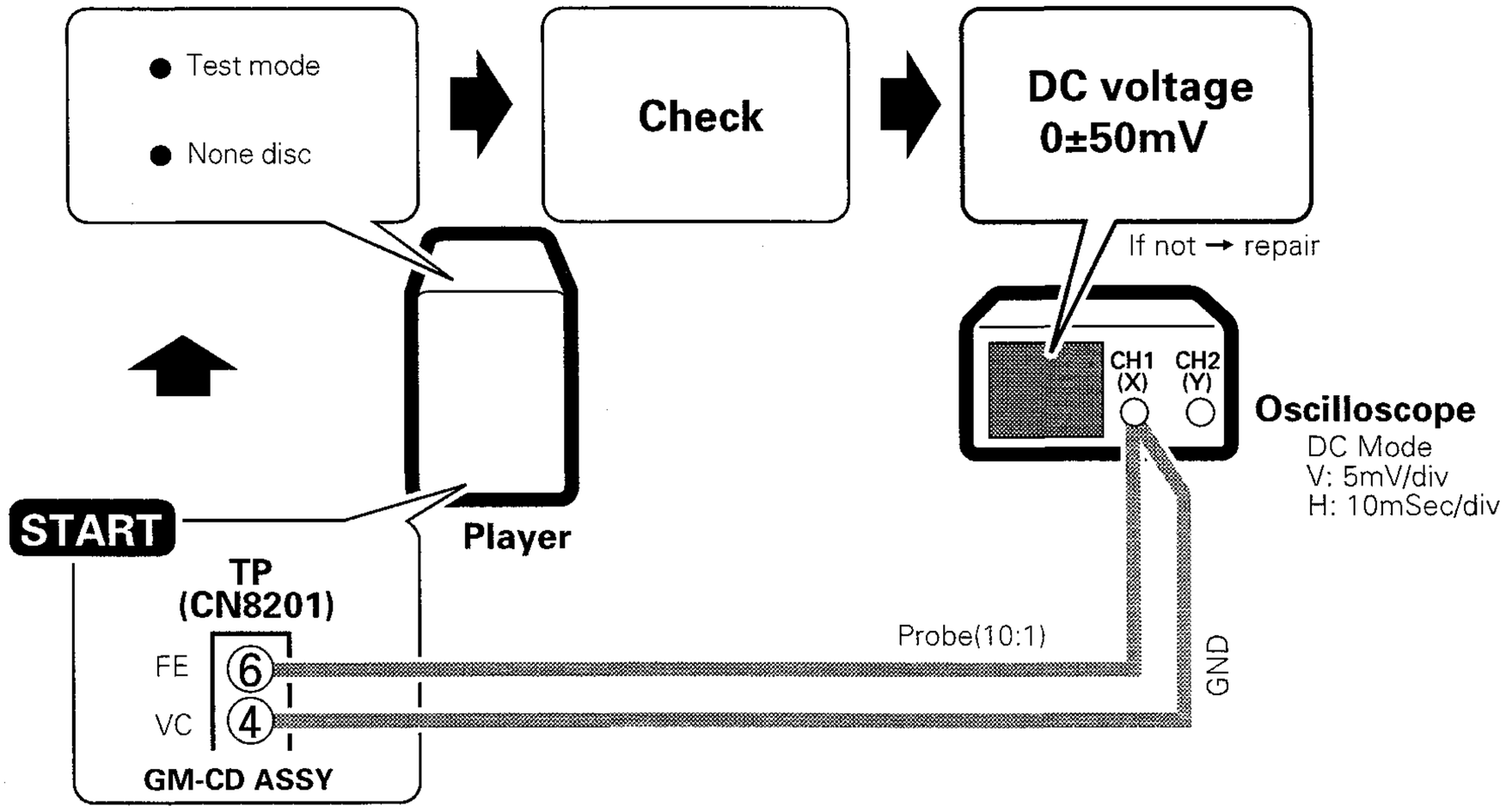




## 2.2Adjustment Locations（テストポイントと調整用 VR の位置）

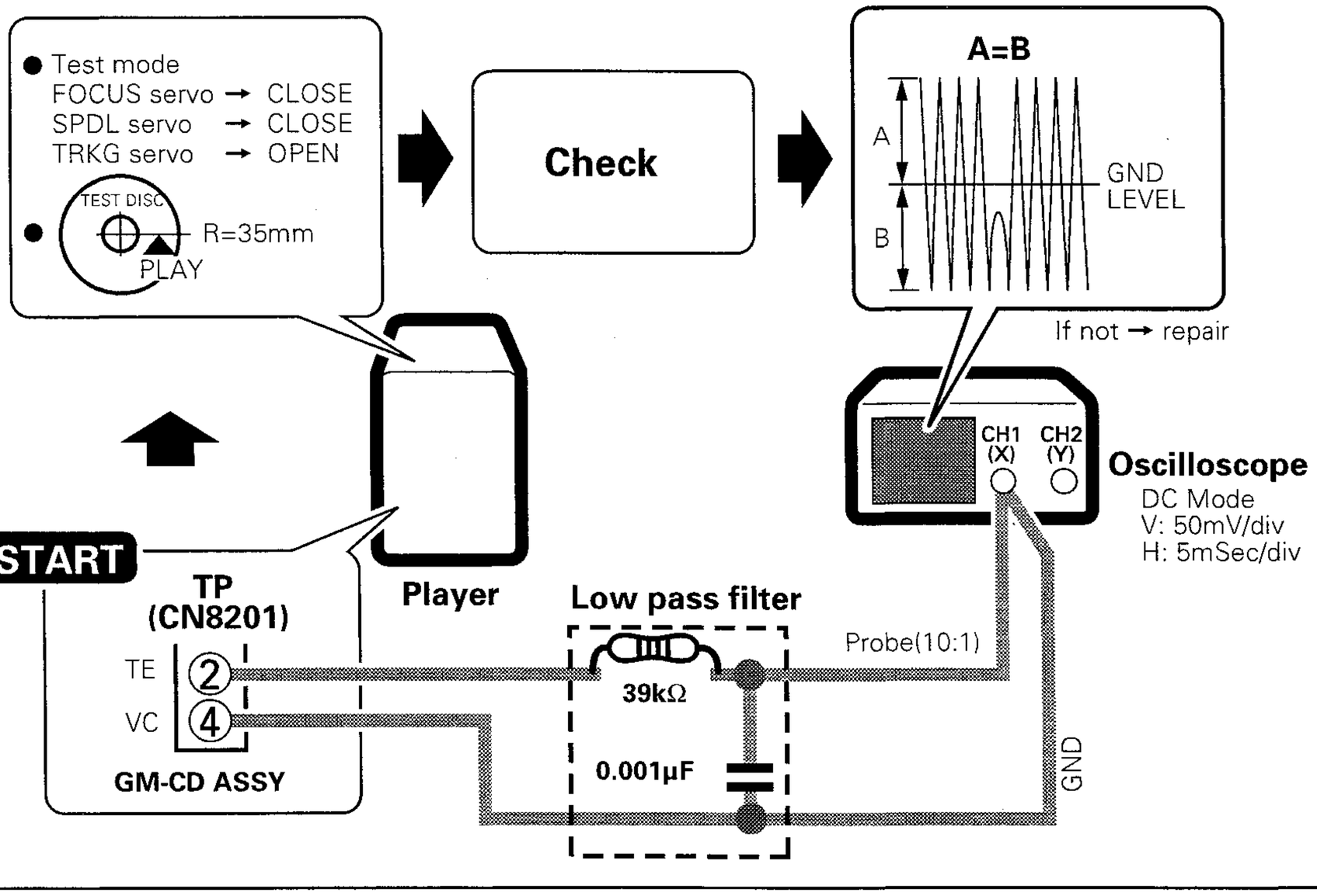


## 2.3 Check and Adjustment (確認、調整)

### 1. Focus Offset Check
(フォーカスオフセット確認)

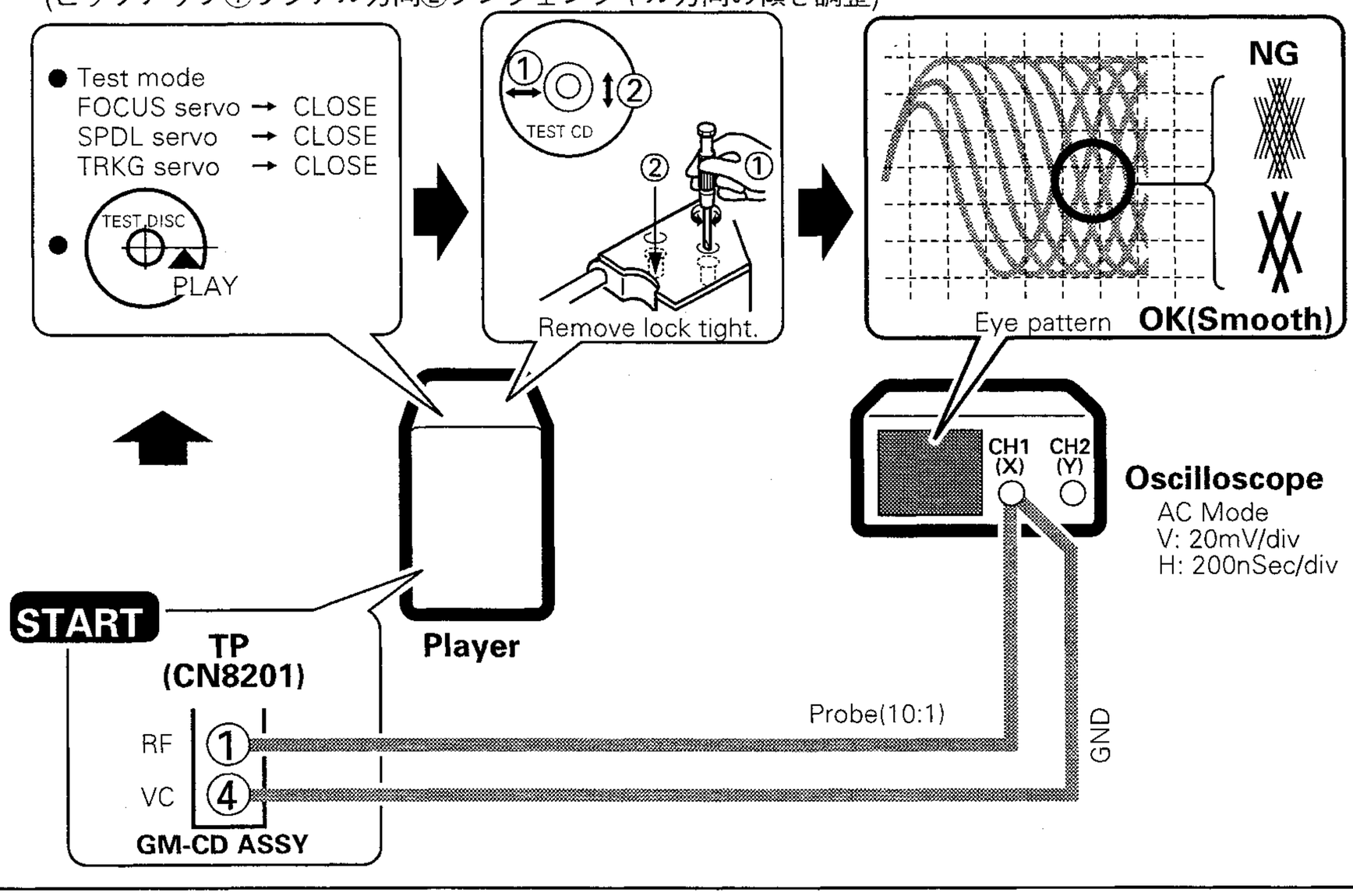



### 2. Tracking Error Balance Check
(トラッキングエラーバランス確認)



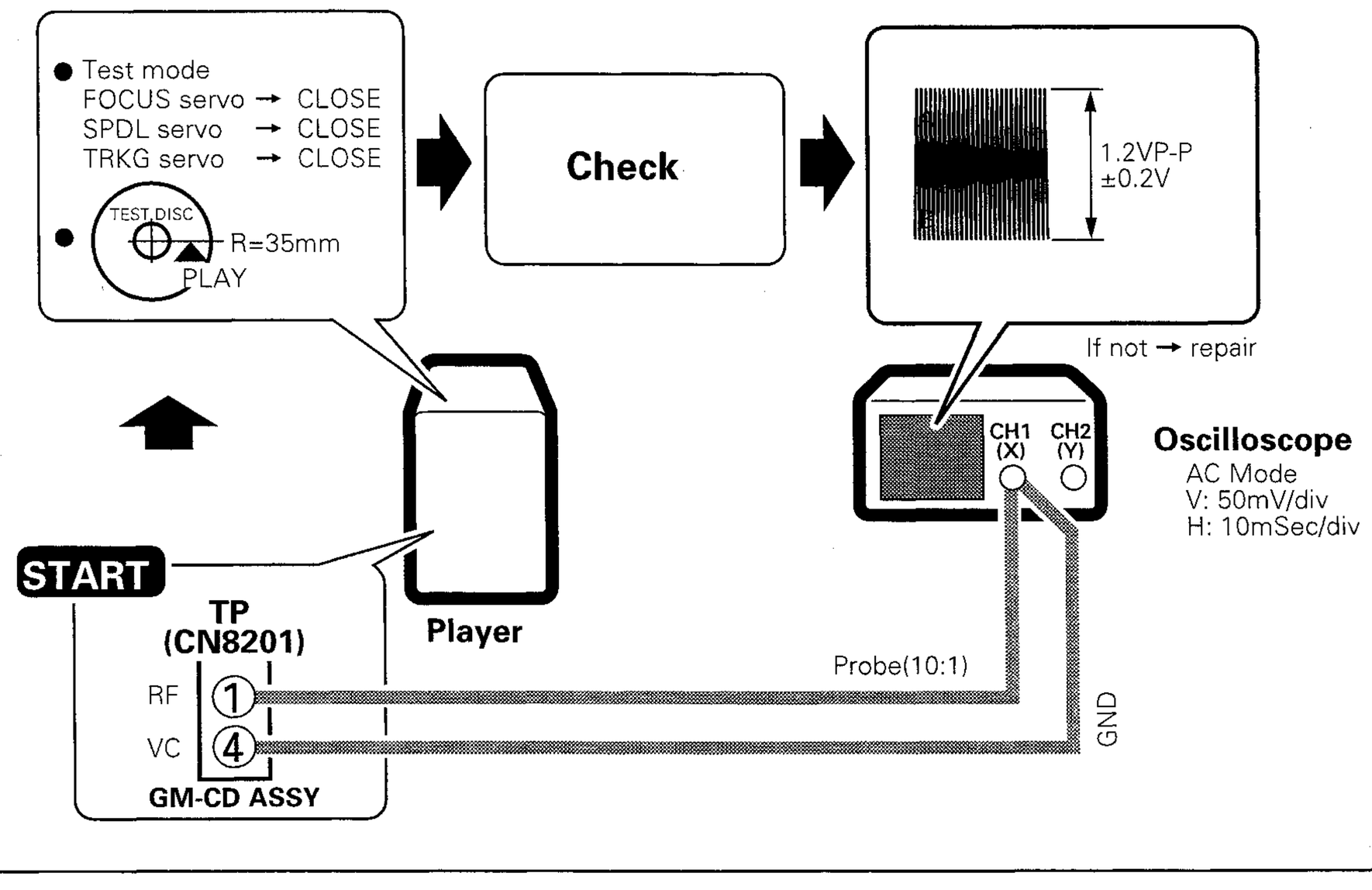
## 3. PICKUP ①RADIAL / ②TANGENTIAL DIRECTION TILT ADJUSTMENT

(ピックアップ①ラジアル方向②タンジェンシャル方向の傾き調整)

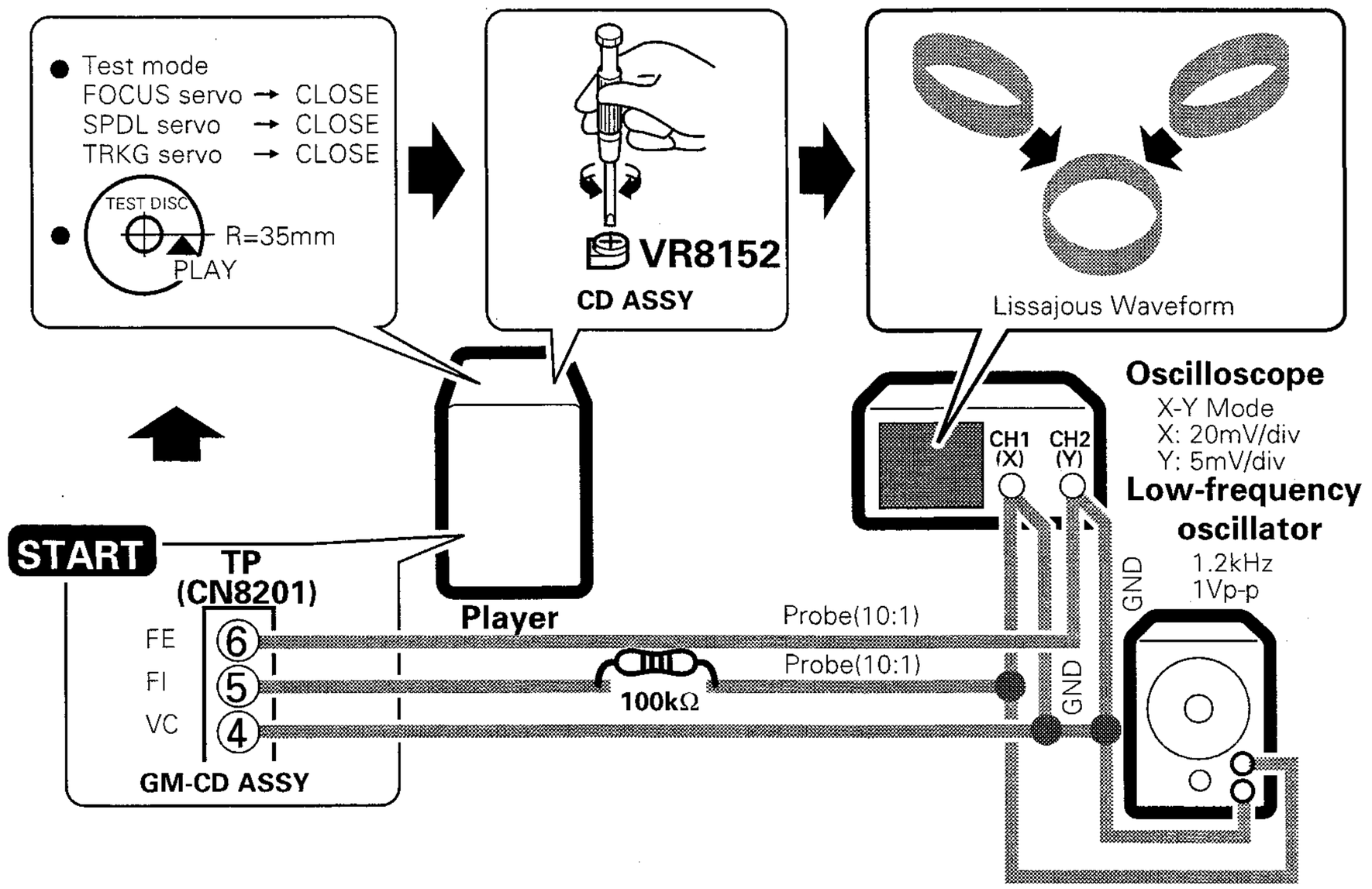



## 4. RF LEVEL CHECK

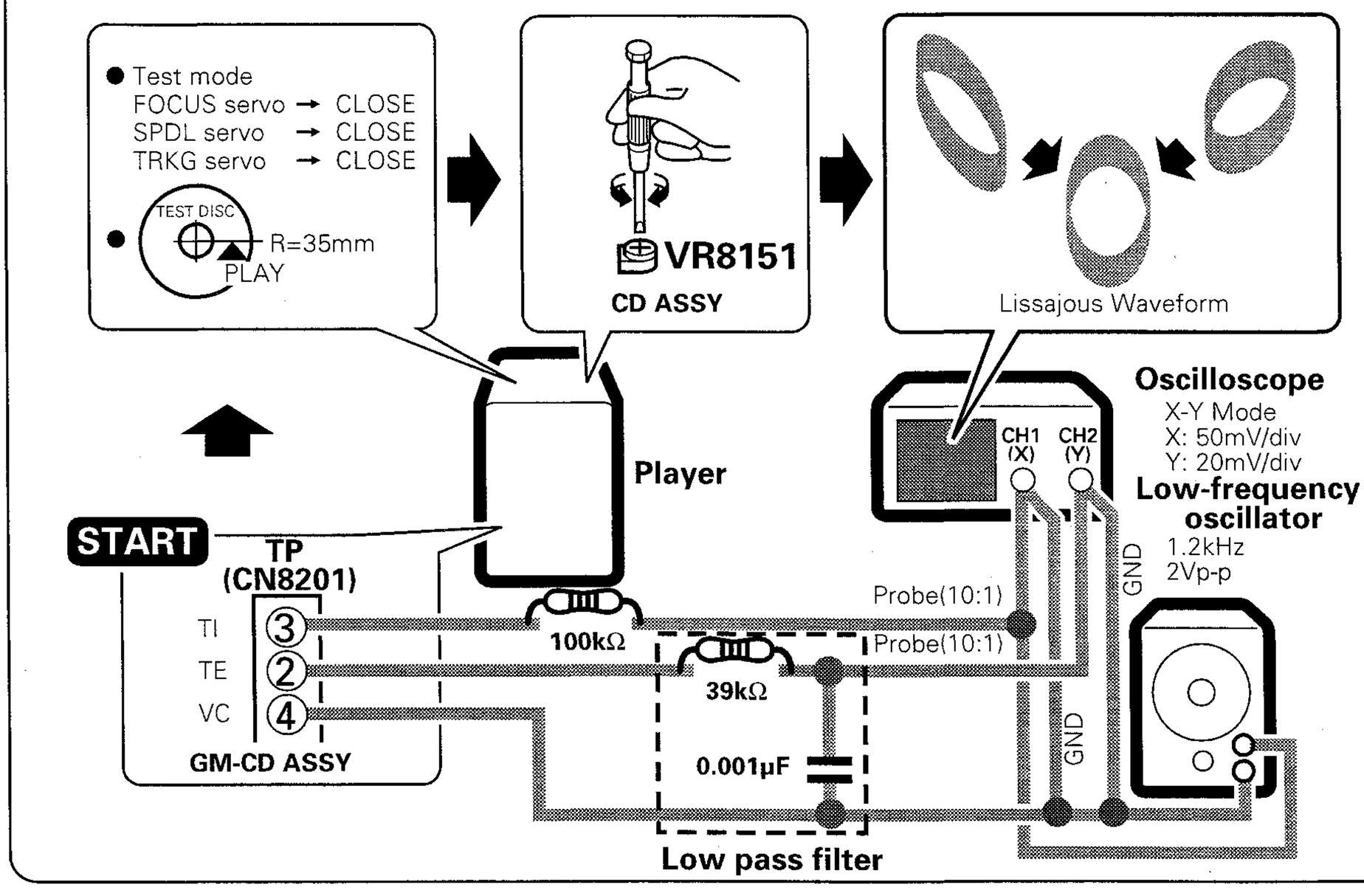
(RFレベル確認)



## 5. Focus Servo Loop Gain Adjustment
(フォーカスサーボループゲイン調整)




## 6. Tracking Servo Loop Gain Adjustment
(トラッキングサーボループゲイン調整)



# 7. GENERAL INFORMATION

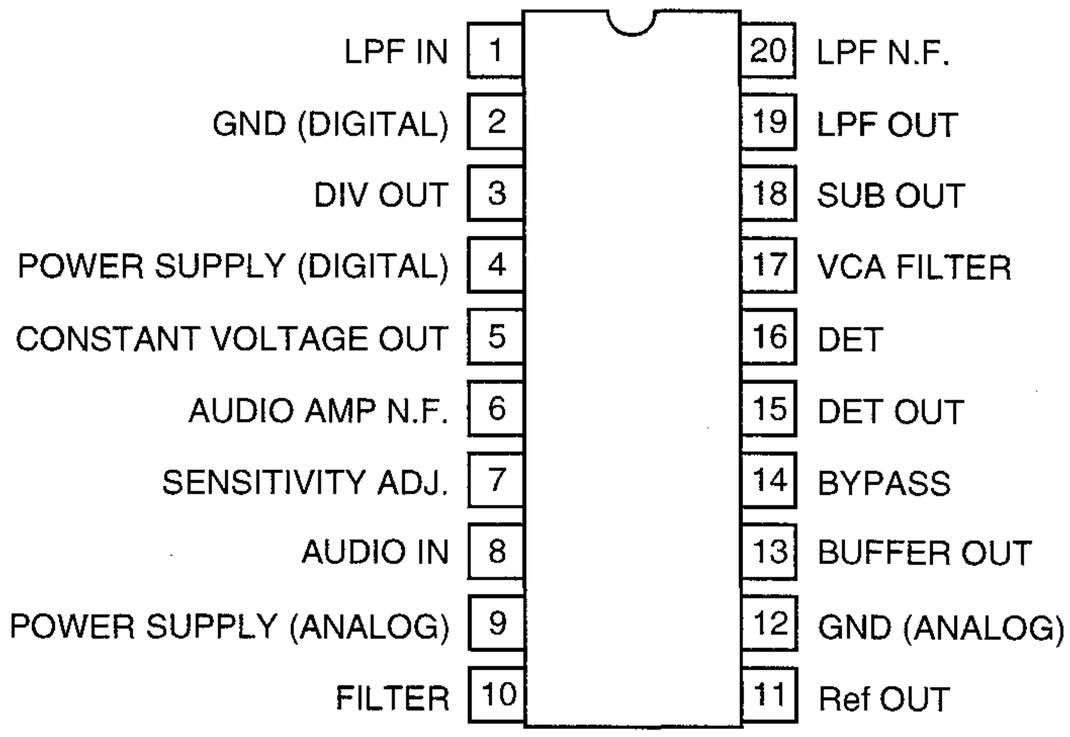
## 7.1 PARTS

### 7.1.1 IC

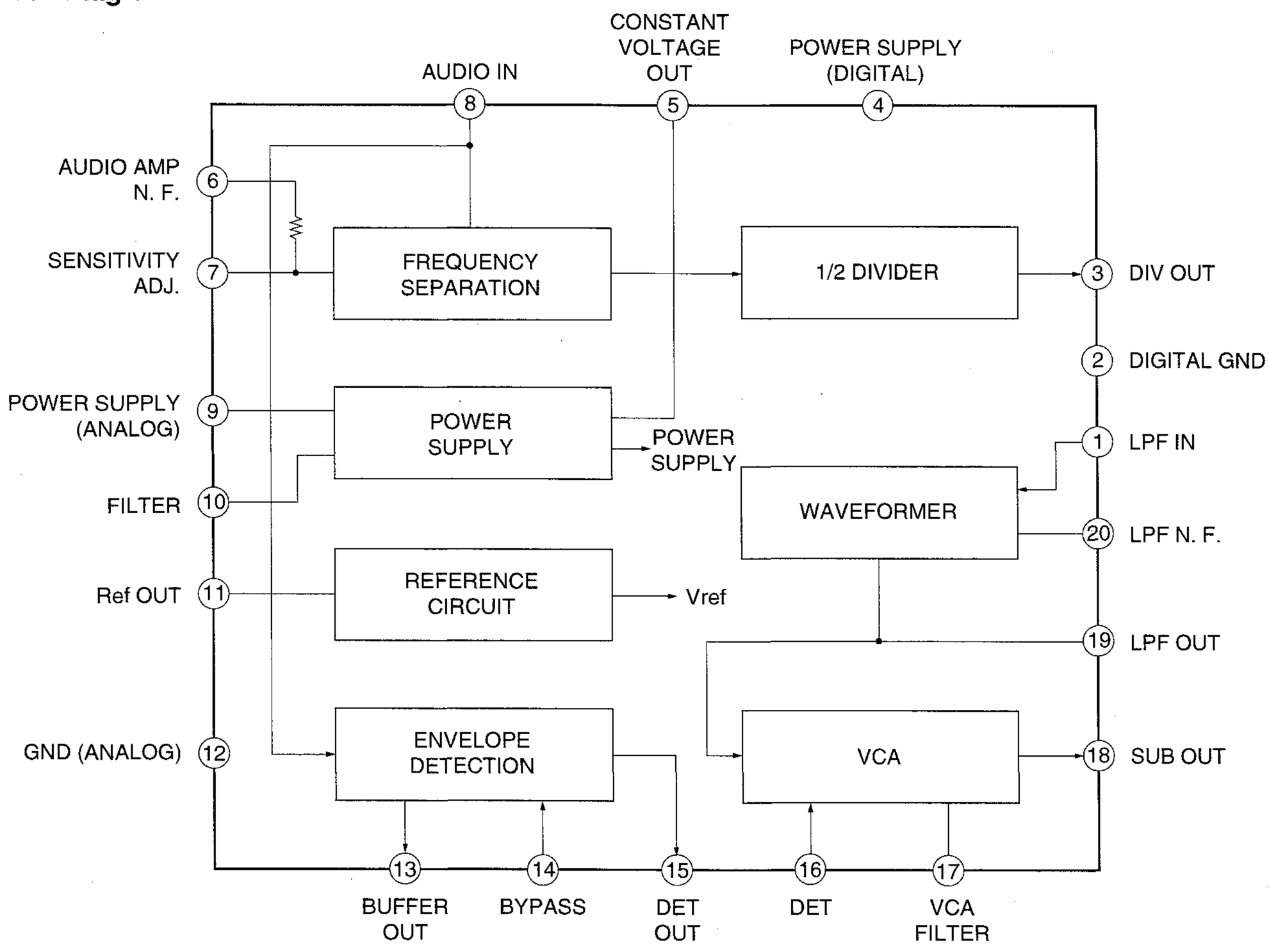
### ■ M51134FP (AF ASSY: IC1009) SUB HARMONIZER (BASS SYNTHESIZER)

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

**● Pin Assignment**




**● Block Diagram**



## ■ PDG205A (DISPLAY ASSY: IC5001)
## DISPLAY μ-COM

### ● Pin Function

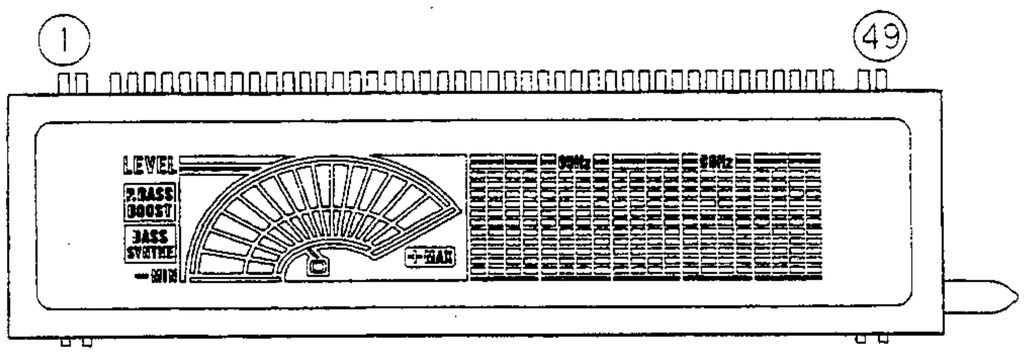
| No. | Function Name | Pin Name | I/O | Function |
|---|---|---|---|---|
| 1 | GA/A1 | G2 | O | FDP control grid　FL PIN NO. G16 |
| 2 | G0/A0 | G1 | O | G9 |
| 3 | NC | – | – | Not used. |
| 4 | PE0/EC0/INT0 | JOG2A | I | Pulse input for jog (for volume control) |
| 5 | PE1/EC1/INT1 | JOG2B | I | |
| 6 | PE2/INT2 | PULSE1 | I | Pulse input for deck 1 reel |
| 7 | PE3/INT3/NMI | ACIN | I | AC pulse input (for clock, power supply monitor) |
| 8 | PE4/RMC | RMC | I | Remote control signal input |
| 9 | PE5 | PULSE2 | O | Pulse input for deck 2 reel |
| 10 | PE6/PMW | M62429CLK | O | Clock output of the base synthesizer volume control IC M62429 |
| 11 | PE7/TO/ADJ | 25HCLK | O | LC7570 clock output |
| 12 | PC0/KR0 | KI1 | I | Key scan return input |
| 13 | PC1/KR1 | KI2 | I | |
| 14 | PC2/KR2 | KI3 | I | |
| 15 | PC3/KR3 | KI4 | I | |
| 16 | PC4/KR4 | KI5 | I | |
| 17 | PC5/KR5 | HPIN | I | Headphone detection H:IN |
| 18 | PC6/KR6 | JOG4A | I | Pulse input for jog (multi amplifier, woofer level) / XR-A700 I/O:Output "L" fixed. |
| 19 | PC7/KR7 | JOG4B | I | |
| 20 | PB0/CINT | JOG3A | I | Pulse input for jog (multi amplifier, P.BASS) / XR-A700 I/O:Output "L" fixed. |
| 21 | PB1/CS0 | JOG3B | I | |
| 22 | PB2/SCK0 | DISPCLK | I | Serial clock input for CD tuner microprocessor display |
| 23 | PB3/SI0 | DISPDATA | I | Serial data input for CD tuner microprocessor display |
| 24 | PB4/SO0 | SBCLK | I/O | System bus serial clock input/output |
| 25 | PB5/SCK1 | SBDATA | O | System bus serial data output |
| 26 | PB6/SI1 | EXCLK | O | (LC75394NED, BU4094BCF) clock output |
| 27 | PB7/SO1 | EXDATA | O | (LC75394NED, BU4094BCF, M62429) data output |
| 28 | $AV_{REF}$ | AVREF | I | A/D converter reference voltage input |
| 29 | PA0/AN0 | SPAIN | I | Spectrum analyzer signal input |
| 30 | PA1/AN1 | KEYIN | I | Key scan input for multi amplifier (AD) / XR-A700 I/O:Output "L" fixed. |
| 31 | PA2/AN2 | MS | I | Deck MS signal input |
| 32 | PA3/AN3 | TEMP | I | Temperature detection |
| 33 | PA4/AN4 | 25HDATA | O | LC7570 data output |
| 34 | PA5/AN5 | CDR/E | I/O | System bus CD communication request/enable. H:Request waiting L:Enable. |
| 35 | PA6/AN6 | JOG1A | I | Pulse input for jog (AD) (multi/MORPHING) |
| 36 | PA7/AN7 | NC | – | Not used. |
| 37 | $AV_{SS}$ | AVSS | – | A/D converter GND |
| 38 | RST | RESET | I | CPU reset input. L: Reset H: –. |
| 39 | EXTAL | XTAL | I | Connected to 8 MHz Ceramic resonator. |
| 40 | XTAL | XTAL | O | |
| 41 | $V_{SS}$ | D.GND | – | GND |
| 42 | TX | NC | O | Not used. |
| 43 | TEX | TEX | I | Not used. |
| 44 | $V_{DD}$ | Vdd | – | Positive power supply |
| 45 | $V_{FDP}$ | VFDP | – | Negative power supply for FL display |
| 46 | PD0/A55 | EVOL CE | O | Main volume control IC LC75394NED strobe output |
| 47 | PD1/A54 | PCONT | O | Power control |
| 48 | PD2/A53 | SOL2 | O | Deck 2 solenoid control |
| 49 | PD3/A52 | SOL1 | O | Deck 1 solenoid control |
| 50 | PD4/A51 | FLWR | O | LC7570 strobe output |

| No. | Function Name | Pin Name | I/O | Function | | |
|---|---|---|---|---|---|---|
| 51 | PD5/A50 | LED2 STB | O | LED control IC BU4094BCF strobe output (2) | | |
| 52 | PD6/A49 | LED1 STB | O | LED control IC BU4094BCF strobe output (1) | | |
| 53 | PD7/A48 | DECKSTB2 | O | Deck signal control IC BU4094BCF strobe output (2) | | |
| 54 | PF0/A47 | 25HSTB | O | XR-A800: Control IC (BU4094BCF) strobe output/XR-A700:AF MUTE control L:ON | | |
| 55 | PF1/A46 | MOTOR | O | Deck motor control. H:ON. | | |
| 56 | PF2/A45 | SPAC | O | BA3835F output select control | | |
| 57 | PF3/A44 | SPAB | O | | | |
| 58 | PF4/A43 | SPAA | O | XR-A800:BA3834F | | |
| 59 | PF5/A42 | PBMUTE | O | Deck playback mute control. H:Mute. | | |
| 60 | PF6/A41 | NC | O | Not used. | | |
| 61 | PF7/A40 | SPRY | O | Speaker relay control. H:Relay ON. | | |
| 62 | PG0/A39 | S24 | O | FL display control anode | FL PIN NO. | S17 |
| 63 | PG1/A38 | S23 | O | | | S5 |
| 64 | PG2/A37 | S22 | O | | | S6 |
| 65 | PG3/A36 | S21 | O | | | S18 |
| 66 | PG4/A35 | S20 | O | | | S19 |
| 67 | PG5/A34 | S19 | O | | | S20 |
| 68 | PG6/A33 | S18 | O | | | S21 |
| 69 | PG7/A32 | S17 | O | | | S15 |
| 70 | PH0/A31 | S16 | O | | | S4 |
| 71 | PH1/A30 | S15 | O | | | S14 |
| 72 | PH2/A29 | S14 | O | | | S16 |
| 73 | PH3/A28 | S13 | O | | | S9 |
| 74 | PH4/A27 | S12/K04 | O | FL display control anode/Key scan output | FL PIN NO. | S10 |
| 75 | PH5/A26 | S11/K03 | O | | | S22 |
| 76 | PH6/A25 | S10/K02 | O | | | S23 |
| 77 | PH7/A24 | S9/K01 | O | | | S24 |
| 78 | A23 | S8/K08 | O | | | S2 |
| 79 | A22 | S7/L07 | O | | | S1 |
| 80 | A21 | S6/K06 | O | | | S12 |
| 81 | A20 | S5/K05 | O | | | S3 |
| 82 | A19 | S4 | O | FL display control anode | FL PIN NO. | S13 |
| 83 | A18 | S3 | O | | | S11 |
| 84 | A17 | S2 | O | | | S8 |
| 85 | A16 | S1 | O | | | S7 |
| 86 | G15/A15 | G16 | O | FL display control grid | FL PIN NO. | G8 |
| 87 | G14/A14 | G15 | O | | | G7 |
| 88 | G13/A13 | G14 | O | | | G6 |
| 89 | $V_{DD}$ | Vdd | – | Positive power voltage supply | | |
| 90 | G12/A12 | G13 | O | FL display control grid | FL PIN NO. | G5 |
| 91 | G11/A11 | G12 | O | | | G4 |
| 92 | G10/A10 | G11 | O | | | G3 |
| 93 | G9/A9 | G10 | O | | | G2 |
| 94 | G8/A8 | G9 | O | | | G1 |
| 95 | G7/A7 | G8 | O | | | G10 |
| 96 | G6/A6 | G7 | O | | | G11 |
| 97 | G5/A5 | G6 | O | | | G12 |
| 98 | G4/A4 | G5 | O | | | G13 |
| 99 | G3/A3 | G4 | O | | | G14 |
| 100 | G2/A2 | G3 | O | | | G15 |

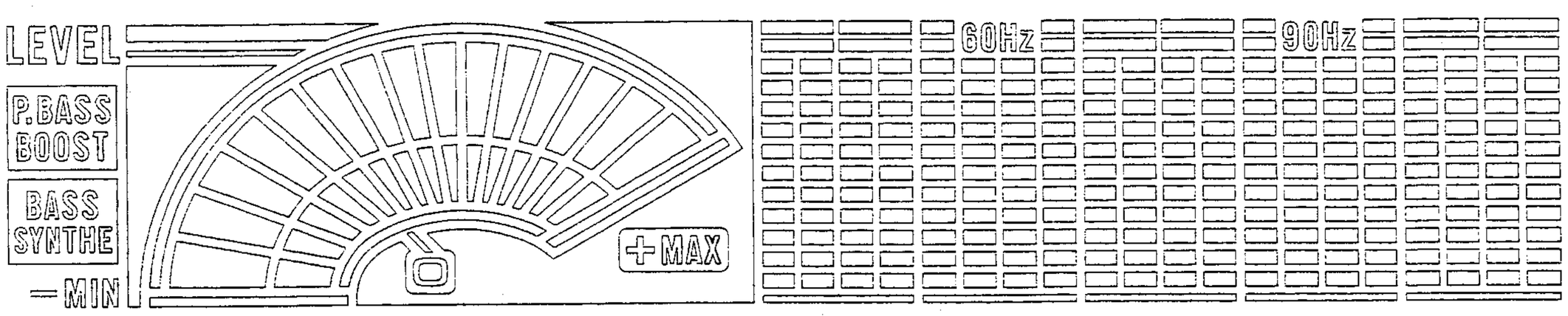
## 7.1.2 DISPLAY

### ■ AAV7043 (SUB DISPLAY ASSY: V7001)

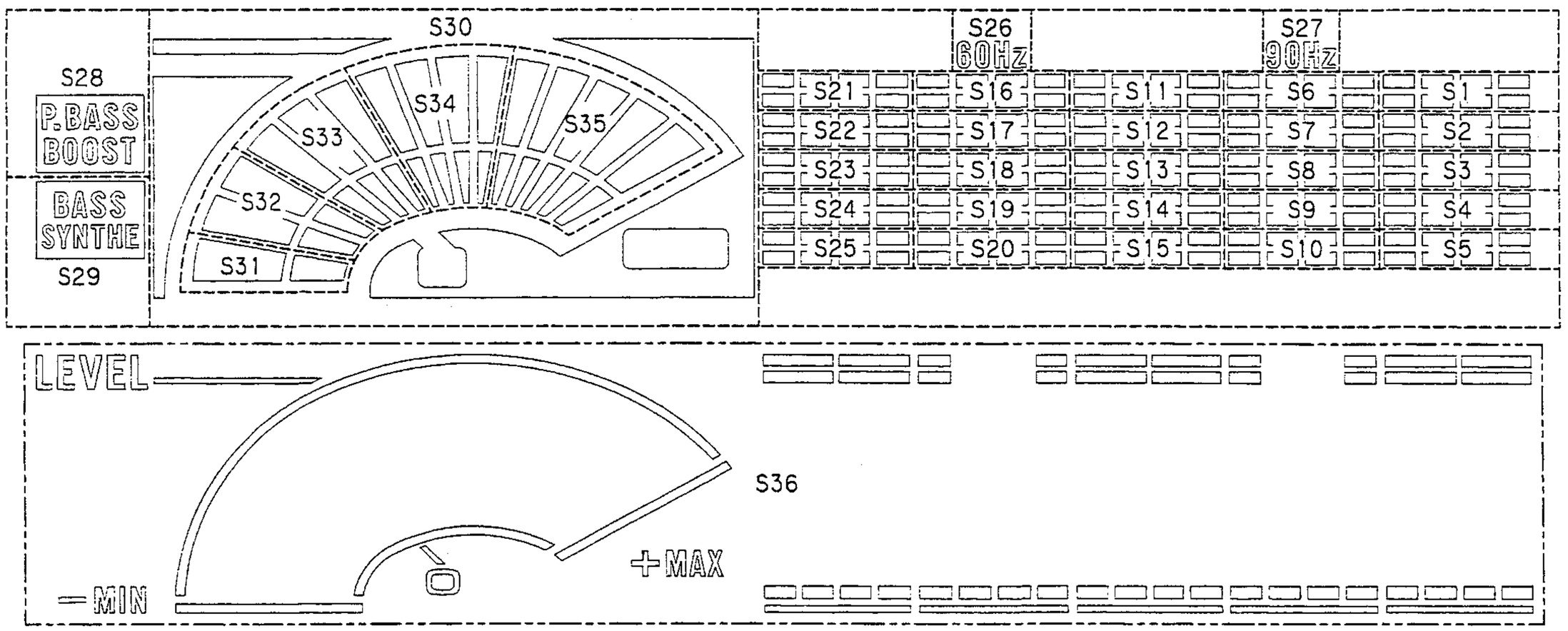
### ● External Dimensions




### ● Display Pattern




### ● Anode and Grid Assignment




### ● Pin Assignment

| Pin No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assignment | F1 | F1 | NP | NL | G | S36 | S35 | S34 | S33 | S32 | S31 | S30 | S29 | S28 | S27 | S26 | NL | NL | NL | NL | S25 | S24 | S23 | S22 | S21 |

| Pin No. | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assignment | S20 | S19 | S18 | S17 | S16 | S15 | S14 | S13 | S12 | S11 | S10 | S9 | S8 | S7 | S6 | S5 | S4 | S3 | S2 | S1 | NL | NP | F2 | F2 |

F1,F2:Filament G:Grid S1-S36:Anode NP:No Pin NL:No Lead

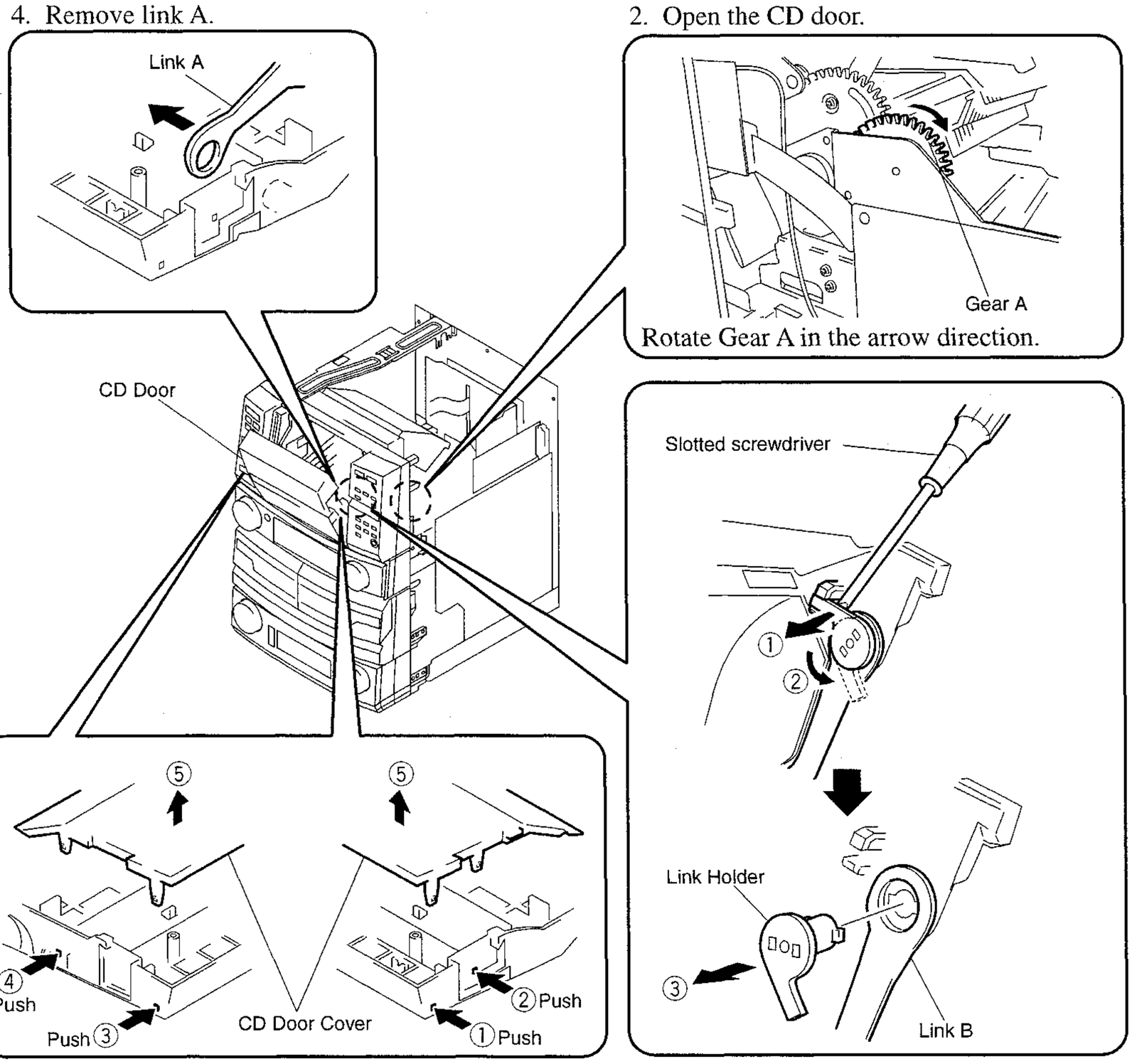
# 7.2 DIAGNOSIS

## 7.2.1 DISASSEMBLY

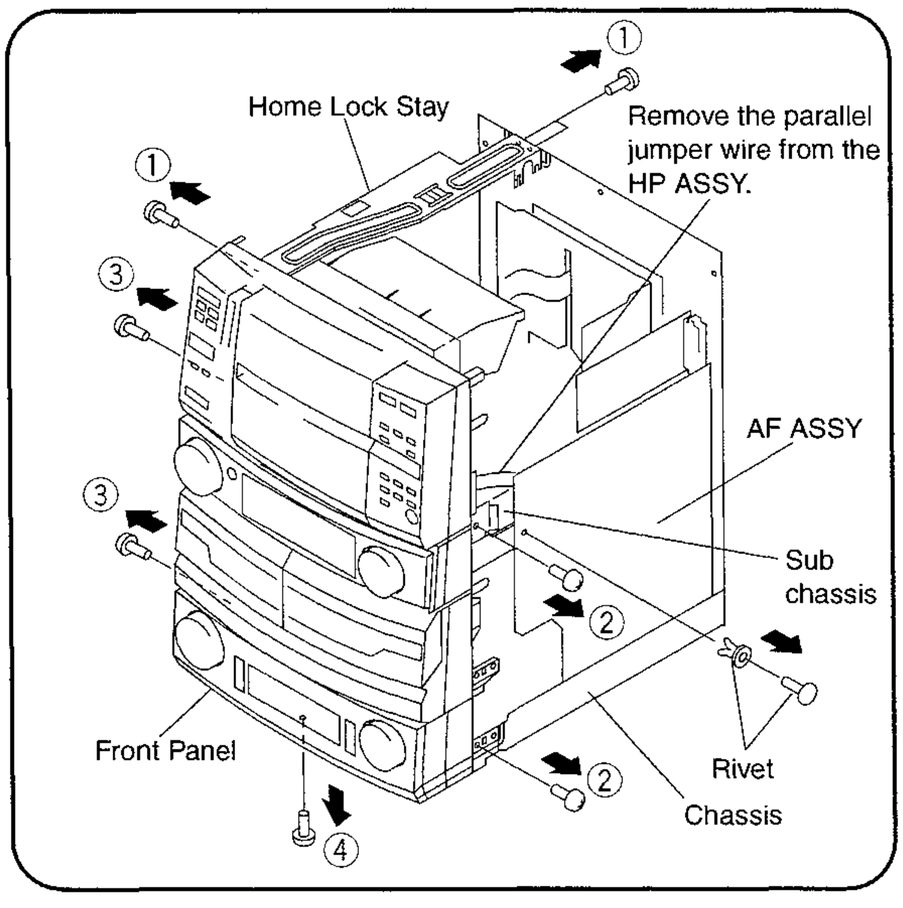
| | |
|---|---|
| • Cassette deck mechanism unit: | Diagnosis and replacement ➡ Remove the front panel. (Refer to "Removing the Front Panel".) |
| • Power amplifier: | Diagnosis and replacement ➡ Remove the rear panel. (Refer to "Removing the AMP ASSY".) |
| • CD (GS) mechanism ASSY: | Diagnosis ➡ Remove the rear panel.<br>Replacement ➡ Remove the rear panel, and remove the whole sub chassis. (Refer to "Removing the CD Mechanism Block".) |

### ■ Removing the Front Panel

1. Remove the bonnet case.
2. Open the CD door.




3. Remove the CD door cover.
4. Remove link A.
5. Remove the link folder and link B.
6. Remove screws ① to ④, the rivet, and the parallel jumper wire.




7. Pull out the front panel from the chassis and sub chassis.

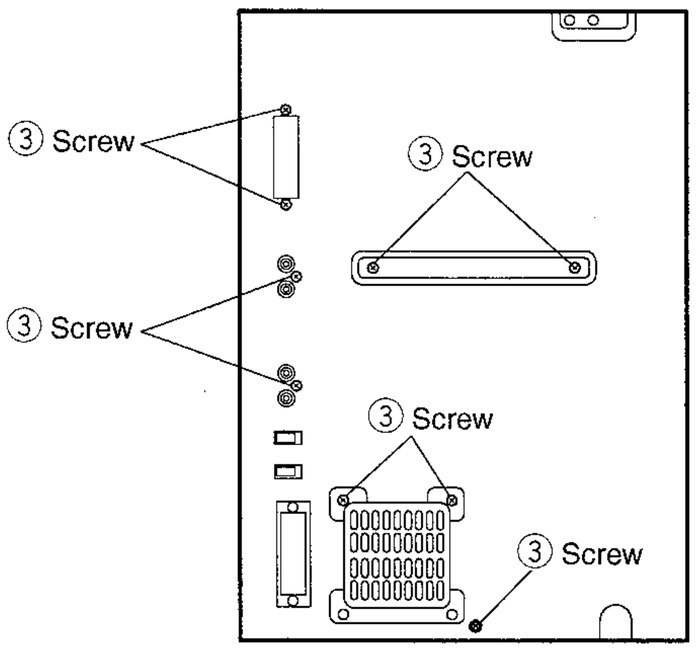
**NOTE:** In this state, the operations of the cassette deck can be checked.

Perform the following to replace the cassette deck mechanism unit.

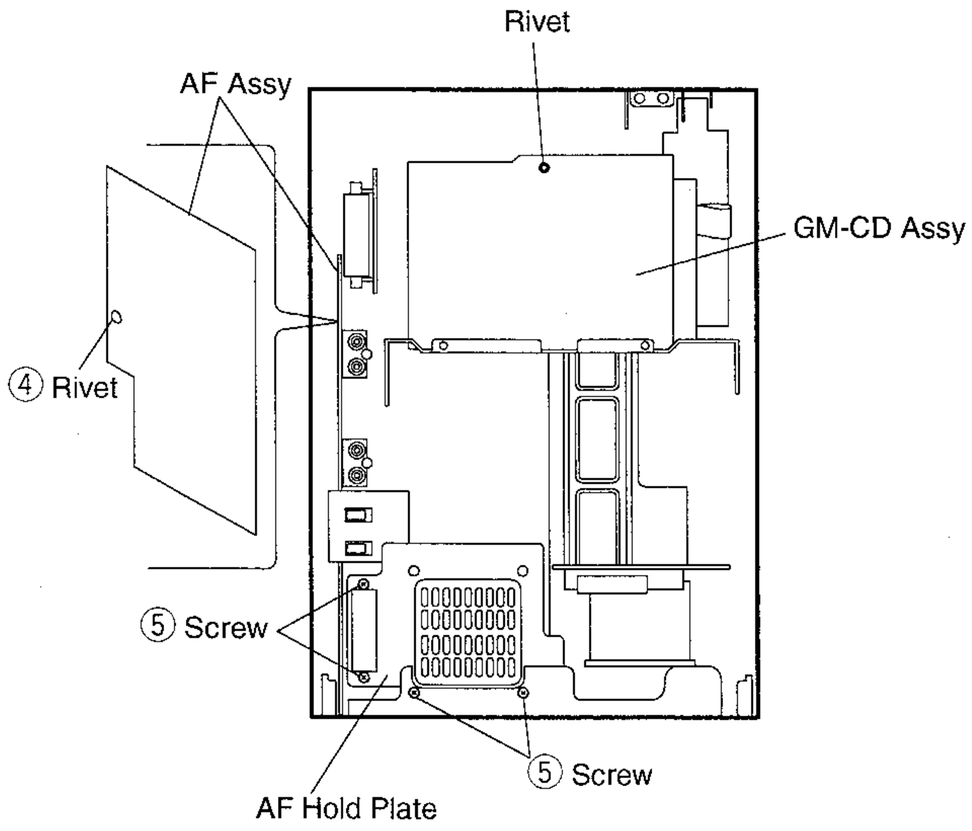
8. Remove the 3P connector of Deck I and 5P connector of Deck II.
9. Remove the flat cable (28P FFC) from the AF ASSY.
10. Remove the cassette deck mechanism unit from the front panel. (For XR-A800, remove the mechanism shield at the bottom of the cassette deck mechanism unit as well.)

## ■ Removing the AMP ASSY

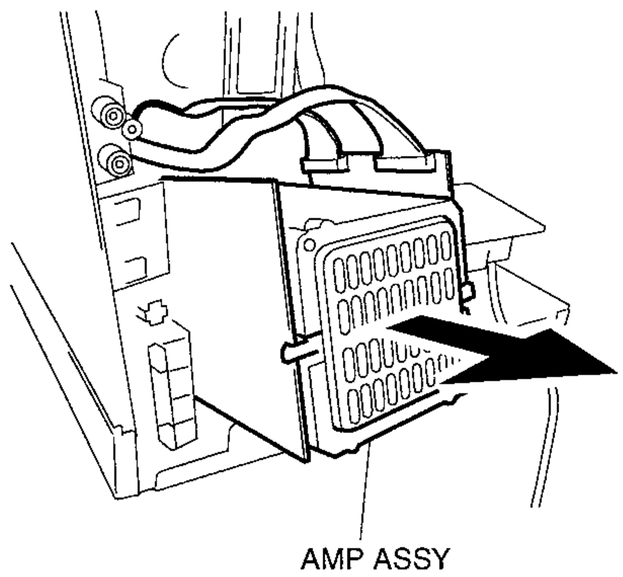
1. Remove the bonnet.
2. Remove the home lock stay.
   (Refer to "Removing the Front Panel".)
3. Remove the rear panel (remove the nine screws ③), and remove the rivet lock of the GM-CD ASSY.




4. Remove the rivet ④ securing the AF ASSY.
5. Remove the AF hold plate (remove the four screws ⑤).



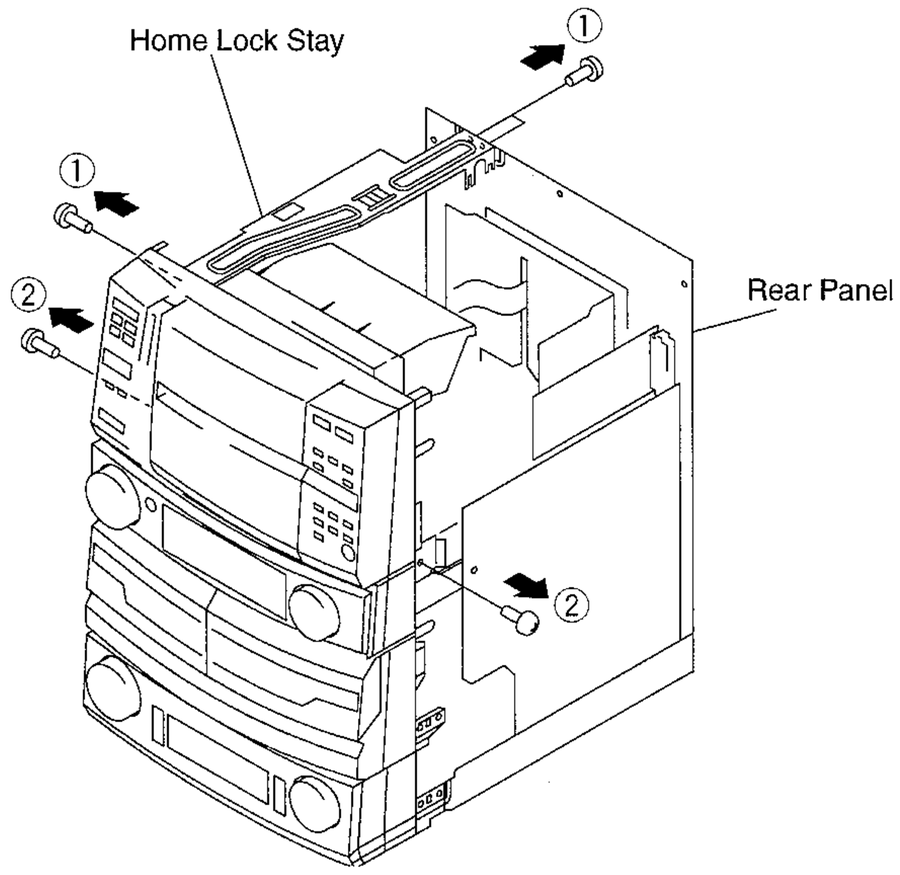

6. Pull out the AMP ASSY from the chassis.

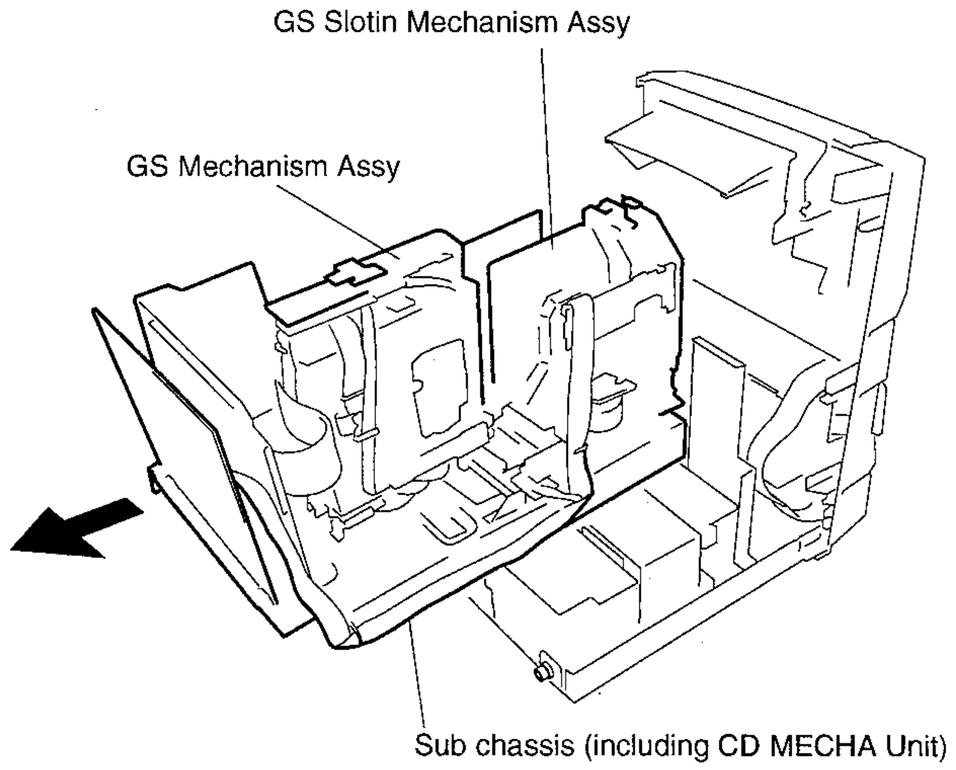



* In this state, the operations of the AMP ASSY can be diagnosed.
(However, be careful not to short-circuit the AF ASSY and chassis.)

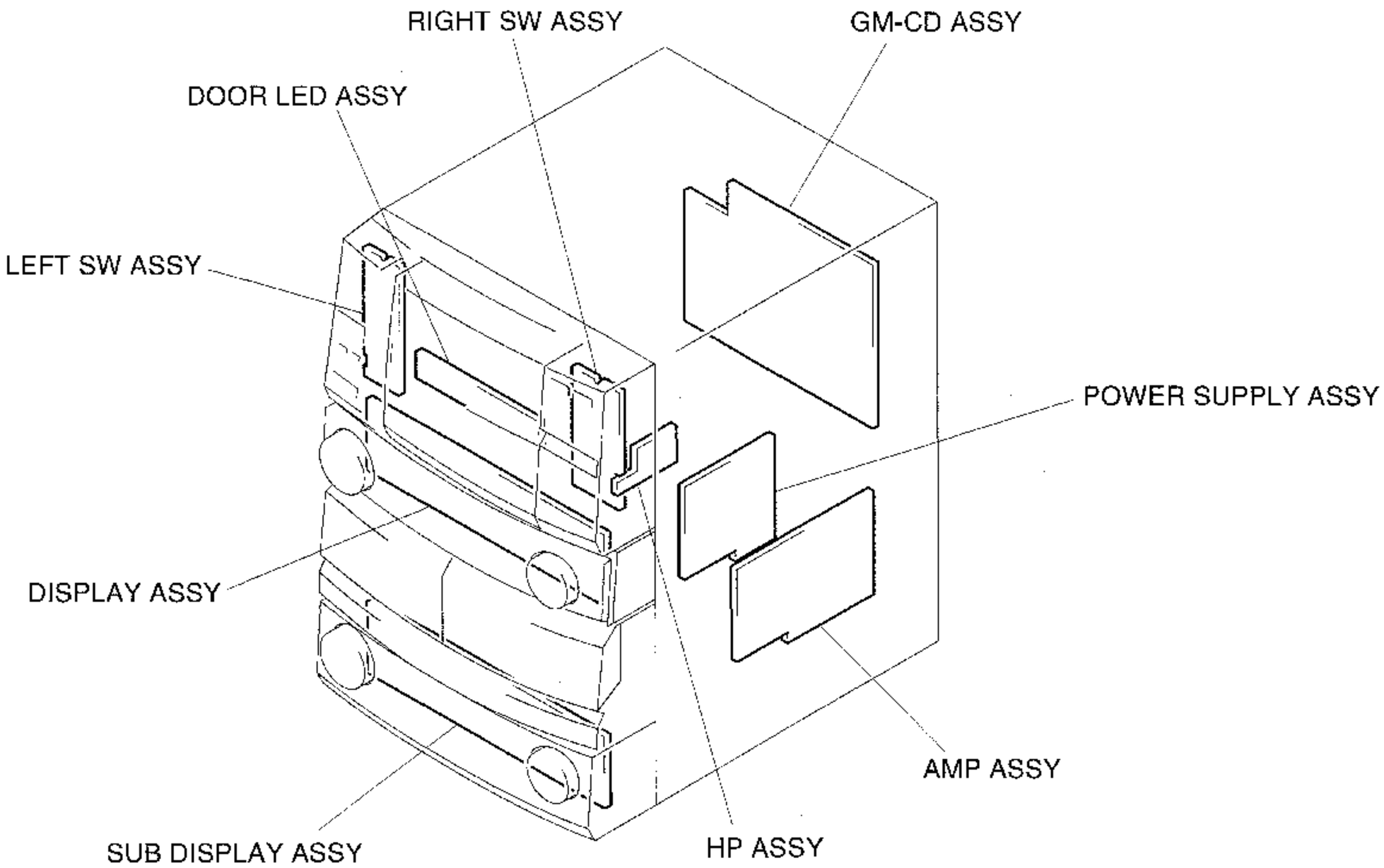
## ■ Removing the CD Mechanism Block (GS Mechanism Assy and GS Slot-In Mechanism Assy)

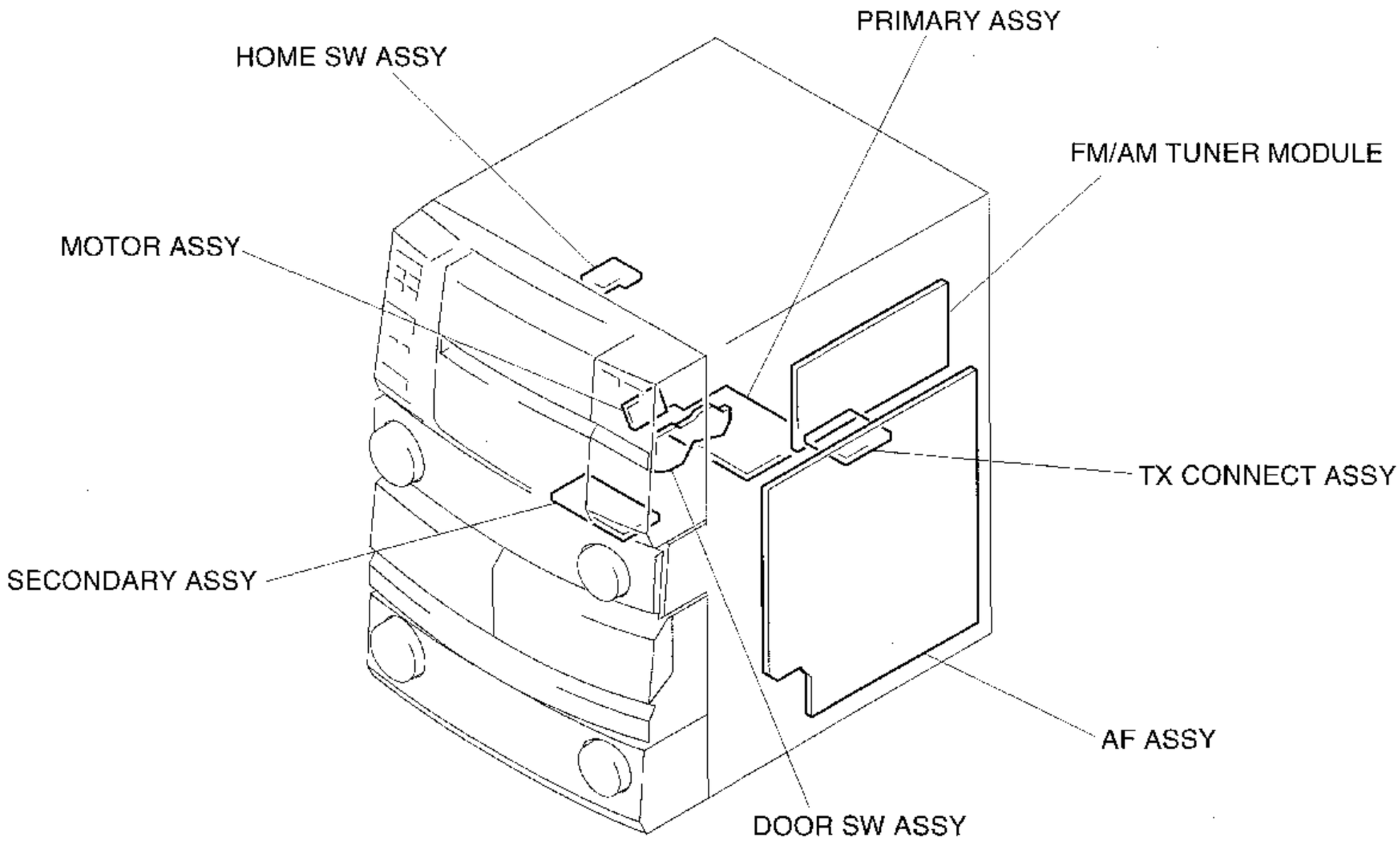
1. Remove the bonnet.
2. Remove the home lock stay. (Remove screw ①.)
3. Remove the rear panel.
   (Refer to step 3 in "Removing the AMP ASSY".)
   **NOTE:** The CD mechanism block can be diagnosed in this state.
4. Remove Link A and Link B.
   (Refer to "Removing the Front Panel".)
   (The front panel and CD mechanism block can be separated.)
5. Pull out the whole CD mechanism block with the sub chassis from the front panel. (Remove screw ②.)



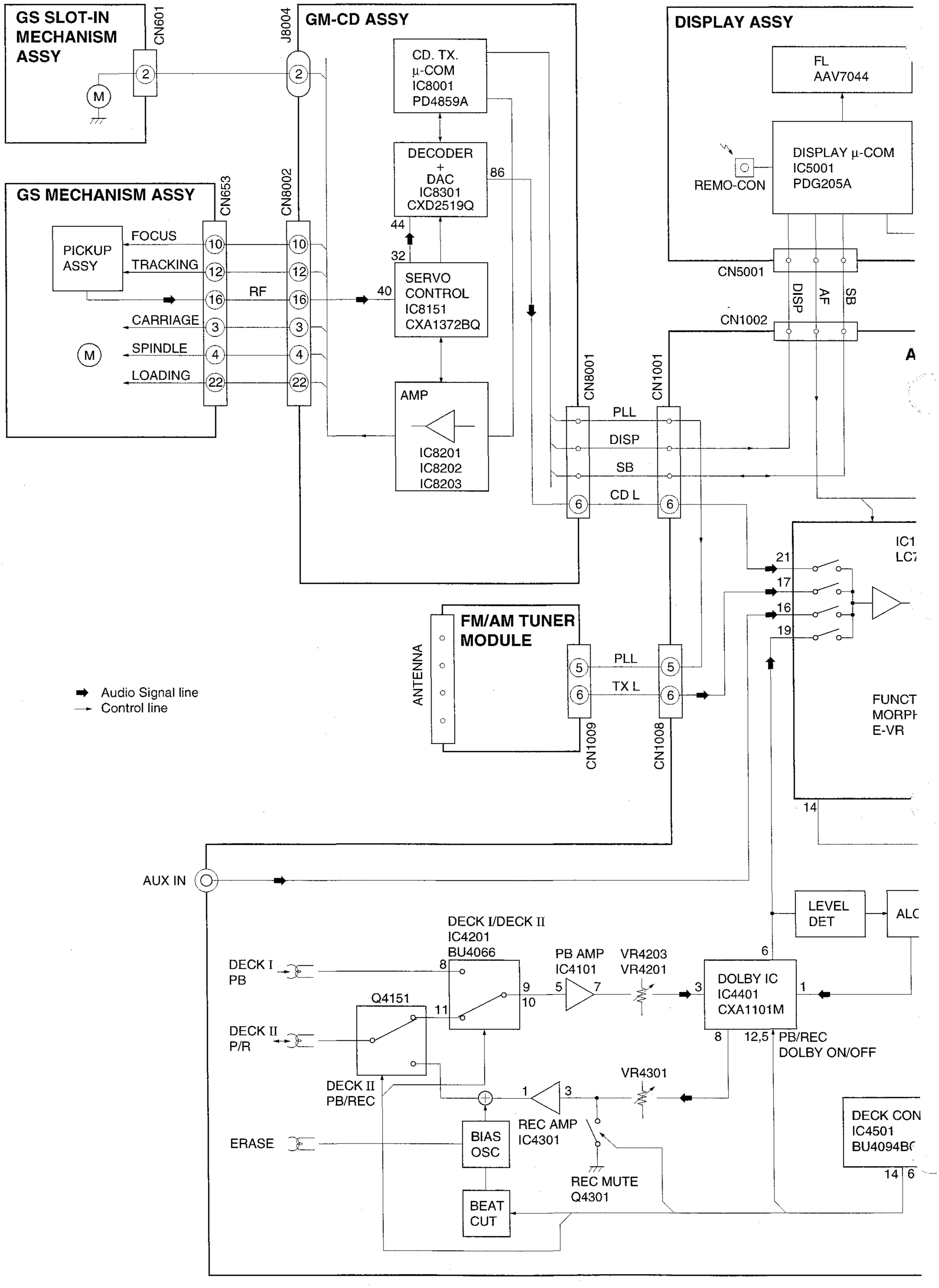



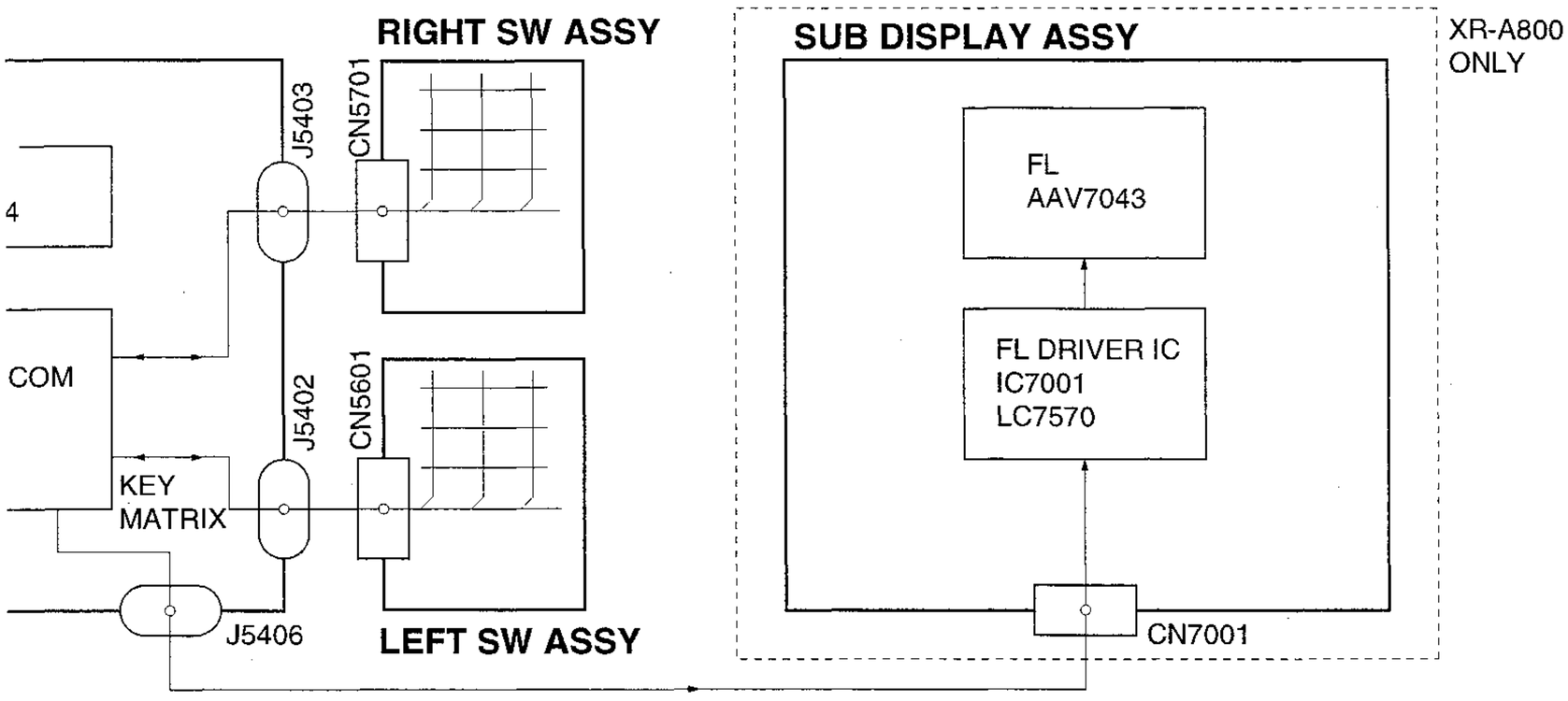
## 7.2.2 PCB LOCATIONS

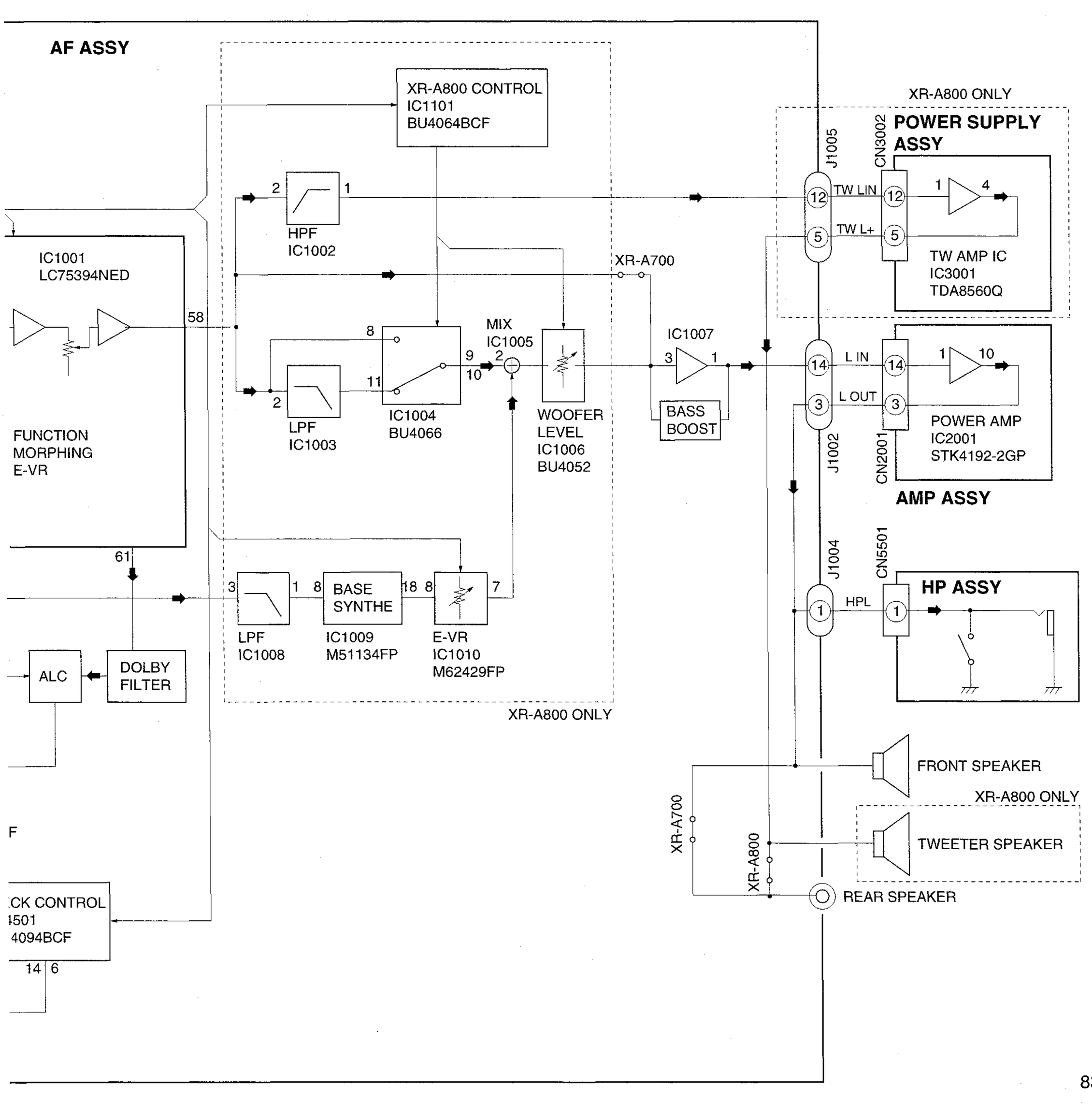


# 7.3 BLOCK DIAGRAM

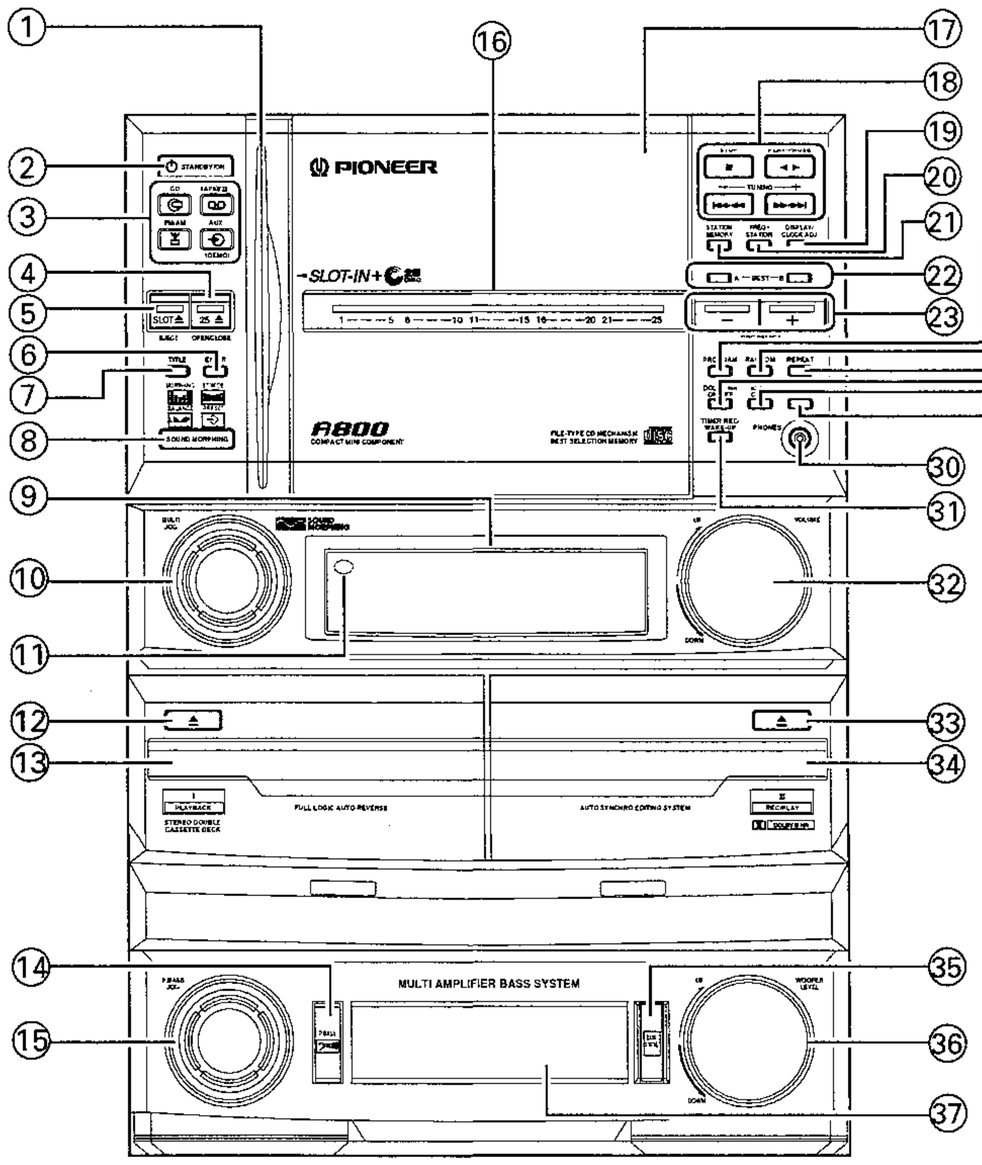



RIGHT SW ASSY
J5403
CN5701
4
COM
J5402
CN5601
KEY
MATRIX
J5406
LEFT SW ASSY
SUB DISPLAY ASSY
XR-A800
ONLY
FL
AAV7043
FL DRIVER IC
IC7001
LC7570
CN7001


AF ASSY
XR-A800 CONTROL
IC1101
BU4064BCF
XR-A800 ONLY
POWER SUPPLY
ASSY
J1005
CN3002
TW LIN
TW L+
TW AMP IC
IC3001
TDA8560Q
HPF
IC1002
XR-A700
IC1001
LC75394NED
58
MIX
IC1005
IC1007
BASS
BOOST
WOOFER
LEVEL
IC1006
BU4052
IC1004
BU4066
LPF
IC1003
L IN
L OUT
POWER AMP
IC2001
STK4192-2GP
AMP ASSY
J1002
CN2001
FUNCTION
MORPHING
E-VR
61
J1004
CN5501
HP ASSY
HPL
LPF
IC1008
BASE
SYNTHE
IC1009
M51134FP
E-VR
IC1010
M62429FP
XR-A800 ONLY
ALC
DOLBY
FILTER
FRONT SPEAKER
XR-A800 ONLY
XR-A700
XR-A800
TWEETER SPEAKER
REAR SPEAKER
CK CONTROL
1501
4094BCF

# 8. PANEL FACILITIES AND SPECIFICATIONS

## 8.1 PANEL FACILITIES




The illustration shows the XR-A800.

**① Plus 1 disc slot**

**② STANDBY/ON switch**

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.

**③ Function buttons**

**④ 25 OPEN/CLOSE button**

**⑤ SLOT EJECT button**

**⑥ ENTER button**

**⑦ TITLE button**

**⑧ SOUND MORPHING button (MORPHING, ST.WIDE, BALANCE, PRESET: XR-A800) (MORPHING, P.BASS, ST.WIDE, BALANCE, PRESET: XR-A700)**

**⑨ Display**

**⑩ SOUND MORPHING JOG/MULTI JOG* dial**

**⑪ Remote sensor**

**⑫ TAPE I Eject (▲)**

**⑬ TAPE I cassette door**

**⑭ P.BASS button (XR-A800 only)**

**⑮ P.BASS JOG dial (XR-A800 only)**

**⑯ 25 DISC indicator**

**⑰ CD Door panel**

**⑱ Common operation button section**

**⑲ DISPLAY/CLOCK ADJ button**

**⑳ FREQ/STATION button**

**㉑ STATION MEMORY button**

**㉒ BEST (A, B) buttons**

**㉓ DISC SELECT + (up)/– (down) buttons**

**㉔ PROGRAM button**

**㉕ RANDOM button**

**㉖ REPEAT button**

**㉗ Dolby** NR ON/OFF button**

Each time this button is pressed, the Dolby NR system turns on and off.

**㉘ ASES/COPY button**

**㉙ REC/STOP button (●/■)**

**㉚ Headphones jack (PHONES)**

**㉛ TIMER REC/WAKE-UP button**

**㉜ VOLUME control**

**㉝ TAPE II Eject (▲)**

**㉞ TAPE II cassette door**

**㉟ BASS SYNTHE button (XR-A800 only)**

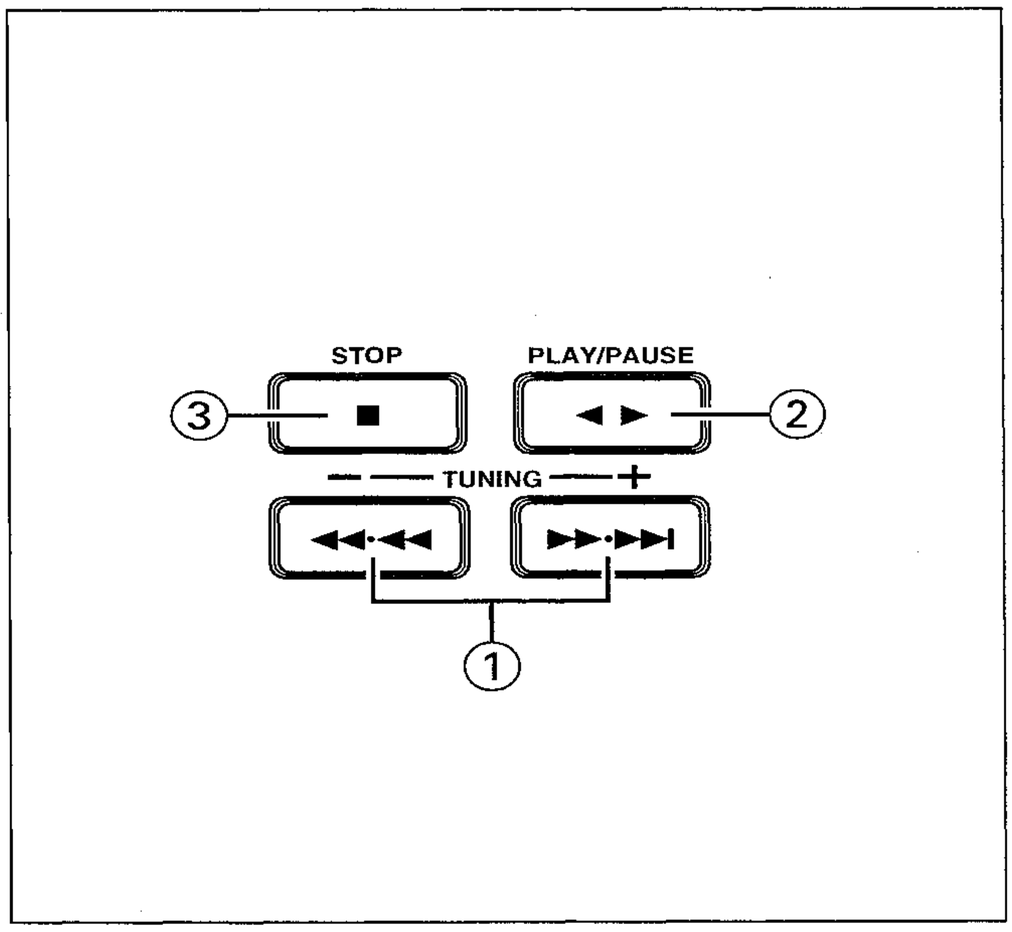
**㊱ WOOFER LEVEL control (XR-A800 only)**

**㊲ Display (XR-A800 only)**

* ..... SOUND MORPHING JOG/MULTI JOG dial is used for multi-functions.

**

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




## COMMON OPERATION BUTTON SECTION

① ⏮, ⏭ buttons
② PLAY/PAUSE button (◄ ►)
③ STOP button (■)

- Roles of the common operation buttons. (The roles of the buttons vary depending on the input functions as shown below.)

**During CD input**

| | | |
|---|---|---|
| **PLAY/PAUSE** | : | Play/Pause button |
| **STOP** | : | Stop button |
| ⏭ | : | Fast forward/track search button |
| ⏮ | : | Fast reverse/track search button |

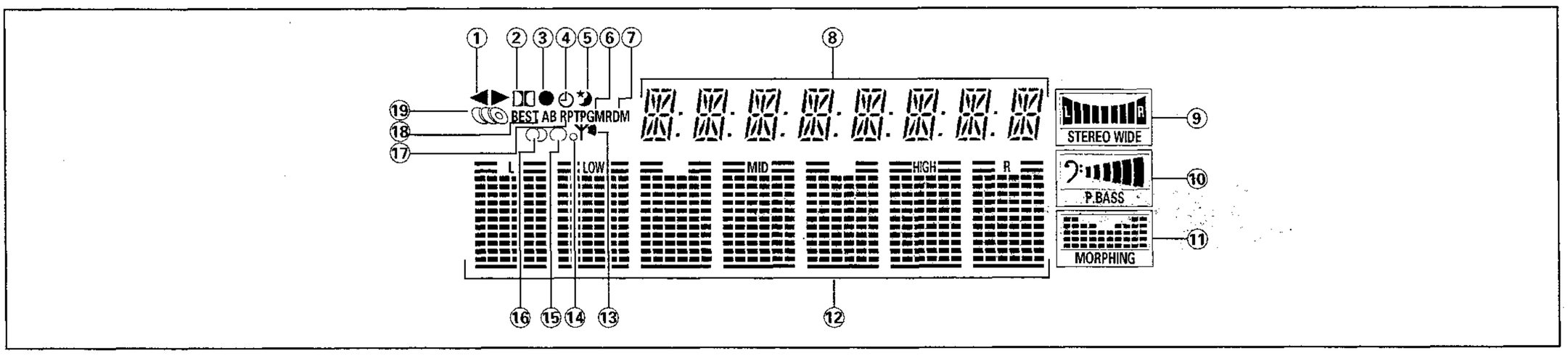
**During cassette deck input**

| | | |
|---|---|---|
| ◄ ► | : | Play button/Tape transport direction |
| **STOP** | : | Stop button |
| ⏭ | : | Fast forward/Music search button |
| ⏮ | : | Rewind/Music search button |

**During tuner operation**

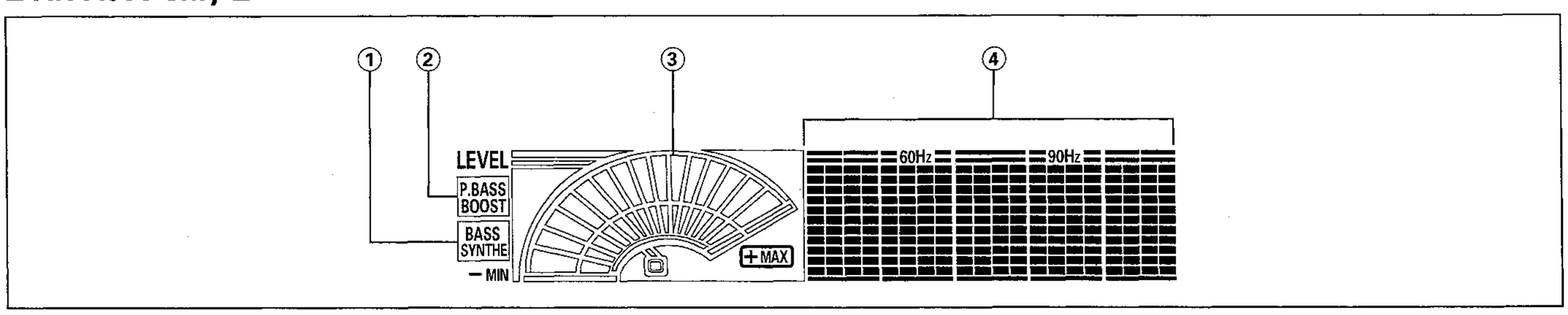
| | | |
|---|---|---|
| ⏭ | : | Frequency and station + (up) button |
| ⏮ | : | Frequency and station – (down) button |

## DISPLAY



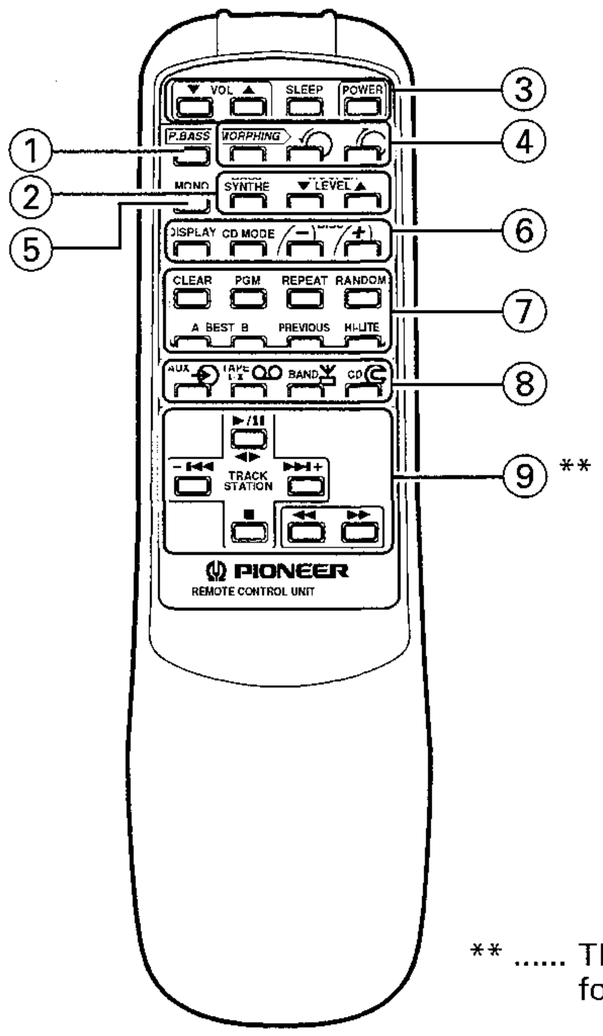

① Lights to show the tape II direction.
② Lights when Dolby NR is ON.
③ Lights during recording and timer recording operation.
④ Lights when setting the timer.
⑤ Lights during sleep timer operation.
⑥ Lights when you press the PGM button.
⑦ Lights when you press the RANDOM button.
⑧ Indicates the frequency and major operation status.
⑨ Displays the ST.WIDE mode.
⑩ Displays the P.BASS mode.
⑪ Displays the MORPHING mode.
⑫ Displays the spectrum analyzer patterns.
⑬ Lights during radio broadcast reception.
⑭ Lights when setting the Beat Cut function.
⑮ Lights when you press the MONO button.
⑯ Lights during FM stereo reception.
⑰ Lights during repeat play.
⑱ Flashes during Best Selection setting (A or B), and lights during play.
⑲ ◎◎◎ : Lights during ALL mode operation.
◎ : Lights during SINGLE mode operation.

## ■ XR-A800 only ■



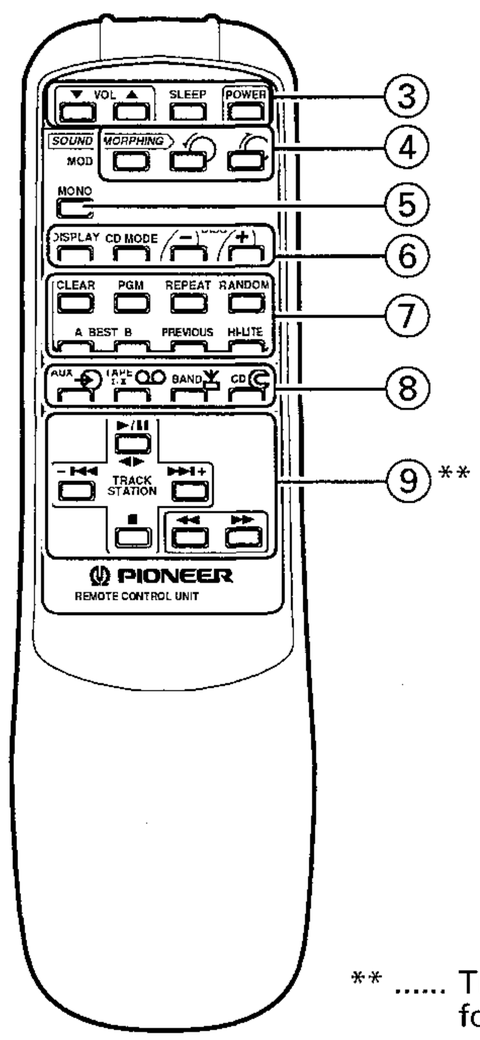

① Lights when BASS SYNTHE button is ON.
② Lights when P.BASS button is ON.
③ Displays the woofer level.
④ Displays the spectrum analyzer patterns of the low frequencies.

XR-A800




** ..... These buttons are used for multi-functions.

XR-A700




** ..... These buttons are used for multi-functions.

## REMOTE CONTROL UNIT

The following instructions concern the XR-A800.

① **P.BASS : P.BASS button**

② **BASS SYNTHE : BASS SYNTHE ON/OFF button**
**WOOFER ▼ LEVEL ▲ : WOOFER LEVEL ▼ (down) ▲ (up) buttons**

The following instructions are for both the XR-A800 and the XR-A700.

③ **POWER button**
**SLEEP : SLEEP button**
**VOLUME ▲ (up), ▼ (down) buttons**
Increases/decreases the sound volume of the unit.

④ **: SOUND MORPHING JOG buttons**
**MORPHING : SOUND MORPHING button**

⑤ **MONO : MONO button**

⑥ **– DISC + : DISC (–, +) buttons**
**CD MODE : CD MODE button**
**DISPLAY : DISPLAY button**

⑦ **RANDOM : RANDOM button**
**REPEAT : REPEAT button**
**PGM : PROGRAM button**
**CLEAR : CLEAR button**
**HI-LITE : HI-LITE button**
**PREVIOUS : PREVIOUS button**
**A BEST B : BEST (A, B) buttons**

⑧ **Input selector buttons (CD, TUNER, TAPE, AUX)**

⑨ **Common operation buttons**
**During CD input**
**►/II : Play/Pause button**
**–I◄◄, ►►I+ : Track search button**
**■ : Stop button**
**◄◄, ►► : Fast reverse/Fast forward button**

**During cassette deck input**
**◄► : Play/Tape transport direction button**
**–I◄◄, ►►I+ : Music search button**
**■ : Stop button**
**◄◄, ►► : Rewind/Fast forward button**

**During tuner operation**
**–I◄◄, ►►I+ : Station – (down)/+ (up) button**
**◄◄, ►► : Frequency down/up button**

# 8.1 SPECIFICATIONS

## ■ STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

**Amplifier Section**

Continuous Power Output (RMS)
- XR-A800
  - Woofer ..... 120 W + 120 W (100 Hz, T.H.D. 10 %, 8 Ω)
  - Tweeter ..... 20 W + 20 W (1 kHz, T.H.D. 10 %, 4 Ω)
- XR-A700 ..... 120 W + 120 W (1 kHz, T.H.D. 10 %, 6 Ω)

**FM Tuner Section**

Reception frequencies ..... 87.5 MHz to 108 MHz
Antenna input ..... 75 Ω unbalanced

**AM Tuner Section**

Reception frequencies ..... 531 kHz to 1,602 kHz (9k)
530 kHz to 1,700 kHz (10k)
Antenna ..... Loop antenna (included)

**Double Cassette Deck Section**

System type ..... 4-track, 2-channel stereo
Heads ..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor ..... DC servo motor x 1
Frequency response
- Type I (Normal) tape ..... *35 Hz to 14,000 Hz ±6 dB (recorded at –20 dB)

SN ratio ..... *56 dB (peak recording level, audible compensation)
Dolby B type NR on ..... 10 dB compensation at 5 kHz

* Values measured in accordance with EIAJ standards.

## ■ FILE TYPE CD PLAYER

Type ..... Compact disc audio system
Usable discs ..... Compact audio discs
Channels ..... 2 channels (stereo)
Program steps ..... 32 steps maximum

## ■ ELECTRICAL REQUIREMENTS, ETC.

Power Requirements ..... AC 110-127/220-230/240 V (switchable), 50/60 Hz
Power Consumption
- XR-A800 ..... 610 W
- XR-A700 ..... 560 W

External dimensions
- XR-A800 ..... 270 (W) x 380 (H) x 369 (D) mm
- XR-A700 ..... 270 (W) x 310 (H) x 369 (D) mm

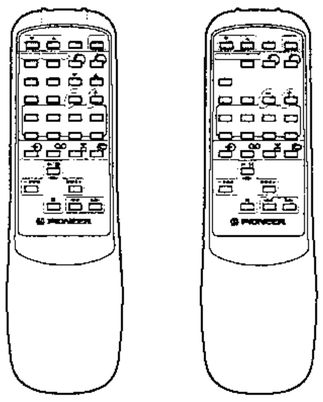
Weight
- XR-A800 ..... 12.5 kg
- XR-A700 ..... 11.5 kg

## ■ ACCESSORIES

Operating Instructions ..... 1
FM antenna ..... 1
AM loop antenna ..... 1
Remote control unit ..... 1
AA/R6P dry cell batteries ..... 2

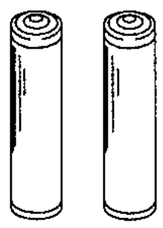
***NOTE:***
*Specifications and design are subject to possible modifications without notice, due to improvements.*

①



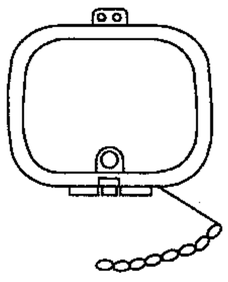
XR-A800 XR-A700
Remote Control Unit
XR-A800 (CU-XR045) : AXD7147
XR-A700 (CU-XR044) : AXD7146

②



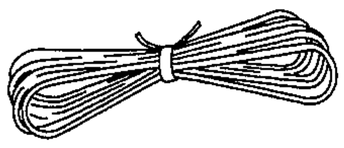
AA/R6P Dry Cell Batteries
VEM-013

③



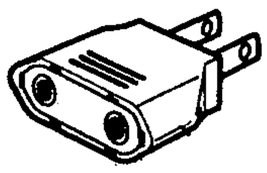
AM Loop Antenna
ATB7004

④



FM Antenna
ADH7007

⑤



Power-cord Plug Conversion Adaptor
VKX1007 (XR-A800/DXJ/NC, XR-A700/DXJ/NC only)