

# Service Manual

ORDER NO.  
**RRV2691**

DVD/CD RECEIVER

# XV-HTD5

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

| Type | Model   | Power Requirement | Region No. | Remarks |
|------|---------|-------------------|------------|---------|
|      | XV-HTD5 |                   |            |         |
| NKXJ | ○       | AC220V            | 3          |         |

● **This service manual should be used together with the following manual(s):**

| Model No.     | Order No. | Remarks |
|---------------|-----------|---------|
| XV-HTD50/MYXJ | RRV2634   |         |

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# 1. SAFETY INFORMATION



## WARNING

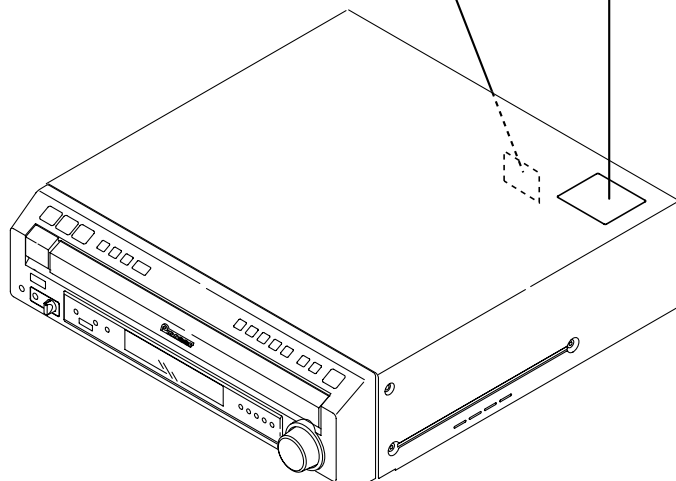
THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.  
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

## LASER DIODE CHARACTERISTICS

FOR DVD : MAXIMUM OUTPUT POWER : 5 mW  
WAVELENGTH : 655 nm  
FOR CD : MAXIMUM OUTPUT POWER : 5 mW  
WAVELENGTH : 785 nm

## LABEL CHECK

Printed on the Rear Panel



## Additional Laser Caution

1. Inside detection switch (S201 on the SMEB assy) and clamp-status detection switch (S11 on the TRSB assy) are detected by the microprocessor (IC11 in the DVDM assy).  
• To permit the laser diode to oscillate, it is required to set the inside detection switch for the inside position (S201 : ON) and to set the loading-status detection switch for the clamp position (the center terminal of S11 is shorted to +5V). The 655 nm laser diode for DVD oscillation will continue if pin 19 of IC1 is shorted to +5V (fault condition) in the DVDM assy.  
The 785 nm laser diode for CD oscillates if pin 20 of IC1 is shorted to +5V in the DVDM assy.  
In the test mode \*, the laser diode oscillates when microprocessor detects a PLAY signal, or when the PLAY key is pressed (S5817 ON in the KEYB assy), with the above requirements satisfied.
2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

\* : Refer to page 81 on service manual RRV2634.

## 2. CONTRAST OF MISCELLANEOUS PARTS

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

● The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part.

Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to  $\nabla$  mark on product are used for disassembly.

● Reference Nos. indicate the pages and Nos. in the service manual for the base model.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

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

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

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

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

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

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

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

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

### ■ CONTRAST TABLE

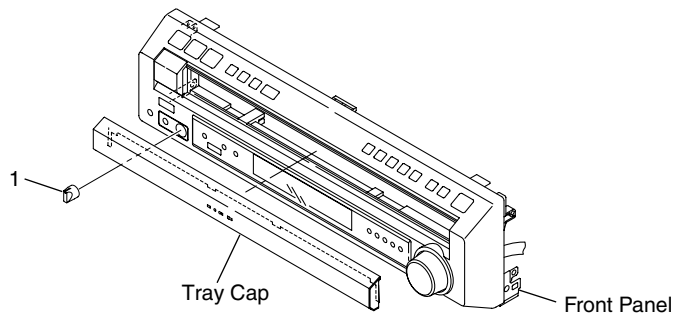
XV-HTD5/NKXJ and XV-HTD50/MYXJ are constructed the same except for the following :

| Ref. No. | Mark | Symbol and Description                         | Part No.          |                  | Remarks |
|----------|------|--|-------------------|------------------|---------|
|          |      |  | XV-HTD50<br>/MYXJ | XV-HTD5<br>/NKXJ |         |
| P9- 2    | NSP  | <b>PCB ASSEMBLIES</b>                          |                   |                  |         |
|          |      | MAIN ASSY                                      | XWX3056           | XWX3059          |         |
| P9- 3    |      | CONNECT ASSY                                   | XWX3061           | XWX3063          |         |
|          |      | COMPLEX ASSY                                   | XWM3202           | XWM3205          |         |
| P9- 5    |      | └ PRIMARY ASSY                                 | XWZ3589           | XWZ3592          |         |
| P9- 7    |      | └ F. AMP ASSY                                  | XWZ3596           | XWZ3598          |         |
| P9- 8    |      | └ R. AMP ASSY                                  | XWZ3600           | XWZ3602          |         |
| P9- 9    |      | └ SPEAKER ASSY                                 | XWZ3604           | XWZ3605          |         |
| P9-11    |      | └ DISPLAY ASSY                                 | XWZ3606           | XWZ3607          |         |
| P11- 1   |      | └ HP MIC ASSY                                  | XWZ3609           | XWZ3611          |         |
|          | NSP  | <b>PACKING SECTION</b>                         |                   |                  |         |
| P7- 1    |      | Power Cord                                     | ADG1154           | DDG1086          |         |
| P7- 8    |      | Operating Instructions (English)               | XRB3016           | Not used         |         |
| P7- 9    |      | Warranty Card                                  | ARY7022           | Not used         |         |
| P7-14    |      | Packing Case                                   | XHD3299           | XHD3300          |         |
| P7-15    |      | Operating Instructions (French/Italian/German) | XRC3062           | Not used         |         |
| P7-16    |      | Operating Instructions (Dutch)                 | XRC3063           | Not used         |         |
| P7-17    |      | Operating Instructions (Spanish)               | XRC3064           | Not used         |         |
|          |      | Operating Instructions (Korean)                | Not used          | XRC3067          |         |
|          |      | Region Label (For Packing Case)                | Not used          | VRW1702          |         |
|          | NSP  | <b>EXTERIOR SECTION</b>                        |                   |                  |         |
| P9-17    |      | 4P F.F.C/60V                                   | XDD3109           | Not used         |         |
| P9-17    |      | 7P F.F.C/60V                                   | Not used          | XDD3110          |         |
| P9-24    |      | Rear Panel                                     | XNC3165           | XNC3170          |         |
| P9-49    |      | Caution Label                                  | VRW1699           | VRW1886          |         |
| P9-54    |      | Getter   | XAX3324           | XAX3325          |         |
|          |      | Round Knob S                                   | Not used          | XAB3022          | No. 1   |
|          |      | K Mark Label                                   | Not used          | XAX3327          |         |
|          |      | <b>FRONT PANEL SECTION</b>                     |                   |                  |         |
| P11-12   |      | Front Panel Assy                               | XXG3126           | XXG3127          |         |
| P11-13   |      | Display Panel                                  | XAK3340           | XAK3341          |         |
| P11-16   |      | Front Panel                                    | XMB3087           | XMB3088          |         |

Notes : For PCB ASSEMBLIES, Refer to "CONTRAST OF PCB ASSEMBLIES" and "2. SCHEMATIC DIAGRAM".

The numbers in the remarks column correspond to the numbers on the "EXPLODED VIEWS".

## EXPLODED VIEWS



## CONTRAST OF PCB ASSEMBLIES

### F MAIN ASSY

XWX3059 and XWX3056 are constructed the same except for the following :

| Mark | Symbol and Description                   | Part No.     |              | Remarks |
|------|--|--------------|--------------|---------|
|      |  | XWX3056      | XWX3059      |         |
|      | IC3002                                   | Not used     | NJM4558MD    |         |
|      | IC3181                                   | Not used     | AN4558NS     |         |
|      | IC5701                                   | BU1923F      | Not used     |         |
|      | C3011, C3014                             | Not used     | CEAT100M50   |         |
|      | C3185                                    | Not used     | CEJQ100M35   |         |
|      | C3186, C3187                             | Not used     | CKSRYB473K25 |         |
|      | C5701                                    | CKSRYB271K50 | Not used     |         |
|      | C5702                                    | CEAT100M50   | Not used     |         |
|      | C5704                                    | CKSRYB103K50 | Not used     |         |
|      | C5705, C5706                             | CCSRCH270J50 | Not used     |         |
|      | C5707                                    | CKSRYB561K50 | Not used     |         |
|      | C5708                                    | CKSRYB104K25 | Not used     |         |
|      | C5830                                    | Not used     | CEAT101M10   |         |
|      | C5831                                    | Not used     | CEAT101M25   |         |
|      | R3181                                    | Not used     | RD1/4PU332J  |         |
|      | R3182                                    | Not used     | RS1/16S332J  |         |
|      | R3183, R3184, R3254, R3258, R3263, R3264 | Not used     | RS1/16S103J  |         |
|      | R5566, R5703                             | Not used     | RS1/16S103J  |         |
|      | R3186, R5705                             | RS1/16S0R0J  | Not used     |         |
|      | R3189, R3190                             | Not used     | RS1/16S682J  |         |
|      | R3255, R3257, R3259, R3261, R5702        | Not used     | RS1/16S473J  |         |
|      | R3256, R3260                             | Not used     | RS1/16S182J  |         |
|      | R5558                                    | RS1/16S153J  | RS1/16S123J  |         |
|      | R5559                                    | RS1/16S562J  | RS1/16S153J  |         |
|      | R5701                                    | RD1/4PU101J  | Not used     |         |
|      | R5830                                    | Not used     | RS1/16S224J  |         |
|      | R5831                                    | Not used     | RS1/16S101J  |         |
|      | CN5501 4P FFC CONNECTOR                  | 52045-0445   | Not used     |         |
|      | CN5502 7P FFC CONNECTOR                  | Not used     | 52045-0745   |         |
|      | KN5701 EARTH METAL FITTING               | VNF1084      | Not used     |         |
|      | X5701 CRYSTAL RESONATOR (4.332MHz)       | ASS7004      | Not used     |         |

### F F. AMP ASSY

XWZ3598 and XWZ3596 are constructed the same except for the following :

| Mark | Symbol and Description | Part No. |            | Remarks |
|------|------------------------|----------|------------|---------|
|      |                        | XWZ3596  | XWZ3598    |         |
|      | C3773                  | Not used | CEAT101M35 |         |

## JF R. AMP ASSY

Although XWZ3602 and XWZ3600 are different in part number, they have the same service parts.

## KF SPEAKER ASSY

Although XWZ3605 and XWZ3604 are different in part number, they have the same service parts.

## LF CONNECT ASSY

XWX3063 and XWX3061 are constructed the same except for the following :

| Mark | Symbol and Description   | Part No.  |  | Remarks |
|------|--|---|--|---------|
|      |  | XWX3061   | XWX3063  |         |
|      | IC5353<br>C5241, C5247<br>C5242, C5248<br>C5271, C5272<br>R5241-R5248<br><br>R5250<br>R9001, R9002 | Not used<br>Not used<br>Not used<br>CCSRCH101J50<br>Not used<br><br>Not used<br>RS1/16S0R0J | AN4558NS<br>CEJQ100M35<br>CCSRCH470J50<br>CCSRCH221J50<br>RS1/16S332J<br><br>RS1/16S0R0J<br>Not used |         |

## OF DISPLAY ASSY

XWZ3607 and XWZ3606 are constructed the same except for the following :

| Mark | Symbol and Description                             | Part No.               |                        | Remarks |
|------|--|------------------------|------------------------|---------|
|      |  | XWZ3606                | XWZ3607                |         |
|      | CN5807 4P FFC CONNECTOR<br>CN5807 7P FFC CONNECTOR | 52044-0445<br>Not used | Not used<br>52044-0745 |         |

## RF MIC HP ASSY

XWZ3611 and XWZ3609 are constructed the same except for the following :


| Mark | Symbol and Description   | Part No.   |  | Remarks |
|------|--|--|--|---------|
|      |  | XWZ3609  | XWZ3611  |         |
|      | IC5802<br>C5805<br>C5806<br>C5807, C5812, C5813<br>C5808, C5814<br><br>C5809<br>C5810<br>C5811<br>R5814<br>R5866<br><br>R5867, R5872, R5874<br>R5868, R5885<br>R5869<br>R5870<br>R5871<br><br>VR5801<br>JA5801 MINI JACK | Not used<br>Not used<br>Not used<br>Not used<br>Not used<br><br>Not used<br>Not used<br>Not used<br>Not used<br>Not used<br><br>Not used<br>Not used<br>Not used<br>Not used<br>Not used<br><br>Not used<br>Not used | NJM4558MD<br>CKSRYB681K50<br>CEAL1R0M50<br>CEAL100M16<br>CCSRCH101J50<br><br>CKSRYB471K50<br>CKSRYB104K25<br>CKSRYB473K25<br>RS1/16S101J<br>RS1/16S222J<br><br>RS1/16S104J<br>RS1/16S223J<br>RS1/16S224J<br>RS1/16S681J<br>RS1/16S102J<br><br>XCS3007<br>AKN7005 |         |

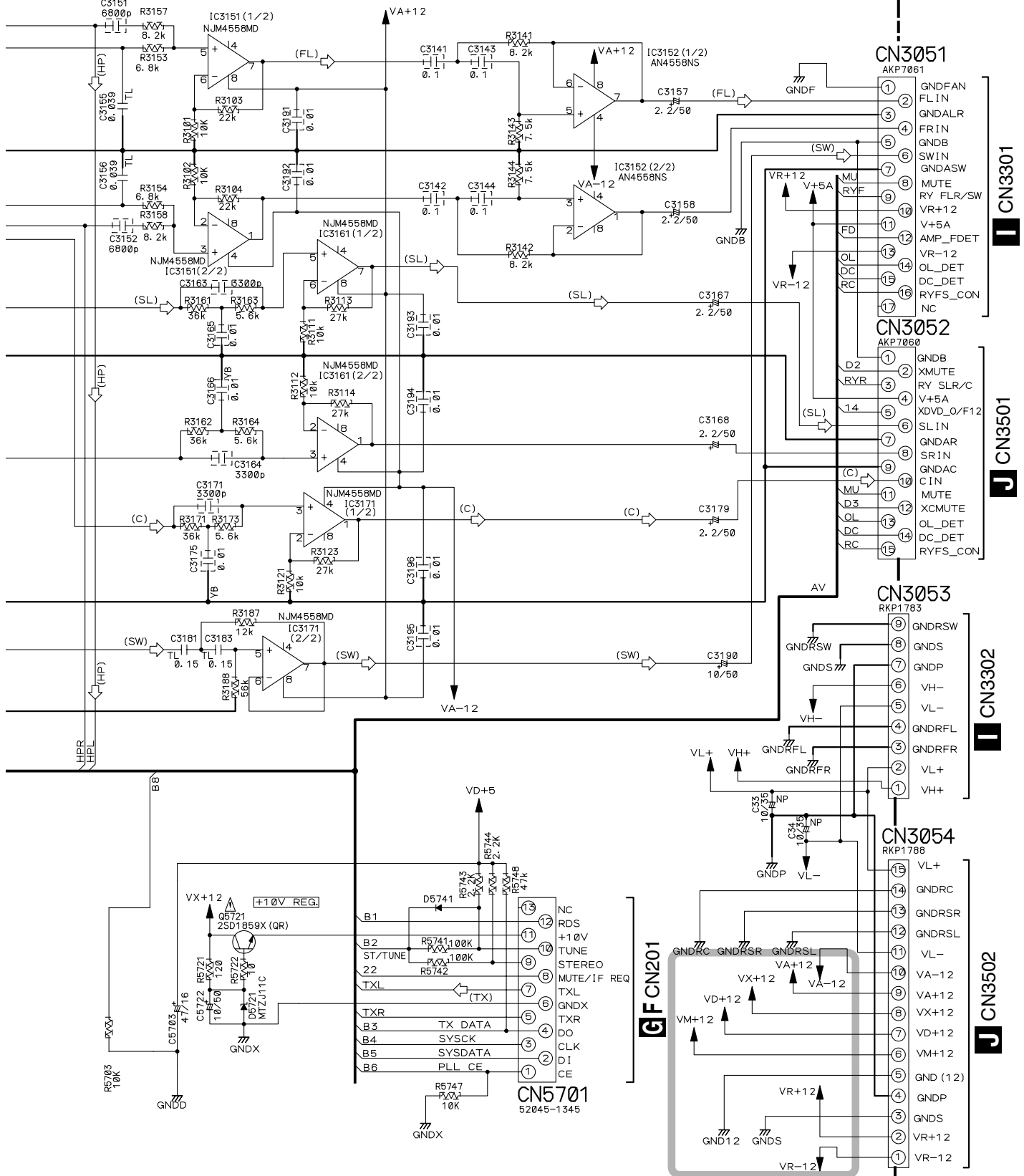
## TF PRIMARY ASSY

Although XWZ3592 and XWZ3589 are different in part number, they have the same service parts.



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

 : The power supply is shown with the marked box.



(VCB) : VCB SIGNAL ROUTE  
(Y) : Y SIGNAL ROUTE  
(C) : C SIGNAL ROUTE

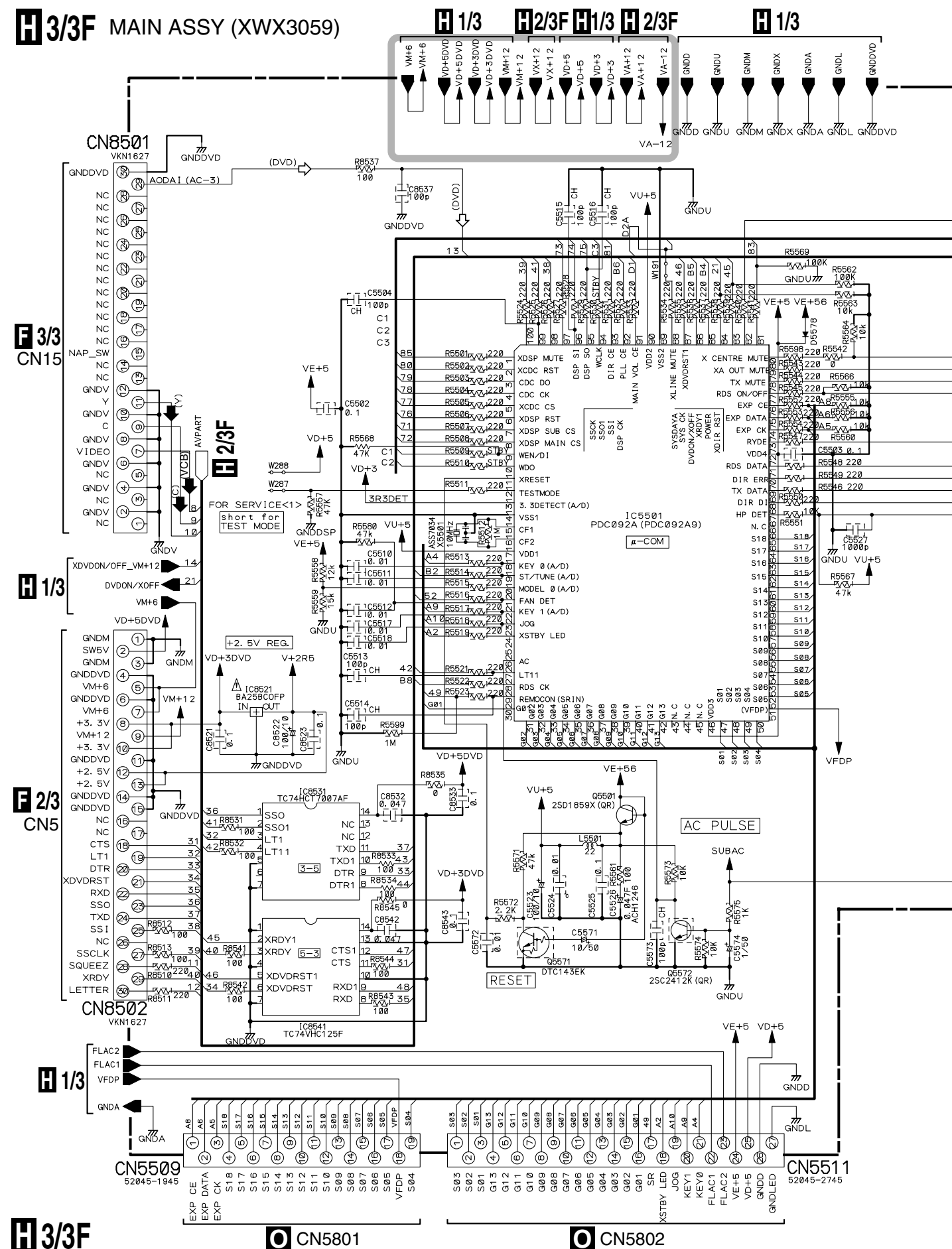
(DVD) : DVD AUDIO SIGNAL ROUTE  
(DI) : DI AUDIO SIGNAL ROUTE  
(FL) : FL AUDIO SIGNAL ROUTE

(HP) : HP AUDIO SIGNAL ROUTE  
(SL) : SL AUDIO SIGNAL ROUTE  
(C) : C AUDIO SIGNAL ROUTE

(SW) : SW AUDIO SIGNAL ROUTE  
(TX) : TX AUDIO SIGNAL ROUTE


**H 2/3F**

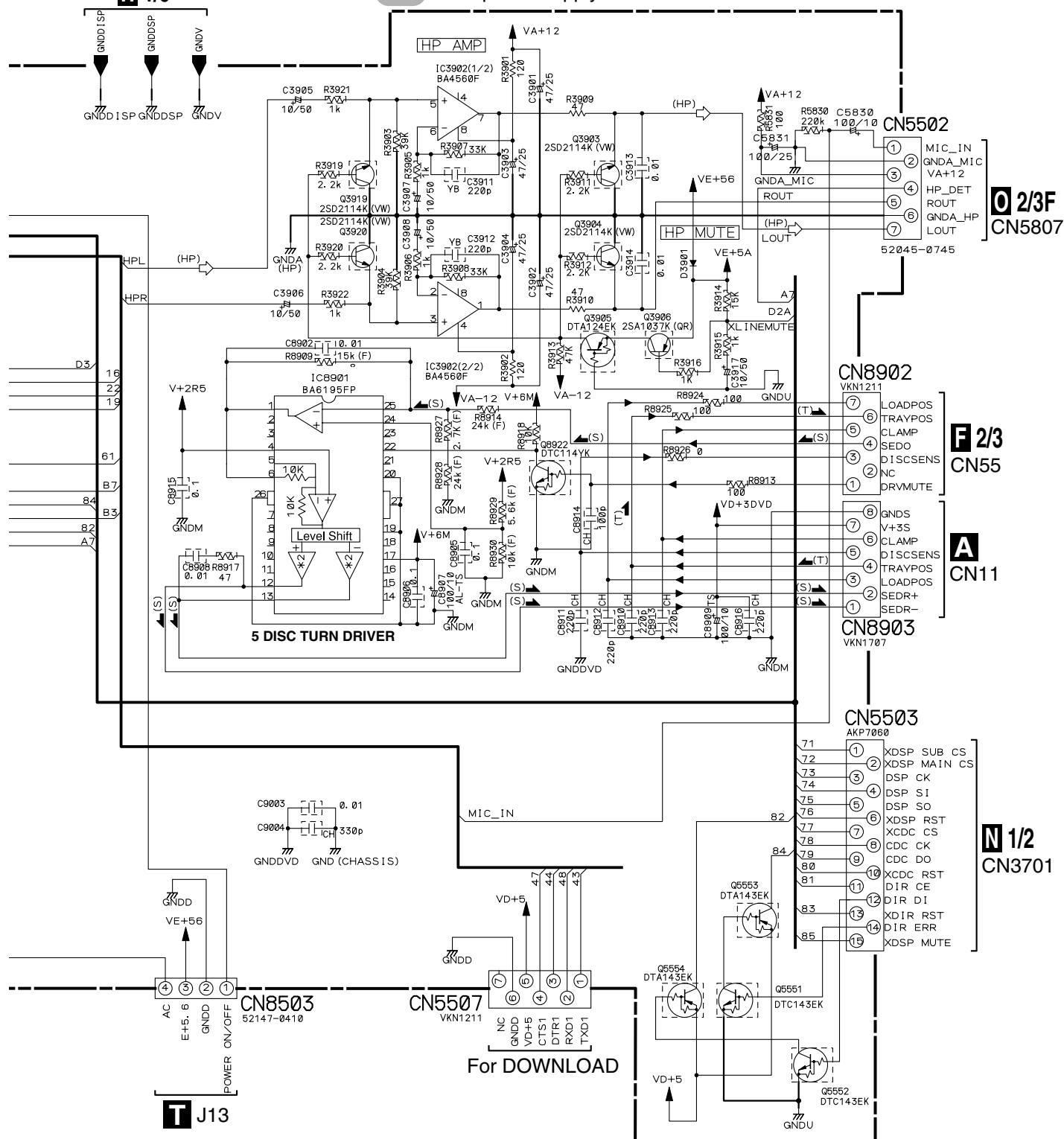
### H 3/3F MAIN ASSY (XWX3059)





# H 1/3

: The power supply is shown with the marked box.



NOTES

ALL CAPACITORS ARE IN  $\mu$ F  
UNLESS OTHERWISE SPECIFIED




```

CH : CCSRCH
SL : CCSRSL
(OTHER : CKSRYB)

```

AL : CEAL  
(OTHER : CEAT\*\*\*M##)

ALL RESISTORS ARE IN  $\Omega$


 1/16W  1/4WPU  (F) 1%

ALL INDUCTORS ARE IN  $\mu\text{H}$

7

NO MARK DIODE


1SS355 1SS133


(VCB)  : VCB SIGNAL ROUTE


(Y).

(C) . . . SIGNAL ROUTE

(DVD) ➡ : DVD AUDIO SIGNAL ROUTE

(HP)  : HP AUDIO SIGNAL ROUTE

(T)  : TRAY POSITION SERVO LOOP LINE

(S)  : SEDO SERVO LOOP LINE





### 3.4 F. AMP ASSY

**F** F. AMP ASSY  
(XWZ3598)

