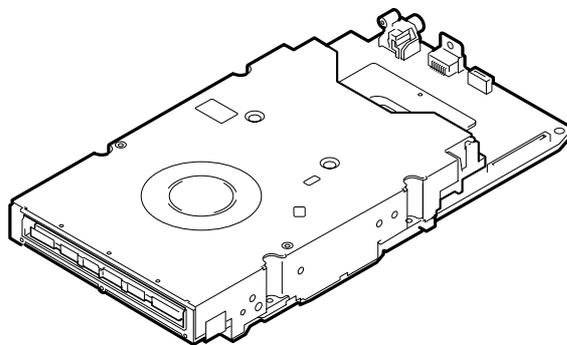


TRAVERSE MECHANISM REPAIR MANUAL

Ver. 1.3 2008.09

DVD RW 6G/7G MECHANISM



SONY[®]

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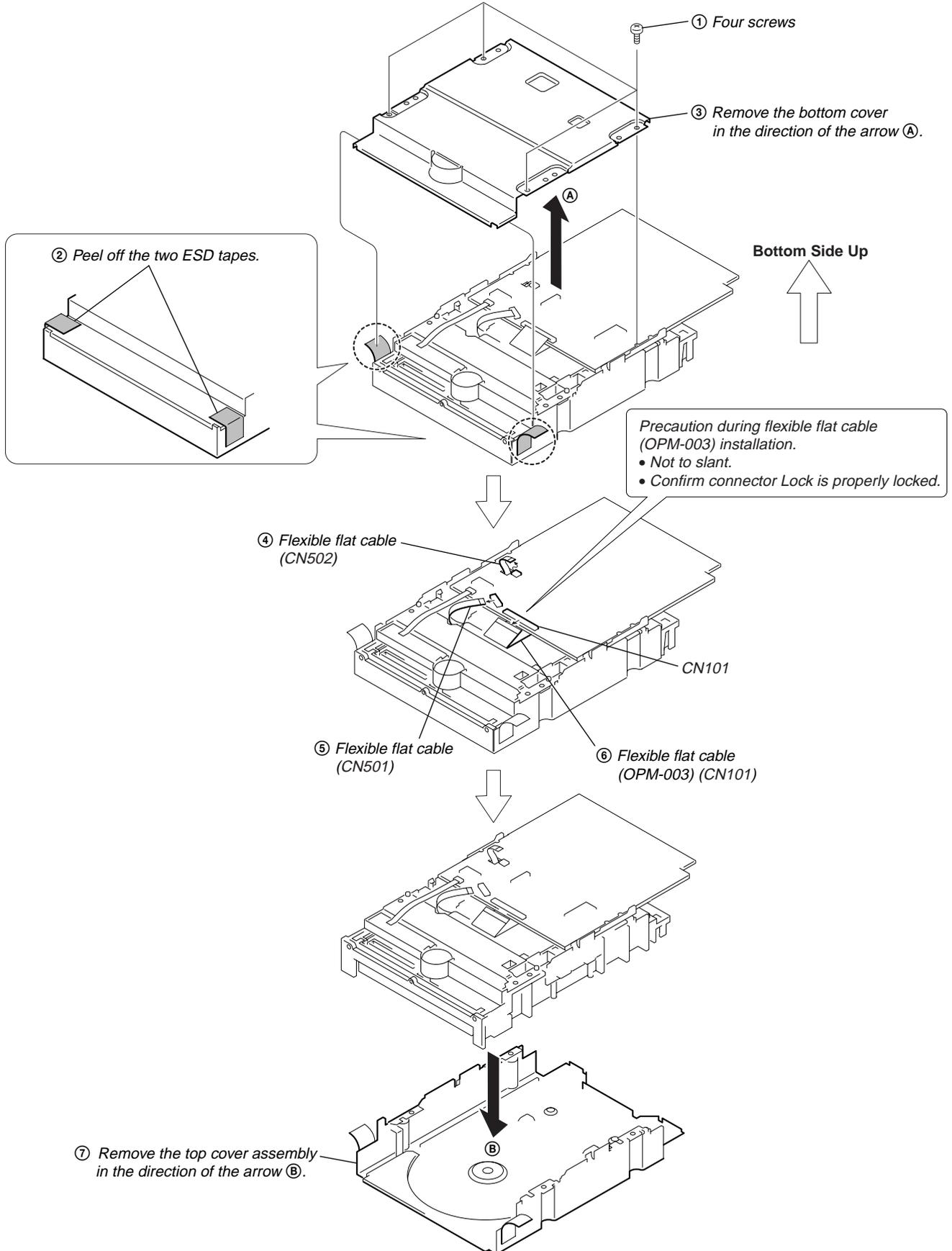
SECTION 1 DISASSEMBLY

NOTE 1: Re-assemble the parts by reversing the steps of disassembly.
NOTE 2: When disassembling, take the anti-static measure.

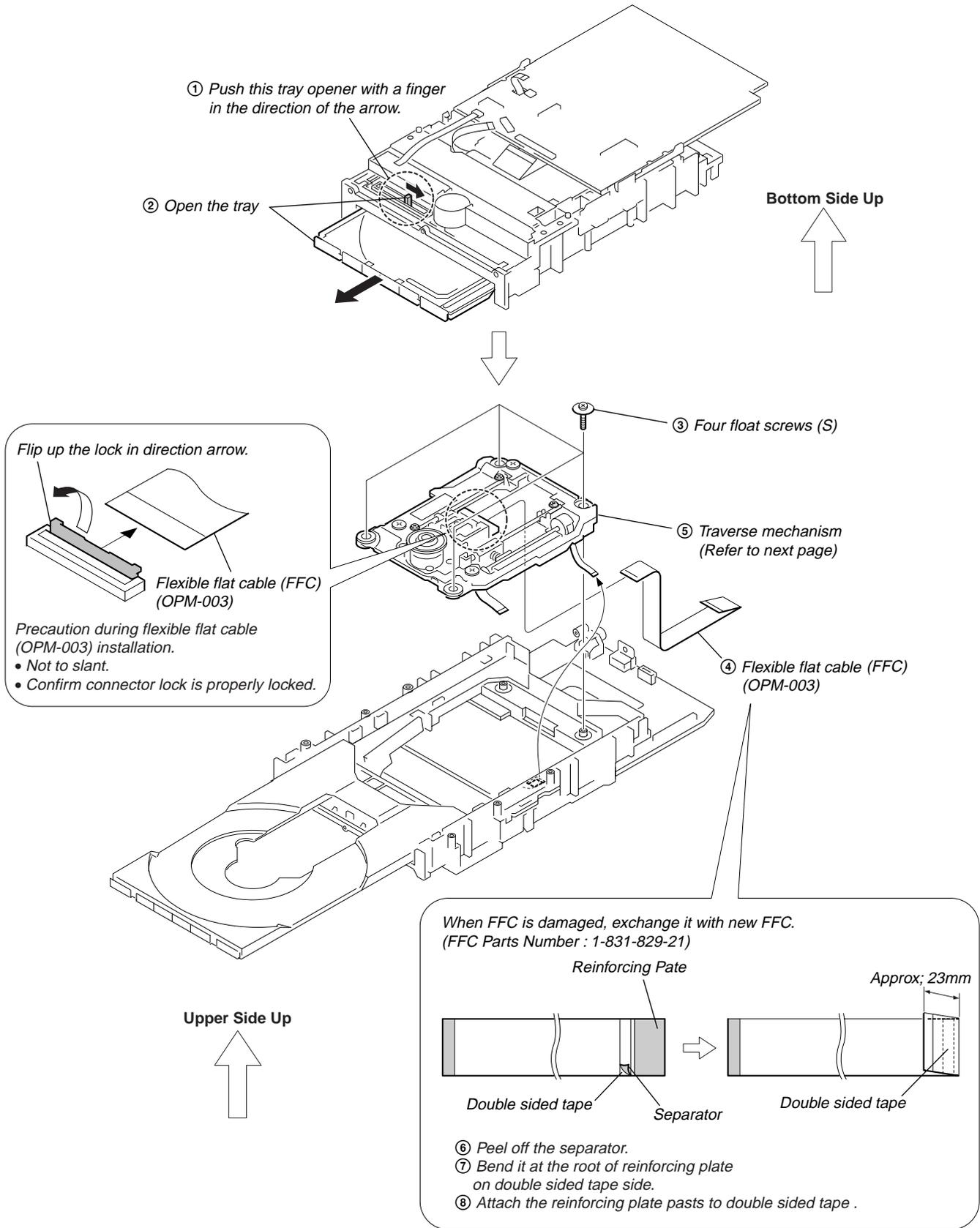
1-1. DVD Drive Unit

Refer to the respective Service Manuals of the respective models for disassembly of the DVD drive unit.

1-2. BOTTOM COVER and TOP COVER ASSEMBLY



1-3. TRAVERSE MECHANISM



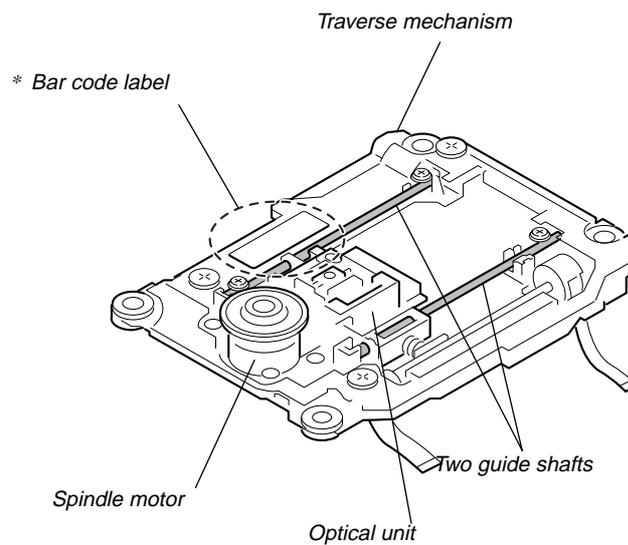
1-4. LD Power Adjustment data

Note : For GX350 single model,

1. Check first customer's unit model name. Write it down.
2. Clear the model name by doing ESC+CHAP+1.
3. Enter the model name and destination of "RDRHX750" and press ESC+CX+1+0 to keep power on.
4. Proceed to adjustment based on Service Manual description and follow until Error rate check.
5. Re-enter original customer's unit model name.

Check the Bar code label on the Traverse Mechanism and take note of the 11-digit number on the label.
Example: 60424949495

↑
last 2-digit are check sum

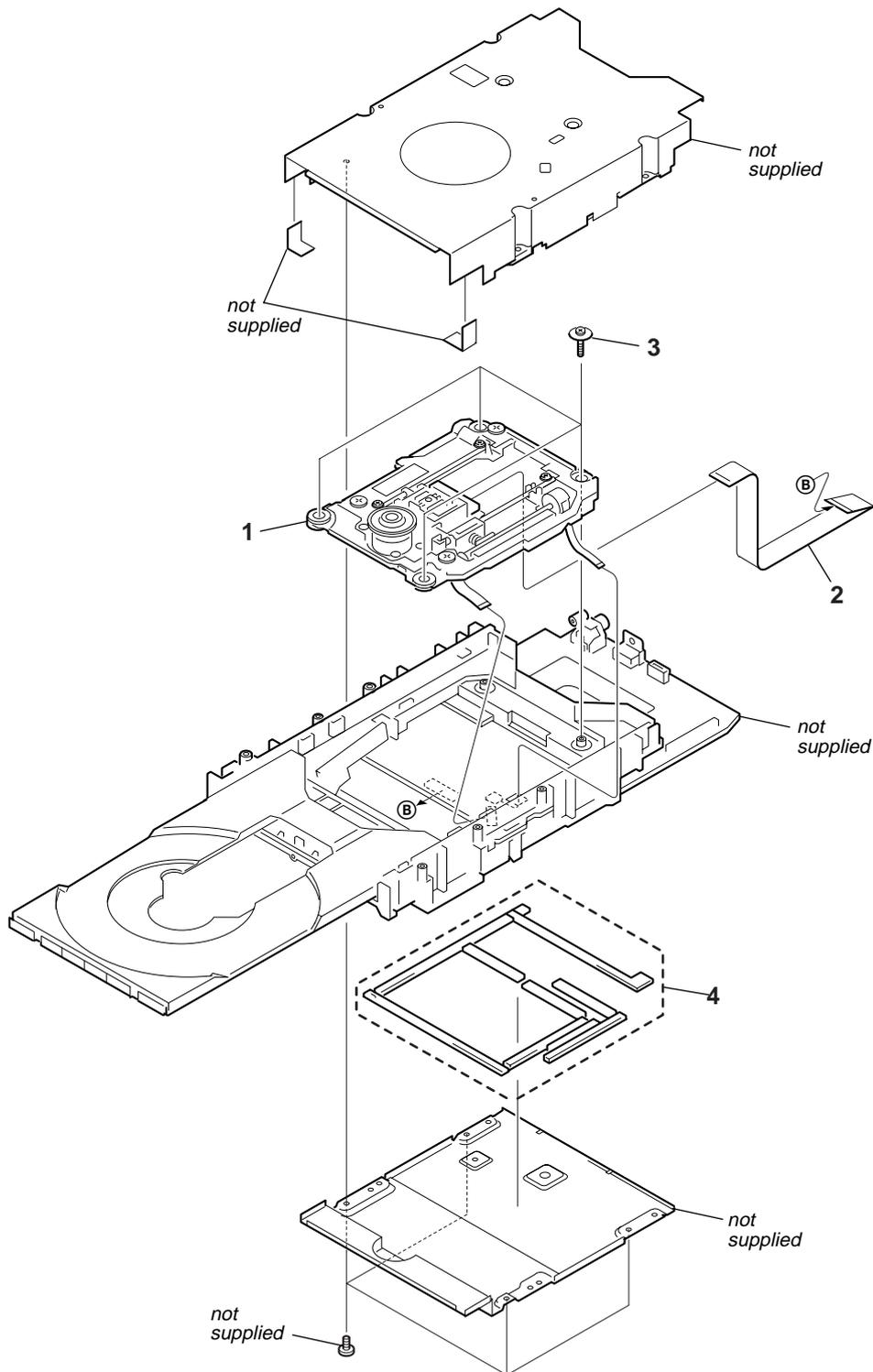


Note : Do not touch spindle motor, optical unit and guide shaft.

* Note : Peel off the Bar code label before attaching new Traverse mechanism on DVD Drive Unit.

SECTION 2 REPAIR PARTS LIST

2-1. Exploded Views

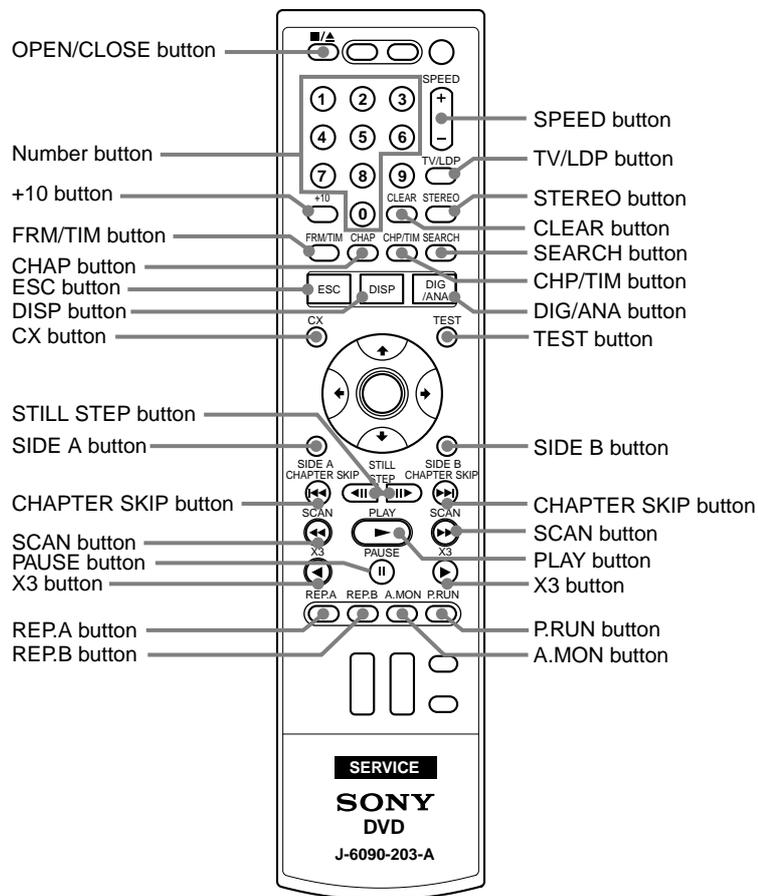


Ref. No.	Part No.	Description	Remarks
1	A-1443-029-A	TM SERVICE PART	
2	1-831-829-21	CABLE, FLEXIBLE FLAT (OPM-003)	
3	2-345-115-11	SCREW(S), FLOAT	
4	3-197-418-01	TAPE(N), DUST PROTECTION	

SECTION 3 ADJUSTMENTS

Preparing for Adjustment

- 1) LD Power Adjustment data
Prepare the 11-digit number marked on the label of the Traverse Mechanism, that is taken in section 1-4 (page 5).
- 2) Tool
 - Remote controller (attached to the main unit)
 - Color monitor
 - Blank DVD-RW disc (JVC/TDK/Verbetim brands are recommended)
 - DVD Video disc (Dual layer: S-2, type)
 - CD disc
 - Service remote controller
(Part code: J-6090-203-A)

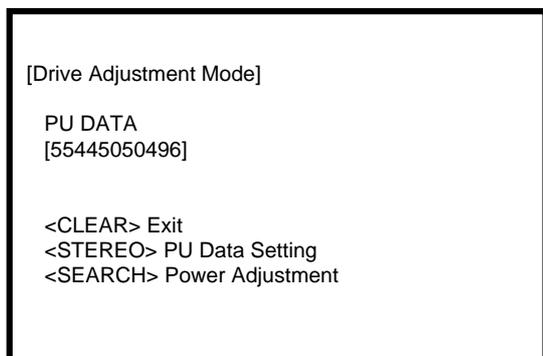


3-1. LD Power Adjustment and function check

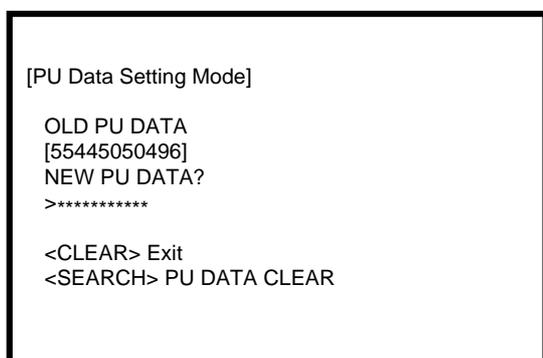
Enter the Service Mode first.

Press the following buttons “ESC” ⇒ “CX” ⇒ “1” ⇒ “0” on the service remote controller.

1. When you enter the Drive Adjustment Mode, the screen is displayed.
On this screen, you can check the 11-digit numeric data.



2. Press “STEREO” on the Service remote controller to enter the PU Data Setting Mode.
When you enter the PU Data Setting Mode, the screen is displayed.



3. Enter an 11-digit number marked on the Traverse Mechanism, by pressing the ten-key from “0” to “9” keys on the Service remote controller.
When you enter the 11-digit number, the screen is displayed.

- Press "PLAY" on the Service remote controller to finalize entry of the 11-digit number.
The 11-digit number contains 2-digit check sum data to prevent input errors.
The screens displayed for the correct/incorrect check sum are as follows.

```
[PU Data Setting Mode]

OLD PU DATA
[55445050496]
NEW PU DATA?
>60424949495 OK ←
<CLEAR> Exit
<SEARCH> PU DATA CLEAR
<PLAY> Enter
```

Correct: OK is displayed.
Go to Step 5 (Power Adjustment Mode)

```
[Drive Adjustment Mode]

PU DATA
[55445050496]
CHECK SUM NG! ←
[60424949333]

<CLEAR> Exit
<STEREO> PU Data Setting
<SEARCH> Power Adjustment
```

Incorrect: CHECK SUM NG! is displayed.
Return to step 2

- When the check sum is correct.
Press "SEARCH" on the Service remote controller to enter the Power Adjustment Mode.
When you enter the Power Adjustment Mode, the following screen is displayed.
The tray opens automatically.

When the tray does not open:
Check Flexible Flat Cable connection.
If it seems to be good, the other parts (MB, Power block) are suspected.

```
[Power Adjustment Mode]

Close The Tray!

<CLEAR> Exit
```

- The following is the progress on the screen.
Close the Tray! → Push the tray for close

7. Close the tray manually and execute the Power Adjustment mode.

Then following items start sequentially.

7-1 DVD Read Power (approx. 10sec) These adjustment will be performed automatically by itself

7-2 RAM Read Power (approx. 20sec)

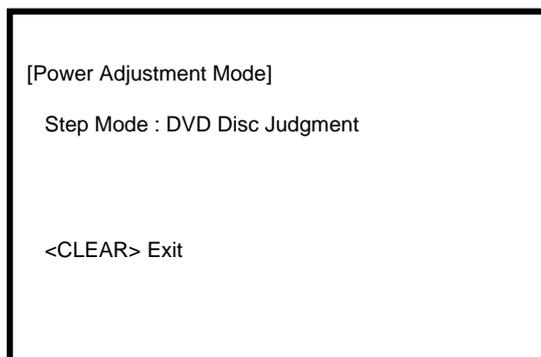
7-3 DVD Write Power (approx. 40sec)

7-4 CD Read Power (approx. 10sec)

7-5 DVD Disc Judgment (approx. 30sec)

The tray opens automatically.

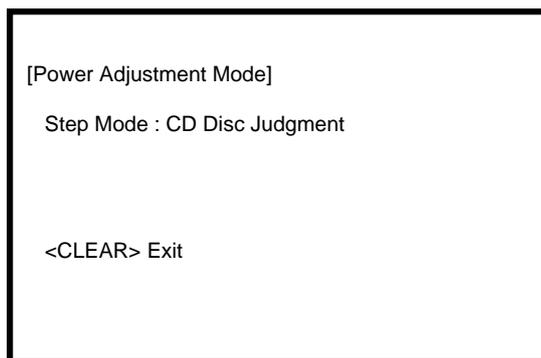
Insert "Any" DVD Dual Layer Disc.



7-6 CD Disc Judgment (approx. 30sec)

The tray opens automatically.

Insert "Any" CD Disc.



Recommended discs are SONY reference disc.
However if it is difficult to use this, any discs available on commercial market can be used.

8. After finishing All adjustments.
Press "CLEAR" to exit the Power Adjustment Mode.

[Power Adjustment Mode]
Step Mode : -
Result : OK

<CLEAR> Exit

3-2. LD Deterioration Information for ATA/ATAPI Confirmation

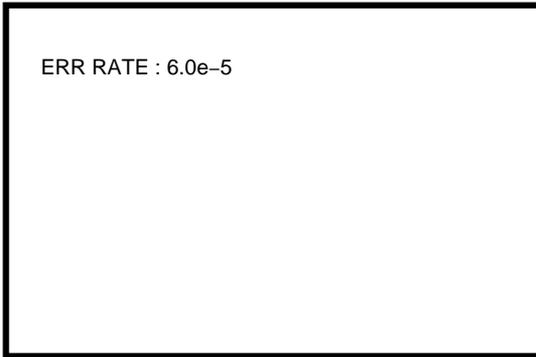
1. Enter the Service mode.
Press the following buttons “ESC” ⇒ “DISP” ⇒ “2” ⇒ “DIG/ANA” ⇒ “DIG/ANA” ⇒ “DIG/ANA” ⇒ “SEARCH” on the service remote controller.
2. Check the IOP.

```
ATA/ATAPI - LD Degrade  
  
CD :0065 103 % OK  
DVD:0065 103 % OK  
TMP:005F 24 C  
ADJ :006B 27 C  
RF :---- 27 C  
TLT :007B
```

LD deterioration specification : less than 120%
(DVD and CD)

3-3. Write Quality Confirmation

1. Insert any DVD-RW media.
(Blank media is the recommend Disc.)
2. Record more than 1~2 minutes contents on disc directly.
ex. XP mode from tuner.
3. Enter the Service mode.
Press the following buttons “ESC” ⇒ “DISP” ⇒ “DIG/ANA” ⇒ “DIG/ANA” on the service remote controller.
4. Screen will appear for error rate measurement.



5. Playback previous recorded title.
Press PLAY on the remote controller or Front Panel.
6. Check the Error Rate during playback.
Error rate specification : less than 1.0e-3

TRAVERSE MECHANISM REPAIR

