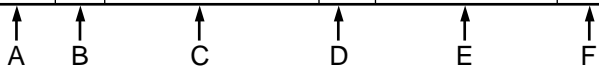


# MAIN PARTS PORTION

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	-	Cassette Cover Ass'y	①	6(L-1)	1
2	⑪	Side Case L Unit	①	6④④-1, (L-2), P1, FP6, FP9	2,3
3	-	Front Case Ass'y	①	2④④-3, FP1	-
4	⑩	Main C.B.A.	①	⑤⑩-4, 3(L-3), B1, FP2, FP3, FP4, FP5, FP7, FP8, FP10, FP301, FP701	4
5	⑫	Rear C.B.A.	①	2④④-5, ⑤⑩-5	5
6	-	Lens Ass'y	①	-----	6
7	-	Top Case & EVF Ass'y	①	2④④-6	7
8	①	Mechanism Chassis Ass'y	①	④④-7, 3(L-4)	8
9	-	Side Case R Ass'y	①	-----	-




## How to read chart shown above:

- A: Order of Procedure steps.  
When reassembling, perform steps(s) in reverse order.
- B: Ref No.
- C: Part to be removed or installed.
- D: Section No.
- E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.  
3④④ = 3 Screws ④④, 2(L-1) = 2 Looking Tabs (L-1)
- F: Refer to "Notes in chart."

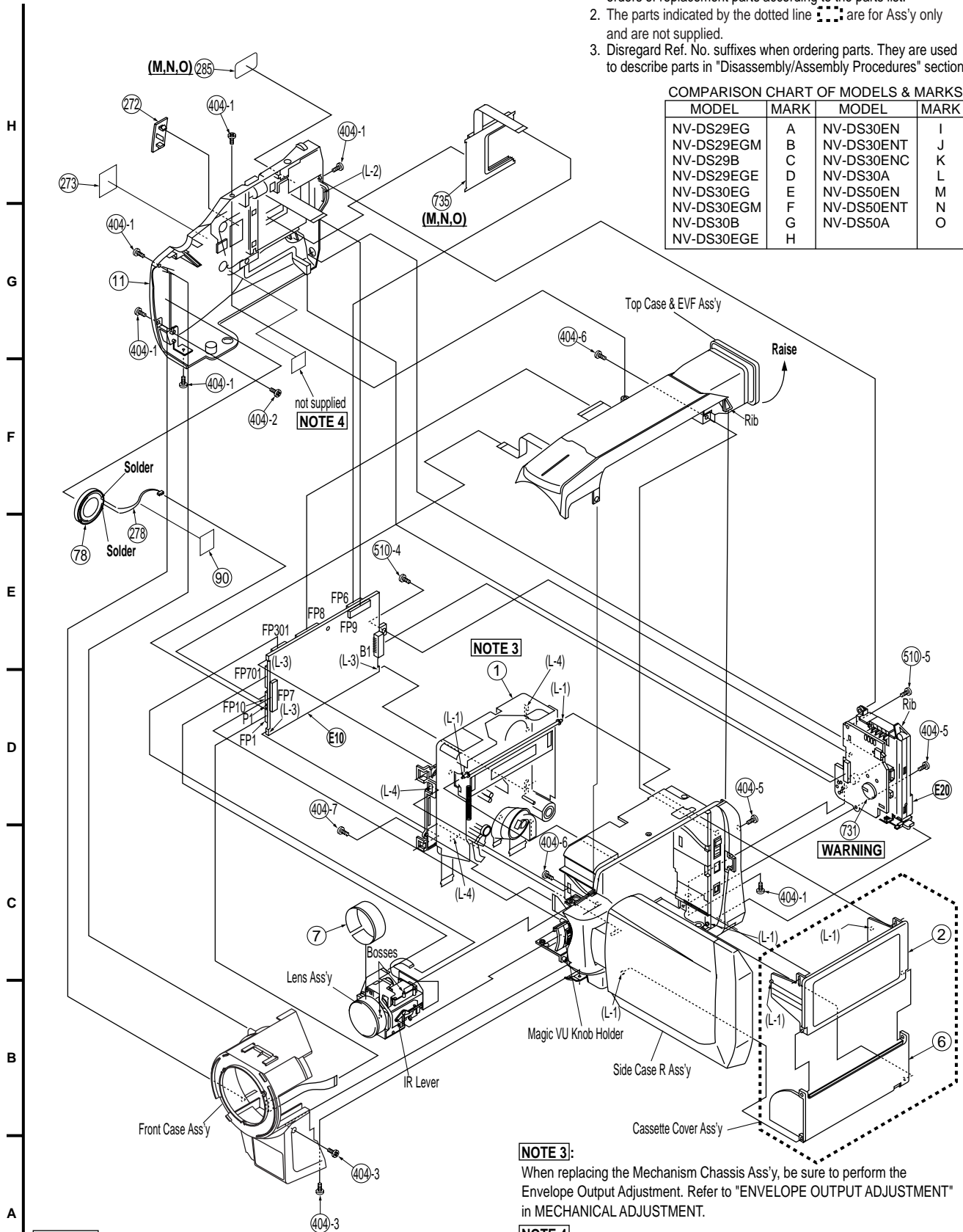
# 1 MAIN PARTS SECTION

**Note:**

1. Parts with no Ref. No. in "EXPLODED VIEW" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
2. The parts indicated by the dotted line  are for Ass'y only and are not supplied.
3. Disregard Ref. No. suffixes when ordering parts. They are used to describe parts in "Disassembly/Assembly Procedures" section.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK	MODEL	MARK
NV-DS29EG	A	NV-DS30EN	I
NV-DS29EGM	B	NV-DS30ENT	J
NV-DS29B	C	NV-DS30ENC	K
NV-DS29EGE	D	NV-DS30A	L
NV-DS30EG	E	NV-DS50EN	M
NV-DS30EGM	F	NV-DS50ENT	N
NV-DS30B	G	NV-DS50A	O
NV-DS30EGE	H		



**WARNING:**  
DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED.  
REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.

**NOTE 3:**  
When replacing the Mechanism Chassis Ass'y, be sure to perform the Envelope Output Adjustment. Refer to "ENVELOPE OUTPUT ADJUSTMENT" in MECHANICAL ADJUSTMENT.

**NOTE 4:**  
In early products, a sheet is used. When replacing the Side Case L Unit, it is not necessary to place the sheet.

## FRONT CASE PORTION & LAMP PORTION

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	⑧3	Lens Hood	②	3 <sup>④04</sup> -1	-
2	⑧4	Lens Ring	②	-----	-
3	④0	Front C.B.A.	②	④04-2, P6501	-
4	⑧9	Front ESD Angle	②	(L-1)	-
5	⑧2	Infrared Panel	②	2(L-2)	-
6	⑧1	Front Case	②	-----	-

↑ A      ↑ B                      ↑ C                      ↑ D                      ↑ E                      ↑ F

### How to read chart shown above:

A: Order of Procedure steps.

When reassembling, perform steps(s) in reverse order.

B: Ref No.

C: Part to be removed or installed.

D: Section No.

E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.

3<sup>④04</sup> = 3 Screws <sup>④04</sup>, 2(L-1) = 2 Looking Tabs (L-1)

F: Refer to "Notes in chart."

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	②81	Light Protector	②	3(L-3)	-
2	②82	Light Reflector	②	2 <sup>④04</sup> -3	-
3	②84	Lamp Socket Unit	②	-----	-
4	②83	Lamp	②	-----	9

↑ A      ↑ B                      ↑ C                      ↑ D                      ↑ E                      ↑ F

### How to read chart shown above:

A: Order of Procedure steps.

When reassembling, perform steps(s) in reverse order.

B: Ref No.

C: Part to be removed or installed.

D: Section No.


E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.

3<sup>④04</sup> = 3 Screws <sup>④04</sup>, 2(L-1) = 2 Looking Tabs (L-1)


F: Refer to "Notes in chart."

## 2 FRONT CASE SECTION

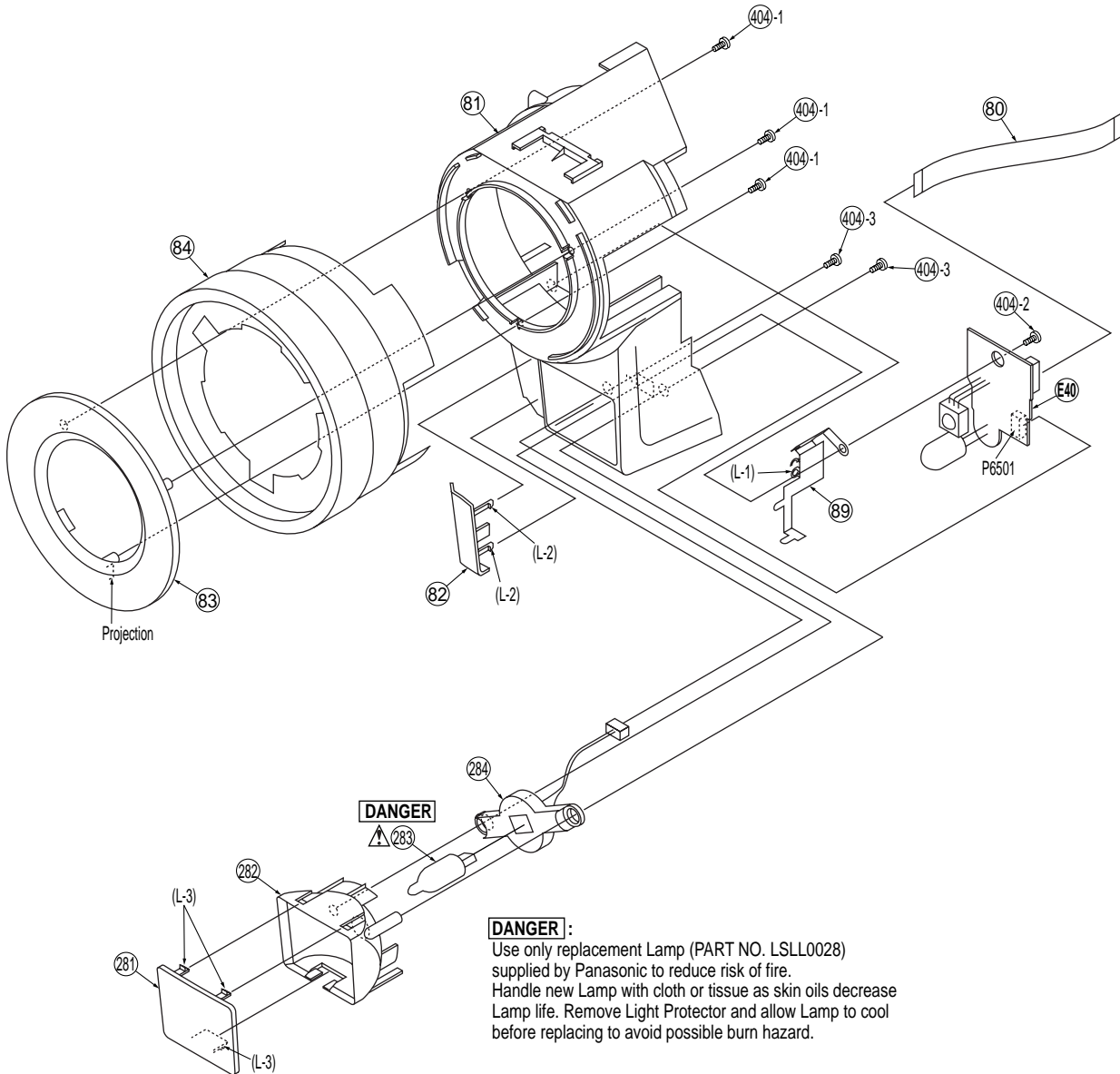
### Note:

1. Parts with no Ref. No. in "EXPLODED VIEW" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
2. The parts indicated by the dotted line  are for Ass'y only and are not supplied.
3. Disregard Ref. No. suffixes when ordering parts. They are used to describe parts in "Disassembly/Assembly Procedures" section.

### IMPORTANT SAFTY NOTICE:

COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

H  
G  
F  
E  
D  
C  
B  
A



**DANGER**  


**DANGER** :  
Use only replacement Lamp (PART NO. LSL0028)  
supplied by Panasonic to reduce risk of fire.  
Handle new Lamp with cloth or tissue as skin oils decrease  
Lamp life. Remove Light Protector and allow Lamp to cool  
before replacing to avoid possible burn hazard.

## CCD PORTION & LENS PORTION

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	⑦⑩	CCD C.B.A.	③	2④②	10
2	⑥⑥	Filter Rubber	③	-----	10
3	②②	Optical Filter	③	-----	10

↑ A    ↑ B            ↑ C            ↑ D            ↑ E            ↑ F

### How to read chart shown above:

- A: Order of Procedure steps.  
When reassembling, perform steps(s) in reverse order.
- B: Ref No.
- C: Part to be removed or installed.
- D: Section No.
- E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.  
3④④ = 3 Screws ④④, 2(L-1) = 2 Looking Tabs (L-1)
- F: Refer to "Notes in chart."

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	⑥⑨	Focus Motor Unit	③	2⑤⑦, Unsolder	-
2	⑥⑧	Zoom Motor Unit	③	3⑤⑦, Unsolder	11


↑ A    ↑ B            ↑ C            ↑ D            ↑ E            ↑ F

### How to read chart shown above:

- A: Order of Procedure steps.  
When reassembling, perform steps(s) in reverse order.
- B: Ref No.
- C: Part to be removed or installed.
- D: Section No.
- E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.  
3④④ = 3 Screws ④④, 2(L-1) = 2 Looking Tabs (L-1)
- F: Refer to "Notes in chart."

### 3 CCD AND LENS SECTION

**Note:**

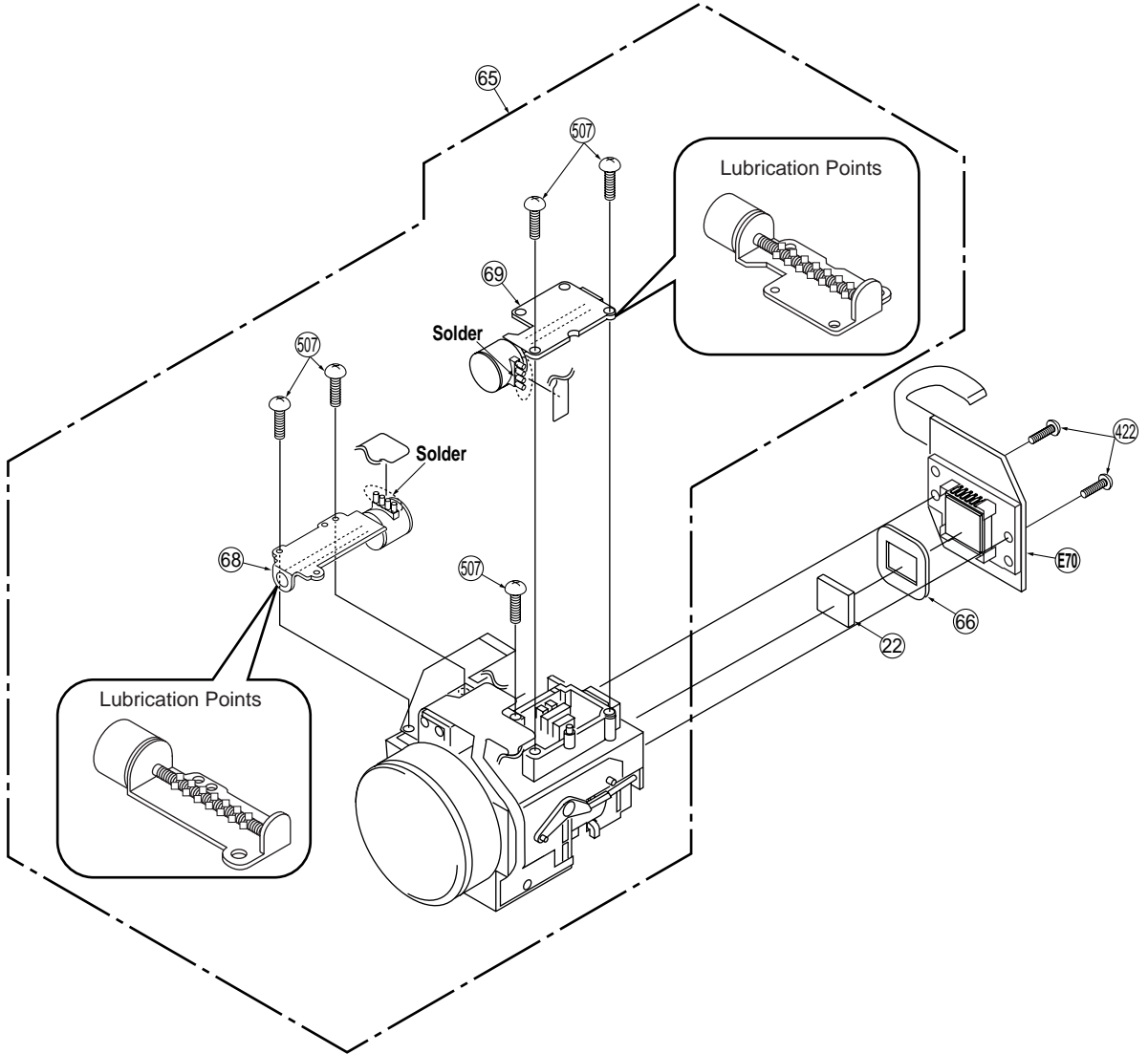
1. Parts with no Ref. No. in "EXPLODED VIEW" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
2. The parts indicated by the dotted line  are for Ass'y only and are not supplied.
3. Disregard Ref. No. suffixes when ordering parts. They are used to describe parts in "Disassembly/Assembly Procedures" section.

**LUBRICATION POINTS**

When the marked parts are replaced, apply the recommended lubricants or adhesive for better maintenance of the unit.

Mark	Kind of Lubricant	Availability	Part Number
□□	Grease	Availability from Factory	LSUQ0002

H  
G  
F  
E  
D  
C  
B  
A



## TOP CASE PORTION & EVF PORTION

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	Ⓔ80	Top Operation C.B.A.	4	4 <sup>416</sup> , P001	-
2	Ⓔ30	Microphone C.B.A.	4	404	-
3	Ⓔ50	EVF Unit	4	3(L-1)	12

↑ A    ↑ B    ↑ C    ↑ D    ↑ E    ↑ F

### How to read chart shown above:

A: Order of Procedure steps.

When reassembling, perform steps(s) in reverse order.

B: Ref No.

C: Part to be removed or installed.

D: Section No.

E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.

3<sup>404</sup> = 3 Screws 404, 2(L-1) = 2 Looking Tabs (L-1)

F: Refer to "Notes in chart."

### Note:

When disassembling or reassembling, make sure that no dust gets in EVF Unit.

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	-	EVF Case Ass'y	4	402, FP951	13
2	40	Eye Cap	4	----	-
3	60	EVF Protect A	4	4(L-2)	-
4	50	EVF Back Light C.B.A.	4	2(L-3), FP952	-
	44	LED Holder		2(L-4)	
	57	LED Diffusion Sheet		2(L-5)	
	54	LCD Panel		----	
	276	Protect Plate B		----	
	274	EVF Mask		----	
5	58	Protect Plate A	4	----	-
6	56	Lens	4	(L-6)	14
	55	Lens Holder		----	
7	53	Eye Sight Lever A	4	402	14
8	52	Eye Sight Lever B	4	----	14
9	59	EVF Protect B	4	----	-

↑ A    ↑ B    ↑ C    ↑ D    ↑ E    ↑ F

### How to read chart shown above:

A: Order of Procedure steps.

When reassembling, perform steps(s) in reverse order.

B: Ref No.

C: Part to be removed or installed.


D: Section No.

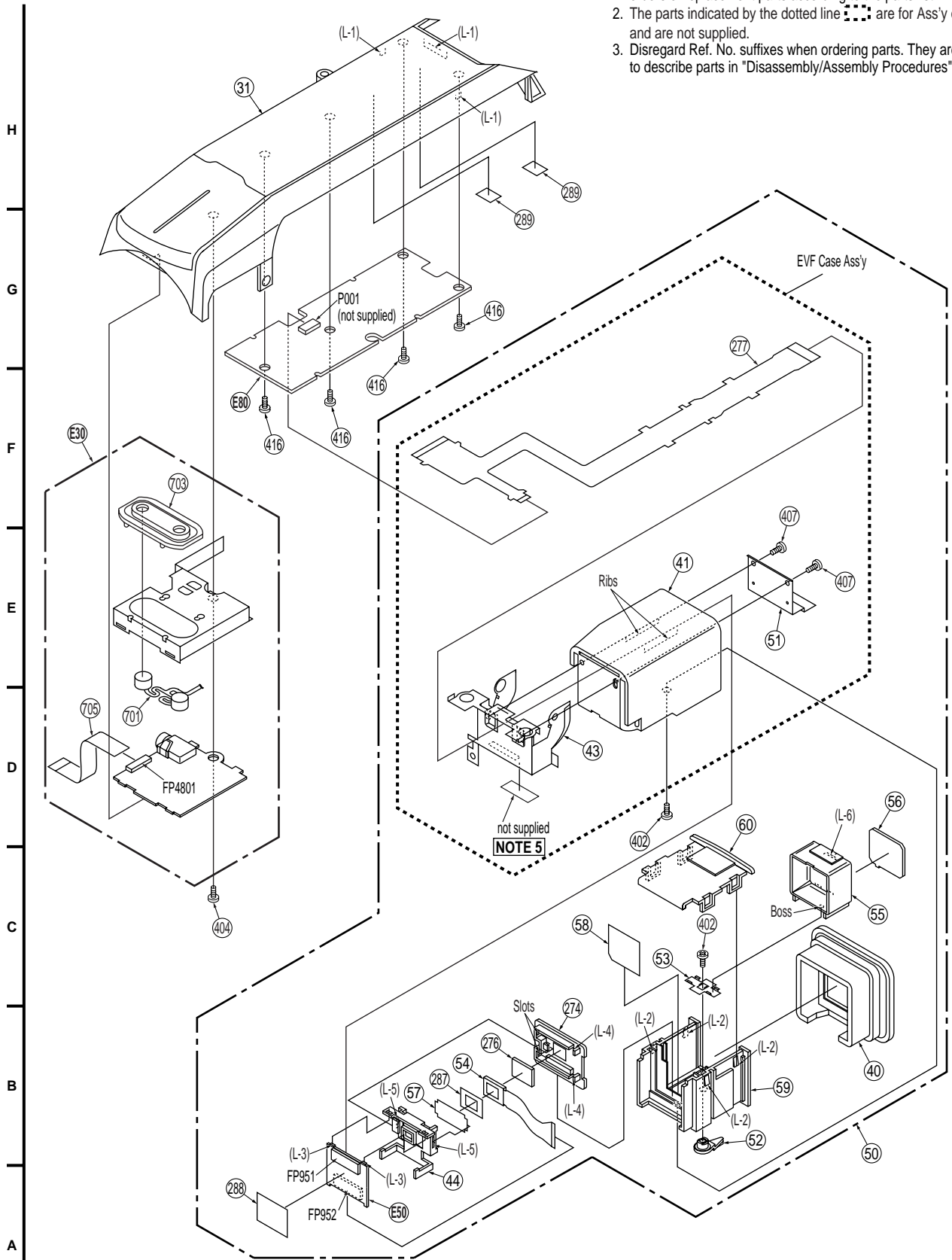
E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.

3<sup>404</sup> = 3 Screws 404, 2(L-1) = 2 Looking Tabs (L-1)

F: Refer to "Notes in chart."

# 4 TOP CASE AND EVF SECTION

- Note:**
1. Parts with no Ref. No. in "EXPLODED VIEW" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
  2. The parts indicated by the dotted line  are for Ass'y only and are not supplied.
  3. Disregard Ref. No. suffixes when ordering parts. They are used to describe parts in "Disassembly/Assembly Procedures" section.



**NOTE 5:**  
 In early products, a sheet is used. When replacing the EVF Angle Unit, do not place the sheet.



## SIDE CASE R PORTION & LCD PORTION

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	②61	Front Cover	⑤	④04	19
2	-	LCD Case Ass'y	⑤	④04, ⑤09	15
3	⑦2	Tripod Frame	⑤	④02	-

↑ A    ↑ B            ↑ C            ↑ D            ↑ E            ↑ F

### How to read chart shown above:

- A: Order of Procedure steps.  
When reassembling, perform steps(s) in reverse order.
- B: Ref No.
- C: Part to be removed or installed.
- D: Section No.
- E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.  
3④04 = 3 Screws ④04, 2(L-1) = 2 Looking Tabs (L-1)
- F: Refer to "Notes in chart."

STEP No.	Ref. No.	PART	Section No.	REMOVE	NOTE
1	⑨4	LCD Cace A Unit	⑤	2 ④03, 9(L-1)	-
2	⑨6	LCD Shaft Unit	⑤	FP8001	-
3	⑨5	LCD Case B	⑤	④04	16
4	⑥0	LCD C.B.A.	⑤	3(L-2), FP8002, Unsolder	17
5	⑨8	LCD Panel Unit	⑤	8(L-3)	17
6	⑨9	Lead Light Panel Unit	⑤	-----	17
7	⑩0	Lamp Unit	⑤	3(L-4), LCD Sheet Unit	18


↑ A    ↑ B            ↑ C            ↑ D            ↑ E            ↑ F

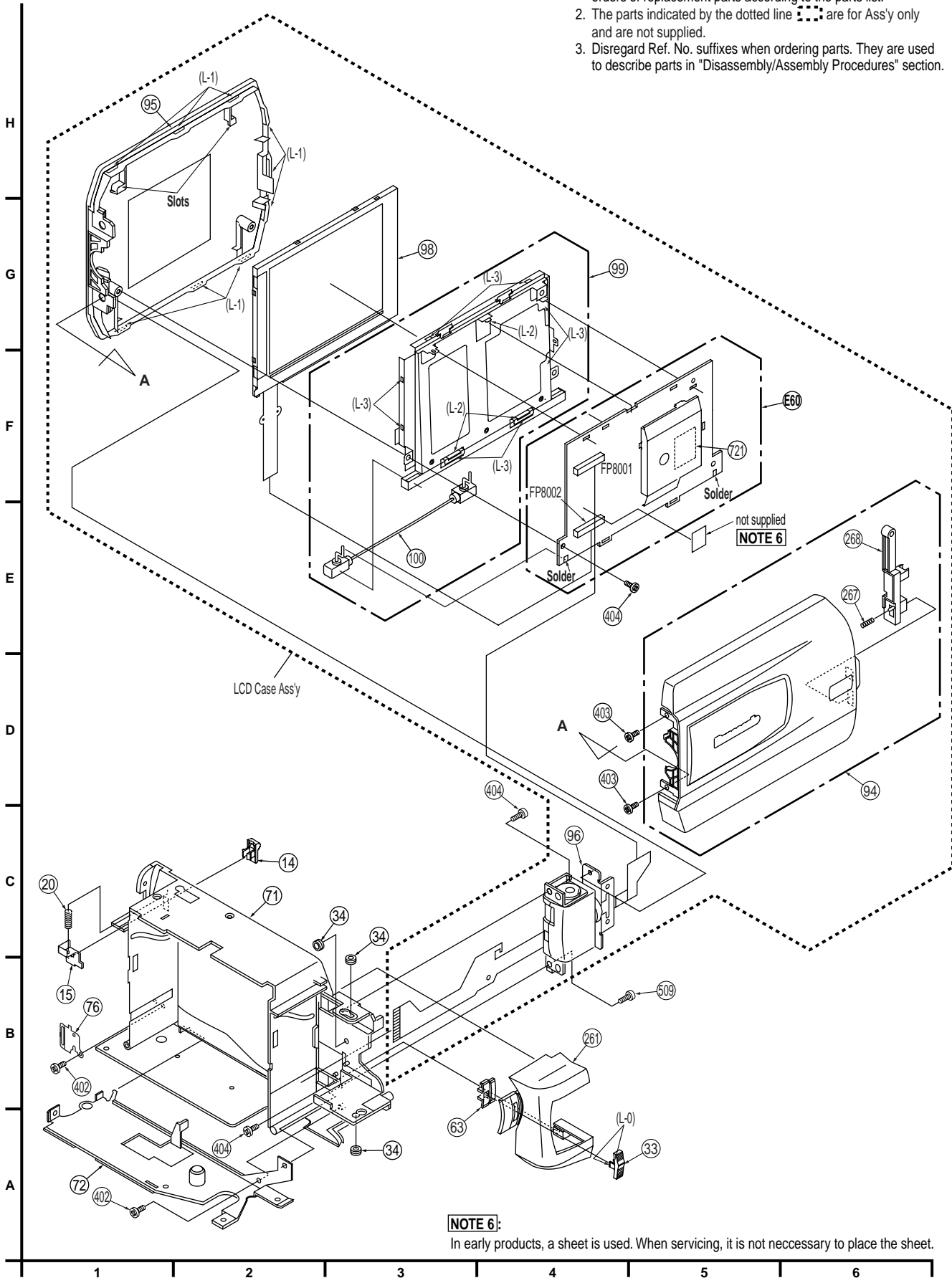
### How to read chart shown above:

- A: Order of Procedure steps.  
When reassembling, perform steps(s) in reverse order.
- B: Ref No.
- C: Part to be removed or installed.
- D: Section No.
- E: Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or unsoldered.  
3④04 = 3 Screws ④04, 2(L-1) = 2 Looking Tabs (L-1)
- F: Refer to "Notes in chart."

# 5 SIDE CASE R AND LCD SECTION

**Note:**

1. Parts with no Ref. No. in "EXPLODED VIEW" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
2. The parts indicated by the dotted line  are for Ass'y only and are not supplied.
3. Disregard Ref. No. suffixes when ordering parts. They are used to describe parts in "Disassembly/Assembly Procedures" section.



**NOTE 6:**

In early products, a sheet is used. When servicing, it is not necessary to place the sheet.

# Notes in chart

## 1. Removal of Cassette Cover Ass'y

### CAUTION:

Be careful not to apply any pressure to the Garage Unit of the Mechanism Chassis Ass'y.

Remove it in the order shown below.

- 1) Open the LCD.
- 2) Slide the EJECT Switch with the power supplied.

### Note:

If it doesn't, eject manually. Refer to "METHOD FOR EJECTING WITH POWER OFF."

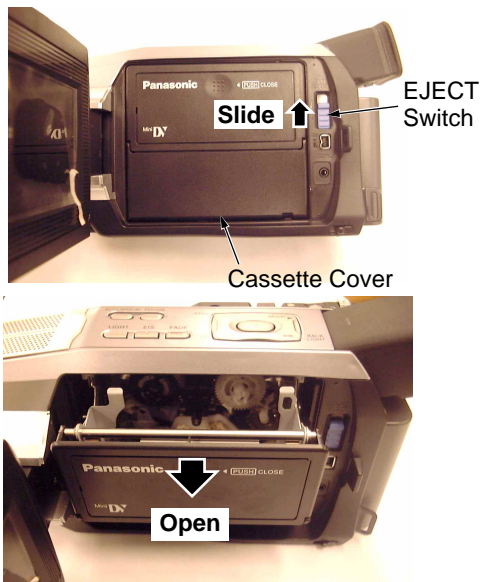


Fig. D2-1

- 3) Push the Cassette Cover to release the Locking Tab (L-1a) as shown.

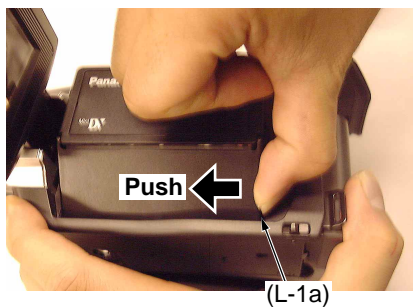


Fig. D2-2

- 4) Push the Cassette Cover to release the Locking Tab (L-1b).

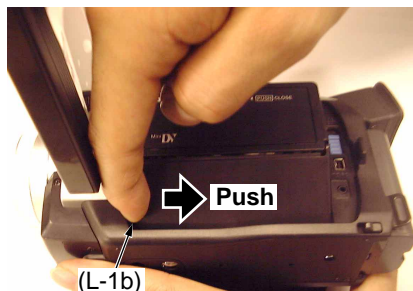


Fig. D2-3

- 5) Push the both side of the Cassette Cover to release the Locking Tabs (L-1c) and (L-1d) from the slots of the Side Case R.

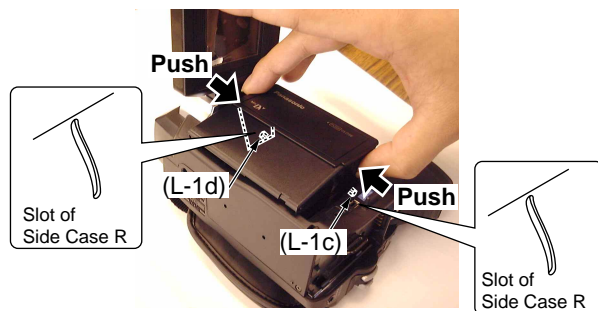


Fig. D2-4

- 6) Open the Cassette Cover as shown.

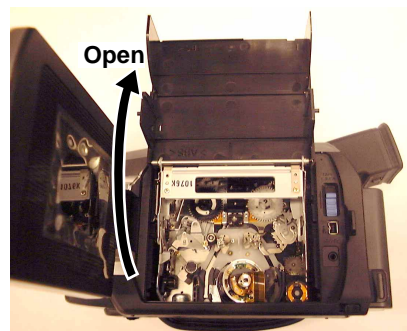


Fig. D2-5

- 7) Pinch and pull the Cassette Cover to release the Locking Tab (L-1e) while holding the Garage Unit carefully as shown. Then, release the Locking Tab (L-1f).

### CAUTION:

Do not break the Cassette Cover.

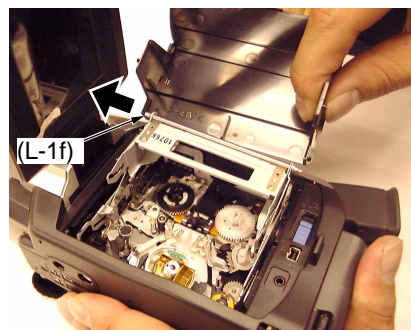
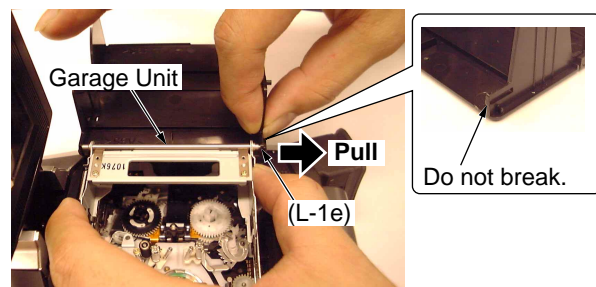


Fig. D2-6

## Installation of Cassette Cover Ass'y

### CAUTION:

Be careful not to apply any pressure to the Garage Unit of the Mechanism Chassis Ass'y.

Install it in the order shown below.

- 1) Set the Locking Tabs (L-1f). Then, pinch and pull the Cassette Cover to set the Locking Tab (L-1e) while holding the Garage Unit carefully. Then, put the Cassette Cover on the Mechanism Chassis Ass'y.

### CAUTION:

Do not break the Cassette Cover.

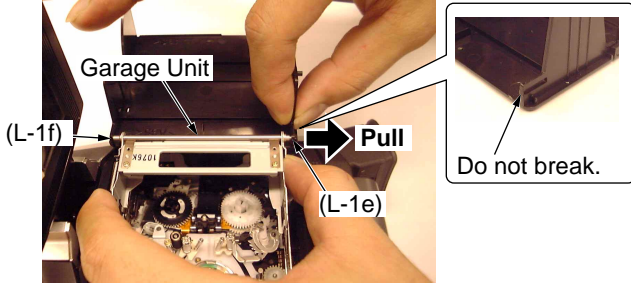


Fig. D2-7

- 2) Push the both side of the Cassette Cover to set the Locking Tabs (L-1c) and (L-1d) to slots of the Side Case R.

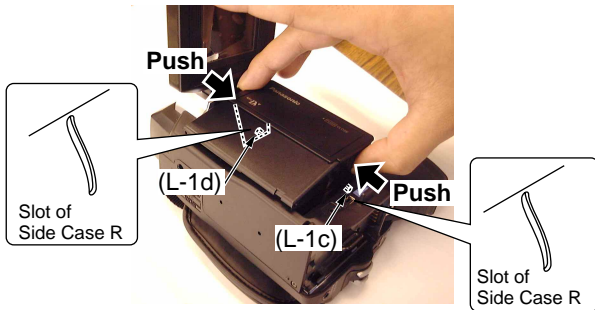


Fig. D2-8

- 3) Push down the upper portion of the Cassette Cover to close as shown.

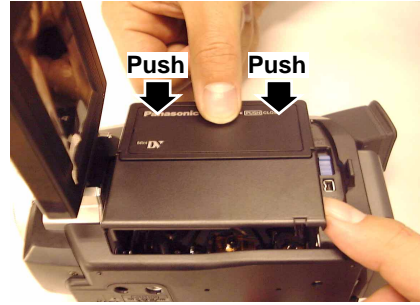


Fig. D2-9

- 4) Push down the lower portion of the Cassette Cover to set Locking Tabs (L-1a) and (L-1b).

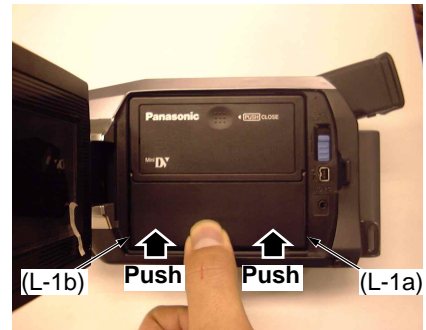


Fig. D2-10

**2. Removal of Side Case L Unit**

Take care not to damage the F.P.C.s or the Speaker Cable.

- 1) After removing the 6 Screws (404-1), release the Portion A of the Side Case L Unit at first. Then, release the Phone Jack of the Rear C.B.A.
- 2) Disconnect the Speaker Cable and the F.P.C.s from the Connectors P1, FP6 and FP9.

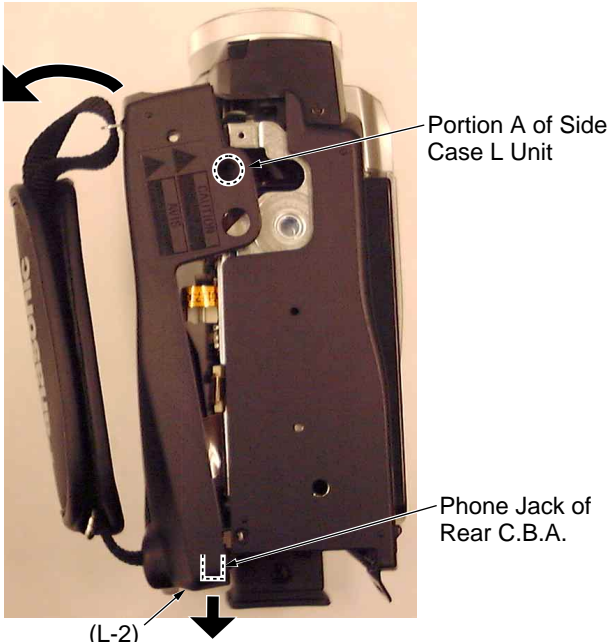


Fig. D3

**Installation of Zoom Switch F.P.C. of Side Case L Unit**

When connecting the Zoom Switch F.P.C. to the Connector FP9 on the Main C.B.A., make it as shown.

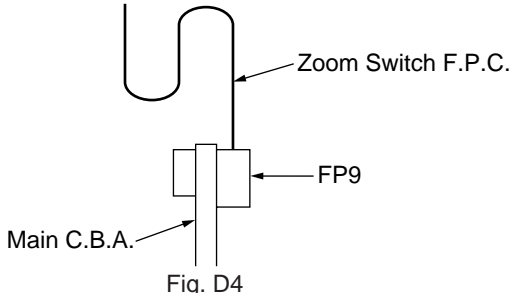


Fig. D4

**3. Removal of Speaker**

- 1) Open the Hand Strap and release it from the hole of the Strap Angle front.
- 2) Remove the Screw (404-2).
- 3) Remove the Strap Angle front and the Speaker Angle. Then, remove the Speaker.

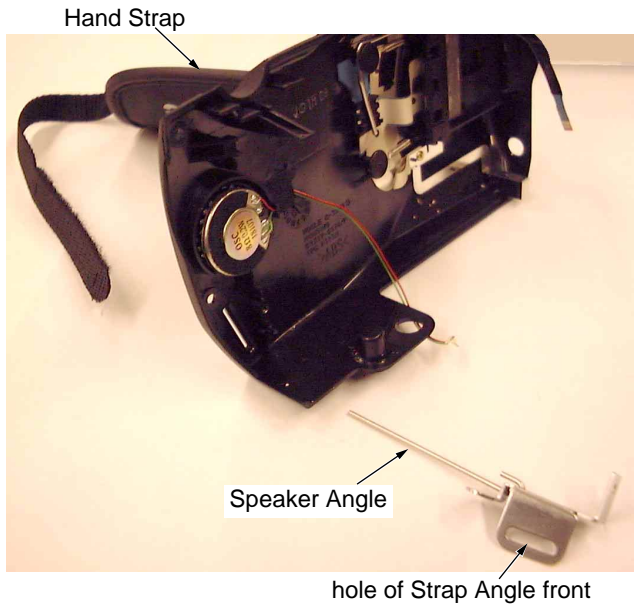


Fig. D5

**4. Installation of Main C.B.A.**

Take care not to damage the Flexible Cables.

- 1) Connect the Flexible Cables to the connectors on the Main C.B.A, verifying that the direction of the Flexible Cables is correct. Refer to "REMOVAL/INSTALLATION OF F.P.C. FROM NON ZIF (Zero Insertion Force) CONNECTOR."

**5. Removal/Installation of Rear C.B.A.**

When removing/installing the Rear C.B.A., raise the EVF Ass'y.

## 6. Installation of Lens Ass'y

Install the Lens Ass'y so that the IR Lever is set to the Magic VU Knob Holder.

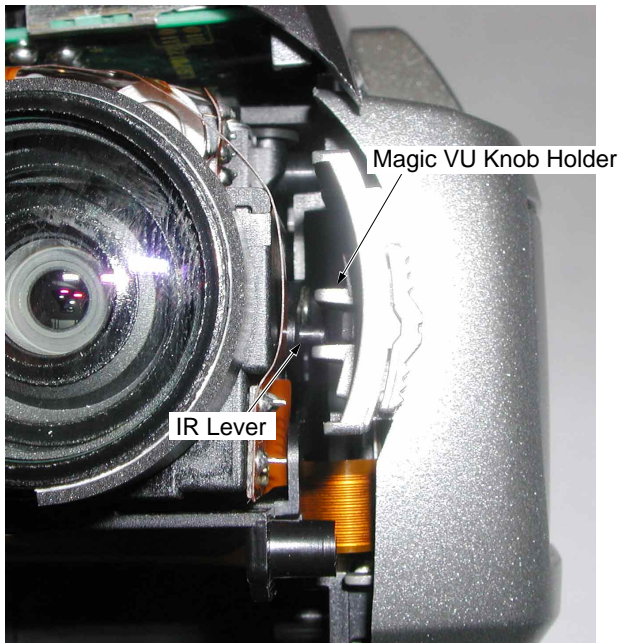


Fig. D6

## 7. Removal of Top Case & EVF Ass'y

To remove the Screw (404-6), raise the EVF Ass'y.

### Installation of Top Case & EVF Ass'y

Secure the Rib of the Top Case & EVF Ass'y to the Side Case R Ass'y.

## 8. Replacement of Mechanism Chassis Ass'y

When replacing the Mechanism Chassis Ass'y, be sure to perform the Envelope Output Adjustment. Refer to "ENVELOPE OUTPUT ADJUSTMENT" in MECHANICAL ADJUSTMENT.

### Installation of Mechanism Chassis Ass'y

When installing the Mechanism Chassis Ass'y, be sure to make the Capstan F.P.C. between the Mechanism Chassis Ass'y and the Tripod Frame as shown.

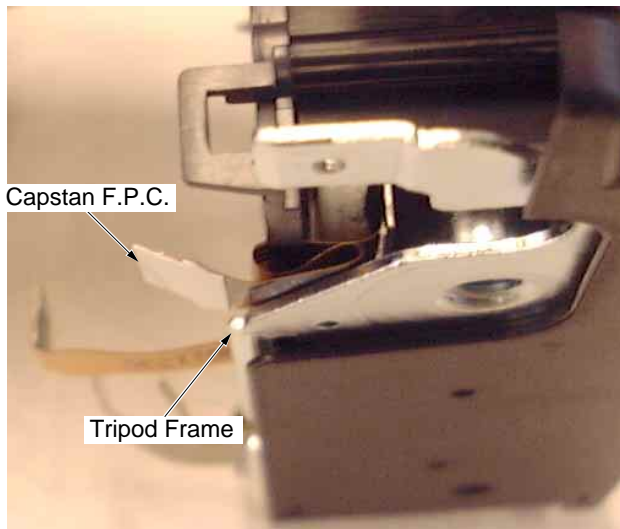


Fig. D7

## 9. Replacement of Lamp

When replacing the Lamp, refer to "HOW TO REPLACE THE LAMP (LSLL0028) OF BUILT-IN LIGHT" in SERVICE NOTES.

### DANGER:

Use only replacement Lamp (PART NO. LSLL0028) supplied by Panasonic to reduce risk of fire.

Handle new Lamp with cloth or tissue as skin oils decrease Lamp life.

Remove Light Protector and allow Lamp to cool before replacing to avoid possible burn hazard.

## 10. Removal of CCD C.B.A., Filter Rubber, Optical Filter

### CAUTION:

1) When removing the CCD C.B.A., take care that the Optical Filter does not fall out.

2) Take extreme caution when removing the CCD C.B.A. because it is easily damaged by static electricity. Use a Wrist Strap while removing and installing.

3) Do not touch the CCD window surface when handling.

**Installation of CCD C.B.A., Filter Rubber, Optical Filter**  
Install in order shown below.

1) Install the Optical Filter correctly.

**Note:** Make sure that no dust gets on the Optical Filter and in the Lens Unit. Clean it with lens cleaning paper dampened with lens cleaner if necessary.

2) Install the Filter Rubber on the Optical Filter correctly as shown below.

**Note:** Make sure that no dust gets on the Filter Rubber.

3) Install the CCD C.B.A. to the Lens Unit. Then, secure the 2 Screws (422) while keeping the CCD C.B.A. pressed toward the upper right corner.

**Note:** Do not touch the Lens Surface. Clean their surface with lens cleaning paper dampened with lens cleaner if necessary.

## 11. Installation of Zoom Motor Unit

Install the Zoom Motor Unit so that the Shaft of the Zoom Motor Unit is set in the Holder. Then, tighten the 3 Screws (507).

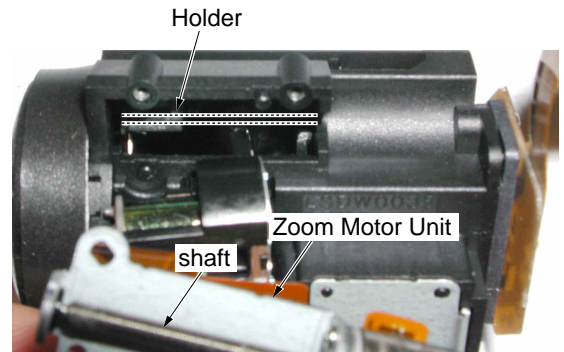


Fig. D8

## 12. Installation of EVF Unit

- 1) Secure the 3 Locking Tabs (L-1) on the Top Case Unit.

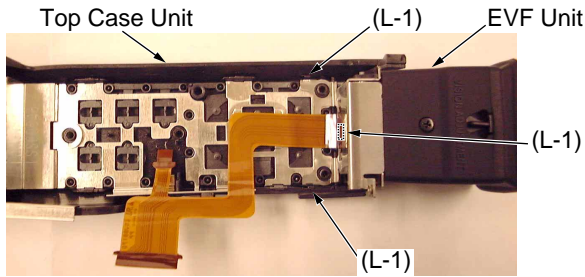


Fig. D9

## 13. Removal of EVF Case Ass'y

Work carefully so as not to damage the Top F.P.C. in the EVF Case Ass'y.

- 1) Remove the Screw (402).
- 2) Pull off the EVF Case Ass'y with grasping the Eye Cap carefully.

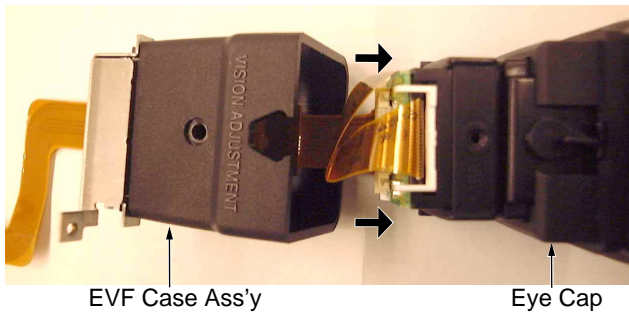


Fig. D10

## Installation of EVF Case Ass'y

- 1) Confirm that the Top F.P.C. is set to ribs in the EVF Case.
- 2) Connect the Top F.P.C. to the Connector FP951 on the EVF Back Light C.B.A.
- 3) Install into the EVF Case Ass'y with bending the Top F.P.C. as shown.

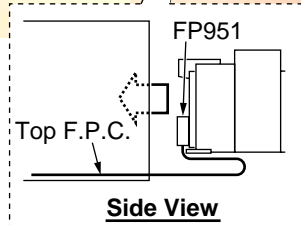
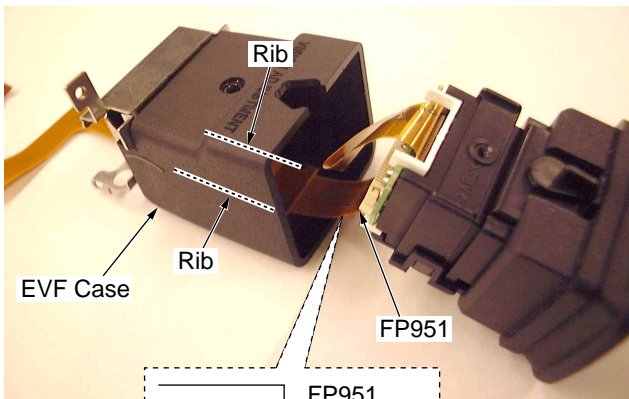


Fig. D11

## 14. Installation of Lens Holder, Eye Sight Lever A, Eye Sight Lever B

- 1) Install the Eye Sight Levers A and B into the EVF Protect B taking care that Portion "a" of the Eye Sight Lever A is installed in the correct direction as shown. Then, tighten the Screw (402).
- 2) Install the Lens Holder so that the boss of the Lens Holder is set to Portion "a" of the Eye Sight Lever A.

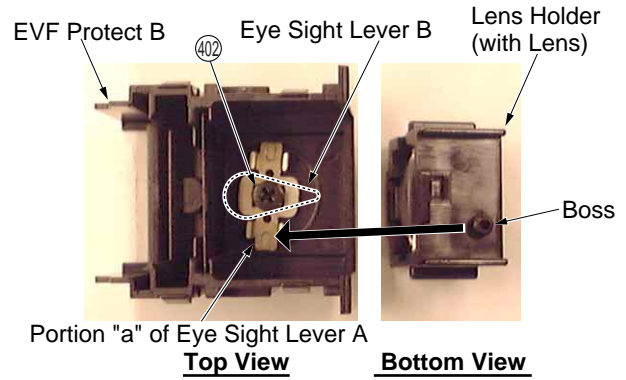


Fig. D12

## 15. Installation of LCD Case Ass'y

Work carefully so as not to damage the F.P.C.

- 1) Put the LCD F.P.C. through the slot of the Side Case R.
- 2) To tighten 2 Screws (404, 509), close the LCD Case Ass'y, or turn it to the right or left.
- 3) Confirm that the LCD F.P.C. is set with 2 Bosses on the Side Case R as shown.

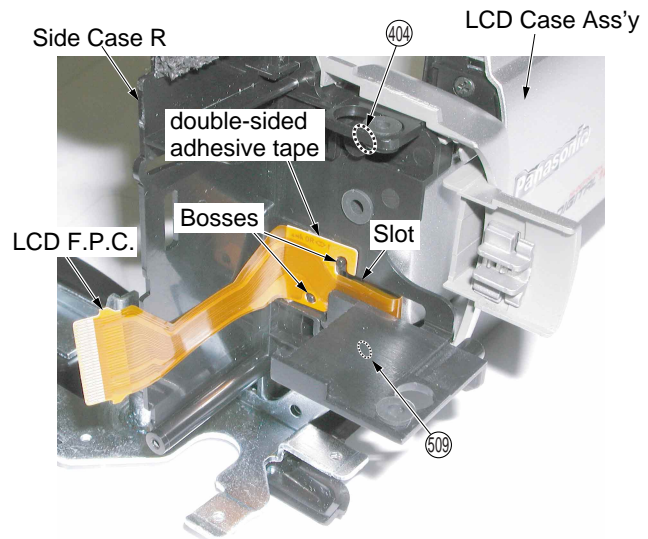


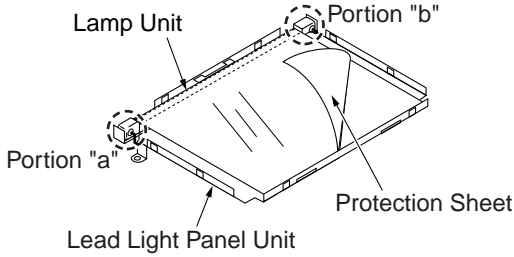
Fig. D13

### 16. Removal of LCD Case B

When removing the LCD Case B, pull the LCD Unit out of the slots while raising the lower portion of the LCD Unit.

### 17. Installation of LCD Panel Unit, Lead Light Panel Unit

- When replacing the Lead Light Panel Unit, make sure to remove the Protection Sheet as shown below.
- Use extreme care when handling the Lead Light Panel Unit and the LCD Panel Unit to avoid damage, dust, and spots (especially fingerprints, etc.). The use of clean cotton gloves is highly recommended.
- Be careful not to apply any pressure to Portion "a" or "b" of the Lamp Unit as shown below.



- After replacing the Lead Light Panel Unit, confirm that the Terminal of the Lamp Unit is soldered correctly as shown below.

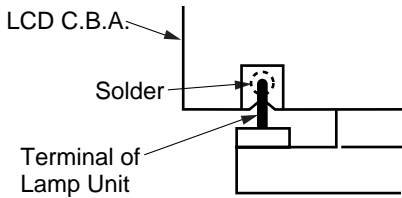
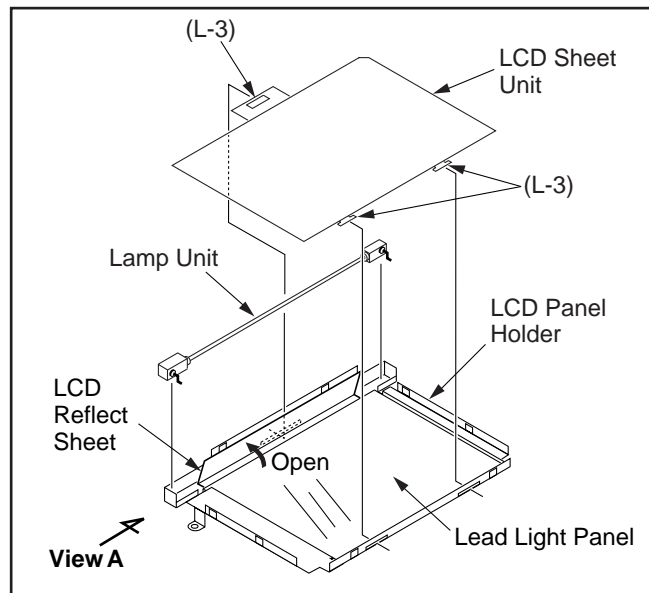
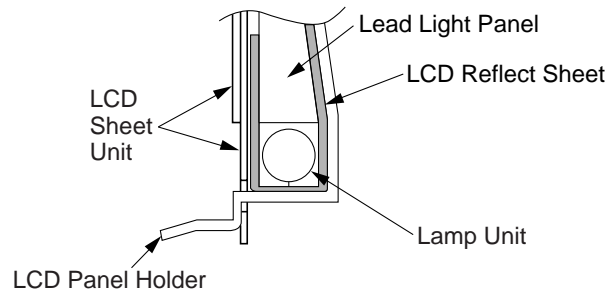


Fig. D14

### 18. Installation of Lamp Unit



- When installing the Lamp Unit, confirm that the Lamp Unit is positioned as shown below.
- Use extreme caution when handling the Lead Light Panel and the LCD Sheet Unit to avoid damage, dust, and spots (especially fingerprints, etc.).



View A

Fig. D15

### 19. Installation of Magic VU Knob Holder, Magic VU Knob

Install them into the Front Cover, verifying that the direction of the Magic VU Knob Holder and the Magic VU Knob are correct.

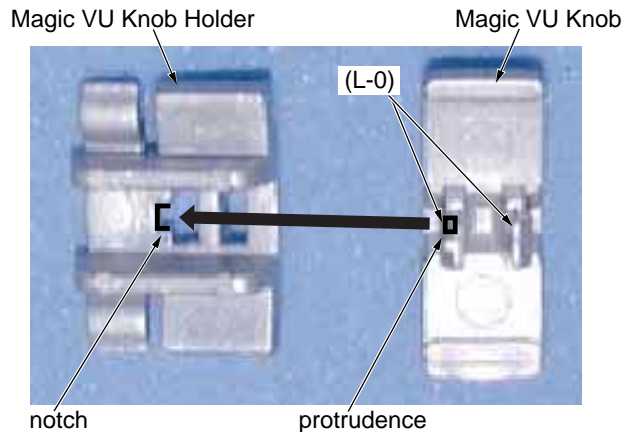


Fig. D16