



作成承認印	配布許可印
	

F70

FAA30051

FAA30351

N70

FAA30151

REPAIR MANUAL

Nikon | NIKON CORPORATION
Tokyo, Japan

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Specifications

Note: Information described in the Instruction Manual and brochures is not included in this paper.

1. Metering system

Same metering system as in F90/N90

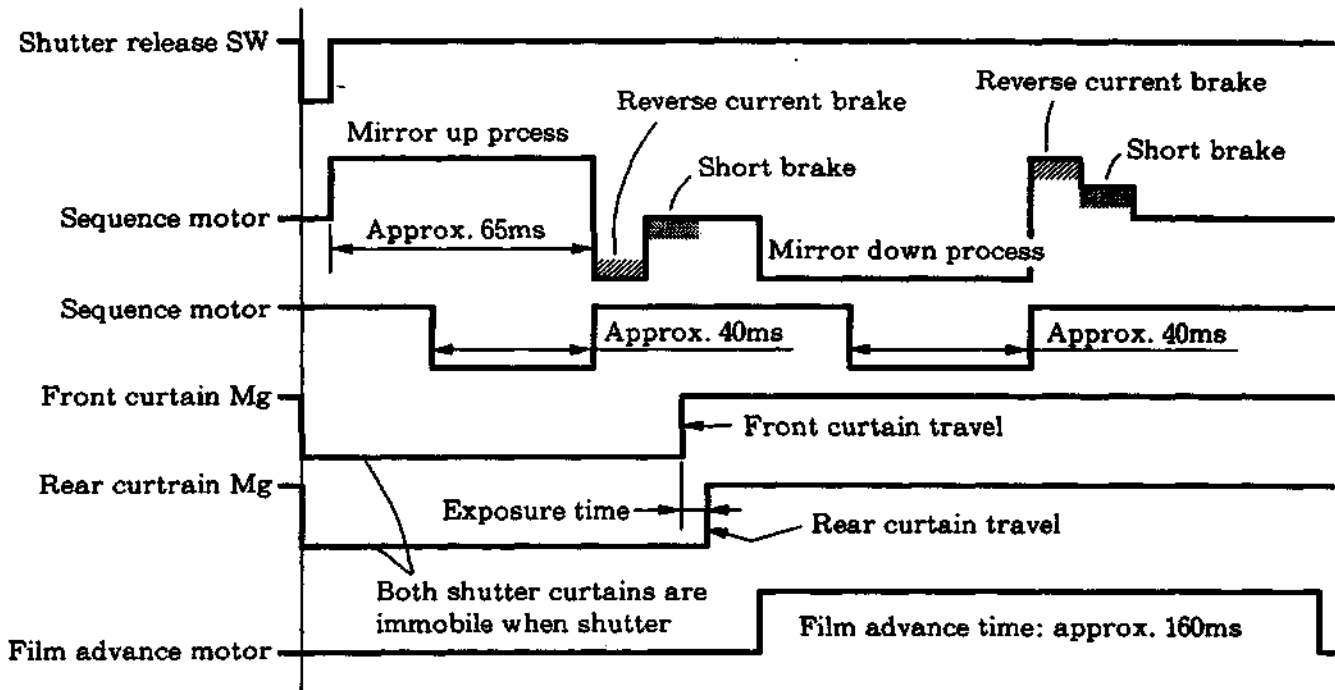
2. Film speed setting

- (1) Film speed is preset to DX mode. If non DX-coded film is loaded, an alarm indicator appears and the shutter release locks up after advancing blank exposures.
- (2) If film speed setting has been set to manual when a DX-coded film is loaded, the camera is controlled by a manually set ISO film speed.

3. AE lock

- (1) Exposure data measured at the time when the AE lock button is pressed can be memorized and exposure is controlled based on that value.
- (2) Exposure value memorized in either P, Ps, S, or A mode is BV value. The exposure indicator in M mode shows the state of BV locked.
- (3) When the AE lock button is pressed, the exposure indicator remains fixed at the memorized data. However, if you rotate the aperture ring in A mode while AE is locked, change the shutter speed to obtain a correct exposure.
When the aperture value reaches its maximum or minimum limit in P or S mode, or when the program chart changes due to lens focal length variation or maximum f-number, change the indicator and the control.
- (4) AE lock remains active as long as the prerelease timer is ON. Shutter prerelease timer cannot turn OFF while AE is locked. The timer turns OFF within approx. 8 seconds after removing one's finger from the AE lock button.
- (5) If a shutter speed has changed to an X sync speed due to the use of a Speedlight while AE is locked, the camera is controlled by the aperture value (obtained from the changed shutter speed) and the locked BV value.
- (6) As AE is locked when the self-timer is activated, no exposure value changes even if the AE lock button is pressed.

4. Sequence control



- (1) When receiving a shutter release signal, the sequence motor starts rotating in normal direction to move the mirror up.
 - Main mirror moves up (to get out of the way of the image optical path.)
 - Aperture lever moves down (to control aperture.)
 - Shutter mechanism hold is released.
- (2) In synchronizing with a shutter release signal, an electric current is transferred to the front and rear shutter curtain Mg's and hold both curtains.
- (3) The front shutter curtain Mg turns OFF after a certain period of time, thus allowing the front shutter curtain to move.
- (4) The rear shutter curtain moves to obtain exposure time by turning OFF the rear shutter curtain Mg in a specified period of time after turning OFF the front curtain Mg.
- (5) The camera goes into a mirror-down process by rotating the sequence motor in reverse direction within a specified period of time after running the rear shutter curtain.
 - Main mirror move down (to the 45° position.)
 - Aperture lever returns (to maximum aperture position)
 - Shutter charging is completed.
- (6) The camera advances film by rotating the film advance motor within a specified period of time after running the rear shutter curtain.

5. Sequence errors

(1) Time out during mirror-up operation

If mirror-up and aperture control operations are not completed within a specified period of time (or duration time between starting rotating the sequence motor and turning OFF the sequence switch exceeds 110ms), the following warning indicators will appear and shutter release will be locked.

《Warning indicators》

- "Err" indicator blinks and aperture indicator goes out (inside viewfinder and LCD panel.)
- Battery check indicator blinks.
- Other indicators are properly displayed.

《Recovery operation》

Turn the power switch OFF once and turn it ON again to recover the shutter release operation.

(2) Time out during mirror-down operation

With the mirror down, aperture control and shutter charging operations cannot be completed within a specified period of time (duration time between start of sequence motor rotation and turning OFF the sequence switch exceeds 100ms), the following warning indicators will appear and shutter release will be locked.

《Warning indicators》

- "Err" indicator blinks and aperture indicator goes out (inside viewfinder and LCD panel.)
- Battery check indicator blinks.
- Other indicators are properly displayed.

《Recovery operation》

Turn the shutter prerelease switch ON after turning OFF the shutter prerelease timer to recover the shutter release operation.

(3) Time out during front shutter curtain operation

Front shutter curtain travel is not completed within a specified period of time (X contact turns OFF in 8msec after the rear curtain Mg turns OFF), the following warning indicators appear and shutter release is locked.

《Warning indicators》

- "Err" indicator blinks and aperture indicator goes out (inside viewfinder and LCD panel.)
- Battery check indicator blinks.
- Other indicators are properly displayed.

《Recovery operation》

Turn the shutter prerelease switch ON after turning OFF the shutter prerelease timer to recover the shutter release operation.

(4) Time out-1 during aperture control

The following warning indicators appear and shutter release will lock if no pulse signal is generated while moving the mirror up.

《Warning indicators》

- "Err" indicator blinks and aperture indicator goes out (inside viewfinder and LCD panel.)
- Other indicators are properly displayed.

《Recovery operation》

- Turn the power switch OFF once and turn it ON again to recover the shutter release operation.
- Set the exposure mode to A or M to recover the shutter release operation.

(5) Time out-2 during aperture control

The following warning indicators appear and shutter release will lock (in P or S mode) if more than six overrun pulse signals are generated after an electric current is transferred to the aperture Mg.

《Warning indicators》

- "Err" indicator blinks and aperture indicator goes out (inside viewfinder and LCD panel.)
- Other indicators are properly displayed.

《Recovery operation》

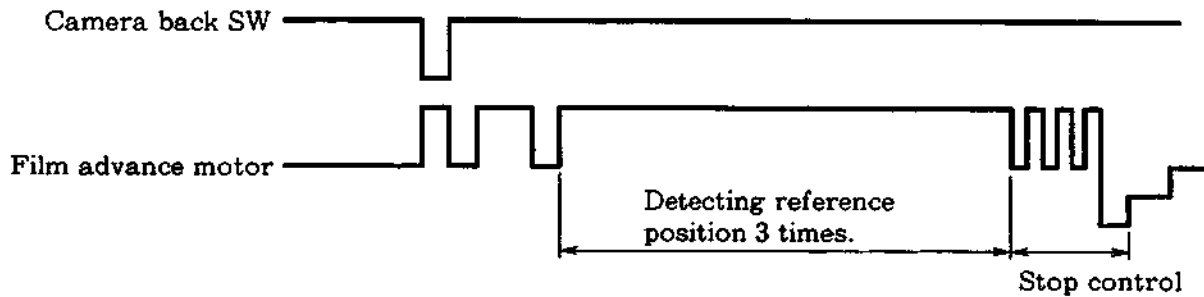
- Turn the power switch OFF once and turn it ON again to recover the shutter release operation.
- Set the exposure mode to A or M to recover the shutter release operation.

(6) Recovery operation if CPU voltage is reset below the threshold voltage (including the case where batteries are removed during operation).

Sequence SW	OFF	ON	OFF	ON
X contact SW	OFF	OFF	ON	ON
State of malfunction	Normal	Abnormal	Abnormal	Abnormal
	Waiting normal shutter release.	Stops abnormally during mirror-up and mirror-down operations.	Waiting mirror-down signal. ● Battery power exhausts in Blub mode. ● Front shutter curtain malfunction.	Stops abnormally during mirror-down operation.
Warning indicators	Normal display	"Err" indicator blinks. Aperture indicator goes out. "□" indicator blinks.	"Err" indicator blinks. Aperture indicator goes out.	"Err" indicator blinks. Aperture indicator goes out. "□" indicator blinks.
Recovery operation	Normal operation	Fully press the shutter release button to rotate the sequence motor reversely, and turn off the sequence SW to stop. Then advance film by one frame.		

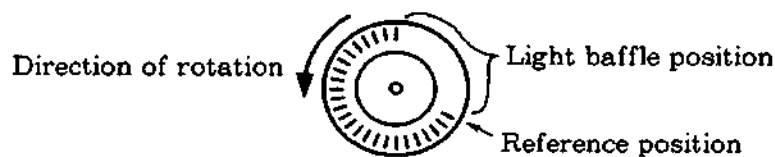
**Even though the sequence SW does not turn OFF, the sequence motor stops in a specified period of time.*

6. Film blank exposures



The film advance motor stops when the reference position* is detected three times and when 43 pulse signals are generated from the last reference position detection.

*Reference position: The position where the first pulse signal is generated after passing the light baffle portion of the encoder blades.



- Blank exposures are 2.5 to 3.5 frames.

7. Controlling film advance operation

(1) Amount of film feed per stroke

- Inter-frame distance: within $2\text{mm} \pm 1\text{mm}$ (no double frames)
- Amount of film feed per stroke: within $38\text{mm} \pm 0.8\text{mm}$.

(2) Film stop control

The film advance motor is programmed to stop when it receives 44 pulse signals from the reference position.

In order to maintain the accuracy of the film stop position against a variation of film advance speed due to power voltage fluctuation, the stop function is controlled by monitoring the film advance speed.

8. Rewinding film

- (1) In silent mode, the film rewind speed is reduced by 60% to minimize noise.
- (2) At the end of film rewind operation, the film tongue is rewound up into the film cartridge.

9. Film advance speed

● AF lens mounted:

(In manual exposure mode (M) at shutter speed of 1/250 sec. or higher, using fresh batteries, at normal temperature. Unit: frame/sec.)

Focus mode	Film advance mode	AF driving inside body	AF driving inside lens	AF lock**
AF-C	CH	3.1 (max.)*	3.1 (max.)*	3.7
	CL	2	2	2
AF-S	CH	3.1 (max.)*	3.1 (max.)*	3.7
	CL	2 (max.)	2 (max.)	2
M	CH	3.7***	3.7***	3.7
	CL	2	2	2

● Non-AF lens mounted:

Focus mode	Film advance mode	Film advance speed
AF-C	CH	3.1
	CL	2
AF-S	CH	3.1
	CL	2
M	CH	3.7***
	CL	2

* Optimum subject for still picture and focus tracking

** AF locks when shutter is pressed halfway in AF-S mode on the body, or when focus lock button on lens is pressed.

*** No in-focus indicator appears starting from the second frame and no exposure metering refresh is performed. Metering and exposure indicator displays are fixed.

10. Shutter

The shutter unit is made up of nine blades including four aluminum blades for the front shutter curtain and two aluminum and three plastic blades for the rear shutter curtain. A coating (18% reflection factor) has been applied on the front shutter curtain (lens side).

11. AE bracketing

- (1) Exposure level is determined by metering the exposure value for each frame and adjusting exposure compensation value equivalent to the correction steps specified for the reference value.
- (2) When AE bracketing is set up, shooting is enabled by adjustment of exposure level from underexposure to overexposure.
- (3) When AE bracketing is set up, and if shooting takes place while holding down the AE lock button, the exposure level is determined by adjusting the specified exposure compensation value for each frame based on the exposure value at the time when AE is locked.
When the AE lock is released, the exposure compensation level is determined based on the reference value measured at the time when the AE lock is released.
- (4) If adjusted exposure level is out of exposure metering range, exposure is controlled at the limit of the metering range.

12. SB bracketing

- (1) TTL flash output level is determined by metering the exposure value for each frame and setting an exposure compensation value equivalent to the correction steps specified for the reference value.
- (2) When SB bracketing is set up, shooting is enabled by continuous adjustment of flash output level from underexposure to overexposure.
- (3) When SB bracketing is set up, and if shooting is made while holding down the AE lock button, the exposure level is determined by adjusting the specified flash output compensation value for each frame, based on the locked BV value for the background at the time when the AE is locked.
When the AE lock is released, the exposure compensation level is determined based on the reference value measured at the time when the AE lock is released.
- (4) If the adjusted exposure level is out of exposure metering range, exposure is controlled at the limit of the metering range. If flash output is insufficient, a full flash output warning indicator appears.

13. Self-timer photography

- (1) When using the self-timer, the exposure metering value should be memorized as a BV value at the time when the self-timer is activated.
- (2) If the shutter speed dial is set to B (bulb) in manual (M) exposure mode, the camera is controlled as described below.
 - If shutter release button is not pressed, shutter is released at shutter speed of approx. 1/30 sec.
 - If shutter release button is pressed, the camera is controlled in B (bulb) mode.

14. 2-pin terminal

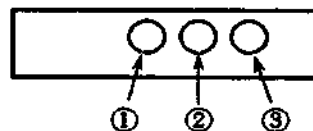
The following two contacts are provided.

- ① Shutter pre-release/shutter release signal contact
- ② GND contact

15. Data back contacts

The following three contacts are provided.

- ① Data imprinting signal contact
- ② Panorama switching signal contact
- ③ GND contact

**16. Electric current consumption**

[Fresh batteries are used at normal temperature (with 5.5V + 0.5Ω using DC regulated power supply)]

Main switch is OFF.	Less than 50 μA
Main switch is ON and shutter prerelease timer is OFF.	Less than 200 μA
Metering and focusing are made while shutter prerelease timer is ON. (AF lens not activated)	Less than 250mA
Metering and focusing are made while shutter prerelease switch is ON and driving AF Nikkor 35-70mm f/3.3-4.5).	Less than 600mA (at rated state)
While the camera is advancing the 18th frame (mirror stays up.)	Less than 700mA (at rated state)
Film is being rewound.	Less than 600mA (at rated state)

Electric Circuit

Wiring Diagram ----- E1

Circuit Diagram ----- E2

PART & CHECKLANDS

TOP COVER FPC (ORIGINAL) ----- E3

TOP COVER FPC (REVISED) ----- E5

PENTAPRISM BOX FPC ----- E7

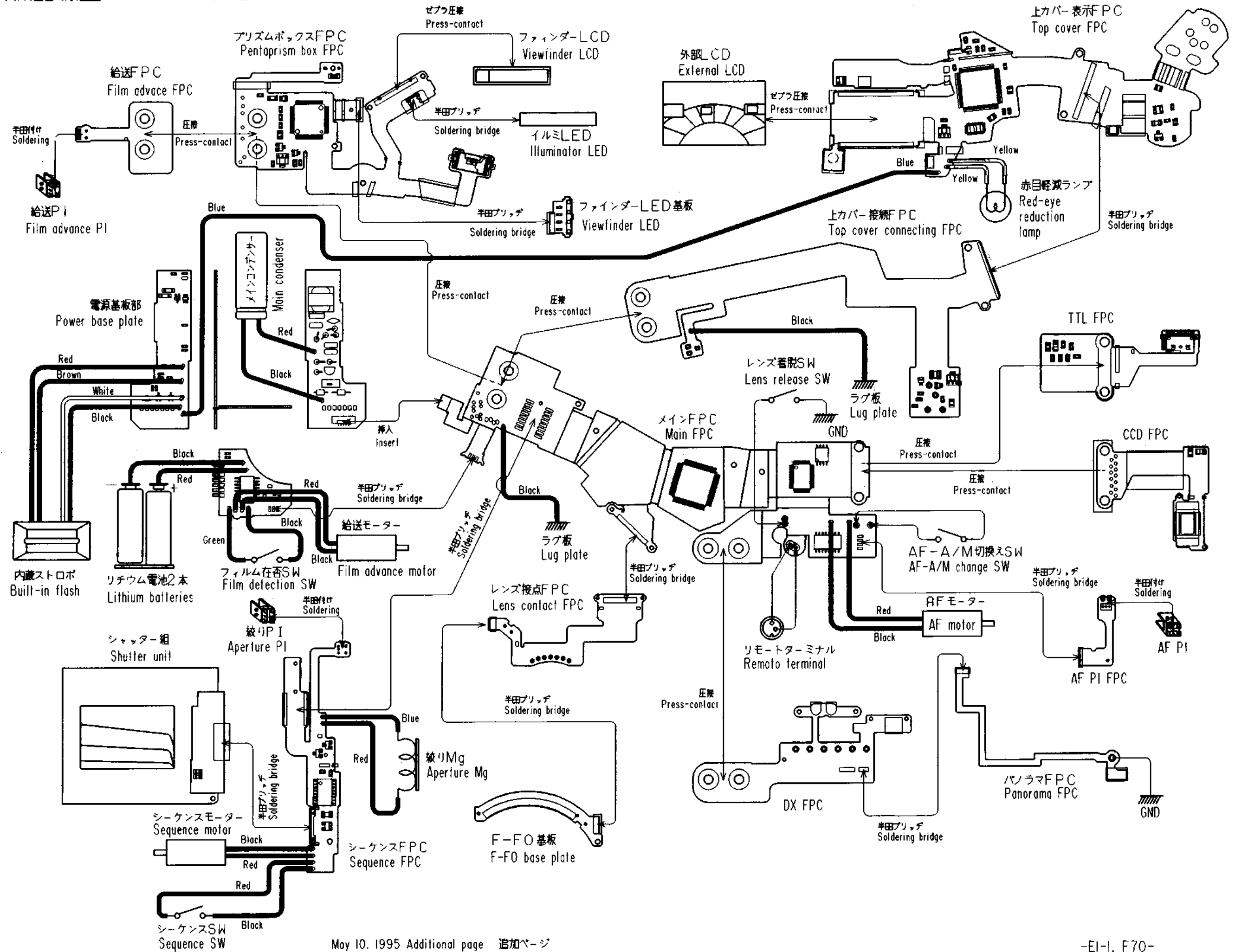
MAIN FPC ----- E10

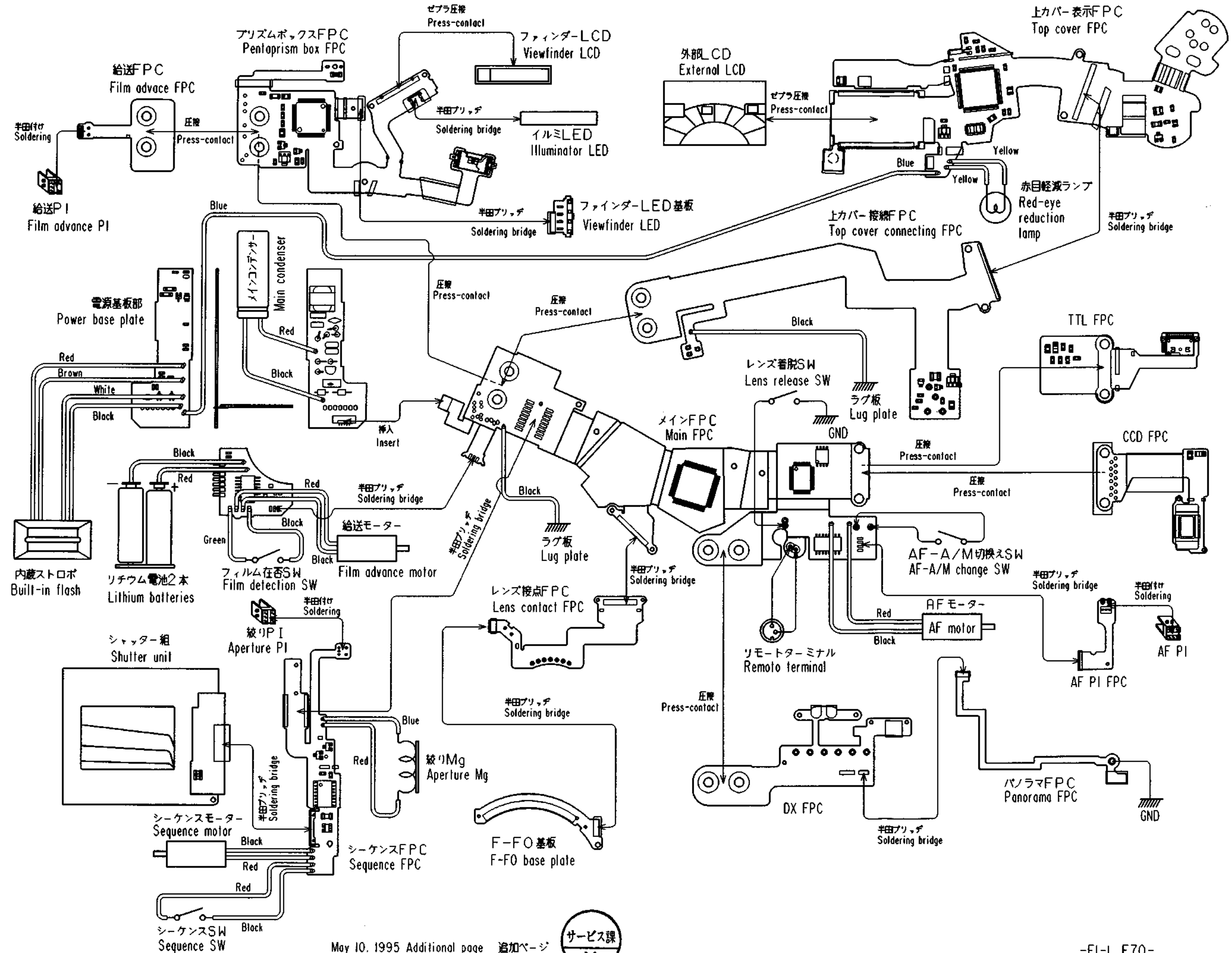
TTL FPC ----- E12

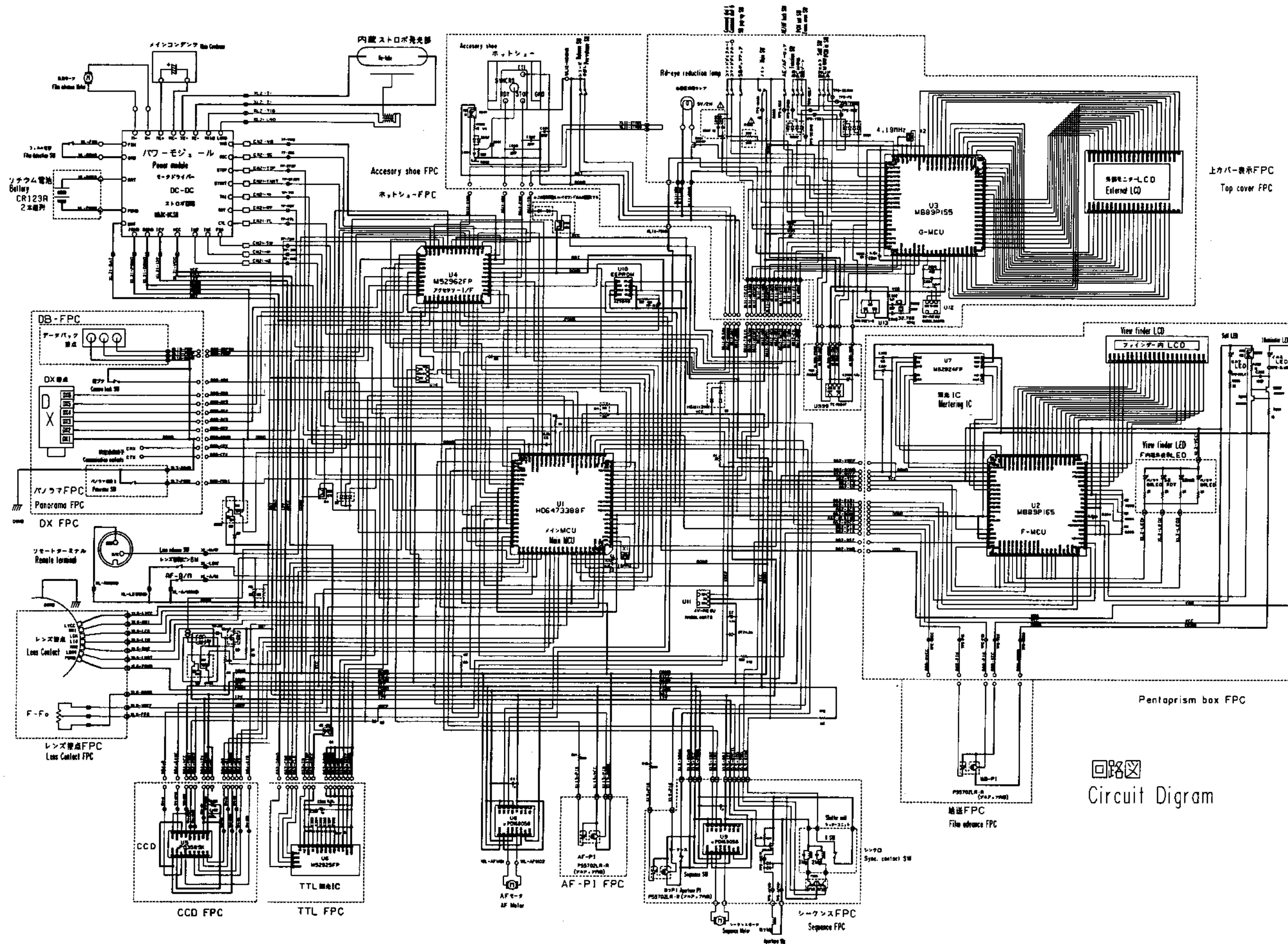
CCD FPC ----- E13

PIN TABLE ----- E14

実体配線図 WIRING DIAGRAM

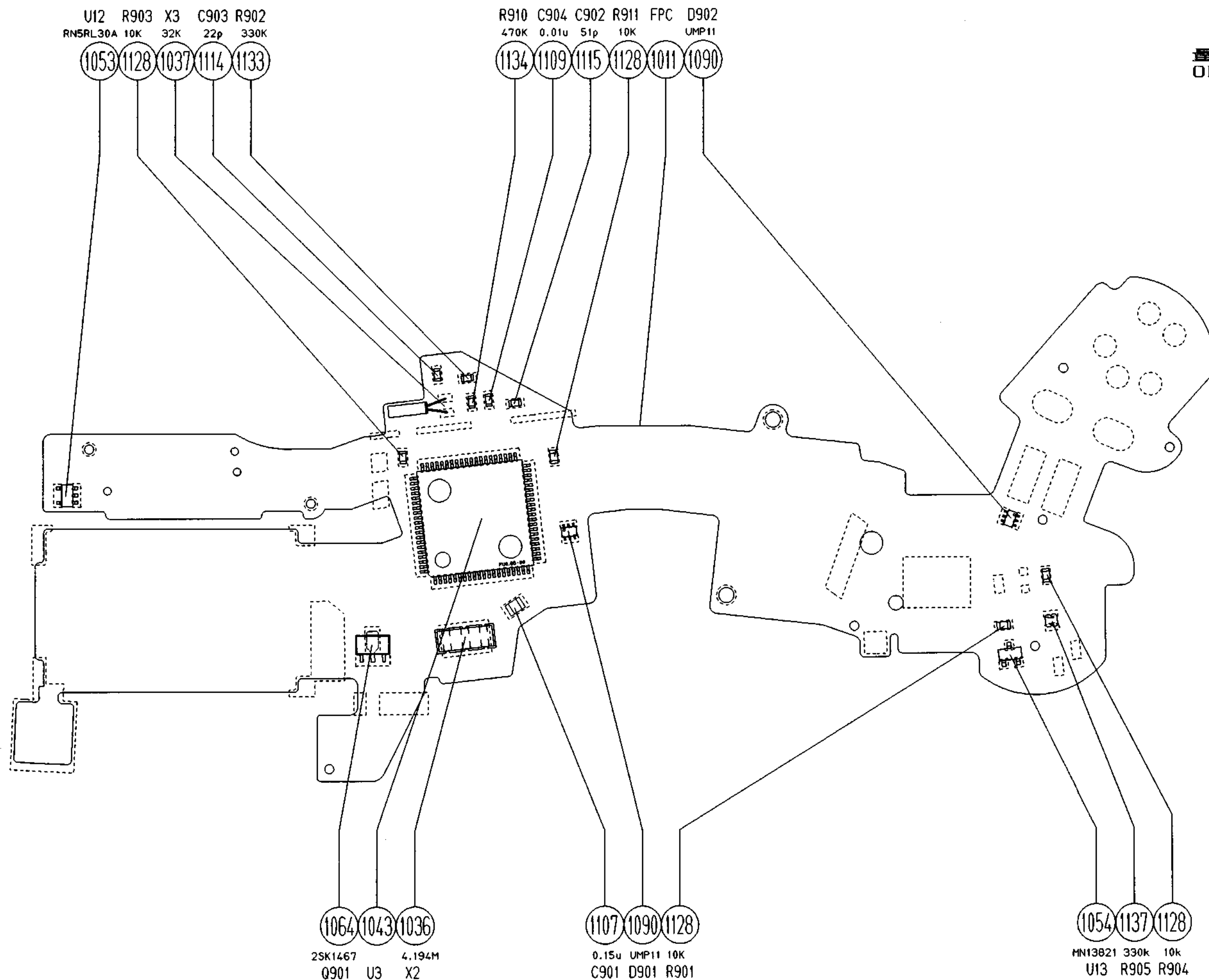




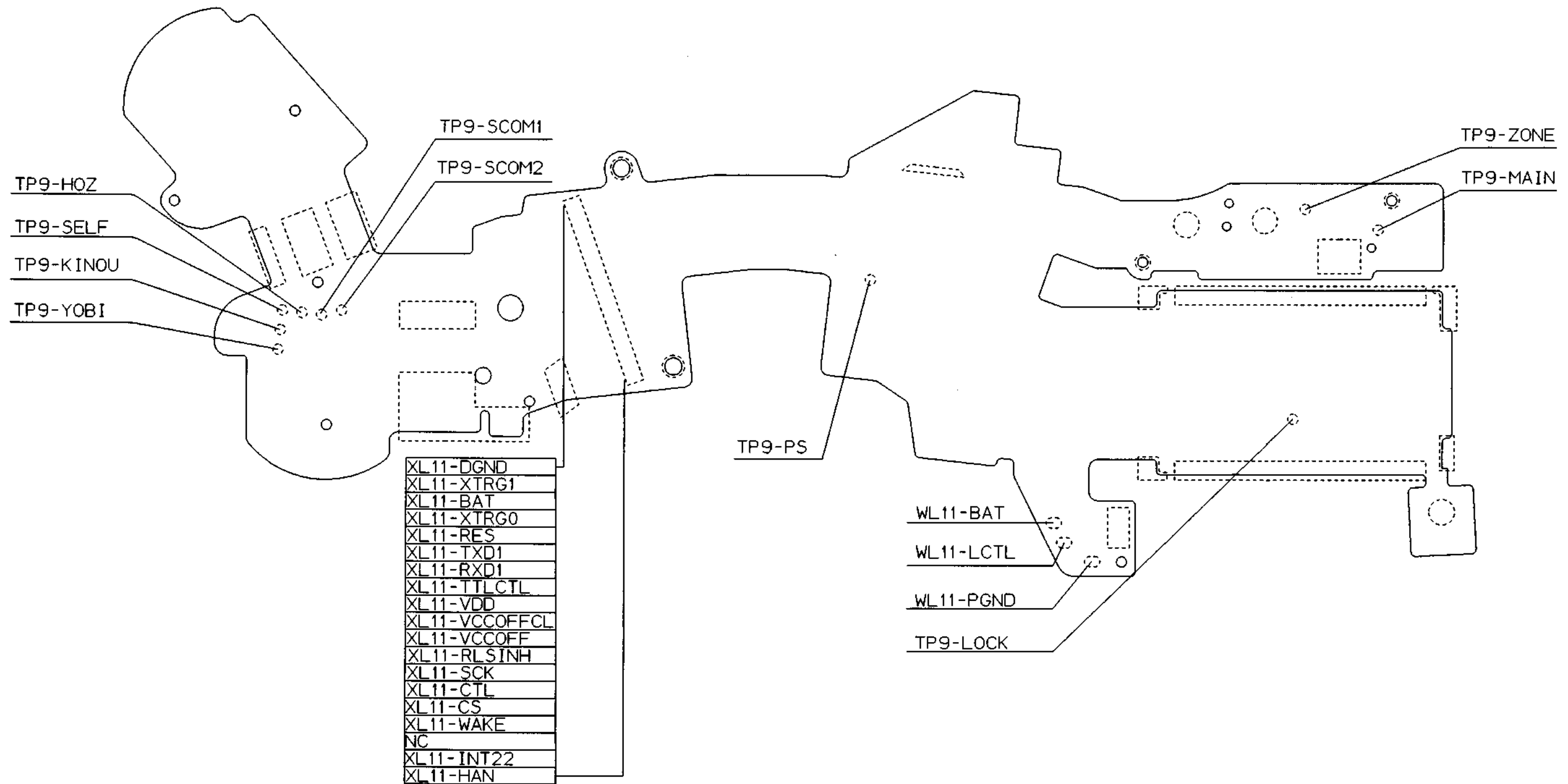


回路図
Circuit Diagram

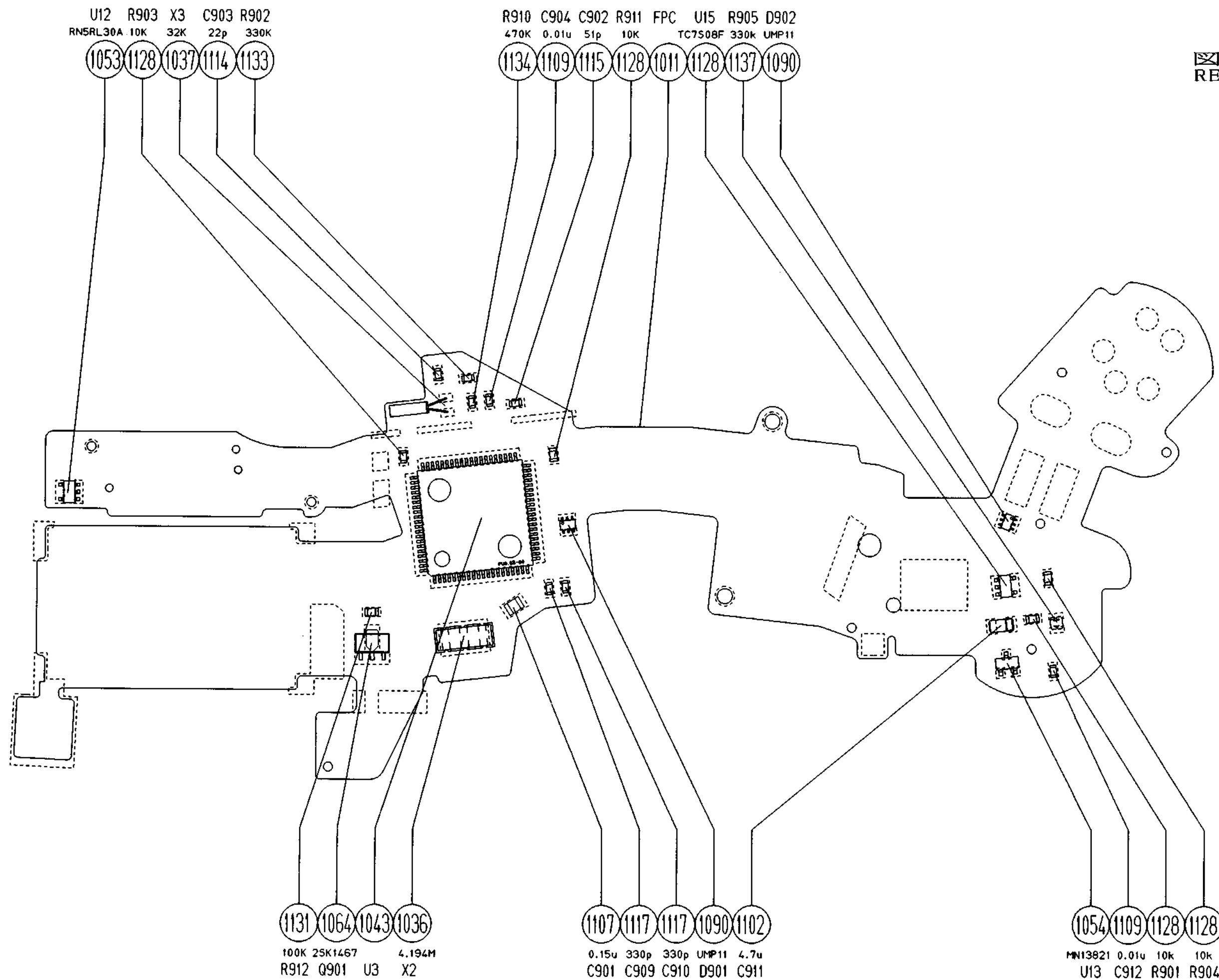
量産初期品
ORIGINAL



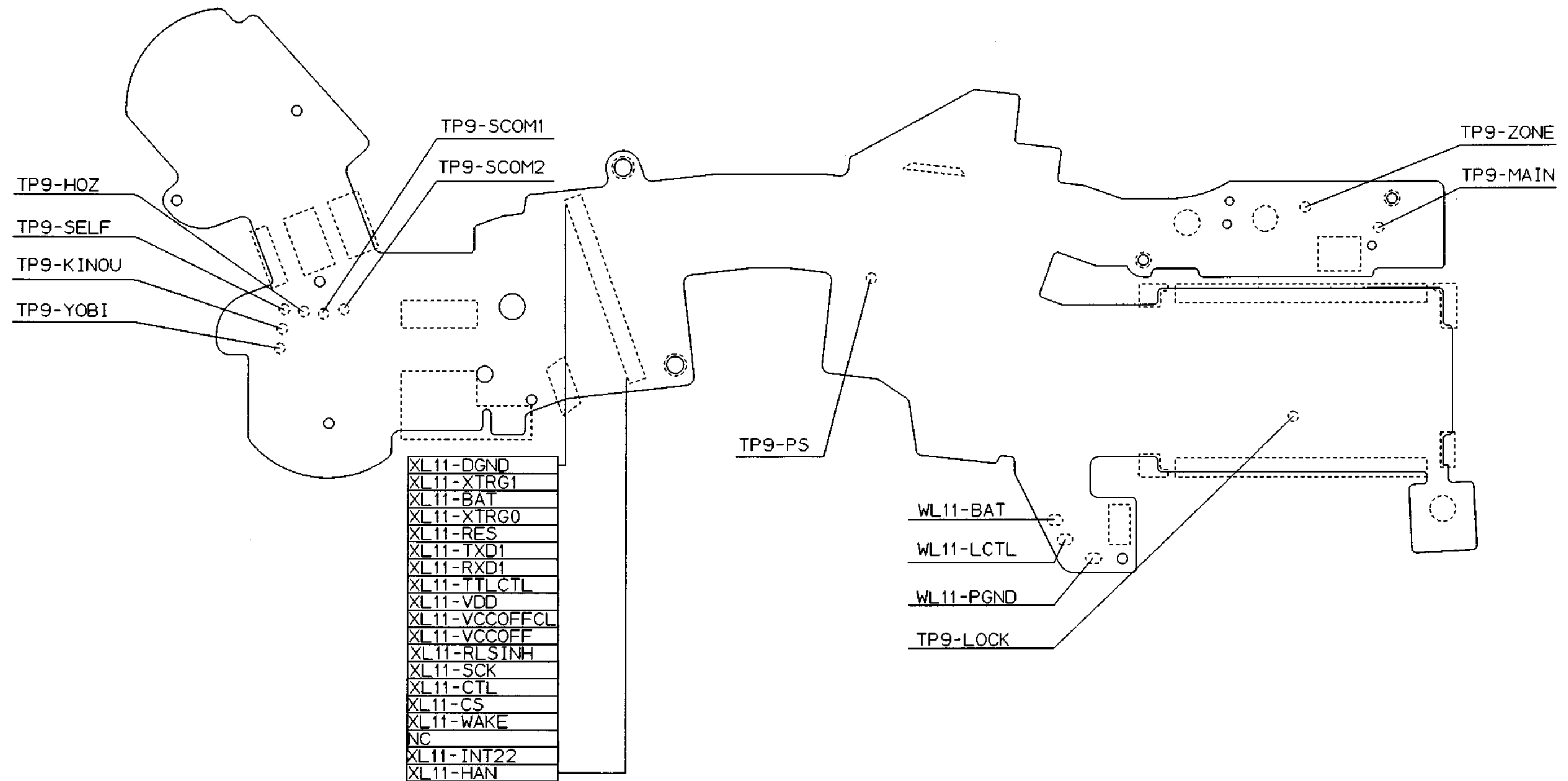
量産初期品
ORIGINAL



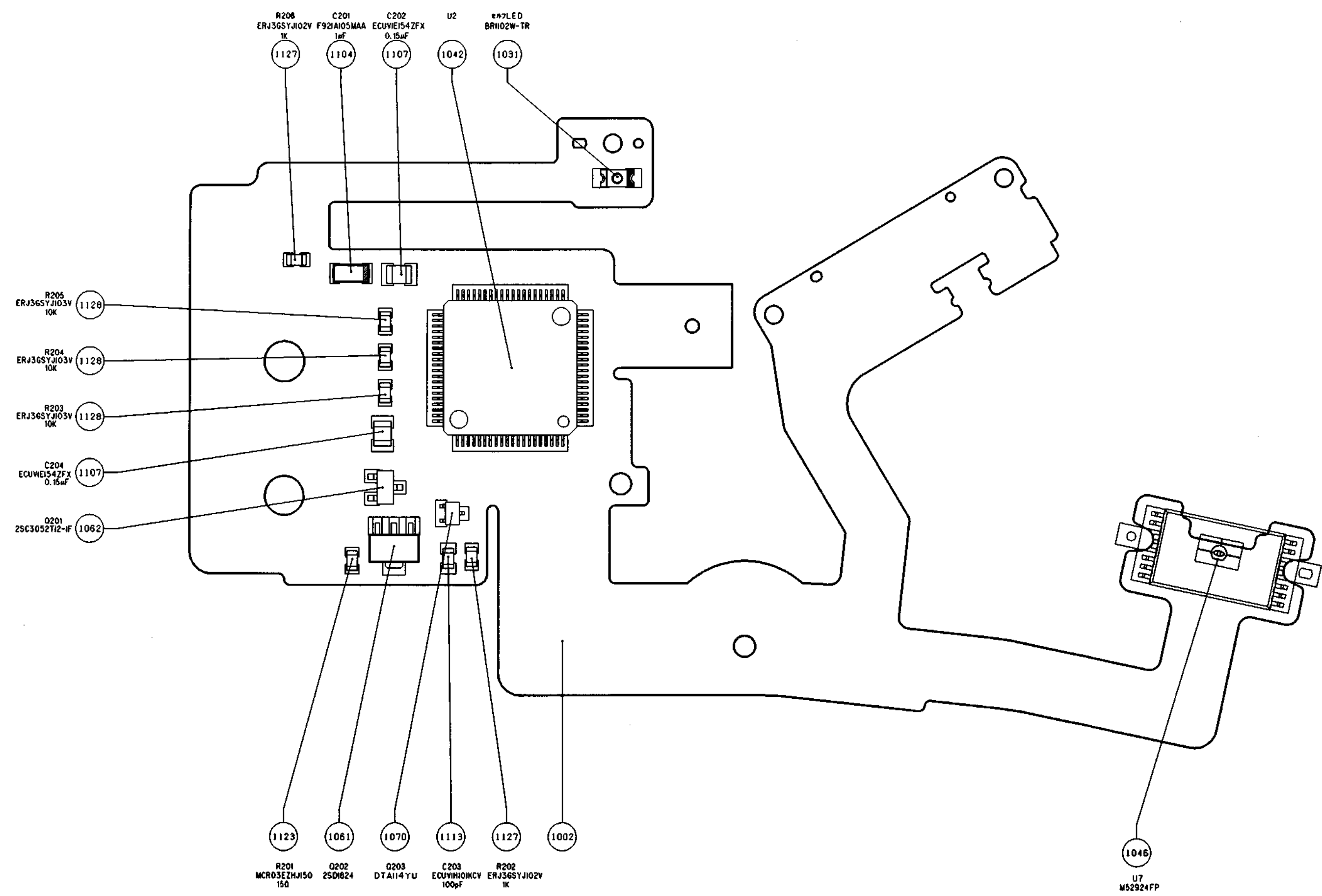
訂品
REVISED

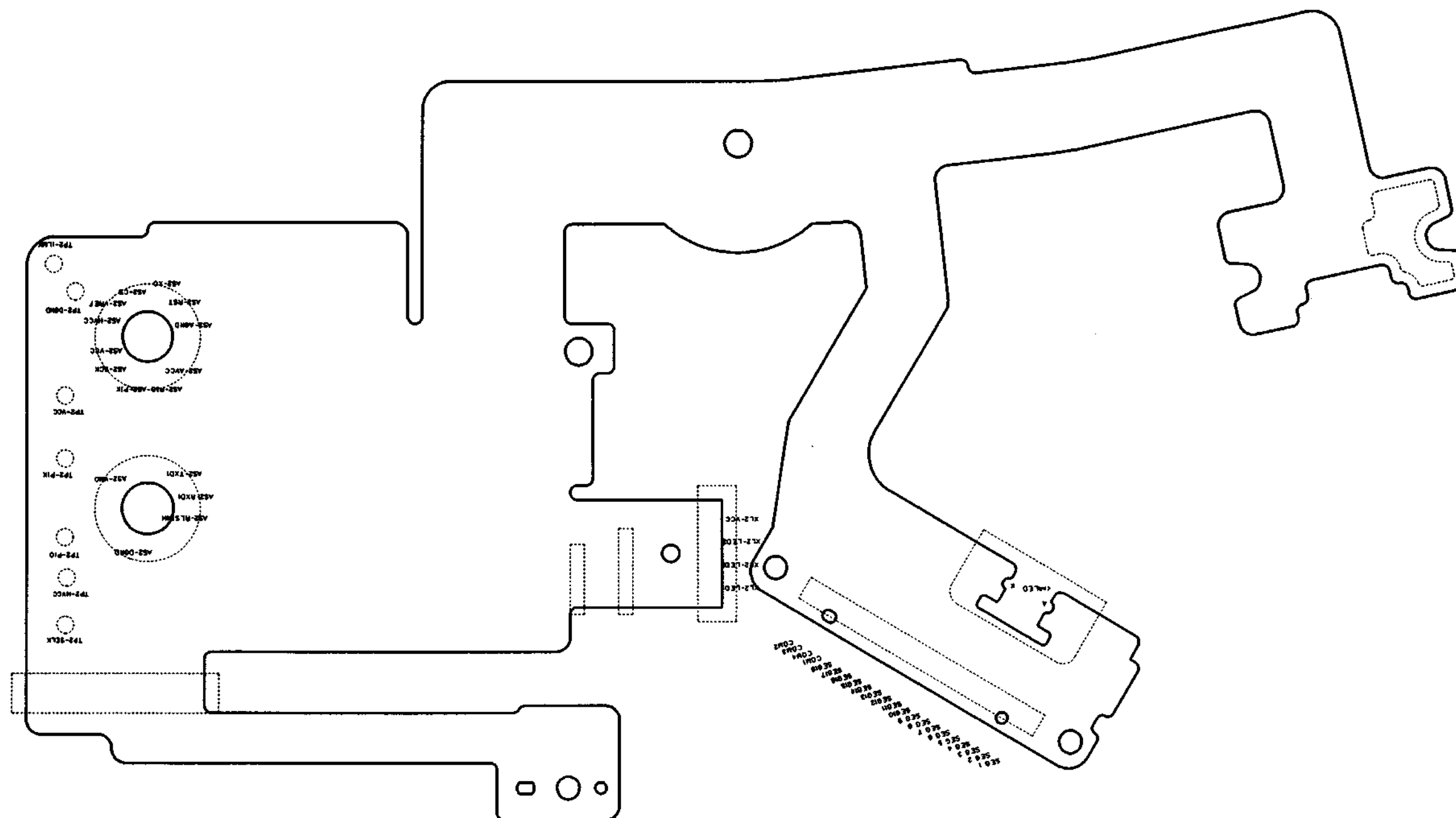


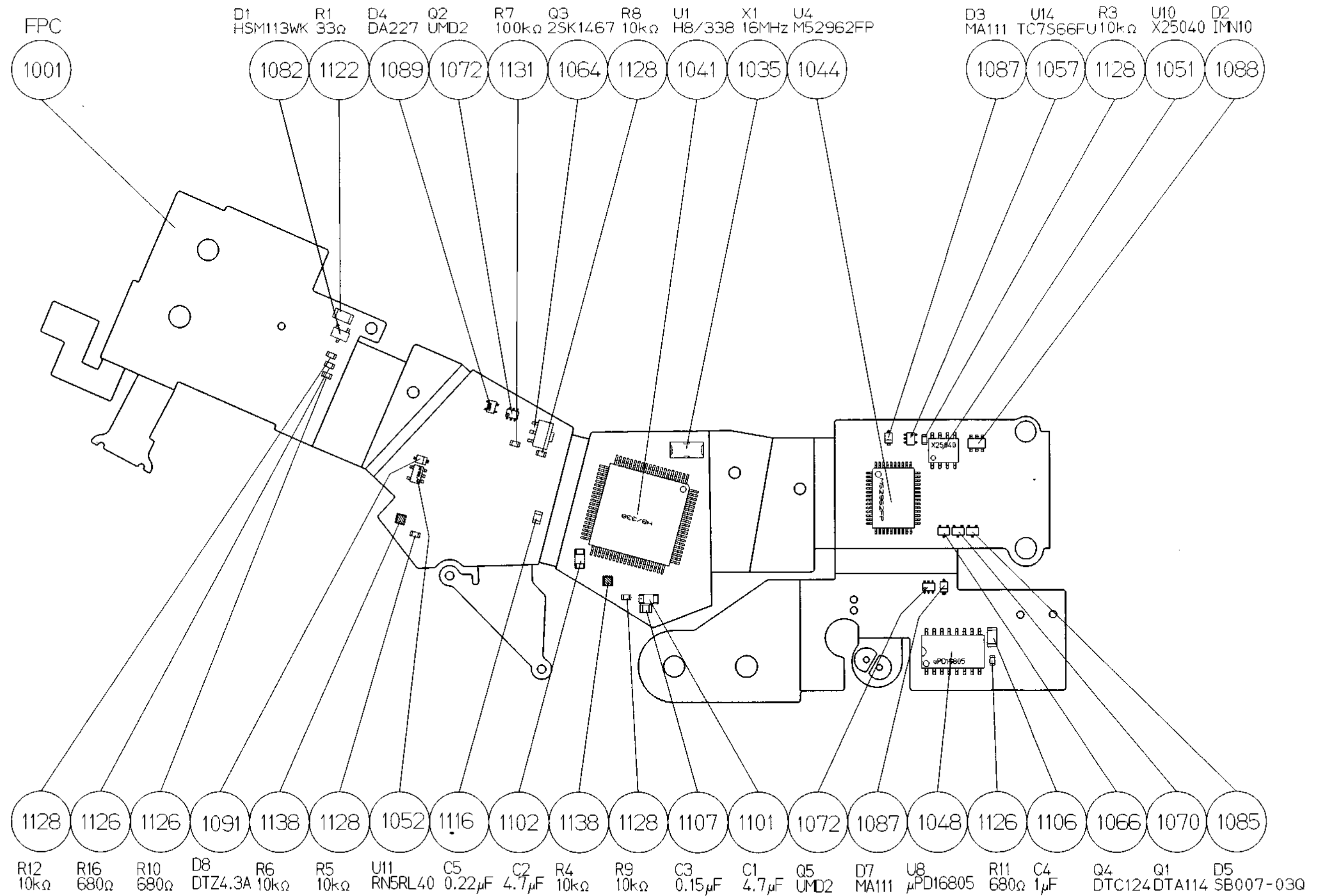
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REVISED

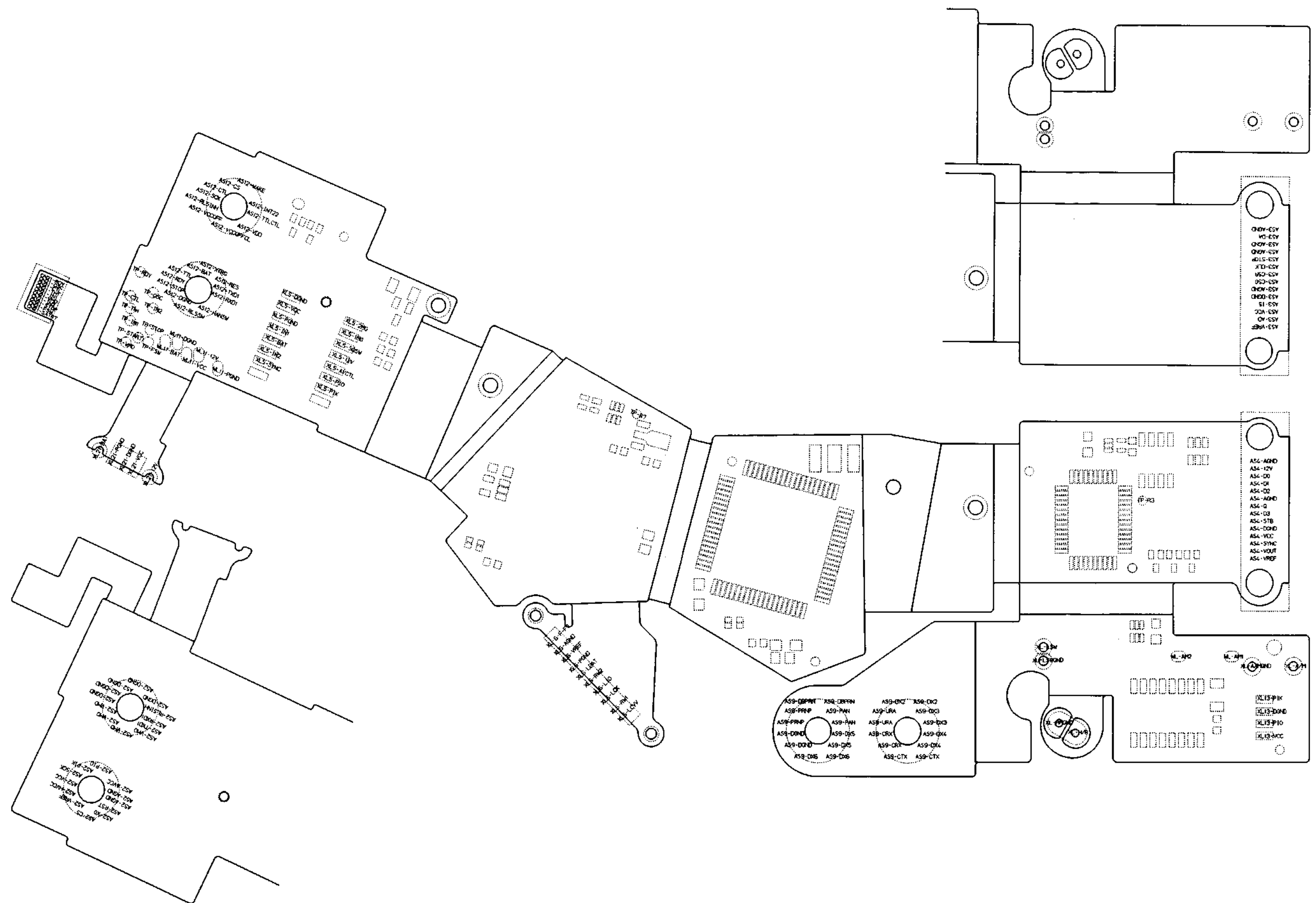


ペンタプリズムボックスFPC
Pentaprism box FPC



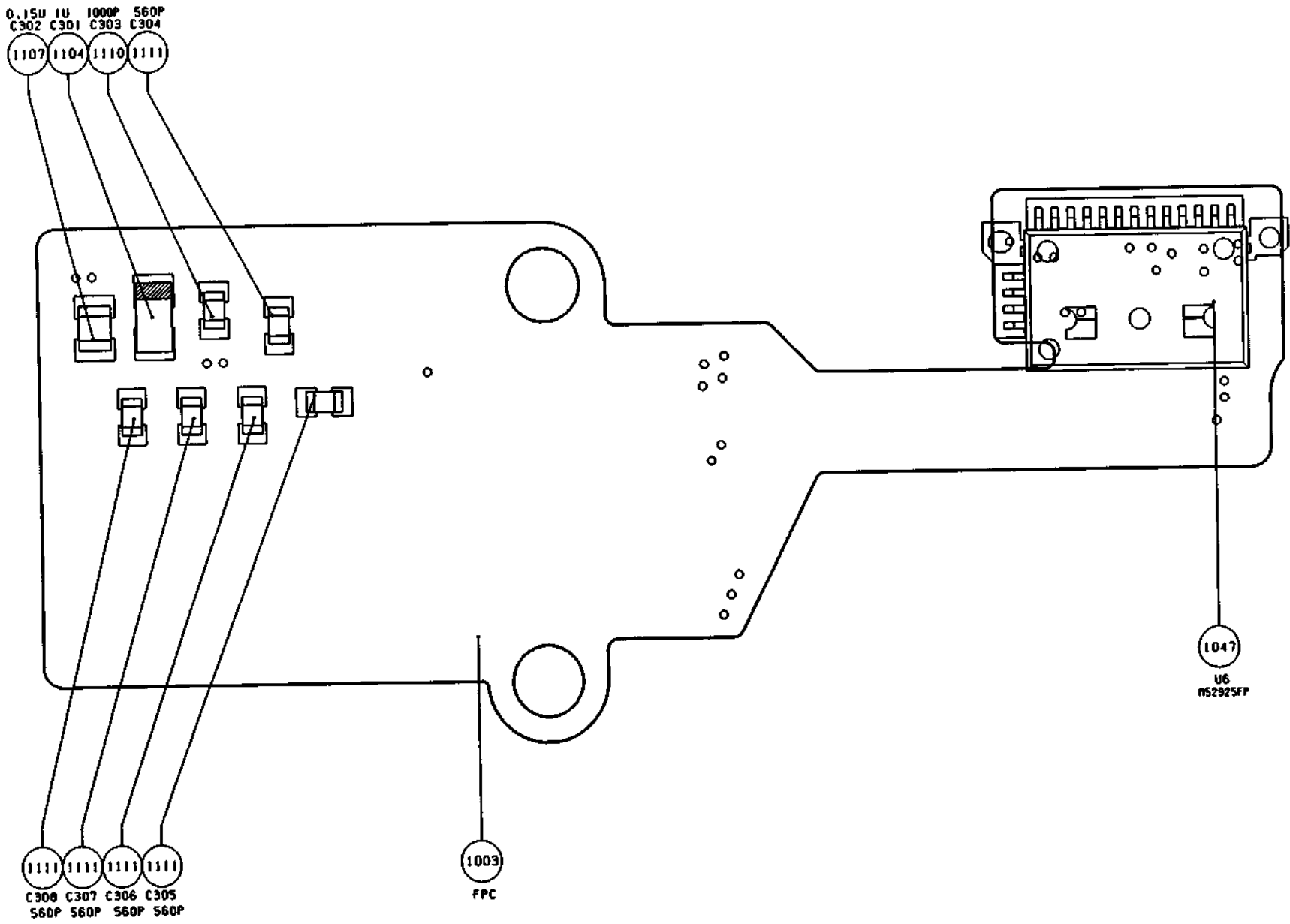




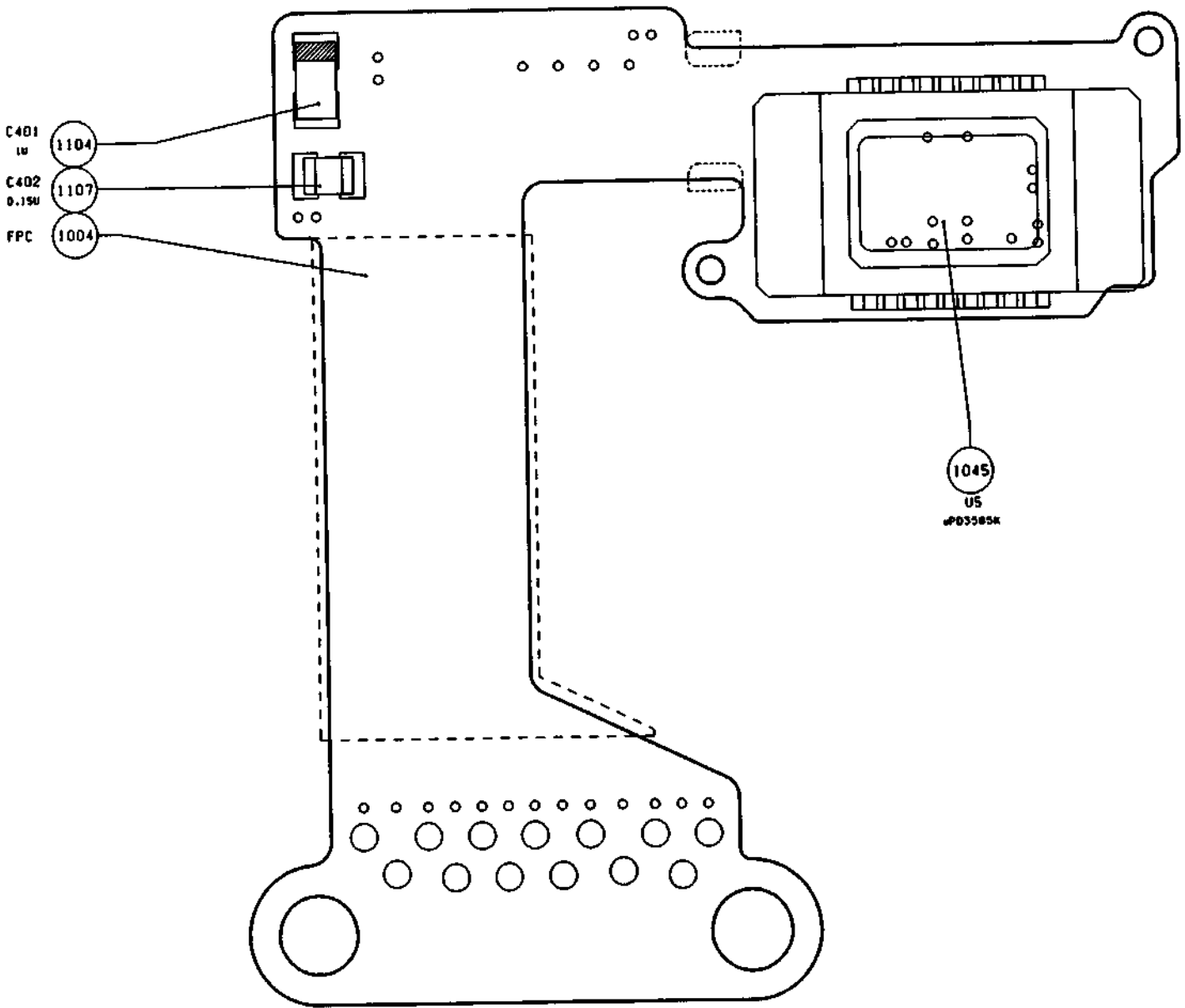


TTL FPC

FAA30051 ~ R. 3364. A



CCD FPC



Main MCU Pin-table			
NO	Terminal	NO	Terminal
1	RES Reset	41	P42 Apperture Mg drive signal
2	XTAL Oscilator	42	P43 Chip select (EEPROM)
3	EXTAL Oscilator	43	P44 S Q motor drive signal 2
4	MD1 V c c	44	P45 Film motor drive signal 2
5	MD0 V c c	45	P46 A F motor drive signal 1
6	NM1 CCD output A/D sync. signal	46	P47 Film motor drive signal 1
7	STBY V c c	47	Vcc V c c
8	Vcc V c c	48	P27 Pre-release switch
9	P52 SerialCLK(F-,G-MCU, EEPROM)	49	P26 Film detection switch
10	P51 Serial Data output	50	P25 LED(Film PI) drive signal
11	P50 Serial Data input	51	P24 LED(App. PI) drive signal
12	Vss D G N D	52	P23 Panorama changed switch
13	P97 Release sequence signal	53	P22 Release switch
14	P96 Oscilator input (F-MCU)	54	P21 Reset signal for F-MCU
15	P95 Serial Chip select (F-MCU)	55	P20 Vcc OFF in signal
16	P94 Serial Chip select (G-MCU)	56	Vss D G N D
17	P93 Vcc OFF out signal (G-MCU)	57	P17 Back door switch
18	P92 Syncro switch	58	P16 A F A/M changed switch
19	P91 Inspection Rx buffer (I/F)	59	P15 A F motor drive direction
20	P90 CCD output A/D sync. signal	60	P14 A F motor drive signal 2
21	P60 1st Mg Drive signal	61	P13 Chip select 1(ch select)
22	P61 2nd Mg Drive signal	62	P12 Chip select 2(ch select)
23	P62 Apperture pulse input	63	P11 Ch select clock
24	P63 Film advance pulse input	64	P10 T T L - I C power supply
25	P64 TTL-stop signal	65	P30 Lens release pin switch
26	P65 Sequence switch	66	P31 Switch control signal
27	P66 TTL-stop (Internal SB)	67	P32 Latch code D ϕ
28	P67 Lens contact R/W1	68	P33 Latch code D 1
29	AVcc 4 V input	69	P34 Latch code D 2
30	P70 C C D output monitor signal	70	P35 Latch code D 3
31	P71 f - f ϕ	71	P36 N C
32	P72 Temperature detection(SB)	72	P37 Latch strobe signal
33	P73 Voltage of Main-con. detect	73	Vss D G N D
34	P74 N C	74	P80 Latch code CS
35	P75 A/D voltage (I/F)	75	P81 Latch code CLK
36	P76 SB charge control voltage	76	P82 Latch code S1
37	P77 T T L gain set voltage	77	P83 Latch code S0
38	AVss A G N D	78	P84 Serial Tx buffer
39	P40 A F pulse input	79	P85 Serial Rx buffer
40	P41 S Q motor drive signal 1	80	P86 Lens serial CLK

Accessary I/F Pin-table			
NO	Terminal	NO	Terminal
1	TTL SB TTL signal	25	DX5 DX 5 contact
2	OSTH SBcharge control Voltage	26	DX6 DX 6 contact
3	OSC SBcharge control Signal	27	ICLK Clock input
4	AD1 A/D Voltage input 1	28	OCLK Clock output for CCD
5	AD2 A/D Voltage input 2	29	LCK Serial clock input
6	ADO A/D Voltage output	30	LSI Serial code input
7	Vcc V c c	31	LCS Chip select input
8	RLS Release signal output	32	RESI Reset input for latch
9	HAN Pre-release signal output	33	AFD1 AFmotor forward drive output
10	RM Remote signal input	34	AFD2 AFmotro reverse drive output
11	RES0 Power on reset signal	35	AFMD AFmotor drive derection input
12	GLC0 X-contact OUTPUT(Hot shoe)	36	AFM1 AFmotor drive signal 1 input
13	GLC1 Start signal(internal SB)	37	AFM2 AFmotor drive signal 2 input
14	GLC2 Battery check drive signal	38	RXD1 Serial data input
15	GLC3 AF-PI drive signal	39	TXD2 Inspection signal output
16	GLC4 Data print signal	40	CRX Inspection ignal in-output
17	DB01 lens contact D	41	TXD1 Serial data output
18	RXD2 Inspection CTX	42	WAKE Power wake-up signal
19	GND D G N D	43	STOP TTL-STOP signal
20	DB02 D B contact for data	44	GND D G N D
21	LS0 Serial status	45	SCK Serial clock input
22	DX2 DX 2 contact	46	RDY Ready terminal(Hot Shoe)
23	DX3 DX 3 contact	47	BAT Battery voltage input
24	DX4 DX 4 contact	48	IS Integrated start signal

F70 (N70) EEPROM DATA

95-03-10

ADRS	CONTENTS	M-CPU				NOTE
		MP 1	MP 2	MP 3		
		3.3 9	3.4 4	4.0 3		
0	AD ADJUSTMENT DATA	—	—	—		
1	1	1	1	1		
1 8 3	AP ADJUSTMENT DATA	—	—	—		
1 8 4	AE ADJUSTMENT DATA	7	7	7		
1 8 5	AE ADJUSTMENT DATA	1 6 4	1 6 4	1 6 4		
1 8 6	AE ADJUSTMENT DATA	3 4	3 4	3 4		
1 8 7	AE ADJUSTMENT DATA	0	0	0		
1 8 8	AE ADJUSTMENT DATA	2 0 5	2 0 5	2 0 5		
1 8 9	AE ADJUSTMENT DATA	1 2 6	1 2 6	1 2 6		
1 9 0	AE ADJUSTMENT DATA	2	2	2		
1 9 1	AE ADJUSTMENT DATA	1	1	1		
1 9 2	AE ADJUSTMENT DATA	—	—	—		
1	1	1	1	1		
2 1 9	AE ADJUSTMENT DATA	—	—	—		
2 2 0	AP CONTROL DATA	1 9 2	1 9 2	1 9 2		
2 2 1	AP CONTROL DATA	1	1	1		
2 2 2	AP CONTROL DATA	1 0 4	1 0 4	1 0 4		
2 2 3	AP CONTROL DATA	2 0	2 0	2 0		
2 2 4	AP CONTROL DATA	1 0	1 0	1 0		
2 2 5	AP CONTROL DATA	—	—	—		
2 2 6	AP CONTROL DATA	1 9 7	1 9 7	1 9 7		
2 2 7	AP CONTROL DATA	1 2 7	1 2 7	1 2 7		
2 2 8	AP CONTROL DATA	1 6 4	1 6 4	1 6 4		
2 2 9	AP CONTROL DATA	1 2 6	1 2 6	1 2 6		
2 3 0	AP CONTROL DATA	1 2 8	1 2 8	1 2 8		
2 3 1	AP CONTROL DATA	1 2 7	1 2 7	1 2 7		
2 3 2	AP CONTROL DATA	1 2 8	1 2 8	1 2 8		
2 3 3	AP CONTROL DATA	2	2	2		

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ADRS	CONTENTS	M-CPU				NOTE
		MP 1	MP 2	MP 3		
		3.3 9	3.4 4	4.0 3		
2 3 4	AF CONTROL DATA	4	4	4		
2 3 5	AF CONTROL DATA	0	0	0		
2 3 6	AE LEVEL ADJUSTMENT DATA CH1	—	—	—		
2 3 7	AE LEVEL ADJUSTMENT DATA CH2	—	—	—		
2 3 8	AE LEVEL ADJUSTMENT DATA CH3	—	—	—		
2 3 9	AE LEVEL ADJUSTMENT DATA CH4	—	—	—		
2 4 0	AE LEVEL ADJUSTMENT DATA CH5	—	—	—		
2 4 1	AE LEVEL ADJUSTMENT DATA CH6	—	—	—		
2 4 2	AE LEVEL ADJUSTMENT DATA CH7	—	—	—		
2 4 3	AE LEVEL ADJUSTMENT DATA CH8	—	—	—		
2 4 4	AE ADJUSTMENT DATA	—	—	—		
2 4 5	AE ADJUSTMENT DATA	—	—	—		
2 4 6	PRE-LEVEL ADJ. DATA CH1	—	—	—		
2 4 7	PRE-LEVEL ADJ. DATA CH2	—	—	—		
2 4 8	PRE-LEVEL ADJ. DATA CH3	—	—	—		
2 4 9	PRE-LEVEL ADJ. DATA CH4	—	—	—		
2 5 0	PRE-LEVEL ADJ. DATA CH5	—	—	—		
2 5 1	TTL PRE-GAMMA ADJUSTMENT DATA	—	—	—		
2 5 2	TTL LEVEL ADJUSTMENT DATA CH1	—	—	—		
2 5 3	TTL LEVEL ADJUSTMENT DATA CH2	—	—	—		
2 5 4	TTL LEVEL ADJUSTMENT DATA CH3	—	—	—		
2 5 5	TTL LEVEL ADJUSTMENT DATA CH4	—	—	—		
2 5 6	TTL LEVEL ADJUSTMENT DATA CH5	—	—	—		
2 5 7	TTL GAMMA ADJUSTMENT DATA	—	—	—		
2 5 8	TTL CONTROL DATA	2 3 0	2 3 0	2 3 0		
2 5 9	CAMERA CONTROL DATA	1 2 5	1 2 5	1 2 5		
2 6 0	CAMERA CONTROL DATA	9 6	9 6	9 6		
2 6 1	CAMERA CONTROL DATA	1 5 0	1 5 0	1 5 0		
2 6 2	CAMERA CONTROL DATA	1 0	1 0	1 0		

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ADRS	CONTENTS	M-CPU				NOTE
		MP 1	MP 2	MP 3		
		3.3 9	3.4 4	4.0 3		
2 6 3	CAMERA CONTROL DATA	1 2 4	1 2 4	1 2 4		
2 6 4	CAMERA CONTROL DATA	2 1 8	2 1 8	2 1 8		
2 6 5	CAMERA CONTROL DATA	8 3	8 3	8 3		
2 6 6	CAMERA CONTROL DATA	4	4	4		
2 6 7	BC ADJUSTMENT DATA	-	-	-		
1	1	1	1	1		
2 7 0	BC ADJUSTMENT DATA	-	-	-		
2 7 1	CAMERA CONTROL DATA	1 9 8	1 9 8	1 9 8		
2 7 2	CAMERA CONTROL DATA	1 7 6	1 7 6	1 7 6		
2 7 3	CAMERA CONTROL DATA	1 0	1 0	1 0		
2 7 4	CAMERA CONTROL DATA	8	8	8		
2 7 5	CAMERA CONTROL DATA	-	-	-		
2 7 6	CAMERA CONTROL DATA	7 2	7 2	7 2		
2 7 7	CAMERA CONTROL DATA	1 7	1 7	1 7		
2 7 8	CAMERA CONTROL DATA	3	3	3		
2 7 9	APERTURE CONTROL DATA	-	-	-		
2 8 0	APERTURE CONTROL DATA	8	8	1 7		
2 8 1	M 1/4000 ADJUSTMENT DATA	-	-	-		
2 8 2	CAMERA CONTROL DATA	5	5	5		
2 8 3	CAMERA CONTROL DATA	1 7	1 7	1 7		
2 8 4	CAMERA CONTROL DATA	7 5	7 5	7 5		
2 8 5	CAMERA CONTROL DATA	6 0	6 0	6 0		
2 8 6	CAMERA CONTROL DATA	0	0	0		
2 8 7	ERROR CODE	-	-	-		
2 8 8	CAMERA CONTROL DATA	0	0	0		
2 8 9	CAMERA CONTROL DATA	2 5 5	2 5 5	2 5 5		
2 9 0	CAMERA CONTROL DATA	0	0	0		
2 9 1	CAMERA CONTROL DATA	0	0	0		

Change page (差換え)

- E 1 8 - P70 -

Mar. 10, 1995



ADRS	CONTENTS	M-CPU				NOTE
		MP 1	MP 2	MP 3		
		3.39	3.44	4.03		
292	CAMERA CONTROL DATA	0	0	0		
293	CAMERA CONTROL DATA	72	72	72		
294	CAMERA CONTROL DATA	2	2	2		
295	CAMERA CONTROL DATA	2	2	2		
296	CAMERA CONTROL DATA	0	0	0		
1	1	1	1	1		
305	CAMERA CONTROL DATA	0	0	0		
306	CAMERA CONTROL DATA	2	2	2		
307	CAMERA CONTROL DATA	4	4	4		
308	CAMERA CONTROL DATA	0	0	0		
1	1	1	1	1		
334	CAMERA CONTROL DATA	0	0	0		
335	CAMERA CONTROL DATA	0	0	0		
336	FOR PRODUCTION STAGE	-	-	-		
1	1	1	1	1		
511	FOR PRODUCTION STAGE	-	-	-		

・記述されている値は固定値および初期値ですが一部の値はカメラの状態により変動します。

・ - は調整値及びカメラの状態により変動する値です。

・ The values stated in the list are the fixed value or the initial value.

Some data change according as the camera condition changes.

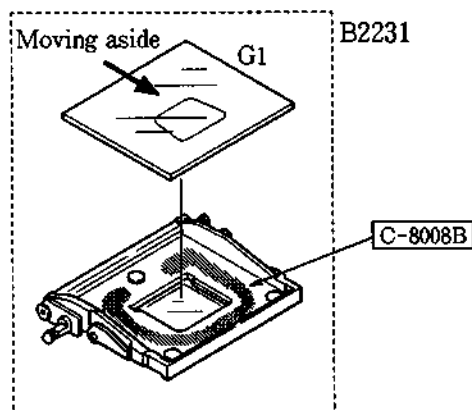
・ The minus mark, -, means the values that will change according to the transition of camera condition.

ASSEMBLING & ADJUSTMENT

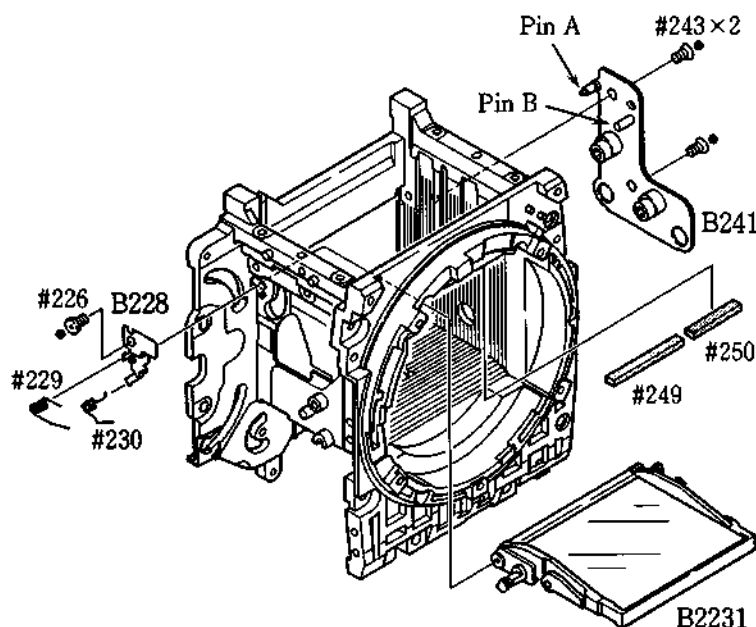
1. FRONT BODY

MAIN MIRROR GROUP

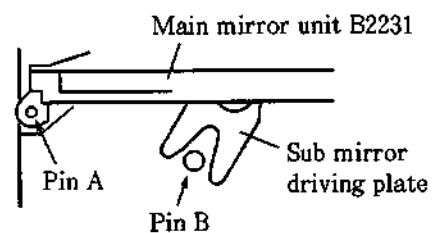
1. Pasting main mirror



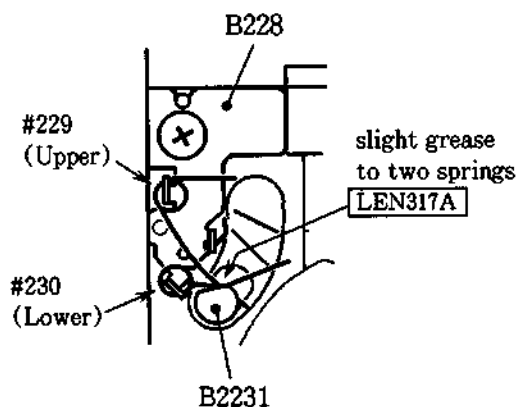
2. Mounting main mirror group



- ① Attach sponges #249 and #250 to the mirror box.
- ② Mount B288 using screw #226.
- ③ Mount main mirror unit B2231 on the pin of B288.
- ④ Mount B241 using screws #243 x 2.

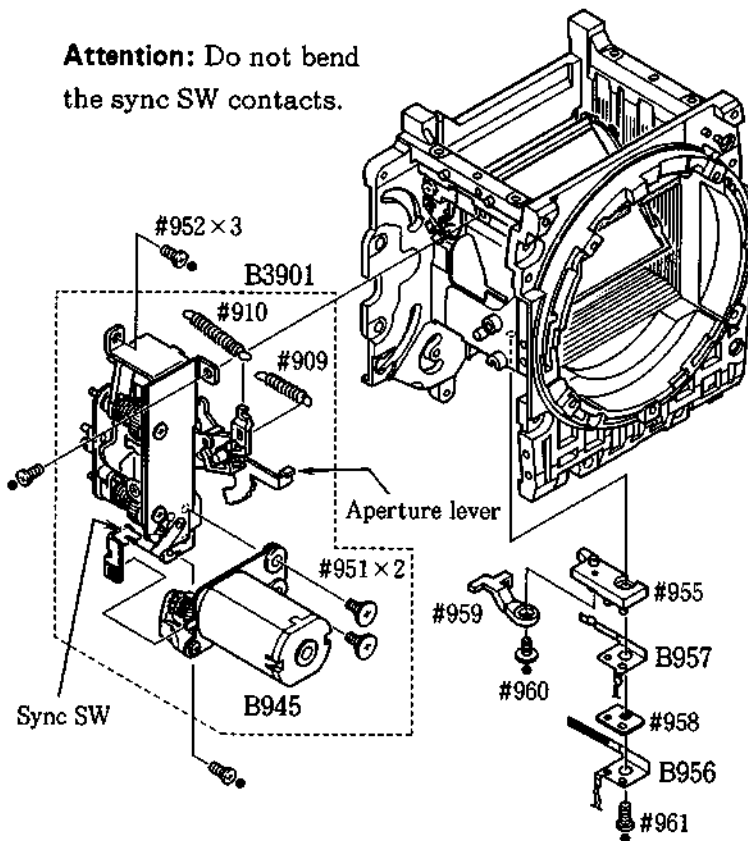


- ⑤ Hook springs #230 and #229.

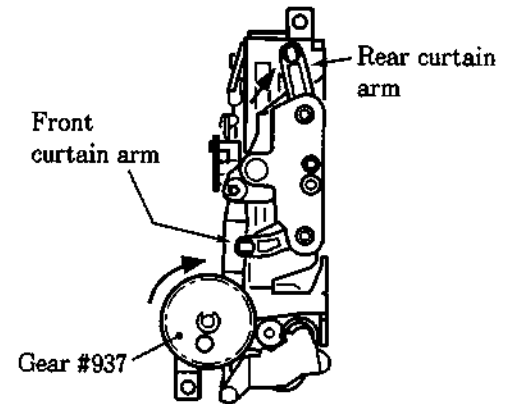


SHUTTER MECHANISM UNIT

Attention: Do not bend the sync SW contacts.



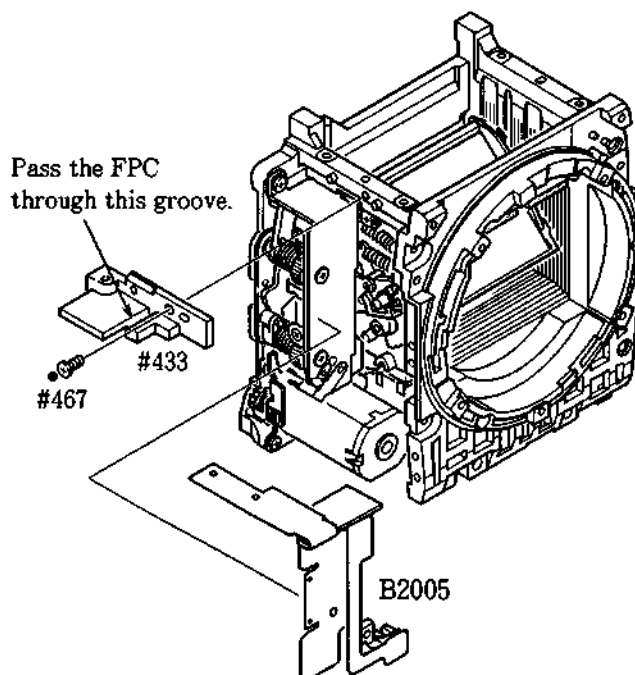
- ① Mount the sequence SW group.
- ② Set shutter mechanism unit B3901 to the settings as shown in the figure below.



- Method: Lift the rear curtain arm to the position shown in the figure and turn gear #937 clockwise until it stops.
- ③ When mounting the shutter mechanism unit, first put the aperture lever in the mirror box, then secure the unit using screws #952x3 while aligning the shafts with the holes.

Inspection: Make sure that the main mirror moves up as the aperture lever is lowered.

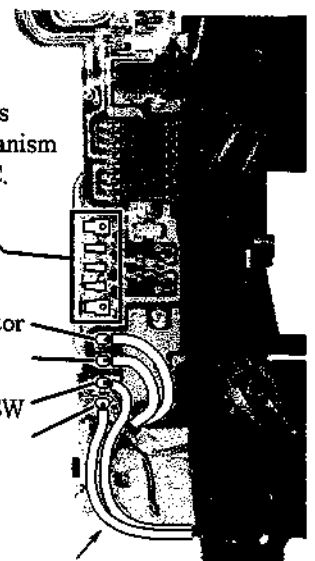
SEQUENCE FPC



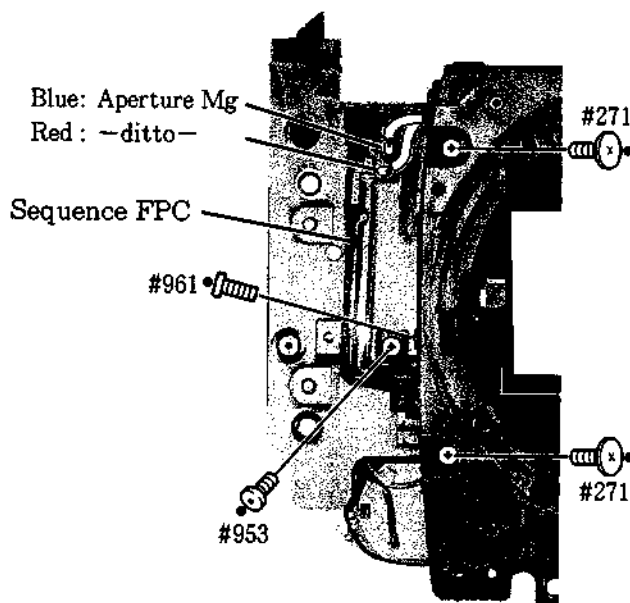
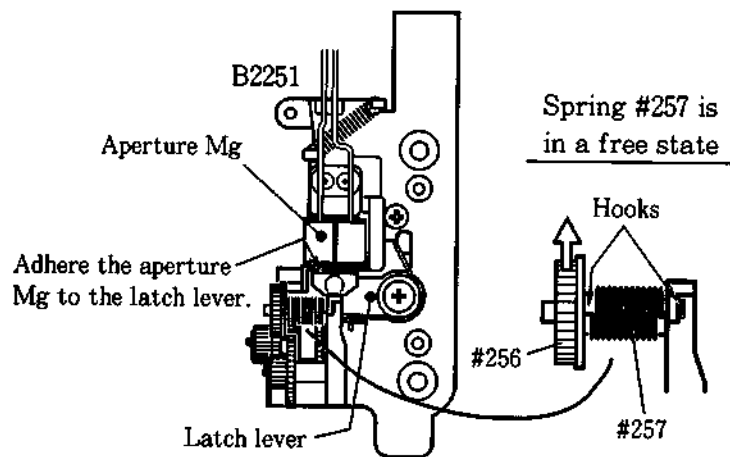
Make soldering bridges between shutter mechanism unit and sequence FPC.

Black: Sequence motor
Red : -ditto-
Red : Sequence SW
Black: -ditto-

Pass two wires connected to the sequence SW outside of the motor.



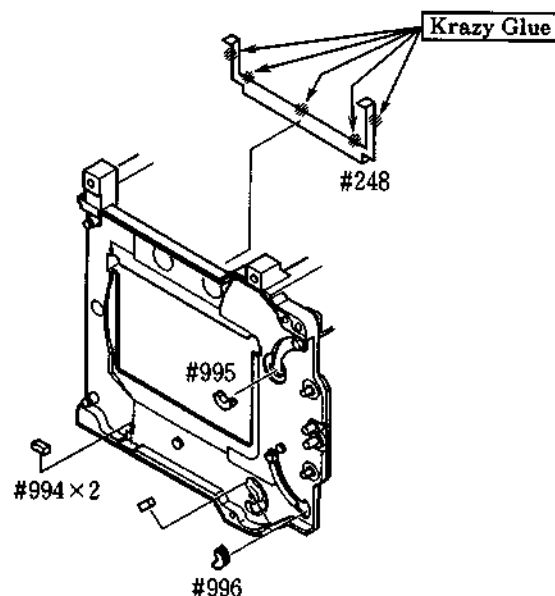
APERTURE CONTROL UNIT



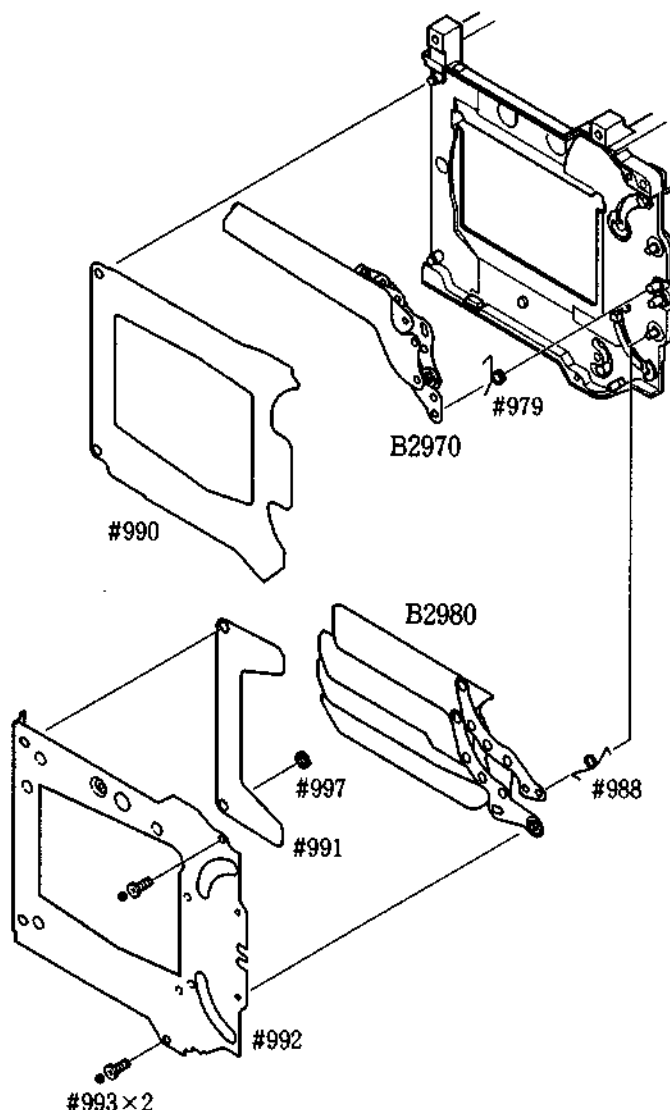
- ① Adhere the aperture Mg to the latch lever, and free spring #257 free from the torsion load.
- ② After turning gear #256 in the direction of the arrow by one to one and a half turns, detach the aperture Mg from the latch lever. Then secure gear #256.
- ③ Mount aperture control unit B2251 to the mirror box using screws #271×2 and #961.
- ④ Mount the aperture PI part of sequence FPC to the aperture control unit using screw #953
- ⑤ Solder two aperture Mg wires.
- ⑥ Once more adhere the aperture Mg to the latch lever.

Inspection: Make sure that the aperture lever moves vertically.

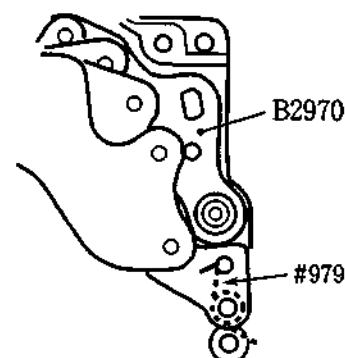
CUSHION RUBBERS, LIGHT BAFFLE PLATE



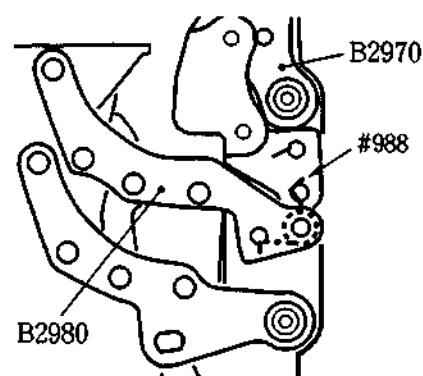
SHUTTER CURTAIN GROUP



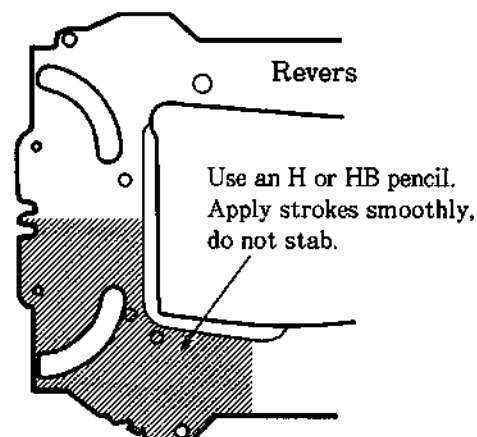
- Hooking position of spring #979



- Hooking position of spring #988



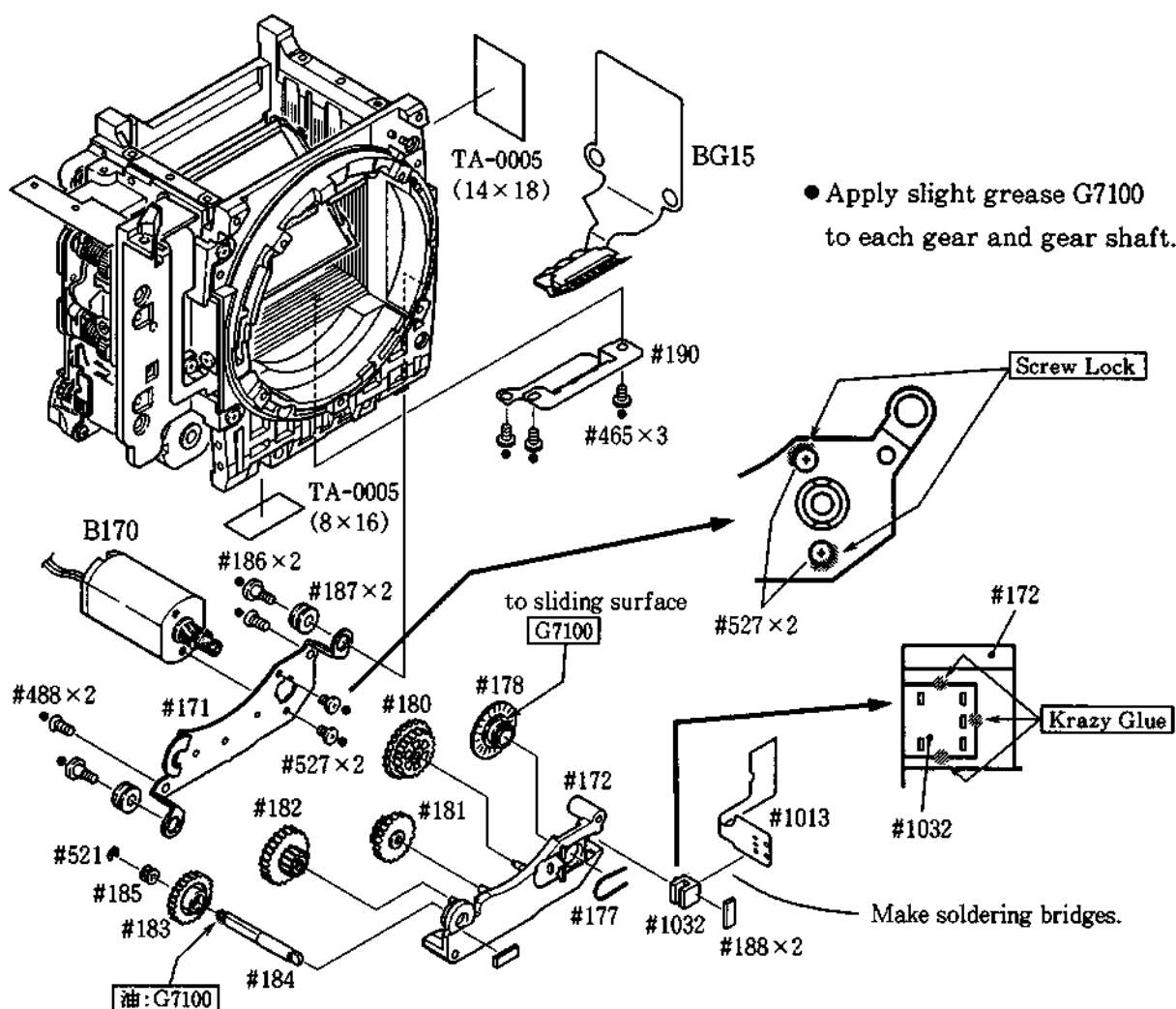
- Applying black marking to #992 with pencil



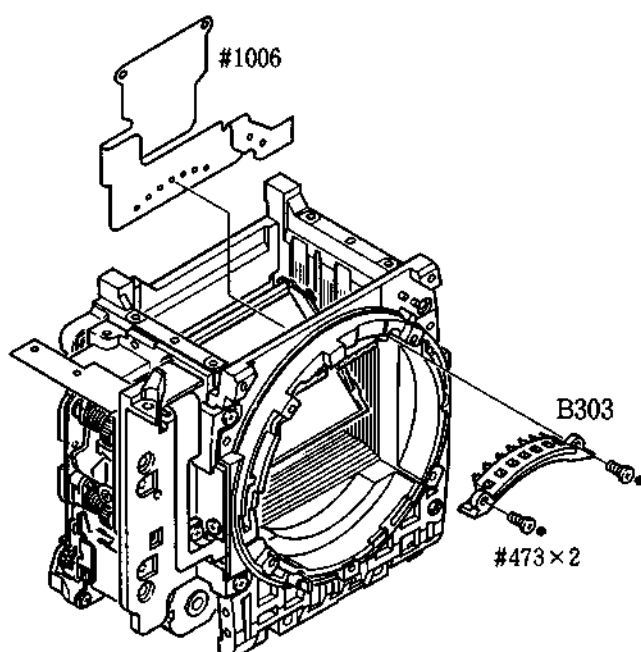
INSPECTION AND ADJUSTMENT OF SHUTTER CURTAIN TRAVELING SPEED

- When the shutter mechanism unit is replaced with a new one, be sure to make an inspection and adjustment the shutter curtain traveling speed according to separate instructions.
When the aperture control unit is replaced, be sure to make an inspection and adjustment the aperture control according to separate instructions.
- When the shutter curtain unit (B2970, B2980) and mirror box unit B31 are replaced with new ones, no particular adjustment is necessary. But make an inspection anyway.

TTL FPC, AF DRIVING GROUP

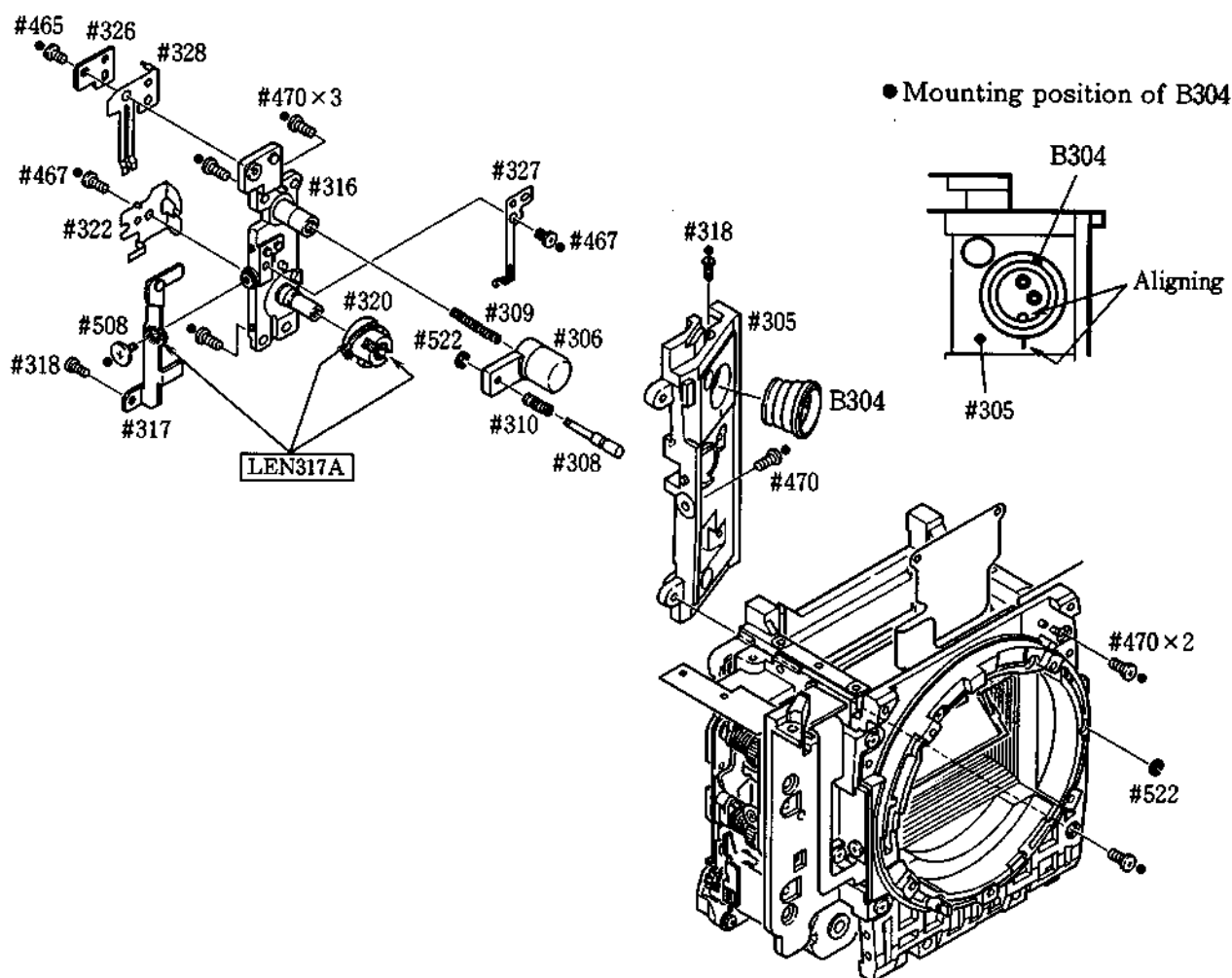


LENS CONTACT GROUP

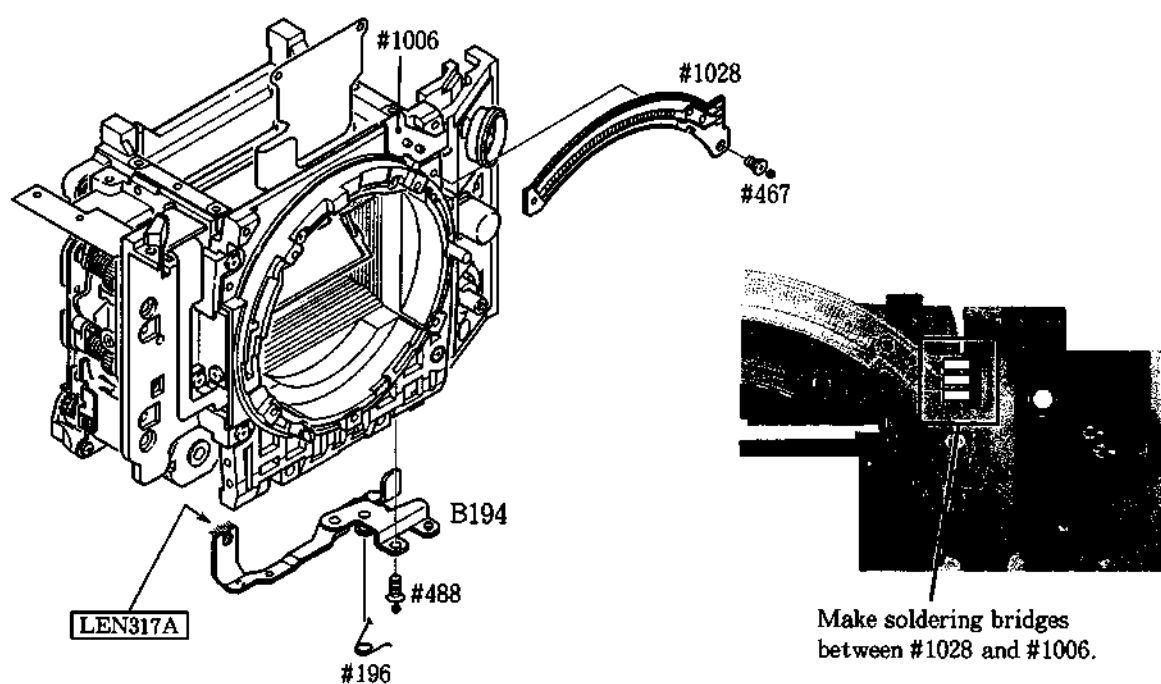


- Make soldering bridges between B303 and #1006.

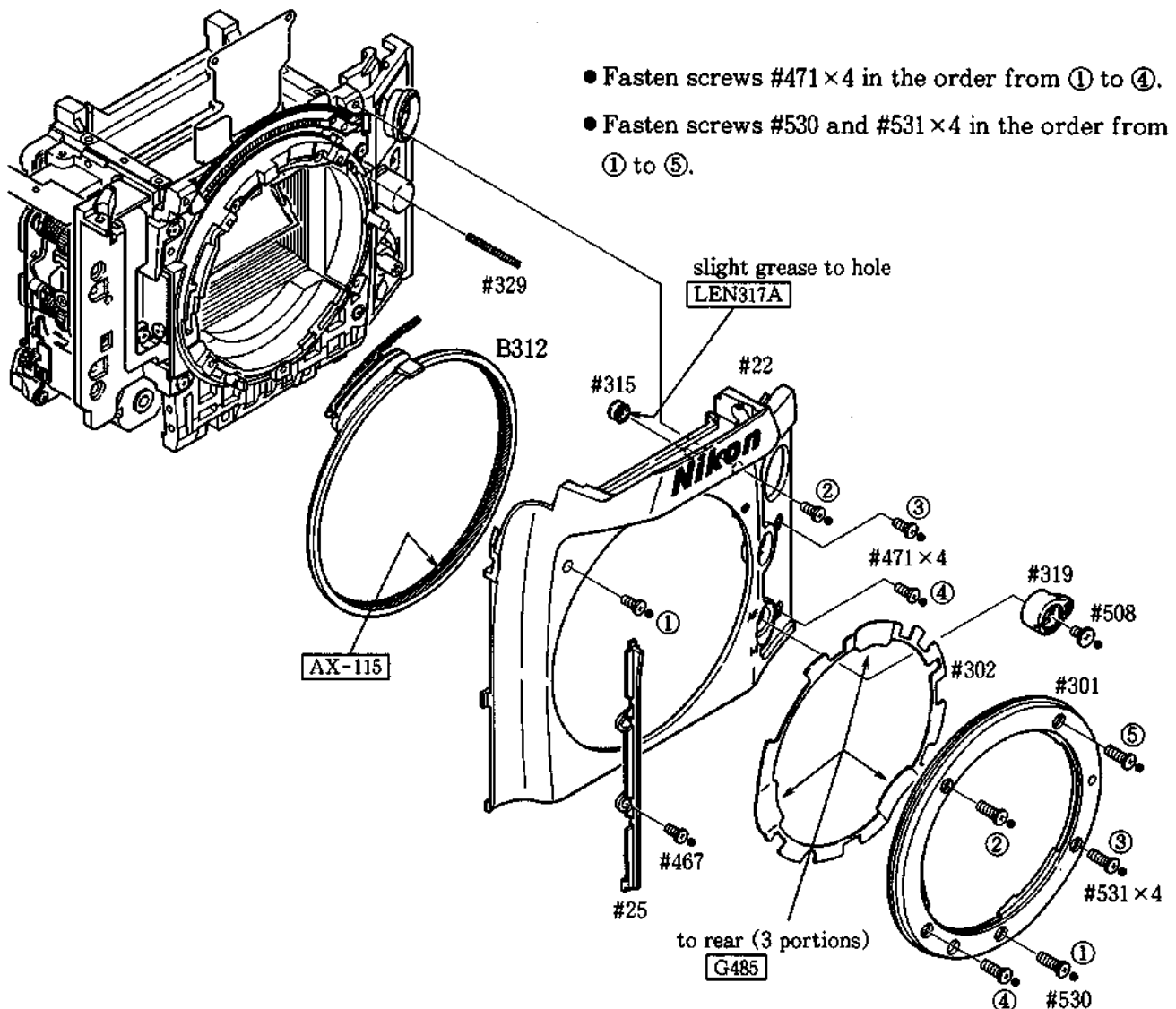
FOCUS MODE SELECTOR BASE PLATE



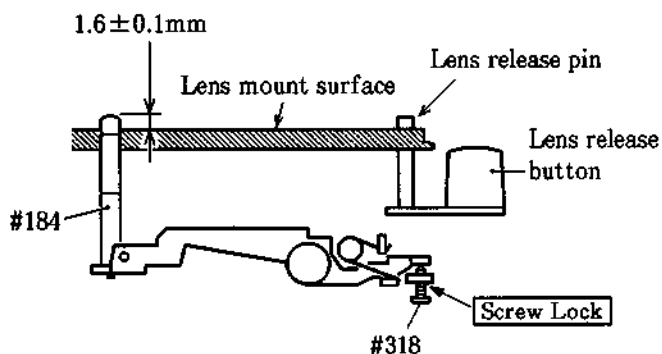
F-F₀ BASE PLATE, LEVER UNIT



FRONT COVER, LENS MOUNT

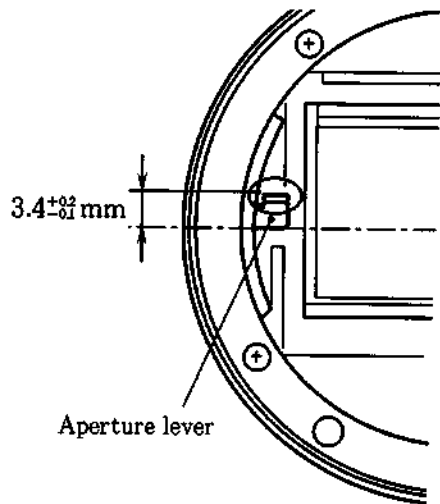


HEIGHT ADJUSTMENT OF AF COUPLING SHAFT #184



- ① Set the focus mode selector #319 to "AF". Measure the height of the AF coupling shaft #184 after pressing the lens release button several times.
- ② Adjust the height of the AF coupling shaft using screw #318.
- ③ The AF coupling shaft should not protrude over the lens mount surface, when the height of lens release pin is adjusted to 0.4mm.
- ④ After adjusting, secure screw #318 using Screw Lock.

ADJUSTMENT OF APERTURE LEVER POSITION

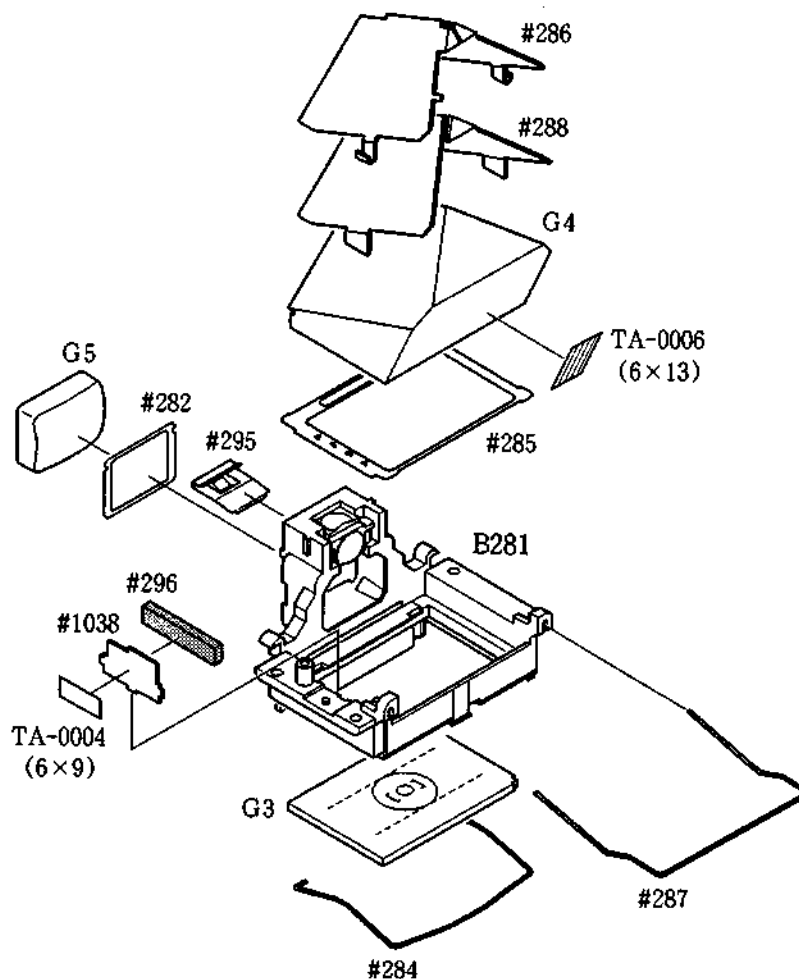


- Measure the height of the aperture lever using tool J18004.

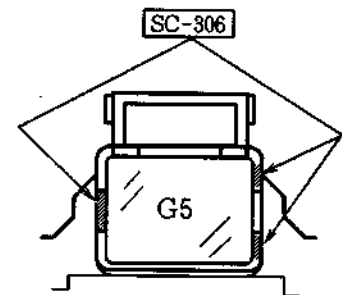
Standard value: $3.4^{+0.2}_{-0.1}$ mm

If the height of the aperture lever is out of the standard value, bend the circled position to adjust. While adjusting, take care not to bend the inside lever and stopper portion.

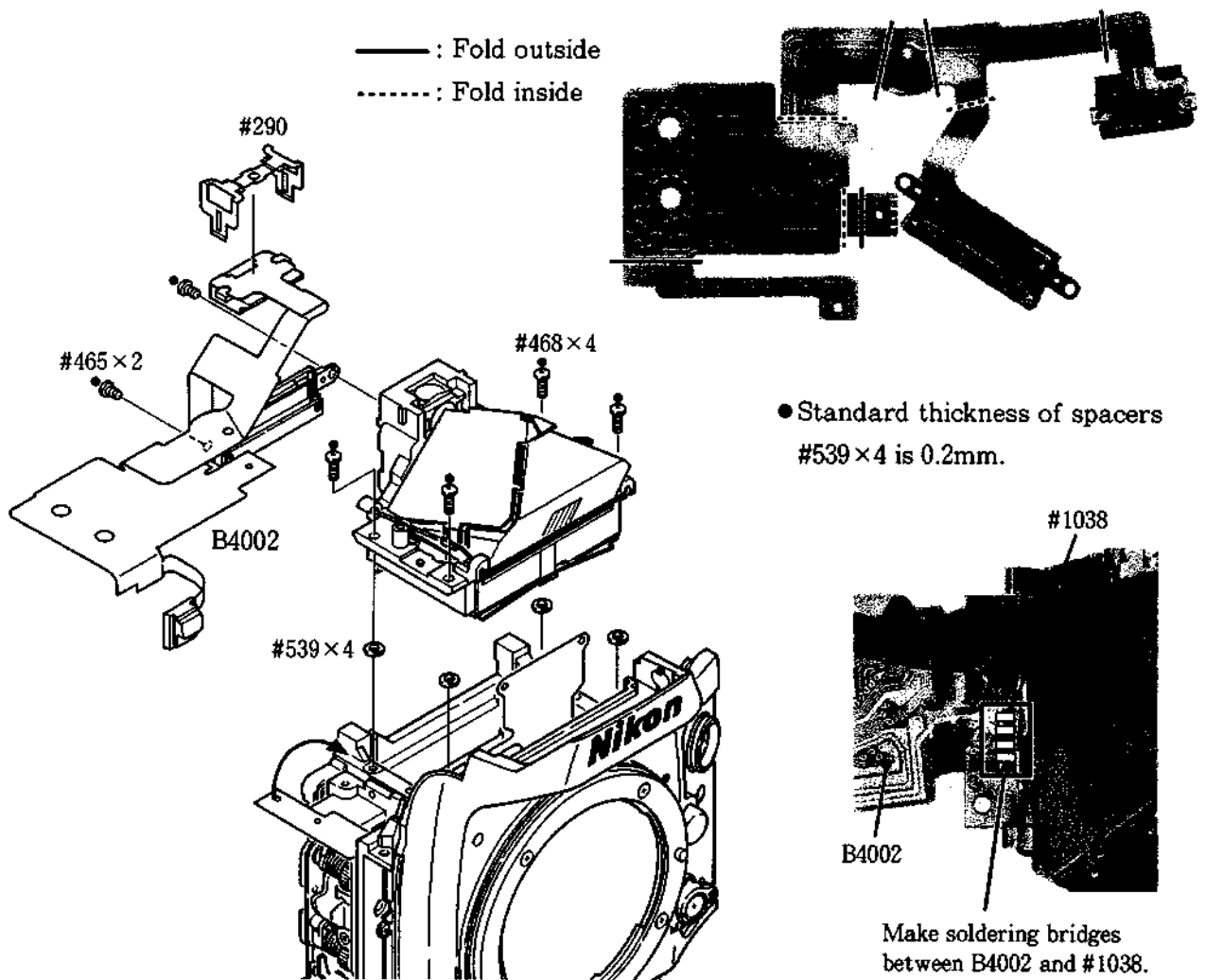
PENTAPRISM GROUP



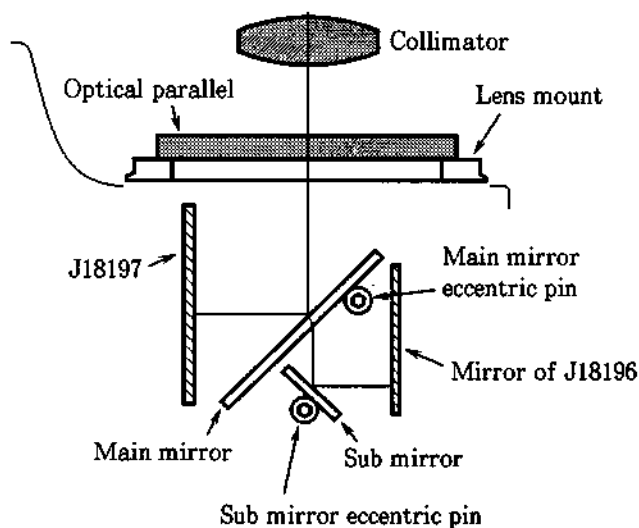
- Pasting eyepiece lens G5



PENTAPRISM FPC



ANGLE ADJUSTMENT OF MAIN MIRROR AND SUB MIRROR TO 45°



*Use tools

1. Angle adjustment of main mirror
 - ① Collimator (J19002)
 - ② Mirror angle inspection mirror (J18197)
 - ③ Optical parallel
 - ④ Hexagonal wrench
2. Angle adjustment of sub mirror
 - ① Collimator (J19002)
 - ② Sub mirror angle adjustment tool (J18196)
 - ③ Hexagonal wrench

● Angle adjustment of main mirror to 45°

Note: Check to confirm the accuracy of the main mirror before and after adjustment by moving it up and down several times.

① Checking the discrepancy (right/left)

If horizontal displacement is out of the standard value, it is possible that bayonet spring #302 is pinched, mirror unit B2231 is defective, or mirror shaft is bent.

② Checking the discrepancy (up/down)

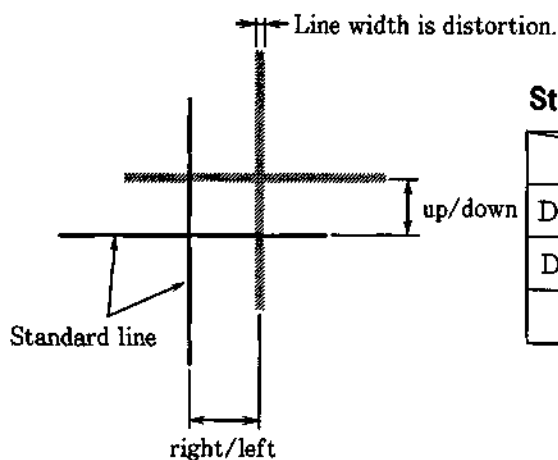
If the amount of the discrepancy is out of the standard value, rotate the main mirror eccentric pin to adjust.

● Angle adjustment of sub mirror to 45°

Note: Check to confirm the accuracy of the main mirror before and after adjustment by moving it up and down several times.

① Checking the discrepancy (up/down)

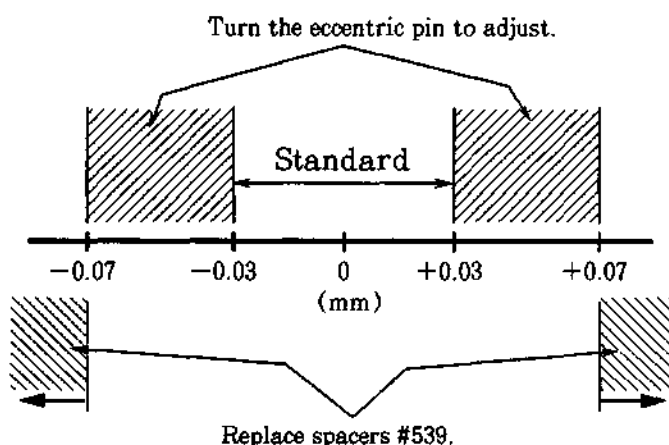
If the amount of the discrepancy is out of the standard value, rotate the sub mirror eccentric pin to adjust.



Standard:

	Main mirror	Sub mirror
Discrepancy (right/left)	Within $\pm 20'$	
Discrepancy (up/down)	Within $\pm 5'$	Within $\pm 5'$
Distortion	Within $\pm 8'$	Within $\pm 8'$

ADJUSTMENT OF INFINITY (∞)



① Replace the focus screen with the one (split prism included) used F-601M cameras.

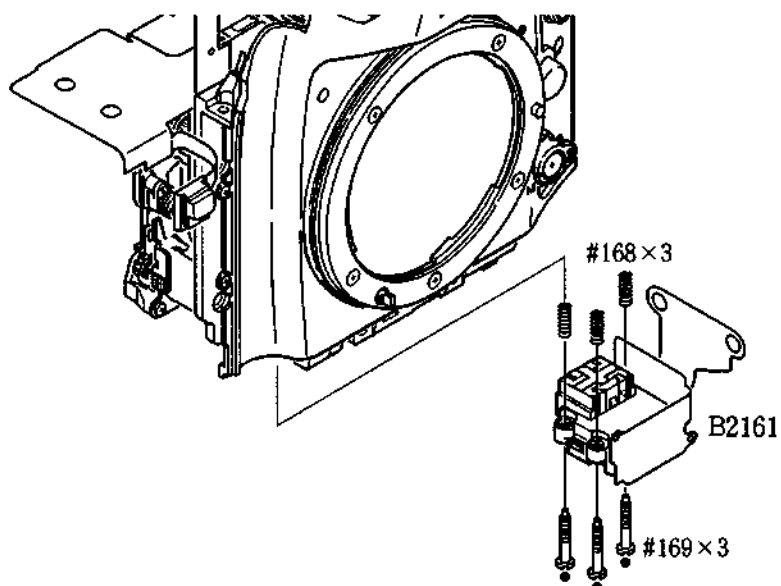
② Mount the reference lens J18010 and read the value.

● From -0.03mm to $+0.03\text{mm}$: within the standard range. No further adjustment is necessary.

● From -0.07mm to -0.03mm or $+0.03\text{mm}$ to $+0.07\text{mm}$: outside the standard range. Turn the eccentric pin of the main mirror to adjust.

● Under -0.07mm or over $+0.07\text{mm}$: Replace spacers #539 $\times 4$.

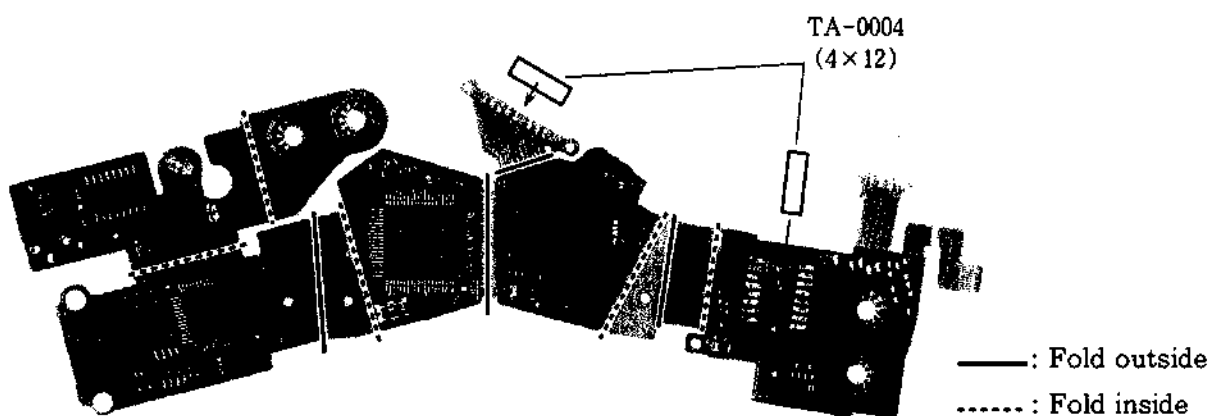
AF SENSOR UNIT



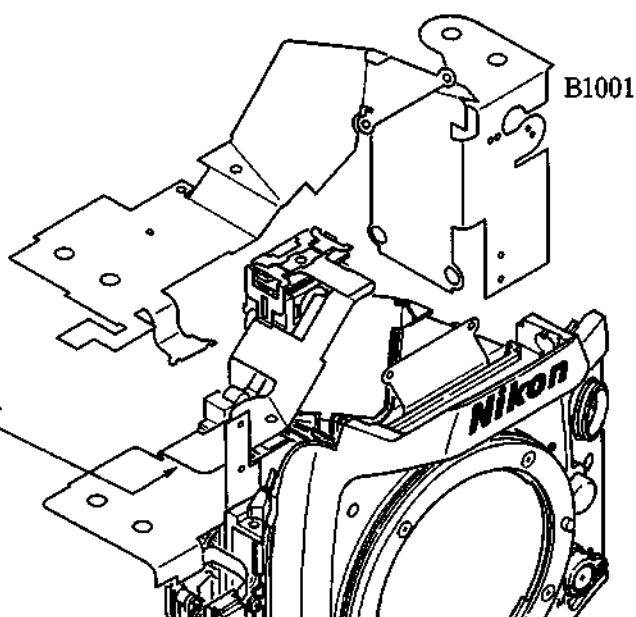
● Fasten screws #169×3 by 14 turns.

MAIN FPC

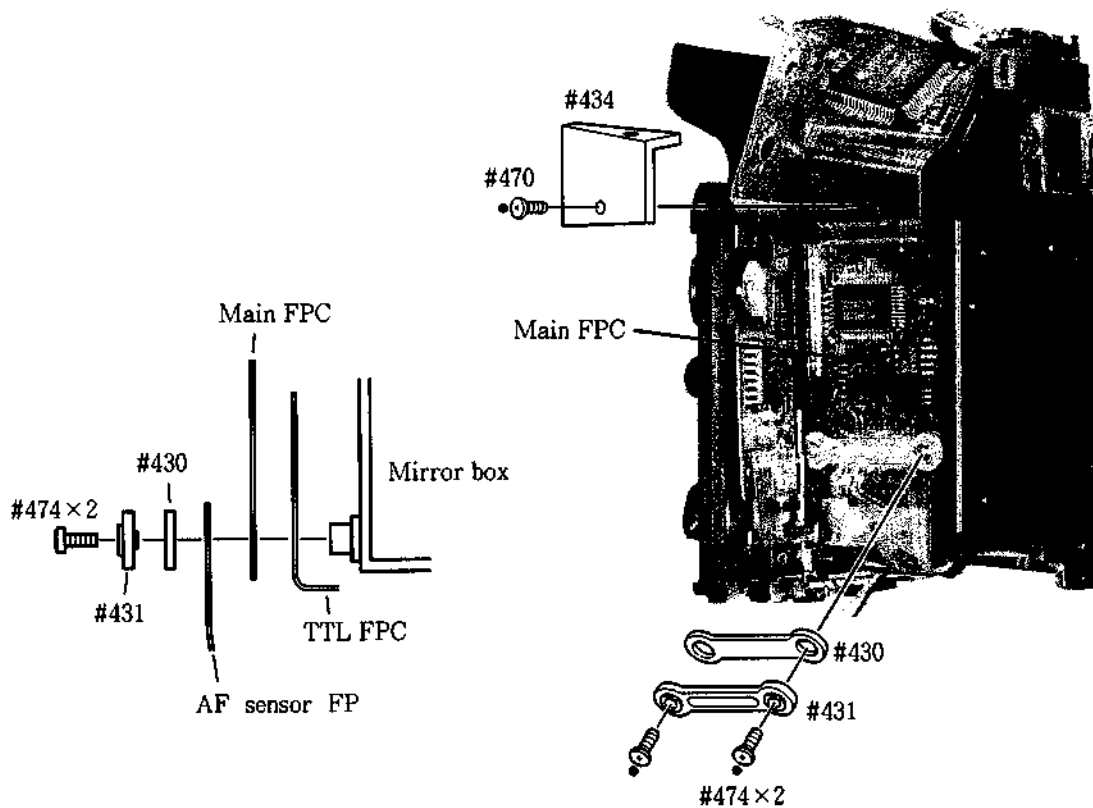
1. Attaching main FPC



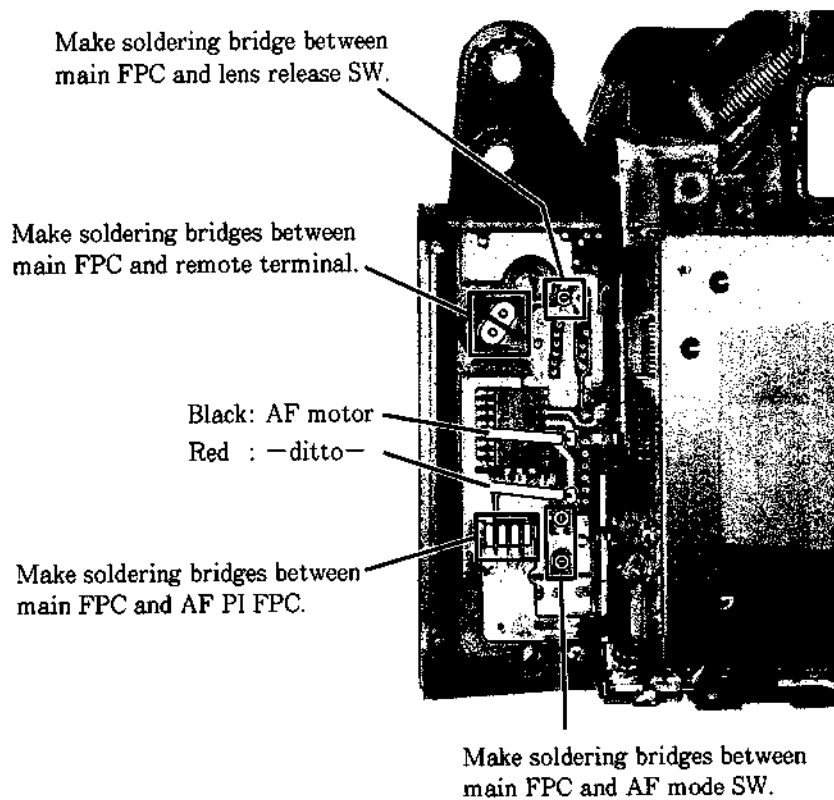
Insert the main FPC
between pentaprism FPCs.



2. Press-contact

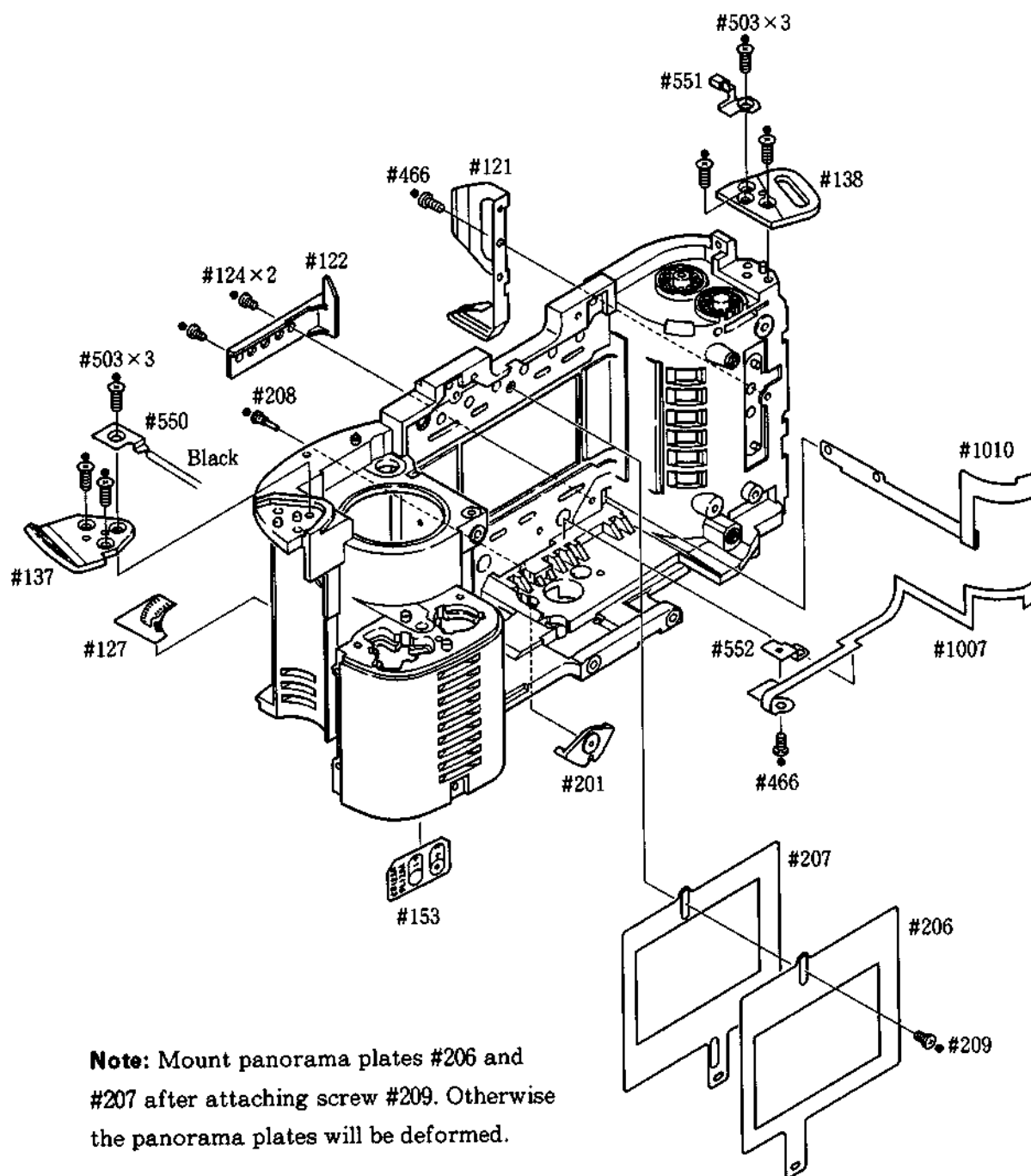


3. Soldering bridges and soldering wires

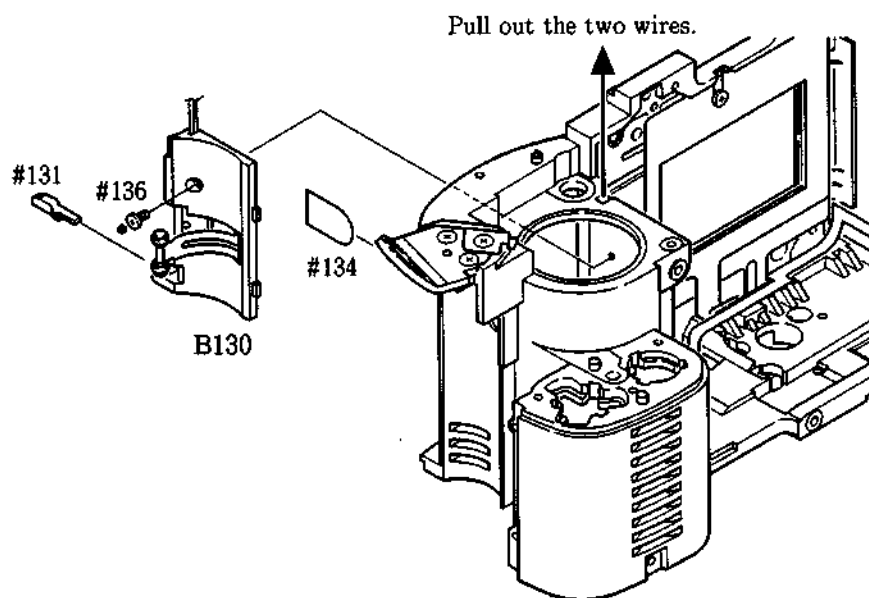


2. REAR BODY

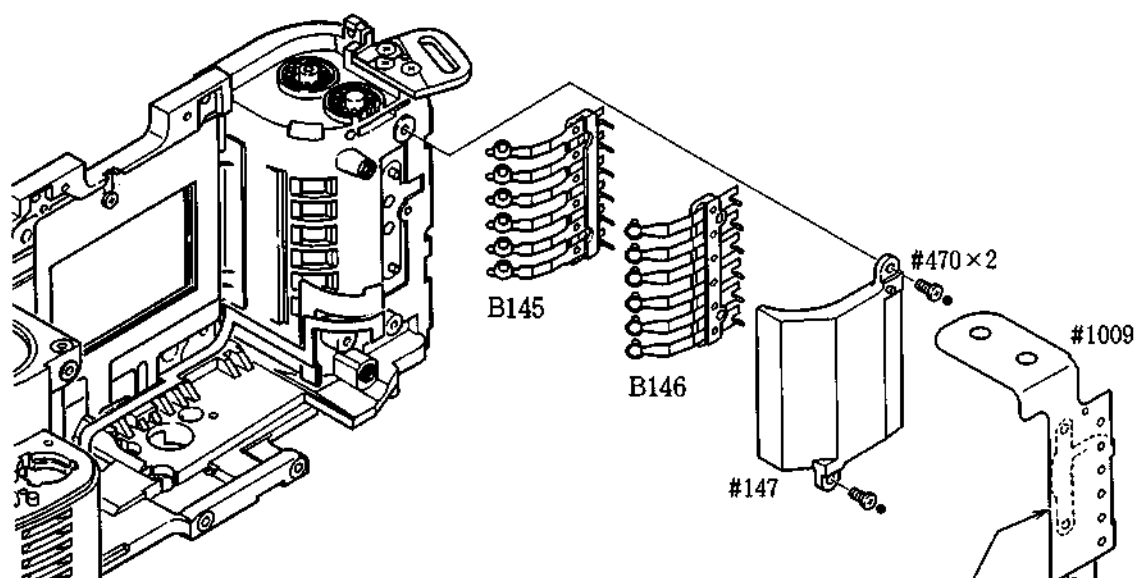
SMALL PARTS OF REAR BODY



FILM DETECTION SW UNIT



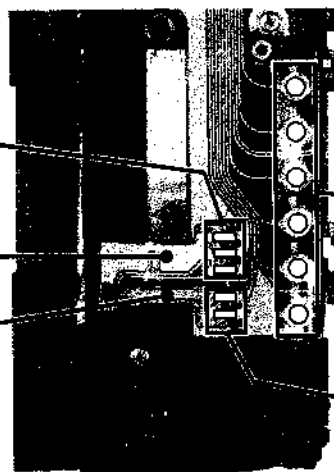
DX CONTACT GROUP



Make soldering bridges between DX FPC and DB FPC (for QD body only).

DB FPC

Panorama FPC



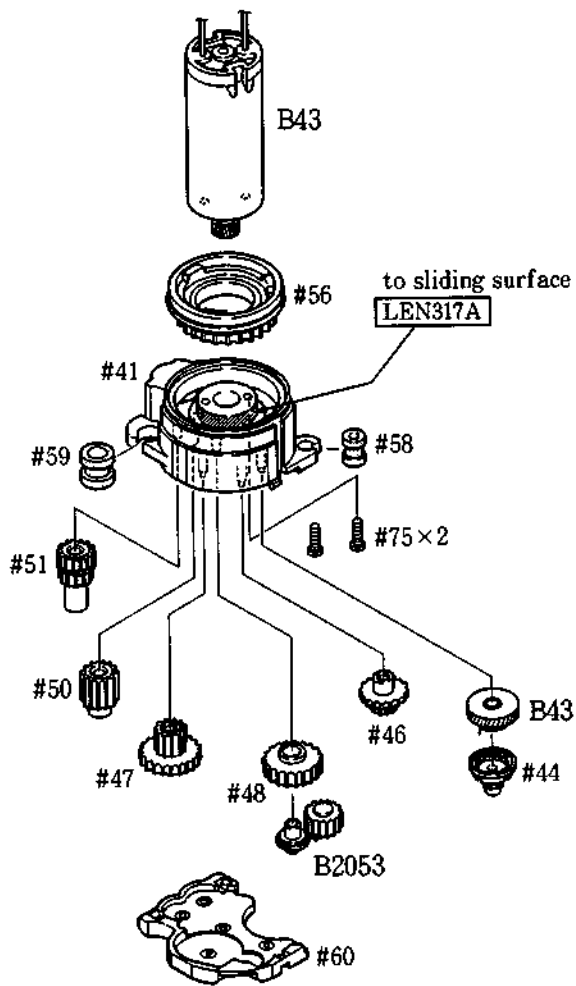
Make soldering bridges between DX FPC and DX contacts.

Make soldering bridges between DX FPC and panorama FPC.

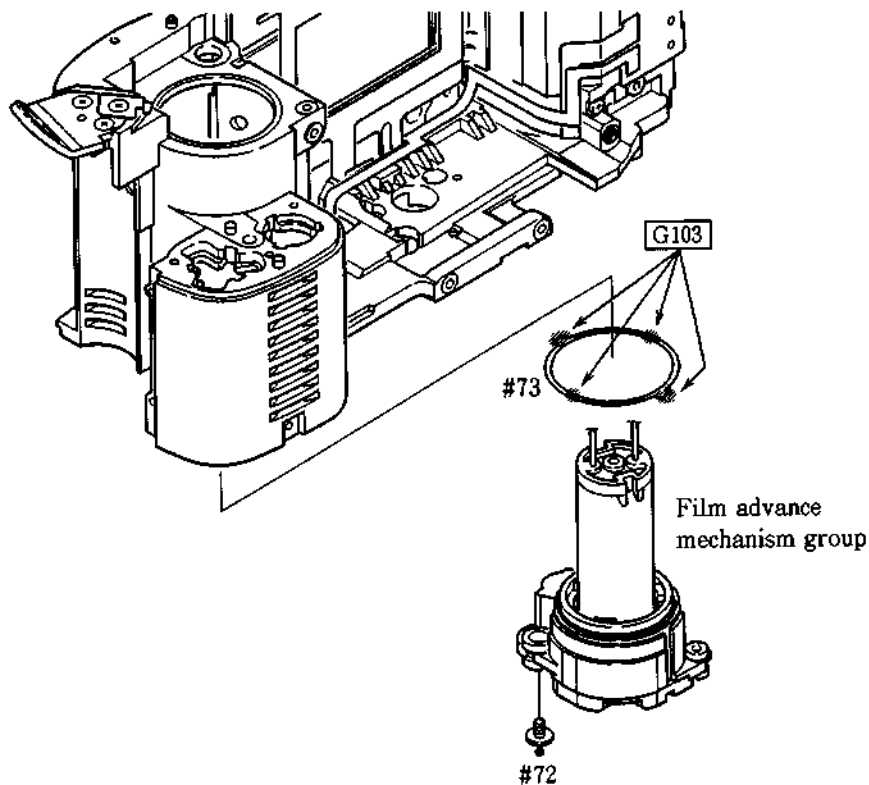
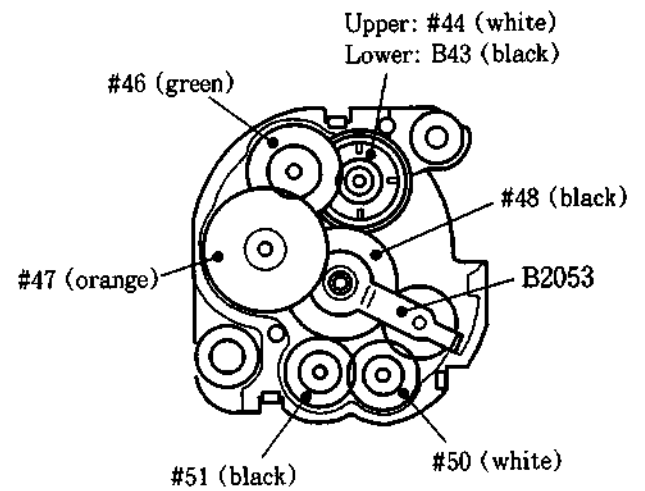
Set the FPC (as indicated by dotted line) between the rear body and B145.

Attach the camera back SW part to rear body.

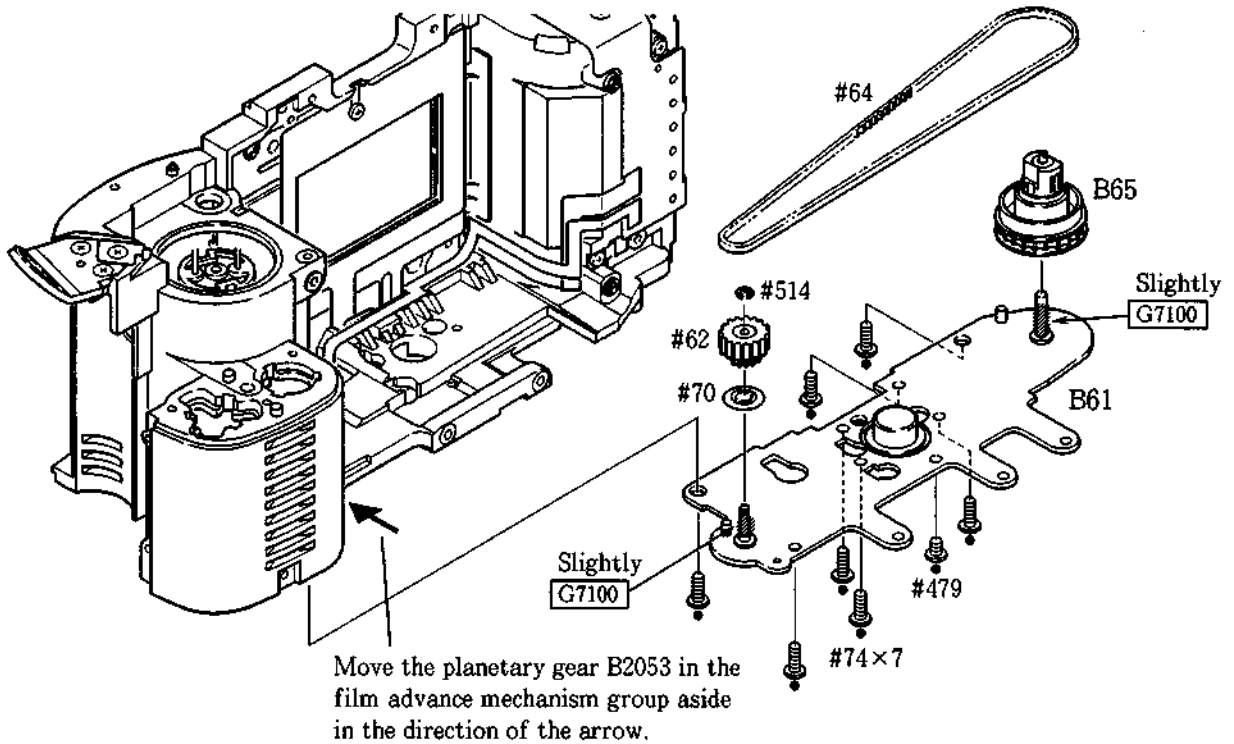
FILM ADVANCE MECHANISM GROUP



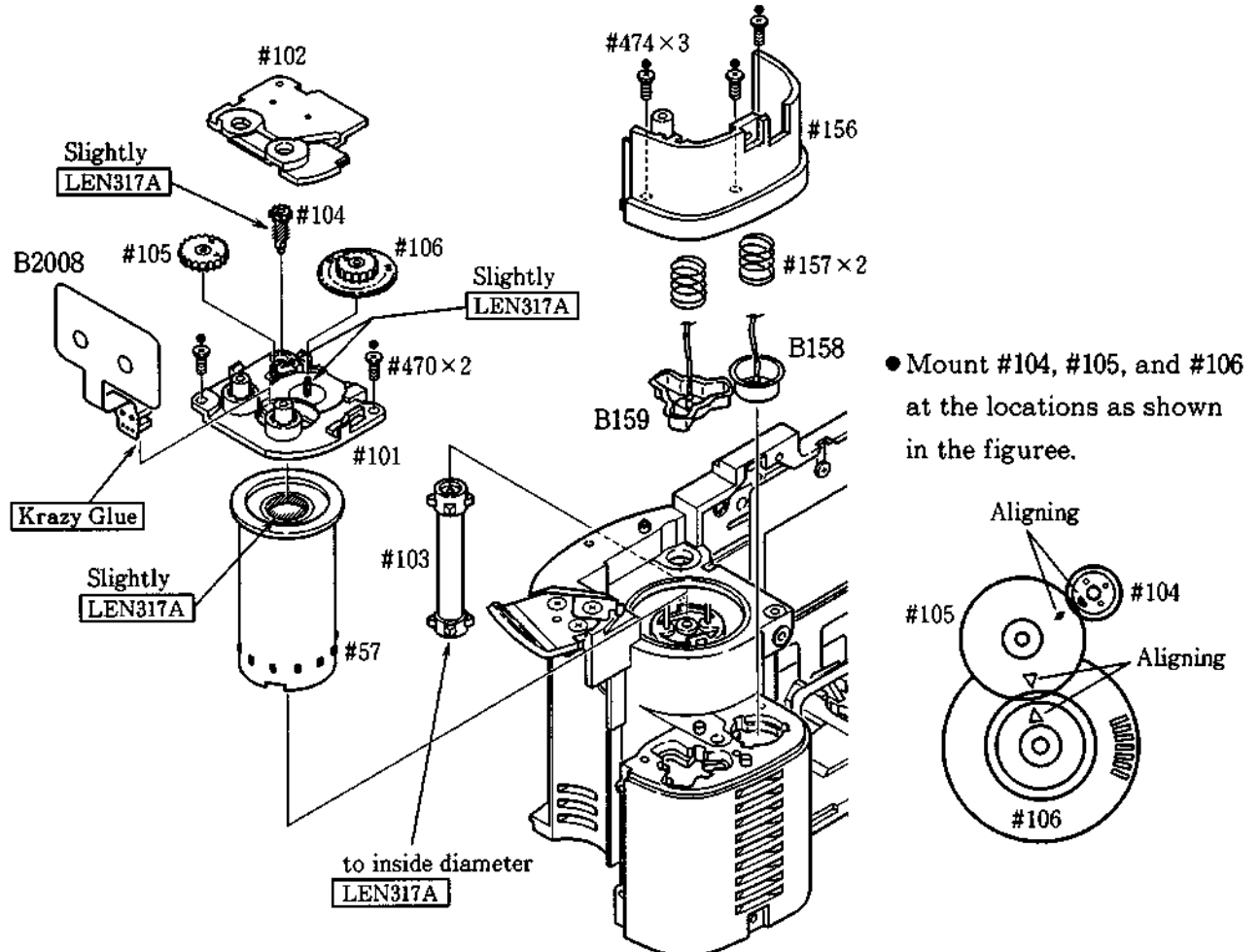
● Apply slight grease G7100 to each gear and gear shaft.



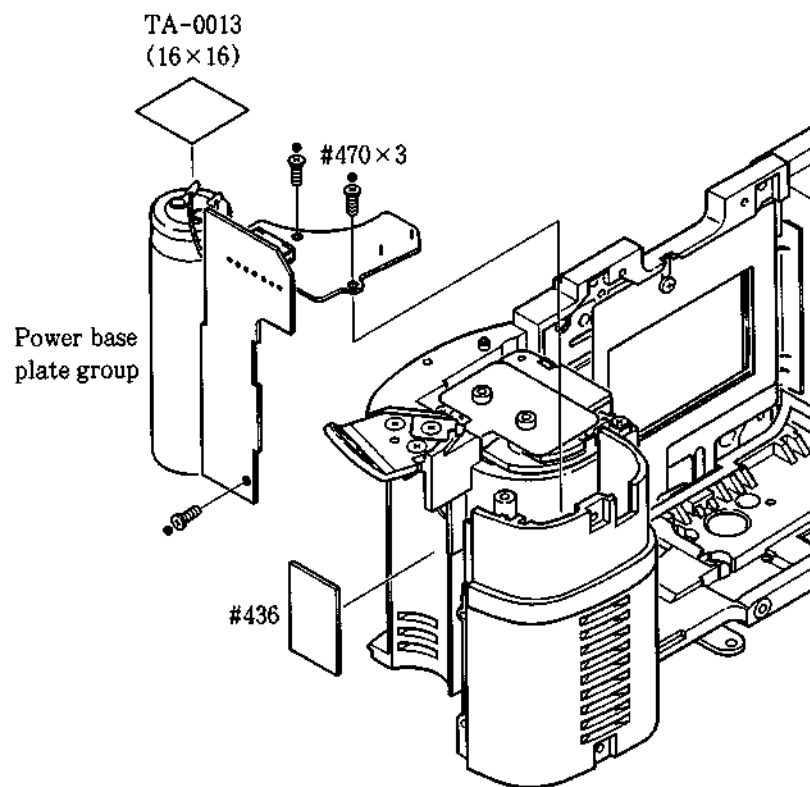
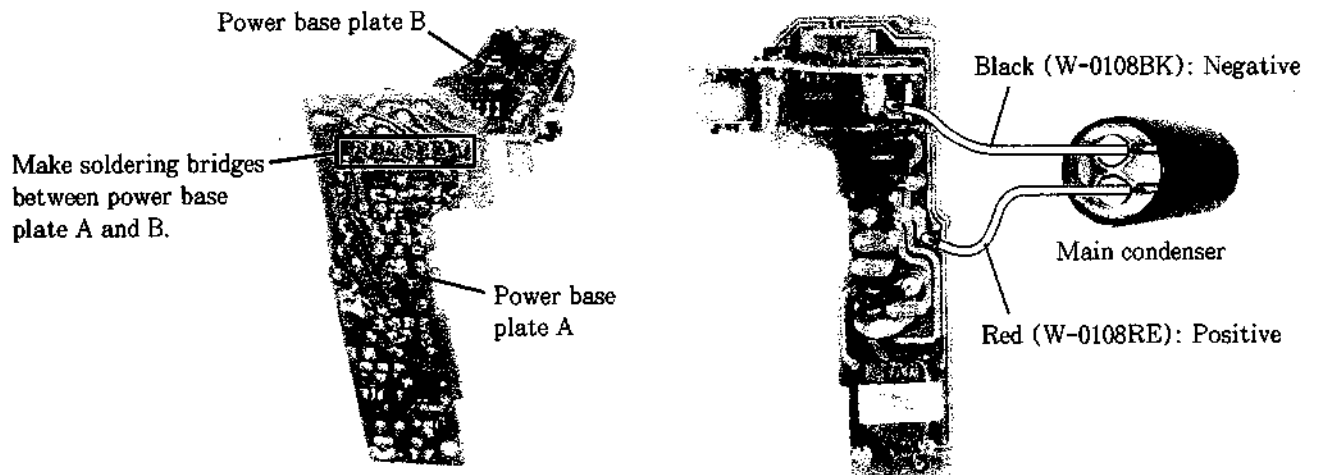
TRIPOD BASE PLATE



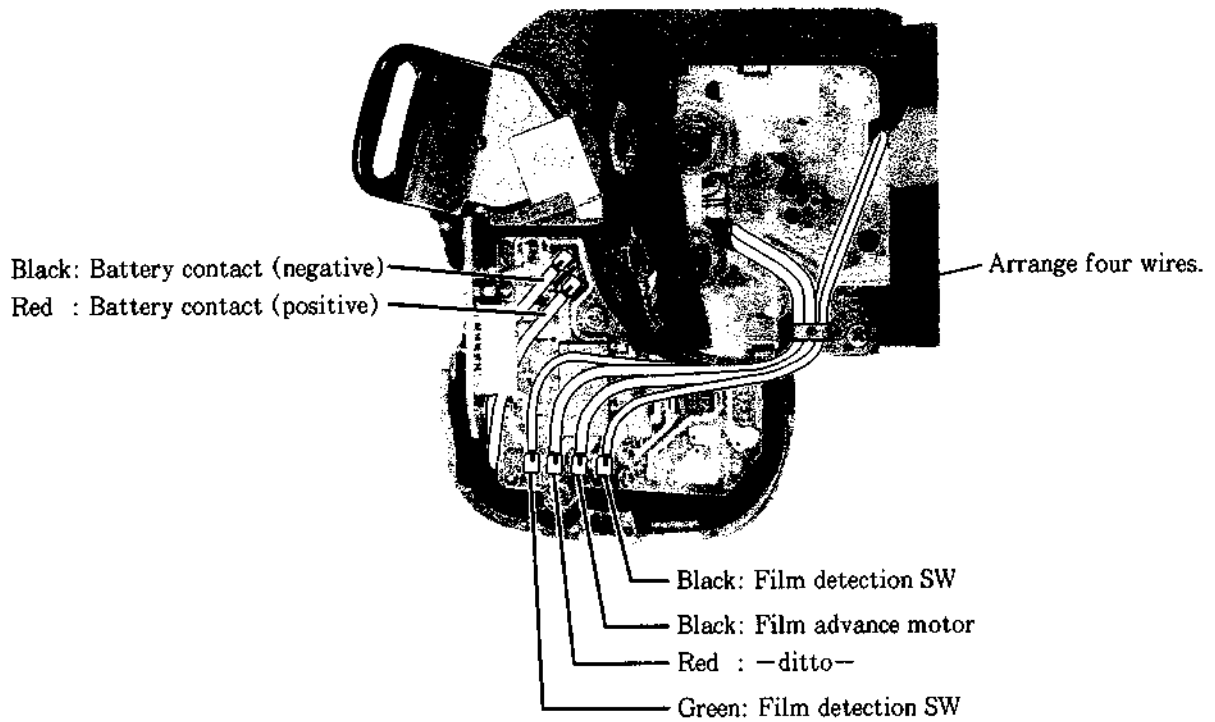
FILM ADVANCE PI BASE PLATE GROUP, BATTERY CONTACT GROUP



POWER BASE PLATE

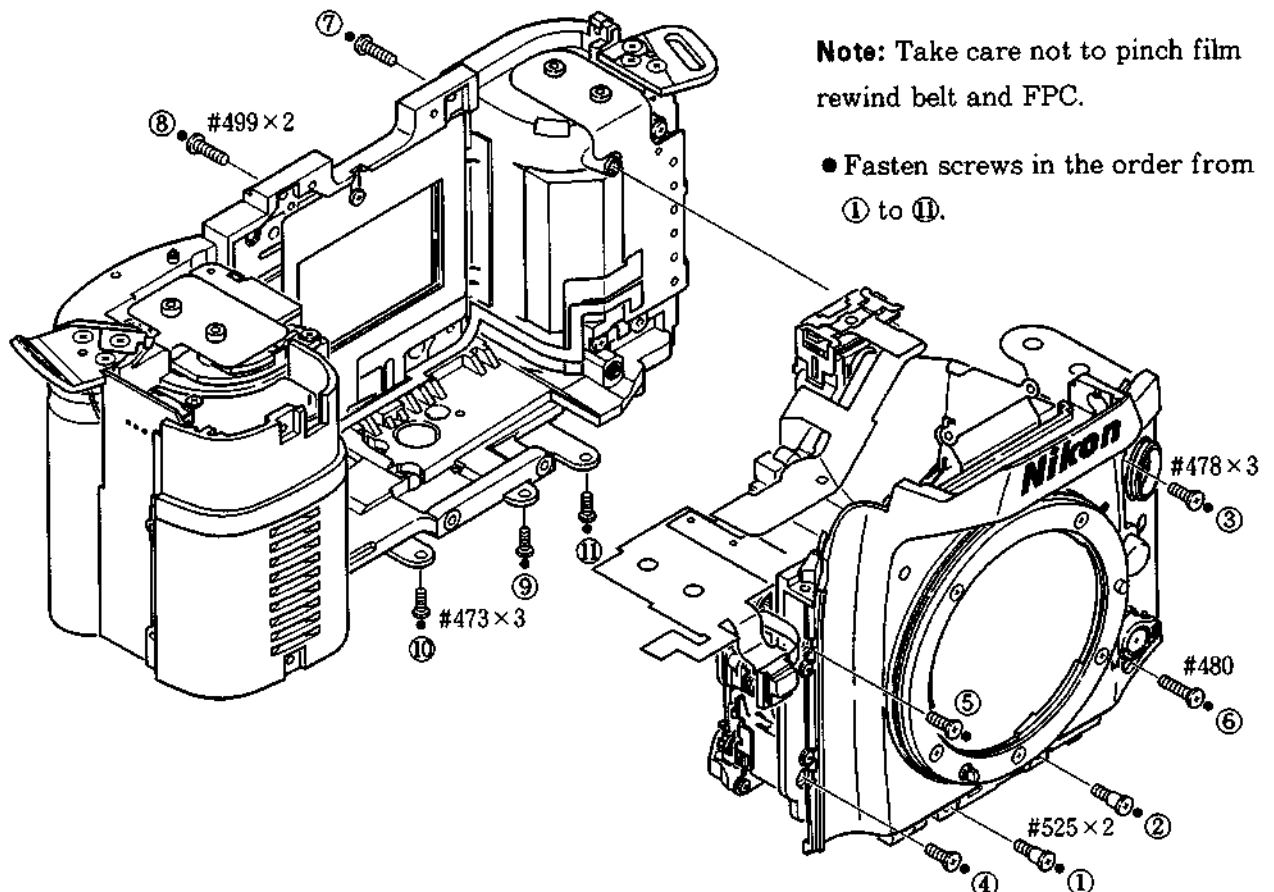


SOLDERING WIRES ON THE POWER BASE PLATE

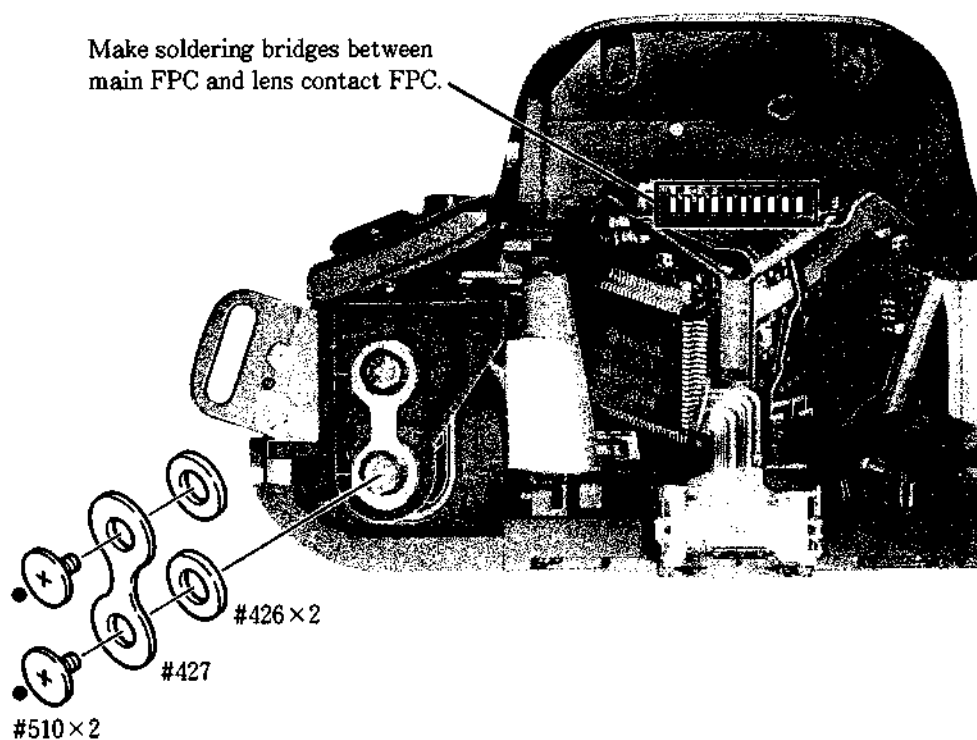
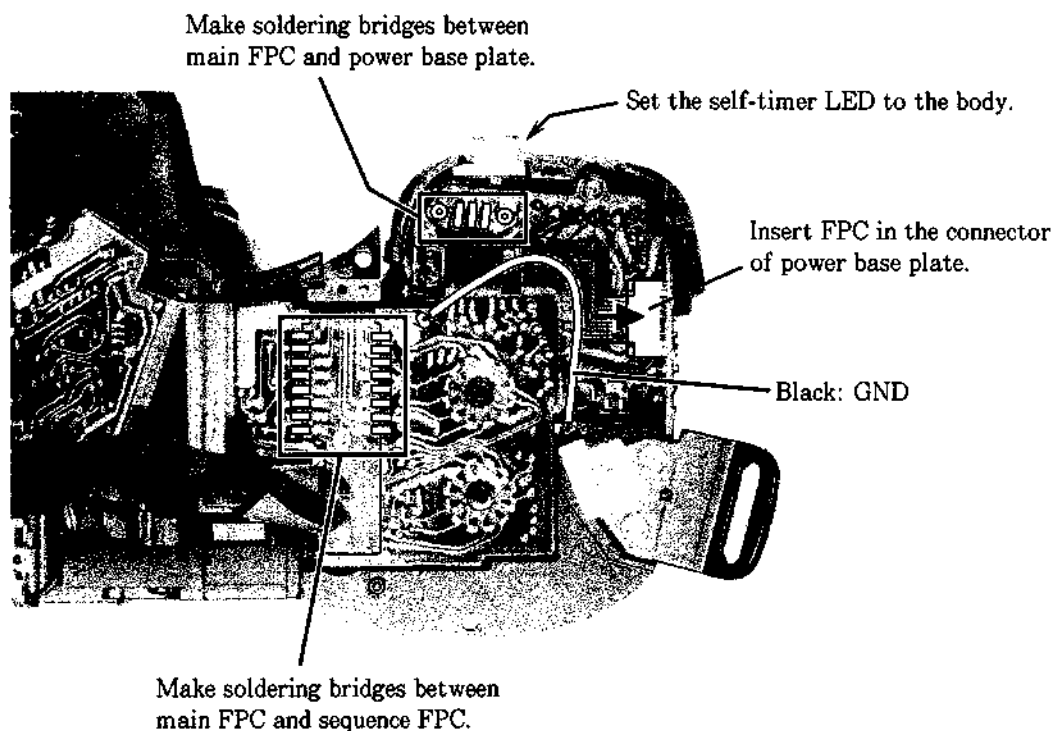


3. FRONT BODY & REAR BODY

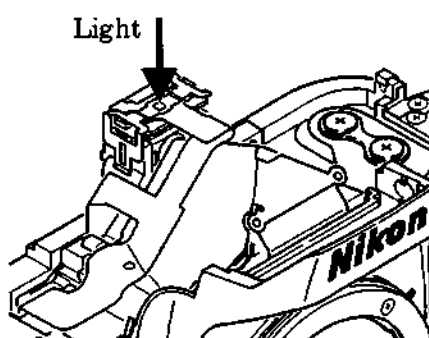
MOUNT FRONT BODY ON REAR BODY



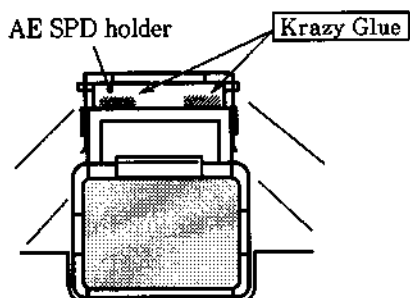
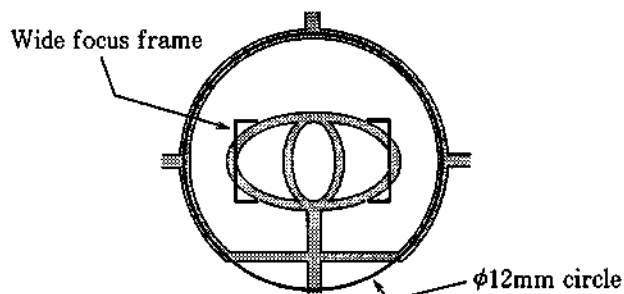
SOLDERING BRIDGES, PRESS-CONTACT



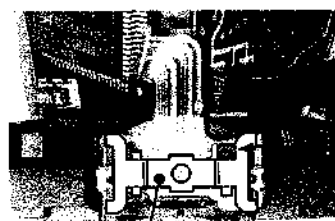
ADJUSTMENT OF AE SPD POSITION



- ① Irradiate a strong light on the AE SPD so that the AE SPD patterns are reflected on the main mirror.
- ② As shown the figure below, align the center of the AE SPD with both the wide focus frame and the $\phi 12\text{mm}$ circle. The AE SPD should be parallel to the main mirror.



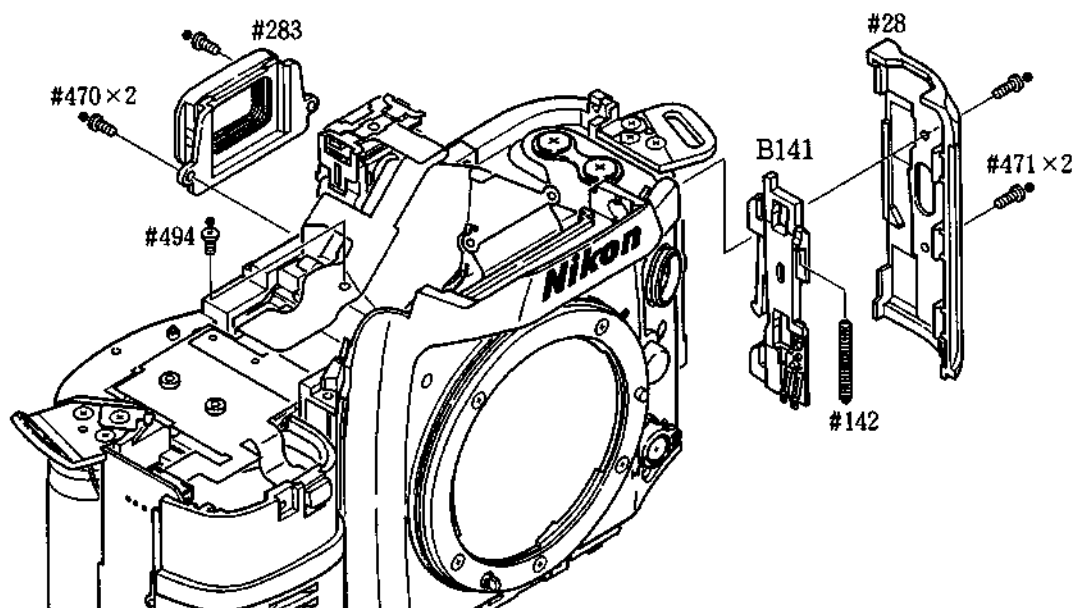
- ③ Secure AE SPD holder using adhesive Krazy Glue. (Refer to figure on the left.)
- ④ Make soldering bridges between AE SPD retainer #290 and pentaprism FPC.



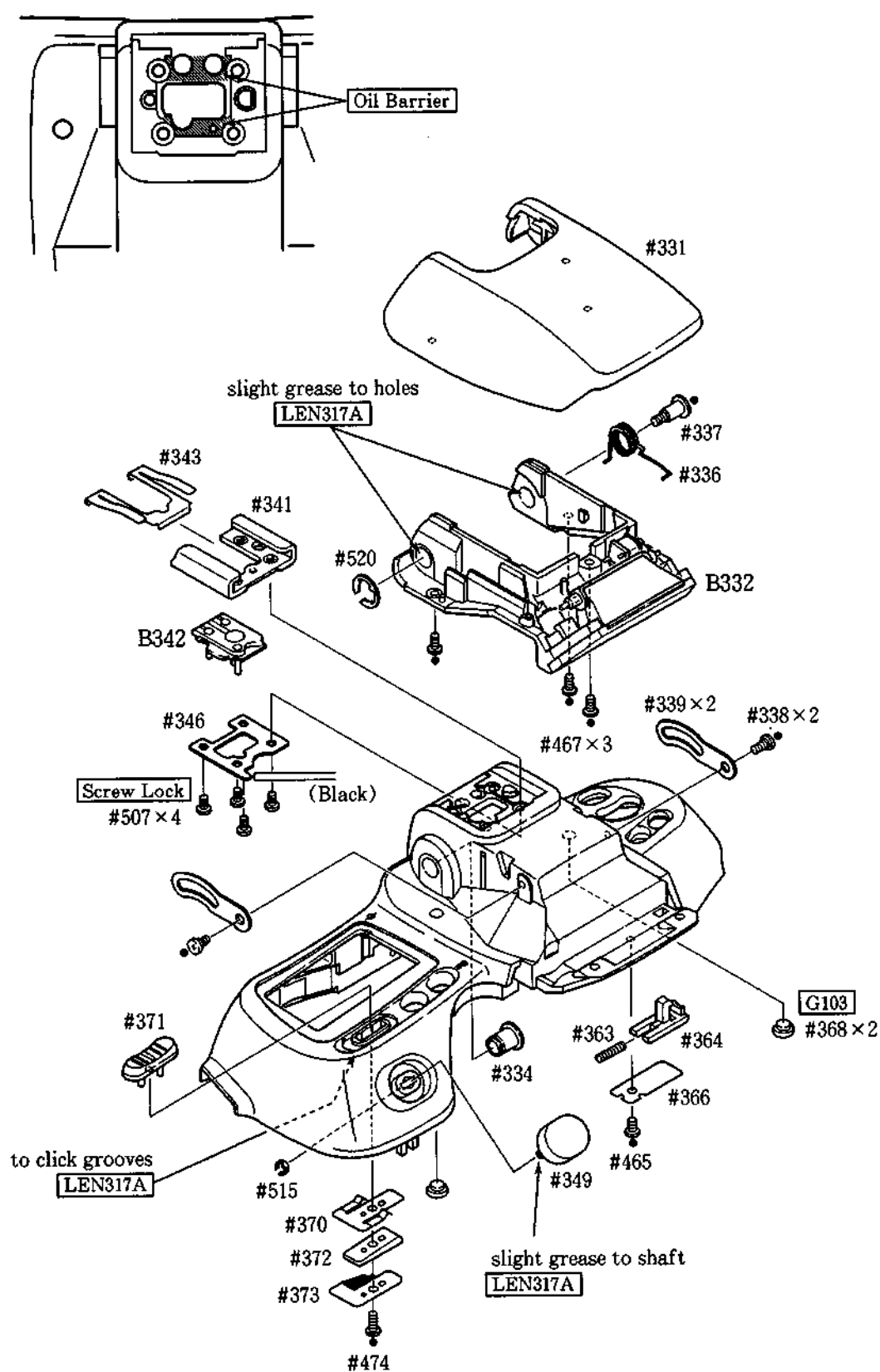
#290

Make soldering bridge.

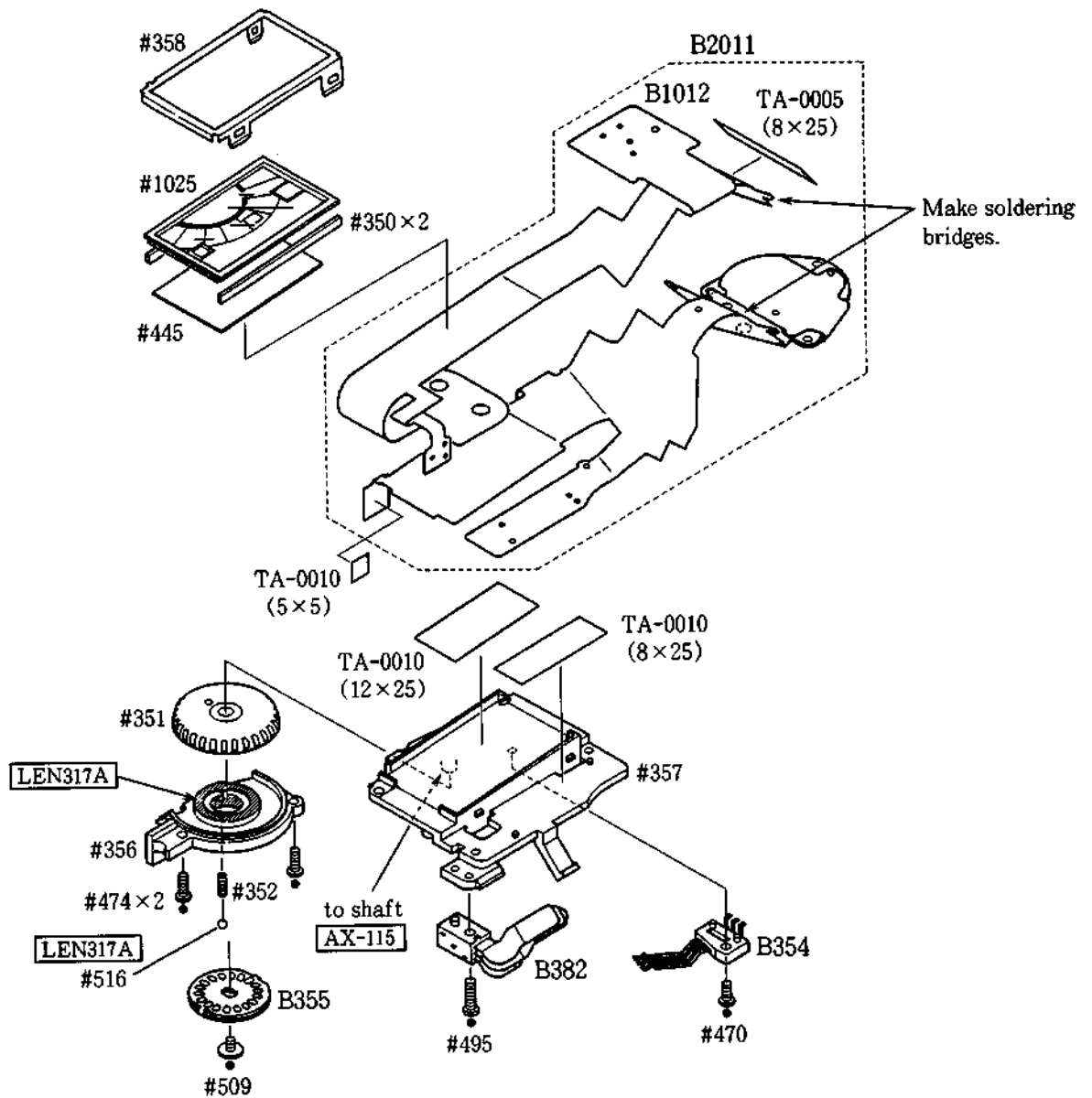
CAMERA BACK LOCK RELEASE, EYEPiece FRAME



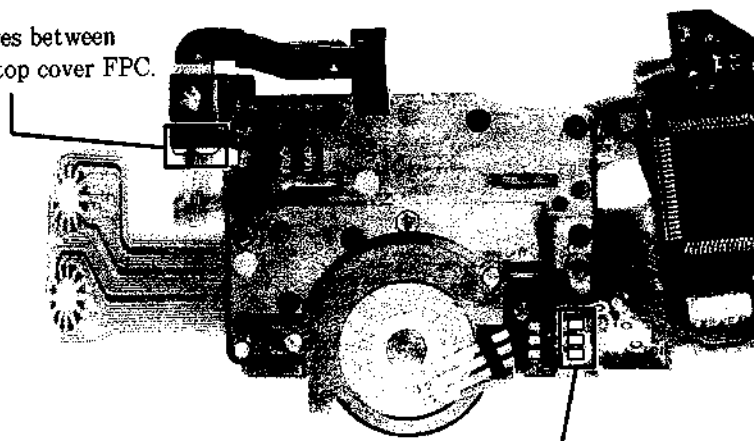
TOP COVER

1. Built-in flash group, small parts

2. Top cover FPC group

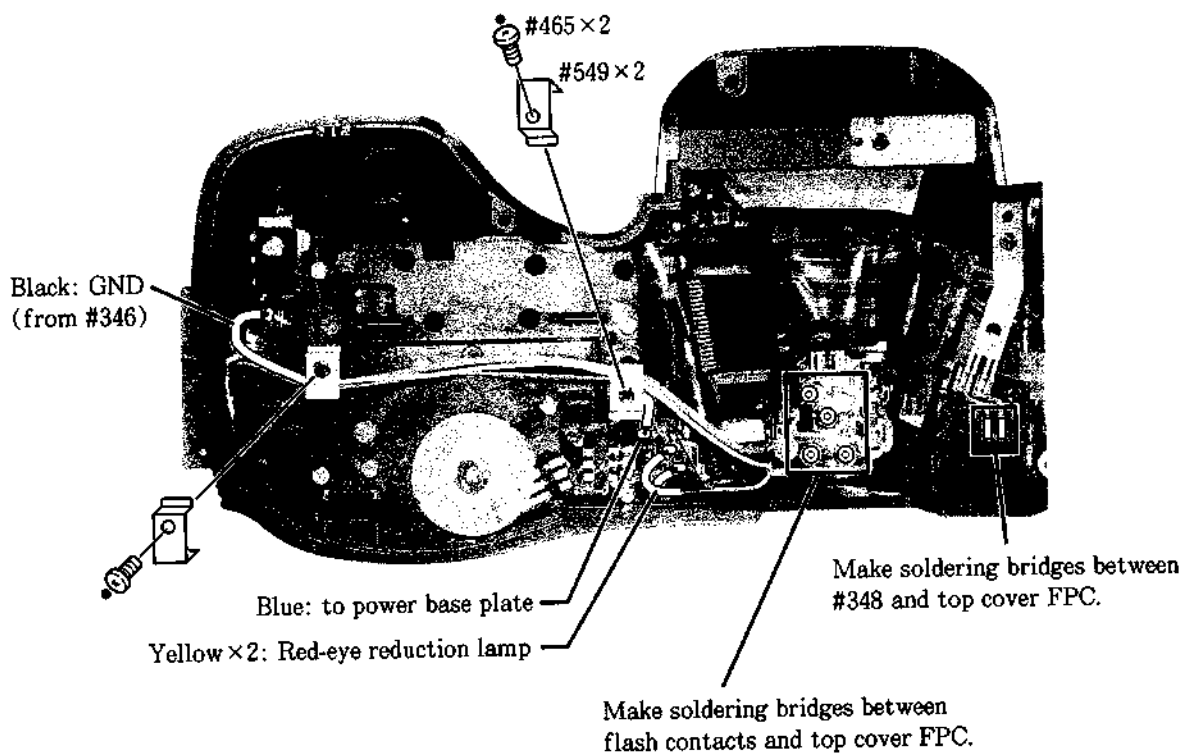
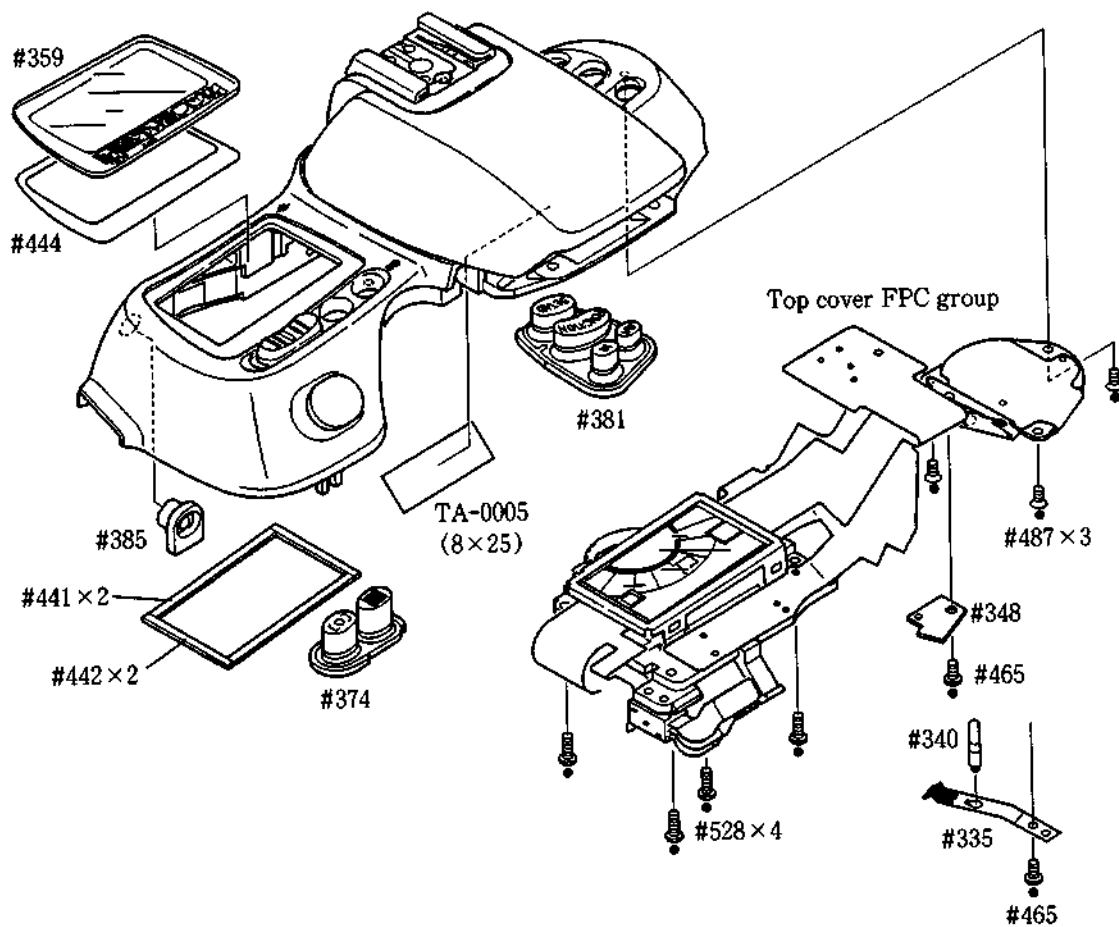


Make soldering bridges between release SW unit and top cover FPC.

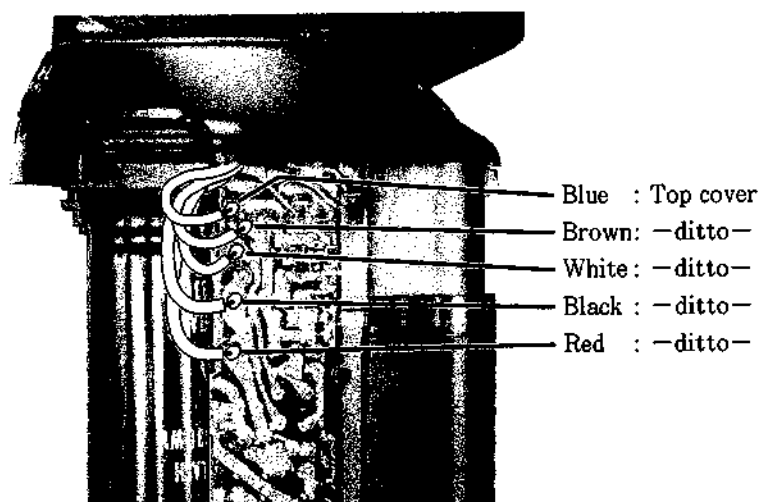
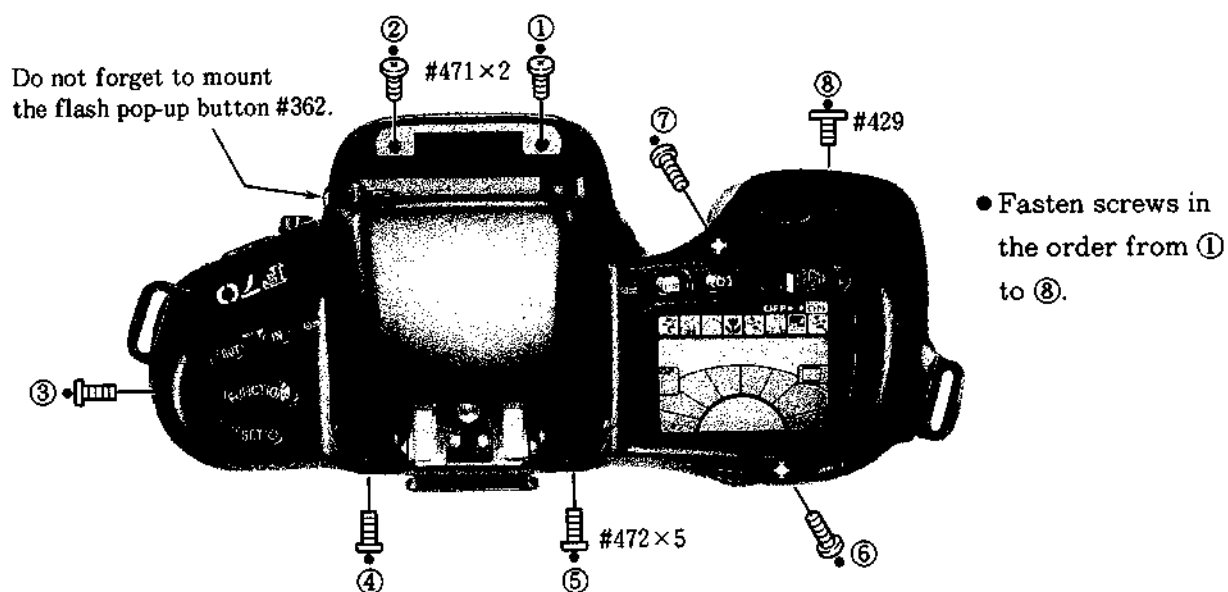
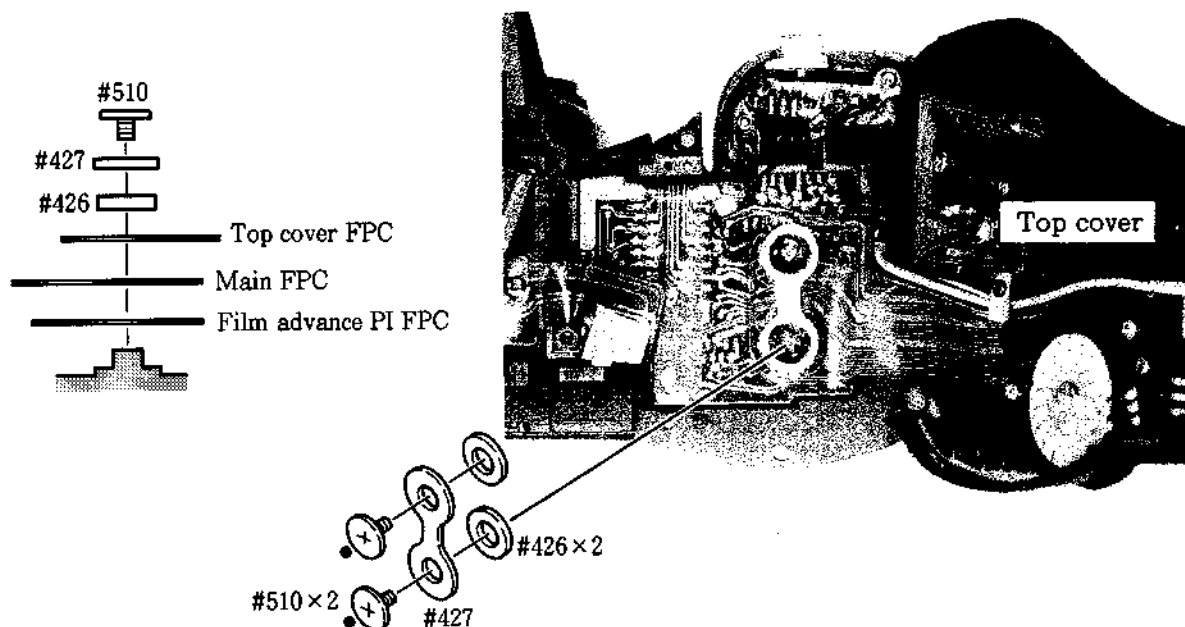


Make soldering bridges between command dial brush and top cover FPC.

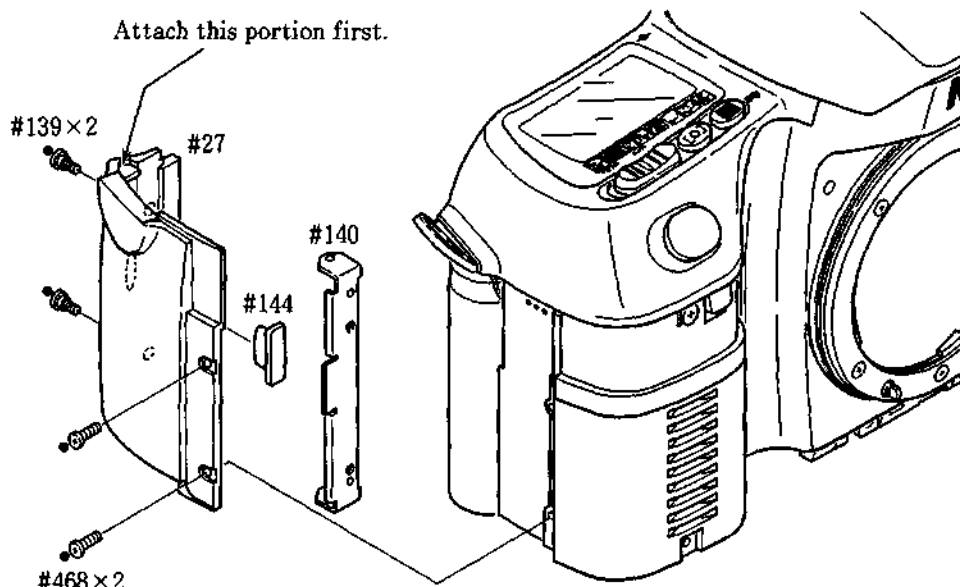
3. Mounting top cover FPC group



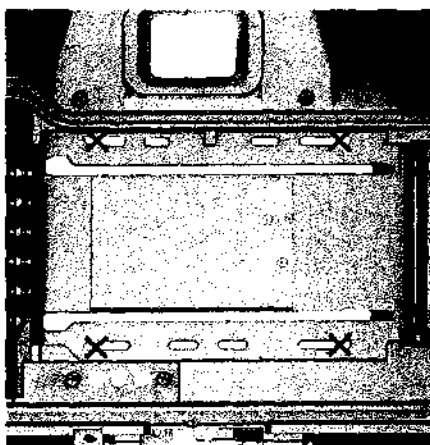
4. Mounting top cover



HAND GRIP REAR COVER



INSPECTION & ADJUSTMENT OF BODY BACK

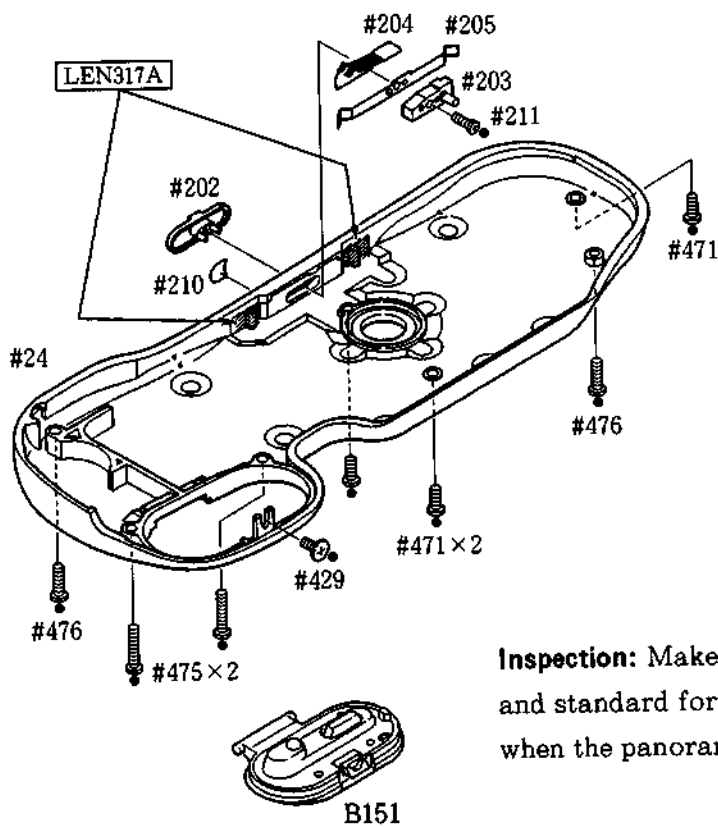
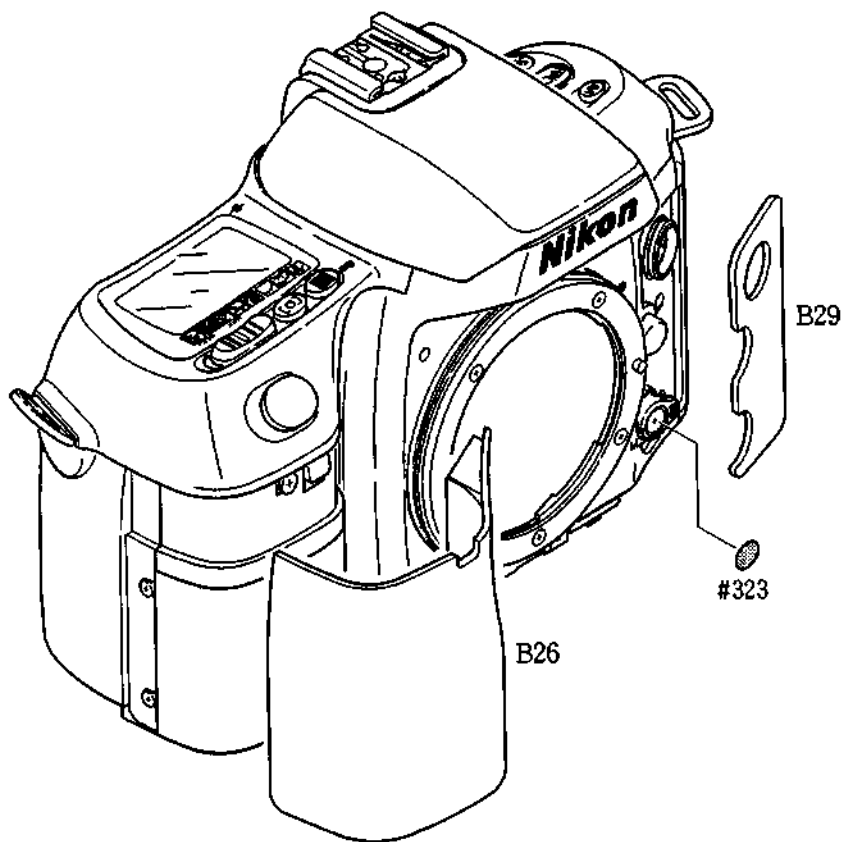


- Measure the distance between the lens mount surface and the outer film guide rail.
Mark X : Measured positions
Standard value: $46.67 \pm 0.02\text{mm}$
Degree of parallel: within 0.02mm
- If the differs from the standard value, unfasten screws securing the front and rear body, and adjust the value while maintaining a good fit between the two parts.
Or adjust the distance by inserting the washers under the lens mount.

INSPECTION & ADJUSTMENT BY USING A PERSONAL COMPUTER

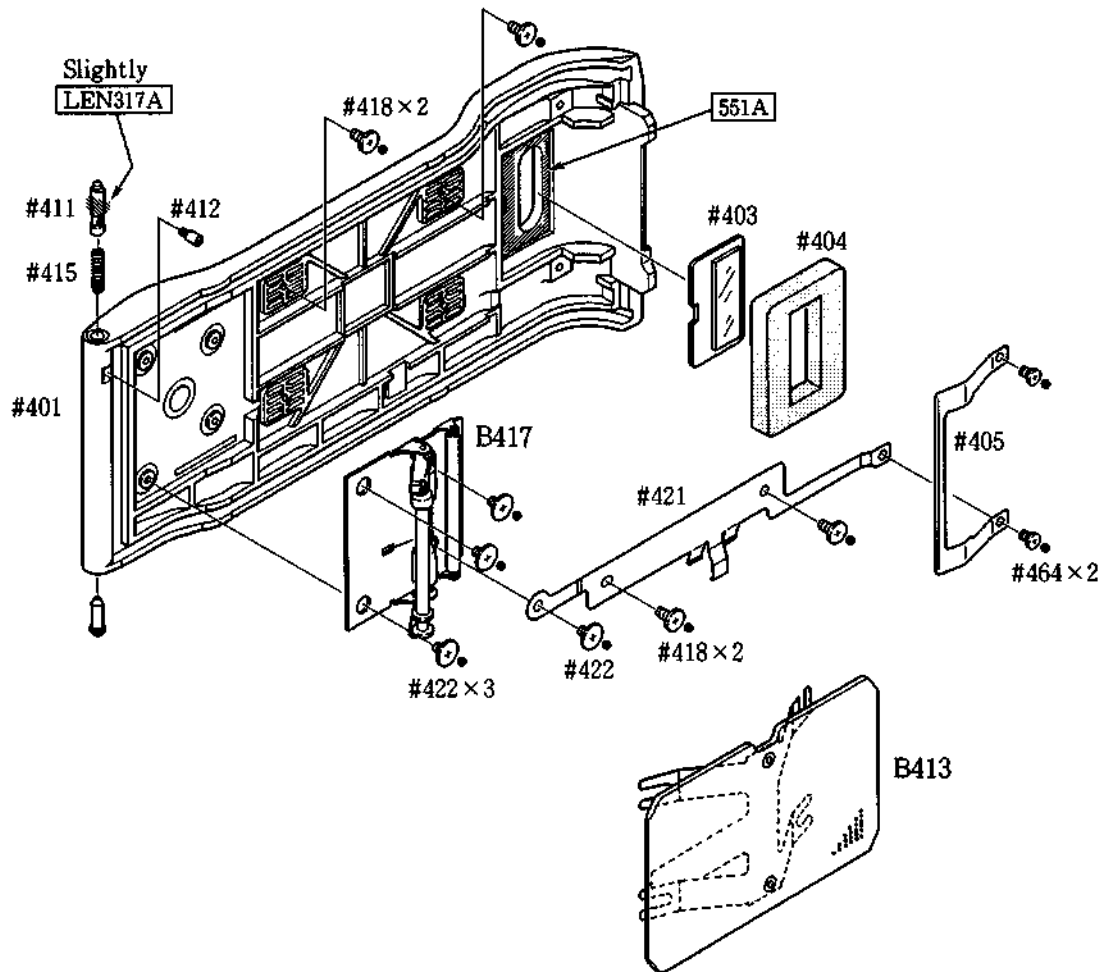
- Use communication tool J15315. Set the tool on the body pulling two pins out of the tool.
Note: Set the switch on the communication box J15278 to "NEW" position.
- Make each inspection and adjustment as indicated on the computer display.

BOTTOM COVER, HAND GRIP RUBBERS



Inspection: Make sure that the panorama and standard formats actually switch over when the panorama lever is operated.

CAMERA BACK (NON-QD TYPE)



INSPECTION AND ADJUSTMENT OF INFINITY (∞)

- Refer to page A10.

INSPECTION AND ADJUSTMENT OF SHUTTER CURTAIN TRAVELING SPEED

1. Assemble the front body (up to A12).
2. Rotate the gear in the sequence motor unit and set the shutter charging completion state.
Shutter charging completion state: Shutter blade is held at the position shown in the figure below, and the main mirror is locked in the down position.
3. When the shutter mechanism unit B3901 has been replaced, set the front and rear curtain gears tentatively according to the instructions below.

● Front curtain gear:

- ① Rotate the worm gear for adjusting front curtain traveling speed clockwise. Set the front curtain driving spring free (or with no tension load applied).
- ② Rotate the worm gear for adjusting front curtain traveling speed counterclockwise and rotate the front curtain gear by one turn.

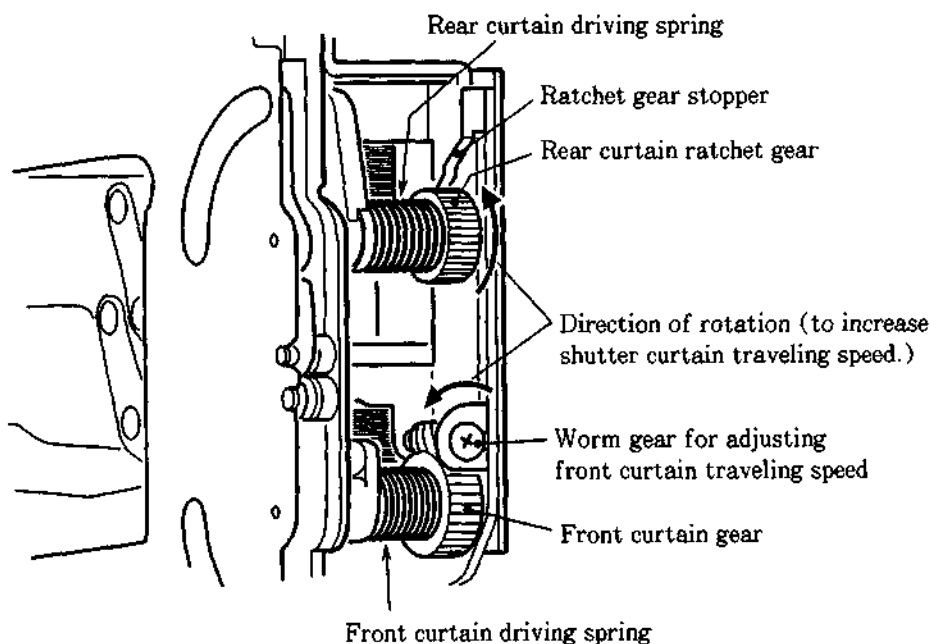
● Rear curtain ratchet gear:

- ① Set aside the ratchet gear stopper to set the rear curtain driving spring free.

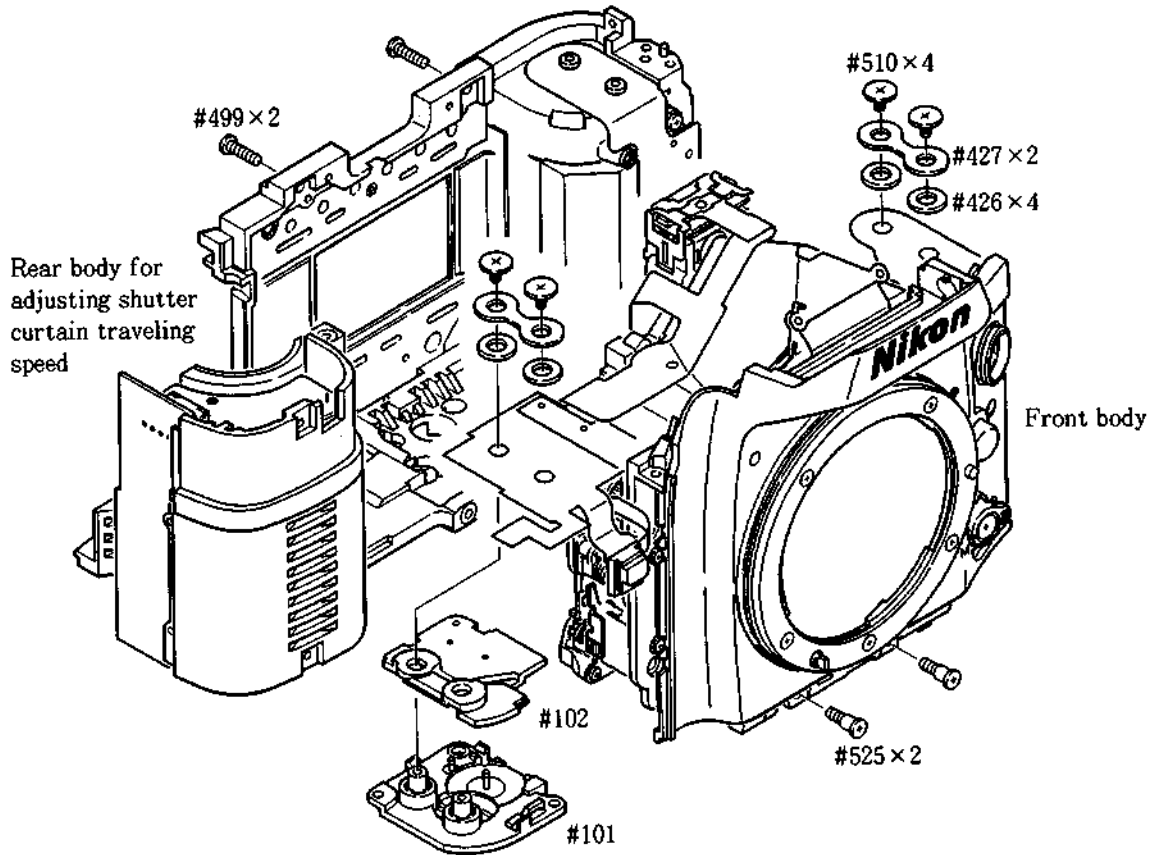
Attention: Be sure to handle the ratchet gear manually and rewind the gear slowly otherwise the rear curtain ratchet gear will rewind too quickly as soon as the ratchet gear stopper is released. Do not bend the ratchet gear stopper too much as it may become bent when releasing since it is made of aluminum.

- ② Use tool J15322 to rotate the rear curtain ratchet gear by 1/2 turn in the direction of the arrow.

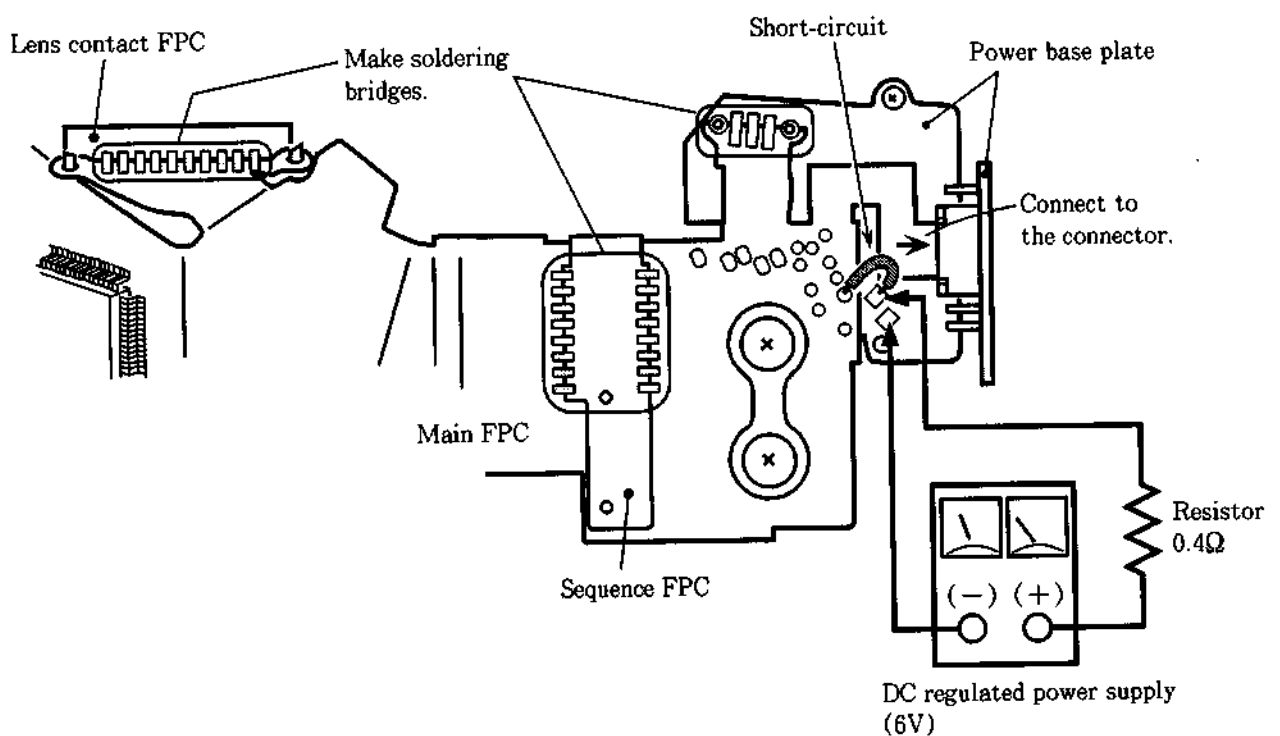
Note: Put a mark on the gear so that you can see how much the gear turns.



4. Mount the front body to the rear body for adjusting shutter curtain traveling speed.
Refer to page T2 "Tool Instruction" for details on rear body for adjusting shutter curtain traveling speed.



5. Make soldering bridge at points shown in the figure below. Then make wiring to supply 6V power to the power base plate.



6. Shutter tester

- Shutter tester can measure up to 1/4000 sec.

- ① When making inspection and adjustment using diffused light type shutter tester (EF-8000), mount a 50mm f/1.8 lens and set the aperture ring to full aperture.
- ② When making inspection and adjustment using parallel light type shutter tester (FS-502-2), no lens is required.

7. Get the tester ready to communicate between personal computer and camera.

Run the inspection and adjustment software (J18242), mount communication tool (J15315) on the camera, and set the communication box switch to NEW side. 6V power is supplied to camera.

8. Select "1. Inspection and adjustment of AE" on the main menu of the inspection and adjustment software. And run "1. Inspection and adjustment shutter traveling speed" to enter inspection mode.

9. Adjusting the shutter curtain traveling speed

- ① On the menu of the inspection and adjustment software, set the shutter speed to 1/125 sec.
- ② Press the space key to release shutter and measure the shutter curtain traveling speed.

The shutter curtain travels from up to down.

- ③ Rotate the worm gear for adjusting front curtain traveling speed and rear curtain ratchet gear so that the measured value comes within the standard range. Refer to page A28 for adjusting locations.
- ④ On the menu of the inspection and adjustment software, set the shutter speed to 1/4000 sec. and confirm the shutter curtain traveling speed and exposure time. If the exposure time at 1/4000 sec. is out of the standard value, return to the menu and select "Inspection and adjusting M1/4000" in the "Inspection and adjustment of AE" and adjust the exposure time at 1/4000 sec.

Note: Check to confirm that there should be no irregularity in the slit width.

Standard value

Shutter curtain traveling speed		Exposure time	
Diffused light type shutter tester	Parallel light type shutter tester	1/125 sec.	1/4000 sec.
4.30ms	5.85ms	7.81ms (6.80 ~ 8.97ms)	0.244ms (0.179 ~ 0.37ms)

10. After adjustment, secure the worm gear for adjusting front curtain traveling speed using Screw Lock.

11. Dismount the tool and assemble the camera.

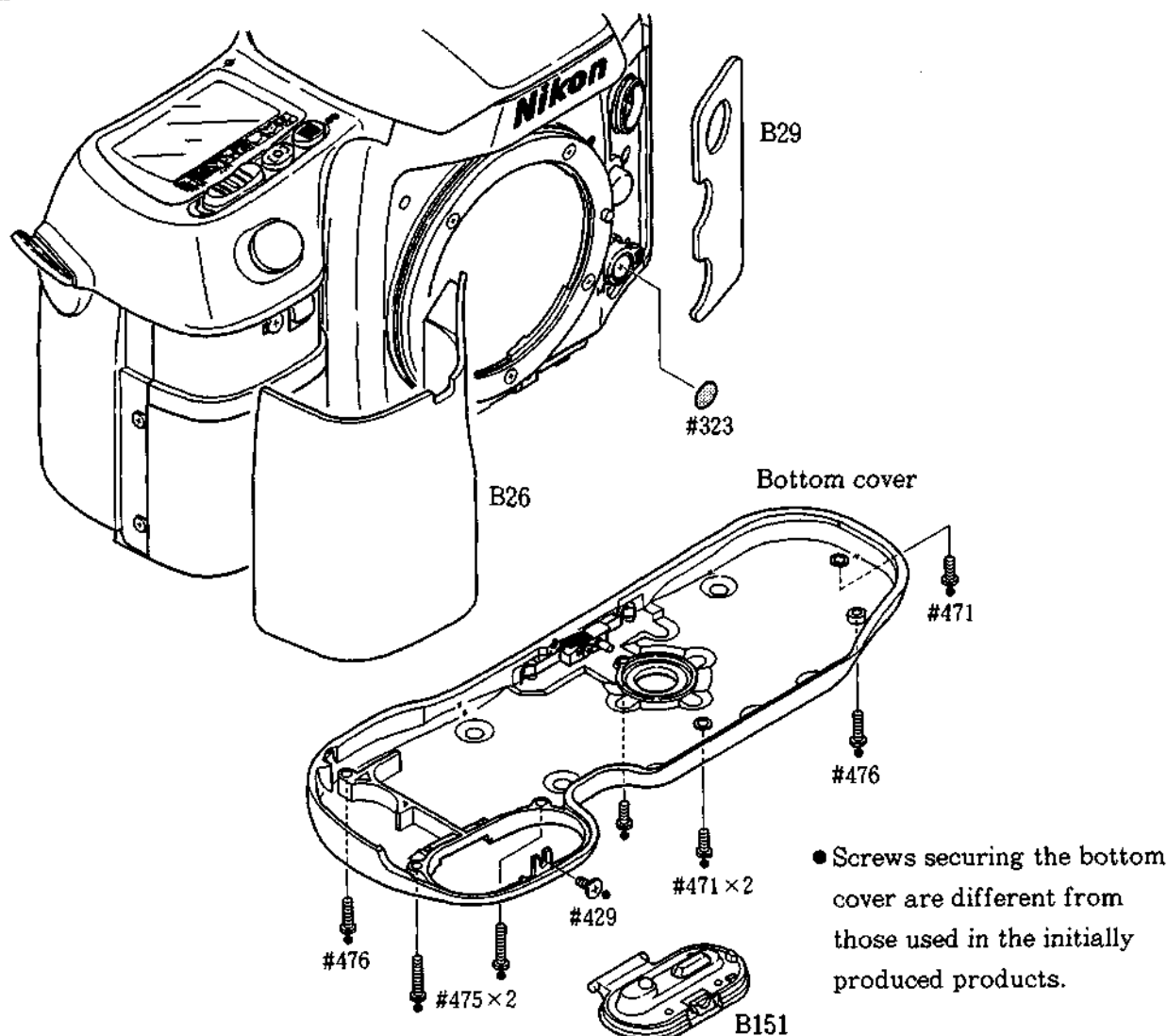
DISASSEMBLING

Notes:

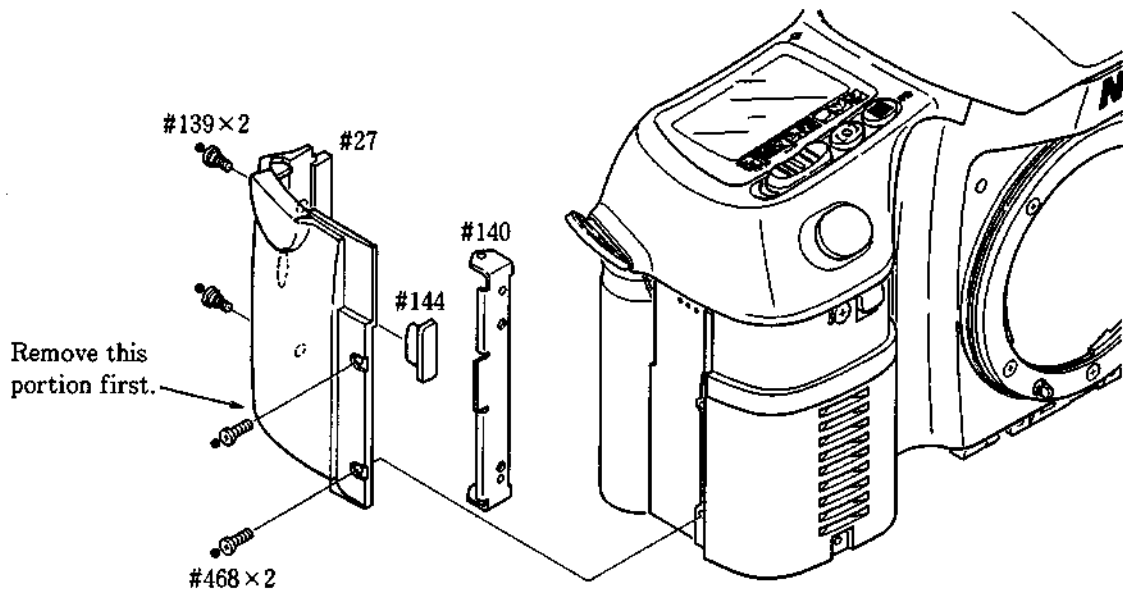
- ① In this repair manual, disassembling and assembling sections are described based on the F70D Panorama body. Refer to the exploded drawings or the product itself for other models.
- ② As for addition and modification of parts, refer to the Technical Information bulletins already issued.
- ③ Be sure to remove batteries and camera back before disassembling.
- ④ When disassembling, pay attention to the arrangement and mounting positions and types of screw to be removed.
- ⑤ Be sure you are grounded when holding FPC because static electricity exerts serious adverse effects on ICs.
- ⑥ The "●" mark on the screws indicates they tap-tight screws.
- ⑦ When you disassemble the camera body further than described in the disassembling section, refer to the exploded drawings and assembling section, since some parts are disassembled as a unit part.

1. Separating the front body and the rear body

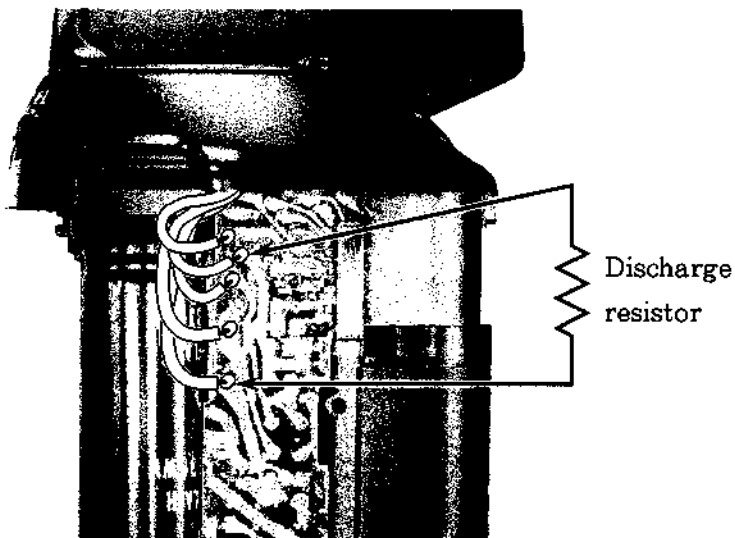
HAND GRIP RUBBERS, BOTTOM COVER



HAND GRIP REAR COVER

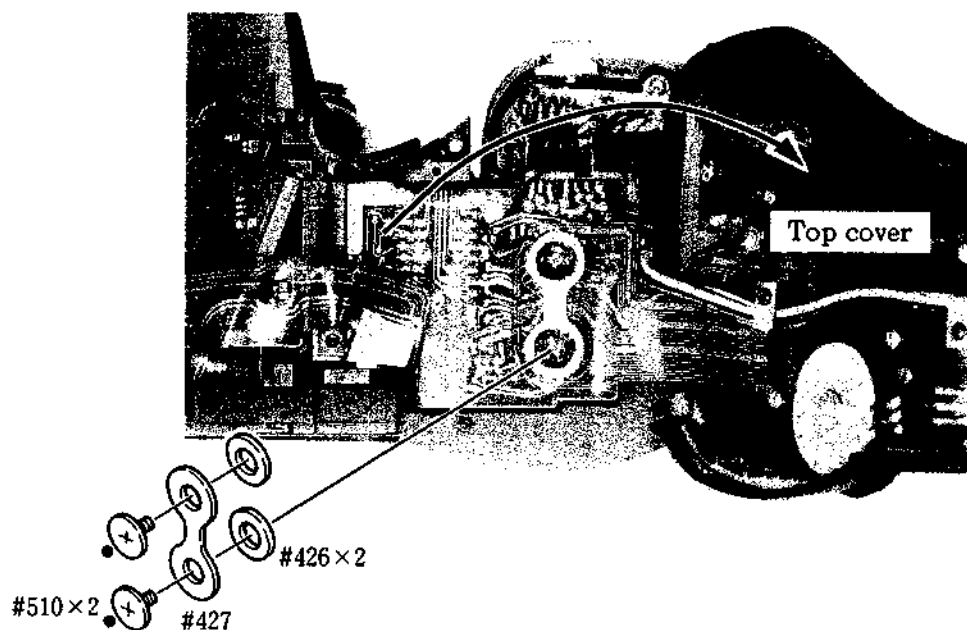
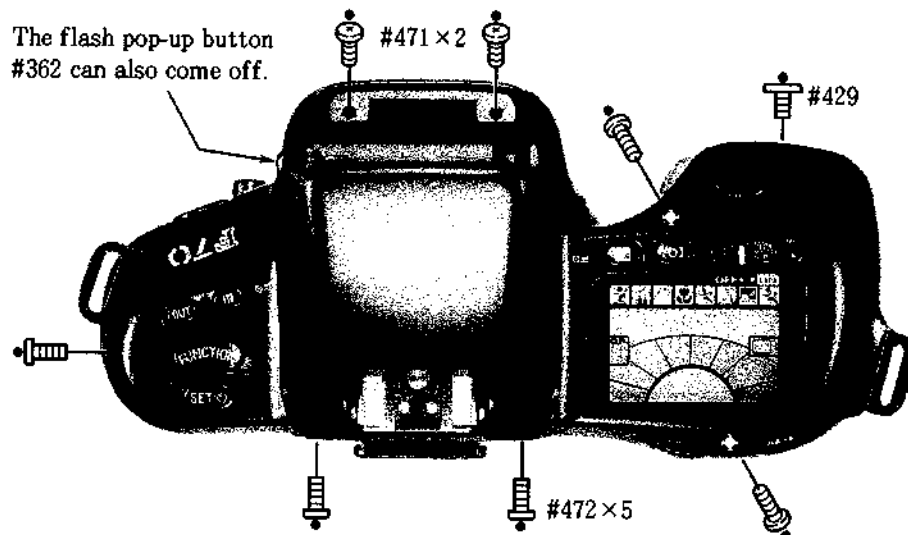
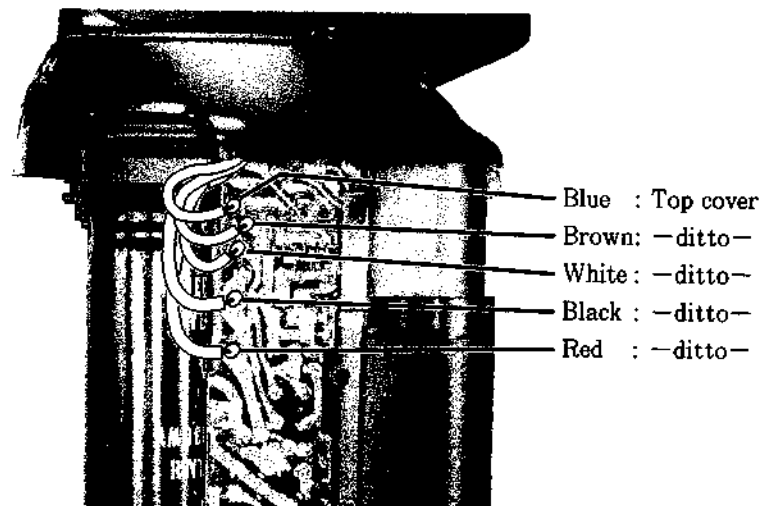


DISCHARGING OF THE MAIN CONDENSER

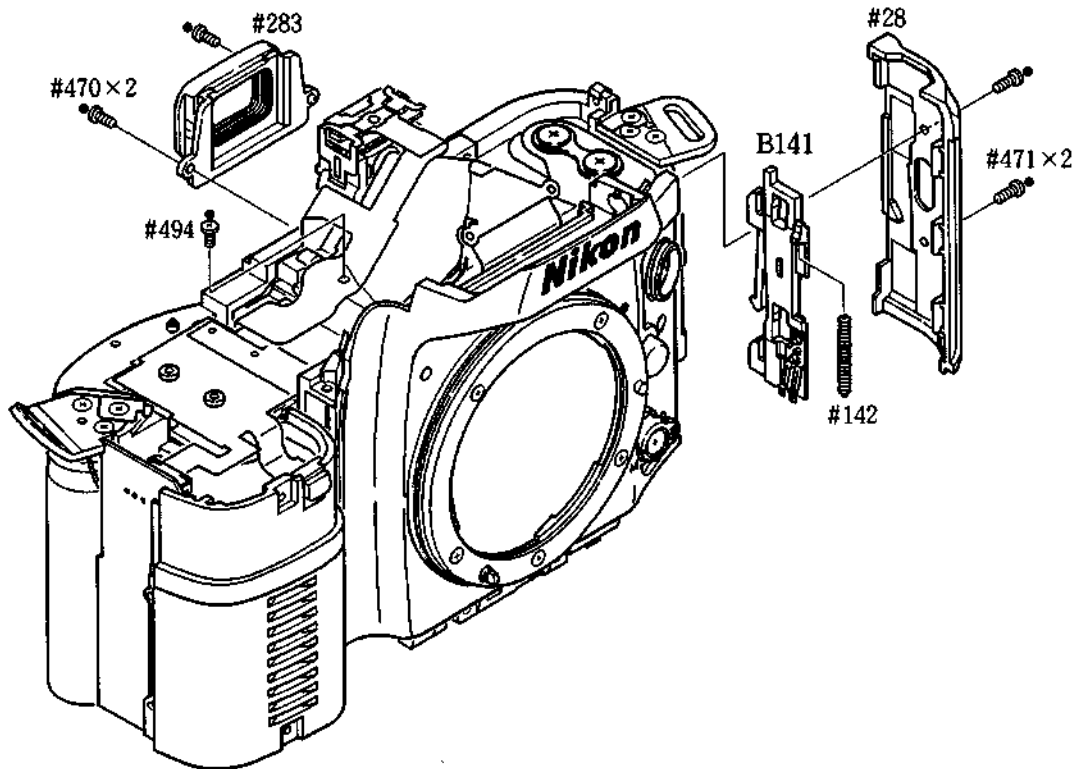


- Discharge the main condenser between the circuit patterns of brown and red wires. As the distance between the patterns is very small, take care not to short-circuit them and damage the parts.
- Use a discharge resistor of approx. 2KΩ/5W.

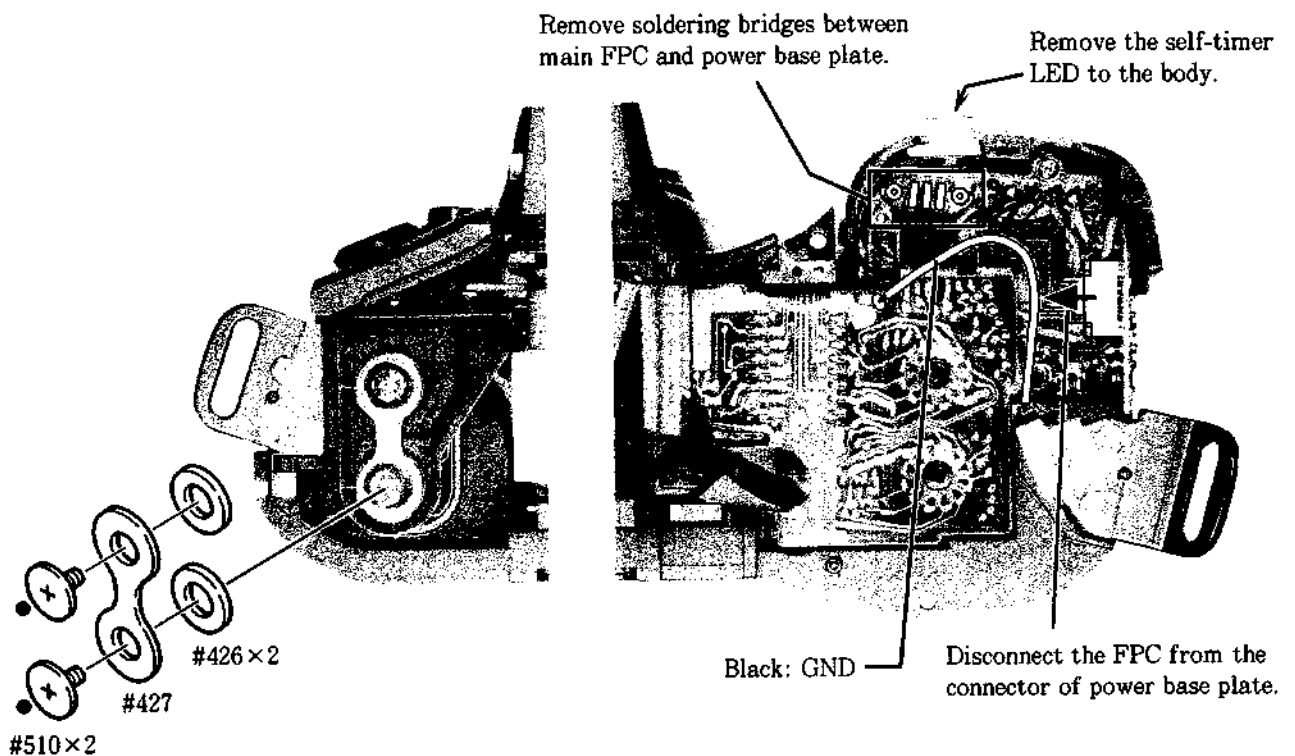
TOP COVER



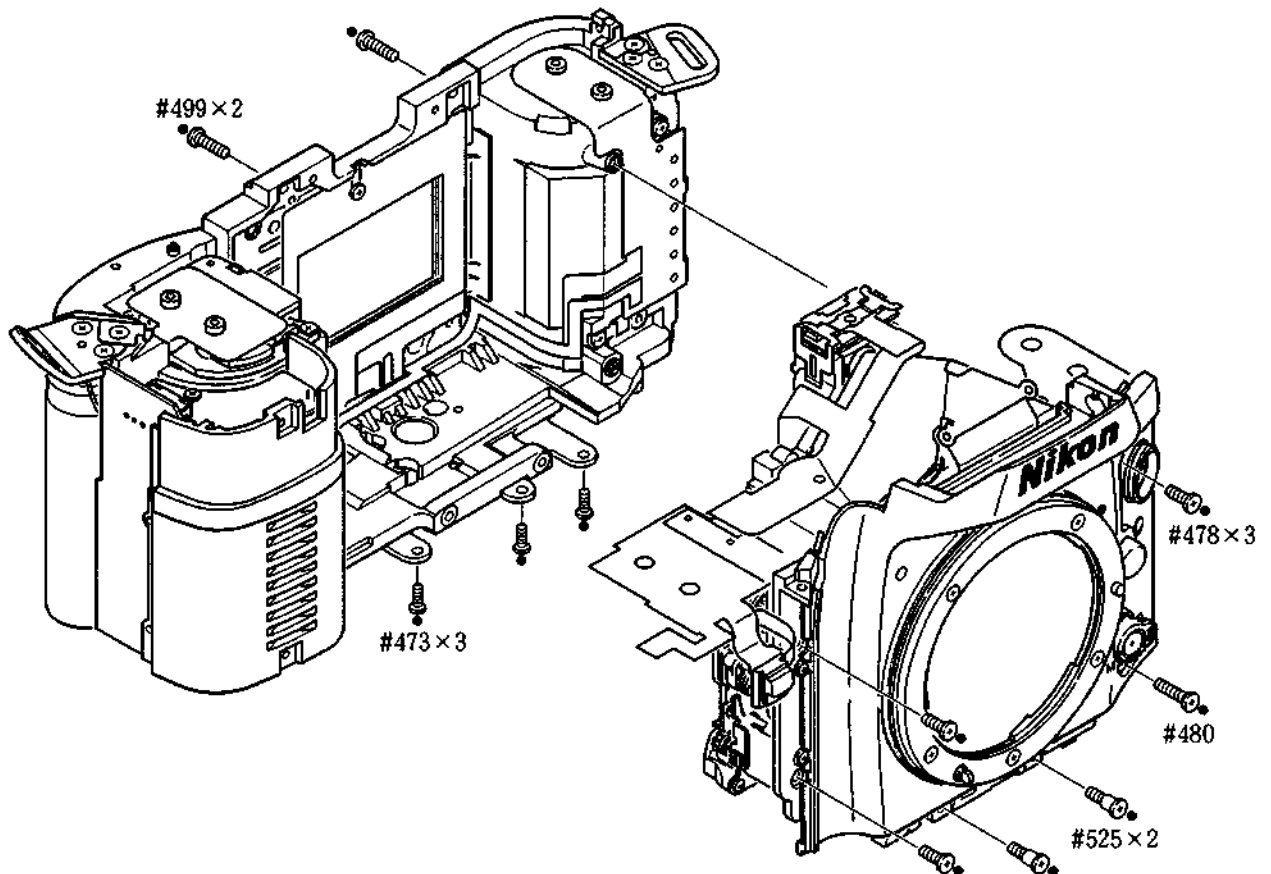
CAMERA BACK LOCK RELEASE, EYEPiece FRAME



REMOVE PRESS-CONTACT & WIRES



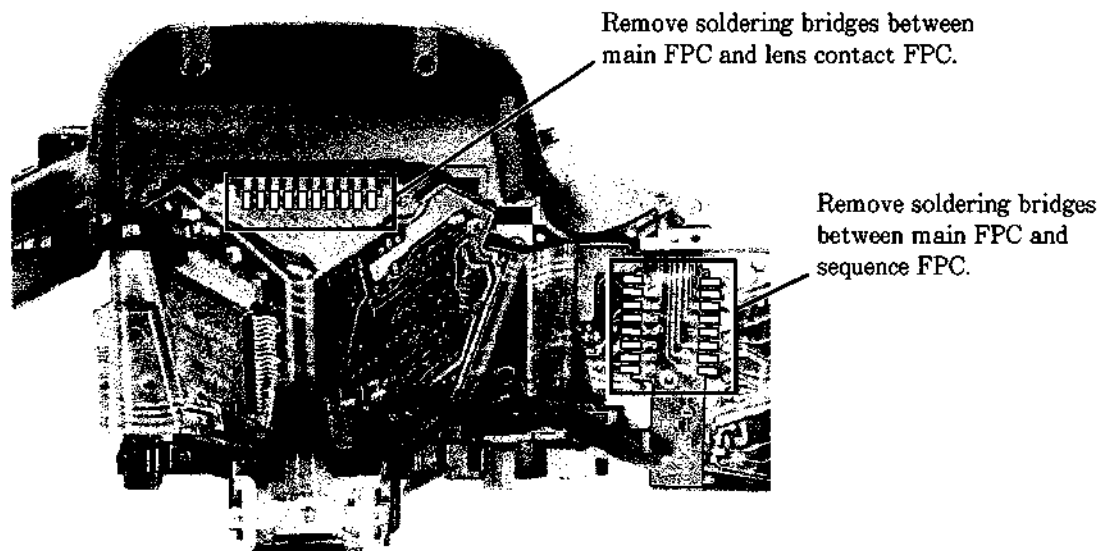
SEPARATING FRONT BODY AND REAR BODY



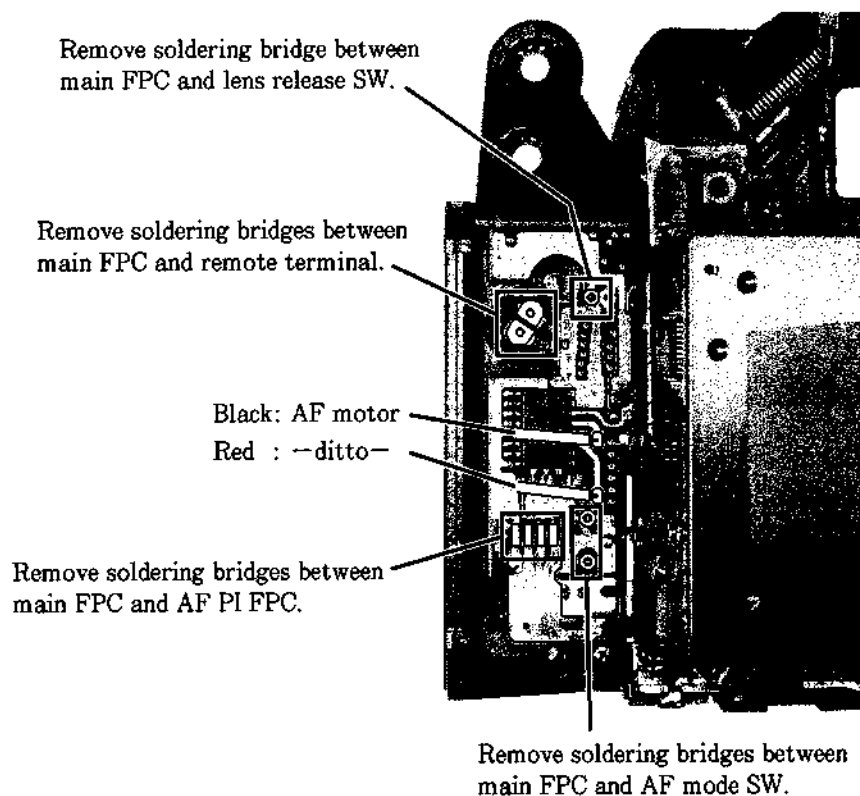
2. FRONT BODY

MAIN FPC

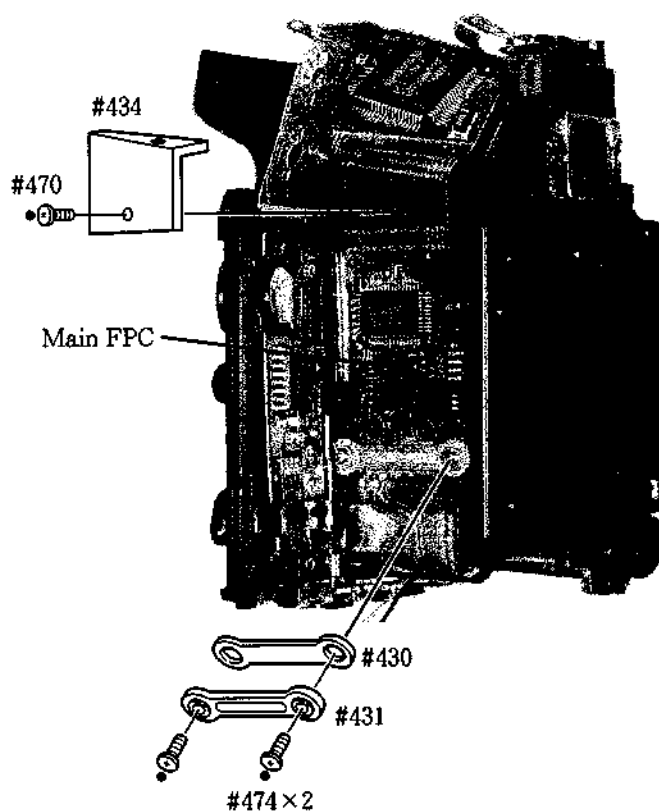
1. Removing soldering bridges



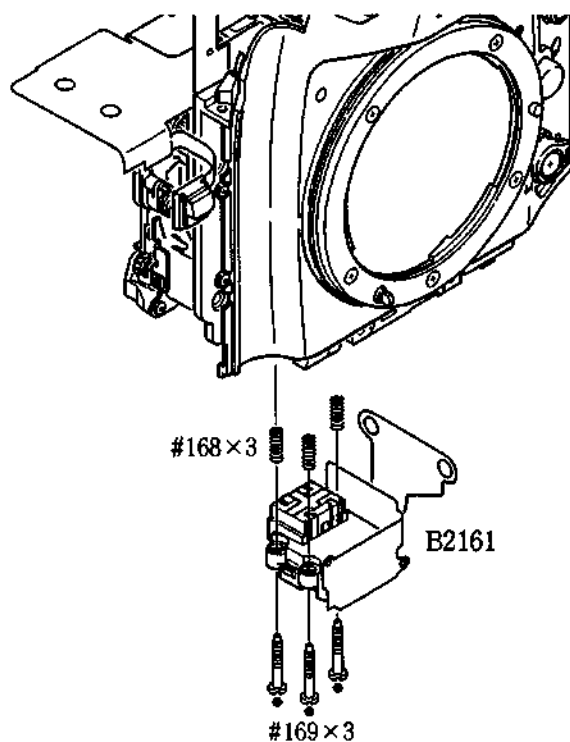
2. Removing soldering bridges and wires



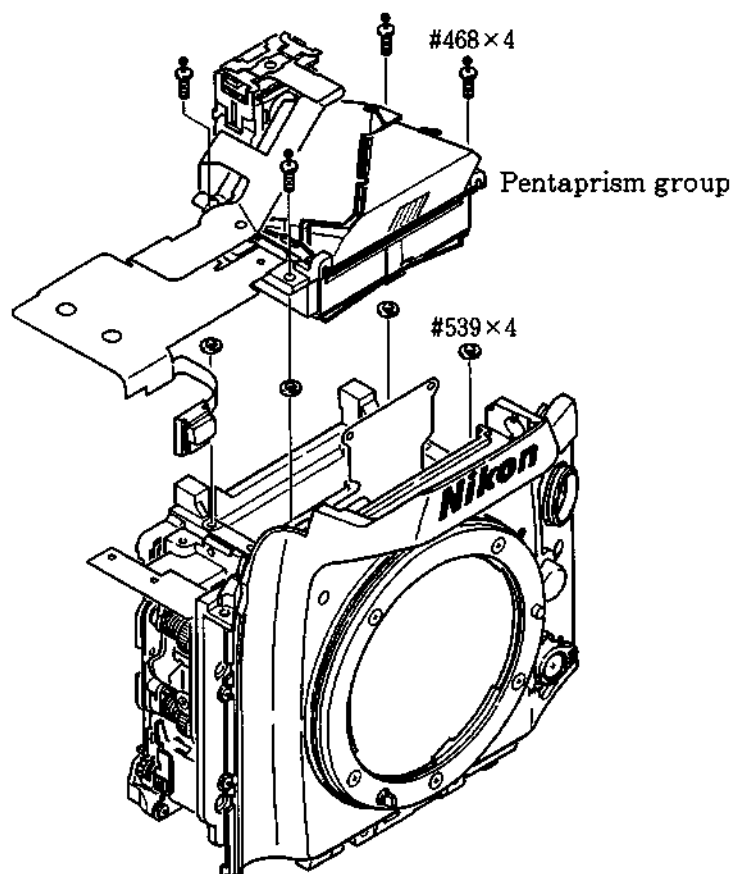
3. Removing press-contact



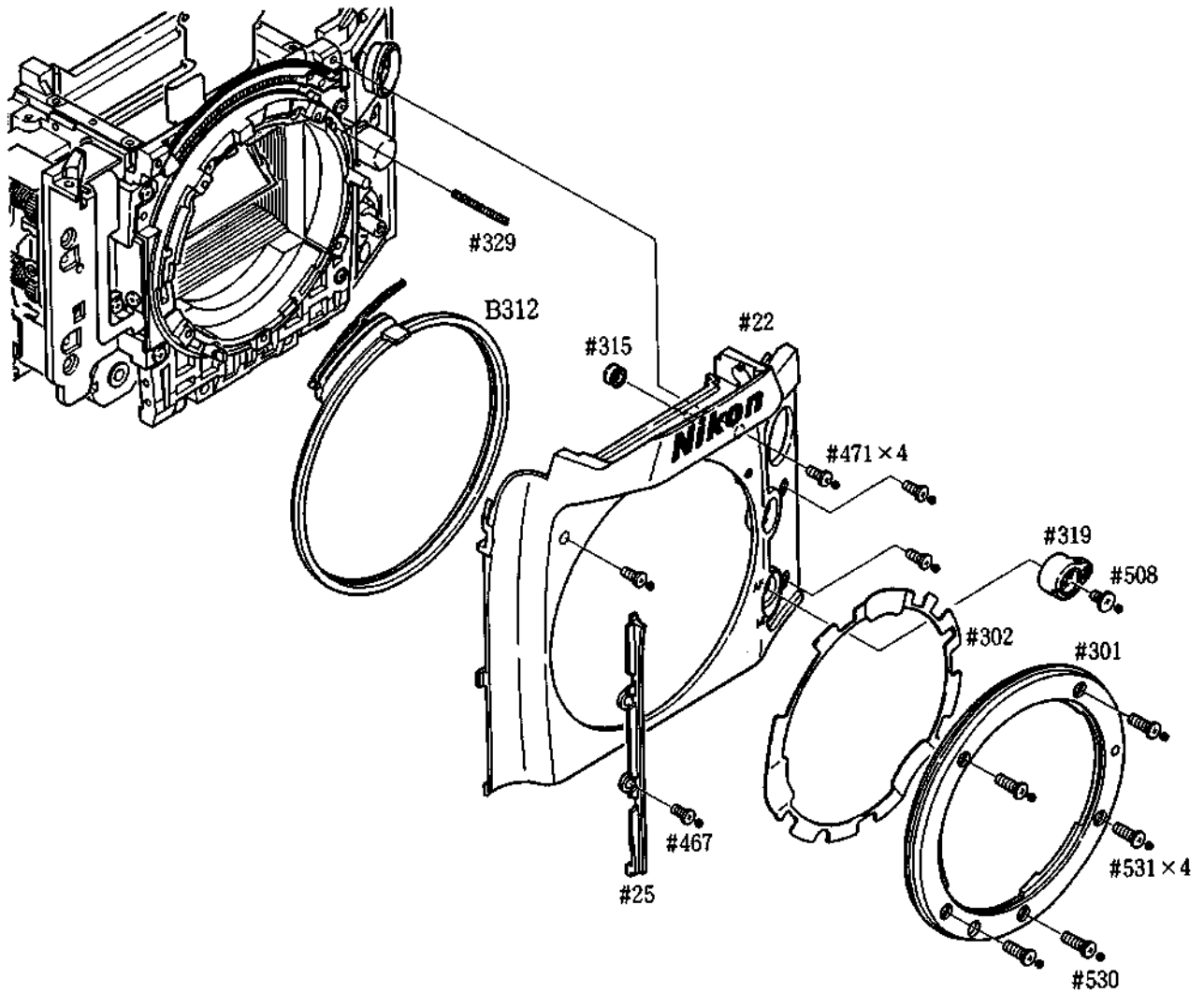
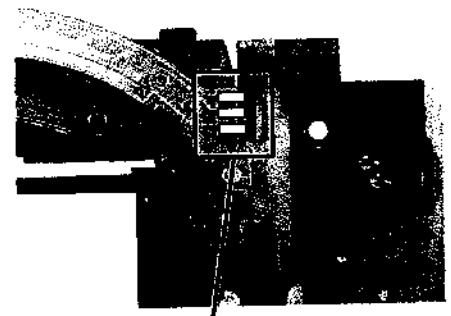
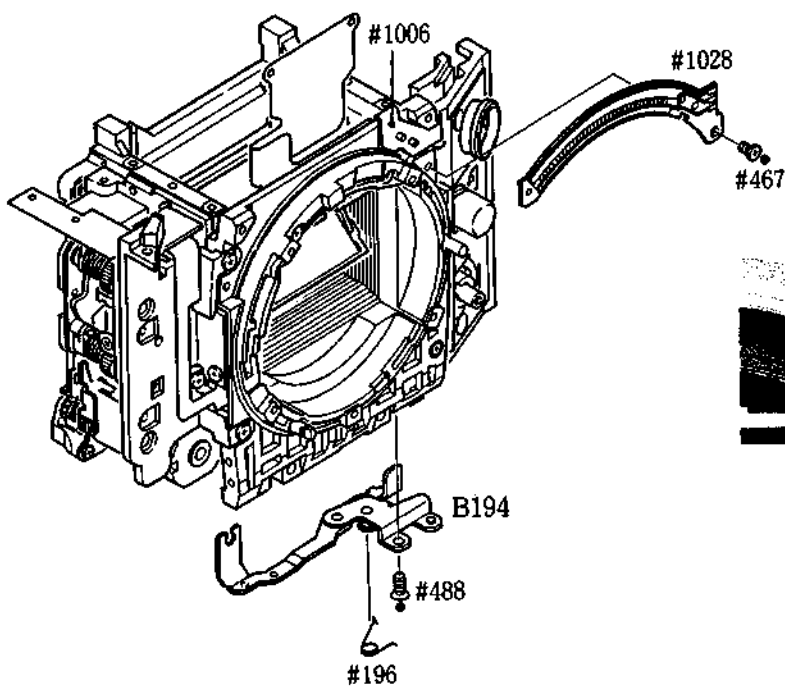
AF SENSOR UNIT



PENTAPRISM GROUP

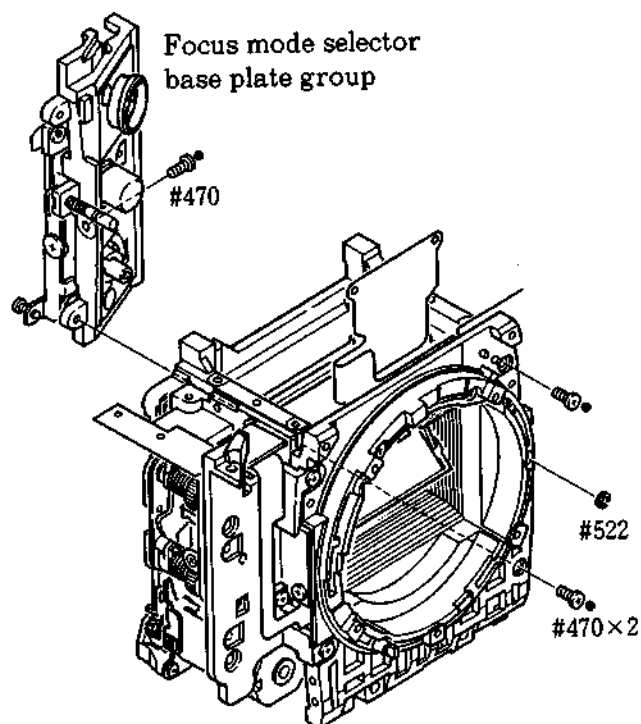


FRONT COVER, LENS MOUNT

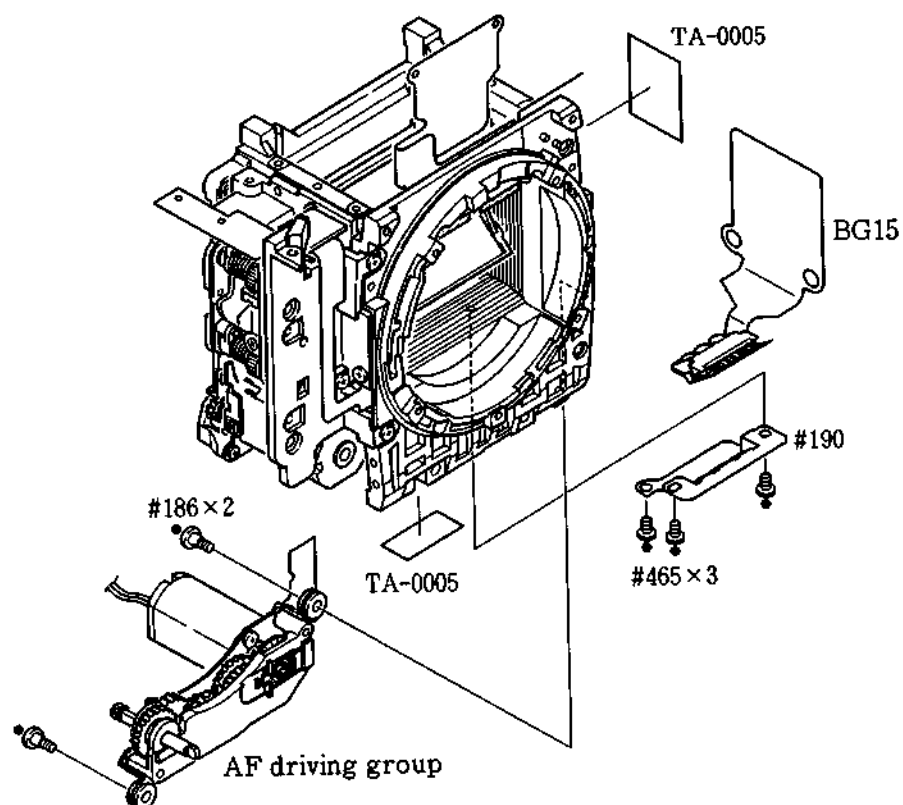
F-F₀ BASE PLATE, LEVER UNIT

Remove soldering bridges between #1028 and #1006.

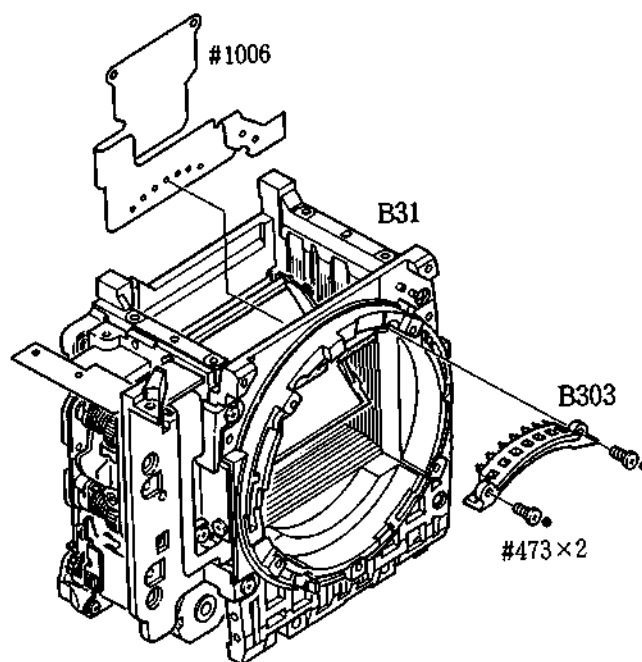
FOCUS MODE SELECTOR BASE PLATE GROUP



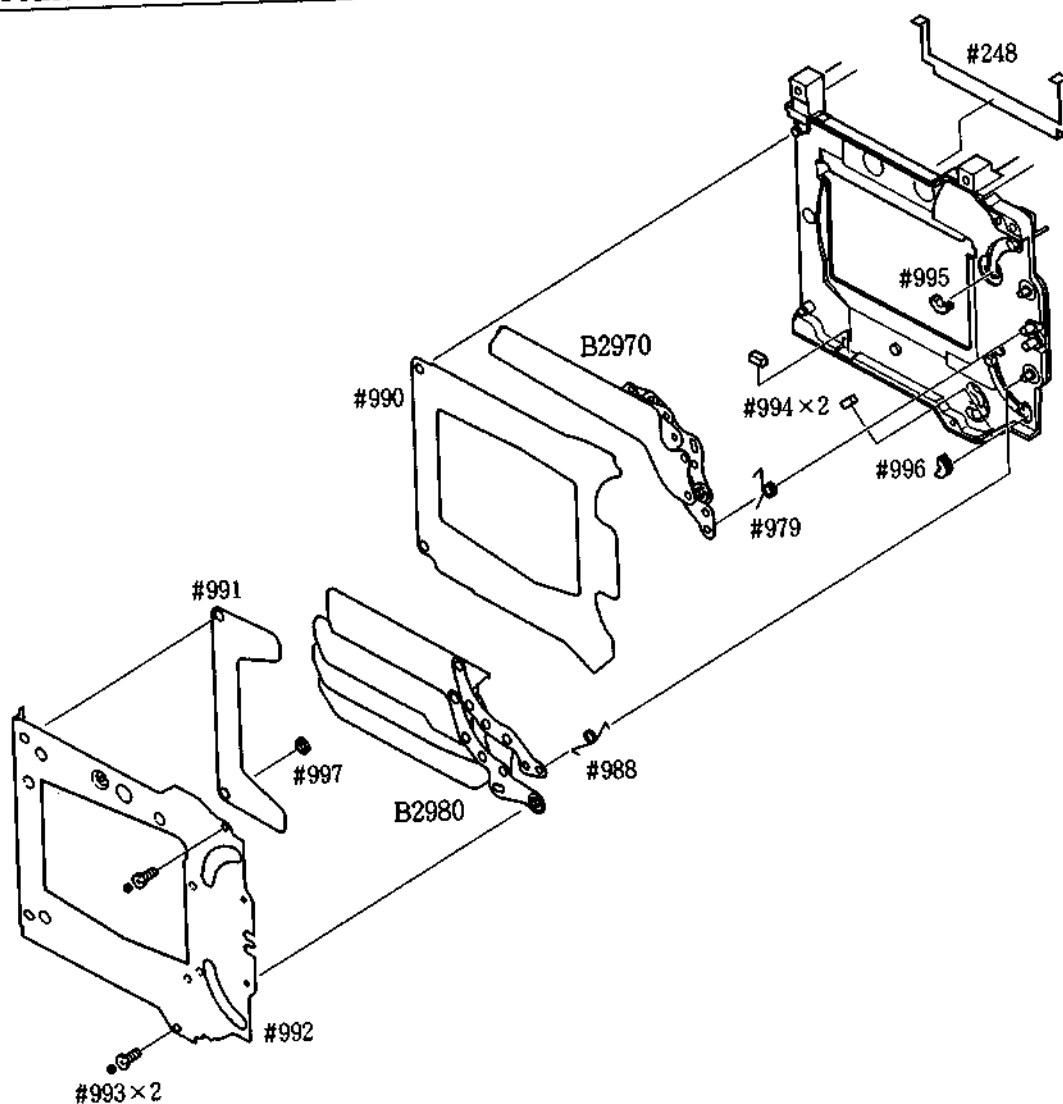
AF DRIVING GROUP, TTL FPC



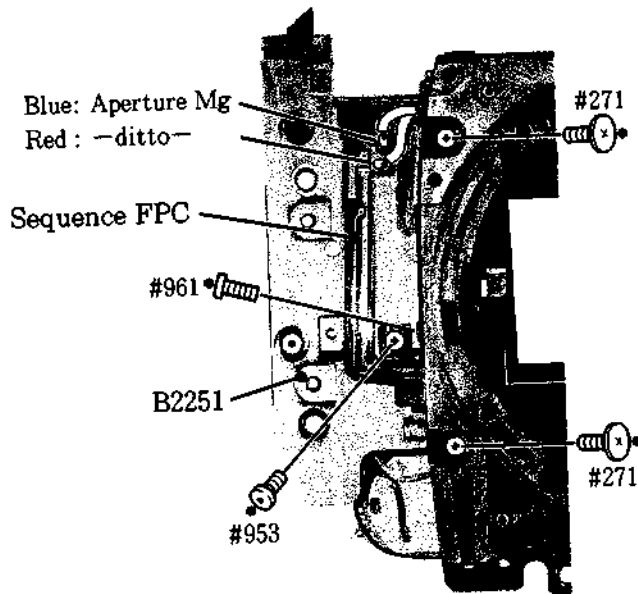
LENS CONTACT GROUP



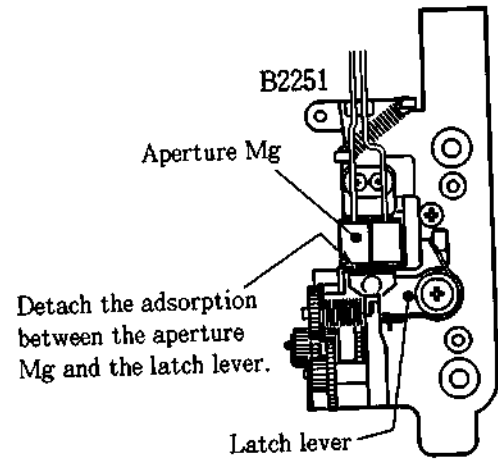
SHUTTER CURTAIN GROUP



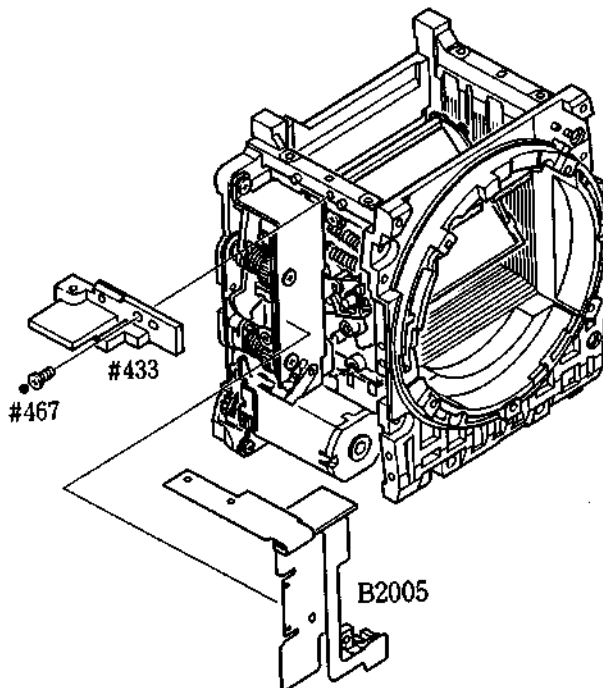
APERTURE CONTROL UNIT



- After detach the adhesion between the aperture Mg and the latch lever, remove the aperture control unit.

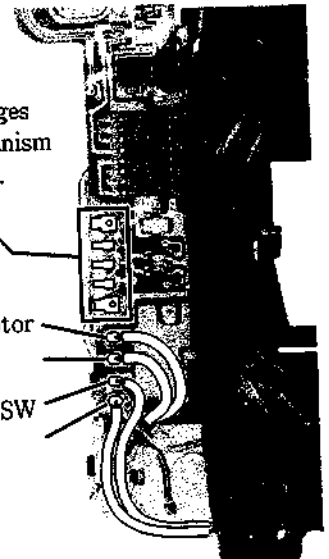


SEQUENCE FPC

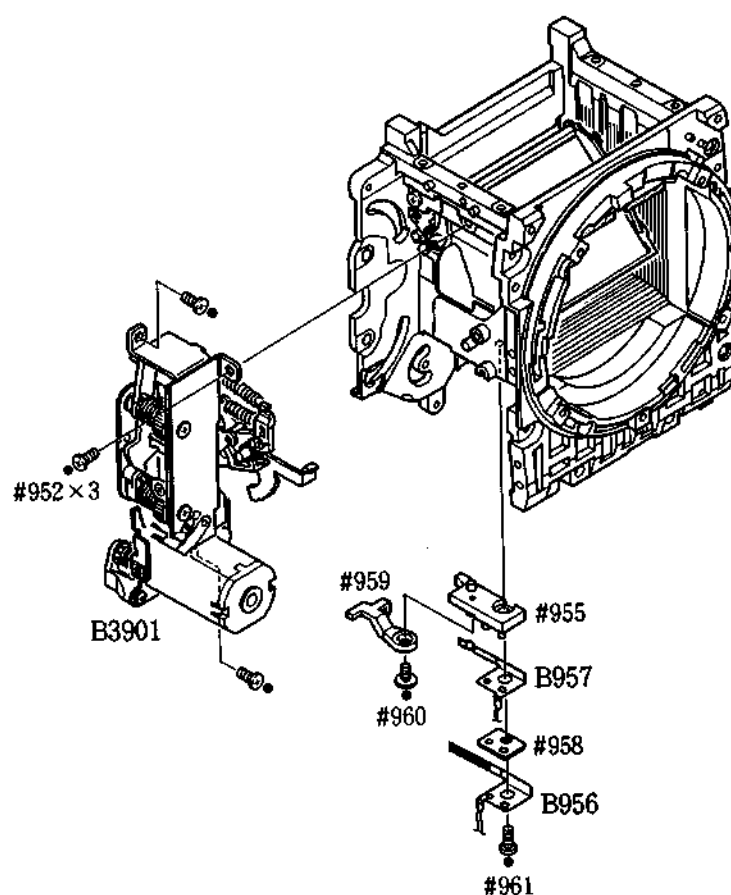


Remove soldering bridges between shutter mechanism unit and sequence FPC.

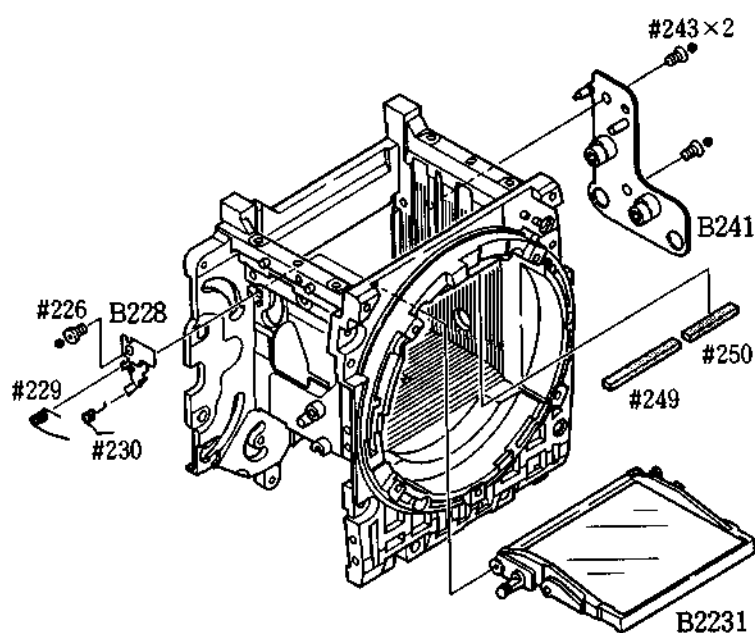
Black: Sequence motor
Red: -ditto-
Red: Sequence SW
Black: -ditto-



SHUTTER MECHANISM UNIT

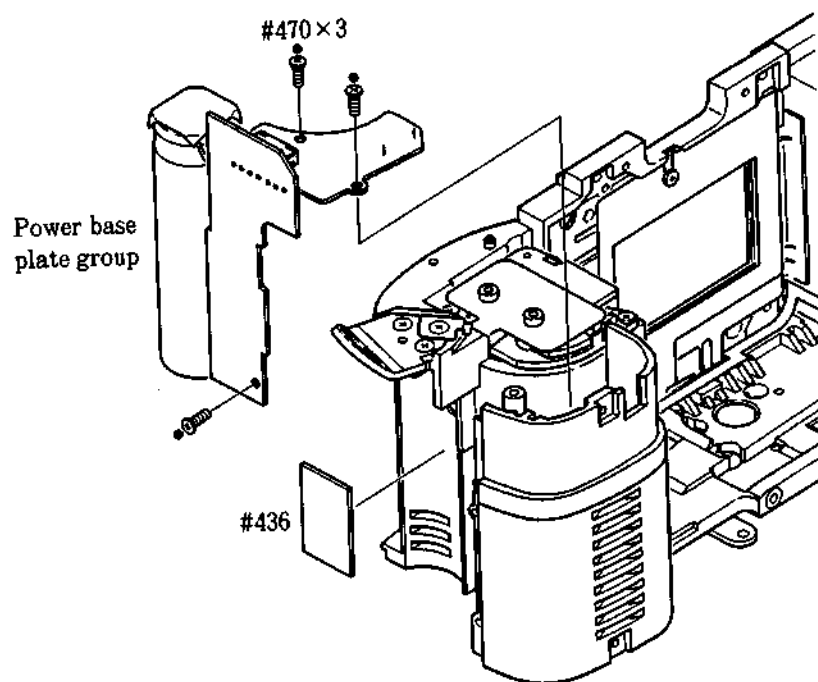
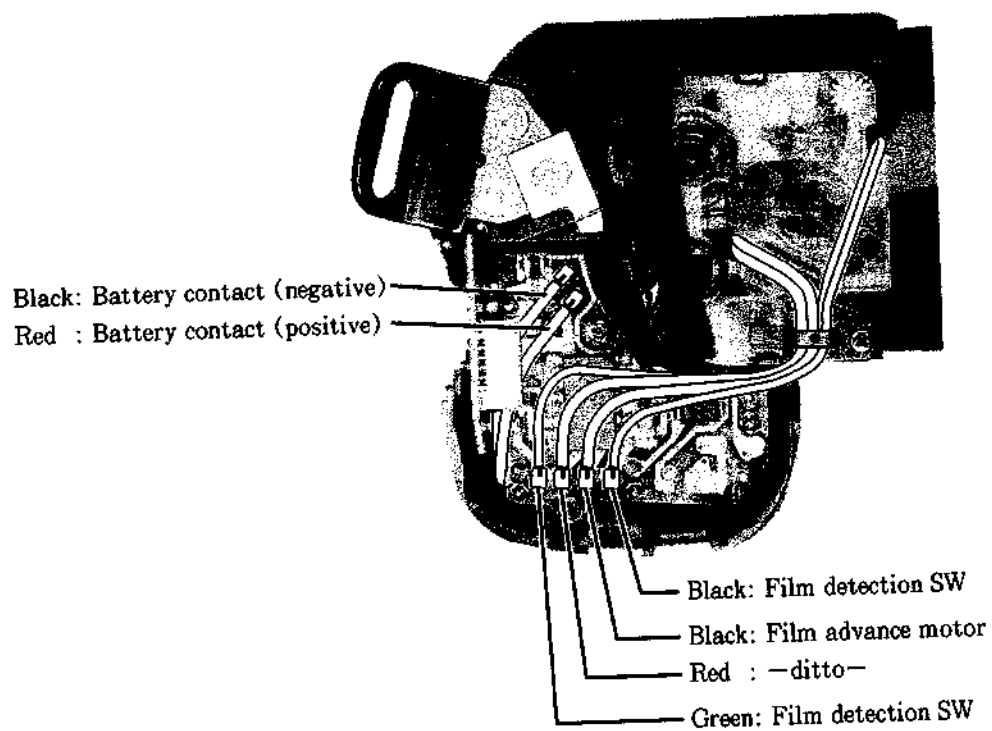


MAIN MIRROR GROUP

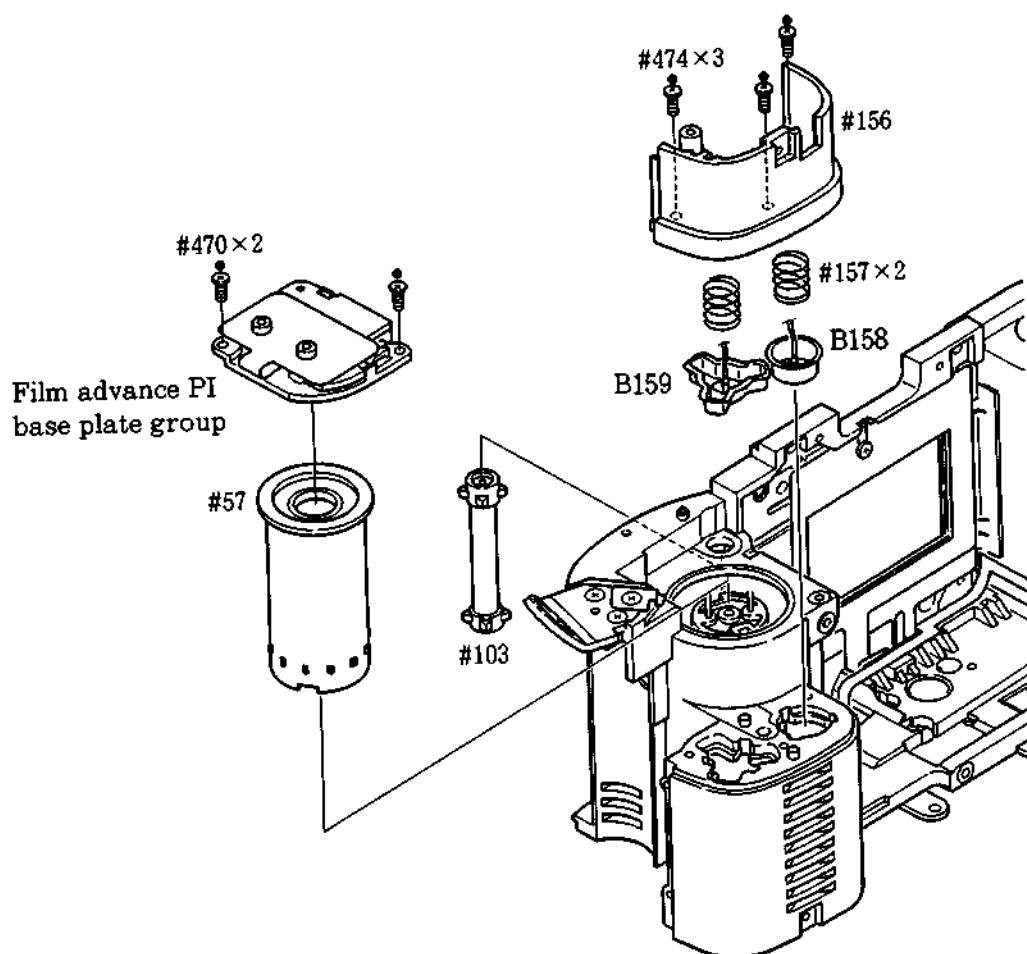


3. REAR BODY

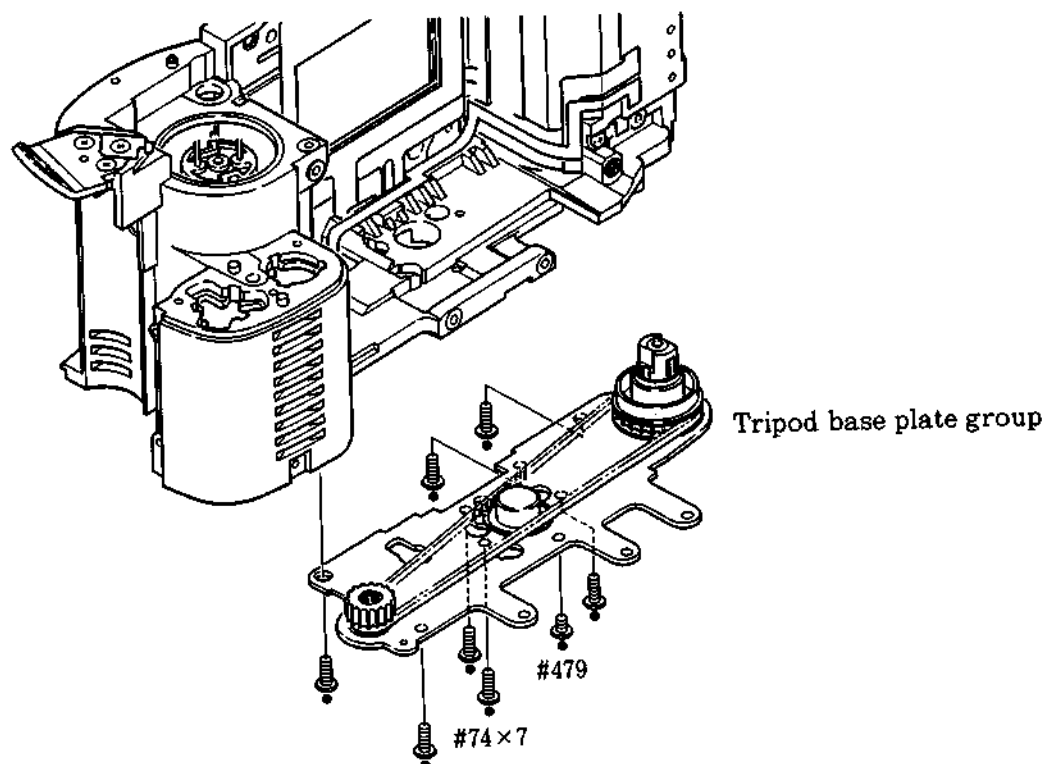
POWER BASE PLATE GROUP



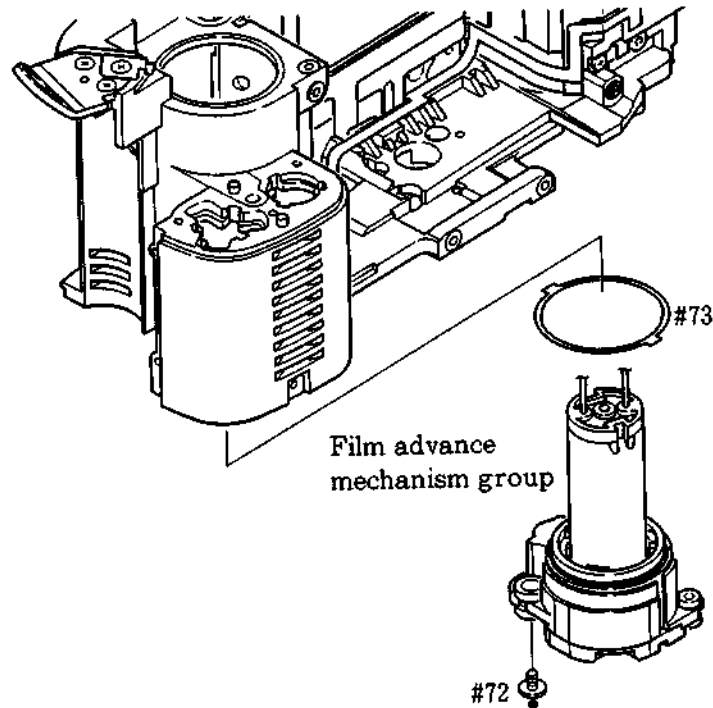
FILM ADVANCE PI BASE PLATE GROUP, BATTERY CONTACT GROUP



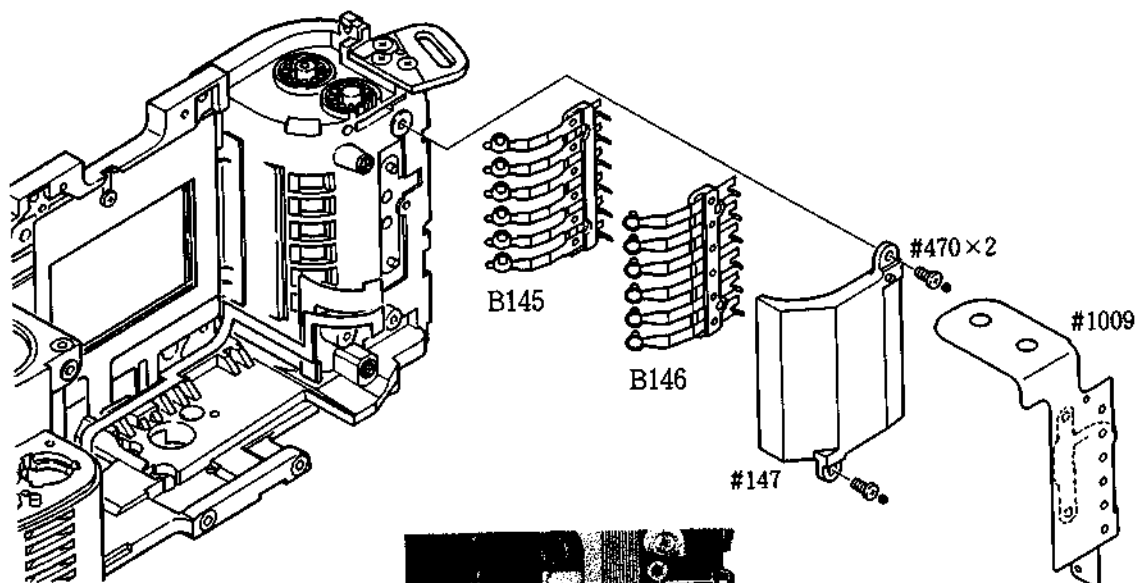
TRIPOD BASE PLATE GROUP



FILM ADVANCE MECHANISM GROUP



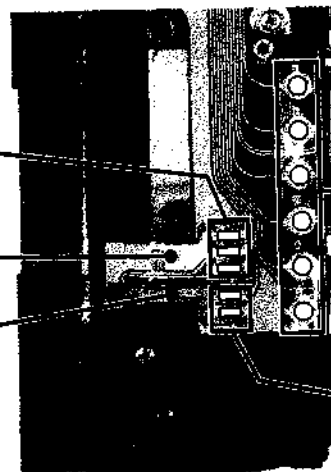
DX CONTACT GROUP



Remove soldering bridges between DX FPC and DB FPC (for QD body only).

DB FPC

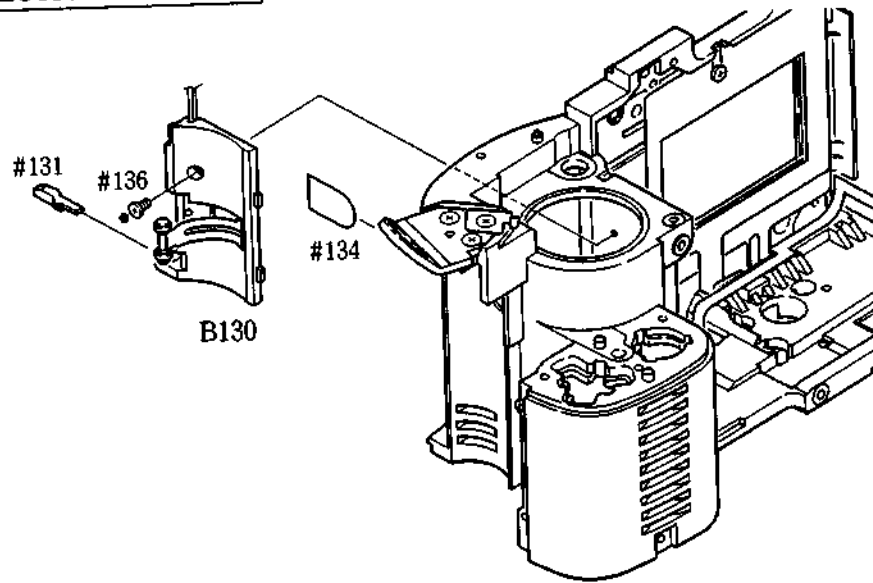
Panorama FPC



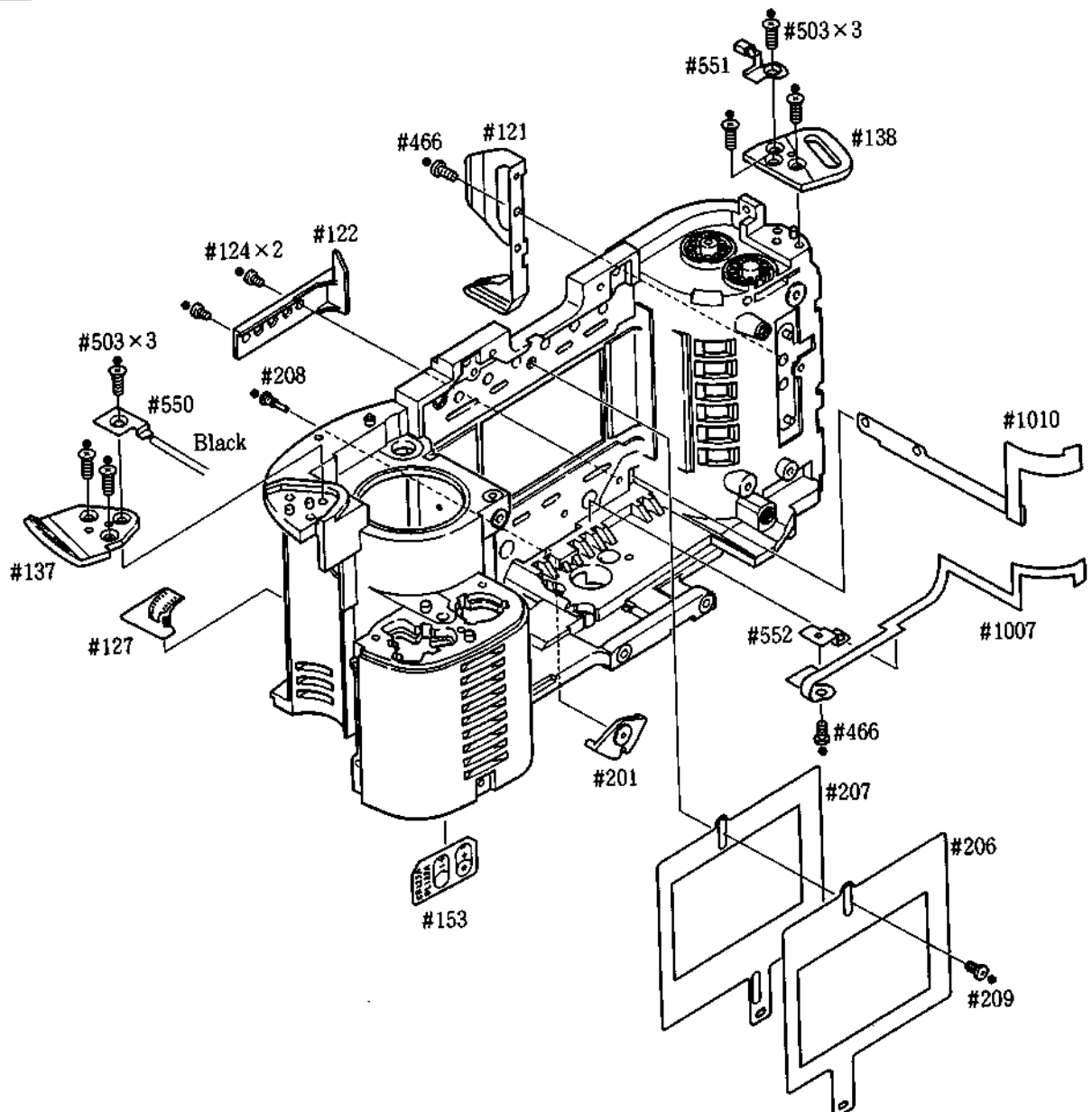
Remove soldering bridges between DX FPC and DX contacts.

Remove soldering bridges between DX FPC and panorama FPC.

FILM DETECTION SW UNIT




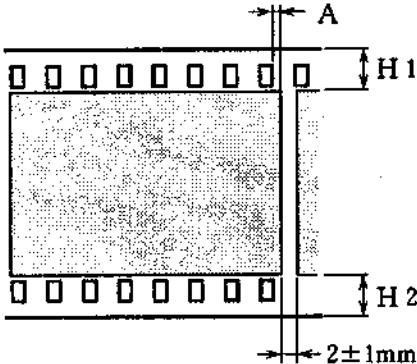
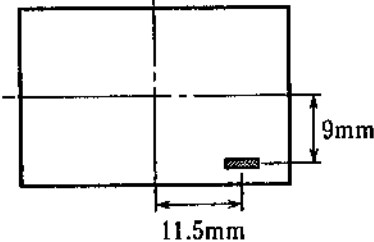
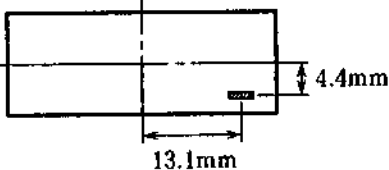
SMALL PARTS OF REAR BODY



Inspection standard

● Set the output voltage to 5.5V and use a 0.4Ω or 0.5Ω resistor when using a DC regulated power supply.

Inspection item	Standard	Remarks
Shutter accuracy (1) Allowance (2) Difference (3) Shutter curtain	1/4000 sec.: +0.6 to -0.45 SV 1/2000 sec.: ±0.4 SV 1/1000 to 30 sec.: ±0.2 SV 1/4000 sec.: within 0.35 SV 1/2000 sec.: within 0.25 SV 1/1000 to 30 sec.: within 0.2 SV No bounce is detected.	Exposure mode: M, S Shutter tester (EF-8000)
Exposure accuracy (1) Allowance (2) Difference	1/1000 sec. or faster: ±0.65 EV Other shutter speed: ±0.5 EV 1/1000 sec. or faster: within 0.6 EV Other shutter speed: within 0.3 EV	Exposure mode: P, Ps, A, S Shutter tester (EF-8000)
Aperture control accuracy (1) Allowance (2) Difference	LV12 (ISO100), 1/125 F/5.6: ±0.4 AV Other aperture: ±0.5 AV Within 0.4 AV	Exposure mode: P, Ps, S Shutter tester (EF-8000)
AF adjustment accuracy (1) L1 to L9 (2) Lxx (3) Yaw (4) Pitch	0 ±90 μm (using offset value) 0 ±180 μm (using no offset value) 0 ±50 μm (using offset value) 0 ±100 μm (using no offset value) 0 ± 6 mrad 0 ±15mrad	Personal computer and other dedicated tools
Height of aperture lever	3.4 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$ mm	J18004
Main mirror 45°	Vertical: ±5' Horizontal: ±20' Distortion: ±8'	J18002, J18197, J18196 Optical parallel Hexagonal key
Sub mirror 45°	Vertical: ±30' Distortion: ±8'	
M. B. F	Standard: 46.67±0.03mm Parallel: Within 0.03mm	J18001 Dial gauge

Inspection item	Standard	Remarks
Battery check voltage (1) First level (2) Second level	Dropping: $5.0 \pm 0.07V$ Recovering: $5.3 \pm 0.07V$ Dropping: $4.7 \pm 0.07V$ Recovering: $5.0 \pm 0.07V$	Use a DC regulated power supply with no resistor.
Frame size (1) Normal size (2) Panorama size (3) Frame position (4) Frame-to-frame space	Width: $24^{+0.4}_{-0.4}mm$ / Depth: $36^{+0.4}_{-0.4}mm$ Width: 13 to 17mm (6.5mm or more for both upper and lower portions)  $A = 0.5 \pm 1.0mm$ $ H1 - H2 = 0.4mm$ or less  $2 \pm 1mm$	Use 50mm f/1.4 lens at infinity shooting distance and maximum aperture. Vernier calipers ISO 100 film
DB imprinting location (1) Normal size (2) Panorama size	 	Vernier calipers ISO 100 film

[1] 工具 TOOL

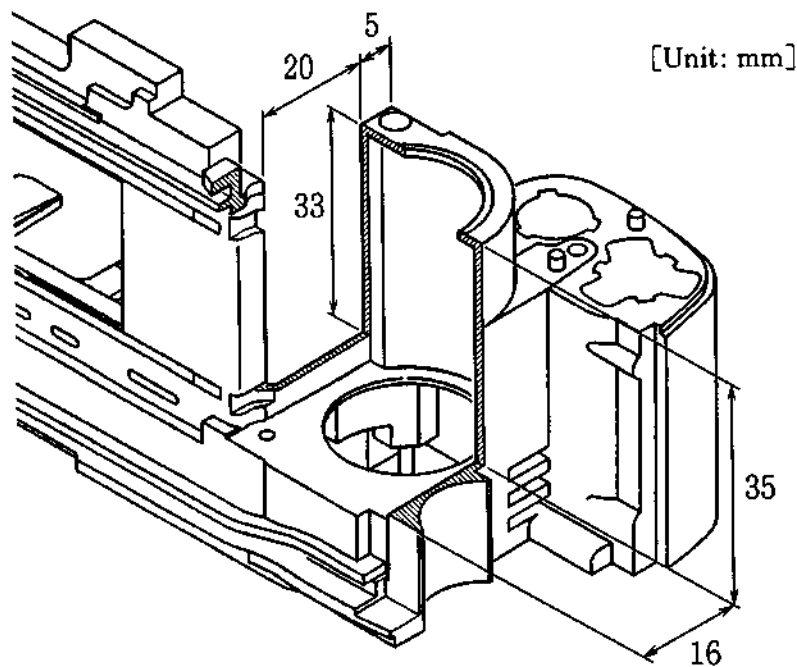
工 具 番 号 TOOL No.	名 称 NAME	区 分 CLASS
J 1 8 2 4 2 A	点検、調整用フロッピーディスク NEC PC-9801用 5インチ INSPECTING & ADJUSTMENT FLOPPY DISK. FOR NEC PC 5'	A
J 1 8 2 4 2 B	点検、調整用フロッピーディスク NEC PC-9801用 3.5インチ INSPECTING & ADJUSTMENT FLOPPY DISK. FOR NEC PC 3.5'	
J 1 8 2 4 2 C	点検、調整用フロッピーディスク IBM PC/AT用 5インチ INSPECTING & ADJUSTMENT FLOPPY DISK. FOR IBM PC 5'	
J 1 8 2 4 2 D	点検、調整用フロッピーディスク IBM PC/AT用 3.5インチ INSPECTING & ADJUSTMENT FLOPPY DISK. FOR IBM PC 3.5'	
J 1 5 3 2 2	幕速度調整用ドライバー ADJUSTMENT DRIVER.	A
J 1 5 3 2 3	幕速度調整用後ボディー REAR BODY FOR SHUTTER CURTAIN SPEED ADJUSTMENT.	A

TOOL INSTRUCTION

SERVICE DEPT

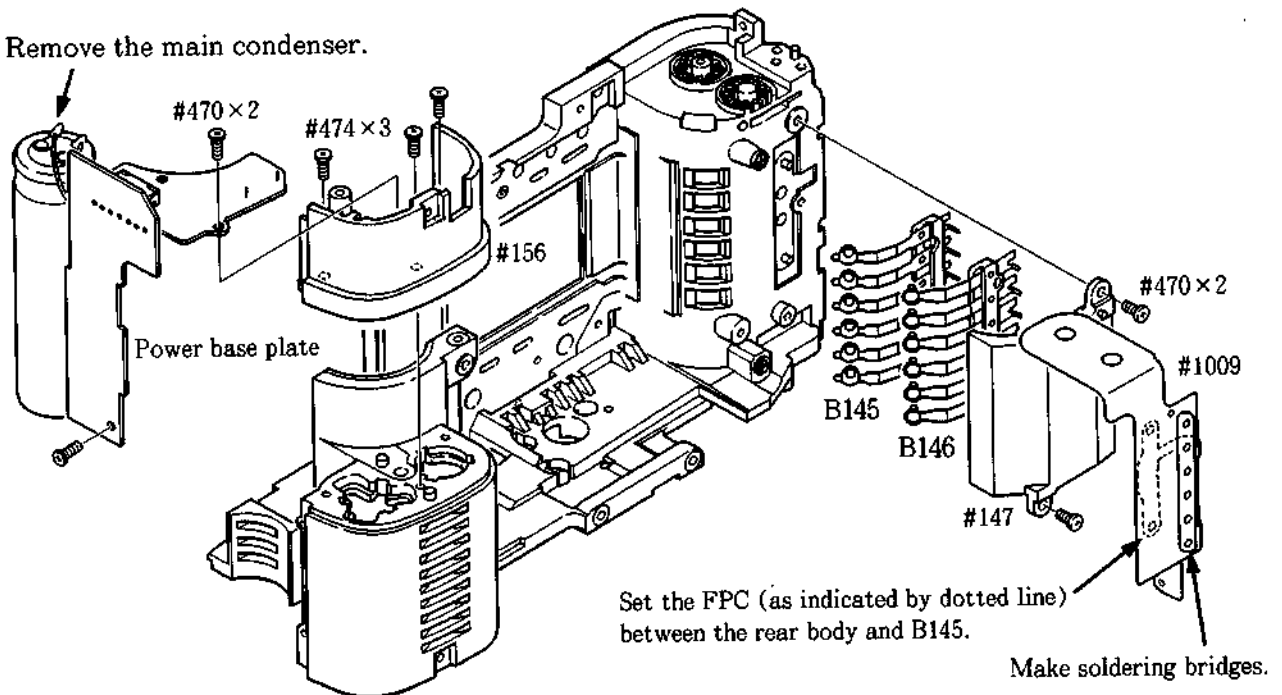
J 1 5 3 2 3

1. Name: Rear body for adjusting shutter curtain traveling speed (do-it-yourself tool)
2. Use: This body is used as a dummy body when adjusting shutter curtain traveling speed.
3. Manufacturing a rear body for adjusting shutter curtain traveling speed
 - Cut off the rear body as shown in the figure below so that you can rotate worm and ratchet gears for adjusting shutter mechanism unit.



- Assemble the rear body for adjusting shutter curtain traveling speed. Other parts are to be used to attach the front body.

Remove the main condenser.



作成承認印

配布許可印



F70

FAA30051

FAA30351

N70

FAA30151

PARTS LIST

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Tokyo, Japan

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A
1B150-089 (1) 1/2

B
FAA30051 - R. 3364. A

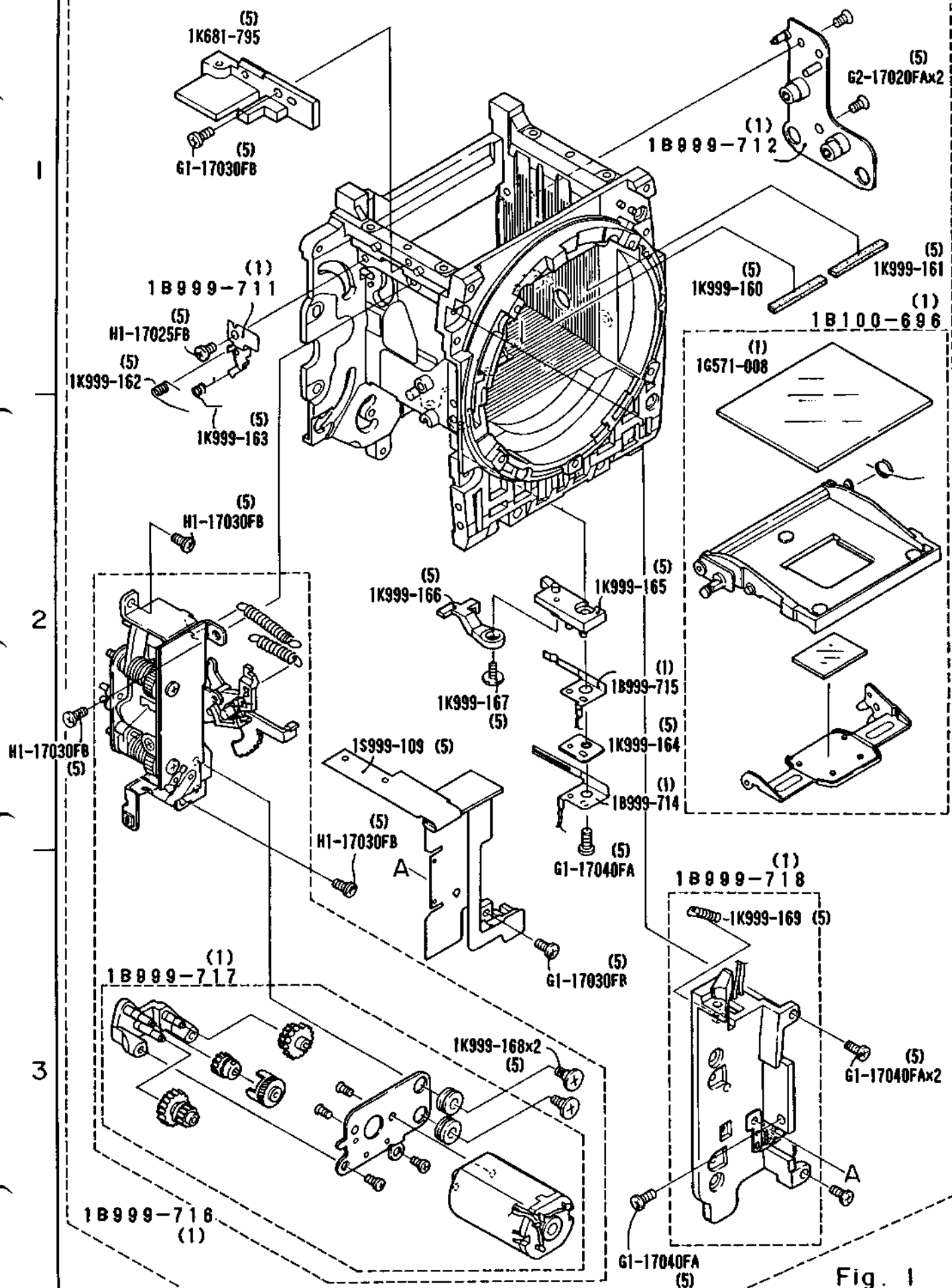


Fig. 1

A

B

FAA30051 - R. 3364. A

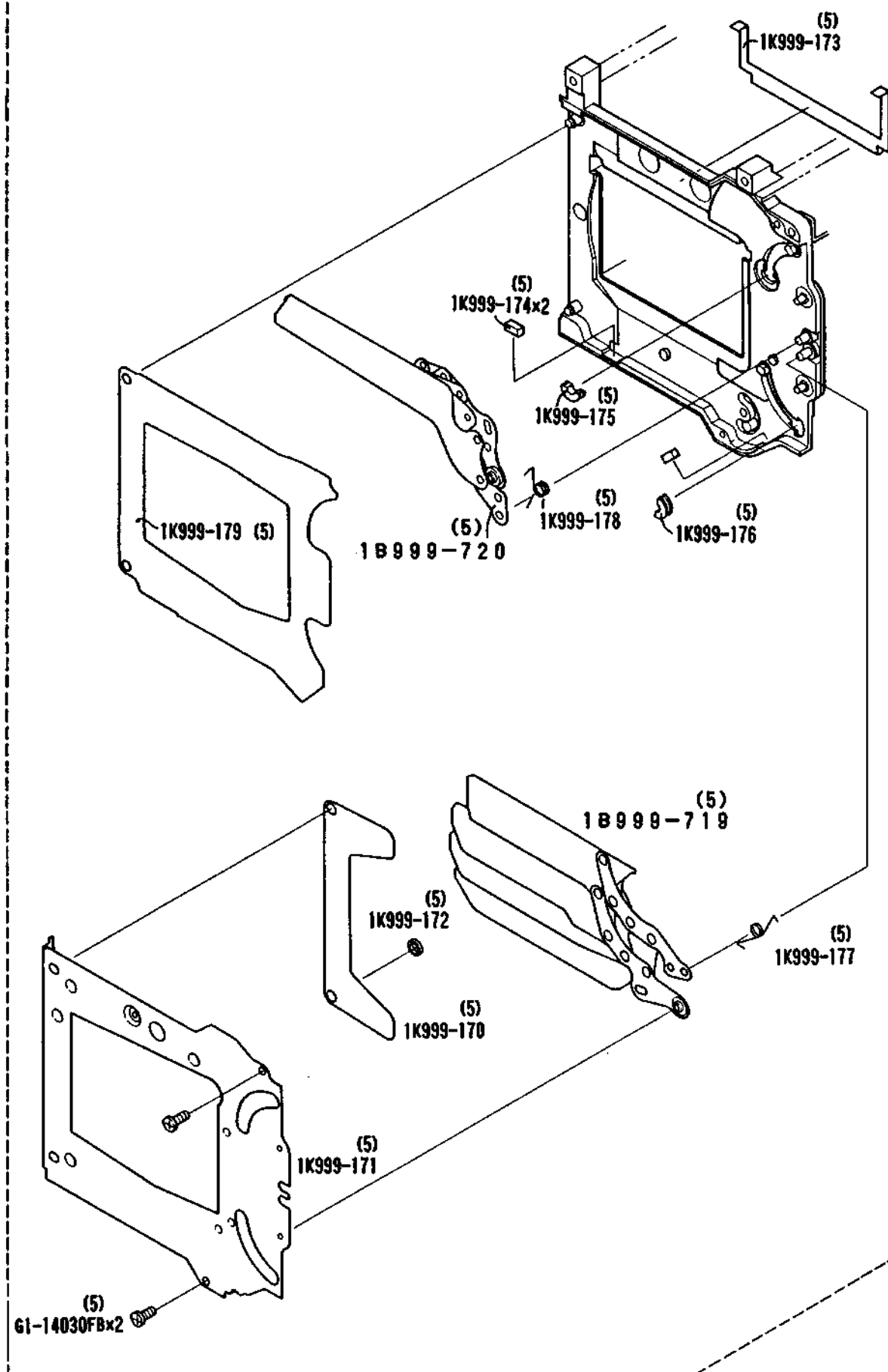
(1)
1B150-069 2/2

Fig. 2

A

I

B

FAA30051 - R. 3364, A

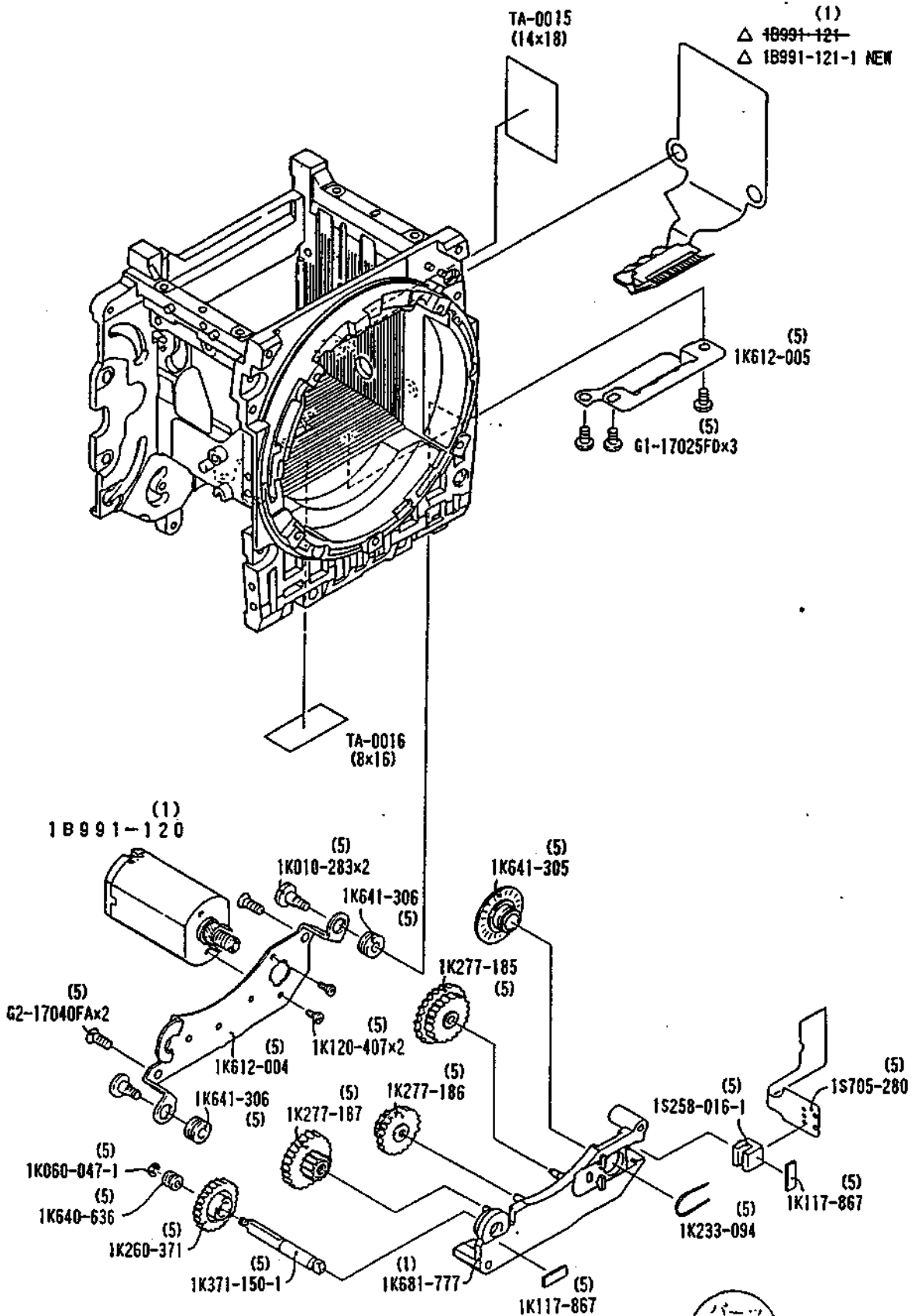
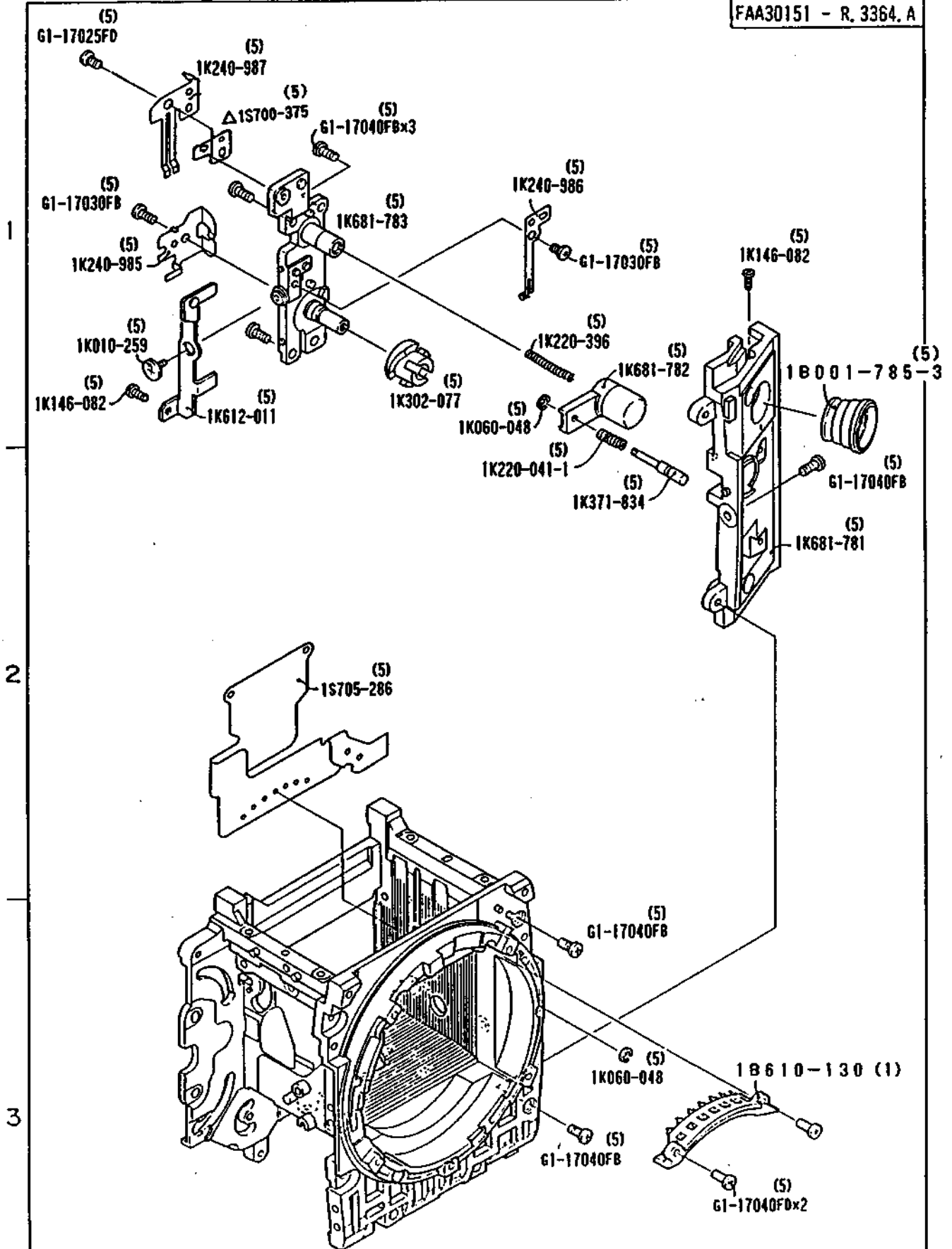


Fig. 3.

A

B

FAA30151 - R. 3364. A



RP-INF. NO. 9481

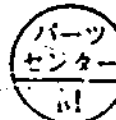


Fig. 4

Change page(差し替え) △×1

- F 4 · F70 -

Dec. 20. 1994

A

B

FAA30051 - R. 3364. A

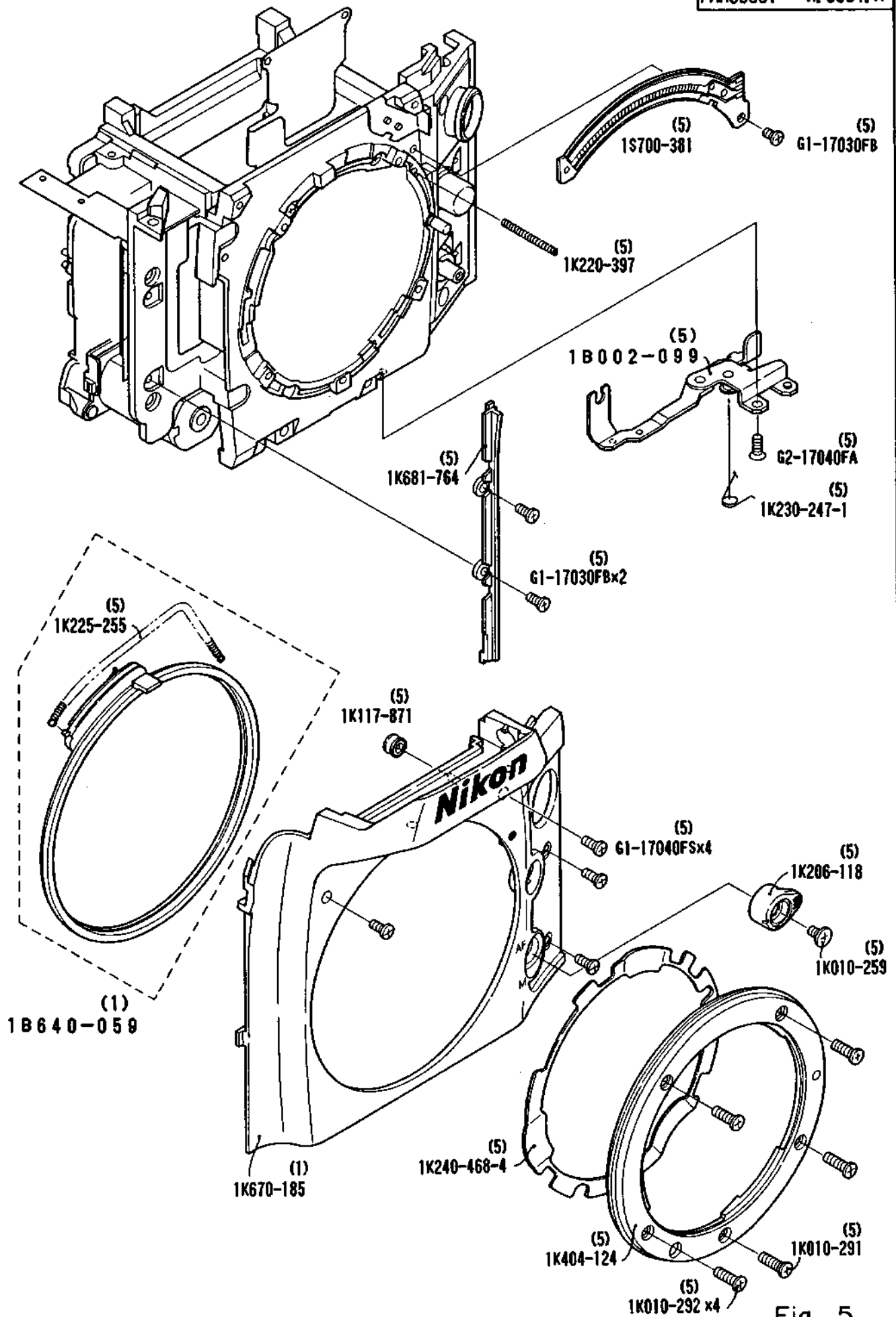


Fig. 5

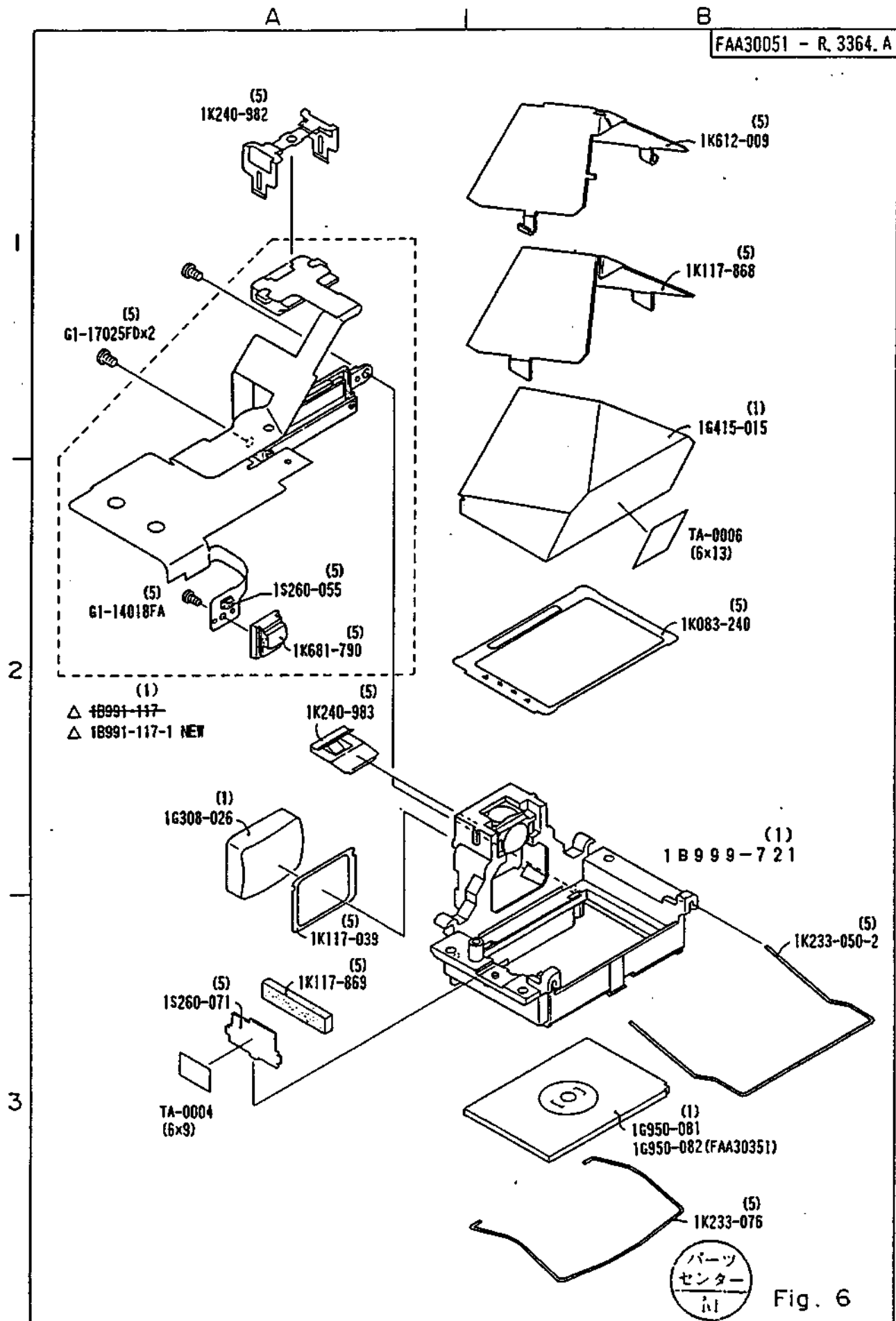
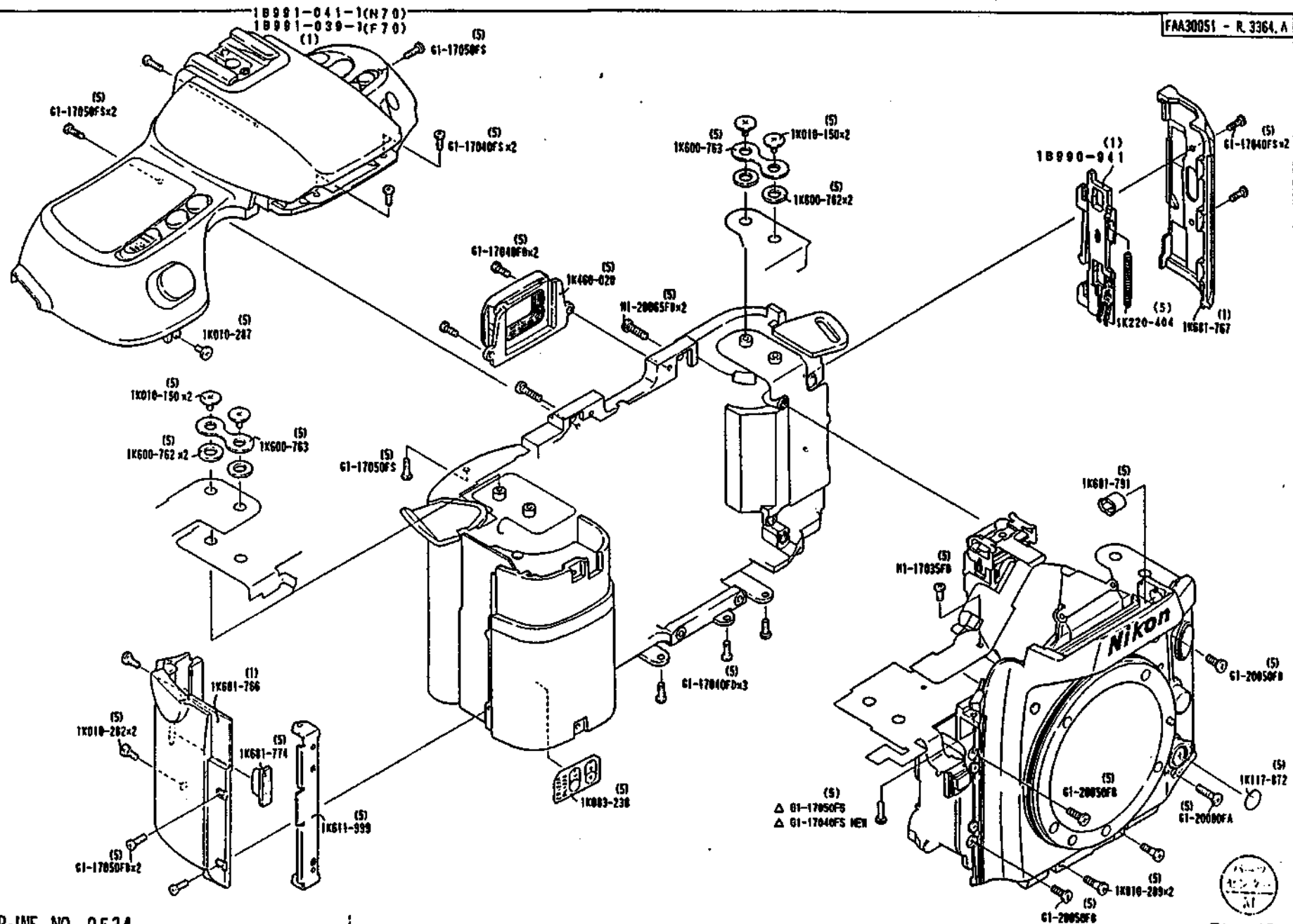


Fig. 11



RP-INF. NO. 9534

Fig. 12



A

B

FAA30051 - R. 3364. A

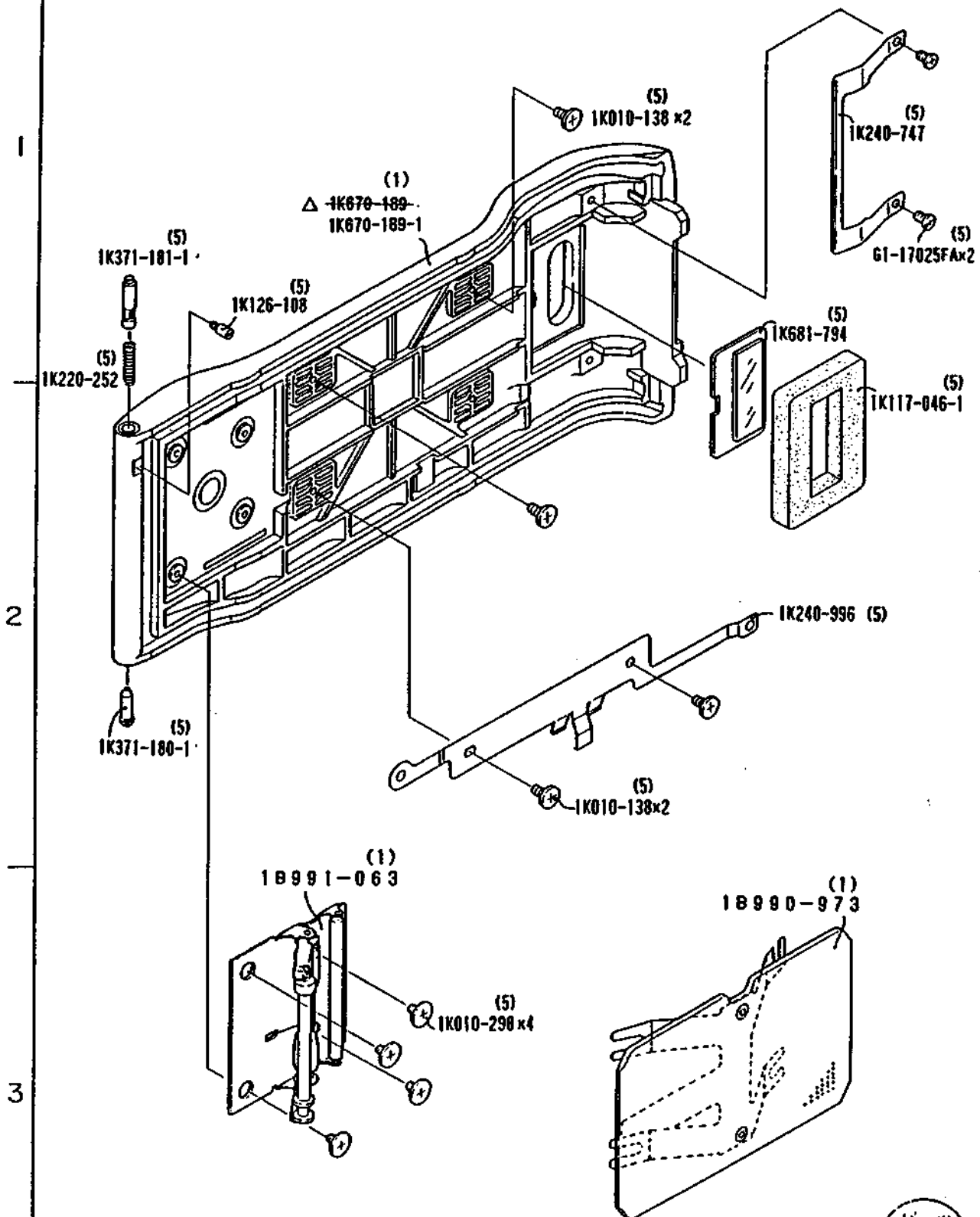


Fig. 14

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部品表 Parts List

FAA80051-R, 3364, A

部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs. Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Term of Delivery	備 考 Remarks	要求単位 Q'ty per order
*IK001-077	507	Screw	4	1B991-039-1	10 B3	○△	P90	5
*IK010-138	418	Screw	4		14 B1.2	○	RS	5
*IK010-150	510	Screw	4		12-A2 12-C1	○	RS	5
*IK010-252-1 (IK010-252)	169	AFセンサー調整ビス AF Sensor adjusting screw	3		7 B3	○	P500(PANORAMA)	5
*IK010-255	136	Screw	1		8 A1	○	P50	5
IK010-258	508	Screw	2		4-A1 5-B3	○		5
IK010-279	72	巻上げ基板取付けビス Film advance plate screw	1		8 A2	○		5
IK010-280	74	底基板止めビス Bottom plate screw	7		8 D3	○		5
IK010-281 IK010-311	124	パトローネ受付け止めビス Film cartridge set mold screw	1		8 A1	○	SP-9461	5
IK010-282	139	蝶番ビス Hinge screw	2		12 A3	○		5
IK010-283	186	AF基板ビス AF plate screw	2		3 A2	○		5
IK010-284	208	Screw	1		8 A1	○		5
IK010-285	337	SB回転軸B Flash slash head shaft B	1	1B991-039-1	10 B1	○△		5
IK010-286	338	SBアップアーム軸 Flash up arm shaft	2	1B991-039-1	10-A2 10-B2	○△		5
IK010-287	429	Screw	2		12-A2 13-A3	○		5
IK010-288	509	Screw	1	1B991-039-1	11 A3	○△		5

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部品表 Parts List

FAA30051-R. 3364. A

部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs. Per Unit	部品番号 Assembly	参照 図番 Fig. No.	販売区分 Term of Delivery	備 考 Remarks	要求単位 Qty per order
IK010-289	525	Screw	2		12 B3	○		5
IK010-290	528	外LCD台座止めビス LCD pedestal screw	4	18991-039-1	11 B3	○△		5
IK010-291	530	BY止めビス BY screw	1		5 B3	○		5
IK010-292	531	BY止めビス BY screw	4		5 B3	○		5
IK010-298	422	Screw	4		14-A3 15-A3	○		5
*IK050-037	539A	合致スペーサ Spacer for focus screen	0-4		7 B2	○	F601	5
*IK050-038	539B	合致スペーサ Spacer for focus screen	0-4		7 B2	○	F601	5
*IK050-039-1 (IK050-039)	539C	合致スペーサ Spacer for focus screen	0-4		7 B2	○	F601	5
△ *IK050-040-2 (IK050-040)	539	合致スペーサ(t=0.5) Spacer for focus screen	0-4		7 B2	○	F601 RP-9534	5
*IK060-045	520	E-ring	1	18991-039-1	10 A2	○△	F50	5
*IK060-047-1 (IK060-047)	521	E-ring	1		3 A3	○	F50	5
*IK060-048	522	E-ring	4		4-B1 4-B3	○	F50	5
IK078-011	516	クリックボール Click ball	1	18991-039-1	11 A3	○△		5
IK083-238	153	電池塞逆入れ防止シール Seal	1		12 B3	○		5
IK083-240	285	視野枠 Finder field frame	1		6 B2	○		5
IK083-241	359	外LCD窓 LCD windw	1	18991-039-1	11 A1	○△		5
IK100-134	137	吊り環 (巻上げ側) Nekstrap ring(Film advance side)	1		8 B2	○		5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs. Per Unit	部品番号 Assembly	参照 図番 Fig. No.	販売区分 Term of Delivery	備 考 Remarks	要求単位 Q'ty per order
IK100-135	138	吊り環 (巻戻し側) Nekstrap ring(Film rewind side)	1		8 C1	○		5
IK110-429	64	巻戻しベルト Film rewind belto	1		8 D2	○		5
*IK115-660-1	298	ペンタ保護テープ (6×13) Pentaprism protect tape	1		6 B2	×	TA-0006	1 roll
*IK117-039	282	接眼視野枠 Eyepiesc mask	1		6 A3	○	F50	5
*IK117-046-1 (IK117-046)	404	パトローネ窓モルト Sponge. film cartridge window	1		14-B2 15-B1	○	F50	5
*IK117-714	134	スプール室穴テープ Tape	1		8 A2	○	F50	5
IK117-864	73	フロートゴムC Flow rubber C	1		8 B3	○		5
IK117-867	188	角ゴム Rubber	2		3 B3	○		5
IK117-868	288	ペンタ保護シート Pentaprism protect sheet	1		6 B1	○		5
IK117-869	296	ゴミモルト Sponge	1		6 A3	○		5
IK117-871	315	連動環ローラ Coupling ring rotler	1		5 A2	○		5
IK117-872	323	A/M飾り板 A/M cover plate	1		12 D3	○		5
IK117-873	430	圧接ゴム Press-contact rubber	1		7 B3	○		5
IK117-874	436	メインC用両面テープ Main condencer Doublu-sided adhesire tape	1		9 B2	○		10
IK117-875	438	両面テープ (6×9) Doublu-sided adhesire tape	1		6 A3	×	TA-0003	1 roll
IK117-876	441	外LCDスポンジA LCD sponge A	2	1B991-039-1	11 A2	○△		5

部品表 Parts List

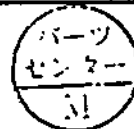
FAA30051-R. 3364. A

部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs. Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Term of Delivery	備 考 Remarks	要求単位 Q'ty per order
1K117-877	442	外LCDスポンジB LCD sponge B	2	1B991-039-1	11 A2	○△		5
1K117-879	444	LCD窓接着テープ Tape	1	1B991-039-1	11 A1	○△		5
1K117-880	445	外LCD座布団 LCD cushion	1	1B991-039-1	11 A3	○△		5
1K117-885	560	ポリエステルテープ (8×25) Tape	2	1B991-039-1 1B991-068	11 B1	×	TA-0014	1 roll
1K117-886	561	AE-L部両面テープ (5×5) AE-L tape	1	1B991-039-1	11 A3	×	TA-0003	1 roll
1K117-887	562	メインSW部両面テープ (8×25) Main SW tape	1	1B991-039-1	11 B3	×	TA-0003	1 roll
1K117-888	563	外LCD部両面テープ (12×25) LCD tape	1	1B991-039-1	11 A3	×	TA-0010	1 roll
1K117-918	559	ポリエステルテープ (8×16) Tape	1		3 A2	×	TA-0016	1 roll
1K117-923	127	フィルム位置マーク Film leader index mark	1		8 A2	○		5
1K117-927	558	ポリエステルテープ (14×18) Tape	1		3 B1	×	TA-0015	1 roll
△ 1K117-955	547	シート Sheet	1		8 B3	○	RP-9511 製技資94F2051	5
1K120-407	527	AFモーター止めビス AF motor screw	2		3 A3	○		5
1K123-188	75	モーター止めビス Motor screw	2		8 A3	○		5
1K126-108	412	軸ビス Shaft screw	1		14-A1 15-A1	○		5
*1K146-082	318	Screw	2		4-A1 4-B1	○	F50	5
1K201-114	351	コマンドダイヤル Command dial	1	1B991-039-1	11 A3	○△		5
1K206-118	319	A/M切替レバー A/M change lever	1		5 B2	○		5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs. Per Unit	部品番号 Assembly	参照 図番 Fig. No.	販売区分 Term of Delivery	備 考 Remarks	要求単位 Q'ty per order
1K206-119	371	電源SWレバー Power SW lever	1	1B991-039-1	10 A2	○△		5
1K208-176	349	リリース鉤 Shutter release button	1	1B991-039-1	10 B3	○△		5
*1K220-041-1 (1K220-041)	310	レンズ着脱ピンバネ Lens release pin spring	1		4 B2	○	F50	5
*1K220-213 △	142	裏蓋開閉レバーバネ Spring, camera back open/close lever	1		12 D1	○	F50D PANORAMA RP-9461	5
*1K220-252 *1K220-213	415	ヒンジ軸バネ Spring, Hinge shaft	1		14-A1 15-A1	○	MF-26	5
*1K220-253-2 (1K220-253)	352	コマンドダイヤルクリックバネ Command dial click spring	1	1B991-039-1	11 A3	○△	F601	5
*1K220-377	168	AF調整バネ AF Adjustment spring	3		7 B3	○	F90	5
*1K220-385	68	フォークバネ Spring, Fork	1	1B991-046	8 D2	○△	F50	5
1K220-394	157	電池接点バネ Battery contact spring	2		9 B1	○		5
1K220-396	309	レンズ着脱鉤バネ Spring, Lens release button	1		4 B1	○		5
1K220-397	329	接地バネ Ground spring	1		5 B1	○		5
1K220-398	363	SB係止レバーバネ Sprig, flash latch lever	1	1B991-039-1	10 B3	○△		5
1K225-255	313	連動環コイルバネ Sprig, coupling ring coil	1	1B640-059	5 A2	○△		5
*1K230-247-1 (1K230-247)	196	横レバーバネ Sprig, transverse lever	1		5 B2	○	F801S	5
1K230-411	336	SBアップバネ Flash up spring	1	1B991-039-1	10 B1	○△		5
*1K233-050-2 (1K233-050)	287	ペンタ押えバネ Pentaprism retainer spring	1		6 B3	○	F50	5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 細 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
*1K233-076	284	スクリーンバネ Screen spring	1		6 B3	○	P50	5
1K233-094	177	羽根止めバネ Curtain screw	1		3 B3	○		5
*1K240-468-4 (1K240-468-2)	302	バヨネットバネ Lens mounting flange spring	1		5 B3	○	P50	5
*1K240-747	405	パトローネ押さえバネ Film cartridge retainer spring	1		14-B1 15-B1	○	P50	5
*1K240-867	343	シューバネ Shou spring	1	1B991-039-1	10 A2	○△	P50	5
*1K240-946-1 (1K240-946)	121	パトローネ押さえバネ Patrone retaining spring	1		8 B1	○	P50	5
1K240-982	290	AESP D押えバネ AESPD retainer spring	1		6 A1	○		5
1K240-983	295	接眼レンズ遮光板 Byepiese light-tight plate	1		6 A2	○		5
1K240-985	322	A/M切替板バネ A/M change/over plate spring	1		4 A1	○		5
1K240-986	327	A/M切替SW A A/M change/over SW A	1		4 B1	○		5
1K240-987	328	着脱ピンSW A Release pin SW A	1		4 A1	○		5
1K240-989	335	SBアップSW Flash up SW	1	1B991-039-1	11 B1	○△		5
1K240-991	370	電源SWクリックバネ Power SW click spring	1	1B991-039-1	10 A3	○△		5
1K240-992	373	電源SWブラシ Power SW brash	1	1B991-039-1	10 A3	○△		5
1K240-996	421	静電気用導通板 Conductive plate	1		14 B2	○		5
1K241-004	550	吊り環GNDラグ板 (巻上げ側) Neckstrap ring GND lug plate (Film advance side)	1		8 B1	○		5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
1K241-005	551	吊り環GNDラグ板 (巻戻し側) Neckstrap ring GND lug plate (Film rewind side)	1		8 C1	○		5
1K241-013	552	ラグ板 Lug plate	1		8 C2	○		5
1K248-021	70	巻戻しギアフランジ Film rewind gear flange	1		8 D8	○		5
*1K260-371	183	カップリングギアE Coupling gear E	1		3 A3	○	P50	5
1K260-718	44	巻上げギアB Film advance gear B	1		8 B3	○		5
1K260-719	48	太陽ギアE Sun gear E	1		8 A3	○		5
1K260-721	50	巻上げアイドルギアG Film advance idle gear G	1		8 A3	○		5
1K260-722	56	スプールギア Spool gear	1		8 A2	○		5
1K260-723	104	スプロケットギア Sprocket gear	1		9 A1	○		5
1K260-724	105	給送検出ギア Film advance detection gear	1		9 A1	○		5
1K260-725	106	回転円板 Revolution disk	1		9 A1	○		5
*1K275-086	103	スプロケット Sprocket	1		9 B2	○	P50	5
1K275-088	57	スプール Spool	1		9 A2	○		5
1K277-181	46	巻上げギアC Film advance gear C	1		8 A3	○		5
1K277-182	47	巻上げギアD Film advance gear D	1		8 A3	○		5
1K277-183	51	巻上げアイドルギアH Film advance idle gear H	1		8 A3	○		5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
1K277-184	62	巻戻しギア Film rewind gear	1		8 D3	○		5
1K277-185	180	減速ギヤ B Reducing gear B	1		3 B3	○		5
1K277-186	181	減速ギヤ C Reducing gear C	1		3 A3	○		5
1K277-187	182	減速ギヤ D Reducing gear D	1		3 A3	○		5
1K302-077	320	A/M切替カム A/M exchaning cam	1		4 A1	○		5
*1K371-150-1 (1K371-150)	184	カップリング軸 Coupling shaft	1		3 A3	○	F50	5
*1K371-180-1 (1K371-180)	402	裏蓋ヒンジ軸A Camera back hinge shaft A	1		14-A2 15-A2	○	MF-26	5
*1K371-181-1 (1K371-181)	411	裏蓋ヒンジ軸B Camera back hinge shaft B	1		14-A1 15-A1	○	MF-26	5
*1K371-834	308	レンズ着脱鉤ピン Lens release button pin	1		4 B2	○	F50	5
1K371-871	340	S BアップSW鉤 Flash up SW button	1	1B991-039-1	11 B1	○△		5
1K404-124	301	バヨネット Bayonet	1		5 B3	○		5
*1K406-032-1 (1K406-032)	341	シュー座 Accessory shoe	1	1B991-057-1 1B991-039-1	10 A2	○△	F50	5
1K460-020	283	接眼枠 Eyepiece frame	1		12 B2	○		5
*1K467-042	325	リモートコネクターキャップ Remote conncter cap	1		13 B1	○	MB-21	5
*1K600-762	426	圧接ゴム Press-contact ruber	4		12-A2 12-C1	○	RS	5
*1K600-763	427	圧接板 Press-contact plate	2		12-A2 12-C1	○	F801S	5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
IK601-325	339	S Bアップアーム Flash up arm	2	1B991-039-1	10-A2 10-B2	○△		5
IK601-326	366	S B保止レバー押さえ板 Flash latch lever retainer	1	1B991-039-1	10 B3	○△		5
IK601-337	346	シュー裏打ち板 Shoe plate	1	1B991-039-1	10 B3	○△		5
IK611-999	140	歯輪 Gear	1		12 B3	○		5
IK612-004	171	A F基板 AF plate	1		3 A3	○		5
IK612-005	190	TTL SPD押え板 TTL SPD retainer	1		3 B1	○		5
IK612-009	286	ペンタ押え板 Pentaprism retainer	1		6 B1	○		5
IK612-011	317	縦レバー Length lever	1		4 A1	○		5
IK612-012	358	外LCD保持枠 LCD holder	1	1B991-039-1	11 A2	○△		5
IK612-031	549	上カバーコード整理曲げ板 Top cover code arrangement plate	2	1B991-039-1	11-A3 11-B3	○△		5
IK625-139	431	圧接板 Press-contact plate	1		7 B3	○		5
*IK630-857	67	フォーク Fork	1	1B991-046	8 D2	○△	F50	5
IK630-885	58	フロートゴムA Flow rubber A	1		8 A2	○		5
IK630-886	59	フロートゴムB Flow rubber B	1		8 A2	○		5
IK630-887	334	S B回転軸A Slash head shaft A	1	1B991-039-1	10 A3	○△		5
*IK640-636	185	カップリングカラー Coupling collar	1		3 A3	○	F50	5

部品表 Parts List

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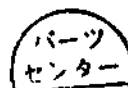
部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
1K641-305	178	AF PI 円盤 AF PI disk	1		3 B2	○		5
1K641-306	187	防振ゴム Cushion rubber	2		3-A2 3-A3	○		5
1K670-185	22	エプロン Apron	1		5 A3	○		1
△ 1K670-189	401	裏蓋 Camera back	1		14 A1	○	RP-9518 95F-2003 RP-9534	1
1K670-189-1								
*1K681-221	368	S B 目隠しゴム Flash bandage rubber	2	18991-039-1	10-A3 10-B3	○△	F601	5
*1K681-678	122	パトローネ受付け Film cartridge set mold	1		8 B1	○	F50	5
1K681-764	25	レッドライン Red line	1		5 A2	○		5
1K681-766	27	グリップ後カバー Hand grip rear cover	1		12 A3	○		1
1K681-767	28	裏蓋開閉レバーカバー Camera back lock-release cover	1		12 D1	○		1
1K681-769	41	巻上げ基板 Film advance plate	1		8 A2	○		1
1K681-770	60	巻上げ基板カバー Film advance plate cover	1		8 A3	○		1
1K681-771	101	上地基板 Upper film advance plate	1		9 A2	○		1
1K681-772	102	上地カバー Film advance cover	1		9 A1	○		1
1K681-773	131	F 検知レバー F viewpoint lever	1		8 A1	○		5
1K681-774	144	裏蓋傷防止ゴム Camera back rubber	1		12 A3	○		5
1K681-775	156	電池接点基板 Battery contac plate	1		9 B1	○		1

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
1K681-777	172	A Fモールド基板 AF mold plate	1		3 A3	○		1
1K681-781	305	A/M切替え板 A/M change plate	1		4 B2	○		5
1K681-782	306	レンズ着脱鉤 Lens release button	1		4 B1	○		5
1K681-783	316	縦レバー基板 Length lever plate	1		4 A1	○		5
1K681-784	331	S B上ケース Upper flash cover	1	1B991-039-1	10 B1	○△		5
1K681-786	333	プロテクター Protector	1	1B991-057-1 1B991-039-1	10 B2	○△		1
1K681-788-1 (1K681-788)	356	コマンドダイヤル受け座 Command dial holder	1	1B991-039-1	11 A3	○△		5
1K681-789	357	外LCD台座 LCD pedestal	1	1B991-039-1	11 B3	○△		5
1K681-790	360	セルフ窓 Self-timer windw	1	1B991-117	6 A2	○△		5
1K681-791	362	S Bアップ鉤 Flash up button	1		12 D2	○		5
1K681-792	364	S B係止レバー Flash latch lever	1	1B991-039-1	10 B3	○△		5
1K681-793	372	電源SW裏打ち板 Battery SW plate	1	1B991-039-1	10 A3	○△		5
1K681-794	403	バトロネ窓 Film cartridge/patrone windw	1		14-B1 15-B1	○		5
1K681-795	433	F P C受け座 (巻上げ側) FPC holder(Advance)	1		1 A1	○		5
1K681-796	434	F P C受け座 (巻戻し側) FPC holder(Rewind)	1		7 B1	○		5
1K681-826	147	D X接点カバー DX contact cover	1		8 D1	○		1

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
1K999-160	249	ミラー受けモルトA Sponge, mirror holder A	1		1 B1	○		5
1K999-161	250	ミラー受けモルトB Sponge, mirror holder B	1		1 B1	○		5
1K999-162	229	ミラーダウンバネ Mirror down spring	1		1 A1	○		5
1K999-163	230	ミラーバウンドバネ Mirror bound spring	1		1 A2	○		5
1K999-164	953	絶縁板 Insulation plate	1		1 B2	○		5
1K999-165	955	反転SW台座 Turn SW pedestal	1		1 B2	○		5
1K999-166	959	反転SWレバー Turn SW lever	1		1 A2	○		5
1K999-167	960	レバー止めビス Lever retaining screw	1		1 A2	○		5
1K999-168	951	段付きビス Shoulder screw	2	1B999-716	1 A3	○△		5
1K999-169	268	戻しコイルバネ Coil spring	1	1B999-718	1 B3	○△		5
1K999-170	991	仕切り板 Partition plate	1		2 A3	○		5
1K999-171	992	カバー板 Cover plate	1		2 A3	○		5
1K999-172	997	ワッシャー Washer	1		2 A2	○		5
1K999-173	248	ミラー上部遮光板 Mirror light baffle plate	1		2 B1	○		5
1K999-174	994	羽根緩衝ゴムA Curtain buffer rubber A	2		2 B1	○		5
1K999-175	995	羽根緩衝ゴムB Curtain buffer rubber B	1		2 B1	○		5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
IS020-130	1025	外LCD LCD	1	18991-039-1		○△		5
IS020-136	B1012	上カバーFPC Top cover FPC	1	18991-168 18991-039-1		○△		5
*IS258-016-1 (IS258-016)	1032	AFフォトインタラプタ AF photo interrupter	1			○	F50D(PANORAMA)	5
*IS260-055	1031	LED LED	1	18991-117		○△	F50	5
IS260-071	1038	F内視野外LCD LCD	1			○		5
△ IS700-375	326	絶縁板 Plate	1			○	RP-9481	5
IS700-376	348	SBアップSW基板 Flash up SW plate	1	18991-039-1		○△		5
IS700-381	1028	F-F0 基板 F-F0 base plate	1			○		5
IS705-280	1013	AFフォトインタラプタFPC AF photo interrupter FPC	1			○		5
IS705-286	1006	レンズ接点FPC Lens contact FPC	1			○		5
IS705-287	1007	パノラマFPC Panoram FPC	1			○		5
IS705-289	1009	DXFPC DX FPC	1			○		5
IS758-050	350	ゼブラゴム Rubber	2	18991-039-1		○△		5
IS758-051	374	PS調整用 PS focus button	1	18991-039-1		○△		5
IS758-052	381	PCM用 PCM button	1	18991-039-1		○△		5
IS758-053	385	AE-L用 AE-L button	1	18991-039-1		○△		5
IS999-109	B2005	SQFPC SQ FPC	1			○		5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 数 Q'ty Per Unit	部品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
G1-14018FA	456	Screw	1	18991-117	6 A2	○△		5
G1-14030FB	993	Screw	2		2 A3	○		5
G1-17025FA	464	Screw	2		14-B1 15-B1	○		5
G1-17025FD	465	Screw	12	18991-039-1	3-B2 4-A1 6-A1	○△		5
G1-17030FA	466	Screw	4	18991-057-1	8-B1 8-C2 10-B2	○△		5
G1-17030FB	467	Screw	8	18991-039-1	1-A1 1-B3 4-A1	○△		5
G1-17040FA	961	Screw	2		1 B3	○		5
G1-17040FB	470	Screw	17	18991-039-1	4-A1 4-B2 4-B3	○△		5
G1-17040FD	473	Screw	5		4-B3 12-C3	○		5
△ G1-17040FS	471	Screw	12		5-B2 12-B1 12-B1, C3	○	RP-9534	5
G1-17045FA	474	Screw	8	18991-039-1	7-B3 9-B1 10-A3	○△		5
G1-17050FB	468	Screw	6		7-B2 12-A3	○		5
△ G1-17050FS	472	Screw	4		12-A1 12-B1 12-B2	○	RP-9534	5
G1-17060FS	476	Screw	2		13-A3 13-B3	○		5
G1-17080FS	475	Screw	2		13 A3	○		5
G1-20025FD	479	Screw	1		8 D3	○		5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
G1-20050FB	478	Screw	3		12 D3	○		5
G1-20080FA	480	Screw	1		12 D3	○		5
G2-17020FA	243	Screw	2		1-B1 14-B1	○		5
G2-17025FA	487	Screw	3	1B991-039-1	11 B2	○△		5
G2-17040FA	488	Screw	3		3-A3 5-B2	○		5
H1-17025FB	226	Screw	1		1 A1	○		5
H1-17030FB	952	Screw	3		1 A2	○		5
H1-17035FB	494	Screw	2		12 C2	○		5
H1-17065FA	495	Screw	1		11 A3	○		5
H1-20065FB	499	Screw	2		12 B2	○		5
H2-20045FA	503	Screw	6		8-B1 8-C1	○		5
S1-01200SX	514	E-ring	2		8 D2	○		5
S1-01500SX	515	E-ring	1	1B991-039-1	10 A3	○△		5

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部組番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs Per Unit	大部組品番号 Main assembly NO.	参照 図番 Fig. No.	備 考 Remarks	要求単位 Q'ty per order
*1B001-785-3 (1B001-785)	B304	リモートコネクター Remoto connector	1		4 B1	F801S	5
1B002-099	B194	横レバー Side lever	1		5 B1		5
1B060-586	42	巻上げモーター Advance motor	1		8 A2		1
1B060-587	B332	S B 発光部 Flash unit	1	1B991-039-1	10 B1		1
1B100-696	B2231	ミラー部組 Mirror unit	1		1 B1		1
1B150-069	B31	ミラーBOX組 Mirror BOX unit	1		1 A1		1
1B240-122	B354	C/D ブラシ C/D brash	1	1B991-039-1	11 A3		1
1B240-123	B382	リリースSW Release SW	1	1B991-039-1	11 A3		1
1B240-130	B145	DX 接点バネ A DX contact spring A	1		8 D1		5
1B240-131	B146	DX 接点バネ B DX contact spring B	1		8 C1		5
1B400-088	B61	底基板 Bottom base plate	1		8 D3		1
1B610-130	B303	レンズ接点FPC Lens contact FPC	1		4 B3		1
1B640-059	B312	連動環 Coupling ring	1		5 A3		1
*1B990-331-1 (1B990-331)	B355	C/D クリック板 C/D click plate	1	1B991-039-1	11 A3	F601	1
*1B990-800	B342	シューモールド Shoe mold	1	1B991-039-1	10 A2	F50	1
*1B990-941	B141	裏蓋開閉キー Back unit open/close key	1		12 D1	F50	1

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部組番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs Per Unit	大部組品番号 Main assembly NO.	参照 図番 Fig. No.	備 考 Remarks	要求単位 Q'ty per order
*1B990-973	B413	圧板 Pressure plate	1		14 B3	F50	1
1B991-039-1	B2023	上カバー Top cover unit	1		12 B1		1
FAA30151 1B991-041-1		上カバー(N70) Top cover unit (N70)	1		12 B1		1
1B991-043	B26	グリップ前カバー Grip front cover	1		13 B2		1
1B991-045	B43	巻上げFギヤ Advance F gear	1		8 B3		1
1B991-046	B65	フックプリー Fork pulley	1		8 D2		1
1B991-048-1	B130	スプールローラー基板 Spool roller base plate	1		8 A1		1
1B991-051	B151	電池蓋 Battery lid	1		13 A3		5
1B991-053	B158	電池接点マイナス Battery contact unit (-)	1		9 B1		5
1B991-054	B159	電池接点プラス Battery contact unit (+)	1		9 B2		5
1B991-063	B417	ローラー基板 Roller base plate	1		14 A3		1
1B991-067	B2008	給送FPC Film advance FPC	1		9 A1		1
1B991-068	B2011	上カバーFPC Top cover unit FPC	1	1B991-039-1	11 B1		1
1B991-071	B2053	遊星ギヤアーム Planetary gear arm	1		8 A3		1
△ 1B991-106	B2161	AFセンサー組 AF sensor unit	1		7 B3	94F-2056 RP-9576	1
△ 1B991-106-1							
△ 1B991-117	B4002	プリズムBOX FPC Prism BOX FPC	1		6 A2	94F-2056 RP-9576	1
△ 1B991-117-1							

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部組番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs Per Unit	大部組品番号 Main assembly NO.	参照 図番 Fig. No.	備 考 Remarks	要求単位 Q'ty per order
1B991-120	B170	AFモーター AF motor	1		3 A2		1
△ 1B991-121	BG15	TTLレンズFPC	1		3	94F-2056 RP-9576	1
△ 1B991-121-1		TTL lens FPC			B1		
1B991-124	B29	巻戻し側基板 Leatherette(rewind side)	1		13 B1		1
△ 1B991-158	B1001	メインFPC	1		7	94F-2056 RP-9576	1
△ 1B991-158-1		Main FPC			A1		
1B999-711	B228	ミラー基板A Mirror base plate A	1		1 A1		1
1B999-712	B241	ミラー基板B Mirror base plate B	1		1 B1		1
1B999-714	B956	反転SW接片A Turn SW contact A	1		1 B2		1
1B999-715	B957	反転SW接片B Turn SW contact B	1		1 B2		1
1B999-716	B3901	S上地板 S upper film advance plate	1		1 A3		1
1B999-717	B945	モールド基板 Mold base plate	1		1 A3		1
1B999-718	B2251	絞り基板 Aperture base plate	1		1 B3		1
1B999-719	B2980	先幕 Opening curtain	1		2 B2		5
1B999-720	B2970	後幕 Closing curtain	1		2 A2		5
1B999-721	B281	プリズムBOX組 Prism BOX unit	1		6 B2		1

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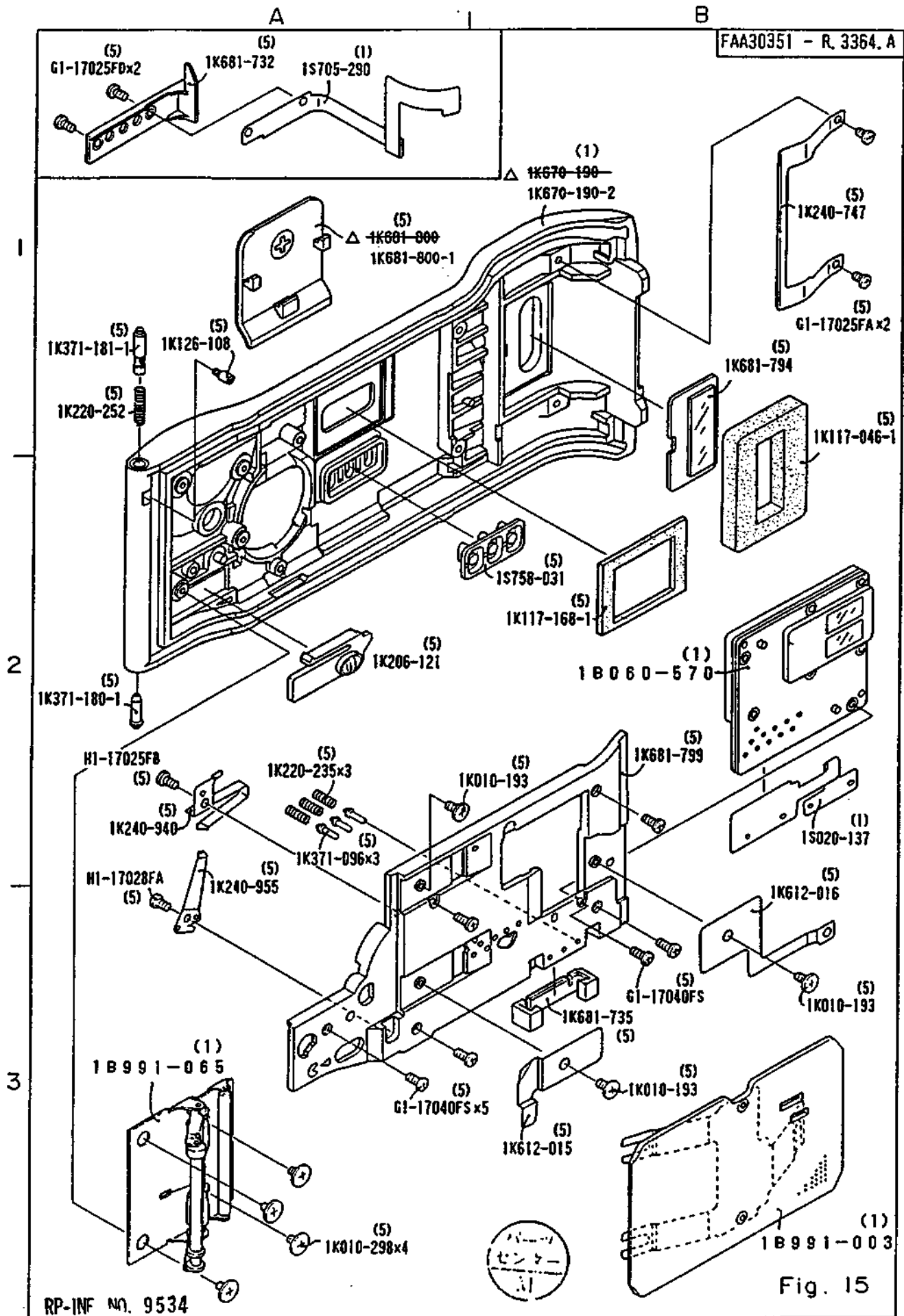


Fig. 15

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Pcs. Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Term of Delivery	備 考 Remarks	要求単位 Q'ty per order
*1K010-193	818	圧板止めビス Pressure plate screw	8			○	MF-20	5
1K010-293	209	パノラマ遮光板止めビス Panorama light baffle plate screw	1			○		5
△ 1K010-306	211	Screw	1			○	RP-9508	5
△ *H1-14050FA								
1K083-242	210	パノラマシール Panorama seal	1			○		5
*1K117-168-1 (1K117-168)	822	LCDモルト LCD sponge	1			○	F50D	5
1K206-120	202	パノラマ切替えレバー Panorama change lever	1			○		5
1K206-121	833	電池蓋止め部材	1			○		5
*1K220-235	828	接点ピンバネ Spring contact pin	3			○	F50D	5
*1K240-940	824	接点バネ (プラス側) Contact pin(+)	1			○	F50D	5
*1K240-955	823	接点バネ (マイナス側) Contact pin(-)	1			○	F50D(PANORAMA)	5
1K240-997	204	パノラマ切替え接片 Panorama change contact unit	1			○		5
1K240-998	205	パノラマ切替えクリック板 Panorama change click plate	1			○		5
*1K371-096	827	接点ピン Contact pin	3			○	F50D	5
1K601-328	206	パノラマ遮光板A Panorama light baffle plate A	1			○		5
1K601-329	207	パノラマ遮光板B Panorama light baffle plate B	1			○		5
1K612-015	834	静電気導通板A Conductive A	1			○		5

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
1G950-082	G3	パノラマフレネル Panoram fresnel lens	1		6 B3	○		1
1S020-137	B8101	DBモジュールFPC DB module FPC	1		15 B2	○		1
1S705-290	1010	DBFPC DB FPC	1		15 A1	○		1
*1S758-031	826	導電ゴム Rubber	1		15 B2	○	P50D	5
G1-17025FD	465	Screw	13		15 A1	○		5
G1-17040FS	841	Screw	6		15-A3 15-B3	○		5
H1-17025FB	842	Screw	1		15 A2	○		5
H1-17028FA	843	Screw	1		15 A2	○		5

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