

# **Nikon F-501**

ニコン F-501

## **REPAIR MANUAL**

修理指針



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Tokyo, Japan

SPECIFICATIONS & MECHANISM

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## [ 1 ] SPECIFICATIONS

Nikon F-501 [N2020 for U.S.A. and Canada, Order No. is FAA20151]

## 1. Outline

The F-501 indicates the direction in which single-lens reflex camera will be advanced in the future.

It is provided a lot of functions well-balancedly such as multi program auto exposure mode, DX-code system, easy loading system etc.

This camera can be used with almost all lenses i.e. new AF lens, AF lens for the F3, AI-S Nikkor lens, AI Nikkor lens and E-series lens.

When a new AF lens is attached to the camera, the motor in the camera operates the focusing function of the lens. And the informations of the CPU in the lens can be transmitted to the camera via the contact of the mount.

## 2. Features

- 1) Autofocus detecting system by the phase contrast detecting
- 2) New AF lens can be focused by the motor in the camera.
- 3) The information from the CPU in the new AF lens is transmitted to the camera.
- 4) Old type AF lens for the F3 can be used with the F-501.
- 5) AF lens can focus either on Continuous Servo mode or on Single Servo mode.
- 6) Motor in the spool automatically advances the film. S mode(single frame shooting) or C mode(continuous shooting) is usable.
- 7) Film automatically advances to the first frame when shutter release button is depressed once.
- 8) Exposure metering system can be selected from Program mode(normal, high-speed and dual), auto mode(aperture priority) and manual mode.
- 9) TTL auto flash control is possible.
- 10) When the exposure metering mode selector is set to program mode, programmed TTL auto flash is possible.
- 11) Film speed can automatically be set when the DX-coded film is used. Manual setting is also possible.
- 12) In the condition of low light intensity, autofocus operates properly with the supporting light of the SB-20.

### 3. Specifications

Type of camera: Refer to the F-301.

Picture size: Refer to the F-301.

Usable film: Refer to the F-301.

Usable lens: 1) New type AF Nikkor lenses  
 2) AF Nikkor lenses for the F3 (The TC-16S cannot be used.)  
 3) AI-type Nikkor lenses (AI, AI-S, E-series lenses)

◦In autofocus shooting, all the lenses of 1) and 2) can be used and the lenses of 3) whose F number is smaller than 2.8 can be used with the TC-16AS.

◦In focus aid shooting, all the lenses of 1), 2) and 3) whose F number is smaller than 4.5 can be used.  
 (Some lenses modified to AI-type can be used.)

Standard lens: New AF Nikkor 50mm F2.8S or New AF zoom Nikkor 35 - 70mm F3.3 - 4.5S lens.

Maximum aperture index: Refer to the F-301.

Shutter: Refer to the F-301.

Lens mount: Refer to the F-301.

Exposure control mode: Dual programmed mode(PDUAL) is made in addition to the modes which the F-301 has.

On PDUAL mode, normal program is used with the lens whose focal length is shorter than 135mm, and high speed program is used with the lens whose focal length is 135mm or longer.

On PDUAL mode, normal or high speed program can automatically be selected because the camera body detects the focal length signal output from the lens.

Electronic circuit: 1) M50753P.....MCU  
 2) M51004P.....Head amplifier  
 3) M51046P.....Indicator and decoder IC  
 4) M51049P.....AF motor driving IC  
 5) HSM12N.....CCD sensor module  
 6) HIM21.....Interface module

1) and 2) are used also in the F-301.

Autofocus detecting system: The distance from the camera to the subject is detected through the lens in the phase contrast detecting method by custom TCL. Sensor module is in the conjugate position to the film plane. Electric charge from 46 CCD in HSM is A/D-converted at interface module(HIM) and transmitted to CPU. CPU computes the data and decides the defocus amount.



Travelling of AF lens: New AF lens is focused by the AF motor in the camera via coupling of the mount.

Old type AF lens is focused by the motor in itself with the signal transmitted from the camera via AF contact on the mount.

Focusing of the AF lens operates while the power hold switch is on.

Lens for focus detection: The lens whose F number is smaller than 4.5.

°Components of TCL is laid in two rows.

One is F2.8 detector( for the lens whose F number is 2.8 or smaller) and the othre is F4.5 detector ( for the other lens).

Brightness for focus detection:

In operating F2.8 detector — Approx. EV4.0 or brighter

In operating F4.5 detector — Approx. EV5.0 or brighter

Autofocus lock: 1) When the new AF lens is attached, AFL(autofocus lock) button on the camera is used.

2) When the old type AF lens is attached, AFL button on the lens as well as on the camera can be used.

\* While AFL button is pressed, servo does not function.

Focusing range:  $\pm 100\mu$  (In operating F2.8 detector)

$\pm 150\mu$  (In operating F4.5 detector)

The detector controls the lens travelling so that the subject will be in this range.

But once the subject is in this range, servo does not function again till the predictor defocus outside  $150\mu$  is detected.

Autofocus flash photography: In case that the user takes photographs in the low light condition, SB-20's AF illuminator makes it possible to take AF photography.

Exposure metering: Refer to the F-301.

Metering range: Refer to the F-301.

Exposure meter: Refer to the F-301.

Audible warning: Refer to the F-301.

Power source: 1) Four AA-type batteries

2) Four AAA-type batteries can be used with optional Nikon battery holder MB-4.

Power hold switch: Power hold switch is turned on when the shutter release button is depressed halfway; stays switched on for 8 sec after lifting finger from the button.

Shutter release: Refer to the F-301.

Battery consumption: When the power hold switch is on: Approx. 60mA  
When AF lens is travelling: Apporx. 300mA

Battery check: In normal condition, the power hold switch remains on for apporx. 8 sec.

Film speed setting: Refer to the F-301.

Exposure compensation: Refer to the F-301.

Film loading: Refer to the F-301.

Frame counter: Refer to the F-301.

Self-timer: Refer to the F-301.

Servo system: With the new AF lens used, the output from the digital encoder in the camera is compared with the predictor defocus amount computed by CPU. With old type AF lens used, the output from the digital encoder in the lens is compared with the predictor defocus amount computed by CPU.

This stops focusing.

When the lens comes near the focusing point, duty proportion is changed and the rotating speed of the motor slows down by the pulse.

When the lens arrives at the focusing point, the motor is stopped by the short brake.

Focus mode: Three modes can be selected by the focus mode selector.

1) Continuous servo autofocus (C)

On this mode, AF lens travels continuously following the movement of the subject.

When the power hold switch is turned on, the lens starts to travel. When the shutter release button is depressed to the end, the shutter can be released even if the lens has not focused.

2) Single servo autofocus

Once focused, focus is locked as long as the power hold switch is on.

Shutter release is not possible until the focusing is complete.

3) Manual focus

The user must focus manually according to the indicator in the viewfinder.

With the old type AF lens used, continuous servo autofocus functions when the A-M switch is set to 'A', and manual focus functions when the A-M switch is set to 'M'.

\* With the non-AF lens used, the focus indicator LEDs functions regardless of the mode of the focus mode selector.

AF contacts: Signals are transmitted between the camera and the lens via AF contacts on the upper side of the mount. Function of the each contact is decided depending on the lens attached to the camera body (new or old type AF lens).

| Contact               | A    | B       | C          | D          | E    | F  | G   |
|-----------------------|------|---------|------------|------------|------|----|-----|
| With new AF lens used | Vcc1 | R/W1    | CLK        | SI/SO      | R/W2 | -  | GND |
| With old AF lens used | Vcc2 | Limiter | Focusing 1 | Focusing 2 | -    | X' | GND |

\* GND of the old AF lens is used as  $\ominus$  terminal of the motor driving circuit, and GND of the signal system is the mount.

The contacts A, B, C, D, E, F and G are arranged from the left.

Firing rate: When the film-advance mode selector is set to 'C' with the fresh batteries set at 20°C, the average firing rate from the first frame to the 24th frame is as follows;

- 1) On continuous servo autofocus mode: 1.7 frame/sec
  - With focus lock: 2.5 frame/sec
  - With exposure lock: 1.4 frame/sec
  - With focus and exposure lock: 20 frame/sec
- 2) On single servo autofocus mode: Not fixed (depends on the subject status)
- 3) On manual focus mode: 2.5 frame/sec (with the non-AF lens)  
1.7 frame/sec (with the AF lens)

Accessory shoe: Refer to the F-301.

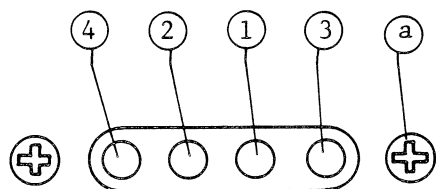
Flash synchronization: Refer to the F-301.

Auto exposure lock: Refer to the F-301.

Tipod socket: Refer to the F-301.

Sequence error warning: Refer to the F-301.

Data back contact: Four contacts are provided.



- ① Power hold/release signal contact
- ② Imprint signal contact
- ③ GND contact
- ④ Focusing signal contact

MF-19 detects the height of screw ① and makes autofocus function.

Remote terminal: Refer to the F-301.

Viewfinder: 1) Focusing screen

Standard equipment: Type B(overall matte surface)

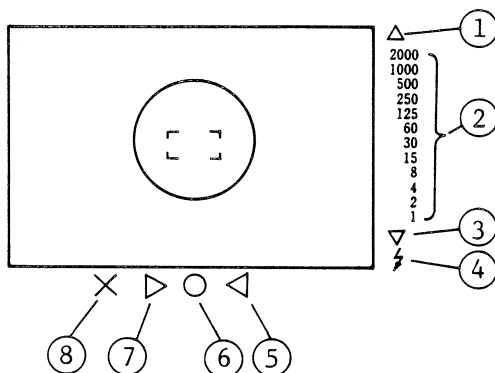
Interchangeable equipment: Type E(with a grid pattern)  
Type J(with a microprism)

Each of three focusing screens has focusing brackets.

2) Quick return mirror

Half mirror

Transmission: Approx. 35%



- ① - ④ are same as the F-301.
- ⑤ - ⑧ are focusing indicator LEDs.
- ⑤ Focus-to-left arrow  
(for too near subject)
- ⑥ In-focus indicator
- ⑦ Focus-to-right arrow  
(for too distant subject)
- ⑧ Focus-not-possible warning

Film-advance LED: Refer to the F-301.

Dimensions: 148.5 x 101.5 x 54.5 (With AA-type batteries)  
(W x H x D)

Weight: Approx. 625g (without batteries)



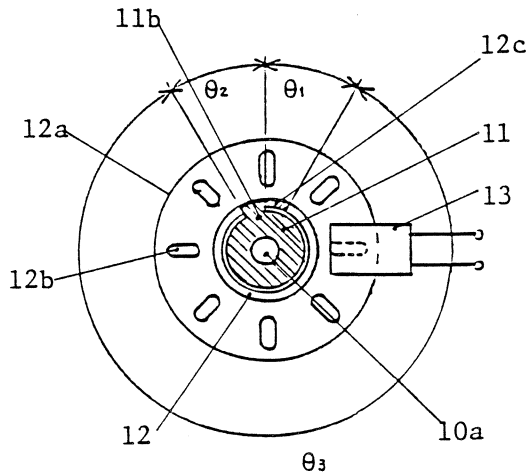


Fig. 3

#12 is relative distance signal plate and it has slits #12b in a radial shape on the plate #12a. The encoder, which has univocal relation with the movement of the optical focusing unit, consists of this slits and the photo interrupter.

The relative distance signal plate #12 is engaged with the inner circle portion #11a of the first gear #11 and the motor shaft, and it is able to rotate by itself irrelevantly to the motor shaft or the first gear.

But the convex portion #12c on the relative distance signal plate #12 will be hanged on the convex portion #11b on the inner circle of the first gear. So, the angle in which the relative distance signal plate can rotate irrelevantly to the backlash from the motor gear unit.

Since the relative distance signal plate #12 is supported by the plate spring #14 and given light pressure, it can rotate with the push of the convex portion but does not rotate by itself.

In the above-mentioned driving organization, focusing is controlled as follows. The motor is drive by the focusing condition detecting system and the calculation circuit in accordance with the data of defocus amount and its direction which is necessary for focusing. Moving amount of the optical focusing unit by motor driving is counted with pulse number of the encoder and the optical focusing unit moves in the amount estimated initially.

After moving of the optical focusing unit, the distance from the subject is detected again. If the focusing is not available, the optical focusing unit continues to move.

#### M mode

When the focus mode selector #4 is set to M, the lever #5a revolves to the left running up on the exchanging lever cam and makes the lever #6 revolve to the right.

On the other end of the focus mode selector #4, AF A/M switch is set. When the switch is off, motor can not be driven.

At the same time, with the revolution of the lever #6, the coupling sinks from the bayonet face. So the connection of the coupling with the lens is canceled and manual focusing is possible.

#### C mode

When the focus mode selector #4 is set to C, the lever #5a revolves to the right.

The lever #6 revolves to the left by the spring #7 with the revolution of the lever #5a and the coupling knocks against the lens.

Aligning operation of the coupling is generated by the pressure of the spring and the driving force is transmitted effectively.

In this case, AF A/M changeover sw is on, One shot sw is off and continuous servo autofocus is possible.

#### S mode

When the focus mode selector #4 is set to S as well as C, the coupling is connected with the lens. One shot sw is turned off with the convex portion on the focus mode selector and sigle servo autofocus mode is selected.

DISASSEMBLING & ASSEMBLING & ADJUSTMENT & EXPLOSION DRAWINGS

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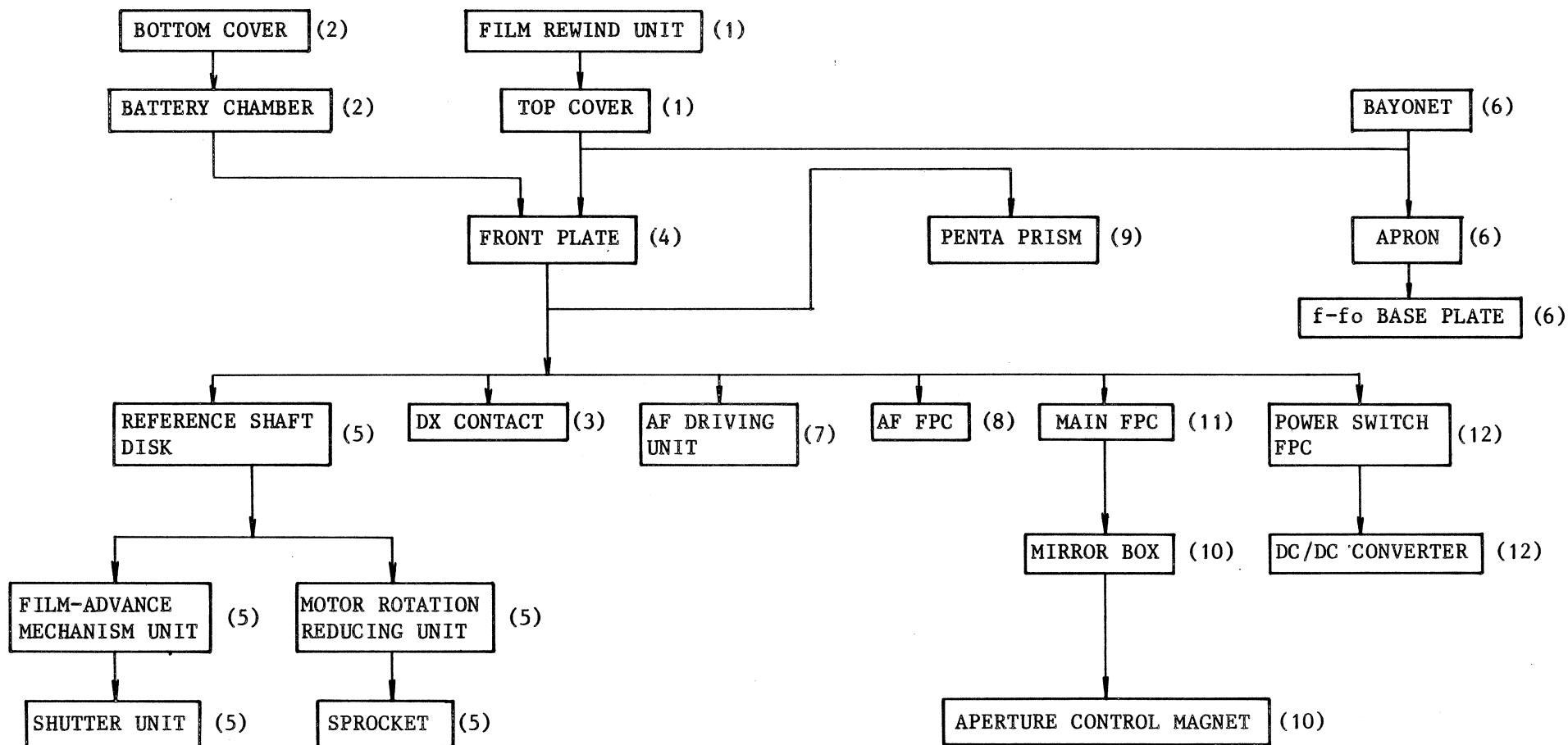
## [2] ASSEMBLING &amp; ADJUSTMENTS &amp; EXPLOSION DRAWINGS

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Note) Please refer to the notice in the development elevation  
for Assembly & Adjustments in the F-301 repair manual.

# 1. DISASSEMBLING OUTLINE

Note: Numbers in parentheses refer to disassembling procedures.

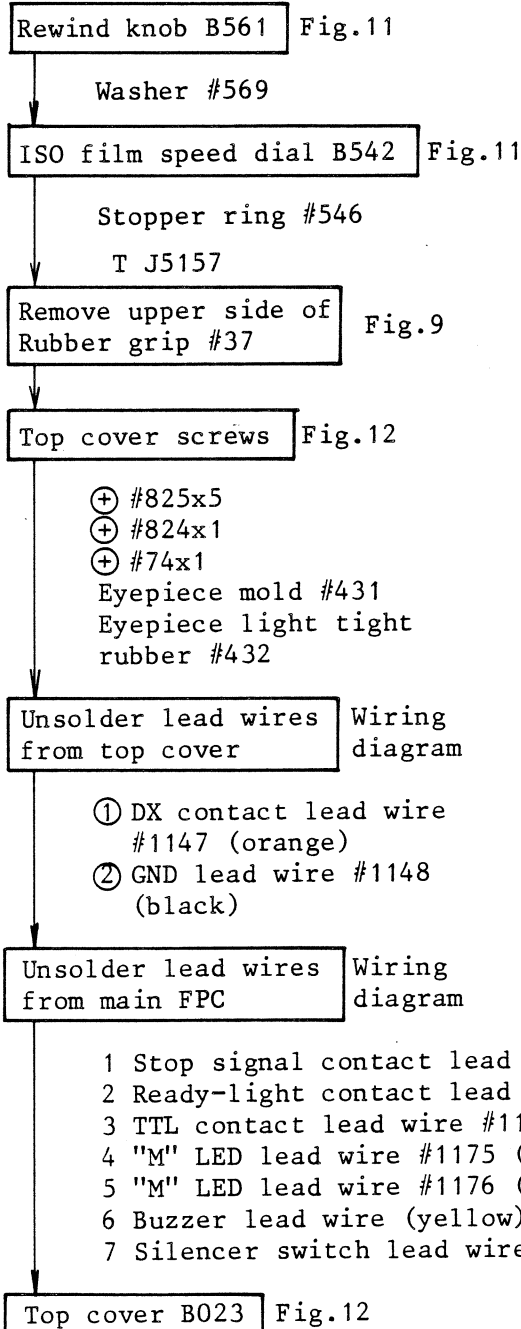




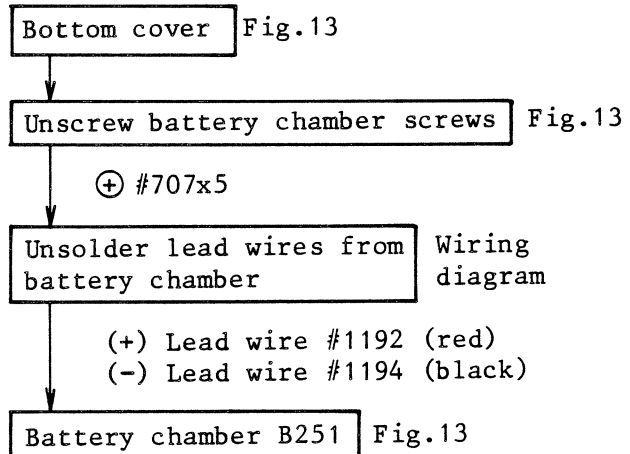
## 2. DISASSEMBLING PROCEDURES

- Note: 1) Disassembling should be started after batteries are removed.
- 2) Figure numbers refer to figures in reassembling procedures.
- 3) Be sure to learn how the lead wires are arranged.
- 4) As ICs are easily affected by static electricity, be sure to ground the camera when soldering or handling.

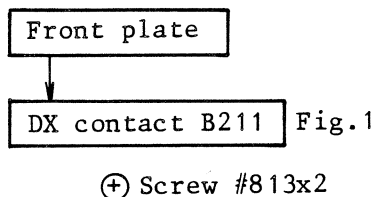
## (1) Top cover



## (2) Bottom cover



## (3) DX contact



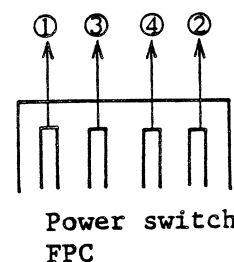
## (4) Front plate

Unsolder lead wires from main FPC      Wiring diagram

|                              |                                          |
|------------------------------|------------------------------------------|
| 1 DX lead wire #1162 (black) | 7 Shutter lead wire (ATO) #1145 (yellow) |
| 2 -ditto- #1167 (pink)       | 8 -ditto- (GND) #1142 (black)            |
| 3 -ditto- #1166 (green)      | 9 -ditto- (IS) #1146 (purple)            |
| 4 -ditto- #1165 (brown)      | 10 -ditto- (1st Mg) #1143 (gray)         |
| 5 -ditto- #1164 (orange)     | 11 -ditto- (V Bat) #1141 (red)           |
| 6 -ditto- #1163 (blue)       | 12 -ditto- (2nd Mg) #1144 (green)        |

Unsolder lead wires from power switch FPC      Wiring diagram

- 1 Motor lead wire (red)
- 2 -ditto- (blue)
- 3 Power source lead wire #1193 (black)
- 4 -ditto- #1191 (red)



Unsolder four lead wires from power switch FPC and data back FPC      Wiring diagram

ISO dial lock button B549      Fig.11

- ⊕ Screw #556x2
- ISO film speed dial B542
- \* Put aside ISO base plate from the rewind shaft retainer

Reatherette      Fig.9

- Grip rubber #37
- Front cover rubber A #38
- Front rubber cover B #39

Unscrew screws of film-advance lever unit      Fig.10

- ⊕ Screw #819x1
- ⊕ Screw #818x1
- ⊕ Screw #702x1

Put Sprocket shaft #62 downward      Fig.3

Lift Film-advance lever unit B121 up      Fig.10

S/C lever plate #949      Fig.4

- ⊖ S/C screw #951
- S/C lever #948

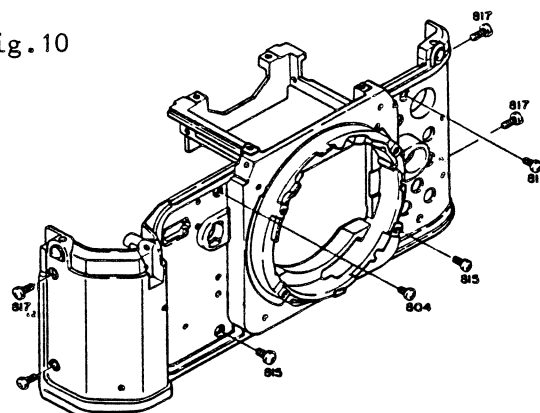
S/C lever name plate #950      Fig.4



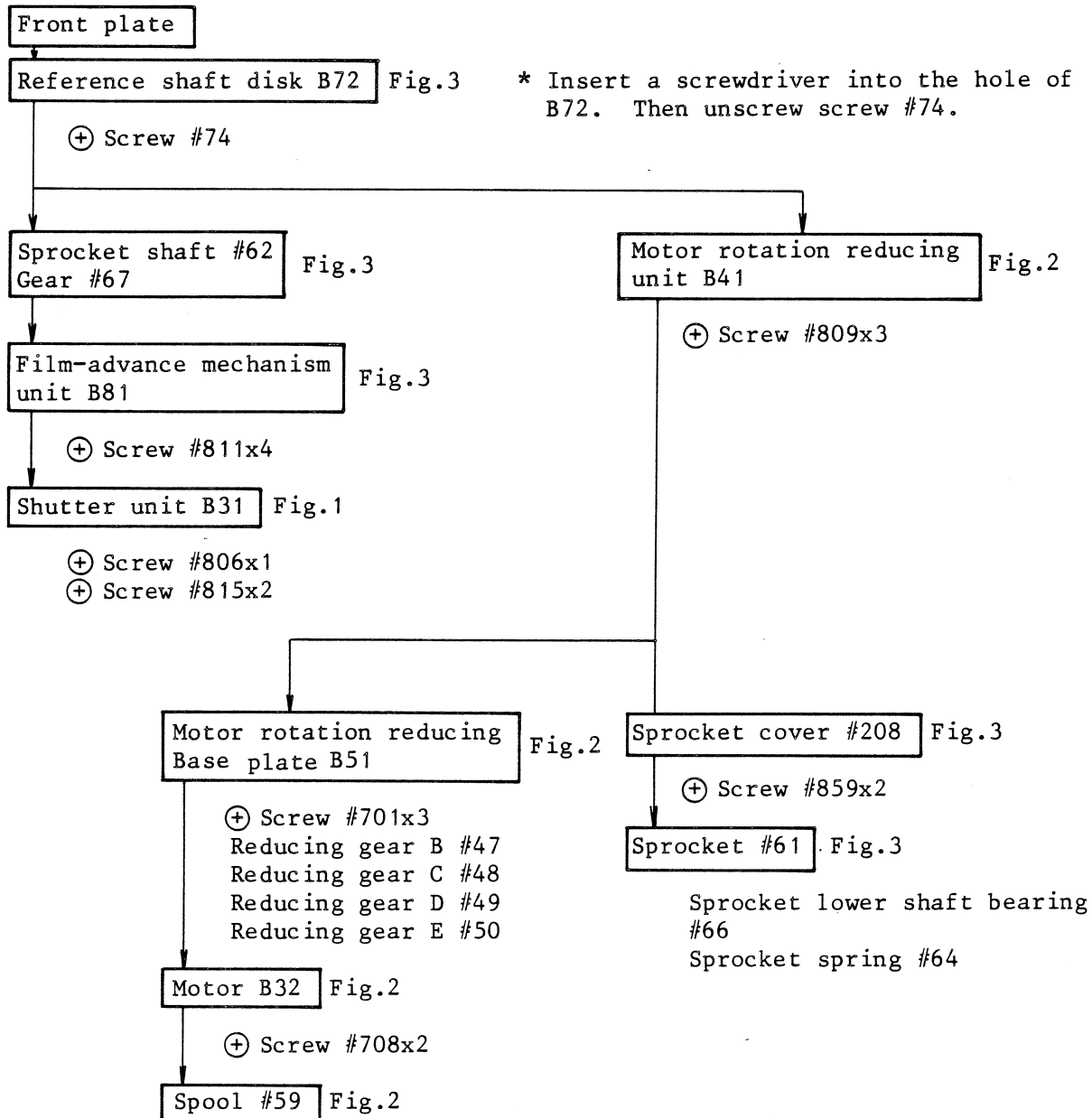
Unscrew screws of front plate      Fig.9

- ⊕ Screw #817x4
- ⊕ Screw #815x3
- ⊕ Screw #804x1

Front plate



## (5) Shutter/Film-advance mechanism unit/Motor rotation mechanism unit



## (6) Apron/f-fo base plate

Bayonet screw #473 Fig.4

- ⊕ Screw #473x4
- ⊕ Screw #475x1
- Bayonet ring #471
- Bayonet spring #472
- EE lens pin #501
- EE lens pin spring #502
- E-ring, EE lens pin #755

S/C lever plate #949 Fig.4

- ⊖ Screw #951
- S/C lever #948

Apron #22 Fig.4

- Unfasten ⊕ Screw #945
- ⊕ Screw #836
- Aperture coupling ring B482
- Aperture coupling ring
- Spring roller #485
- AEL button #451
- AFL button #452

Unsolder lead wires from f-fo base plate Wiring diagram

- 1 Lead wire #1157 (orange)
- 2 Lead wire #1158 (blue)
- 3 Lead wire #1156 (brown)

f-fo base plate B1131 Fig.4

- ⊕ Screw #802x2

## (7) AF motor unit

Unsolder lead wires from power switch FPC Wiring diagram

- 1 Photo interrupter lead wire #1181 (red)
- 2 -ditto- #1182 (green)
- 3 -ditto- #1183 (orange)
- 4 -ditto- #1184 (white)
- 5 Lens contact FPC lead wire #1168 (orange)
- 6 -ditto- #1169 (black)
- 7 AF motor lead wire (red)
- 8 -ditto- (blue)

AF motor unit B2901 Fig.5

- ⊕ Screw #712x2
- ⊖ Screw #715x1

## (8) AF FPC

Press-contact of AF FPC Fig.9

- ⊕ Screw #668x2
- Press-contact plate #673
- Press-contact rubber #674

Remove adhesive at mirror box bottom plate Fig.7

AF FPC B1004

- ⊖ Screw #405x3
- Spring #406x3
- ⊕ Screw #820x2

## (9) Pentaprism

Press-contact of main FPC  
and power switch FPC Fig.9

Press-contact plate #662  
Press-contact rubber B #664  
⊕ Screw #860x2

Unsolder lead wires from  
main FPC Wiring  
diagram

- 1 Mirror sw lead wire #1177 (pink)
- 2 f-fo lead wire #1157 (orange)
- 3 Shutter lead wire  
(ATO) #1145 (yellow)
- 4 -ditto- (GND) #1142 (black)
- 5 -ditto- (IS) #1146 (purple)
- 6 -ditto- (1st Mg) #1143 (gray)
- 7 -ditto- (V BAT) #1141 (red)
- 8 -ditto- (2nd Mg) #1144 (green)

Unsolder nine lead wires  
from lens contact FPC Wiring  
diagram

Unsolder six lead wires  
from AF LED Wiring  
diagram

AE SPD base plate retaining  
spring #436 Fig.8

⊕ Screw #710x2

Pentaprism retainer #426 Fig.7

\* Lift main FPC up.

Pentaprism G4 Fig.8

Pentaprism spring #427

## (10) Mirror box/Aperture magnet

Take off fo spring #495

Unscrew mirror box screws Fig.7

- ⊕ Screw #839x2
  - ⊕ Screw #809
  - ⊕ Screw #388
- Mirror actuating lever  
holding plate #321

Mirror holder B331 Fig.7

Mirror down spring #410  
Washer #761

Aperture control lever #327 Fig.7

E ring #754

Unscrew screws of base plate I Fig.7

- ⊕ Screw #813
  - ⊕ Screw #851
- Mirror switch B319

Base plate L B341 Fig.7

Program switch base plate  
B1136 Fig.6

- ⊕ Screw #382
- ⊕ Screw #387

Aperture magnet #355 Fig.6

⊕ Screw #851x2

## (11) Main FPC

Press-contact of main FPC  
and power switch FPC

Fig.9

- ⊕ Screw #860x2
- Press-contact plate #662
- Press-contact rubber B #664

Unsolder lead wires from  
main FPC

Wiring  
diagram

- 1 Mirror sw lead wire #1177 (pink)
- 2 -ditto- #1178 (black)
- 3 Program sw lead wire #1170 (orange)
- 4 Aperture magnet lead wire (blue)
- 5 -ditto- (red)
- 6 EE lens sw lead wire #1153 (blue)
- 7 f-fo base plate lead wire #1157 (orange)
- 8 -ditto- #1158 (blue)
- 9 -ditto- #1156 (brown)
- 10 fo base plate lead wire #1161 (blue)
- 11 -ditto- #1159 (white)
- 12 -ditto- #1160 (orange)
- 13 TTL SPD lead wire #1172 (yellow)
- 14 -ditto- #1171 (brown)
- 15 Fmm sw lead wire #1173 (green)
- 16 -ditto- #1174 (white)
- 17 One shot sw lead wire #1152 (purple)
- 18 AF A/M changeover sw lead wire #1154 (white)
- 19 Pentaprism retaining plate #426

Unsolder nine lead wires from  
lens contact FPC

Wiring  
diagram

Unsolder six lead wires from  
AF LED

Wiring  
diagram

AE SPD base plate retaining  
spring #436

Fig.8

- ⊕ Screw #710x2

Unsolder lead wires from  
remote terminal

Wiring  
diagram

Press-contact AF FPC

Fig.9

- ⊕ Screw #668x2
- AF FPC press-contact rubber #764
- AF FPC press-contact plate #673

Unscrew main FPC screws of  
rewind side

Fig.9

- ⊕ Screw #820x1
- ⊕ Screw #839x2

Press-contact of AE LED

Fig.9

- AE LED press-contact spring #686
- AE LED press-contact mold #684
- AE LED press-contact rubber #685

Main FPC B1001

Fig.9



## (9) Power switch FPC/DC/DC converter

Press-contacts of main FPC and power switch FPC Fig.9

- ⊕ Screw #860x2
- Press-contact plate #662
- Press-contact rubber B #664

Unsolder five contacts of DC/DC converter Wiring diagram

Unsolder lead wires Wiring diagram

- 1 Photo interrupter lead wire #1181 (red)
- 2 -ditto- #1182 (green)
- 3 -ditto- #1183 (orange)
- 4 -ditto- #1184 (white)
- 5 Lens contact FPC lead wire #1168 (orange)
- 6 -ditto- #1169 (black)
- 7 AF motor lead wire (red)
- 8 -ditto- (blue)

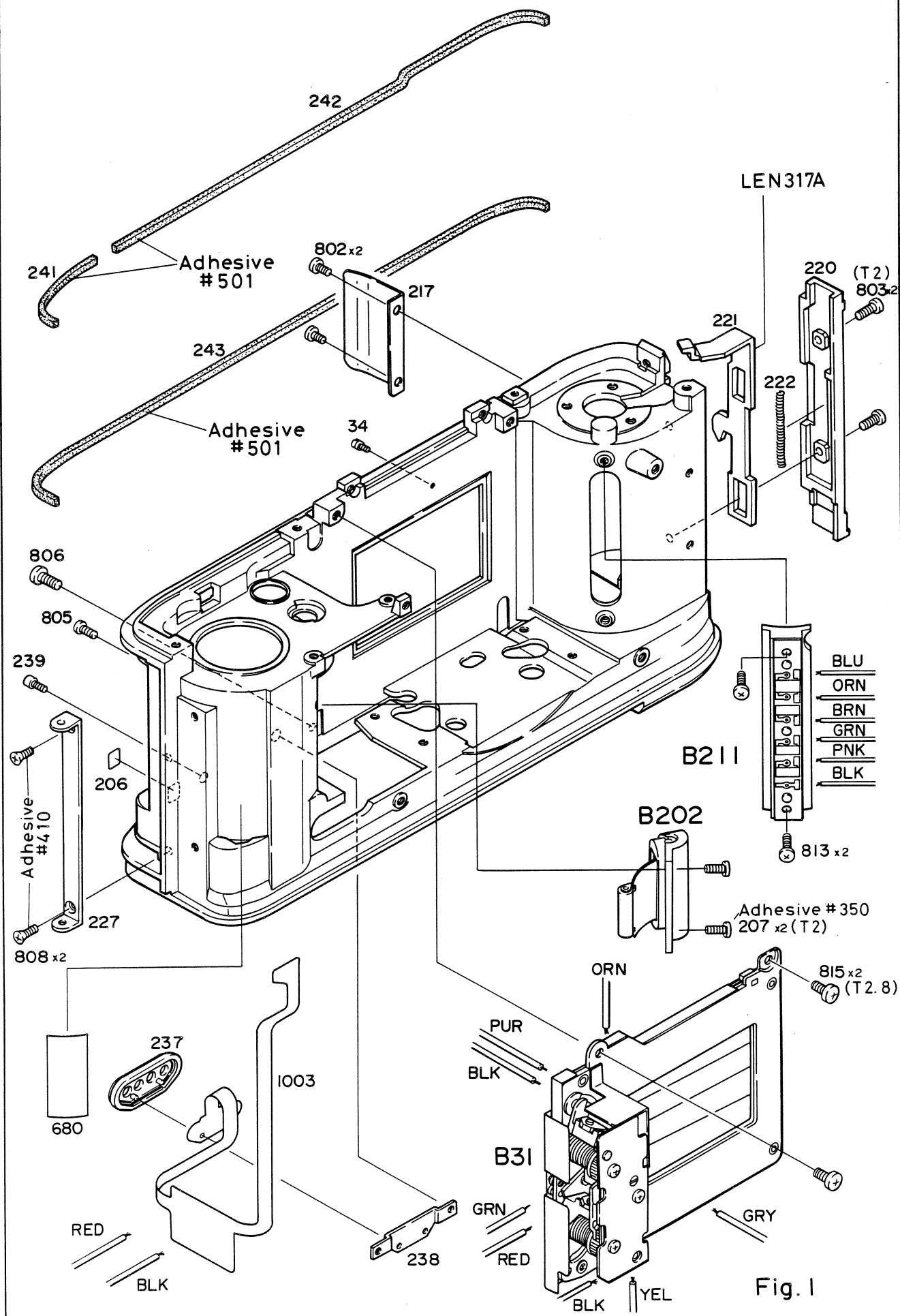
Unscrew power switch FPC screws Fig.10

- ⊕ Screw #820x3

Power switch FPC B4002 Fig.10

DC/DC converter B1021 Fig.10

- ⊕ Screw #839x2





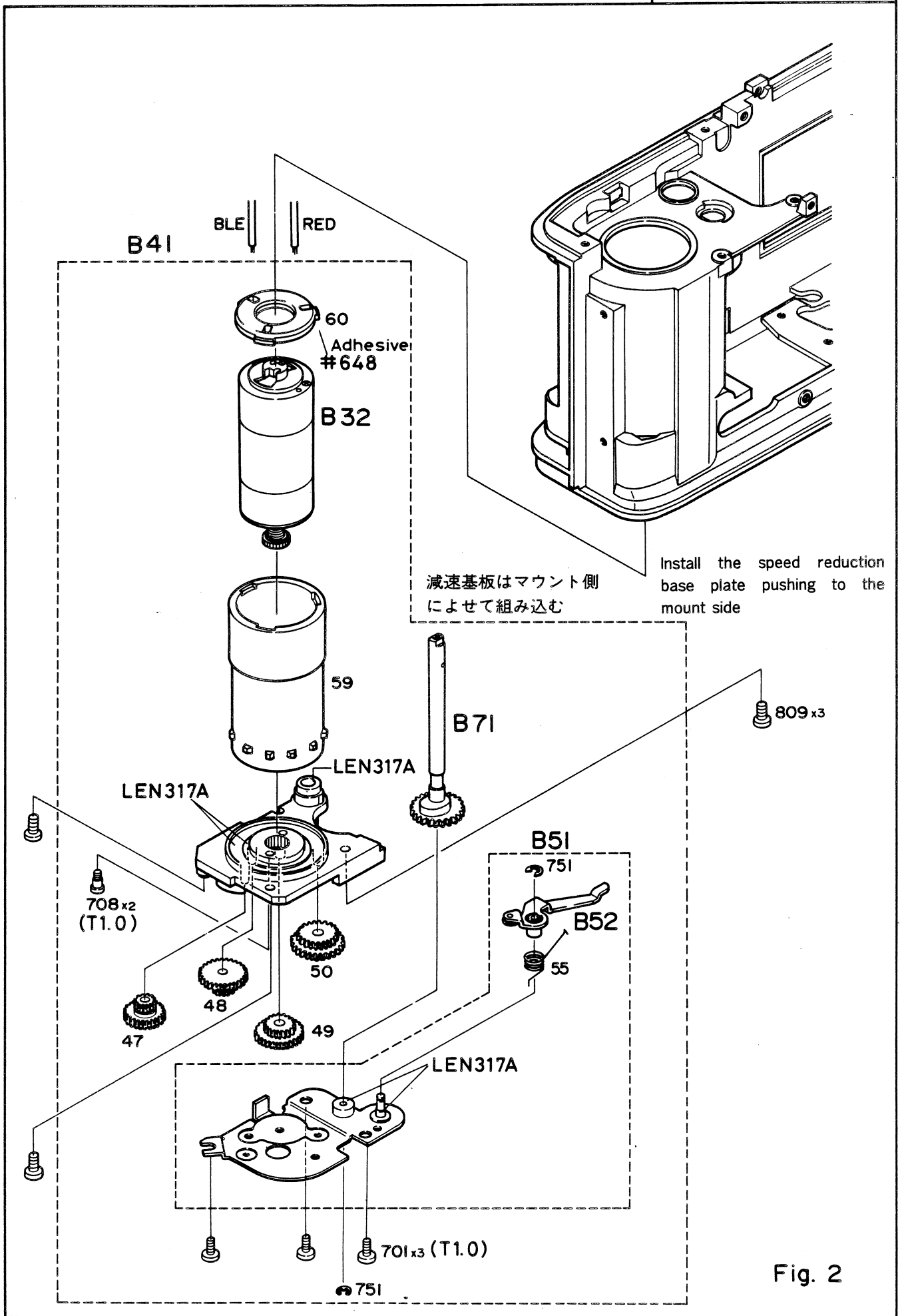


Fig. 2

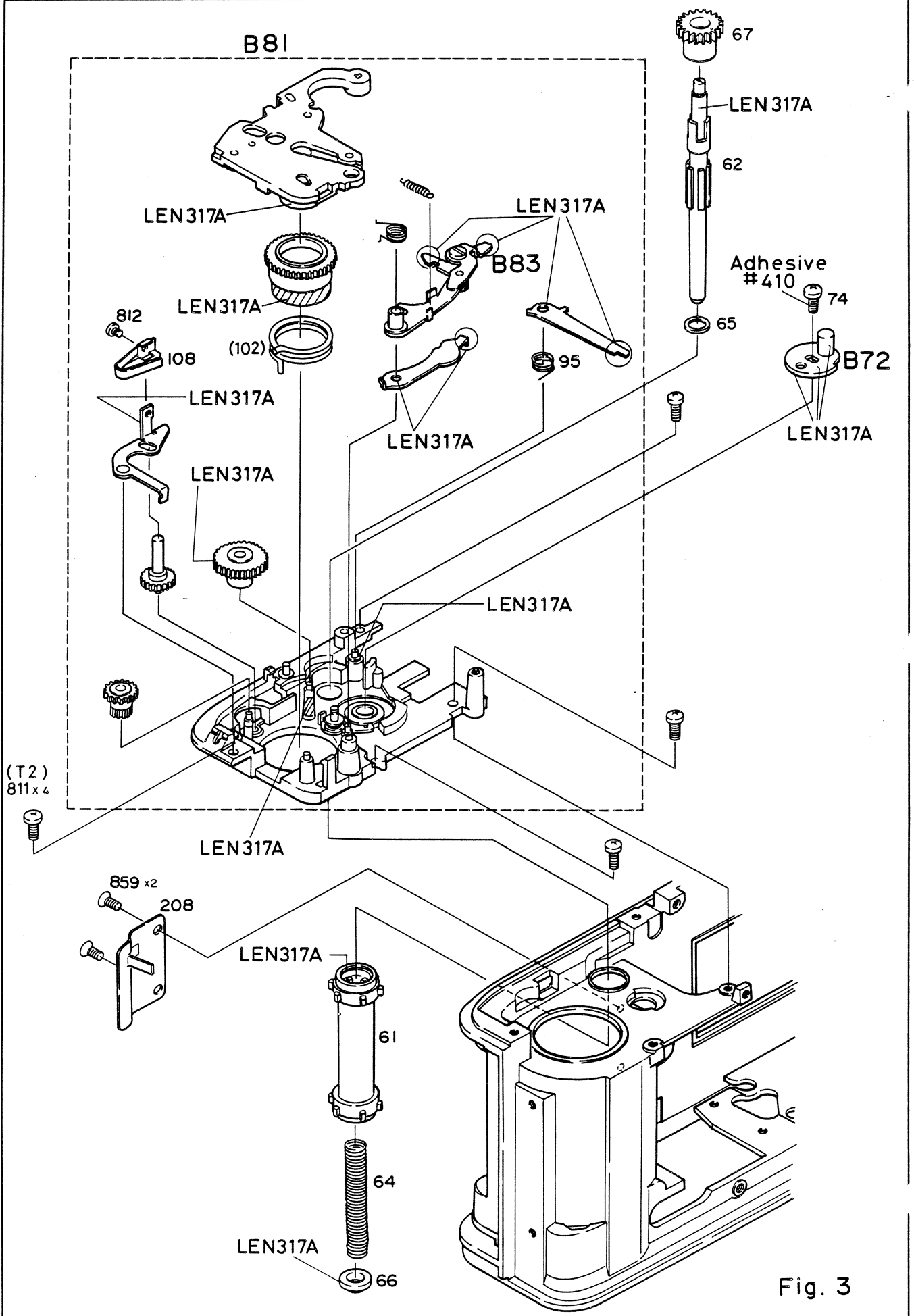
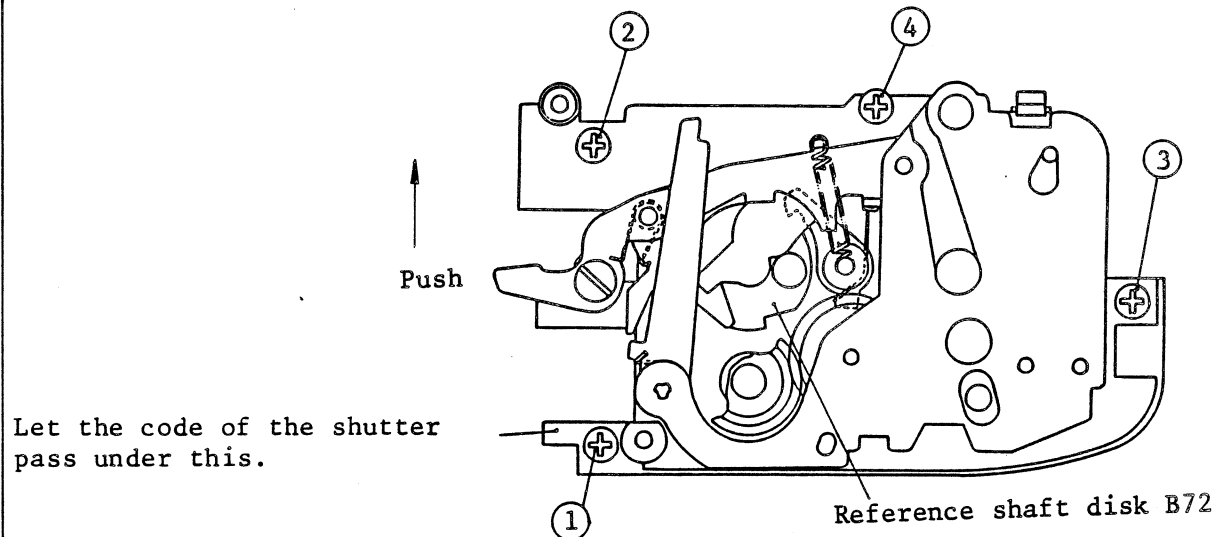


Fig. 3

fig. 3 How to install the film-advance mechanism unit and the reference shaft disk

After installing the film-advance mechanism unit, rotate the spool and fix the spool flection spring to the spool. Then, tighten the screw #811.

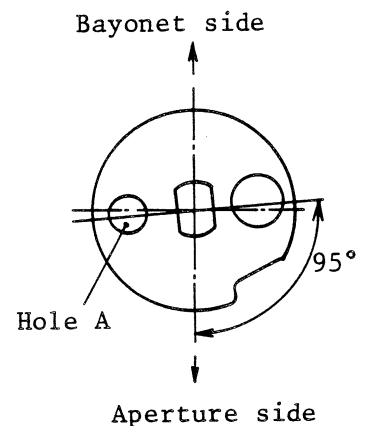


Push the film-advance mechanism unit to the mount side and tighten the screws in the order indicated in fig. 3-1.

Rotate the reference shaft B71 with the manual film-advance tool (J15258). When the charge lever B52 comes to the aperture side, set the reference shaft. (fig. 3-2)

Set the reference shaft and reference shaft disk at the position indicated in fig. 3-2

Apply the adhesive #410B/M to the point of the screw #74. Fix the hole A with the driver and tighten the screw #74.



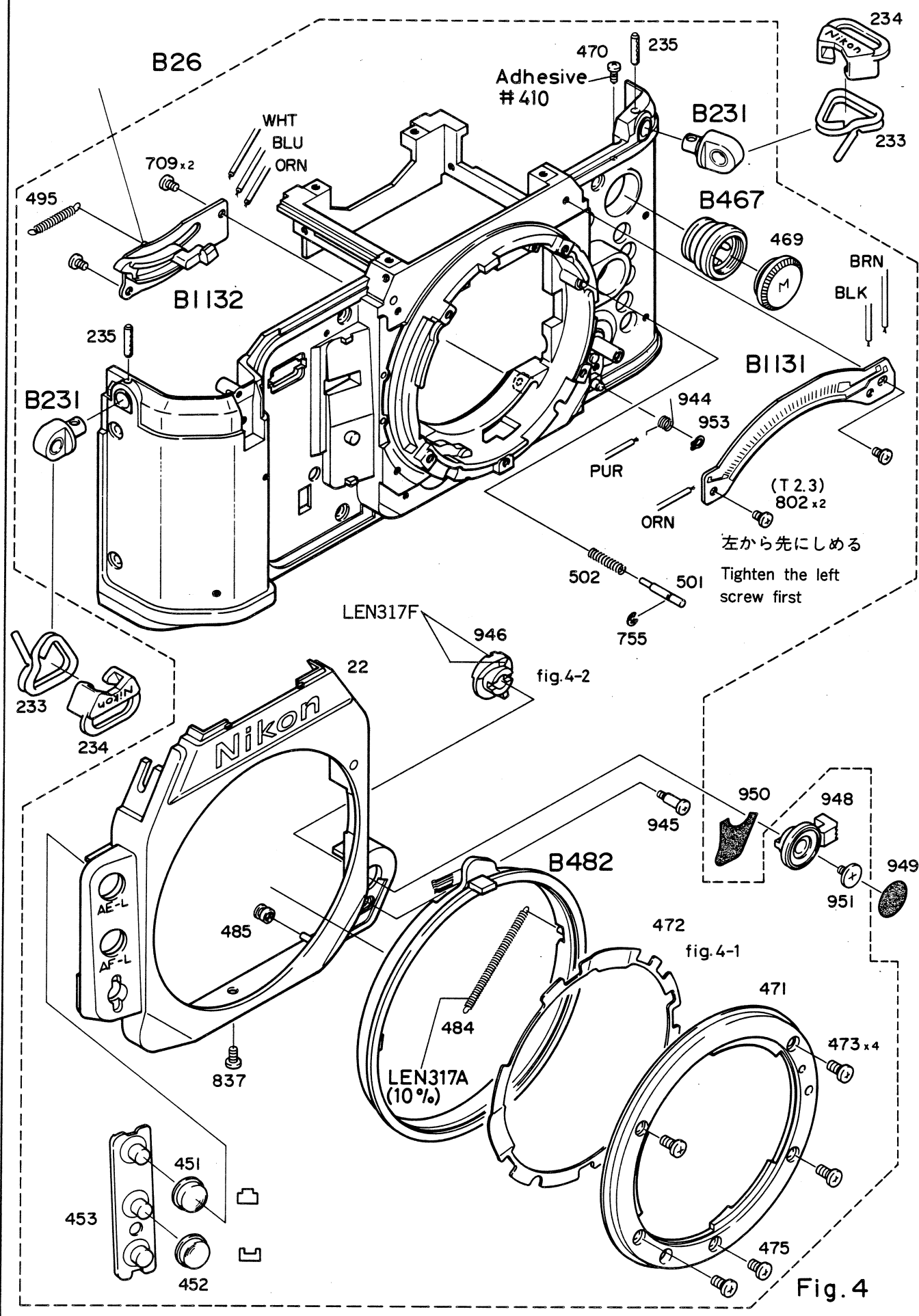


fig. 4-1 Bayonet spring-lubrication

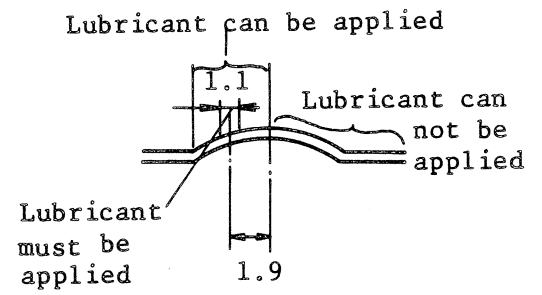
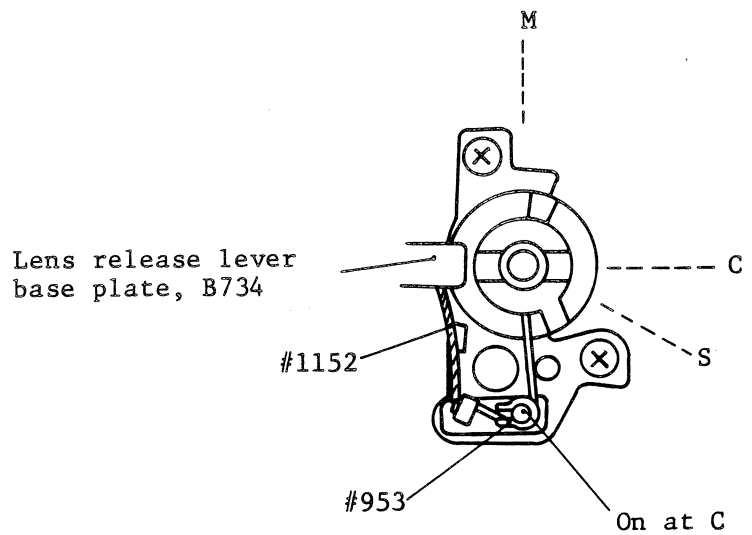


fig. 4-2 S/C exchanging cam



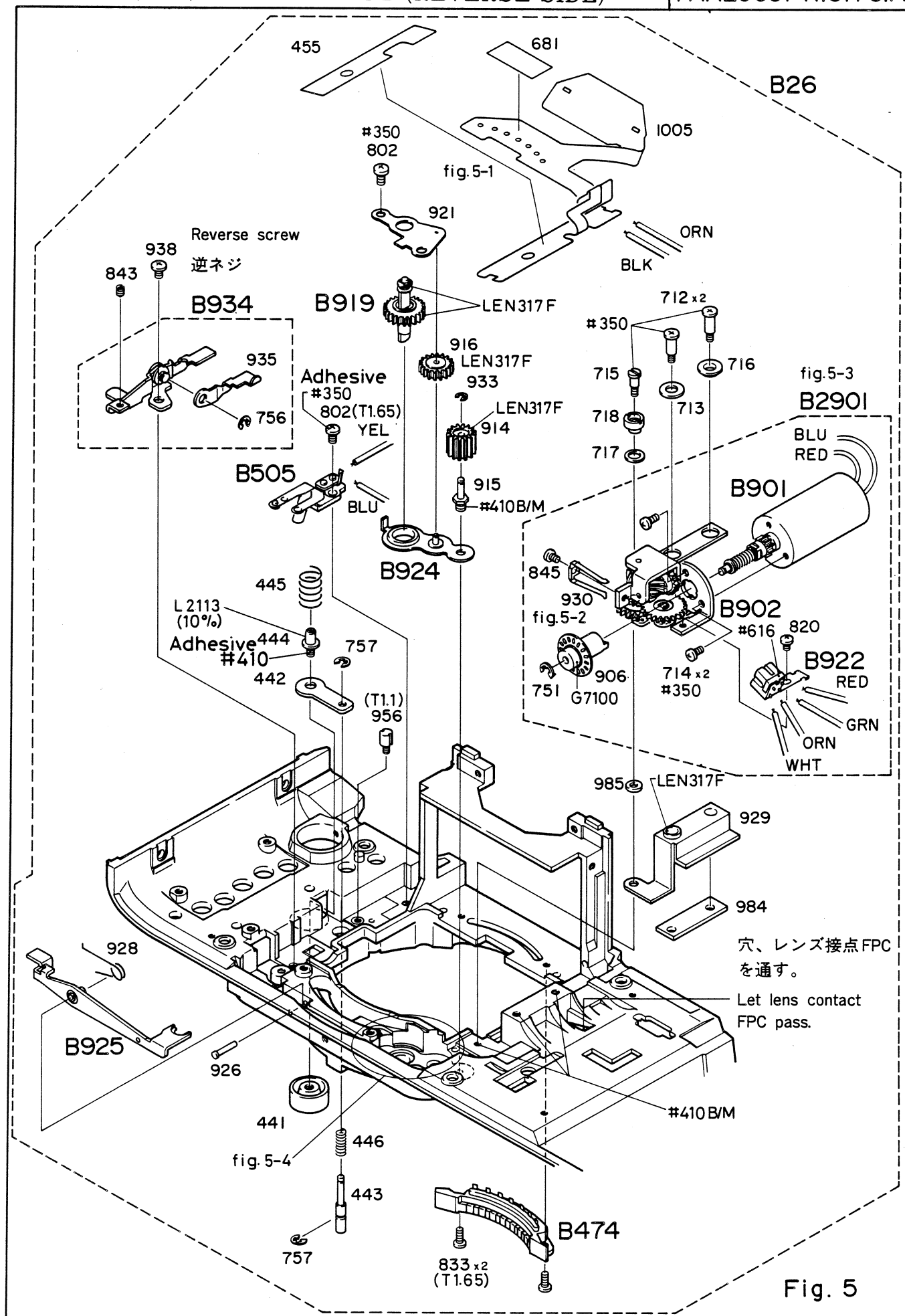


Fig. 5

fig. 5-1 Soldering of the lens contact FPC (1005) with the lens contact B474

Solder should not be over the lens contact

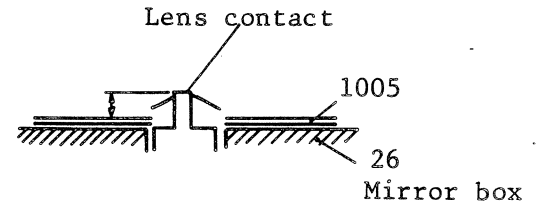


fig. 5-2 Installation of the photo interrupter

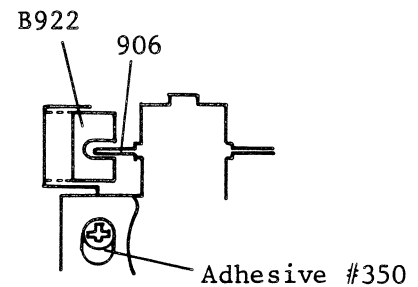


fig. 5-3 Positioning of the AF motor

After installing the AF motor unit B2901 to the camera, set the codes as indicated in the right figure.

- ① Turn #715 so that the current value will be maximum.
- ② Turn the collar #718 in the reverse direction to ① so that the current value will be minimum.
- ③ Then, turn #718 in the reverse direction to ② so that the current value starts to rise.
- ④ Return #718 in 30° from the position set in ③
- ⑤ Apply adhesive on the tops of #712x2 and #718.

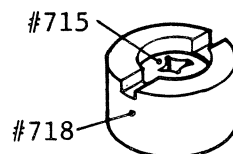
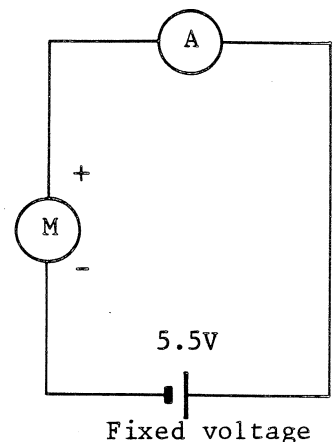
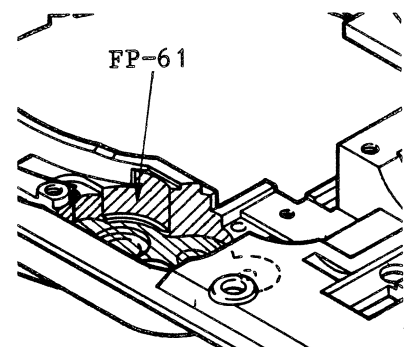


fig. 5-4 Application of the oil barrier

Apply the oil barrier to prevent the bleeding of the oil.



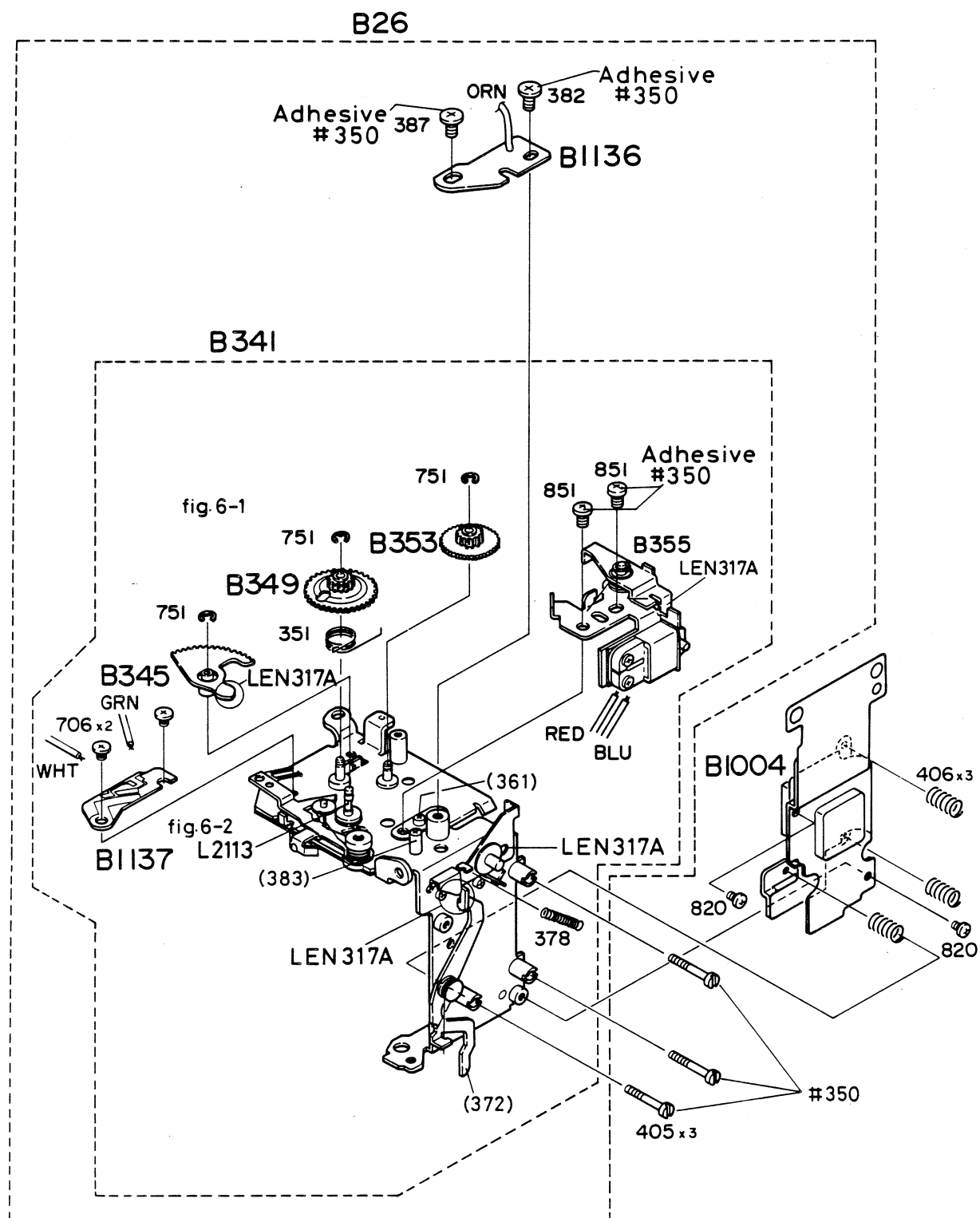


Fig. 6



fig. 6-1

Rotate the aperture control gear B349. Clockwise and keep it at the position where spring hole is facing to the center of #353. Then, install the segment gear B345.

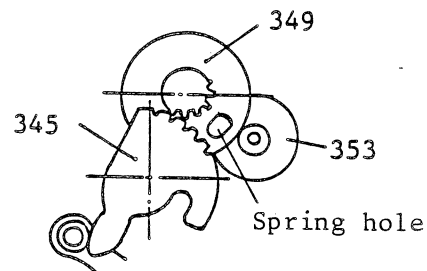


fig. 6-2 Positioning of the fmm switch

Loosen the screw #706 and adjust the fmm position.

- With the lens whose focal length is shorter than 135mm: white - off  
green - off
- With the lens whose focal length is 135mm or longer: white - on  
green - off
- With AI-S teleconverter: white - off  
green - on

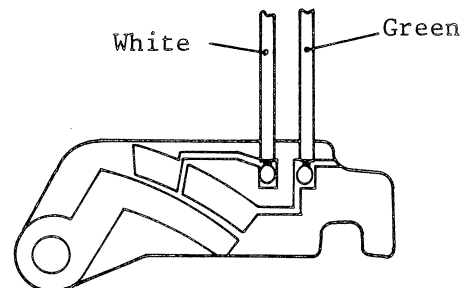


fig. 6-3

- 1) Connect the program switch lead wires to a tester.
- 2) Install the mirror box to the front body and set Tool J18004 to the bayonet of camera body.
- 3) Slowly move the mirror actuating lever #305.
- 4) Adjust eccentric screw #383 so that the program switch can be turned off when the reading of J18004 is  $2.7 \pm 0.1$ .
- 5) After adjustment, apply on adhesive to both screw heads of screws #387 and #382.

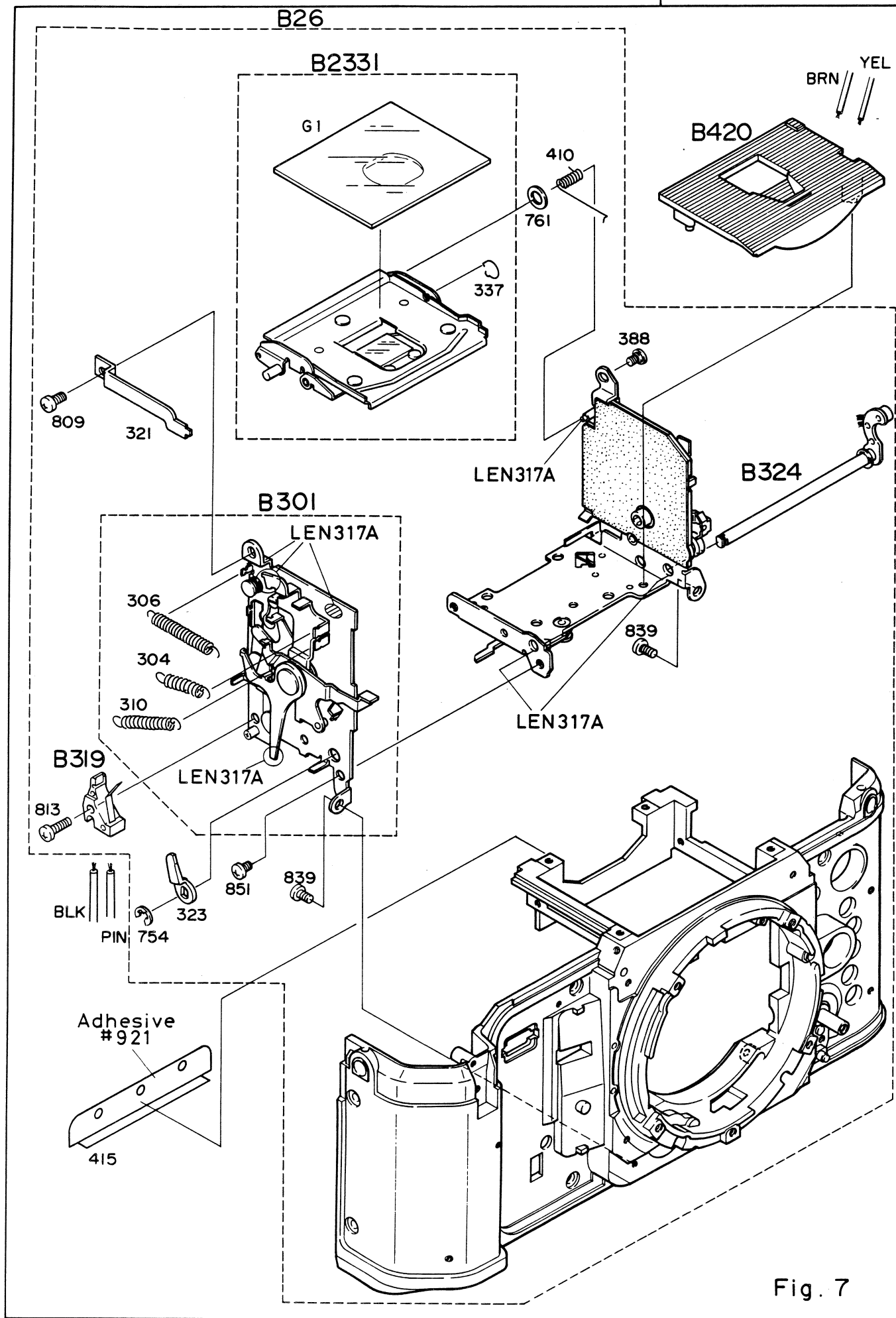


Fig. 7

# Adjustment of 45° setting of the reflex mirror

Vertical collimator J19002  
Optical lens J18037  
Mirror 45° inspecting tool J18182

Set J18037 at the mount

Remove the focusing screen and set J18182.

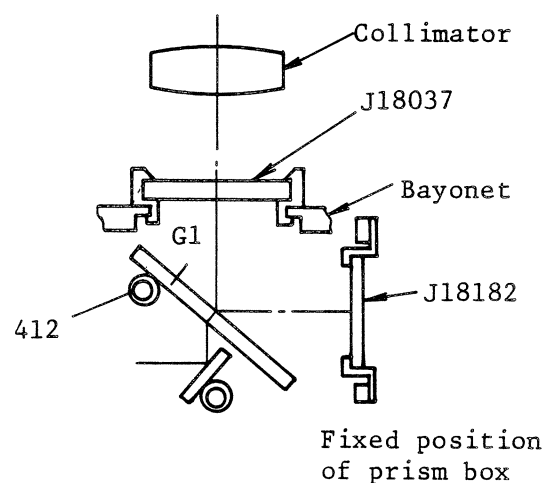
Turn the switch of the collimator on,  
Then, turn the mount to the objective  
lens of the collimator.

Adjust mirror 45°  
① Horizontal: Shift the base plates  
I and L  
② Vartical: Rotate #412.  
③ Distortion: Replaster the mirror

Standard Horizontal:  $\pm 20''$   
Vertical:  $\pm 5''$   
Distortion:  $8''$

\* Be careful not to touch the sub mirror.

As the field of vision of J19002 is  $40^\circ$ , please refer it in the  
above adjustment.



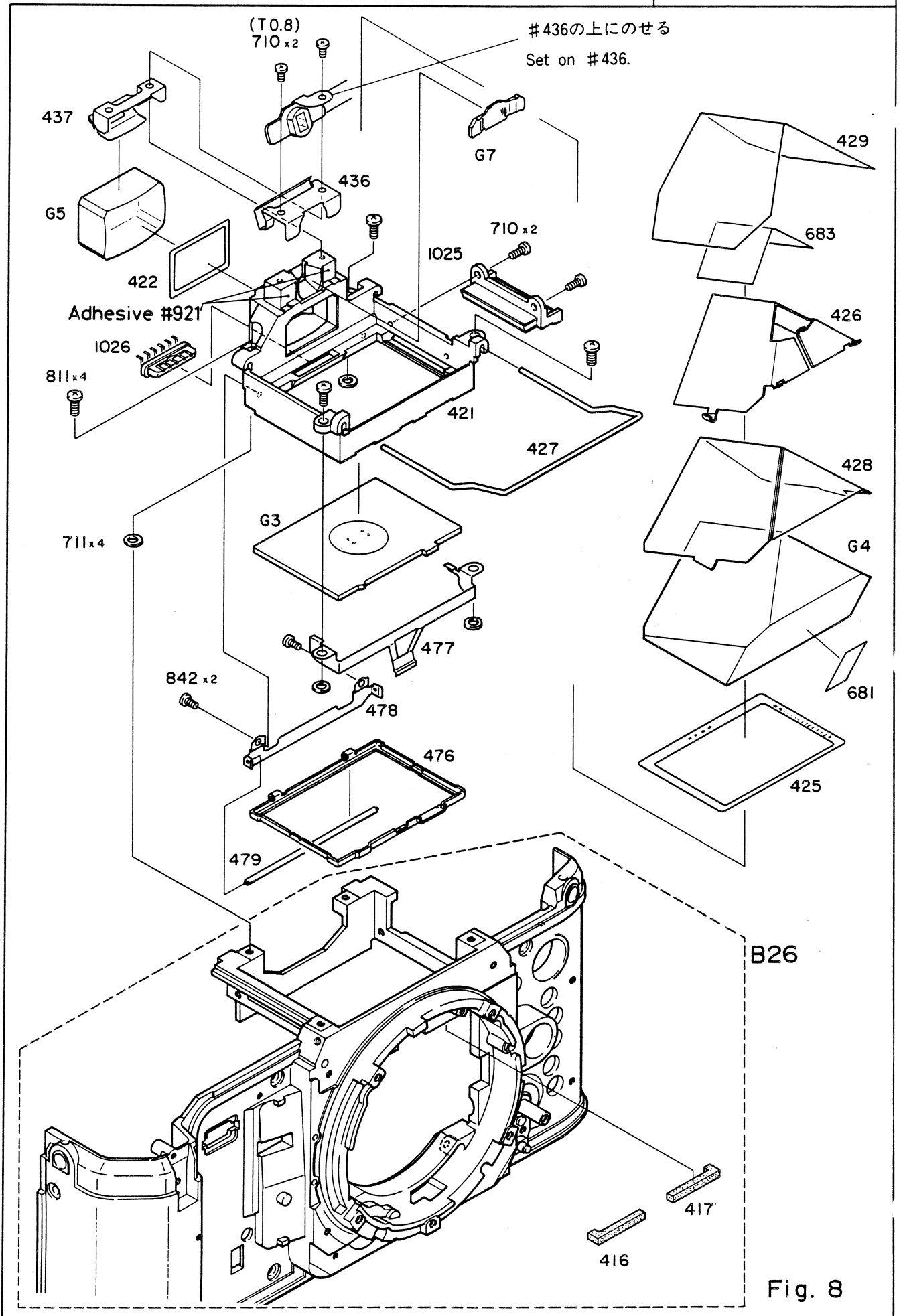


Fig. 8

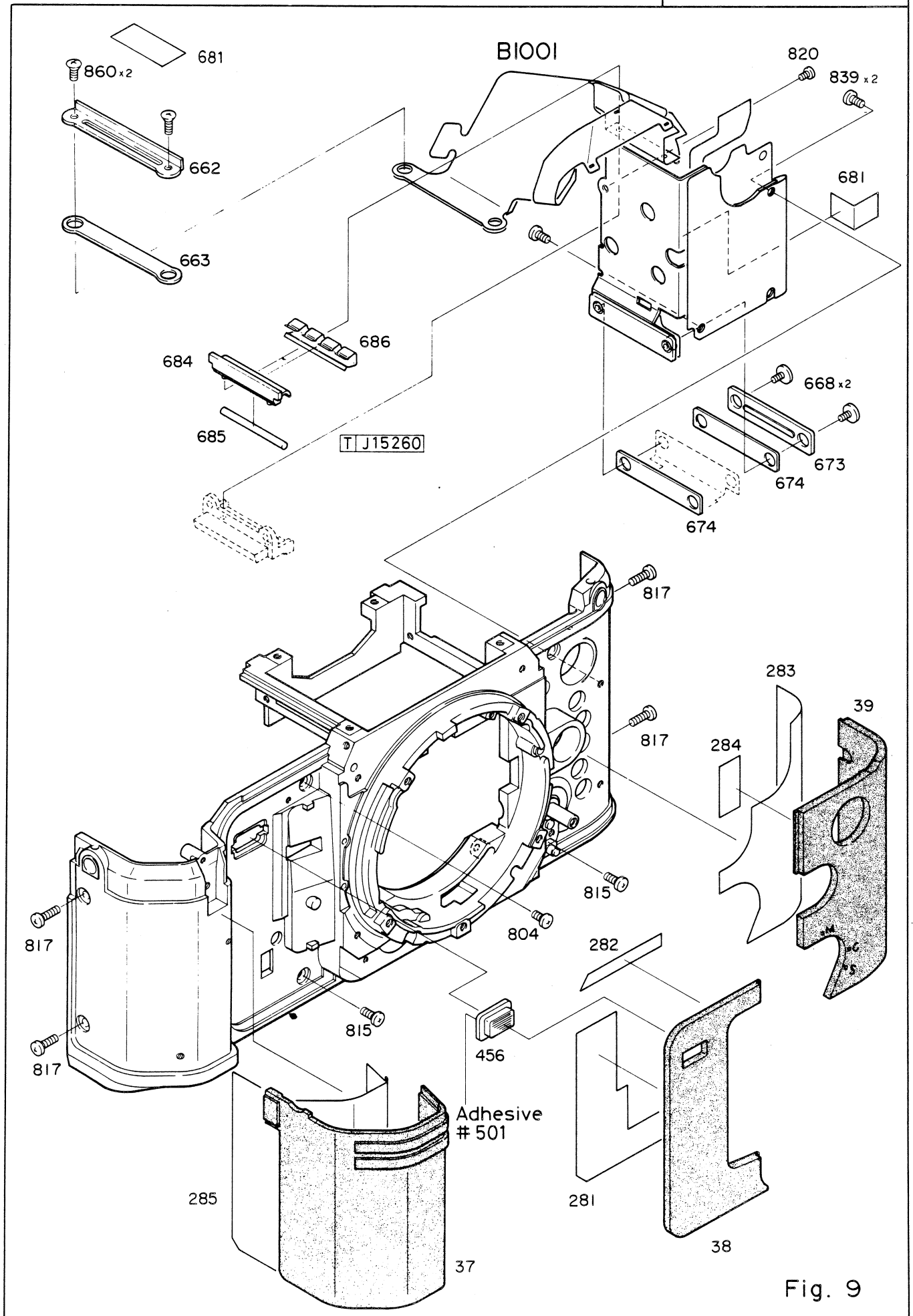


Fig. 9

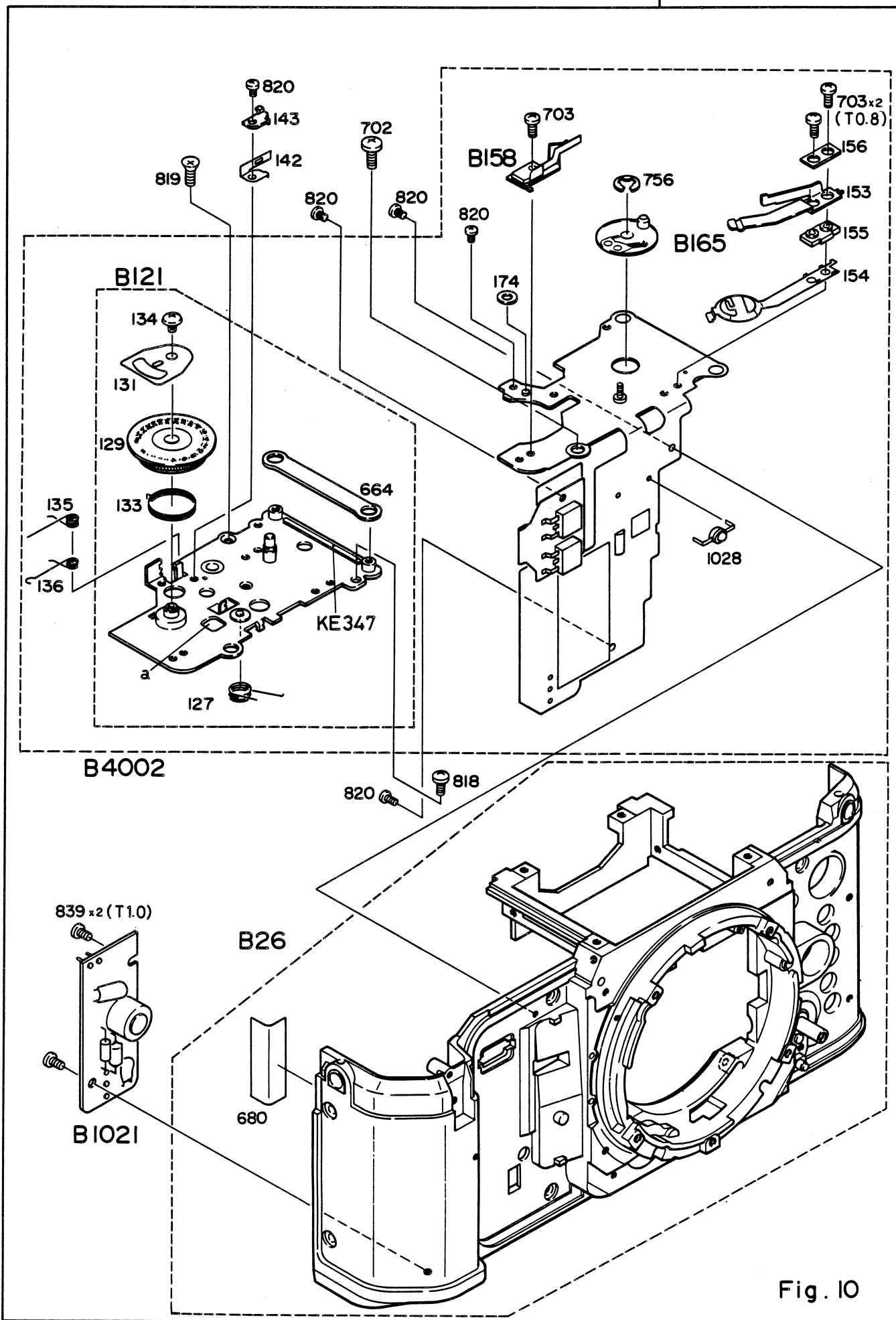


Fig. 10

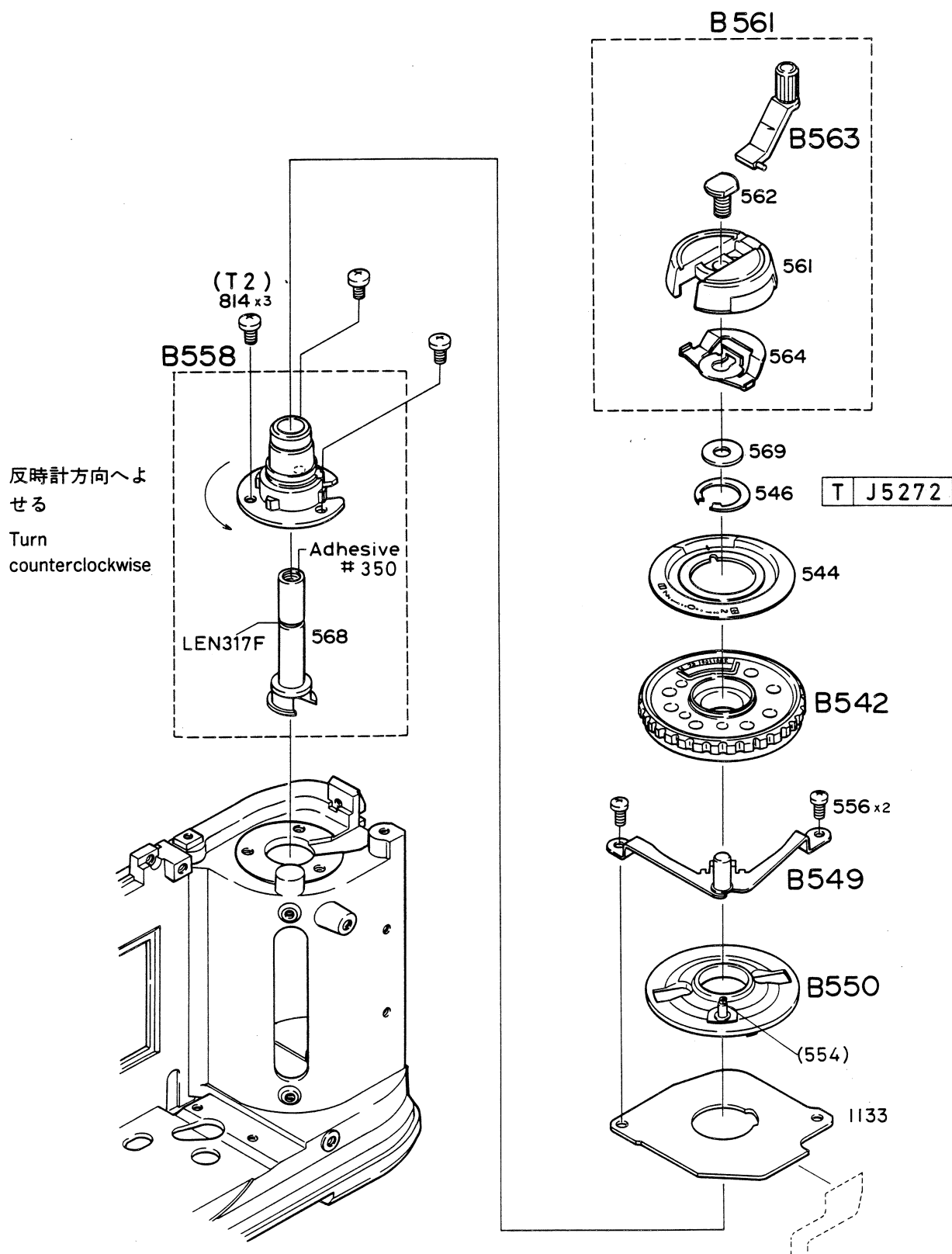


Fig. 11

## 12. 上カバー部 TOP COVER

FAA20051-R.3176.A

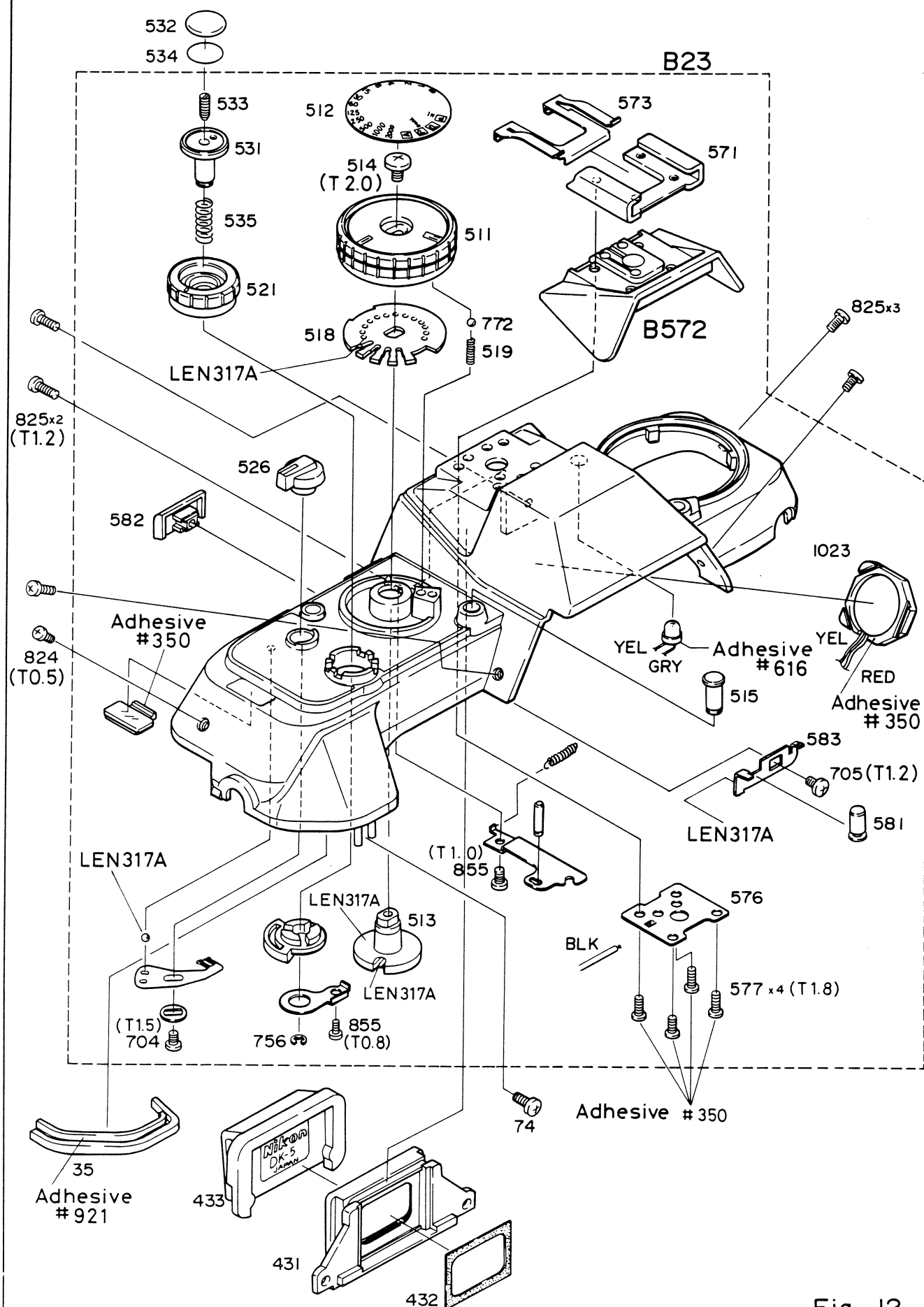


Fig. 12



fig. 12 Installation of the top cover

Solder nine lead wires Wiring diagram

Stick tapes on #1149 (pink),  
#1150(brown) and #1151(green) fig. 12-1

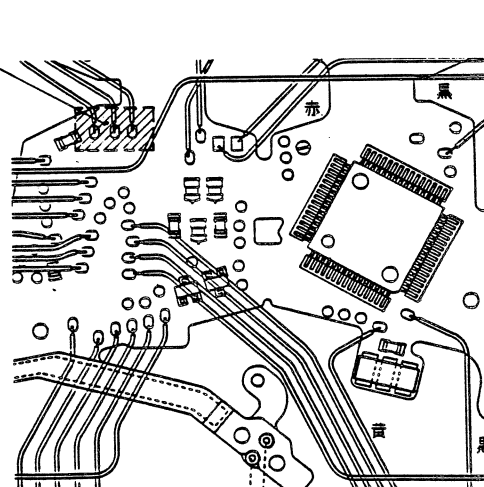
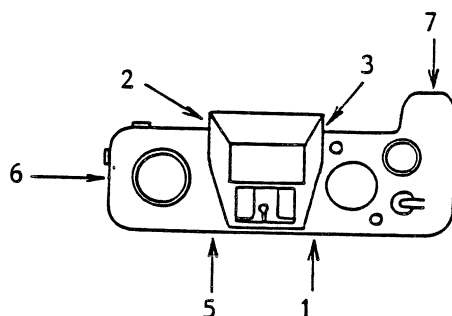


fig. 12-1

- ① Set the shutter dial to B
- ② Set the film-advance mode selector to S
- ③ Turn the shutter dial brush ring B165 (Fig. 10) counterclockwise to the limit.

Do not put the buzzer lead wires (red and yellow) on SPD.

Tighten the screws.



\* Do not tight  
excessively, since  
screw is tightened to  
the plastic.

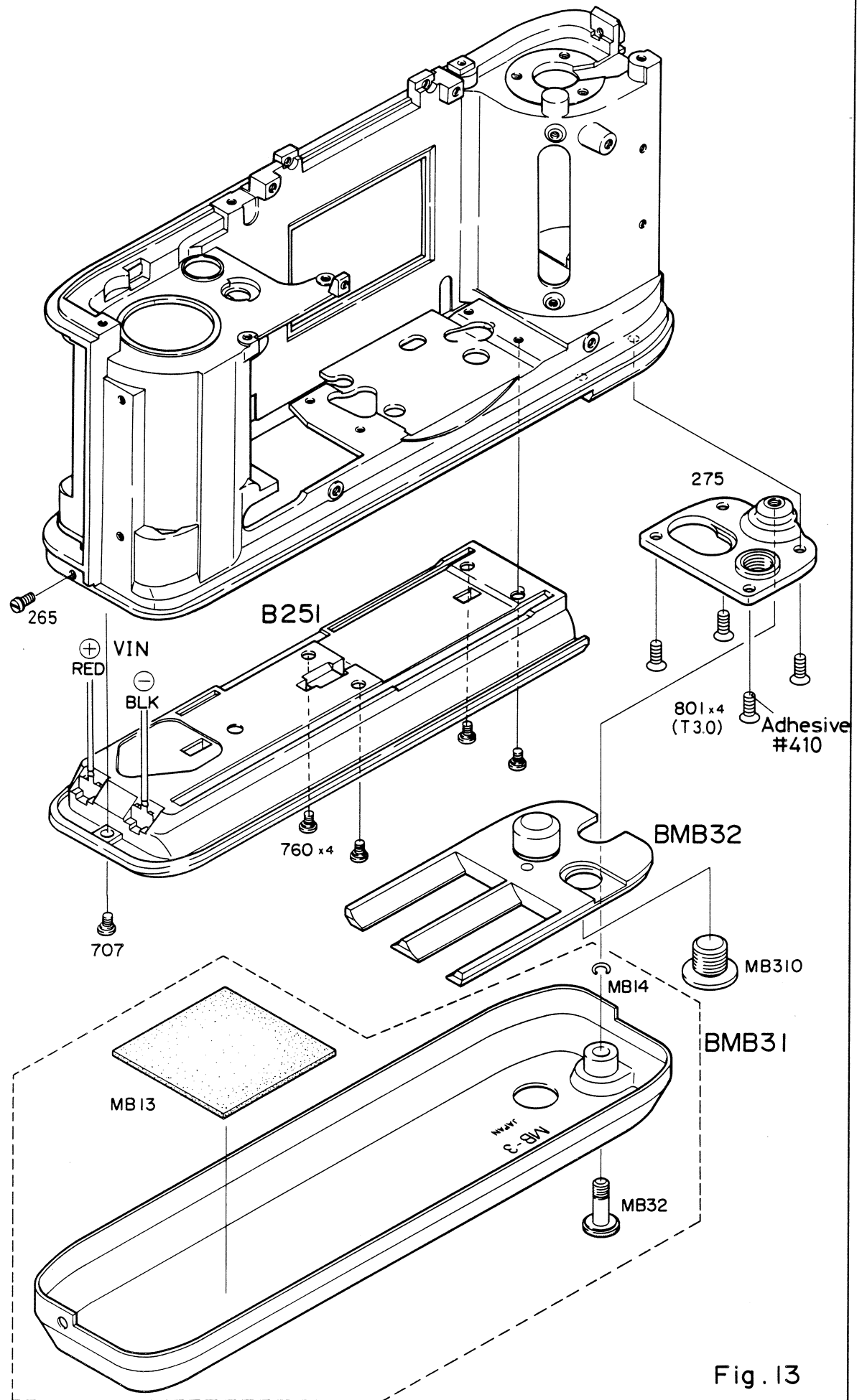


Fig. 13

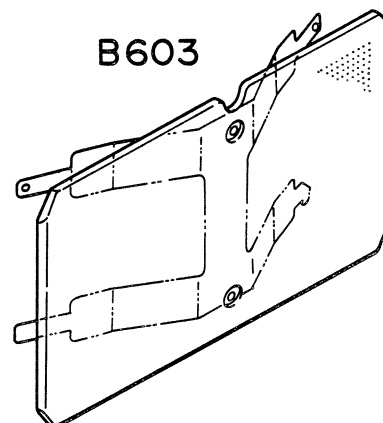
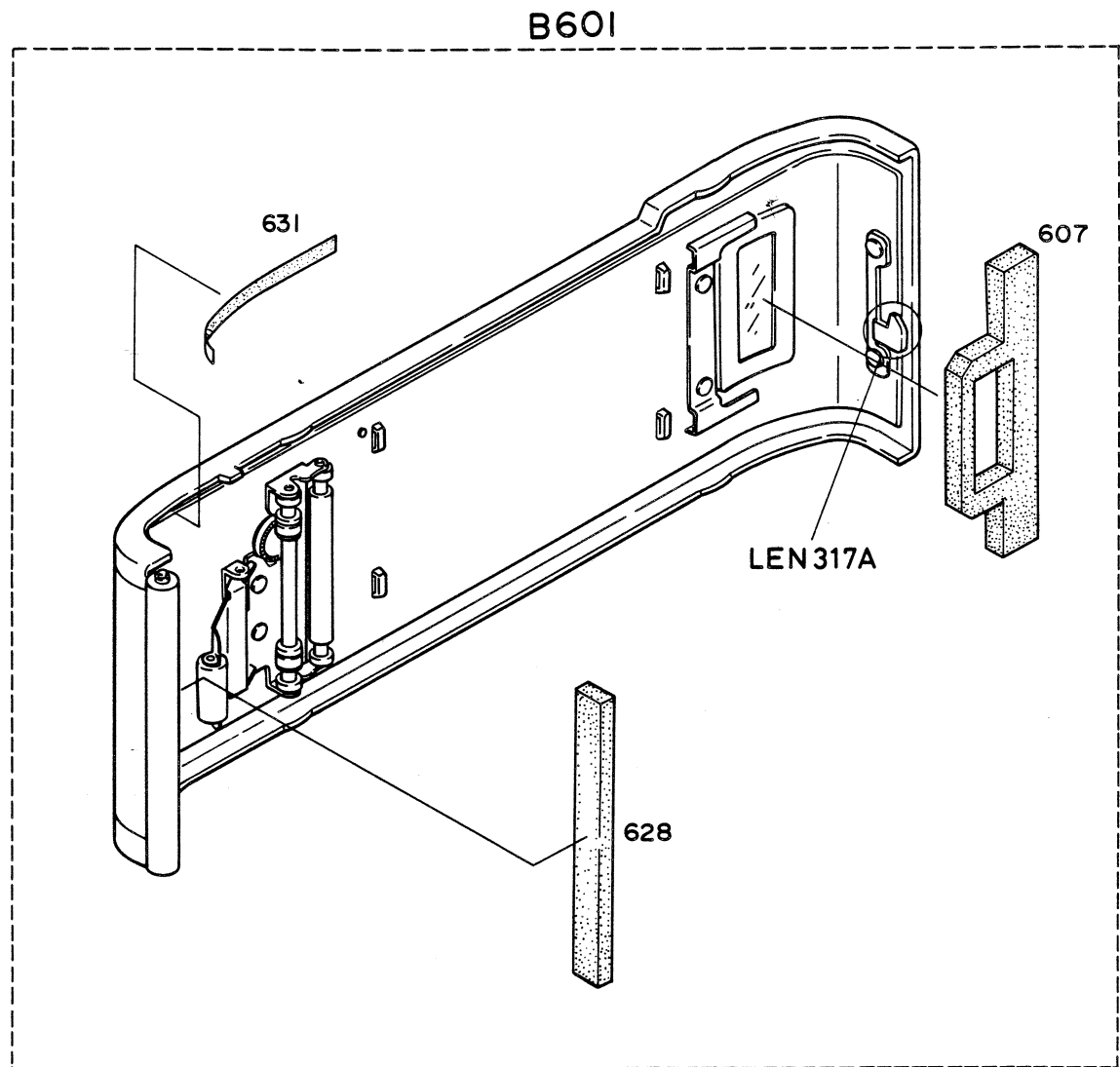


Fig. 14

## 15. Front plate installation

Install sprocket shaft #62. Fig.3

Set the reference shaft disk in place. Fig.3

See Fig.R1.

Operate the mirror once.  
Fit the shutter set lever with the reset lever L.

See fig. R2

\* The shutter set lever is to be free.

Install the front plate to the body die-casting

Be careful not to catch the data back FPC lead wires.

Set shutter charge lever B52 so that the shutter set lever can be positioned as shown in Fig.R3.

Use fingers to hold the front plate and set Manual film-advance tool J15255 to the front plate.

Turn Manual film-advance tool J15255 counterclockwise.

Move the mirror up.

Turn J15255 clockwise.

Move the mirror down. To charge shutter.  
Shutter is to operate.  
(Shutter curtain does not open.) -

Place and hold the front plate turned lower-left (film-advance side) and tighten screws according to the order indicated in Fig.R4.

Place and hold front plate toward the arrow direction.

Adjust the position of film-advance lever unit B121.



Bayonet side

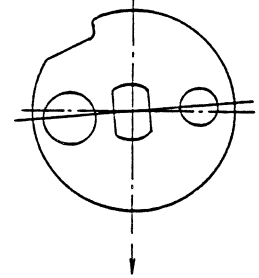


Fig. R1

Sprocket side

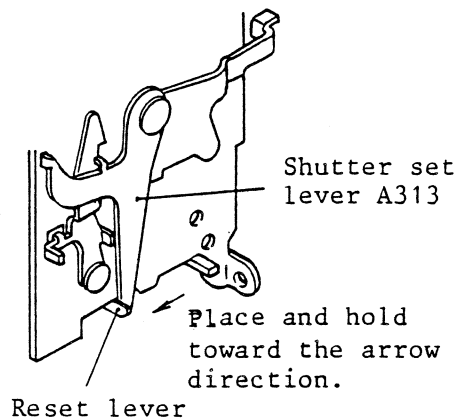


Fig.R2

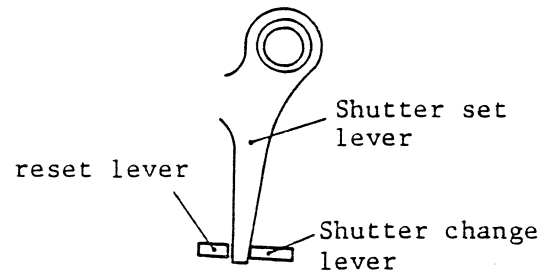


Fig. R3

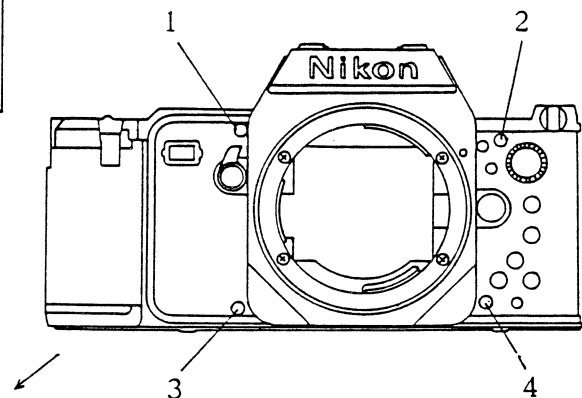


Fig.R4

1  
Set a gear under film advance lever unit B121 to the position as shown in Fig. R5.

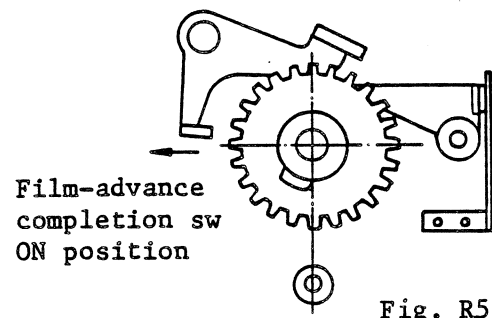


Fig. R5

Set the reference shaft disk to the installing position.  
See Fig. R6

Position the cutout of Frame counter gear #105 to Direction b.



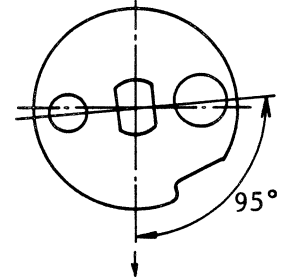
Fig. 3

Position the mark on the sprocket shaft #62 to Direction a and depress it.

See Fig. R7.



Bayonet side



Sprocket side.

Fig. R6

Move the film-advance lath lever #94 to Direction c and install the film-advance lever unit.

Tighten three screws.  
Screw #819 should be tightened first.

Fig. 10

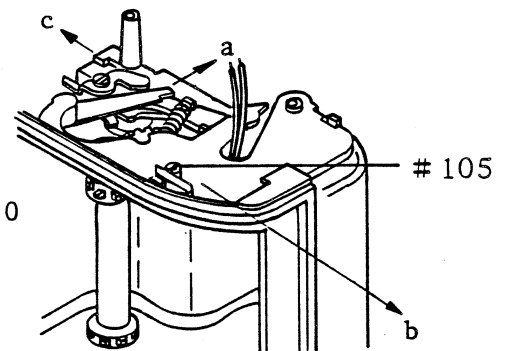
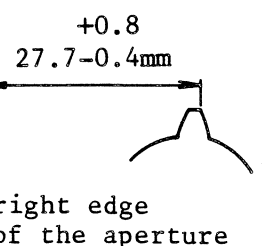


Fig. R7

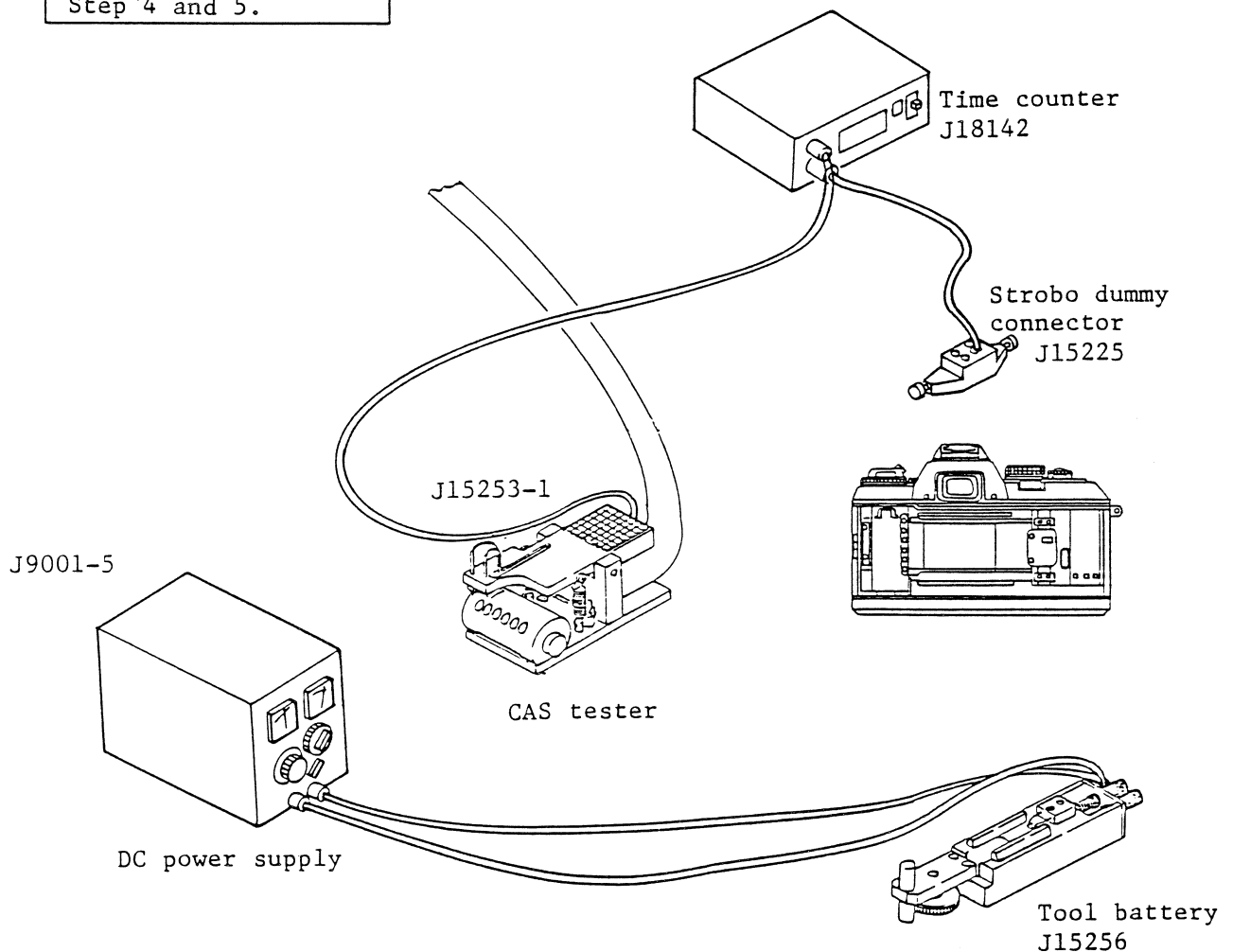
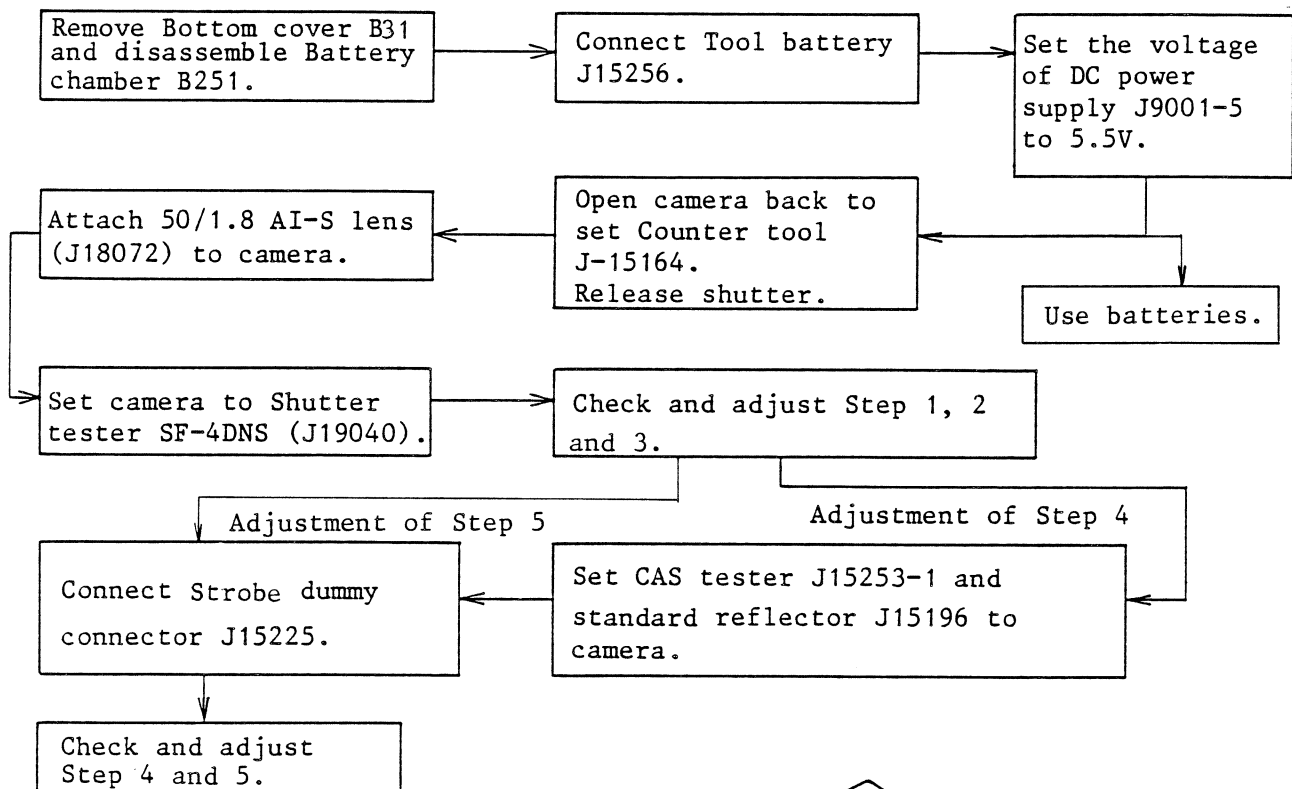
Release the press-contact of the main and power switch FPCs to facilitate installation of front plate necessary. Refer to Fig. 9.

Make sure that the mirror and the shutter operate properly by turning the manual film-advance tool(J15258) counterclockwise and then clockwise.

Use finger to position sprocket teeth of film-advance completion to check the position.



## 16. Shutter speed accuracy adjustment



## Adjustment

## Tools:

Adjustment for Step 1, 2, 3 and 5

Shutter tester SF-4DNS (J-19040), 50/1.8 AI-S lens (J-18072)

Tool battery (J-15256), DC power supply (J-9001-5)

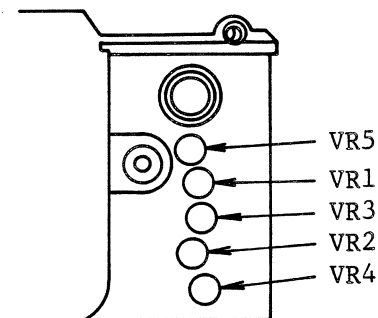
Counter tool (J-15164), Screw driver (J-15135)

Adjustment for step 4

The above tool with: Time counter (J-15188)

Strobo dummy connector  
(J-15225)Standard reflector  
(J-15196)

CAS tester (J-15253-1)

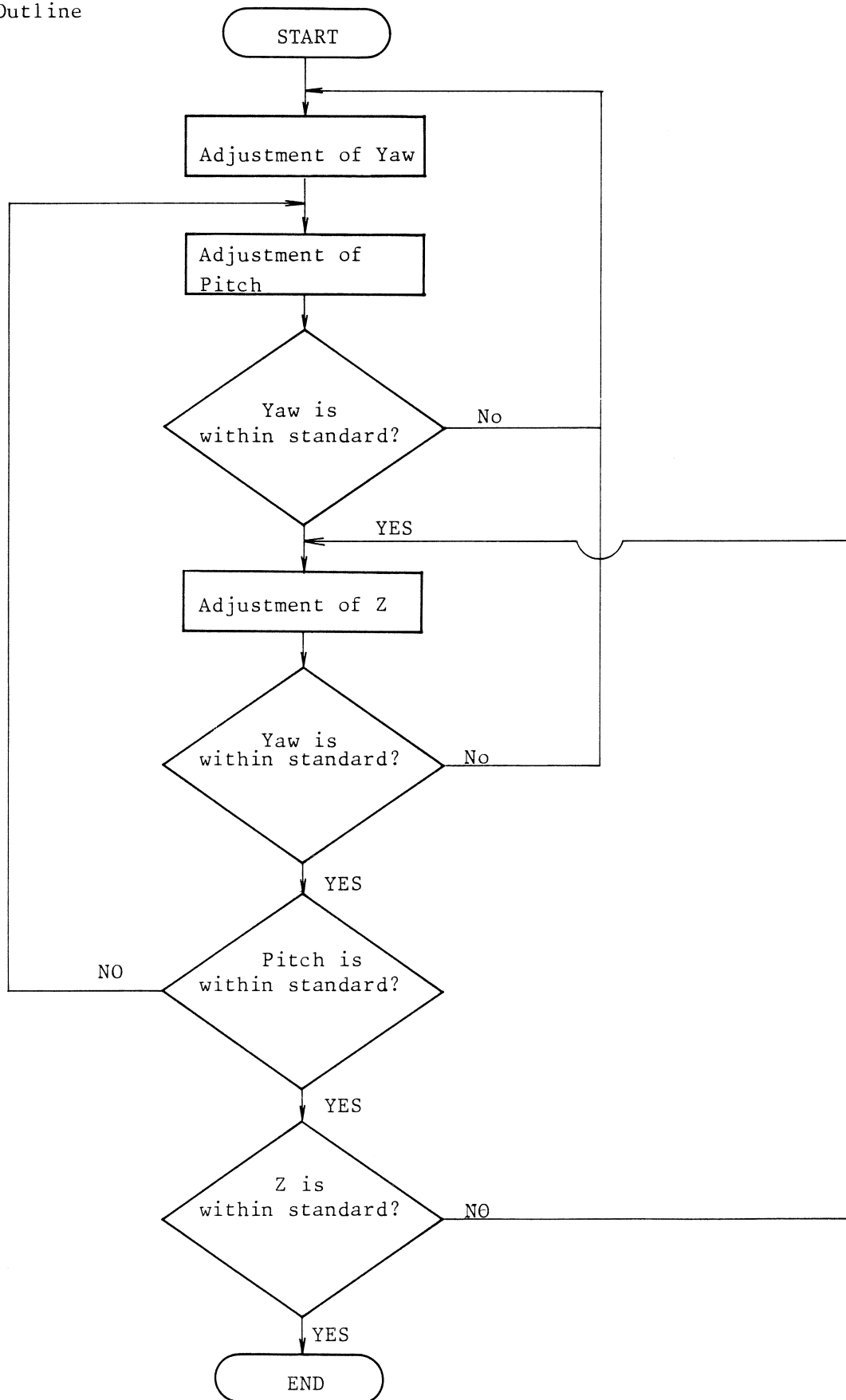


\*1 If the only LED at 125 light up, it is without problem.

| Step | Adjustment                             | Variable resistor | f/stop | Shutter dial | EV | ISO dial | Standard                                                                                                            |
|------|----------------------------------------|-------------------|--------|--------------|----|----------|---------------------------------------------------------------------------------------------------------------------|
| 1    | Closing shutter curtain release timing | VR5               | 1.8    | 2000         | 15 | 100      | 0.3 - 0.57ms                                                                                                        |
| 2    | Shutter speeds delivery on A mode      | VR1               | 1.8    | A            | 9  | 100      | 7.04 - 8.6ms                                                                                                        |
|      | Audio warning check                    |                   | 5.6    | A            | 9  | 100      | When the audible warning sw is on and the shutter release button is lightly pressed, audible warning should bleeps. |
| 3    | Display level                          | VR3               | 1.8    | A            | 9  | 100      | *1<br>1) LEDs at both 60 and 125 should light up.<br>2) LED at 125 should light up                                  |
|      | LED display check                      |                   | 1.8    | A            | 9  | 100      | LED at 125 should light up when a DX-coded film (ISO 100) is used.                                                  |
| 4    | TTL level                              | VR2               | 1.8    | A            | 15 | 100      | 0.11 - 0.14ms<br>(reading of time counter)                                                                          |
|      | LED display check                      |                   | 4      | A            | 9  | 100      | LED at 125 and "W" ready-light LED should light up.<br>LED at 30 should blink.                                      |
| 5    | Program level                          | VR4               | 16     | P            | 15 | 100      | F5.27 - F6.06<br>Value B of Shutter tester SF-4DNS                                                                  |
|      | LED display check                      |                   | 8      | P            | 15 | 100      | △ Both top and bottom<br>▽ LEDs should blink.                                                                       |
|      |                                        |                   | 16     | P            | 15 | 100      | △ Both LEDs should not<br>▽ turn on.                                                                                |

## 17. Adjustment of autofocus

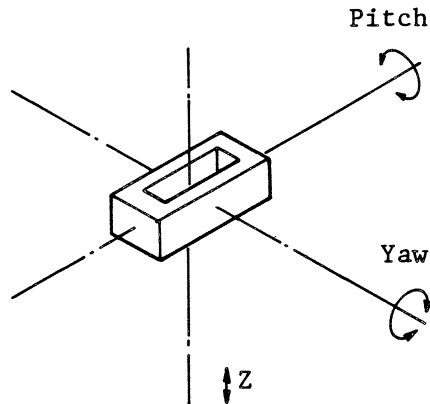
Outline





# Adjustment procedures

For adjustment of autofocus accuracy, perform the positioning of the sensor module.



Z: Parallel  
Yaw: Inclination  
Pitch: Inclination

Adjust with three screws #405 on the bottom of the body.  
See Fig. 6.

## Tools and measuring instruments

Shutter tester or photometric box  
Adapter for Pitch (J18185)  
Adapter for Yaw (J18184)  
AF adjuster (J15259)  
Lens for Z(fixed at 2m)(J18183)  
Sine chart for Z (J18186)  
CAS tester (J15253-1)  
RAM tester (J15253)  
ND filter 8X (J18191)

Lighting box for Z (J15264)  
AAA flourescent light (J15264-2)  
Transformer (J9005)  
Transformer code (J15264-1)

## Adjustment

When you receive the claim about autofocus accuracy or replace autofocus FPC, front plate or mirror box, please adjust autofocus accuracy as follow;

Make sure of 46.5mm and 45°

Disassemble the bottom cover, the battery holder and the battery chamber

\* This is not necessary in inspecting the autofocus accuracy.

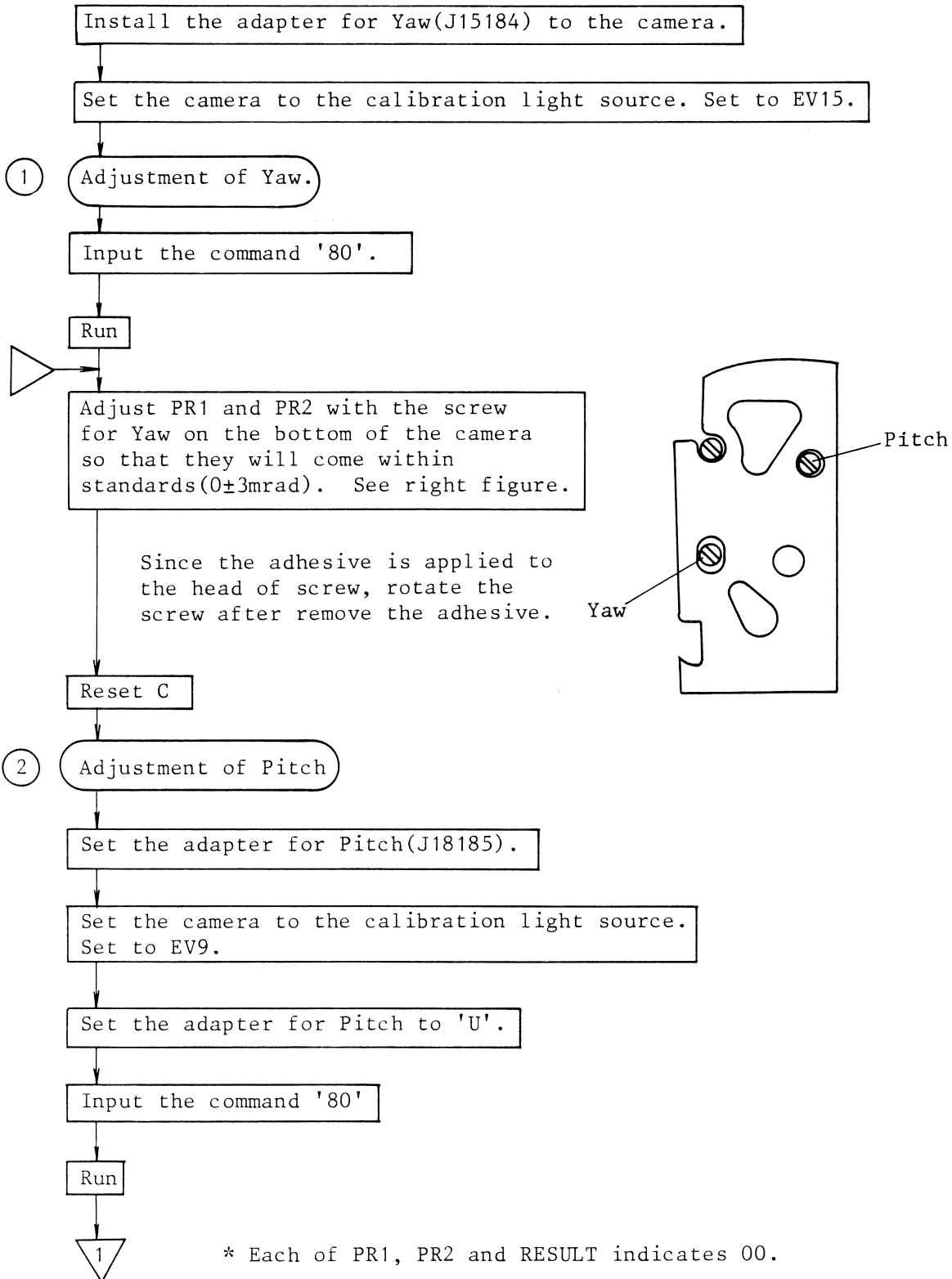
Install the AF adjuster (J15259) to tripod socket.

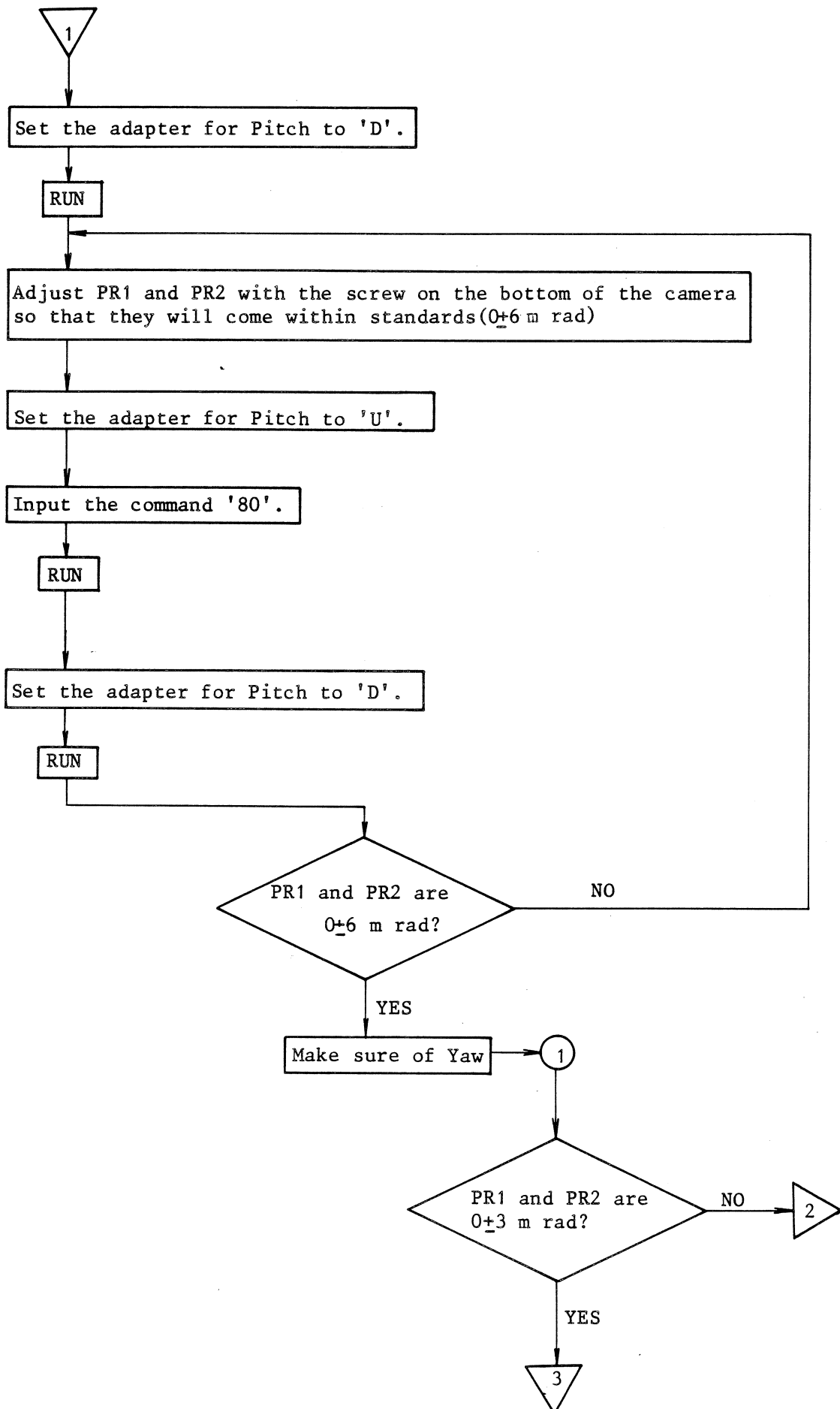
Solder two lead wires to data back FPC.

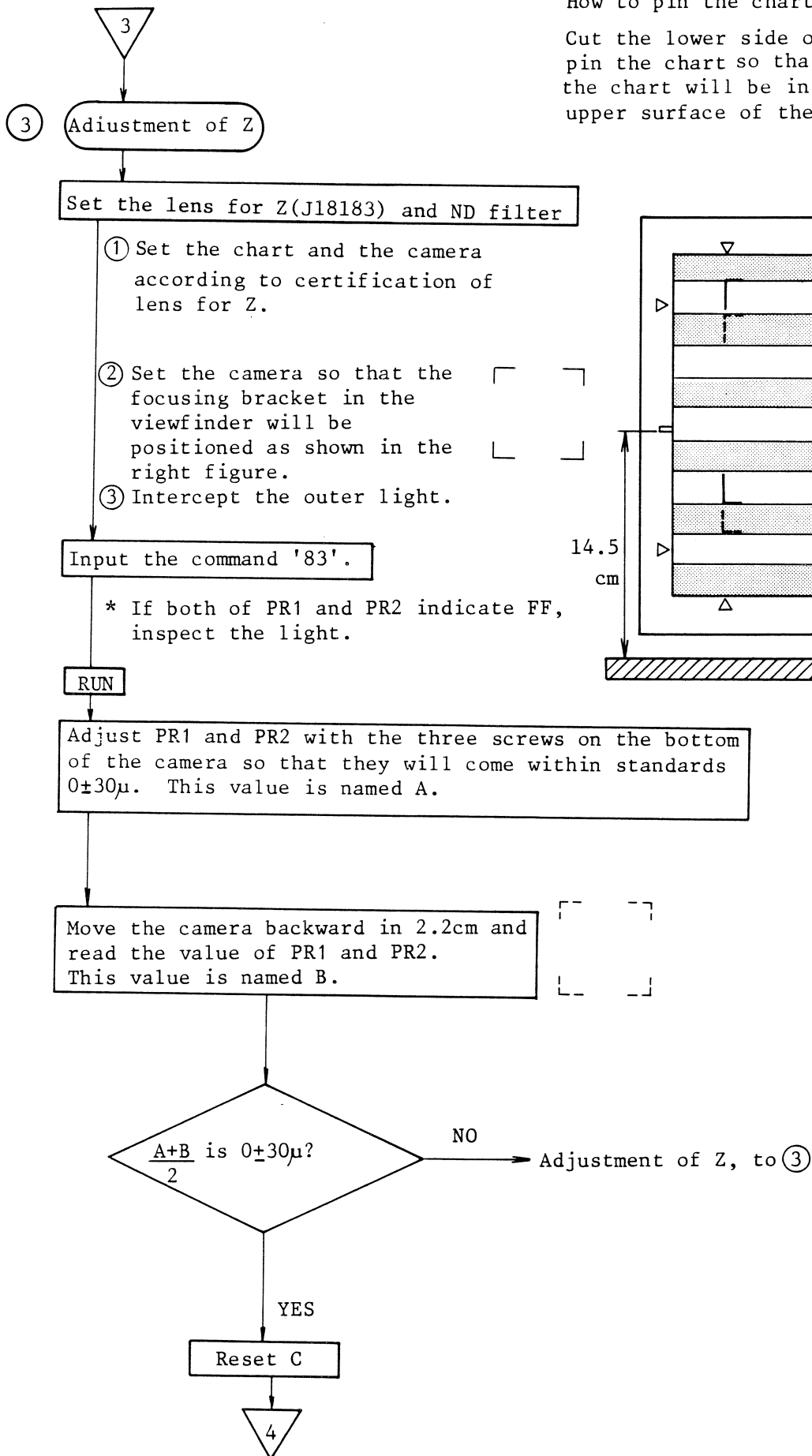
\* Be sure not to connect reversely.  
If the lead wires are connect reversely, DC/DC converter may be damaged.  
Fixed voltage: 5.5V

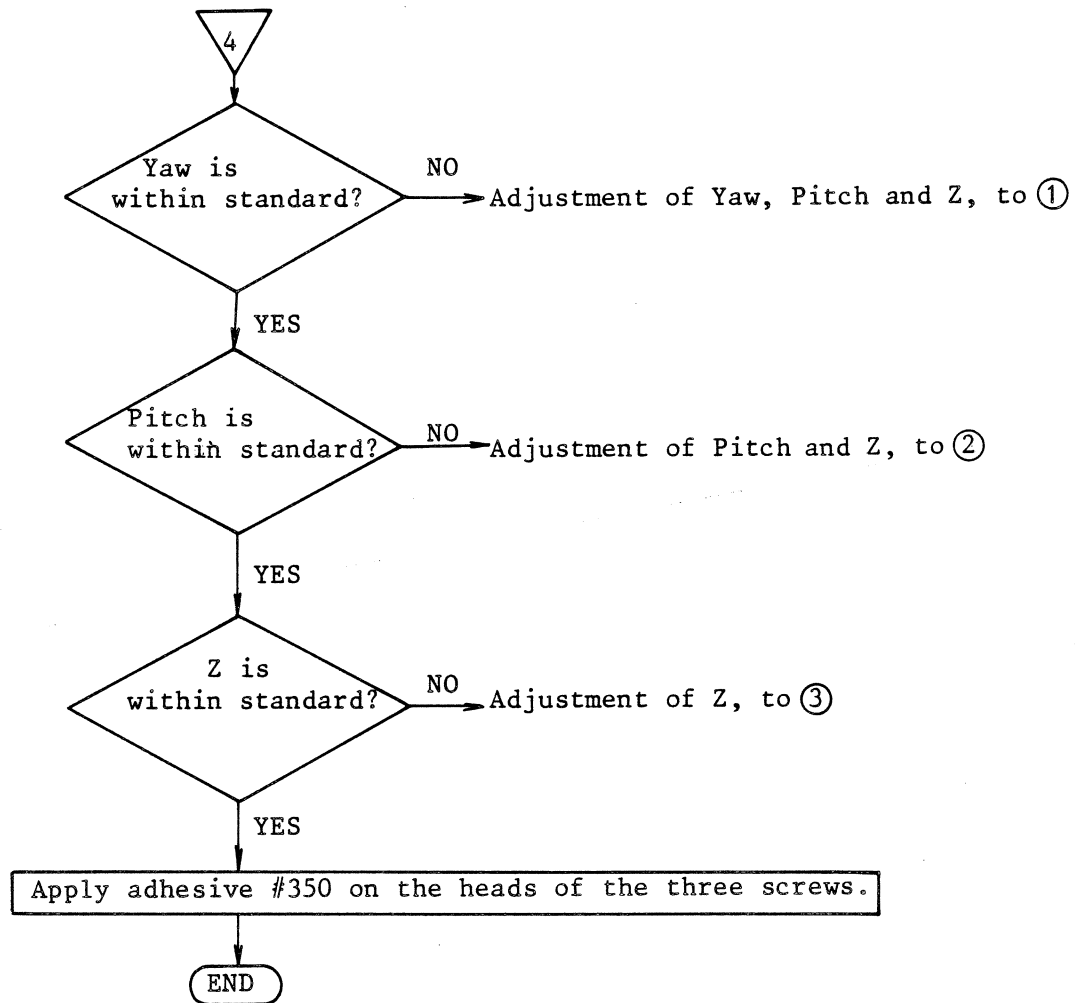
Take off the leatherette and set the CAS tester.

Turn the power of RAM tester on and set RAM tester to test mode.









ELECTRIC CIRCUIT

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## OUTLINE OF THE F-501 CIRCUIT DIAGRAM

The electric circuit of the F-501 is mainly composed of the following nine components;

1. Power source control
2. Operation/data input processing control
3. CPU
4. Decoder, display control
5. Film-advancing motor driving control
6. AE analog calculation control
7. TTL flash output calculation control
8. Light sensitive cell, Interface
9. AF lens control and focusing

### 1. Power source control

Common to the F-301

### 2. Operation/data input processing control

The information from on-off switching and dial settings performed by a user and also the information on sequence timing are inputted into one of CPU, AF interface and AF motor control circuit. According to the information from the AF A/M switch, which is inputted into the AF motor control circuit, only the AF motor is decided to start driving disregarding the information from the CPU.

Out of the informations from the four switches which is to be inputted into the AF interface, the remaining information, which the CPU cannot hold, is read via A/D channel of the interface module and is inputted into the CPU through the digital communication.

Other digital input data and analog input data are inputted into the CPU.

In addition to fo and f-fo signals, the data of the shutter speed dial and the ISO film speed dial are analog input data(A/D input).

#### CPU

##### Digital input data

|               |       |                            |       |
|---------------|-------|----------------------------|-------|
| Power hold sw | 1-bit | Counter sw                 | 1-bit |
| Release sw    | 1-bit | Program sw                 | 1-bit |
| Self-timer sw | 1-bit | Mirror sw                  | 1-bit |
| AE lock sw    | 1-bit | Closing shutter curtain sw | 1-bit |
| AF lock sw    | 1-bit | Film-advance completion sw | 1-bit |
| S/C sw        | 1-bit |                            |       |
|               |       | DX-coded film              | 5-bit |
|               |       | FAI distinction            | 1-bit |



## Analog input data

fo signal  
f-fo signal  
Shutter speed dial  
ISO film speed dial

## AF interface(HIM)

## Digital input data

AF S/C sw 1-bit  
EE lens distinction 1-bit  
Tele sw 1-bit  
Teleconverter sw 1-bit

AF motor driving circuit  
(M51049P)

## Digital input data

AF A/M sw 1-bit

## 3. CPU

Function of the CPU mainly consists of the following eight factors.

1) - 5) are common to the function of the CPU for the F-301 except that analog data of the shutter speed dial and the ISO film speed dial are inputted after A/D conversion.

- 1) Sequence control
- 2) Calculation of the viewfinder display(AE)
- 3) Manual shutter speed control
- 4) Aperture control on programmed mode
- 5) Shutter and aperture control on speedlight mode
- 6) Calculation of distance detection and viewfinder display(AF)

The data output from HSM(light sensitive cell for autofocus, CCD) are A/D-converted serially by HIM(interface) and are inputted into CPU through communication. On the basis of these data, the defocus amount is calculated in accordance with the calculation routine.

The code and the defocus amount from the reference decide the viewfinder display( $\times \triangleright \circ \triangleleft$ ), the lens travelling direction and the travelling amount.

- 7) Lens data detection

The new AF lens has the data of the field shift amount coefficient which is necessary for focusing control.

The CPU reads these data through serial I/O communication. And it is judged with the data that the new AF lens is attached.

- 8) Focusing control

In order to focus the lens, the motor is driven and the feedback pulse is counted by the CPU counter.

As the counter number increases (gets closer to the focus point), the motor rotation duty is changed and then, motor is stopped.

Higher focusing accuracy is available by this process.

#### 4. Decoder display control

6-bit codes from CPU are decoded to light up the AE LED and the AF LED inside the viewfinder.

6-bit codes provided from CPU are decoded and they are latched by the strobe signal to be output to command the various operations.

The operations commanded by the latched output are as follows;

- 1) Film-advance motor driving
- 2) AF motor driving
- 3) Timing control for the analog AE control
- 4) Timing control for the digital shutter speed control on manual mode
- 5) Aperture control magnet actuation/self-timer LED blinking
- 6) LED lighting during film-advancing
- 7) Audio warning operation
- 8) Power source control for the new and old type AF lens

#### 5. Motor driving control

Common to the F-301

#### 6. AE analog calculation control

Common to the F-301

#### 7. TTL flash output calculation control

Common to the F-301

#### 8. Light sensitive cell for autofocus, Interface

HIM(interface module) receives the command from the CPU and commands HSM(sensor module: CCD) to store and transfer the electric charge. Then, the output signal is A/D-converted and transmitted to the CPU as digital signal.

For this operation, the clock generator is installed in HIM to control the CCD driving sequence.

HSM stores and transfers the proper electric charge, which corresponds to the light value, at one of the component rows(for F2.8 detector or F4.5 detector) in accordance with the driving clock and the component row changeover signal output from HIM.

HIM has another six channels of A/D converter. Two channels out of them are used for  $\bar{x}$ p adjusting trimmer and other four channels are for read-out of the switches which are not directly related to distance detection.

## 9. AF lens control and focusing

When the new AF lens is attached and its A/M switch is set to A, the AF motor can be driven by the operation of the AF motor control circuit and the AF motor driving circuit in accordance with the driving signal from the decoder latch.

The AF motor is controlled on normal rotation, reverse rotation, braking and stopping modes. And the AF lens focuses via coupling of the mount.

This rotation of the AF motor is converted into pulse by the plate actuating with it and the photo interrupter. This signal is waveform-shaped into 'feedback pulse' by the control circuit and transmitted to the CPU.

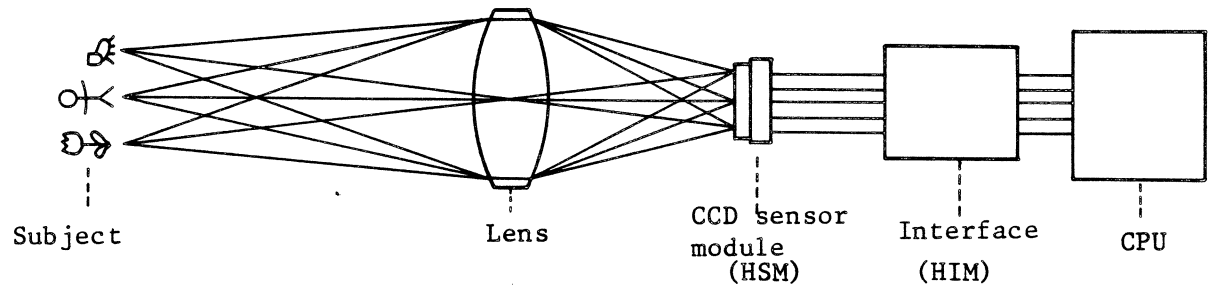
When the old type AF lens is attached, the driving signal from the decoder latch is transmitted to the lens contact directly.

The pulse from the relative distance terminal of the lens contact is waveform-shaped and transmitted to the CPU in the same way as the case of the new AF lens.

## AUTOFOCUS SYSTEM

Autofocus system of the F-501 is composed of the closed loop control system which consists of the defocus detecting system by TCL system and the driving control system from CPU to the AF motor.

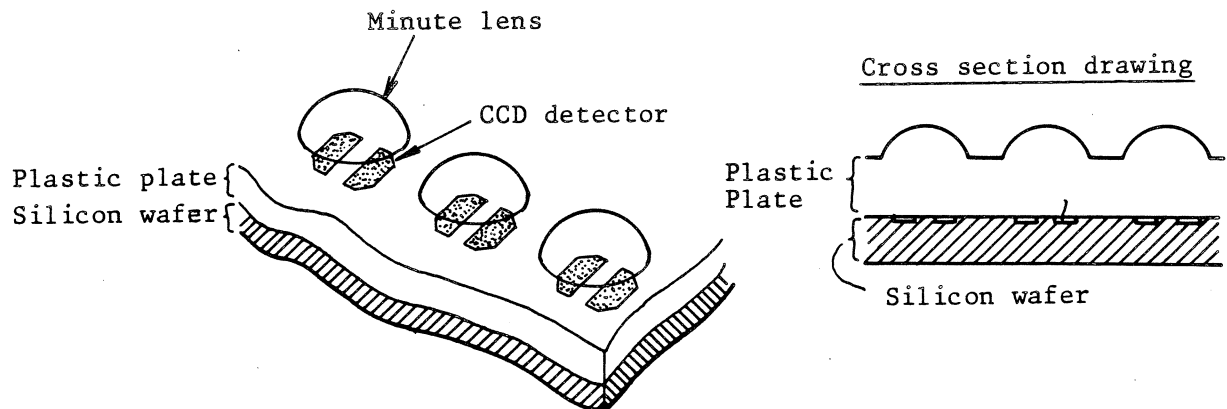
### 1. Defocus detecting system



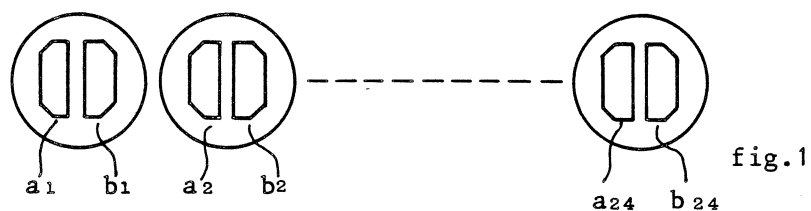
#### 1) Construction of the sensor module

The sensor module(HSM) of TCL is CCD.

24 pairs of detectors(48pcs) are lined in a row on the silicon wafer. A plastic plate is adhered on the silicon wafer and 24 minute lenses are built on the plastic plate (one minute lens for each pair of CCD detectors) as shown in the below figures.

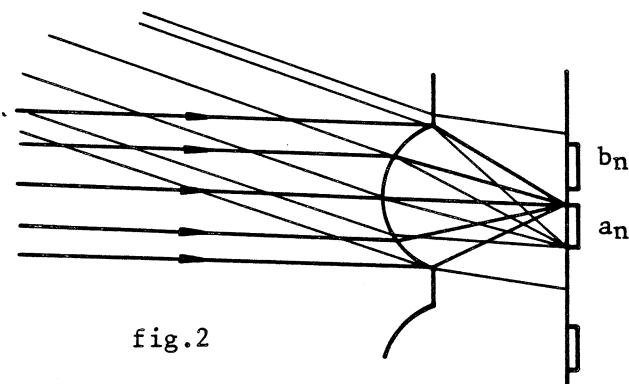


## 2) CCD output on various lens positions

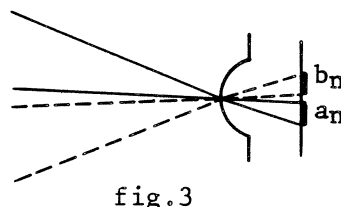


Each detector is named as shown in fig.1.

Light each detector receives is indicated in the fig.2.



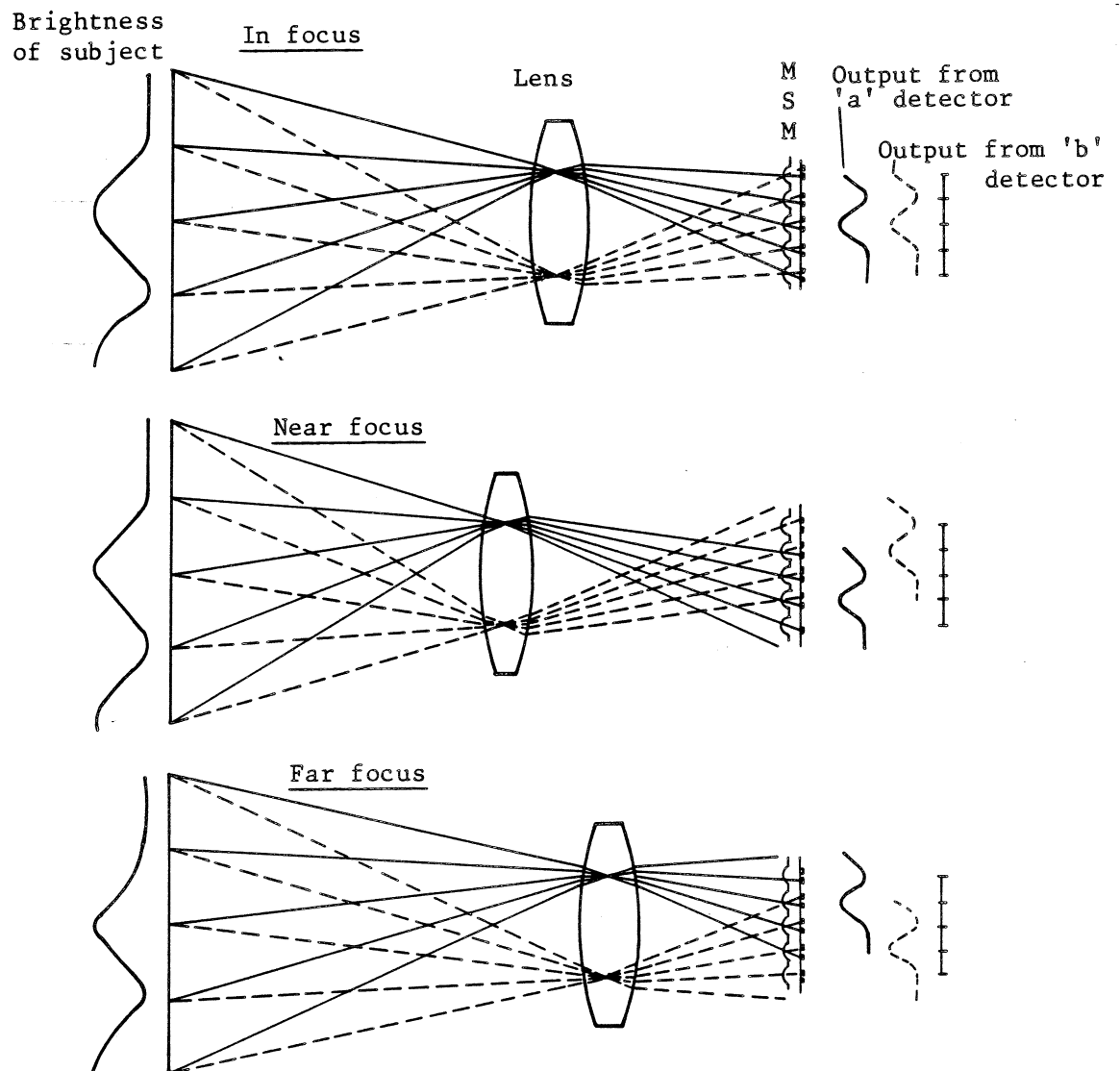
Detector 'a<sub>n</sub>' receives only the beam from the right half and detector 'b<sub>n</sub>' only from the left half as shown in fig.3.



This sensor module is located at such position as the distance from the subject to the sensor module is the same as the one to the film plane. In this condition, the output from the detectors a<sub>1</sub> - a<sub>24</sub> indicates the horizontal transition of light value of the subject, which is detected only from the beam of the right half.

And the output from b<sub>1</sub> - b<sub>24</sub> indicates the vertical transition of light value which is detected only from the beam of the left half.

Following figures indicate the three focusing conditions.



Each distance is not the same as the one actually measured.

### 3) Calculation of the defocus amount

In focus, the output from 'a' detector is the same as that from 'b' detector. As the lens travels to the direction of the subject, the image of 'a' detector moves to the left and that of 'b' detector to the right. Moving amount of the images of both 'a' and 'b' detectors is the same. If the lens travels to the direction of the film plane, the image of 'a' detector moves to the right and that of 'b' detector to the left.

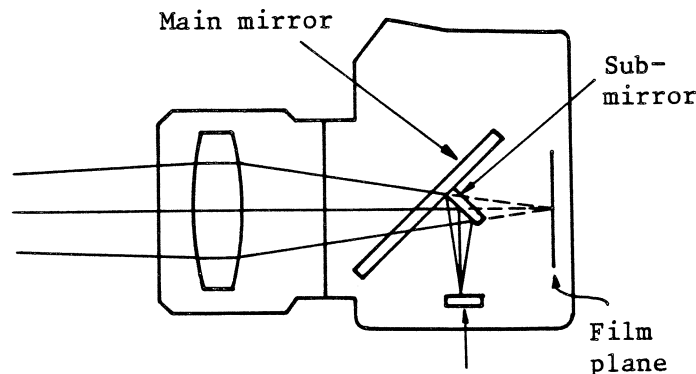
In principle, this moving amount(including +, - sign) is in proportion to the travelling amount of the lens, that is the distance from the film plane to the image formation plane on the optical axis. The coefficient is decided by the incident angle of the light to detectors. So, through the moving amount of the images of 'a' and 'b' detectors, travelling amount of the lens to the focusing point(including +, - sign) is decided.

Analog signal of the output from the sensor module is A/D-converted by the interface module(HIM). Then, it is inputted into the CPU as a digital signal. CPU calculates the above-mentioned moving amount by using the fixed algorithm.

Components of the sensor module are lined in two rows, and each detector has the different size. So, the angle in which the detectors can receive light is dependent on the detector. The two rows of the detectors are named F2.8 detectors and F4.5 detectors. F2.8 detectors cover the lenses whose maximum apertures are F2.8 or below. And F4.5 detectors cover the lenses whose maximum apertures are above F2.8. The lenses whose maximum apertures are above F4.5 cannot be used. Each of the F2.8 detectors and F4.5 detectors have K factor of their own, which is a ratio of the above-mentioned moving amount against the travelling amount of the lens.

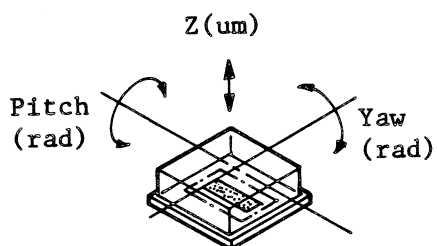
### 4) Alignment of the sensor module

The distance from the subject to the sensor module is made the same as the one to the film plane by the sub-mirror as shown in the following figures.



The position of the sensor module reflects directly to the focusing accuracy of the camera. So, the minute adjustment is required in aligning the sensor module.

There are three parameters for alignment as shown in the following figures.



Please make adjustment by using the three adjusting screws, so that the three parameters may come close to zero.

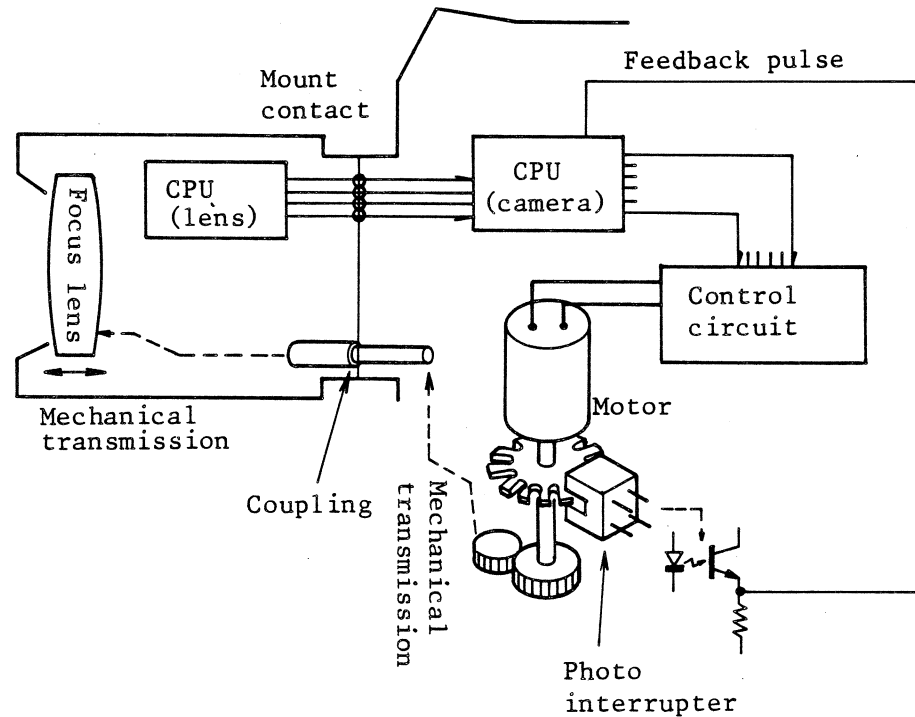


## 2. AF lens driving control system

The defocus amount is calculated and given by the defocus detecting system.

AF lens driving control system drives the lens with necessary amount and stops the lens so that the defocus amount may become zero.

The following is the outline of the AF lens driving control system when the new AF lens is attached.



CPU in the camera demands that CPU in the lens should send the data of the image surface shift amount coefficient, and reads it as a digital signal through the mount contact.

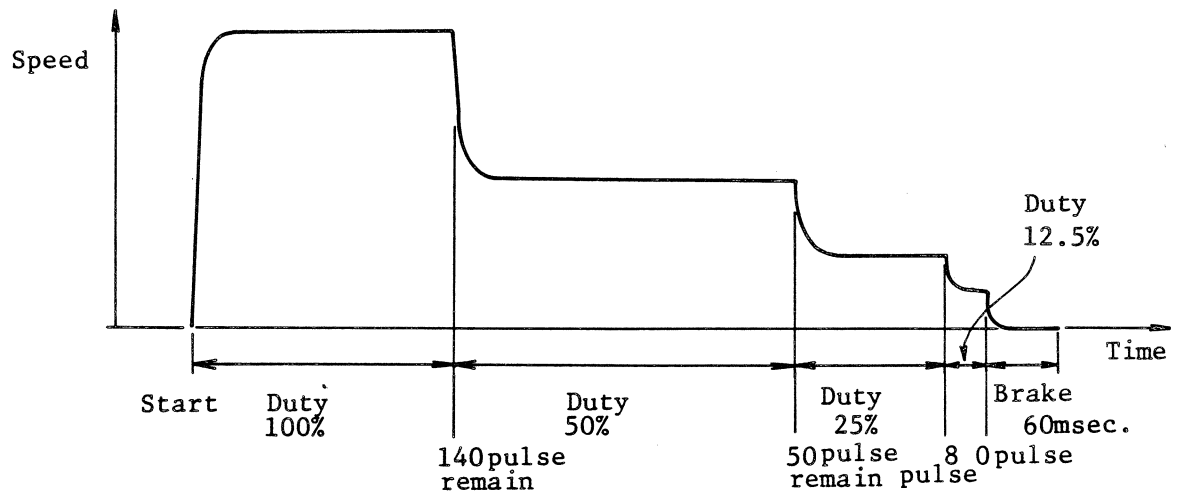
The image surface shift amount coefficient shows the ratio of the rotation of the coupling on the mount against the shift amount of the image surface given by the rotation frequency. In other words, this means how many motor rotations are required for the lens travelling.

Each lens has a value of its own. With the zoom lens, the value changes depending on the focal length set.

Then, CPU in the camera calculates the rotation of the AF motor with the use of the defocus amount detected by the defocus detecting system and the image surface shift amount coefficient. If the result is out of the focusing range, the AF motor travels.

When the motor rotates, the plate rotates together with the motor shaft. Then, the photo interrupter converts this rotation into electric pulse signal. CPU counts this pulse and monitors it till it comes to the desired value.

In order to stop the motor rotation precisely when the pulse comes to the desired value, the motor rotates on four steps of rotating speed as the following graph.



When the old type AF lens which does not have CPU is attached, the image surface shift amount is uniform. The AF motor and the feedback pulse generation circuit are in the lens and the signal is transmitted to the camera via the mount contact.

Exchanging of the driving speed of the AF motor is as follows;

Till remaining 8 pulse: Duty 100%

At remaining 8 pulse: Duty 50%

### 3. Control loop by all systems

The F-501 has three focus modes.

1) M mode (annual focus)

Servo does not operate. Only the viewfinder display operates.

2) C mode (continuous servo autofocus)

Focus detection continues as long as the power hold switch is on.

When the power hold switch is turned off, the lens stops moving.

The focus indicator LED remains on as long as the power hold timer is on even if the finger is detached from the shutter release button.

3) S mode (single servo autofocus)

When the power hold switch is turned on, the lens start to travel.

Once focused, the lens stops travelling even if the power hold timer continues on.

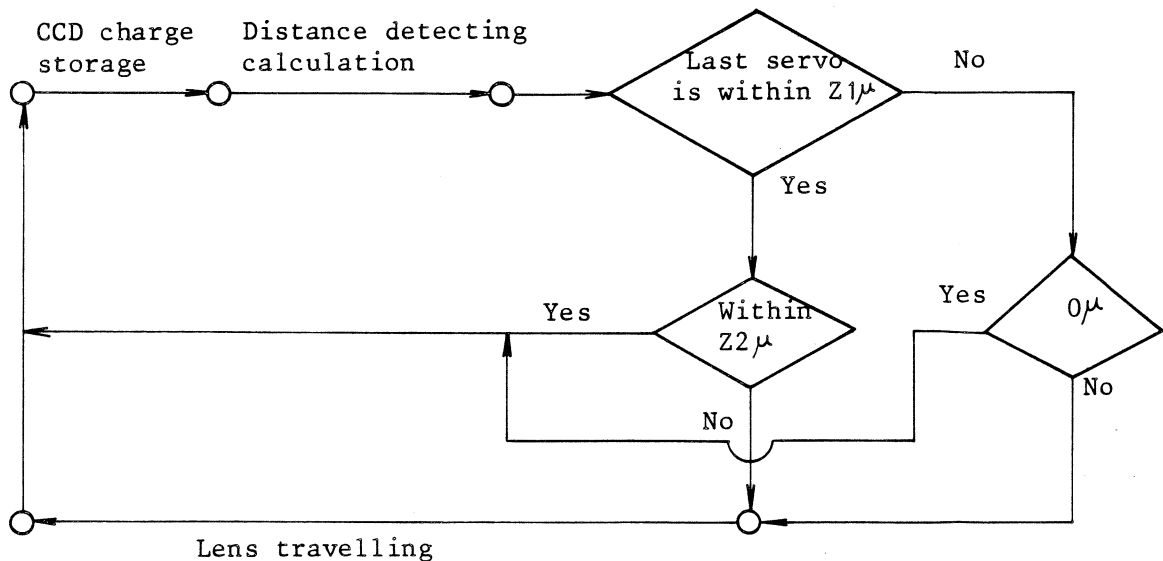
If the finger is detached from the shutter release button, the lens stops travelling even before focusing.

The viewfinder display operates while the power hold switch is on.

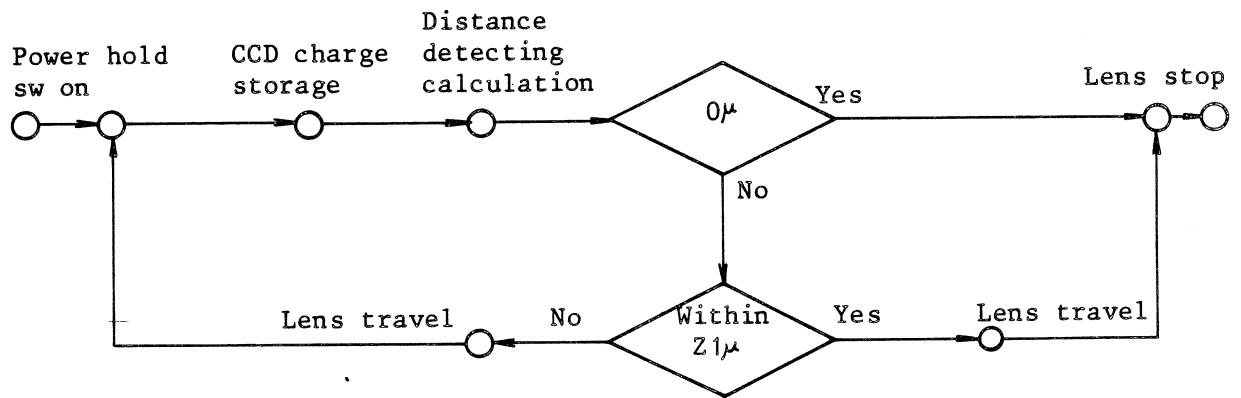
And when the power hold switch is turned off, the viewfinder display stops operating.

The following is control loops on C and S modes.

#### AF CONTROL LOOP ON C MODE (when the power hold switch is on)



If the calculatoin result from the inputted data is within Z1 , then, the defocus amount is judged to be small. And if it is within Z2 , the lens does not travel at all.

AF CONTROL LOOP ON S MODE

The power hold switch is turned on and storage, calculation and lens travelling are repeated.  
 When the defocus amount is within  $Z1\mu$ , the lens will be stopped after the next one cycle.

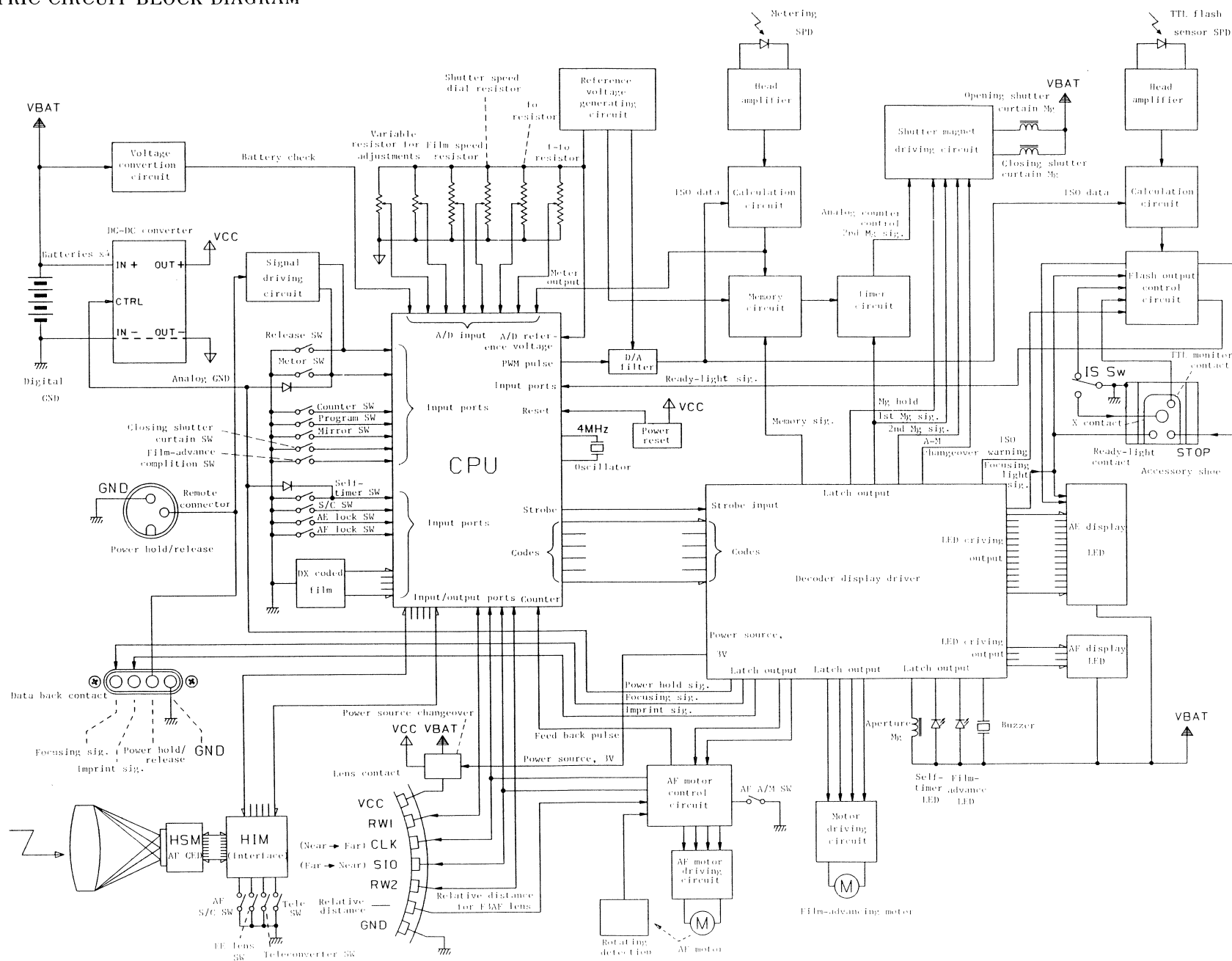
\*  $Z1$  and  $Z2$  are the defocus amount which indicates the fixed focus judging zone. ( $Z1 > Z2$ )

## SWITCHES

| Name                    | Position                       | Operation                                                                                                                                                                                 |
|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF A/M<br>changeover sw | reverse side<br>of front plate | When the focus mode selector is set to M,<br>it is turned off and focus mode is switched<br>to manual mode.                                                                               |
| One shot sw             | Front side of<br>front plate   | When the focus mode selector is set to S,<br>it is turned off and focus mode is switched<br>to single autofocus servo mode.                                                               |
| fmm sw                  | Base plate L                   | Tele sw: When the lens whose focal length is<br>135mm or longer is attached, it is<br>turned on.<br><br>Teleconverter sw: When the AI-S teleconverter<br>is attached, it is turned<br>on. |
| AF lock sw              | Front side of<br>front plate   | When the autofocus lock button is pressed,<br>it is turned on and focus is locked.                                                                                                        |

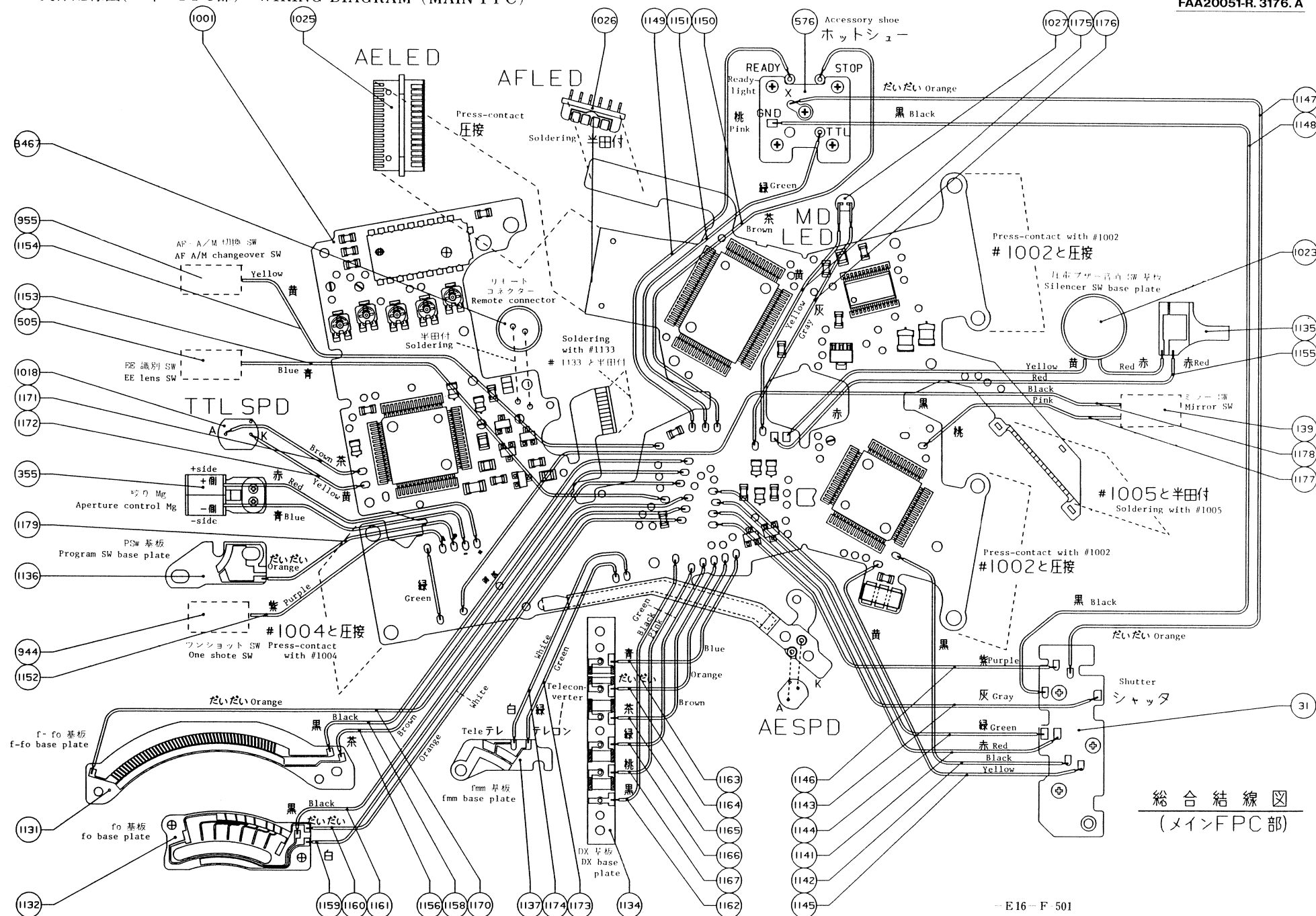
°The operation of the other switches is same as that of the F-301.  
But the positions of the self-timer sw and the AE lock sw are  
changed.

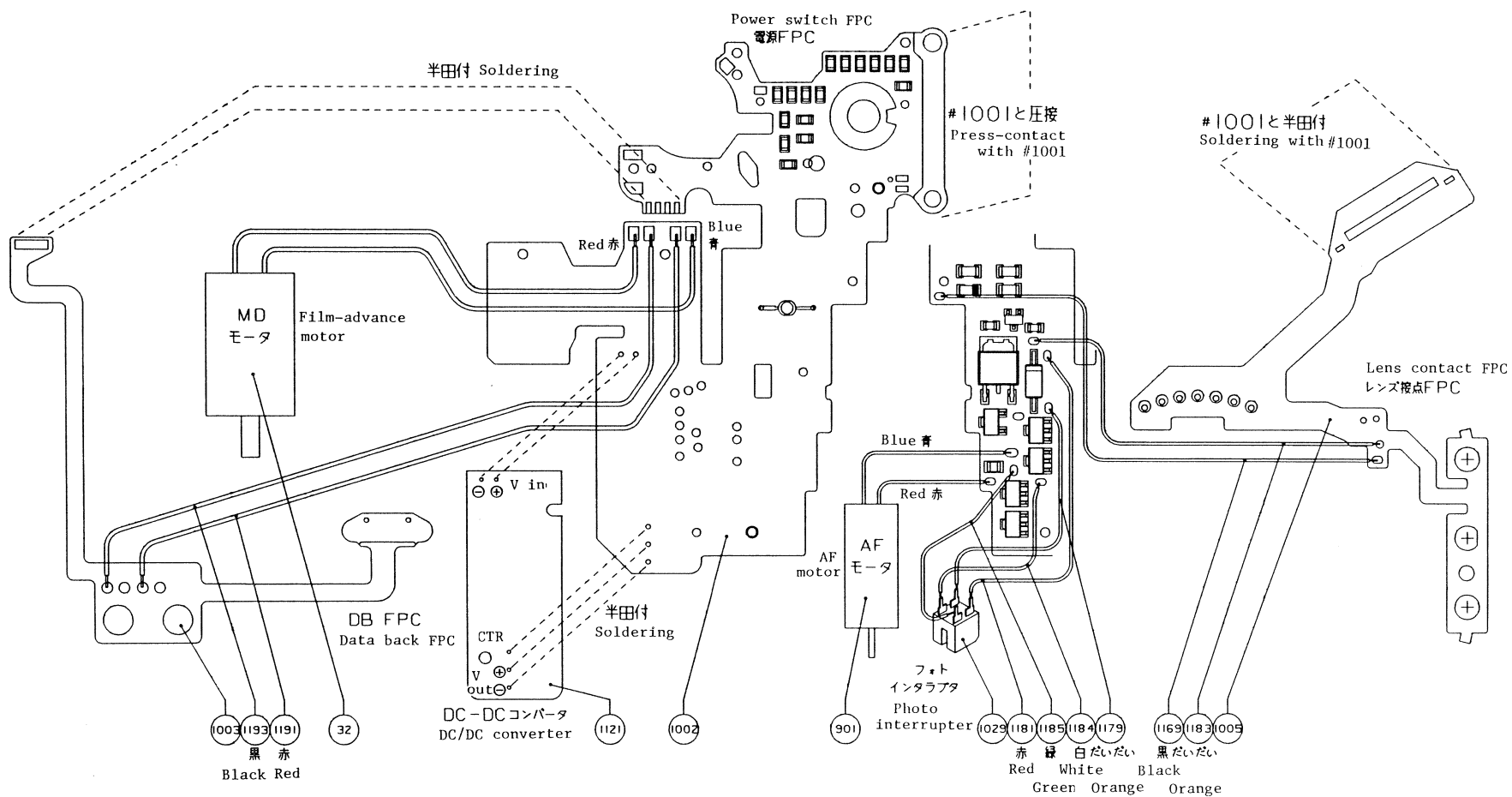
# ELECTRIC CIRCUIT BLOCK DIAGRAM



実体配線図(メインFPC部) WIRING DIAGRAM (MAIN FPC)

FAA20051-R. 3176. A







防湿塗料塗布図 MOISTURE-PROOF COATING DIAGRAM

○ 部

①～⑧

フレオン拭き

及び シールグロー塗布

Wipe with Freon and

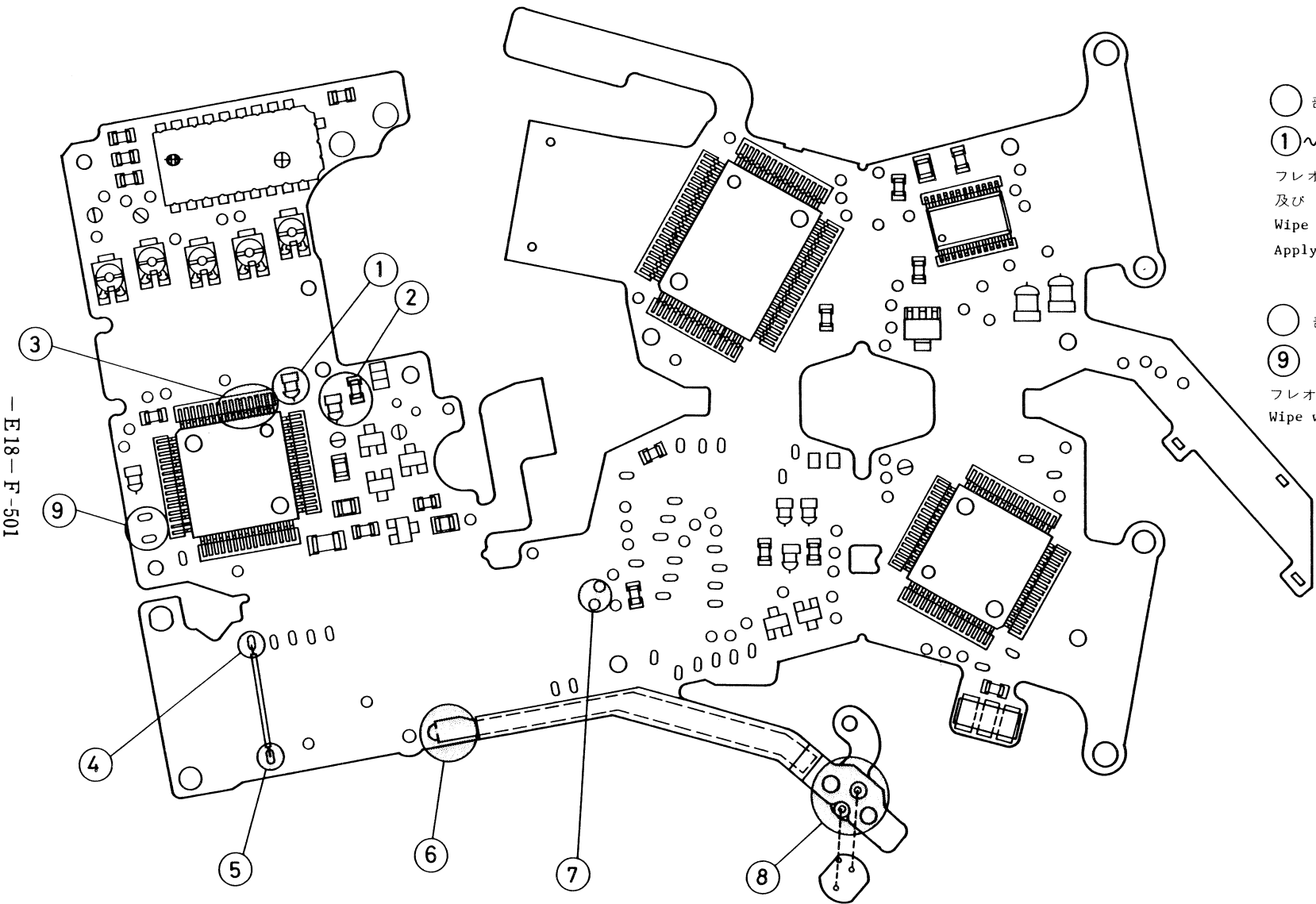
Apply moisture-proof coating

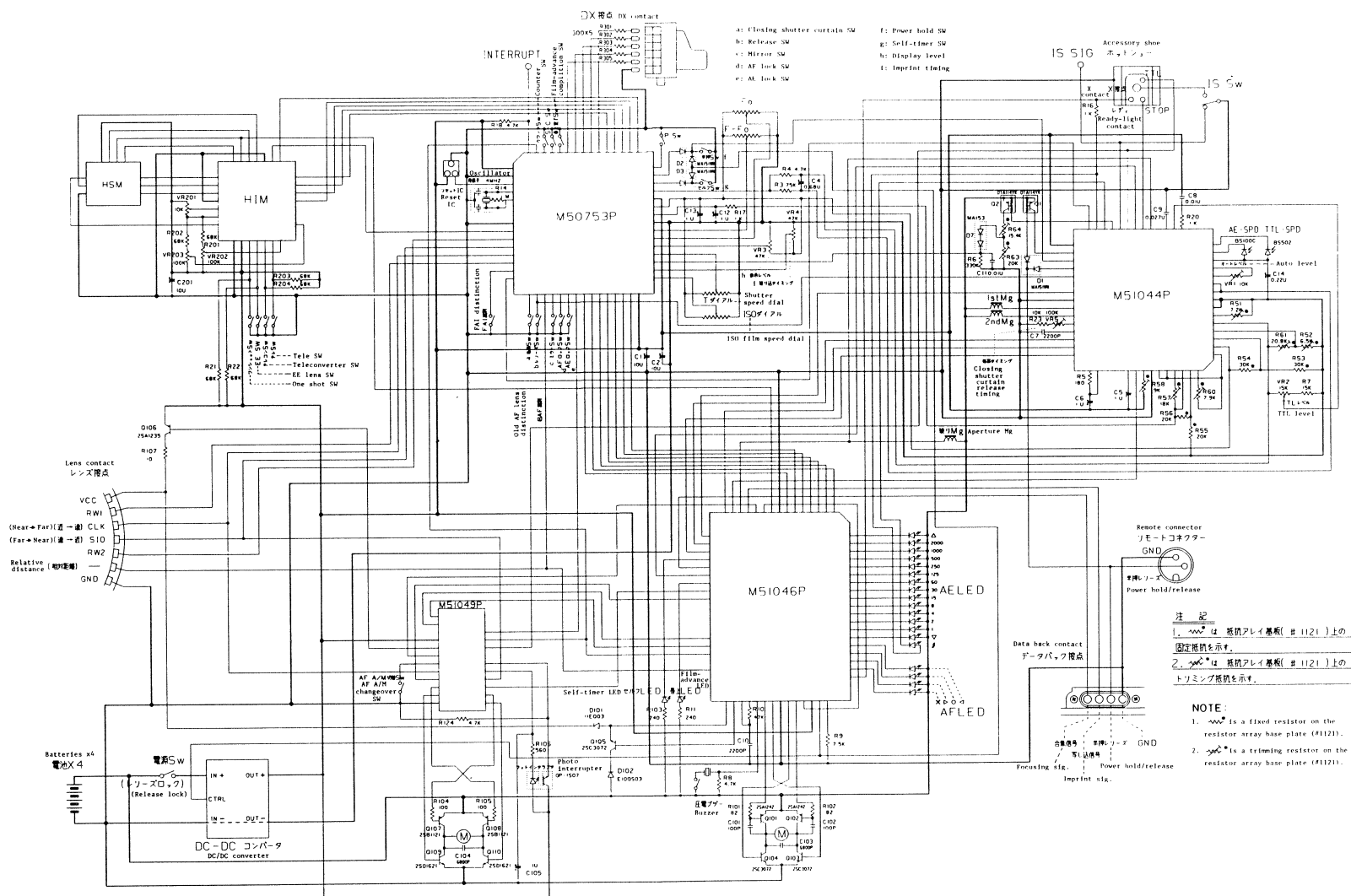
○ 部

⑨

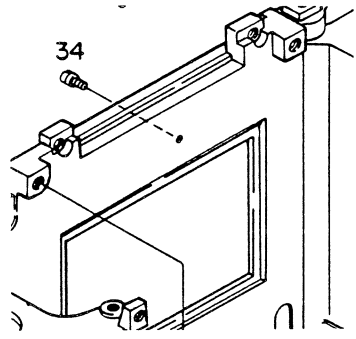
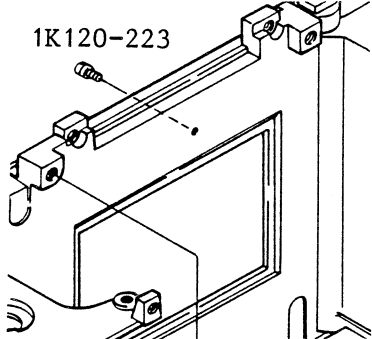
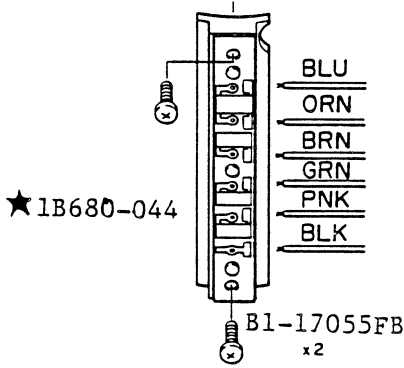
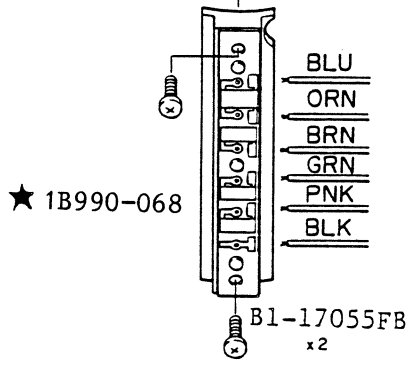
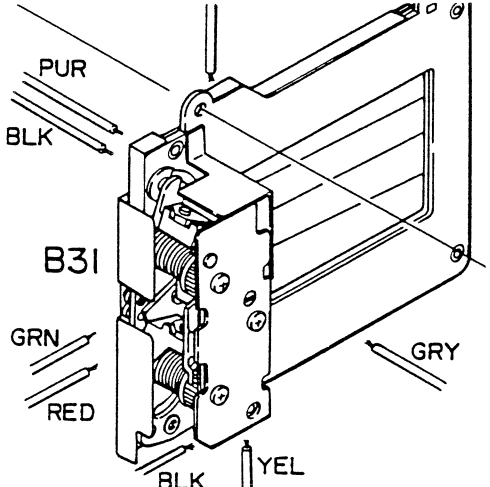
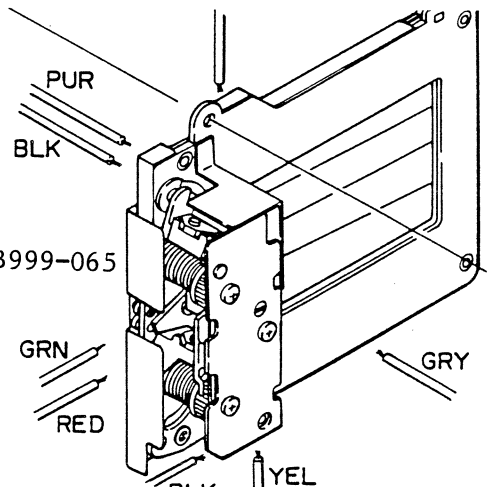
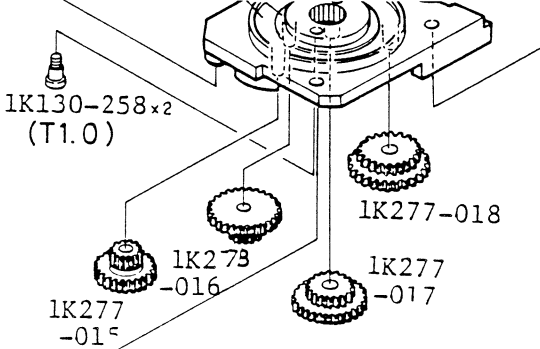
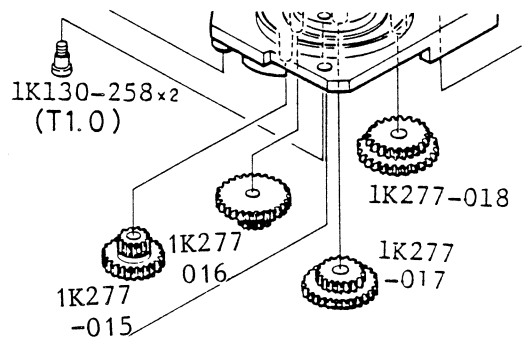
フレオン拭きのみ

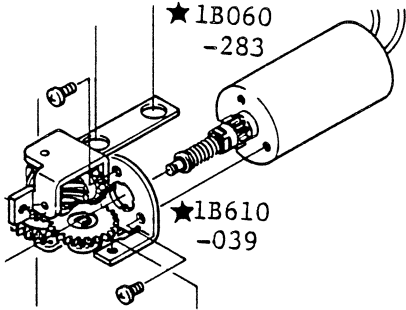
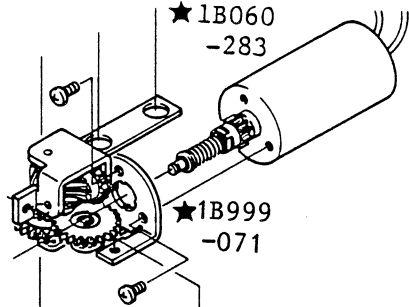
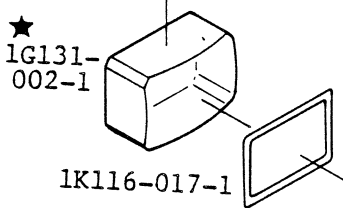
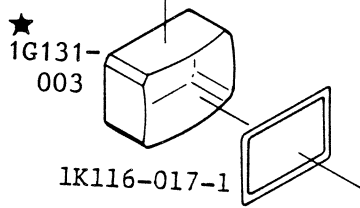
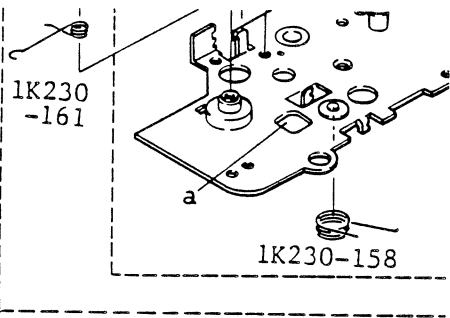
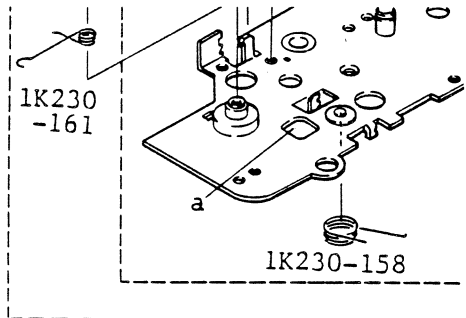
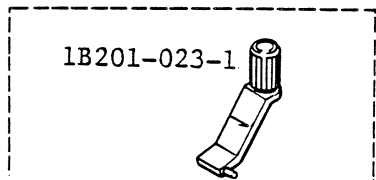
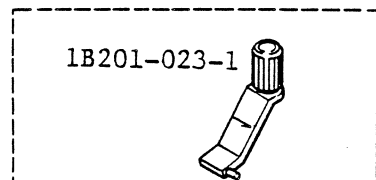
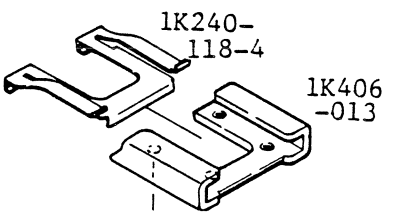
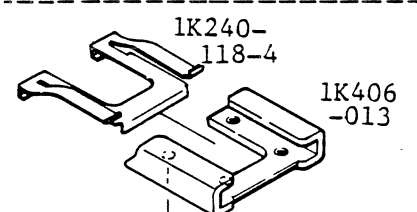
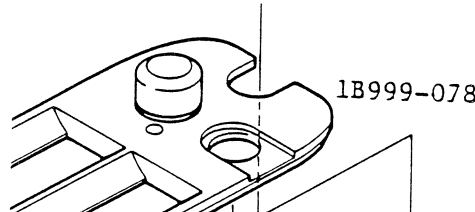
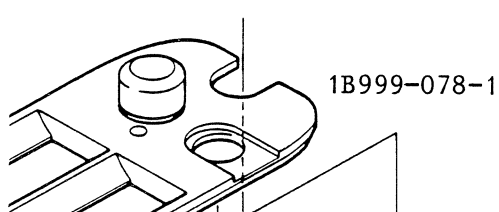
Wipe with Freon

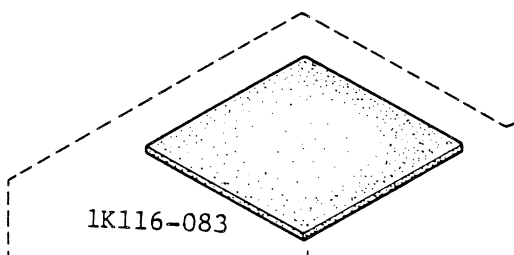
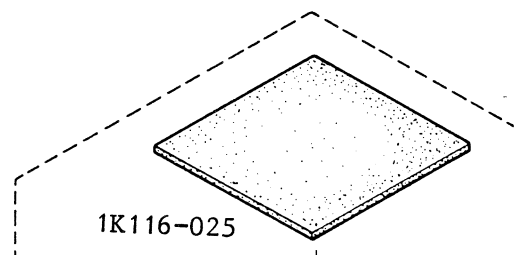




## 正誤表 Corrections

| Page         | MISTAKE                                                                                                                                                                           | CORRECT                                                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F1<br>Fig. 1 |  <p>34</p>                                                                                       |  <p>1K120-223</p>                                                                                |
|              |  <p>★ 1B680-044</p> <p>BLU<br/>ORN<br/>BRN<br/>GRN<br/>PNK<br/>BLK</p> <p>B1-17055FB<br/>x2</p> |  <p>★ 1B990-068</p> <p>BLU<br/>ORN<br/>BRN<br/>GRN<br/>PNK<br/>BLK</p> <p>B1-17055FB<br/>x2</p> |
|              |  <p>PUR<br/>BLK<br/>GRN<br/>RED<br/>YEL</p> <p>B31</p>                                         |  <p>PUR<br/>BLK<br/>GRN<br/>RED<br/>YEL</p> <p>1B999-065</p>                                   |
| F2<br>Fig. 2 |  <p>1K130-258x2<br/>(T1.0)</p> <p>1K277-016<br/>1K277-017<br/>1K277-018<br/>1K277-015</p>      |  <p>1K130-258x2<br/>(T1.0)</p> <p>1K277-016<br/>1K277-017<br/>1K277-018<br/>1K277-015</p>       |

| Page           | MISTAKE                                                                                                                                        | CORRECT                                                                                                                                                          |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F5<br>Fig. 5   |  <p>★1B060-283<br/>★1B610-039</p>                             |  <p>★1B060-283<br/>★1B999-071</p>                                             |
| F8<br>Fig. 8   |  <p>★1G131-002-1<br/>1K116-017-1</p>                          |  <p>★1G131-003<br/>1K116-017-1</p>                                            |
| F10<br>Fig. 10 |  <p>1K230-161<br/>a<br/>1K230-158<br/>★1B990-062</p>         |  <p>1K230-161<br/>a<br/>1K230-158<br/>★1B990-062-2</p>                       |
| F11<br>Fig. 11 |  <p>1B990-052-1<br/>1B201-023-1</p>                         |  <p>1B990-052<br/>1B201-023-1</p>                                           |
| F12<br>Fig. 12 |  <p>-074<br/>★1B990-028-3<br/>1K240-118-4<br/>1K406-013</p> |  <p>1B999-074 (FAA20151)<br/>★1B990-028-3<br/>1K240-118-4<br/>1K406-013</p> |
| F13<br>Fig. 13 |  <p>1B999-078</p>                                           |  <p>1B999-078-1</p>                                                         |

| Page           | MISTAKE                                                                           | CORRECT                                                                             |
|----------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| F13<br>Fig. 13 |  |  |

## 展開図追加 Additional Figure

F13a

Fig. 13-1

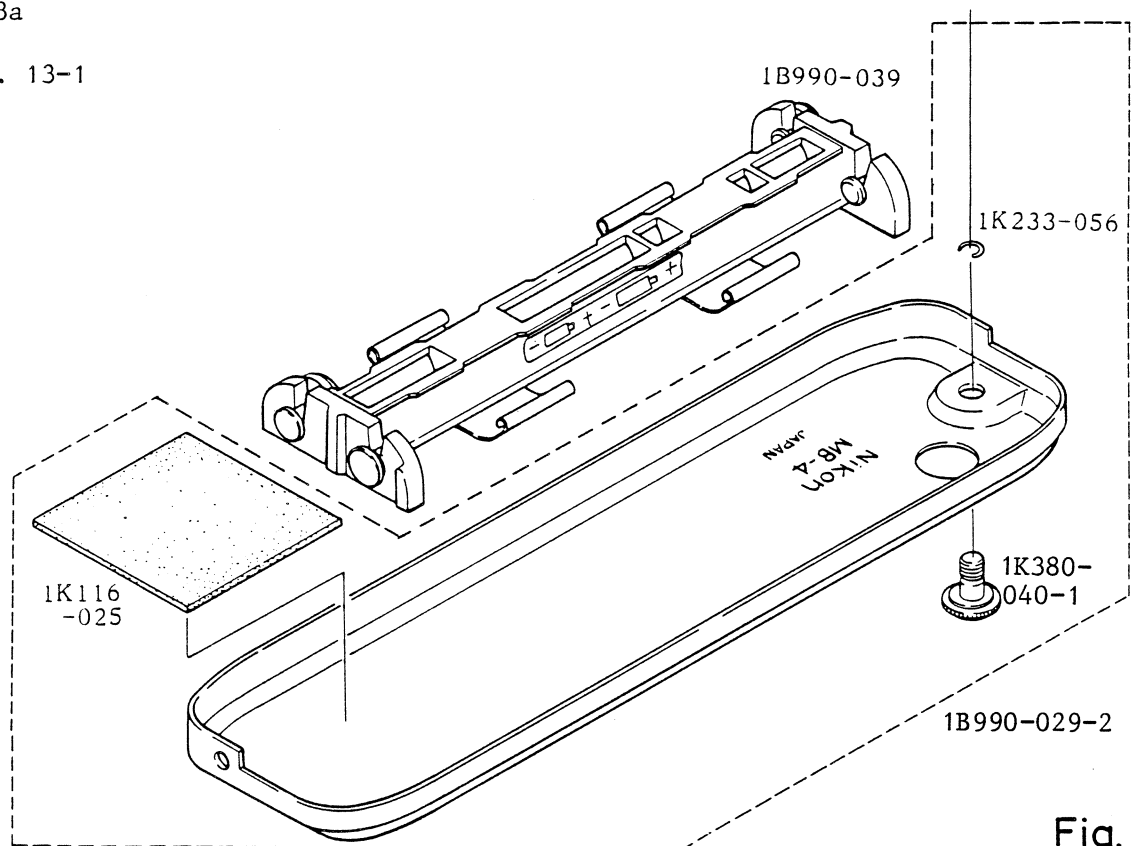
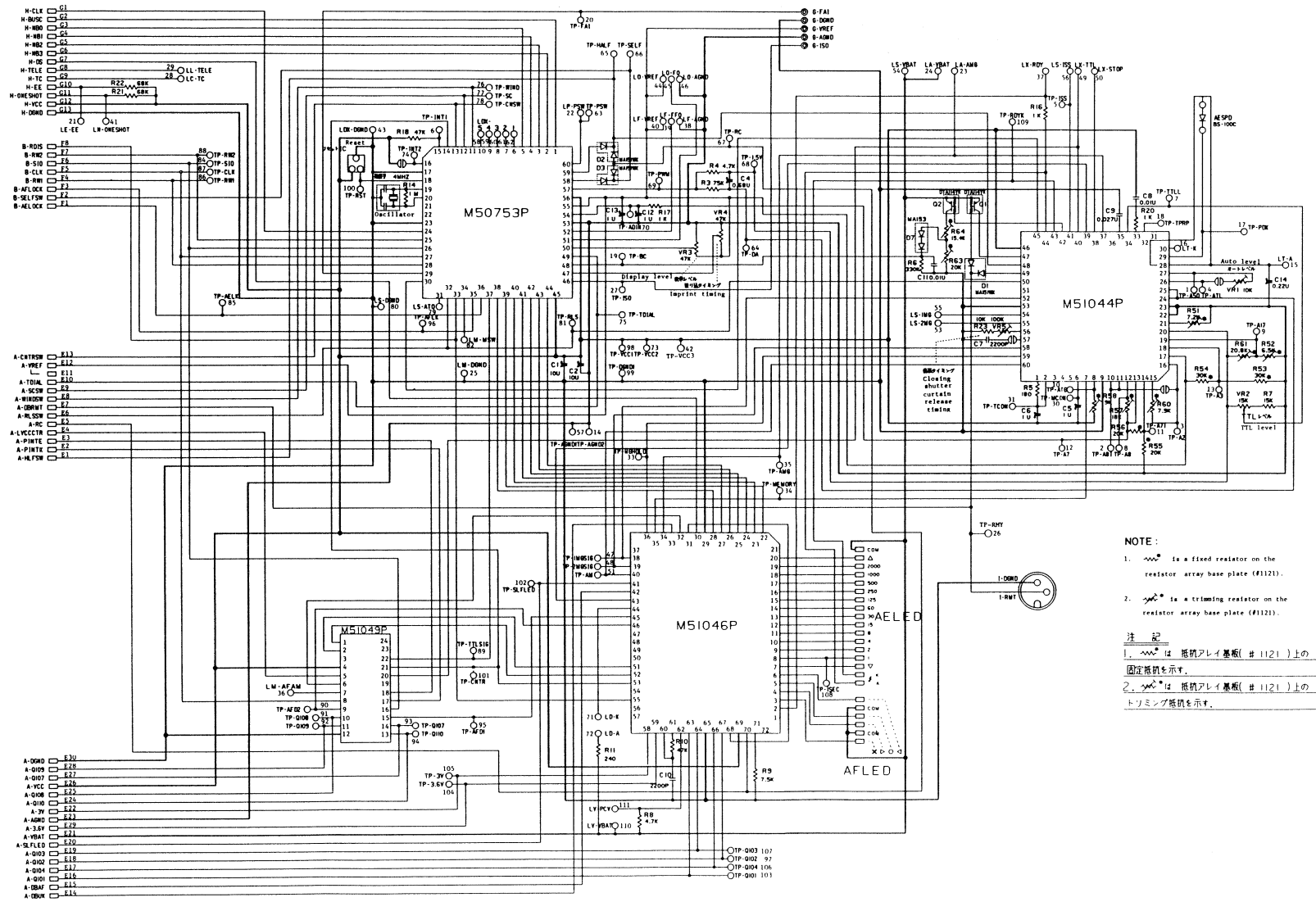


Fig. 13-1

| Page | MISTAKE             | CORRECT        |
|------|---------------------|----------------|
| F17  | G5, 1G131-002-1     | 1G131-003      |
|      | MB13, 1K116-083     | 1K116-025      |
|      | B211, 1B680-044     | 1B990-068      |
|      | Additional part No. | B31, 1B999-065 |
| F18  | B561, 1B990-052-1   | 1B990-052      |
|      | B902, 1B610-039     | 1B999-071      |
|      | B4002, 1B990-062    | 1B990-062-2    |
|      | BMB32, 1B999-078    | 1B999-078-1    |
|      |                     |                |



**NOTE:**

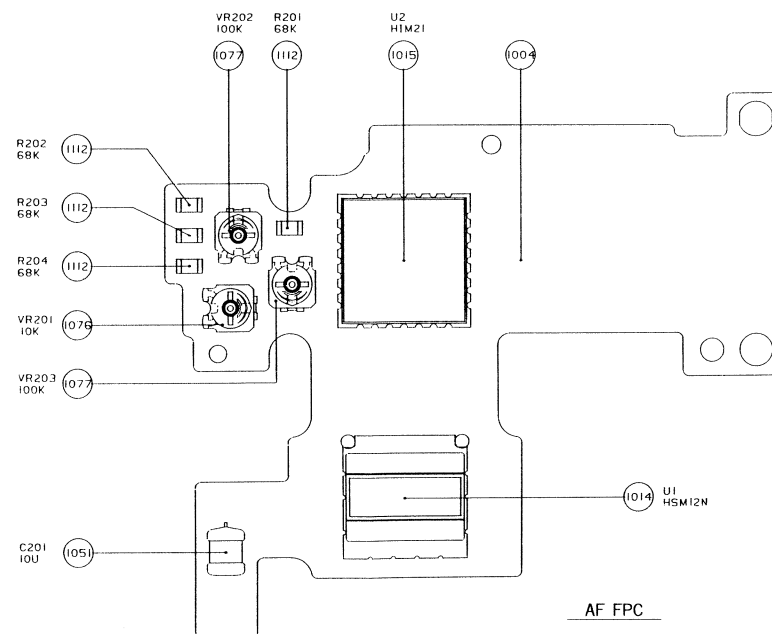
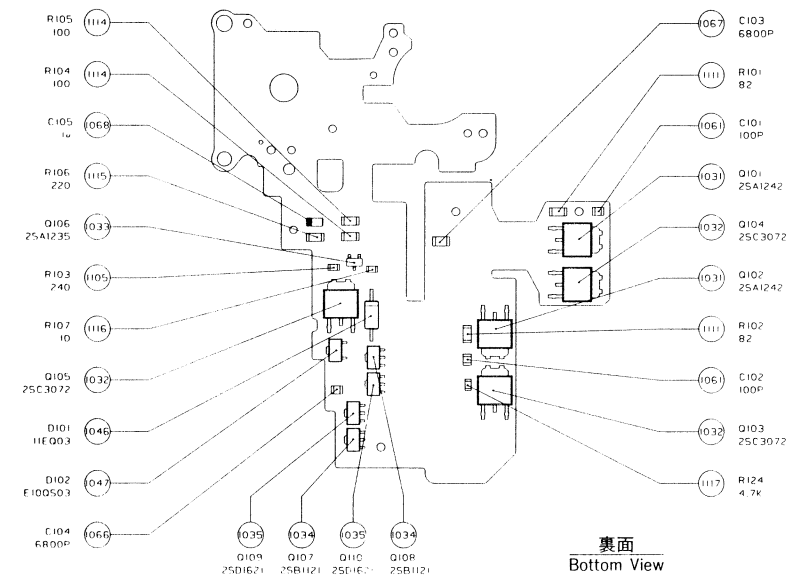
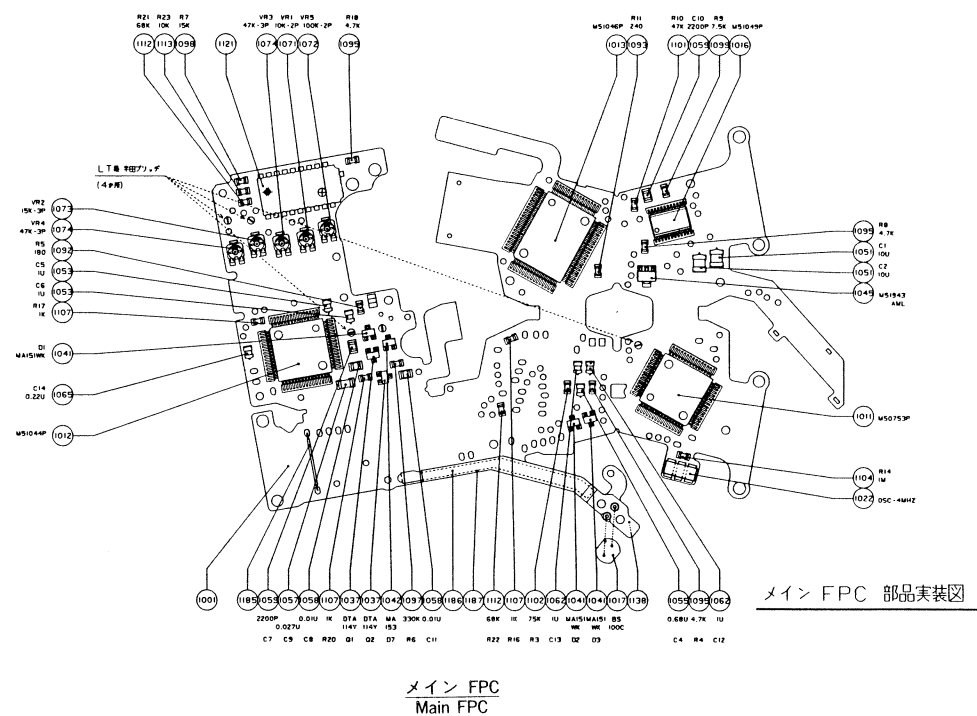
1.  $\sim$  is a fixed resistor on the resistor array base plate (#1121).
2.  $\sim$  is a trimming resistor on the resistor array base plate (#1121).

**注記**

1.  $\sim$  は抵抗アレイ基板( # 1121 )上の固定抵抗を示す。
2.  $\sim$  は抵抗アレイ基板( # 1121 )上のトリミング抵抗を示す。

電気部品配置図 CIRCUITRY PARTS LOCATIONS

FAA20051-R. 3176. A



## CIRCUITRY PARTS LIST

| Index |               | Function                                      | Index         |          | Function 称                                    |
|-------|---------------|-----------------------------------------------|---------------|----------|-----------------------------------------------|
| R3    | 75K $\Omega$  | PWM filter resistor                           | C101          | 100P     | Prevention of spike                           |
| R4    | 4.7K $\Omega$ | PWM discharging                               | C102          | 100P     | Prevention of spike                           |
| R5    | 180 $\Omega$  | Timer C discharging                           | C103          | 6800P    | Motor noise reduction C                       |
| R6    | 330K $\Omega$ | Battery check resistor                        | C104          | 6800P    | Motor noise reduction C                       |
| R7    | 15K $\Omega$  | TTL level fixing                              | C105          | 1 $\mu$  | Relative distance pulse condenser             |
| R8    | 4.7K $\Omega$ | Buzzer discharging                            | C201          | 10 $\mu$ | By-pass condenser                             |
| R9    | 7.5K $\Omega$ | LED current set                               |               |          |                                               |
| R10   | 47K $\Omega$  | Oscillation resistor                          |               |          |                                               |
| R11   | 240 $\Omega$  | MD LED resistor                               | Q1            | DTA114Y  | Remote sw power-on transistor                 |
| R14   | 1M $\Omega$   | Oscillator resistor                           | Q2            | DTA114Y  | Battery check transistor                      |
| R16   | 1K $\Omega$   | Ready-light current supply control            | Q101          | 2SA1242  | MD transistor                                 |
| R17   | 1K $\Omega$   | Filter resistor                               | Q102          | 2SA1242  | MD transistor                                 |
| R18   | 4.7K $\Omega$ | INT pull-up                                   | Q103          | 2SC3072  | MD transistor                                 |
| R20   | 1K $\Omega$   | Integration condenser resistor                | Q104          | 2SC3072  | MD transistor                                 |
| R21   | 68K $\Omega$  | HIM A/D pull-up                               | Q105          | 2SC3072  | Old lens Vcc supply                           |
| R22   | 68K $\Omega$  | HIM A/D pull-up                               | Q106          | 2SA1235  | New lens Vcc supply                           |
| R23   | 10K $\Omega$  | Closing shutter curtain release timing fixing | Q107          | 2SB1121  | AF MD transistor                              |
| R101  | 82 $\Omega$   | Q101 base resistor                            | Q108          | 2SB1121  | AF MD transistor                              |
| R102  | 82 $\Omega$   | Q102 base resistor                            | Q109          | 2SD1621  | AF MD transistor                              |
| R103  | 240 $\Omega$  | Self-timer LED current supply control         | Q110          | 2SD1621  | AF MD transistor                              |
| R104  | 100 $\Omega$  | Q107 base resistor                            |               |          |                                               |
| R105  | 100 $\Omega$  | Q108 base resistor                            | D1            | MA151WK  | Remote diode                                  |
| R106  | 560 $\Omega$  | Photo interrupter current supply control      | D2            | MA151WK  | Remote diode                                  |
| R107  | 10 $\Omega$   | New lens Vcc protecting                       | D3            | MA151WK  | Self-timer diode                              |
| R124  | 4.7K $\Omega$ | Photo interrupter load                        | D7            | MA153    | Battery check level shift                     |
| R201  | 68K $\Omega$  | X-BAR-P fixing                                | D101          | 11EQ03   | 3V protection                                 |
| R202  | 68K $\Omega$  | X-BAR-P fixing                                | D102          | E10QS03  | Protection from reverse connection of battery |
| R203  | 68K $\Omega$  | HIM A/D pull-up                               |               |          |                                               |
| R204  | 68K $\Omega$  | HIM A/D pull-up                               | VR1           | 10K      | Auto mode level                               |
| C1    | 10 $\mu$      | By-pass condenser                             | VR2           | 15K      | TTL mode level                                |
| C2    | 10 $\mu$      | By-pass condenser                             | VR3           | 47K      | LED display level                             |
| C4    | 0.68 $\mu$    | PWM filter condenser                          | VR4           | 47K      | Aperture stage down timing                    |
| C5    | 1 $\mu$       | Memory condenser                              | VR5           | 100K     | Closing shutter curtain release timing        |
| C6    | 1 $\mu$       | Timer condenser                               | VR201         | 10K      | HIM A/D reference adjustment                  |
| C7    | 2200P         | Closing shutter curtain release timing        | VR202         | 100K     | HIM X-BAR-P                                   |
| C8    | 0.01 $\mu$    | Integration condenser                         | VR203         | 100K     | HIM X-BAR-P                                   |
| C9    | 0.027 $\mu$   | IS delay condenser                            | M 5 1 0 4 4 P |          | Head amplifier IC                             |
| C10   | 2200P         | Oscillation condenser                         | M 5 1 0 4 6 P |          | Display, decoder IC                           |
| C11   | 0.01 $\mu$    | Battery check condenser                       | M 5 0 7 5 3 P |          | MCU                                           |
| C12   | 1 $\mu$       | Filter condenser                              | M 5 1 0 4 9 P |          | AF driving IC                                 |
| C13   | 1 $\mu$       | Vref filter condenser                         | M 5 1 9 4 3   |          | Reset IC                                      |
| C14   | 0.22 $\mu$    | TTL flash output control regulator            | H S M 1 2 N   |          | Sensor module                                 |
|       |               |                                               | H 1 M 2 1     |          | Interface module                              |



## CHECK LANDS

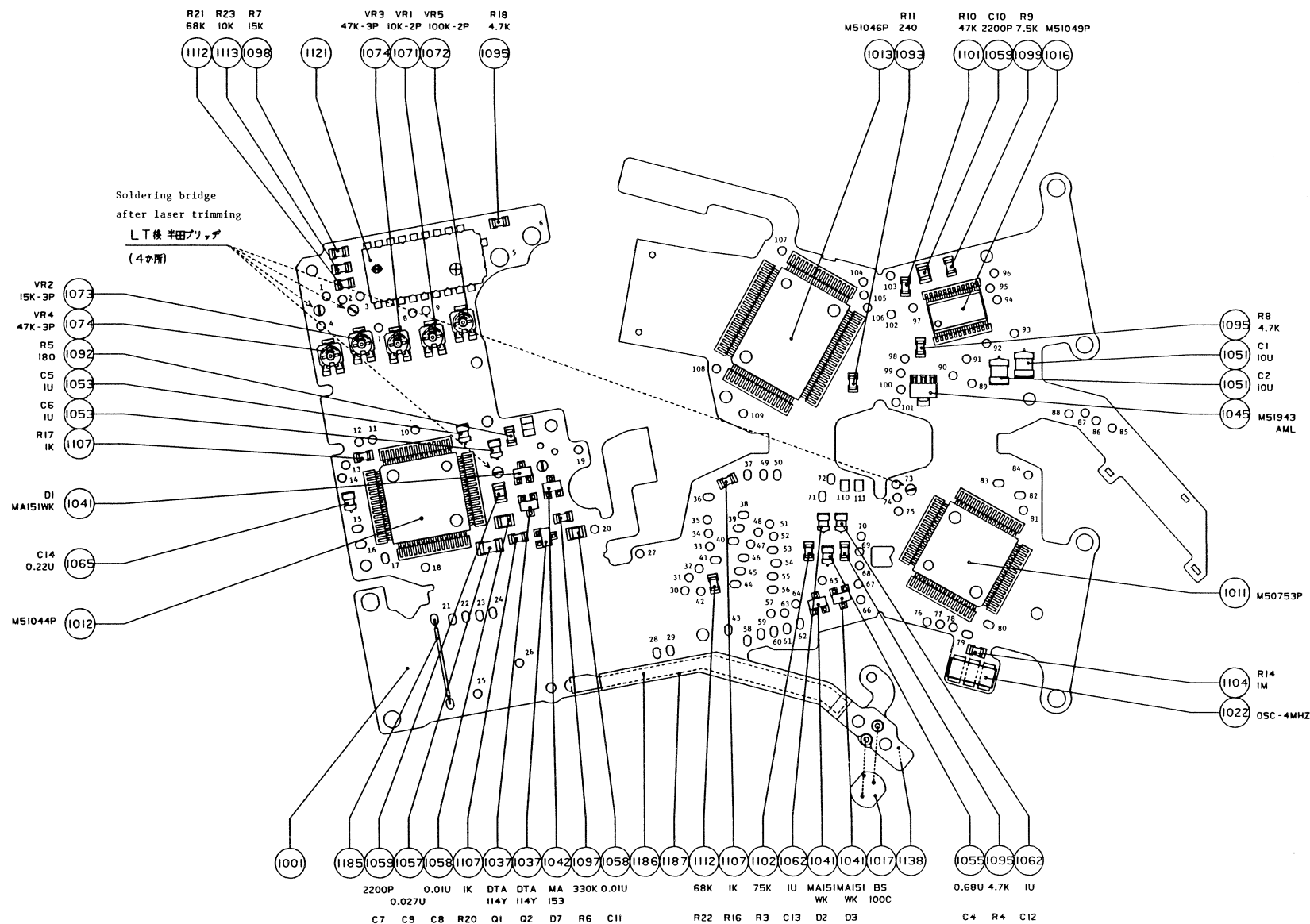
1) \*Lead wire soldering terminal

2) Number in parentheses is the check land number for the F-301.

|    |                                        |      |    |                                |      |     |                  |       |
|----|----------------------------------------|------|----|--------------------------------|------|-----|------------------|-------|
| 1  | Auto level shift                       | (10) | 41 | EE lens sw lead wire (blue)    | (40) | 81  | Release sw       | (72)  |
| 2  | f-fo reference output                  | (7)  | 42 | Vcc                            |      | 82  | *Mirror sw       |       |
| 3  | A2 out                                 | (13) | 43 | *FAI lead wire (black)         | (56) |     | lead wire (pink) | (85)  |
| 4  | Auto level shift                       | (12) | 44 | *fo lead wire (orange)         | (49) | 83  | GND              |       |
| 5  | IS terminal S                          | (8)  | 45 | *fo lead wire (white)          | (48) | 84  | SIO              |       |
| 6  | INT                                    | (9)  | 46 | *fo lead wire (black)          | (47) | 85  | AE lock          | (83)  |
| 7  | TTL mode level                         | (1)  | 47 | First Mg signal                | (50) | 86  | RW1              |       |
| 8  | Meter output 2                         | (4)  | 48 | Second Mg signal               | (51) | 87  | Clock            |       |
| 9  | Shutter speed proportion 2             | (5)  | 49 | *TTL terminal (green)          | (42) | 88  | RW2              |       |
| 10 | Auto r                                 | (15) | 50 | *Stop terminal (brown)         | (43) | 89  | TTL signal       |       |
| 11 | Meter output 1                         | (2)  | 51 | A/M changeover                 |      | 90  | AFD2             |       |
| 12 | Meter output 3                         | (14) | 52 | ISO warning                    |      | 91  | Q108             |       |
| 13 | A/D r reference                        | (18) | 53 | *Second Mg lead wire (green)   | (62) | 92  | Q109             |       |
| 14 | Analong GND                            | (21) | 54 | *V BAT lead wire (red)         | (63) | 93  | Q107             |       |
| 15 | *TTL SPD A lead wire (brown)           | (16) | 55 | *First Mg lead wire (gray)     | (64) | 94  | Q110             |       |
| 16 | *TTL SPD K lead wire (yellow)          | (17) | 56 | *IS sw lead wire (purple)      | (65) | 95  | AFD1             |       |
| 17 | SPD K                                  | (19) | 57 | Analog GND                     |      | 96  | AFK              |       |
| 18 | Shutter speed proportionon 1           | (20) | 58 | *FAI lead wire (pink)          | (57) | 97  | Q102             | (102) |
| 19 | Battery check                          | (92) | 59 | *FAI lead wire (green)         | (58) | 98  | Vcc              |       |
| 20 | FAI indentification                    | (32) | 60 | *FAI lead wire (brown)         | (59) | 99  | Digital GND      |       |
| 21 | *One shot sw lead wire (purple)        |      | 61 | *FAI lead wire (orange)        | (60) | 100 | RESET            |       |
| 22 | *Program sw lead wire (orange)         | (28) | 62 | *FAI lead wire (blue)          | (61) | 101 | CNTR             |       |
| 23 | *Aperture Mg lead wire (blue)          | (29) | 63 | Program sw                     | (70) | 102 | SELF-TIMER LED   | (98)  |
| 24 | *Aperture Mg lead wire (red)           | (30) | 64 | DA                             |      | 103 | Q101             | (99)  |
| 25 | *Mirror sw lead wire (black)           | (84) | 65 | Power hold sw                  | (67) | 104 | 3.6V             |       |
| 26 | Remote terminal                        | (24) | 66 | Self-timer sw                  | (71) | 105 | 3.0V             |       |
| 27 | Film speed dial                        |      | 67 | RC (remote control)            | (69) | 106 | Q104             | (101) |
| 28 | *Teleconverter lead wire (green)       |      | 68 | 1.5V                           | (3)  | 107 | Q103             | (100) |
| 29 | *Tele lead wire (white)                |      | 69 | PWM                            | (68) | 108 | AF LED 1 sec.    | (103) |
| 30 | Memory condenser                       | (54) | 70 | Meter output                   | (75) | 109 | Ready-light K    |       |
| 31 | Timer condenser                        | (53) | 71 | *MD LED K lead wire (gray)     | (93) | 110 | *Silencer sw     |       |
| 32 | Integration condenser                  |      | 72 | *MD LED K lead wire (yellow)   | (94) |     | lead wire (red)  | (105) |
| 33 | Mg hold                                | (38) | 73 | Vcc                            |      | 111 | *PVC lead wire   |       |
| 34 | Memory signal                          | (39) | 74 | INT2                           |      |     | (yellow)         | (106) |
| 35 | Aperture Mg signal                     | (52) | 75 | Shutter dial                   |      |     |                  |       |
| 36 | *A/M change over sw lead wire (yellow) |      | 76 | Film-advance sw                | (77) |     |                  |       |
| 37 | *Ready-light LED (pink)                | (41) | 77 | AF S/C changeover sw ((AF))    |      |     |                  |       |
| 38 | *f-fo lead wire (black)                | (44) | 78 | Frame counter sw               | (73) |     |                  |       |
| 39 | *f-fo lead wire (brown)                | (45) | 79 | *Closing shutter curtain sw    |      |     |                  |       |
| 40 | *f-fo lead wire (orange)               | (46) |    | lead wire (yellow)             | (87) |     |                  |       |
|    |                                        |      | 80 | *GND shutter lead wire (black) | (86) |     |                  |       |
|    |                                        |      |    |                                |      |     |                  |       |
|    |                                        |      |    |                                |      |     |                  |       |
|    |                                        |      |    |                                |      |     |                  |       |

メインFPC部品実装図 COMPONENT MOUNTING DIAGRAM (MAIN FPC)

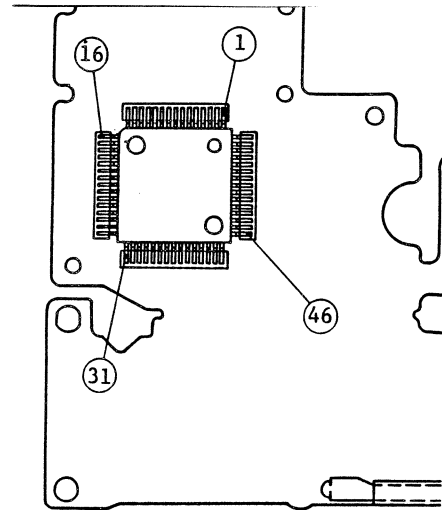
FAA20051-R. 3176. A



# HEAD AMPLIFIER TERMINALS

(51044)

(A1~A60)



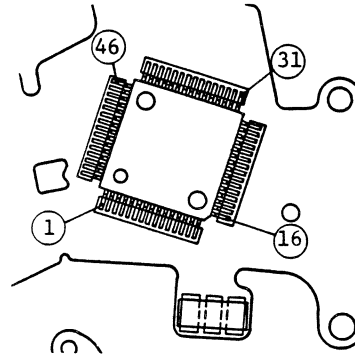
|     | Name                | Function                      |     | Name                  | Function                                         |
|-----|---------------------|-------------------------------|-----|-----------------------|--------------------------------------------------|
| 1   | Condenser discharge | Timer condenser discharge     | 3 2 | T                     | Temperature proportion                           |
| 2   | A11                 | A11 $\ominus$                 | 3 3 | Integration condenser | Integration condenser                            |
| 3   | A18 out             | NC                            | 3 4 | A13                   | TTL level                                        |
| 4   | A18                 | NC                            | 3 5 | A19                   | A19                                              |
| 5   | A18                 | NC                            | 3 6 | 1.2V                  | NC                                               |
| 6   | A9 out              | Memory condenser              | 3 7 | Zener                 | Zener                                            |
| 7   | A9                  | A9 memory                     | 3 8 | STOP                  | STOP                                             |
| 8   | A9                  | Auto $\tau$                   | 3 9 | ISO WARNING           | ISO WARNING                                      |
| 9   | A8 changeover       | A8 changeover                 | 4 0 | TTL                   | TTL                                              |
| 1 0 | A8-1                | f-fo output                   | 4 1 | ISS                   | IS SW                                            |
| 1 1 | A8-2                | f-fo output                   | 4 2 | Monitor               | Vcc monitor                                      |
| 1 2 | A8                  | Metering calculation output 3 | 4 3 | K                     | Ready-light LED-Cathode                          |
| 1 3 | A7 out              | Metering calculation output 2 | 4 4 | A                     | Ready-light LED-Anode                            |
| 1 4 | A7                  | Metering calculation output 1 | 4 5 | CPU                   | Speedlight Ready-light                           |
| 1 5 | A2                  | f-fo $\tau$ reference         | 4 6 | Vcc                   | Vcc                                              |
| 1 6 | A2 out              | f-fo $\tau$                   | 4 7 | RC in                 | Remote control                                   |
| 1 7 | A3 out              | A/D $\tau$                    | 4 8 | RC out                | Power hold                                       |
| 1 8 | A3                  | A/D $\tau$ reference          | 4 9 | RC in                 | Remote control                                   |
| 1 9 | A17                 | Temperature proportion        | 5 0 | RC out                | Remote release                                   |
| 2 0 | A17 out             | D/A $\tau$                    | 5 1 | NC                    | NC                                               |
| 2 1 | A16                 | Temperature proportion        | 5 2 | 1 sig.                | First Mg signal                                  |
| 2 2 | A4 changeover       | Analog GND                    | 5 3 | D GND                 | Digital GND                                      |
| 2 3 | A GND               | A GND                         | 5 4 | 1st Mg                | First Mg output                                  |
| 2 4 | A4-2                | D/A output                    | 5 5 | 2nd Mg                | Second Mg output                                 |
| 2 5 | A4-1                | D/A output                    | 5 6 | Timing R              | Closing shutter curtain release timing resistor  |
| 2 6 | A6                  | Auto level shift              | 5 7 | Timing C              | Closing shutter curtain release timing condenser |
| 2 7 | A5 out              | Auto level shift              | 5 8 | 2 sig.                | Second Mg signal                                 |
| 2 8 | A4 out              | SPD-Analog                    | 5 9 | Mg Hold               | Magnet hold                                      |
| 2 9 | A5                  | SPD-Cathode                   | 6 0 | A-M                   | A-M changeover                                   |
| 3 0 | A14                 | TTL-SPD-Cathode               |     |                       |                                                  |
| 3 1 | A14 out             | NC                            |     |                       |                                                  |

## MICRO COMPUTER TERMINALS

(M50753)

C1 ~ C60

( ) ----- Terminals No in F-301.



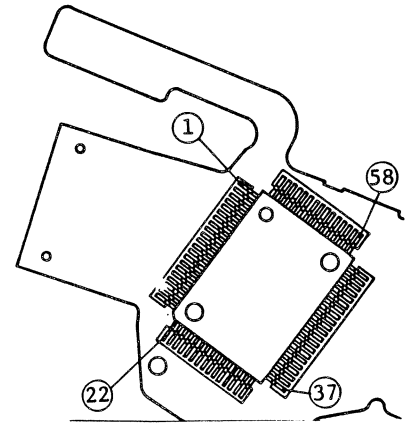
|    | Name  | Function                         | I / O |    | Name  | Function                         | I / O |
|----|-------|----------------------------------|-------|----|-------|----------------------------------|-------|
| 1  | P24   | HIM Bus control                  | I / O | 31 | P15   | Closing shutter curtain SW (3)   | I     |
| 2  | P23   | HIM NB3                          | I / O | 32 | P14   | Release sw (59)                  | I     |
| 3  | P22   | HIM NB2                          | I / O | 33 | P13   | New/old lens distinction         | I     |
| 4  | P21   | HIM NB1                          | I / O | 34 | P12   | Mirror SW (5)                    | I     |
| 5  | P20   | HIM NB0                          | I / O | 35 | P11   | AF lock SW                       | I     |
| 6  | P37   | DX 4 (6)                         | I / O | 36 | P10   | AF lock SW                       | I     |
| 7  | P36   | DX 3 (7)                         | I / O | 37 | P07   | TTL flash unit distinction       | I     |
| 8  | P35   | DX 2 (8)                         | I / O | 38 | P06   | Strobe signal T (38)             | O     |
| 9  | P34   | DX 1 (9)                         | I     | 39 | P05   | Decoder output A (44)            | O     |
| 10 | P33   | DX 0 (10)                        | I     | 40 | P04   | Decoder output B (43)            | O     |
| 11 | P32   | Film-advance SW (4)              | I     | 41 | P03   | Decoder output C (42)            | O     |
| 12 | P31   | S-C changeover SW (31)           | I     | 42 | P02   | Decoder output D (41)            | O     |
| 13 | P3    | Counter SW (58)                  | I     | 43 | P01   | Decoder output E (40)            | O     |
| 14 | CNTR  | Relative distance pulse          | I     | 44 | P00   | Decoder output F (39)            | O     |
| 15 | INT1  | Interrupt SC-13 (15)             | I     | 45 | Vcc   | Vcc                              |       |
| 16 | INT2  | Test                             | I     | 46 | INT7  | ISO dial                         | I     |
| 17 | CMVss | D GND (17)                       |       | 47 | INT6  | Aperture stop down timing (47)   | I     |
| 18 | Reset | Reset CPU (18)                   |       | 48 | INT5  | Battery check (48)               | I     |
| 19 | X IN  | Clock input (19)                 | I     | 49 | INT4  | Shutter speed dial               | I     |
| 29 | X OUT | Clock output (20)                |       | 50 | INT3  | Display level (50)               | I     |
| 21 |       | NC                               |       | 51 | INT2  | fo (51)                          | I     |
| 22 |       | NC                               |       | 52 | INT1  | f-fo (52)                        | I     |
| 23 | Vss   | D GND                            |       | 53 | A Vss | Analog GND (53)                  |       |
| 24 | 2 φ   | HIM clock                        |       | 54 | INT0  | Metering output (54)             | I     |
| 25 | P43   | AF lens signal R/W2              |       | 55 | V ref | A/D reference voltage input (55) |       |
| 26 | P42   | AF lens signal SI/O I / O        | I / O | 56 | A Vcc | Vcc (56)                         |       |
| 27 | P41   | AF lens signal CLK I / O         | I / O | 57 | PWM   | PWM (57)                         |       |
| 28 | P40   | AF lens signal R/W1 I / O        | I / O | 58 | P27   | Self-timer SW                    | I     |
| 29 | P17   | FAI distinction (11)             | I     | 59 | P26   | Power holding SW                 | I     |
| 30 | P16   | Speedlight ready-light sig. (29) | I     | 60 | P25   | Strobe program SW                | I     |

## DISPALY DECODER IC TERMINALS

M51046P

(B1 ~ B72)

( ) ----- Terminals No. in F-301.

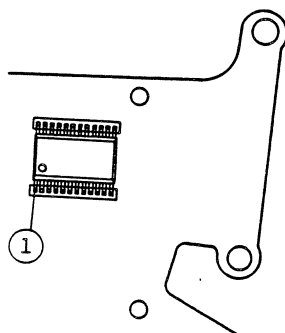


|    | Name  | Function                            |     | Name    | Function                         |
|----|-------|-------------------------------------|-----|---------|----------------------------------|
| 1  |       | NC                                  |     |         |                                  |
| 2  | O 1 9 | Ready signal (Focusing light)       |     |         |                                  |
| 3  | O 1   | Low contrast ×                      | 3 9 | Q 3     | 2nd Mg (3 2)                     |
| 4  | O 2   | Near ◁                              | 4 0 | Q 4     | A-M changeover (3 3)             |
| 5  | O 3   | Correct ○                           | 4 1 | Q 5     | Self-timer LED (3 4)             |
| 6  | O 4   | Far ▷                               | 4 2 | Q 6     | Focusing signal                  |
| 7  | O 5   | Under ▽ (1 5)                       | 4 3 | Q 7     | ISO warning (2 9)                |
| 8  | O 6   | 1 (1 4)                             | 4 4 | Q 1 3   | Motor drive LED (3 7)            |
| 9  | O 7   | 2 (1 3)                             | 4 5 | A 1     | AF motor Far → Near              |
| 10 | O 8   | 4 (1 2)                             | 4 6 | A 2     | AF motor Near → Far              |
| 11 | O 9   | 8 (1 1)                             | 4 7 |         | NC                               |
| 12 | O 1 0 | 1 5 (1 0)                           | 4 8 |         | NC                               |
| 13 | O 1 1 | 3 0 (9)                             | 4 9 |         | NC                               |
| 14 | O 1 2 | 6 0 (8)                             | 5 0 |         | NC                               |
| 15 | O 1 3 | 1 2 5 (7)                           | 5 1 | P 4     | AF lock detection for F3 AF lens |
| 16 | O 1 4 | 2 5 0 (6)                           | 5 2 | P 5     | AF lock detection for F3 AF lens |
| 17 | O 1 5 | 5 0 0 (5)                           | 5 3 | P 6     | Relative distance pulse          |
| 18 | O 1 6 | 1 0 0 0 (4)                         | 5 4 | P 7     | NC                               |
| 19 | O 1 7 | 2 0 0 0 (3)                         | 5 5 | R D I S | Relative distance for F3 AF lens |
| 20 | O 1 8 | Over △ (2)                          | 5 6 |         | NC                               |
| 21 |       | NC                                  | 5 7 |         | NC                               |
| 22 | A     | Strobe A (1 6)                      | 5 8 | 3 V     | 3 V                              |
| 23 | B     | Strobe B (1 7)                      | 5 9 | 3. 6 V  | 3. 6 V                           |
| 24 | C     | Strobe C (1 8)                      | 6 0 | S 1     | Oscillation circuit (4 8)        |
| 25 | D     | Strobe D (1 9)                      | 6 1 | S 2     | Oscillation circuit (4 9)        |
| 26 | E     | Strobe E (2 0)                      | 6 2 | O s c   | Oscillation output (5 0)         |
| 27 | F     | Strobe F (2 1)                      | 6 3 | MD 1    | MD1 Motor driving (5 1)          |
| 28 | T     | Strobe T (2 2)                      | 6 4 | MD 3    | MD3 Motor driving (5 4)          |
| 29 | GND   | GND (2 3)                           | 6 5 | GND     | GND                              |
| 30 | Q 2 0 | TCL selection                       | 6 6 | MD 4    | Motor driving (5 5)              |
| 31 | Q 1 9 | Power source control for F3 AF lens | 6 7 | MD 2    | Motor driving (5 2)              |
| 32 | Q 1 8 | AF lens selection                   | 6 8 | CTR     | 3.6V control (5 6)               |
| 33 | Q 1 6 | Data back imprint (2 7)             | 6 9 | V c c   | V c c (5 7)                      |
| 34 | Q 1 5 | Aperture Mg (2 8)                   | 7 0 | RC      | Remote control (5 8)             |
| 35 | Q 1 4 | Memory (2 6)                        | 7 1 | I L     | I LED (5 9)                      |
| 36 | Q 1   | 1st and 2nd Mg off                  | 7 2 | NC      | NC                               |
| 37 |       | NC                                  |     |         |                                  |
| 38 | Q 2   | 1st Mg (3 1)                        |     |         |                                  |

## AF MOTOR DRIVING I C TERMINALS

M51049P

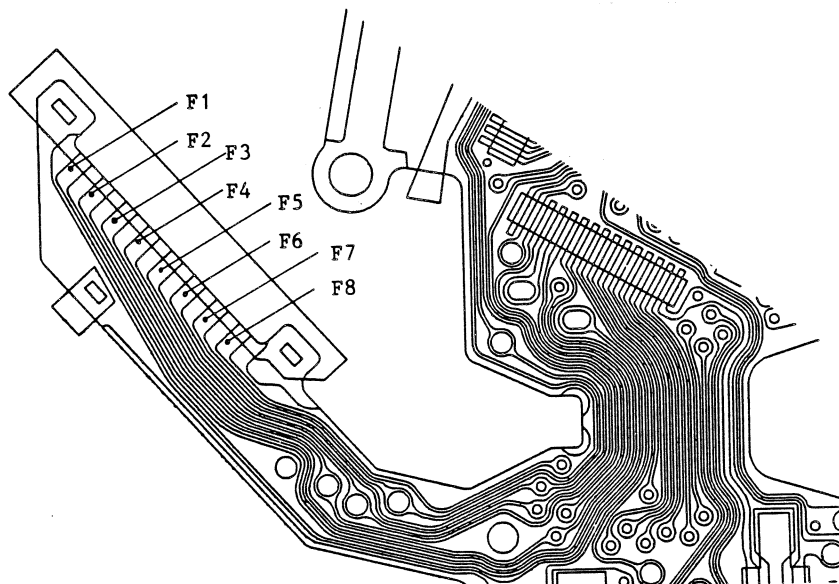
D1 ~ D24



|    | Function                             |    | Function                   |
|----|--------------------------------------|----|----------------------------|
| 1  | AF lock detecting for F3 AF lens     | 13 | MD10                       |
| 2  | AF lock detecting for F3 AF lens     | 14 | MD7                        |
| 3  | NC                                   | 15 | Far → Near                 |
| 4  | Vcc                                  | 16 | Far → Near(for F3 AF lens) |
| 5  | Power source control for new AF lens | 17 | Photo interrupter LED      |
| 6  | Selection of lens (new or old)       | 18 | Relative distance          |
| 7  | AF A-M changeover SW                 | 19 | NC                         |
| 8  | Near → Far (for F3 AF lens)          | 20 | TTL monitor                |
| 9  | Near → Far                           | 21 | Relative distance pulse    |
| 10 | MD8                                  | 22 | TTL mode detection         |
| 11 | MD9                                  | 23 | NC                         |
| 12 | GND                                  | 24 | NC                         |

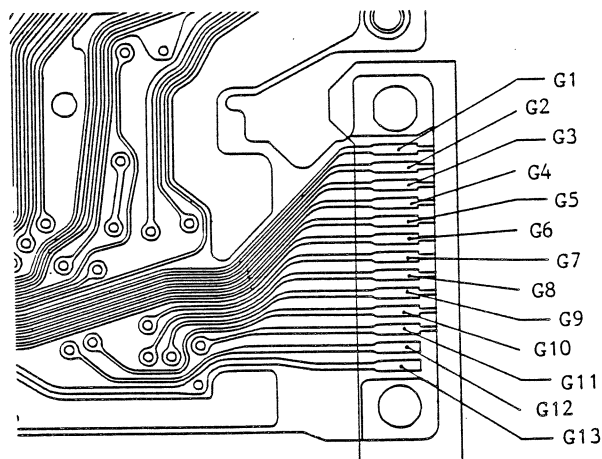
## AF LENS CONTACT

F1 ~ F8



|     | Name    | Function       |     | Name | Function               |
|-----|---------|----------------|-----|------|------------------------|
| F 1 | AELock  | AE lock SW     | F 5 | CLK  | AF lens signal         |
| F 2 | SELF SW | Self-timer SW  | F 6 | SIO  | AF lens signal         |
| F 3 | AFLOCK  | AF lock SW     | F 7 | RW2  | AF lens signal         |
| F 4 | RW1     | AF lens signal | F 8 | RDIS | F3 AF lens distinction |

## AF FPC TERMINAL



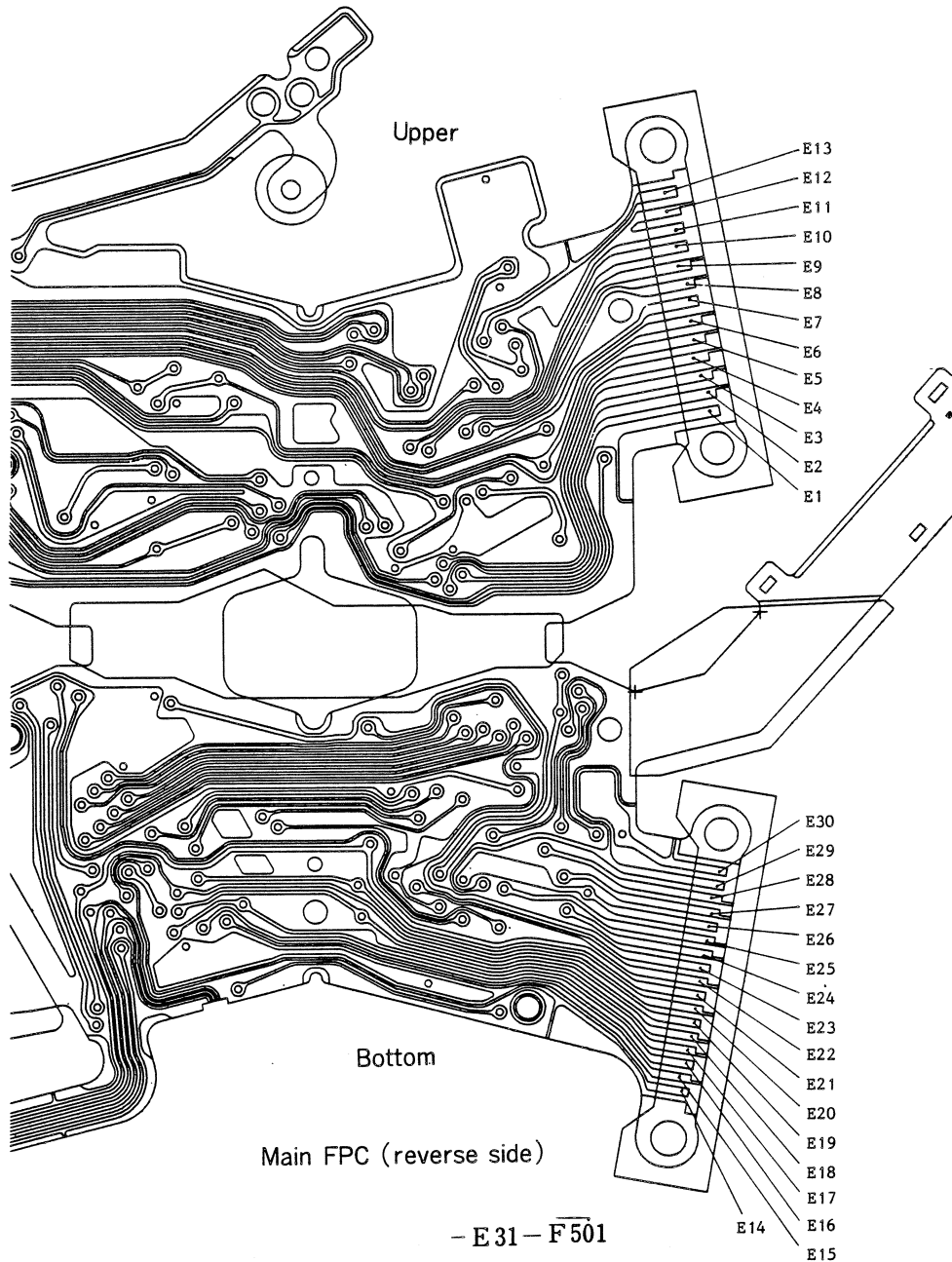
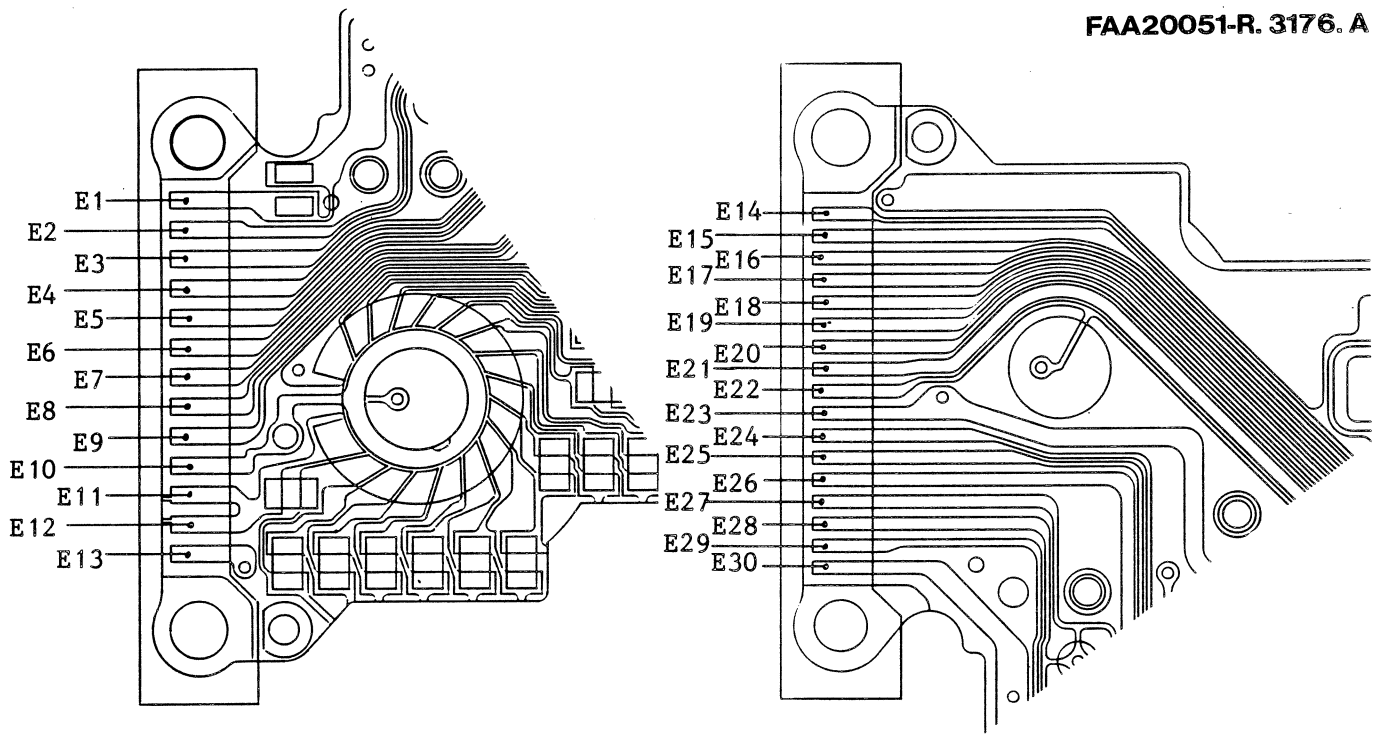
|     | Name | Function        |      | Name    | Function         |
|-----|------|-----------------|------|---------|------------------|
| G 1 | CLK  | Clock           | G 8  | TELE    | Tele SW          |
| G 2 | BUSC | HIM bus control | G 9  | TC      | Teleconverter SW |
| G 3 | NB 0 | HIM NB0         | G 10 | EE      | EE lens SW       |
| G 4 | NB 1 | HIM NB1         | G 11 | ONESHOT | One shot SW      |
| G 5 | NB 2 | HIM NB2         | G 12 | VCC     | V c c            |
| G 6 | NB 3 | HIM NB3         | G 13 | DGND    | GND              |
| G 7 | DS   | DS signal       |      |         |                  |

# MAIN FPC AND POWER SWITCH FPC TERMINALS

( ) ----- Terminals No. in F-301

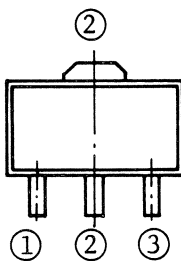
|       | Name       | Function                             |
|-------|------------|--------------------------------------|
| E 1   | HLE SW     | Power holding SW (E 1 2)             |
| E 2   | PINT K     | Photo interrupter K                  |
| E 3   | PINT E     | Photo interrupter E                  |
| E 4   | LV c c CTR | Vcc control for new AF lens          |
| E 5   | RC         | RC (E 2 0)                           |
| E 6   | RLSSW      | Release SW (E 8)                     |
| E 7   | DBRMT      | Data back power hold/release (E 1 4) |
| E 8   | WINDSW     | Film-advance SW (E 7)                |
| E 9   | SCSW       | S/C changeover SW (E 6)              |
| E 1 0 | TDIAL      | Shutter speed dial                   |
| E 1 1 | TVREF      | Shutter speed dial reference voltage |
| E 1 2 | TVREF      | Shutter speed dial reference voltage |
| E 1 3 | COUNTER    | Counter SW (E 1)                     |
| E 1 4 | DBUK       | Data back imprint signal (E 1 5)     |
| E 1 5 | DBAF       | Data back focusing signal            |
| E 1 6 | Q 1 0 1    | Q 1 0 1 B (E 1 6)                    |
| E 1 7 | Q 1 0 4    | Q 1 0 4 B (E 1 7)                    |
| E 1 8 | Q 1 0 2    | Q 1 0 2 B (E 1 9)                    |
| E 1 9 | Q 1 0 3    | Q 1 0 3 B (E 1 8)                    |
| E 2 0 | SELFLED    | Self-timer LED K (E 2 1)             |
| E 2 1 | VBAT       | V BAT (E 2 3)                        |
| E 2 2 | 3 V        | Vcc for F3 AF lens                   |
| E 2 3 | AGND       | GND (E 2 2)                          |
| E 2 4 | Q 1 1 0    | Q 1 1 0 B                            |
| E 2 5 | Q 1 0 8    | Q 1 0 8 B                            |
| E 2 6 | V c c      | V c c (E 1 1)                        |
| E 2 7 | Q 1 0 7    | Q 1 0 7 B                            |
| E 2 8 | Q 1 0 9    | Q 1 0 9 B                            |
| E 2 9 | 3. 6 V     | 3. 6 V                               |
| E 3 0 | DGND       | GND                                  |





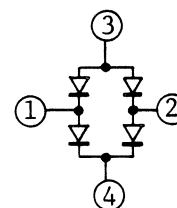
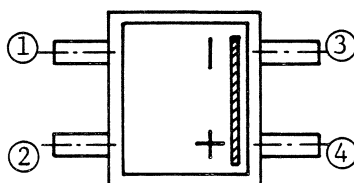
## 1. Power transistor

2SD1621



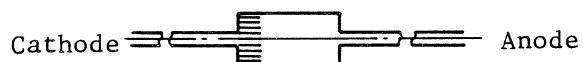
- ① Base
- ② Collector
- ③ Emitter

## 2. Rectifier diode bridge



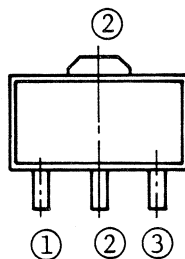
## 3. Shotky barrier diode

11EQ03



## 4. Reset IC

M51943

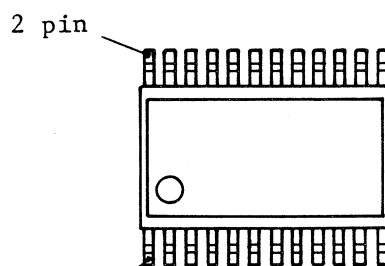


Terminal

- ① Vcc
- ② GND
- ③ Reset out

## 5. AF driver IC

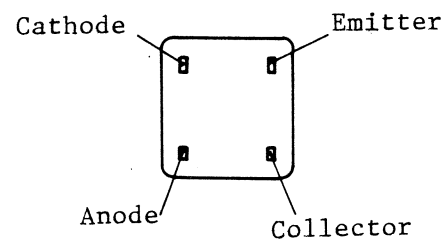
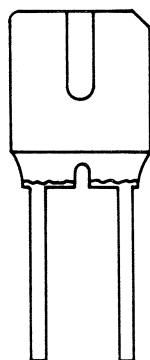
M51049P



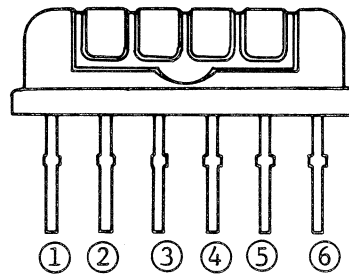
1 pin

## 6. Photo interrupter

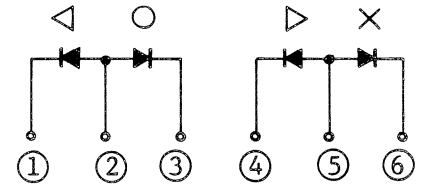
GPIS07



## 7. AF LED



Terminal arrangement



## CIRCUITRY OUTLINE

## 1. Power control circuit

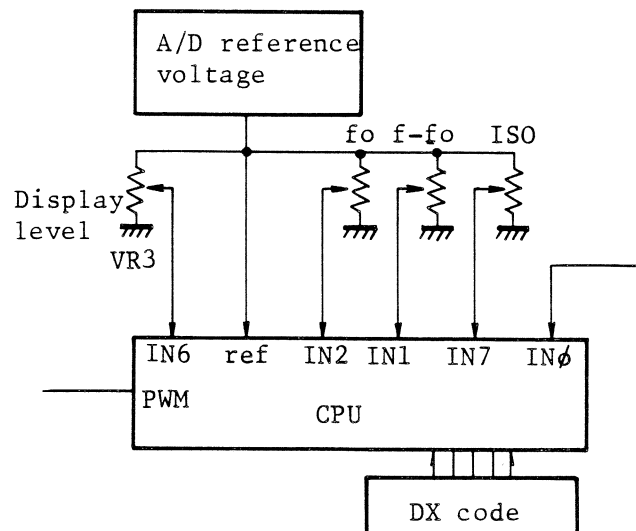
The same as in the F-301 except the following points

- Decoder IC is changed. (M51045P  $\Rightarrow$  M51046P)  
(This is the same in Fig.1-1.)
- '16sec. power hold timer' is changed to '8sec power hold timer'.
- 2) of 8sec. power hold operation is changed to 'To hold power while Auto exposure switch is on or Autofocus lock switch is on'.

## 2. Metering calculation for LED display

The same as in the F-301 except the following points

- CPU reads the ISO data from gray codes of ISO film speed dial or.....'  
'CPU reads the ISO data from A/D conversion of brush's electric potential of the variable resistor which actuates with ISO film speed dial and is located between Reference voltage for A/D conversion and GND or .....'
- 'The ends of both F-Fo resistor and Fo resistor are connected to Reference voltage for A/D conversion, and the other ends are connected to F-Fo reference voltage.'  $\longrightarrow$  'The ends of both F-Fo resistor and Fo resistor are connected to Reference voltage for A/D conversion, and the other ends are connected to GND.'
- Fig.2-1 is changed as follows;



## 3. Aperture control circuit

The same as in the F-301

## 4. Analog shutter speed control

The same as in the F-301

## 5. Digital shutter speed control

The same as in the F-301

## 6. Shutter actuating circuit

The same as in the F-301

## 7. LED display circuit

The same as in the F-301 except the following

'14 dots of LED for shutter speed display is directly controlled by Decoder IC.' → '14 dots of LED for shutter speed display and 4 dots of focus indicator LED are directly controlled by Decoder IC.'

## 8. Motor driving circuit(for film-advancing)

The same as in the F-301

## 9. TTL flash output control circuit

The same as in the F-301

## 10. Aperture control on TTL programmed auto mode

The same as in the F-301

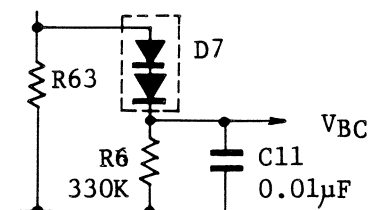
## 11. Battery check circuit

The same as in the F-301 except the following

In Fig.11-1, the position of C11 is changed to parallel position to R7.

## 12. Remote signal detecting circuit

The same as in the F-301



## 13. LED display circuit (other LEDs) and audio warning

The same as in the F-301

## 14. Variable resistors for adjustments

The same as in the F-301

## 15. Defocus amount detecting circuit (Fig.15-1)

Data are furnished between CPU and HIM via 6 lines, that are CLK, BUSC (Bus control) and 4-bits of NB0 - 3. CPU takes timing with BUSC and sends commands to HIM with NB0 - 3. The commands are to send data from CCD and A/D conversion.

On the other hand, after execution of the commands, HIM sends 8-bits data divided in two times (4-bits data in a time) to CPU with NB0 - 3, while taking timing with BUSC.

There is a circuit in HIM to control HSM. And it commands HSM to store the electric charge of CCD, transmit the data and reset with the five clocks of T, R and 1 - 3 used.

HIM outputs reference voltage (Vref) used for storage of electric charge in HSM and has a special A/D converter to A/D-convert the analog output from HSM.

In addition to that, HIM has 6 channels of A/D converters for general use. 2 channels of them send adjustment value for  $\bar{x}_p$  to compensate the data from CCD. HSM repeats the cycle of storage of electric charge, transmission and reset, and sends outputs from CCD to HIM.

CPU reads  $\phi$  signal and transmits DS signal to HSM and HIM via decoder, by which it is decided which detector is used, F2.8 detector or F4.5 detector. After this process, HSM exchanges the components row and HIM exchanges the A/D timing of the output from CCD which is inputted serially. 24 pairs of the output data from CCD transmitted to CPU detect the distance from the film plane to the focusing point, with fixed algorithm for defocus amount calculation.

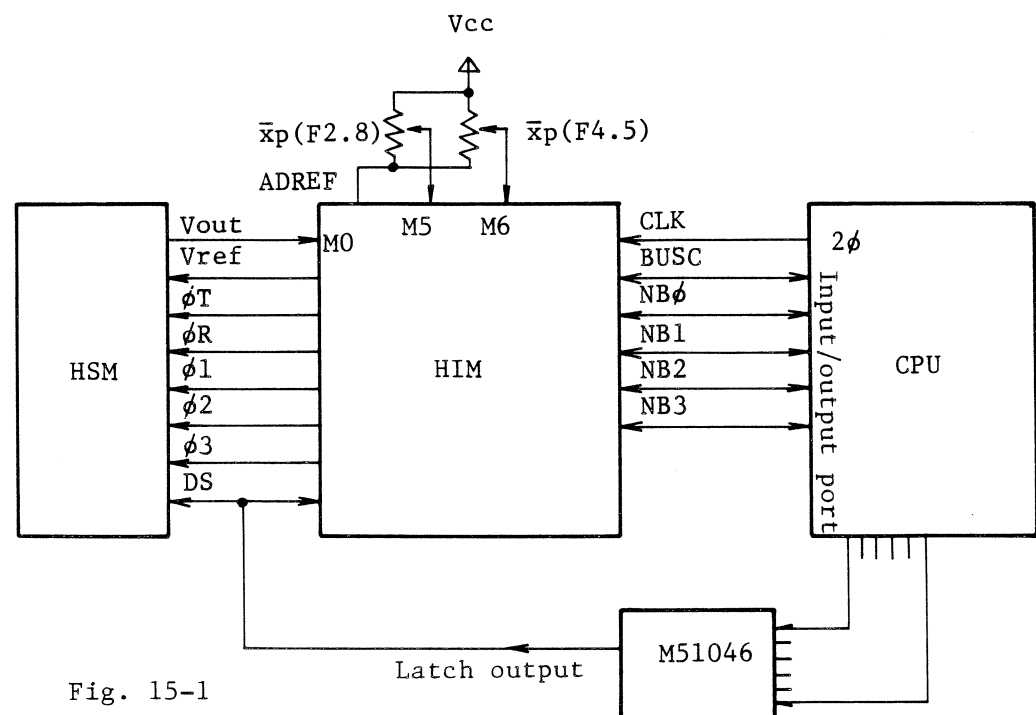


Fig. 15-1

## 16. Transmission of the AF lens data

When the power switch is turned on or fo signal is changed, CPU in the camera tries serial communication with the mount contacts. If the new AF lens (or TC-16AS) is attached, a proper response is returned to CPU. CPU judges whether the new AF lens is attached or not by checking the possiibility of the serial communication.

Signal lines for the communication are terminal B, C and D. Existence of CPU in the lens is detected by B signal from the camera. Then, digital command is transmitted serially by D signal and CPU reads it together with C signal. CPU in the lens treats this command and informs CPU with B signal that sending the data is ready.

Then, CPU in the camera outputs C signal to receive the data from lens. CPU in the lens transmits the appointed address data to CPU in the camera and informs CPU in the camera with B signal that sending the data is completed and receiving the next command is ready.

The above-mentioned operation is a cycle for data reading. CPU in the F-501 repeats this cycle and reads a series of data.

Serial communication after detection of new AF lens is carried out once a storage of CCD.

When the teleconverter TC-16AS is attached, the terminal for use is switched. i.e. When the teleconverter switch detects the teleconverter, CPU in the camera substitute E signal for B signal. (In CPU in the lens, the same terminal is used.)

In Fig.16-1, only lens distinction bits and bits for zoom encoder are indicated, but CPU in the lens has other bits, too.

## 17. AF lens driving control circuit (Fig.17-1)

The F-501 has circuits for driving of both of old type AF lens(AF Nikkor for the F3AF) and new type AF lens(AF AI Nikkor). After detecting of new or old type AF lens, CPU decides which circuit is used.

### 1) When the new type AF lens is attached

CPU makes the lens distinction signal(046- 32 or 049- 6 ) low and turns new lens Vcc on via M51046P. In order to drive the lens, CPU makes one of driving signals(A1 or A2) low. And CPU makes both of A1 and A2 low to brake the lens.

At that moment, if the focus mode selector is set to C or S, AF motor driving circuit(Q107 - Q110) is provided with base current.

The base current is approx. 40mA. And the current of the motor in driving the lens is approx. 600 - 800mA(in starting) or approx.200mA (in normal driving). If the focus mode selector is set to M, even though the driving signal(A1 and A2) reaches the motor driving circuit, current is not generated in the circuit and the motor does not rotate.

The photo interrupter which detects the motor rotation operates only when it is necessary. That is, only when the current actually flows in the motor driving circuit (when driving or braking), LED of the photo interrupter lights up. At the same time, the photo interrupter encodes light and shade of the signal plate which passes through the slit, and inputs the feedback pulse made rectangular by the comparator to the counter of CPU.

As for the actual sequence of the driving control, please refer to 'Autofocus system'.

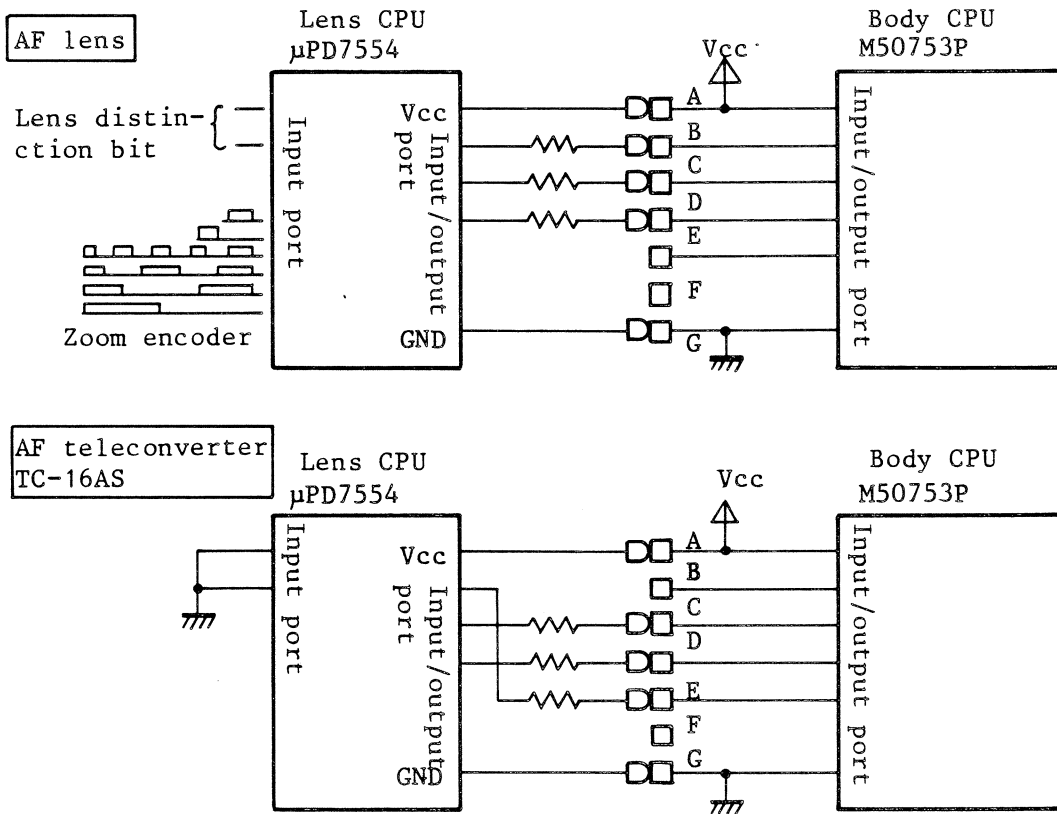
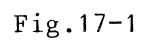


Fig. 16-1





## 2) When the old type AF lens is attached

The relative distance signal terminal of the old type AF lens is for transmission of the feedback pulse to detect the rotating amount of the motor in the lens. Between this terminal and GND, resistors of approx. 200 - 3.3k $\Omega$  are connected. The port(P13) of CPU reads the information from this terminal. If the result is low, it is judged that the old type AF lens is attached.

When the old type AF lens is distinguished, the lens distinction signal (046- ③② or 049- ⑥) becomes high and the new lens Vcc is turned off. At the same time, the power source of 3V for the old type AF lens is turned on via 046.

If the lens distinction signal is high, the driving signal(A1, A2) output from 046 is directly transmitted to 049 8 and ⑥ pin and then, transmitted to the lens via two terminals of the mount contacts. Then, the motor in the lens will rotate.

The focus mode is not decided by the focus mode selector of the camera but is decided by the focus mode selector of the lens.

The feedback pulse enters to 046 and is changed to rectangular pulse and then, enters to the counter of CPU.

As for the actual sequence of the driving control, please refer to 'Autofocus system'.

## 3) When the non-AF lens is attached

When the result of the lens distinction does not apply to either of the above-mentioned two cases, a non-AF lens is distinguished. In this case, the lens distinction signal is high(old type AF lens side), Vcc for the new AF lens is turned off and also the power source for the old type AF lens is turned off.

## ◦Vcc supply circuit for new and old type AF lenses (Fig.17-2)

When the power source is turned on or fo signal is changed, the lens distinction signal L is output via 046 to try the serial communication against the lens. And Vcc for new type AF lens (5 - 6V) is turned on once. Then, the serial communication is tried twice successively. The following operation will be divided as shown below according to the result.

- 1 In case that the serial communication is acceptable (in case that new type AF lens is attached):  
The power source for the new AF lens remains on and 3V power source is not turned on.
- 2 In case that the serial communication is not acceptable
  - 2 -1. When the relative distance terminal for old type AF lens (P13 of CPU) is low (when the old type AF lens is attached):  
The lens distinction signal becomes high, the power source for the new type AF lens is turned off, 3.6V output is turned on via 046 and the power source for the old type AF lens is turned on.
  - 2 -2. When the relative distance terminal for old type AF lens (P13 of CPU) is high (when the non-AF lens is attached):  
The lens distinction signal becomes high, Vcc for the new AF lens is turned off, 3.6V output remains off and the power source for the old type AF lens is turned off.

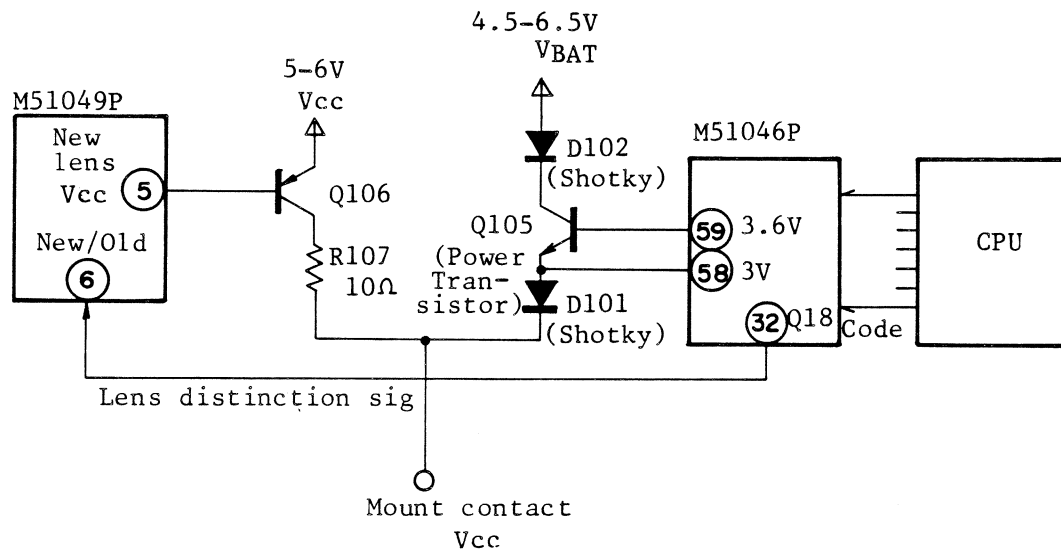


Fig.17-2

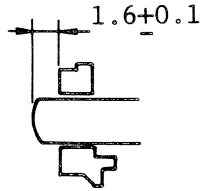
INSPECTION STANDARDS FOR REPAIR & TOOLS

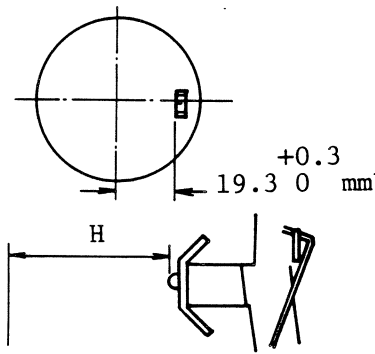
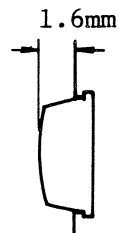
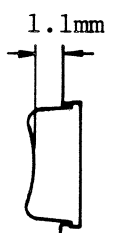
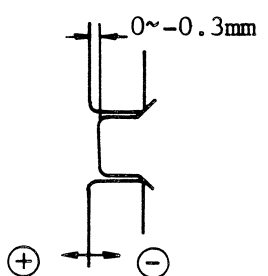
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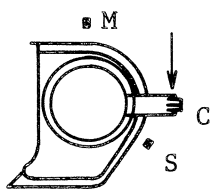
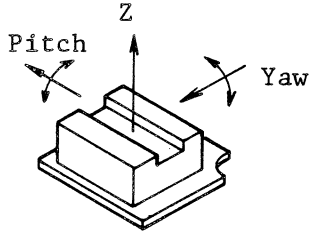
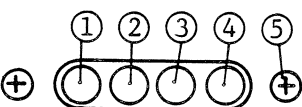
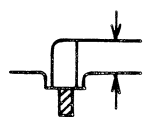
|                                           | Page |
|-------------------------------------------|------|
| [1] INSPECTION STANDARDS FOR REPAIR ..... | R1   |
| [2] TOOL LIST .....                       | R5   |

## INSPECTION STANDARDS FOR REPAIR

\*Please refer to 'INSPECTION STANDARDS FOR REPAIR' of the F-301 repair manual, for further information on the standard regulations.

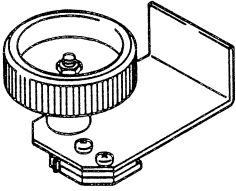
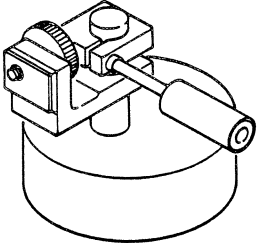
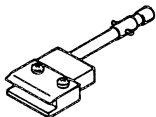
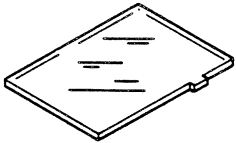
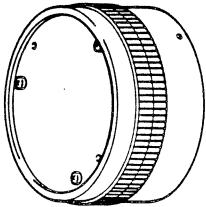
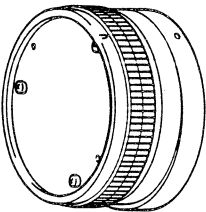
|            | ITEM                | STANDARD                                                                                                                                                                                                                                                                                                                                                    | TOOL                                         |
|------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| VIEWFINDER | Focus brackets      | Against the viewfinder frame<br>inclination: within $1^{\circ}$<br>displacement from the center:<br>$X=0\pm0.2\text{mm}$<br>$Y=0.5\pm0.2\text{mm}$                                                                                                                                                                                                          |                                              |
| LENS MOUNT | Lens release button | Tension: 700g or less<br>(on S or C mode of AF mode)                                                                                                                                                                                                                                                                                                        | J5029                                        |
|            | AF coupling         | Operation: When the lens release button is pressed to the end, its head should be below the bayonet face(on S or C mode).<br>The coupling should be below the bayonet face(on M mode).<br>Height: $1.6\pm0.1\text{mm}$<br>Tension: 60g or less(on the bayonet face)<br> | Slide caliper<br>J5018                       |
|            | Aperture lever      | Height: $3.1^{+0.1}_{-0}\text{mm}$ (after shutter-cocking)<br>Stroke: 7.1mm or more<br>Tension for return: 90 - 120g<br>Horizontal position: $18.7^{+0.35}_{-0.3}\text{mm}$<br>(from the center of the camera)<br>Depth: $5.8^{+0.9}_{-0.5}\text{mm}$ (from the bayonet face)                                                                               | Slide caliper<br>J5019<br>J18004<br>J18005-1 |
|            | Screen installation | Spring release tension: $90\pm30\text{g}$                                                                                                                                                                                                                                                                                                                   | J5018                                        |

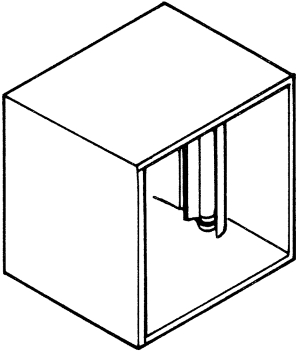
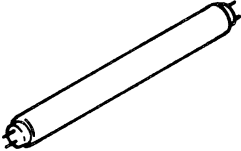
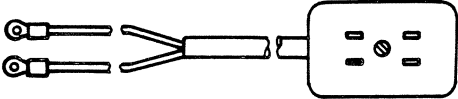
|                                                 | ITEM              | STANDARD                                                                                                                                                                                                |  |              |              | TOOL                                                                                  |                                         |                  |              |       |
|-------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|--------------|---------------------------------------------------------------------------------------|-----------------------------------------|------------------|--------------|-------|
|                                                 | fmm lever         | Horizontal position:<br>$19.3^{+0.3}_{-0}$ mm                                                                                                                                                           |  |              |              |     | Slide Caliper<br><br>J5019              |                  |              |       |
|                                                 |                   | Stroke:                                                                                                                                                                                                 |  |              |              |                                                                                       |                                         |                  |              |       |
|                                                 |                   | Tension:                                                                                                                                                                                                |  |              |              |                                                                                       |                                         |                  |              |       |
|                                                 |                   | Focal Length                                                                                                                                                                                            |  |              |              |                                                                                       |                                         | H                | Tension      | PDUAL |
|                                                 |                   | Shorter than 135mm                                                                                                                                                                                      |  |              |              |                                                                                       |                                         | 6.9mm or shorter | 40gr or more | PN    |
| 135mm or longer                                 |                   |                                                                                                                                                                                                         |  | 7.25 - 8.0mm |              | PHI                                                                                   |                                         |                  |              |       |
| Telecon-verter                                  |                   |                                                                                                                                                                                                         |  | 8.2 - 8.4mm  | 60gr or less | PHI                                                                                   |                                         |                  |              |       |
| AE LOCK BUTTON/AF LOCK BUTTON/SELF-TIMER BUTTON | AE lock button    | ON position: To be on at limit<br>OFF position:<br>To be off when the finger is lifted from the button<br>Tension: 110 - 190g<br>Height: 1.6mm or more                                                  |  |              |              |   | J5019<br><br>Slide Caliper              |                  |              |       |
|                                                 | AF lock button    | ON position: To be on at limit<br>OFF position:<br>To be off when the finger is lifted from the button<br>Tension: 110 - 190g<br>Height: 1.1mm or more                                                  |  |              |              |  | J5019<br>Slide Caliper                  |                  |              |       |
|                                                 | Self-timer button | Reset:<br>To be reset by pressing self-timer button during self-timer is in operation<br>Height: 0 - -0.3mm<br>ON position:<br>-0.8mm - -1.4mm<br>Tension: 60g or more<br>Delay action time:<br>10±2sec |  |              |              |  | J5019<br><br>Slide Caliper<br><br>Watch |                  |              |       |

|                     | ITEM                                                                        | STANDARD                                                                                                                                                                                                                                                                                                                                                                                                                              | TOOL                                                                                                |
|---------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| FOCUS MODE SELECTOR | Focus mode selector                                                         | <p>M mode: Servo does not operate.</p> <p>C mode: Shutter can be released whether the lens is focusing or not.</p> <p>S mode: Shutter cannot be released until the lens focuses.</p> <p>Switching torque: <math>350 \pm 100\text{g}</math></p>                                                                                                     | <p>J5029</p> <p>New AF lens</p>                                                                     |
| HSM                 | Accuracy                                                                    | <p>Yaw: <math>0 \pm 3\text{mrad}</math></p> <p>Pitch: <math>0 \pm 6\text{mrad}</math></p> <p>Z: <math>0 \pm 30\mu\text{m}</math></p>                                                                                                                                                                                                               | <p>J18185</p> <p>J18184</p> <p>J15259</p> <p>J18183</p> <p>J18186</p> <p>J15253-1</p> <p>J15253</p> |
| DATA BACK CONTACT   | Data back contact                                                           |   <p>Diecast is regarded as reference.</p> <p>1 Focusing signal contact</p> <p>2 Imprint signal contact</p> <p>3 Power hold/release signal contact</p> <p>4 GND</p> <p>5 Body distinction screw</p> <p>Height of 5 : <math>1.4^{+0.3}_{-0.2}\text{mm}</math></p> |                                                                                                     |
| AF ACCURACY         | <p>Low brightness limit</p> <p>Lighting range of in-focus indicator LED</p> | <p>F2.8 detector: EV4 or brighter</p> <p>F4.5 detector: EV5 or brighter</p> <p><math>\pm 150\mu\text{m}</math> (conversion at image surface)</p>                                                                                                                                                                                                                                                                                      | <p>50mm F1.8 AF lens</p>                                                                            |
| STROBE              | Warning for minimum aperture setting                                        | <p>With an AI-S type lens</p> <p>AV8(F16) &lt; Warning does not operate.</p> <p>AV6(F8) <math>\geq</math> Warning operates.</p>                                                                                                                                                                                                                                                                                                       | <p>SB-15</p>                                                                                        |

|               | ITEM                                   | STANDARD                                                                                                                              | TOOL                                                |
|---------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| FIRING RATE   | Max. firing rate<br>(frame per second) | With a non-AF lens: $2.5 \pm 0.5$ fps<br><br>On C mode: $1.7 \pm 0.5$ fps<br><br>On AF lock: $2.5 \pm 0.5$ fps                        | J9001-5<br>Test film<br>(24 exposure film)<br>Watch |
| CURRENT VALUE | Battery consumption                    | Metering and distance detection:<br>120mA or less<br><br>AF lens driving: 400mA or less<br><br>Film-advancing: 700mA or less(average) | Digital<br>voltmeter                                |
| BATTERY CHECK | Battery check<br>voltage               | 5.5V or more: To hold power for 8sec<br><br>4.0V or less: To turn off LED and to<br>lock shutter release                              | J9001-5<br><br>Digital<br>voltmeter                 |
|               |                                        |                                                                                                                                       |                                                     |



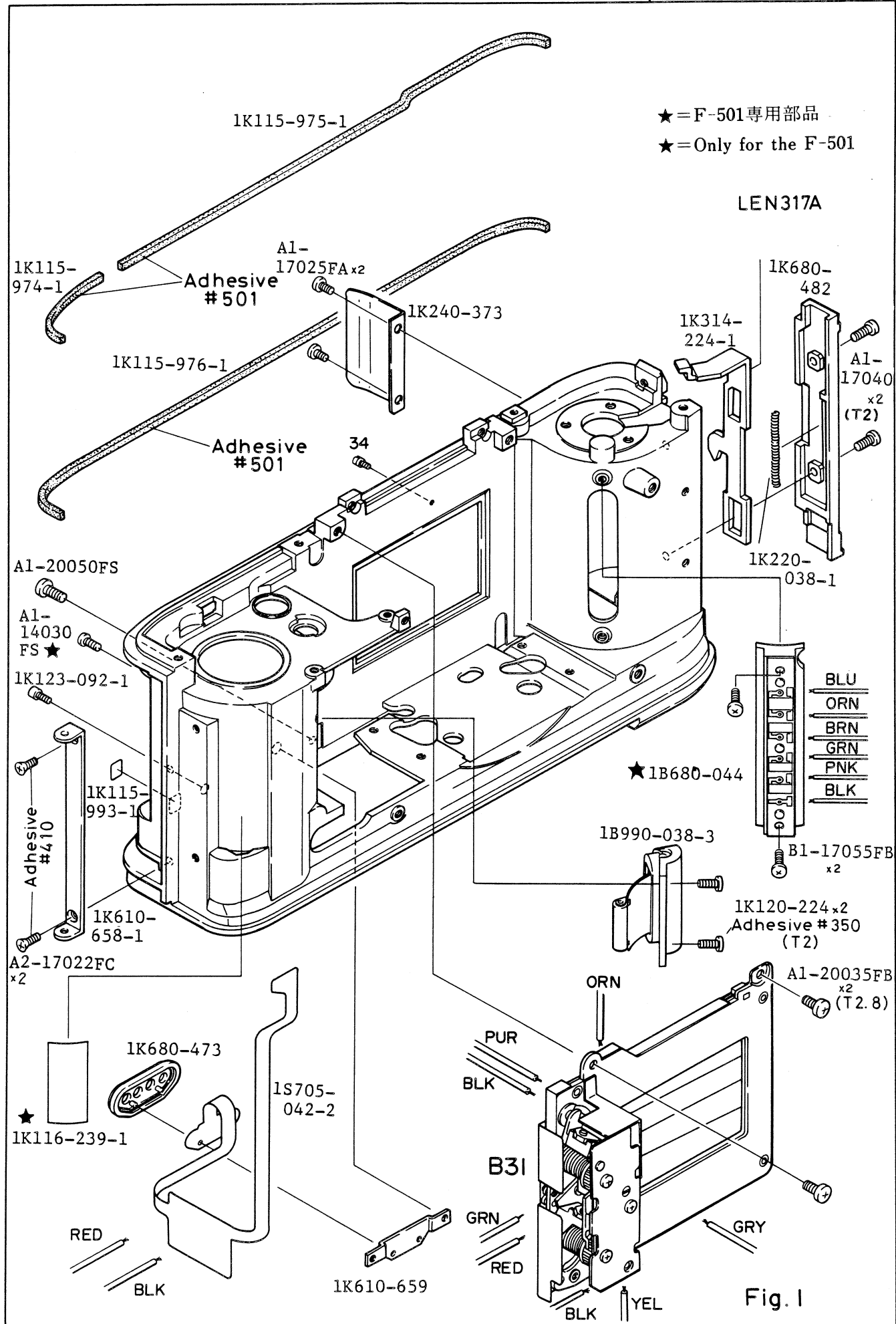
| Tool No. | Name                         | Illustration                                                                         | Class | Remarks                                  |
|----------|------------------------------|--------------------------------------------------------------------------------------|-------|------------------------------------------|
| J15258   | Manual film-advance tool     |    | A     | Common to the modified one for the F-301 |
| J15259   | AF adjuster                  |    | A     |                                          |
| J15260   | AE LED pressure welding tool |   | A     | Common to the modified one for the F-301 |
| J18182   | Mirror 45° inspecting tool   |  | A     |                                          |
| J18184   | Adapter for Yaw              |  | A     |                                          |
| J18185   | Adapter for pitch            |  | A     |                                          |
| J18183   | Lens for Z                   | 50/1.4 S Fixed at 2m                                                                 | A     |                                          |
| J18186   | Sine chart for Z             | Sine chart                                                                           | A     |                                          |

| Tool No. | Name                     | Illustration                                                                        | Class | Remarks              |
|----------|--------------------------|-------------------------------------------------------------------------------------|-------|----------------------|
| J15264   | Lighting box<br>for Z    |   | A     | For 50Hz<br>For 60Hz |
| J15264-2 | AAA flourescent<br>light |   | A     |                      |
| J15264-1 | Transformer<br>code      |  | A     |                      |
| J18191   | ND filter 8x             |                                                                                     | A     |                      |

EXPLODED DRAWINGS

## Contents

|                                             |     |
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| 6. BASE PLATE L .....                       | F6  |
| 7. FRONT PLATE .....                        | F7  |
| 8. PENTAPRISM .....                         | F8  |
| 9. MAIN FPC .....                           | F9  |
| 10. POWER SWITCH FPC .....                  | F10 |
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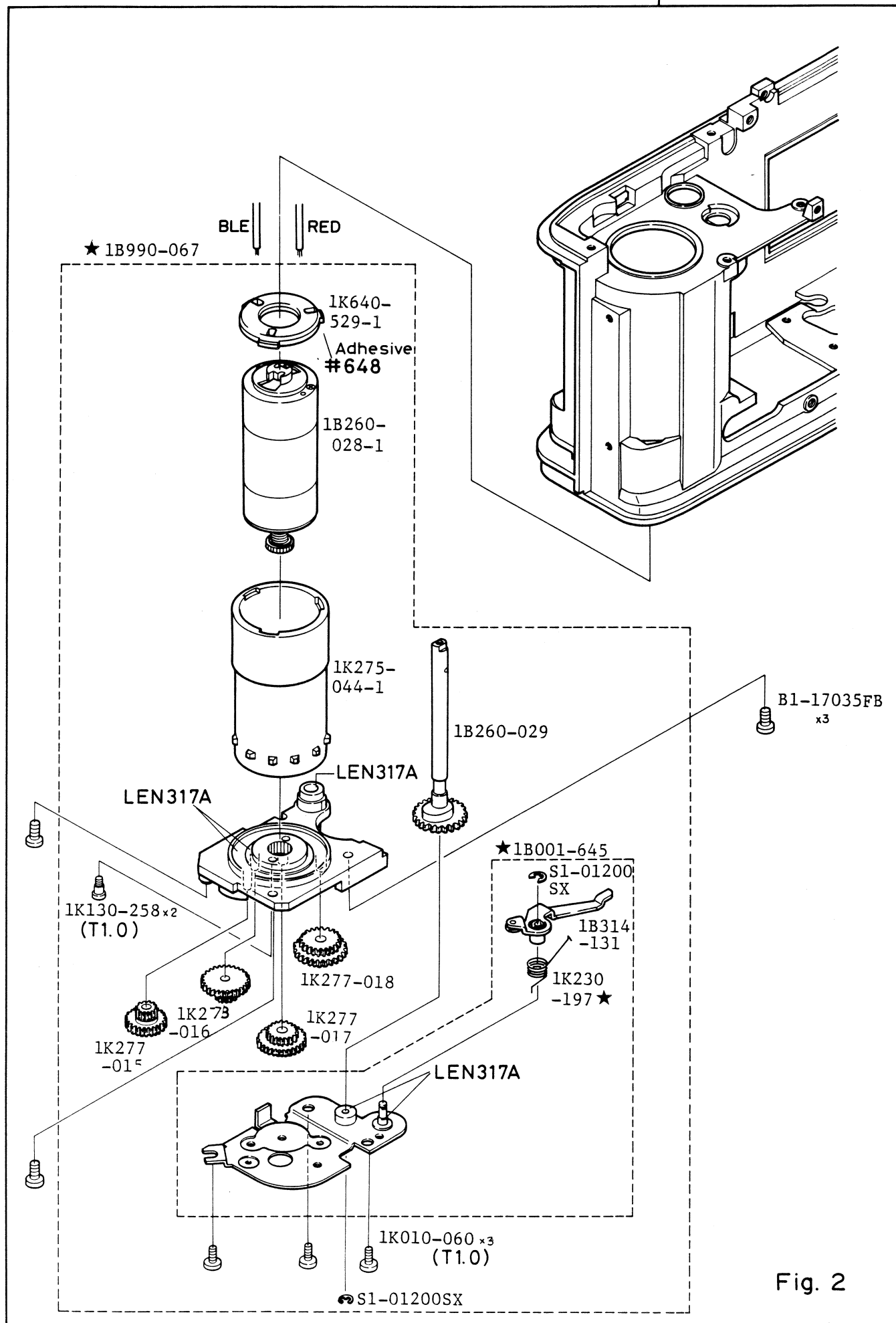


Fig. 2

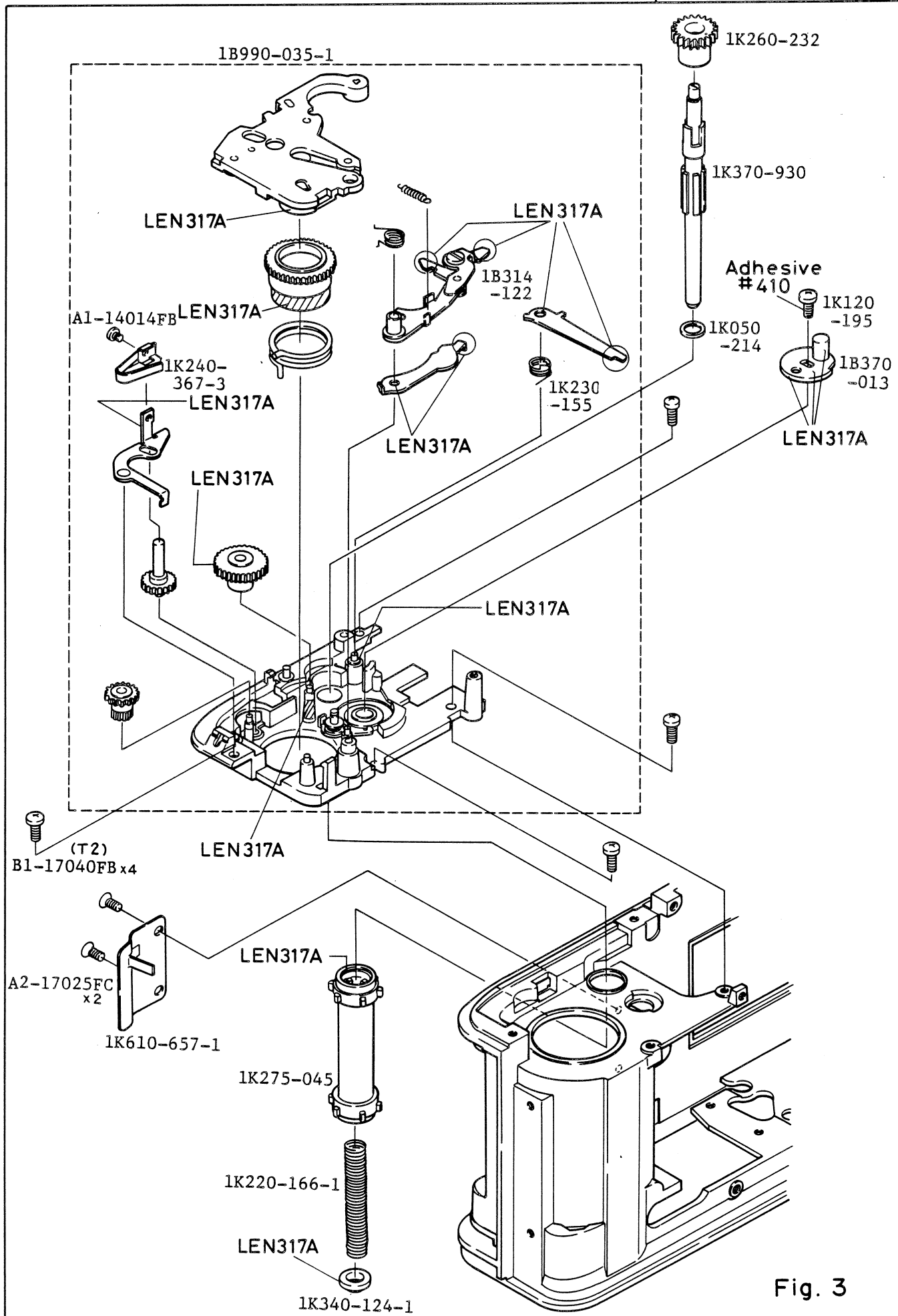


Fig. 3

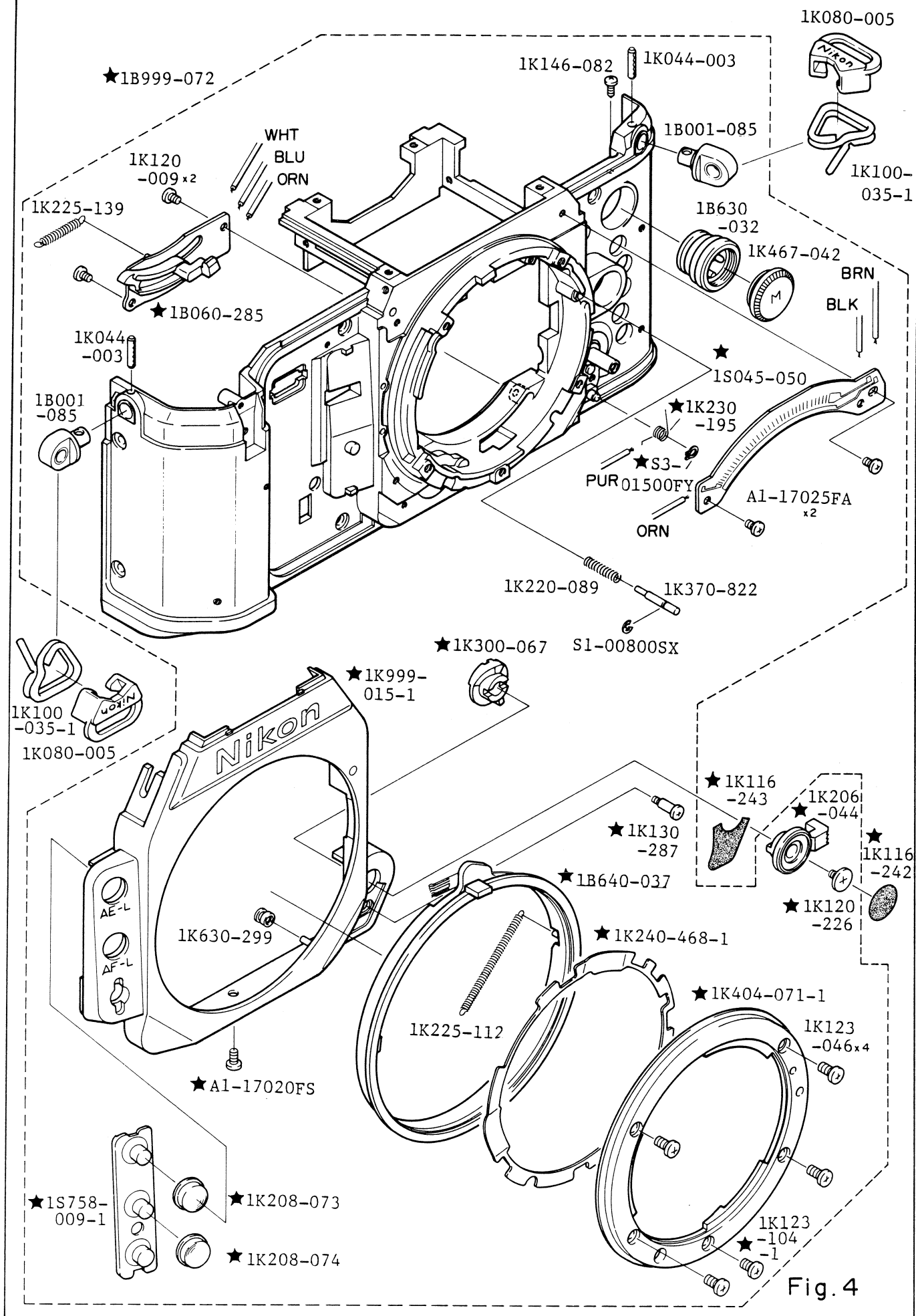


Fig. 4

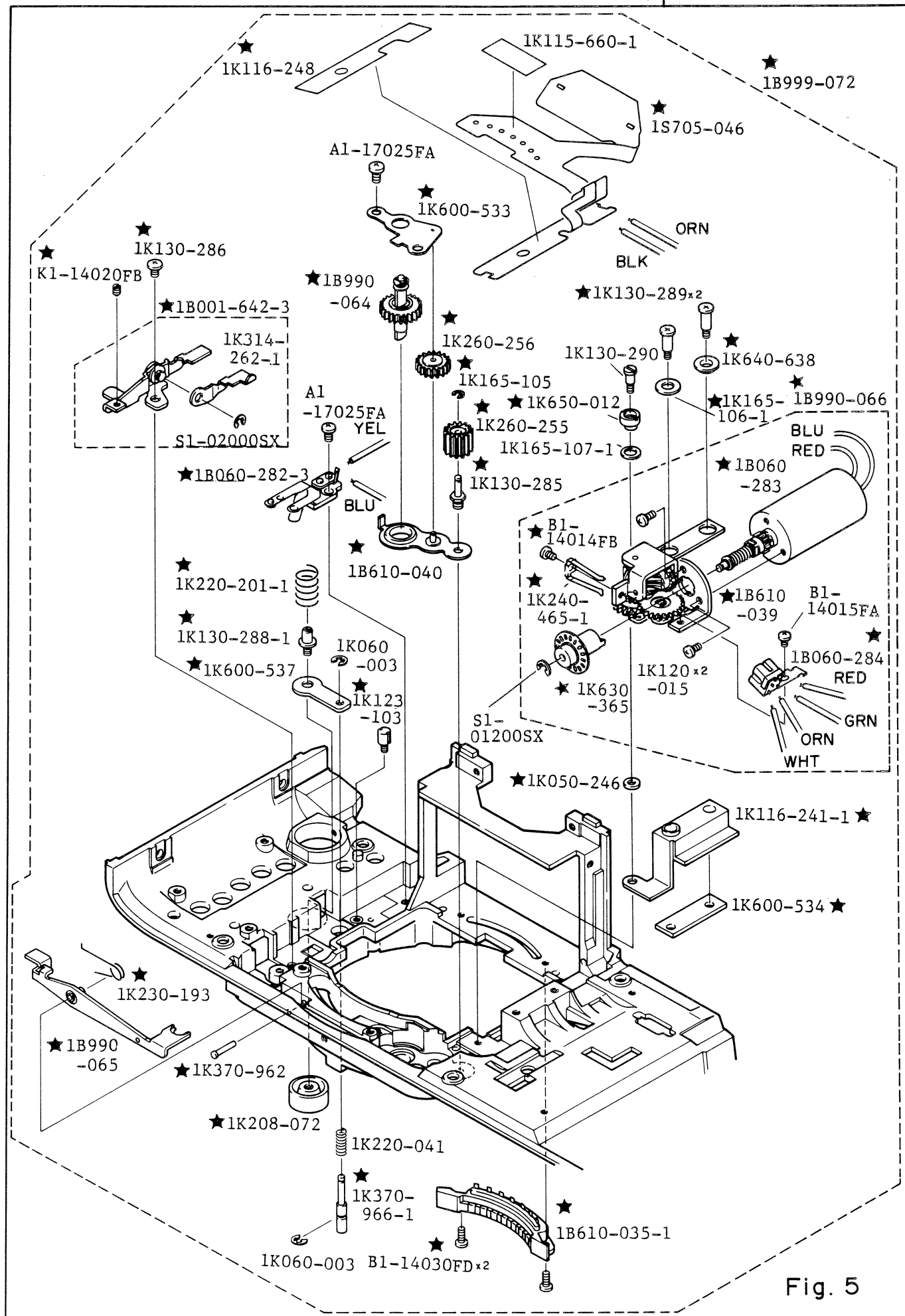


Fig. 5



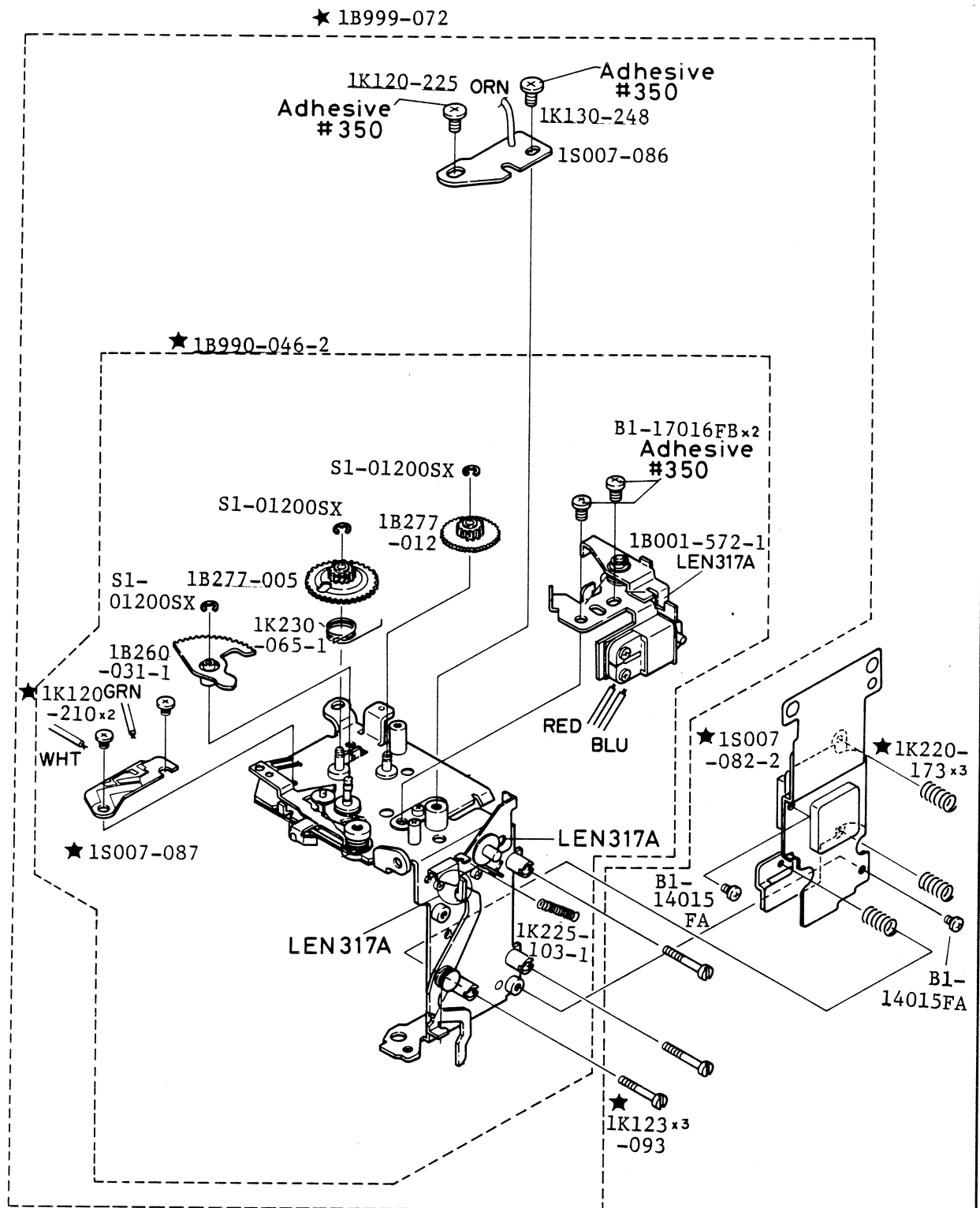
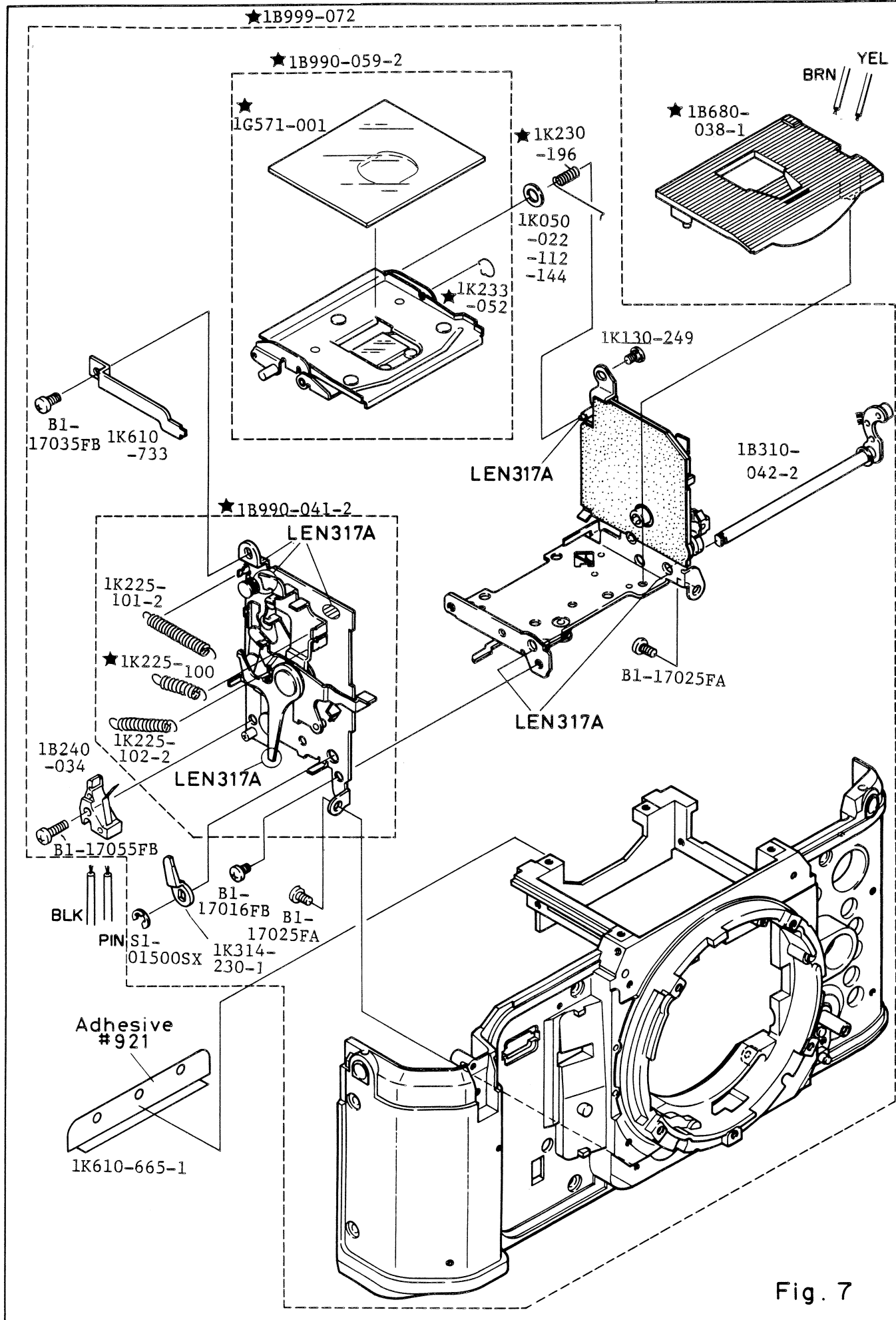


Fig. 6

# 7. 前板部 FRONT PLATE

FAA2005I-R.3176.A



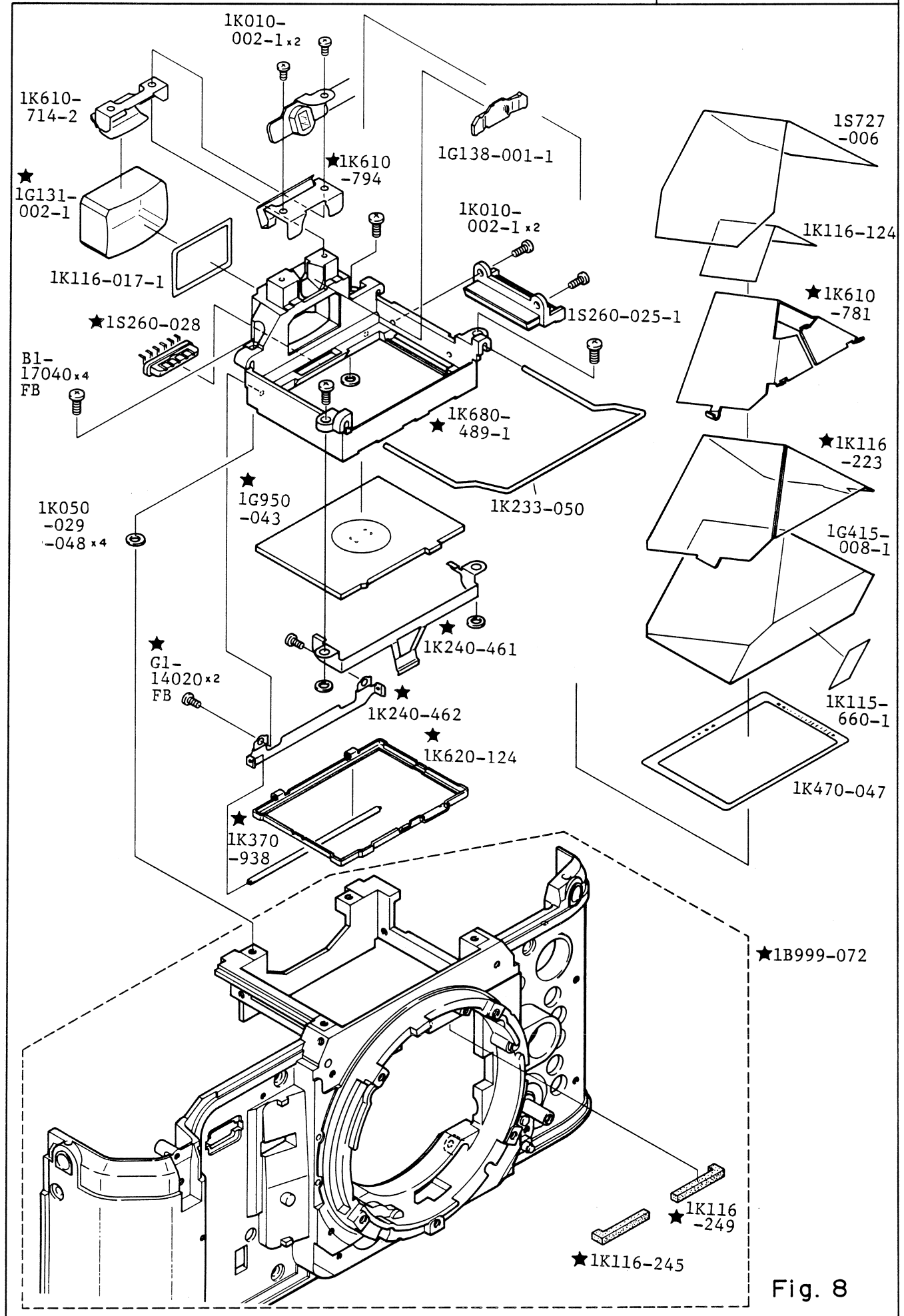


Fig. 8

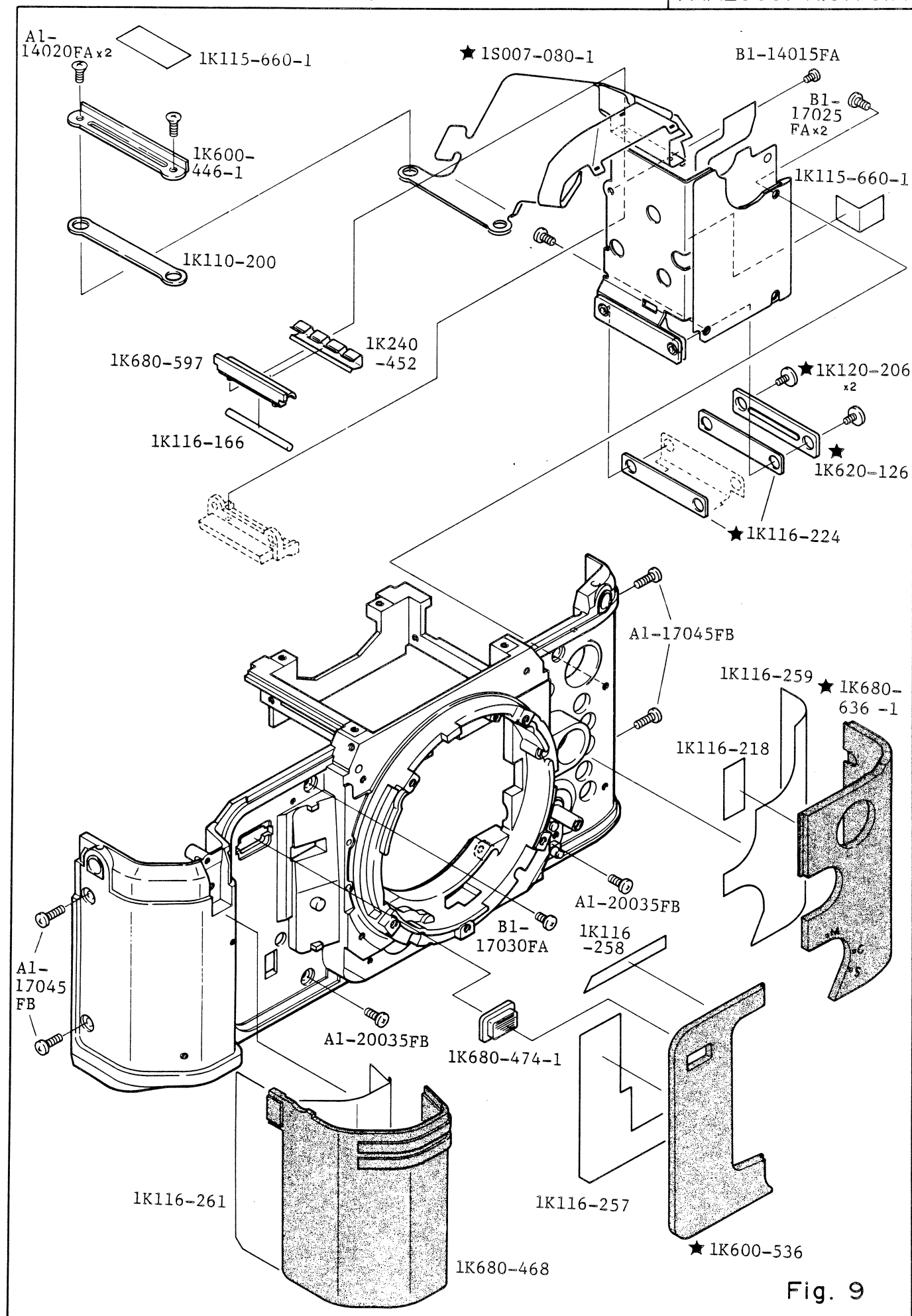


Fig. 9

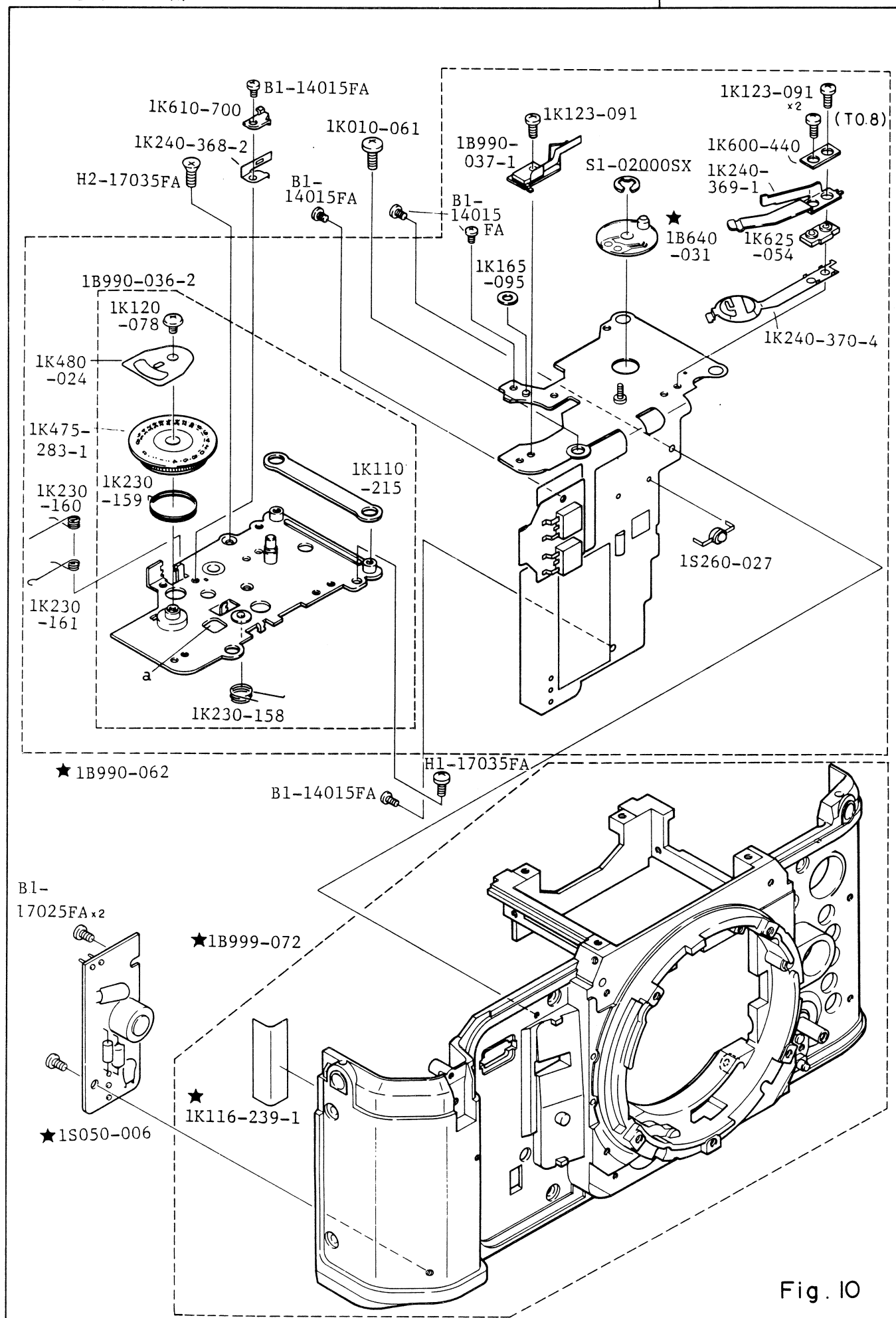


Fig. 10

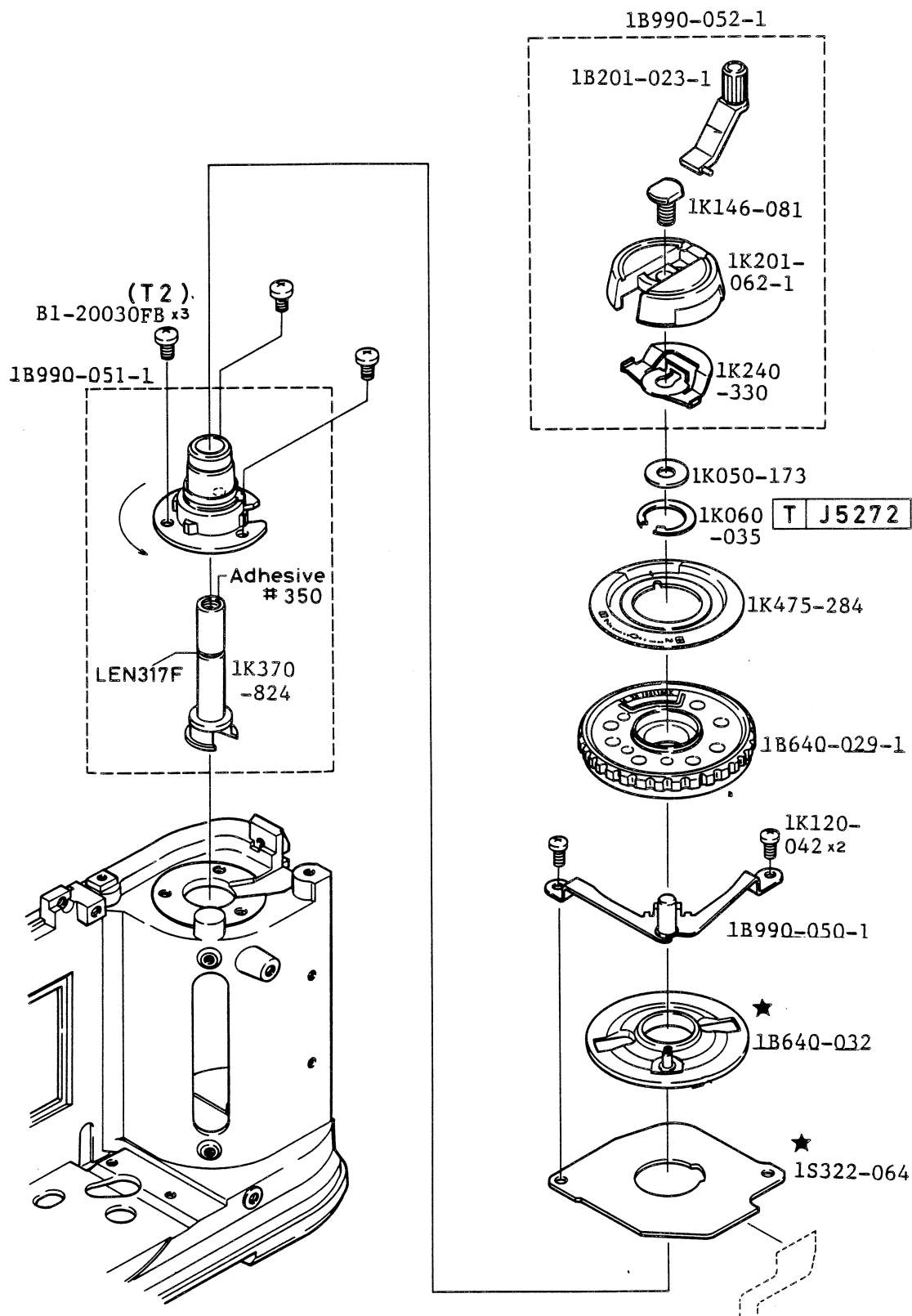


Fig. 11

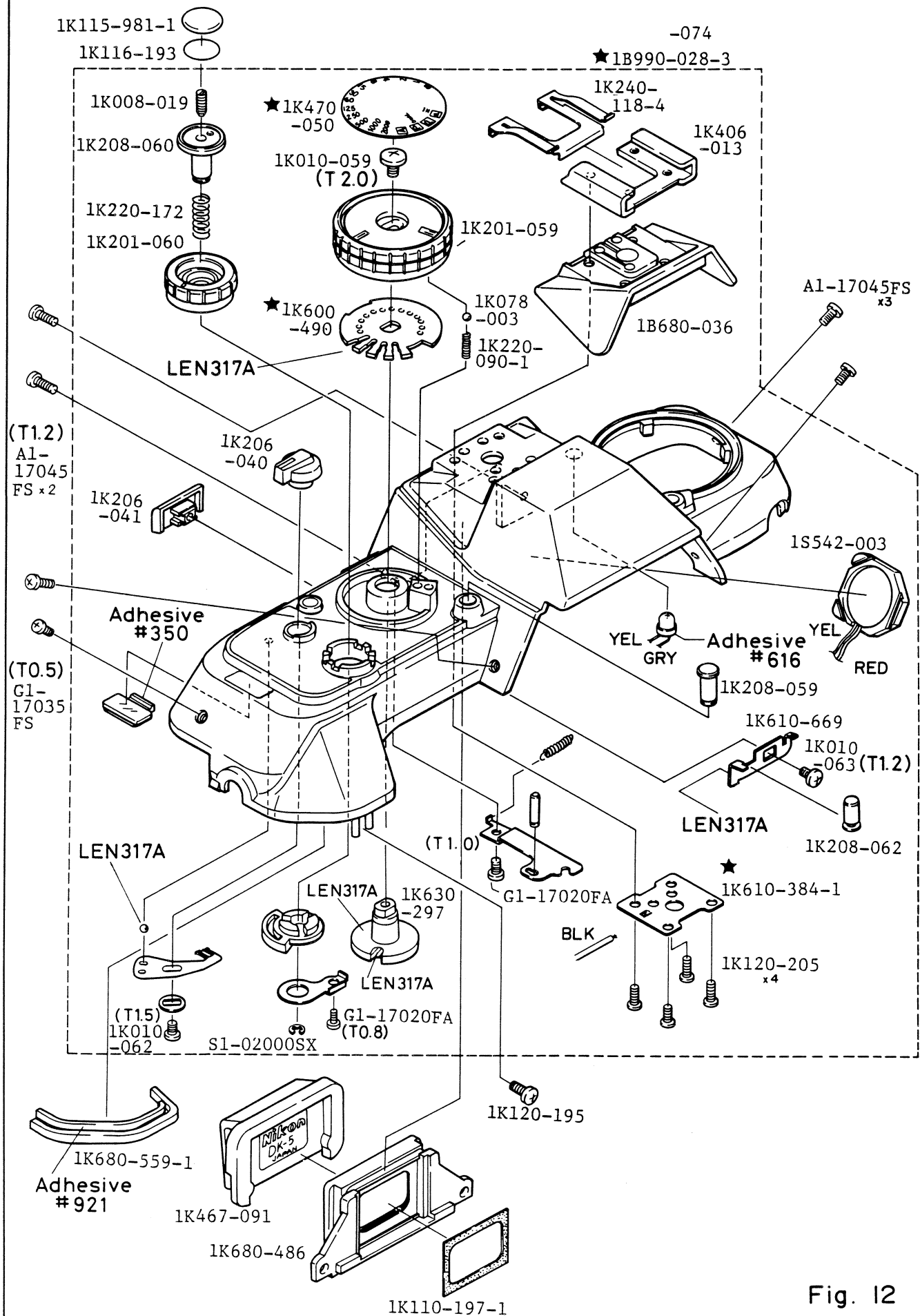


Fig. 12

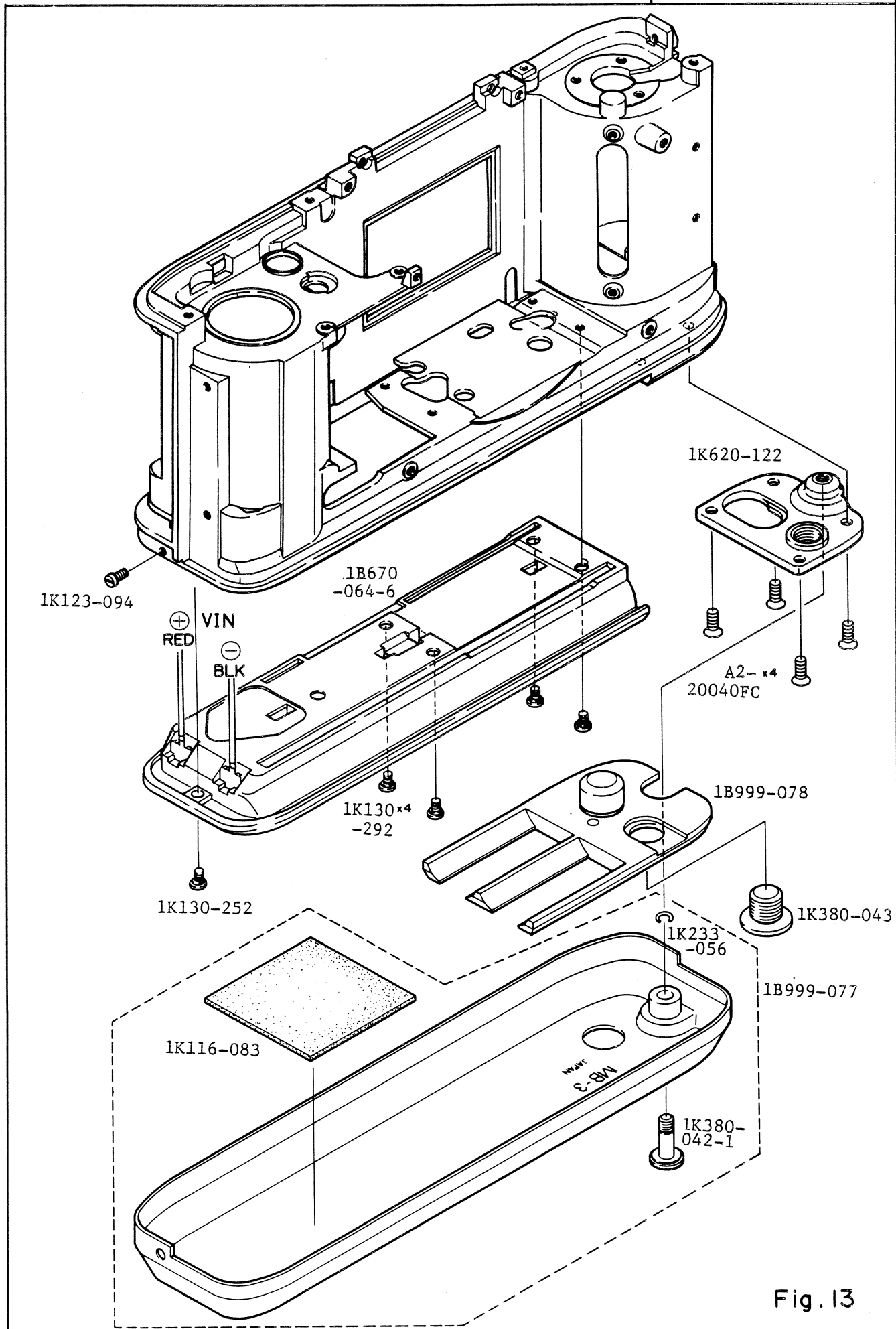


Fig. 13



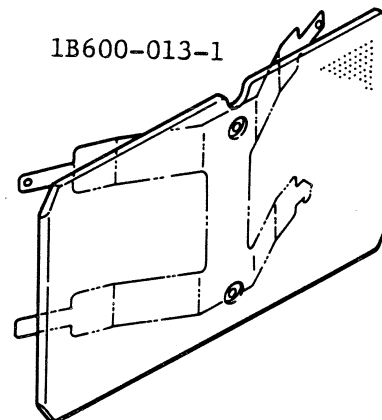
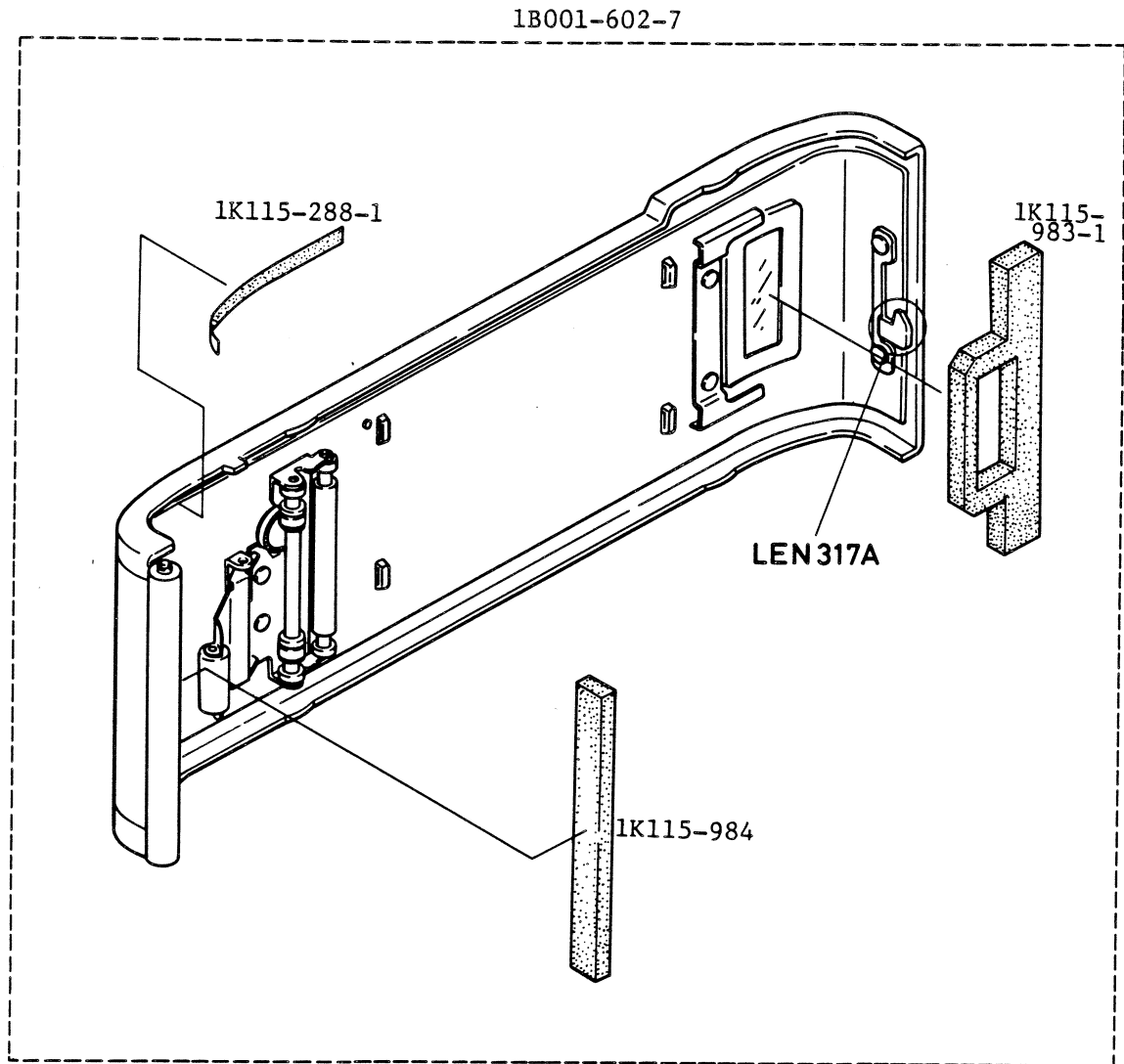


Fig. 14

部品对照表

Parts Number Reference Table

| 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number | 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number | 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number |
|-----------------------------|------------------------|-----------------------------|------------------------|-----------------------------|------------------------|
| 22                          | 1K999-015-1            | 206                         | 1K115-993-1            | 405                         | 1K123-093              |
| 34                          | 1K120-223              | 207                         | 1K120-224              | 406                         | 1K220-173              |
| 35                          | 1K680-559-1            | 208                         | 1K610-657-1            | 410                         | 1K230-196              |
| 37                          | 1K680-468              | 217                         | 1K240-373              | 415                         | 1K610-665-1            |
| 38                          | 1K600-536              | 220                         | 1K680-482              | 416                         | 1K116-245              |
| 39                          | 1K680-636 -1           | 221                         | 1K314-224-1            | 417                         | 1K116-249              |
| 47                          | 1K277-015              | 222                         | 1K220-038-1            | 421                         | 1K680-489-1            |
| 48                          | 1K277-016              | 227                         | 1K610-658-1            | 422                         | 1K116-017-1            |
| 49                          | 1K277-017              | 233                         | 1K100-035-1            | 425                         | 1K470-047              |
| 50                          | 1K277-018              | 234                         | 1K080-005              | 426                         | 1K610-781              |
| 55                          | 1K230-197              | 235                         | 1K044-003              | 427                         | 1K233-050              |
| 59                          | 1K275-044-1            | 237                         | 1K680-473              | 428                         | 1K116-223              |
| 60                          | 1K640-529-1            | 238                         | 1K610-659              | 429                         | 1S727-006              |
| 61                          | 1K275-045              | 239                         | 1K123-092-1            | 431                         | 1K680-486              |
| 62                          | 1K370-930              | 241                         | 1K115-974-1            | 432                         | 1K110-197-1            |
| 64                          | 1K220-166-1            | 242                         | 1K115-975-1            | 433                         | 1K467-091              |
| 65                          | 1K050-214              | 243                         | 1K115-976-1            | 436                         | 1K610-794              |
| 66                          | 1K340-124-1            | 265                         | 1K123-094              | 437                         | 1K610-714-2            |
| 67                          | 1K260-232              | 275                         | 1K620-122              | 441                         | 1K208-072              |
| 74                          | 1K120-195              | 281                         | 1K116-257              | 442                         | 1K600-537              |
| 95                          | 1K230-155              | 282                         | 1K116-258              | 443                         | 1K370-966-1            |
| 108                         | 1K240-367-3            | 283                         | 1K116-259              | 444                         | 1K130-288-1            |
| 127                         | 1K230-158              | 284                         | 1K116-218              | 445                         | 1K220-201-1            |
| 129                         | 1K475-283-1            | 285                         | 1K116-261              | 446                         | 1K220-041              |
| 131                         | 1K480-024              | 304                         | 1K225-100              | 451                         | 1K208-073              |
| 133                         | 1K230-159              | 306                         | 1K225-101-2            | 452                         | 1K208-074              |
| 134                         | 1K120-078              | 310                         | 1K225-102-2            | 453                         | 1S758-009-1            |
| 135                         | 1K230-160              | 321                         | 1K610-733              | 455                         | 1K116-248              |
| 136                         | 1K230-161              | 323                         | 1K314-230-1            | 456                         | 1K680-474-1            |
| 142                         | 1K240-368-2            | 337                         | 1K233-052              | 469                         | 1K467-042              |
| 143                         | 1K610-700              | 351                         | 1K230-065-1            | 470                         | 1K146-082              |
| 153                         | 1K240-369-1            | 378                         | 1K225-103-1            | 471                         | 1K404-071-1            |
| 154                         | 1K240-370-4            | 382                         | 1K130-248              | 472                         | 1K240-468-1            |
| 156                         | 1K600-440              | 387                         | 1K120-225              | 473                         | 1K123-046              |
| 174                         | 1K165-095              | 388                         | 1K130-249              | 475                         | 1K123-104-1            |
| 155                         | 1K625-054              |                             |                        | 476                         | 1K620-124              |
|                             |                        |                             |                        | 477                         | 1K240-461              |
|                             |                        |                             |                        | 478                         | 1K240-462              |

## 部品对照表

## Parts Number Reference Table

| 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number | 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number | 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number |
|-----------------------------|------------------------|-----------------------------|------------------------|-----------------------------|------------------------|
| 479                         | 1K370-938              | 631                         | 1K115-288-1            | 760                         | 1K130-292              |
| 484                         | 1K225-112              | 662                         | 1K600-446-1            | 761                         | 1K050-022              |
| 485                         | 1K630-299              | 663                         | 1K110-200              | 761                         | 1K050-112              |
| 495                         | 1K225-139              | 664                         | 1K110-215              | 761                         | 1K050-144              |
| 501                         | 1K370-822              | 668                         | 1K120-206              | 772                         | 1K078-003              |
| 502                         | 1K220-089              | 673                         | 1K620-126              | 801                         | A2-20040FC             |
| 511                         | 1K201-059              | 674                         | 1K116-224              | 802                         | A1-17025FA             |
| 512                         | 1K470-050              | 680                         | 1K116-239-1            | 803                         | A1-17040FB             |
| 513                         | 1K630-297              | 681                         | 1K115-660-1            | 804                         | B1-17030FA             |
| 514                         | 1K010-059              | 683                         | 1K116-124              | 805                         | A1-14030FS             |
| 515                         | 1K208-059              | 684                         | 1K680-597              | 806                         | A1-20050FS             |
| 518                         | 1K600-490              | 685                         | 1K116-166              | 808                         | A2-17022FC             |
| 519                         | 1K220-090-1            | 686                         | 1K240-452              | 809                         | B1-17035FB             |
| 521                         | 1K201-060              | 701                         | 1K010-060              | 811                         | B1-17040FB             |
| 526                         | 1K206-040              | 702                         | 1K010-061              | 812                         | A1-14014FB             |
| 531                         | 1K208-060              | 703                         | 1K123-091              | 813                         | B1-17055FB             |
| 532                         | 1K115-981-1            | 704                         | 1K010-062              | 814                         | B1-20030FB             |
| 533                         | 1K008-019              | 705                         | 1K010-063              | 815                         | A1-20035FB             |
| 534                         | 1K116-193              | 706                         | 1K120-210              | 817                         | A1-17045FB             |
| 535                         | 1K220-172              | 707                         | 1K130-252              | 818                         | H1-17035FA             |
| 544                         | 1K475-284              | 708                         | 1K130-258              | 819                         | H2-17035FA             |
| 546                         | 1K060-035              | 709                         | 1K120-009              | 820                         | B1-14015FA             |
| 556                         | 1K120-042              | 710                         | 1K010-002-1            | 824                         | G1-17035FS             |
| 561                         | 1K201-062-1            | 711                         | 1K050-048              | 825                         | A1-17045FS             |
| 562                         | 1K146-081              | 711                         | 1K050-029              | 833                         | B1-14030FD             |
| 564                         | 1K240-330              | 712                         | 1K130-289              | 837                         | A1-17020FS             |
| 568                         | 1K370-824              | 713                         | 1K165-106-1            | 839                         | B1-17025FA             |
| 569                         | 1K050-173              | 714                         | 1K120-015              | 842                         | G1-14020FB             |
| 571                         | 1K406-013              | 715                         | 1K130-290              | 843                         | K1-14020FB             |
| 573                         | 1K240-118-4            | 716                         | 1K640-638              | 845                         | B1-14014FB             |
| 576                         | 1K610-384-1            | 717                         | 1K165-107-1            | 851                         | B1-17016FB             |
| 577                         | 1K120-205              | 718                         | 1K650-012              | 855                         | G1-17020FA             |
| 581                         | 1K208-062              | 751                         | S1-01200SX             | 859                         | A2-17025FC             |
| 582                         | 1K206-041              | 754                         | S1-01500SX             | 860                         | A1-14020FA             |
| 583                         | 1K610-669              | 755                         | S1-00800SX             |                             |                        |
| 607                         | 1K115-983-1            | 756                         | S1-02000SX             |                             |                        |
| 628                         | 1K115-984              | 757                         | 1K060-003              |                             |                        |
|                             |                        |                             |                        |                             |                        |

部品对照表

Parts Number Reference Table

| 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number | 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number | 補助番号<br>Auxiliary<br>Number | 部 品 番 号<br>Part Number |
|-----------------------------|------------------------|-----------------------------|------------------------|-----------------------------|------------------------|
| 906                         | 1K630-365              | G1                          | 1G571-001              | B23                         | 1B990-028-3            |
| 914                         | 1K260-255              | G3                          | 1G950-043              | B23                         | 1B999-074              |
| 915                         | 1K130-285              | G4                          | 1G415-008-1            | B26                         | 1B999-072              |
| 916                         | 1K260-256              | G5                          | 1G131-002-1            | B32                         | 1B260-028-1            |
| 921                         | 1K600-533              | G7                          | 1G138-001-1            | B41                         | 1B990-067              |
| 926                         | 1K370-962              |                             |                        | B51                         | 1B001-645              |
| 928                         | 1K230-193              |                             |                        | B52                         | 1B314-131              |
| 929                         | 1K116-241-1            |                             |                        | B71                         | 1B260-029              |
| 930                         | 1K240-465-1            |                             |                        | B72                         | 1B370-013              |
| 933                         | 1K165-105              |                             |                        | B81                         | 1B990-035-1            |
| 935                         | 1K314-262-1            | MB2                         | 1K240-375              | B83                         | 1B314-122              |
| 938                         | 1K130-286              | MB12                        | 1K380-040-1            | B121                        | 1B990-036-2            |
| 944                         | 1K230-195              | MB13                        | 1K116-083              | B158                        | 1B990-037-1            |
| 945                         | 1K130-287              | MB14                        | 1K233-056              | B165                        | 1B640-031              |
| 946                         | 1K300-067              | MB32                        | 1K380-042-1            | B202                        | 1B990-038-3            |
| 948                         | 1K206-044              | MB310                       | 1K380-043              | B211                        | 1B680-044              |
| 949                         | 1K116-242              |                             |                        | B231                        | 1B001-085              |
| 950                         | 1K116-243              |                             |                        | B251                        | 1B670-064-6            |
| 951                         | 1K120-226              |                             |                        | B301                        | 1B990-041-2            |
| 953                         | S3-01500FY             |                             |                        | B319                        | 1B240-034              |
| 956                         | 1K123-103              |                             |                        | B324                        | 1B310-042-2            |
| 984                         | 1K600-534              |                             |                        | B341                        | 1B990-046-2            |
| 985                         | 1K050-246              |                             |                        | B345                        | 1B260-031-1            |
| 988                         | 1K050-065              |                             |                        | B349                        | 1B277-005              |
| 1001                        | 1S705-043              |                             |                        | B353                        | 1B277-012              |
| 1003                        | 1S705-042-2            |                             |                        | B355                        | 1B001-572-1            |
| 1004                        | 1S705-045              |                             |                        | B420                        | 1B680-038-1            |
| 1005                        | 1S705-046              |                             |                        | B467                        | 1B630-032              |
| 1021                        | 1S050-006              |                             |                        | B474                        | 1B610-035-1            |
| 1023                        | 1S542-003              |                             |                        | B482                        | 1B640-037              |
| 1025                        | 1S260-025-1            |                             |                        | B505                        | 1B060-282-3            |
| 1026                        | 1S260-028              |                             |                        | B542                        | 1B640-029-1            |
| 1028                        | 1S260-027              |                             |                        | B549                        | 1B990-050-1            |
| 1133                        | 1S322-064              |                             |                        | B550                        | 1B640-032              |
|                             |                        |                             |                        | B558                        | 1B990-051-1            |
|                             |                        |                             |                        |                             |                        |
|                             |                        |                             |                        |                             |                        |
|                             |                        |                             |                        |                             |                        |
|                             |                        |                             |                        |                             |                        |

## Parts Number Reference Table

[illegible]

PARTS LIST

## Contents

|     |                        |     |
|-----|------------------------|-----|
| [1] | PARTS LIST .....       | P1  |
| [2] | SUBASSEMBLY LIST ..... | P29 |

| 部 品 番 号<br>Part No. | 名 称<br>Name                                                 | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|---------------------|-------------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K008-019         | リリース鉤軸<br>Release button shaft                              | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5  |
| * 1K010-002-1       | Screw                                                       | 4                              |                              | 8                             | ○                             | F-301          | 10 |
| * 1K010-059         | Tダイヤルビス<br>Screw, shutter dial                              | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| * 1K010-060         | 減速ギア基板ビス<br>Screw, reduction gear base plate                | 3                              | 1B990-067                    | 2                             | ○△                            | F-301          | 10 |
| * 1K010-061         | 上地基板ビス<br>Screw, film-advance lever                         | 1                              |                              | 10                            | ○                             | F-301          | 10 |
| * 1K010-062         | 音消しレバービス<br>Screw, rewind lock lever                        | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| * 1K010-063         | Rロックレバービス<br>Screw, rewind lock lever                       | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| * 1K044-003         | 耳環圧入ピン<br>Press-fit pin, eyelet                             | 2                              | 1B999-072                    | 4                             | ○△                            | F-301          | 10 |
| * 1K050-022         | チリトリガタ取りワッシャー B<br>Washer, mirror holder<br>0.8 × 1.9 × 0.2 | 0~1                            | 1B999-072                    | 7                             | ○△                            | F-301          | 10 |
| * 1K050-029         | 46.5 調整用ワッシャー A<br>Washer A<br>2.1 × 3.8 × 0.05             | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-030         | 46.5 調整用ワッシャー B<br>Washer B<br>2.1 × 3.8 × 0.06             | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-031         | 46.5 調整用ワッシャー C<br>Washer C<br>2.1 × 3.8 × 0.07             | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-032         | 46.5 調整用ワッシャー D<br>Washer D<br>2.1 × 3.8 × 0.08             | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
|                     |                                                             |                                |                              |                               |                               |                |    |
|                     |                                                             |                                |                              |                               |                               |                |    |

## 部 品 表 Parts list

F A A 20051 — R. 3176. A

| 部 品 番 号<br>Part No.          | 名 称<br>Name                                 | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|------------------------------|---------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K050-033                  | 46.5 調整用ワッシャー E<br>Washer E<br>2.1×3.8×0.09 | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-034                  | 46.5 調整用ワッシャー F<br>Washer F<br>2.1×3.8×0.1  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-035                  | 46.5 調整用ワッシャー G<br>Washer G<br>2.1×3.8×0.11 | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-036                  | 46.5 調整用ワッシャー H<br>Washer H<br>2.1×3.8×0.12 | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-037                  | 46.5 調整用ワッシャー I<br>Washer I<br>2.1×3.8×0.2  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-038                  | 46.5 調整用ワッシャー J<br>Washer J<br>2.1×3.8×0.3  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-039                  | 46.5 調整用ワッシャー K<br>Washer K<br>2.1×3.8×0.4  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-040                  | 46.5 調整用ワッシャー L<br>Washer L<br>2.1×3.8×0.5  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-041                  | 46.5 調整用ワッシャー M<br>Washer M<br>2.1×3.8×0.6  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-042                  | 46.5 調整用ワッシャー N<br>Washer N<br>2.1×3.8×0.7  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-043                  | 46.5 調整用ワッシャー O<br>Washer O<br>2.1×3.8×0.8  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-044                  | 46.5 調整用ワッシャー P<br>Washer P<br>2.1×3.8×0.9  | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-045-1<br>(1K050-045) | 46.5 調整用ワッシャー Q<br>Washer Q<br>2.1×3.8×1    | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
|                              |                                             |                                |                              |                               |                               |                |    |
|                              |                                             |                                |                              |                               |                               |                |    |



## 部 品 表 Parts list

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| 部 品 番 号<br>Part No.          | 名 称<br>Name                                             | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|------------------------------|---------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K050-046-1<br>(1K050-046) | 46.5 調整ワッシャー R<br>Washer R<br>2.1×3.8×1.1               | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-047-1<br>(1K050-047) | 46.5 調整ワッシャー S<br>Washer S<br>2.1×3.8×1.2               | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-048                  | 46.5 調整ワッシャー T<br>Washer T<br>2.1×3.8×0.03              | 0~4                            |                              | 8                             | ○                             | F-301          | 10 |
| * 1K050-065                  | 座 金<br>Washer                                           | 1                              | 1B999-072                    |                               | ○△                            | FG             | 10 |
| * 1K050-112                  | チリトリガタ取りワッシャー C<br>Washer, mirror holder<br>0.8×1.9×0.3 | 0~1                            | 1B999-072                    | 7                             | ○△                            | F-301          | 5  |
| * 1K050-144                  | チリトリガタ取りワッシャー A<br>Washer, mirror holder<br>0.8×1.9×0.1 | 0~1                            | 1B999-072                    | 7                             | ○△                            | F-301          | 10 |
| * 1K050-173                  | 巻戻しノブ座金<br>Washer, rewind knob<br>3.1×7×0.7             | 1                              |                              | 11                            | ○                             | F-301          | 10 |
| * 1K050-214                  | スプロケットワッシャー<br>Sprocket washer<br>3.3×4.8×0.5           | 1                              |                              | 3                             | ○                             | F-301          | 5  |
| 1K050-246                    | 基板取付座 B<br>Mount B                                      | 1                              | 1B999-072                    | 5                             | ○△                            |                | 10 |
| * 1K060-003                  | レンズ着脱Eリング<br>E-ring                                     | 2                              | 1B999-072                    | 5                             | ○△                            | F-301          | 10 |
| * 1K060-035                  | I S O内環止メ輪<br>Stopper ring                              | 1                              |                              | 11                            | ○                             | F-301          | 5  |
| * 1K078-003                  | Tダイヤル音消しクリックボール<br>Click ball, shutter dial             | 2                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| * 1K080-005                  | 三角環飾り モールド<br>Neckstrap protector                       | 2                              |                              | 4                             | ○                             | F-301          | 10 |
|                              |                                                         |                                |                              |                               |                               |                |    |
|                              |                                                         |                                |                              |                               |                               |                |    |

| 部 品 番 号<br>Part No.          | 名 称<br>Name                                        | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|------------------------------|----------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K100-035-1<br>(1K100-035) | 三角環<br>Neckstrap ring                              | 2                              |                              | 4                             | ○                             | F-301          | 5  |
| * 1K110-197-1<br>(1K110-197) | 接眼窓モールド遮光ゴム<br>Light-tight rubber, eyepiece        | 1                              |                              | 12                            | ○                             | F-301          | 5  |
| * 1K110-200                  | メインフレキ圧接下ゴム<br>Press-contact rubber                | 1                              |                              | 9                             | ○                             | F-301          | 5  |
| * 1K110-215                  | メインフレキ圧接上ゴム<br>Press-contact rubber                | 1                              | 1B990-036-2<br>1B990-062-2   | 10                            | ○△                            | F-301          | 5  |
| * 1K115-288-1                | 裏蓋カウンター遮光紙<br>Light baffle, camer back counter     | 1                              | 1B001-602-7                  | 14                            | ○△                            | F-301          | 50 |
| * 1K115-660-1<br>(1K115-660) | アセテートクロステープ<br>Tape                                | 4                              | 1B999-072                    | 5, 8, 9                       | ○△                            | F-301          | 10 |
| * 1K115-974-1                | 裏蓋溝上モルト A<br>Sponge strip A, camera back(top)      | 1                              |                              | 1                             | ○                             | F-301          | 5  |
| * 1K115-975-1                | 裏蓋溝上モルト B<br>Sponge strip B, camera back (top)     | 1                              |                              | 1                             | ○                             | F-301          | 5  |
| * 1K115-976-1                | 裏蓋溝下モルト<br>Sponge strip, camera back<br>(bottom)   | 1                              |                              | 1                             | ○                             | F-301          | 5  |
| * 1K115-981-1                | レリーズ釦飾り板<br>Cover plate, shutter release<br>button | 1                              |                              | 12                            | ○                             | F-301          | 5  |
| * 1K115-983-1                | 裏蓋窓モルト<br>Sponge strip, camera back                | 1                              | 1B001-602-7                  | 14                            | ○△                            | F-301          | 5  |
| * 1K115-984                  | 裏蓋遮光モルト A<br>Right-tight sponge A,<br>camera back  | 1                              | 1B001-602-7                  | 14                            | ○△                            | F-301          | 5  |
| * 1K115-993-1                | フィルム先端指標<br>Film leader index                      | 1                              |                              | 1                             | ○                             | F-301          | 5  |
|                              |                                                    |                                |                              |                               |                               |                |    |
|                              |                                                    |                                |                              |                               |                               |                |    |

## 部 品 表 Parts list

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| 部 品 番 号<br>Part No.          | 名 称<br>Name                                   | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|------------------------------|-----------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| * 1K116-017-1<br>(1K116-017) | 接眼マスク<br>Eyepiece mask                        | 1                              |                              | 8                             | ○                             | F-301          | 5 |
| * 1K116-025                  | 底カバーモルト<br>Sponge strip, bottom cover         | 1                              | 1B990-029-2                  | 13                            | ○△                            | F-301          | 5 |
| * 1K116-124                  | 両面テープ<br>Adhesive double coated tape          | 3                              | 1S007-080                    | 8                             | ○△                            | F-301          | 1 |
| * 1K116-166                  | AE LED 圧接ゴム<br>Press contact rubber           | 1                              |                              | 9                             | ○                             | F-301          | 5 |
| * 1K116-193                  | リリース釦飾り板テープ<br>Adhesive double coated tape    | 1                              |                              | 12                            | ○                             | F-301          | 5 |
| * 1K116-218                  | 前カバーゴム B用テープ b<br>Tape, front cover           | 1                              |                              | 9                             | ○                             | F-301          | 5 |
| 1K116-223                    | ペンタ押えシート<br>Pentaprism seat                   | 1                              |                              | 8                             | ○                             |                | 5 |
| 1K116-224                    | AF フレキ圧接ゴム<br>Press-contact rubber,<br>AF FPC | 2                              |                              | 9                             | ○                             |                | 5 |
| 1K116-239-1                  | 上地フレキグリップ部絶縁テープ<br>Tape, power sw FPC         | 2                              | 1B999-072                    | 1,10                          | ○△                            |                | 5 |
| 1K116-241-1                  | 防振ゴム<br>Rubber, vibration isolation           | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| 1K116-242                    | S/C 飾り板<br>Plate, S/C lever                   | 1                              |                              | 4                             | ○                             |                | 5 |
| 1K116-243                    | S/C 銘 板<br>Name plate, S/C lever              | 1                              |                              | 4                             | ○                             |                | 5 |
| 1K116-245                    | ミラーアップ受モルト A<br>Sponge strip A, mirror        | 1                              | 1B999-072                    | 8                             | ○△                            |                | 5 |
|                              |                                               |                                |                              |                               |                               |                |   |
|                              |                                               |                                |                              |                               |                               |                |   |

| 部 品 番 号<br>Part No. | 名 称<br>Name                                   | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|---------------------|-----------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| 1K116-248           | AFL フレキシブル部接着テープ<br>Tape, AF lock sw          | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5  |
| 1K116-249           | ミラーアップ受モルトB<br>Sponge strip B, mirror         | 1                              | 1B999-072                    | 8                             | ○△                            |                | 5  |
| 1K116-257           | 前カバーゴムA用テープ a<br>Tape a, front cover rubber a | 1                              |                              | 9                             | ○                             |                | 5  |
| 1K116-258           | 前カバーゴムA用テープ b<br>Tape b, front cover rubber b | 1                              |                              | 9                             | ○                             |                | 5  |
| 1K116-259           | 前カバーゴムB用テープ a<br>Tape a, front cover rubber a | 1                              |                              | 9                             | ○                             |                | 5  |
| 1K116-261           | グリップカバー用接着テープ<br>Tape, grip cover             | 1                              |                              | 9                             | ○                             |                | 5  |
| * 1K120-009         | fo ばねビス<br>Screw, fo spring                   | 2                              | 1B999-072                    | 4                             | ○△                            | F-301          | 10 |
| * 1K120-015         | 基板連結ビス<br>Screw, AF motor unit                | 2                              | 1B990-066<br>1B999-072       | 5                             | ○△                            | FE2            | 10 |
| * 1K120-042         | ISO ロック板ビス<br>Screw, ISO lock plate           | 2                              |                              | 11                            | ○                             | F-301          | 10 |
| * 1K120-078         | カウンタービス<br>Frame count screw                  | 1                              | 1B990-036-2<br>1B990-062-2   | 10                            | ○△                            | F-301          | 10 |
| * 1K120-195         | 基準軸ビス 上カバービスC<br>Screw C, top cover           | 2                              |                              | 3                             | ○                             | F-301          | 10 |
| * 1K120-205         | シュービス<br>Screw, accessory shoe                | 4                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| 1K120-206           | 圧接ビス<br>Screw, press contact                  | 2                              |                              | 9                             | ○                             |                | 10 |
|                     |                                               |                                |                              |                               |                               |                |    |
|                     |                                               |                                |                              |                               |                               |                |    |

| 部 品 番 号<br>Part No.        | 名 称<br>Name                                                               | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|----------------------------|---------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K120-210                | f mm 基板ビス<br>Screw                                                        | 2                              | 1B990-046-2<br>1B999-072     | 6                             | ○△                            |                | 10 |
| * 1K120-223                | フィルムガイドピン<br>Screw, film guide                                            | 1                              |                              | 1                             | ○                             | F-301          | 10 |
| * 1K120-224                | フィルムガイド板座ビス<br>Screw, film guide                                          | 2                              |                              | 1                             | ○                             | F-301          | 10 |
| * 1K120-225<br>(1K120-081) | P. SW プリント板ビス<br>Screw, program switch<br>printed circuit                 | 1                              | 1B999-072                    | 6                             | ○△                            | F-301          | 10 |
| 1K120-226                  | S/C ビス<br>Screw S/C lever                                                 | 1                              | 1B999-072                    | 4                             | ○△                            |                | 10 |
| * 1K123-046                | バヨネットビス A<br>Screw A, bayonet ring                                        | 4                              | 1B999-072                    | 4                             | ○△                            | F-301          | 10 |
| * 1K123-091                | 電源 S W, レリーズ S W ビス<br>Screw, power switch and release<br>switch          | 3                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 10 |
| 1K123-092-1                | DB 識別ビス<br>Screw, DB contact                                              | 1                              |                              | 1                             | ○                             |                | 5  |
| 1K123-093                  | TCL ビス<br>Screw, TCL module                                               | 3                              |                              | 6                             | ○                             |                | 5  |
| * 1K123-094                | 底カバー着脱ピン<br>Bottom cover release pin                                      | 1                              |                              | 13                            | ○                             | F-301          | 5  |
| 1K123-103                  | A/M SW ピン<br>Screw, A/M switch                                            | 1                              | 1B999-072                    | 5                             | ○△                            |                |    |
| 1K123-104-1                | バヨネットビス B<br>Screw B, bayonet ring                                        | 1                              | 1B999-072                    | 4                             | ○△                            |                |    |
| * 1K130-248                | P. SW プリント板止めビス A<br>Retaining screw A, program<br>switch printed circuit | 1                              | 1B999-072                    | 6                             | ○△                            | F-301          | 10 |
|                            |                                                                           |                                |                              |                               |                               |                |    |
|                            |                                                                           |                                |                              |                               |                               |                |    |

## 部 品 表 Parts list

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| 部 品 番 号<br>Part No. | 名 称<br>Name                                                            | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|---------------------|------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K130-249         | L基板止めビス A<br>Retaining screw A,<br>printed circuit                     | 1                              | 1B999-072                    | 7                             | ○△                            | F-301          | 10 |
| * 1K130-252         | 電池室ビス<br>Screw, battery chamber                                        | 1                              |                              | 13                            | ○                             | F-301          | 10 |
| * 1K130-258         | モータービス<br>Screw, motor                                                 | 2                              | 1B990-067                    | 2                             | ○△                            | F-301          | 10 |
| 1K130-285           | ギヤC軸<br>Gear C shaft                                                   | 1                              | 1B999-072                    | 5                             | ○△                            |                |    |
| 1K130-286           | 第1 レバー基板ビス<br>Screw                                                    | 1                              | 1B999-072                    | 5                             | ○△                            |                |    |
| 1K130-287           | S/C 軸<br>S/C shaft                                                     | 1                              | 1B999-072                    | 4                             | ○△                            |                |    |
| 1K130-288-1         | レンズ着脱鉤軸<br>Axle, lens release button                                   | 1                              | 1B999-072                    | 5                             | ○△                            |                |    |
| 1K130-289           | モーター基板ビス<br>Screw                                                      | 2                              | 1B999-072                    | 5                             | ○△                            |                |    |
| * 1K130-292         | 電池室ビス<br>Screw, battery chamber                                        | 4                              |                              | 13                            | ○                             | F-301          |    |
| * 1K146-081         | 巻戻しノブビス<br>Rewind knob screw                                           | 1                              | 1B990-052                    | 11                            | ○△                            | F-301          | 5  |
| * 1K146-082         | リモートコネクター止めビス<br>Retaining screw, remote                               | 1                              | 1B999-072                    | 4                             | ○△                            | F-301          | 5  |
| * 1K165-095         | カウンター S W絶縁ワッシャー<br>Insulating washer, frame<br>counter switch (t=0.1) | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5  |
| 1K165-105           | ギヤ止めワッシャー<br>Gear, retaining washer                                    | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5  |
|                     |                                                                        |                                |                              |                               |                               |                |    |
|                     |                                                                        |                                |                              |                               |                               |                |    |

## 部 品 表 Parts list

F A A 20051 — R. 3176. A

| 部 品 番 号<br>Part No. | 名 称<br>Name                                          | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|---------------------|------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| 1K165-106-1         | モーター基板ビス座<br>Washer, motor base plate                | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| * 1K201-059         | T ダイアル<br>Shutter dial                               | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1K201-060         | S/C 切換ダイアル<br>S/C selector ring                      | 1                              | 1B990-028-2                  | 12                            | ○△                            | F-301          | 5 |
| * 1K201-062-1       | 巻戻しノブ<br>Rewind knob                                 | 1                              | 1B990-052                    | 11                            | ○△                            | F-301          | 5 |
| * 1K206-040         | 音消しレバー<br>Silencer lever                             | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1K206-041         | R ロックレバー<br>Rewind lock lever                        | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| 1K206-044           | S/C レバー<br>S/C lever                                 | 1                              | 1B999-072                    | 4                             | ○△                            |                | 5 |
| * 1K208-059         | T ダイアルロック解除釦<br>Release button, shutter<br>dial lock | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1K208-060         | リリース釦<br>Shutter release button                      | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1K208-062         | R 釦<br>Rewind button                                 | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| 1K208-072           | レンズ着脱釦<br>Lens release button                        | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| 1K208-073           | AEL 釦<br>Button, AE memory lock                      | 1                              | 1B999-072                    | 4                             | ○△                            |                | 5 |
| 1K208-074           | AFL 釦<br>Button, A F lock                            | 1                              | 1B999-072                    | 4                             | ○△                            |                | 5 |
|                     |                                                      |                                |                              |                               |                               |                |   |
|                     |                                                      |                                |                              |                               |                               |                |   |

## 部 品 表 Parts list

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| 部 品 番 号<br>Part No.          | 名 称<br>Name                                                    | 1 台 分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|------------------------------|----------------------------------------------------------------|----------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K220-038-1                | 裏蓋開閉キーばね<br>Spring, camera back O/C key                        | 1                                |                              | 1                             | ○                             | F-301          | 10 |
| * 1K220-041                  | レンズ着脱ピンばね<br>Spring, lens release pin                          | 1                                | 1B999-072                    | 5                             | ○△                            | F-301          | 10 |
| * 1K220-089                  | EE 識別ピンばね<br>Spring, EE lens pin                               | 1                                | 1B999-072                    | 4                             | ○△                            | F-301          | 10 |
| * 1K220-090-1                | T ダイヤルクリックばね<br>Click spring, shutter dial                     | 1                                | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| * 1K220-166-1                | スプロケットばね<br>Sprocket spring                                    | 1                                |                              | 3                             | ○                             | F-301          | 5  |
| * 1K220-172                  | リリース鉤ばね<br>Spring, shutter release button                      | 1                                | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5  |
| 1K220-173                    | TCL ばね<br>TCL spring                                           | 3                                |                              | 6                             | ○                             |                | 10 |
| 1K220-201-1                  | レンズ着脱ボタン軸ばね<br>Spring, lens release button axle                | 1                                | 1B999-072                    | 5                             | ○△                            |                | 10 |
| 1K225-100                    | ミラーアップばね<br>Mirror-up spring                                   | 1                                | 1B990-041-2<br>1B999-072     | 7                             | ○△                            |                | 5  |
| * 1K225-101-2<br>(1K225-101) | 絞りレバー戻しばね<br>Aperture lever spring                             | 1                                | 1B990-041-2<br>1B999-072     | 7                             | ○△                            | F-301          | 5  |
| * 1K225-102-2<br>(1K225-102) | 絞りレバー駆動ばね<br>Aperture lever actuating spring                   | 1                                | 1B990-041-2                  | 7                             | ○△                            | F-301          | 5  |
| * 1K225-103-1                | 絞り制御リセット板コイルばね<br>Coil spring, aperture<br>control reset plate | 1                                | 1B990-046-2<br>1B999-072     | 6                             | ○△                            | F-301          | 5  |
| * 1K225-112                  | 運動環ばね<br>Spring, aperture coupling ring                        | 1                                | 1B640-037<br>1B999-072       | 4                             | ○△                            | F-301          | 5  |
|                              |                                                                |                                  |                              |                               |                               |                |    |
|                              |                                                                |                                  |                              |                               |                               |                |    |



## 部 品 表 Parts list

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| 部 品 番 号<br>Part No.          | 名 称<br>Name                                        | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|------------------------------|----------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K225-139                  | f <sub>o</sub> ばね<br>f <sub>o</sub> spring         | 1                              | 1B999-072                    | 4                             | ○△                            | F-301          | 5  |
| * 1K230-065-1<br>(1K230-065) | 絞り制御ギヤ Bばね<br>Spring, aperture control gear B      | 1                              | 1B990-046-2<br>1B999-072     | 6                             | ○△                            | F-301          | 10 |
| * 1K230-155                  | 巻上制限係止レバーバネ<br>Spring, film-advance lath lever     | 1                              | 1B990-035-1                  | 3                             | ○△                            | F-301          | 10 |
| * 1K230-158                  | 巻上制限レバーばね<br>Spring, film-advance stopper<br>lever | 1                              | 1B990-036-2<br>1B990-062-2   | 10                            | ○△                            | F-301          | 5  |
| * 1K230-159                  | カウンターばね<br>Frame counter spring                    | 1                              | 1B990-036-2<br>1B990-062-2   | 10                            | ○△                            | F-301          | 5  |
| * 1K230-160                  | 巻上制限ワイヤー SW<br>Wire switch, film-advance stopper   | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5  |
| * 1K230-161                  | カウンターワイヤー SW<br>Wire switch, frame counter         | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5  |
| 1K230-193                    | 第2 レバーばね<br>Spring, 2nd lever                      | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5  |
| 1K230-195                    | S/C 接点板ばね<br>Spring, S/C contact                   | 1                              | 1B999-072                    | 4                             | ○△                            |                | 5  |
| 1K230-196                    | 主ミラーダウンばね<br>Main spring, mirror down              | 1                              | 1B999-072                    | 7                             | ○△                            |                | 5  |
| 1K230-197                    | Sチャージレバーばね<br>Spring, shutter charge lever         | 1                              | 1B001-645<br>1B990-067       | 2                             | ○△                            |                | 5  |
| * 1K233-050                  | ペンタ押えばね<br>Retaining spring pentaprism             | 1                              |                              | 8                             | ○                             | F-301          | 5  |
| 1K233-052                    | サブミラーばね<br>Spring, sub mirror                      | 1                              | 1B990-059-1<br>1B999-072     | 7                             | ○△                            |                | 5  |
|                              |                                                    |                                |                              |                               |                               |                |    |
|                              |                                                    |                                |                              |                               |                               |                |    |

| 部 品 番 号<br>Part No.            | 名 称<br>Name                                          | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |    |
|--------------------------------|------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|----|
| * 1K233-056                    | 線ばね<br>Spring                                        | 1                              | 1B990-029-2                  | 13                            | ○△                            | F-301          | 5  |
| * 1K240-118-4<br>(1K240-118-3) | シューばね<br>Spring, accessory shoe                      | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 10 |
| * 1K240-330                    | 巻戻しクランクレバーばね<br>Spring, rewind crank                 | 1                              | 1B990-052                    | 11                            | ○△                            | F-301          | 10 |
| * 1K240-367-3                  | カウンター送りギヤばね<br>Spring, frame counter advance<br>gear | 1                              | 1B990-035-1                  | 3                             | ○△                            | F-301          | 5  |
| * 1K240-368-2                  | AR ばね<br>AR spring                                   | 1                              |                              | 10                            | ○                             | F-301          | 5  |
| * 1K240-369-1                  | リリース SW<br>Release switch                            | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5  |
| * 1K240-370-4                  | 半押し SW<br>Power hold switch                          | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5  |
| * 1K240-373                    | バトロネ保持ばね<br>Retaining spring, patorone               | 1                              |                              | 1                             | ○                             | F-301          | 5  |
| * 1K240-375                    | 電池ホルダーばねB<br>Spring, battery holder                  | 2                              | 1B990-039                    |                               | ○△                            | F-301          | 5  |
| * 1K240-452                    | AE LED 圧接ばね<br>Spring, press contact AE LED          | 1                              |                              | 9                             | ○                             | F-301          | 5  |
| 1K240-461                      | スクリーン 枠係止板<br>Holding plate                          | 1                              |                              | 8                             | ○                             |                | 5  |
| 1K240-462                      | スクリーン枠支持板<br>Screen frame, supporting plate          | 1                              |                              | 8                             | ○                             |                | 5  |
| 1K240-465-1                    | 相対距離信号押えばね<br>Spring relative distance signal        | 1                              | 1B990-066<br>1B999-072       | 5                             | ○△                            |                | 5  |
|                                |                                                      |                                |                              |                               |                               |                |    |
|                                |                                                      |                                |                              |                               |                               |                |    |

| 部 品 番 号<br>Part No.          | 名 称<br>Name                                  | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|------------------------------|----------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| 1K240-468-1                  | バヨネットばね<br>Spring, bayonet ring              | 1                              | 1B999-072                    | 4                             | ○△                            |                | 5 |
| * 1K260-232                  | スプロケットギヤ<br>Sprocket gear                    | 1                              |                              | 3                             | ○                             | F-301          | 5 |
| 1K260-255                    | ギヤ C<br>Gear C                               | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| 1K260-256                    | ギヤ B<br>Gear B                               | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| * 1K275-044-1<br>(1K275-044) | スプール<br>Spool                                | 1                              | 1B990-067                    | 2                             | ○△                            | F-301          | 5 |
| * 1K275-045                  | スプロケット<br>Sprocket                           | 1                              |                              | 3                             | ○                             | F-301          | 5 |
| * 1K277-015                  | 減速ギヤ B<br>Reducing gear B                    | 1                              | 1B990-067                    | 2                             | ○△                            | F-301          | 5 |
| * 1K277-016                  | 減速ギヤ C<br>Reducing gear C                    | 1                              | 1B990-067                    | 2                             | ○△                            | F-301          | 5 |
| * 1K277-017                  | 減速ギヤ D<br>Reducing gear D                    | 1                              | 1B990-067                    | 2                             | ○△                            | F-301          | 5 |
| * 1K277-018                  | 減速ギヤ E<br>Reducing gear E                    | 1                              | 1B990-067                    | 2                             | ○△                            | F-301          | 5 |
| 1K300-067                    | S/C 切換カム<br>S/C exchanging cam               | 1                              | 1B999-072                    | 4                             | ○△                            |                |   |
| * 1K314-224-1                | 裏蓋開閉キー<br>Camera back O/C key                | 1                              |                              | 1                             | ○                             | F-301          | 5 |
| * 1K314-230-1                | 絞り制御連結レバー<br>Aperture control coupling lever | 1                              | 1B999-072                    | 7                             | ○△                            | F-301          | 5 |
|                              |                                              |                                |                              |                               |                               |                |   |
|                              |                                              |                                |                              |                               |                               |                |   |

| 部 品 番 号<br>Part No.          | 名 称<br>Name                               | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|------------------------------|-------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| 1K314-262-1                  | 連動レバー<br>Coupling lever                   | 1                              | 1B001-642-1                  | 5                             | ○△                            |                | 5 |
| * 1K340-124-1                | スプロケット下軸受<br>Bearing, sproket lower shaft | 1                              |                              | 3                             | ○                             | F-301          | 5 |
| * 1K370-822                  | E E 識別ピン<br>E E lens pin                  | 1                              | 1B999-072                    | 4                             | ○△                            | F-301          | 5 |
| * 1K370-824                  | 巻戻しフォーク軸<br>Rewind folk shaft             | 1                              | 1B990-051-1                  | 11                            | ○△                            | F-301          | 5 |
| * 1K370-930                  | スプロケット軸<br>Sprocket shaft                 | 1                              |                              | 3                             | ○                             | F-301          | 5 |
| 1K370-938                    | スクリーン枠支持軸<br>Shaft, focusing screen frame | 1                              |                              | 8                             | ○                             |                | 5 |
| 1K370-962                    | 第2レバー軸<br>2 nd lever shaft                | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| 1K370-966-1                  | レンズ着脱ピン<br>Lens release pin               | 1                              | 1B999-072                    | 5                             | ○△                            |                |   |
| * 1K380-040-1<br>(1K380-040) | 底カバービス<br>Bottom cover screw              | 1                              | 1B990-029-2                  |                               | ○△                            | F-301          | 5 |
| 1K380-042-1                  | ローレットネジ<br>Screw                          | 1                              | 1B999-077                    | 13                            | ○△                            |                | 5 |
| 1K380-043                    | 三脚雄ネジ<br>Screw                            | 1                              |                              | 13                            | ○                             |                | 5 |
| 1K404-071-1                  | バヨネット<br>Bayonet ring                     | 1                              | 1B999-072                    | 4                             | ○△                            |                | 5 |
| * 1K406-013                  | シュー<br>Accessory shoe                     | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
|                              |                                           |                                |                              |                               |                               |                |   |
|                              |                                           |                                |                              |                               |                               |                |   |

| 部 品 番 号<br>Part No. | 名 称<br>Name                                | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 充<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|---------------------|--------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| * 1K467-042         | リモートコネクターキャップ<br>Remote connector cap      | 1                              |                              | 4                             | ○                             | F-301          | 5 |
| * 1K467-091         | 接眼キャップ<br>Eyepiece cap                     | 1                              |                              | 12                            | ○                             | F-301          | 5 |
| * 1K470-047         | 視野枠<br>Viewfield frame                     | 1                              |                              | 8                             | ○                             | F-301          | 5 |
| 1K470-050           | T ダイアル目盛板<br>Shutter speeds indicator      | 1                              | 1B990-028-3                  | 12                            | ○△                            |                | 5 |
| * 1K475-283-1       | カウンターラチェット<br>Frame counter ratchet        | 1                              | 1B990-036-2<br>1B990-062-2   | 10                            | ○△                            | F-301          | 5 |
| * 1K475-284         | ISO 上表示板<br>ISO dial, upper                | 1                              |                              | 11                            | ○                             | F-301          | 5 |
| * 1K480-024         | カウンター指標板<br>Frame counter index            | 1                              | 1B990-036-2<br>1B990-062-2   | 10                            | ○△                            | F-301          | 5 |
| * 1K600-440         | リリースSW押え板<br>Release switch retainer       | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5 |
| * 1K600-446-1       | メインフレキ圧接板<br>Press-contact plate, main FPC | 1                              |                              | 9                             | ○                             | F-301          | 5 |
| 1K600-490           | T ダイアルクリック板<br>Click plate, shutter dial   | 1                              | 1B990-028-3                  | 12                            | ○△                            |                | 5 |
| 1K600-533           | ギヤ押え板<br>Gear retaining plate              | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| 1K600-534           | 基板取付座 A<br>Mount A                         | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| 1K600-536           | 前カバーゴム A<br>Rubber A, front cover          | 1                              |                              | 9                             | ○                             |                | 5 |
|                     |                                            |                                |                              |                               |                               |                |   |
|                     |                                            |                                |                              |                               |                               |                |   |

| 部 品 番 号<br>Part No.          | 名 称<br>Name                                               | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|------------------------------|-----------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| 1K600-537                    | レンズ着脱板<br>Lens release plate                              | 1                              | 1B999-072                    | 5                             | ○△                            |                | 5 |
| * 1K610-384-1<br>(1K610-384) | シュー裏打ち板<br>Plate, accessory shoe (bottom)                 | 1                              | 1B990-028-3                  | 12                            | ○△                            | FG<br>FG-20    |   |
| * 1K610-657-1                | スプロカバー板<br>Sproket cover                                  | 1                              |                              | 3                             | ○                             | F-301          | 5 |
| * 1K610-658-1                | 裏蓋ヒンジ板<br>Camera back hinge                               | 1                              |                              | 1                             | ○                             | F-301          | 5 |
| * 1K610-659                  | DB 接点フレキ押え板<br>Retainer, data back contact                | 1                              |                              | 1                             | ○                             | F-301          | 5 |
| * 1K610-665-1                | ミラー後部遮光板<br>Light baffle plate, mirror                    | 1                              |                              | 7                             | ○                             | F-301          | 5 |
| * 1K610-669                  | R ロック板<br>Rewind lock plate                               | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1K610-700                  | A R ばね押え<br>A R spring retainer                           | 1                              |                              | 10                            | ○                             | F-301          | 5 |
| * 1K610-714-2                | AE SPD シールド板<br>AE SPD shield                             | 1                              |                              | 8                             | ○                             | F-301          | 5 |
| * 1K610-733                  | ミラー駆動レバーガタ防止板<br>Holding plate, mirror actuating<br>lever | 1                              | 1B999-072                    | 7                             | ○△                            | F-301          | 5 |
| 1K610-781                    | ペンタ押え板<br>Pentaprism retaining plate                      | 1                              |                              | 8                             | ○                             |                | 5 |
| 1K610-794                    | AE SPD 基板押えばね<br>Spring, AE SPD base plate                | 1                              |                              | 8                             | ○                             |                | 5 |
| * 1K620-122                  | 三脚基板<br>Tripod base plate                                 | 1                              |                              | 13                            | ○                             | F-301          | 5 |
|                              |                                                           |                                |                              |                               |                               |                |   |
|                              |                                                           |                                |                              |                               |                               |                |   |

## 部 品 表 Parts list

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| 部 品 番 号<br>Part No. | 名 称<br>Name                                           | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|---------------------|-------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| 1K620-124           | スクリーン枠<br>Frame, focusing screen                      | 1                              |                              | 8                             | ○                             |                | 5 |
| 1K620-126           | AF フレキ圧接板<br>Press-contact plate, AF FPC              | 1                              |                              | 9                             | ○                             |                | 5 |
| * 1K625-054         | 半押し S W絶縁座<br>Insulating plate, power<br>hold switch  | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5 |
| * 1K630-297         | T ダイアル軸<br>Axle, shutter dial                         | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1K630-299         | 運動環ばねローラー<br>Roller, aperture coupling<br>ring spring | 1                              | 1B999-072                    | 4                             | ○△                            | F-301          | 5 |
| 1K630-365           | 相対距離信号羽根<br>Blade, relative distance signal           | 1                              | 1B990-066<br>1B999-072       | 5                             | ○△                            |                | 5 |
| * 1K640-529-1       | スプール上座<br>Spool upper cover                           | 1                              | 1B990-067                    | 2                             | ○△                            | F-301          | 5 |
| 1K640-638           | ワッシャ<br>Washer                                        | 1                              | 1B999-072                    | 5                             | ○△                            |                |   |
| 1K650-012           | 偏心環<br>Eccentric ring                                 | 1                              | 1B999-072                    | 5                             | ○△                            |                |   |
| * 1K680-468         | グリップゴム<br>Rubber, grip                                | 1                              |                              | 9                             | ○                             | F-301          | 5 |
| * 1K680-473         | D B 接点座<br>Base, data back contact                    | 1                              |                              | 1                             | ○                             | F-301          | 5 |
| * 1K680-474-1       | セルフ窓<br>Self-timer window                             | 1                              |                              | 9                             | ○                             | F-301          | 5 |
| * 1K680-482         | 裏蓋開閉キーカバー<br>Cover, camera back O/C key               | 1                              |                              | 1                             | ○                             | F-301          | 5 |
|                     |                                                       |                                |                              |                               |                               |                |   |
|                     |                                                       |                                |                              |                               |                               |                |   |

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## 部 品 表 Parts list

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| 部 品 番 号<br>Part No. | 名 称<br>Name | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売 区<br>Term of<br>Sale | 備 考<br>Remarks |
|---------------------|-------------|--------------------------------|------------------------------|-------------------------------|--------------------------|----------------|
| A1-14014FB          | Screw       | 1                              | 1B990-035                    | 3                             | ○△                       |                |
| A1-14020FA          | Screw       | 2                              |                              | 9                             | ○                        |                |
| A1-14030FS          | Screw       | 1                              |                              | 1                             | ○                        |                |
| A1-17020FS          | Screw       | 1                              | 1B999-072                    | 4                             | ○△                       |                |
| A1-17025FA          | Screw       | 6                              | 1B999-072                    | 1, 4, 5                       | ○△                       |                |
| A1-17040FB          | Screw       | 2                              |                              | 1                             | ○                        |                |
| A1-17045FB          | Screw       | 4                              |                              | 9                             | ○                        |                |
| A1-17045FS          | Screw       | 5                              |                              | 12                            | ○                        |                |
| A1-20035FB          | Screw       | 5                              |                              | 1, 9                          | ○                        |                |
| A1-20050FS          | Screw       | 1                              |                              | 1                             | ○                        |                |
|                     |             |                                |                              |                               |                          |                |
| A2-17022FC          | Screw       | 2                              |                              | 1                             | ○                        |                |
|                     |             |                                |                              |                               |                          |                |
|                     |             |                                |                              |                               |                          |                |
|                     |             |                                |                              |                               |                          |                |

## 部 品 表 Parts list

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| 部 品 番 号<br>Part No. | 名 称<br>Name | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No.          | 参照図番<br>Reference<br>Fig. No. | 販・売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |
|---------------------|-------------|--------------------------------|---------------------------------------|-------------------------------|-------------------------------|----------------|
| A2-17025FC          | Screw       | 2                              |                                       | 3                             | ○                             |                |
| A2-20040FC          | Screw       | 4                              |                                       | 13                            | ○                             |                |
|                     |             |                                |                                       |                               |                               |                |
| B1-14014FB          | Screw       | 1                              | 1B990-066<br>1B999-071<br>1B999-072   | 5                             | ○△                            |                |
| B1-14015FA          | Screw       | 10                             | 1B990-062-2<br>1B990-066<br>1B999-072 | 5,6<br>9,10                   | ○△                            |                |
| B1-14030FD          | Screw       | 2                              | 1B999-072                             | 5                             | ○△                            |                |
| B1-17016FB          | Screw       | 3                              | 1B990-046-2<br>1B999-072              | 6,7                           | ○△                            |                |
| B1-17025FA          | Screw       | 7                              | 1B999-072                             | 9,7                           | ○△                            |                |
| B1-17030FA          | Screw       | 1                              |                                       | 9                             | ○                             |                |
| B1-17035FB          | Screw       | 4                              | 1B999-072                             | 2,7                           | ○△                            |                |
| B1-17040FB          | Screw       | 8                              |                                       | 3,8                           | ○                             |                |
| B1-17055FB          | Screw       | 3                              | 1B999-072                             | 1,7                           | ○△                            |                |
| B1-20030FB          | Screw       | 3                              |                                       | 11                            | ○                             |                |
|                     |             |                                |                                       |                               |                               |                |
|                     |             |                                |                                       |                               |                               |                |

## 部 品 表 Parts list

F A A 20051 — R. 3176. A

| 部 品 番 号<br>Part No. | 名 称<br>Name                    | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No.                                                                               | 参照図書<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |
|---------------------|--------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|----------------|
| G1-14020FB          | Screw                          | 2                              |                                                                                                            | 8                             | ○                             |                |
| G1-17020FA          | Screw                          | 2                              | 1B990-028-3                                                                                                | 12                            | ○△                            |                |
| G1-17035FS          | Screw                          | 1                              |                                                                                                            | 12                            | ○                             |                |
| G2-17030FC          | Screw                          | 4                              | 1B990-039                                                                                                  |                               | ○△                            |                |
| H1-17035FA          | タップタイトネジ<br>Self tapping screw | 1                              |                                                                                                            | 10                            | ○                             |                |
|                     |                                |                                |                                                                                                            |                               |                               |                |
| H2-17035FA          | タップタイトネジ<br>Self tapping screw | 1                              |                                                                                                            | 10                            | ○                             |                |
| K1-14020FB          | Screw                          | 1                              |                                                                                                            | 5                             | ○                             |                |
| S1-00800SX          | E ring                         | 4                              | 1B990-064<br>1B060-283<br>1B999-071<br>1B999-072<br>1B990-066                                              | 4                             | ○△                            |                |
| S1-01200SX          | E ring                         | 8                              | 1B001-645<br>1B060-283<br>1B260-028-1<br>1B990-046-2<br>1B990-067<br>1B990-066<br>1B990-028-3<br>1B999-072 | 2,6,5                         | ○△                            |                |
| S1-01500SX          | E ring                         | 2                              | 1B310-042-2<br>1B999-072                                                                                   | 7                             | ○△                            |                |
| S1-02000SX          | E ring                         | 3                              | 1B990-062-2<br>1B001-642-3                                                                                 | 10<br>12                      | ○△                            |                |
|                     |                                |                                |                                                                                                            |                               |                               |                |
|                     |                                |                                |                                                                                                            |                               |                               |                |

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[illegible]

F A A 20051 — R.3176.A

[illegible]

## 部 品 表 Parts list

F A A 20051 — R.3176. A

| 部 品 番 号<br>Part No. | 名 称<br>Name                                    | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |   |
|---------------------|------------------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|---|
| * 1S260-025-1       | AE LED アレイ<br>AE LED array                     | 1                              |                              | 8, 9                          | ○                             | F-301          | 5 |
| * 1S260-027         | セルフ表示LED<br>Self-timer LED                     | 1                              | 1B990-062-2                  | 10                            | ○△                            | F-301          | 5 |
| 1S260-028           | LED アレイ<br>LED array                           | 1                              |                              | 8                             | ○                             |                | 5 |
| 1S322-064           | ISO ダイアル基板<br>Base plate, ISO film speed       | 1                              |                              | 11                            | ○                             |                | 1 |
| * 1S542-003         | 圧電ブザー<br>Buzzer                                | 1                              | 1B990-028-3                  | 12                            | ○△                            | F-301          | 5 |
| * 1S705-042-2       | DB FPC<br>Data back FPC                        | 1                              |                              | 1                             | ○                             | F-301          | 5 |
| 1S705-046           | フレキシブルプリント板<br>(レンズ接点 FPC)<br>Lens contact FPC | 1                              | 1B999-072                    | 5                             | ○△                            |                | 1 |
| * 1S727-006         | ペンタ絶縁シート<br>Insulating sheet pentaprism        | 1                              |                              | 8                             | ○                             | F-301          | 5 |
| 1S758-009-1         | 導電ゴム                                           | 1                              | 1B999-072                    | 4                             | ○△                            |                |   |
| * 1S810-571         | リード線 (赤) $\ell = 105$<br>Lead wire (Red)       | 2                              | 1B990-028-3                  |                               | ×                             | W-0065 RE      |   |
| * 1S810-572         | リード線 (黒) $\ell = 100$<br>Lead wire (Black)     | 1                              |                              |                               | ×                             | W-0065 BK      |   |
| * 1S810-573         | リード線 (灰) $\ell = 100$<br>Lead wire (Gray)      | 1                              |                              |                               | ×                             | W-0065 GY      |   |
| * 1S810-574         | リード線 (緑) $\ell = 100$<br>Lead wire (Green)     | 1                              |                              |                               | ×                             | W-0056 GN      |   |
| 1S810-409           | リード線 (赤) $\ell = 30$<br>Lead wire (Red)        | 1                              |                              |                               | ×                             | W-0056 RE      |   |
|                     |                                                |                                |                              |                               |                               |                |   |

| 部 品 番 号<br>Part No. | 名 称<br>Name                                 | 1 台 分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No. | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |
|---------------------|---------------------------------------------|----------------------------------|------------------------------|-------------------------------|-------------------------------|----------------|
| * 1S810-575         | リード線 (黄)<br>Lead wire (Yellow) $\ell = 100$ | 1                                |                              |                               | ×                             | W-0056YE       |
| * 1S810-576         | リード線 (紫)<br>Lead wire (Purple) $\ell = 90$  | 1                                |                              |                               | ×                             | W-0056PU       |
| * 1S810-577         | リード線 (橙)<br>Lead wire (Orange) $\ell = 95$  | 1                                |                              |                               | ×                             | W-0056OR       |
| * 1S810-578         | リード線 (黒)<br>Lead wire (Black) $\ell = 11$   | 1                                |                              |                               | ×                             | W-0056BK       |
| * 1S810-579         | リード線 (桃)<br>Lead wire (Pink) $\ell = 75$    | 1                                | 1B990-028-3                  |                               | ×                             | W-0056PK       |
| * 1S810-580         | リード線 (茶)<br>Lead wire (Brown) $\ell = 75$   | 1                                | 1B99Q-028-3                  |                               | ×                             | W-0056BN       |
| * 1S810-581         | リード線 (緑)<br>Lead wire (Green) $\ell = 80$   | 1                                | 1B990-028-3                  |                               | ×                             | W-0056GN       |
| * 1S810-582-1       | リード線 (青)<br>Lead wire (Blue) $\ell = 60$    | 1                                | 1B060-282-2                  |                               | ×                             | W-0056BE       |
| * 1S810-585-1       | リード線 (橙)<br>Lead wire (Orange) $\ell = 25$  | 1                                |                              |                               | ×                             | W-0056OR       |
| * 1S810-590-1       | リード線 (黒)<br>Lead wire (Black) $\ell = 65$   | 1                                | 1B990-068                    |                               | ×                             | W-0056BK       |
| * 1S810-591-1       | リード線 (青)<br>Lead wire (Blue) $\ell = 45$    | 1                                | 1B990-068                    |                               | ×                             | W-0056BE       |
| * 1S810-592-1       | リード線 (橙)<br>Lead wire (Orange) $\ell = 50$  | 1                                | 1B990-068                    |                               | ×                             | W-0056OR       |
| * 1S810-593-1       | リード線 (茶)<br>Lead wire (Brown) $\ell = 55$   | 1                                | 1B990-068                    |                               | ×                             | W-0056BN       |
| 1S810-586-1         | リード線 (青)<br>Lead wire (Blue) $\ell = 25$    | 1                                |                              |                               | ×                             | W-0056BE       |
|                     |                                             |                                  |                              |                               |                               |                |

## 部 品 表 Parts list

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| 部 品 番 号<br>Part No. | 名 称<br>Name                                | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No.          | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks  |
|---------------------|--------------------------------------------|--------------------------------|---------------------------------------|-------------------------------|-------------------------------|-----------------|
| *1S810-594-1        | リード線 (緑) $\ell = 55$<br>Lead wire (Green)  | 1                              | 1B990-068                             |                               | ×                             | W-0056GN        |
| *1S810-595-1        | リード線 (桃) $\ell = 60$<br>Lead wire (Pink)   | 1                              | 1B990-068                             |                               | ×                             | W-0056PK        |
| *1S810-598          | リード線 (橙) $\ell = 30$<br>Lead wire (Orange) | 1                              | 1B999-072<br>1S007-086                |                               | ×                             | W-0056OR        |
| *1S810-599-1        | リード線 (灰) $\ell = 45$<br>Lead wire (Gray)   | 1                              | 1B680-038                             |                               | ×                             | W-0056BN        |
| *1S810-600-1        | リード線 (黄) $\ell = 50$<br>Lead wire (Yellow) | 1                              | 1B680-038                             |                               | ×                             | W-0056YE        |
| *1S810-601          | リード線 (黄) $\ell = 60$<br>Lead wire (Yellow) | 1                              | 1B990-028-3                           |                               | ×                             | W-0056YE        |
| *1S810-602          | リード線 (灰) $\ell = 60$<br>Lead wire (Gray)   | 1                              | 1B990-028-3                           |                               | ×                             | W-0056GY        |
| *1S810-605          | リード線 (赤) $\ell = 80$<br>Lead wire (Red)    | 1                              |                                       |                               | ×                             | W-0080RE        |
| *1S810-606          | リード線 (赤) $\ell = 30$<br>Lead wire (Red)    | 1                              | 1B670-064-5                           |                               | ×                             | OLD<br>W-0080RE |
| *1S810-607          | リード線 (黒) $\ell = 75$<br>Lead wire (Black)  | 1                              |                                       |                               | ×                             | W-0080BK        |
| *1S810-608          | リード線 (黒) $\ell = 30$<br>Lead wire (Black)  | 1                              | 1B670-064-5                           |                               | ×                             | OLD<br>W-0080BK |
| 1S810-614           | リード線 (緑) $\ell = 25$<br>Lead wire (Green)  | 1                              | 1B990-046-2<br>1S007-087<br>1B999-072 |                               | ×                             | W-0056GN        |
| 1S810-615           | リード線 (白) $\ell = 30$<br>Lead wire (White)  | 1                              | 1B990-046-2<br>1S007-087<br>1B999-072 |                               | ×                             | W-0056WH        |
|                     |                                            |                                |                                       |                               |                               |                 |
|                     |                                            |                                |                                       |                               |                               |                 |



## 部 品 表 Parts list

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| 部 品 番 号<br>Part No. | 名 称<br>Name                                | 1台分<br>個 数<br>Pcs. per<br>Unit | 部 組 品 番 号<br>Subassembly No.        | 参照図番<br>Reference<br>Fig. No. | 販 売<br>区 分<br>Term of<br>Sale | 備 考<br>Remarks |  |
|---------------------|--------------------------------------------|--------------------------------|-------------------------------------|-------------------------------|-------------------------------|----------------|--|
| 1S810-753           | リード線 (紫)<br>Lead wire (Purple) $\ell = 30$ | 1                              | 1B060-282<br>1B999-072              |                               | ×                             | W-0056PU       |  |
| 1S810-754           | リード線 (黄)<br>Lead wire (Yellow) $\ell = 30$ | 1                              | 1B060-282<br>1B999-072              |                               | ×                             | W-0056YE       |  |
| 1S810-755           | リード線 (茶)<br>Lead wire (Brown) $\ell = 25$  | 1                              | 1S045-050<br>1B999-072              |                               | ×                             | W-0056BN       |  |
| 1S810-756           | リード線 (黒)<br>Lead wire (Black) $\ell = 25$  | 1                              | 1S045-050<br>1B999-072              |                               | ×                             | W-0056BK       |  |
| 1S810-757           | リード線 (白)<br>Lead wire (White) $\ell = 85$  | 1                              | 1B060-285<br>1B999-072              |                               | ×                             | W-0056WH       |  |
| 1S810-758           | リード線 (橙)<br>Lead wire (Orange) $\ell = 85$ | 1                              | 1B060-285<br>1B999-072              |                               | ×                             | W-0056OR       |  |
| 1S810-759           | リード線 (黒)<br>Lead wire (Black) $\ell = 85$  | 1                              | 1B060-285<br>1B999-072              |                               | ×                             | W-0056BK       |  |
| 1S810-760           | リード線 (橙)<br>Lead wire (Orange) $\ell = 40$ | 1                              | 1B999-072                           |                               | ×                             | W-0056OR       |  |
| 1S810-761           | リード線 (黒)<br>Lead wire (Black) $\ell = 45$  | 1                              | 1B999-072                           |                               | ×                             | W-0056BK       |  |
| 1S810-762           | リード線 (橙)<br>Lead wire (Orange) $\ell = 75$ | 1                              | 1S045-050<br>1B999-072              |                               | ×                             | W-0056OR       |  |
| 1S810-763           | リード線 (桃)<br>Lead wire (Pink) $\ell = 200$  | 1                              | 1B999-072                           |                               | ×                             | W-0056PK       |  |
| 1S810-764           | リード線 (黒)<br>Lead wire (Black) $\ell = 100$ | 1                              | 1B999-072                           |                               | ×                             | W-0056BK       |  |
| 1S810-765           | リード線 (赤)<br>Lead wire (Red) $\ell = 25$    | 1                              | 1B060-284<br>1B999-066<br>1B999-072 |                               | ×                             | W-0056RE       |  |
|                     |                                            |                                |                                     |                               |                               |                |  |
|                     |                                            |                                |                                     |                               |                               |                |  |

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| 部 組 品 番 号<br>Assembly No.   | 名 称<br>Name                                         | 1台分<br>個 数<br>Pcs.per<br>Unit | 大 部 組 品 番 号<br>Main Assembly No. | 参照図番<br>Figure | 備 考<br>Remarks |    |
|-----------------------------|-----------------------------------------------------|-------------------------------|----------------------------------|----------------|----------------|----|
| *1B001-085                  | 吊り環<br>Eyelet                                       | 2                             | 1B999-072                        | 4              | F-301          | 10 |
| *1B001-572-1<br>(1B001-572) | 絞り制御Mg基板<br>Base plate, aperture<br>control magnet  | 1                             | 1B990-046-2<br>1B999-072         | 6              | F-301          | 1  |
| *1B001-602-7                | 裏 蓋<br>Camer back                                   | 1                             |                                  | 14             | F-301          | 1  |
| 1B001-642-3                 | 着脱連動レバー基板<br>Base plate, lens<br>release lever      | 1                             | 1B999-072                        | 5              |                | 5  |
| *1B001-645                  | 減速基板<br>Base plate, motor<br>rotation reducing      | 1                             | 1B990-067                        | 2              | F-301          | 1  |
| 1B060-282-3                 | E E 識別 S W<br>EE lens swtch                         | 1                             | 1B999-072                        | 5              |                | 5  |
| 1B060-283                   | A F モーター<br>AF motor                                | 1                             | 1B990-066<br>1B999-072           | 5              |                | 1  |
| 1B060-284                   | フォトインターラプター保持基板<br>Base plate, photo<br>interrupter | 1                             | 1B990-066<br>1B999-072           | 5              |                | 1  |
| 1B060-285                   | f o 基板<br>fo base plate                             | 1                             | 1B999-072                        | 4              |                | 5  |
| *1B201-023-1<br>(1B201-023) | 巻戻しクランク<br>Rewind crank                             | 1                             | 1B990-052                        | 11             | F-301          | 5  |
| *1B240-034                  | 板バネ<br>Leaf spring                                  | 1                             | 1B999-072                        | 7              | F-301          | 5  |
| *1B260-028-1<br>(1B260-028) | モーターギヤ組<br>Gear unit, motor                         | 1                             | 1B990-067                        | 2              | F-301          | 1  |
| *1B260-029                  | 基準軸<br>Reference shaft                              | 1                             | 1B990-067                        | 2              | F-301          | 5  |
|                             |                                                     |                               |                                  |                |                |    |
|                             |                                                     |                               |                                  |                |                |    |

## 部組品一覧表 Assembly List

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| 部 組 品 番 号<br>Assembly No.     | 名 称<br>Name                                 | 1台分<br>個 数<br>Pcs.per<br>Unit | 大 部 組 品 番 号<br>Main Assembly No. | 参照図番<br>Figure | 備 考<br>Remarks |   |
|-------------------------------|---------------------------------------------|-------------------------------|----------------------------------|----------------|----------------|---|
| *1B260-031-1<br>(1B260-031)   | セグメントギヤ<br>Segment gear                     | 1                             | 1B990-046-2<br>1B999-072         | 6              | F-301          | 5 |
| *1B277-005                    | 絞り制御ギヤ<br>Aperture control gear             | 1                             | 1B990-046-2<br>1B999-072         | 6              | F-301          | 5 |
| *1B277-012                    | ラチェットギヤ<br>Ratchet gear                     | 1                             | 1B990-046-2<br>1B999-072         | 6              | F-301          | 5 |
| *1B310-042-2<br>(1B310-042-1) | 横軸連結レバー<br>Side shaft coupling lever        | 1                             | 1B999-072                        | 7              | F-301          | 5 |
| *1B314-122                    | ミラー駆動レバー<br>Mirror actuating lever          | 1                             | 1B990-035-1                      | 3              | F-301          | 5 |
| *1B314-131                    | Sチャージレバー<br>Shutter charge lever            | 1                             | 1B001-645                        | 2              | F-301          | 5 |
| 1B370-013                     | 基準軸円盤<br>Disk, reference shaft              | 1                             |                                  | 3              | F-301          | 5 |
| *1B600-013-1                  | 圧 板<br>Pressure plate                       | 1                             |                                  | 14             | F-301          | 5 |
| 1B610-035-1                   | A F 接点<br>AF contact                        | 1                             | 1B999-072                        | 5              |                | 5 |
| 1B610-040                     | カップリング軸受け基板<br>Base plate, coupling bearing | 1                             | 1B999-072                        | 5              |                | 5 |
| *1B630-032                    | リモートコネクター<br>Remote connector               | 1                             | 1B999-072                        | 4              | F-301          | 5 |
| *1B640-029-1                  | I S Oダイヤル<br>I S O film speed dial          | 1                             |                                  | 11             | F-301          | 5 |
| 1B640-031                     | T ブラシ環<br>Ring, shutter dial brush          | 1                             | 1B990-062-2                      | 10             |                | 5 |
|                               |                                             |                               |                                  |                |                |   |
|                               |                                             |                               |                                  |                |                |   |

## 部組品一覽表 Assembly List

F A A 20051 — R. 3176. A

| 部組品番号<br>Assembly No.          | 名 称<br>Name                           | 1台分<br>個 数<br>Pcs.per<br>Unit | 大部組品番号<br>Main Assembly No. | 参照図番<br>Figure | 備 考<br>Remarks |   |
|--------------------------------|---------------------------------------|-------------------------------|-----------------------------|----------------|----------------|---|
| 1B640-032                      | I S O ブラシ<br>Brush, ISO film speed    | 1                             |                             | 11             |                | 5 |
| 1B640-037                      | 連動環<br>Aperture coupling ring         | 1                             | 1B999-072                   | 4              |                | 5 |
| * 1B670-064-5                  | 電池室<br>Battery chamber                | 1                             |                             | 13             | OLD            | 5 |
| * 1B670-064-6                  |                                       |                               |                             |                | F-301          |   |
| * 1B680-036                    | シュー座<br>Accessory shoe                | 1                             | 1B990-028-3                 | 12             | F-301          | 5 |
| 1B680-038-1                    | ミラーBox 底板<br>Bottom plate, mirror box | 1                             |                             | 7              |                | 5 |
| 1B990-028-3                    | 上カバー<br>Top cover                     | 1                             |                             | 12             |                | 1 |
| * 1B990-029-2                  | 底カバー<br>Bottom cover                  | 1                             |                             |                | F-301          | 1 |
| * 1B990-035-1                  | 下地基板<br>Unit, film-advance mechanism  | 1                             |                             | 3              | F-301          | 1 |
| * 1B990-036-2                  | 上地基板<br>Unit, film- advance           | 1                             | 1B990-062-2                 | 10             | F-301          | 1 |
| * 1B990-037-1<br>(1B990-037)   | 電源 S W<br>Power switch                | 1                             | 1B990-062-2                 | 10             | F-301          | 5 |
| * 1B990-038-3<br>(1B990-038-2) | フィルムガイド<br>Unit, film arm             | 1                             |                             | 1              | F-301          | 5 |
| * 1B990-039                    | 電池ホルダー<br>Battery holder              | 1                             |                             |                | F-301          | 5 |
| 1B990-041-2                    | I 基板<br>Base plate I                  | 1                             | 1B999-072                   | 7              |                | 1 |
|                                |                                       |                               |                             |                |                |   |
|                                |                                       |                               |                             |                |                |   |

## 部組品一覧表 Assembly List

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| 部 組 品 番 号<br>Assembly No. | 名 称<br>Name                               | 1台分<br>個 数<br>Pcs.per<br>Unit | 大 部 組 品 番 号<br>Main Assembly No | 参照図番<br>Figure        | 備 考<br>Remarks |   |
|---------------------------|-------------------------------------------|-------------------------------|---------------------------------|-----------------------|----------------|---|
| 1B990-046-2               | L 基板<br>Base plate L                      | 1                             | 1B999-072                       | 6                     |                | 1 |
| *<br>1B990-050-1          | I S O ロ ッ ク 釦<br>Button, ISO dial lock    | 1                             |                                 | 11                    | F-301          | 5 |
| *<br>1B990-051-1          | 巻戻し軸受<br>Rewind shaft bearing             | 1                             |                                 | 11                    | F-301          | 5 |
| *<br>1B990-052            | 巻戻しノブ<br>Rewind knob                      | 1                             |                                 | 11                    | F-301          | 5 |
| 1B990-059-2               | 主ミラー<br>Main mirror                       | 1                             | 1B999-072                       | 7                     |                | 1 |
| 1B990-062-2               | 電源 F P C<br>Power sw FPC                  | 1                             |                                 | 10                    |                | 1 |
| 1B990-064                 | カップリング軸<br>Axle, AF coupling              | 1                             | 1B999-072                       | 5                     |                | 5 |
| 1B990-065                 | カップリング解除レバー<br>Release lever, AF coupling | 1                             | 1B999-072                       | 5                     |                | 5 |
| 1B990-066                 | A F 駆動部<br>Unit, AF motor                 | 1                             | 1B999-072                       | 5                     |                | 1 |
| 1B990-067                 | M減速基板<br>Unit, motor<br>rotation reducing | 1                             |                                 | 2                     |                | 1 |
| 1B990-068                 | D X 接点<br>DX contact                      | 1                             |                                 | 1                     |                | 5 |
| 1B999-071                 | モーター基板部<br>Base plate, AF motor           | 1                             | 1B990-066<br>1B999-072          | 5                     |                | 5 |
| 1B999-072                 | 前 板<br>Front plate                        | 1                             |                                 | 4, 5<br>6, 7, 8<br>10 |                | 1 |
| 1B999-065                 | シャッター組<br>Shutter unit                    | 1                             |                                 | 1                     |                | 1 |
|                           |                                           |                               |                                 |                       |                |   |

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