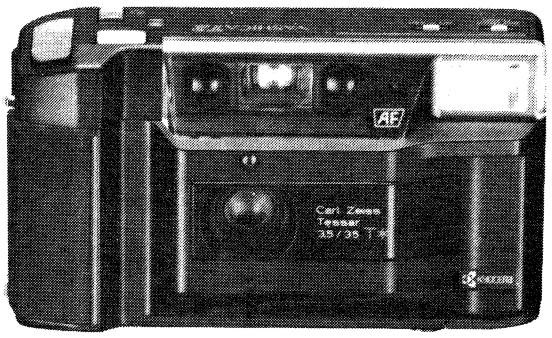
YASHICA

T2 / T2-D

REPAIR MANUAL



KYOCERA CORPORATION
Optical Equipments Service

CONTENTS:

SPECIFICATIONS

Type	: 35㎜ lens-shutter camera with auto-focus and automatic exposure control.
Lens	: Carl Zeiss Tessar T* 35㎜ f/3.5 (four-element, three-group lens composition).
Auto Lens Barrier	: Opens only when shutter is released; normally closed for lens protection.
Shutter	: Programmed electronic shutter (1/8-1/500 sec.).
Self-timer	: Electronic self-timer with indicator lamp (about 10 sec. delay). Can be canceled during countdown.
Exposure Control	: Programmed AE system (with SPD sensor). Metering range……EV 6.6-17 (ISO 100).
Film Speed Setting	: Automatic with DX-coded film of ISO 50-1600. Automatically sets to ISO 100 with non DX film.
Focusing	: Auto-focusing from 1 m to infinity; provided with focus lock.
Viewfinder	: Albada-type, bright frame finder.
Viewfinder Display	: Picture area frame (with parallax correction marks), focusing spot, focusing symbols, flash charging indicator.
Film Loading	: Automatic film loading (film advances automatically to frame No. 1).
Film Advance	: Automatic.
Film Rewind	: Automatic rewinding and automatic stop. Provided with rewind button for rewinding film in mid-roll.
Exposure Counter	: Automatic resetting, additive type.
Built - in Flash	: Flashmatic type; automatic firing in low light; flash head fixed. Flash range about 1-2.5 m (ISO 100); recycle time about 1.9 sec. (not including film transport time). Capability of daylight synchro flash.
Battery	: 6V lithium battery (2CR5); capable of exposing about 1000 frames (50% with flash) - equivalent to about 40 rolls of 24 exposure film.
Power Switch	: With power switch ON, camera is ready for shooting in about 1.9 sec.
Auto - dating Unit (T2D only)	: Built-in quartz clock with liquid crystal display. Year / month / day or hour / minute can be printed (up to the year 2019). Date printing can be omitted. Automatic correction of date and time. Operates on 3V lithium battery (CR 2025).
Dimensions	: T2 ……132(W)×73(H)×48(D)㎜; T2D……132(W)×73(H)×53(D)㎜.
Weight	T2 ……300g(without battery); T2D……320g(without battery).

1. DISASSEMBLING OF THE EXTERIOR PARTS

1-1 Top Cover Removal;

1) Remove four Top Cover Set Screws (64213529).
2) Disengage the projection on the Front Cover from the slot in the Top Cover and upward to remove the Top Cover Ass'y (375055) in the direction of the arrow as shown in (Fig 1).
3) Remove two synchonizing Button (374123).

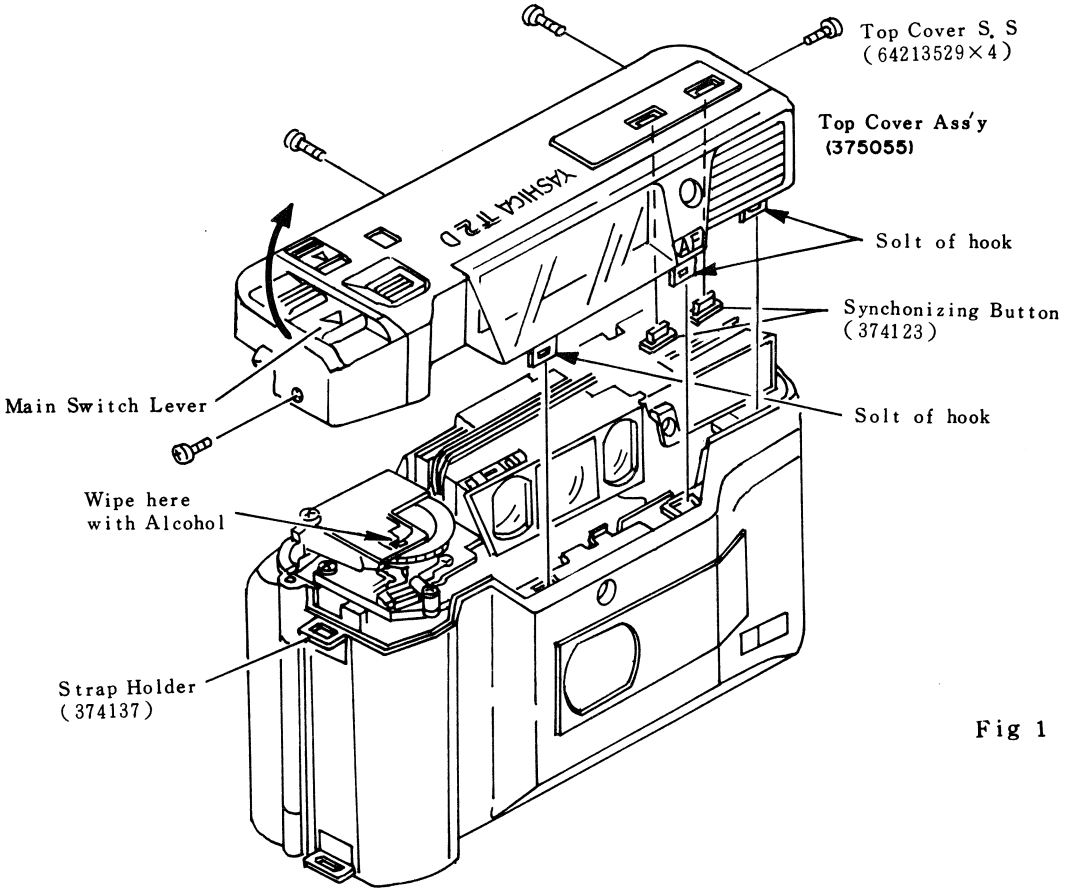


Fig 1

〔Note for disassembling and reassembling Top Cover〕

a) Before removing and attaching the Top Cover, be sure to turn off the Main Switch Lever.
b) Flash Capacitor presents a serious shock hazard even when the power source is removed. After removing the Top Cover, it is vital to discharge the Flash Capacitor carefully using a 5~10 Watt, 90~500 Ohm resistor.

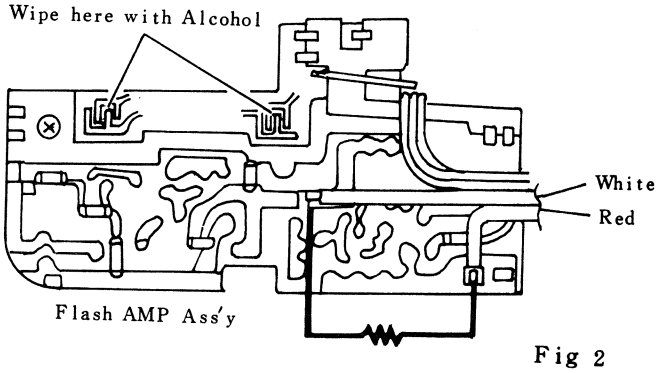


Fig 2

c) Befor attaching the Top Cover, clean the pattern side surfaces of the Flash AMP Ass'y (374073) and Self-timer Switch Board Ass'y (374075) with Alcohol as shown in (Fig 1, 2).

d) When attaching the Top Cover, caution not to pinch Synchonizing Buttons between Top Cover and Flash AMP Ass'y.
And check Synchonizing Buttons for their operations.

1-2 Front Cover Removal;

1) Loosen the Battery Cap Screw with a coin and slide open the Battery Cap Ass'y (374053).
2) Peel off the Grip Cover (374303).
3) Remove seven Front Cover Set Screws (64114029×2)(64213529×2)(66001025×3).
4) Upward to remove the Front Cover Ass'y (374051) in the direction of the arrow as shown in (Fig 3). And remove Strap Holder (374137).(Fig 1).

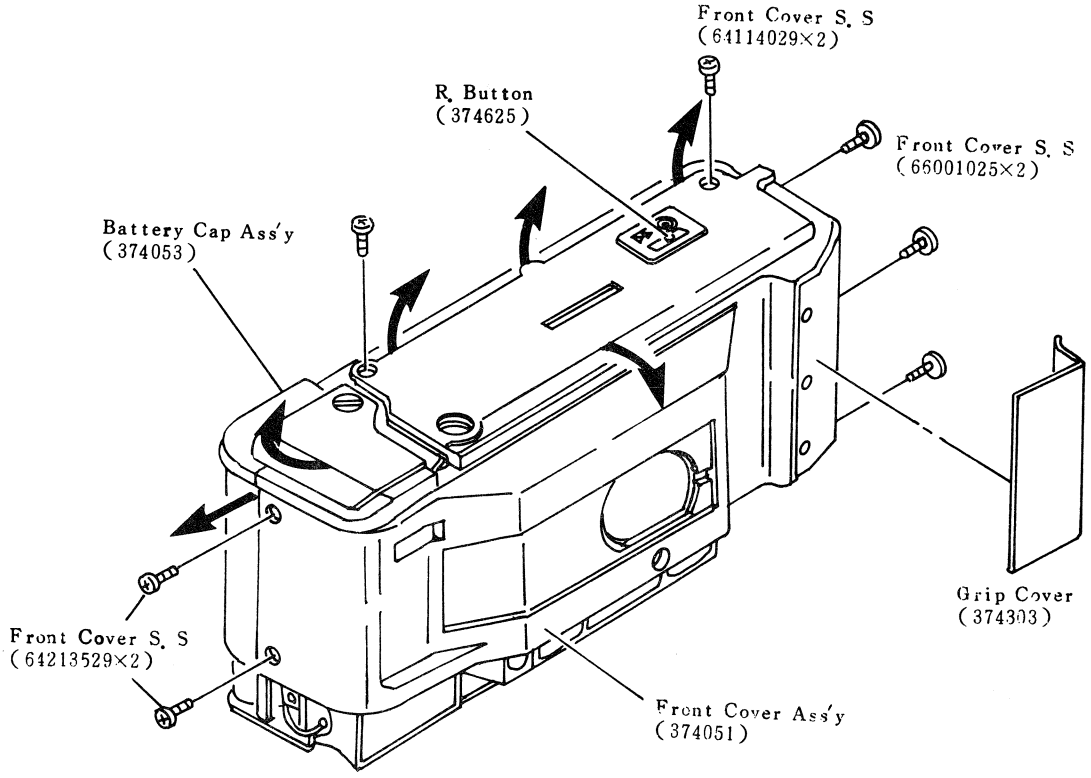


Fig 3

〔Note for disassembling and reassembling Front Cover〕

a) When removing and attaching the Front Cover, take care not to damage the projection of Body.
b) When removing and attaching the Front Cover, take care not to damage the R.Button (374625). and caution not to pinch R. Button also check the R.Button for its Operations as shown in (Fig 3).

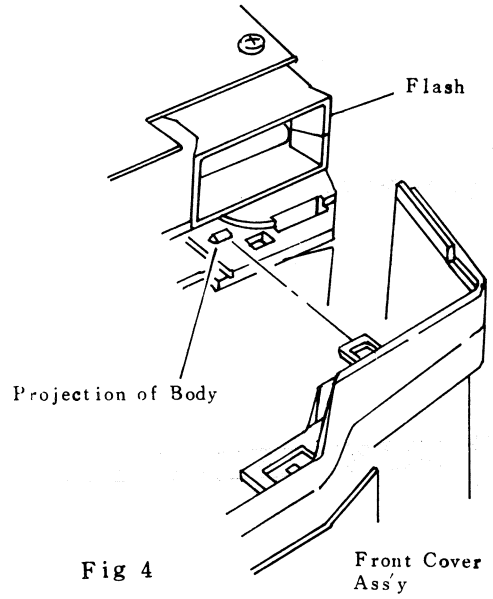


Fig 4

〔Reassembling Proceaures of Front Cover Ass'y〕

1) Put Front Cover Ass'y on Body after fitting screw holes of Strap Holder (374137) and Front Cover Ass'y.
2) Bottom side of Front Cover is left up and then insert R.Button in it.
3) Push Front Cover and put Front Cover hook on projetion of Body. See (Fig 4)

※ Never pinch R.Button between Body and bottom side of Front Cover. See (Fig 3).

〔Reassembling of Grip Cover〕

1) Remove bond on Front Cover with tweezers or the like.
2) Wipe up bond on back side of Grip Cover (374303) with Flonsolve.
3) Coat liquid mixed Sony-Bond Super SC-102 40% and Methyl Ether Keton 60% on grip position of Front Cover.
4) After bond drys up (almost no sticking with finger), apply Grip Tape (374312).
5) Press Grip Tape with finger, tweezers or so like.
6) Coat liquid mixed Sony-Bond Super SC-102 and Methyl Ether Keton on back side of Grip Cover.
7) Remove paper on Grip Tape.
8) Stick Grip Cover after bond on Grip Cover drys up.

※ Stick Grip Cover with taking care of no air between them.

9) Press Grip Cover.

〔How to operate Shutter with Main Switch OFF〕

1) Discharge the Flash Capacitor.
2) Unsolder Blue lead wire on the Flash AMP Ass'y (from FPC-F).
   (for flash charge signal line).
3) Unsolder Black lead wire on the FPC-F (from Main Switch)
   (for GND of Main Switch). See (Fig 30).
4) Solder the printed circuit pattern on the Flash AMP Ass'y as shown in (Fig 5).

※ Shutter does not release in low light situations (EV 8.5~EV 10.0).

〔Note〕

a) After check Shutter function, remove soldering points of printed circuit pattern on the Flash AMP Ass'y and solder Black and Blue lead wires.
b) In case of Flash AMP Ass'y replacement, remove soldering points of pattern on the Flash AMP Ass'y.
   If you insert battery into body without removing soldering points of pattern on the Flash AMP Ass'y, premature battery rundown.

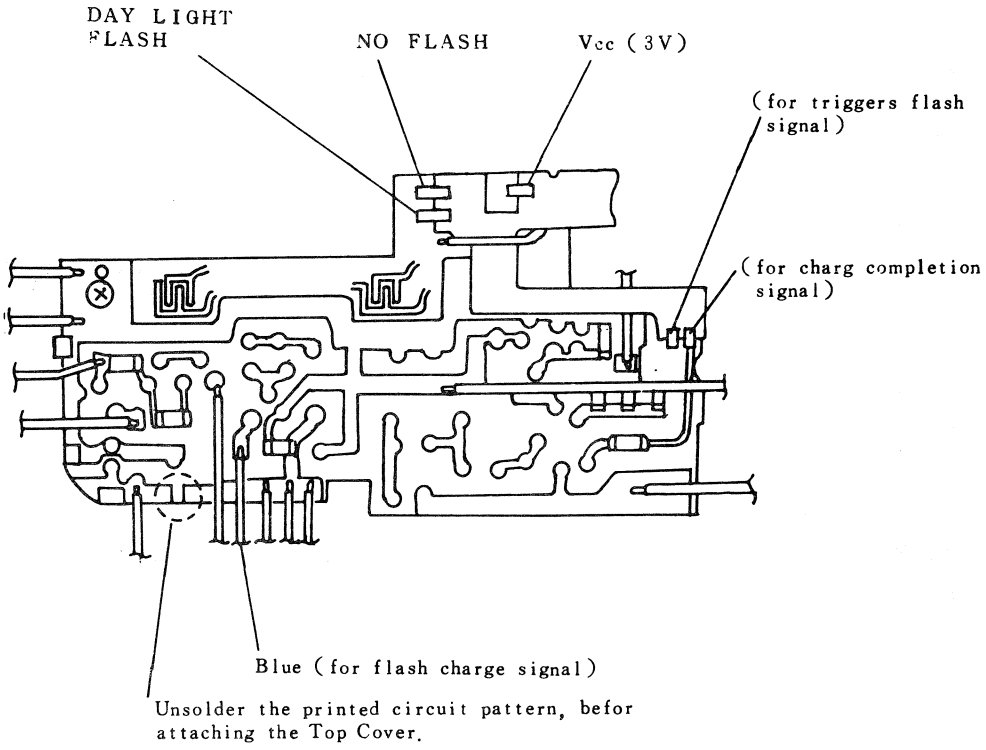


Fig 5

2. DISASSEMBLING OF THE FLASH AMP. Ass'y.

2-1 Flash AMP. Ass'y Removal;

1) Unsolder fourteen lead wires and soldered joints on the Flash AMP. Ass'y.

① Black lead wire (from FPC-F).
② White lead wire (from IRED).
③ Light Blue lead wire (from FPC-F).
④ Yellow lead wire (from AF-COB).
⑤ Orange lead wire (from Main Switch).
⑥ Red lead wire (from Main Switch).
⑦ Blue lead wire (from FPC-F).
⑧ Red lead wire (from FPC-F).
⑨ Red lead wire (from FPC-F).
⑩ White lead wire (from Flash Capacitor).
⑪ Red lead wire (from Flash Capacitor).
⑫ Black lead wire (from AF-COB).
⑬ Red lead wire (from AF-COB).
⑭ Pink lead wire (from IRED).
⑮ Unsoldering soldered joint of Battery Contact (-).
⑯ Unsoldering soldered joint of Battery Contact (+).
⑰ Unsoldering five soldered joints of FPC-F and Flash AMP. Ass'y.

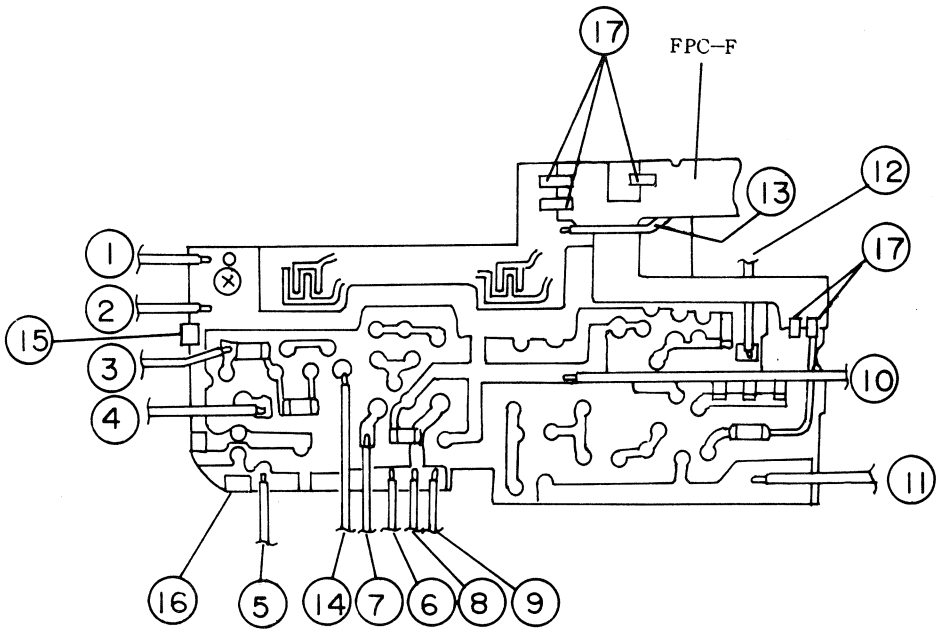


Fig 6

2) Remove two Flash AMP. Set Screws (64215026×2).

3) Remove the Flash AMP. Ass'y (374034) from camera body.

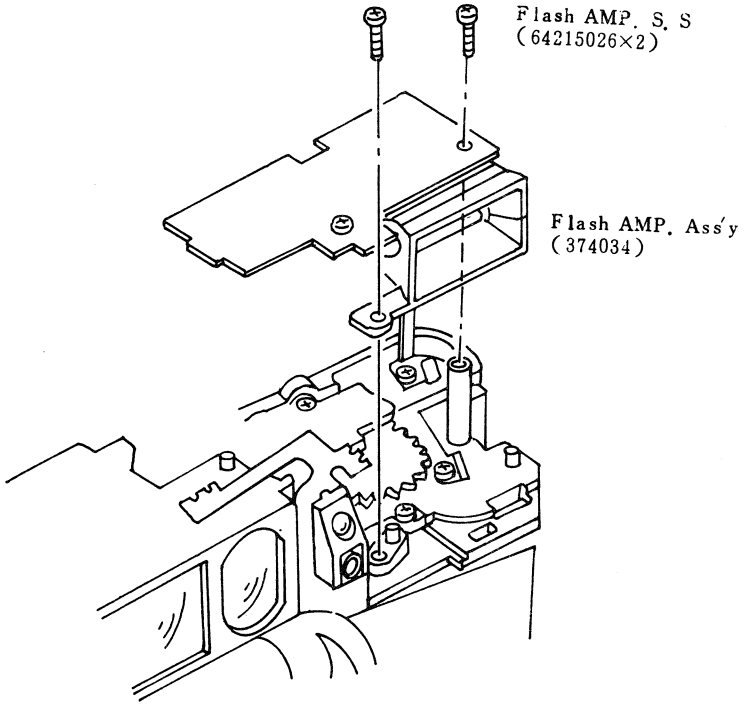


Fig 7

〔Forming of lead wires〕

※ Before attaching the Flash AMP. Ass'y, forming of lead wires as shown below.

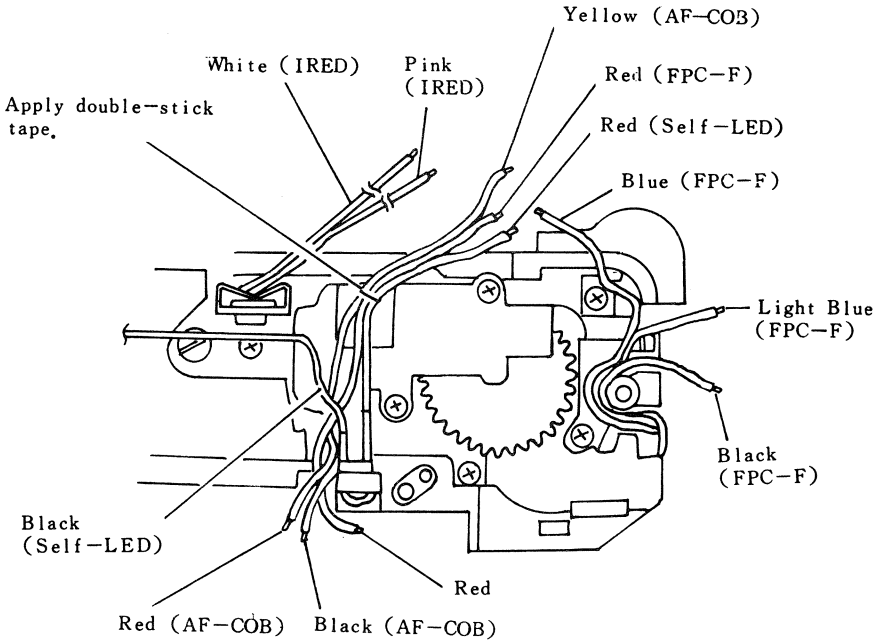


Fig 8

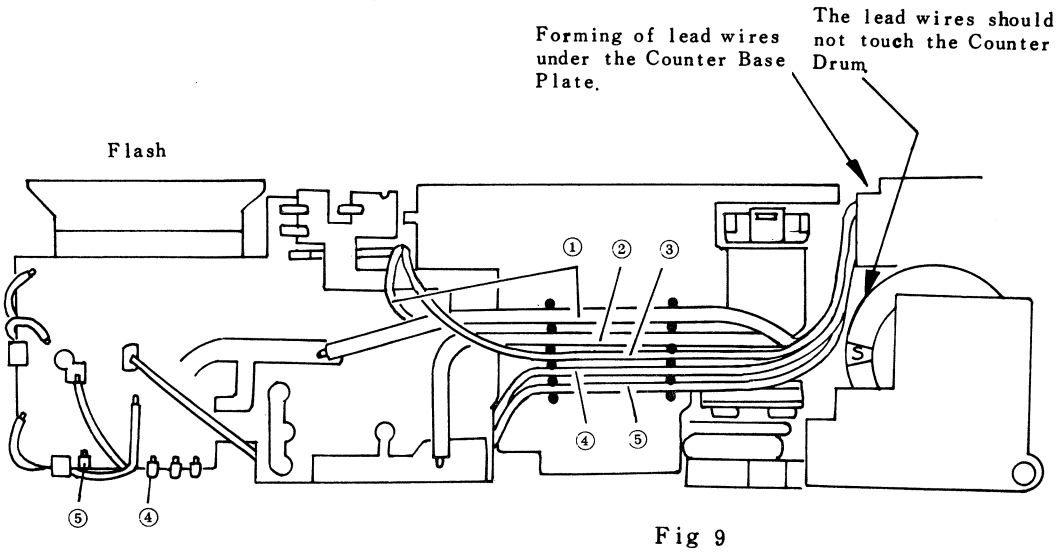


Fig 9

① White lead wire (from Flash Capacitor).
Black lead wire (Self-LED ⟷ Shutter).
② Red lead wire (from Flash Capacitor).
③ Black lead wire (Main Switch ⟷ FPC-F).
④ Red lead wire (from Main Switch).
⑤ Orange lead wire (from Main Switch).

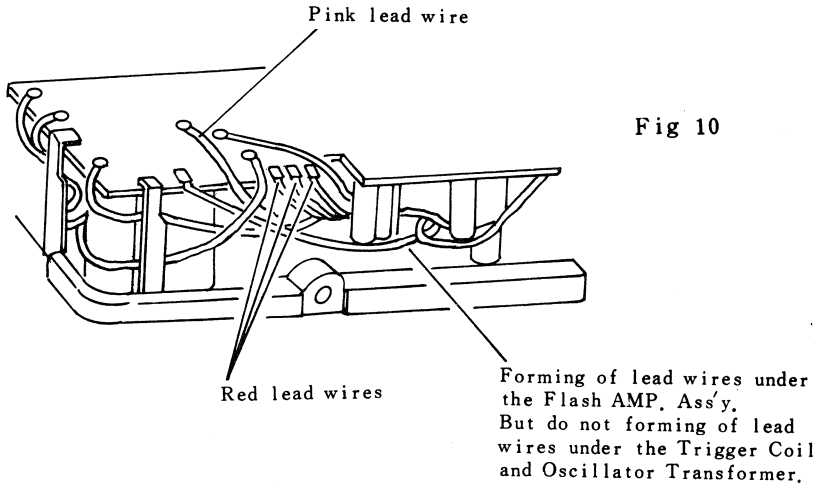


Fig 10

〔Note for soldering lead wire〕

a) Do not mis-soldering Pink lead wire and Red lead wire.
If mis-soldering of Pink lead wire in position of Red lead wire, the IRED (Infrared Emitting Diode) Should broke and you can not replace the IRED only, you must replace with the AF Base Ass'y.

3. DISASSEMBLING OF THE ISO BASE PLATE.

3-1 Barrier Removal;

1) Remove the GS Ring (66172022), Barrier Washer (60322610), Barrier Spring (1) (360220) and Barrier (360203) W/Barrier Spring (2)(360221).

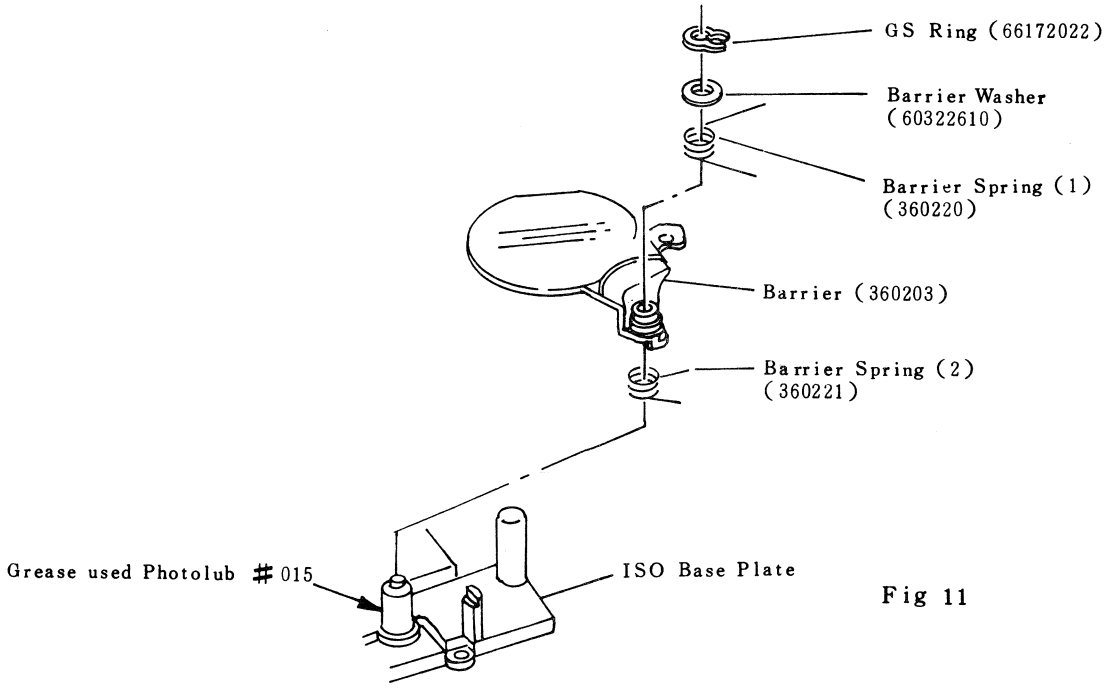


Fig 11

〔Hook up the Barrier Spring〕

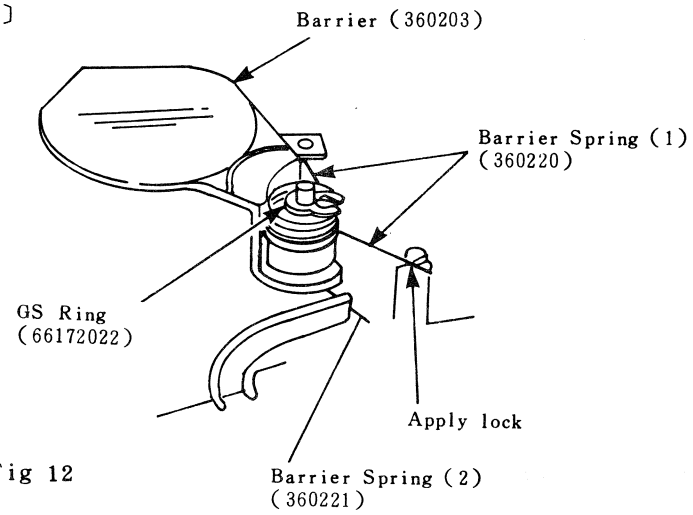


Fig 12

〔Note〕

a) When fixing the Barrier with the GS Ring (66172022), the GS Ring should be positioned as shown in (Fig 12) and check to make sure the movement is smooth.

3-2 ISO Base Plate Removal;

1) Remove ISO Base Plate Set Screw (63914526) and Relay Fixer (374209).
2) Remove ISO Base Plate Set Screw (64214026) and ISO Base Plate (370202).

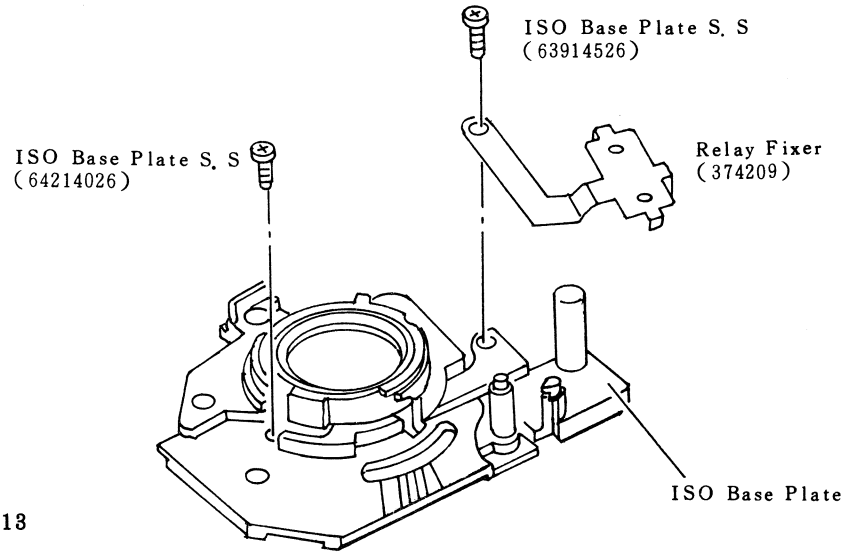


Fig 13

〔Note〕

a) When attaching the Relay Fixer (374209), caution not to pinch FPC-F and Relay. See (Fig 14).

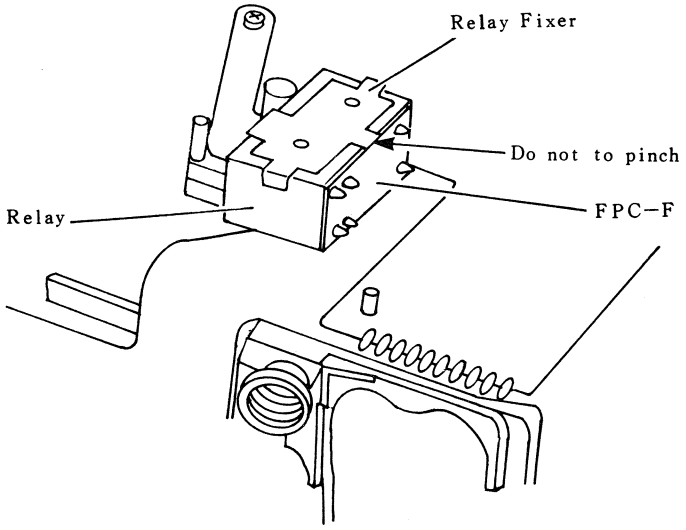


Fig 14

4. DISASSEMBLING OF THE FRONT PLATE Ass'y & TAKING LENS FOCUS ADJUSTMENT.

4-1 FM Base Plate Removal;

1) Unsolder Gray and Pink lead wires (from FPC-G).
2) Unsolder Black lead wire (from Shutter).
3) Unsolder Red lead wire (from FPC-F).
4) Unsolder Black and Light Blue lead wire (from Shutter FPC).
5) Remove FM Board Set Screw (64213526), Lock Lever Shaft (374207) and FM Board Ass'y (374077).

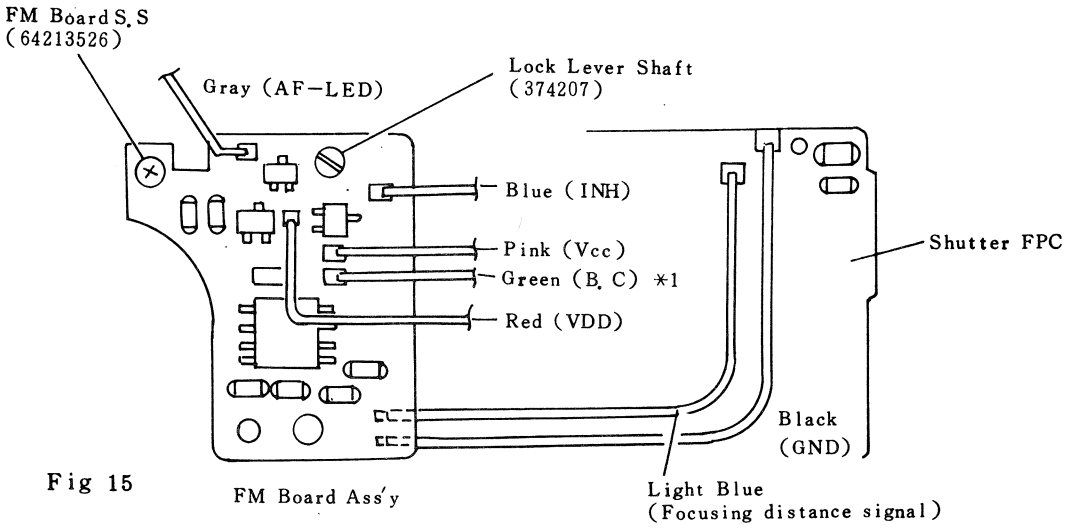


Fig 15

*1 ·····Color of lead wire has been changed Black → Yellow → Green.

4-2 Front Plate W/Lens Ass'y Removal;

〔Note〕

Befor removing the Front Plate, cover the surface of AF Base Ass'y with a bond paper tape as shown below.

If you do not, easily make a scratch on the Glass of AF Base Ass'y. you can not replace each Glass, if replace it, it very hard to adjust Auto Focus without a measuring instrument.

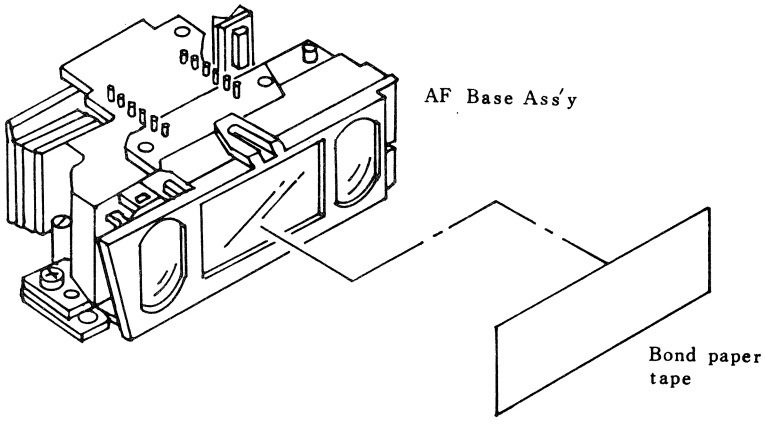


Fig 16

1) Unsolder three soldered joints of FPC–G and CLK Board (374563).
2) Unsolder Red lead wire and soldered joint of FPC–G and AF Magnet.
3) Remove four Front Plate Set Screws (63914526×3)(61914026) and Front Plate Ass'y (374076).

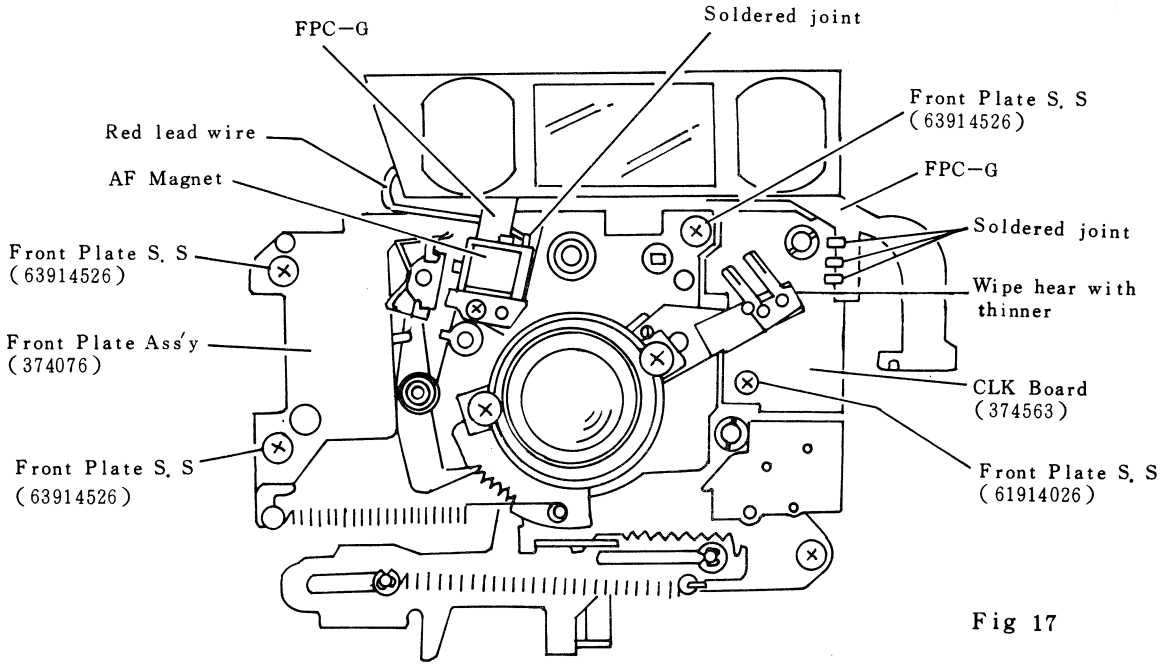


Fig 17

〔Note〕

a) When unsoldering or soldering soldered joint of AF Magnet quickly. AF Magnet should become defect with over–heat with soldering.
b) Forming Red lead wire on AF Magnet.
Pass the Red lead wire through the back of FPC–G as shown in (Fig 18).
The Red lead wire should not touch the Movable Plate (360571).
c) Use thinner to clean the surface of CLK Board (374563) where it makes contact with contact of Focusing Ring Ass'y, after three soldered joints of FPC–G and CLK Board. See (Fig 17).

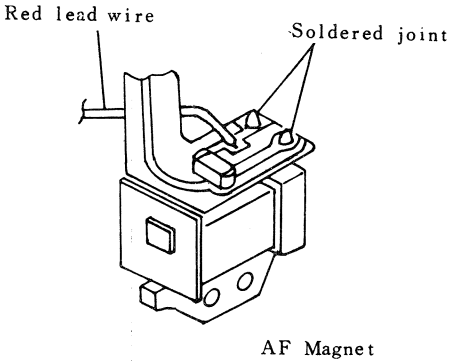


Fig 18

4-3 Lens Ass'y Removal;

1) Remove the respective parts ①～⑯ shown in (Fig 19) in numerical order.

〔Note〕

a) Helicoide Nut (360215) is counter clockwise screw.

b) Do avoid damage to the contact of the Focusing Ring Ass'y during the repair.

c) Do avoid damage to the Movable Plate Spring during the repair.

d) Never touch the Movable Plat (360571) with hand (finger) directly daring the repair.

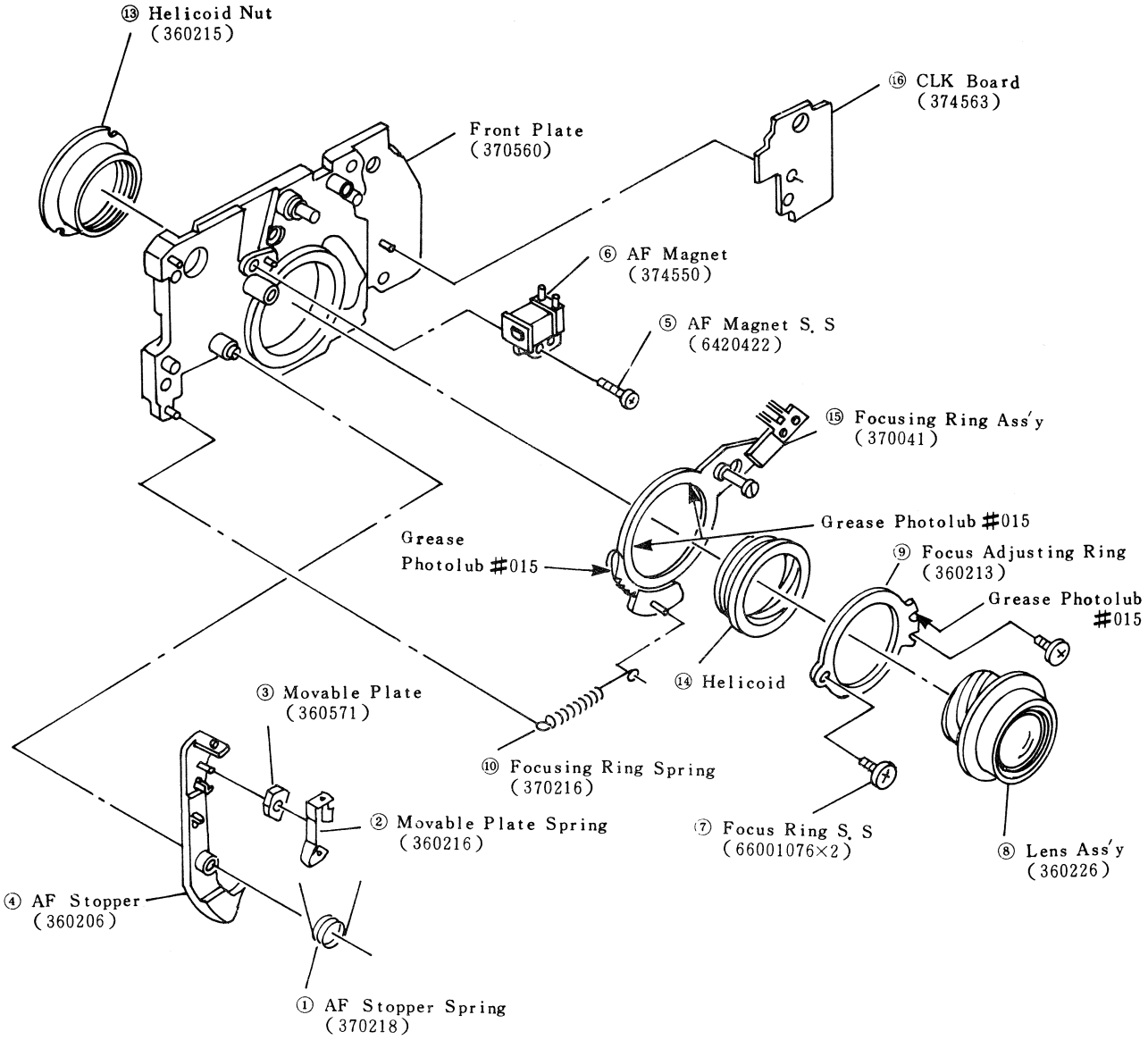


Fig 19

〔Note for reassembling〕

a) Do not overtighte the Helicoid Nut (360215), it located the back side of the Front Plate.If overtighten the Helicoid Nut, Lens should be not turne smooth.

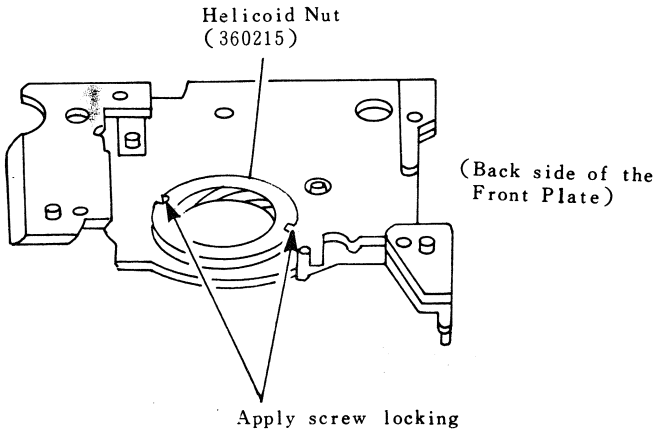


Fig 20

b) Position of the AF Magnet.

(1) Shutter is charged by moving the Set Plate and Start Plate of the shutter in the arrow direction as shown below.

(2) Complete contact between surface of Movable Plate and cores of Magnet and tighten Magnet Set Screw.

c) The surface of AF Magnet core and Movable Plate must be clean.

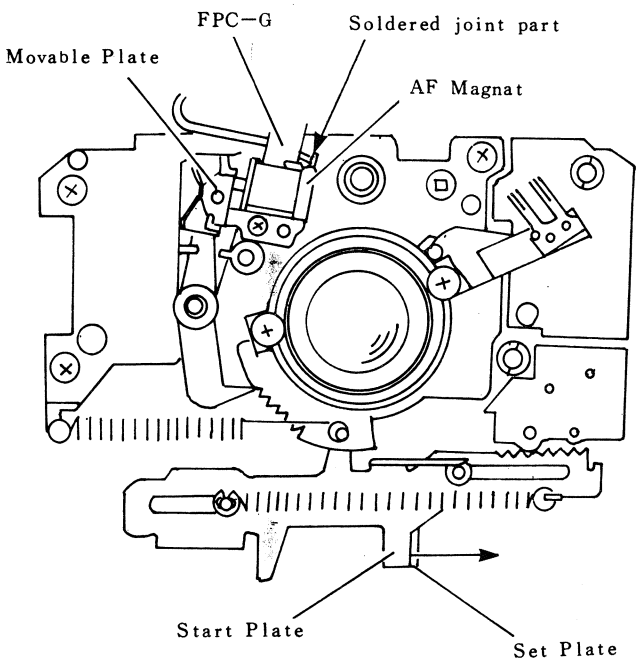


Fig 21

4-4 Taking Lens Focus Adjustment; (Not Auto Focus system)

1) Assemble the camera completely except for the Top Cover and Front Cover.
2) Load the fresh film into the camera and advance severa times.
3) Take out the battery while depressing the Shutter Release Contact.
4) Set the contact of Focusing Ring Ass'y at (▲) position (Release the AF Stopper claw) as shown in (Fig 22).
5) Set the Lens Tester (colimator) at 7.5m (not infinity).

The focal length of your Lens Tester	Setting position for Helicoid of Lens Tester (colimator) at 7.5m
F=193.5mm (Model for 24LT-2DTS) (GOKO-SHA)	-5.0±1.0mm

6) Open the Shutter blades fully, and then check and adjust.
Move the Set Plate of the Shutter in the arrow direction by the screw driver, etc., and the Shutter can be opened and Set Plate is supported as it is.
7) Untighten two Focus Adjusting Screws (66001076×2) and then adjust by turning the Lens Ass'y.
After tighten Focus Adjusting Screws and adjust fine adjustment, adjust by turning the fine adjust-screw as shown in (Fig 22).
And apply screw locking.

〔Note〕

a) After adjusting the Lens Focus, make sure to Set Plate is returned complete.

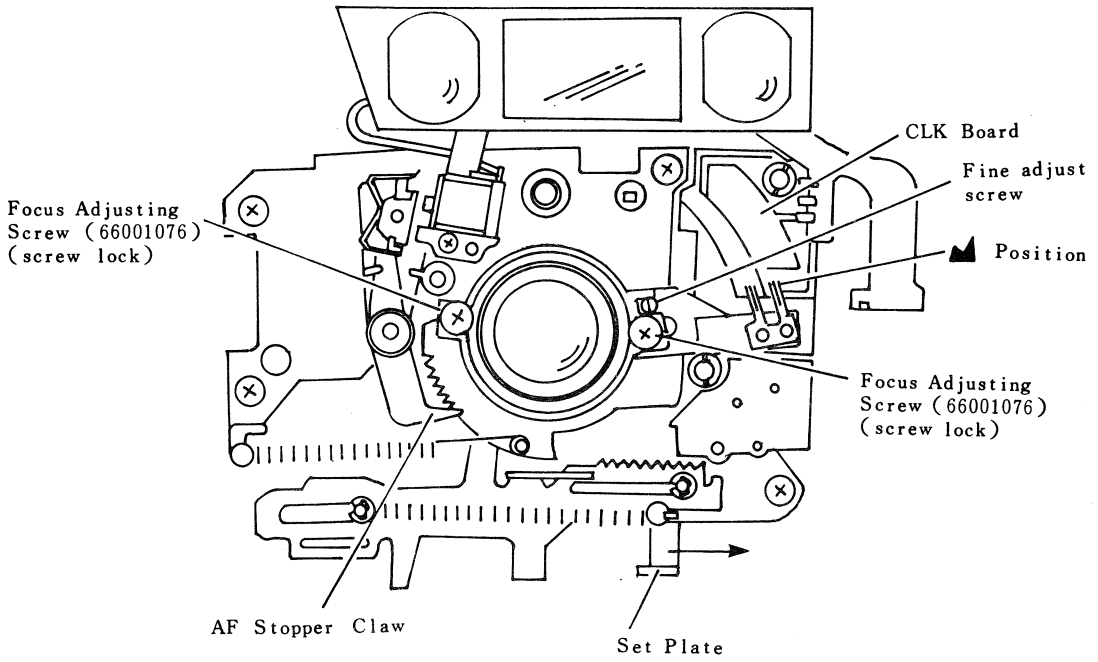


Fig 22

5. DISASSEMBLING OF THE SHUTTER Ass'y.

5-1 Shutter Ass'y Removal;

1) Unsolder eleven lead wires and soldered joints on the Shutter FPC.

① White lead wire (from FPC-G to FPC-F).

② Purple lead wire (from FPC-G to FPC-F).

③ Soldered joint FPC-G and Shutter FPC.

④ Red, Yellow and Brown lead wires (from Release Switch Board to Shutter FPC).

⑤ Purple and Orange lead wires (from Self-timer Switch Board to Shutter FPC).

⑥ Red, Orange and Yellow lead wires (from DX-Switch to Shutter FPC).

⑦ Black lead wire (from Self-timer LED to Shutter). See (Fig 24)

⑧ Unsolder ten soldered joints of Shutter FPC and FPC-F.

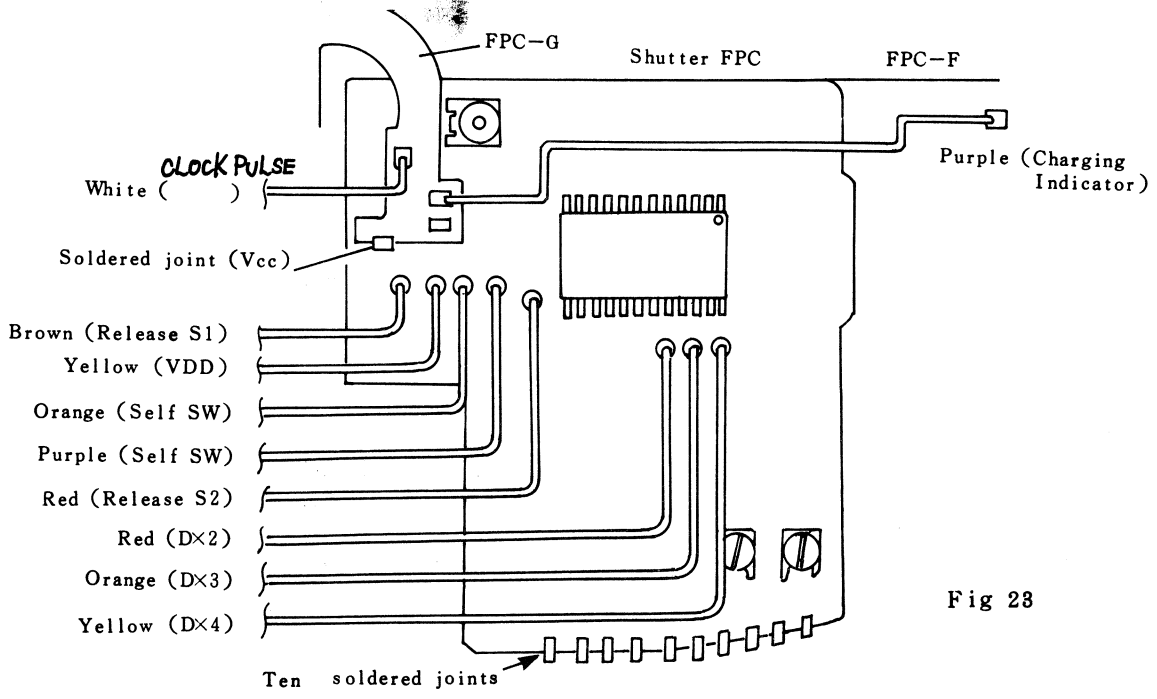


Fig 23

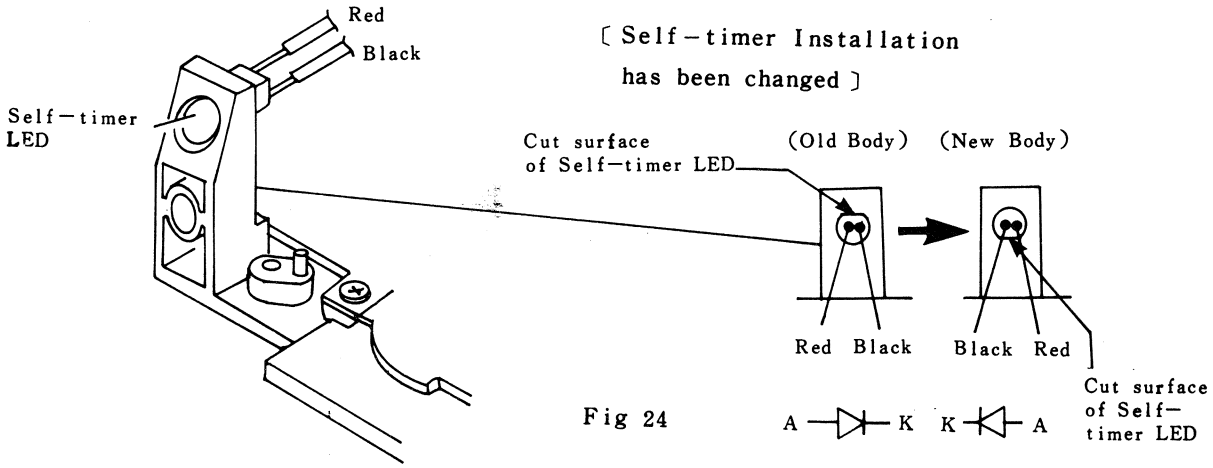


Fig 24

2) Remove three Shutter Set Screws (64213526×2)(64214026) and Lead Wire Fixer (110928).

3) Remove FM Board Set Screw (1)(370214) and Shutter Ass'y (374041).

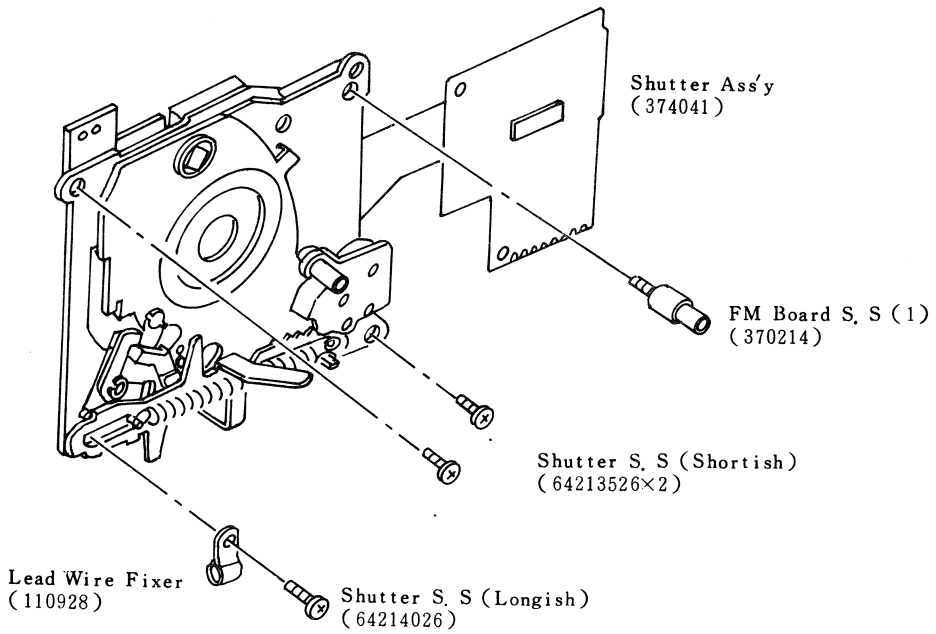


Fig 25

〔Reassembling Proceaures of Shutter Ass'y〕

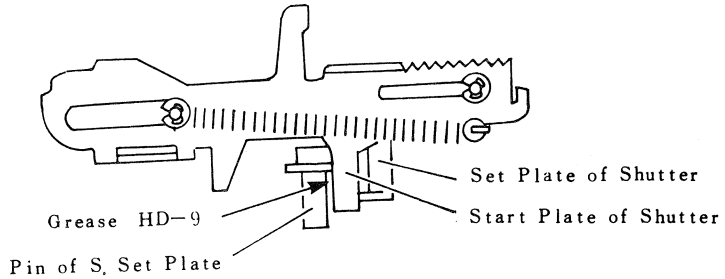
1) Befor attaching Shutter Ass'y, Set the Shutter mechanism and S. Set Plate to cherging position.

2) After attaching Shutter Ass'y, check the Shutter function.

※ After check the Shutter function, make sure to Set Plate is returned complete.

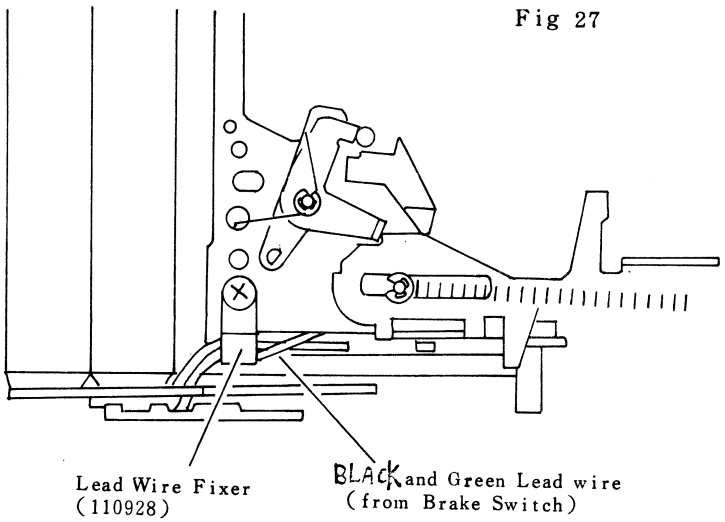
3) Apply grease HD-9 to between the pin of S. Set Plate and Start Plate as shown in (Fig 26).

Fig 26



4) Fix BLACK and Green lead wire with a Lead Wire Fixer (110928) as shown below.

Fig 27



〔Back Side of the Shutter Ass'y〕

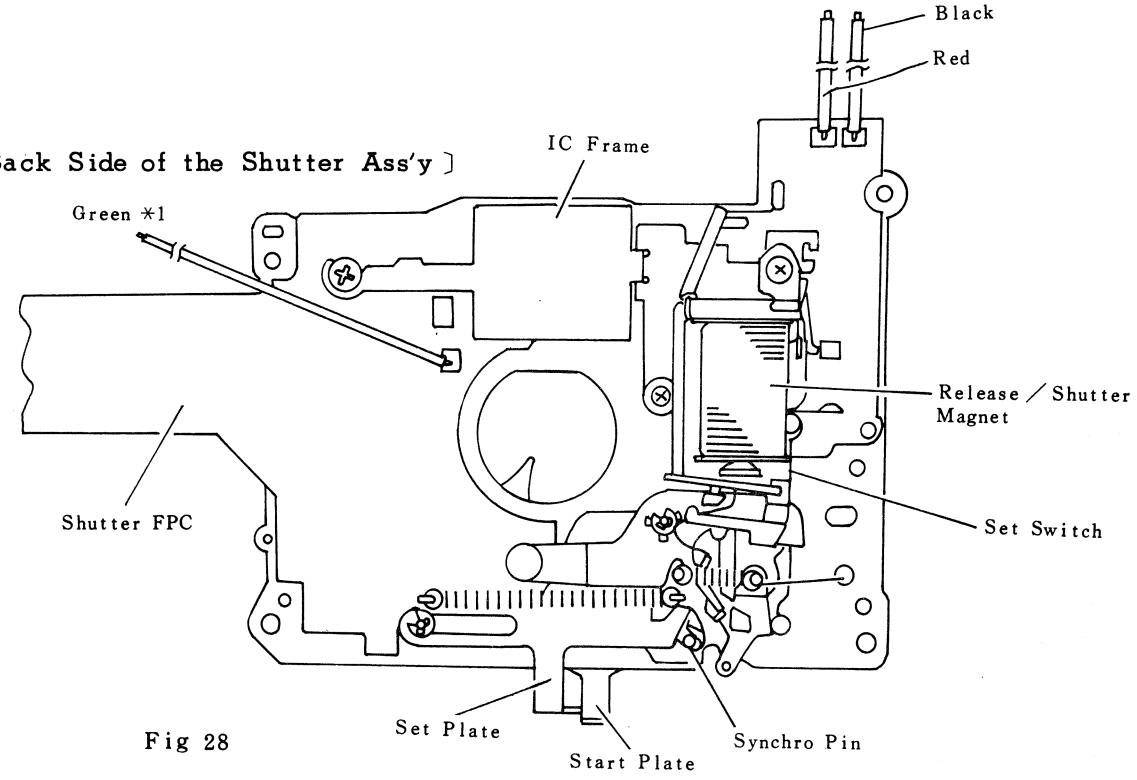


Fig 28

*1 ····· Color of lead wire has been changed Black → Yellow → Green.

Set Switch

This is arranged on the Shutter Base Ass'y, and turned "OFF" by charging the Shutter and turned "ON" by releaseing the Shutter, to starts Start Plate activating exposure sequence.

〔Soldered joint point of Shutter FPC〕

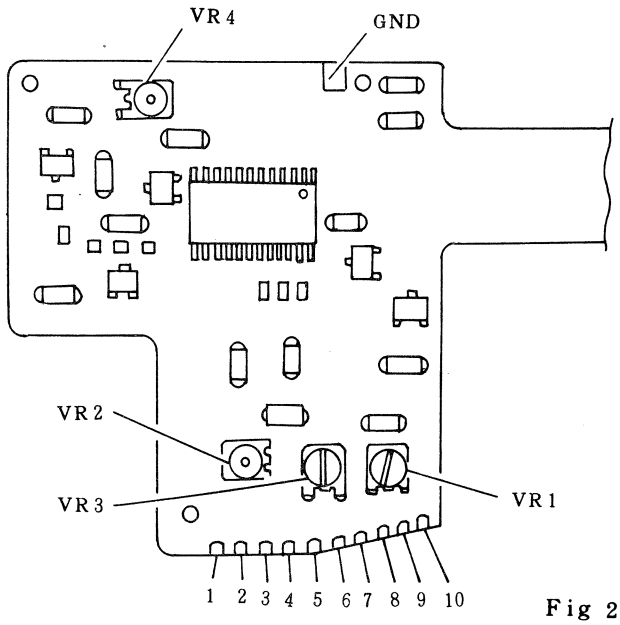


Fig 29

1. 6V (Power supply voltage)
2. 3V ($\overline{V_{DD}}$)(Output voltage from Constant-voltage IC).
3. 3V (Vcc)(While pushing the Release Switch halfway, 3V is devoloped.
4. Shutter Magnet signal.
5. Date signal
6. GND
7. Flash trigger signal
8. Flash mode signal (Conversion of Flash mode in low light under EV10).
9. Shutter Release inhibit.
   ※ Can not releas it again becouse the inhibit circuit is adopted to stop the Release circuit during winding and charging the Flash.
10. Low light warning signal.
    ※ In bright situations, 3V is develop.
    In low light situations, low pulse is adopted and then conversion of Flash mode.

VR1 Automatic Exposure Adjustment.
VR2 You can not adjust.
VR3 Adjustment of Flash Exposure (Flashmatic)
VR4 You can not adjust.

6. DISASSEMBLING OF THE FPC–F Ass'y.

6–1 FPC–F Ass'y Removal;

1) Unsolder Black lead wire (from Main Switch).
2) Unsolder Green and Pink lead wires (from Film Existence Switch).
3) Unsolder light Blue lead wire (from Release Switch Board).

(At bottom of the camera body)

4) Unsolder Orange and Gray lead wires (from Motor).
5) Unsolder Black and Green lead wires (from Brake Switch).
6) Unsolder Pink and Blue lead wires (from C–Switch).
7) Unsolder two soldered joints of FPC–F and D. Contact Plate.
8) Remove the R. Button Guide Set Screw (64213526).
9) Remove the FPC–F Ass'y

※ FPC–F Ass'y stuck with the double–stick tape.

Fig 30

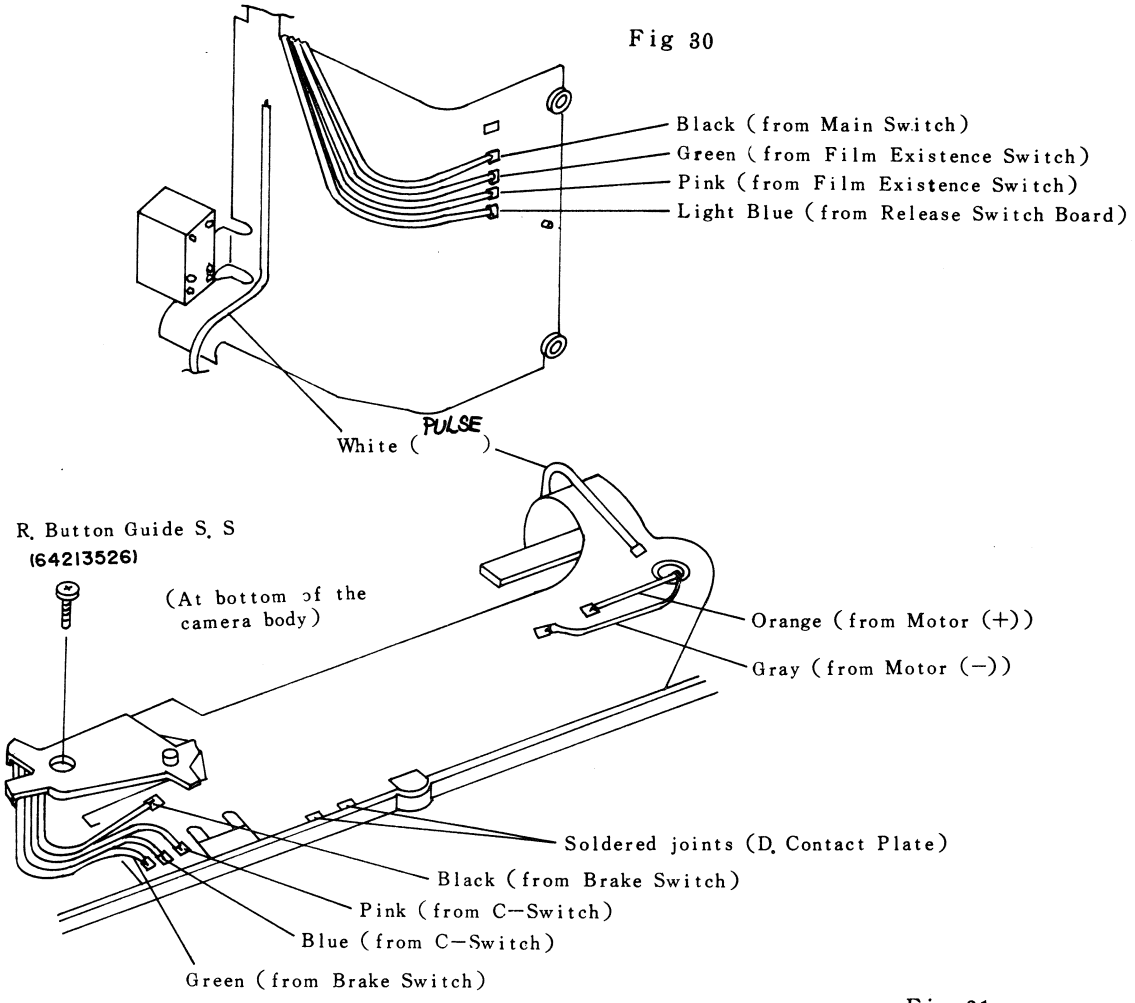


Fig 31

〔Forming of FPC−F Ass'y at bottom of the camera body〕

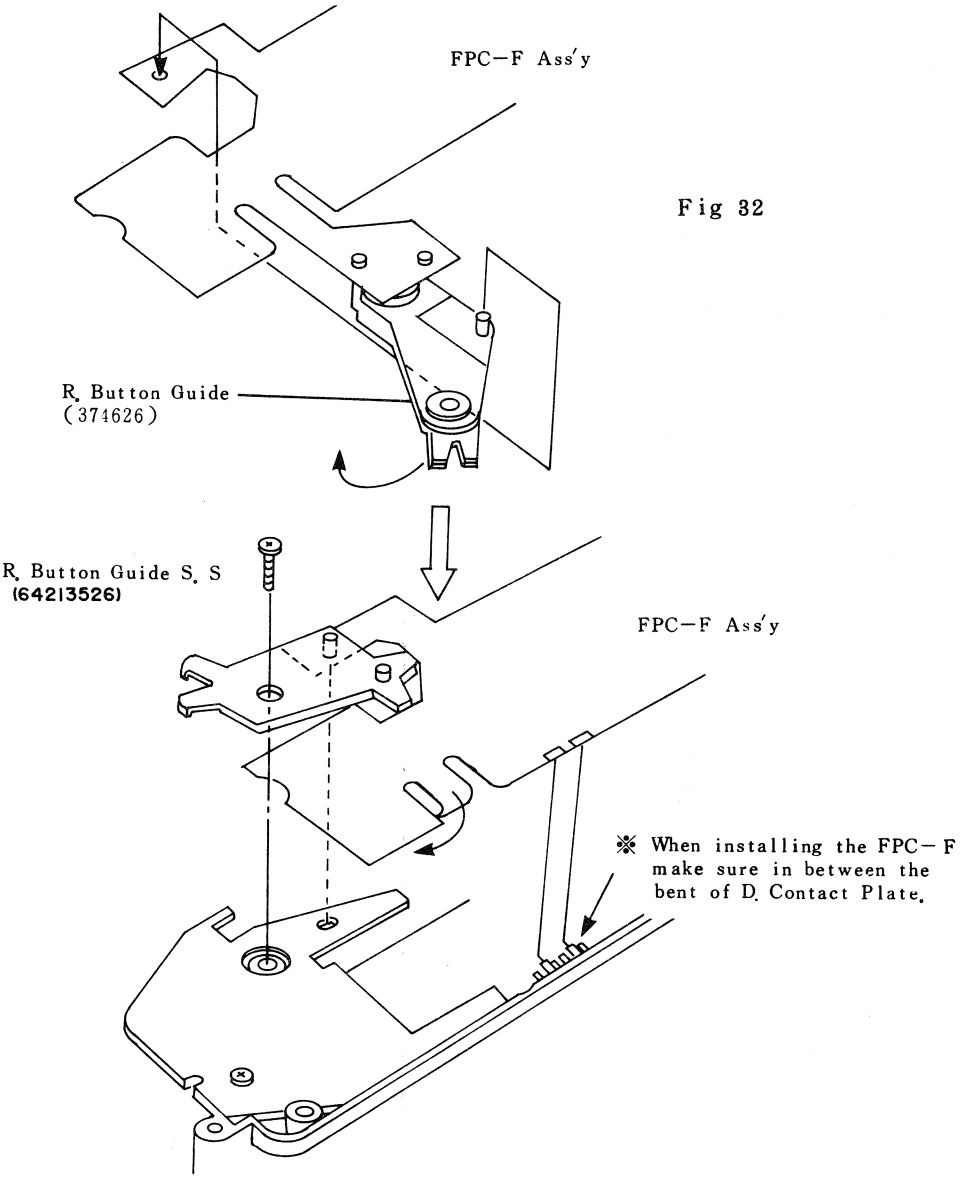


Fig 32

〔Forming of lead wires at bottom of the camera body〕

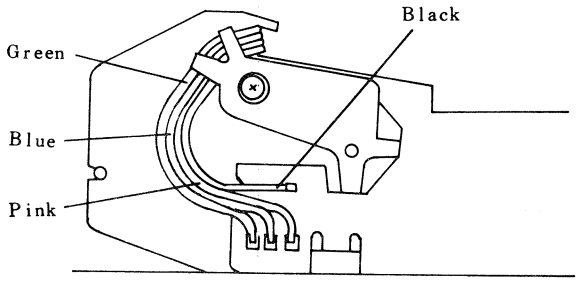


Fig 33

7. DISASSEMBLING OF THE AF BASE Ass'y & AUTO FOCUSING ADJUSTMENT.

7-1 AF Base Ass'y Removal;

1) Remove two AF Base Set Screws (64214526) (66001032).
2) Remove the AF Base Ass'y (374091) and F. Signal Drum with F. Signal Gear (2).
3) Remove the AF Base Washer (370811).

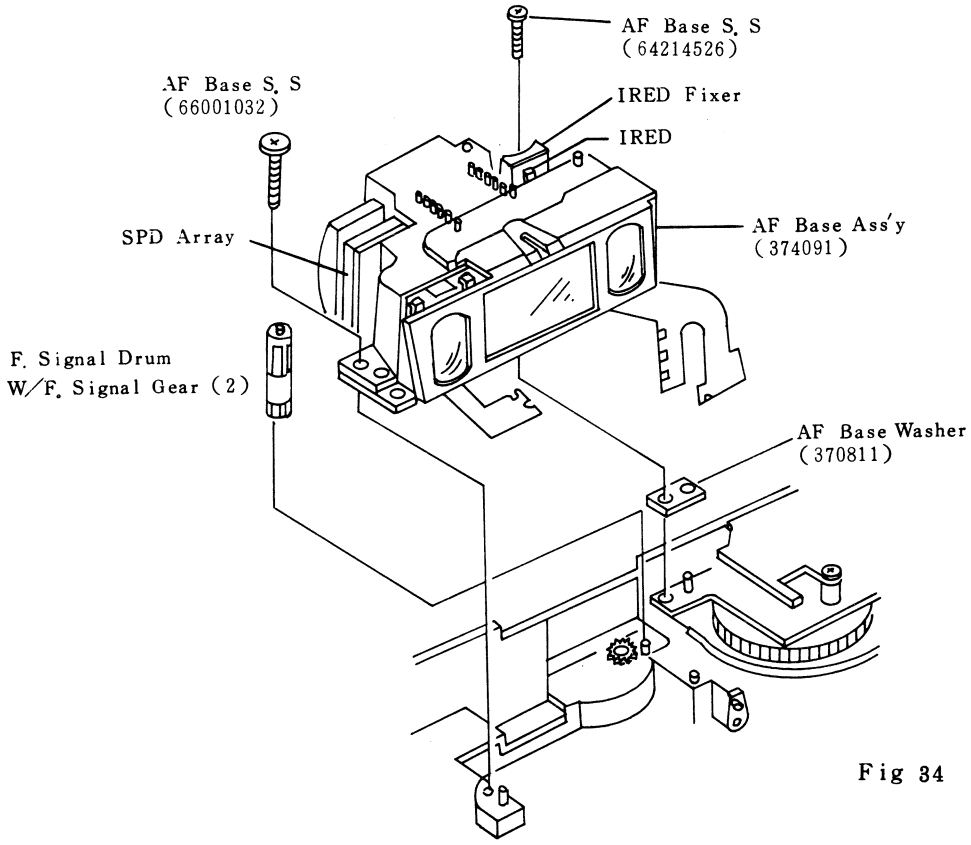


Fig 34

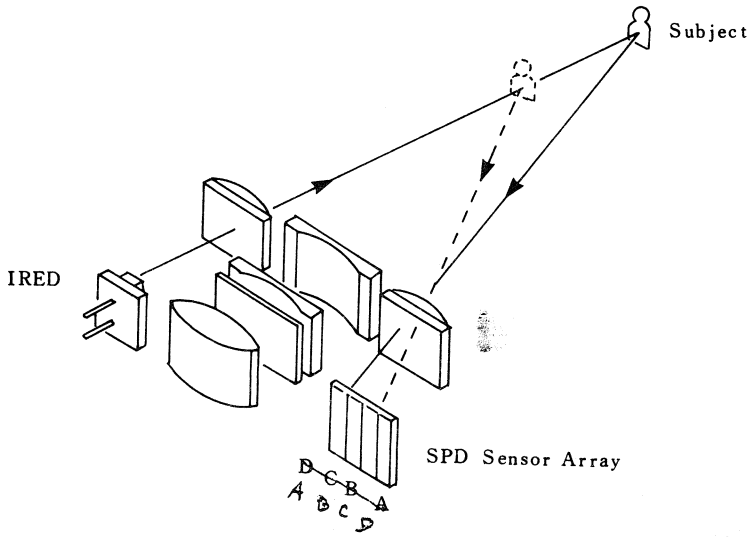
〔Note for disassembling and reassembling AF Base Ass'y〕

a) Take care without bending of IRED leads during the removing or setting of AF Base Set Screw (64214526).
If IRED lead touchs to IRED Fixer Spring and makes short circuit, auto focusing should be all infinity.
b) IC for AF-COB is weak against static electricity, leak or humidity, then take care of handling for AF Base Ass'y.
c) Never overhaul AF Base Ass'y because shift of IRED and SPD array should make impossible for auto focusing adjust.

〔Outline of Information〕

Automatic Focusing Method

This is an active Auto Focus system. The system consists of a light emitting section that casts an infrared beam on the subject, a light receiving section that captures a light spot of the light beam cast on the subject, an electronic circuit that controls the distance signal detection and focusing and a lens driving section. The light receptor captures the light spot to stop the focusing operation of the beam is acquired by rotating the light source of the light emitter to scan the subject area from a close distance to infinity.
The infrared beam is emitted from the IRED (Infrared Emitting Diode), and the light-metering element to capture the light spot of the beam the subject is a SPD array. This system has a four-split SPD sensor continuously disposed horizontally that as certains the distance by the position of the light spot of the subject on the sensor. Thus, the distance data divided in to eight focusing zones.



(Triangulation type auto focus system)

Fig 35

Auto Focus System

SPD Array

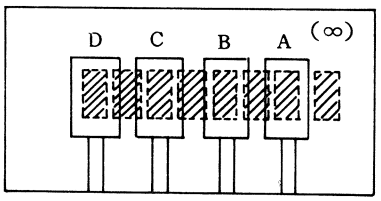


Fig 36

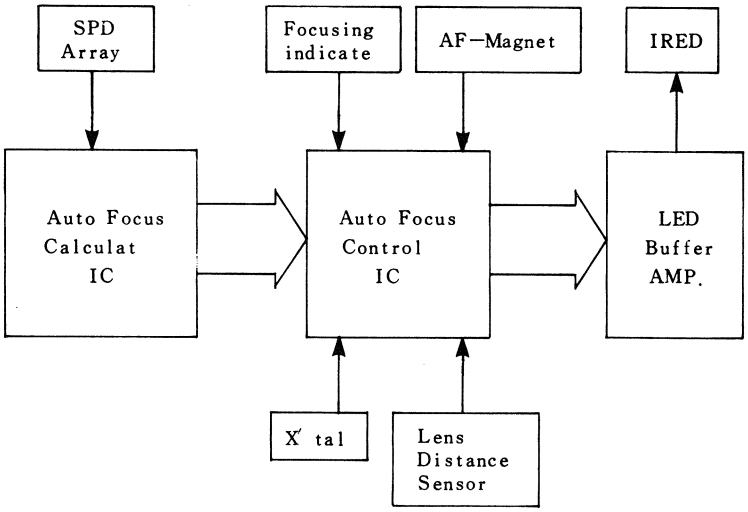
▨ indicates the area where the bounce light spot from the subject is received.

Steps	A	B	C	D	Distance from the test chart	The focusing mark in the viewfinder
1	0	0	0	1	0.70～0.9 m	will pulsate
1	0	0	1	1	1.03 m	will indicate
2	0	0	1	0	1.19 m	will indicate
3	0	1	1	0	1.41 m	will indicate
4	0	1	0	0	1.74 m	will indicate
5	1	1	0	0	2.26 m	will indicate
6	1	0	0	0	3.25 m	will indicate
7	0	0	0	0	7.50 m	will indicate

Fig 37

※ The digital in the binary sclale of notation.

Block Diagram of Auto Focus



〔Note〕

It is imporatant, befor starting a repair, to check that the trouble is due to malfunction and not incorrect use.

(Hord to fcous subjects)

Some of the hard to focus subjects are listed below.
When shooting such subjects, use the focus lock on an object equidistant to intended subject, and then reframe and shoot the intend subject as described above.

a) When there is a strong light source such as sunlight on or around the Focusing Spot.
b) Fireworks, smoke or similay floating objects.
c) Shining or glossy surfaces such as a car body and water surface.
d) Black objects with small reflections such as human hair.
e) When the subject is behind a glass window.
f) When the subject is extremely small.

7-2 Auto Focusing Adjustment;

〔Note〕

a) Never turn any screws because it very hard to adjust position of SPD Array and position of Infrared beem transmitted without a measuring in strument, except changing position of Focus.
So position of SPD Array and IRED have been correctly adjusted already when the AF Base Ass'y (374091) has been assembled in the factory, spare parts as well.

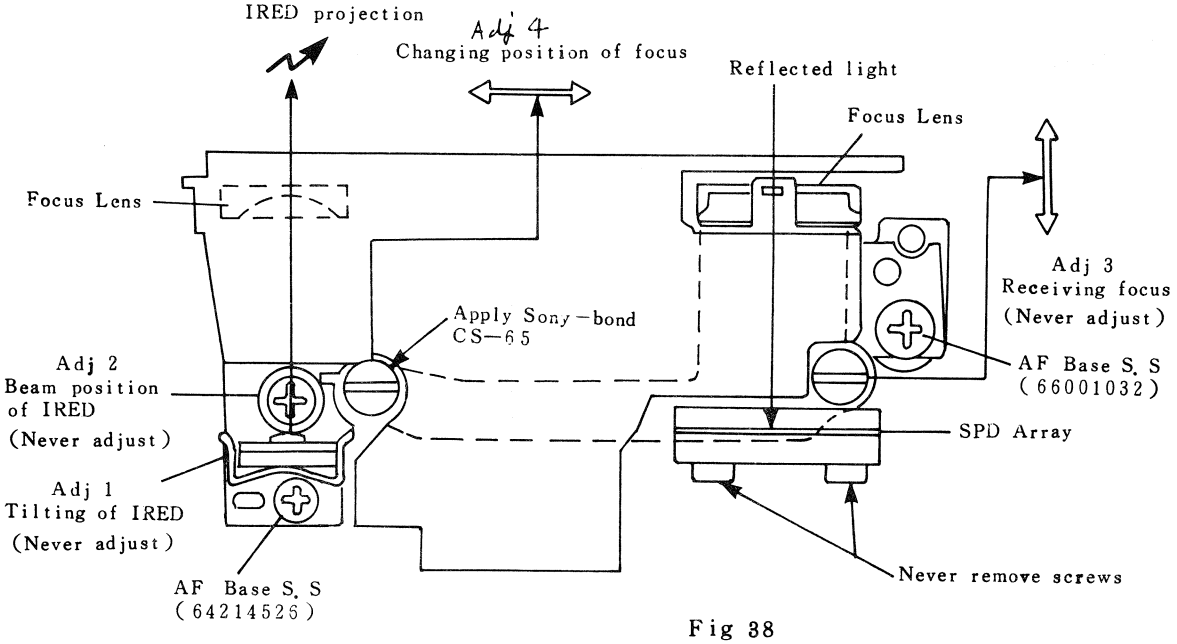


Fig 38

Adj 1 For tilting of IRED adjustment·····Never adjust because base length (33㎜) (if you do, focus curve is changed) should be changed.

Adj 2 For beam position of IRED and focusing·····Vertical adjustment of IRED. (Never adjust because it is imposible).

Adj 3 For light receiving SPD focusing adjustment·····Distance adjustment of focusing lens. (NEVER ADJUST)

Adj 4 For changing position of focus adjustment·····Changing position of focus adjusting with reflective ratio 18% gray chart. (18% Kodak Gray Cards)(moving of light receiving focusing lens).

〔Auto Focusing adjustment procedure〕

(Changing position adjustment)

※ Never use tungsten-filament lamp or mercury group. Fluorescent lamp has to be set out of viewfinder. But Focusing works under dark condition.

1) Set the camera body at the position 1.74㎜ distance from the reflective ratio 18% gray chart. The camera body should be aligned with the center of the test chart in the same height.

2) Aim the camera at the test chart and release the shutter, where the pin of Focusing Ring Ass'y is stopped at the 4 steps on the mark of ISO Base as shown in (Fig 39) (the AF Stopper (360206) engages the 4 tooth of Focusing Ring Ass'y (370041)). If does not, make adjustment by turning the screw of changing position of focus as shown in (Fig 38), Viewfinder indication LED should be lighten () When press the Release Switch halfway down.
Checks should be repeated several times.

3) Move the camera to set it at the position 2.26m distance from the test chart and release the Shutter, where the pin of Focusing Ring Ass'y is stopped at the 5 steps on the mark of ISO Base. If does not, make adjustment by turning the screw of changing position of focus.
Viewfinder indication LED should be lighten () when press the Release Switch halfway down.
Checks should be repeated several times.

4) Move the camera to set it at the position 1.74m distance and repeat 2) operation and repeat the adjustments.

5) Move the camera to set it at the position 2.26m distance and repeat 3) operation and repeat the adjustments.

6) Move the camera to set it at other positions (0.90m, 1.03m 1.19m, 1.41m, 3.25m and 7.5m distance) and check where pin of Focusing Ring Ass'y is stopped the different steps on the mark of ISO Base.

〔Note〕

The screw of changing position of focus is locked tight, so take care when adjusting it.

But do not use any solvent fluid (Thinner, Methyl ether keton and Ether alcohl etc).

After completing the adjustment, apply a drop of Sony-bond CS-65 agent to screw of changing position of focus as shown in (Fig 38).

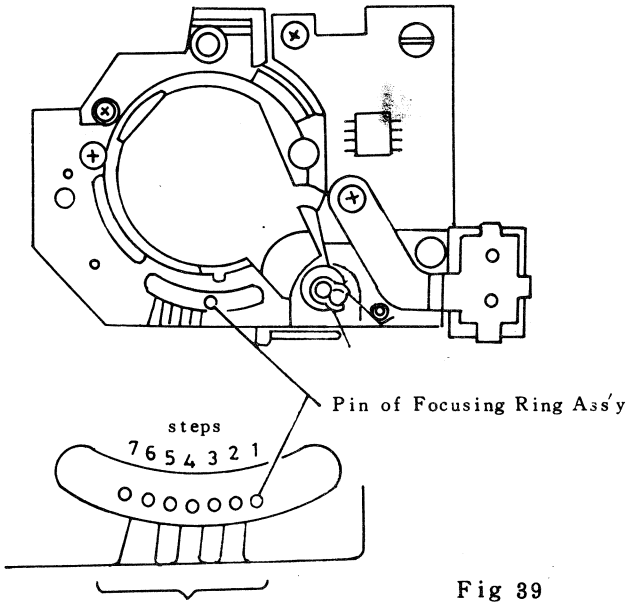


Fig 39

Steps	Distance from the test chart	The focusing mark in the viewfinder
1	0.90m	will pulsate
1	1.03m	will indicate
2	1.19m	will indicate
3	1.41m	will indicate
4	1.74m	will indicate
5	2.26m	will indicate
6	3.25m	will indicate
7	7.5 m	will indicate

Fig 40

8. DISASSEMBLING OF THE COUNTER BASE Ass'y.

8-1 Counter Base Ass'y Removal;

1) Unsolder two Orange, Purple and Yellow lead wires on the Self-timer Switch Board Ass'y.
2) Remove the Self-timer Switch Board Set Screw (64213526) and Self-timer Switch Board Ass'y (374075).

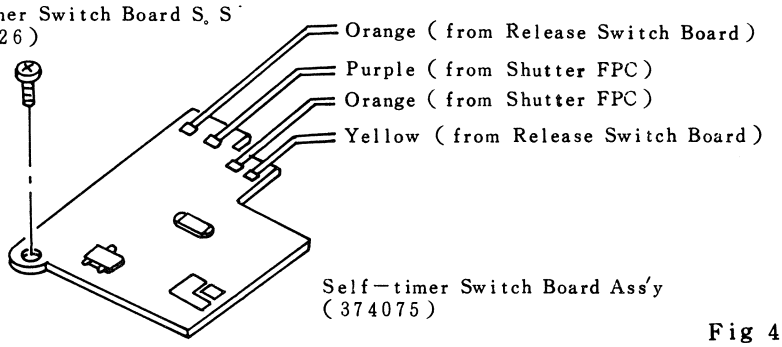
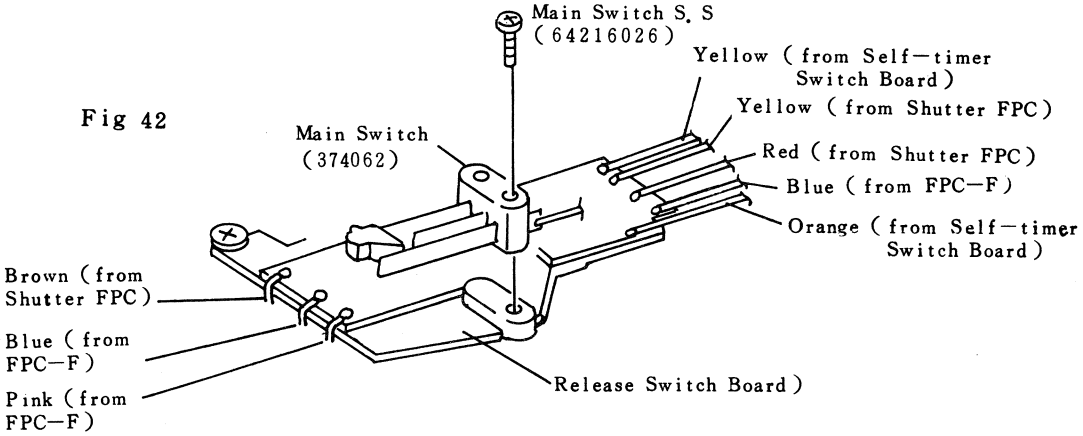


Fig 41

8-2 Counter Base Ass'y Removal;

1) Remove the Main Switch Set Screw (64216026) and Main Switch Ass'y (374062).
2) Unsolder Brown, Blue and Pink lead wires on Release Switch Board.
3) Unsolder Yellow, Red and Blue lead wires on Release Switch Board.

Fig 42



4) Remove the GS Ring (66172022), Counter Washer (60322110) Counter Drun (374402) and Counter Spring (360417).
5) Romove the GS Ring (66172022), C.Reverse Lever Washer (60322110), C.Reverse Lever Spring (374405) and C.Reverse Lever (374404).

6) Remove the GS Ring (66171522), C-SW Lever Washer (60441510), C-Switch Lever Spring (374407) and C-Switch Lever (374406).

7) Remove the GS Ring (66171522) and C. Operation Gear Spring (360404).

8) Remove the Release Contact (1) Set Screw (64214526) and Release Contact (1) (374410).

9) Remove the Counter Base Plate Set Screw (358611) and Counter Base Plate Ass'y (374061).

10) Remove the C. Operation Gear (374403).

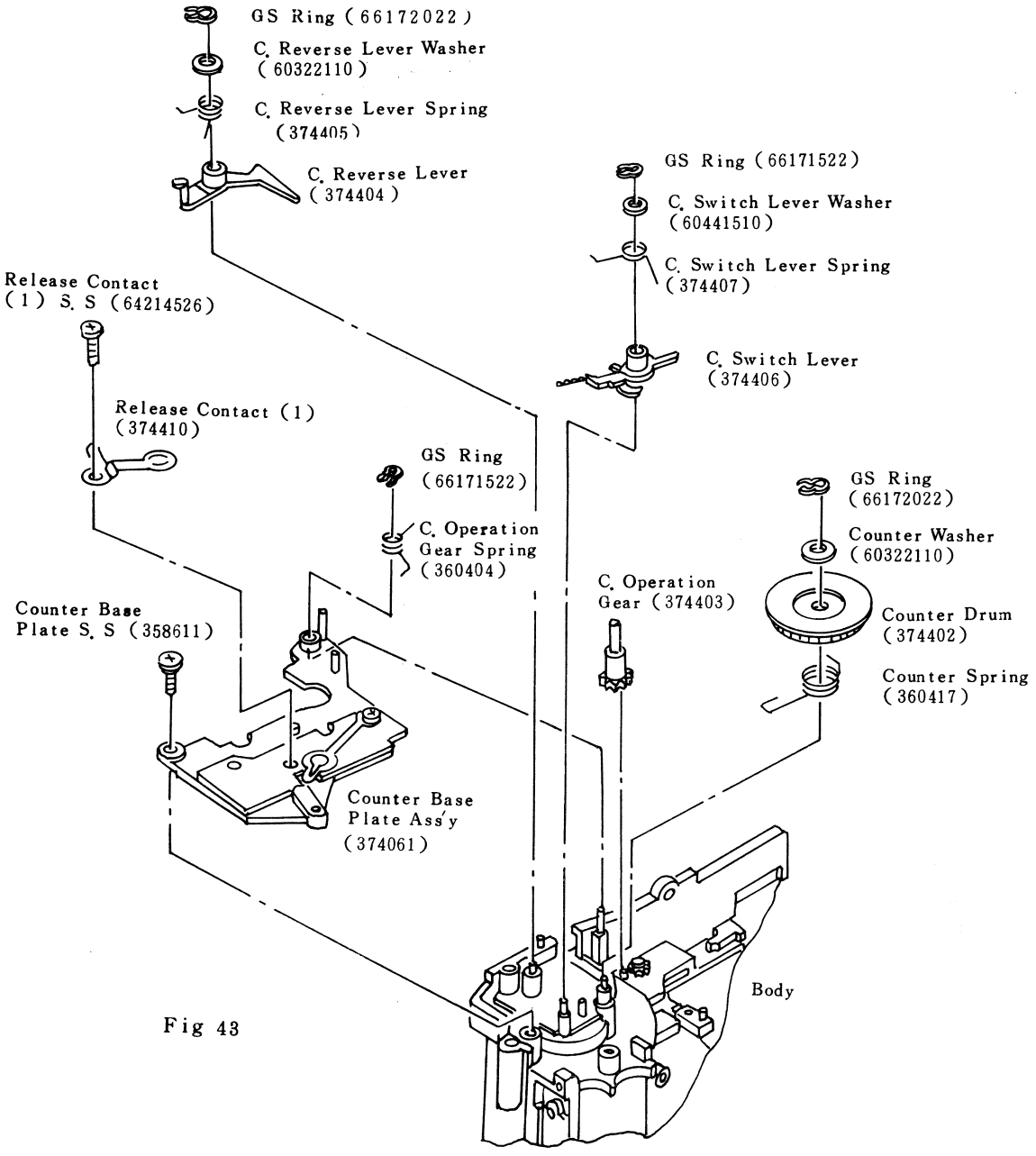


Fig 43

(How to hook the counter Spring with the protrusion)

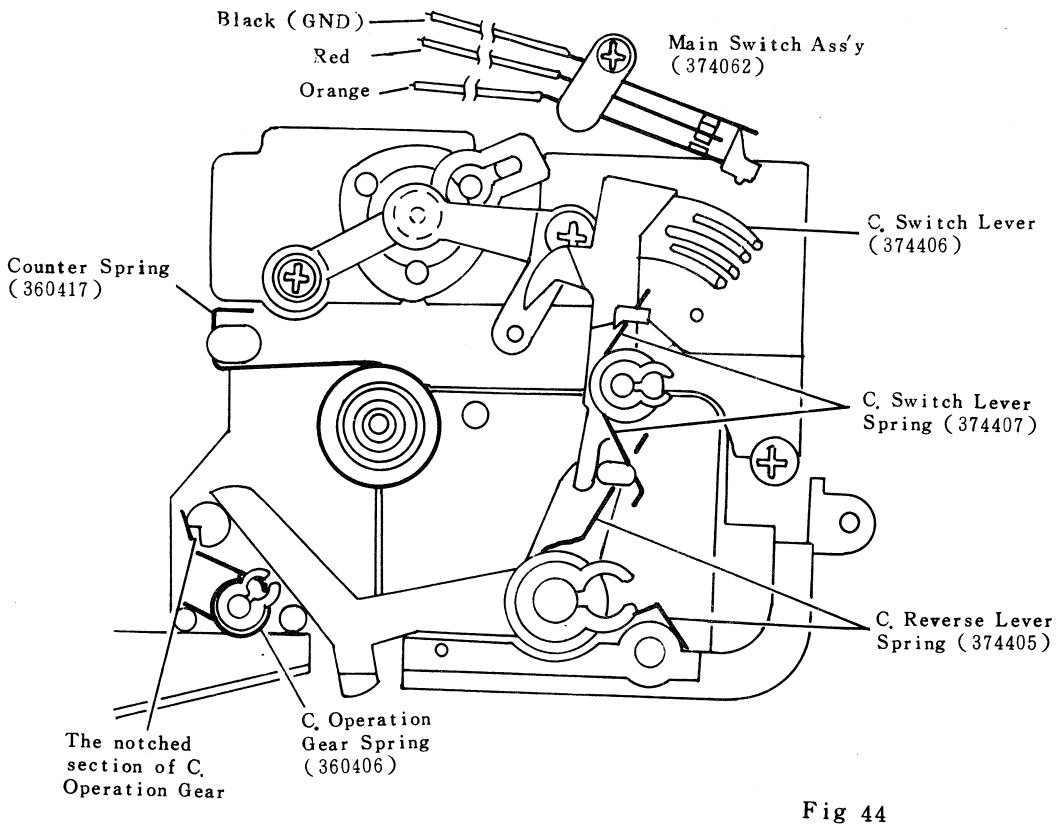


Fig 44

〔Note〕

a) Position the notched section of C. Operation Gear (374403) as shown in (Fig 44). If the position of the C. Operation Gear is not correct, it skips two frames or no frame.

(Main Switch is in OFF position) (Main Switch is in ON position)

Fig 45

9. DISASSEMBLING OF THE WINDING MECHANISM.

9-1 Spool Collar Removal;
(At bottom of camera body)

1) Remove the respecitve parts ① ~ ⑲ shown in (Fig 46) in numerical order.

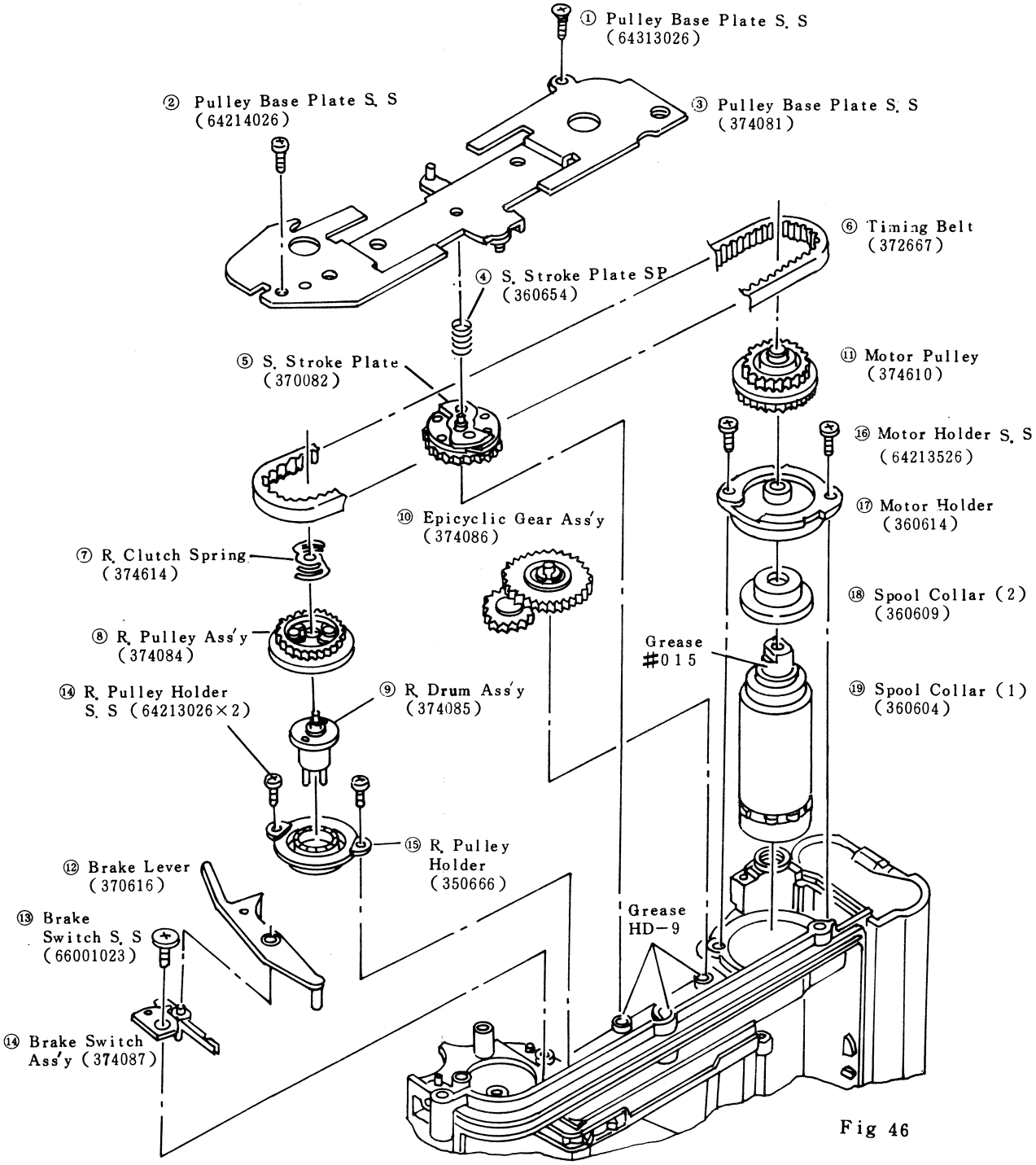


Fig 46

〔Note for reassembling Clutch Spring〕

1) Insert claw parts of R. Clutch Spring (374614) into the slot of R. Clutch Plate as shown in (Fig 47).

〔Note〕

Winding system should be stopped at almost 20 frames without assembling of R. Clutch Spring (374614) in normal position.

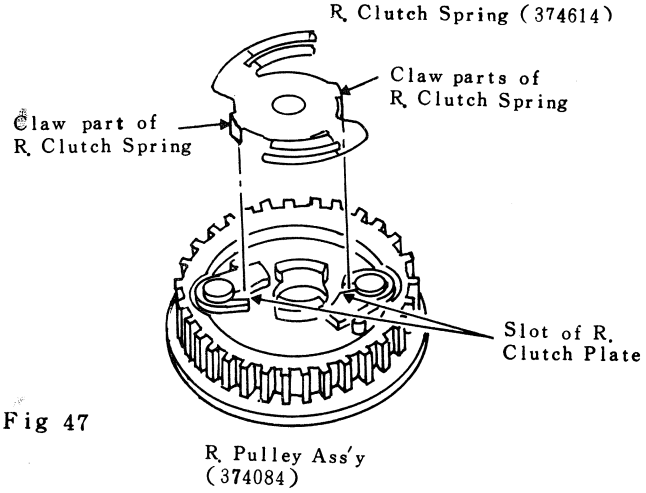


Fig 47

〔Note for reassembling Brake Switch〕

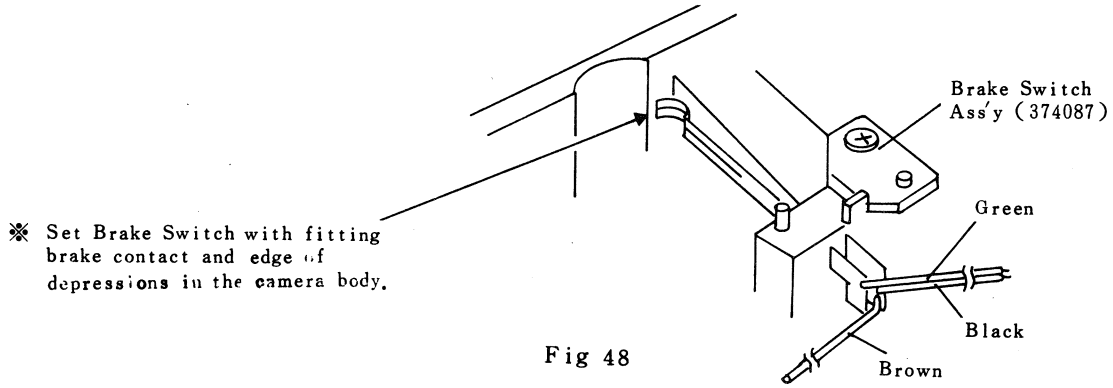


Fig 48

〔Note〕

Take care that Brake Switch lead wires (Green, Black and Brown) should touch on Shutter Magnet, Shutter spring and etc. when you forming lead wires.

〔Adjustment of Brake Switch〕

Adjust Brake Switch by changing the gap between Brake Contact. as shown in (Fig 49)

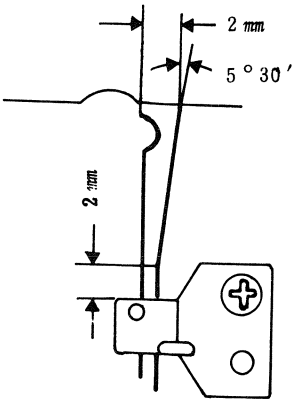
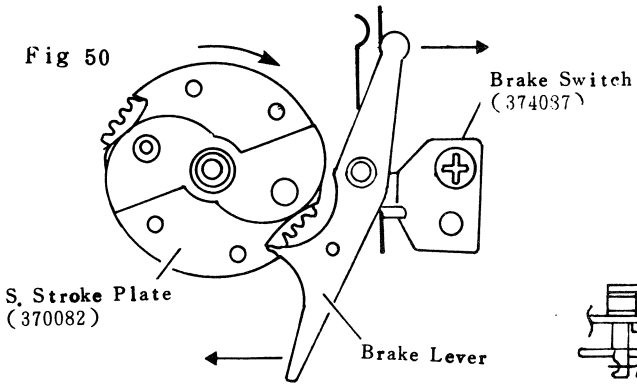


Fig 49

Brief Explanation of Brake Switch.

To control the Motor (ON & OFF).
The Shutter is released and a series of sequential operations are carried out. Then, exposure is completed and the Start Plate returns to its home position, at the same time the push to the Brake Lever and the Brake Switch is turned " ON " as shown in (Fig 51).
Brake Switch is turned " OFF " by charging the Shutter and rotating the S. Stroke Plate and then Motor stop as shown in (Fig 50).

Fig 50



(Brake Switch is in OFF position)

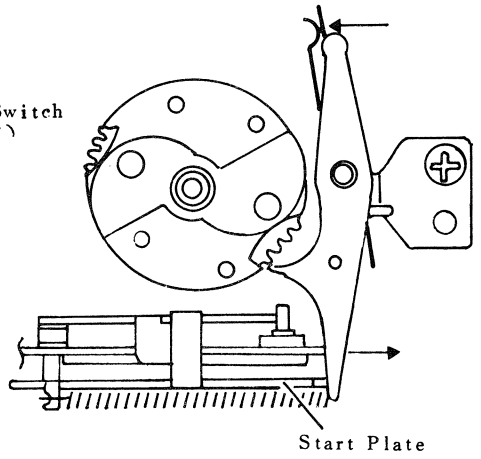
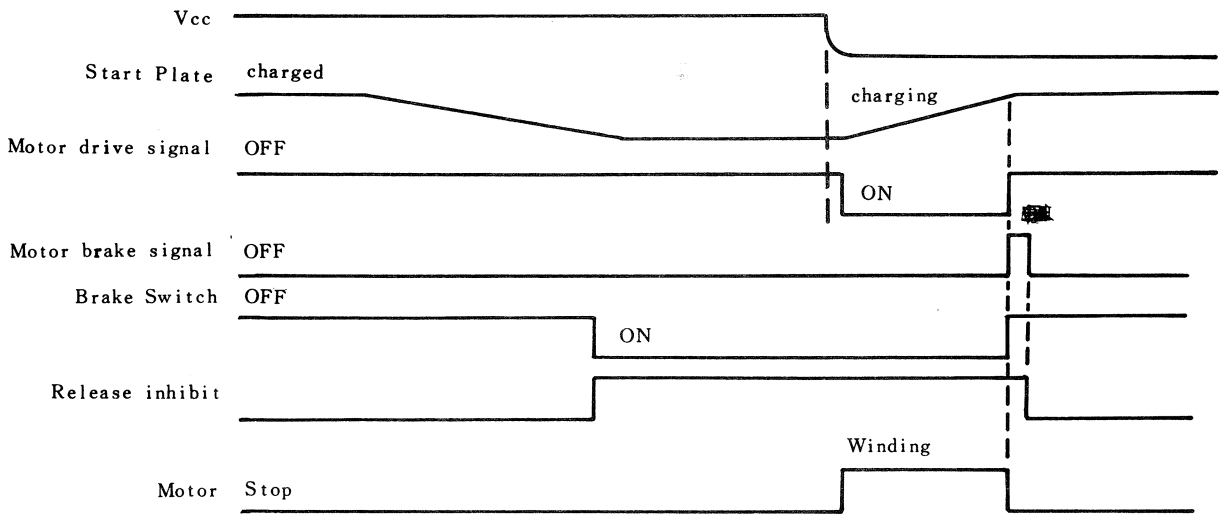


Fig 51

(Brake Switch is in ON position)

(Timing chart of Brake Switch)



9-2 Motor Removal ;

(At upper of camera body)

1) Remove the respcitve parts ①～⑩ shown in (Fig 52) in numerical order.

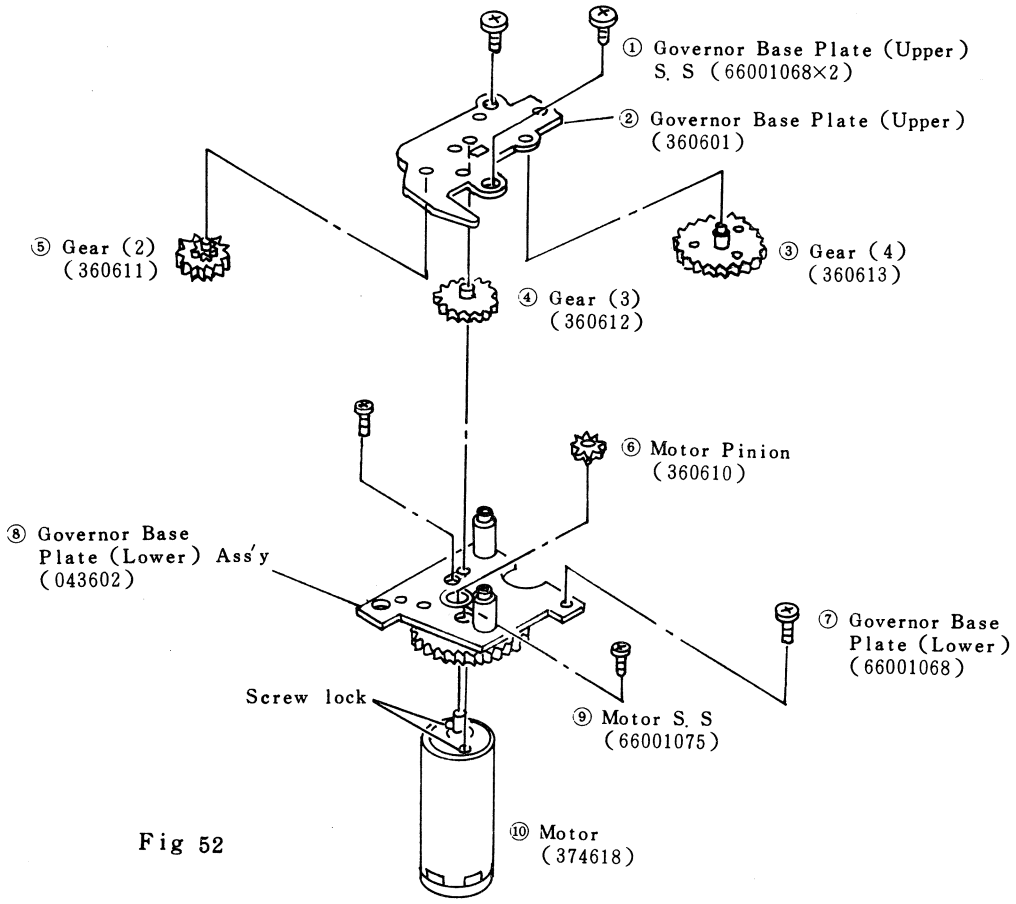


Fig 52

※ Apply grease #015 on shafts of each gears.

〔Check the Motor operation〕

a) Motor has to operate with external power 6V on leads of Motor directly.
Current value less than 170mA at winding and rewinding.

※ Checked current value without setting of Shutter.

※ Change the electric power poles for the check of rewinding.

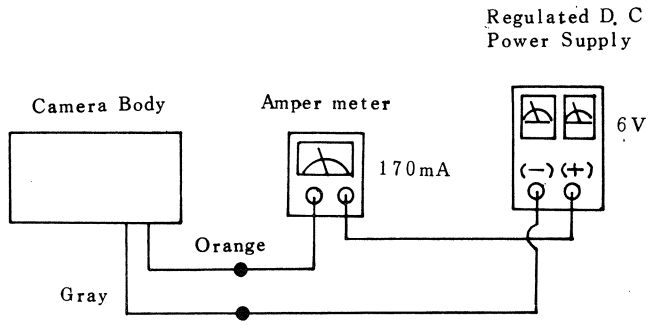


Fig 53

10. DISASSEMBLING OF OTHER PARTS

10-1 Film Existence Switch Removal;

1) Lift up Film Existence Switch (374035) with screwdriver No 4 as shown in (Fig 54).

〔Note〕
Remove Film Existence Switch without snapping pin on the body because it is sticked with Cemedine 551.

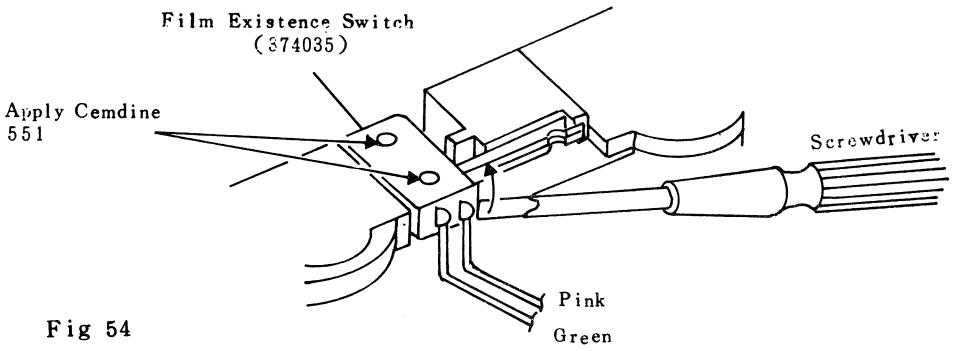


Fig 54

〔Adjustment of Film Existence Switch〕

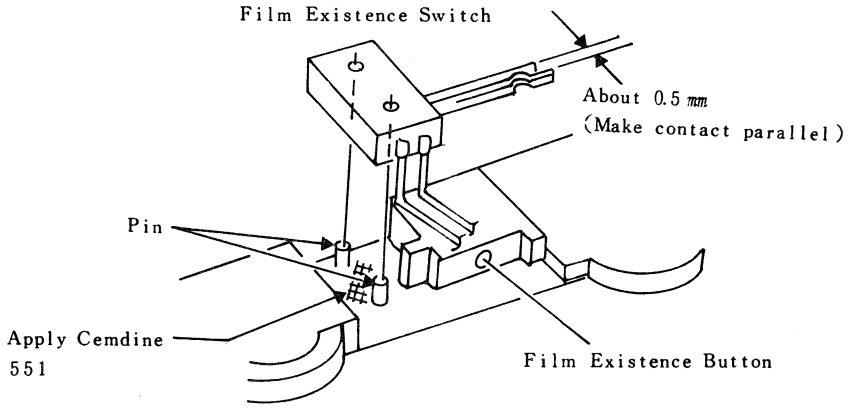


Fig 55

Brief Explanation of Film Existence Switch.

Film Existence Switch should be ON with set of film.
Film Existence Switch should be OFF with end of film rewinding, and Motor should stop after about 2 seconds.
※ If switch is kept ON after rewinding film, Motor should be continue to rewind.

10-2 DX-Switch Ass'y Removal;

1) Remove the DX-Switch Set Screw (64214526). DX-Switch Cover (370108) and DX-Switch Ass'y (374036).

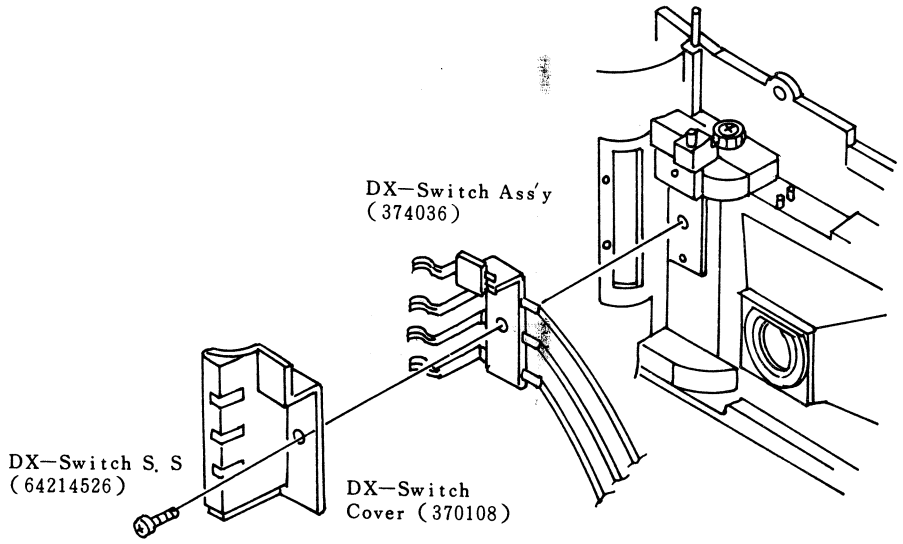
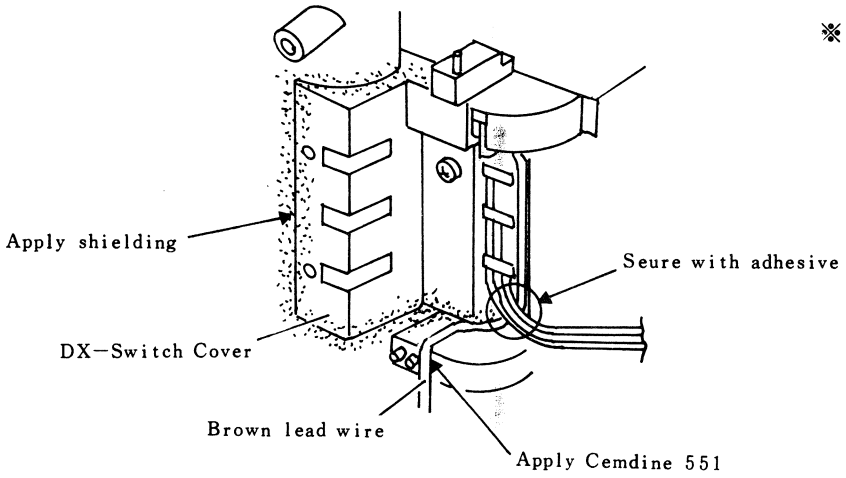


Fig 56

〔Note for reassembling DX-Switch Ass'y〕

a) When attaching DX-Switch Ass'y, take care not to deform the DX-Contact.

b) Apply shielding adhesive around DX-Switch Cover for light proof as shown in (Fig 57).



※ Forming lead wires with Placing by the side of another without rising because lead wires touch Shutter Magnet so easy.

Fig 57

Brief Explanation of DX-Switch.

The camera will accept DX-coded films with speeds ranging from ISO 50 to ISO 1600 and automatically set itself for the speed of the film loaded in it. (An electrically readable encodement of ISO speed.)

- If the camera is loaded with non-DX film, it will set itself automatically for ISO 100.

ISO	50	[64	80]
ISO	100	[125	160]
ISO	200	[250	320]
ISO	400	[500	640]
ISO	800	[1000	1250]
ISO	1600		

※ Halfway ISO uses together with each group.

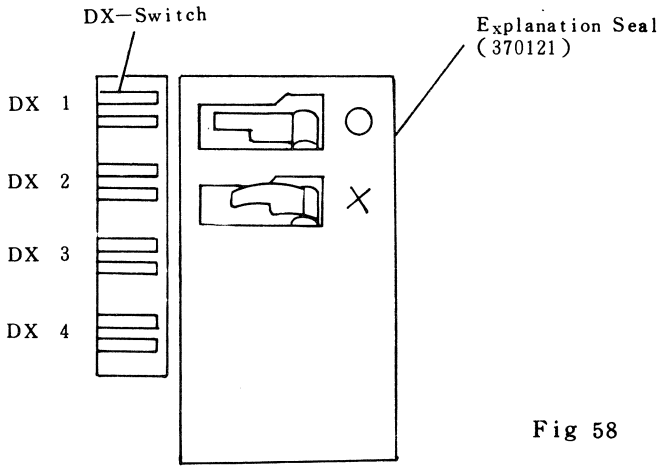


Fig 58

(Film Chamber)

11. ADJUSTMENT OF AUTOMATIC EXPOSURE

11-1 Automatic Exposure Adjustment;

1) Set the EE Tester.....ASA 100, K=1.3
2) Set the camera to be tested.....ISO 100
   (Without film in the camera body, ISO will set for ISO 100)
3) Remove the KYOCERA Name Plate (374311) on the right side of camera body as shown in (Fig 59).
4) Automatic exposure can be adjusted by turning VR1 Semifixed resistor as shown in (Fig 60).

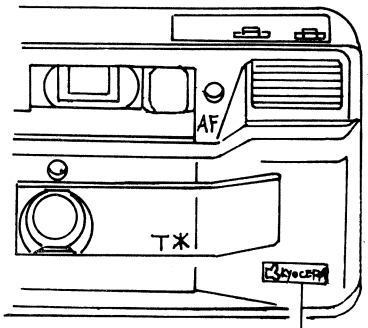


Fig 59

KYOCERA Name Plate (374311)

※ The exposure error at each LV level must be within the tolerances shown below.

Tolerance Limite

Setting of EE Tester	EV Tolerance	
LV15	−0.7 ~ +0.8EV	
LV12	−0.7 ~ +0.8EV	
LV10	−0.7 ~ +0.9EV	*1
LV 8	−0.8 ~ +0.8EV	*2

*1 The Flash does not fire.
*2 The Flash fires automatically.

※ At the time of exposure check under less than LV 8.5, Shutter Release Button while pressing on the No-flash Button.

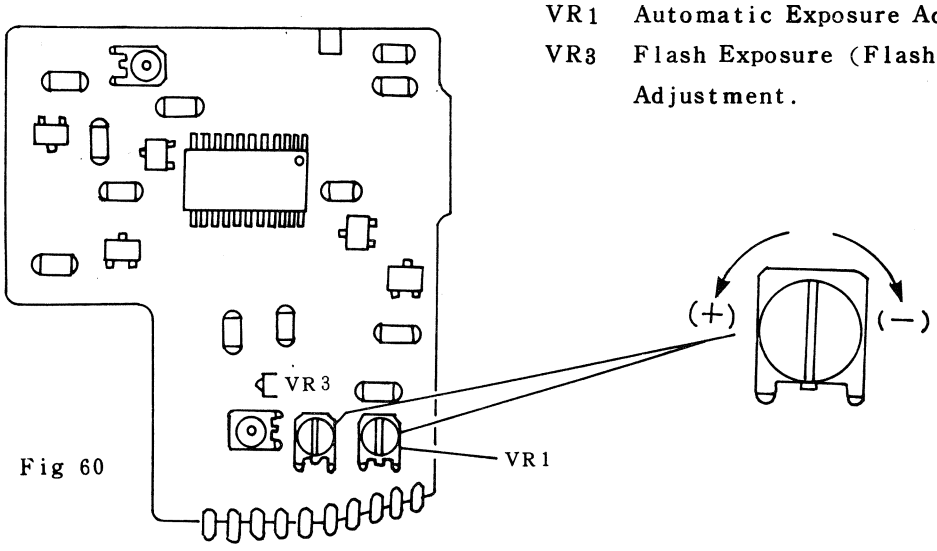


Fig 60

VR1 Automatic Exposure Adjustment.
VR3 Flash Exposure (Flashmatic) Adjustment.

12. FLASHMATIC OPERATION & ADJUSTMENT

12-1 Flashmatic Operation

The Flash fires automatically in low-light (less than LV 8.5) situations.

(1) ChargingIndicator in the Viewfinder.
While the flash is charging, the Flash Charging Indicator " ϟ " will turn on in the viewfinder, and it should not turn on after finish of charge. Also Shutter Release Button should be locked while the flash is charging in low-light situations. Charge should be stopped if you keep to push Shutter Release Button during charge.

(2) Flash Auto Flash Zone.
Flash should flash automaticaly under brightness of LV 8.5 ~ 10.0.

(3) Guide Number
Guide number of Flash is 8 (ISO 100.m).
(Checked with JCII Flash meter at 3m).

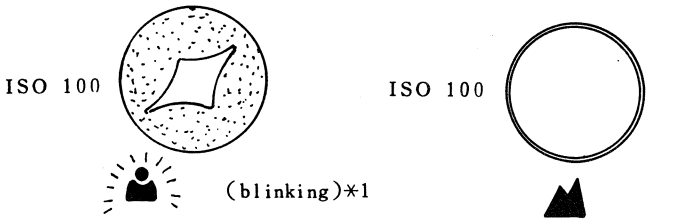
<Flash Range>

ISO	50	Approx. 1 -2 m
ISO	100	Approx. 1 -2.5 m
ISO	400	Approx. 1 -4.8 m
ISO	1000	Approx. 1.3-7 m
ISO	1600	Approx. 1.5-9 m

12-2 Flashmatic Aperture Adjustment.

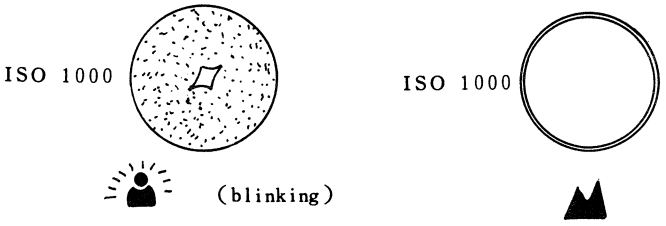
1) Open the Bark Cover by pushing down the Back Cover Release Knob toward.
2) After the flash fully charged (Charging Indicator " ϟ " is in off position), the focusing mark " 👤 " blink in the viewfinder with pressing the Shutter Release Button halfway, keep such condition, and press the button all the way down. Check aperture from film rail side with light of Flash as shown in (Fig 61).
3) Flashmatic aperture can be adjusted by turning VR 3 Semi-fixed resistor as shnwn in (Fig 60)

Measure the Flashmatic Aperture



Close distance　　Infinity distance

* 1 Closer than 1m, the symbol will blink.



Close distance　　Infinity distance

Fig 61

13. OTHERS

13-1 Battery Check Voltage

When the main battery voltage drops 4.69V ±0.3V, the Focusing symbol " 👤 " in the viewfinder should not light at all.
Shutter Release locked between 4.44V ±0.3V.

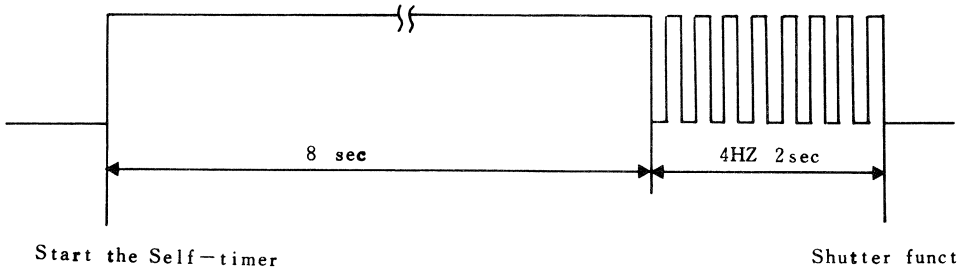
※ Check at enough bright situations without Flash fires.

13-2 Self-timer

Self-timer begins function with sliding of Self-timer Switch.
Front LED should blink for indication of self-timer function while self-timer is working. Shutter should be released 10 second after self-timer begins function.

※ Self-timer should not work while Charging Indicator " ⚡ " lights up.

Self-timer LED Display



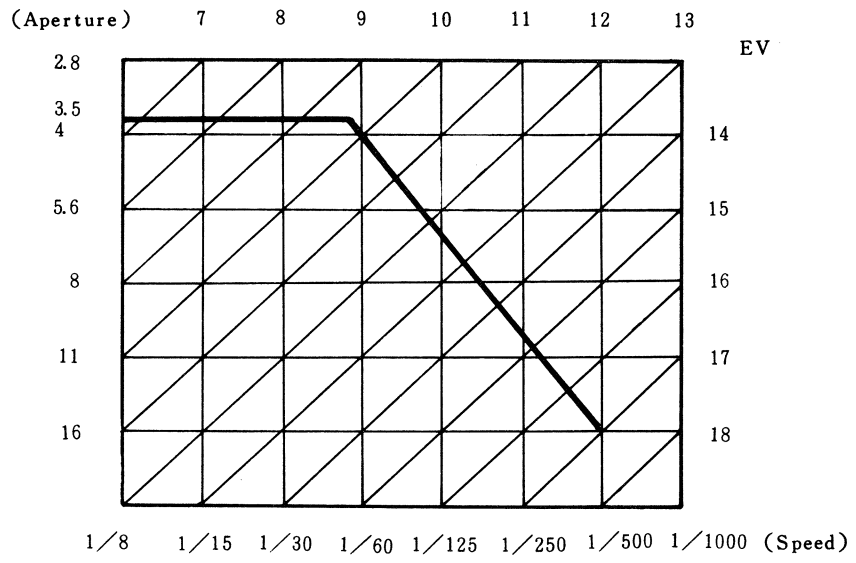
13-3 Battery Power ConsumPtion

Conditions	Electrie current
Main Switch OFF	OA
Main Switch ON (Stand by current)	Less than 250μA
Film loading	Less than 250mA
Film rewinding	Less than 300mA

*1

* 1 Stand by current measuring value just after charging finish.

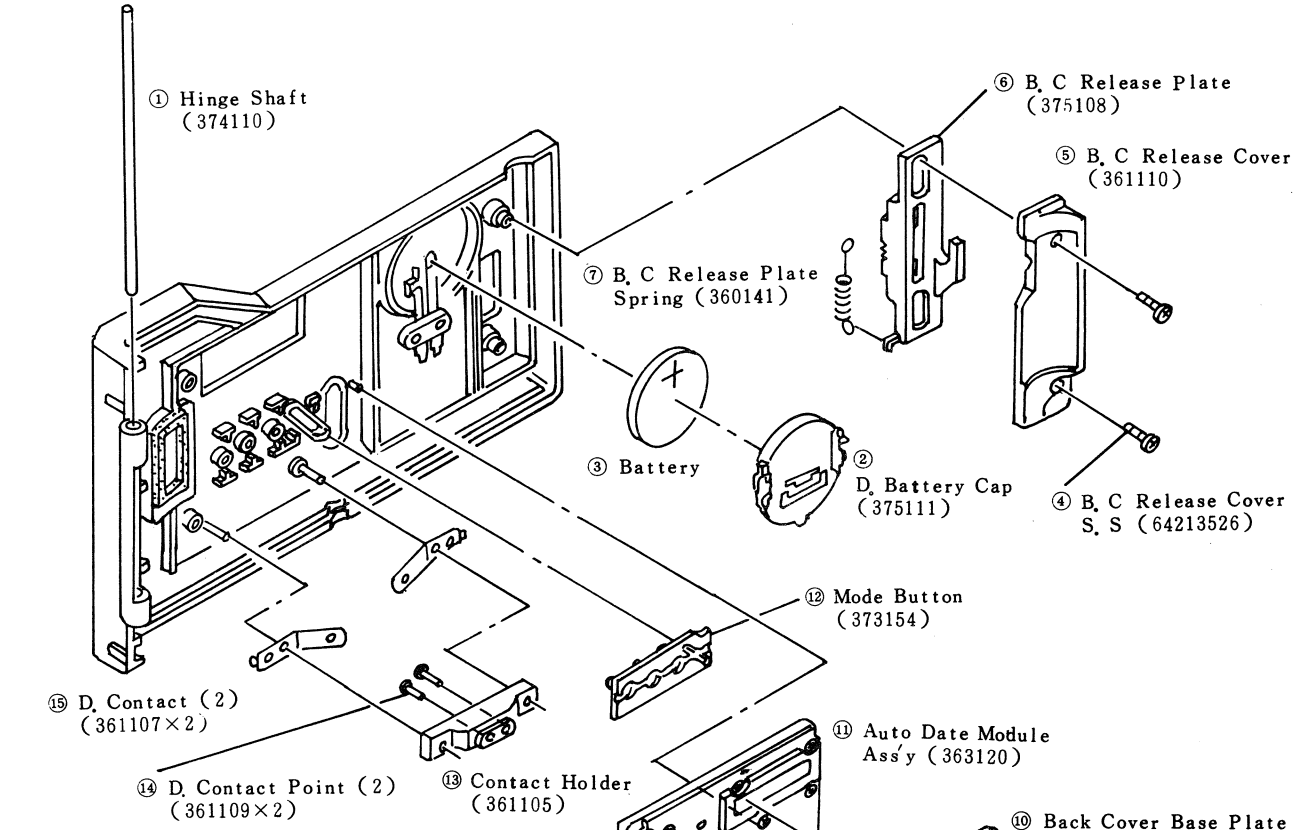
13-4 Program Scale.



14. DISASSEMBLING OF THE DATE BACK Ass'y

14-1 Disassembling of the Date Back Ass'y

1) Remove the respective parts ① ~ ⑮ shown in (Fig 62) in numerical order and unsolder four lead wires (Red, Black, Green and Purple) as shown below.



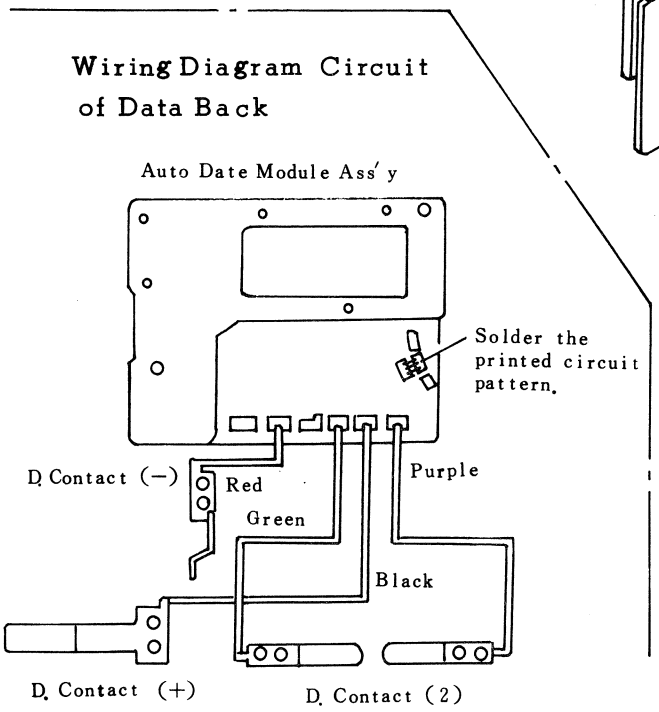


Fig 62

15. PERFORMANCE OF ELECTRONIC PARTS

15-1 Performance of Electronic Parts on FPC-F Ass'y

No	Code	Descrption	Performance
1		Relay	To switch the Motor drive to wind and rewind
2	D201	Diode	Makes charge signal from charge inhibit signal
3	D202	Diode	Makes faster discharge of C205
4	D208	Diode	For counter electromotive force by-pass at Relay off
5	Q207	Transistor	For ON or OFF Relay switch
6	C203	Capacitor	Stabilizes 3V power source
7	R201	Resistor	For discharge of electric capacity at Main Switch OFF
8	R208	Resistor	For arrangement of Flash fire signal
9	R203	Resistor	Separates signal of Ne-tube ON from noise
10	R204	Resistor	Input for pull-up resistor of IC-3 12pin
11	R209	Resistor	Input for pull-up resistor of IC-4 2pin
12	R210	Resistor	For rest pulse of flip-flop for low brightness signal latch
13	C204	Capacitor	Time constant for charge signal output time at release switch OFF
14	C205	Capacitor	For time constant of charge signal and release inhibit time at Main Switch ON
15	R205	Resistor	Time constant of charge signal at release switch OFF.
16	IC 3		IC.(AND)
17	Q202	Transistor	Amplifys signal of Ne-tube ON
18	Q210	Transistor	Amplifys Motor break signal
19	Q201	Transistor	Amplifys charge signal
20	Q205	Transistor	Amplify for inverts of flash signal
21	Q203	Transistor	Amplify for inverts of flash signal
22	R202	Resistor	For limit of charging LED current
23	IC 2		IC.(Schmidt NAND)
24	R206	Resistor	For time constant resistor of charge signal and release inhibit time at Main Switch ON.
25	R207	Resistor	For time constant resistor of release inhibit time at Release Switch ON.
26	R211	Resistor	Capacitor discharge resistor for reset-pulse of flip-flop for low brightness signal latch

No	Code	Descrption	Performance
27	R212	Resistor	Time constant resistor from Film Switch OFF to Motor stop at rewinding.
28	C208	Capacitor	Time constant capacitor from Film Switch OFF to Motor stop at rewinding.
29	C206	Capacitor	For time constant capacitor of release inhibit time at Release Switch ON.
30	C207	Capacitor	Capacitor for reset−pulse of flip−flop for low brightness signal latch
31	IC 4		IC.(NOR)
32	Q204	Transistor	Amplify for invert of low brightness signal
33	Q206	Transistor	Amplify for invert of flash signal
34	D204	Diode	For counter electromotive force by−pass of Motor and discharge of 3V cricuit at Main Switch OFF
35	D205	Diode	For judge of Motor wind & rewind and rewind by−pass
37	R213	Resistor	Absorber resistor for leak current
38	R216	Resistor	Absorber resistor for leak current
39	R214	Resistor	Limit resistor of Motor wind signal
40	IC 1	Regulator IC	Constant output of about 3V at input of 6V
41	Q211.	Transistor	Amplifys Motor drive signal
42	R217	Resistor	Filter resistor for power source noise
43	IC 5		Motor control IC
44	C209	Capacitor	Power on reset of IC5
45	C201	Capacitor	For stabilizer of power source voltage
46	C202	Capacitor	For stabilizer of power source voltage
47	C210	Capacitor	For stabilizer of power source voltage
48	R215	Resistor	limit resistor of Motor rewind signal
49	Q208	Transistor	Amplifys Motor regular wind signal
50	D203	Diode	For discharge release inhibit of time constant capacitor

15-2 Performance of Electronic Parts on FM Board Ass'y

No	Code	Descrption	Performance
1	R509	Resistor	Voltage divide resistor for battery voltage detection
2	R514	Resistor	Put out indication in the viewfinder
3	Q502	Transistor	Switch circuit of battery check IC operation
4	Q503	Transistor	Switch circuit of put out indication in the viewfinder after releasing Shutter
5	Q501	Transistor	Switch circuit of battery check IC operation
6	R512	Resistor	Standard voltage divide resistor for compare
7	R513	Resistor	Standard voltage divide resistor for compare
8	IC10		Comparator IC
9	R511	Resistor	Voltage divide resistor for battery voltage detection
10	R510	Resistor	Voltage divide resistor for battery voltage detection
11	R508	Resistor	Voltage divide resistor for battery voltage detection

(FM Board Ass'y)

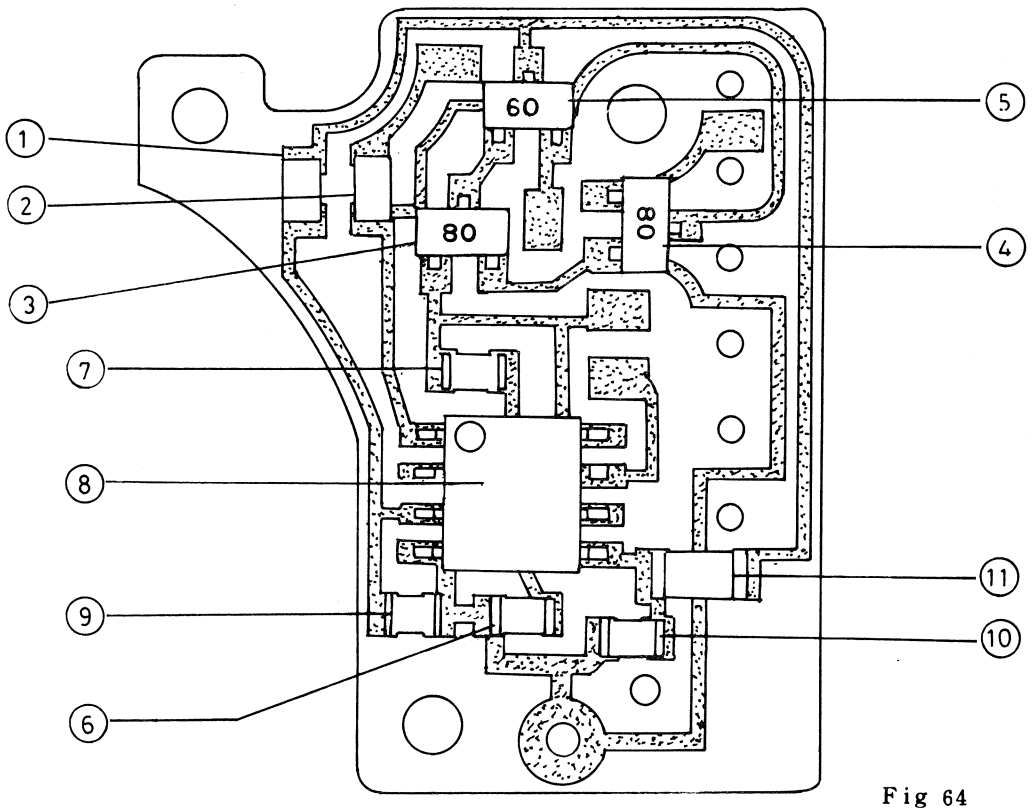


Fig 64

15-3 Performance of Electronic Parts on Flash AMP Ass'y

(Top side)

No	Code	Descrption	Performance
1	R107	Resistor	For oscillation start
2	R109	Resistor	For current limit of IRED
3	C104	Capacitor	For stabilizer of oscillation
4	R104	Resistor	Standard resistor for detection of zenner current
5	C102	Capacitor	For noise by-pass
6	R105	Resistor	For thermo-proof of zenner diode
7	R108	Resistor	For limit of capacitor charge current
8	R103	Resistor	For limit of trigger signal current
9	R102	Resistor	Standard resistor for emission of trigger signal
10	R110	Resistor	For limit of IRED signal

(Back side)

11	Q107	Transistor	Amplify IRED signal
12	R106	Resistor	Limit resistor for discharge current of Ne tube
13	C109	Capacitor	For power source of IRED
14	Q106	Transistor	Amplify IRED signal
15	C108	Capacitor	Stabilizer power source voltage
16	Q103	Transistor	For Switch of charge ON/OFF
17	Oscillation Transformer		Boost voltage from 6V to 2800V
18	Q104	Transistor	For boost voltage
19	Q105	Transistor	For boost voltage
20	C107	Capacitor	Stabilizes oscillation for boost voltage
21	D103	Diode	Converts from boost AC to DC
22	R101	Resistor	For limit of trigger capacitor (C101) charge current
23	C101	Capacitor	Power source for emission of trigger pulse
24		Trigger coil	Voltage boost transformer for emission pulse
25	D101	Diode	For trigger capacitor charge
26	D102	Zenner diode	For detection of oscillation stop voltage
27	Q101	Thyristor	For switch of trigger signal emission
28	Q102	Transistor	Amplifys oscillation stop signal
29	Ne	Ne tube	Detects charge finish
30	R111	Resistor	For by-pass of leak current
31	C103	Capacitor	Extends charge stop time when protect circuit operates
32	TH	Thermistor	For thermo-proof of zenner diode

(Top side of Flash AMP Ass'y)

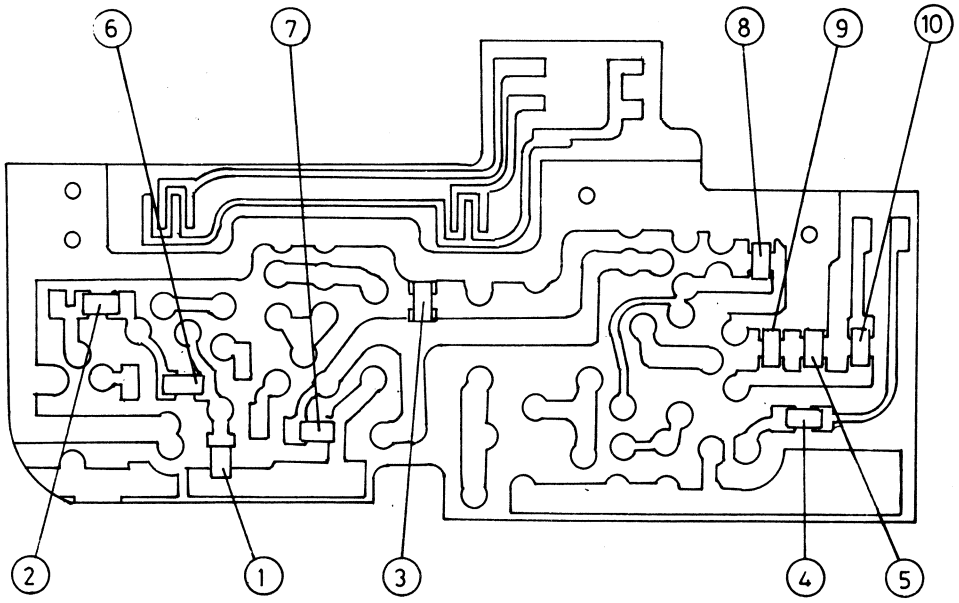


Fig 65

(Back side of Flash AMP Ass'y)

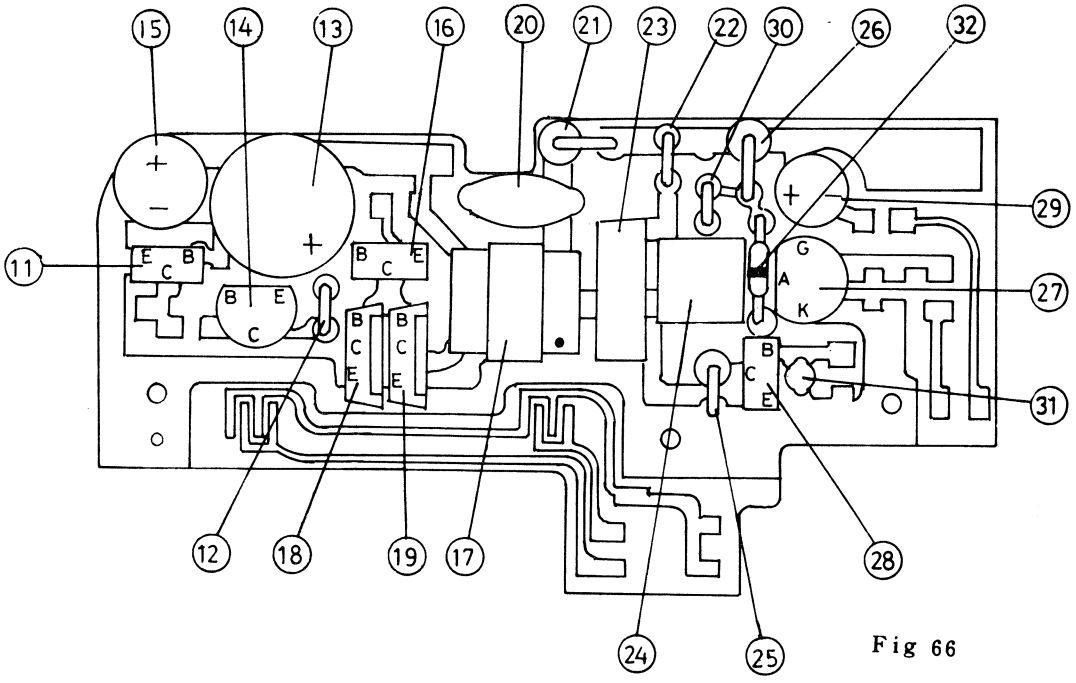


Fig 66

15-4 MD Control IC (IC-5) Terminal Functions

Pin No	I / O	Function
1	I	For Winding signal. "L" is input.
2	I	For Rewinding signal. "H" is input.
3	I	Power source (Vcc) 3V.
4	I	For Blank-Shots signal. "H" is input.
5	I	For Brake Switch signal. "L" is input.
6	I	CLOCK PULSE signal. "L" is input.
7		Not used.
8		GND
9		Not used.
10	I	For Power On Reset signal. "L" is input.
11	O	For Film end signal. Auto rewinding and Relay drive. "H" is output.
12	O	For Release inhibit signal. "H" is output.
13	O	For Motor brake signal. "H" is output.
14	O	For Motor drive signal. "L" is output.
15	I	For Flash charging stop signal. "L" is OUTPUT
16	I	Power source (V_{DD}) 3V.

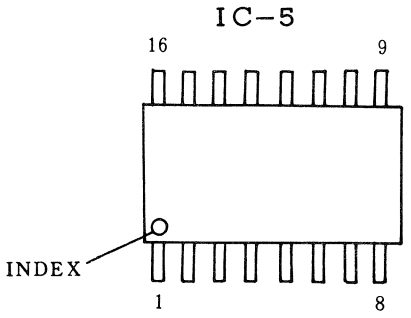


Fig 67

15-5 Regulator IC (IC-1) Terminal Functions

Pin No	Function
1	Input voltage 6V
2	GND
3	Output voltage 3V

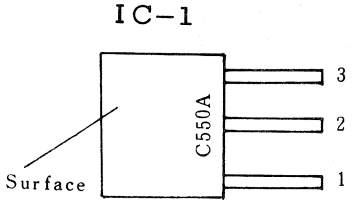


Fig 68

15-6 Measuring conditions of voltage value and waveform

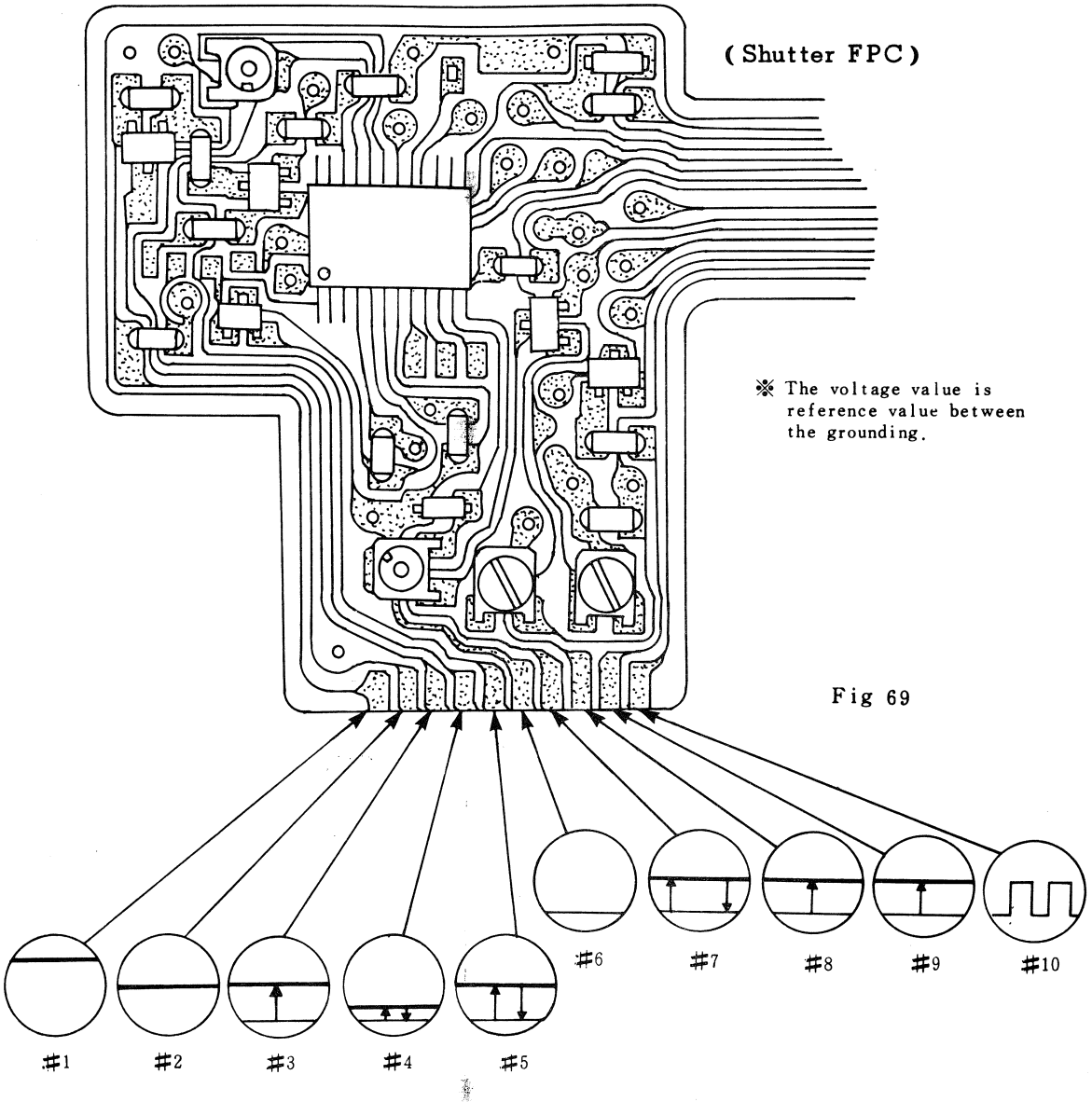


Fig 69

#1 6V, for Power supply voltage

#2 3V (V_{DD}), Output for voltage from Regulator IC

#3 3V (Vcc), while depress 1st step of release button, 3V is devoloped.

#4 Shutter Magnet signal, about 1V is devoloped while depress 2nd step of release button.

#5 Date signal, 3V is devoloped while depress 2nd step of release button.

#6 GND

#7 Flash trigger signal 3V is devoloped while depress 1st step of release button and OV is devoloped while depress 2nd step of release button.

#8 Flash mode signal, 3V is devoloped in bright situations.

#9 Shutter Release inhibit, 3V is devoloped while depress 2nd step of release button

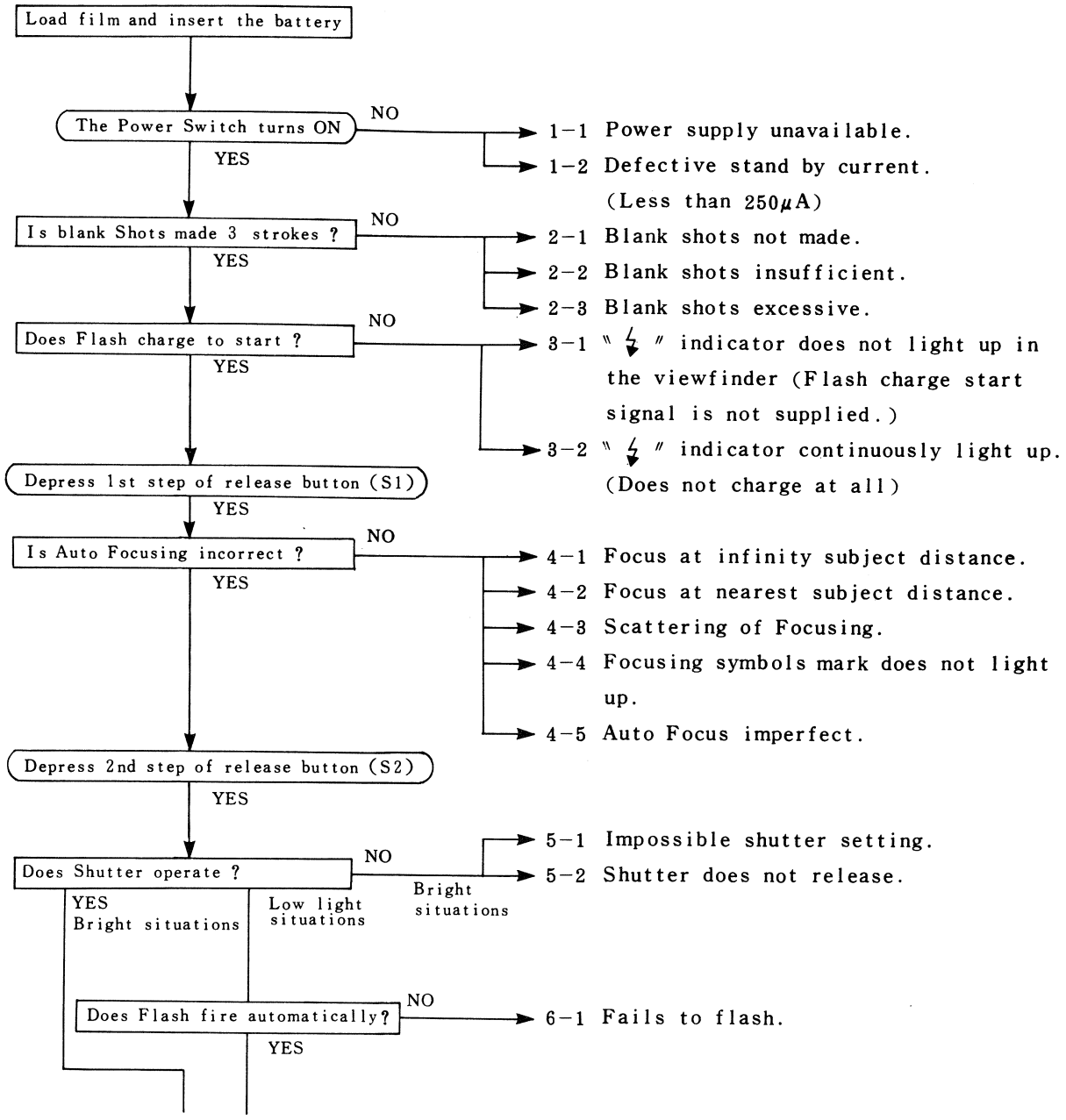
#10 Low light warning signal in low light situations.

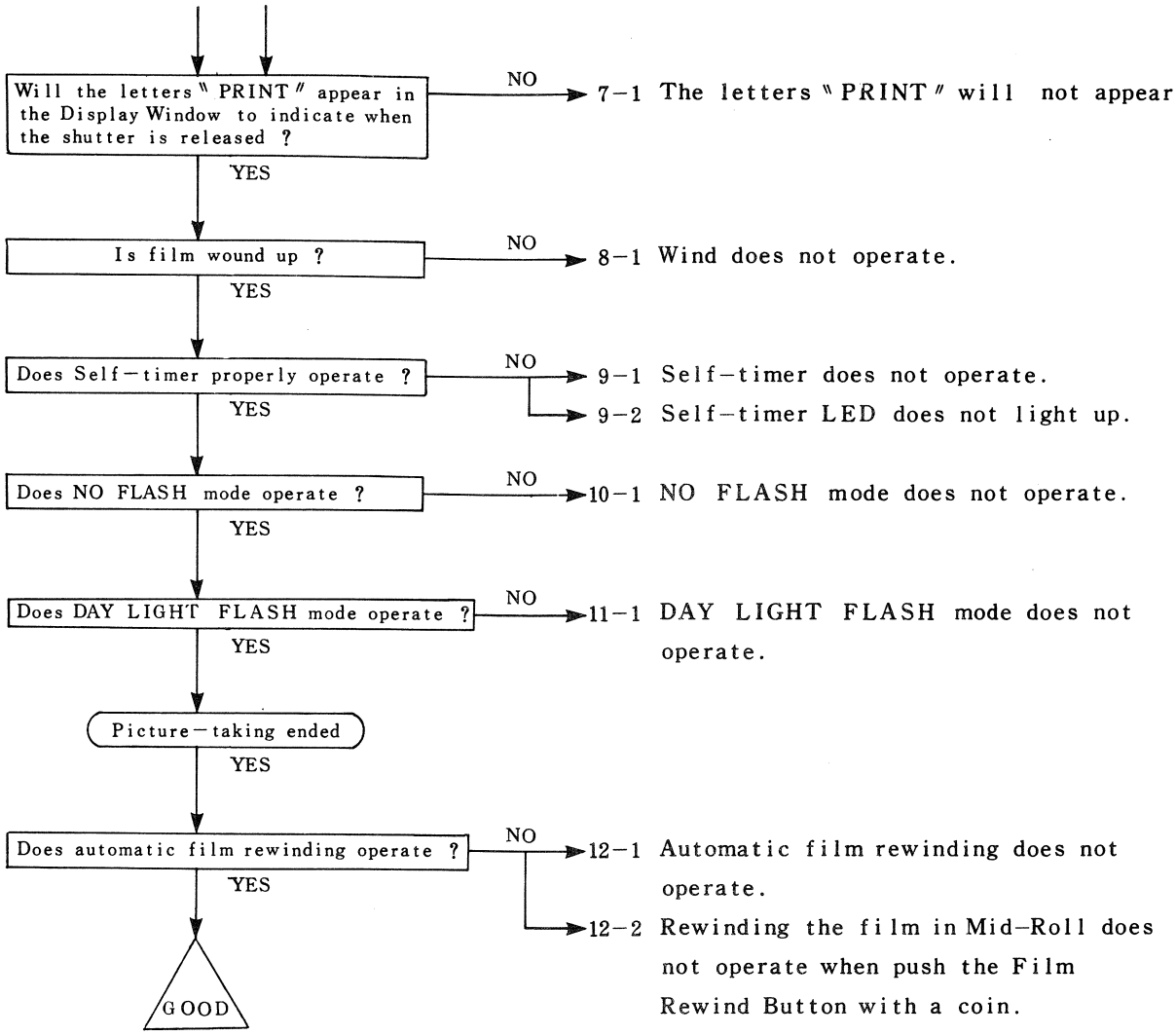
16 TROUBLE SHOOTING

〔Note〕

a) Check the of your repair for unsoldered or poorly-soldered connections. Check the Shutter FPC, FPC-F and Flash AMP. Ass'y for solder splashes and bridges.

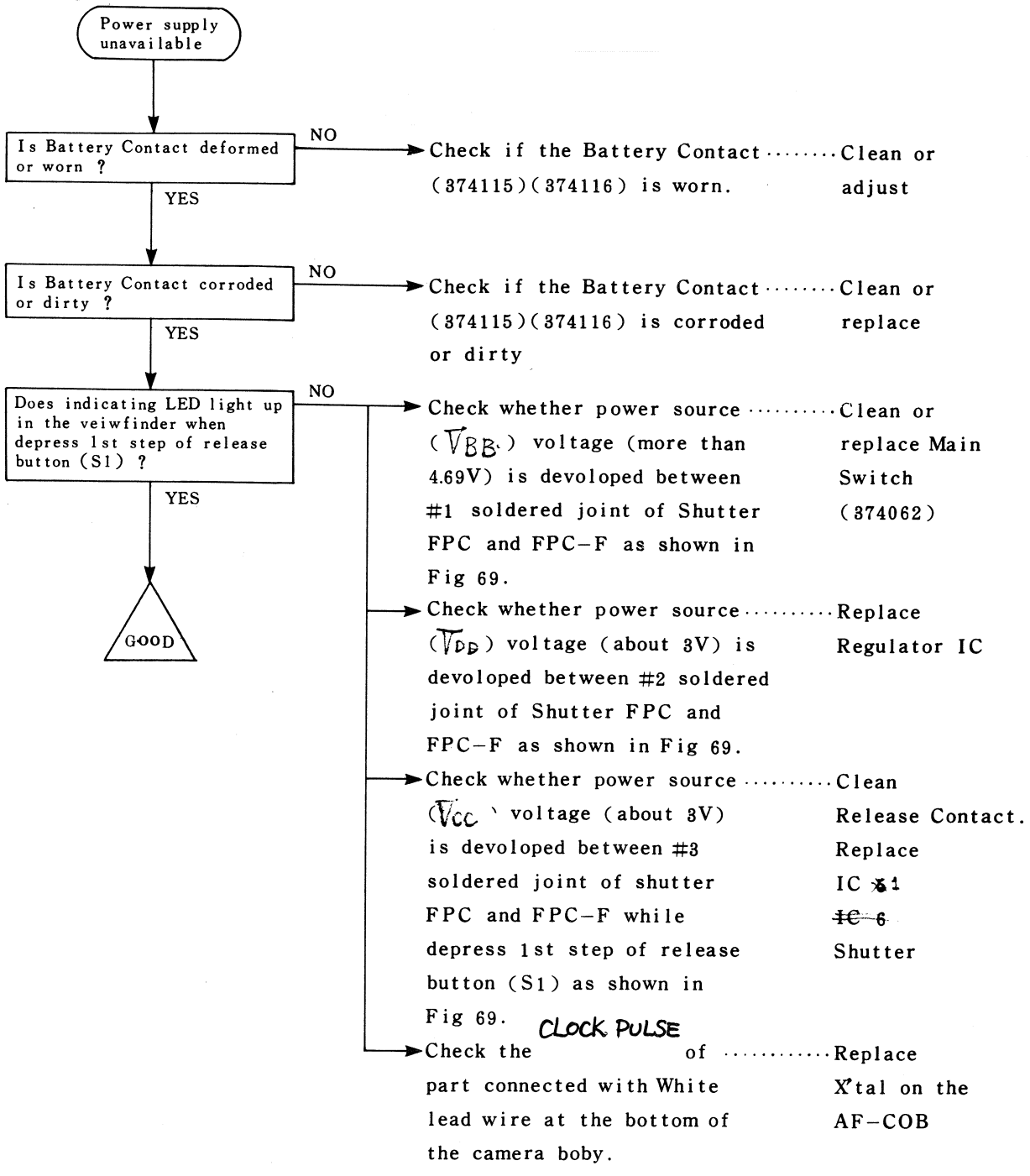
b) Check the Shutter FPC, FPC-F and Flash AMP. Ass'y wiring to ensure that no wires are 〝 pinched 〞.



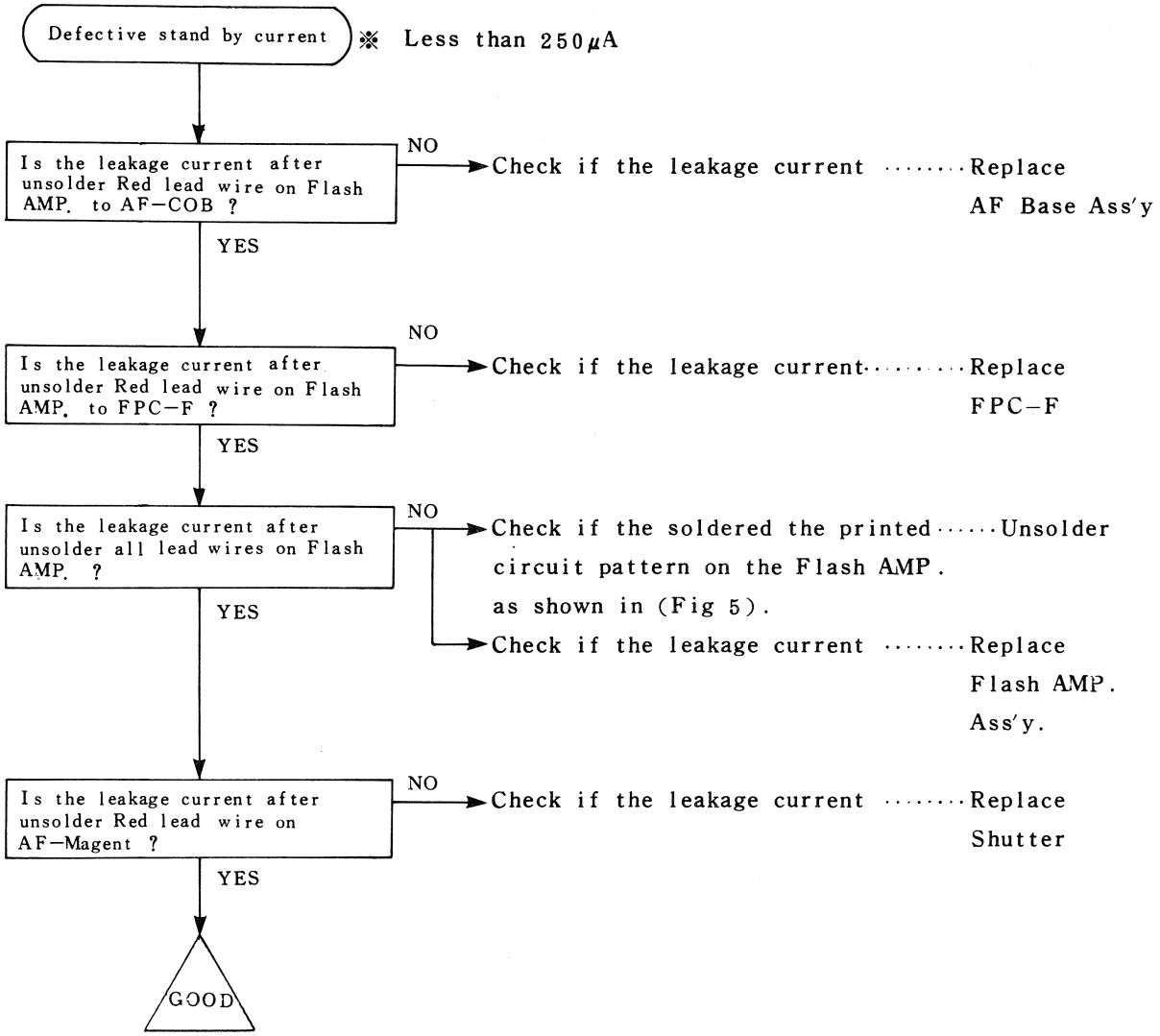

Will the letters " PRINT " appear in the Display Window to indicate when the shutter is released ?
NO
7-1 The letters " PRINT " will not appear.
YES
Is film wound up ?
NO
8-1 Wind does not operate.
YES
Does Self-timer properly operate ?
NO
9-1 Self-timer does not operate.
9-2 Self-timer LED does not light up.
YES
Does NO FLASH mode operate ?
NO
10-1 NO FLASH mode does not operate.
YES
Does DAY LIGHT FLASH mode operate ?
NO
11-1 DAY LIGHT FLASH mode does not operate.
YES
Picture-taking ended
YES
Does automatic film rewinding operate ?
NO
12-1 Automatic film rewinding does not operate.
12-2 Rewinding the film in Mid-Roll does not operate when push the Film Rewind Button with a coin.
YES
GOOD

16-1 Defective Power Supply

16-1-1

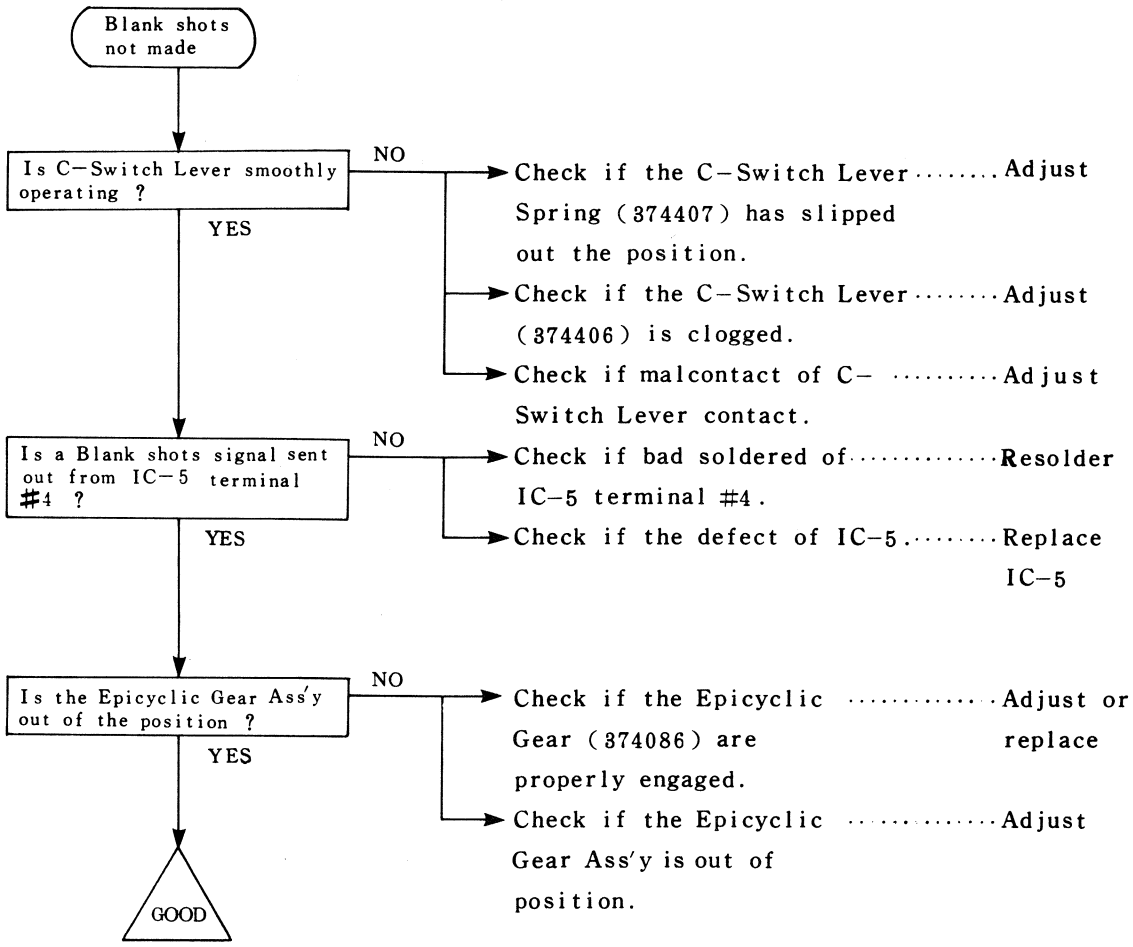


16-1-2

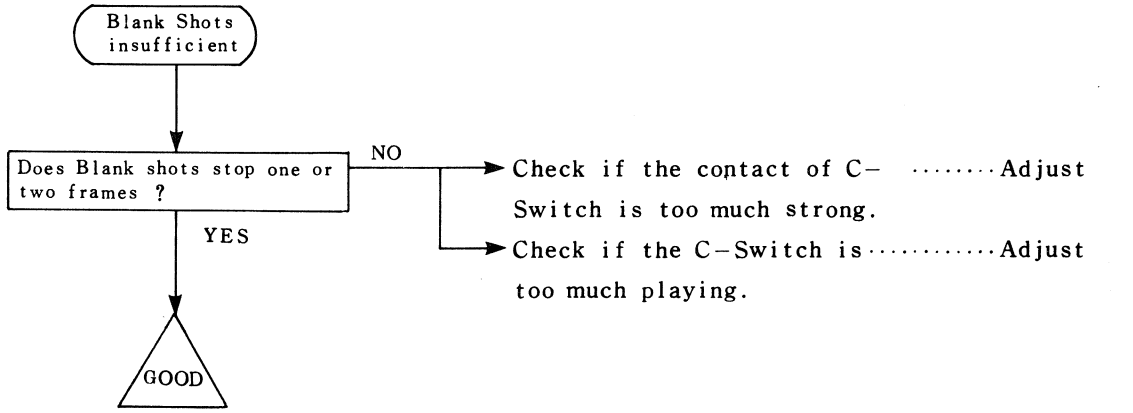

Defective stand by current
※ Less than 250μA
Is the leakage current after unsolder Red lead wire on Flash AMP. to AF-COB ?
NO
Check if the leakage current ·····Replace AF Base Ass'y
YES
Is the leakage current after unsolder Red lead wire on Flash AMP. to FPC-F ?
NO
Check if the leakage current·····Replace FPC-F
YES
Is the leakage current after unsolder all lead wires on Flash AMP. ?
NO
Check if the soldered the printed circuit pattern on the Flash AMP. as shown in (Fig 5).
·····Unsolder
Check if the leakage current ·····Replace Flash AMP. Ass'y.
YES
Is the leakage current after unsolder Red lead wire on AF-Magent ?
NO
Check if the leakage current ·····Replace Shutter
YES
GOOD

16-2 Defective Blank shots Mechanism

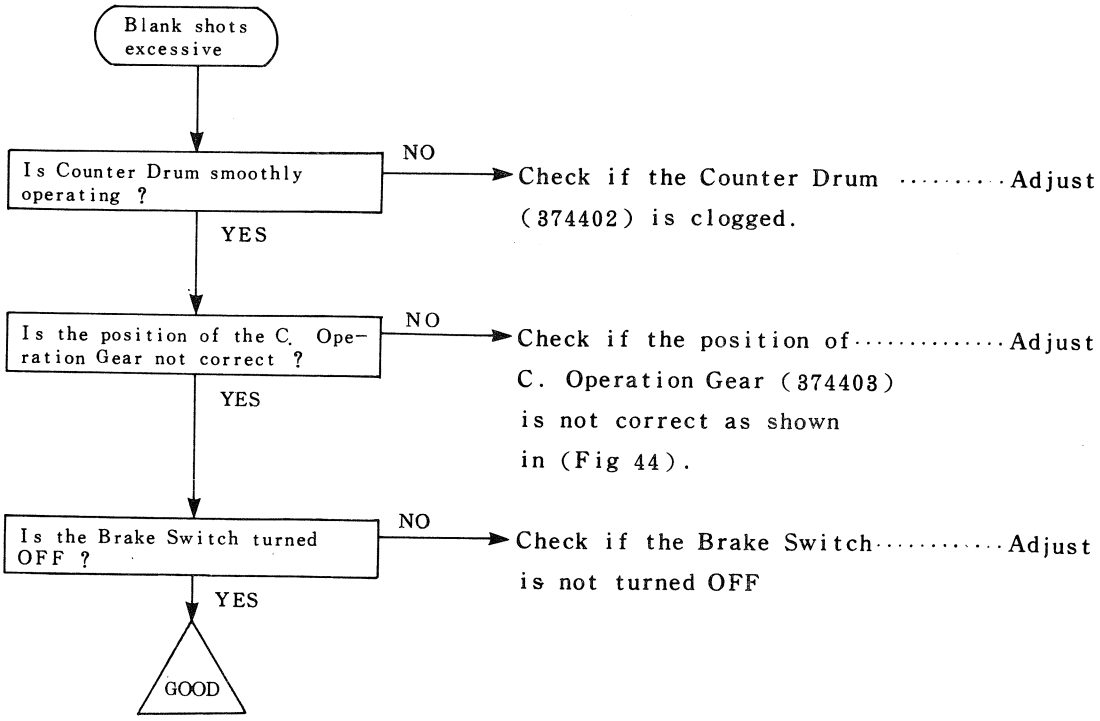
16-2-1



16-2-2

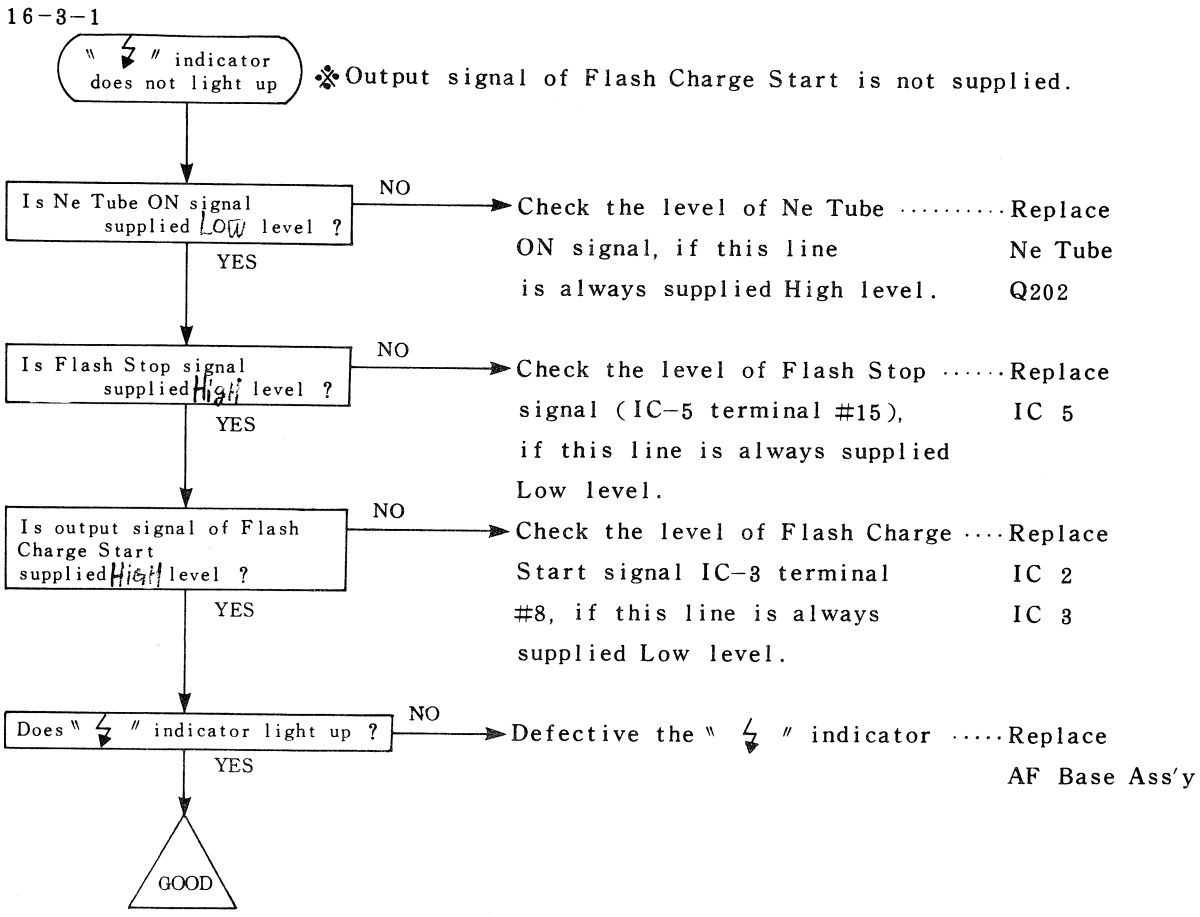


16-2-3

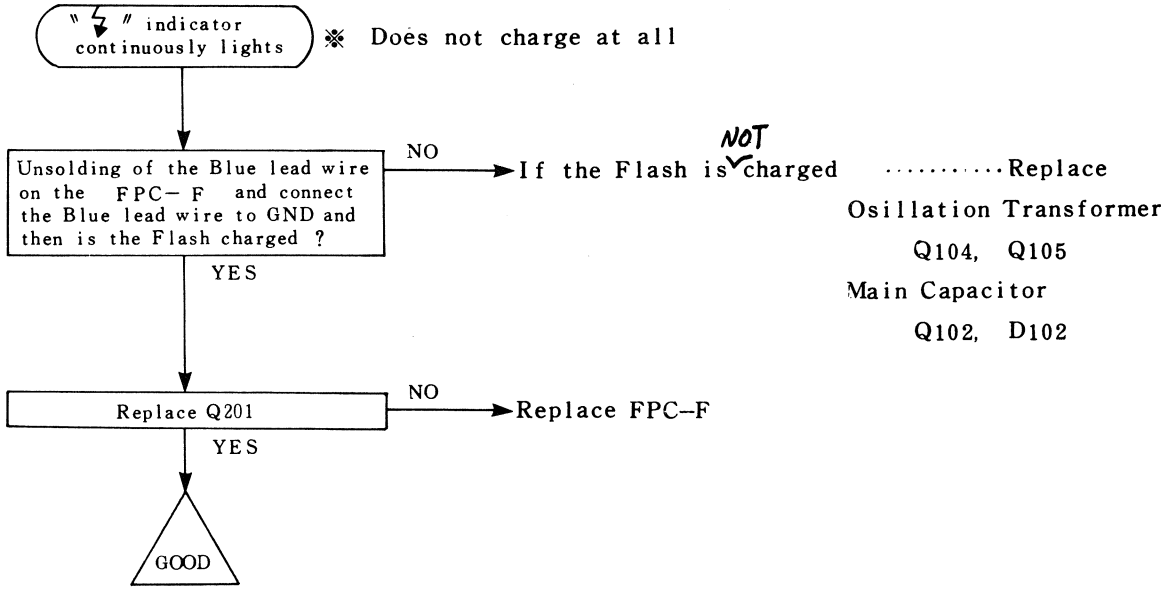


16-3 Defective Flash Charge

16-3-1

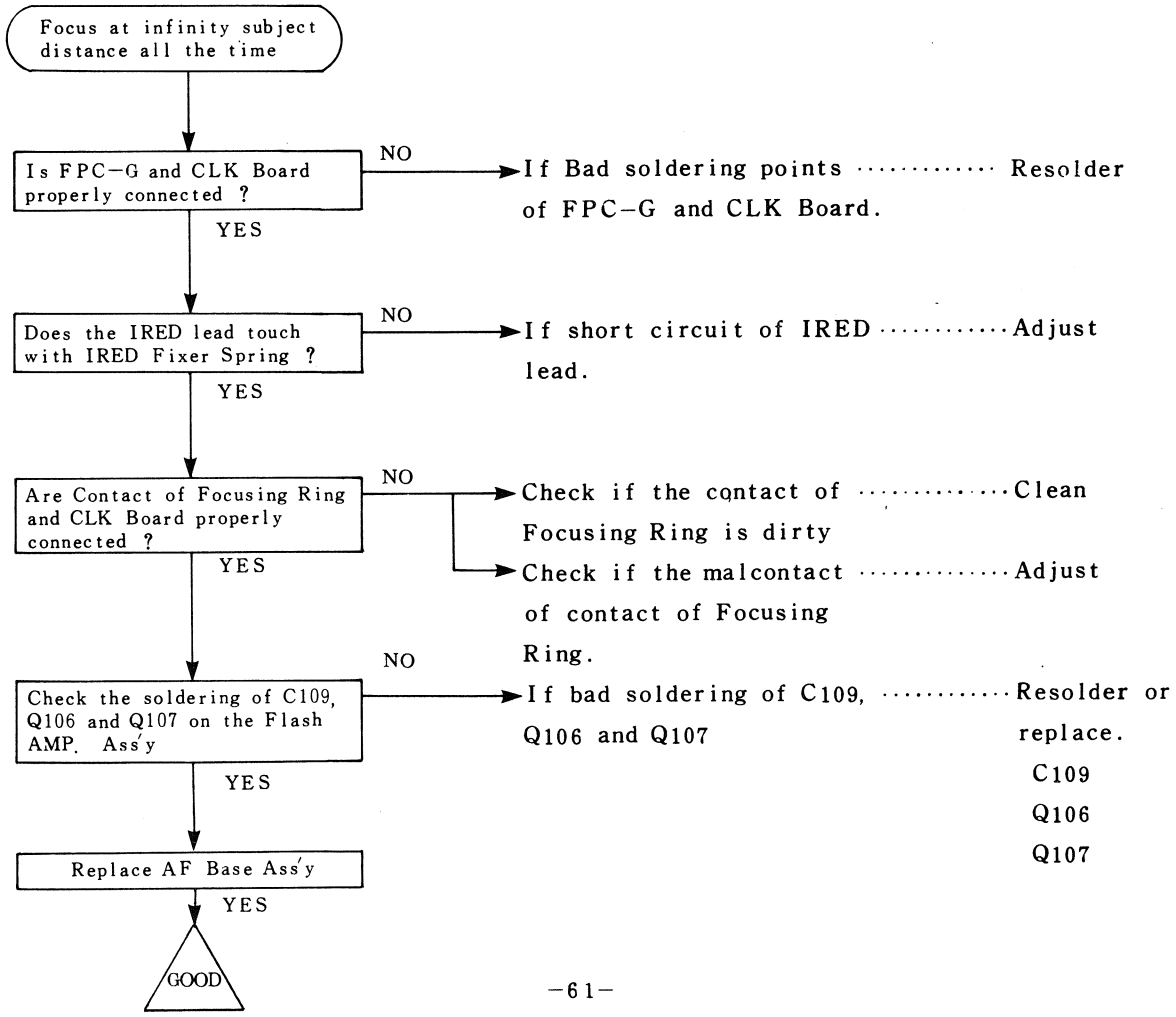


16-3-2

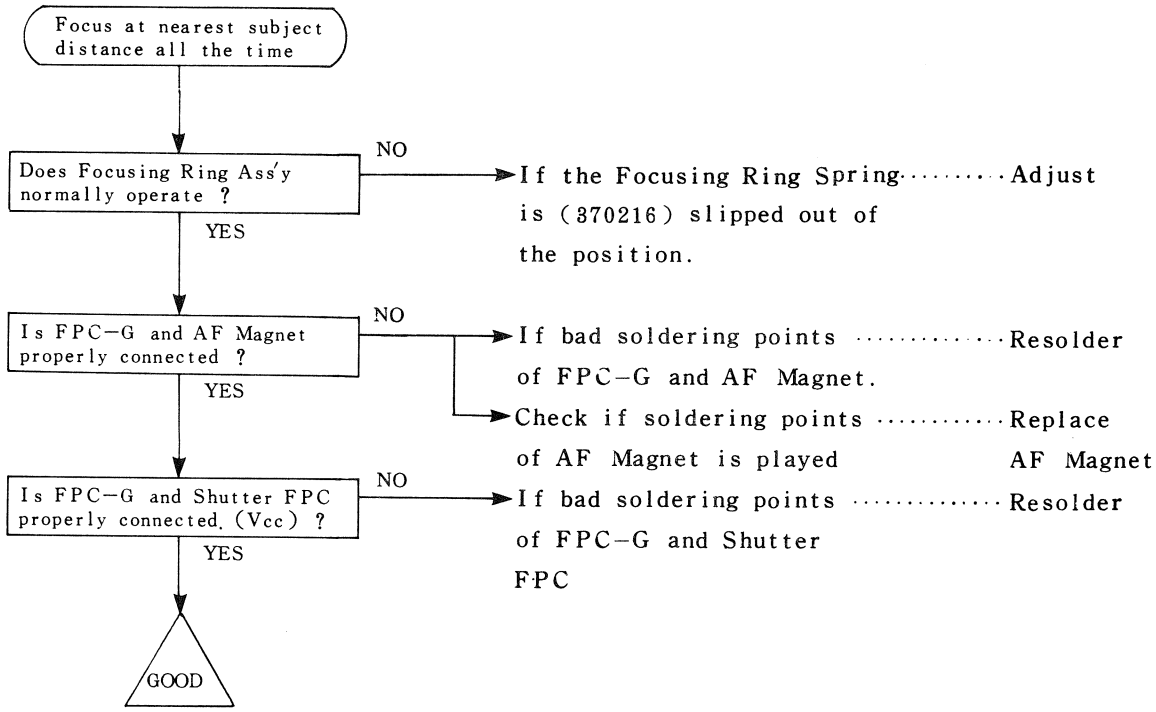


16-4 Defective Automatic Focusing

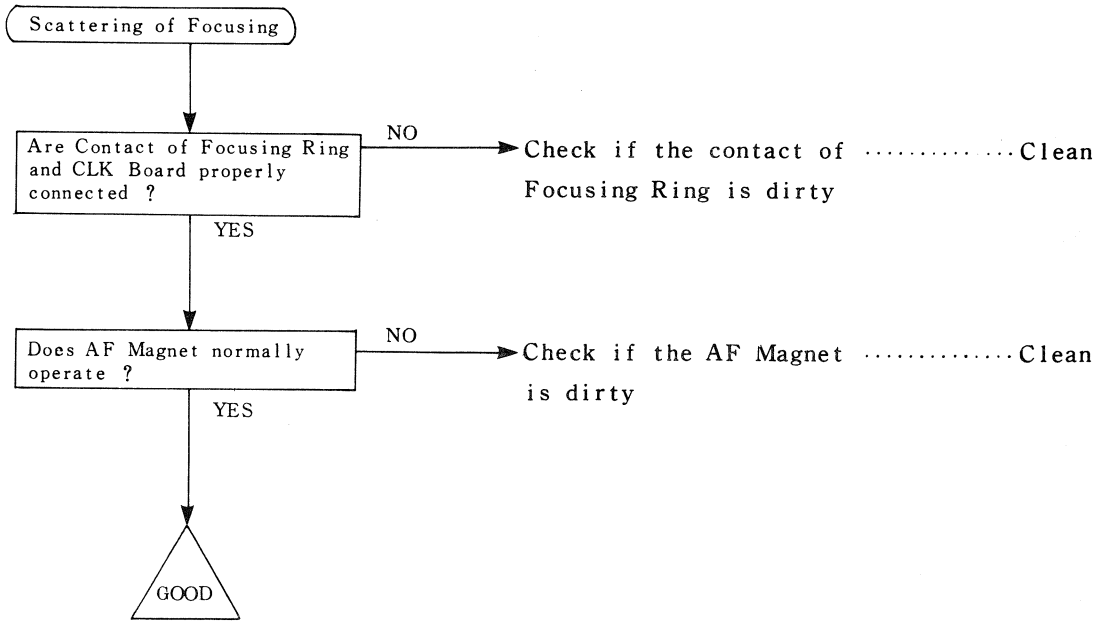
16-4-1



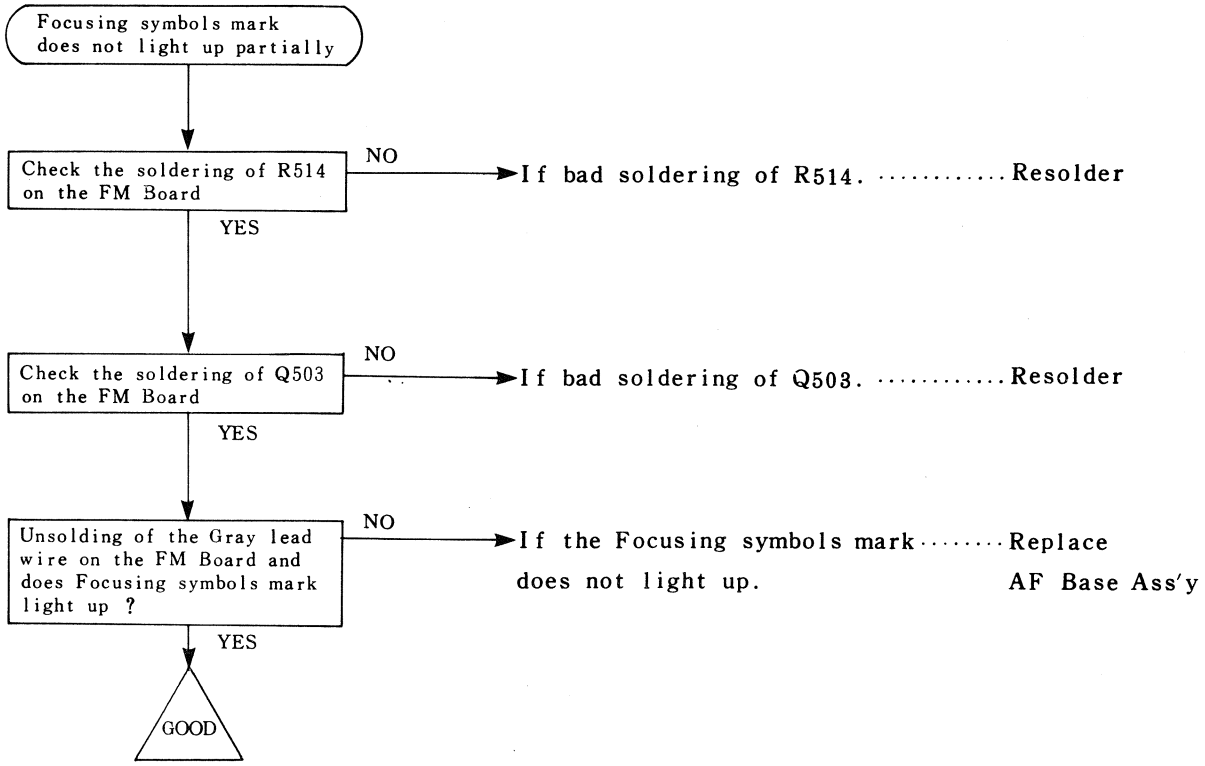
16-4-2


Focus at nearest subject distance all the time
Does Focusing Ring Ass'y normally operate ?
NO
If the Focusing Ring Spring is (370216) slipped out of the position. ····· Adjust
YES
Is FPC-G and AF Magnet properly connected ?
NO
If bad soldering points ····· Resolder of FPC-G and AF Magnet.
Check if soldering points of AF Magnet is played ····· Replace AF Magnet
YES
Is FPC-G and Shutter FPC properly connected. (Vcc) ?
NO
If bad soldering points ····· Resolder of FPC-G and Shutter FPC
YES
GOOD

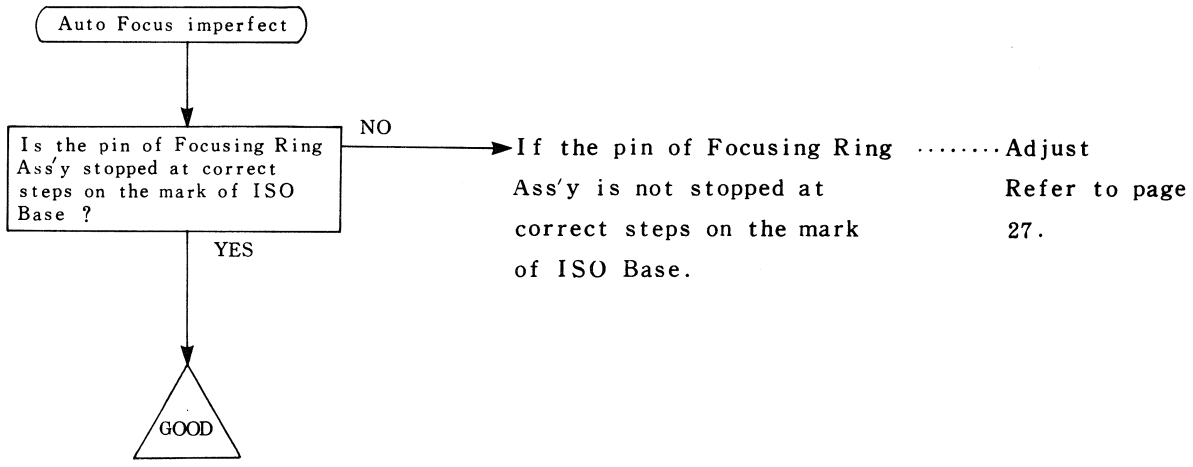
16-4-3


Scattering of Focusing
Are Contact of Focusing Ring and CLK Board properly connected ?
NO
Check if the contact of Focusing Ring is dirty ····· Clean
YES
Does AF Magnet normally operate ?
NO
Check if the AF Magnet is dirty ····· Clean
YES
GOOD

16-4-4

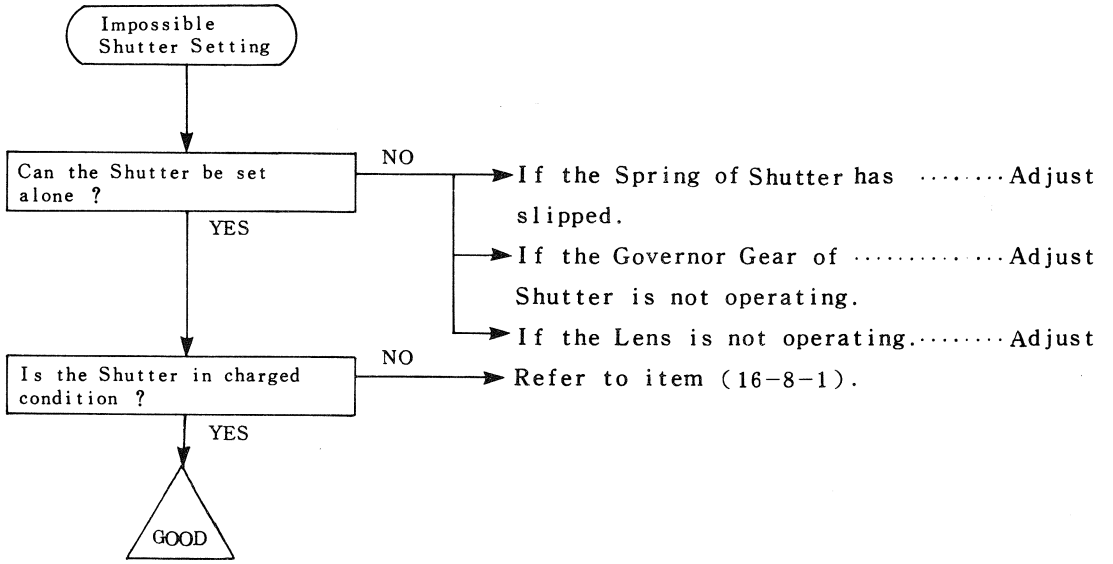

Focusing symbols mark does not light up partially
Check the soldering of R514 on the FM Board
NO
If bad soldering of R514. ..... Resolder
YES
Check the soldering of Q503 on the FM Board
NO
If bad soldering of Q503. ..... Resolder
YES
Unsolding of the Gray lead wire on the FM Board and does Focusing symbols mark light up ?
NO
If the Focusing symbols mark does not light up. ..... Replace AF Base Ass'y
YES
GOOD

16-4-5

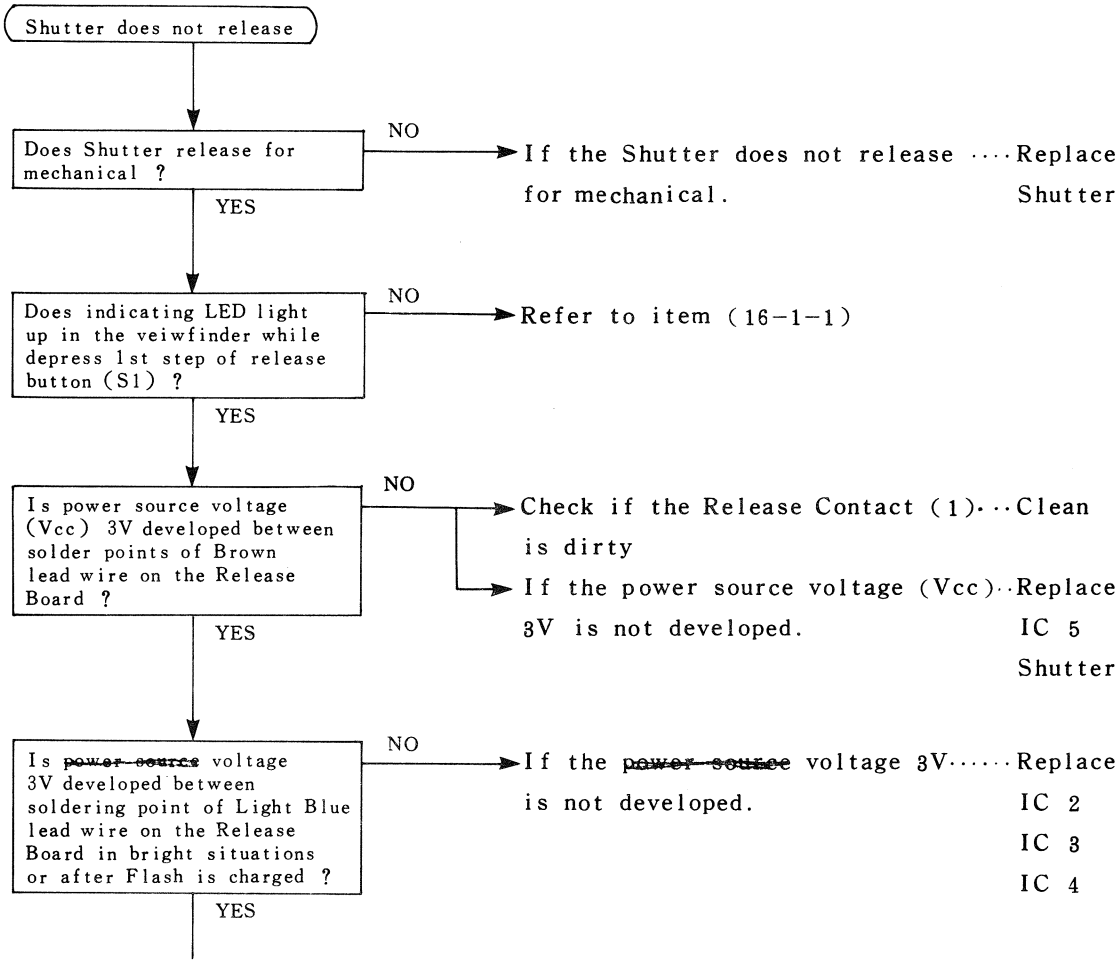

Auto Focus imperfect
Is the pin of Focusing Ring Ass'y stopped at correct steps on the mark of ISO Base ?
NO
If the pin of Focusing Ring Ass'y is not stopped at correct steps on the mark of ISO Base. ..... Adjust Refer to page 27.
YES
GOOD

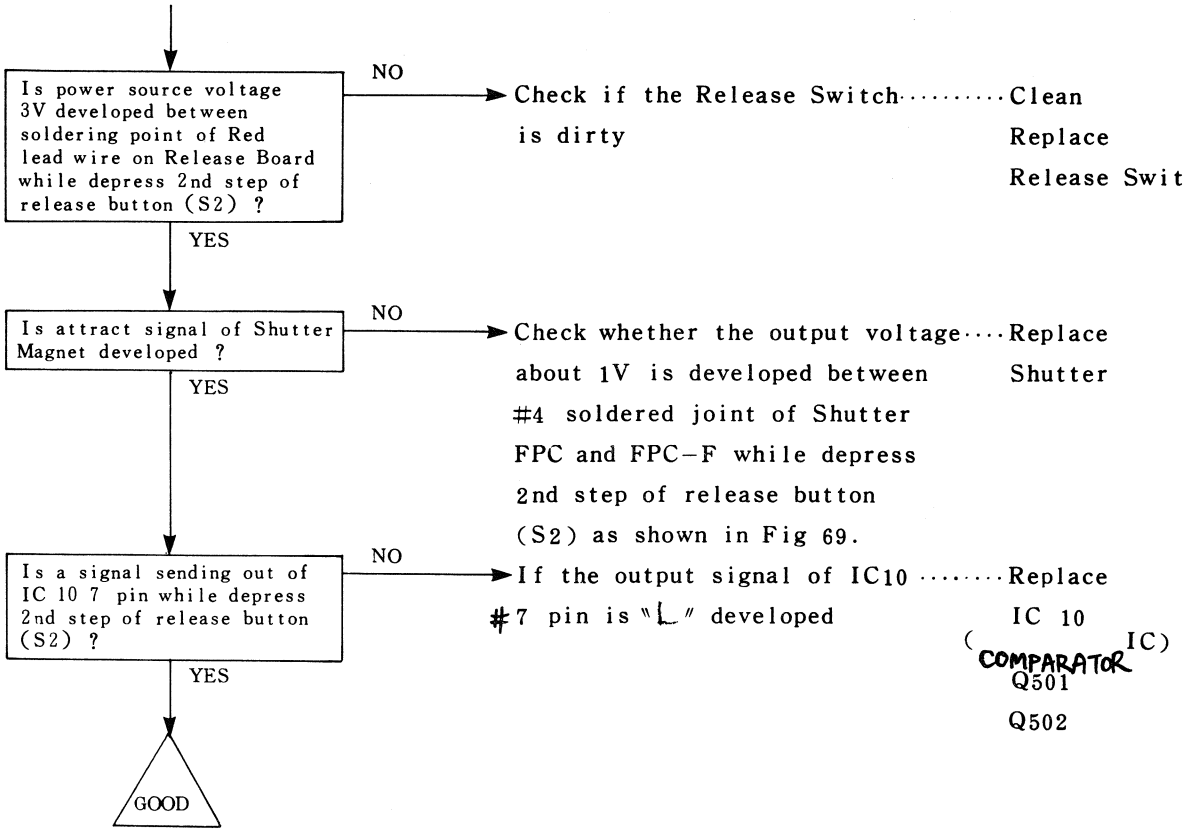
16-5 Defective Shutter

16-5-1



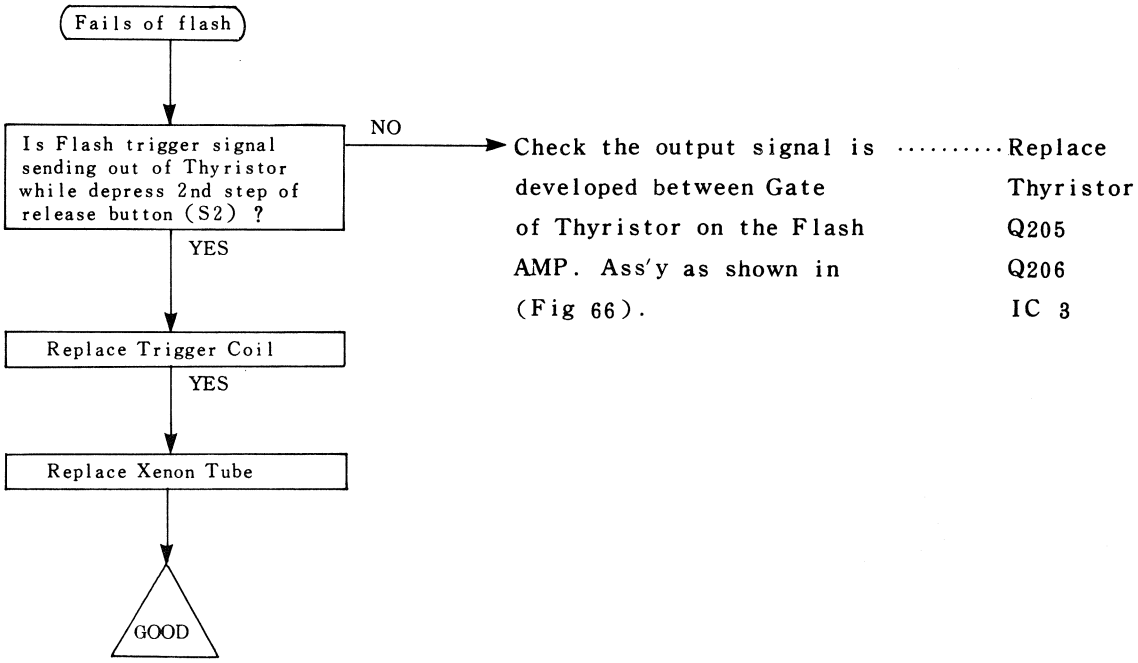
16-5-2





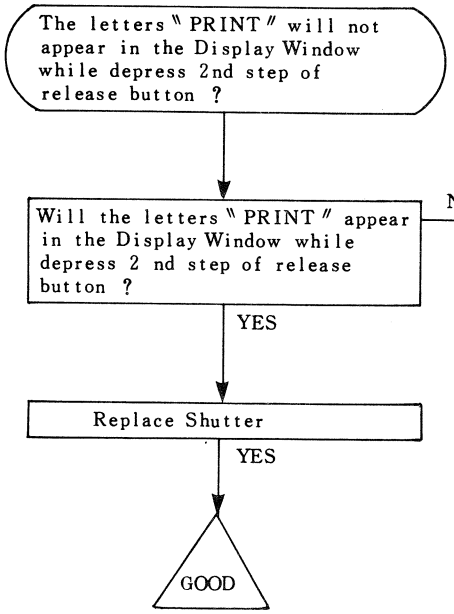
16-6 Defective Flash

16-6-1



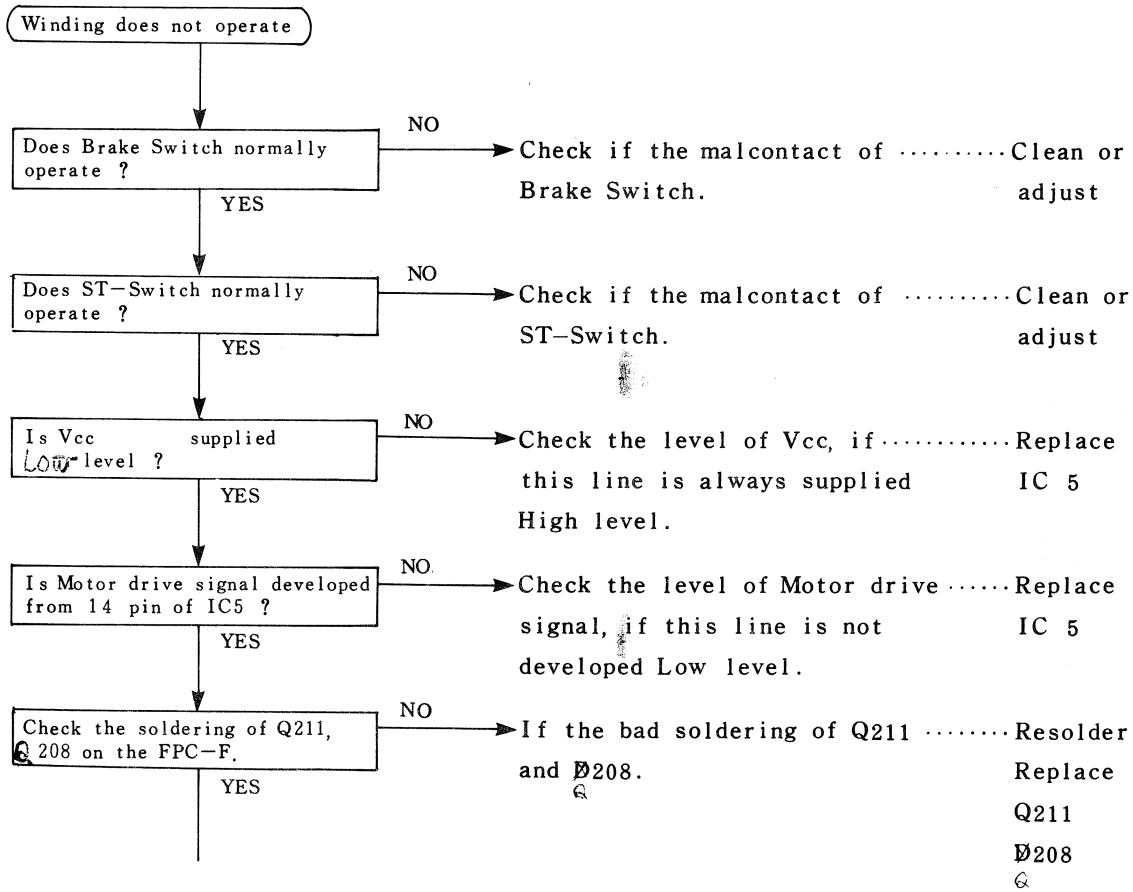
16-7 Defective Date

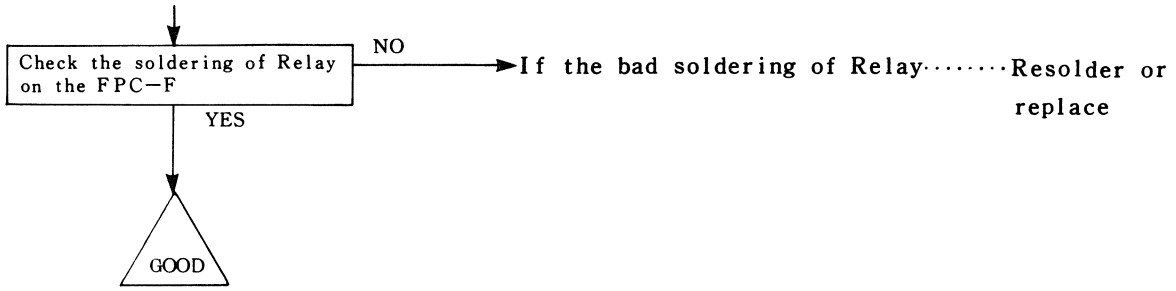
16-7-1



16-8 Defective Winding Mechanism

16-8-1



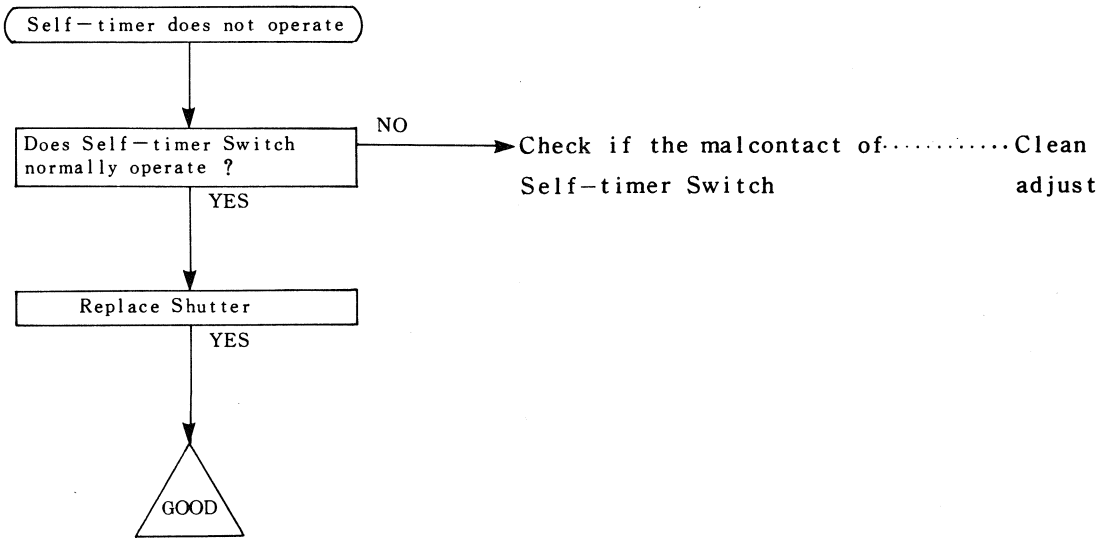


DEFECT No winding after Flash fire.

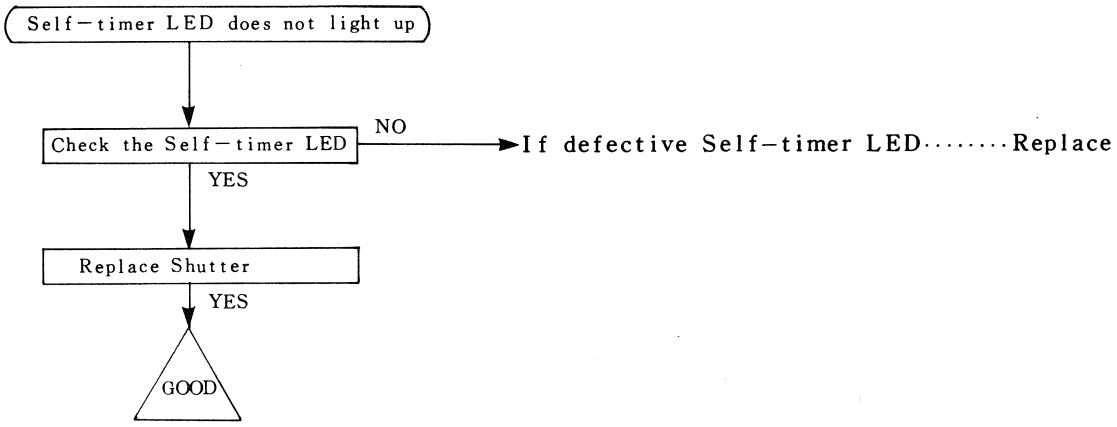
CAUSE When put the lead wires under the Trigger Coil and Osillation Transformer as shown in (Fig 10).

16-9 Defective Self-timer

16-9-1

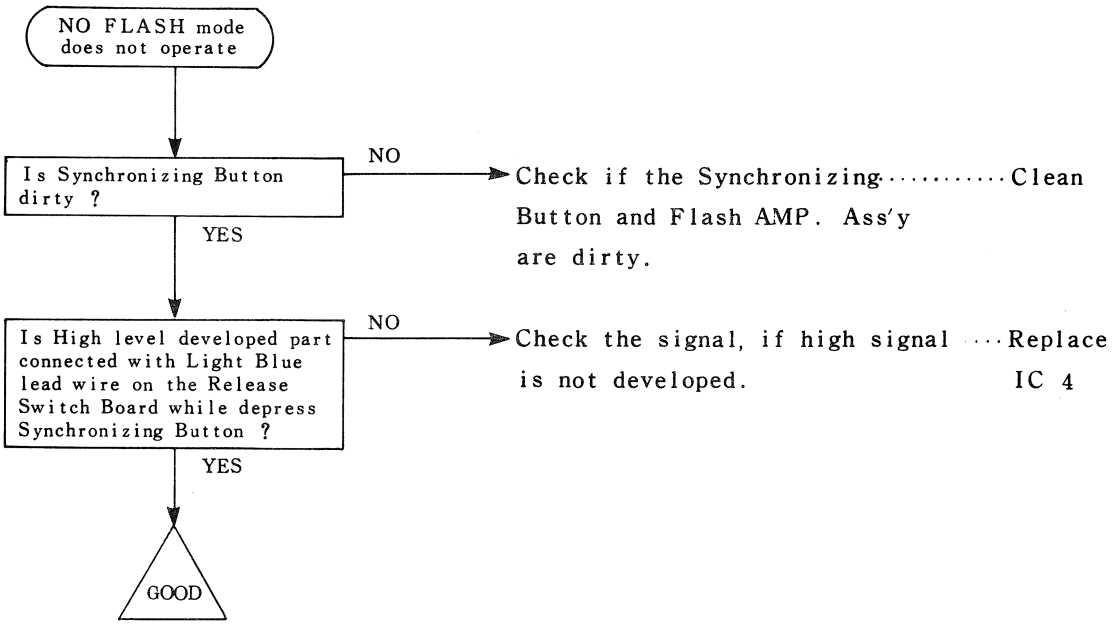


16-9-2



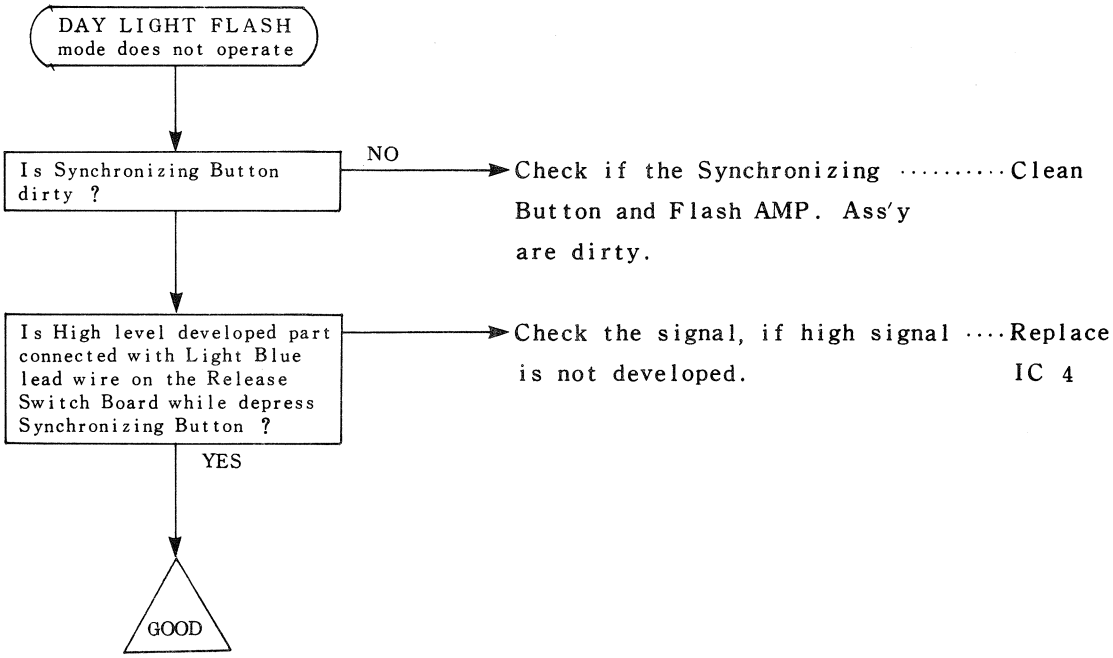
16-10 Defective NO FLASH Mode

16-10-1



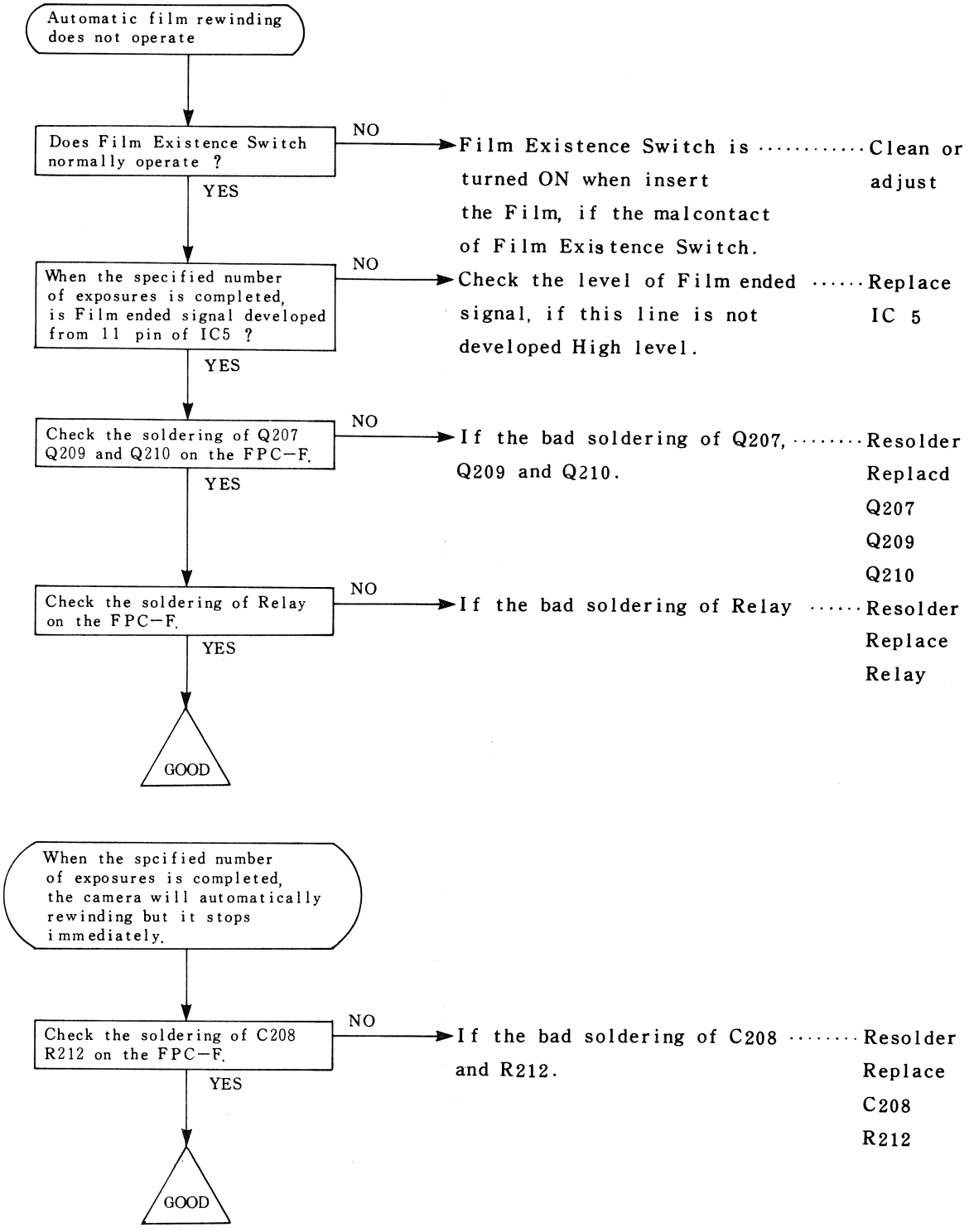
16-11 Defective DAY LIGHT FLASH Mode

16-11-1

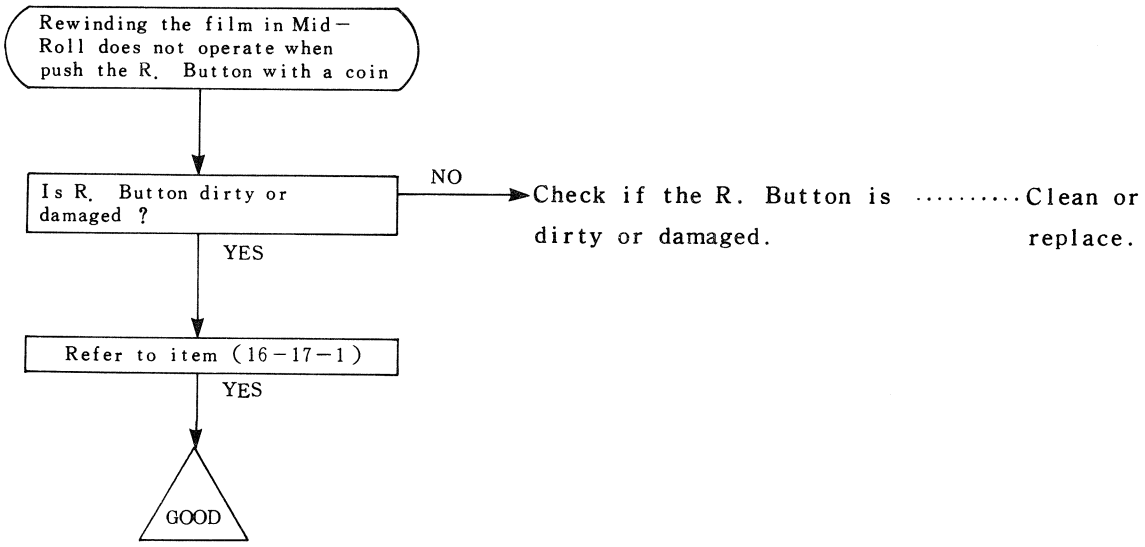


16-17 Defective Rewinding

16-17-1



16-17-2



DEFECT Rewind is not stoped.

CAUSE Film Existence Switch is kept ON.

DEFECT Winding is stoped at part way (about 1 ~20 snapshots) and it will automatically wind the film back into its cassette.

CAUSE R. Clutch Spring (374614) is slipped out of the position.

17 ELECTRICAL PARTS LIST AND LOCATION

This section complete Electrical parts list and Electrical parts location.

Note : When ordering for spare parts, please clarify a Model, parts number and quantity.

COMPLETE PARTS LIST OF FPC-F Ass'y

No.	Parts No.	Code	Descrption
1	374 502		Relay
2	360 551	D201	Diode
3	360 551	D202	Diode
4	360 551	D208	Diode
5	374 509	Q207	Transistor with resistor
6	358 525	C203	Capacitor 100μF 10V
7	159 556	R201	Resistor 1KΩ
8	159 556	R208	Resistor 1KΩ
9	159 559	R203	Resistor 100KΩ
10	159 559	R204	Resistor 100KΩ
11	159 559	R209	Resistor 100KΩ
12	159 559	R210	Resistor 100KΩ
13	374 517	C204	Capacitor 3.3μF 4V
14	374 517	C205	Capacitor 3.3μF 4V
15	374 572	R205	Resistor 2MΩ
16	374 504	IC 3	IC
17	152 510	Q202	Transistor
18	152 510	Q210	Transistor
19	374 508	Q201	Transistor with resistor
20	374 508	Q205	Transistor with resistor
21	374 507	Q203	Transistor with resistor
22	159 557	R202	Resistor 560Ω
23	374 503	IC 2	IC
24	374 573	R206	Resistor 1MΩ
25	374 573	R207	Resistor 1MΩ
26	374 573	R211	Resistor 1MΩ
27	374 573	R212	Resistor 1MΩ
28	374 516	C208	Capacitor 2.2μF 6.3V
29	374 515	C206	Capacitor 0.22μF 35V
30	370 511	C207	Capacitor 0.047μF
31	374 505	IC 4	IC
32	374 510	Q204	Transistor with resistor
33	374 510	Q206	Transistor with resistor
34	360 549	D204	Diode
35	360 549	D205	Diode
37	370 567	R213	Resistor 10KΩ
38	370 567	R216	Resistor 10KΩ
39	374 574	R214	Resistor 220Ω
40	372 503	IC 1	Regulator IC
41	374 523	Q211	Transistor
42	370 529	R217	Resistor 4.7 Ω
43	370 521	IC 5	IC
44	137 526	C209	Capacitor 0.047 F
45	374 514	C201	Capacitor 4.7μF 10V
46	374 514	C202	Capacitor 4.7μF 10V
47	374 514	C210	Capacitor 4.7μF 10V
48	374 571	R215	Resistor 220Ω
49	358 513	Q208	Transistor
50	368 519	D203	Diode

COMPLETE PARTS LIST OF FLASH AMP. Ass' y

No.	Parts No.	Code	Descrption
1	374 574	R107	Resistor 220Ω
2	374 574	R109	Resistor 220Ω
3	374 581	C104	Capacitor 0.022μF
4	374 575	R104	Resistor 680KΩ
5	370 511	C102	Capacitor 0.047μF
6	374 567	R105	Resistor 10KΩ
7	374 567	R108	Resistor 10KΩ
8	159 556	R103	Resistor 1KΩ
9	374 560	R102	Resistor 2KΩ
10	374 560	R110	Resistor 2KΩ
11	374 534	Q107	Transistor
12	374 541	R106	Resistor 2.7Ω
13	374 539	C109	Capacitor 470μF 6.3V
14	350 521	Q106	Transistor
15	358 525	C108	Capacitor 100μF 10V
16	374 532	Q103	Transistor with Resistor
17	374 527		Oscillation Transformer
18	374 531	Q104	Transistor
19	374 531	Q105	Transistor
20	776 507	C107	Capacitor 100PF 2KV
21	372 580	D103	Diode
22	372 576	R101	Resistor 1MΩ
23	346 552	C101	Capacitor 0.047μF 250V
24	360 527		Trigger Coil
25	223 50701	D101	Diode
26	374 535	D102	Zenner diode
27	350 582	Q101	Thyristor
28	374 530	Q102	Transistor
29	374 528	Ne	Ne Tube
30	374 54210	R111	Resistor
31	374 537	C103	Capacitor
32	372 583	TH	Thermistor

ELECTRICAL PARTS LOCATION

(Top side of Flash AMP Ass'y)

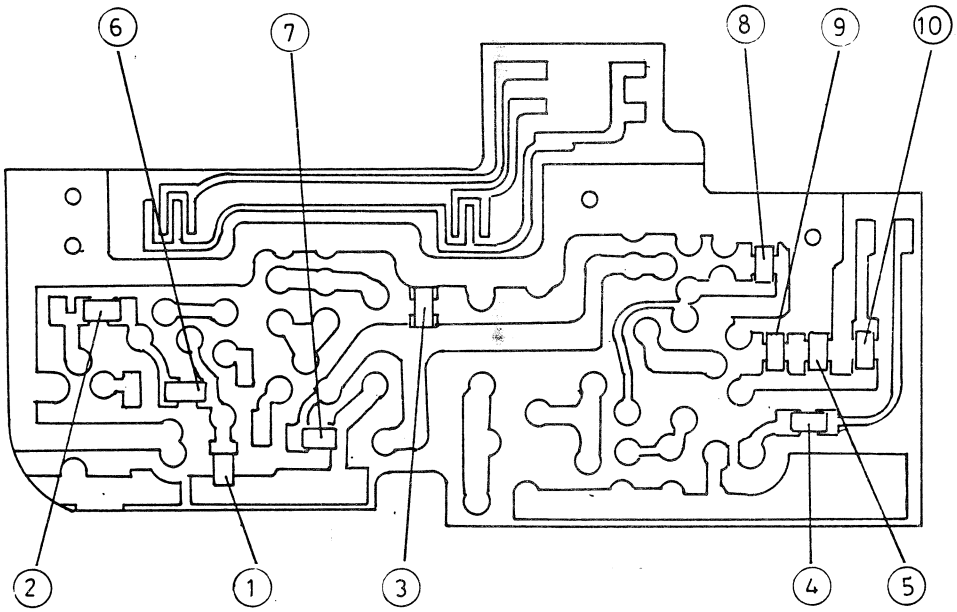


Fig 73

(Back side of Flash AMP Ass'y)

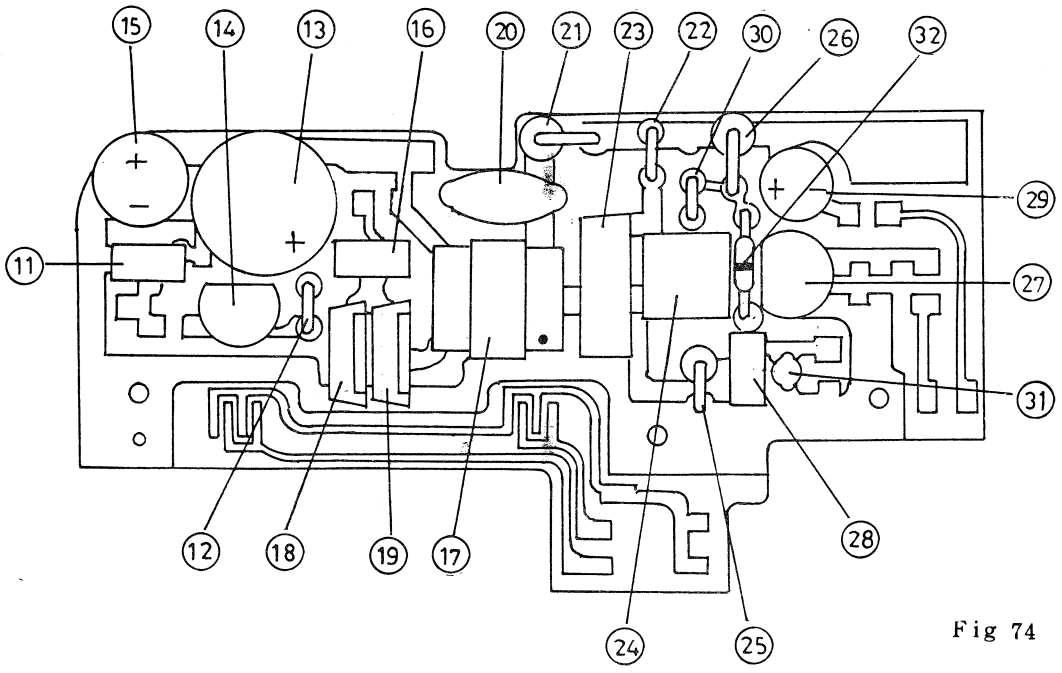


Fig 74

(FPC-F Ass'y)

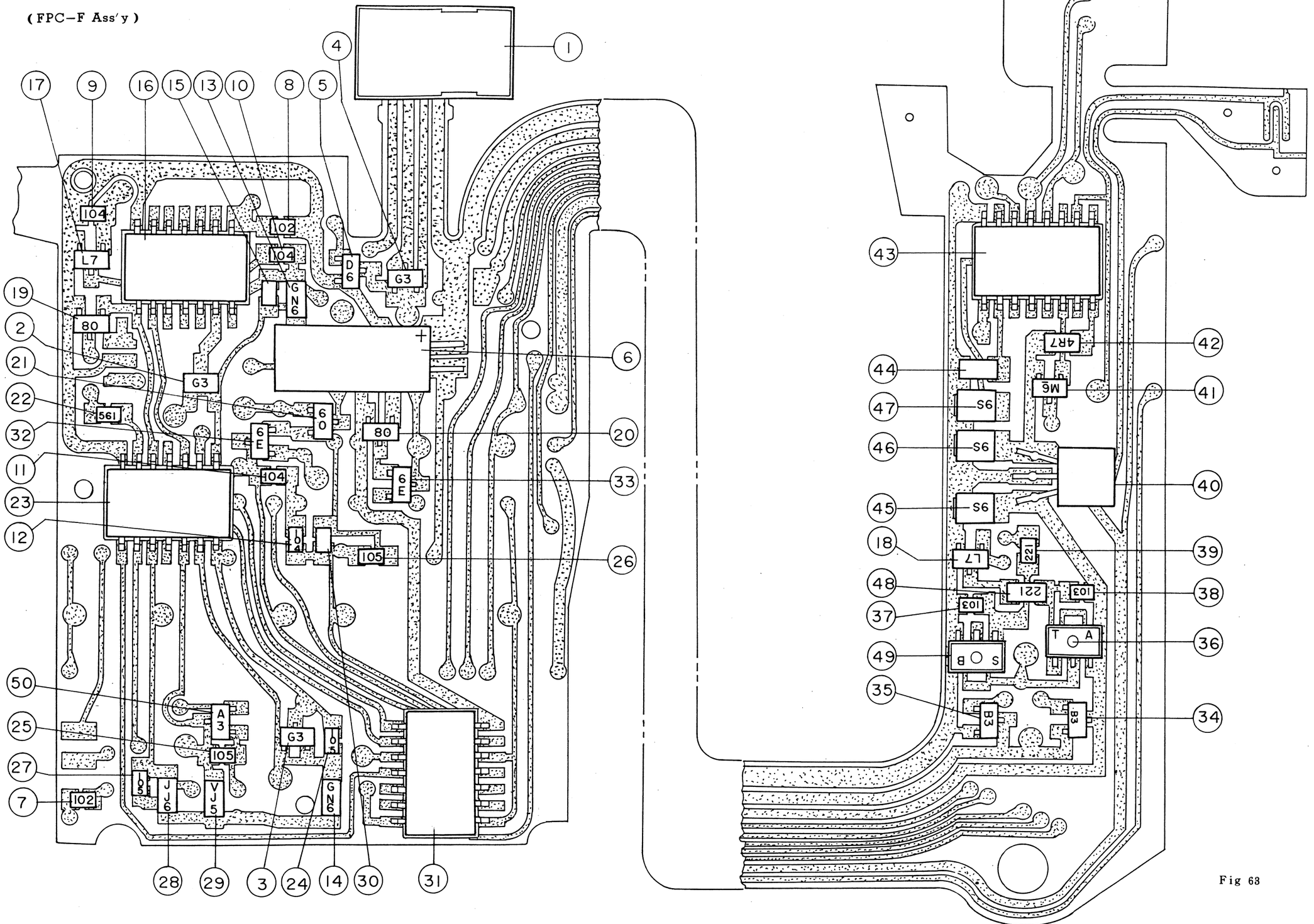
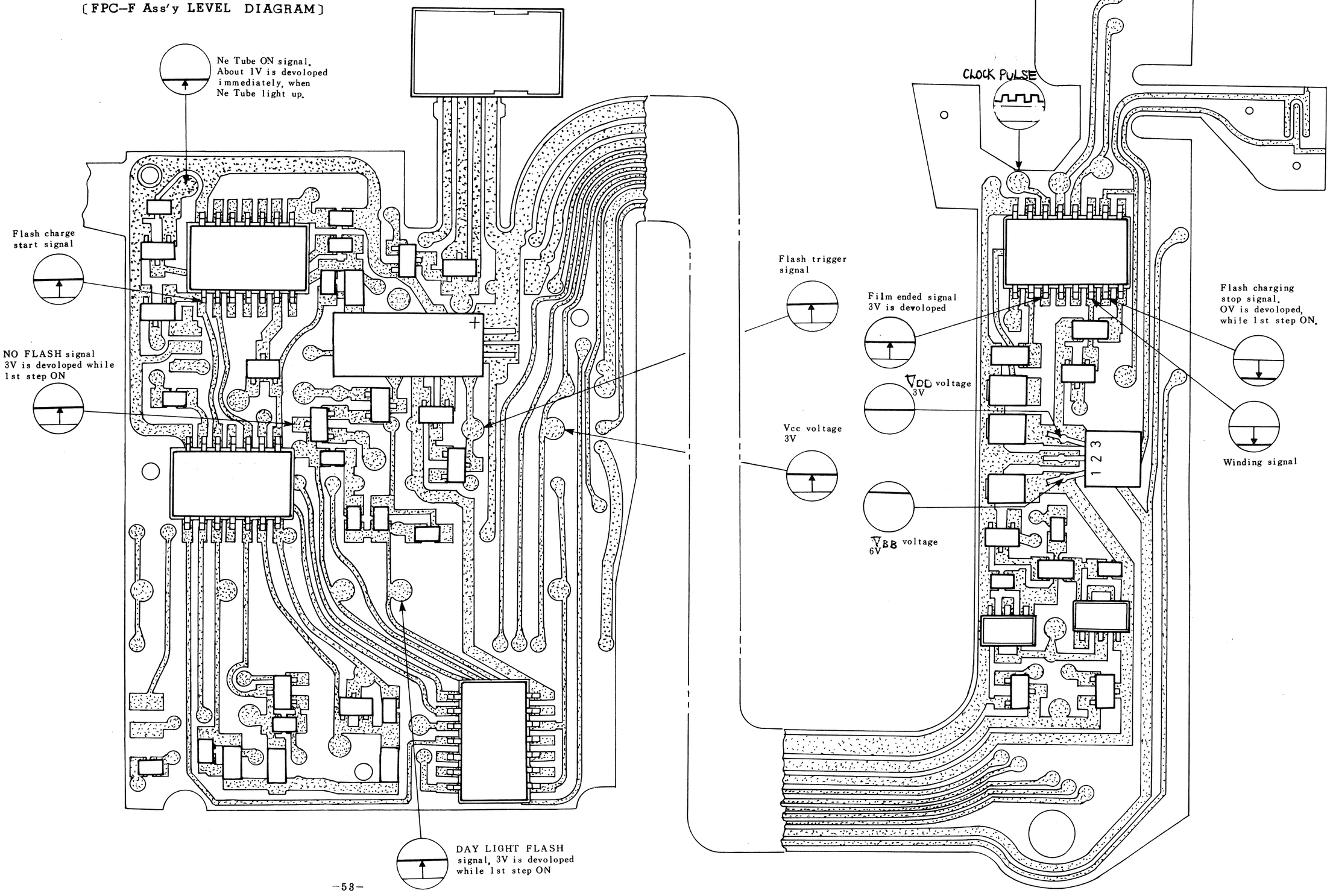
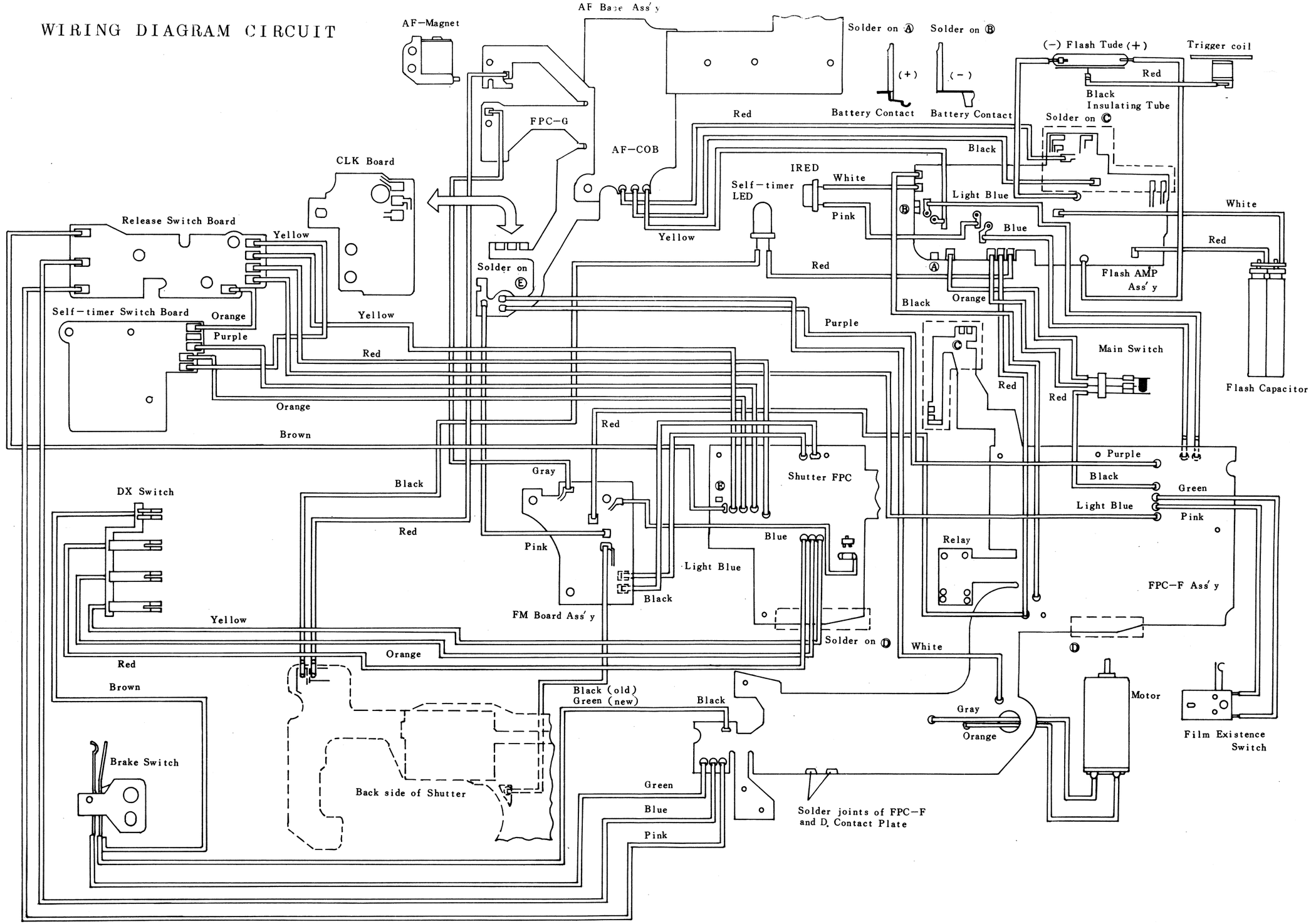


Fig 63

〔FPC-F Ass'y LEVEL DIAGRAM〕



WIRING DIAGRAM CIRCUIT



ELECTRICAL PARTS LOCATION

FPC-F Ass'y

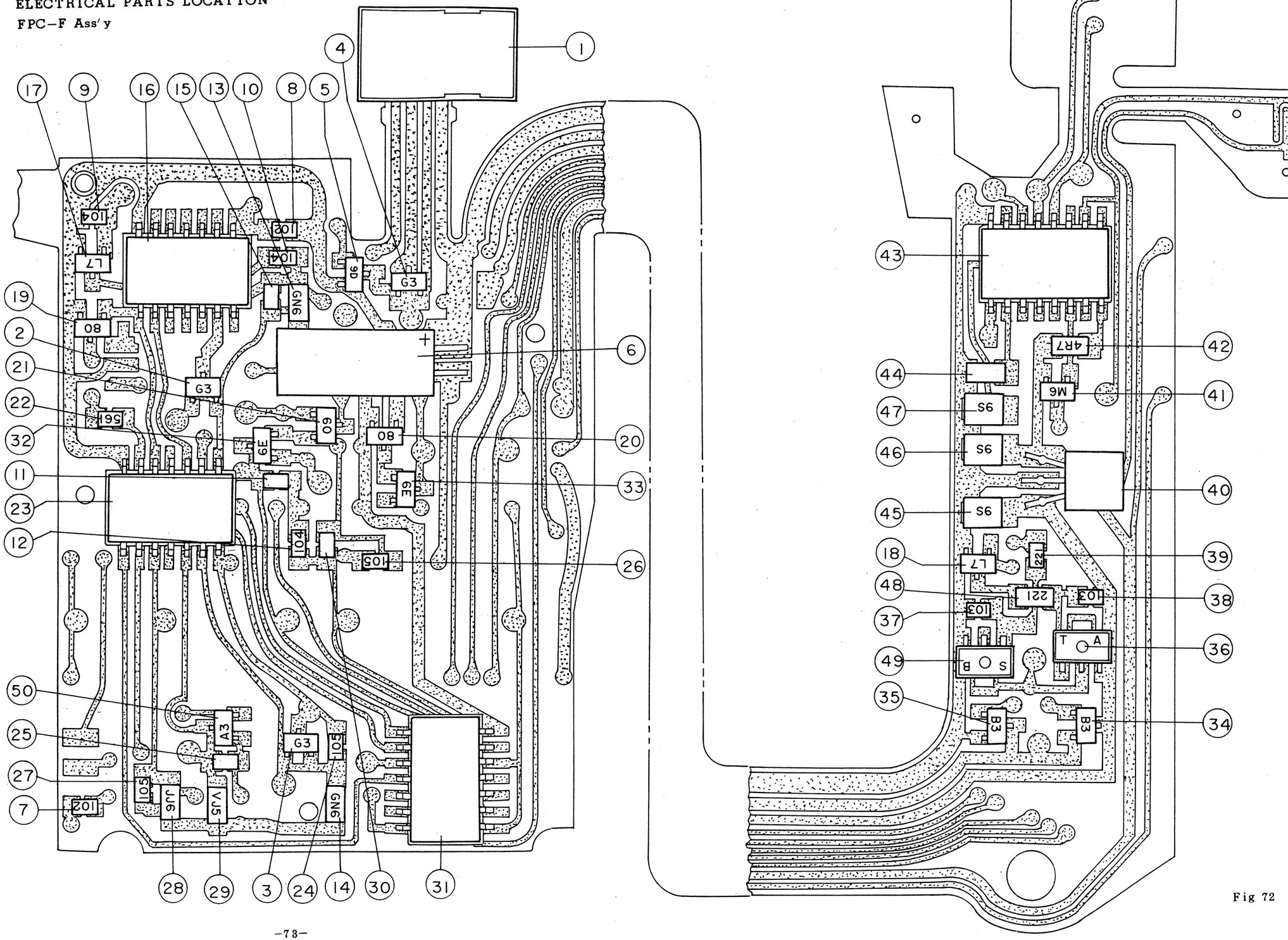
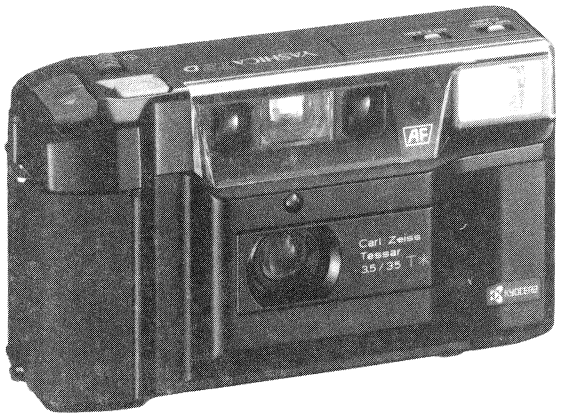


Fig 72

YASHICA

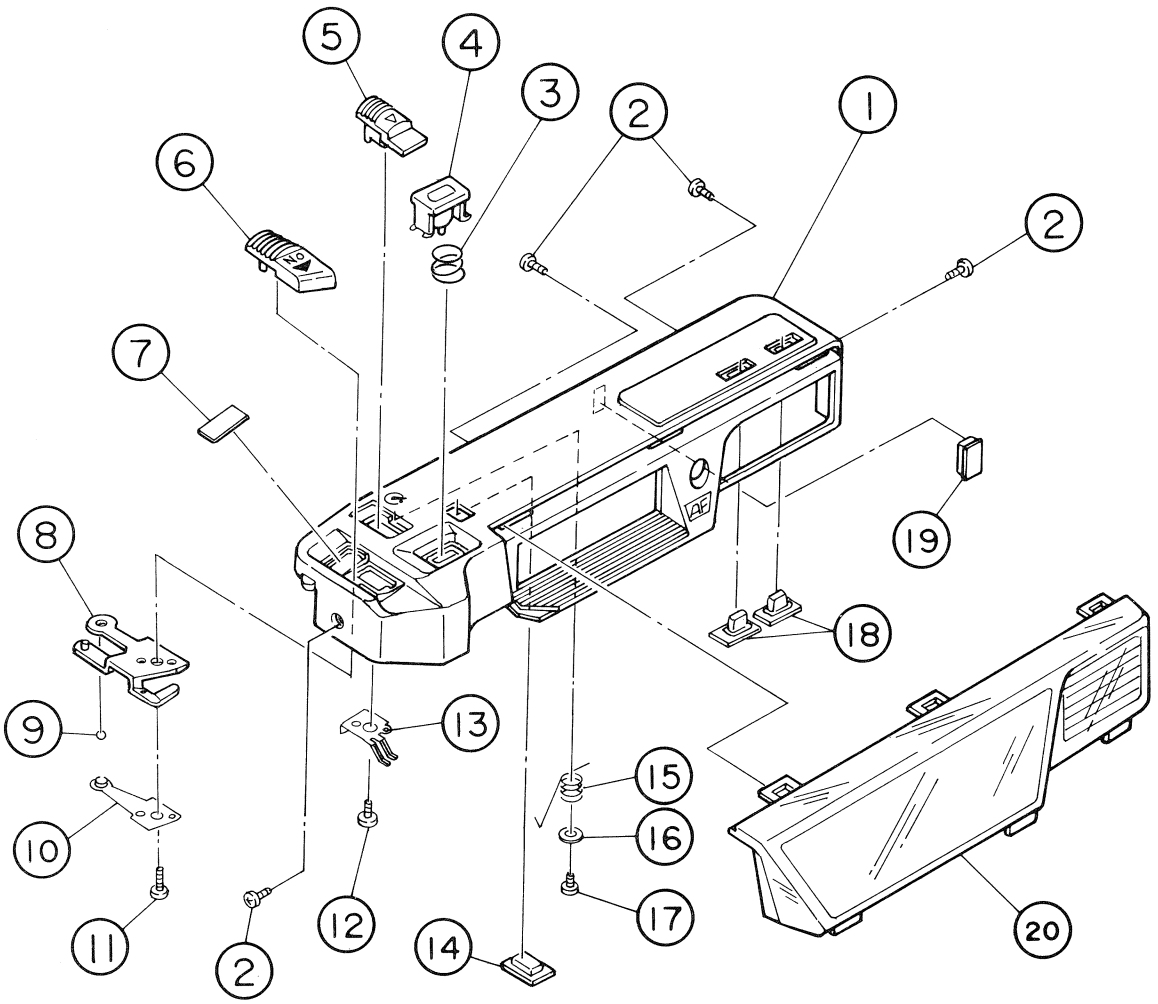
T2 / T2-D

ASSEMBLING CHART



KYOCERA CORPORATION
Optical Equipments Division

SERVICE 860601

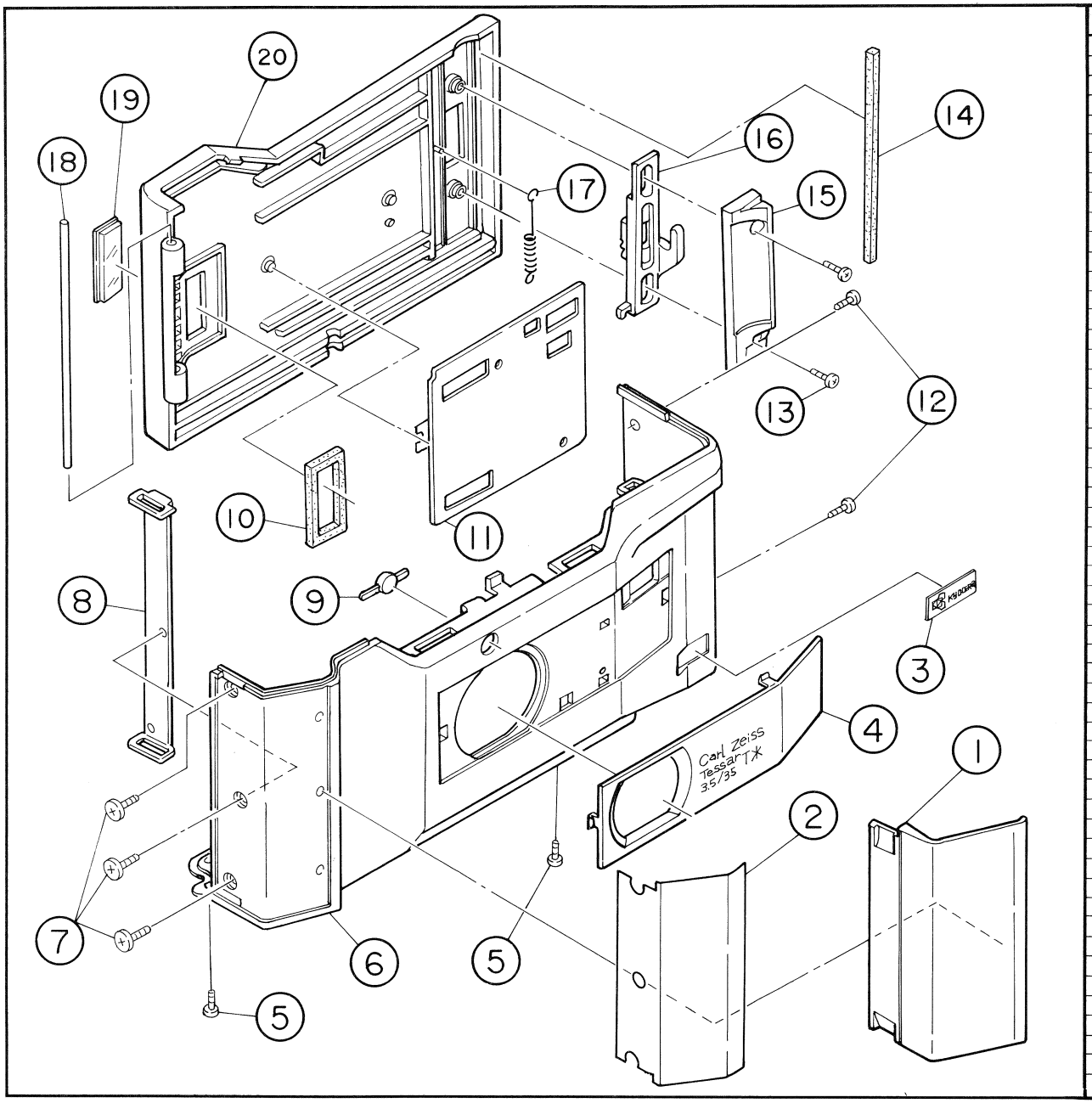


	PARTS NO.	DESCRIPTION	QTY
1	*	TOP COVER	1
2	64213529	TOP COVER S.S.	4
3	374 313	RELEASE BUTTON SPRING	1
4	374 310	RELEASE BUTTON	1
5	374 325	SELF-TIMER LEVER	1
6	374 320	MAIN SWITCH LEVER	1
7	374 323	MAIN SWITCH NAME PLATE	1
8	374 321	MAIN SWITCH LEVER FIXER	1
9	66702020	STEEL BALL	1
10	374 322	MAIN SWITCH CLICK PLATE	1
11	64214026	MAIN SWITCH LEVER S.S.	1
12	64212526	SELF-TIMER CONTACT S.S.	1
13	374 327	SELF-TIMER CONTACT	1
14	374 308	COUNTER WINDOW	1
15	374 329	SELF-TIMER CONTACT SPRING	1
16	60331822	SELF-TIMER CONTACT WASHER	1
17	64112026	SELF-TIMER CONTACT S.S.	1
18	374 123	SYNCHRONIZING BUTTON	2
19	374 309	INDICATOR WINDOW	1
20	374 307	FINDER WINDOW	1

1,3-17,19,20.

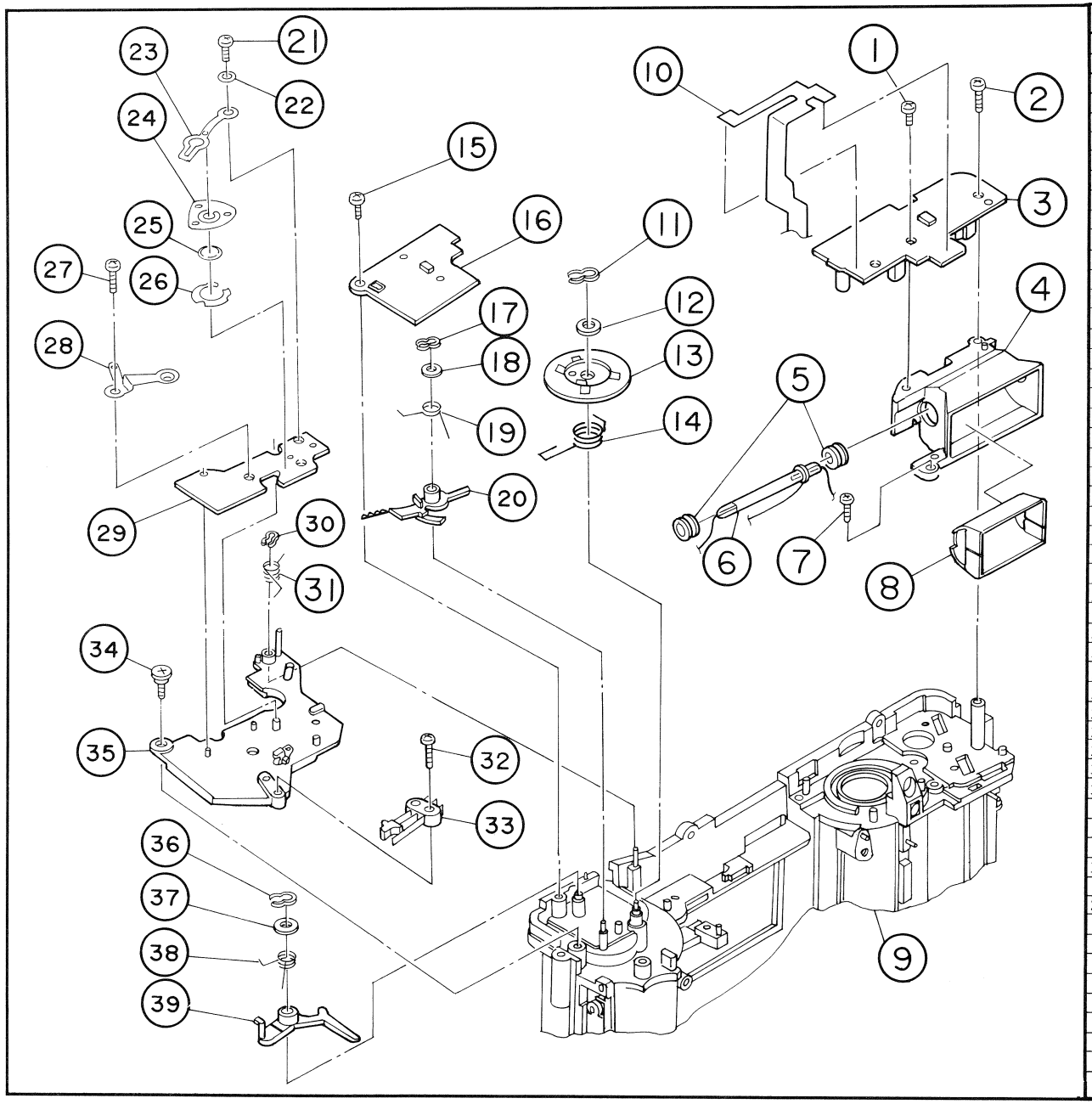
374 052	TOP COVER ASS'Y (KYOCERA-T) (FOR JAPAN)
375 052	TOP COVER ASS'Y (KYOCERA-T D) (FOR JAPAN)
374 055	TOP COVER ASS'Y (YASHICA-T2) (FOR EXPORT)
375 055	TOP COVER ASS'Y (YASHICA-T2 D) (FOR EXPORT)

PARTS MARKED * ARE NOT AVAILABLE



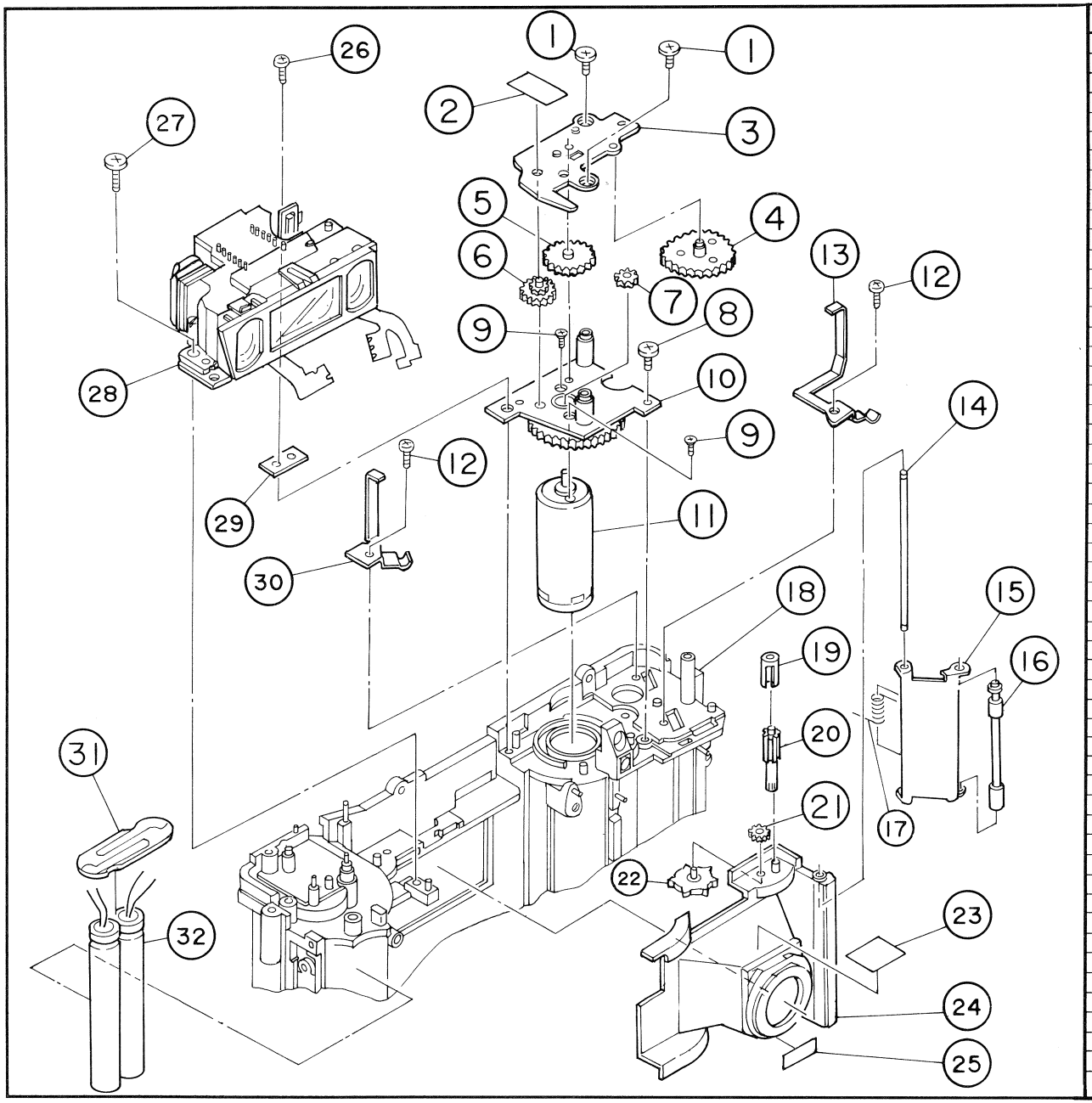
	PATTS NO.	DESCRIPTION	QTY
1	374 303	GRIP COVER	1
2	374 312	GRIP TAPE	1
3	374 311	KYOCERA NAME PLATE	1
4	374 316	FRONT PANEL (2)	1
5	64114029	FRONT COVER S.S.	2
6	374 301	FRONT COVER	1
7	66001025	FRONT COVER S.S.	3
8	374 137	STRAP HOLDER	1
9	350 316	LIGHT GATHERING LENS	1
10	358 128	FILM CHECK WINDOW MOQUETTE	1
11	374 037	PRESSURE PLATE ASS'Y	1
12	64213529	FRONT COVER S.S.	2
13	64213526	B.C RELEASE COVER S.S.	2
14	374 113	BACK COVER MOQUETTE	1
15	360 137	B.C RELEASE COVER	1
16	374 108	B.C RELEASE PLATE	1
17	360 141	B.C RELEASE PLATE SPRING	1
18	374 110	HINGE SHAFT	1
19	374 109	FILM CHECK WINDOW	1
20	374 105	BACK COVER	1
2,4,6,9.			
	374 051	FRONT COVER ASS'Y	1
10,11,13-17,19,20.			
	374 033	BACK COVER ASS'Y	1

PARTS MARKED * ARE NOT AVAILABLE



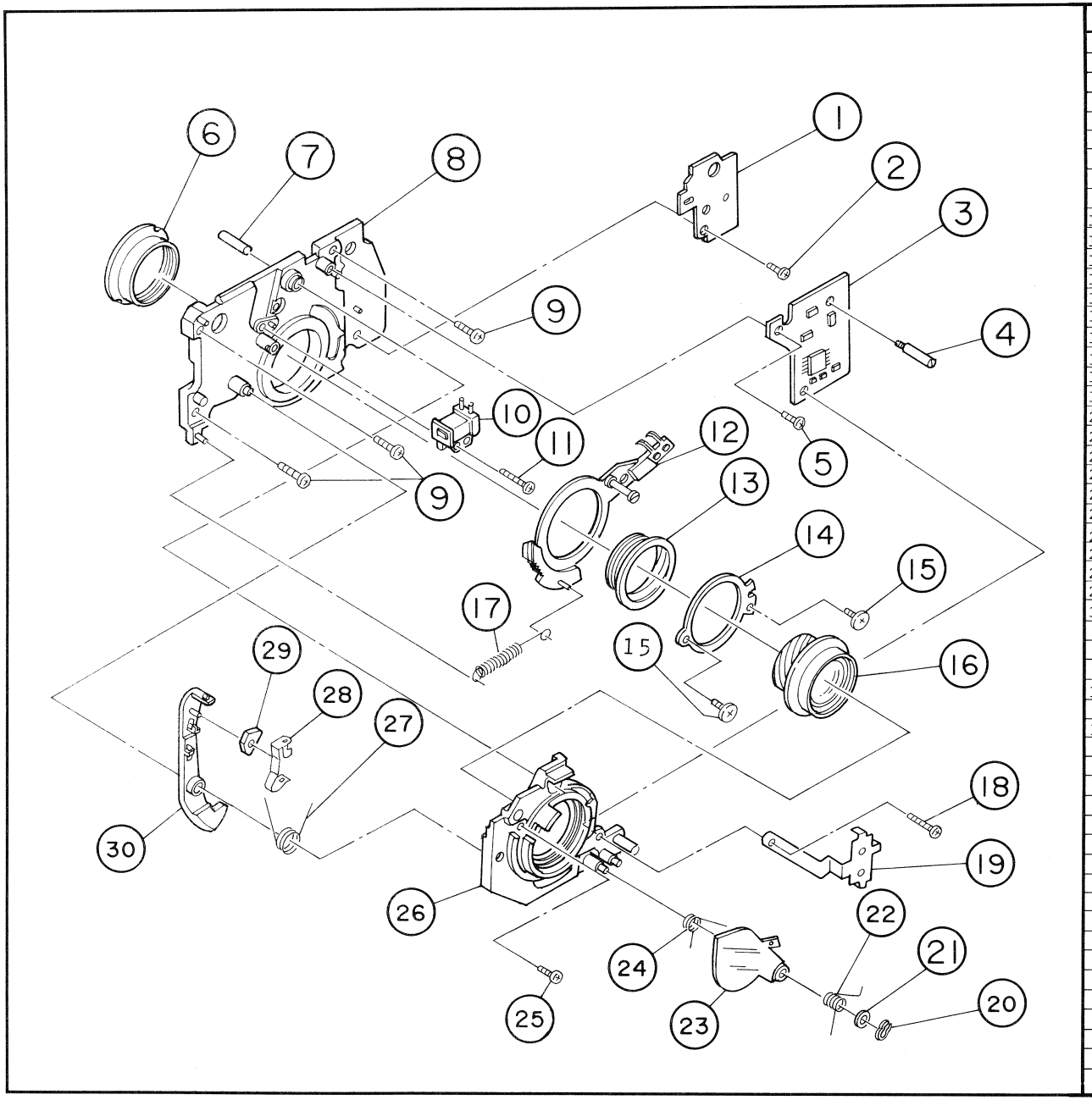
	PARTS NO.	DESCRIPTION	QTY
1	64213026	FLASH AMP. S.S.	1
2	64215026	FLASH AMP. S.S.	1
3	374 073	FLASH AMP ASS'Y	1
4	374 120	FLASH CASE	1
5	374 122	FLASH TUBE HOLDER	2
6	374 529	FLASH TUBE	1
7	64215026	FLASH CASE S.S.	1
8	374 121	REFLECTOR	1
9	*	BODY	1
10	*	FPC-F (See page No. 6.7.)	
11	66172022	GS-RING (GS-20)	1
12	60322110	COUNTER WASHER	1
13	374 402	COUNTER DRUM	1
14	360 417	COUNTER SPRING	1
15	64213526	SELF-TIMER SWITCH BOARD S.S.	1
16	374 075	SELF-TIMER SWITCH BOARD ASS'Y	1
17	66171522	GS-RING (GS-15)	1
18	60441510	C-SWITCH LEVER WASHER	1
19	374 407	C-SWITCH LEVER SPRING	1
20	374 406	C-SWITCH LEVER	1
21	64113026	RELEASE CONTACT S.S.	1
22	60121810	RELEASE CONTACT WASHER	1
23	374 411	RELEASE CONTACT (2)	1
24	374 412	RELEASE SWITCH HOLDER	1
25	360 412	RELEASE SWITCH	1
26	360 413	RELEASE SPACER	1
27	64214526	RELEASE CONTACT S.S.	1
28	374 410	RELEASE CONTACT (1)	1
29	374 079	RELEASE SWITCH BOARD ASS'Y	1
30	66171522	GS-RING (GS-15)	1
31	360 404	C. OPERATION GEAR SPRING	1
32	64216026	MAIN SWITCH S.S.	1
33	374 062	MAIN SWITCH ASS'Y	1
34	358 611	COUNTER BASE PLATE S.S.	1
35	*	COUNTER BASE PLATE	1
36	66172022	GS-RING (GS-20)	1
37	60322110	C. REVERSE LEVER WASHER	1
38	374 405	C. REVERSE LEVER SPRING	1
39	374 404	C. REVERSE LEVER	1
1,3-6,8.			
	374 034	FLASH ASS'Y	1
21-26,29,35			
	374 061	COUNTER BASE PLATE ASS'Y	1

PARTS MARKED * ARE NOT AVAILABLE



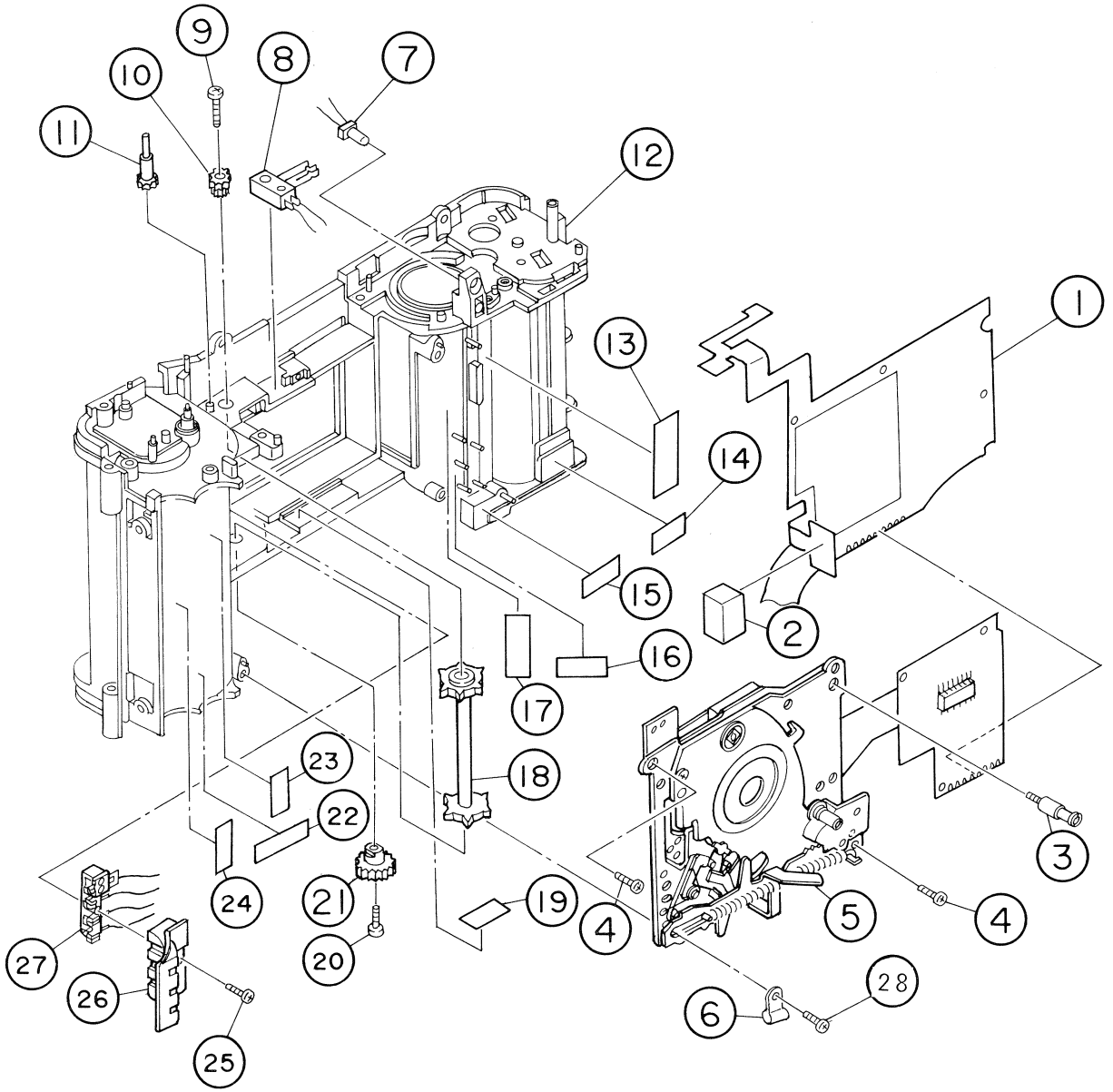
	PARTS NO.	DESCRIPTION	QTY
1	66001068	GOVERNOR BASE PLATE(UPPER)S.S.	2
2	*	DOUBLE COATED TAPE	1
3	360 601	GOVERNOR BASE PLATE (UPPER)	1
4	360 613	GEAR (4)	1
5	360 612	GEAR (3)	1
6	360 611	GEAR (2)	1
7	360 610	MOTOR PINION	1
8	66001068	GOVERNOR BASE PLATE(LOWER) S.S.	1
9	66001075	MOTOR S.S.	2
10	043 602	GOVERNOR BASE PLATE(LOWER)ASS'Y	1
11	374 618	MOTOR	1
12	64213026	BATTERY CONTACT S.S.	2
13	374 116	BATTERY CONTACT (-)	1
14	374 119	A.L. ROLLER SHAFT	1
15	374 118	A.L. ROLLER HOLDER	1
16	374 117	A.L. ROLLER	1
17	350 135	A.L. ROLLER SPRING	1
18	*	BODY	1
19	360 125	F. SIGNAL DRUM	1
20	360 111	F. SIGNAL GEAR(2)	1
21	360 110	F.SIGNAL GEAR (1)	1
22	360 109	F. SIGNAL SPROCKET	1
23	*	DOUBLE COATED TAPE	1
24	*	LIGHT-PROOF FRAME ASS'Y	1
25	*	DOUBLE COATED TAPE	1
26	64214526	AF BASE S.S.	1
27	66001032	AF BASE S.S.	1
28	374 091	AF BASE ASS'Y	1
29	370 811	AF BASE WASHER	1
30	374 115	BATTERY CONTACT (+)	1
31	374 548	CAPACITOR BOARD	1
32	374 538	FLASH CAPACITOR	2
14-17,21,22,24.			
	374 032	LIGHT-PROOF FRSME ASS'Y	1
31,32.			
	374 074	FLASH CAPACITOR ASS'Y	1

PARTS MARKED * ARE NOT AVAILABLE



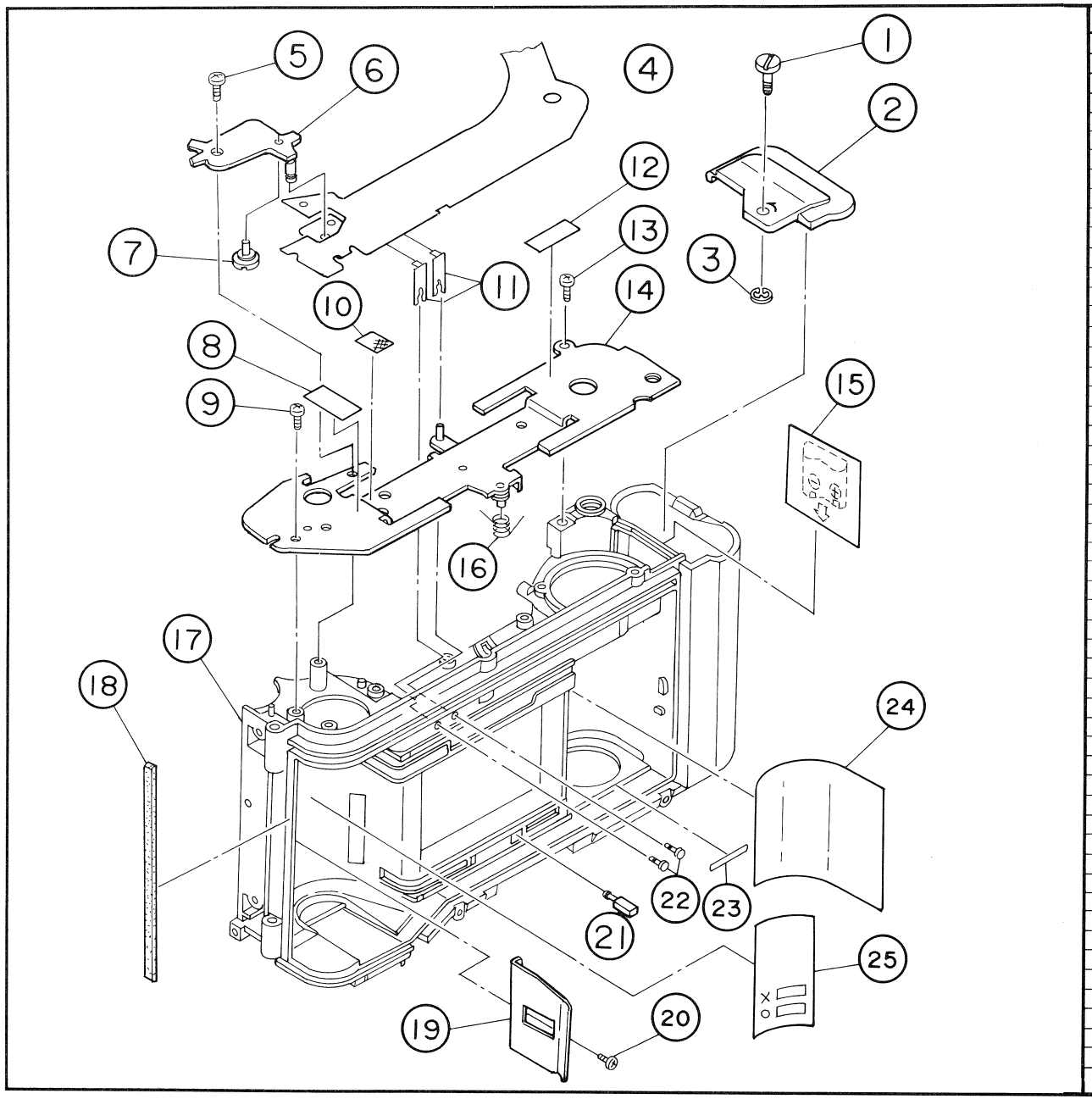
	PARTS NO.	DESCRIPTION	QTY
1	374 563	CLK BOARD	1
2	61914026	FRONT BASE PLATE S.S.	1
3	374 077	FM BOARD ASS'Y	1
4	374 207	LOCK LEVER SHAFT	1
5	64213526	FM BOARD S.S.	1
6	360 215	HELICOID NUT	1
7	374 202	FIBER TUBE	1
8	370 201	FRONT PLATE	1
9	63914526	FRONT PLATE S.S.	3
10	374 550	AF MAGNET	1
11	64204222	AF MAGNET S.S.	1
12	370 041	FOCUSING RING ASS'Y	1
13	*	HELICOID	1
14	360 213	FOCUS ADJUSTING RING	1
15	66001076	FOCUS RING S.S.	2
16	*	LENS	1
17	370 216	FOCUSING RING SPRING	1
18	63914526	RELAY FIXER S.S.	1
19	374 209	RELAY FIXER	1
20	66172022	GS-RING (GS-20)	1
21	60322610	BARRIER WASHER	1
22	360 220	BARRIER SPRING (1)	1
23	360 203	BARRIER	1
24	360 221	BARRIER SPRING (2)	1
25	64214026	ISO BASE PLATE S.S.	1
26	370 202	ISO BASE PLATE	1
27	370 218	AF STOPPER SPRING	1
28	360 216	MOVABLE PLATE SPRING	1
29	360 571	MOVABLE PLATE	1
30	360 206	AF STOPPER	1
1,6-8,10-17,27-30.			
	374 076	FRONT BASE PLATE ASS'Y	1
13,16			
	360 226	LENS ASS'Y	1

PARTS MARKED * ARE NOT AVAILABLE



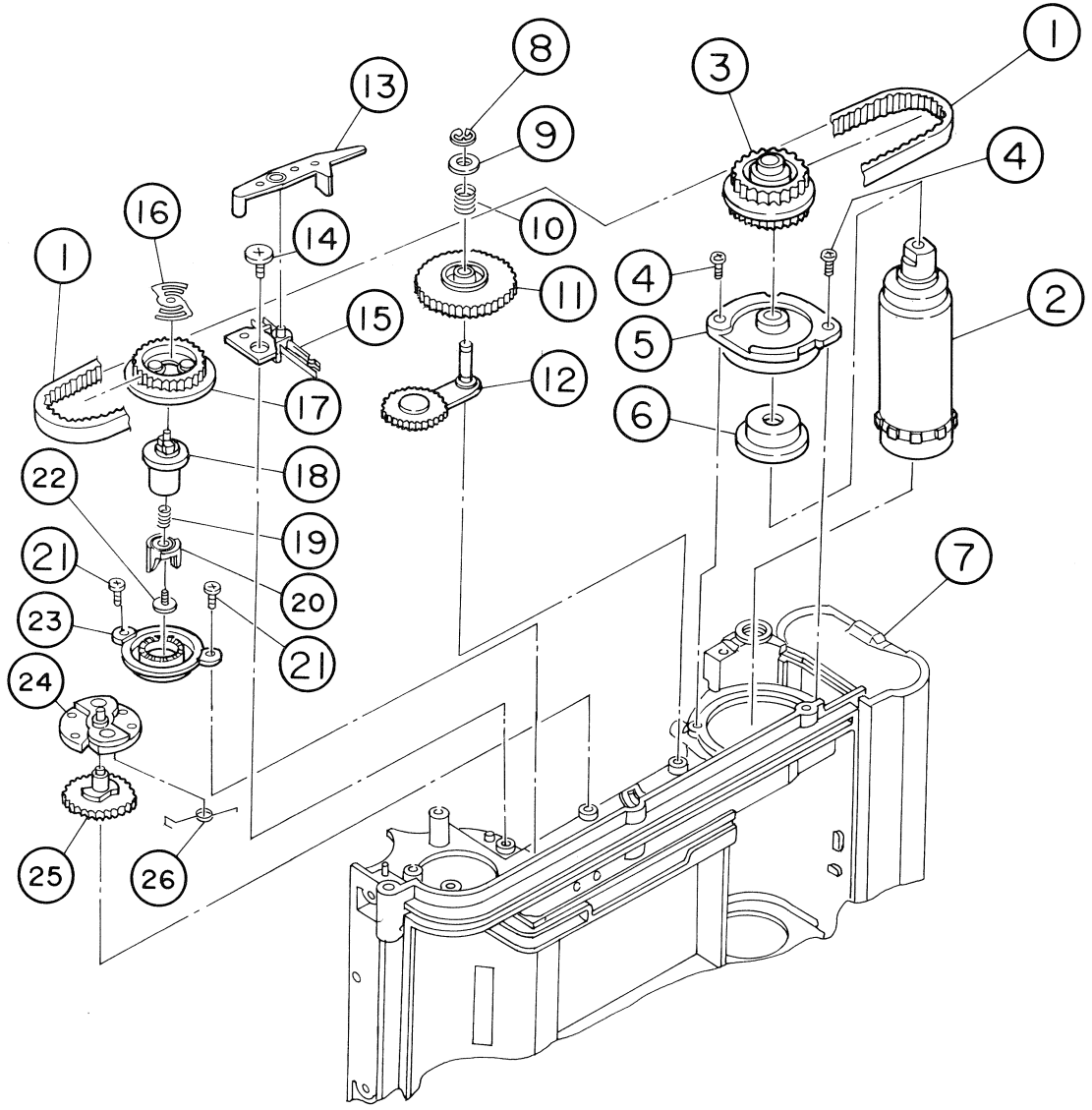
	PARTS NO.	DESCRIPTION	QTY
1	*	FPC-F	1
2	374 502	RELAY	1
3	370 214	FM BOARD S.S.(1)	1
4	64213526	SHUTTER S.S.	2
5	374 041	SHUTTER ASS'Y	1
6	110 928	LEAD WIRE FIXER	1
7	358 523	SELF-TIMER LED	1
8	374 035	FILM EXISTENCE SWITCH	1
9	64217026	SPROCKET GEAR S.S.	1
10	350 617	SPROCKET GEAR	1
11	374 403	C. OPERATION GEAR	1
12	*	BODY	1
13	*	DOUBLE COATED TAPE	1
14	*	DOUBLE COATED TAPE	1
15	*	DOUBLE COATED TAPE	1
16	*	DOUBLE COATED TAPE	1
17	*	DOUBLE COATED TAPE	1
18	374 623	SPROCKET	1
19	*	DOUBLE COATED TAPE	1
20	64217026	S. GEAR S.S.	1
21	350 410	S.GEAR	1
22	*	DOUBLE COATED TAPE	1
23	*	DOUBLE COATED TAPE	1
24	*	DOUBLE COATED TAPE	1
25	64214526	DX SWITCH S.S.	1
26	370 108	DX SWITCH COVER	1
27	374 036	DX SWITCH ASS'Y	1
28	64214026	SHUTTER S.S	1
1,2.			
	374 071	FPC-F ASS'Y	1
		(See Page No.7)	

PARTS MARKED * ARE NOT AVAILABLE



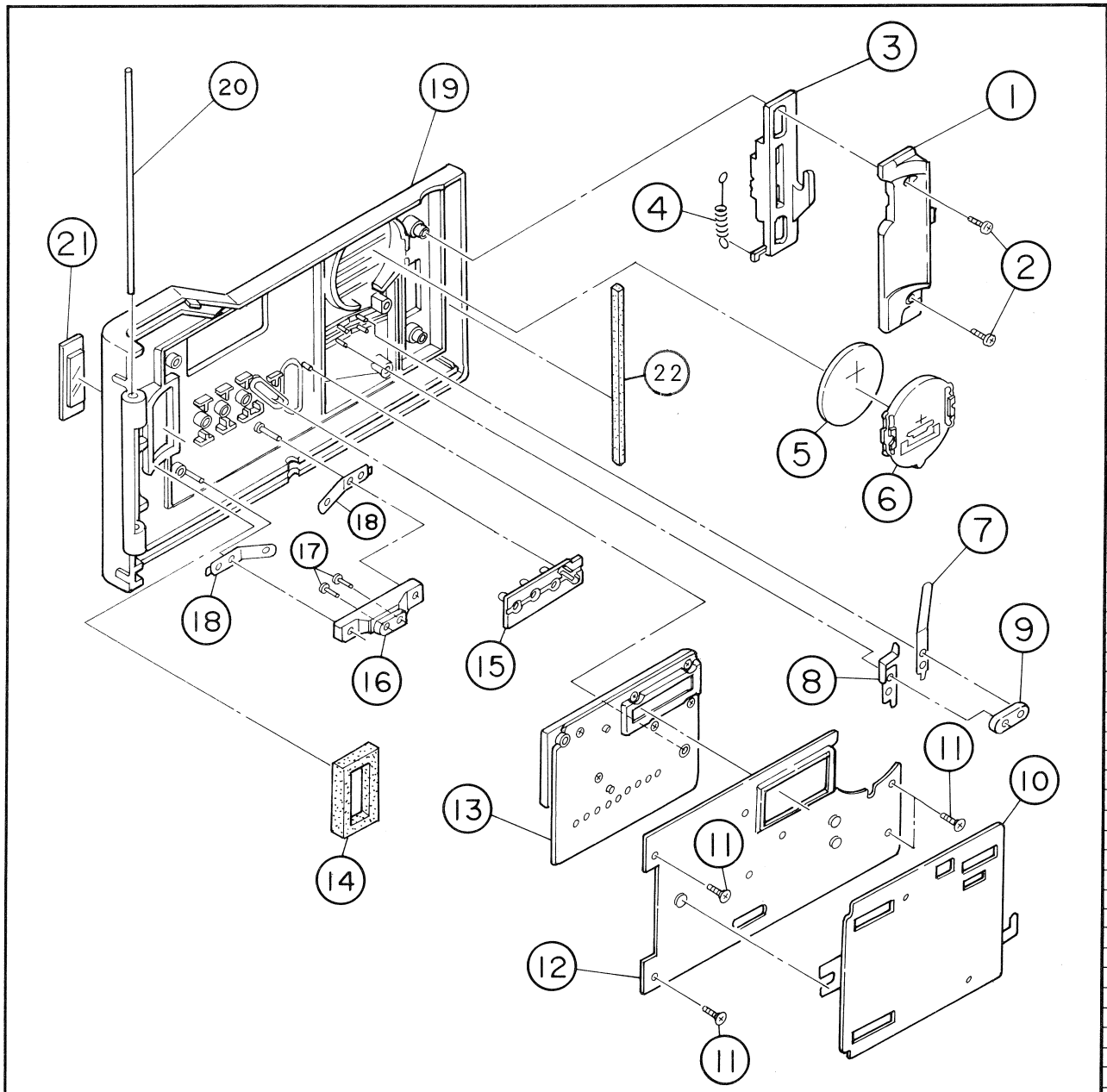
	PARTS NO.	DESCRIPTION	QTY
1	374 305	BATTERY CAP S.S.	1
2	*	BATTERY CAP	1
3	66102025	E RING (E-25)	1
4	*	FPC-F	1
5	64213526	R. BUTTON GUIDE S.S.	1
6	374 626	R. BUTTON GUIDE	1
7	374 625	R. BUTTON	1
8	*	DUBLE COATED TAPE	1
9	64214026	PULLEY BASE PLATE S.S.	1
10	*	ACETATE CLOTH TAPE	1
11	374 136	D. CONTACT PLATE	2
12	*	DOUBLE COATED TAPE	1
13	64313026	PULLEY BASE PLATE S.S.	1
14	374 081	PULLEY BASE PLATE ASS'Y	1
15	372 147	BATTERY COMPARTMENT SEAL	1
16	374 605	S. SET PLATE SPRING	1
17	*	BODY	1
18	350 127	BACK COVER MOQUETTE(5)	1
19	374 141	CASSETE SPRING PLATE	1
20	61912522	CASSETE SPRING PLATE S.S.	1
21	374 130	FILM EXISTENCE BUTTON	1
22	361 108	D. CONTACT (1)	2
23	370124	FILM MARK	1
24	374 138	FILM COVER	1
25	370 121	EXPLANATION SEAL	1
1-3.			
	374 053	BATTERY CAP ASS'Y	1
4,6,7.			
	374 071	FPC-F ASS'Y	1
		(See Page No.6)	

PARTS MARKED * ARE NOT AVAILABLE



	PARTS NO.	DESCRIPTION	QTY
1	372 667	TIMING BELT	1
2	360 604	SPOOL COLLAR (1)	1
3	374 610	MOTOR PULLEY	1
4	64213526	MOTOR HOLDER S.S.	2
5	360 614	MOTOR HOLDER	1
6	360 609	SPOOL COLLAR (2)	1
7	*	BODY	1
8	66101525	E-RING (E-15)	1
9	60422110	EPICYCLIC GEAR WASHER	1
10	350 673	FRICTION SPRING	1
11	350 609	52 GEAR	1
12	*	EPICYCLIC GEAR SUB ASS'Y	1
13	370 616	BRAKE LEVER	1
14	66001023	BRAKE SWITCH S.S.	1
15	374 087	BRAKE SWITCH ASS'Y	1
16	374 614	R. CLUTCH SPRING	1
17	374 084	R. PULLEY ASS'Y	1
18	374 615	R. DRUM	1
19	350 663	R. SHAFT SPRING	1
20	374 616	FILM REWINDING FORK	1
21	64213026	R. PULLEY HOLDER S.S.	2
22	66001042	R. DRUM S.S.	1
23	350 666	R. PULLEY HOLDER	1
24	*	S. STROKE PLATE	1
25	350 622	CLUTCH GEAR	1
26	360 623	CLUTCH CLAW SPRING	1
8-12.			
	374 086	EPICYCLIC GEAR ASS'Y	1
18-20,22.			
	374 085	R. DRUM ASS'Y	1
24,26.			
	370 082	S. STROKE PLATE	1

PARTS MARKED * ARE NOT AVAILABLE



	PARTS NO.	DESCRIPTION	QTY
1	361 110	B.C. RELEASE COVER	1
2	64213526	B.C. RELEASE COVER S.S.	2
3	375 108	B.C. RELEASE PLATE	1
4	360 141	B.C. RELEASE PLATE SPRING	1
5	*	BATTERY	1
6	375 111	D. BATTERY CAP	1
7	363 109	D. CONTACT (+)	1
8	363 110	D. CONTACT (-)	1
9	363 121	D. CONTACT FIXER	1
10	375 037	PRESSURE PLATE ASS'Y	1
11	64113026	BACK COVER BASE PLATE S.S.	4
12	375 110	BACK COVER BASE PLATE ASS'Y	1
13	363 120	AUTO DATE MODULE ASS'Y	1
14	358 128	FILM CHECK WINDOW MOQUETTE	1
15	373 154	MODE BUTTON	1
16	361 105	CONTACT HOLDER	1
17	361 109	D. CONTACT POINT (2)	2
18	361 107	D. CONTACT (2)	2
19	375 105	D. BACK COVER	1
20	374 110	HINGE SHAFT	1
21	374 109	FILM CHECK WINDOW	1
22	374 113	BACK COVER MOQUETTE	1
1-4,6-19,21.			
	375 033	D. BACK COVER ASS'Y	1