REPAIR MANUAL
&
PARTS LIST

FUJICA
GS-645

FUJICA
GS-645-WIDE

FUJICA
GS-645-S

CONTENTS

I DISASSEMBLY AND REASSEMBLY

1. Top cover assembly (1 - 1)

- ○ Remove the film advance lever assembly (1 - 33) after removing the set screw (1 - 30).
- ○ Raise the top cover assembly (1 - 1) to remove it after removing three set screws (1 - 27, 1 - 28 and 1 - 29).

  NOTE: Pay attention on the two lead wires extended to the shoe (1 - 4).

[REASSEMBLY]

- ○ Be sure to set the film selector knob (1 - 9) to the 120 film side before installing the top cover. If the top is installed with the film selector knob set to 220 film side, the selector lever in the film advance mechanism assembly (3 - 1) will be bent.
- ○ Arrange the associated lead wires properly so that they are not seen through the viewfinder window, and install the top cover.
- ○ Carefully combine the top cover with the terminal cover (7 - 40) and cover frame (7 - 50).
- ○ Carefully install the lock plate (1 - 37) so that it will not be overlapped on the lever (3 - 29).
- ○ Check the shutter release for the operating stroke. The desirable operating stroke of the shutter release is shown below.

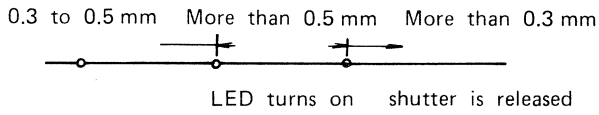


Fig. 1

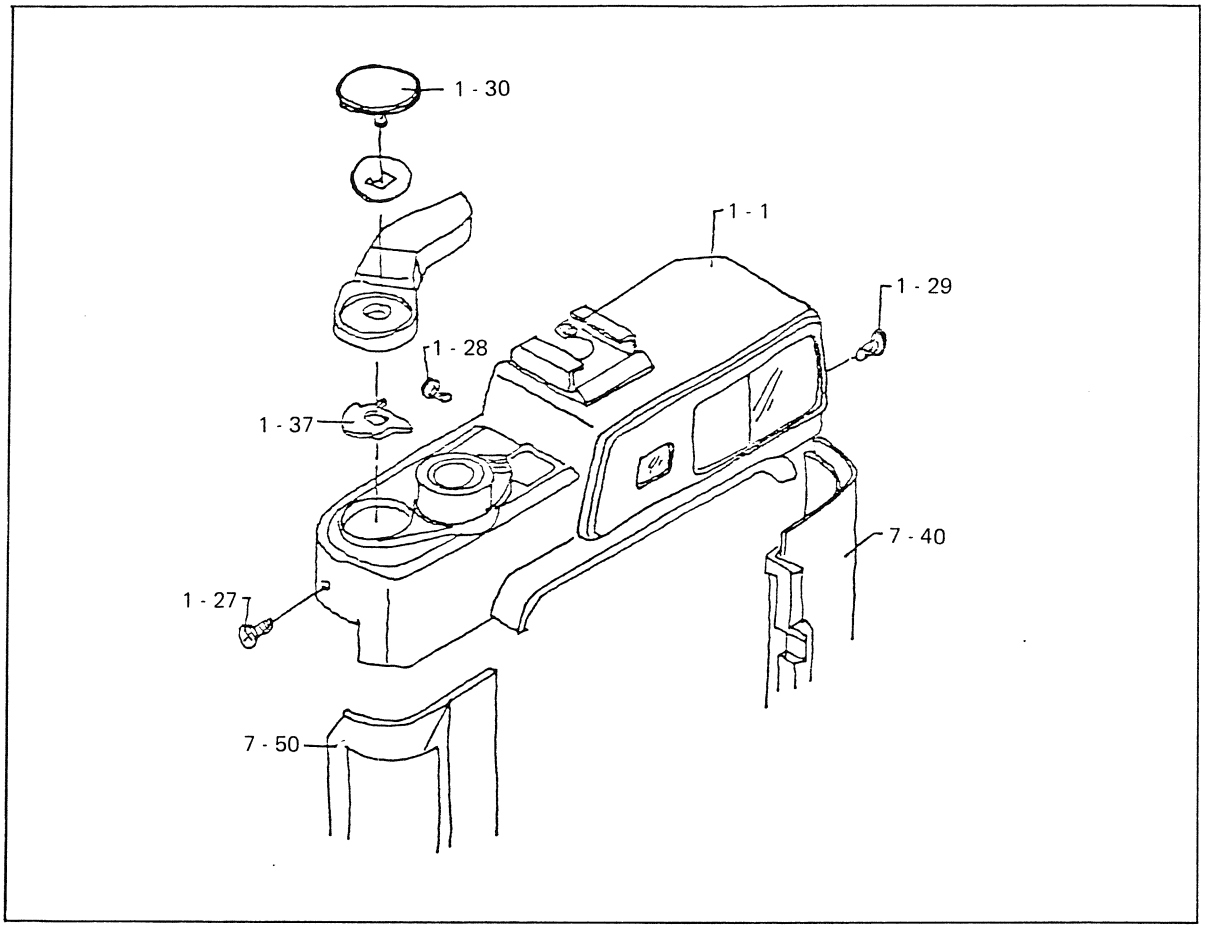


Fig. 2

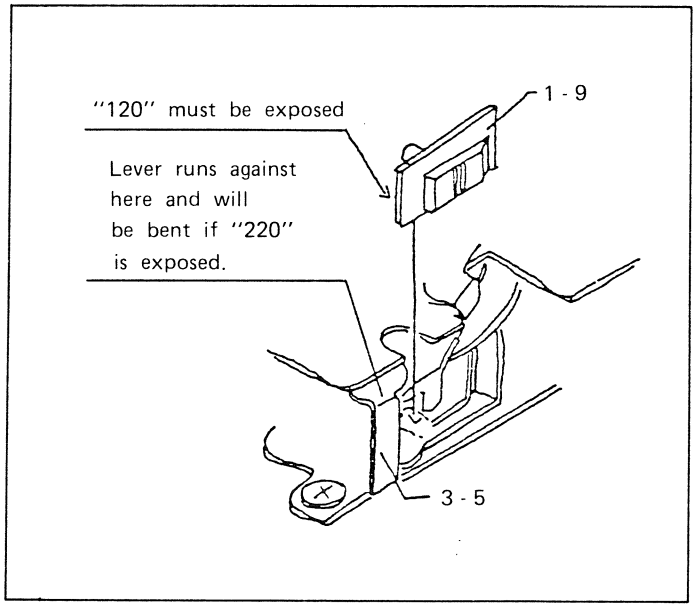
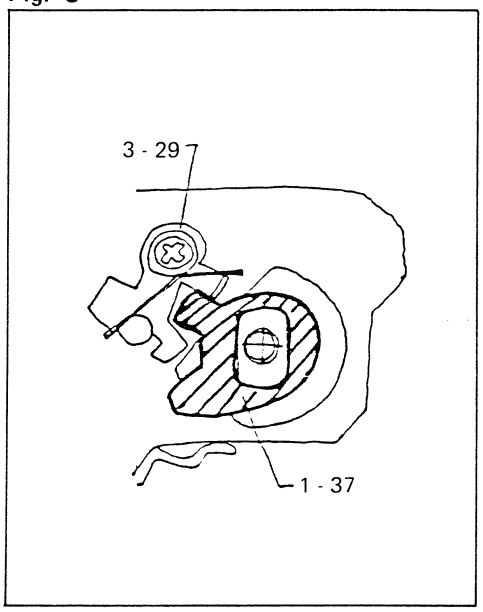


Fig. 3



2. Range finder assembly (2 - 12)

- ○ Disconnect the associated lead wires so that the flexible PCB assembly (2 - 1) can be removed together with the cover (2 - 13).
- ○ Remove the range finder assembly (2 - 12) upward after removing three set screws (2 - 8×2 and 2 - 9).

[REASSEMBLY]

- ○ Combine the pin (6 - 37) of the linkage assembly with the interlock plate (2 - 60).
- ○ Secure the flexible PCB assembly (2 - 1) on the cover (2 - 13) with a piece of double - sided adhesive tape.
- ○ Combine the photocell (built in the flexible PCB assembly) with the photocell frame (2 - 35), and install the flexible PCB assembly with two screws (2 - 2).

Fig. 4

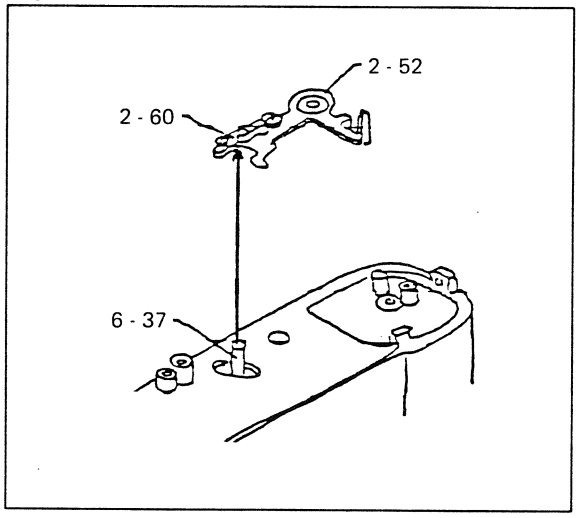
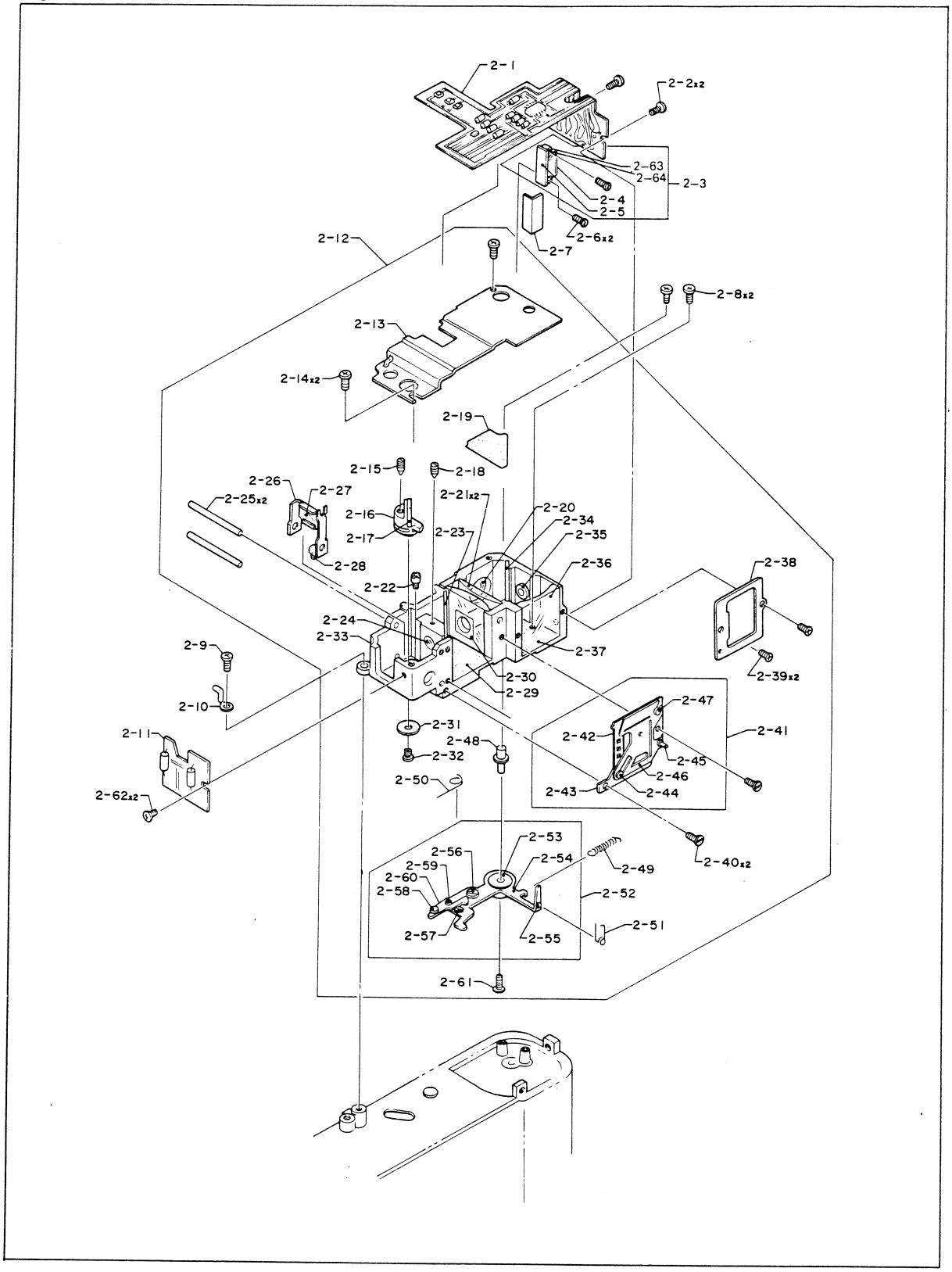


Fig. 5


2-1
2-2x2
2-63
2-64
2-3
2-4
2-5
2-6x2
2-7
2-12
2-8x2
2-13
2-14x2
2-19
2-15
2-18
2-26
2-27
2-25x2
2-21x2
2-20
2-16
2-34
2-17
2-23
2-35
2-28
2-36
2-38
2-22
2-24
2-33
2-37
2-39x2
2-9
2-30
2-29
2-10
2-47
2-31
2-41
2-11
2-48
2-42
2-32
2-45
2-46
2-50
2-43
2-44
2-62x2
2-40x2
2-53
2-56
2-54
2-59
2-49
2-60
2-58
2-52
2-57
2-55
2-51
2-61

3. Film advance mechanism assembly (3 - 1)

○ The following instructions for removal of the film advance mechanism assembly are for your reference only. A new method may be developed and used. In this case, however, it must be kept in your mind that the wire assembly (5 - 37) which operates when charging the shutter is associated with the film advance mechanism. Be careful not to damage or fold the wire.

a. Remove the bellows from the housing side after removing four set screws (6 - 46).

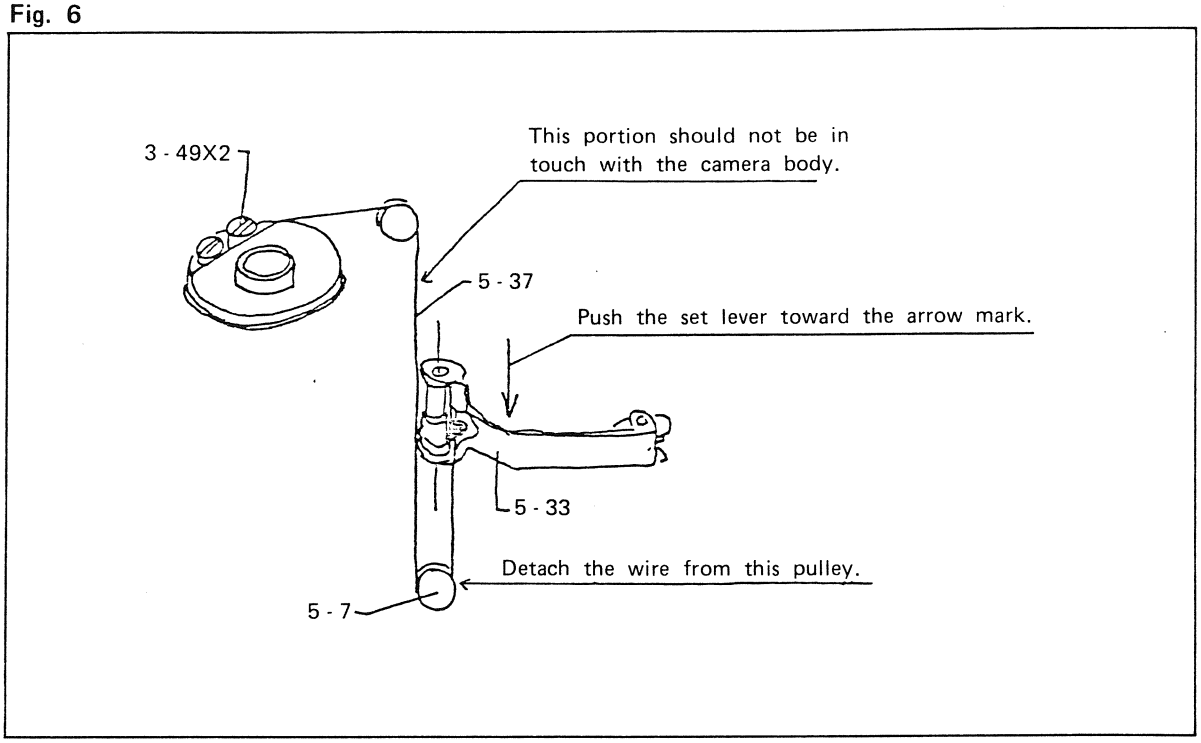
b. Remove the wire from the pulley base assembly (5 - 7) by moving the set lever (5 - 33) so that the wire is loosened.

c. Remove set screws (3 - 125×3) and screw (3 - 126).

d. With the film chamber door and zero reset lever opened, remove the film advance mechanism assembly (3 - 1) upward.

e. When separating the wire from the film advnace mechanism assembly (3 - 1), loosen two eccentric pins (3 - 49) on the large pulley.
When the wire is removed once, do not use it again but replace the wire assembly (5 - 37) with a new one.
For wire assembly setting, refer to II - 4 below.

Fig. 6

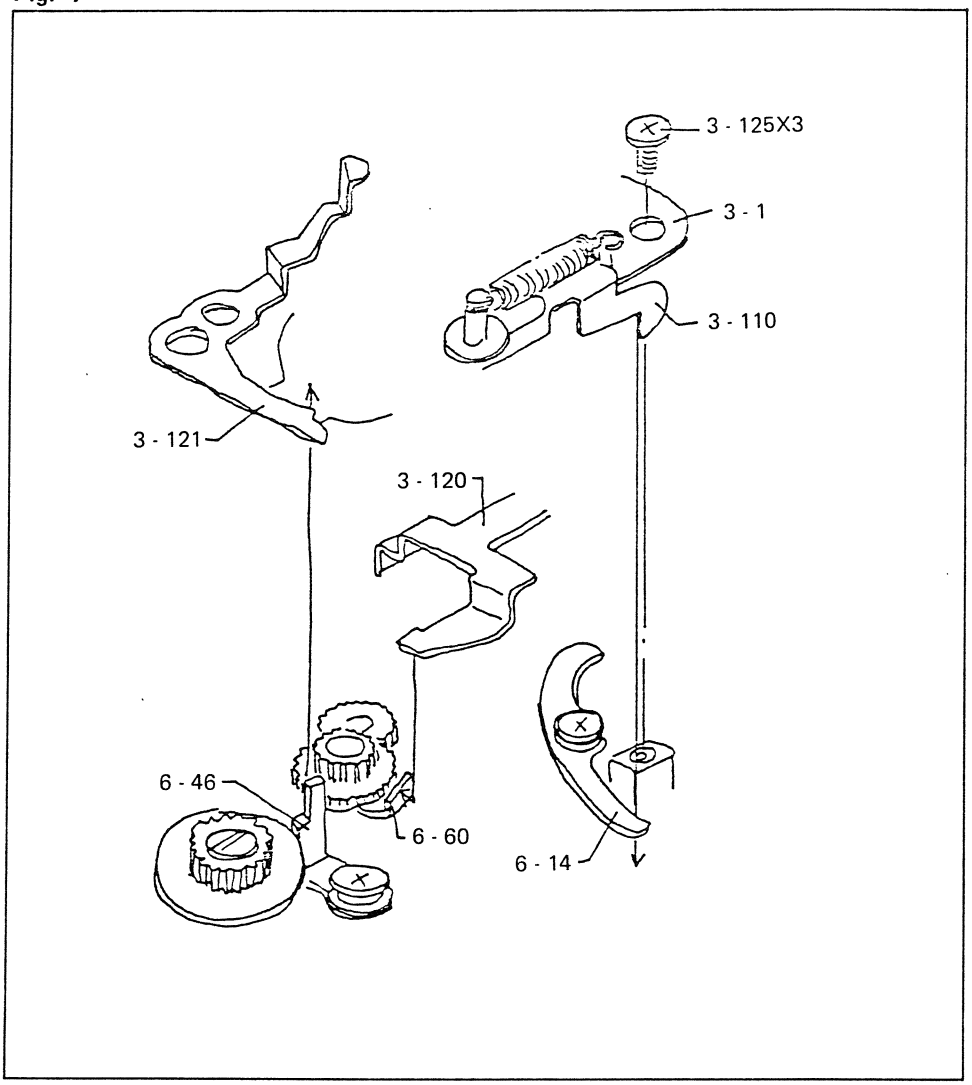

3 - 49X2
This portion should not be in touch with the camera body.
5 - 37
Push the set lever toward the arrow mark.
5 - 33
Detach the wire from this pulley.
5 - 7

[Installing Film Advance Mechanism Assembly (3 - 1)]

- Combine the zero reset lever (3 - 120) with the lever (6 - 60) of the idle gear assembly (6 - 59).
- Combine the lever (6 - 64) with the lever (3 - 121).
- Combine the lever (3 - 110) with the lever (6 - 14).

  NOTE: After insuring that the above three combinations are complete, install the film advance mechanism assembly.
  When the counter dial is advanced over 1 with the zero reset lever (3 - 120) pressed, the lever (3 - 121) will drop.
- Tighten three set screws (3 - 125) and screw (3 - 126).
- When applying the spring (3 - 62) to the screw (3 - 126), be careful not to deform the spring. If the spring is deformed, noise will occur or the film advance will not return smoothly.
- When the wire is connected, make sure that the wire is applied to the roller in the film advance mechanism assembly (3 - 1) side completely first.
  Then, loosen the set lever, and apply the wire to the lower pulley of the pulley base assembly (5 - 7).

Fig. 7



4. Housing assembly (4 - 10)

- ○ Remove four set screws (6 - 46) from the rail surface.
- ○ Wind up the film advance lever, and fold the linkage mechanism in a half way.
- ○ Remove two screws (5 - 17) with a pin - face spanner.

  NOTE: When reinstalling these screws, be sure to lock them with screw locking agent.
- ○ Remove two set screws (5 - 18) with a flat head screw driver.

  NOTE: When reinstalling these screws, be sure to lock them with screw locking agent.
- ○ Remove the gate (5 - 76) and two links (5 - 67), and take out the housing assembly (4 - 10) carefully.

  NOTE: Pay attenion on the lead wires extended from the shutter assembly.
- ○ When replacing the shutter assembly with a new one.
  Remove the housing assembly (4 - 10) as described above, take out the lead wires from the camera body, remove the rear lens assembly (4 - 57) and hold ring (4 - 56) with a pin face spanner, and then, take out the shutter assembly.

[REASSEMBLY]

Be careful not to hold the lead wire in between the bellows and housing when installing the bellows.

If the lead wire is held, the helicoid will not operate smoothly.

When the helicoid is operated to the position for the minimum distance, the lead wires must have an extra length.

Fig. 8

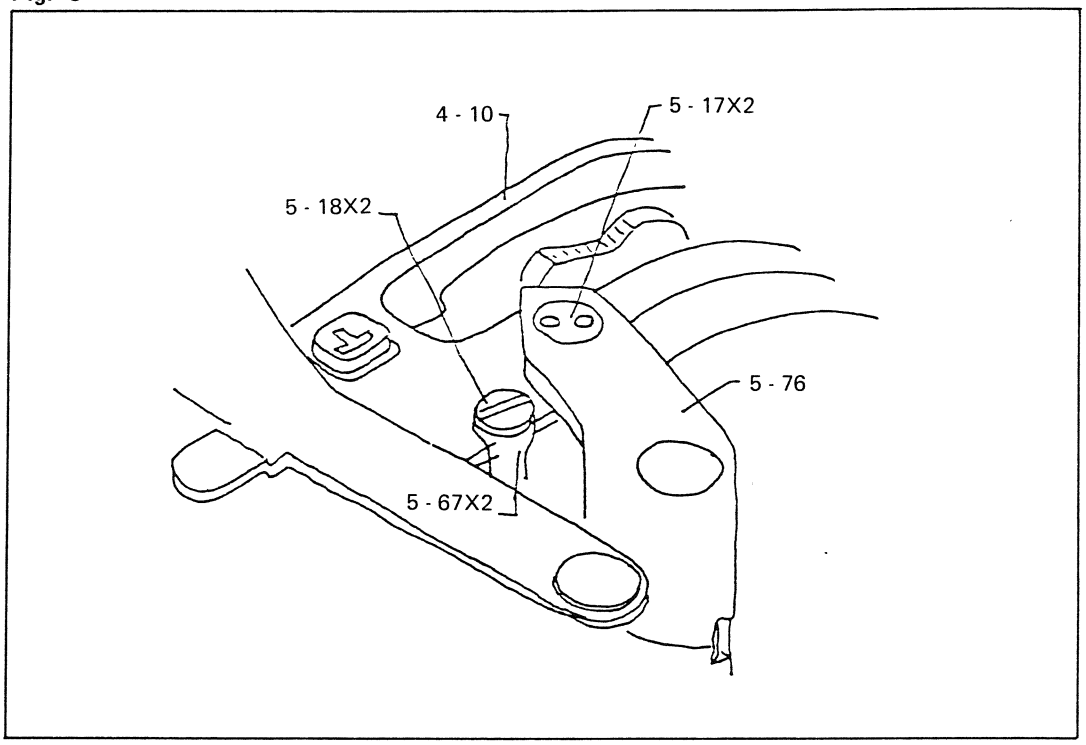
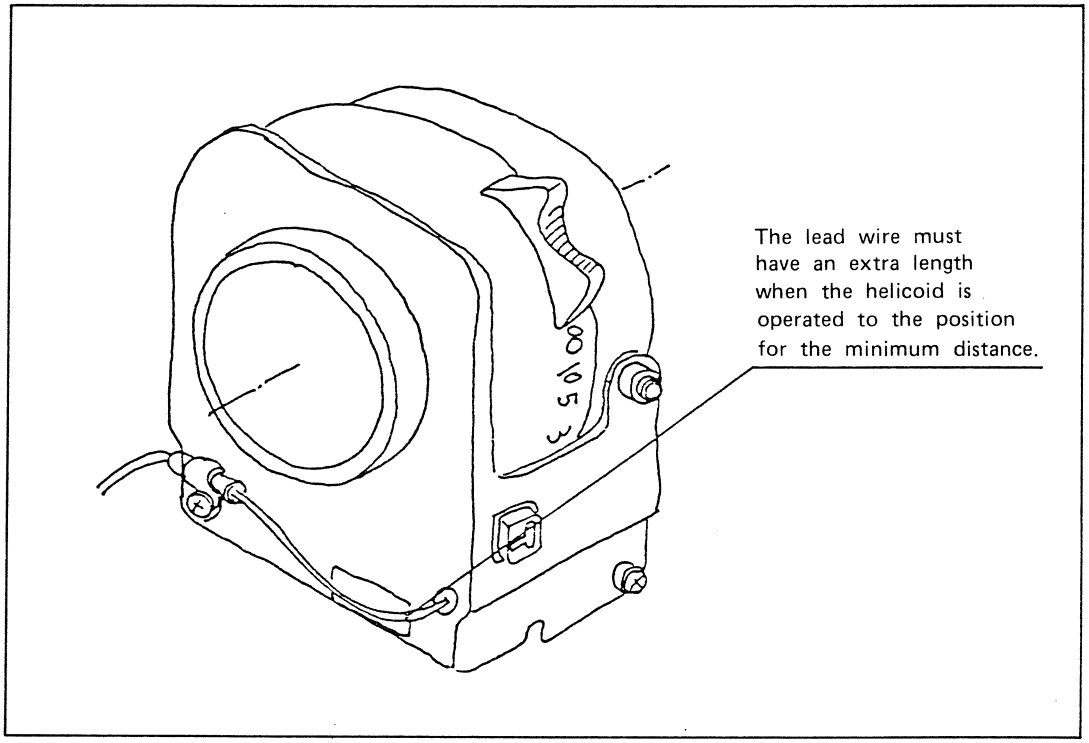

4 - 10
5 - 17X2
5 - 18X2
5 - 76
5 - 67X2

Fig. 9


The lead wire must have an extra length when the helicoid is operated to the position for the minimum distance.

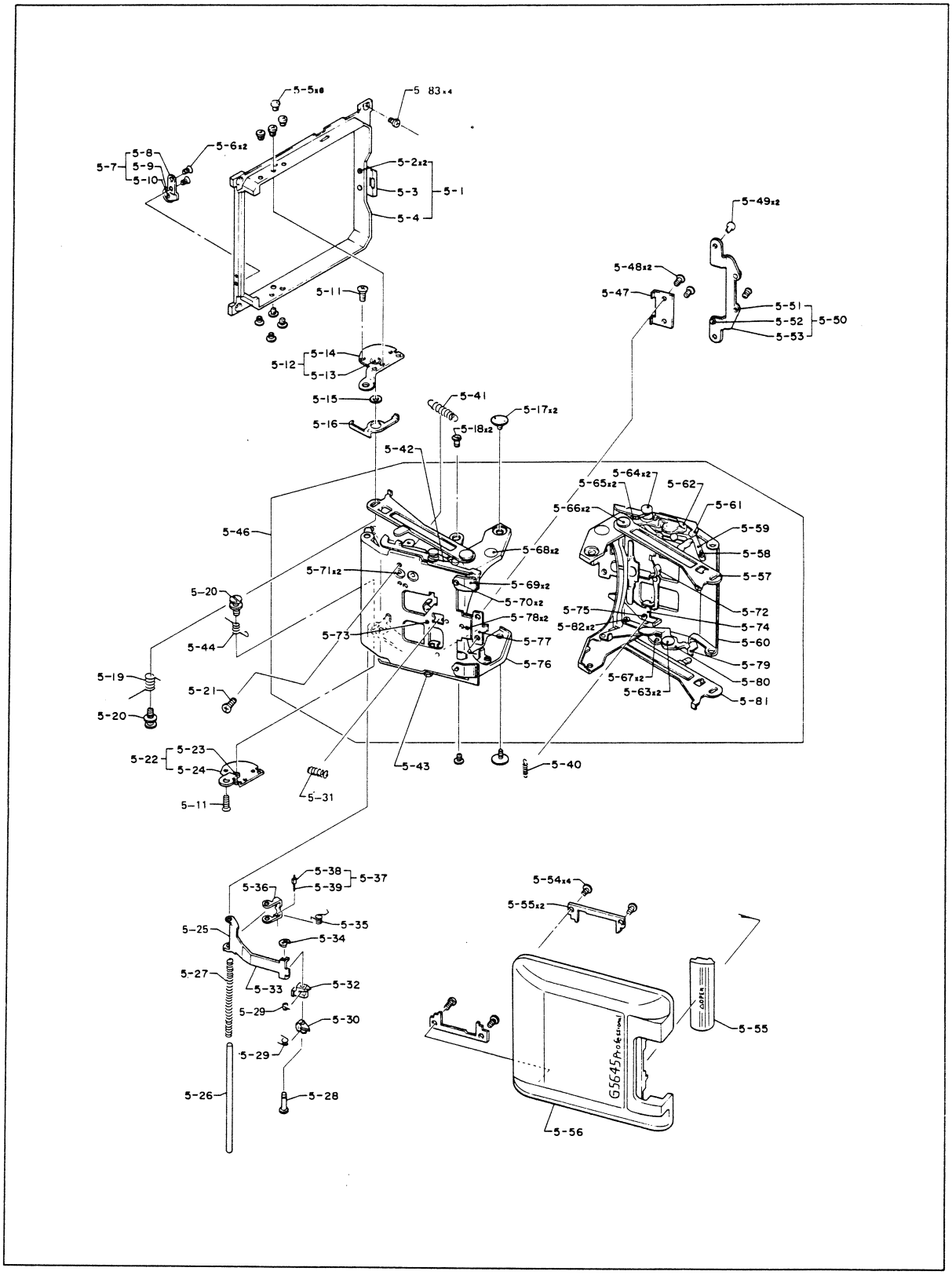
5. Front cover mechanism assembly (5 - 46)

- ○ Do not loosen eight set screws (5 - 5) unless otherwise necessary. These screws are used to adjust the parallelism between the film plane and shutter installing surface.
- ○ When these set screws are loosened, adjust the parallelism in accordance with the instructions in II - 3 below.
- ○ Do not remove four washers (6 - 22) expect when adjusting focusing performance.
- ○ When removing the front cover mechanism assembly, remove four set screws (5 - 83).

[REASSEMBLY]

- ○ Pay attention on the installing directions of the two holders (5 - 45).
- ○ Combine the front cover mechanism assembly with the camera body with the lever (6 - 11) released.
- ○ Open and fold the front cover and make sure that the lever (6 - 11) hooks and unhooks with the leaf spring (5 - 16).

Fig. 10


5-5x6
5-83x4
5-6x2
5-8
5-9
5-10
5-7
5-2x2
5-3
5-1
5-4
5-11
5-12
5-14
5-13
5-15
5-16
5-41
5-17x2
5-18x2
5-42
5-49x2
5-48x2
5-47
5-51
5-52
5-53
5-50
5-64x2
5-65x2
5-62
5-66x2
5-61
5-59
5-58
5-57
5-46
5-68x2
5-71x2
5-69x2
5-70x2
5-20
5-78x2
5-73
5-77
5-44
5-76
5-75
5-72
5-82x2
5-74
5-60
5-19
5-21
5-79
5-67x2
5-80
5-63x2
5-81
5-20
5-22
5-23
5-24
5-11
5-31
5-43
5-40
5-38
5-37
5-36
5-39
5-35
5-25
5-34
5-27
5-33
5-32
5-29
5-30
5-29
5-26
5-28
5-54x4
5-55x2
5-55
5-56
GS645 Professional

Ⅱ REASSEMBLY AND ADJUSTMENT

1. Friction of film take up shaft.

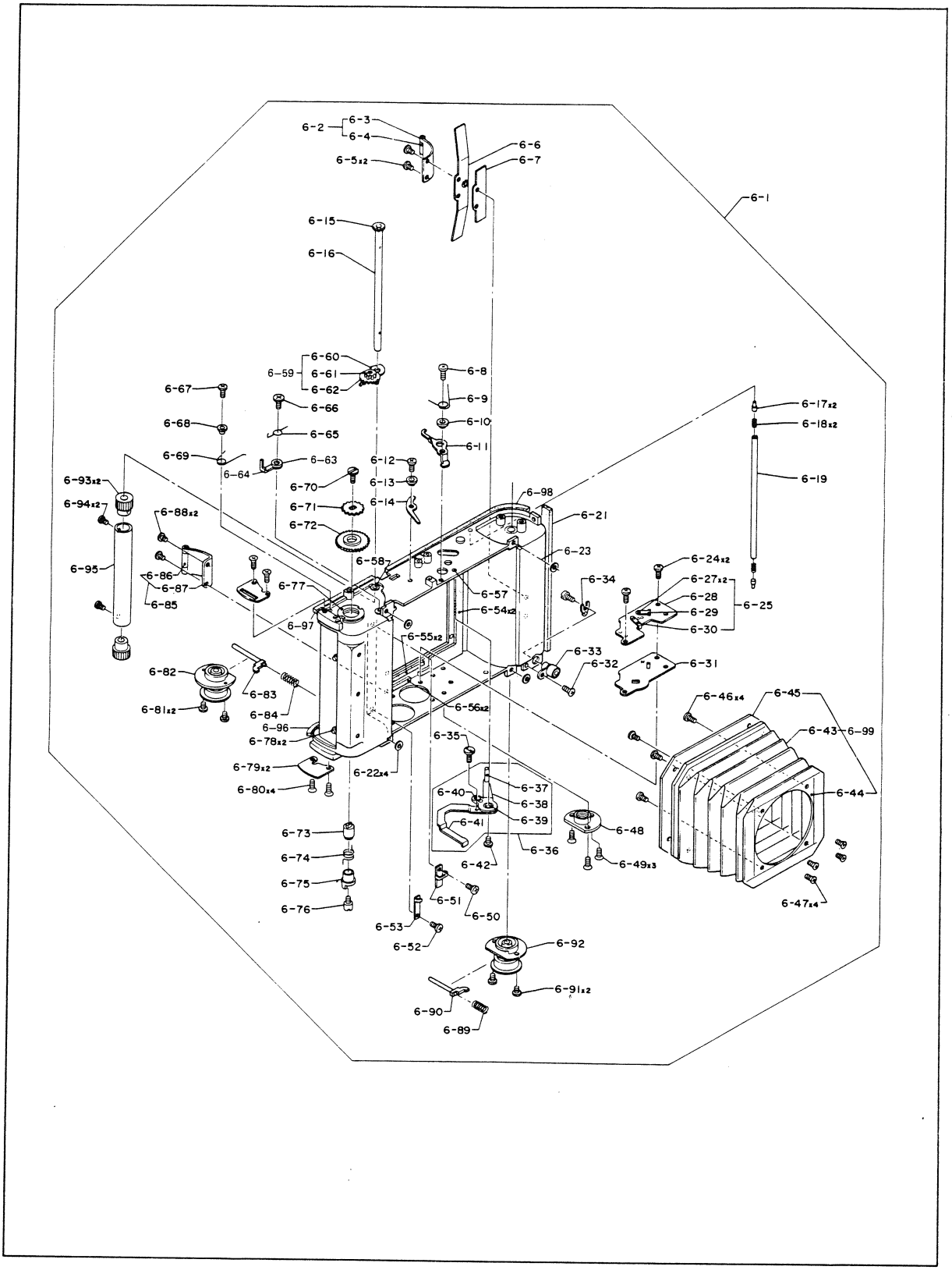
One stroke of the film advance lever consists of one frame film feeding and shutter charging. Film feeding length differs depending on diameter of the film wound up on the film take up shaft.
For the above reasons, the film take up shaft must have a proper friction so that no force is applied to the film take up shaft by the number of turns of the counter roller.

- ○ The spring (6 - 74) functions to provide the film take up shaft with a proper friction. If this spring does not operate smoothly, the film advance lever will not operate smoothly.
  Apply a sufficient volume of Helicolube/Molycote mixed grease.

2. Air discharging groove of the bellows

When the bellows is opened rapidly after loading a film, the bellows will shrink as vacuum occurs within the space.
To prevent this occurrence, the camera body has grooves, and to prevent light leakage through the grooves, moquette is used.
The moquette is located behind the rail surface.
Note that the function of the moquette affects both the air discharging and light shielding.

Fig. 11


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-8
6-9
6-10
6-11
6-12
6-13
6-14
6-15
6-16
6-17x2
6-18x2
6-19
6-21
6-22x4
6-23
6-24x2
6-25
6-27x2
6-28
6-29
6-30
6-31
6-32
6-33
6-34
6-35
6-36
6-37
6-38
6-39
6-40
6-41
6-42
6-43
6-44
6-45
6-46x4
6-47x4
6-48
6-49x3
6-50
6-51
6-52
6-53
6-54x2
6-55x2
6-56x2
6-57
6-58
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-74
6-75
6-76
6-77
6-78x2
6-79x2
6-80x4
6-81x2
6-82
6-83
6-84
6-85
6-86
6-87
6-88x2
6-89
6-90
6-91x2
6-92
6-93x2
6-94x2
6-95
6-96
6-97
6-98
6-99

3. Adjustment of parallelsim of the front cover mechanism assembly

- ○ The optical axis of the lens must be perpendicular against the film plane, or otherwise, focusing cannot be made correctly.
- ○ Based on the film plane, adjust parallelism of the lens plane.

[METHOD]

Special tools and instrument to be prepared.

Base plate (J11286)

Reflector (J11303)

Collimater (Gokosha Model)

a. Check the optical axis of the collimater and right angle (perpendicular alignment) of the base plate.

b. Place the rail plane on the base plate, and place the reflector on the front sace of the lens.
When the name ring is installed, remove it. [Watch the front of the front lens assembly frame.]

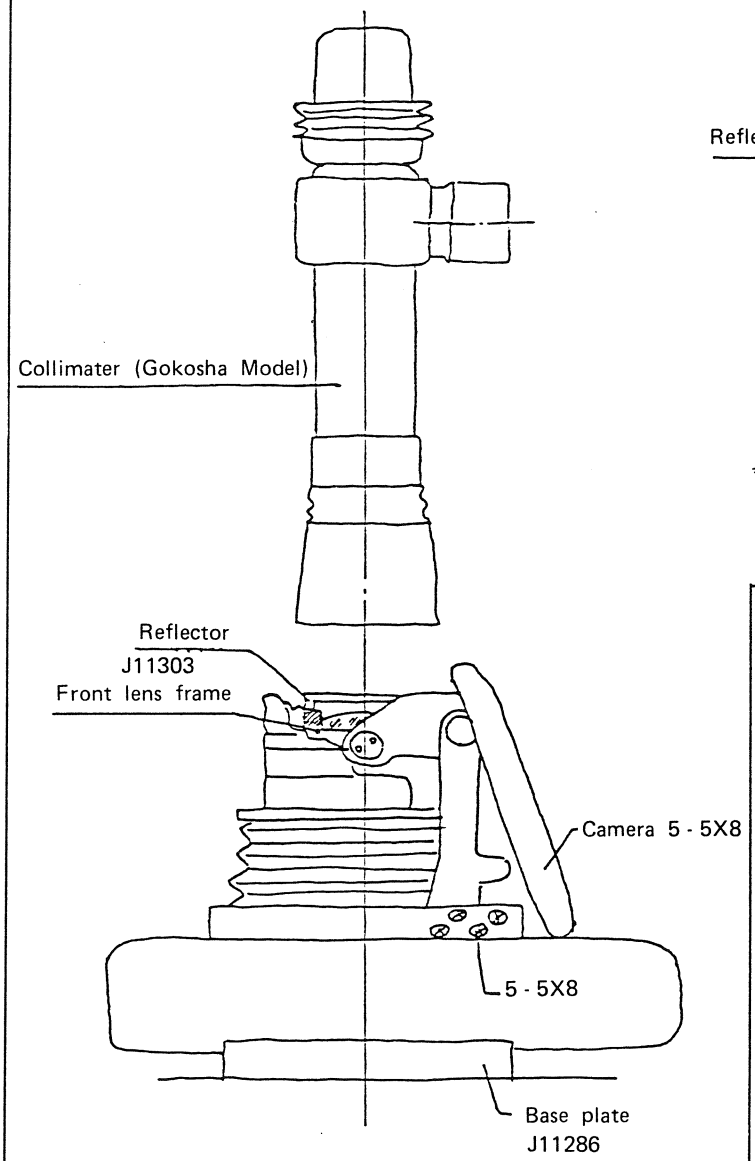
c. Set the collimater to the inifinite (∞), check the reflected image, and adjust the parallelism by loosening eight set screws (5 - 5) so that the reflected image is in the center.
The rating is within 30'. The parallelism is satisfactory as long as the image is within the field of view frame of the collimator (Gokosha Model).

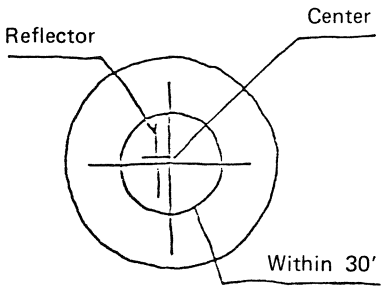
d. When the parallelism is adjusted completely, lock the eight set screws (5 - 5) with screw locking agent (Alonalpha or Sumicatight).

When the parallelism cannot be adjusted with the set screws (5 - 5):

- ○ Visually check that the housing is installed in parallel to the gate (5 - 76).
- ○ Check that the stopper portion of the base plate (5 - 60) is not deviated horizontally. When deviated, it may be adjusted by bending.
- ○ Make sure that the front cover mechanism assembly has risen completely.

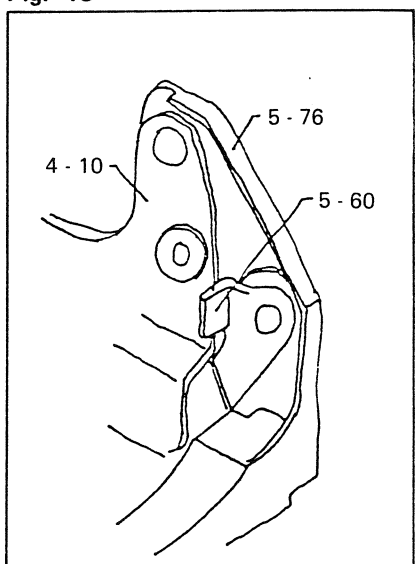
Fig. 12





Field of view within collimater

Fig. 13



4. Adjustment of shutter setting

Adjustment of wire

- Adjust two eccentric pins (3 - 49) to adjust set value.

[Ideal set position]

Release the shutter, watch the gap between the set lever (5 - 33) and base plate (5 - 60), and set the gap to 1 mm from the base plate.
Make sure that the shutter can be set with a sufficient space for both the infinite and minimum distance sides.

[When shutter set is unsatisfactory at the minimum distance side]

- Check the set lever of the slider for slackness, and bend as shown in the right hand figure to adjust.
- When the slackness is excessive, replace the set lever with a new one.
- When the adjustment is completed, and the wire is too long, cut it with a cutter.
- Be sure that the wire does not come out from the large pulley.
- The wire must have an extra space against the eccentric pin.
- Apply Alonalpha to the wire edge so that it will not get loose.
- Make sure that the wire is not damaged or bent sharply.

Fig. 14

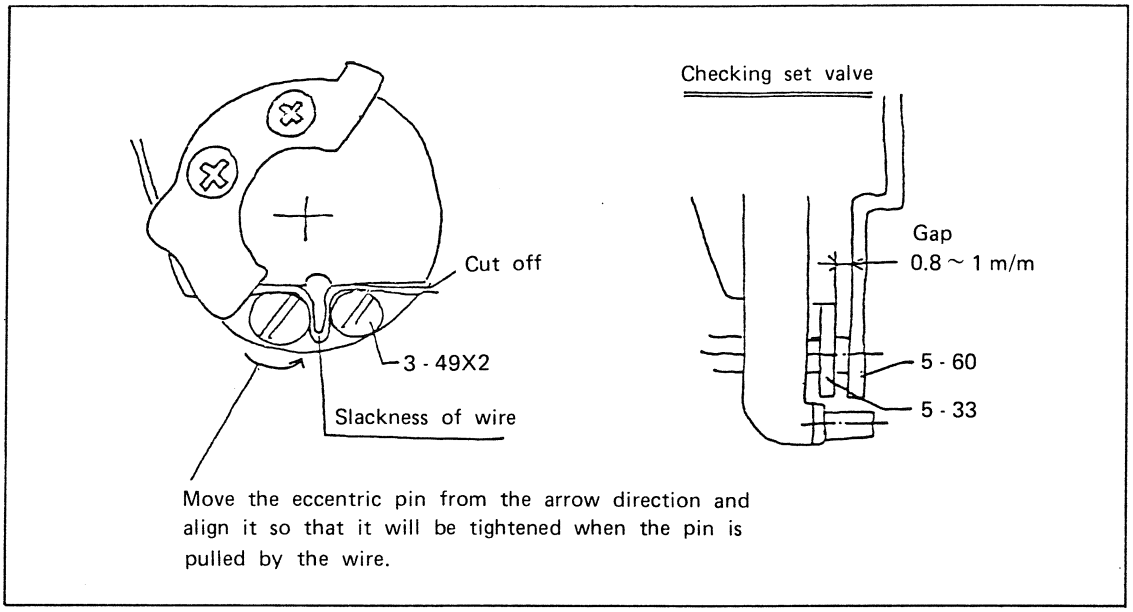
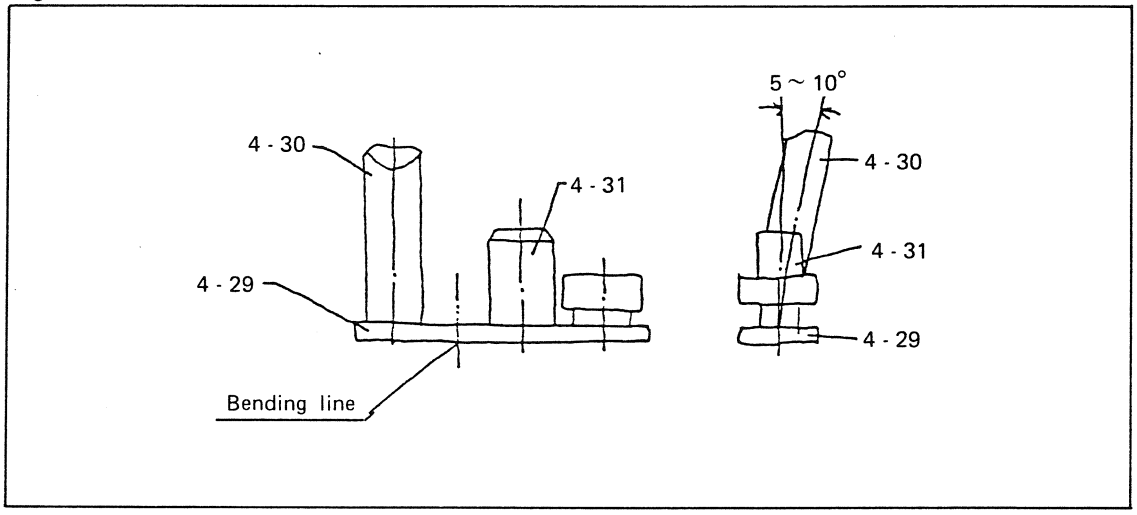

Checking set valve
Cut off
3 - 49X2
Slackness of wire
Gap
0.8 ~ 1 m/m
5 - 60
5 - 33
Move the eccentric pin from the arrow direction and align it so that it will be tightened when the pin is pulled by the wire.

Fig. 15


4 - 30
4 - 31
4 - 29
Bending line
5 ~ 10°
4 - 30
4 - 31
4 - 29

5. Adjustment of focusing (Infinity adjustment)

- ○ Set the collimater to ∞.
- ○ Watch the film plane, and fix the ∞ side stopper of the helicoid at the position where image of the collimater is correctly focused.
- ○ To adjust, loosen four set screws (4 - 51).

NOTE: Set the film plane within +0.05±0.1 mm (— 0.05 to +0.15 mm) against the rail plane.
[Set film side to +0.05 mm against the rail plane.]

6. Adjustment of viewfinder (Coincidence of images)

To adjust coincidence of the stationary image and moving image, the screw (2 - 15) (for height) and eccentric pin (2 - 22) (for left or right) are used.

[Adjustment procedure]

Coincidence of inifinite image

(1) Apply the lens to the ∞ side stopper and coincide the moving image with the stationary image.

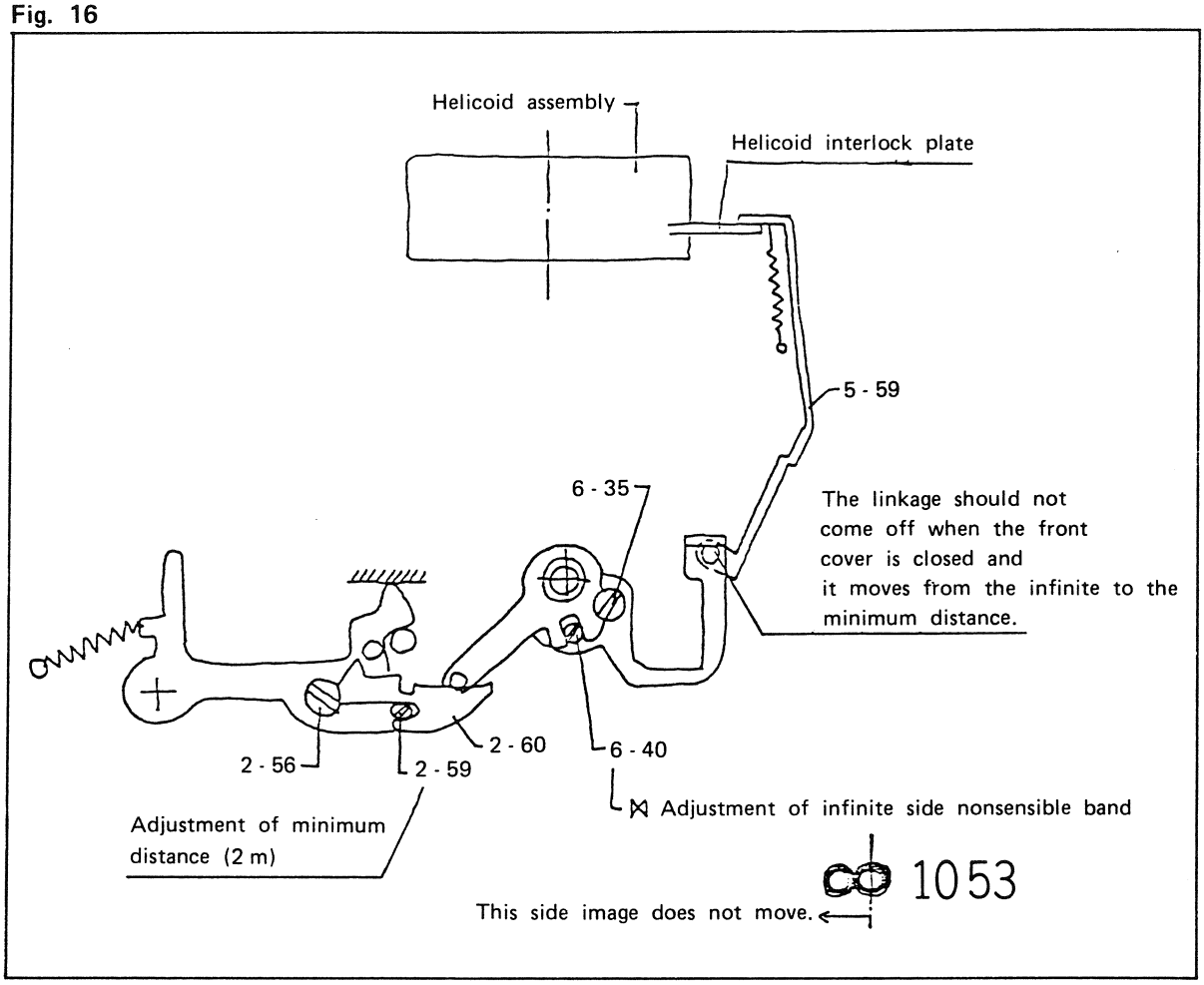
(2) Fix the helicoid at the position where an image in 2 meter distance is focused on the film plane, and watch the coincidence in the viewfinder.
When the image is deviated to the right or left, adjust the eccentric pin (2 - 59).

(3) Check the infinity, and repeat the adjustment until the focusing performance is within the permissible range (— 0.05 to +0.15 mm).

(4) Setting infinite image non - sensing band

Adjust the eccentric pin (6 - 40) of the linkage assembly (6 - 36) so that the image in the infinite side is in the non - sensing band at ¼ of the ∞ mark and thereafter. [Provide a proper gap by bending the linkage assembly so that the image coincidence in the viewfinder is not affected even if the engagement of the interlock lever changes.]

Fig. 16


Helicoid assembly
Helicoid interlock plate
5 - 59
6 - 35
The linkage should not come off when the front cover is closed and it moves from the infinite to the minimum distance.
2 - 56
2 - 59
2 - 60
6 - 40
Adjustment of minimum distance (2 m)
Adjustment of infinite side nonsensible band
1053
This side image does not move.

○ Adjustment of viewfinder (parallax)

Adjust deviation between the picture frame on the film plane and viewfinder frame.

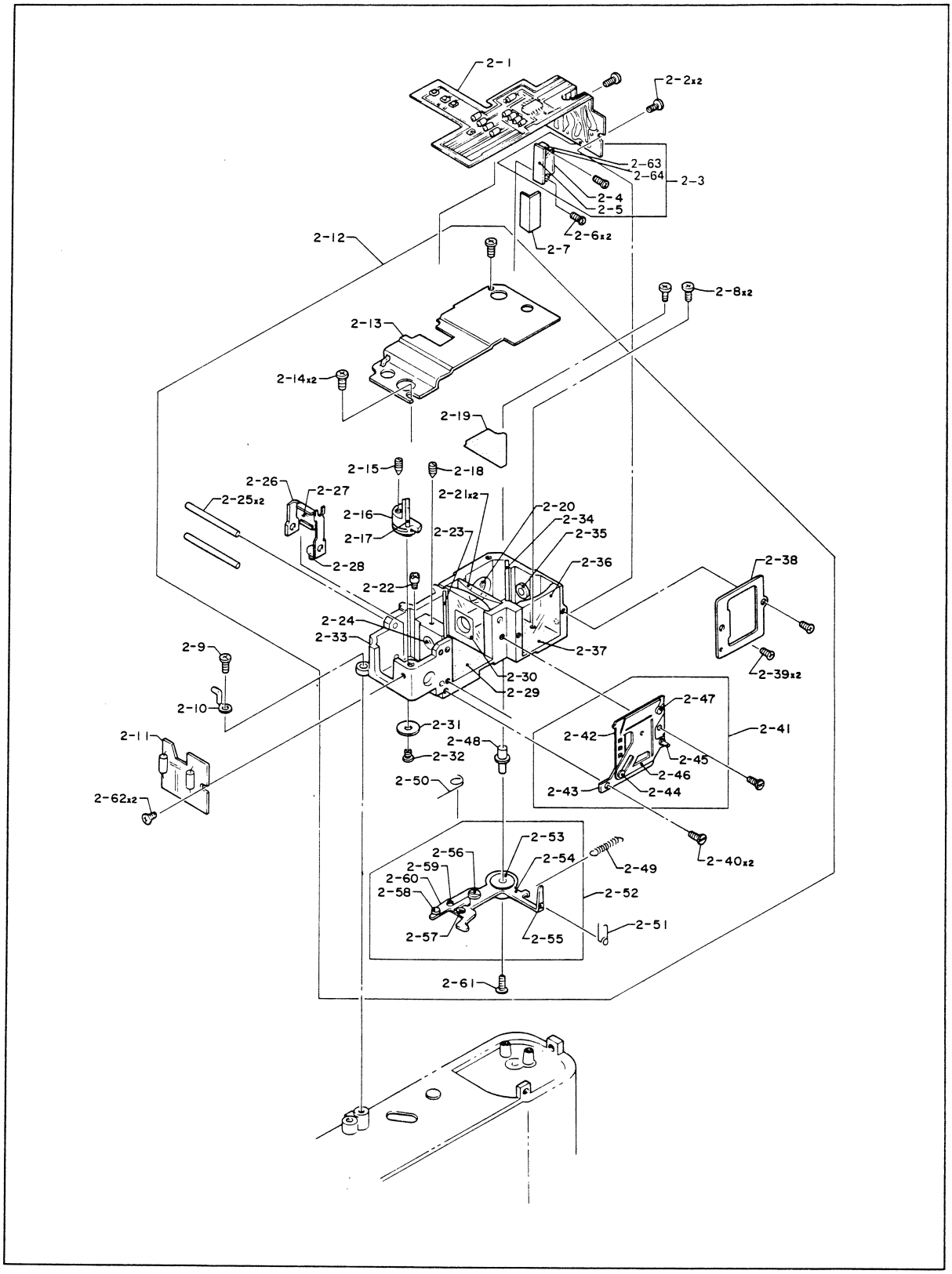
To adjust it, adjust position of the viewfinder frame assembly (2 - 41) with two screws (2 - 40).

When the parallax is adjusted for the infinite, make sure that it is not deviated remarkably at the minimum distance (1 m).

Adjustment of moving image focusing

With the bar prism (2 - 24), focusing of the moving image can be coincided with the stationary image.

Fig. 17


2-1
2-2x2
2-63
2-64
2-3
2-4
2-5
2-6x2
2-7
2-12
2-8x2
2-13
2-14x2
2-19
2-15
2-18
2-26
2-27
2-25x2
2-21x2
2-16
2-17
2-20
2-34
2-35
2-23
2-28
2-36
2-22
2-38
2-24
2-33
2-37
2-39x2
2-9
2-30
2-29
2-10
2-47
2-31
2-41
2-11
2-48
2-42
2-32
2-45
2-46
2-50
2-43
2-44
2-62x2
2-53
2-56
2-54
2-49
2-59
2-60
2-58
2-52
2-40x2
2-57
2-55
2-51
2-61

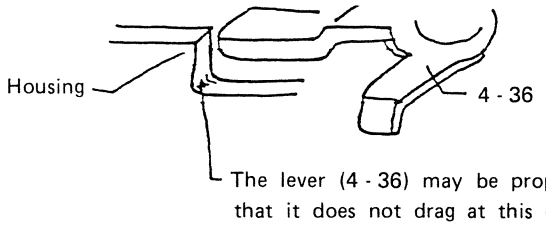
7. Film advance/shutter charge system

7 - 1 Shutter charging and releasing mechanism

- ○ When the film advance lever is wound up, the large pulley assembly (3 - 42) takes up the wire.
- ○ The set lever (5 - 33) moves as it is pulled by the wire, and the claw (5 - 30) engages with the slider assembly (4 - 24) causing the slider assembly to operate.
- ○ The shutter set lever is set by the slider assembly (4 - 24).
- ○ When the film advance lever is returned, the large pulley assembly (3 - 42) returns until it is hooked by the release plate assembly (3 - 11). Then the set lever (5 - 33) also returns due to the spring (5 - 27).
- ○ The slider assembly (4 - 24) is also returned by the spring (4 - 18), and the lever (4 - 36) returns until it is hooked by the housing.

[When the shutter is released as soon as the shutter is charged or as the front cover is closed]

Cause No. 1 : The lever (4 - 36) does not hook correctly.



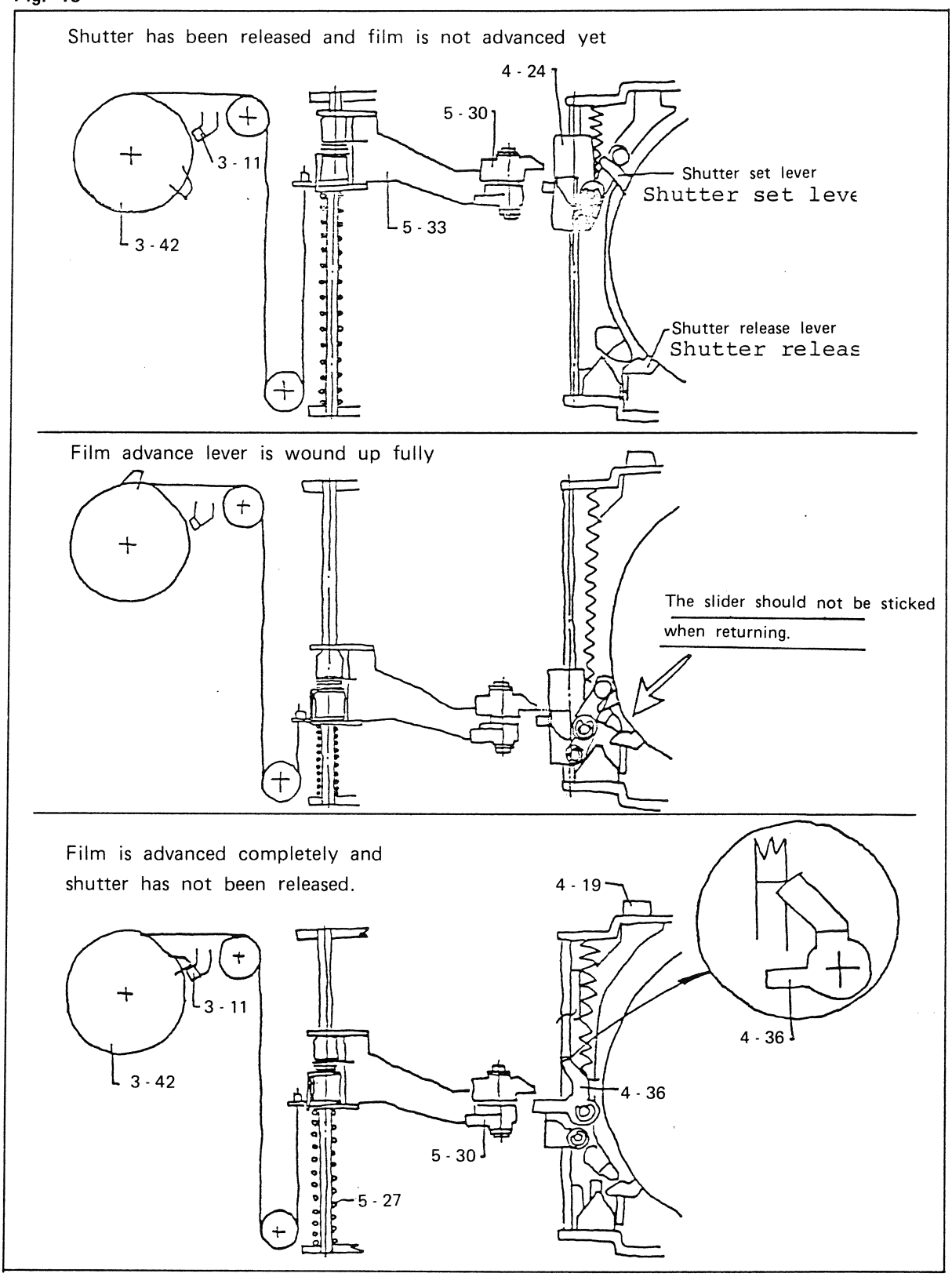
Cause No. 2 : Take - up set value is insufficient, and therefore, the claw (5 - 30) releases the lever (4 - 36) as soon as the shutter is charged. When the shutter is charged, there must be a proper gap between the claw (5 - 30) and lever (4 - 36).

Cause No. 3 : The engagement between the large pulley assembly (3 - 42) and release plate assembly (3 - 11) is improper.

○ Shutter release

- ★ When the shutter release button is pressed, the release plate assembly (3 - 11) disengages with the large pulley assembly (3 - 42).
- ★ When the large pulley assembly is freed, the spring (5 - 27) causes the set lever to move.
- ★ The claw (5 - 30) disengages the lever (4 - 36), causing the slider to move.
- ★ The lever is pushed (4 - 19) is pushed by the slider, causing the shutter release lever to move, and thus, the shutter opens and closes.

Fig. 18


Shutter has been released and film is not advanced yet
4 - 24
5 - 30
3 - 11
3 - 42
5 - 33
Shutter set lever
Shutter set leve
Shutter release lever
Shutter releas
Film advance lever is wound up fully
The slider should not be sticked
when returning.
Film is advanced completely and
shutter has not been released.
4 - 19
3 - 11
3 - 42
4 - 36
4 - 36
5 - 30
5 - 27

○ T - mode

When the lever (4 - 19) is pushed from the outside, the release lever moves causing the shutter to be opened in a half way.
The shutter does not operate to close because the shutter set lever is locked by the slider in the shutter charged position.
When the shutter release button is pressed, allowing the slider to run, the set lever operates, causing the shutter blade to close.

The shutter is not released.

○ When the shutter is charged completely but the shutter cannot be released or slider does not run as the shutter release button is pressed (occasional occurrences are also included).

⇩

The shaft holder portion of the large pulley assembly (3 - 42) is heavy.

Repair : Clean the shaft. Do not use grease.

○ The slider runs but the shutter blade does not open (occasional occurrences are also included)

⇩

Insufficient shutter charging.

Repair : The shutter must be charged with a sufficient setting strokes at both the minimum distance and infinity sides.
When the shutter charging is minus at the minimum distance side, refer to II - 4 above.

7 - 2 Film take - up mechanism

The exposure counter does not advance unless the counter roller is turned with a film loaded.

a. Advancing film from S to 1

- ○ When a film is loaded and the film advance lever is wound up, the counter roller (6 - 93) is turned to the arrow direction by the film.
- ○ As the counter roller (6 - 93) turns the counter dial (3 - 51) is advanced.
- ○ The film advance lever can be wound up successively until the 1st frame is indicated by the exposure counter.
- ○ When the film is wound up to the 1st frame, the edge of the counter dial disengages with the rising portion (A) of the lever (3 - 121), allowing the lever (3 - 121) to turn to the arrow direction.
- ○ When the disc (3 - 85) turns and the groove is coincided with the lever (3 - 121), the lever drops into the groove, and the lever (6 - 64) engages with the ratchet wheel (6 - 72).
- ○ When the ratchet wheel (6 - 72) stops, the film taking - up force acts as a friction, causing the film taking - up (advance) to stop. The film advance lever can be wound up continuously until the swing lever (3 - 78) disengages with the ratchet even after the film stops.

Fig. 19

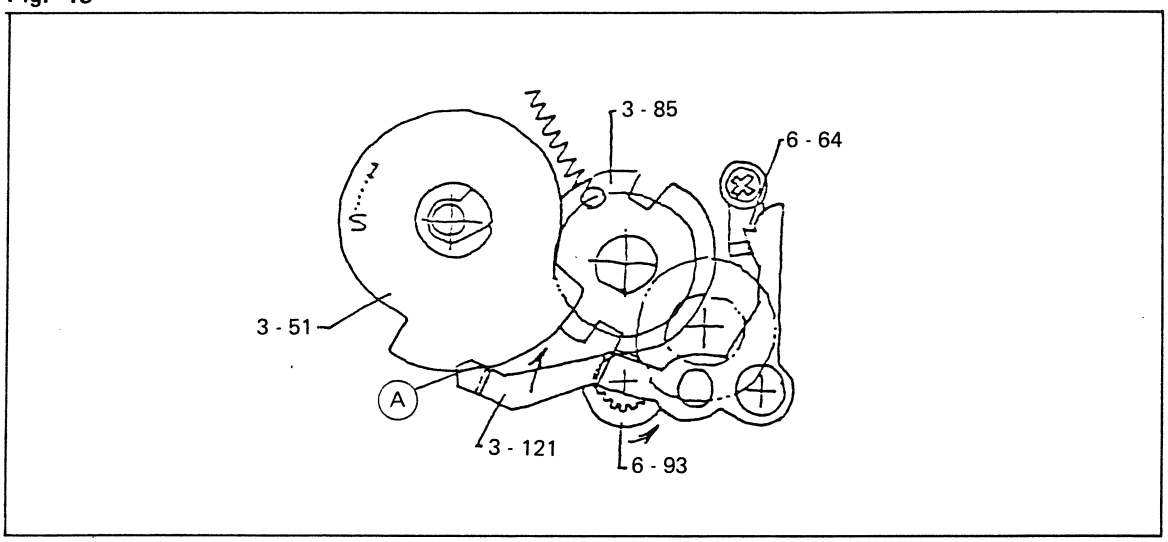
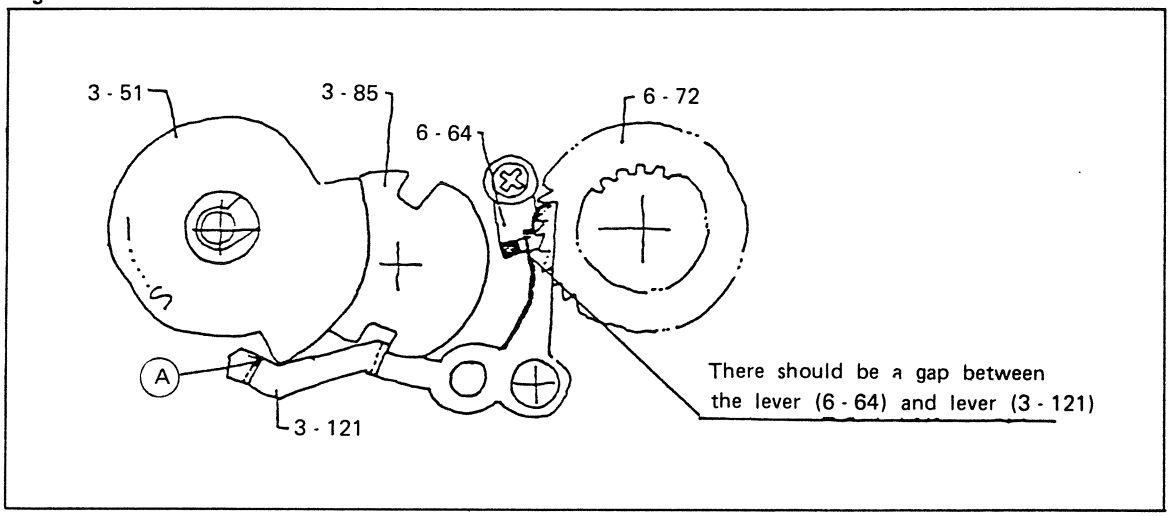

3 - 85
6 - 64
3 - 51
A
3 - 121
6 - 93

Fig. 20


3 - 51
3 - 85
6 - 64
6 - 72
A
3 - 121
There should be a gap between
the lever (6 - 64) and lever (3 - 121)

b. Advancing film to the next frame

★ When the film is advanced to the 1st frame and the shutter is charged completely, the relative parts are set as shown below so that double exposure can be prevented.
The lever (3 - 109) engages with the swing lever (3 - 78) with the swing lever (3 - 78) opposed to the ratchet wheel assembly (3 - 54).
The swing lever (3 - 78) functions as a stopper, and the ratchet wheel assembly (3 - 54) cannot turn.

★ When the shutter is released, the release lever assembly (3 - 64) is pushed by the cam (3 - 46) of the large pulley assembly (3 - 42), and the lever (3 - 121) joined with the release lever assembly (3 - 64) moves.

Fig. 21

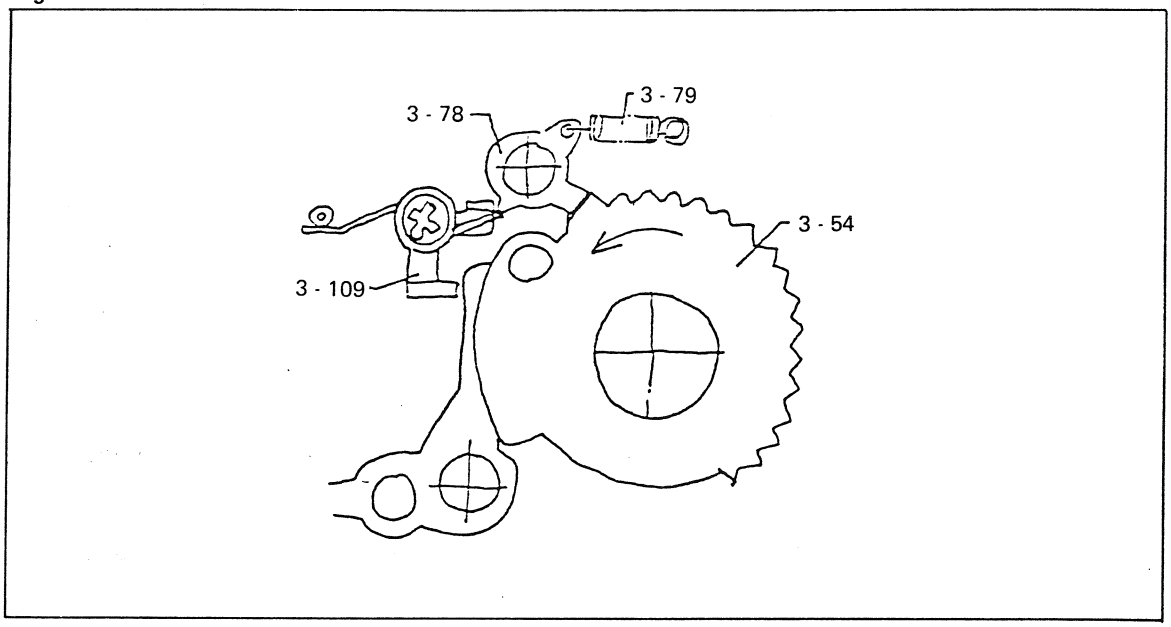
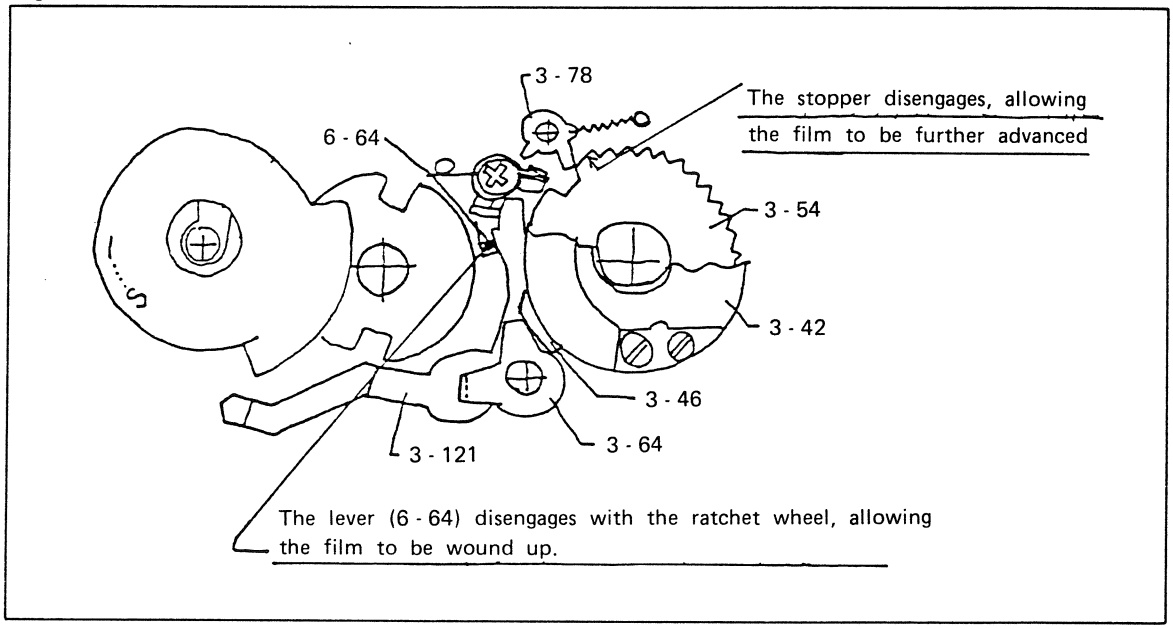

3 - 78
3 - 79
3 - 54
3 - 109

Fig. 22


3 - 78
The stopper disengages, allowing the film to be further advanced
6 - 64
3 - 54
3 - 42
3 - 46
3 - 64
3 - 121
The lever (6 - 64) disengages with the ratchet wheel, allowing the film to be wound up.

★ When beginning to advance the film and the release lever assembly (3 - 64) is about to disengage with the cam (3 - 46), the groove of the disc (3 - 85) must have been separated from the rising portion of the lever (3 - 121) by the film.

If this alignment is incorrect, one frame is overlapped with another.

When the lever (3 - 121) is limited at the periphery of the disc (3 - 85), the lever (6 - 64) should not engage with the ratchet wheel (6 - 72).

When this arrangement is improper, one frame is overlapped with another or noise is generated.

c. Ending exposure of the last frame of a 120 film.

The lever (3 - 2) is pushed up by interlocking with the counter, and the lever (3 - 121) is kept in the released state.

Film can be wound up to the end in the manner similar to the film advancement from S to 1.

NOTE: The lever (3 - 2) must be pushed by the leaf spring (3 - 9) toward the arrow (A) direction.

Fig. 23

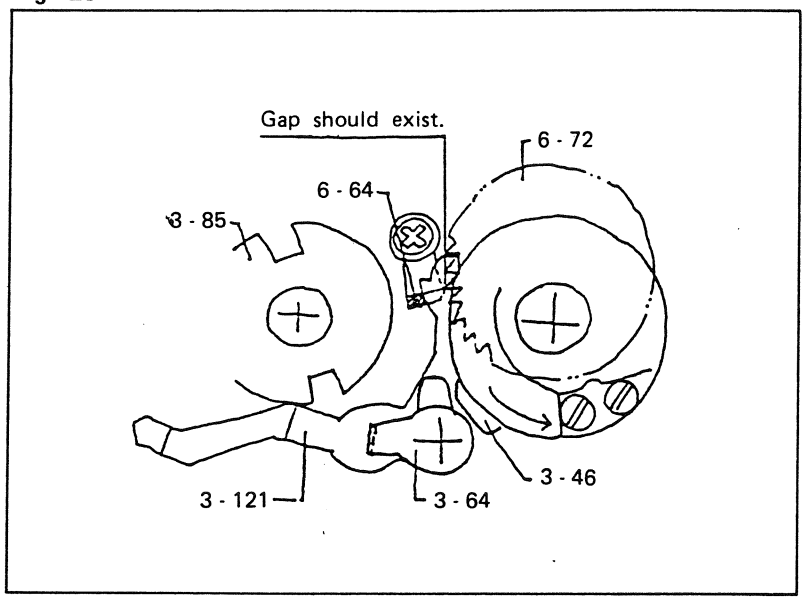
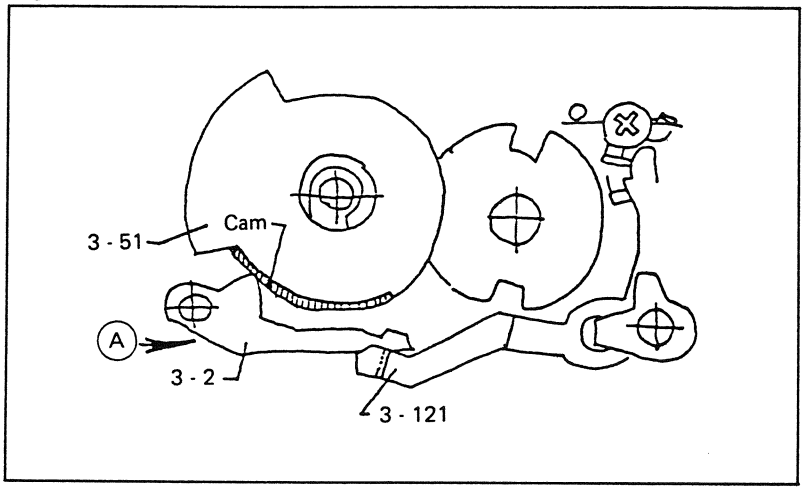


Fig. 24



d. Ending exposure of the last frame of a 220 film

The lever (3 - 2) is set to the 220 film with the film selector knob of the top cover assembly, and thus, the lever is separated from the counter dial. If the lever is not separated from the counter dial, film winding is freed at the 16th frame.
When the 30th frame is exposed, and the film advance lever is wound up, the projection of the counter dial enters beneath the lever (3 - 121), and the lever (3 - 121) is kept in the separated state.
When the lever (3 - 121) runs against the dial (3 - 51), check the film advancing timing for delay.

e. 1st frame film position

A 120 film has a mark on the film leader. Match this mark with the mark on the camera body, and advance the film to the 1st frame.
Some times, the 1st frame film position may be deviated from the number indicated on the back of the film.
This deviation should be within ±½ frame.

[When excessively deviated]

- Make sure that the disc (3 - 85) is returned to the predetermined position by the spring (3 - 82) when the film chamber door is opened.
- At position S, there should be a gap between the claw (3 - 115) and counter gear (3 - 52).

Fig. 25

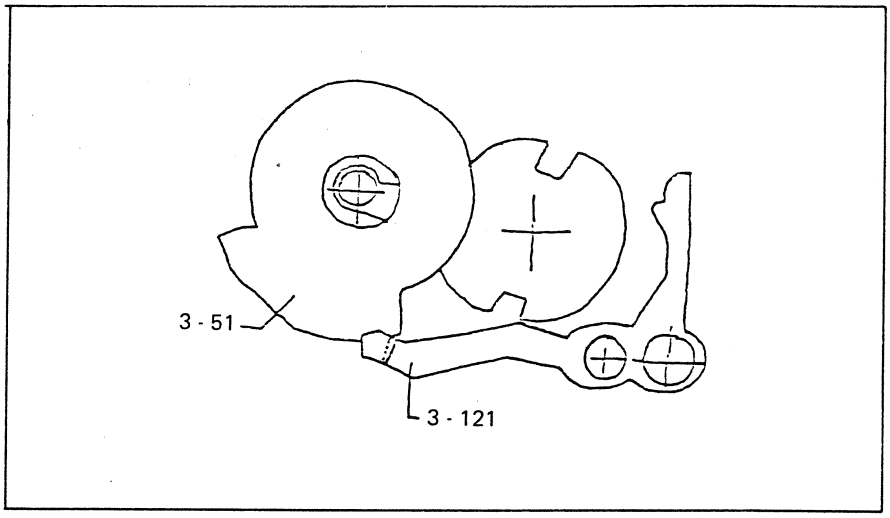
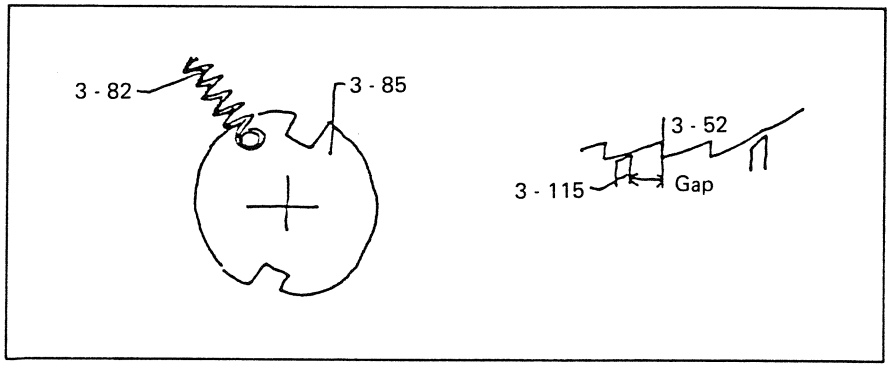


Fig. 26



8. Shutter release locking mechanism

○ Locking during winding up a film

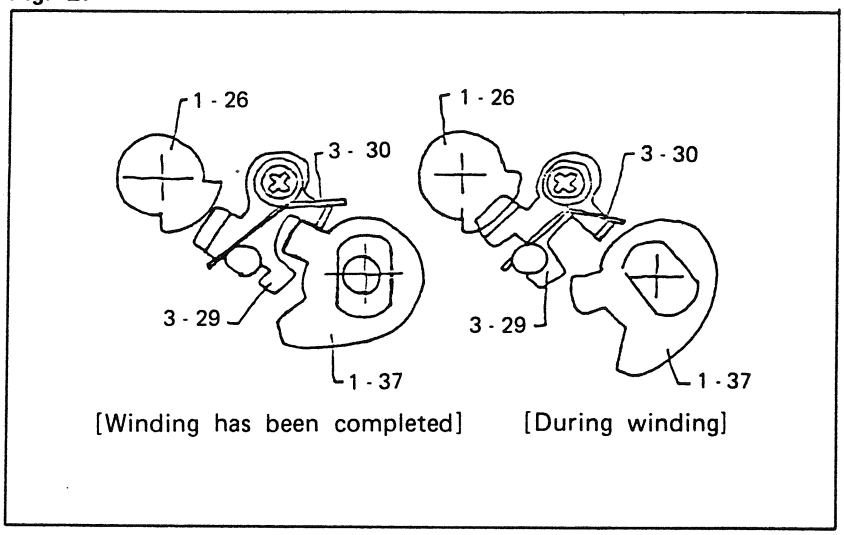
The lever (3 - 29) is pushed by the lock plate (1 - 37), causing the lever to be separated from the lock plate (1 - 26). Then, the shutter release can be depressed. During winding up a film (Unless the film advance lever is turned completely), the lever (3 - 30) is beneath the lock plate (1 - 26), locking the shutter release.

○ Locking shutter release at other modes

When the exposure counter is in S to 1 or when no film is loaded.
Movement of the lever (3 - 33) caused by the spring (3 - 35) toward direction (A) is stopped by the cam (3 - 52).

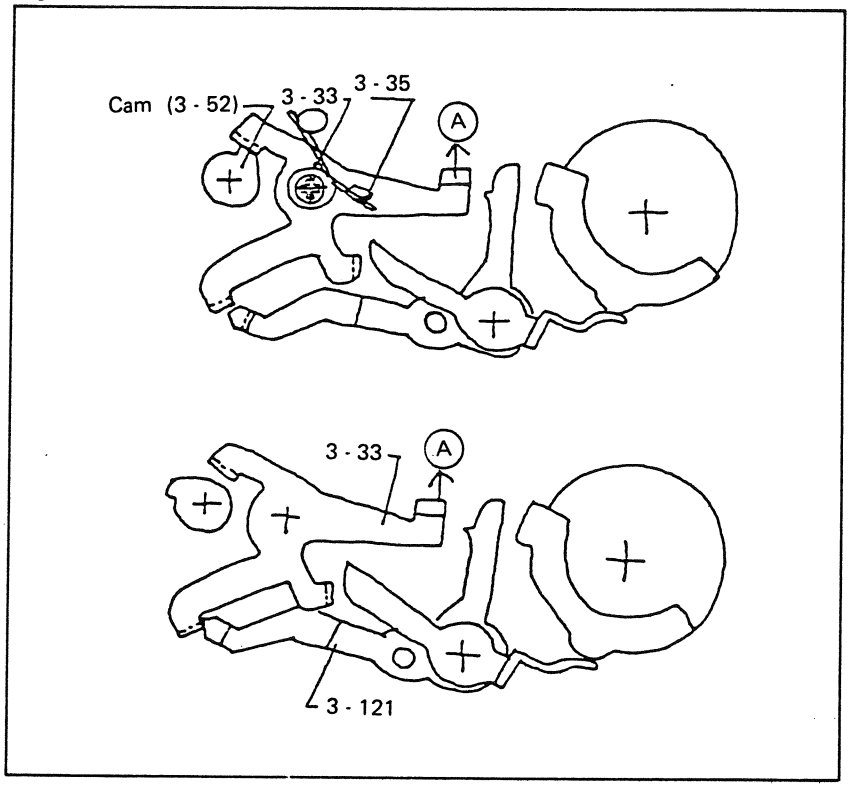
When the cam moves away
Movement of the lever (3 - 33) toward direction (A) is stopped by the head of the lever (3 - 121).

Fig. 27



[Winding has been completed] [During winding]

Fig. 28



Before the lever (3 - 121) drops down

The lever (3 - 33) moves freely to direction (A) because the lever (3 - 121) has run away. Therefore, movement of the lever (3 - 33) is stopped by the lever (3 - 40).

When the film ends

When the 16th frame (120 film) or 31st frame (220 film) is exposed, the lever (3 - 121) runs away.
Then the head of the lever (3 - 121) disengages, causing the lever (3 - 33) to move toward direction (A), and thus, the shutter release is locked.

Fig. 29

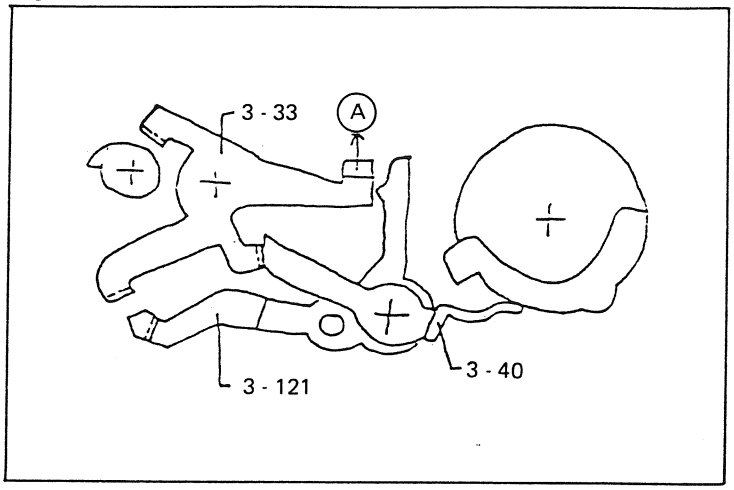
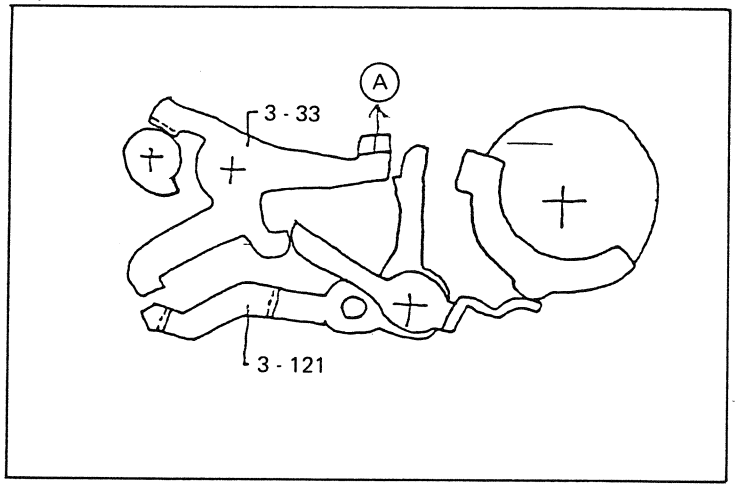


Fig. 30

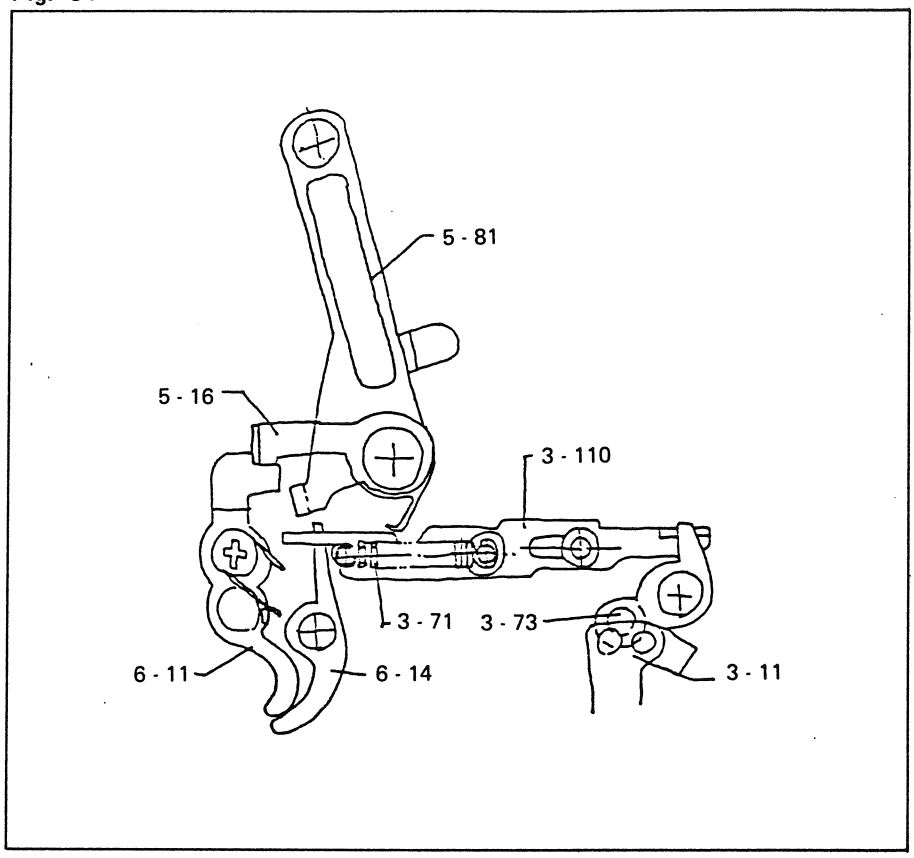


○ Locking the shutter release when the front cover mechanism is in the folded state.

The leaf spring (5 - 16) locks the lever (6 - 11), causing the interlock lever (3 - 110) to be pulled.
Then, the shaft (3 - 73) enters beneath the release plate assembly (3 - 11).
Thus, the shutter release cannot be depressed.

When the shutter release is not locked normally, check the leaf spring (5 - 16).
If this leaf spring is disengaged with the guide shaft (5 - 13), positioning cannot be made correctly.
Check the set screw (5 - 20) to insure that it is tightened securely.
Check that the lever (3 - 110) is caused to move smoothly by the spring (3 - 71).

Fig. 31



9. Front cover linkage mechanism

[MOTION]

[Opening]

- The lock levers (5 - 62 and 5 - 80) must hold the collar (4 - 6) securely.
  ⇨ The housing is held by the rising portion of the base plate (5 - 60) and collar (4 - 6).
- Check hooks (A), (B) and (C) to insure that they are functioning correctly.
- Pay particular attention on the relationship between the springs (5 - 42 and 5 - 43) and levers (5 - 80 and 5 - 62).
  The springs should not be held or bit. Further, the spring force must be transmitted to the levers smoothly.
- Use a collar of the optimum diameter.
- The caulking must have been made correctly.

[Closing (Folding)]

Make sure that the hooks (A), (B) and (C) (6 positions) disengage correctly when the push lever (5 - 50) is pressed.

Fig. 32

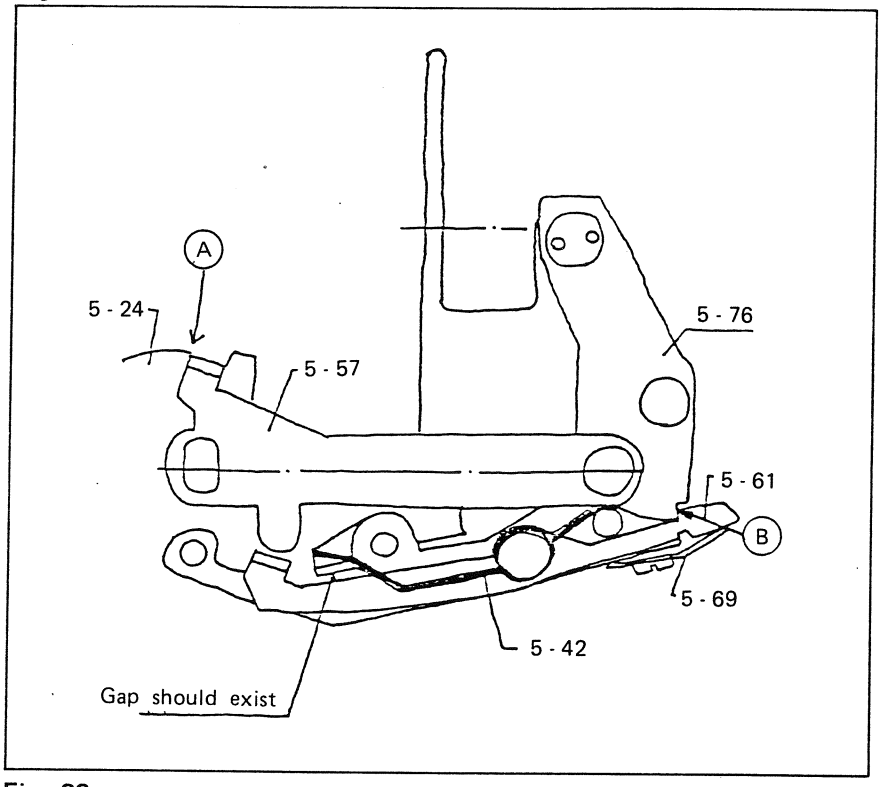
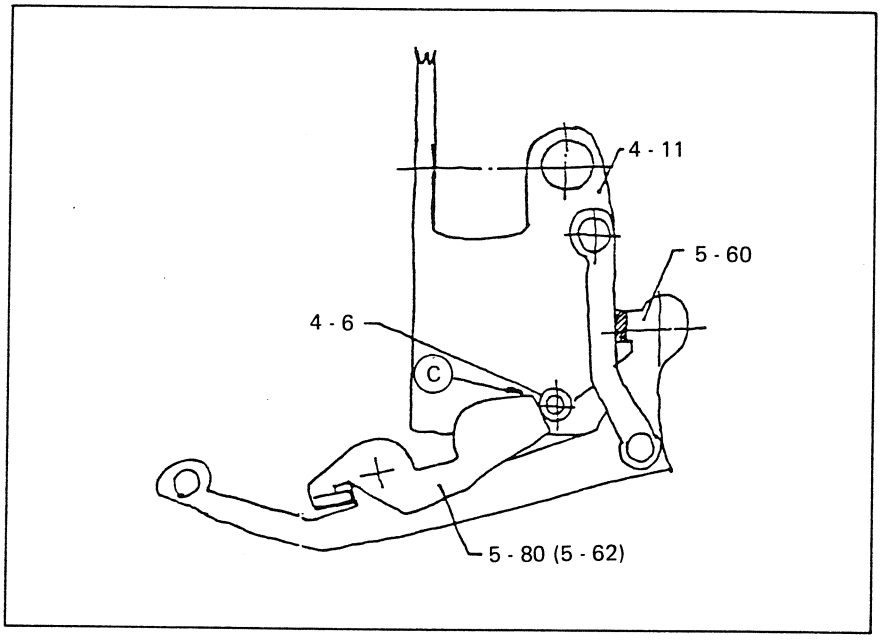


Fig. 33



○ Folding the linkage mechanism

Smoothness of folding is affected by strength of the bellows.
When the bellows is deformed, apply water to the interior of the bellows, reform it, and leave it for 24 hours or longer with the bellows folded.

○ Lens infinity set safety set safety mechanism

Except when the focusing ring of the helicoid assembly (4 - 41) is in the inifinite position, the lever (4 - 3) engages with the arm of the base plate, causing the linkage mechanism not be folded.

REASON: When the front cover is folded at a position other thatn the infinity, the cover cannot be folded correctly because the lens is moved forward. This also causes the lens to be scratched.

Fig. 34

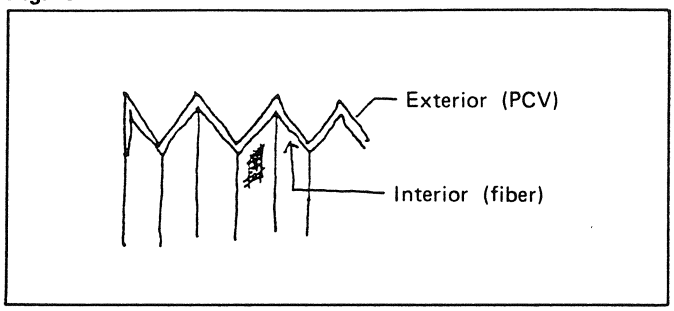
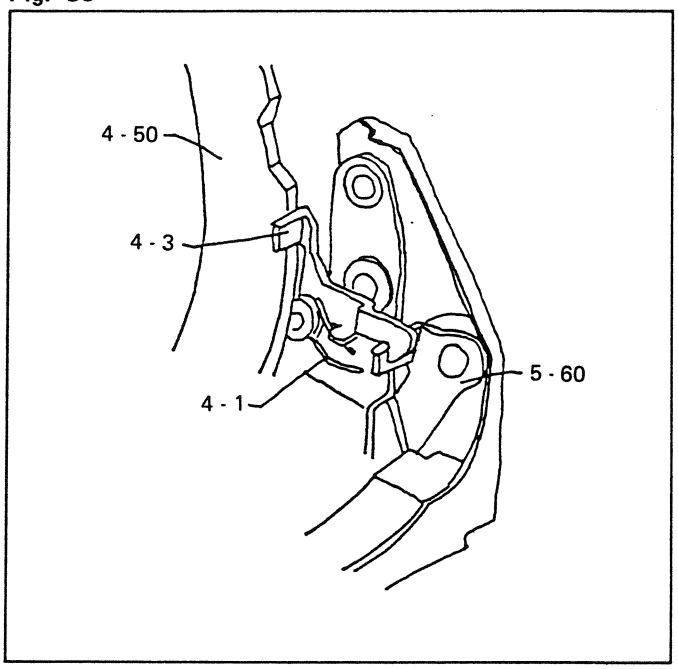


Fig. 35

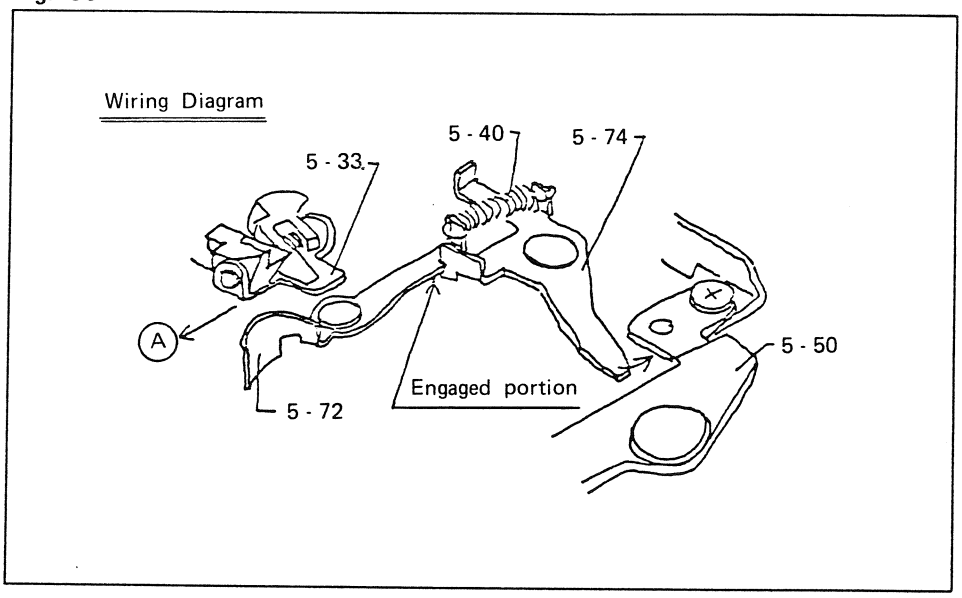


○ Film advance end sensing safety mechanism

When the film is advanced to the next frame, the hook portions of the levers (5 - 72 and 5 - 74) engage, the lever (5 - 74) runs away from the push lever (5 - 50), and the front cover can be folded.
When the shutter is released, the set lever (5 - 33) moves to the arrow (A), the levers (5 - 72 and 5 - 74) disengage, the head of the lever (5 - 74) enters beneath the push lever (5 - 50), causing the front cover not to be folded.

When the film advance lever is wound up, the set lever (5 - 33) pushes the lever (5 - 40), causing the above shown engaged portion to be engaged.

Fig. 36



10. Adjustment of electrical circuit

○ Wiring

Perform wiring by referring to the wiring diagram.
No short - circuit or bridged soldering should exist.
Pay particular attention on the lead wires extended from the shutter assembly so that they are not held between parts or they are not pulled unreasonably.
The lead wires may be broken.

○ Adjustment of S. F. T. value potentiometer voltage

To adjust this voltage, use variable resistor VR1.
Measure voltage across the terminals to which blue and green lead wires are connected from the shutter assembly.

Adjust voltage so that $V_2 - V_1 = 373.1 \pm 2$ mV.

where, V_1 : Voltage at ASA 1600 T 1/1 F3.4

V_2 : Voltage at ASA 25 T 1/500 F22

○ Adjustment of voltage across IC Pin No. 5 and 16

To adjust this voltage, use VR3. The rated voltage is 205±2 mV.

○ Adjustment of LED display

Adjust variable resistor VR2 so that the center LED lights at the following settings.

ASA : 100

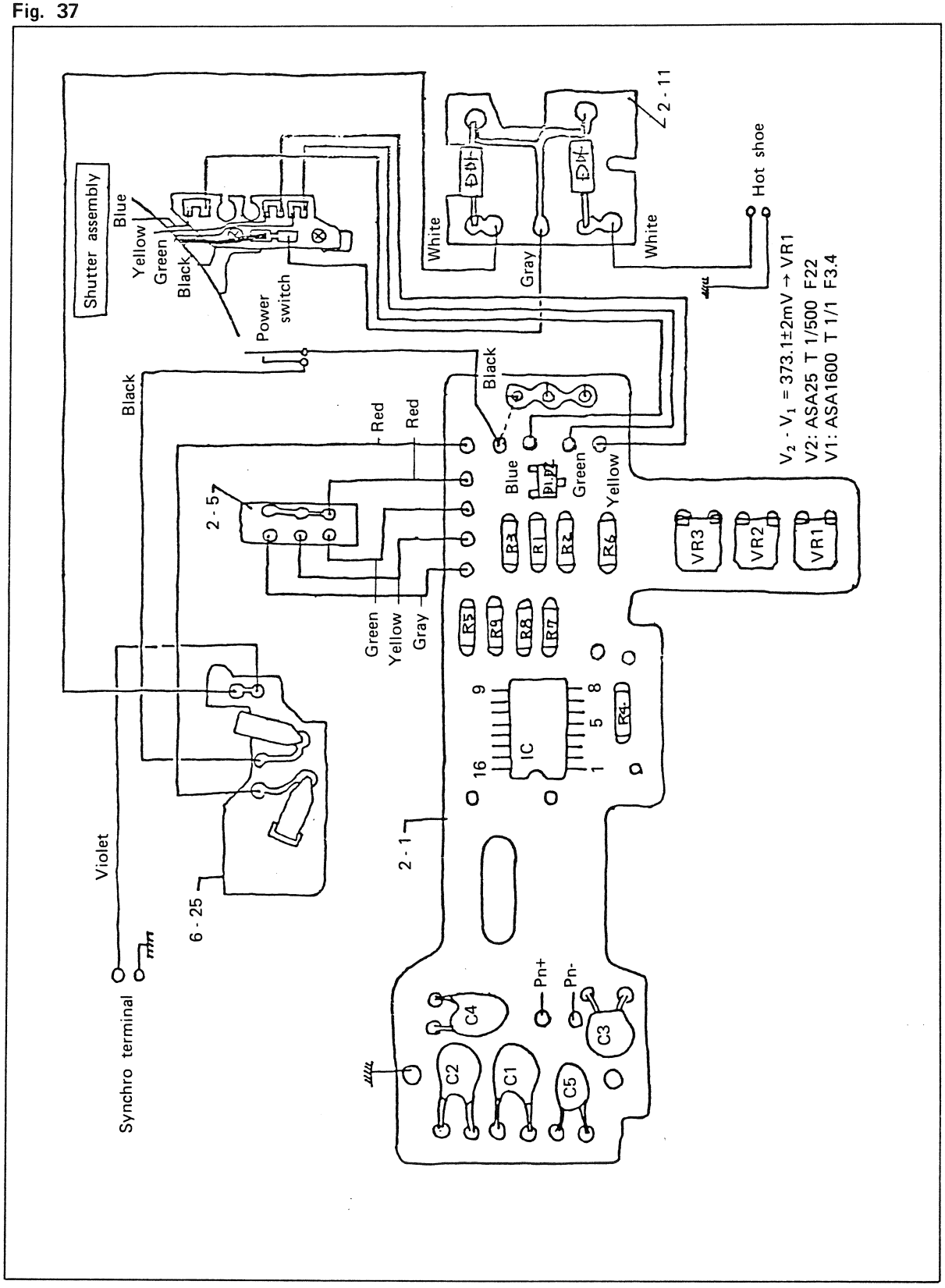
F : 5.6

T : 1/125

LV : 12 (Brightness 1800 rlx.)

In this case, used K - value is 1.3.

Fig. 37


Shutter assembly
Blue
Yellow
Green
Black
Power switch
White
Gray
White
2 - 11
Hot shoe
$V_2 - V_1 = 373.1 \pm 2mV \rightarrow VR1$
V2: ASA25 T 1/500 F22
V1: ASA1600 T 1/1 F3.4
Black
Red
Red
Black
Blue
Green
Yellow
2 - 5
R3
R1
R2
R6
VR3
VR2
VR1
Green
Yellow
Gray
R5
R9
R8
R7
9
16
IC
1
5
8
R4
2 - 1
Violet
6 - 25
Synchro terminal
Pn+
Pn-
C4
C3
C2
C1
C5

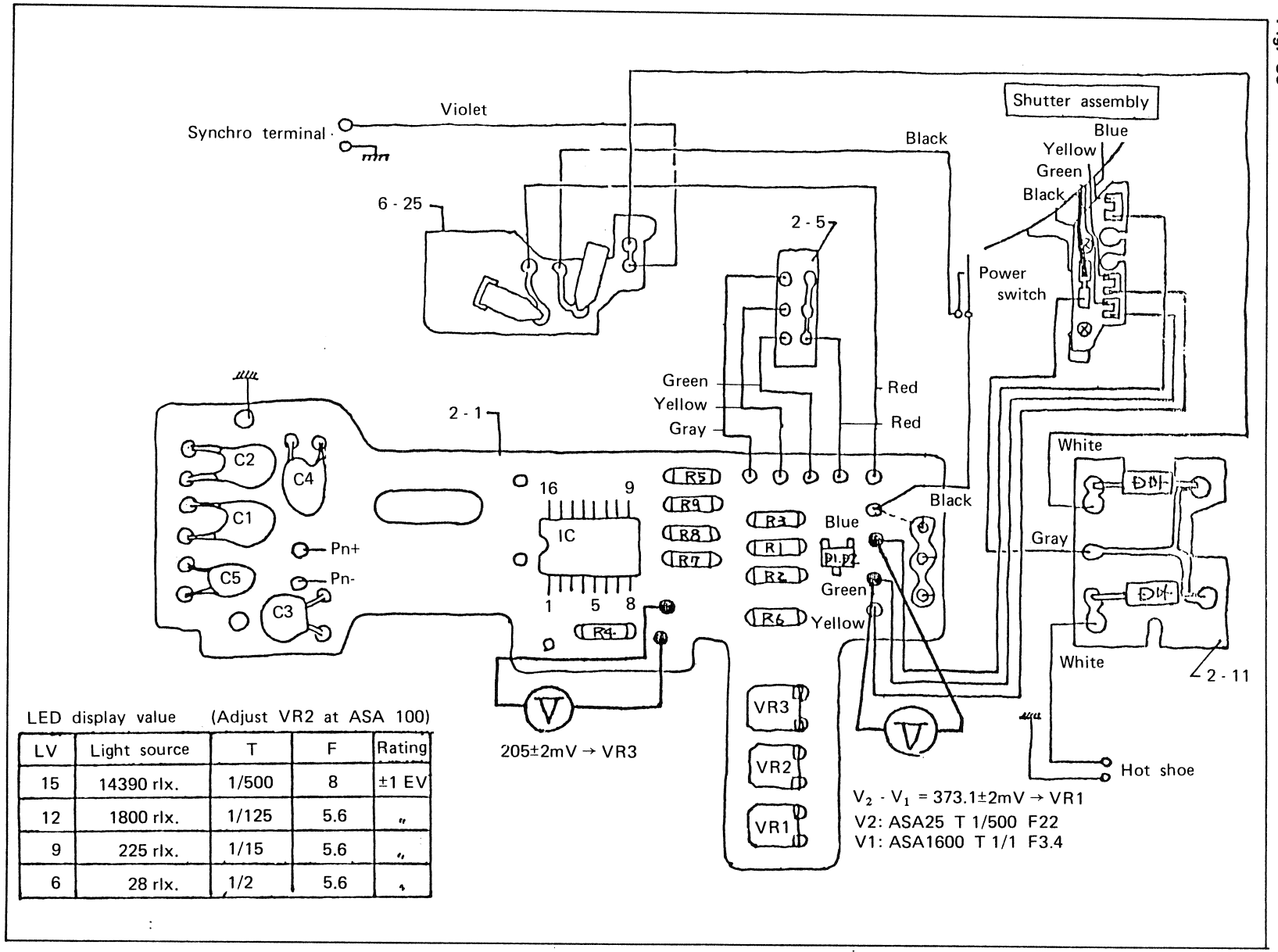


Fig. 38

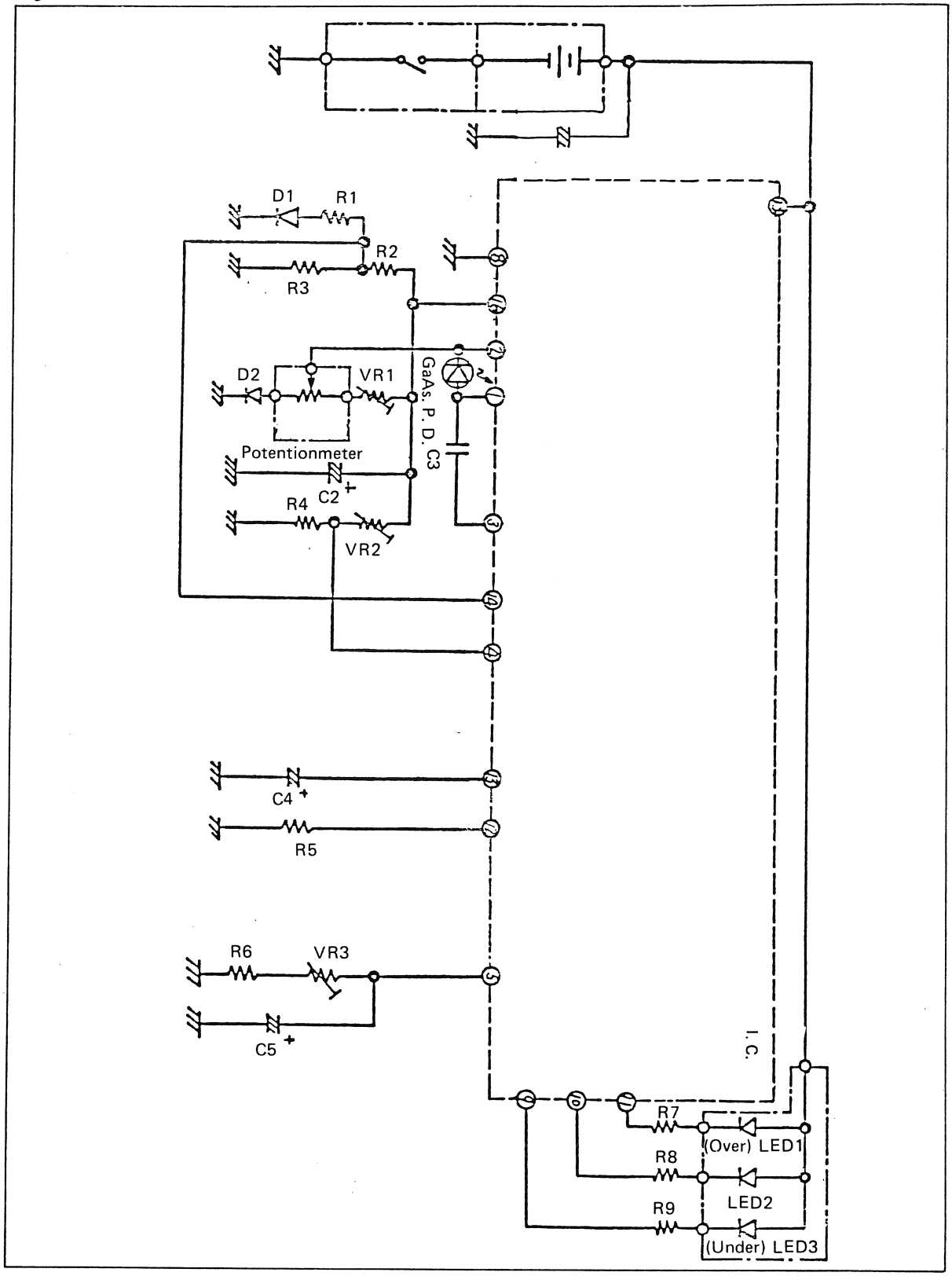
LED display value (Adjust VR2 at ASA 100)

LV	Light source	T	F	Rating
15	14390 rlx.	1/500	8	±1 EV
12	1800 rlx.	1/125	5.6	"
9	225 rlx.	1/15	5.6	"
6	28 rlx.	1/2	5.6	"

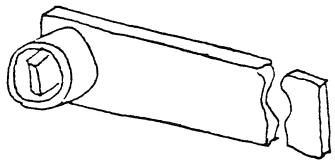
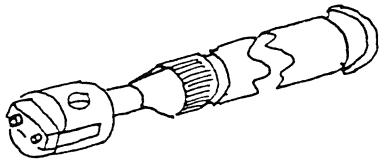
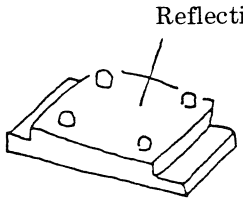
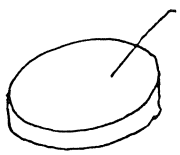
○ IC TA. 2F 7646F pin operations

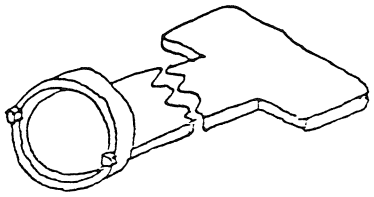
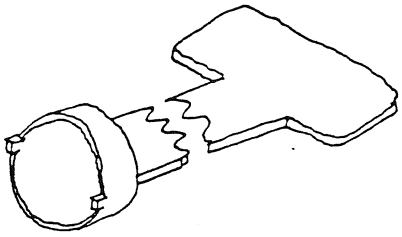
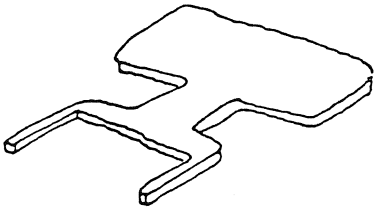
Pin No.	Name	Operation
1	Photocell (—) input	
2	S. F. T value input	
3	S. F. T. L output	About 18.2 mV/EV $\frac{V_2 - V_1}{20.5} = \frac{373.1}{20.5}$ = 18.2
4	S. F. T. L output adjust terminal	LED display value adjustment
5	LED lighting width adjust terminal	
6		
7		
8	GND	
9	LED terminal (Under)	ON at 0.5V or below, OFF at 1.5V or higher
10	LED terminal (Proper)	ON at 0.5V or below, OFF at 1.5V or higher
11	LED terminal (Over)	ON at 0.5V or below, OFF at 1.5V or higher
12	Battery check terminal	LED goes out when voltage is about 2.0V
13	Output stabilizing terminal	LED is unstable under OPEN state
14	Temperature guarantee circuit terminal	
15	IC poower supply (+)	Battery voltage
16	Reference voltage	1.25V

Fig. 39


D1
R1
R2
R3
D2
VR1
GaAs. P. D. C3
Potentionmeter
C2
R4
VR2
C4
R5
R6
VR3
C5
I. C.
R7
(Over) LED1
R8
LED2
R9
(Under) LED3

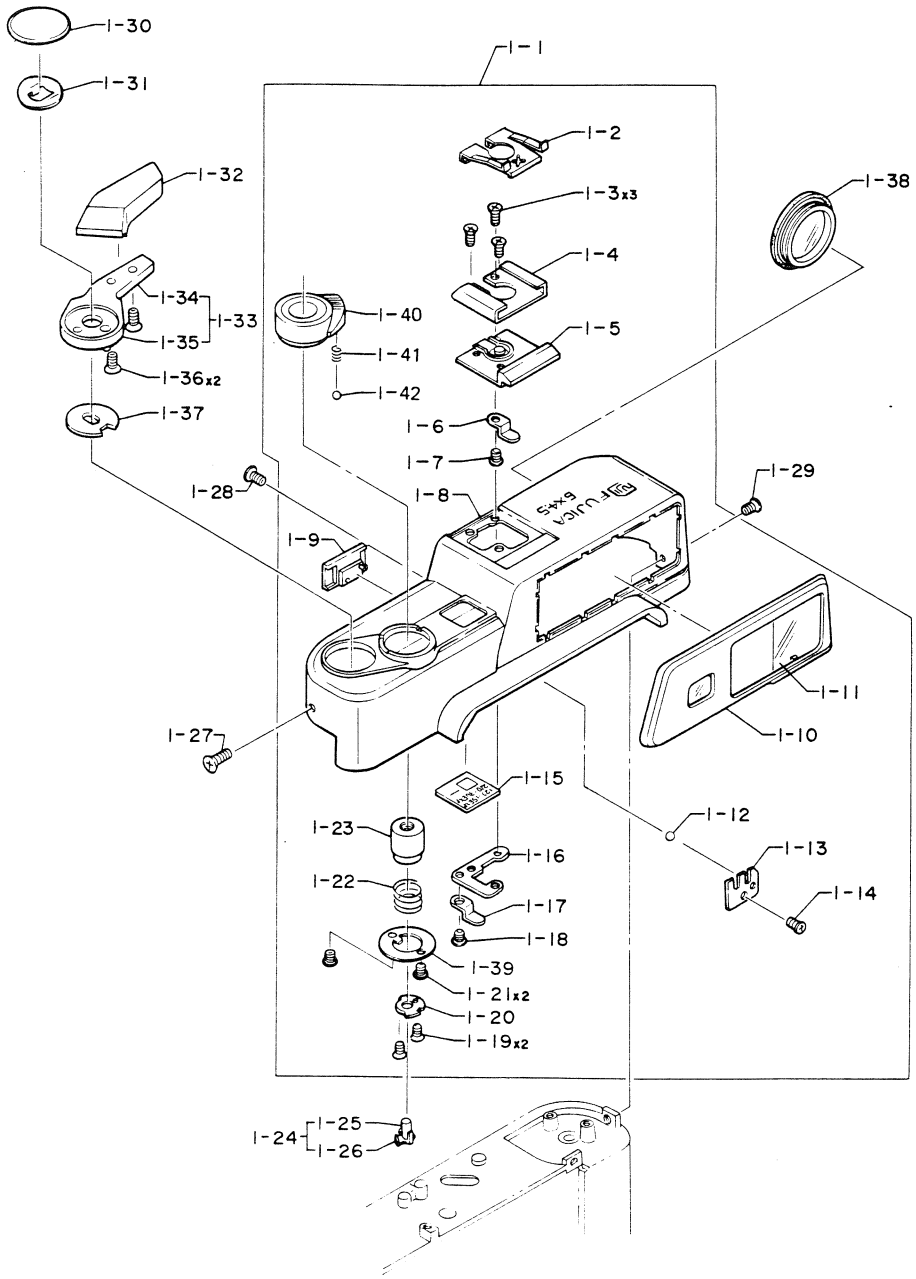
Ⅲ SPECIAL TOOL LIST

No.	Name	Sketch and Application
J11299	Screw driver	 Used to hold the set screw when tightening the set screw when adjusting spool friction. The subhective set screws are 6 - 76 and 6 - 70.
J11317	Pin face screw driver	 Used to install and remove the set screw (5 - 17).
J11286	Base plate	 Placed on the rail of the camera
J11303	Reflector	 Used when adjusting parallelism of the lens

No.	Name	Sketch and Application
J11293 - 01	Pin face spanner	 Used for tightening ring (4 - 56).
J11293 - 02	Pin face spanner	 Used for the rear lens (4 - 57).
J11293 - 03	Pin face spanner	 Used for the front lens (4 - 59).

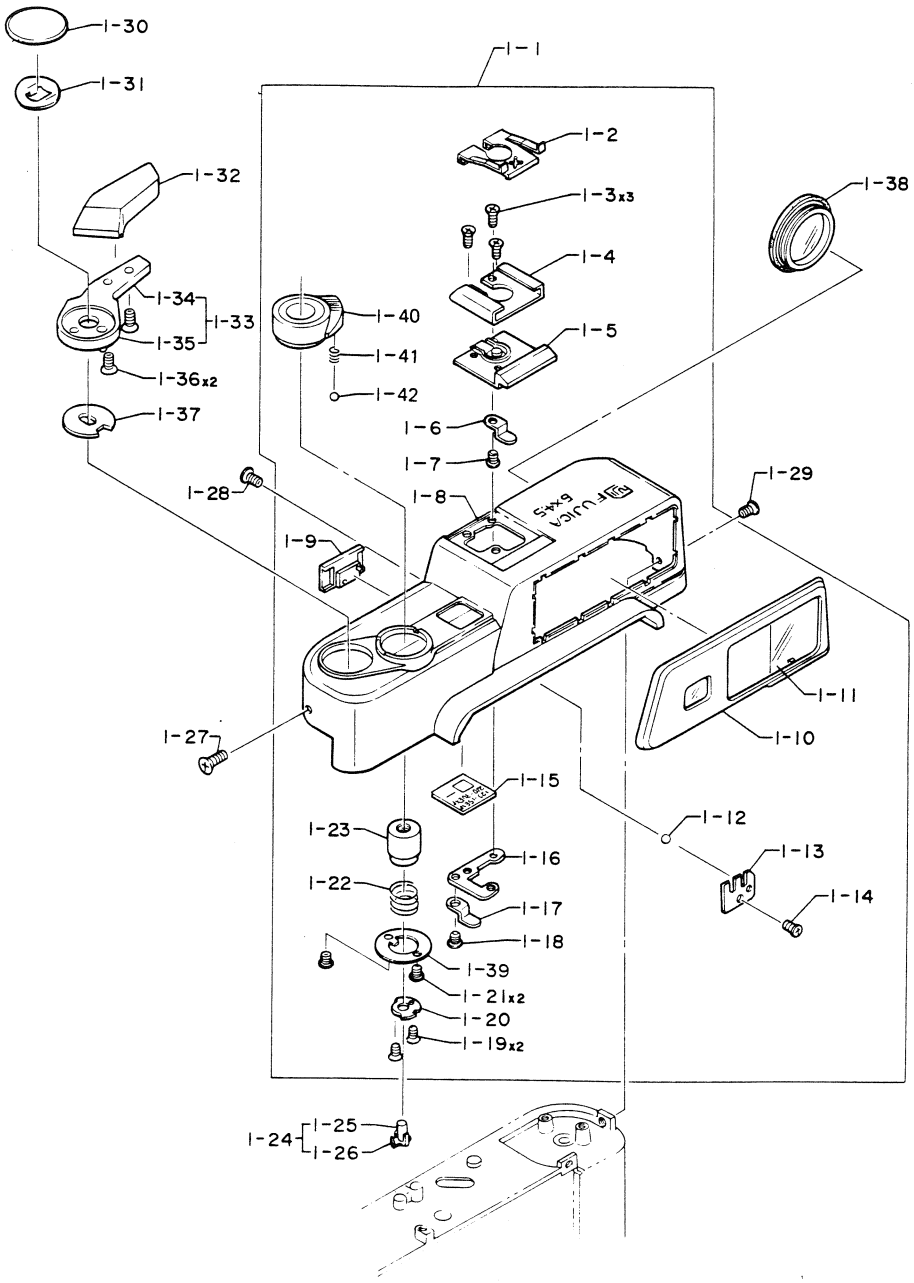
Ⅳ PARTS LIST

Fig. 1


1-30
1-31
1-1
1-2
1-32
1-3x3
1-38
1-4
1-34
1-33
1-35
1-40
1-5
1-36x2
1-41
1-42
1-37
1-6
1-7
1-28
1-8
1-29
1-9
1-11
1-10
1-27
1-15
1-12
1-23
1-16
1-13
1-22
1-17
1-14
1-18
1-39
1-21x2
1-20
1-19x2
1-24
1-25
1-26

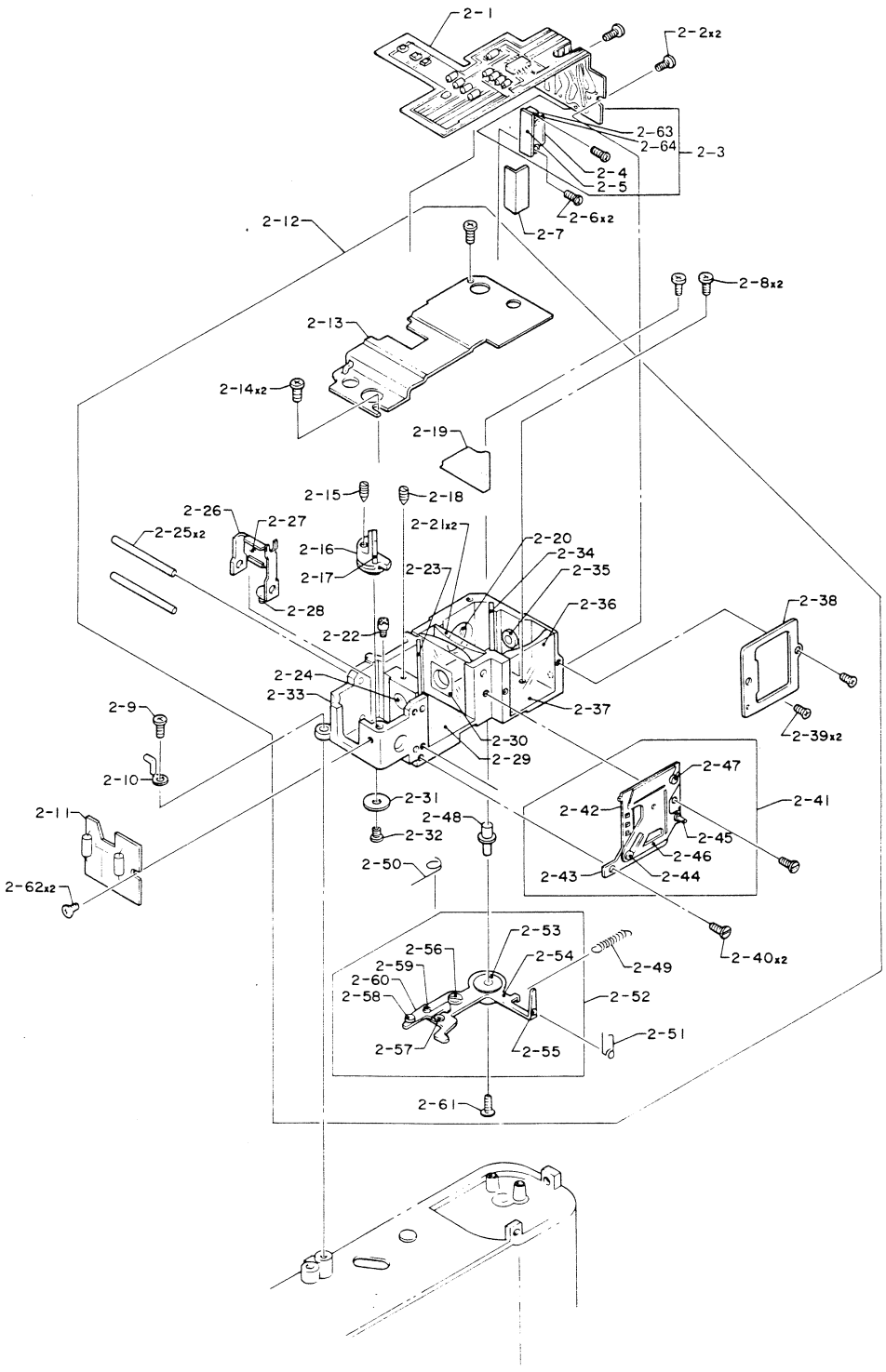
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
1 - 1	303A3286000	Top cover assembly	1	
1 - 2	11B1492470	Shoe cover	1	ST901BL
1 - 3	111M170401N	Set screw	3	
1 - 4	11B2252410	Shoe	1	STX - 1
1 - 5	115A3286010	Contact seat assembly	1	
1 - 6	109B35871	Contact	1	
1 - 7	110M140121N	Set screw	1	
1 - 9	16B3286143	Film selector knob	1	
1 - 10	84B3286111	Window frame	1	
1 - 11	6A3286090	Window glass	1	
1 - 12	200M20	Steel ball	1	
1 - 13	50B3286153	Leaf spring	1	
1 - 14	113M170201S	Set screw	1	
1 - 15	6B3286224	Exposure counter window	1	
1 - 16	85B3286210	Base plate	1	
1 - 17	109B35871	Contact	1	
1 - 18	110M140121N	Set screw	1	
1 - 19	111M140251S	Set screw	1	
1 - 20	85B3286253	Holder	1	
1 - 21	113M140201S	Set screw	2	
1 - 22	50B3286240	Spring	1	
1 - 23	16B3286233	Shutter release	1	
1 - 24	32A3280100	Release bar assembly	1	
1 - 27	53B3280360	Screw	1	
1 - 28	53B3280350	Screw	1	
1 - 29	53B3280350	Screw	1	
1 - 30	53B3280421	Set screw	1	
1 - 31	50B3280380	Leaf spring	1	
1 - 32	81B3280402	Cover plate	1	
1 - 33	47A3280050	Film advance lever assembly	1	
1 - 36	111M170503S	Set screw	2	
1 - 37	85B3280372	Lock plate	1	

Fig. 1


1-30
1-31
1-32
1-33
1-34
1-35
1-36x2
1-37
1-1
1-2
1-3x3
1-4
1-5
1-6
1-7
1-8
1-9
1-10
1-11
1-12
1-13
1-14
1-15
1-16
1-17
1-18
1-19x2
1-20
1-21x2
1-22
1-23
1-24
1-25
1-26
1-27
1-28
1-29
1-38
1-39
1-40
1-41
1-42
FUJICA GS645

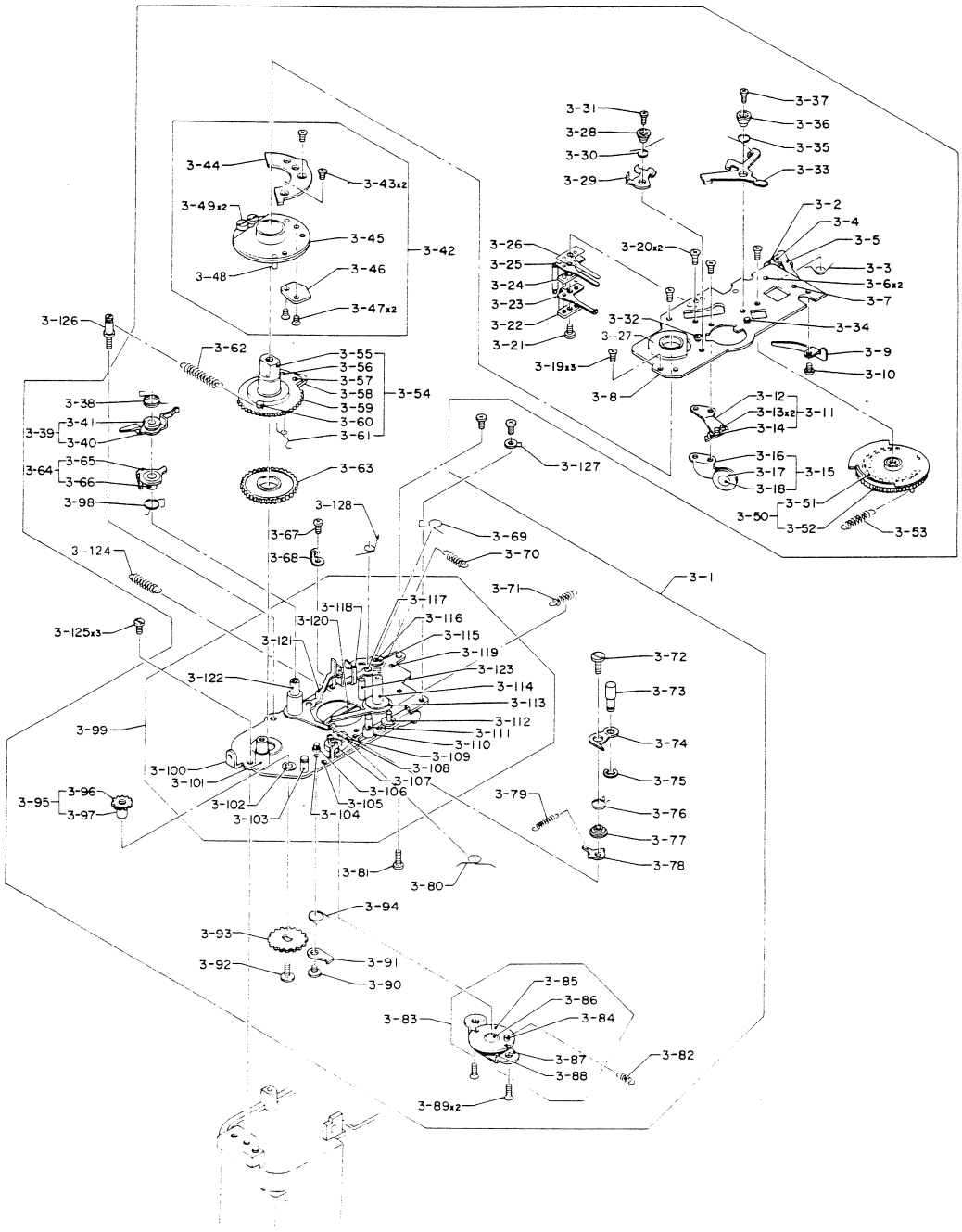
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
1 - 38	23A3280630	Eyepiece assembly	1	
1 - 39	85B3286190	Stopper	1	
1 - 40	16B3286180	Button seat	1	
1 - 41	50B3286200	Spring	1	
1 - 42	200M12	Steel ball	1	

Fig. 2


2-1
2-2x2
2-63
2-64
2-3
2-4
2-5
2-6x2
2-7
2-12
2-8x2
2-13
2-14x2
2-19
2-15
2-18
2-26
2-27
2-25x2
2-16
2-17
2-21x2
2-20
2-34
2-35
2-23
2-36
2-28
2-22
2-24
2-33
2-37
2-38
2-39x2
2-9
2-10
2-30
2-29
2-31
2-48
2-32
2-47
2-42
2-41
2-45
2-46
2-43
2-44
2-11
2-62x2
2-50
2-40x2
2-53
2-56
2-54
2-49
2-59
2-60
2-58
2-52
2-57
2-55
2-51
2-61

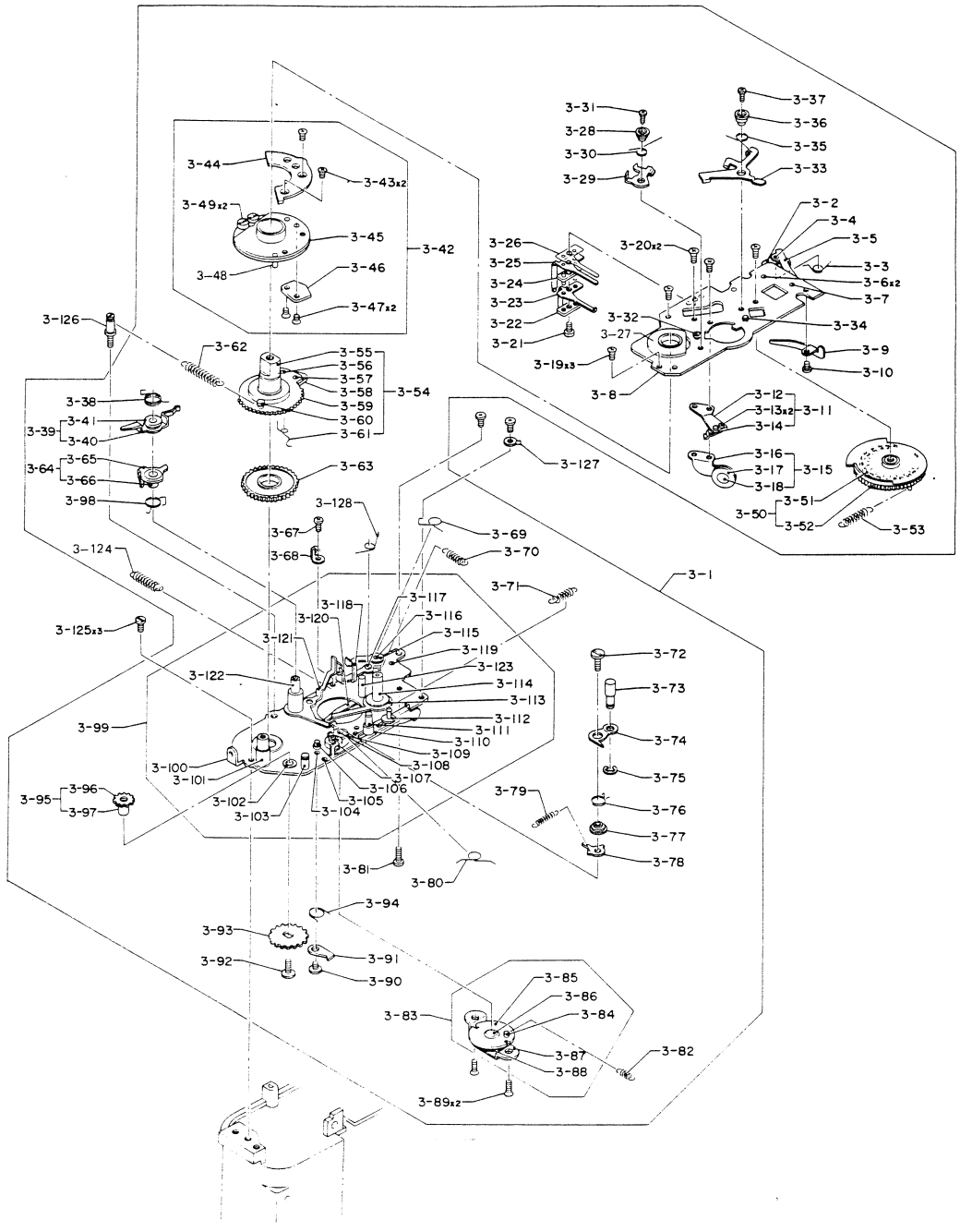
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
2- 1	110A3288810	Flexible PCB assembly	1	
2- 2	110M170301N	Screw	2	
2- 3	81A3287500	LED holder assembly	1	
2- 5	110A3288590	LED assembly (R)	1	
2- 6	110M140503S	Set screw	2	
2- 7	27B3287870	Light shielding paper	1	
2- 8	110M200551S	Screw	2	
2- 9	110M200551S	Screw	1	
2-10	109B72560	Staple	1	
2-11	110A3289100	PCB assembly	1	
2-12	99A51321A00	Range finder assembly	1	
2-13	11B3287640	Cover	1	
2-14	110M170251S	Screw	2	
2-15	53B32460	Adjust screw	1	
2-18	120M200503F	Screw	1	
2-19	27B3287790	Velveteen (I)	1	
2-29	27B3287800	Velveteen (II)	1	
2-31	55B2324850	Washer	1	
2-32	110M170251S	Screw	1	
2-37	27B3287810	Velveteen (III)	1	
2-39	111M140251S	Screw	2	
2-40	53B2193440	Screw	2	
2-41	29A3287510	Virefinder frame assembly	1	
2-49	50B1299093	Spring	1	
2-50	50B3287700	Spring	1	
2-51	50B3287830	Spring	1	
2-52	47A3287490	Linkage assembly	1	
2-56	53B32770	Screw	1	
2-61	53B32580	Screw	1	
2-62	110M140251S	Screw	2	

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-71
3-72
3-73
3-74
3-75
3-76
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-110
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128

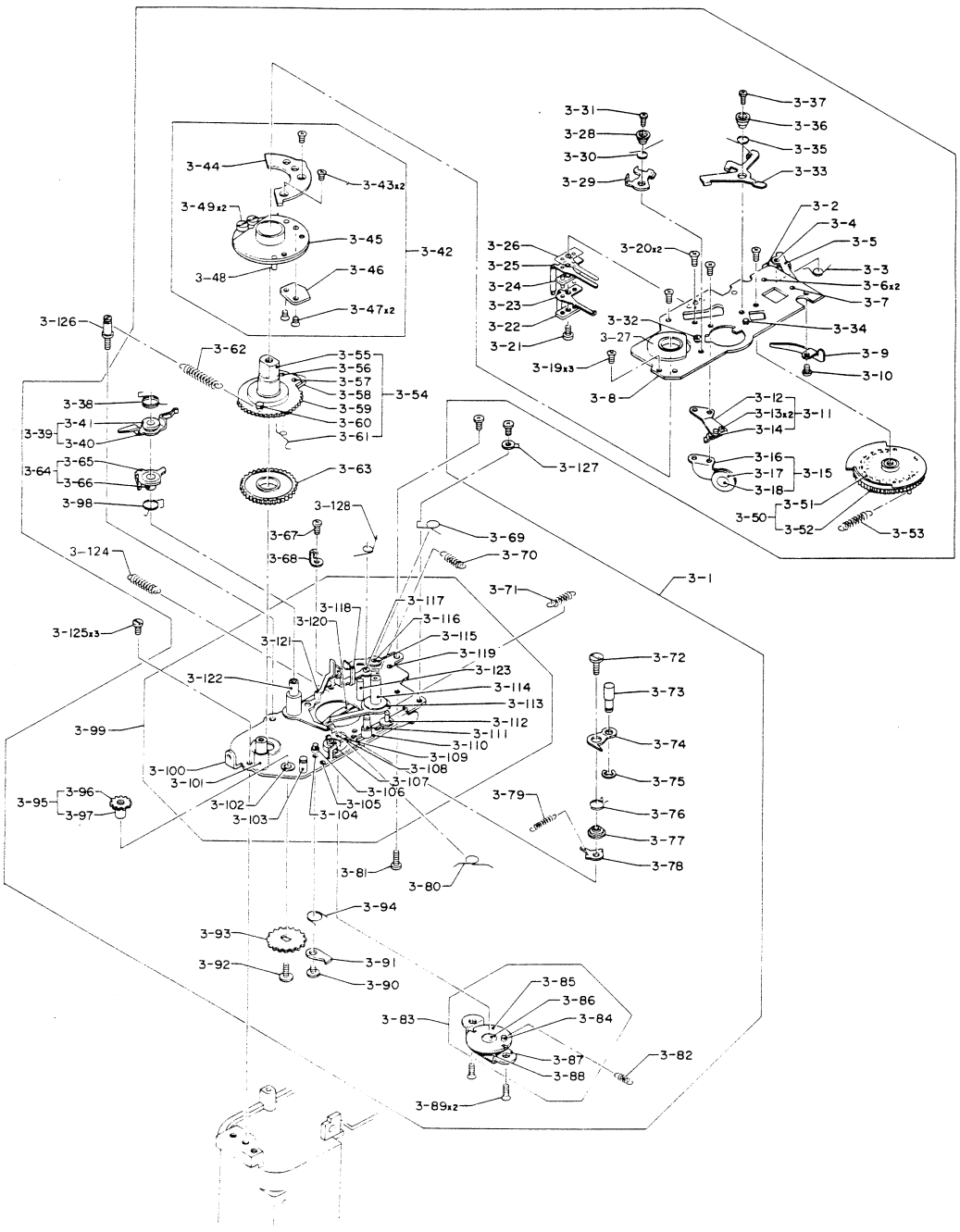
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
3 - 1	310A3284950	Film advance mechanism assembly	1	
3 - 3	50B3284080	Spring	1	
3 - 9	50B3284070	Leaf spring	1	
3 - 10	110M140121N	Set screw	1	
3 - 11	85A3284990	Release plate assembly	1	
3 - 15	85A3285000	Pulley base assembly	1	
3 - 19	111M170401S	Set screw	3	
3 - 20	111M170201S	Set screw	2	
3 - 21	110M140303S	Set screw	1	
3 - 22	115B1278230	Insulation plate	1	
3 - 23	109B3284730	Contact	1	
3 - 24	115B127030	Insulator	1	
3 - 25	109B3284720	Contact	1	
3 - 26	109B3284820	Insulator	1	
3 - 28	42B3284910	Collar	1	
3 - 29	47B3284900	Lever	1	
3 - 30	50B3284921	Spring	1	
3 - 31	111M140251S	Set screw	1	
3 - 33	47B3286480	Lever	1	
3 - 34	17B29290	Shaft	1	
3 - 35	50B3284921	Spring	1	
3 - 36	42B3286500	Collar	1	
3 - 37	111M140251S	Set screw	1	
3 - 38	50B3286490	Spring	1	
3 - 39	47A3285140	Lever assembly	1	
3 - 42	36A3285130	Large pulley assembly	1	
3 - 43	111M170201S	Set screw	2	
3 - 44	85B3284560	Large cam	1	
3 - 46	85B3284550	Cam	1	
3 - 47	111M140201S	Set screw	2	
3 - 50	34A3285050	Counter dial assembly	1	
3 - 53	50B3284300	Spring	1	

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-71
3-72
3-73
3-74
3-75
3-76
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-110
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128

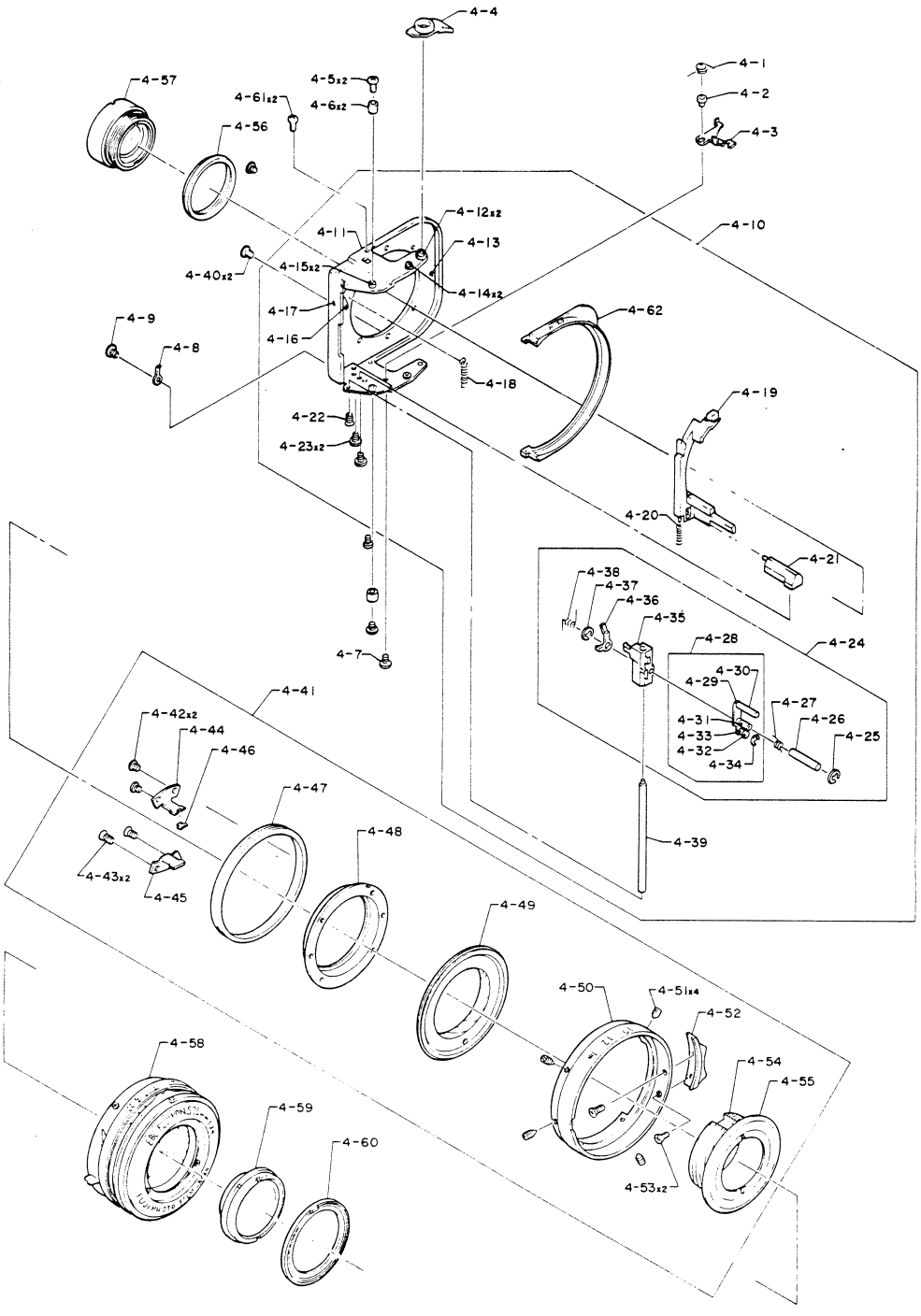
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
3 - 54	34B3285080	Ratchet wheel assembly	1	
3 - 61	50B3284510	Spring	1	
3 - 62	50B3284661	Spring	1	
3 - 63	34B3284450	Gear	1	
3 - 64	47A3285090	Release lever assembly	1	
3 - 67	110M170453S	Set screw	1	
3 - 68	111B72560	Staple	1	
3 - 69	50B3284270	Spring	1	
3 - 70	50B93500	Spring	1	
3 - 71	50B3281491	Spring	1	
3 - 72	53B3284380	Set screw	1	
3 - 73	17B3284790	Shaft	1	
3 - 74	47B3284770	Lever	1	
3 - 75	191M012T	E - clip	1	
3 - 76	50B3284870	Spring	1	
3 - 77	42B3284780	Collar	1	
3 - 78	85B3284360	Swing lever	1	
3 - 79	17B3284940	Spring	1	
3 - 80	50B3284430	Spring	1	
3 - 81	110M140453S	Set screw	1	
3 - 82	50B3284191	Spring	1	
3 - 83	41A3285030	Plate assembly	1	
3 - 89	110M170353S	Set screw	2	
3 - 90	53B3284810	Set screw	1	
3 - 91	45B1061	Claw	1	
3 - 92	53B29190	Set screw	1	
3 - 93	34B3284120	Gear	1	
3 - 94	50B3284400	Spring	1	
3 - 95	34A3285110	Gear shaft assembly	1	
3 - 98	50B3284672	Spring	1	
3 - 124	50B2458151	Spring	1	
3 - 125	110M200303S	Set screw	3	

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-71
3-72
3-73
3-74
3-75
3-76
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-110
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128

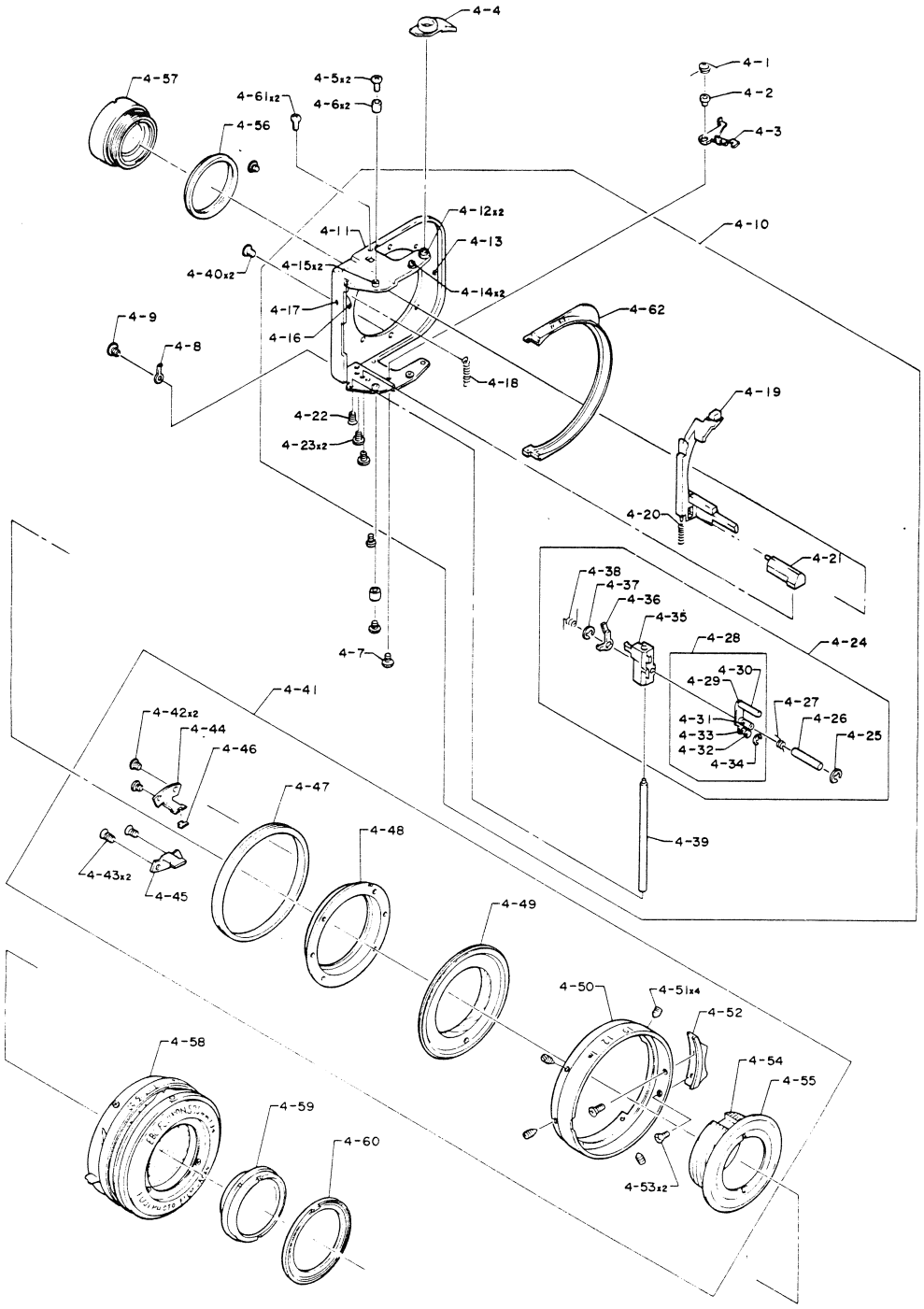
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
3 - 126	53B3281730	Screw	1	
3 - 127	111B72560	Staple	1	
3 - 128	50B3284330	Spring	1	

Fig. 4


4-4
4-1
4-2
4-3
4-57
4-61x2
4-5x2
4-6x2
4-56
4-12x2
4-13
4-10
4-11
4-40x2
4-15x2
4-14x2
4-62
4-17
4-16
4-9
4-8
4-18
4-19
4-22
4-23x2
4-20
4-21
4-38
4-37
4-36
4-35
4-28
4-24
4-30
4-29
4-27
4-31
4-26
4-33
4-25
4-32
4-34
4-7
4-41
4-42x2
4-44
4-46
4-47
4-48
4-43x2
4-45
4-49
4-39
4-50
4-51x4
4-52
4-58
4-54
4-55
4-59
4-60
4-53x2

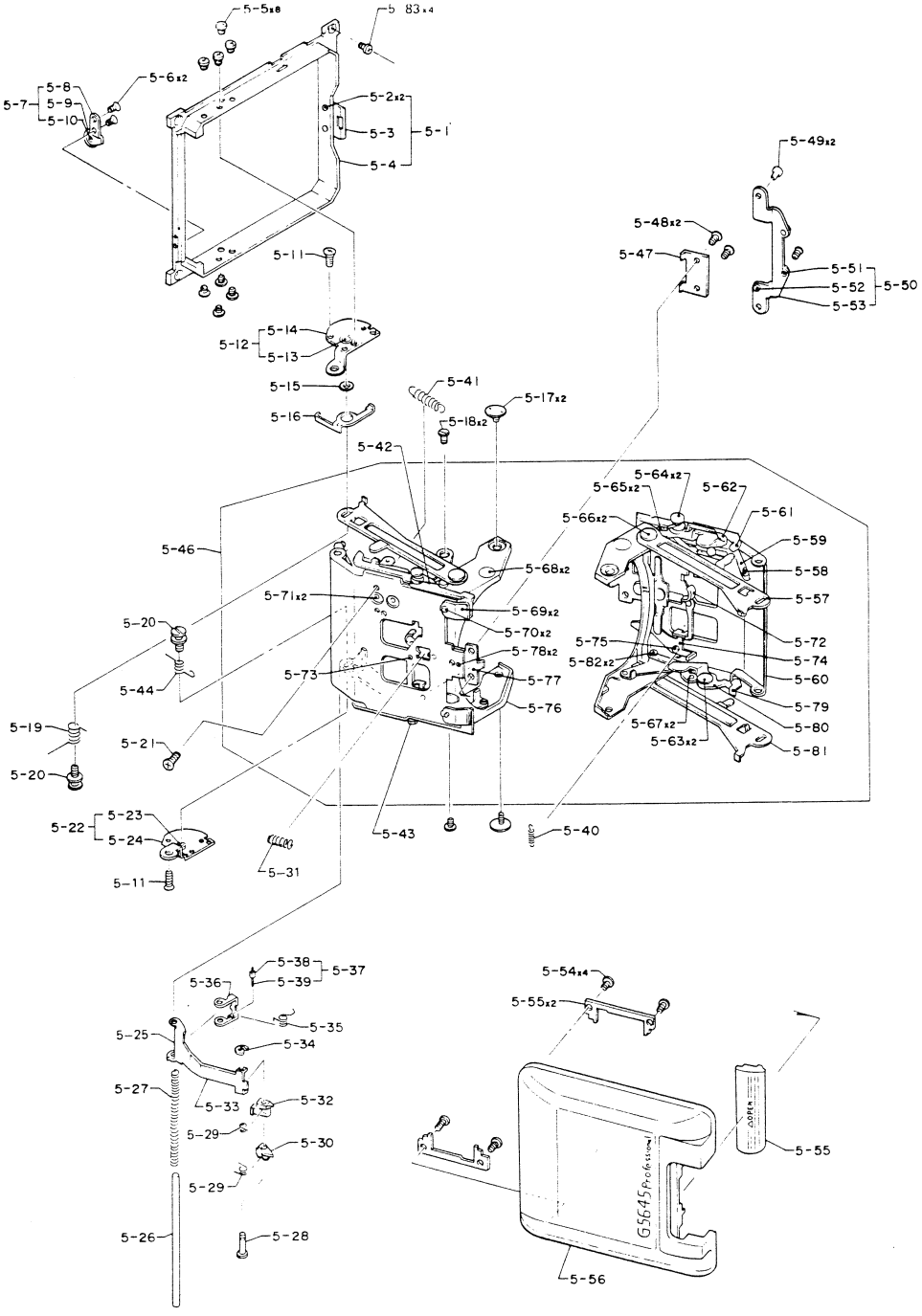
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
4 - 1	50B3285540	Spring	1	
4 - 2	32B3285530	Shaft	1	
4 - 3	47B3285520	Lever	1	
4 - 4	11B3280700	Index cover	1	
4 - 5	110M140303S	Set screw	2	
4 - 6	23B3285510	Collar D = 3ϕ	0 ~ 2	
	23B3285550	Collar D = 3.4ϕ	0 ~ 2	
	23B3285560	Collar D = 2.6ϕ	0 ~ 2	
	23B3282780	Collar D = 2.8ϕ	0 ~ 2	
	23B3282790	Collar D = 3.2ϕ	0 ~ 2	
	23B3282800	Collar D = 3.6ϕ	0 ~ 2	
4 - 7	110M140351S	Set screw	1	
4 - 8	85B3282821	Staple	1	
4 - 9	110M140161S	Set screw	1	
4 - 10	12A3282030	Housing assembly	1	
4 - 18	50B3285330	Spring	1	
4 - 19	47B3285197	Lever	1	
4 - 20	50B3285321	Spring	1	
4 - 21	81B3285200	Rod	1	
4 - 22	111M140301S	Set screw	1	
4 - 23	113M170401S	Set screw	2	
4 - 24	82A3282040	Slider assembly	1	
4 - 25	191M012T	E - clip	1	
4 - 26	32B3285280	Shaft	1	
4 - 27	50B3285313	Spring	1	
4 - 28	47A3282100	Lever assembly	1	
4 - 34	191M012T	E - clip	1	
4 - 35	82B3285270	Slider	1	
4 - 36	47B3285260	Lever	1	
4 - 37	191M012T	E - clip	1	
4 - 38	50B3285300	Spring	1	
4 - 39	32B3285290	Shaft	1	

Fig. 4


4-4
4-1
4-2
4-3
4-57
4-61x2
4-5x2
4-6x2
4-56
4-12x2
4-11
4-13
4-10
4-40x2
4-15x2
4-14x2
4-17
4-16
4-9
4-8
4-18
4-62
4-19
4-22
4-23x2
4-20
4-21
4-38
4-37
4-36
4-35
4-28
4-24
4-30
4-29
4-27
4-31
4-26
4-33
4-25
4-32
4-34
4-7
4-41
4-42x2
4-44
4-46
4-47
4-48
4-43x2
4-45
4-49
4-39
4-50
4-51x4
4-52
4-58
4-54
4-55
4-59
4-60
4-53x2

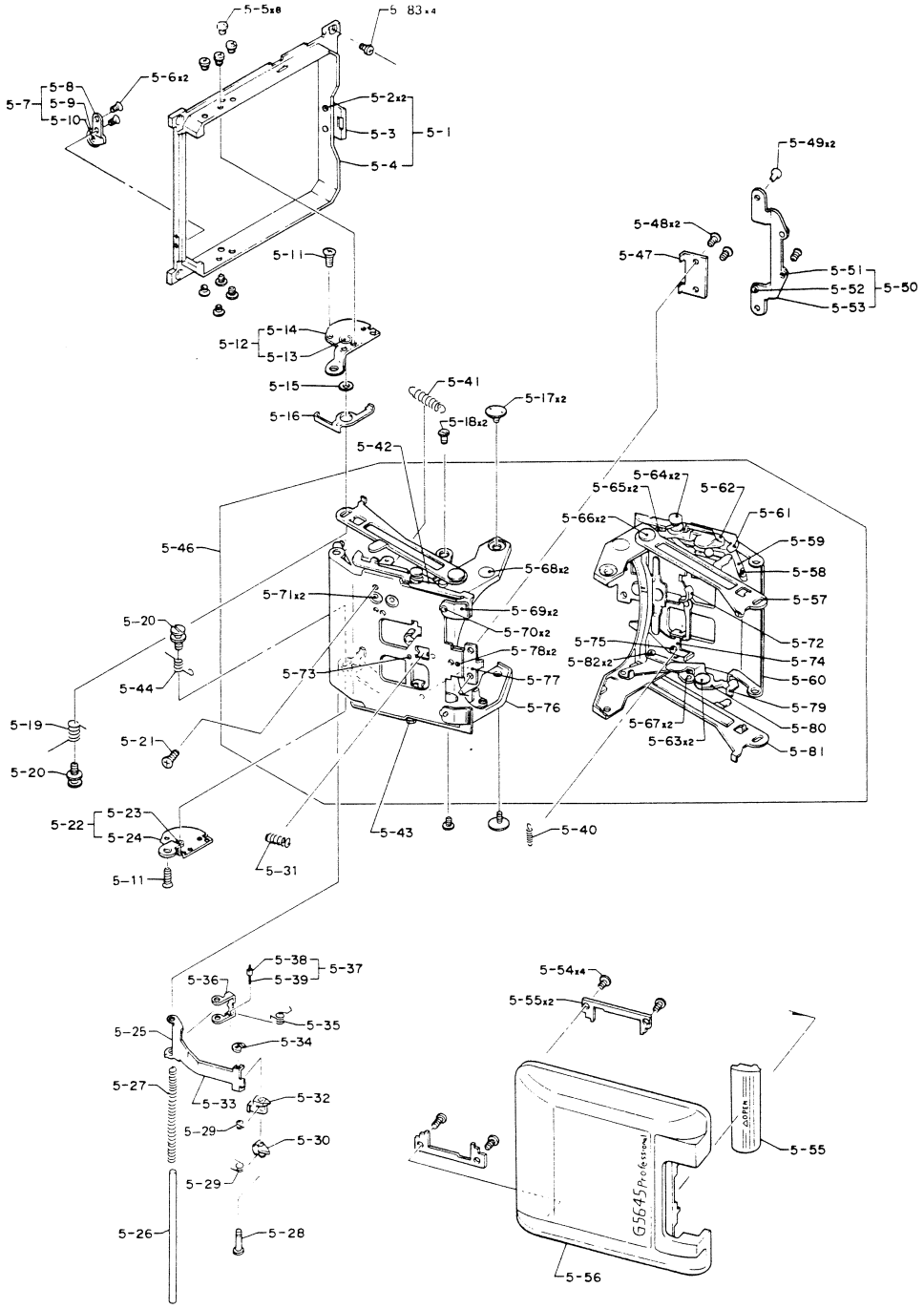
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
4 - 40	111M140221S	Set screw	2	
4 - 41	21A3283050	Helicoid assembly	1	
4 - 42	110M140253T	Set screw	2	
4 - 43	111M140253T	Set screw	2	
4 - 44	30B3282970	Helicoid guide	1	
4 - 45	30B3282980	Helicoid guide	1	
4 - 46	27B3289470	Light shielding material	1	
4 - 50	23B3283000	Focusing ring	1	
4 - 51	120M170301S	Set screw	4	
4 - 52	16B3283090	Knob	1	
4 - 53	114A170301S	Set screw	2	
4 - 56	23B3283030	Hold ring	1	
4 - 57	21A3289390	Rear lens assembly	1	
4 - 58	38A3389460	Shutter assembly	1	
4 - 59	21A3289380	Front lens assembly	1	
4 - 60	23B3280430	Name ring	1	
4 - 61	110M140201S	Set screw	2	
4 - 62	11B3280470	Mold	1	

Fig. 5


5-5x8
5-83x4
5-6x2
5-8
5-7
5-9
5-10
5-2x2
5-3
5-1
5-4
5-11
5-12
5-14
5-13
5-15
5-16
5-41
5-17x2
5-18x2
5-42
5-49x2
5-48x2
5-47
5-51
5-52
5-50
5-53
5-64x2
5-65x2
5-62
5-66x2
5-61
5-59
5-58
5-57
5-72
5-74
5-60
5-79
5-80
5-81
5-63x2
5-67x2
5-82x2
5-75
5-46
5-68x2
5-71x2
5-69x2
5-70x2
5-78x2
5-77
5-76
5-73
5-20
5-44
5-19
5-21
5-22
5-23
5-24
5-43
5-40
5-31
5-11
5-38
5-39
5-37
5-36
5-35
5-25
5-34
5-27
5-33
5-32
5-29
5-30
5-29
5-26
5-28
5-54x4
5-55x2
5-55
5-56
GS645 Professional

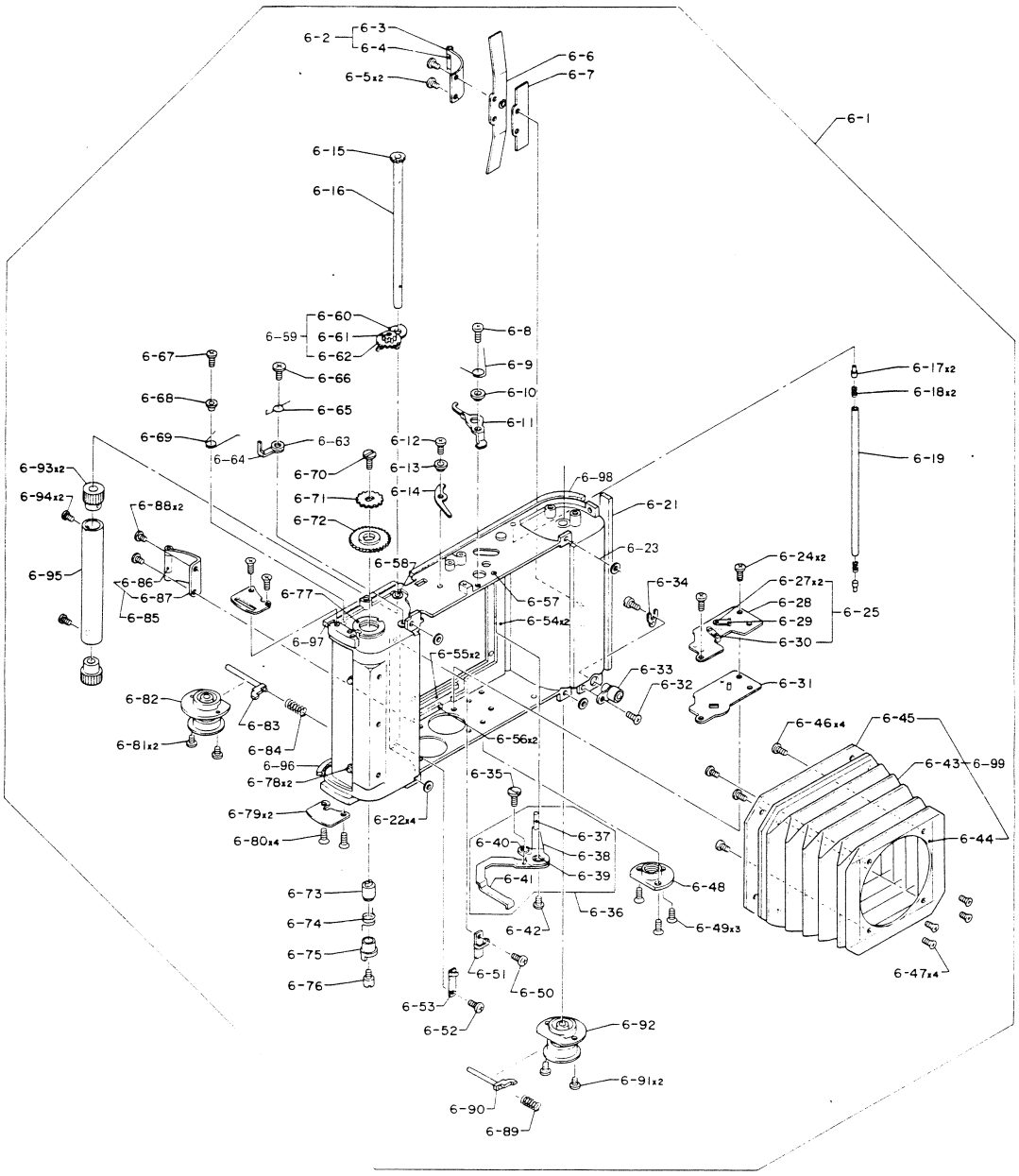
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
5 - 1	46A3282020	Frame assembly	1	
5 - 5	110M170301S	Set screw	8	
5 - 6	111M170351S	Set screw	1	
5 - 7	85A3282110	Pulley base assembly	1	
5 - 11	111M170701S	Set screw	1	
5 - 12	48A3282080	Upper shaft holder assembly	1	
5 - 15	55B3285340	Washer	0 ~ 1	
5 - 16	50B3283910	Leaf spring	1	
5 - 17	53B3283810	Screw	2	
5 - 18	53B3283800	Set screw	2	
5 - 19	50B3283890	Spring	1	
5 - 20	53B3283751	Set screw	2	
5 - 21	110M140351S	Set screw	1	
5 - 22	48A3282090	Lower shaft holder assembly	1	
5 - 25	111M170701S	Set screw	1	
5 - 26	32B3282290	Shaft	1	
5 - 27	50B3282682	Main spring	1	
5 - 28	32B3283961	Shaft	1	
5 - 29	50B3283991	Spring	1	
5 - 30	82B3282732	Claw	1	
5 - 31	50B3283351	Spring	1	
5 - 32	82B3282741	Claw	1	
5 - 33	47B3283857	Set lever	1	
5 - 34	191M012T	E - clip	1	
5 - 35	50B3282410	Spring	1	
5 - 36	85B3282330	Wire lever	1	
5 - 37	56A3280090	Wire assembly	1	
5 - 40	50B3282770	Spring	1	
5 - 41	50B3283930	Spring	1	
5 - 42	50B3283472	Spring	1	
5 - 43	50B3283482	Spring	1	
5 - 44	50B3283900	Spring	1	

Fig. 5


5-5x8
5-83x4
5-6x2
5-8
5-7
5-9
5-10
5-2x2
5-3
5-1
5-4
5-11
5-12
5-14
5-13
5-15
5-16
5-49x2
5-48x2
5-47
5-51
5-52
5-50
5-53
5-41
5-17x2
5-18x2
5-42
5-64x2
5-65x2
5-62
5-66x2
5-61
5-59
5-58
5-57
5-46
5-68x2
5-71x2
5-69x2
5-70x2
5-20
5-78x2
5-75
5-72
5-82x2
5-74
5-44
5-73
5-77
5-60
5-76
5-79
5-67x2
5-80
5-19
5-21
5-63x2
5-81
5-20
5-22
5-23
5-24
5-43
5-40
5-11
5-31
5-38
5-37
5-39
5-36
5-54x4
5-55x2
5-35
5-25
5-34
5-27
5-33
5-32
5-29
5-30
5-55
5-29
5-26
5-28
5-56

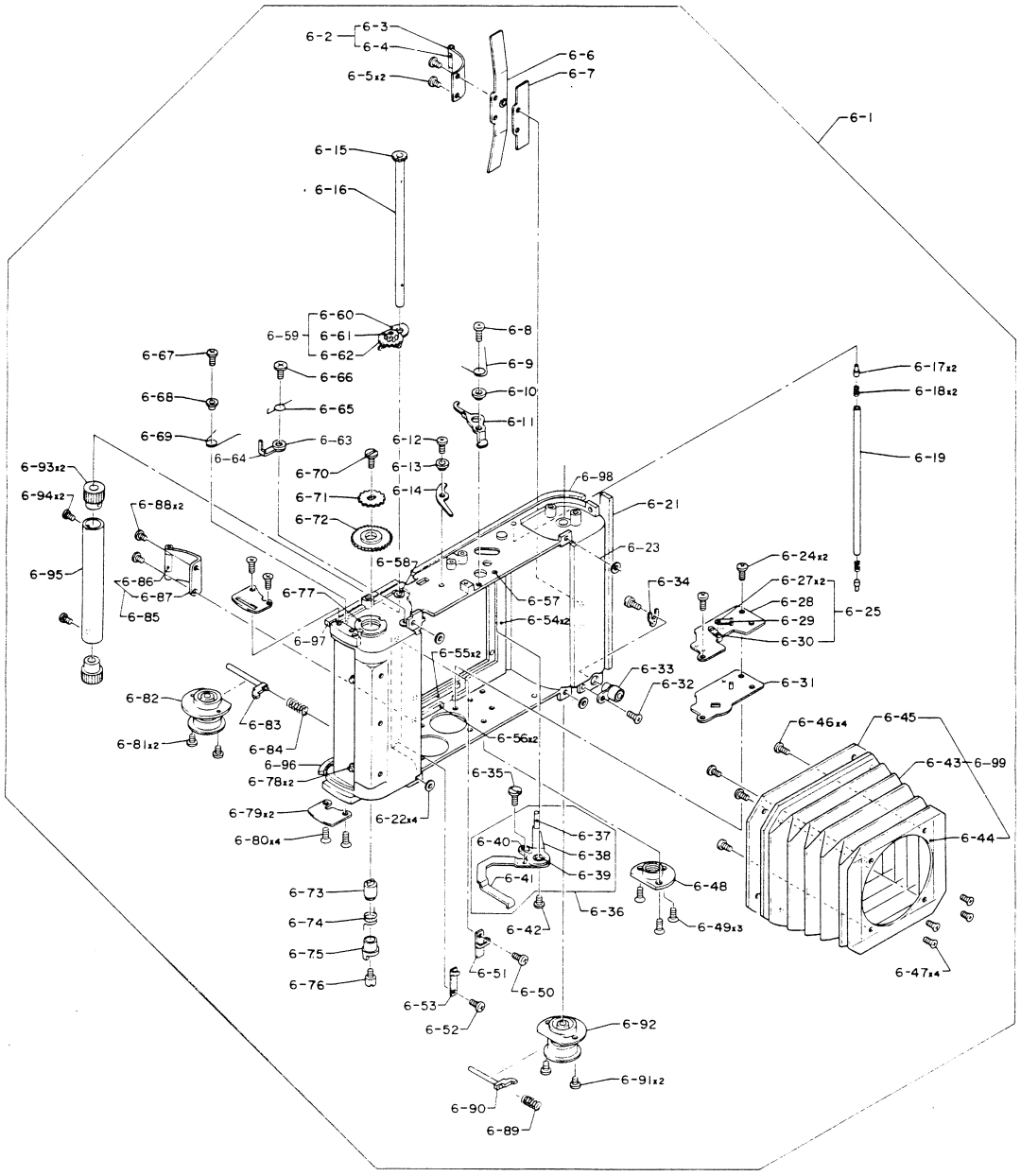
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
5 - 45	85B3280510	Holder	2	
5 - 46	46A3282014	Front cover mechanism assembly	1	
5 - 47	85B3280490	Holder	1	
5 - 48	113M170251S	Set screw	1	
5 - 49	110M170223S	Set screw	1	
5 - 50	47A3282120	Push lever	1	
5 - 54	113M170401S	Set screw	1	
5 - 55	16B3285972	Knob	1	
5 - 69	50B3285480	Leaf spring	2	
5 - 70	110M140201S	Set screw	2	
5 - 83	110M230403S	Set screw	4	

Fig. 6


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-8
6-9
6-10
6-11
6-12
6-13
6-14
6-15
6-16
6-17x2
6-18x2
6-19
6-21
6-22x4
6-23
6-24x2
6-25
6-27x2
6-28
6-29
6-30
6-31
6-32
6-33
6-34
6-35
6-36
6-37
6-38
6-39
6-40
6-41
6-42
6-43
6-44
6-45
6-46x4
6-47x4
6-48
6-49x3
6-50
6-51
6-52
6-53
6-54x2
6-55x2
6-56x2
6-57
6-58
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-74
6-75
6-76
6-77
6-78x2
6-79x2
6-80x4
6-81x2
6-82
6-83
6-84
6-85
6-86
6-87
6-88x2
6-89
6-90
6-91x2
6-92
6-93x2
6-94x2
6-95
6-96
6-97
6-98
6-99

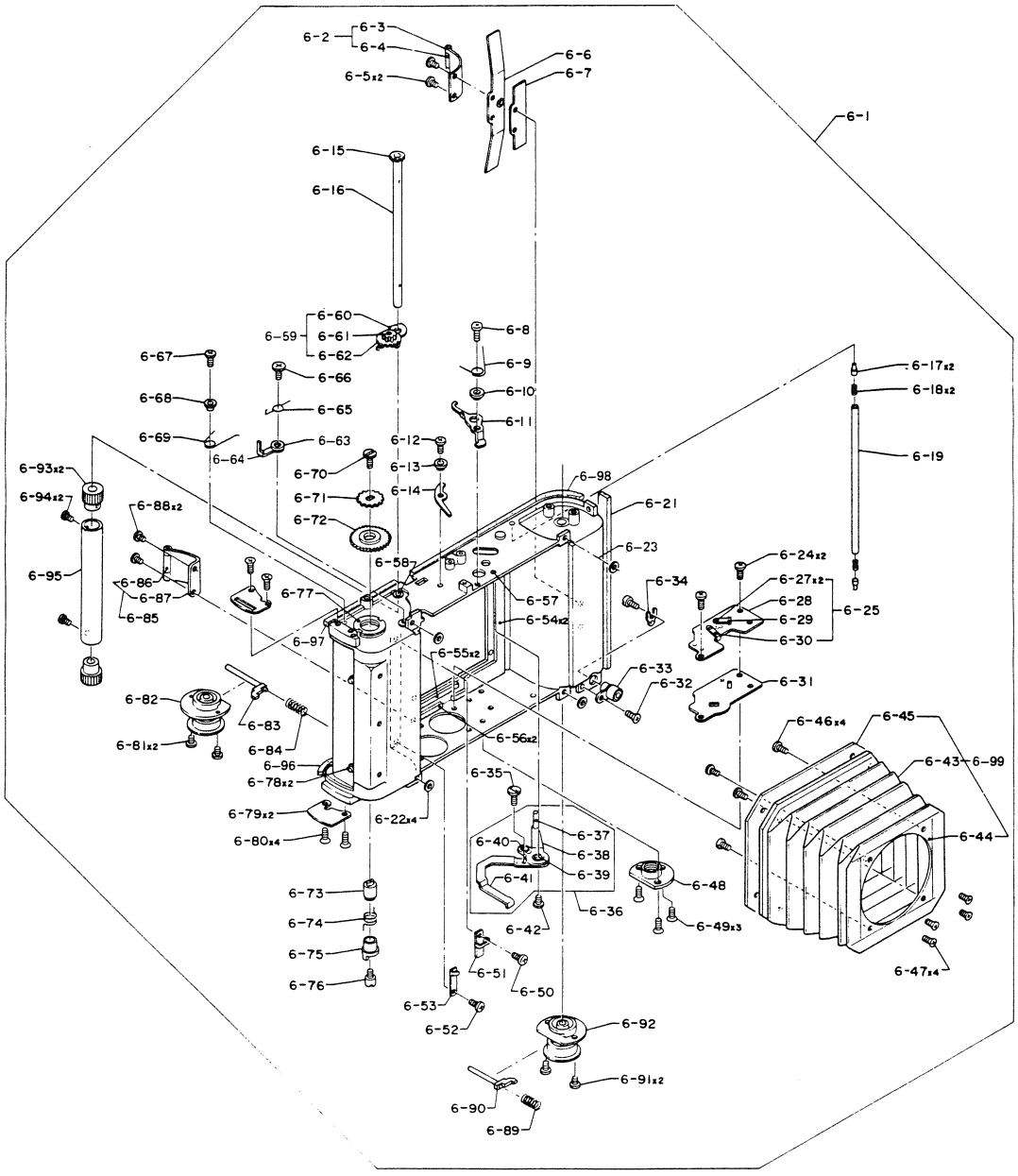
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
6 - 1	301A3281000	Camera body assembly	1	
6 - 2	50A3281090	Leaf spring assembly	1	
6 - 5	110M140251N	Set screw	2	
6 - 6	50B486960	Leaf spring	1	
6 - 7	55B3281930	Adjust plate	1	
6 - 8	53B3281770	Screw	1	
6 - 9	50B3281722	Spring	1	
6 - 10	42B3281701	Collar	1	
6 - 11	47B3281683	Lever	1	
6 - 12	110M170301B	Set screw	1	
6 - 13	42B3281701	Collar	1	
6 - 14	47B3281692	Lever	1	
6 - 15	34B3281390	Gear	1	
6 - 16	32B3281380	Shaft	1	
6 - 17	17B30161	Pin	2	
6 - 18	50B30170	Spring	2	
6 - 19	30B3281360	Roller	1	
6 - 21	27B3281851	Moquette	1	
6 - 22	55B3285350	Washer	0 ~ 4	
6 - 24	110M170251S	Set screw	2	
6 - 25	110A3289010	Battery PCB assembly	1	
6 - 31	115B3280550	Insulation plate	1	
6 - 32	111M170301N	Set screw	1	
6 - 33	112A3281050	Synchro - socket assembly	1	
6 - 34	108B563570	Lug	1	
6 - 35	53B32770	Screw	1	
6 - 36	47A3281010	Linkage assembly	1	
6 - 42	53B32770	Screw	1	
6 - 46	111M140301S	Set screw	4	
6 - 47	111M170221S	Set screw	4	
6 - 48	53B93823	Tripod socket	1	
6 - 49	111M200503S	Set screw	3	

Fig. 6


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-8
6-9
6-10
6-11
6-12
6-13
6-14
6-15
6-16
6-17x2
6-18x2
6-19
6-21
6-22x4
6-23
6-24x2
6-25
6-27x2
6-28
6-29
6-30
6-31
6-32
6-33
6-34
6-35
6-36
6-37
6-38
6-39
6-40
6-41
6-42
6-43
6-44
6-45
6-46x4
6-47x4
6-48
6-49x3
6-50
6-51
6-52
6-53
6-54x2
6-55x2
6-56x2
6-57
6-58
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-74
6-75
6-76
6-77
6-78x2
6-79x2
6-80x4
6-81x2
6-82
6-83
6-84
6-85
6-86
6-87
6-88x2
6-89
6-90
6-91x2
6-92
6-93x2
6-94x2
6-95
6-96
6-97
6-98
6-99

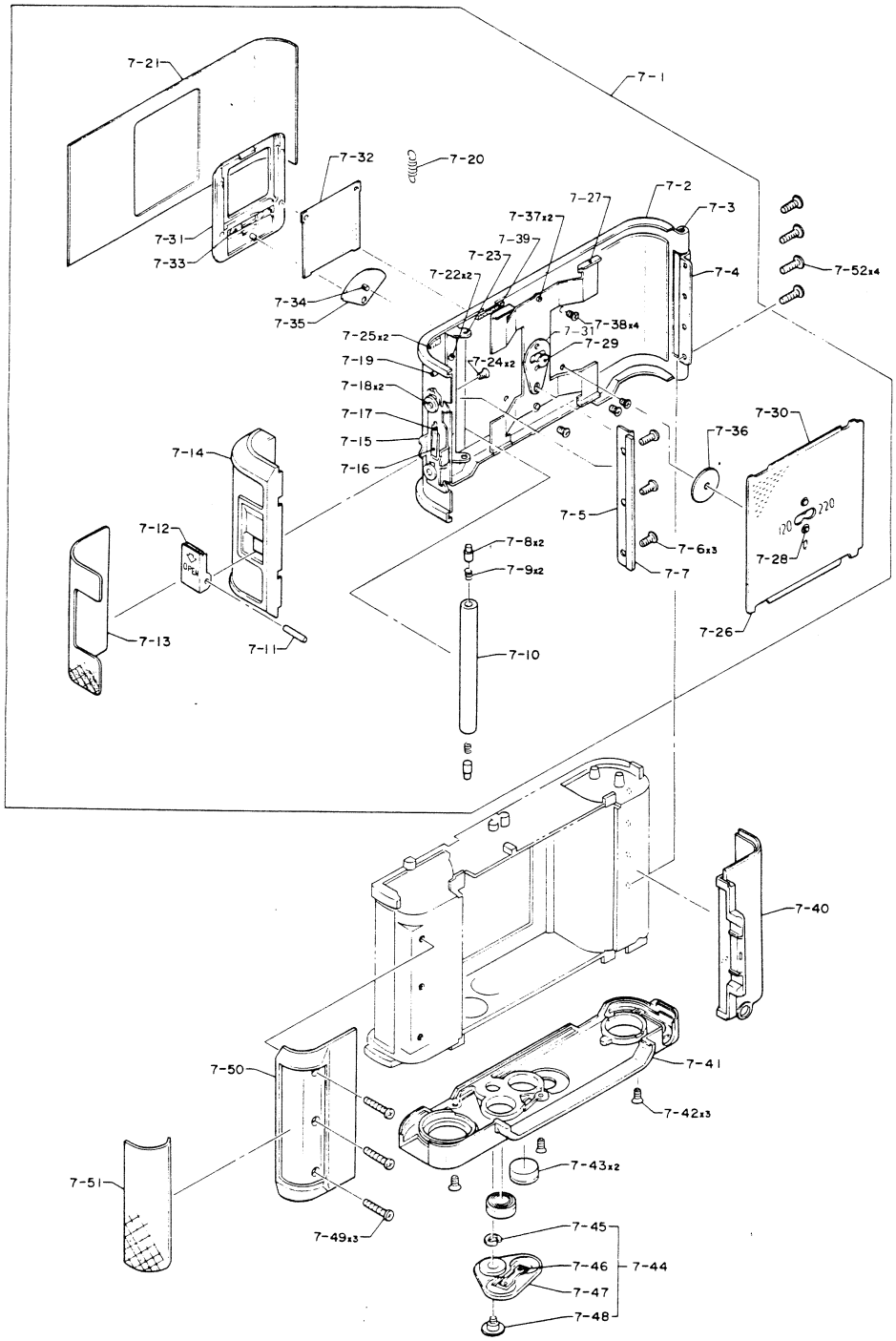
REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
6 - 50	110M170201S	Set screw	1	
6 - 51	85B3281780	Cord holder	1	
6 - 52	110M170201S	Set screw	1	
6 - 53	85B3281780	Cord holder	1	
6 - 54	27B3281852	Moquette	2	
6 - 55	27B3281870	Moquette	2	
6 - 56	27B3281880	Moquette	2	
6 - 59	34A3281030	Idle gear assembly	1	
6 - 63	42B3281660	Collar	1	
6 - 64	47B3281670	Lever	1	
6 - 65	50B3281450	Spring	1	
6 - 66	50B3281760	Set screw	1	
6 - 67	110M170353S	Set screw	1	
6 - 68	42B3281840	Collar	1	
6 - 69	50B3281830	Spring	1	
6 - 70	53B3281350	Screw	1	
6 - 71	34B3284120	Gear	1	
6 - 72	34B3281321	Ratchet wheel	1	
6 - 73	32B3281310	Shaft	1	
6 - 74	50B3281330	Spring	1	
6 - 75	32B3281301	Spool shaft	1	
6 - 76	53B3281340	Screw	1	
6 - 77	42B3281290	Shaft holder	1	
6 - 79	41B3281231	Strap eyelet	2	
6 - 80	111M200503M	Set screw	4	
6 - 81	110M200351S	Set screw	2	
6 - 82	23A3281080	Guide ring assembly	1	
6 - 83	82B3281150	Release bar	1	
6 - 84	50B3281180	Spring	1	
6 - 85	50A3281100	Leaf spring assembly	1	
6 - 88	110M140251N	Set screw	2	
6 - 89	50B3281180	Spring	1	

Fig. 6

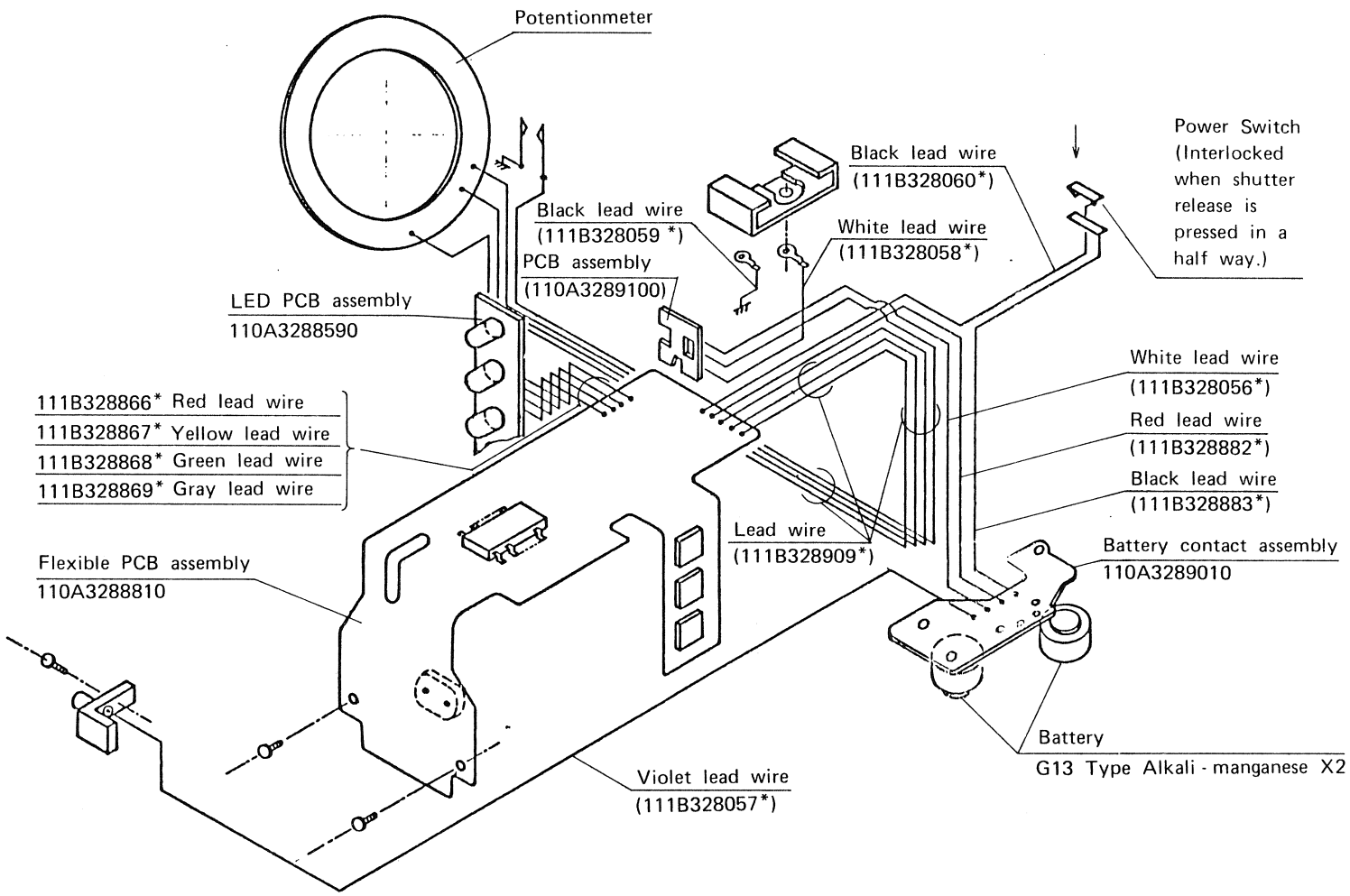

6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-8
6-9
6-10
6-11
6-12
6-13
6-14
6-15
6-16
6-17x2
6-18x2
6-19
6-21
6-22x4
6-23
6-24x2
6-25
6-27x2
6-28
6-29
6-30
6-31
6-32
6-33
6-34
6-35
6-36
6-37
6-38
6-39
6-40
6-41
6-42
6-43
6-44
6-45
6-46x4
6-47x4
6-48
6-49x3
6-50
6-51
6-52
6-53
6-54x2
6-55x2
6-56x2
6-57
6-58
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-74
6-75
6-76
6-77
6-78x2
6-79x2
6-80x4
6-81x2
6-82
6-83
6-84
6-85
6-86
6-87
6-88x2
6-89
6-90
6-91x2
6-92
6-93x2
6-94x2
6-95
6-96
6-97
6-98
6-99

REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
6 - 90	82B3281160	Release bar	1	
6 - 91	110M200351S	Set screw	2	
6 - 92	23A3281080	Guide ring assembly	1	
6 - 93	36B3281400	Counter roller	2	
6 - 94	111M140401S	Set screw	2	
6 - 95	36B3281410	Counter drum	1	
6 - 96	27B3281810	Moquette	1	
6 - 97	27B3281820	Moquette	1	
6 - 98	27B3281800	Moquette	1	
6 - 99	37A3281070	Bellows assembly	1	

Fig. 7


7-1
7-2
7-3
7-4
7-5
7-6x3
7-7
7-8x2
7-9x2
7-10
7-11
7-12
7-13
7-14
7-15
7-16
7-17
7-18x2
7-19
7-20
7-21
7-22x2
7-23
7-24x2
7-25x2
7-26
7-27
7-28
7-29
7-30
7-31
7-32
7-33
7-34
7-35
7-36
7-37x2
7-38x4
7-39
7-40
7-41
7-42x3
7-43x2
7-44
7-45
7-46
7-47
7-48
7-49x3
7-50
7-51
7-52x4

REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
7 - 1	302A3287000	Film chamber door assembly	1	
7 - 3	32B32031	Hinge shaft	1	
7 - 4	19B32020	Hinge	1	
7 - 5	27B3287120	Light shielding plate	1	
7 - 6	113M200501S	Set screw	3	
7 - 7	27B32000	Moquette	1	
7 - 8	17B30160	Shaft	2	
7 - 9	50B30170	Spring	2	
7 - 10	37B492633	Roller	1	
7 - 11	32B3287340	Shaft	1	
7 - 12	16B3287320	Open - close button	1	
7 - 13	59B3287371	Leather	1	
7 - 14	11B3281242	Cover frame	1	
7 - 20	50B3287391	Spring	1	
7 - 21	59B3287270	Leather	1	
7 - 24	114M200501S	Set screw	2	
7 - 25	27B3287280	Moquette	2	
7 - 39	27B3287290	Moquette	1	
7 - 40	11B3281620	Terminal cover	1	
7 - 41	11B3280300	Bottom cover	1	
7 - 42	53B2189030	Set screw	3	
7 - 43	104K457690	Battery	2	
7 - 44	16A3280070	Battery cap assembly	1	
7 - 45	191M020T	E - clip	1	
7 - 48	53B3280320	Set screw	1	
7 - 49	110M230803S	Set screw	3	
7 - 50	11B3285980	Cover frame	1	
7 - 51	59B3280620	Leather	1	


Potentionmeter
Black lead wire
(111B328060*)
Power Switch
(Interlocked
when shutter
release is
pressed in a
half way.)
Black lead wire
(111B328059 *)
White lead wire
(111B328058*)
PCB assembly
(110A3289100)
LED PCB assembly
110A3288590
White lead wire
(111B328056*)
111B328866* Red lead wire
111B328867* Yellow lead wire
111B328868* Green lead wire
111B328869* Gray lead wire
Red lead wire
(111B328882*)
Black lead wire
(111B328883*)
Lead wire
(111B328909*)
Battery contact assembly
110A3289010
Flexible PCB assembly
110A3288810
Battery
G13 Type Alkali - manganese X2
Violet lead wire
(111B328057*)

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6-115

DATE. December 5, 1983

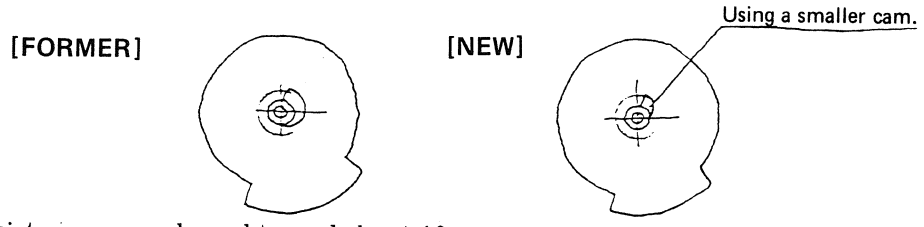
MODEL Fujica GS645 and GS645 Wide

SUBJECT Instructions to be added to the repair manual

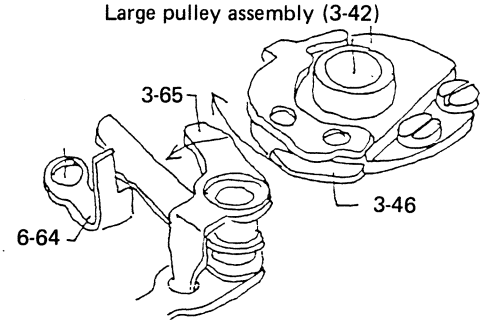
DESCRIPTION

Add the following repair instructions to the repair manual.

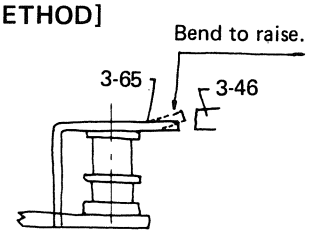
1. For Fujica GS645, when the user pushes the shutter release button before winding up the film to the first frame, pictures are overlapped at the boarder between zero frame and first frame. In this case, replace the counter dial assembly (3-50) with the one for Fujica GS645 Wide. Then, the shutter release button is locked and it cannot be depressed until the film is wound up one frame completely.



2. When pictures are overlapped toward about 10mm.
   This occurs when the film is wound with the camera held up side down.
   The large pulley assembly (3-42) has a play toward the thrust direction. When the camera is held up side down, the release lever (3-65) comes off the cam (3-46) toward the height direction. Then, the lever (6-64) operates, causing the film to drag due to a friction.



[REPAIR METHOD]



   Properly bend the release lever (3-65) so that it will not come off the cam (3-46).
   The bending should be limited to the thickness of the lever.

3. Overlap other than above
   When film feeding torque overcomes the film taking up torque, this trouble occurs. Check the pressure plate, film feeding shaft, film taking up torque, etc.

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. No. G6-116

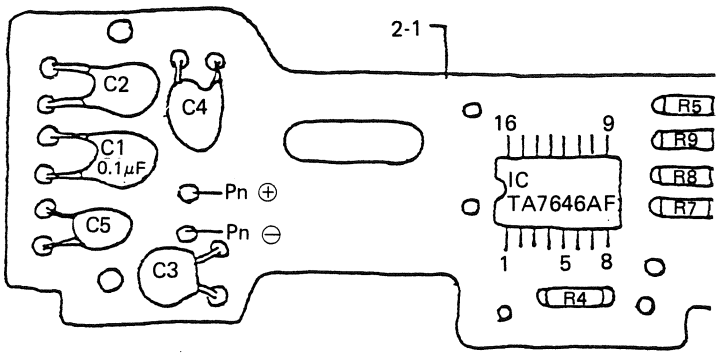
DATE. December 25, 1983

MODEL Fujica GS645, GS645 Wide

SUBJECT Changed IC and capacitor

DESCRIPTION

- The currently used IC (TA7646F) is changed to TA7646AF.
- The capacity of the capacitor IC is changed from 15 μF to 0.1 μF.



- The above changes do no affect adjustment of the flexible PCB.

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6-117

DATE. February 1, 1984

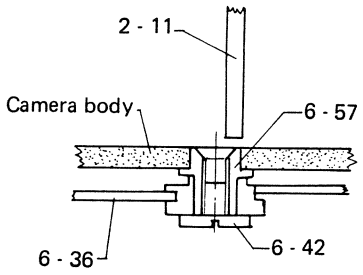
MODEL Fujica GS645

SUBJECT Changed linkage assembly (6 - 36) and PCB assembly (2 - 11)

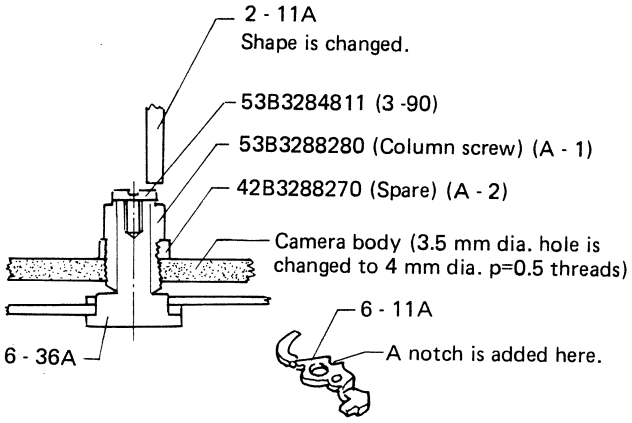
DESCRIPTION

To improve range finder performance, the linkage assembly (6 - 36) and PCB assembly (2 - 11) are changed as shown below.

FORMER



NEW



The above change has been effected on those manufactured during January, 1984 (Body Serial No. 301xxxx) and thereafter.

To apply this change, remove the caulking (6 - 57) and change the 3.5 mm dia. hole to 4 mm dia. p=0.5 threads.

PARTS SUPPLY INFORMATION

Technical Bulletin No. G6-117

FORMER TYPE						NEW TYPE			
REF NO.	PARTS NO.	PARTS NAME	QTY	NO LONGER SUPPLIED	CONTINUOUSLY SUPPLIED	REF NO.	PARTS NO.	PARTS NAME	QTY
6 - 36		Linkage assembly	1	○		6-36A		Linkage assembly	1
2 - 11		PCB assembly	1	○		2-11A		PCB assembly	1

REMARKS:

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6(W)-118

DATE. February 1, 1984

MODEL Fujica GS645 and GS645 Wide

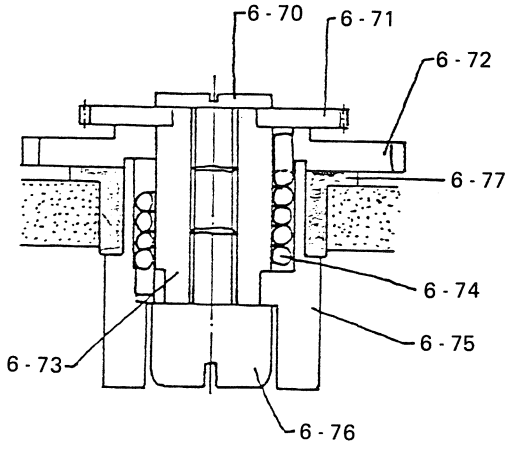
SUBJECT Improved stability of spool friction

DESCRIPTION

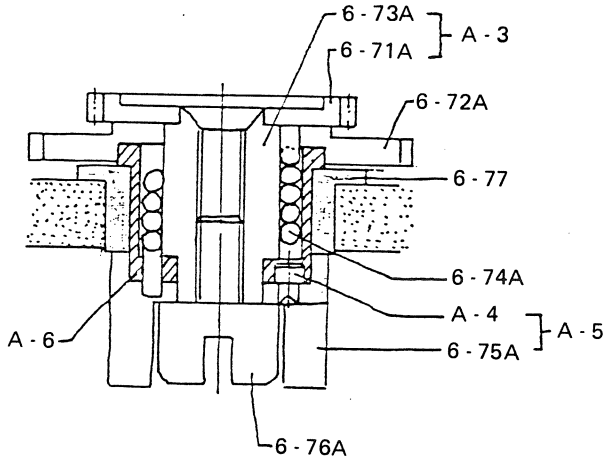
To improve efficiency of transferring torque to the spool and to wind up the film correctly, the relative parts are changed as shown below. Friction torque of the spring (6 - 74) is not changed, but torque transferred to the spool shaft (6 - 75) increases.

This improvement is effected on those manufactured during January, 1984 (GS645 - Body Serial No.301xxxx; GS645 Wide - Body Serial No. 601xxxx) and thereafter.

FORMER



NEW



A - 3 32A3281060 Gear assembly

A - 4 17B3281610 Pin

A - 5 32A3281280 Spool shaft assembly

A - 6 42B3281600 Bushing

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6(W)-119

DATE. February 1, 1984

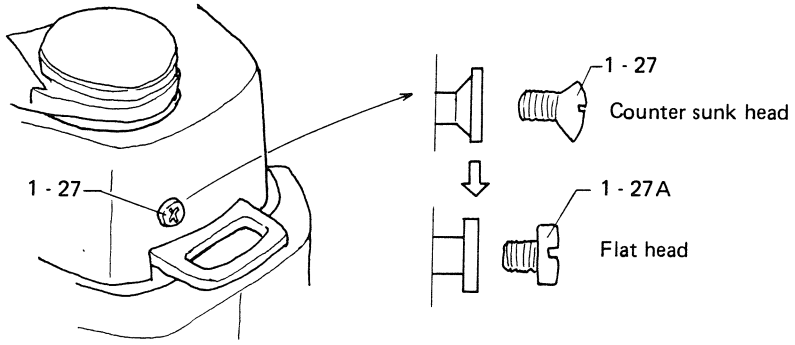
MODEL Fujica GS645 and G645 Wide

SUBJECT Improved strength of the top cover

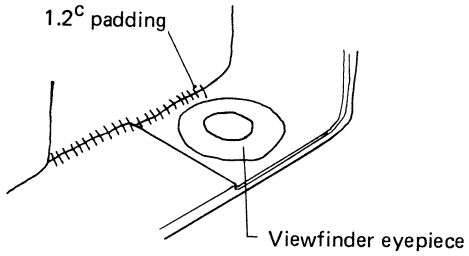
DESCRIPTION

To improve strength of the top cover, the following changes are made.

(1) Head of the screw (1 - 27) is changed from counter sunk to flat.



(2) The top cover interior is reinforced with a padding.



The above improvement is effected on those manufactured during February, 1984 (GS645 - Body Serial No. 302xxxx; GS645 Wide - Serial No. 602xxxx) and thereafter.

PARTS SUPPLY INFORMATION — Technical Bulletin No. G6(W)-119

FORMER TYPE						NEW TYPE			
REF NO.	PARTS NO.	PARTS NAME	QTY	NO LONGER SUPPLIED	CONTINUOUSLY SUPPLIED	REF NO.	PARTS NO.	PARTS NAME	QTY
1 - 27		Screw	1	○		1- 27A		Screw	1

REMARKS:

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6(J)-118

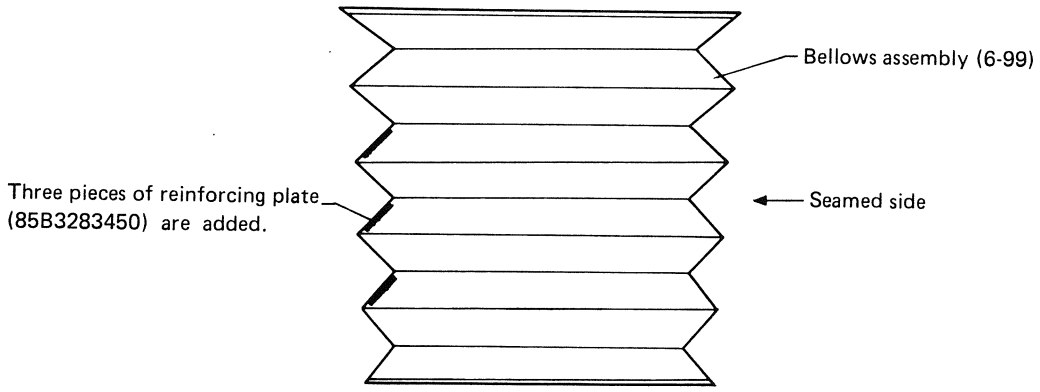
DATE. April 20, 1984

MODEL Fujica GS645

SUBJECT Reinforced bellows assembly

DESCRIPTION

To keep the bellows in the correct shape, the bellows assembly is reinforced as shown below:



The above reinforcement will be made on those manufactured during May, 1984 (Body Serial No. 305xxxx) and thereafter.

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6 (J)-119

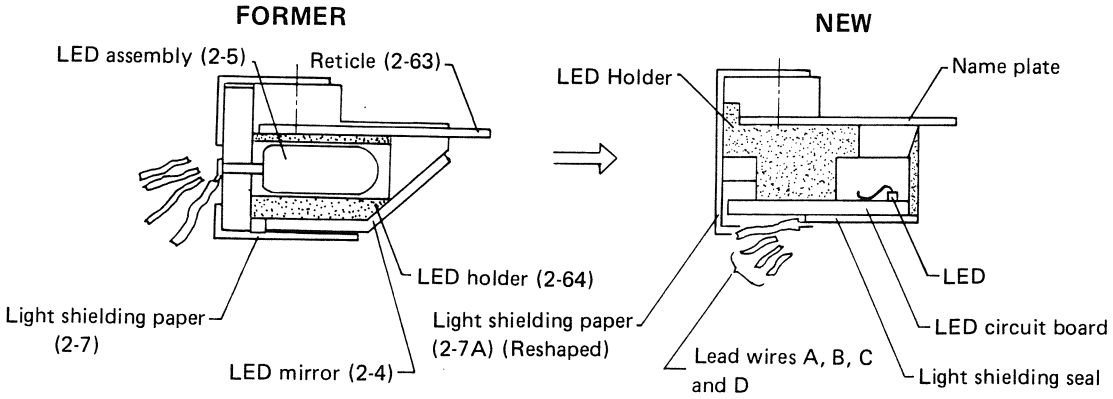
DATE. April 20, 1984

MODEL Fujica GS645

SUBJECT Changed LED holder assembly

DESCRIPTION

To use LED of new type, the LED holder assembly and relative parts are changed as shown below;



LED holder assembly
(2-3) 81A3287500

LED holder assembly
(2-3A) 81A3288500

NOTE: LED holder assembly (81A3287500 or 81A3288500) does not include light shielding paper.

The above change will be effected on those manufactured during August, 1984 (Body Serial No. 308xxxx) and thereafter.

PARTS SUPPLY INFORMATION

Technical Bulletin No. G6(J)-119

FORMER TYPE						NEW TYPE			
REF NO.	PARTS NO.	PARTS NAME	QTY	NO LONGER SUPPLIED	CONTINUOUSLY SUPPLIED	REF NO.	PARTS NO.	PARTS NAME	QTY
2-3	81A3287500	LED Holder Assembly	1	○		2-3A	81A3288500	LED Holder Assembly	1
2-7		Light Sheilding Paper	1	○		2-7A		Light Shielding Paper	1

REMARKS

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6(W)-121

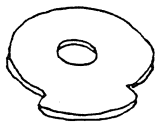
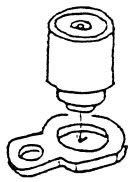
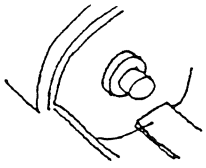
DATE. February 1, 1984

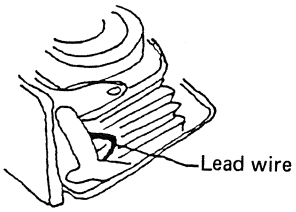
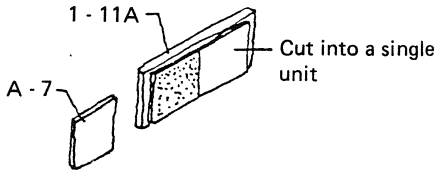
MODEL Fujica GS645 and GS645 Wide

SUBJECT Design change

DESCRIPTION

Changes are made as shown below.

Item	Description	Effected on
○ Counter dial	Material change from aluminum to brass  Round edge (preventing burr) The new type is interchangeable with former type.	JABAR B# 301xxxx Wide B# 601xxxx
○ Synchro-socket assembly (6 - 33)	Single unit assembly is changed to two piece assembly (caulked)  The new type is interchangeable with former type.	JABARA B# 301xxxx Wide B# 601xxxx
○ Spool shaft (feeding side)	Material change from alumina+hard almite to brass+nickel plating.  Improving slipping of the spool	JABARA B# 301xxxx Wide B# 601xxxx

Item	Description	Effected on
○ Lead wire (8 - 11) (111B3289090)	Color change from dark gray to dark black  The new type is interchangeable with former type.	JABARA B# 301xxxx
○ Window glass	No longer adhered. Preventing peel off The new type is interchangeable with former type.  (A - 7 : 6B 3286273 1 - 11A: 6B 8386123)	JABARA B# 303xxxx

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6-132

DATE. November 30, 1984

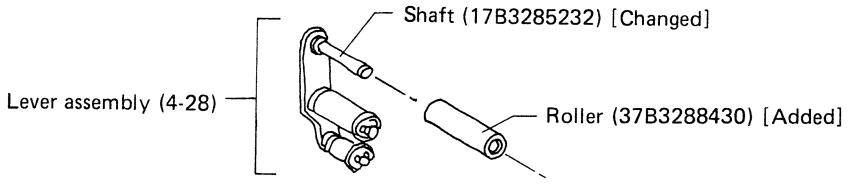
MODEL Fujica GS645

SUBJECT Added roller

DESCRIPTION

To improve shutter releasing, a roller will be added to the lever assembly (4-28) as shown below.

The roller will be added to those manufactured during December, 1984 and thereafter.



FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6-133

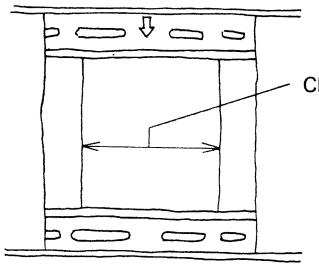
DATE. November 30, 1984

MODEL Fujica GS645

SUBJECT Changed frame size

DESCRIPTION

To comply with JIS (Japanese Industrial Standards), the frame size has been changed as shown below. This change has been effected on those manufactured during April, 1984 and thereafter.



This change also applies to Fujica GS645W and GS645S.

FUJI PHOTO FILM CO., LTD.

FUJI TECHNICAL BULLETIN

NO. G6-137

DATE. May 30, 1988

MODEL Fujica GS645

SUBJECT Reference numbers for changed/added parts

DESCRIPTION

With the Technical Bulletin (T/B) shown below, A-series reference numbers (A-1 through A-12) have been assigned. To avoid duplication, new reference numbers are assigned as shown in the attached parts list.

Correct your parts list accordingly.

T/B No.	SUBJECT	REF. NO.
G6-101	Changed flash circuit	A-1 through A-3
G6-105	Newly added lead guide plate	A-4
G6-107	Added parts	A-5, A-6
G6-117	Changed linkage assembly and PCB assembly	A-1(A-7), A-2(A-8)
G6(W)-118	Improved stability of spool friction	A-3(A-9), A-4(A-10), A-5(A-11), A-6(A-12)

MODEL : Fujica GS645
Q No. : Q920

Former Ref. No.	Current Ref. No.	Current Parts No.	Parts Name	Price (US$)	Remraks
A-1	2-65	85B3288050	Lug	0.02	Changed
A-2	2-66	85B3287900	Insulation plate	0.02	Changed
A-3	2-67	95B3288060	Nylon screw	0.03	Changed
A-4	4-68	85B3285720	Lead guide plate	0.06	Changed
A-5	4-71	50B3282480	Lock lever	0.08	Changed
A-6	4-70	27B3281940	Moquette	0.02	Changed
A-7(A-1)	6-100	53B3288280	Column screw	0.19	Changed
A-8(A-2)	6-101	42B3288270	Sparcer	0.05	Changed
A-9(A-3)	6-102	32A3281060	Gear assembly	0.40	Changed
A10(A-4)	6-103	17B3281610	Pin	0.03	Changed
A-11(A-5)	6-104	32A3281280	Spool shaft assembly	0.34	Changed
A-12(A-6)	6-105	42B3281600	Bushing	0.18	Changed

MODEL : Fujica GS645 (W)
Q No. : Q923

Former Ref. No.	Current Ref. No.	Current Parts No.	Parts Name	Price (US$)	Remarks
A-9(A-3)	6-102	32A3281060	Gear assembly	0.40	Changed
A-10(A-4)	6-103	17B3281610	Pin	0.03	Changed
A-11(A-5)	6-104	32A3281280	Spool shaft assembly	0.34	Changed
A-12(A-6)	6-105	42B3281600	Bushing	0.18	Changed

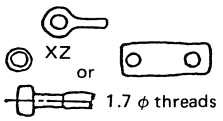
T/B G6 – 101

○ The following parts have been added to the new type.

* A-1 (85B3288050) Lug

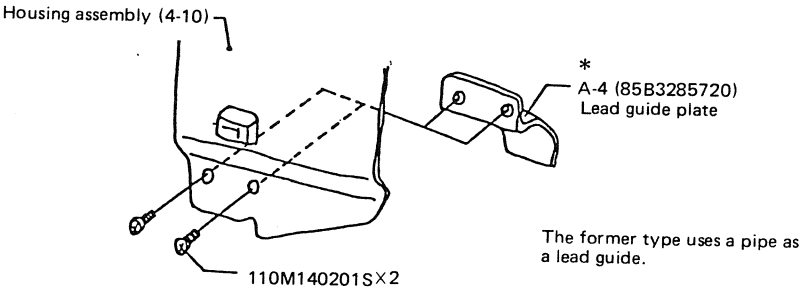
* A-2 (85B3287900) Insulation plate

* A-3 (95B3288060) Nylon screw



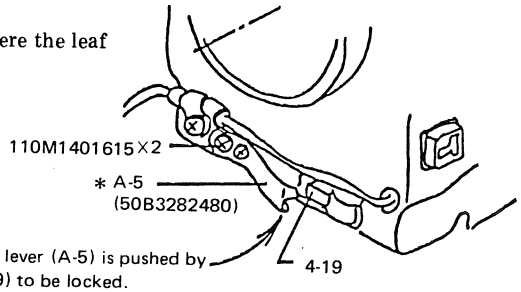
T/B G6 – 105

To arrange the leads extended from the shutter more neatly, the lead guide plate (A-4) has been added as shown below:



T/B G6 – 107

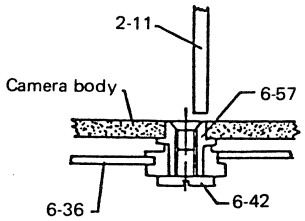
* Moquette (27B3281940) A-6
Sticked to the portion of the camera body where the leaf spring comes into contact.



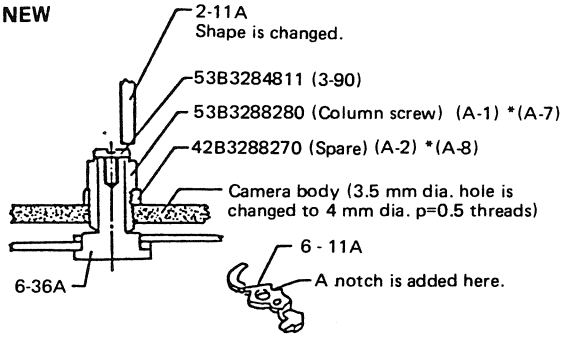
When the front cover is closed, the lock lever (A-5) is pushed by the camera body, causing the lever (4-19) to be locked.

T/B G6 – 117

FORMER

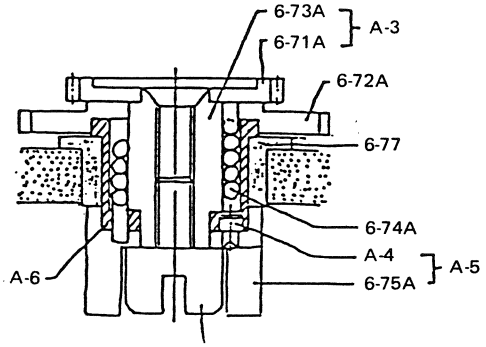


NEW



T/B G6 - 118

NEW



A-3 *(A-9) 32A3281060 Gear assembly
A-4 *(A-10) 17B3281610 Pin
A-5 *(A-11) 32A3281280 Spool shaft assembly
A-6 *(A-12) 42B3281600 Bushing

CONTENTS

I DISASSEMBLY AND REASSEMBLY

1. Top cover assembly (1 - 50)

- Remove the film advance lever assembly (1 - 33) after removing the set screw (1 - 30).
  When a washer is used on the lock plate (1 - 37), be careful not lose it.
  This washer is to adjust friction in the spare angle of the film advance lever.
  When the friction is improper, apply Helicolube/Molycote mixed grease to the washer slightly.
- Raise the top cover assembly (1 - 1) to remove it after removing three set screws (1 - 27, 1 - 28 and 1 - 29).

  NOTE: Pay attention on the two lead wires extended to the shoe (1 - 4).

[REASSEMBLY]

- Be sure to set the film selector knob (1 - 9) to the 120 film side before installing the top cover. If the top is installed with the film selector knob set to 220 film side, the selector lever (3 - 5) in the film advance mechanism assembly (3 - 1) will be bent.
- Arrange the associated lead wires properly so that they are not seen through the viewfinder window, and install the top cover.
- Carefully combine the top cover with the terminal cover (7 - 52) and cover frame (7 - 50).
- No gap should remain between the top cover and front cover (5 - 48).
- Carefully install the lock plate (1 - 37) so that it will not be overlapped on the lever (3 - 29).
- Check the shutter release for the operating stroke. The desirable operating stroke of the shutter release is shown below.

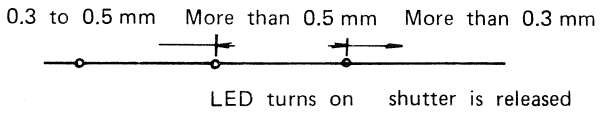


Fig. 1

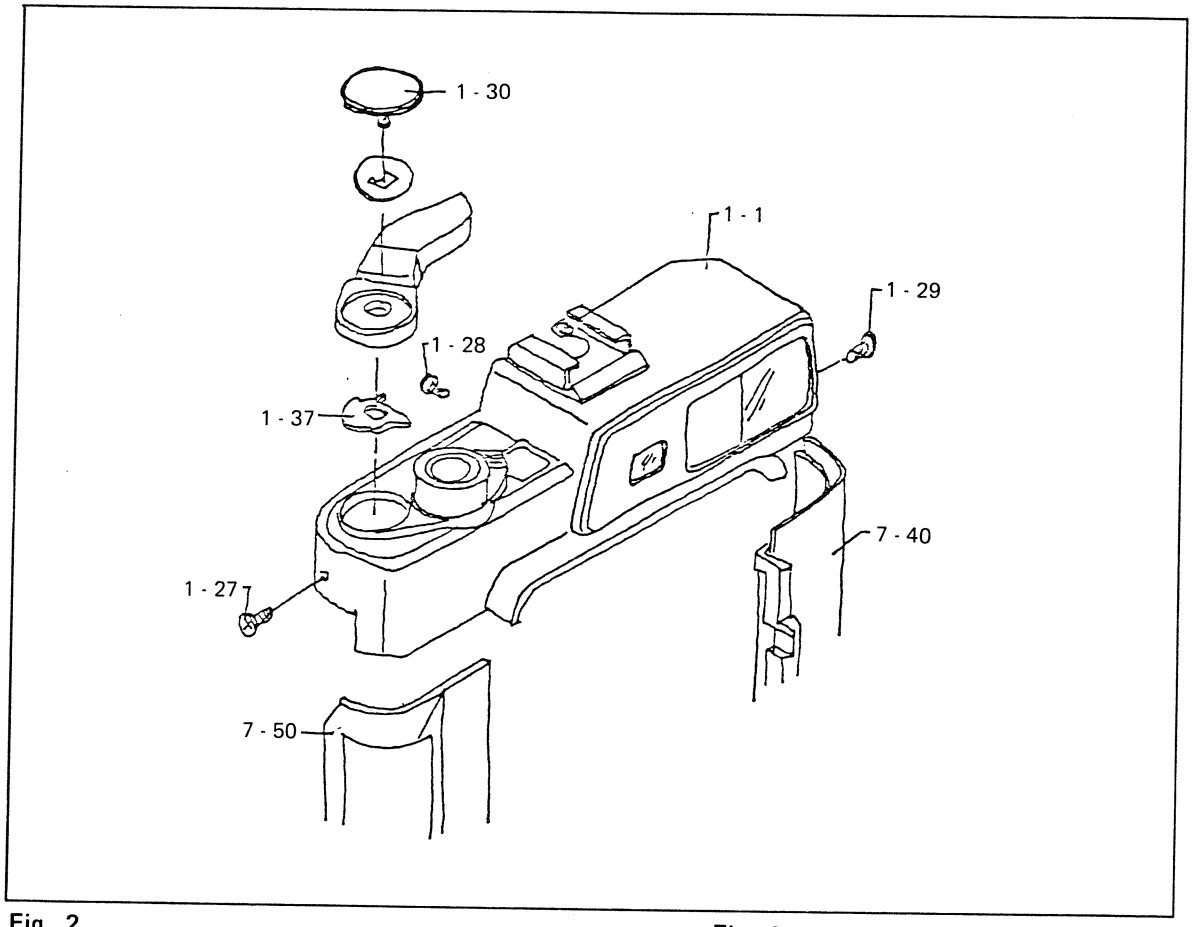


Fig. 2

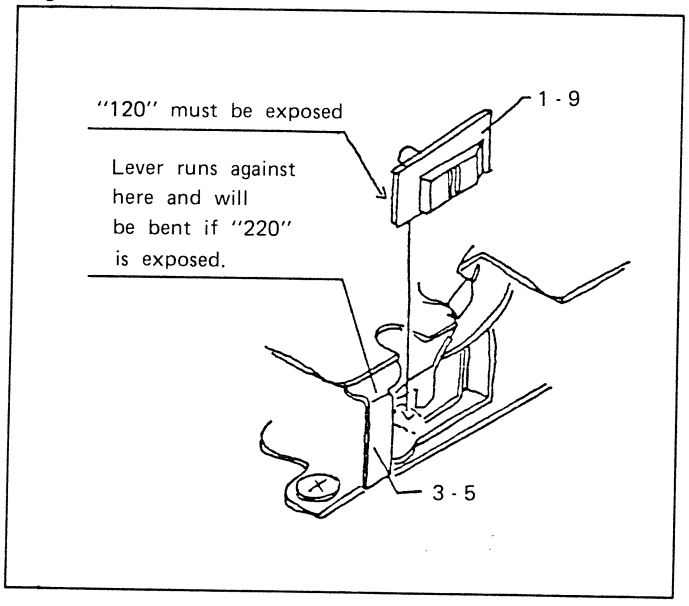
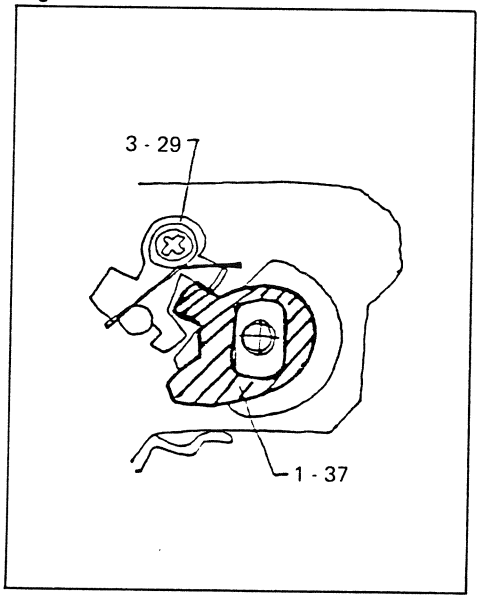


Fig. 3



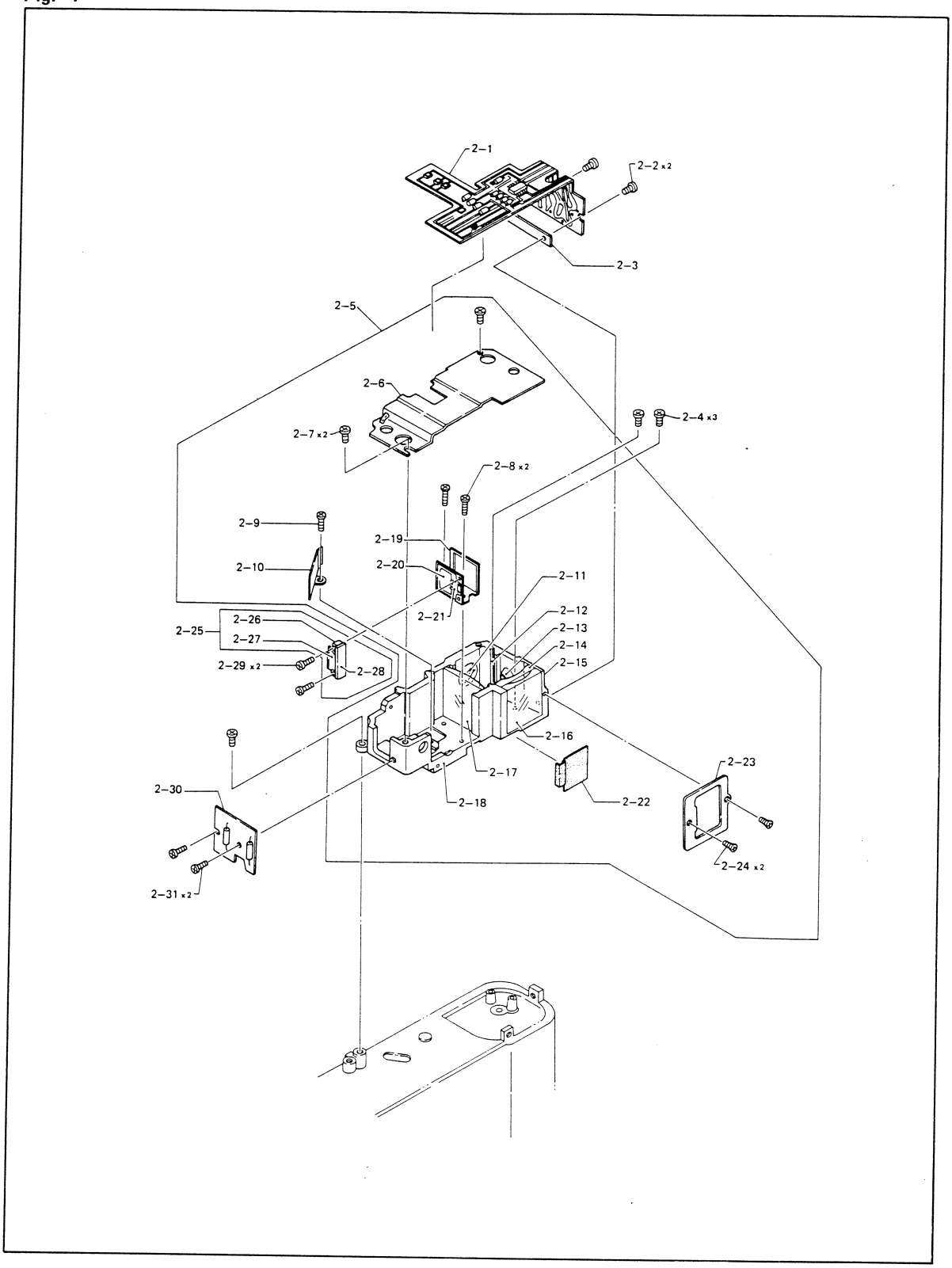
2. Range finder assembly (2 - 5)

- ○ Disconnect the associated lead wires so that the flexible PCB assembly (2 - 1) can be removed together with the cover (2 - 6).
- ○ Remove the range finder assembly (2 - 5) upward after removing three set screws (2 - 4).

[REASSEMBLY]

- ○ No combination is involved because the view finder is not interlocked with range finder.
- ○ Fix the flexible PCB assembly (2 - 1) on the cover (2 - 6) with double - sided adhesive tape.
- ○ For two screws (2 - 2), Nylon or metal screws are used because of the circuit pattern of the PCB. The PCB is floated from the ground. If it is shorted, + LED will light continuously.
- ○ The photocell soldered on the flexible PCB assembly must be combined with the photocell frame (2 - 13) correctly. If this is deviated, an over - exposure will result even if the tester indicates satisfactory.

Fig. 4


2-1
2-2 x2
2-3
2-5
2-6
2-7 x2
2-4 x3
2-8 x2
2-9
2-10
2-19
2-20
2-21
2-11
2-12
2-13
2-14
2-15
2-25
2-26
2-27
2-29 x2
2-28
2-16
2-17
2-18
2-22
2-23
2-24 x2
2-30
2-31 x2

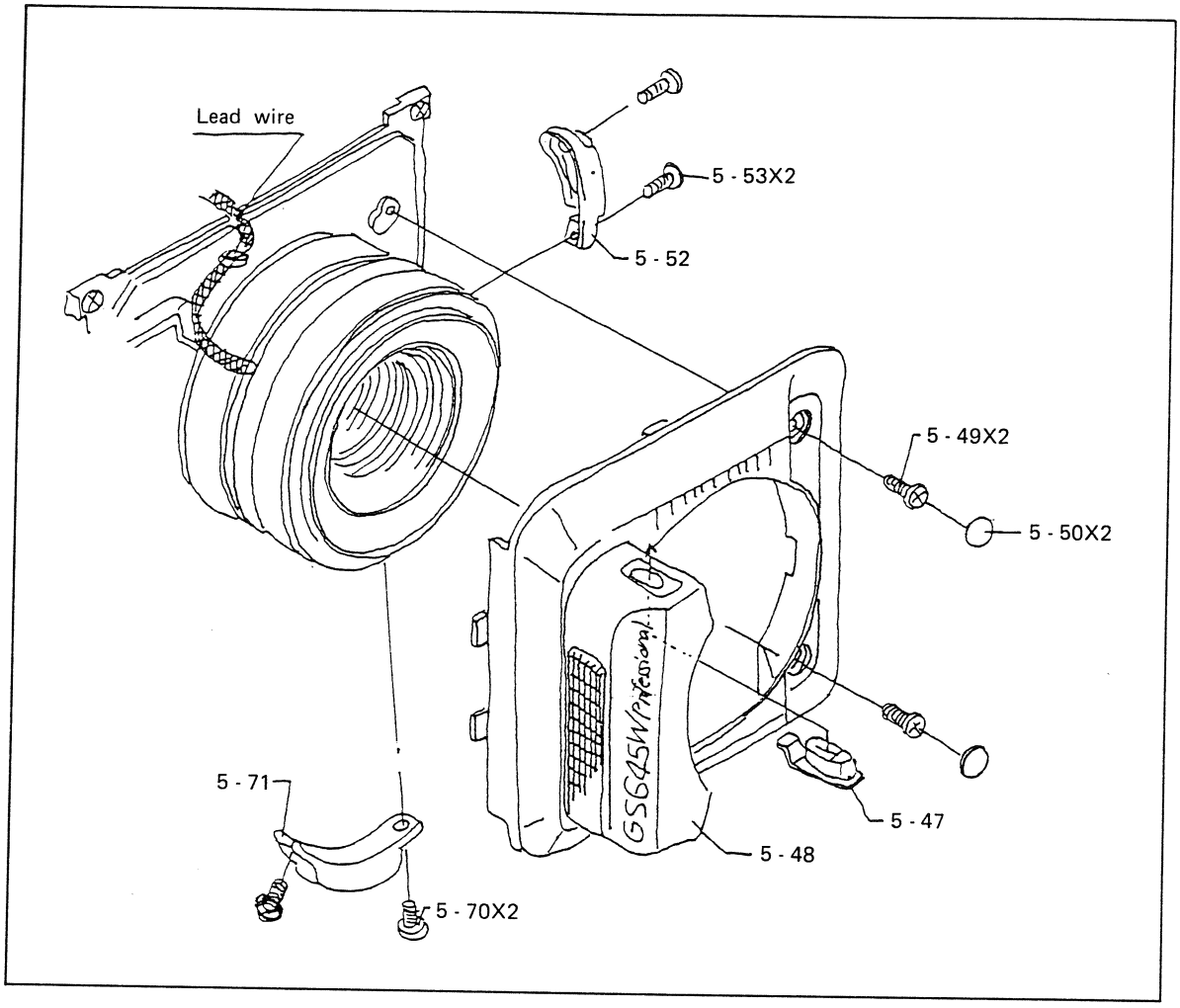
3. Front cover (5 - 48)

- ○ Remove the aperture selector knob (5 - 71) after removing two screws (5 - 70).
- ○ Remove the knob (5 - 52) after removing two screws (5 - 53).
- ○ Remove the cover frame (7 - 50) after removing the leather (7 - 51) and three set screws (7 - 49).
- ○ Remove two cover plates (5 - 50) and screws (5 - 49).
- ○ Paying attention on the shutter assembly (5 - 68), remove the front cover forward. Be careful not to drop off the button (5 - 47).

[REASSEMBLY]

- ○ Pay attention on the position of the lead wire extended from the shutter. If this position is improper, the button (5 - 47) will not move smoothly.
- ○ No gap should be made between the front cover (5 - 48) and terminal cover (7 - 52), cover frame (7 - 50), bottom cover (7 - 41) or top cover assembly (1 - 50).

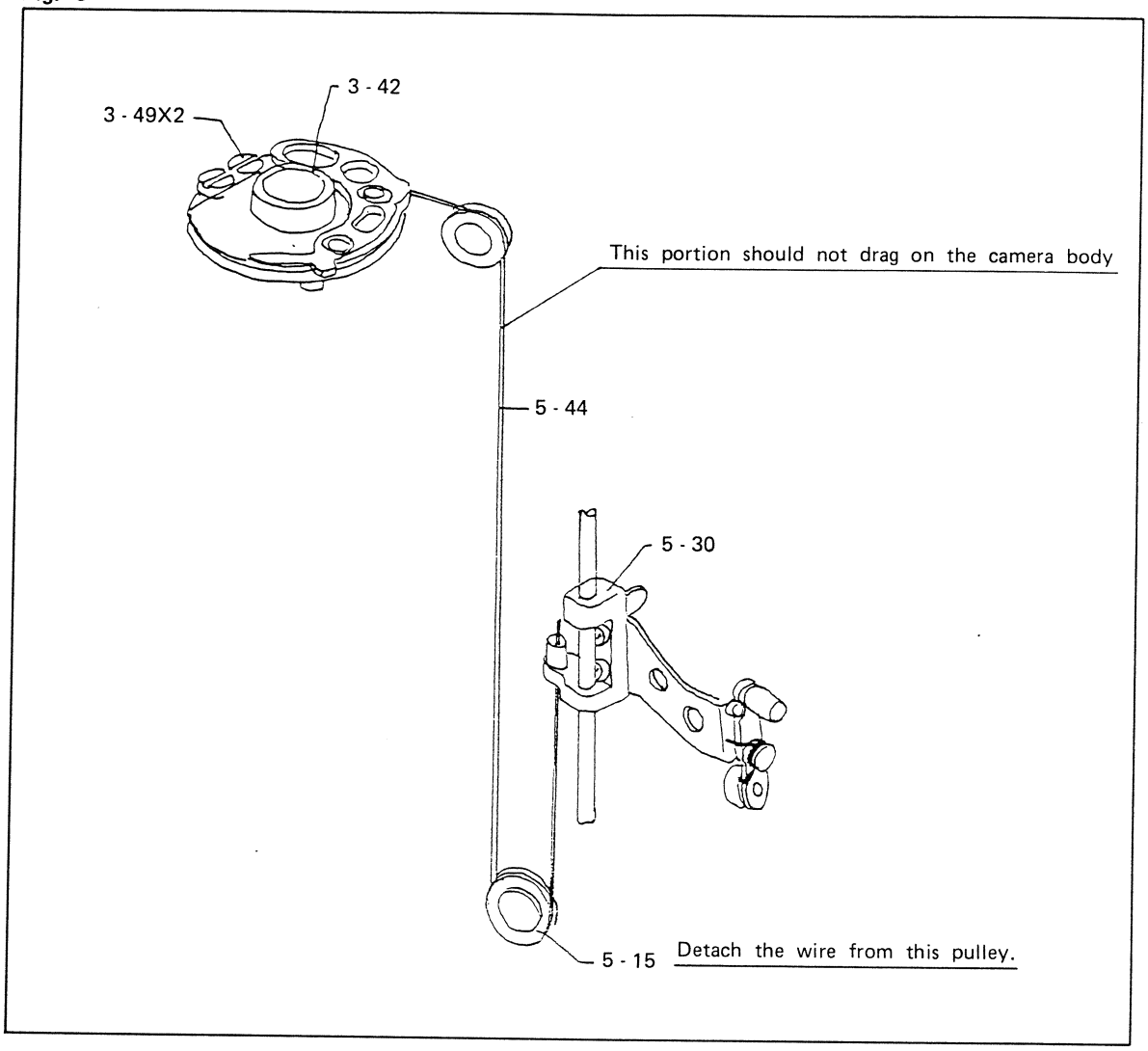
Fig. 5


Lead wire
5 - 53X2
5 - 52
5 - 49X2
5 - 50X2
5 - 71
5 - 70X2
5 - 47
5 - 48
GS645W Professional

4. Film advance mechanism assembly (3 - 1)

- Use of the following instructions is recommended because the wire assembly (5 - 44) is set.
  a. Move the set lever assembly (5 - 30) so that the wire is slackened, and detach the wire from the pulley base assembly (5 - 15).
  b. Remove three set screws (3 - 125) and screw (3 - 126).
  c. With the camera back opened, open the zero reset lever, and remove the film advance mechanism assembly (3 - 1) upward.
  d. Method to separate the wire assembly (5 - 44) from the film advance mechanism assembly (3 - 1).
     - Loosen two lock pins (3 - 49) of the large pulley assembly (3 - 42) clockwise, and detach the wire.
     - When the wire is removed once, do not use it atain but replace the wire with a new one.
     - For wire assembly setting, refer to II - 2 below.

Fig. 6


3 - 42
3 - 49X2
This portion should not drag on the camera body
5 - 44
5 - 30
5 - 15
Detach the wire from this pulley.

[Installing Film Advance Mechanism Assembly (3 - 1)]

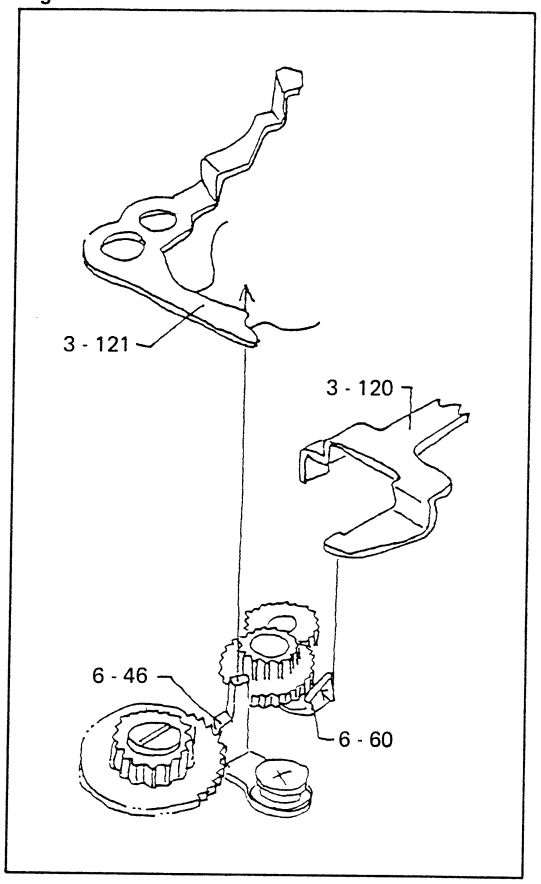
- ○ Combine the zero reset lever (3 - 120) with the lever (6 - 60) of the idle gear assembly (6 - 59).
- ○ Combine the lever (6 - 64) with the lever (3 - 121).
- ○ Push the zero reset lever (3 - 120) to advance the counter dial over 1 so that the lever (3 - 121) will drop, and then, check the above combinations.
- ○ Tighten three set screws (3 - 125) and screw (3 - 126).
- ○ When applying the spring (3 - 62) to the screw (3 - 126), be careful not to deform the spring.
- ○ When the wire is connected, make sure that the wire is applied to the pulley (3 - 17) in the film advance mechanism assembly (3 - 1) side completely first. Then, apply the wire to the lower pulley (5 - 15).

[REPAIR]

When the film advance lever does not return smoothly.

- ○ Make sure that the spring (3 - 62) is not deformed.
- ○ Smooth the shaft hole on the large pulley assembly (3 - 42) with a 6 mm diameter rod.

Fig. 7



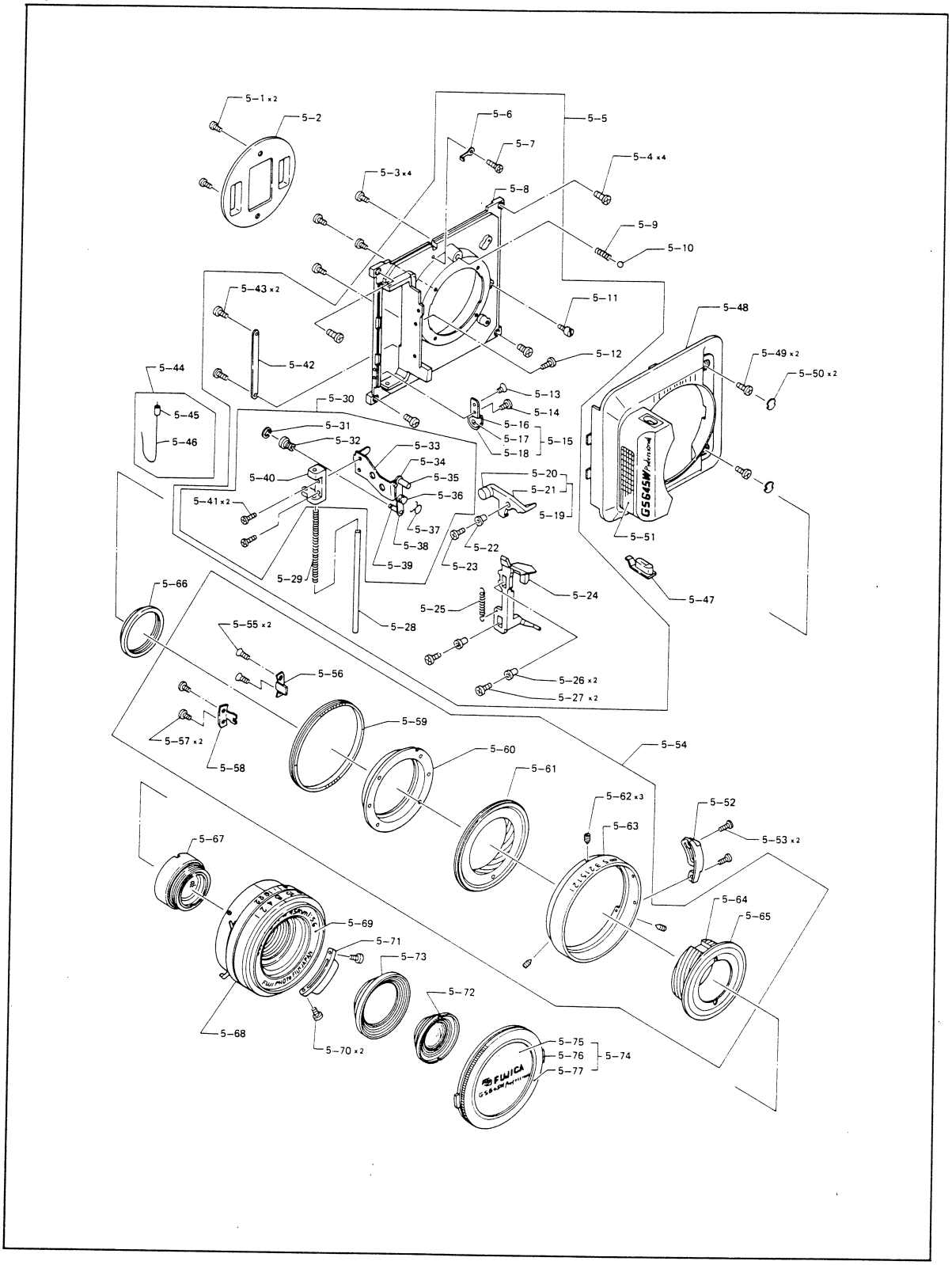
5. Shutter assembly (5 - 68)

- ○ Remove the front cover (5 - 48).
- ○ Loosen the hold ring (5 - 66) with the special tool (J11293 - 05)

[REASSEMBLY]

- ○ Match two positioning pins of the shutter with the helicoid.
- ○ Combine the set lever with the release lever.
- ○ When tightening the hold ring, hold the shutter assembly securely.
  In this case, if the camera body is held, the helicoid guide may be bent.
  Make sure that the helicoid guide key set screw is tightened correctly.

Fig. 8


5-1 x2
5-2
5-6
5-5
5-7
5-4 x4
5-3 x4
5-8
5-9
5-10
5-43 x2
5-11
5-48
5-42
5-12
5-49 x2
5-50 x2
5-44
5-13
5-30
5-14
5-45
5-16
5-31
5-17
5-15
5-46
5-32
5-33
5-18
5-34
5-20
5-40
5-35
5-21
5-41 x2
5-36
5-19
5-37
5-51
5-38
5-22
5-39
5-23
5-47
5-29
5-24
5-66
5-25
5-28
5-55 x2
5-56
5-26 x2
5-27 x2
5-57 x2
5-59
5-54
5-58
5-60
5-61
5-62 x3
5-52
5-67
5-63
5-53 x2
5-64
5-65
5-69
5-71
5-73
5-72
5-68
5-70 x2
5-75
5-76
5-74
5-77

II REASSEMBLY AND ADJUSTMENT

1. Friction of film take up shaft.

- One stroke of the film advance lever consists of one frame film feeding and shutter charging.
- Film feeding length differs depending on diameter of the film wound up on the film take up shaft.
- For the above reasons, the film take up shaft must have a proper friction so that no force is applied to the film take up shaft by the number of turns of the counter roller.
  - The spring (6 - 74) functions to provide the film take up shaft with a proper friction. If this spring does not operate smoothly, the film advance lever will not operate smoothly.
  - Apply a sufficient volume of Helicolube/Molycote mixed grease.

[REPAIR]

When the film advance lever is sticky:

a. Check the spring (6 - 74) for the deformation and lubrication with grease.

b. Check the shaft of the gear (3 - 95) for lubrication, and apply grease if necessary.

Fig. 9

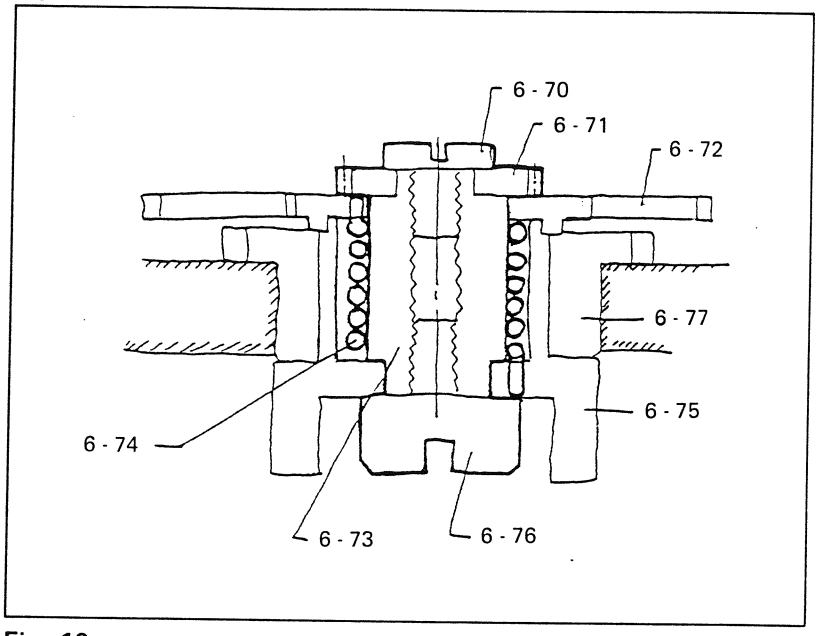
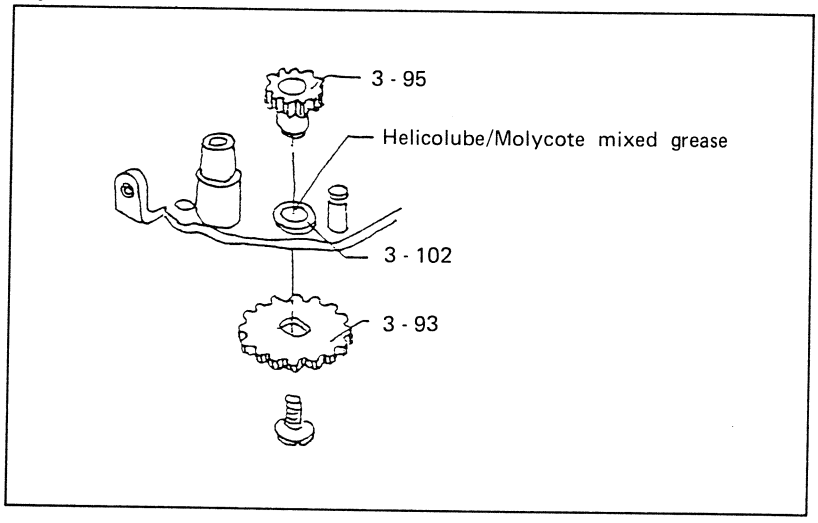

6 - 70
6 - 71
6 - 72
6 - 77
6 - 75
6 - 74
6 - 73
6 - 76

Fig. 10


3 - 95
Helicolube/Molycote mixed grease
3 - 102
3 - 93

2. Adjustment of shutter setting

Adjustment of wire

- Adjust two lock pins (3 - 49) to adjust position of the set lever assembly (5 - 30). Release the shutter, and set the wire in the position so that the gap between the holder (5 - 40) of the set lever assembly (5 - 30) and base plate (5 - 8) is 0.5 to 1 mm.
- When the adjustment is completed and the wire is too long, cut it with a cutter. The wire should not come out of the large pulley.
  Apply Alonalpha to the wire edge so that it will not get loose.
  The wire must have an extra space against lock pins.

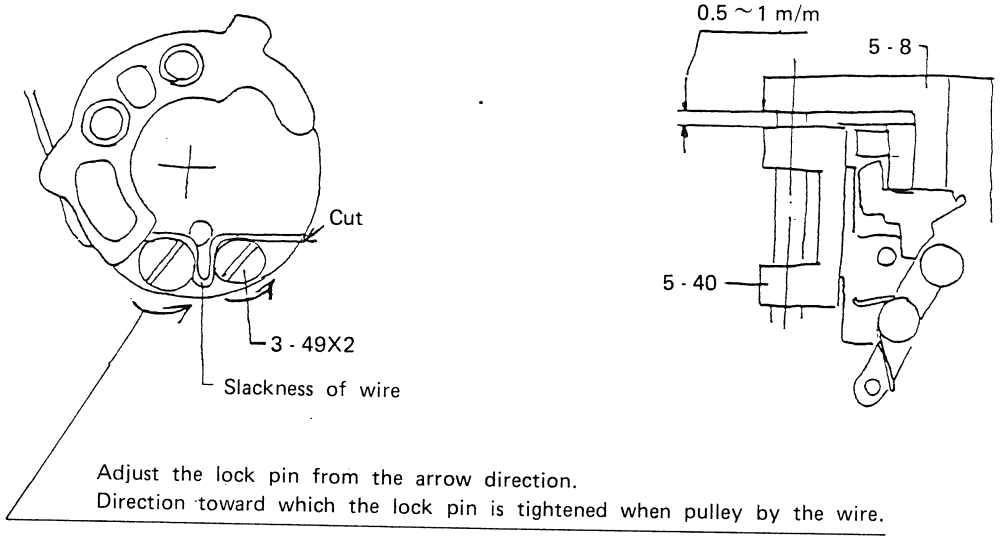
Adjustment of set value

- For both the infinite and close - up distance sides, the shutter must be set correctly.
- When adjustment is required, properly bend the set lever (5 - 33).
  To be more specific, bend the set lever so that the swing lever (3 - 78) engages with a tooth of the ratchet wheel assembly (3 - 54) in 1/2 to one tooth when the release ends its motion (when the lever within the shutter completes the charging).

[CAUTION]

Do not bend the set lever excessively. The wire may disengage.

Fig. 11



Adjust the lock pin from the arrow direction.
Direction toward which the lock pin is tightened when pulley by the wire.

Fig. 12

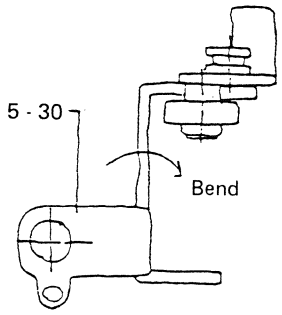
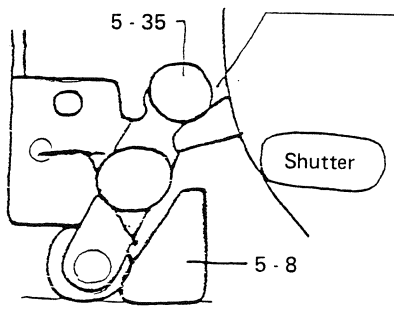


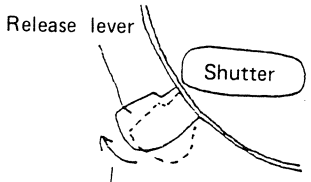
Fig. 13

Do not bend excessively.
A gap should remain between the pulley and shutter exterior.

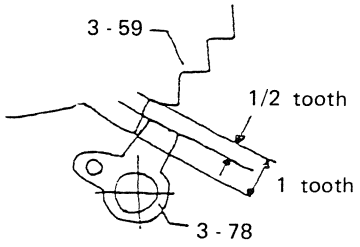


At most position in the winding completed side

Fig. 14



Stop the lever when the motion ends, and check the swing lever (3 - 78) for its position.



3. Adjustment of shutter release

○ Adjustment of shutter release lever (Adjustment of depth of button (5 - 47))

a. Properly bend the release lever in the shutter side so that the shutter releases when the long opening of the release lever is coincided with the collar (5 - 26).

b. Make sure that the release lever (5 - 24) is not hooked when it is pushed down to the bottom.

c. Make sure that the shutter is released only by force of the spring (5 - 29). Further, make sure that the shutter can be released when the set lever assembly (5 - 30) is held by hand and returned slowly without applying s shock.
If this adjustment is improper, the shutter may not be released occationally or when the outside temperature is low.

[REPAIR]

Check the position where the shutter releases. When an extra stroke after releasing the shutter exceeds 0.5 mm on the motion of the sel lever assembly (5 - 30), repair inside of the shutter.
When the set lever is bent for adjustment, make sure that the shutter blade opens correctly when the shutter is opened.

○ Adjustment of position of release plate assembly (3 - 11)

a. Make sure that the release plate assembly is installed as shown in the right hand figure. If this position is improper, shutter button depth will be too shallow or too deep. When depth of the shutter button is too shallow, the shutter may be released when the film advance lever is returned rapidly.

b. Apply Helicolube/Molycote mixed grease to the claws on the large pulley assembly and release plate assembly.

Fig. 15

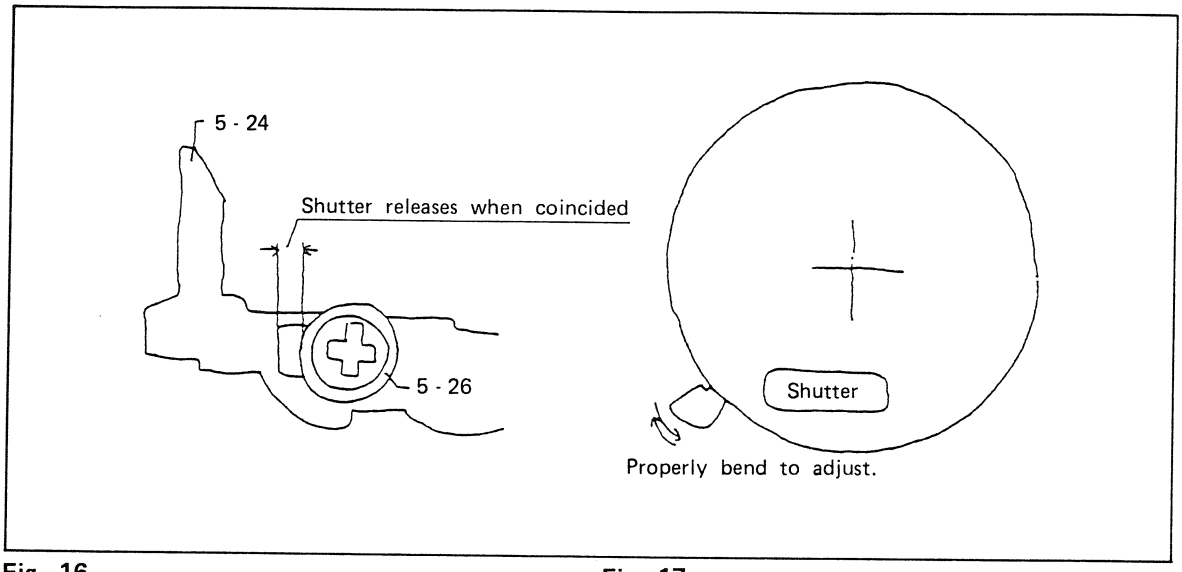


Fig. 16

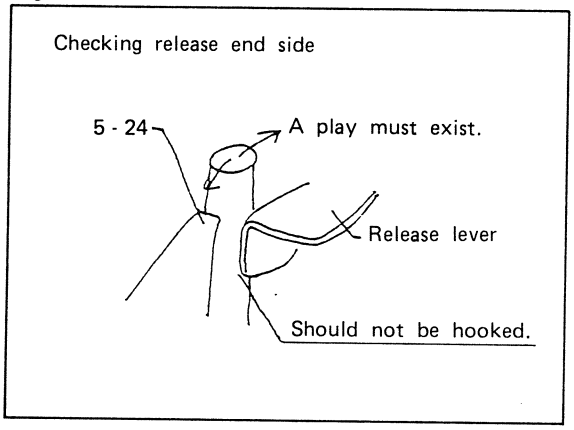


Fig. 17

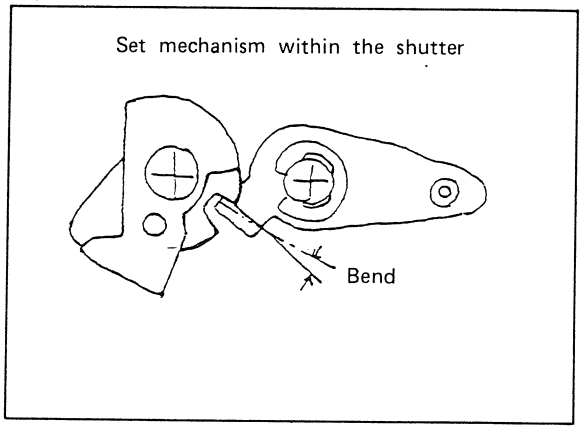
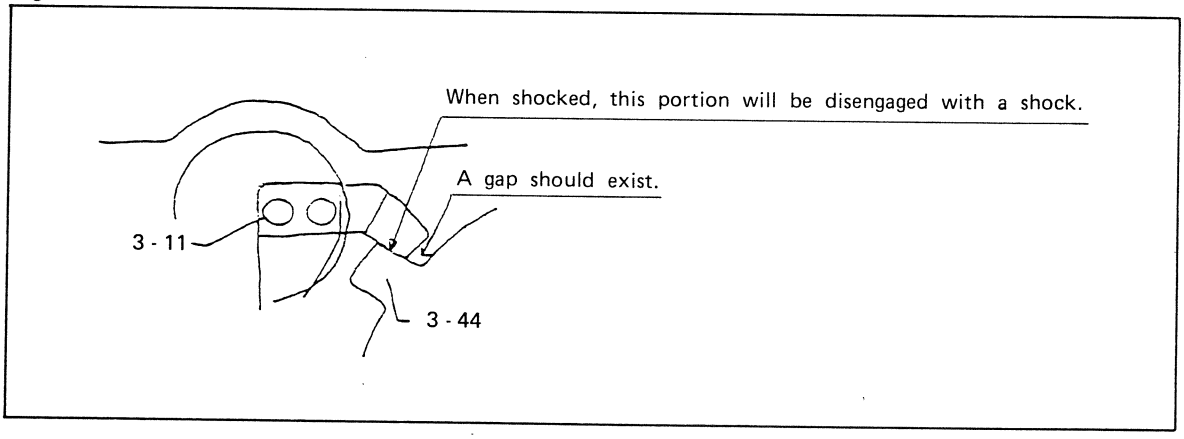


Fig. 18



4. Adjustment of focusing (Infinity adjustment)

- ○ Set the collimater to ∞.
- ○ Watch the film plane, and fix the ∞ side stopper of the helicoid at the position where image of the collimater is correctly focused.
- ○ To adjust, loosen three set screws (5 - 62).

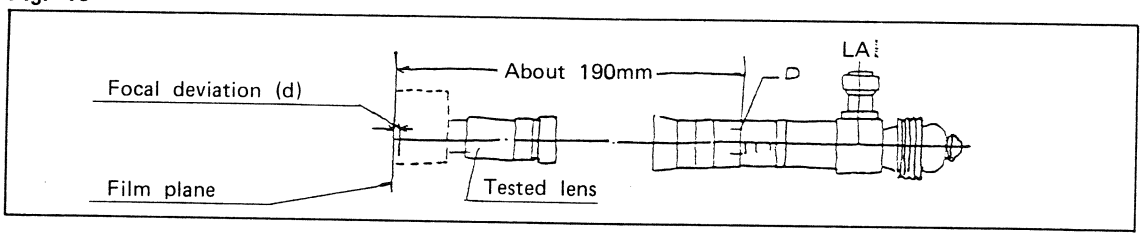
  NOTE: Set the film plane within $-0.04^{\pm 0.02}$ mm against the rail plane.
  [Position of -0.04 mm in the lens side against rail plane]
  Repair rating: The focused position should be in 0 to -0.08 mm.
- ○ After completing the adjustment, make sure that the helicoid comes into contact with the stoppers in both the infinity and close - up distance sides.
  If not, adjust number of washers (6 - 22) used.

When using Gokosha Model 24LT II, Be sure to use the reflector (J11286).
Use the conversion table (for Gokosha Model 24LT II collimater), and:

- * Read the focal distance 45 mm of the checked lens. The condition is satisfactory when stroke of the objective lens of the collimate is 0 to 2.0 mm (focusing value 0 to -1.0 mm).
- * At the time of adjustment, it is -0.04 mm. Therefore, set the objective lens in the position of -0.9 mm, and adjust position of the helicoid.

Deviations between film plane and focal plane (From Gokosha 24LT II Conversion Table)

Fig. 19



D \ f	Wide angle camera 45	Camera with bellows 75
mm		
0.1	0.0054	0.0150
0.2	0.0108	0.0301
0.3	0.0162	0.0451
0.4	0.0217	0.0602
0.5	0.0271	0.0753
0.6	0.0326	0.0904
0.7	0.0380	0.1055
0.8	0.0434	0.1207
0.9	0.0489	0.1358
1.0	0.0544	0.1510
1.2	0.0653	0.1814
1.4	0.0763	0.2119
1.6	0.0873	0.2424
1.8	0.0982	0.2730
2.0	0.1093	0.3036
2.2	0.1203	0.3343

f : Focal range of the camera
D : Stroke of collimater objective lens
In case of +, the focal position is behind the film plane.
In case of −, the focal position is the lens side.

5. Film take - up mechanism

The exposure counter does not advance unless the counter roller is turned with a film loaded.

a. Advancing film from S to 1

- ○ When a film is loaded and the film advance lever is wound up, the counter roller (6 - 93) is turned to the arrow direction by the film.
- ○ As the counter roller (6 - 93) turns the counter dial (3 - 51) is advamced.
- ○ The film advance lever can be wound up successively until the 1st frame is indicated by the exposure counter.
- ○ When the film is wound up to the 1st frame, the edge of the counter dial disengages with the rising portion (A) of the lever (3 - 121), allowing the lever (3 - 121) to turn to the arrow direction.
- ○ When the disc (3 - 85) turns and the groove is coincided with the lever (3 - 121), the lever drops into the groove, and the lever (6 - 64) engages with the ratchet wheel (6 - 72).
- ○ When the ratchet wheel (6 - 72) stops, the film taking - up force acts as a friction, causing the film taking - up (advance) to stop.
  The film advance lever can be wound up continuously until the swing lever (3 - 78) disengages with the ratchet even after the film stops.

Fig. 20

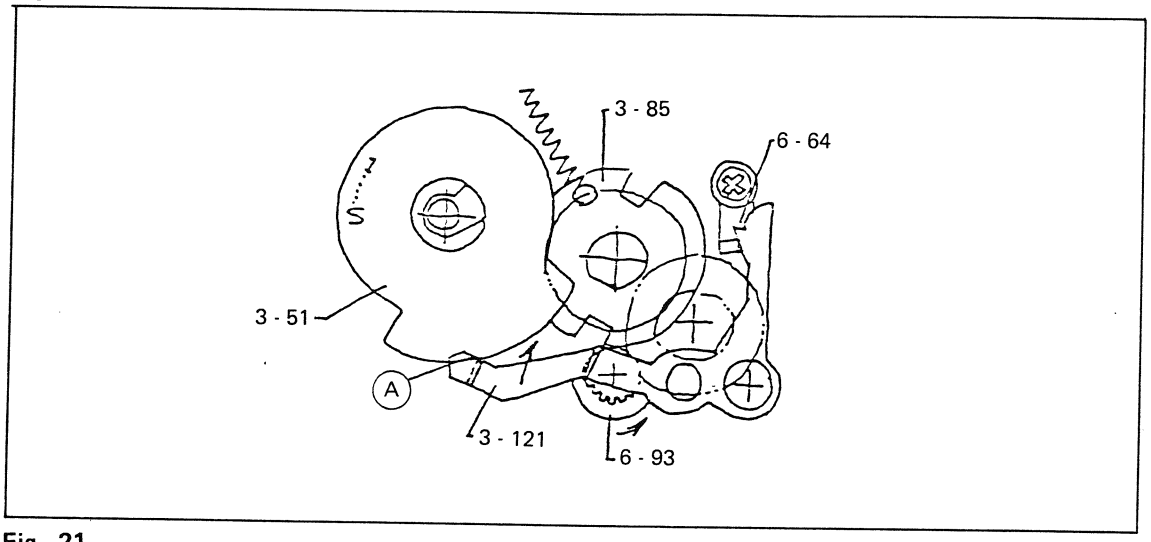
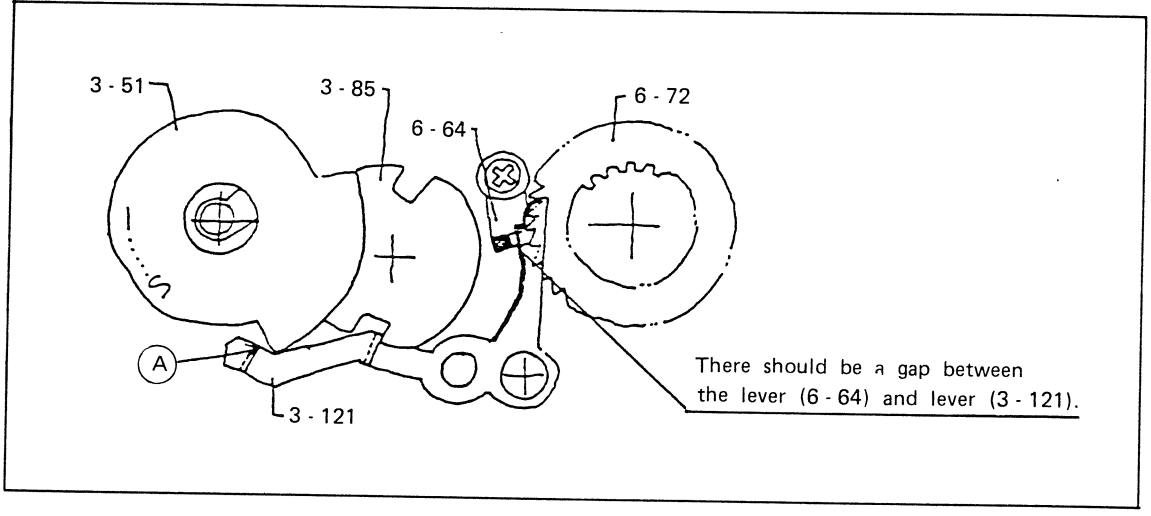

3 - 85
6 - 64
3 - 51
A
3 - 121
6 - 93

Fig. 21


3 - 51
3 - 85
6 - 64
6 - 72
A
3 - 121
There should be a gap between
the lever (6 - 64) and lever (3 - 121).

b. Advancing film to the next frame

★ When the film is advanced to the 1st frame and the shutter is charged completely, the relative parts are set as shown below so that double exposure can be prevented.
The lever (3 - 109) engages with the swing lever (3 - 78) with the swing lever (3 - 78) opposed to the ratchet wheel assembly (3 - 54).
The swing lever (3 - 78) functions as a stopper, and the ratchet wheel assembly (3 - 54) cannot turn.

★ When the shutter is released, the release lever assembly (3 - 64) is pushed by the cam (3 - 46) of the large pulley assembly (3 - 42), and the lever (3 - 121) joined with the release lever assembly (3 - 64) moves.

Fig. 22

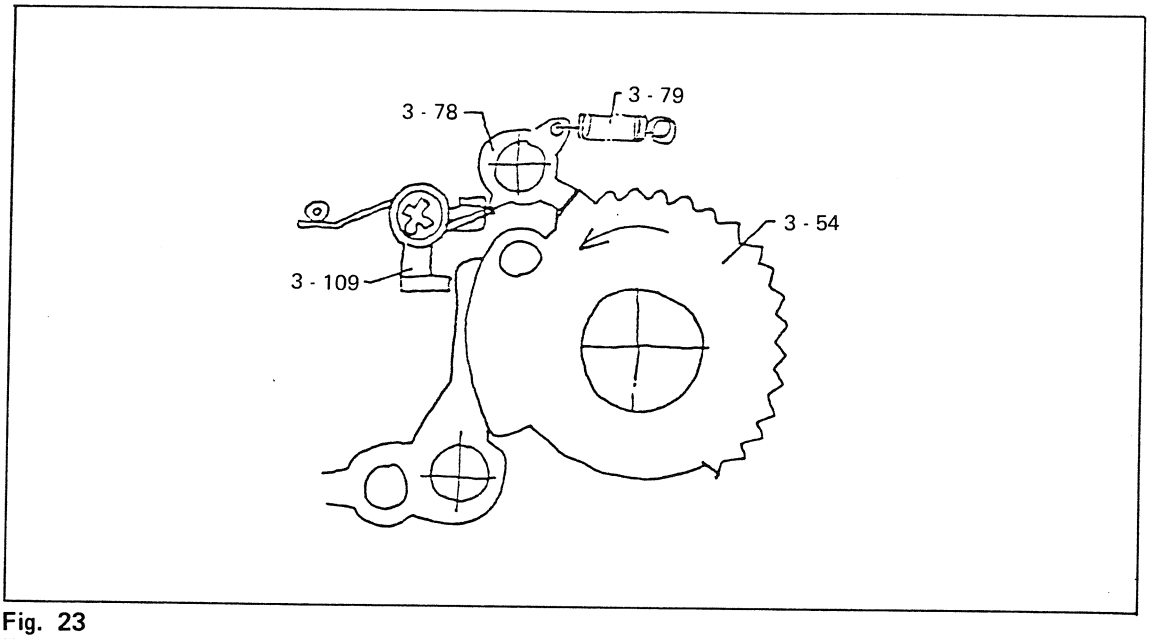
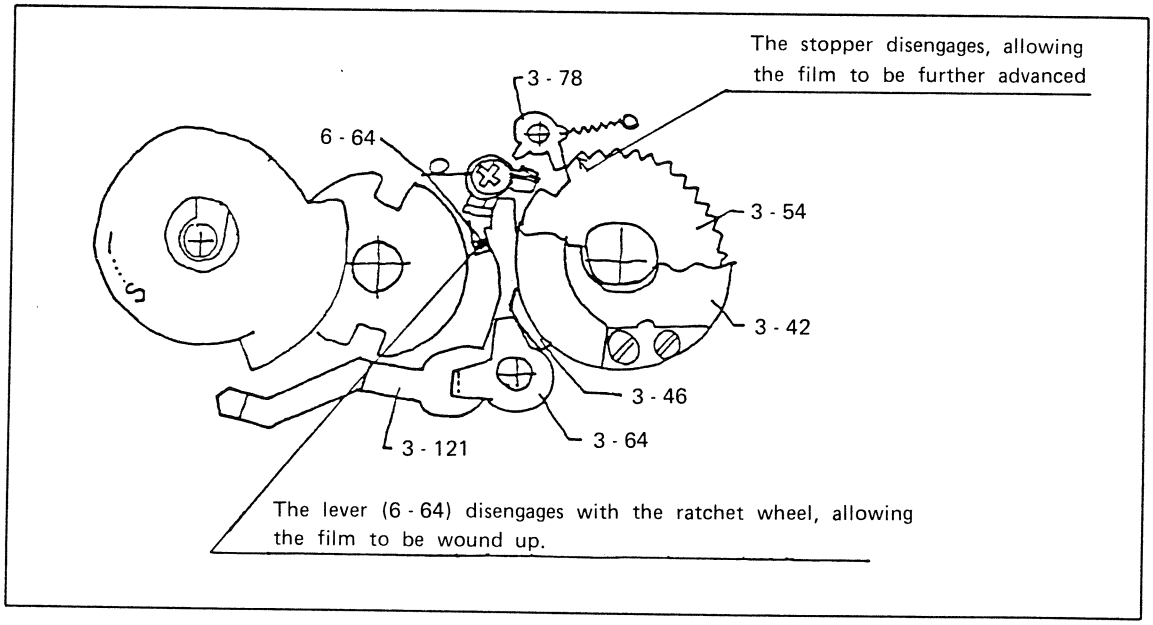

3 - 78
3 - 79
3 - 54
3 - 109

Fig. 23


The stopper disengages, allowing the film to be further advanced
3 - 78
6 - 64
3 - 54
3 - 42
3 - 46
3 - 64
3 - 121
The lever (6 - 64) disengages with the ratchet wheel, allowing the film to be wound up.

★ When beginning to advance the film and the release lever assembly (3 - 64) is about to disengage with the cam (3 - 46), the groove of the disc (3 - 85) must have been separated from the rising portion of the lever (3 - 121) by the film.

↳ If this alignment is incorrect, one frame is overlapped with another.

When the lever (3 - 121) is limited at the periphery of the disc (3 - 85), the lever (6 - 64) should not engage with the ratchet wheel (6 - 72).

↳ When this arrangement is improper, one frame is overlapped with another or noise is generated.

c. Ending exposure of the last frame of a 120 film.

The lever (3 - 2) is pushed up by interlocking with the counter, and the lever (3 - 121) is kept in the released state.

↳ Film can be wound up to the end in the manner similar to the film advancement from S to 1.

NOTE: The lever (3 - 2) must be pushed by the leaf spring (3 - 9) toward the arrow (A) direction.

Fig. 24

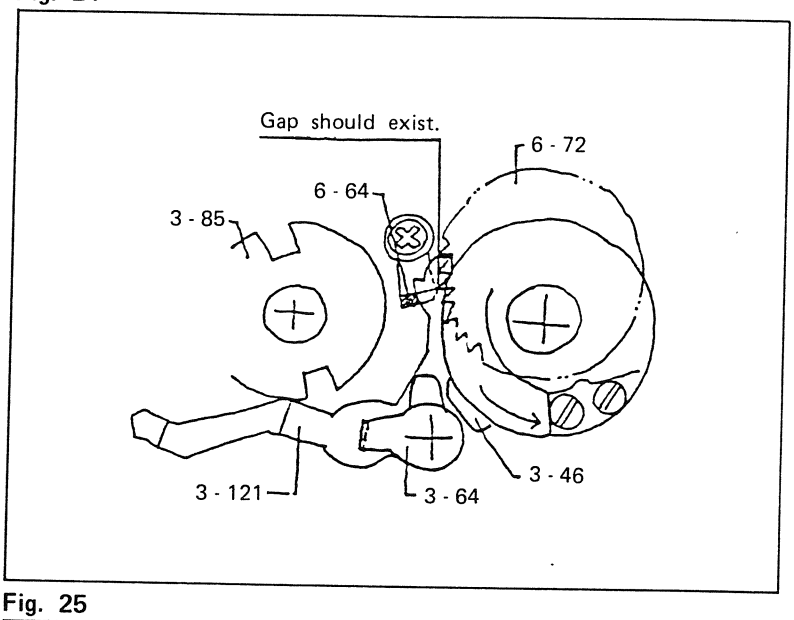
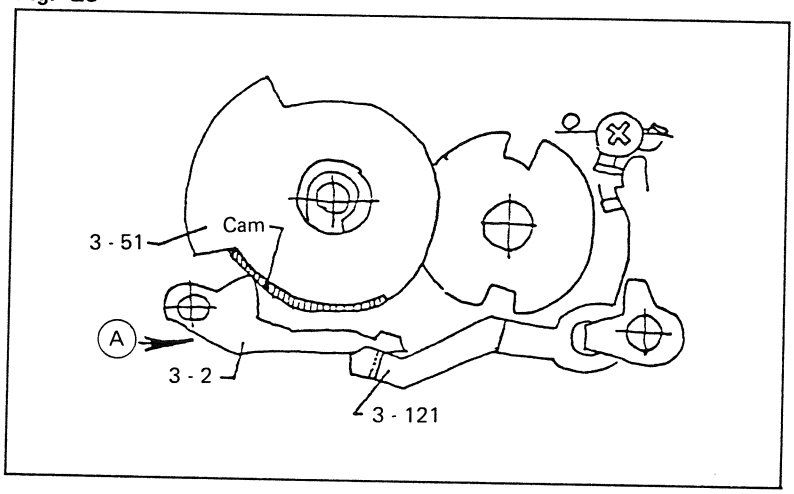


Fig. 25



d. Ending exposure of the last frame of a 220 film

The lever (3 - 2) is set to the 220 film with the film selector knob of the top cover assembly, and thus, the lever is separated from the counter dial.
If the lever is not separated from the counter dial, film winding is freed at the 16th frame.
When the 30th frame is exposed, and the film advance lever is wound up, the projection of the counter dial enters beneath the lever (3 - 121), and the lever (3 - 121) is kept in the separated state.
When the lever (3 - 121) runs against the dial (3 - 51), check the film advancing timing for delay.

e. 1st frame film position

A 120 film has a mark on the film leader. Match this mark with the mark on the camera body, and advance the film to the 1st frame.
Some times, the 1st frame film position may be deviated from the number indicated on the back of the film.
This deviation should be within ±½ frame.

[When excessively deviated]

- Make sure that the disc (3 - 85) is returned to the predetermined position by the spring (3 - 82) when the film chamber door is opened.
- At position S, there should be a gap between the claw (3 - 115) and counter gear (3 - 52).

Fig. 26

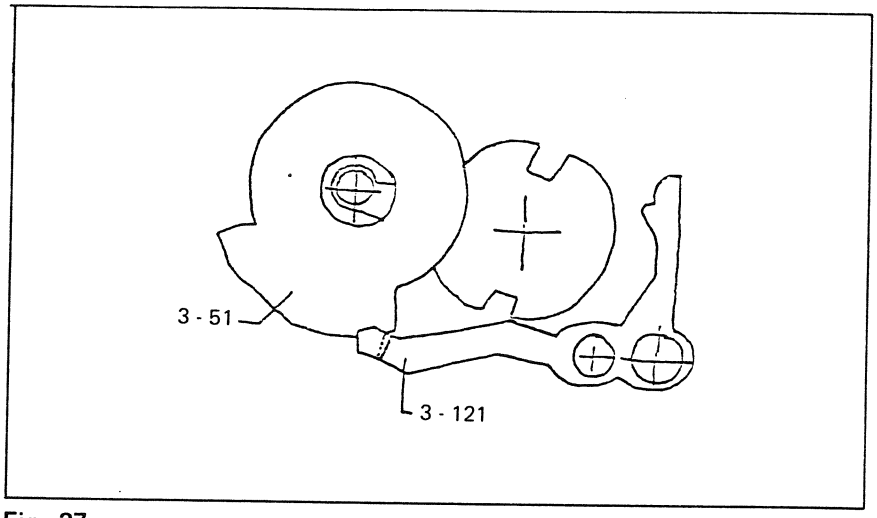
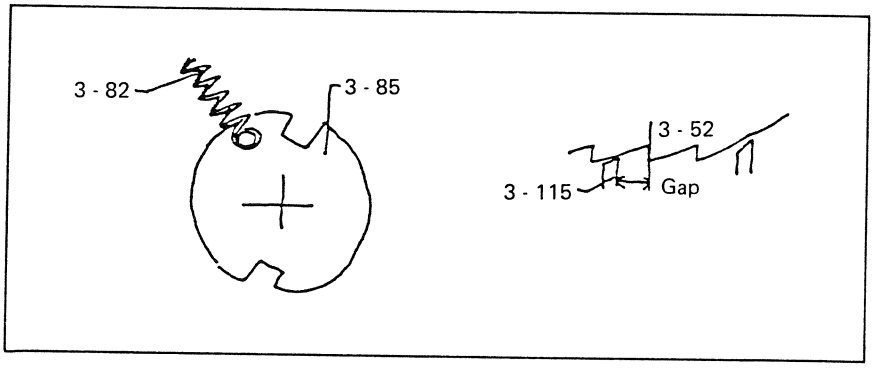


Fig. 27



f. Checking depth of the counter stop claw (3 - 118)

Push the marked portion of the film chamber door, and make sure that the stop claw (3 - 118) does not move toward the depth direction.

[When the stop claw moves]

(1) Make sure that the film chamber door is not warped.

(2) Make sure that the stop claw is not bent.

g. Checking the feed claw, stop claw and index lever for their shapes

Primarily, it should be bent in right angle.
However, as for the index lever, it may be bent as shown in the figure when film winding is stopped correctly as the film is advanced one frame.

Fig. 28

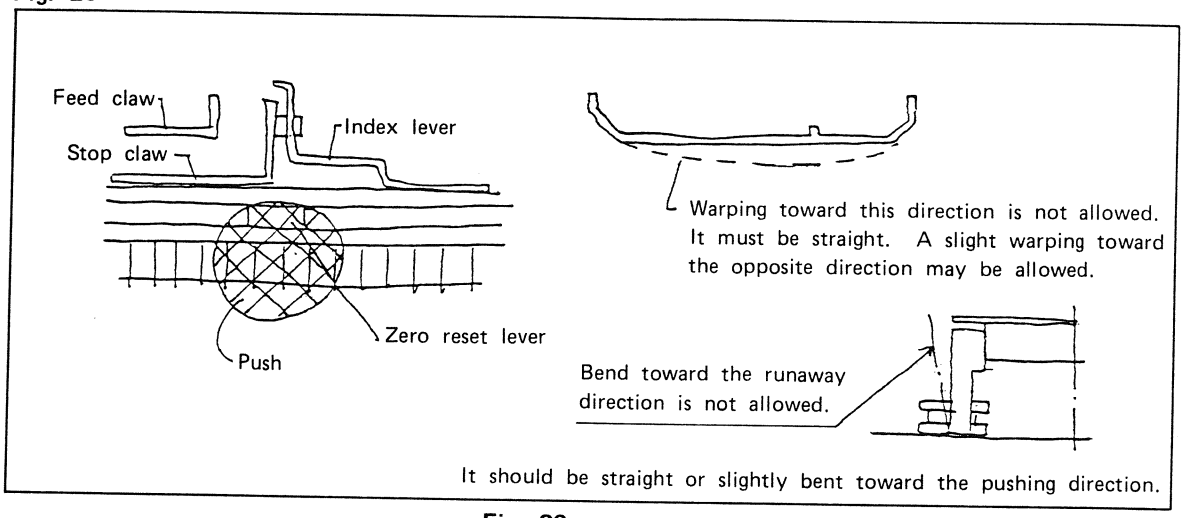
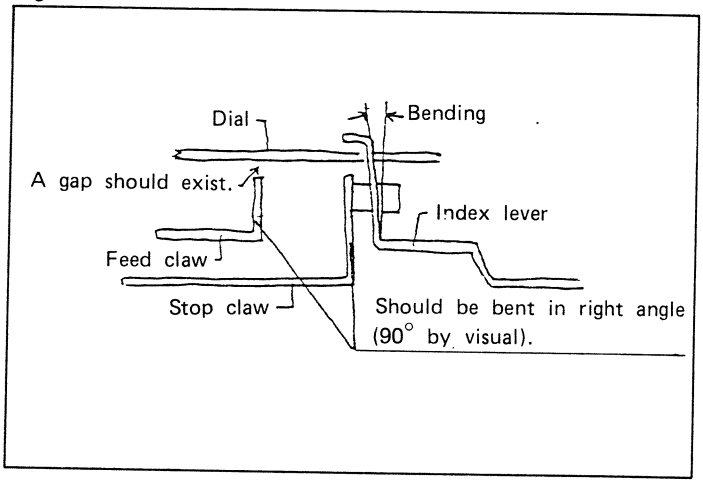

Feed claw
Index lever
Stop claw
Zero reset lever
Push
Warping toward this direction is not allowed.
It must be straight. A slight warping toward
the opposite direction may be allowed.
Bend toward the runaway
direction is not allowed.
It should be straight or slightly bent toward the pushing direction.

Fig. 29


Dial
Bending
A gap should exist.
Index lever
Feed claw
Stop claw
Should be bent in right angle
(90° by visual).

6. Shutter release locking mechanism

○ Locking during winding up a film

The lever (3 - 29) is pushed by the lock plate (1 - 37), causing the lever to be separated from the lock plate (1 - 26). Then, the shutter release can be depressed. During winding up a film (Unless the film advance lever is turned completely), the lever (3 - 30) is beneath the lock plate (1 - 26), locking the shutter release. When the shutter button is hooked with the film advance lever returned, check the lever (3 - 29) for improper bending.

○ Button locking mechanism at film end

S position

Movement of the lever (3 - 35) by the spring (3 - 33) toward direction (A) is stopped by the counter cam (3 - 52).

Winding completed position

Movement of the lever (3 - 35) toward direction (A) is stopped by the head of the index lever (3 - 121).

Fig. 30

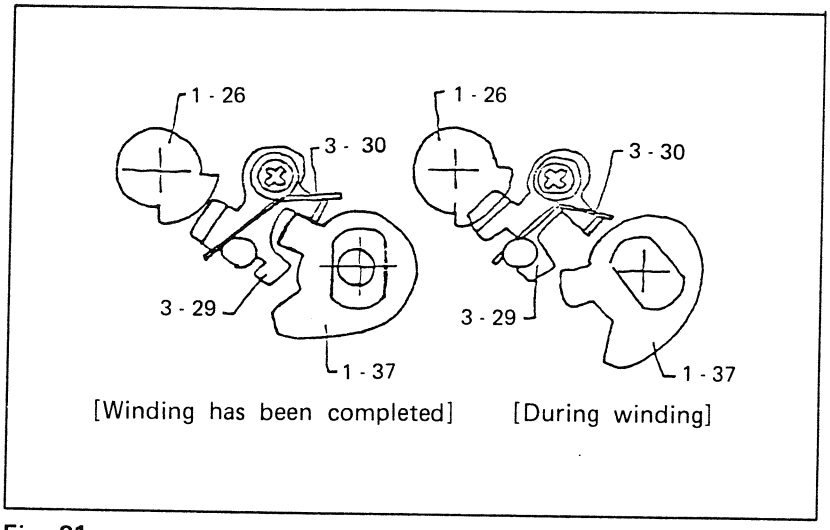
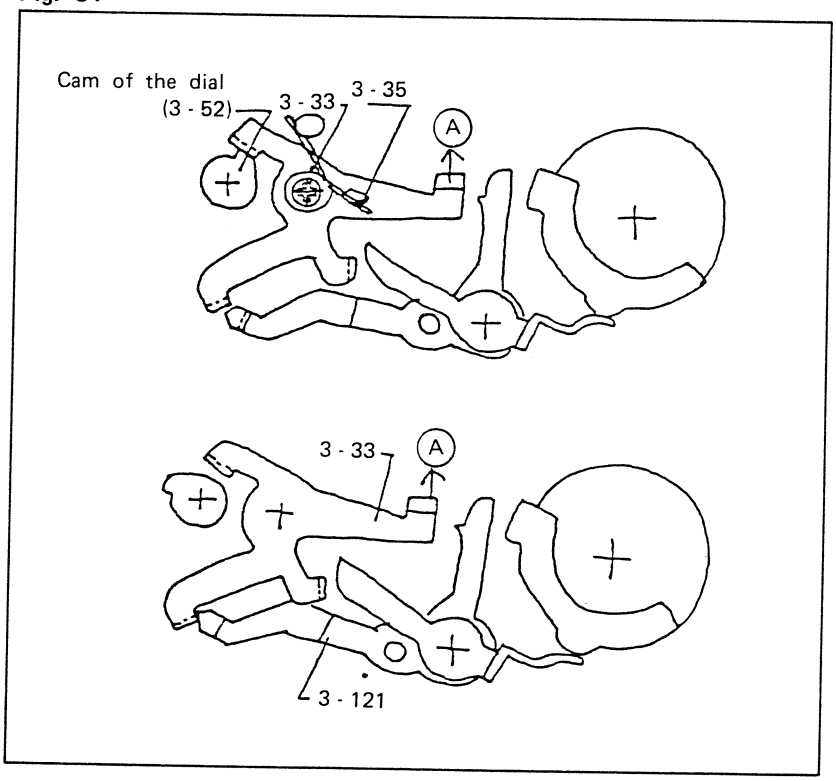

1 - 26
3 - 30
3 - 29
1 - 37
[Winding has been completed]
1 - 26
3 - 30
3 - 29
1 - 37
[During winding]

Fig. 31


Cam of the dial
(3 - 52)
3 - 33
3 - 35
A
3 - 33
A
3 - 121

Before the lever (3 - 121) drops down

The lever (3 - 33) moves freely to direction (A) because the lever (3 - 121) has run away. Therefore, movement of the lever (3 - 33) is stopped by the lever (3 - 40).

When the film ends

When the 16th frame (120 film) or 31st frame (220 film) is exposed, the lever (3 - 121) runs away.
Then the head of the lever (3 - 121) disengages, causing the lever (3 - 33) to move toward direction (A), and thus, the shutter release is locked.

When the 1st frame of the film is not wound up completely and the shutter button is pushed, the shutter button can be depressed and the shutter opens in case of Fujica GS645 (bellows type). In this case, the 1st frame is deviated 1 to 2 cm, causing a deplicated exposure.
To prevent this, the shape of the cam (3 - 52) is changed. This change has also been made for the bellows type.

Fig. 32

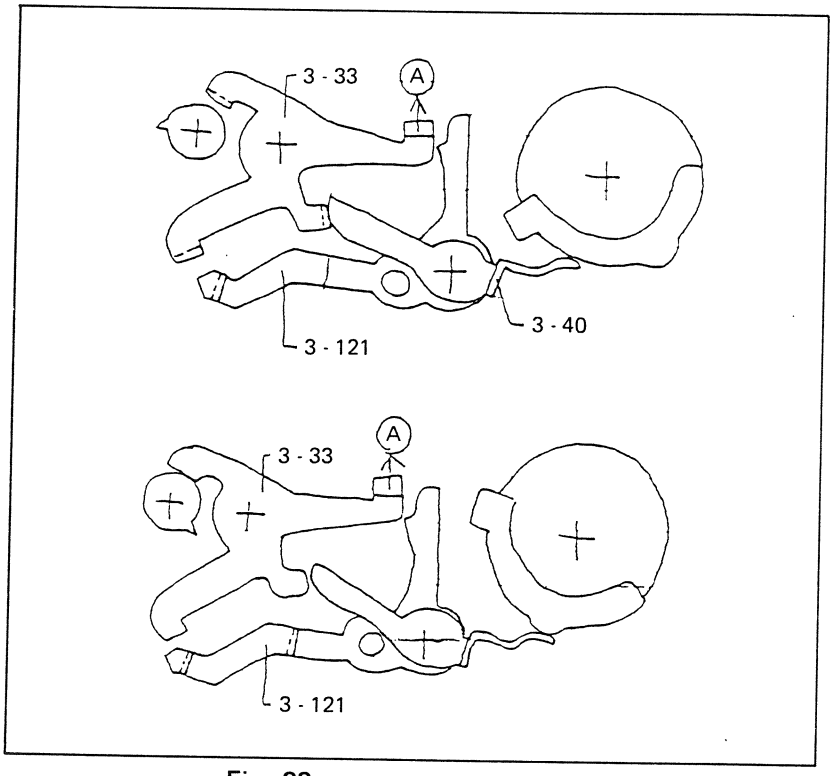
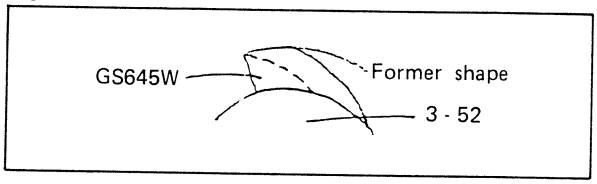


Fig. 33



7. Adjustment of electrical circuit

○ Wiring

Perform wiring by referring to the wiring diagram.
No short - circuit or bridged soldering should exist.
Pay particular attention on the lead wires extended from the shutter assembly so that they are not held between parts or they are not pulled unreasonably. The lead wires may be broken.

* Properly align the lead wire extended from the shutter assembly so that the color cannot be seen from the outside.

○ Adjustment of S. F. T. value potentiometer voltage

To adjust this voltage, use variable resistor VR1.
Measure voltage across the terminals to which blue and green lead wires are connected from the shutter assembly.

Adjust voltage so that $V_2 - V_1 = 327.6 \pm 2$ mV.

where, V_1 : Voltage at ASA 1600 1/1 F8

V_2 : Voltage at ASA 25 1/500 F22
Note: Not at F5.6.

○ Adjustment of voltage across IC Pins No. 5 and 16

To adjust this voltage, use VR3. The rated voltage is 205±2 mV.

○ Adjustment of LED display

Adjust variable resistor VR2 so that the center LED lights at the following settings.

ASA : 100

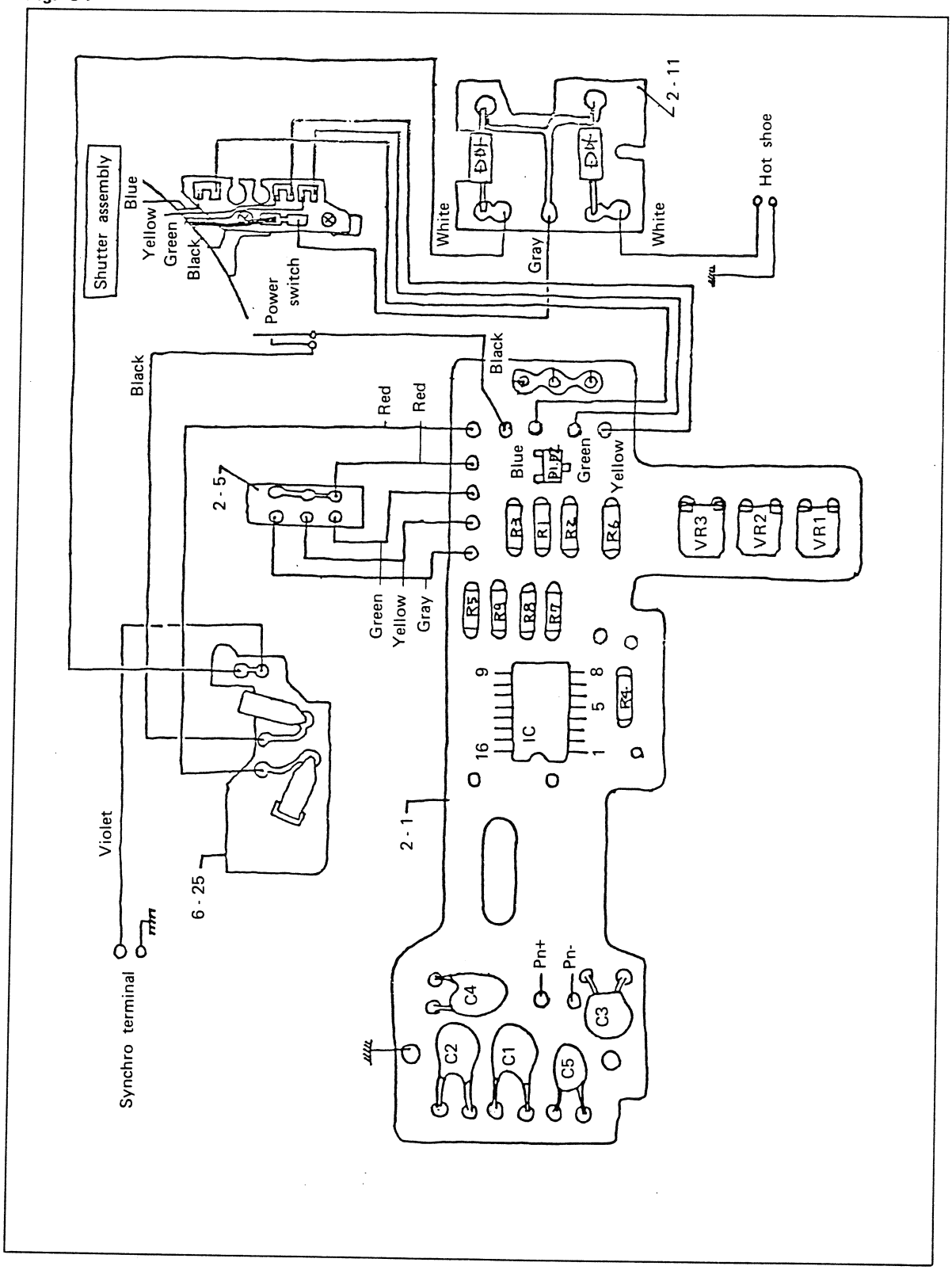
F : 22

T : 1/8

LV : 12 (Brightness 2267.9 rlx.)

In comparison with Fujica GS645, the brightness (2267.9 rlx) is brighter by 1/3 step.

Fig. 34


Shutter assembly
Blue
Yellow
Green
Black
Power switch
Black
Red
Red
Black
Blue
Green
Yellow
2 - 5
2 - 11
White
Gray
White
Hot shoe
VR3
VR2
VR1
R3
R1
R2
R6
R5
R9
R8
R7
R4
IC
16
9
8
5
1
Green
Yellow
Gray
2 - 1
Violet
6 - 25
Synchro terminal
Pn+
Pn-
C4
C3
C2
C1
C5

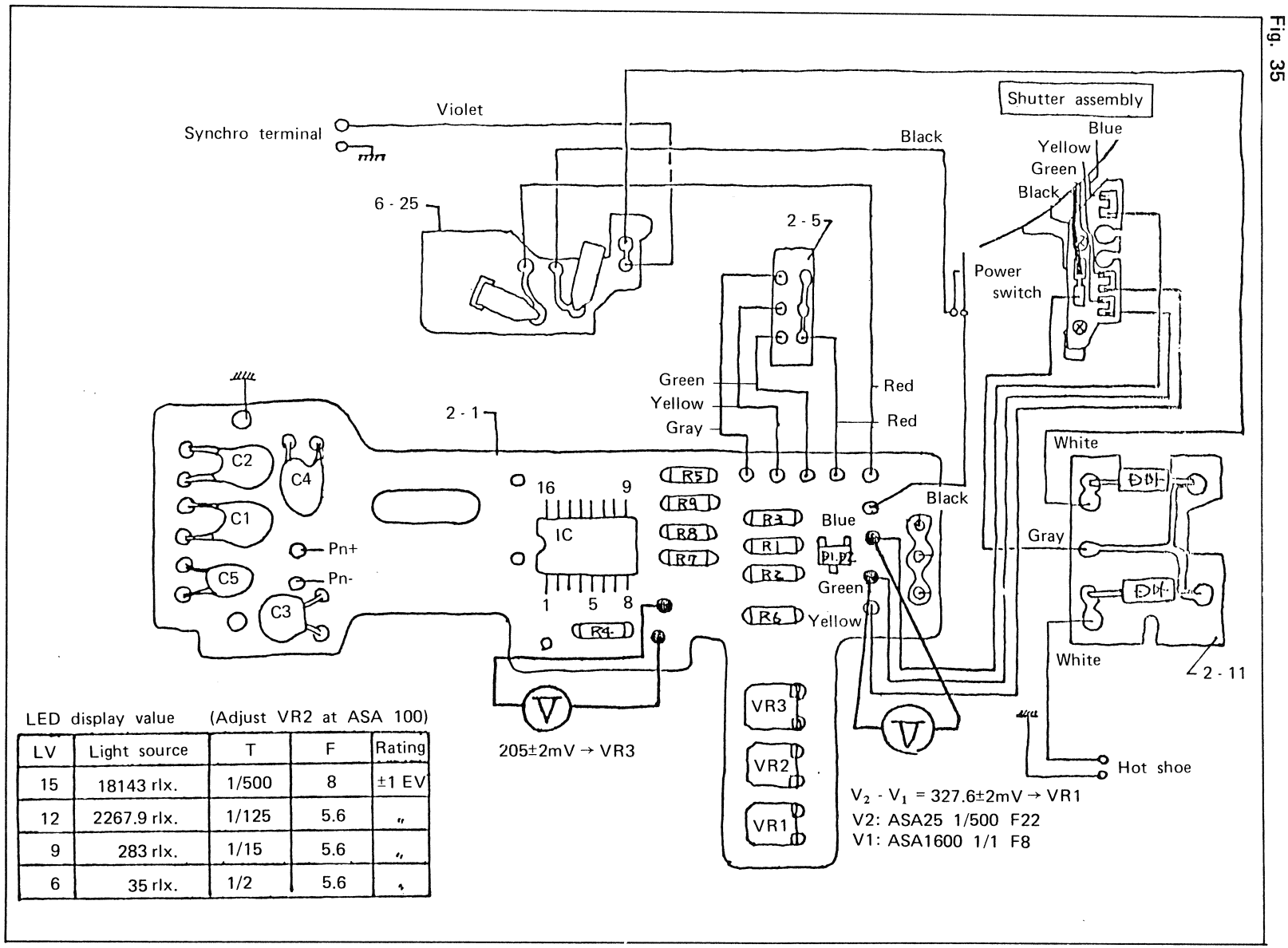


Fig. 35

LED display value (Adjust VR2 at ASA 100)

LV	Light source	T	F	Rating
15	18143 rlx.	1/500	8	±1 EV
12	2267.9 rlx.	1/125	5.6	"
9	283 rlx.	1/15	5.6	"
6	35 rlx.	1/2	5.6	"

○ IC TA. 2F 7646F pin operations

Pin No.	Name	Operation
1	Photocell (—) input	
2	S. F. T value input	
3	S. F. T output	About 18.2 mV/EV
4	S. F. T. L output adjust terminal	LED display value adjustment
5	LED lighting width adjust terminal	
6		
7		
8	GND	
9	LED terminal (Under)	ON at 0.5V or below, OFF at 1.5V or higher
10	LED terminal (Proper)	
11	LED terminal (Over)	
12	Battery check terminal	LED goes out when voltage is about 2.0V
13	Output stabilizing terminal	LED is unstable under OPEN state
14	Temperature guarantee circuit terminal	
15	IC power supply (+)	Battery voltage
16	Reference voltage	1.25V

Fig. 36

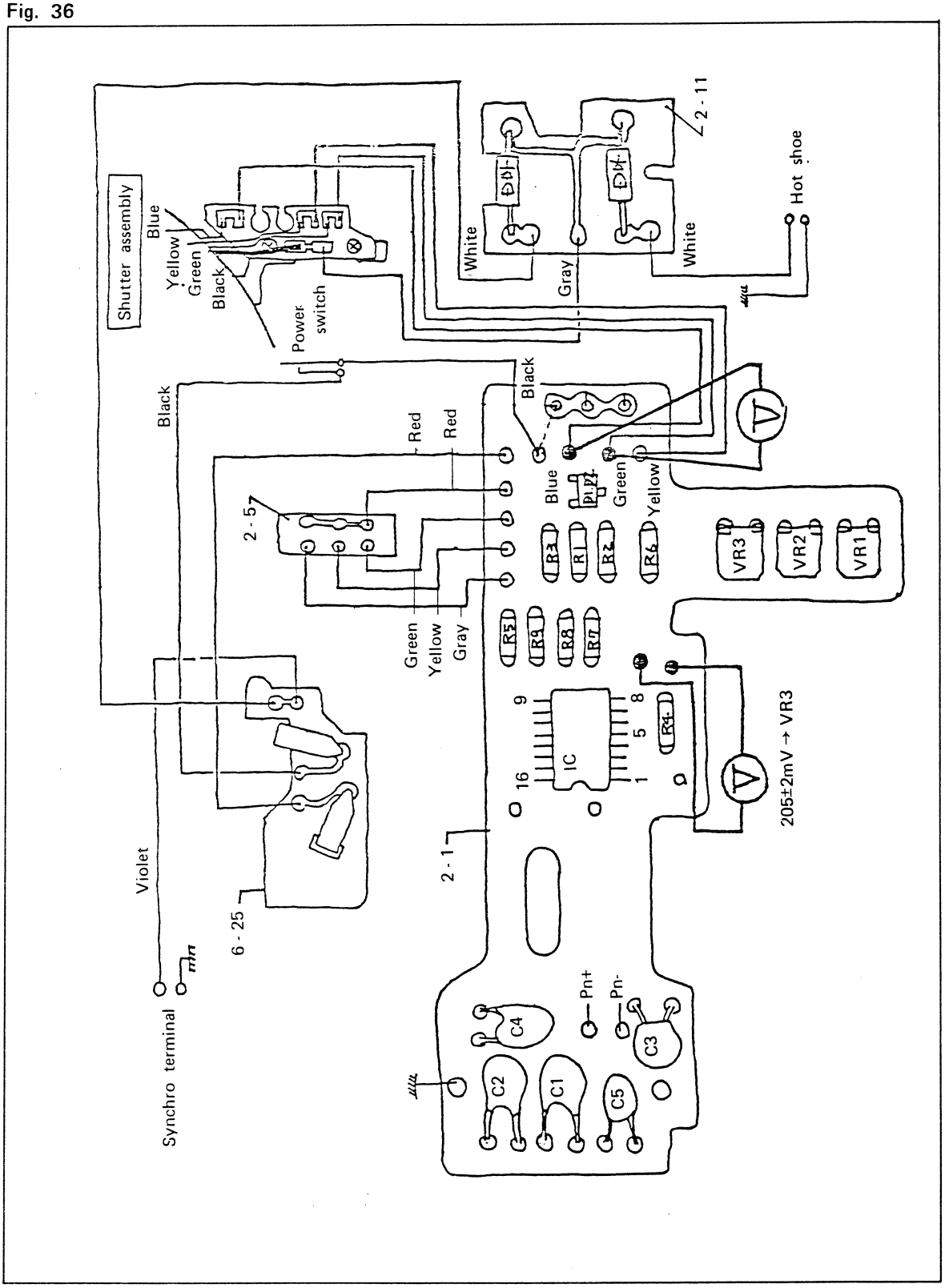
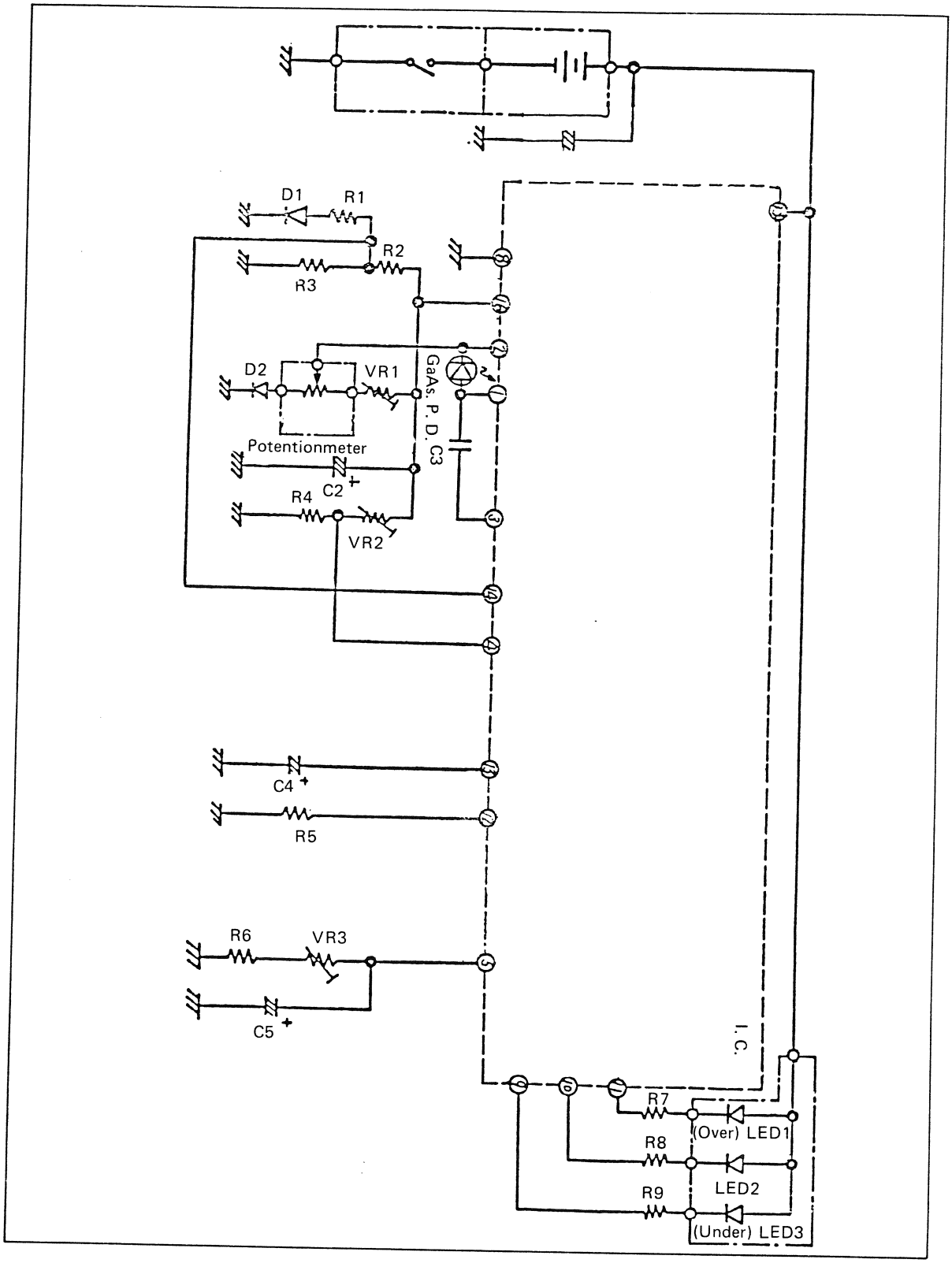
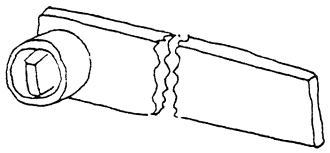
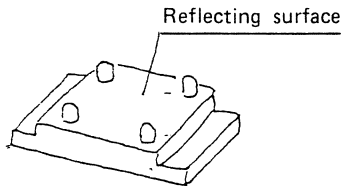
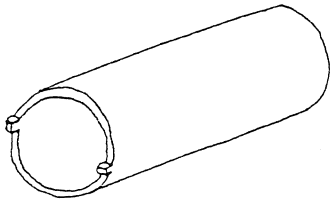
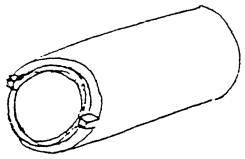

Shutter assembly
Blue
Yellow
Green
Black
Power switch
Black
Red
Red
Black
White
Gray
White
2 - 11
Hot shoe
Blue
Green
Yellow
2 - 5
Green
Yellow
Gray
R3
R1
R2
R6
VR3
VR2
VR1
R5
R9
R8
R7
R4
IC
16
9
1
5
8
205±2mV → VR3
Violet
Synchro terminal
6 - 25
2 - 1
Pn+
Pn-
C4
C2
C1
C5
C3

Fig. 37

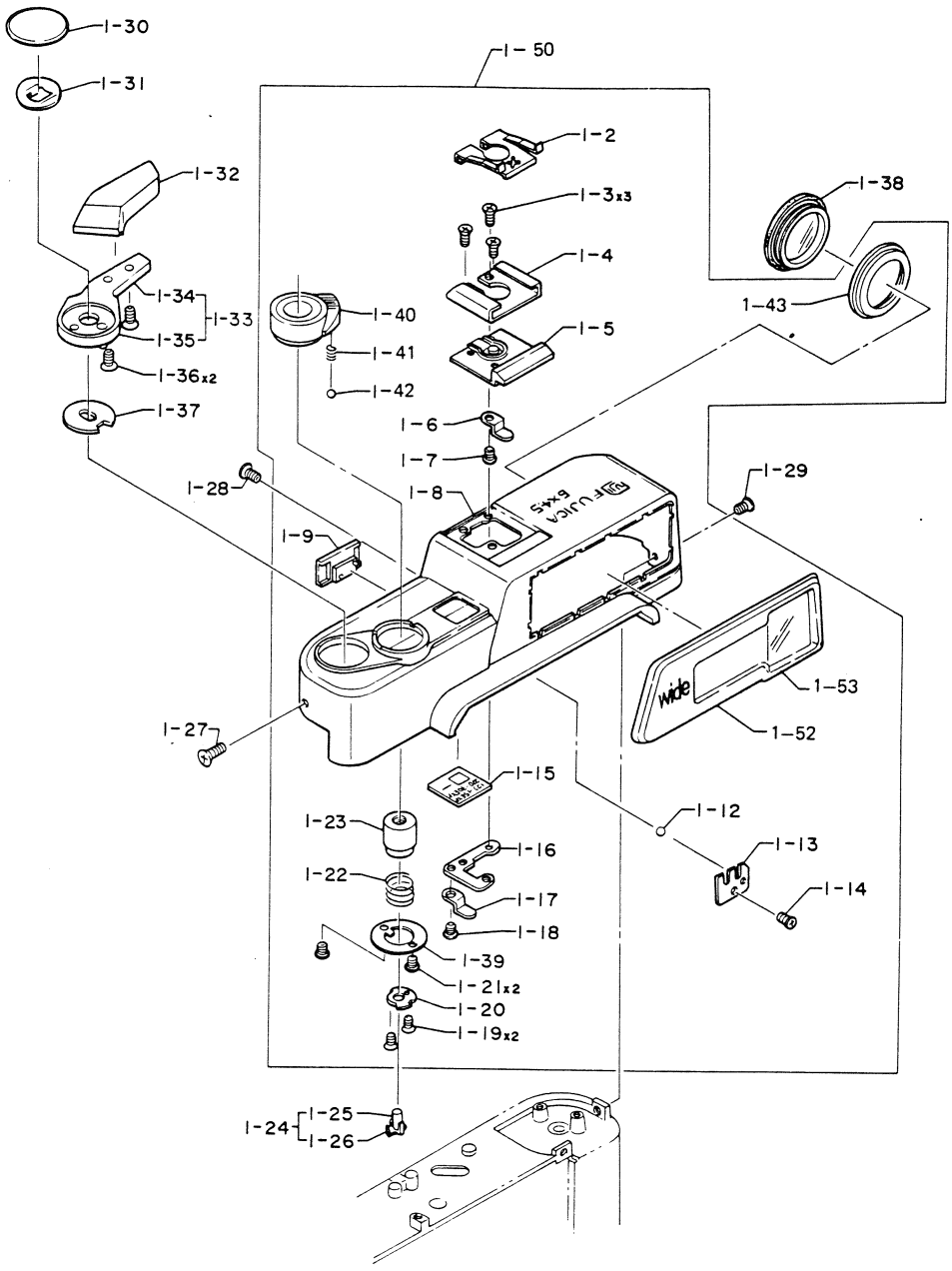

D1
R1
R2
R3
D2
VR1
GaAs. P. D.
C3
Potentionmeter
C2
R4
VR2
C4
R5
R6
VR3
C5
I. C.
R7
(Over) LED1
R8
LED2
R9
(Under) LED3

III SPECIAL TOOL LIST

No.	Name	Sketch and Application
J11299 Commonly used with GS645	Screw driver	 When tightening the spool friction set screw, this tool is used to hold the screw. The subjective set screws are 6 - 76 and 6 - 70.
J11286 Commonly used with GS645	Base plate	 Placed on the rail of the camera
J11293 - 05	Pin face spanner	 Used for hold ring (5 - 66)
J11341	Pin face spanner	 Used for rear lens assembly

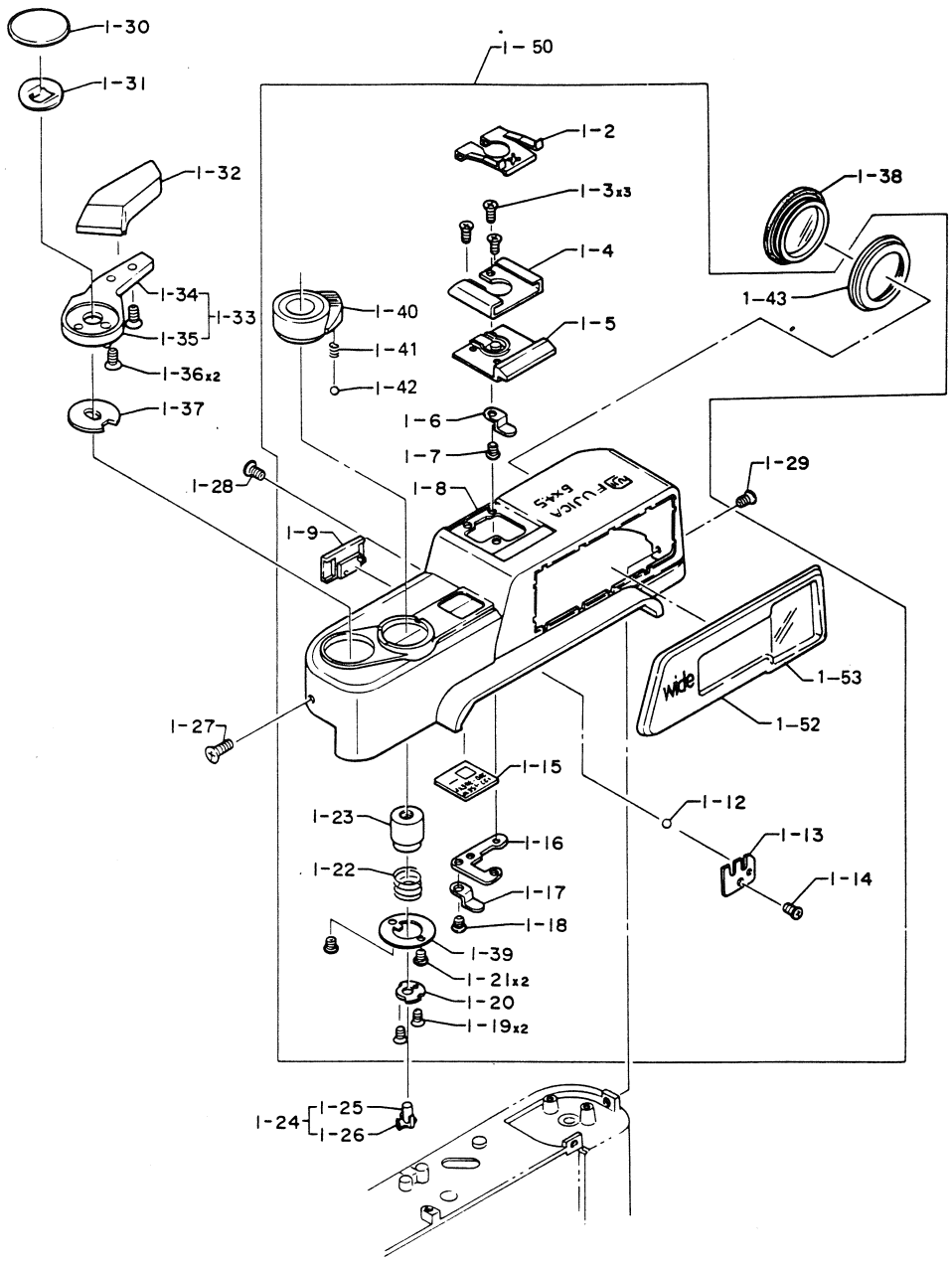
IV PARTS LIST

Fig. 1


1-30
1-31
1-32
1-34
1-33
1-35
1-36x2
1-37
1-28
1-9
1-27
1-50
1-2
1-3x3
1-4
1-40
1-41
1-42
1-5
1-6
1-7
1-8
1-38
1-43
1-29
1-53
1-52
1-15
1-12
1-13
1-14
1-23
1-22
1-16
1-17
1-18
1-39
1-21x2
1-20
1-19x2
1-24
1-25
1-26

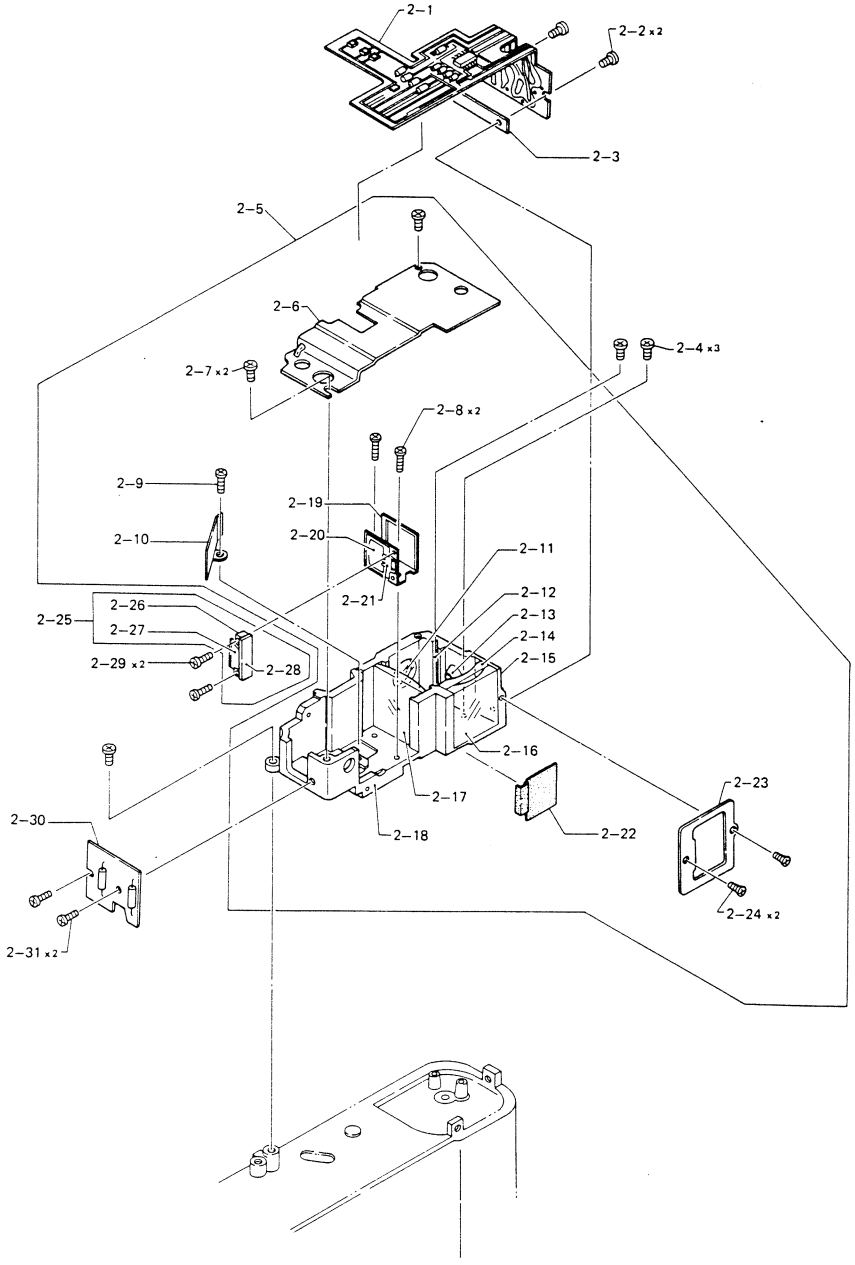
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
1 - 2	11B1492470	Shoe cover	1	GS645
1 - 3	111M170401N	Set screw	3	GS645
1 - 4	11B2252410	Shoe	1	GS645
1 - 5	115A3286010	Contact set assembly	1	GS645
1 - 6	109B35871	Contact	1	GS645
1 - 7	110M140121N	Set screw	1	GS645
1 - 9	16B3286143	Film selector knob	1	GS645
1 - 12	200M20	Steel ball	1	GS645
1 - 13	50B3286153	Leaf spring	1	GS645
1 - 14	113M170201S	Set screw	1	GS645
1 - 15	6B3286224	Exposure counter window	1	GS645
1 - 16	85B3286210	Base plate	1	GS645
1 - 17	109B35871	Contact	1	GS645
1 - 18	110M140121N	Set screw	1	GS645
1 - 19	111M140251S	Set screw	1	GS645
1 - 20	85B3286253	Holder	1	GS645
1 - 21	113M140201S	Set screw	2	GS645
1 - 22	50B3286240	Spring	1	GS645
1 - 23	16B3286233	Shutter release	1	GS645
1 - 24	32A3280100	Release bar assembly	1	GS645
1 - 27	53B3280360	Screw	1	GS645
1 - 28	53B3280350	Screw	1	GS645
1 - 29	53B3280350	Screw	1	GS645
1 - 30	53B3280421	Set screw	1	GS645
1 - 31	50B3280380	Leaf spring	1	GS645
1 - 32	81B3280402	Cover plate	1	GS645
1 - 33	47A3280050	Film advance lever assembly	1	GS645
1 - 36	111M170503S	Set screw	2	GS645
1 - 37	85B3280372	Lock plate	1	GS645
1 - 38	23A3280630	Eyepiece assembly	1	GS645
1 - 39	85B3286190	Stopper	1	GS645
1 - 40	16B3286180	Button seat	1	GS645

Fig. 1


1-30
1-31
1-32
1-34
1-33
1-35
1-36x2
1-37
1-50
1-2
1-3x3
1-4
1-40
1-41
1-42
1-5
1-6
1-7
1-8
1-28
1-9
1-38
1-43
1-29
1-53
1-52
1-27
1-15
1-12
1-23
1-16
1-13
1-22
1-17
1-14
1-18
1-39
1-21x2
1-20
1-19x2
1-24
1-25
1-26

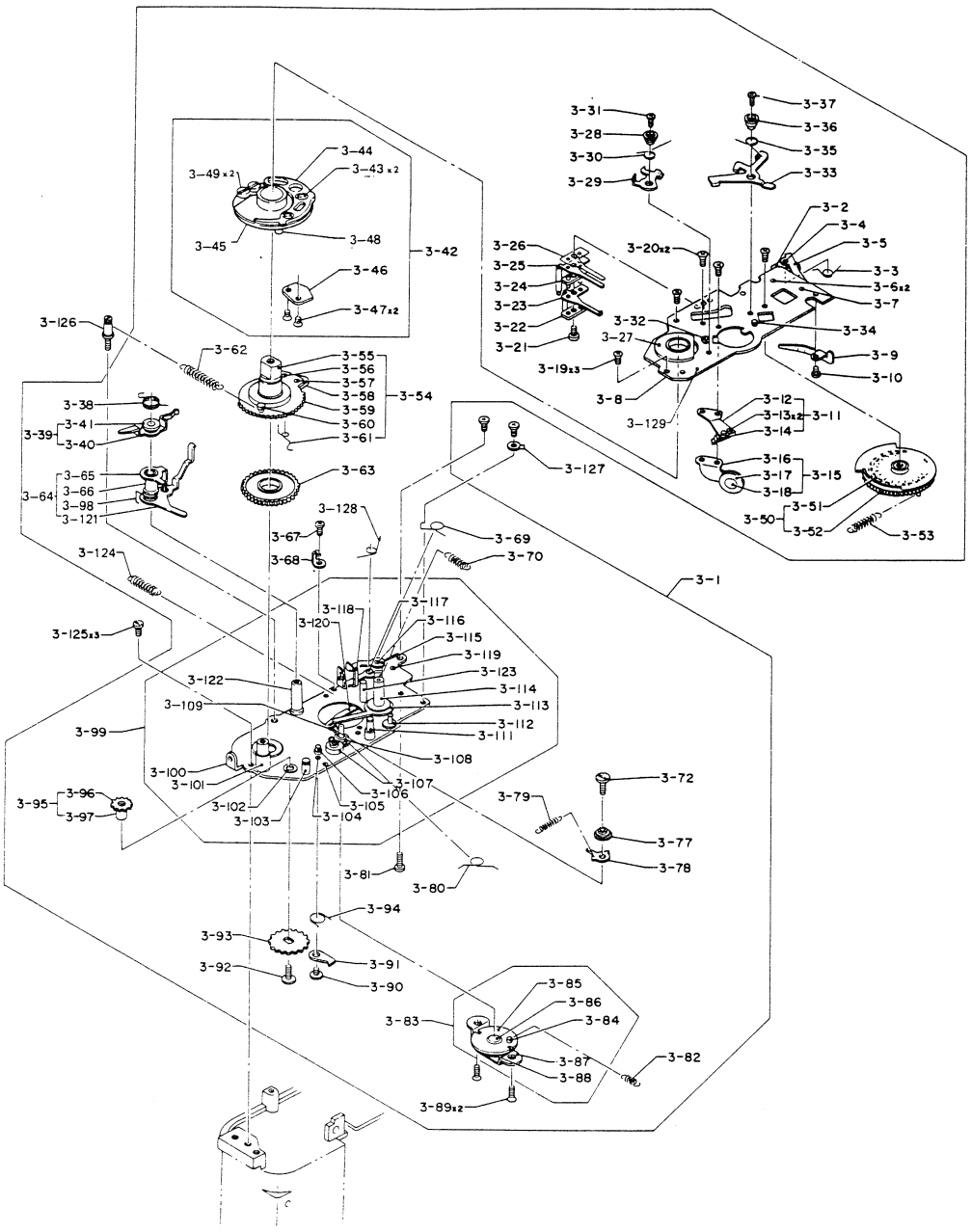
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
1 - 41	50B3286200	Spring	1	GS645
1 - 42	200M12	Steel ball	1	GS645
1 - 50	303A3662300	Top cover assembly	1	
1 - 52	84B3662310	Window frame	1	
1 - 53	6B3662320	Window glass	1	

Fig. 2


2-1
2-2 x2
2-3
2-5
2-6
2-7 x2
2-4 x3
2-8 x2
2-9
2-10
2-19
2-20
2-21
2-11
2-12
2-13
2-14
2-15
2-25
2-26
2-27
2-29 x2
2-28
2-16
2-17
2-18
2-22
2-23
2-24 x2
2-30
2-31 x2

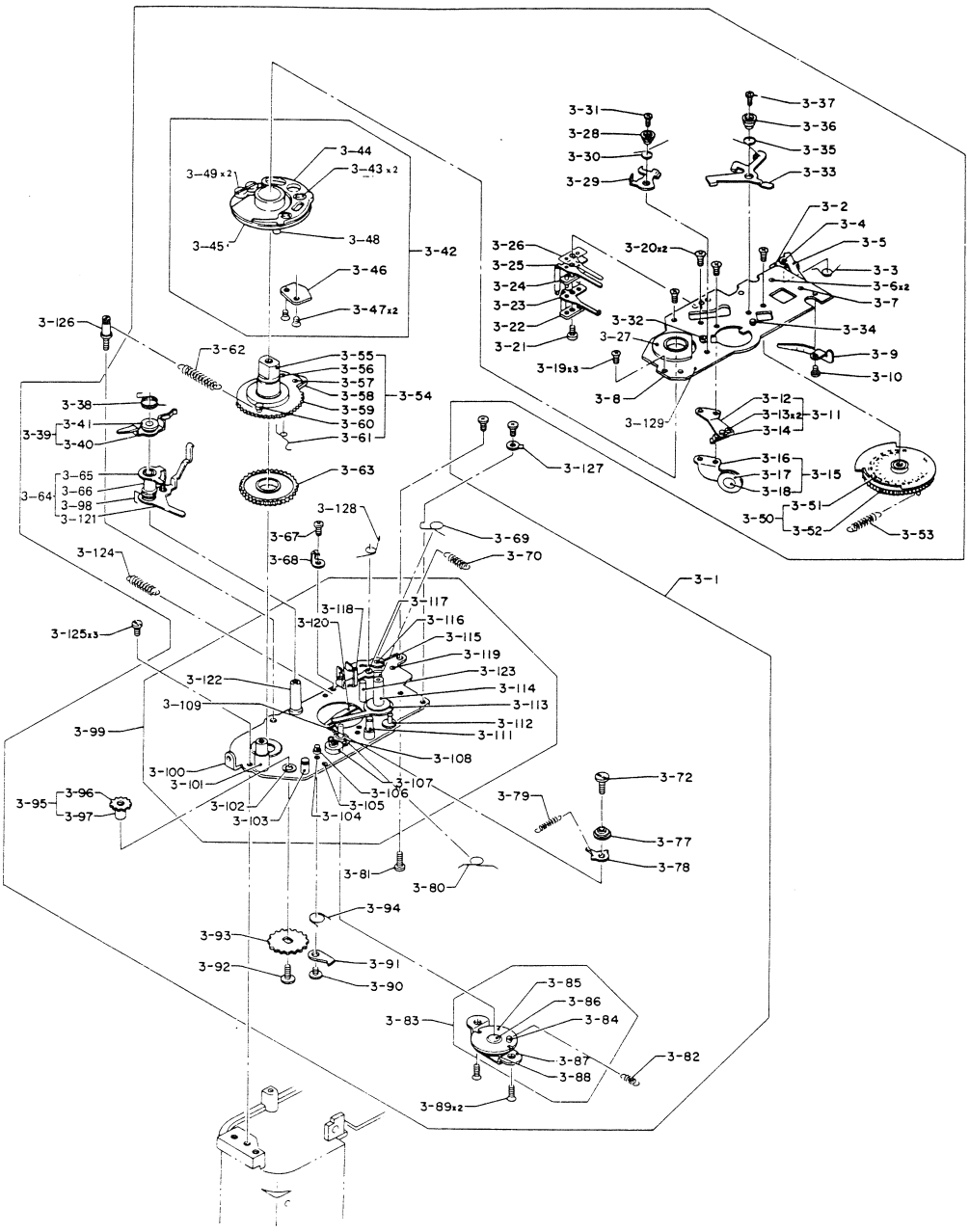
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
2 - 1	110A3288810	Flexible PCB assembly	1	GS645
2 - 2	95B3288060	Screw	2	
2 - 3	85B3287900	Insulation plate	1	
2 - 4	110M200551S	Screw	3	
2 - 5	99A51619A10	Range finder assembly	1	
2 - 6	11B3287640	Cover	1	GS645
2 - 7	110M170251S	Screw	2	
2 - 8	110M170251S	Screw	2	
2 - 9	110M170251S	Screw	1	
2 - 22	27B3662980	Light shielding plate	1	
2 - 23	11B3662960	Mask	1	
2 - 24	111M140251S	Screw	2	
2 - 25		LED holder assembly	1	
2 - 29	110M140503S	Screw	2	
2 - 30	110A3289100	PCB assembly	1	
2 - 31	110M140251S	Screw	2	

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-72
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128
3-129

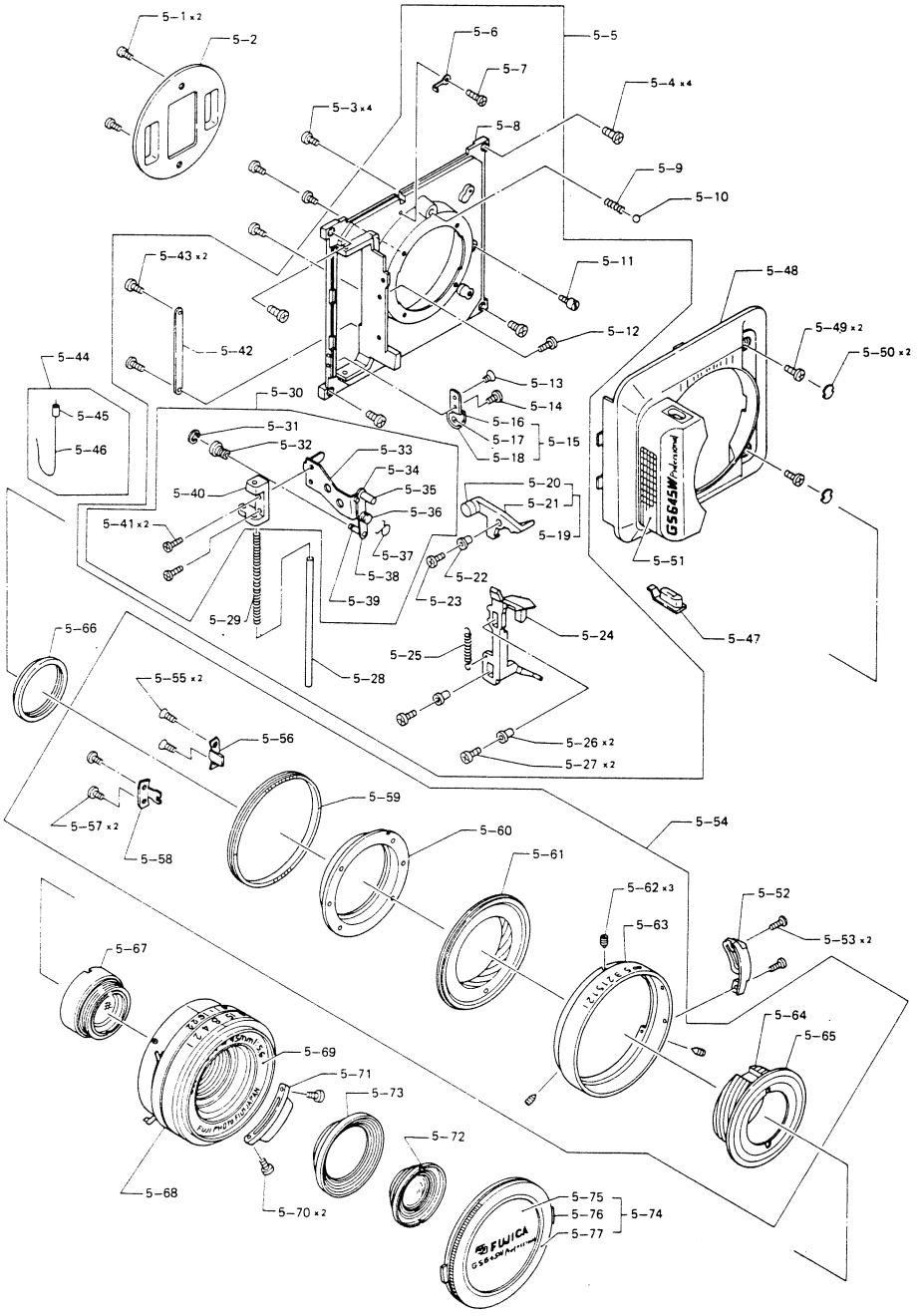
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
3 - 1	310A3662200	Film advance mechanism assembly	1	GS645
3 - 3	50B3284080	Spring	1	GS645
3 - 9	50B3284070	Leaf spring	1	GS645
3 - 10	110M140121N	Set screw	1	GS645
3 - 11	85A3284990	Release plate assembly	1	GS645
3 - 15	85A3285000	Pulley base assembly	1	GS645
3 - 19	111M170401S	Set screw	3	GS645
3 - 20	111M170201S	Set screw	2	GS645
3 - 21	110M140303S	Set screw	1	GS645
3 - 22	115B1278230	Insulation plate	1	GS645
3 - 23	109B3284730	Contact	1	GS645
3 - 24	115B127030	Insulator	1	GS645
3 - 25	109B3284720	Contact	1	GS645
3 - 26	109B3284820	Insulator	1	GS645
3 - 28	42B3284910	Collar	1	GS645
3 - 29	47B3284900	Lever	1	GS645
3 - 30	50B3284921	Spring	1	GS645
3 - 31	111M140251S	Set screw	1	GS645
3 - 33	47B3286480	Lever	1	GS645
3 - 34	17B29290	Shaft	1	GS645
3 - 35	50B3284921	Spring	1	GS645
3 - 36	42B3286500	Collar	1	GS645
3 - 37	111M140251S	Set screw	1	GS645
3 - 38	50B3286490	Spring	1	GS645
3 - 39	47A3285140	Lever assembly	1	GS645
3 - 42	36A3285130	Large pulley assembly	1	GS645
3 - 43	111M170201S	Set screw	2	GS645
3 - 44	85B3284560	Large cam	1	GS645
3 - 46	85B3284550	Cam	1	GS645
3 - 47	111M140201S	Set screw	2	GS645
3 - 49	17B3284571	Lock pin	2	GS645
3 - 50	34A3285050	Counter dial assembly	1	GS645

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-72
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128
3-129

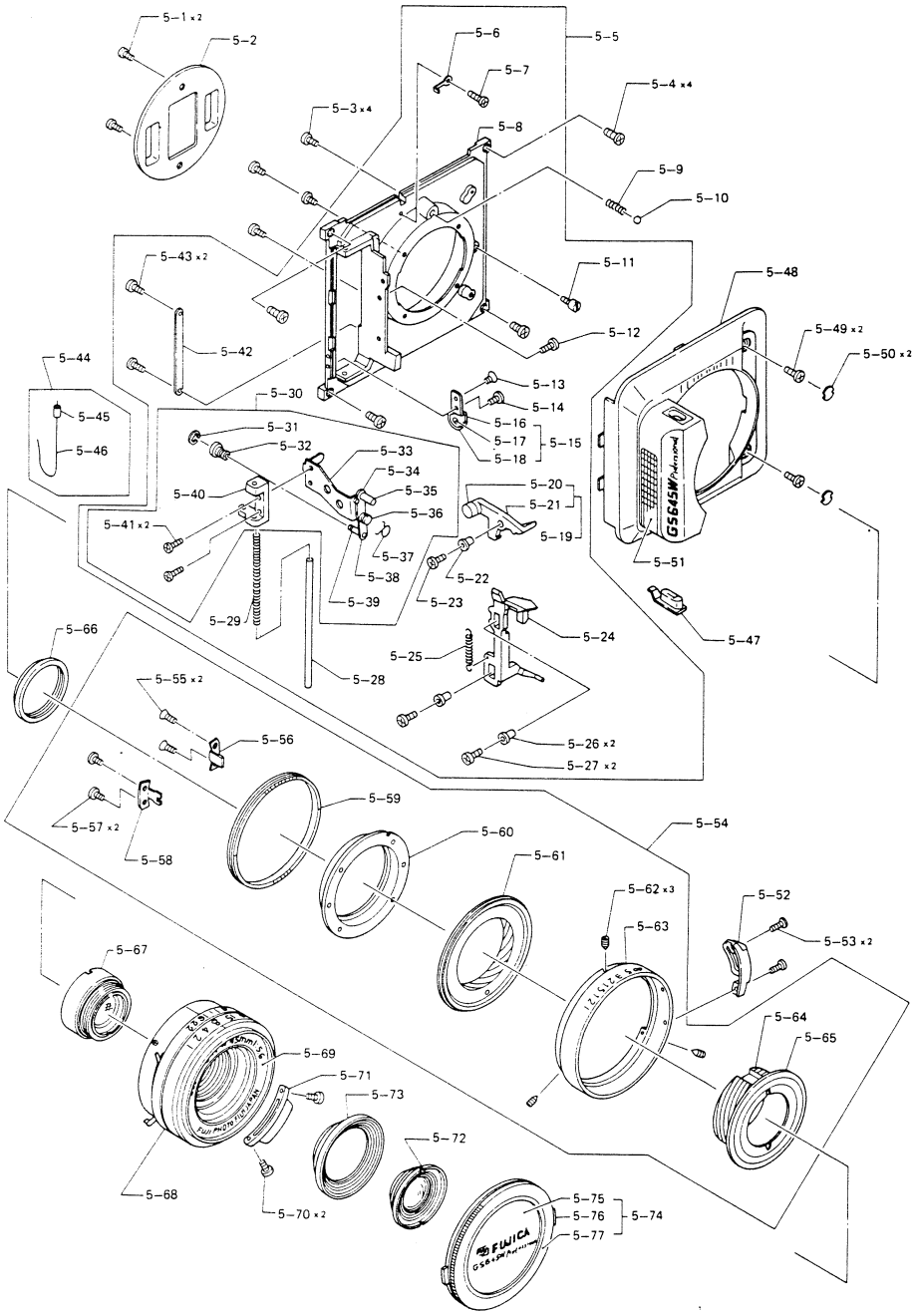
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
3 - 53	50B3284300	Spring	1	GS645
3 - 54	34B3285080	Ratchet wheel assembly	1	GS645
3 - 61	50B3284510	Spring	1	GS645
3 - 62	50B3284661	Spring	1	GS645
3 - 63	34B3284450	Gear	1	GS645
3 - 64	47A3285090	Release lever assembly	1	GS645
3 - 67	110M170453S	Set screw	1	GS645
3 - 68	111B72560	Staple	1	GS645
3 - 69	50B3284270	Spring	1	GS645
3 - 70	50B93500	Spring	1	GS645
3 - 72	53B3284380	Set screw	1	GS645
3 - 77	42B3284780	Collar	1	GS645
3 - 78	85B3284360	Swing lever	1	GS645
3 - 79	17B3284940	Spring	1	GS645
3 - 80	50B3284430	Spring	1	GS645
3 - 81	110M140453S	Set screw	1	GS645
3 - 82	50B3284191	Spring	1	GS645
3 - 83	41A3285030	Plate assembly	1	GS645
3 - 89	110M170353S	Set screw	2	GS645
3 - 90	53B3284810	Set screw	1	GS645
3 - 91	45B1061	Claw	1	GS645
3 - 92	53B29190	Set screw	1	GS645
3 - 93	34B3284120	Gear	1	GS645
3 - 94	50B3284400	Spring	1	GS645
3 - 95	34A3285110	Gear shaft assembly	1	GS645
3 - 98	50B3284672	Spring	1	GS645
3 - 124	50B2458151	Spring	1	GS645
3 - 125	110M200303S	Set screw	3	GS645
3 - 126	53B3281730	Screw	1	GS645
3 - 127	85B3280760	Staple	1	GS645
3 - 128	50B3284330	Spring	1	GS645
3 - 129	17B3284851	Stopper pin	1	GS645

Fig. 5


5-1 x2
5-2
5-6
5-5
5-7
5-4 x4
5-3 x4
5-8
5-9
5-10
5-43 x2
5-11
5-48
5-42
5-12
5-49 x2
5-50 x2
5-44
5-13
5-30
5-14
5-45
5-31
5-16
5-46
5-32
5-17
5-15
5-33
5-18
5-34
5-40
5-35
5-20
5-36
5-21
5-41 x2
5-19
5-37
5-51
5-38
5-22
5-39
5-23
5-47
5-29
5-24
5-66
5-25
5-28
5-55 x2
5-56
5-26 x2
5-27 x2
5-57 x2
5-59
5-54
5-58
5-60
5-61
5-62 x3
5-52
5-63
5-53 x2
5-67
5-64
5-65
5-69
5-71
5-73
5-72
5-68
5-70 x2
5-75
5-76
5-74
5-77

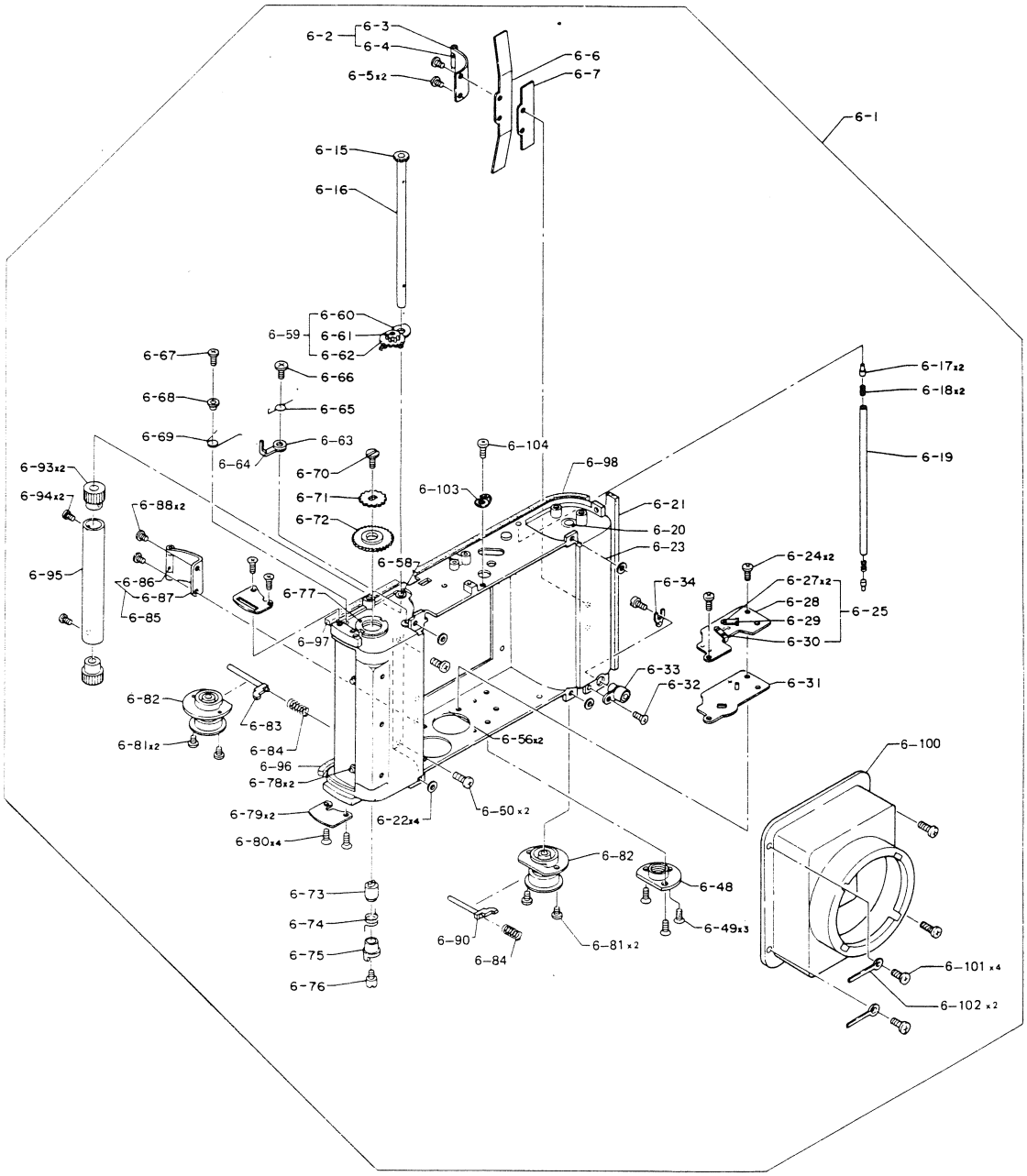
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
5 - 1	110M140251S	Screw	2	
5 - 2	27B3661060	Light shielding plate	1	
5 - 3	110M140301S	Screw	4	
5 - 4	110M230453S	Screw	4	
5 - 5	46A3661800	Shutter set mechanism assembly	1	
5 - 6	111B72560	Staple	1	
5 - 7	110M170501M	Screw	1	
5 - 8	46B3661910	Base plate	1	
5 - 9	50B3662010	Spring	1	
5 - 10	200M12	Steel ball	1	
5 - 11	53B3662020	Stopper pin	1	
5 - 12	110M170501M	Screw	1	
5 - 13	111M170351S	Screw	1	
5 - 14	110M170351S	Screw	1	
5 - 15	85A3282110	Pulley base assembly	1	GS645
5 - 19		Bell crank assembly	1	
5 - 22	32B3661920	Collar	1	
5 - 23	110M170501M	Screw	1	
5 - 24	47B3661930	Release lever	1	
5 - 25	50B3662030	Spring	1	
5 - 26	32B3661920	Collar	2	
5 - 27	110M170501M	Screw	2	
5 - 28	32B3282290	Shaft	1	
5 - 29	50B3282680	Spring	1	
5 - 30	47A3661892	Set lever assembly	1	
5 - 31	191M012T	E - clip	1	
5 - 32	82B3285250	Roller	1	
5 - 37	50B3661991	Spring	1	
5 - 40	30B3662081	Guide	1	
5 - 41	110M140403S	Screw	2	
5 - 42	85B3662000	Guide plate	1	
5 - 43	110M170351S	Screw	2	

Fig. 5


5-1 x2
5-2
5-6
5-5
5-7
5-4 x4
5-3 x4
5-8
5-9
5-10
5-43 x2
5-11
5-48
5-42
5-12
5-49 x2
5-50 x2
5-44
5-13
5-30
5-14
5-45
5-16
5-31
5-17
5-15
5-46
5-32
5-33
5-18
5-34
5-40
5-35
5-20
5-36
5-21
5-41 x2
5-19
5-37
5-51
5-38
5-22
5-39
5-23
5-29
5-24
5-47
5-66
5-25
5-28
5-55 x2
5-56
5-26 x2
5-27 x2
5-59
5-57 x2
5-60
5-54
5-58
5-61
5-62 x3
5-52
5-63
5-53 x2
5-67
5-64
5-65
5-69
5-71
5-73
5-72
5-68
5-75
5-76
5-74
5-70 x2
5-77

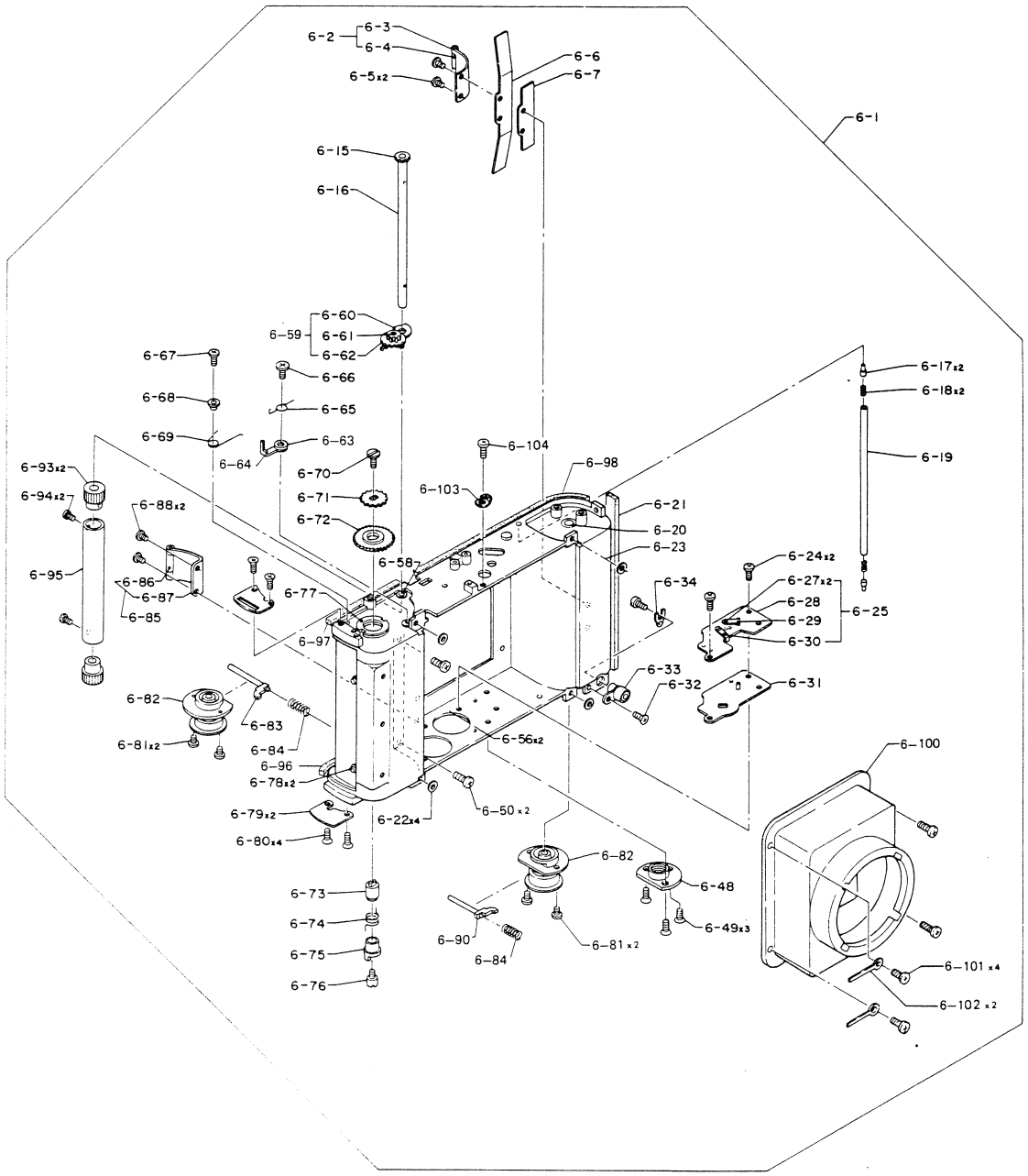
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
5 - 44	56A3280090	Wire assembly	1	GS645
5 - 47	82B3661070	Button	1	
5 - 48	11B3661030	Front cover	1	
5 - 49	110M200703S	Screw	2	
5 - 50	85B3661191	Cover plate	2	
5 - 51	59B3661151	Leather	1	
5 - 52	16B3661080	Knob	1	
5 - 53	53B3661140	Screw	2	
5 - 54	21A3662700	Helicoid assembly	1	
5 - 55	111M140253T	Screw	2	
5 - 57	110M140253T	Screw	2	
5 - 62	120M170301S	Screw	3	
5 - 63	23B3662790	Focusing ring	1	
5 - 66	23B3661090	Hold ring	1	
5 - 67	21A3363130	Rear lens assembly	1	
5 - 68	38B3383730	Shutter assembly	1	
5 - 69	23B3661041	Name ring	1	
5 - 70	53B3661170	Screw	2	
5 - 71	16B3661110	Aperture selector knob	1	
5 - 72	21A3363120	Front lens assembly	1	
5 - 73	23B3661021	Hood	1	
5 - 74	96A12177A00	Lens cap assembly	1	
5 - 75	58B3663620	Name plate	1	

Fig. 6


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-15
6-16
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-58
6-77
6-97
6-98
6-103
6-104
6-21
6-20
6-23
6-17x2
6-18x2
6-19
6-24x2
6-27x2
6-28
6-29
6-30
6-25
6-34
6-33
6-32
6-31
6-93x2
6-94x2
6-95
6-88x2
6-86
6-87
6-85
6-82
6-83
6-81x2
6-84
6-96
6-78x2
6-79x2
6-80x4
6-22x4
6-56x2
6-50x2
6-73
6-74
6-75
6-76
6-82
6-90
6-84
6-81x2
6-48
6-49x3
6-100
6-101x4
6-102x2

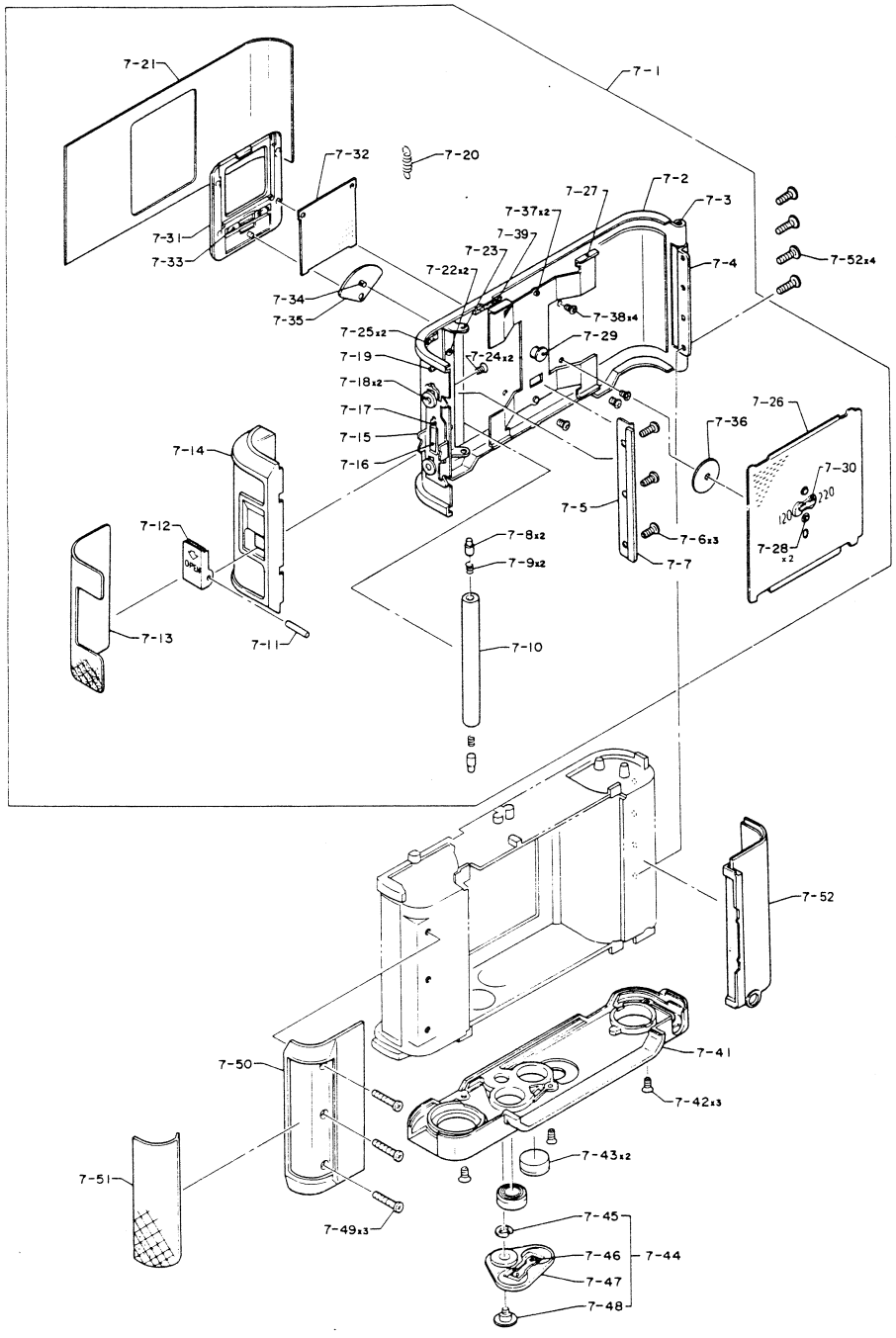
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
6 - 1	301A3661700	Camera body assembly	1	GS645
6 - 2	50A3281090	Leaf spring assembly	1	GS645
6 - 5	110M140251N	Set screw	2	GS645
6 - 6	50B486960	Leaf spring	1	GS645
6 - 7	55B3281930	Adjust plate	1	GS645
6 - 15	34B3281390	Gear	1	GS645
6 - 16	32B3281380	Shaft	1	GS645
6 - 17	17B30161	Pin	2	GS645
6 - 18	50B30170	Spring	2	GS645
6 - 19	30B3281360	Roller	1	GS645
6 - 21	27B3281851	Moquette	1	GS645
6 - 22	55B3285350	Washer	0 ~ 4	GS645
6 - 24	110M170251S	Set screw	2	GS645
6 - 25	110A3289010	Battery PCB assembly	1	GS645
6 - 31	115B3280550	Insulation plate	1	GS645
6 - 32	111M170301N	Set screw	1	GS645
6 - 33	112A3281050	Synchro - socket assembly	1	GS645
6 - 34	108B563570	Lug	1	GS645
6 - 48	53B93823	Tripod socket	1	GS645
6 - 49	111M200453S	Set screw	3	GS645
6 - 50	110M170201S	Set screw	1	GS645
6 - 59	34A3281030	Idle gear assembly	1	GS645
6 - 63	42B3281660	Collar	1	GS645
6 - 64	47B3281670	Lever	1	GS645
6 - 65	50B3281450	Spring	1	GS645
6 - 66	53B3281760	Set screw	1	GS645
6 - 67	110M170353S	Set screw	1	GS645
6 - 68	42B3281840	Collar	1	GS645
6 - 69	50B3281830	Spring	1	GS645
6 - 70	53B3281350	Screw	1	GS645
6 - 71	34B3284120	Gear	1	GS645
6 - 72	34B3281321	Ratchet wheel	1	GS645

Fig. 6


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-15
6-16
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-74
6-75
6-76
6-77
6-82
6-83
6-84
6-85
6-86
6-87
6-88x2
6-93x2
6-94x2
6-95
6-96
6-97
6-98
6-103
6-104
6-17x2
6-18x2
6-19
6-20
6-21
6-23
6-24x2
6-25
6-27x2
6-28
6-29
6-30
6-31
6-32
6-33
6-34
6-48
6-49x3
6-50x2
6-56x2
6-58
6-78x2
6-79x2
6-80x4
6-81x2
6-90
6-100
6-101x4
6-102x2
6-22x4

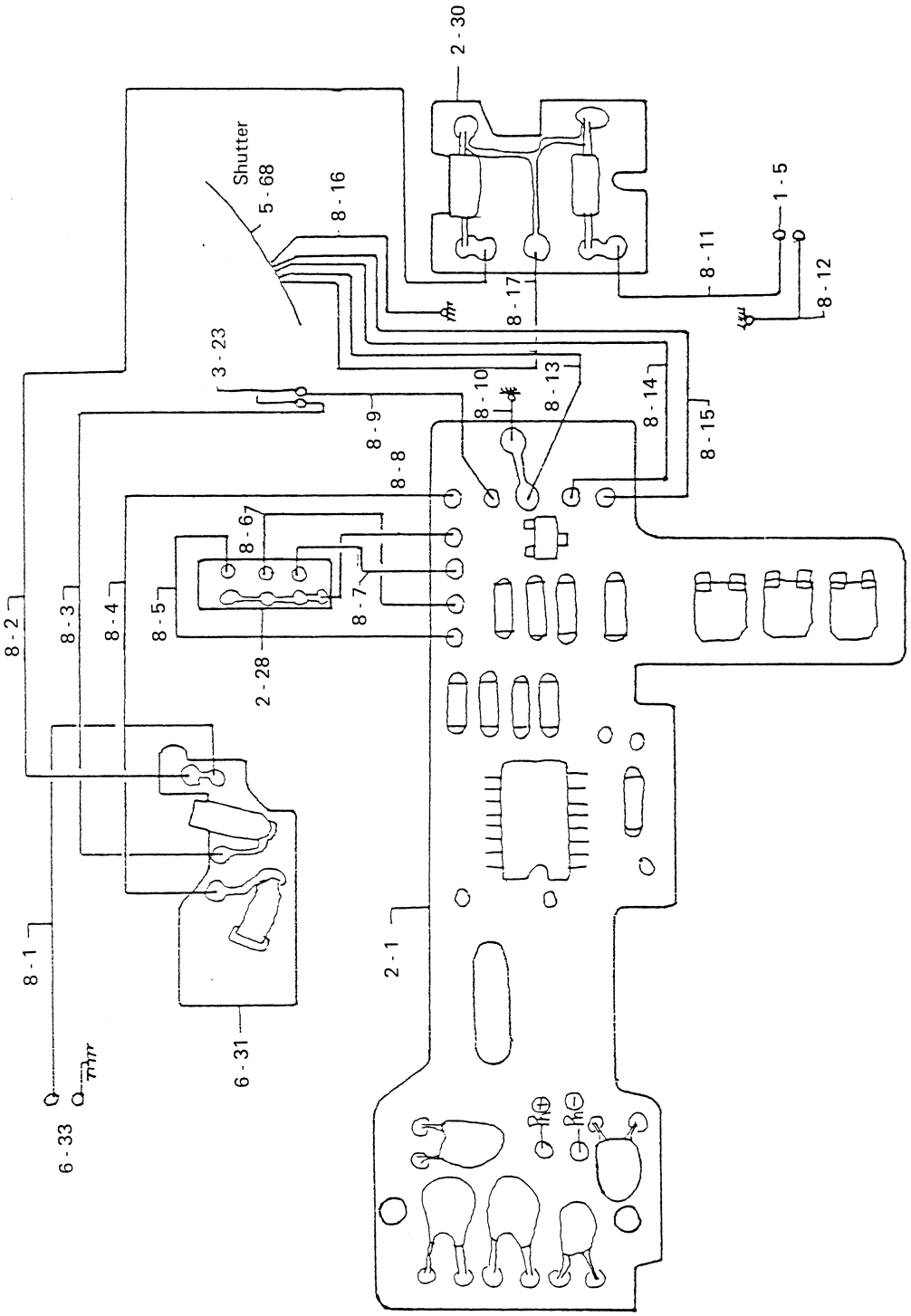
REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
6 - 73	32B3281310	Shaft	1	GS645
6 - 74	50B3281330	Spring	1	GS645
6 - 75	32B3281301	Spool shaft	1	GS645
6 - 76	53B3281340	Screw	1	GS645
6 - 77	42B3281290	Shaft holder	1	GS645
6 - 79	41B3281231	Strap eyelet	2	GS645
6 - 80	111M200453M	Set screw	4	GS645
6 - 81	110M200351S	Set screw	2	GS645
6 - 82	23A3281080	Guide ring assembly	1	GS645
6 - 83	82B3281150	Release bar	1	GS645
6 - 84	50B3281180	Spring	1	GS645
6 - 85	50A3281100	Leaf spring assembly	1	GS645
6 - 88	110M140251N	Set screw	2	GS645
6 - 90	82B3281160	Release bar	1	GS645
6 - 93	36B3281400	Counter roller	2	GS645
6 - 94	111M140401S	Set screw	2	GS645
6 - 95	36B3281410	Counter drum	1	GS645
6 - 96	27B3281810	Moquette	1	GS645
6 - 97	27B3281820	Moquette	1	GS645
6 - 98	27B3281800	Moquette	1	GS645
6 - 100	27B3661740	Light shielding barrel	1	
6 - 101	110M170303S	Screw	4	
6 - 102	111B72560	Lug	2	
6 - 103	111B72560	Lug	1	
6 - 104	110M170201S	Screw	1	

Fig. 7


7-21
7-1
7-32
7-20
7-2
7-27
7-3
7-37x2
7-39
7-23
7-31
7-33
7-22x2
7-4
7-52x4
7-34
7-35
7-38x4
7-25x2
7-29
7-19
7-24x2
7-18x2
7-17
7-15
7-16
7-26
7-36
7-14
7-30
7-5
7-12
7-8x2
7-9x2
7-6x3
7-7
7-28x2
7-13
7-11
7-10
7-52
7-41
7-50
7-42x3
7-43x2
7-51
7-49x3
7-45
7-46
7-44
7-47
7-48

REF NO.	PART NO.	PART NAME	Q'TY	Commonly used with
7 - 1	302A3287000	Film chamber door assembly	1	GS645
7 - 3	32B32031	Hinge shaft	1	GS645
7 - 4	19B32020	Hinge	1	GS645
7 - 5	27B3287120	Light shielding plate	1	GS645
7 - 6	113M200501S	Set screw	3	GS645
7 - 7	27B32000	Moquette	1	GS645
7 - 8	17B30160	Shaft	2	GS645
7 - 9	50B30170	Spring	2	GS645
7 - 10	37B492633	Roller	1	GS645
7 - 11	32B3287340	Shaft	1	GS645
7 - 12	16B3287320	Open - close button	1	GS645
7 - 13	59B3287371	Leather	1	GS645
7 - 14	11B3281242	Cover frame	1	GS645
7 - 20	50B3287391	Spring	1	GS645
7 - 21	59B3287270	Leather	1	GS645
7 - 24	114M200501S	Set screw	2	GS645
7 - 25	27B3287280	Moquette	2	GS645
7 - 39	27B3287290	Moquette	1	GS645
7 - 41	11B3280300	Bottom cover	1	GS645
7 - 42	53B2189030	Set screw	3	GS645
7 - 43	104K457690	Battery	2	GS645
7 - 44	16A3280070	Battery cap assembly	1	GS645
7 - 45	191M020T	E - clip	1	GS645
7 - 48	53B3280320	Set screw	1	GS645
7 - 49	110M230803S	Set screw	3	GS645
7 - 50	11B3285980	Cover frame	1	GS645
7 - 51	59B3280620	Leather	1	GS645
7 - 52	11B3661050	Terminal cover	1	

Fig. 8


2 - 30
Shutter
5 - 68
8 - 16
1 - 5
8 - 11
8 - 12
8 - 17
3 - 23
8 - 10
8 - 13
8 - 14
8 - 15
8 - 9
8 - 8
8 - 67
8 - 7
8 - 5
8 - 4
8 - 3
8 - 2
2 - 28
8 - 1
6 - 33
6 - 31
2 - 1

REF NO.	PART NO.	PART NAME	Q'TY	REMARKS
8 - 1	111B3280570	Lead wire (Violet)	1	
8 - 2	111B3280560	Lead wire (White)	1	
8 - 3	111B3288830	Lead wire (Black)	1	
8 - 4	111B3288820	Lead wire (Red)	1	
8 - 5	111B3663080	Lead wire (Gray)	1	
8 - 6	111B3663060	Lead wire (Yellow)	1	
8 - 7	111B3663100	Lead wire (Green)	1	
8 - 8	111B3663040	Lead wire (Red)	1	
8 - 9	111B3280600	Lead wire (Black)	1	
8 - 10	111B3289140	Lead wire (Black)	1	
8 - 11	111B3280580	Lead wire (White)	1	
8 - 12	111B3280590	Lead wire (Black)	1	
8 - 13		Lead wire (Blue)	1	Contained in shutter assembly (5 - 68)
8 - 14		Lead wire (Green)	1	Contained in shutter assembly (5 - 68)
8 - 15		Lead wire (Yellow)	1	Contained in shutter assembly (5 - 68)
8 - 16		Lead wire (Black)	1	Contained in shutter assembly (5 - 68)
8 - 17		Lead wire (Gray)	1	Contained in shutter assembly (5 - 68)

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6W-104

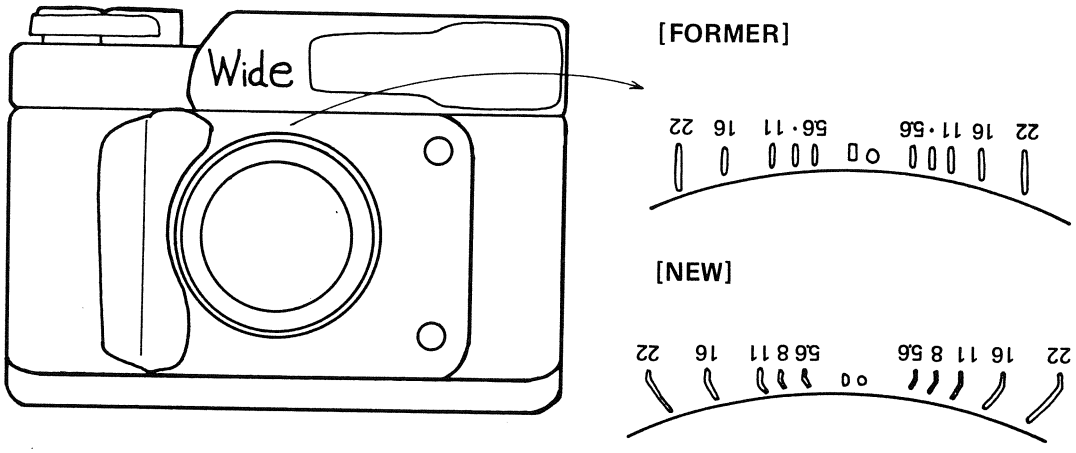
DATE. December 5, 1983

MODEL Fujica GS645 Wide

SUBJECT Changed depth of field scale

DESCRIPTION

The depth of field scale will be changed as shown below, starting on those manufactured during December, 1983 and thereafter.



FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6W-122

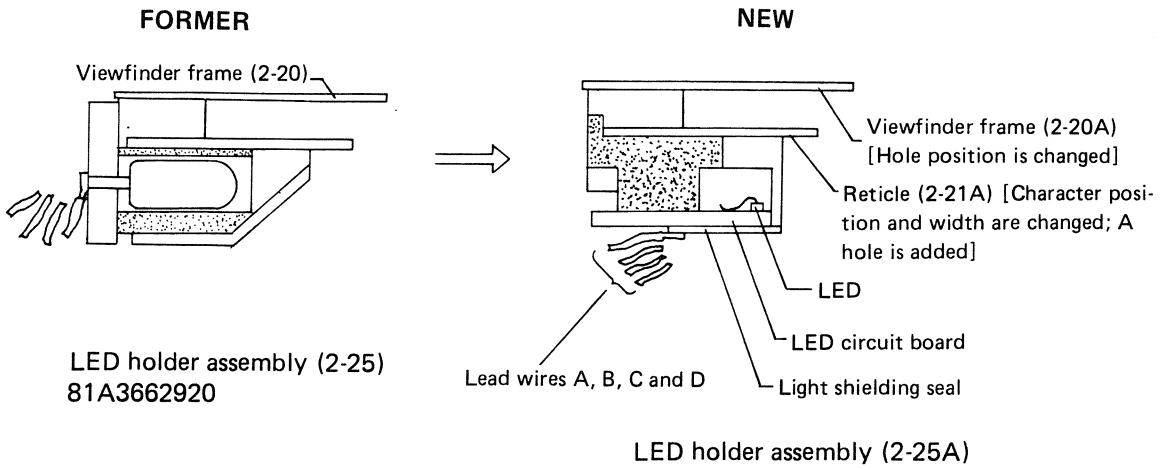
DATE. April 20, 1984

MODEL Fujica GS645 Wide

SUBJECT Changed LED holder assembly

DESCRIPTION

To use LED of new type, the LED holder assembly and relative parts are changed as shown below;



NOTE: LED holder assembly (81A3662920) does not include the viewfinder frame.
LED holder assembly (81A3663200) does not include the viewfinder frame and reticle.

The above change will be effected on those manufactured during June, 1984 (Body Serial No. 606xxxx) and thereafter.

PARTS SUPPLY INFORMATION

Technical Bulletin No. G6W-122

FORMER TYPE						NEW TYPE			
REF NO.	PARTS NO.	PARTS NAME	QTY	NO LONGER SUPPLIED	CONTINUOUSLY SUPPLIED	REF NO.	PARTS NO.	PARTS NAME	QTY
2-20		Viewfinder frame	1	○		2-20A		Viewfinder frame	1
2-21		Reticle	1	○		2-21A		Reticle	1
2-25	81A3662920	LED holder assembly	1	○		2-25A	81A3663200	LED holder assembly	1

REMARKS

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6W-105

DATE. January 10, 1984

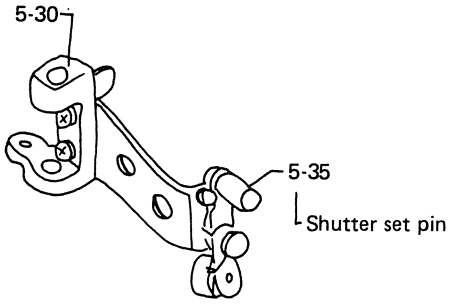
MODEL Fujica GS645 Wide

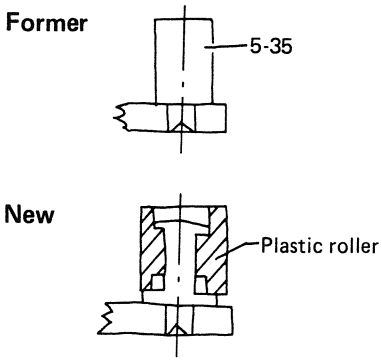
SUBJECT Changed shutter set pin

DESCRIPTION

To further improve performance of the aperture selector ring, the shutter set pin (5-35) on the set lever assembly (5-30) is changed to a new type.

The new type is equipped with a plastic roller.





The above change will be effected on those manufactured during January, 1984 (Body Serial No. 601XXXX) and thereafter.

CONTENTS

– CONT. –

I TROUBLESHOOTING

1. Shutter System

1.1 Shutter release cannot be depressed.

- Tilted lever (3-121)

OK ↓ NO ⟶ Repair.

- Bent 220 selecting lever

NO ⟶ Repair.

1.2 Shutter cannot be released. (Shutter does not open.)

- Shutter set

OK ↓ NO ⟶ Adjust with wire assembly (5-44).

- Set lever and set roller

OK ↓ NO ⟶ Repair.

- Setting mechanism within the shutter

NO ⟶ Repair and adjustment.

1.3 Shutter does not close.

- Button (5-47) operation

OK ↓ NO ⟶ Repair and adjustment

- Button (5-47) installation

OK ↓ NO ⟶ Reinstall correctly.

- Shutter

NO ⟶ Replace.

Check release lever also for operations.

2. Range Finder System

2.1 Range finder does not operate.

- Linkage I (2-39) dragging with body

OK ↓ NO ⟶ Repair.

- Interlock bar (5-101) operation

OK ↓ NO ⟶ Repair.

- Spring (2-44) installation

NO ⟶ Repair.

2.2 Viewfinder frame does not operate smoothly.

- Spring (2-34) installation

OK ↓ NO ⟶ Repair.

- Moving frame (2-29) is dragging with LED (2-19)

OK ↓ NO ⟶ Repair.

- Linkage I (2-39) dragging with body

NO ⟶ Repair.

2.3 Moving image in the range finder is deviated (at infinity).

- Image is deviated at infinity.

OK ↓ NO ⟶ Adjust.

- Moving image cannot be seen clearly

NO ⟶ Adjust parallax.

II REPAIR AND ADJUSTMENT

1. Adjustment of Range Finder

1.1 Adjustment of infinity

1) When adjusting the range finder for the infinity, position the camera correctly against a collimator. When checking the range finder for the infinity, collimator may not be used but the range finder may be checked by observing an actual object in the infinity.
Turn the adjust plate (5-104) of the interlock bar assembly (5-10) to make a play between the interlock bar (5-101) and linkage I (2-39). Now, make sure that the lens is focused correctly (0±0.03), and remove the play between the interlock bar (5-101) and linkage I (2-39) with the adjust plate (5-104).

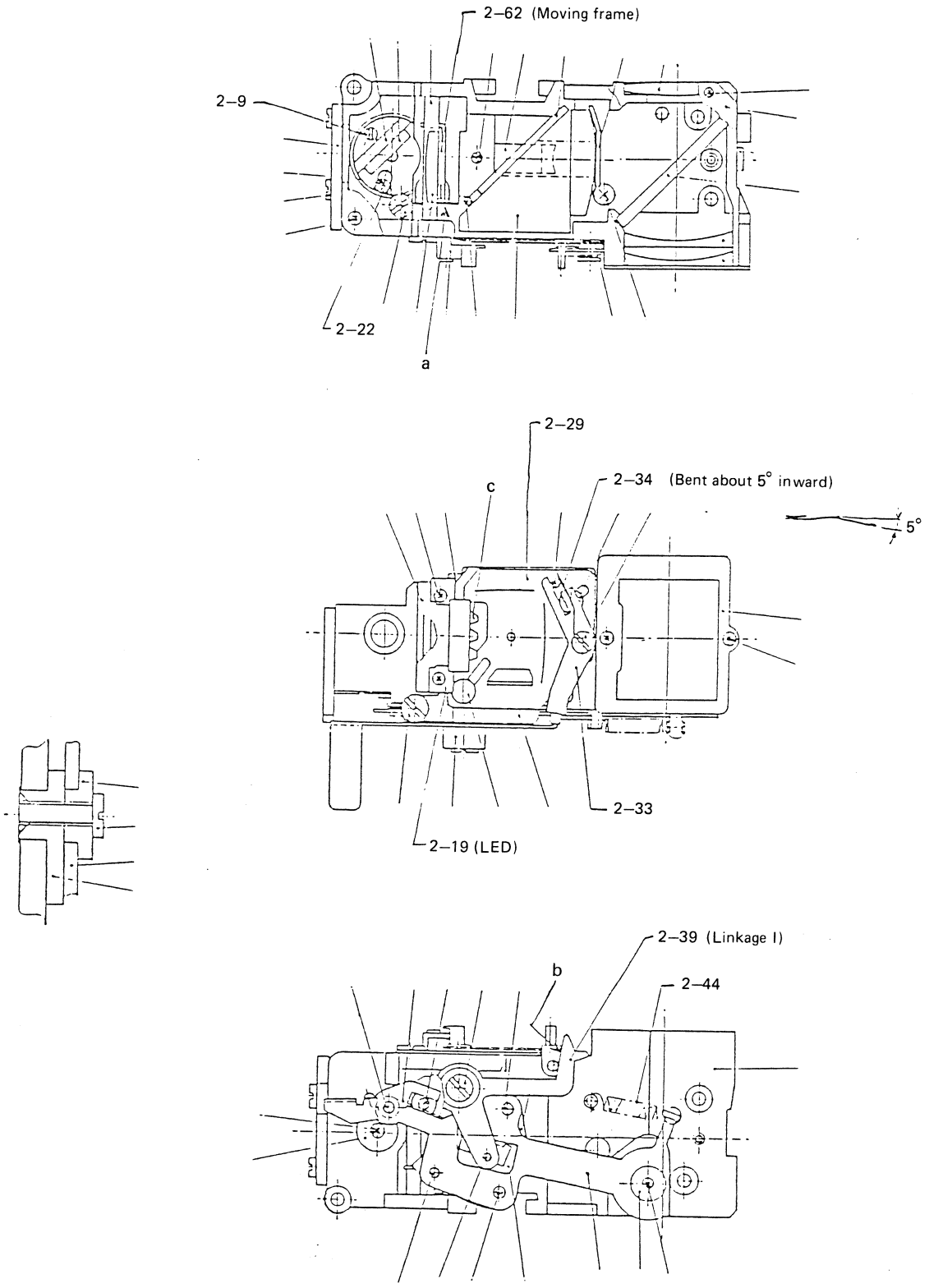
2) When coincidence is deviated at the infinity, turn the adjust pin (2-22) properly to adjust it. After completing the adjustment, the deviation should be within 30'.
In this case, the moving frame (2-62) must be in tight contact with the wall (a) of the range finder body.

3) When the stationary and moving images are vertically deviated, remove the adjust screw (2-9), tilt down the mirror base (2-66) toward such direction as that the mirror is faced upward, reinstall the adjust screw (2-9), and tighten the adjust screw (2-9) until the images agree.
When performing this adjustment, do not adjust toward the adjust screw loosening direction.
After completing the above adjustments, be sure to lock the screws for both the horizontal and vertical directions.

1.2 Adjustment of 2m distance

1) Place a readily seen chart (with vertical slit) in a position 2 meters from the rail plane of the camera, and make sure that images agree correctly at the infinity.
Now, face the camera against the chart correctly, and adjust the eccentric pin (2-53) properly so that the lens focus is within 0±0.03.
Repeated adjustments may be required. However, perform this adjustment correctly and accurately or otherwise correct focus (high resolution) cannot be obtained when objects in 1 to 3 meter distance is photographed.

Fig. 1


2–62 (Moving frame)
2–9
2–22
a
2–29
c
2–34 (Bent about 5° inward)
5°
2–33
2–19 (LED)
2–39 (Linkage I)
b
2–44

2) Next, turning the helicoid, set the range finder from the close-up side (1m) to 2m, and make sure that the focus deviation is 0.08mm or less. Perform this check carefully because when the range finder has a play at the close-up distance, deviation grows.

A play occurs when the interlock bar (5-101) is separated from the linkage I (2-39). When any play is observed, properly bend the linkage I (2-39) to eliminate the play.

1.3 Adjustment of parallax

1) With the moving image is matched with the stationary image or slightly deviated at the infinity, look into the viewfinder and move your eye to the left and right. Then, the moving image may flicker.

This is called parallax.

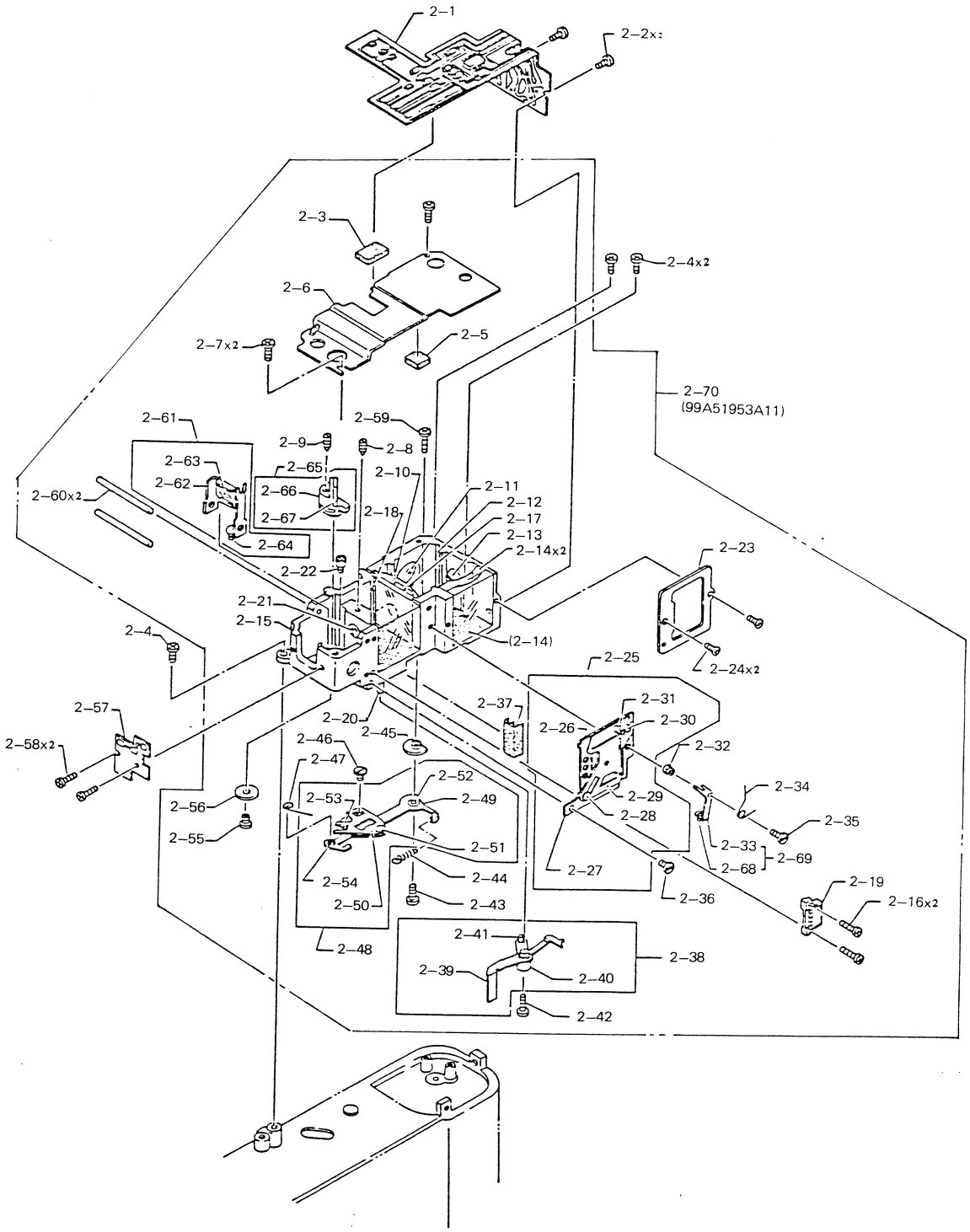
2) Parallax occurs when the focus of the moving image is not correctly adjusted at the infinity. To adjust parallax, watching the infinity with a collimater, move the collimation adjust lens (2-21) front and back, and adjust it so that difference of the collimation between the stationary moving images is 0.1 to 0.2 dpt.

3) When adjusting parallax and the lens (2-21) is moved, the moving image moves vertically and horizontally. Place the eccentric pin (2-22) in the neutral position, and set the lens at the position where the images are matched approximately at the infinity. Be sure to lock the lens with High Super. Failure from locking the lens may cause 2m adjustment not to be made.

NOTE:

It has been understood that secular change occurs on any range finders. When repairing a camera, it is recommended that check and adjustment be performed as described in 1.1 through 1.3 above.

Fig. 2


2–1
2–2x2
2–3
2–4x2
2–6
2–7x2
2–5
2–70
(99A51953A11)
2–61
2–59
2–9
2–8
2–63
2–65
2–10
2–62
2–66
2–11
2–60x2
2–67
2–18
2–12
2–17
2–64
2–13
2–14x2
2–22
2–23
2–21
2–15
(2–14)
2–4
2–25
2–24x2
2–57
2–37
2–31
2–20
2–45
2–26
2–30
2–58x2
2–46
2–32
2–47
2–52
2–34
2–53
2–49
2–29
2–56
2–28
2–35
2–55
2–51
2–33
2–69
2–54
2–44
2–27
2–68
2–50
2–43
2–36
2–19
2–16x2
2–41
2–48
2–38
2–39
2–40
2–42

1.4 Range finder and viewfinder frame repairing method

1) When the range finder does not operate normally, repair as follows.

a) When the linkage I (2-39) is deformed causing the caulked portion of the pin (2-41) to be in contact with the body, reform the linkage I (2-39).

b) When the interlock bar (5-101) does not operate normally, pull it out, clean interior of the bushing (5-9) and interlock bar, and apply silicon oil slightly with lens paper impregnated with silicon oil. Be careful not to apply silicon oil excessively.

c) When the hook is deformed causing the spring (2-44) to come off, reform the hook and reinstall the spring correctly.

d) When the head (b) of the linkage I (2-39) is deformed causing the head to be in contact with the lever (2-33), repair the linkage I.

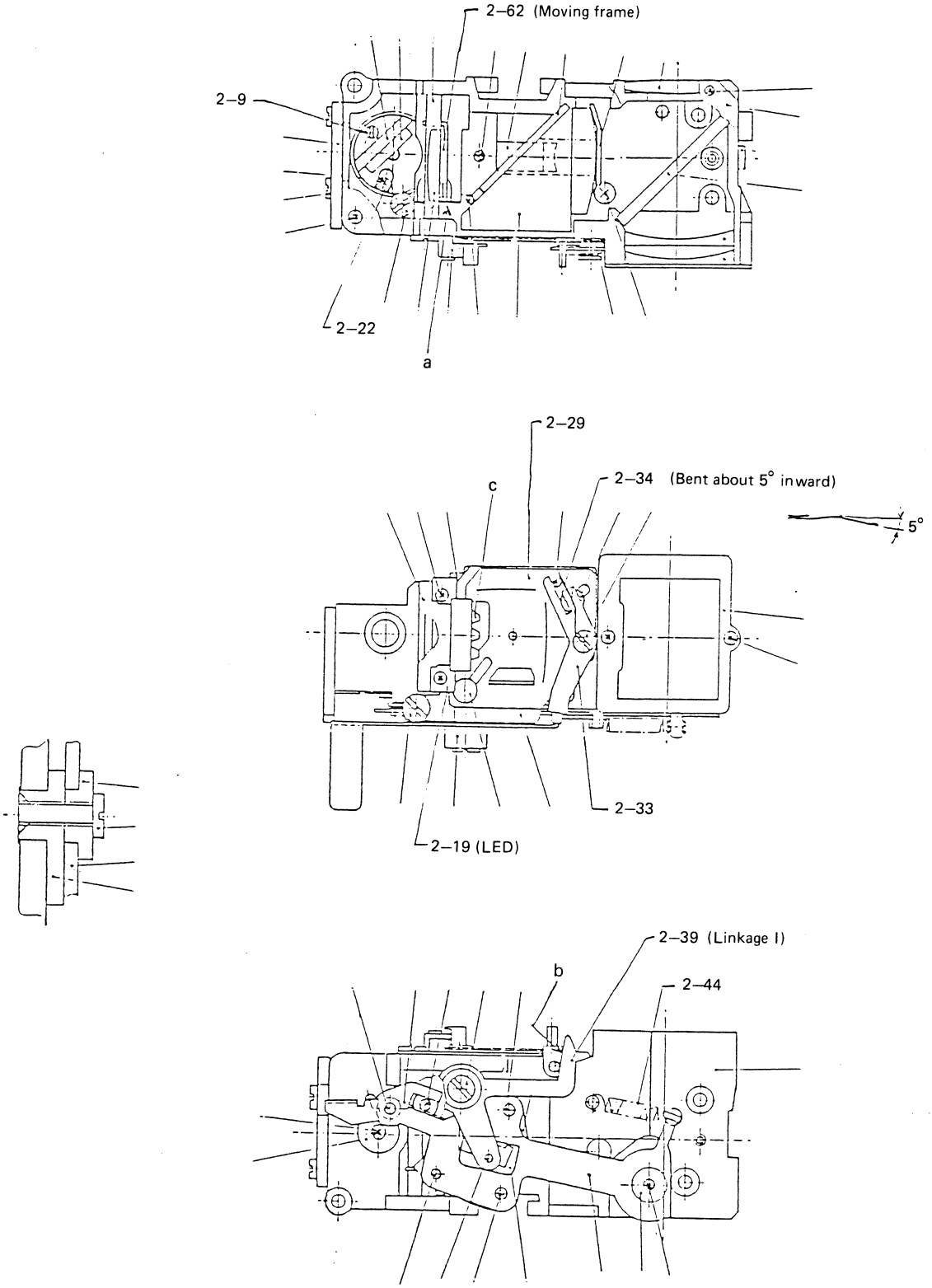
2) When the viewfinder frame does not operate normally, repair as follows.

a) When the spring (2-34) has come off, bend the head of the spring about 5° inward (toward the viewfinder frame), and reinstall it securely.

b) When the light shielding plate portion (c) of the LED (2-19) is in contact with the moving frame (2-29), remove the viewfinder frame assembly (2-25), and repair warping of the base plate (2-27). When repairing the base plate (2-27), be careful not to deform the fixed frame (2-26) and moving frame (2-29).

c) Check the range finder also as described in 1.4 above.

Fig. 3


2–62 (Moving frame)
2–9
2–22
a
2–29
c
2–34 (Bent about 5° inward)
5°
2–33
2–19 (LED)
2–39 (Linkage I)
b
2–44

2. Adjustment of Focus

2.1 Adjust focus so that the accuracy is 0±0.03 when the rail plane is assumed to be zero (calculated from the conversion table of Gokosha Model 24LT Type II collimater). After completing the adjustment, be sure to lock three screws (5-62) securely with screw locking agent.

Further, turn the helicoid to both the close-up end and infinity end, and make sure that it comes into contact with the stopper.

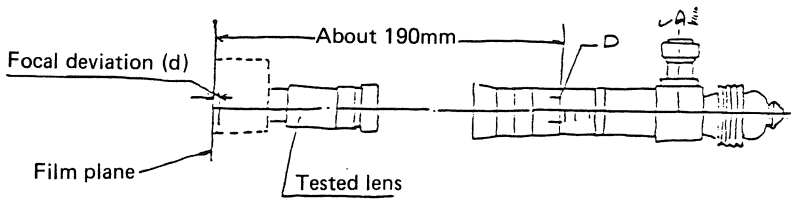
The adjust tool used is the one used for Fujica GS645.

2.2 Adjustment of range finder is described before adjustment of focus in this manual. When focus is adjusted, however, be sure to adjust the range finder.

2.3 The focus adjusting target is 0±0.03. However, as long as it is within 0±0.05, the performance is acceptable.

Fig. 4

Deviations between film plane and focal plane (from Gokosha 24LT II conversion table)



D \ f	GS645W 45	GS645S 60	GS645 75
0.0	0.000	0.000	0.000
mm 0.1	0.0054	0.0096	0.0150
0.2	0.0108	0.0192	0.0301
0.3	0.0162	0.0280	0.0451
0.4	0.0217	0.0389	0.0602
0.5	0.0271	0.0482	0.0753
0.6	0.0326	0.0579	0.0904
0.7	0.0380	0.0675	0.1055
0.8	0.0434		0.1207
0.9	0.0489		0.1358
1.0	0.0544		0.1510
1.2	0.0653		0.1814
1.4	0.0763		0.2119
1.6	0.0873		0.2424
1.8	0.0982		0.2730
2.0	0.1093		0.3036
2.2	0.1203		0.3343

f: Focal range of the camera

D: Stroke of collimater objective lens

In case of +, the focal position is behind the film plane.

In case of —, the focal position is in the lens side.

3. Adjustment of Exposure (S.F.T.A. potentiometer)

CAUTION:

Carefully handle the flexible PCB so as not to damage it.

Perform soldering carefully so that connections are made correctly and securely, causing no bridge and other defects.

3.1 Adjustment of VR1

1) Set the VR1 to the neutral position, and apply 3V±0.2V.
Thereafter, the method of adjustment is the same as Fujica GS645W.

2) Set film speed of the shutter to 1600, shutter speed to 1/1 and aperture to F4.

3) Measure voltage across green and blue lead wires on the PCB, and record this voltage as V1.

4) Next, set film speed of the shutter to 25, shutter speed to 1/500 and aperture to F22. Measure voltage across green and blue lead wires, and record this voltage as V2.

5) Obtain Vs by the following calculation.

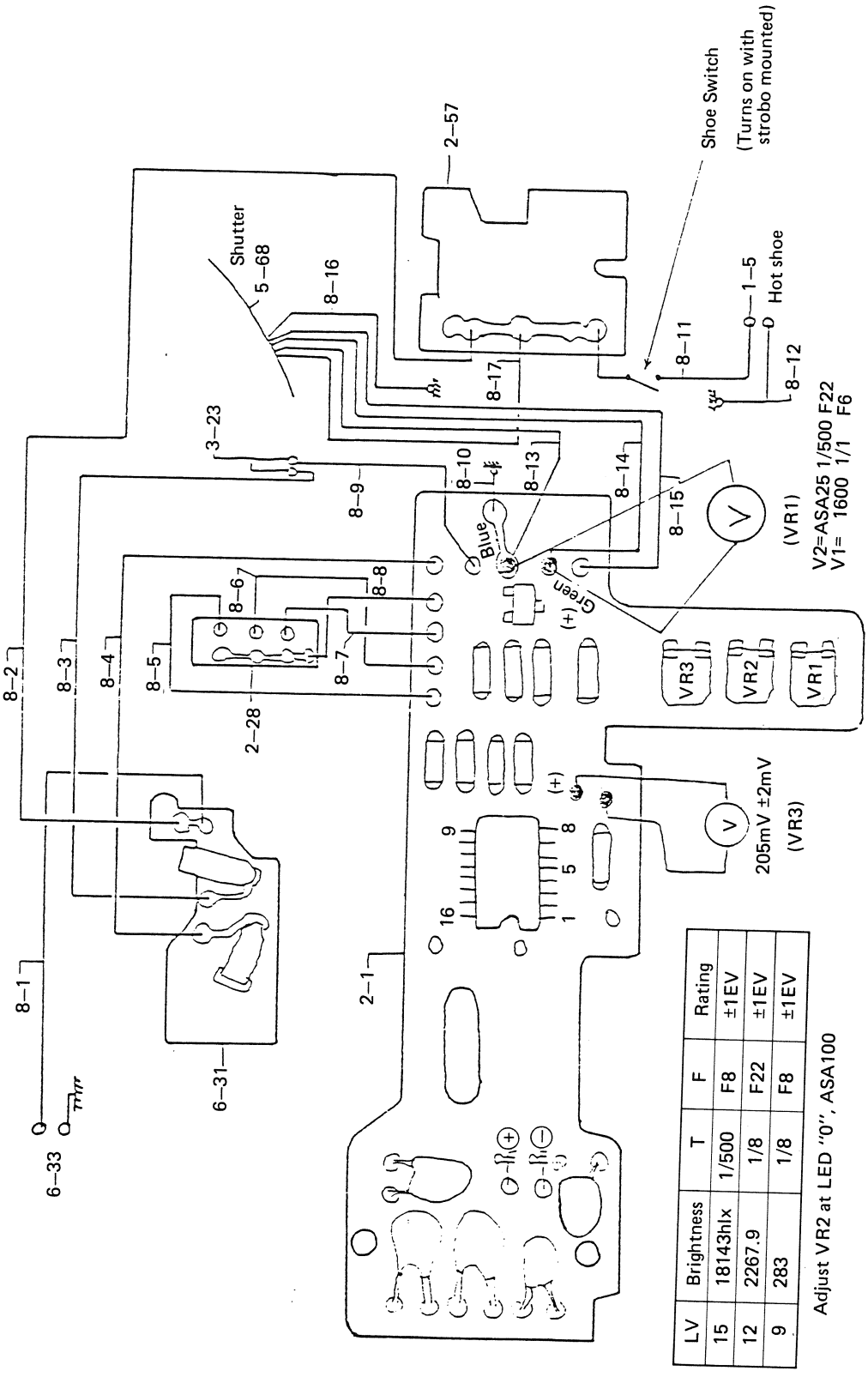
$$Vs = \frac{369}{1 - \frac{V1}{V2}} \text{ mv } \pm 2\text{mv}$$

6) Adjust VR1 so that voltage across green and blue lead wire (V2) is equal to voltage Vs.

3.2 Adjustment of VR3

Adjust VR3 properly so that voltage across IC pin No. 16 and 5 is 205±2mV.

Fig. 5



LV	Brightness	T	F	Rating
15	18143hlx	1/500	F8	±1EV
12	2267.9	1/8	F22	±1EV
9	283	1/8	F8	±1EV

3.3 Adjustment of VR2

1) Adjust VR2 so that the LED indication is "0" at the following settings.

EV 12, ASA100, T1/8, F22

EV9, ASA100, T1/1, F22

EV15, ASA100, T1/60, F22

2) When the LED indication is "+ 0" or "0 —" , readjust VR2 again at the voltage 10mV below the voltage adjusted by VR3.

3.4 Checking battery check

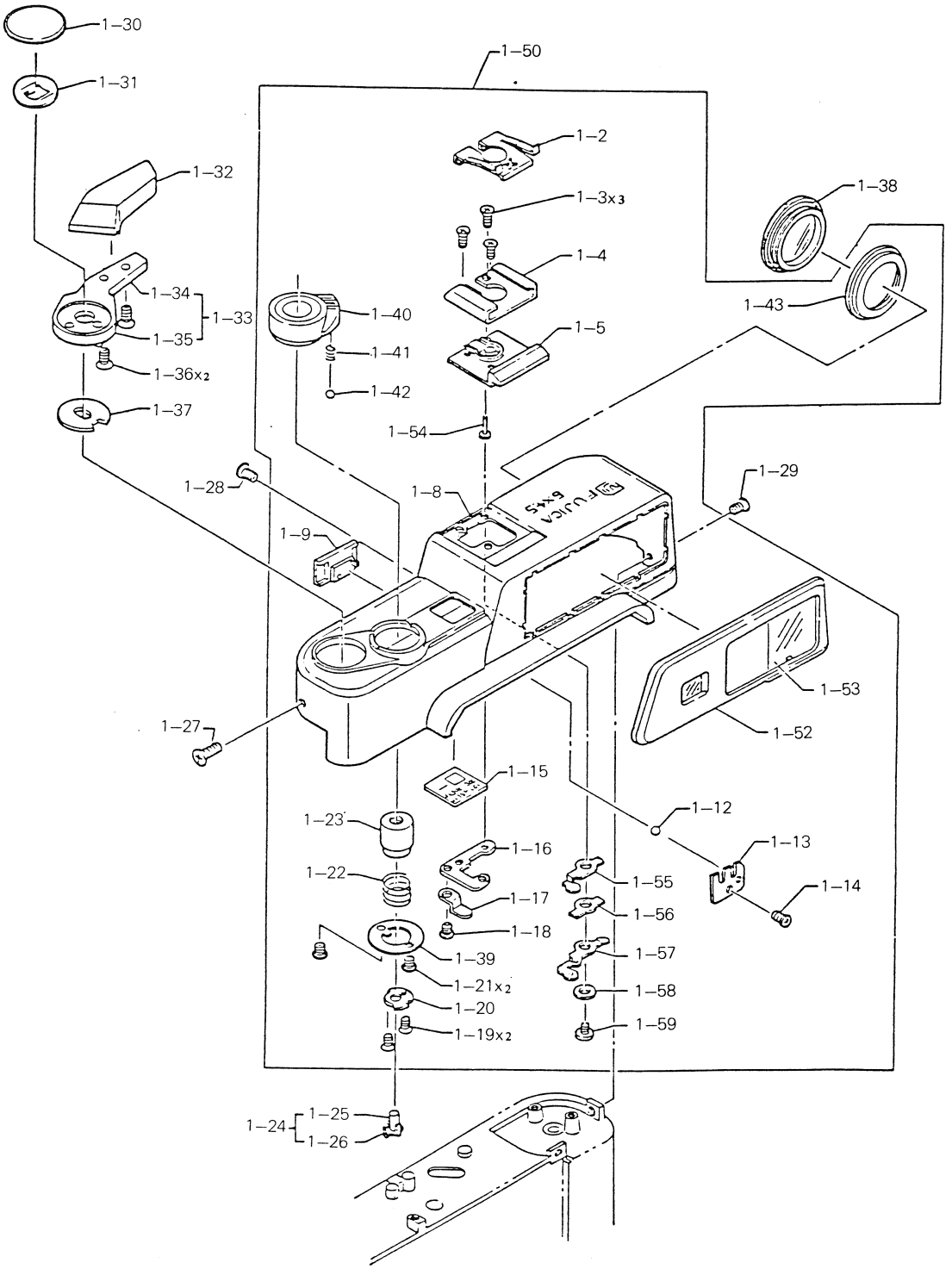
Make sure that all LED indications (0, +, —) go out when voltage of the battery is 2.2V or below.

○ IC TA 2F 7646F operations

Pin No.	Name	Operation
1	Photocell (—) input	
2	S.F.T value input	
3	S.F.T value output	About 18.2mV/EV
4	S.F.T.L output adjust terminal	LED display value adjustment
5	LED lighting width adjust terminal	
6	———	
7	———	
8	GND	
9	LED terminal (under)	ON at 0.5V or below, OFF at 1.5V or above
10	LED terminal (proper)	
11	LED terminal (over)	
12	Battery check terminal	LED goes out at about 2.0V.
13	Output stabilizing terminal	LED is unstable under OPEN state
14	Temperature guarantee circuit terminal	
15	IC power supply (+)	Battery voltage
16	Reference voltage	1.25V

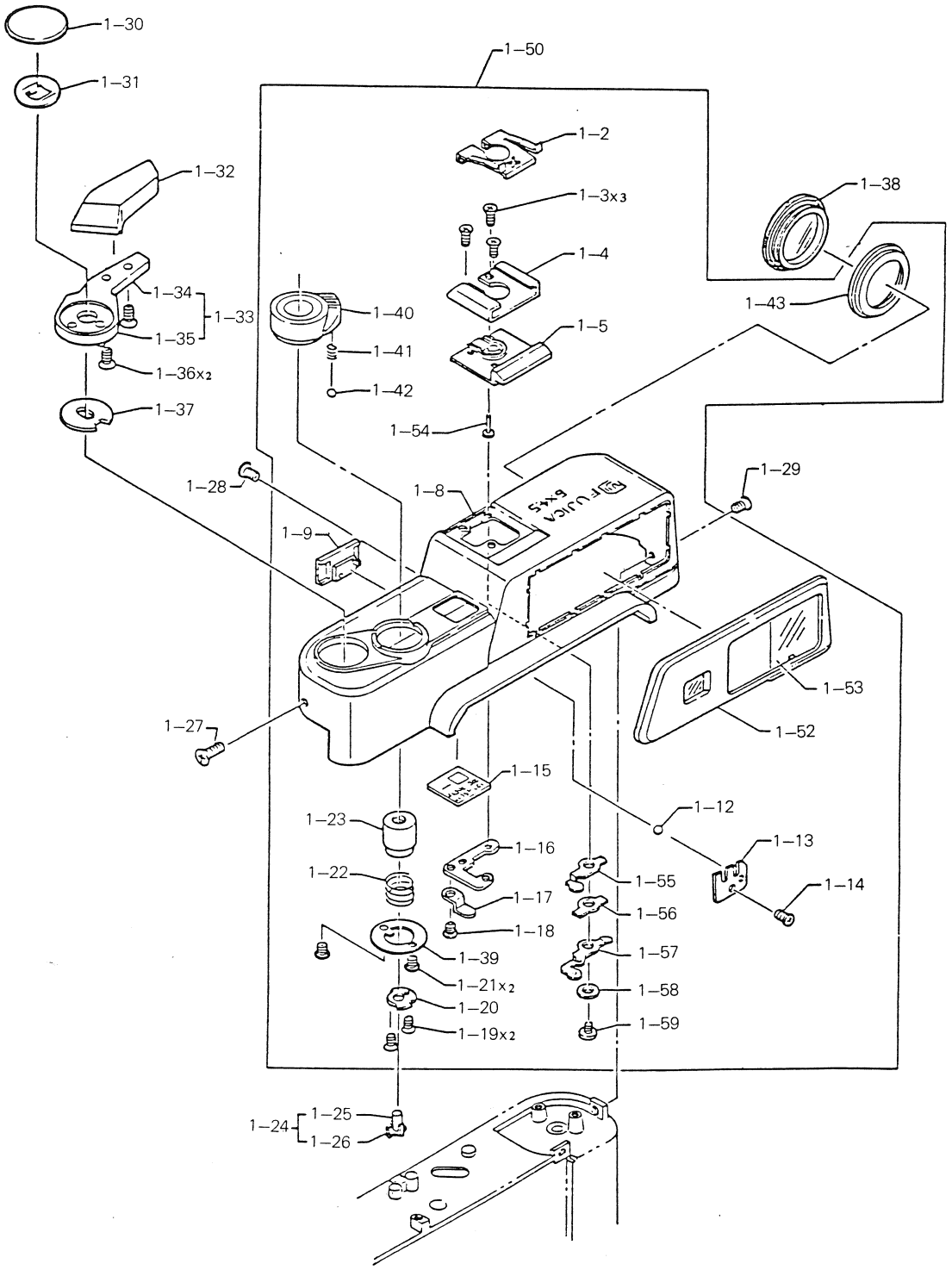
III PARTS LIST

Fig. 1


1–30
1–31
1–32
1–34
1–33
1–35
1–36x2
1–37
1–50
1–2
1–3x3
1–4
1–5
1–40
1–41
1–42
1–54
1–38
1–43
1–28
1–8
1–9
1–29
1–53
1–52
1–27
1–15
1–12
1–23
1–16
1–13
1–22
1–17
1–55
1–56
1–14
1–18
1–57
1–39
1–21x2
1–58
1–20
1–59
1–19x2
1–24
1–25
1–26

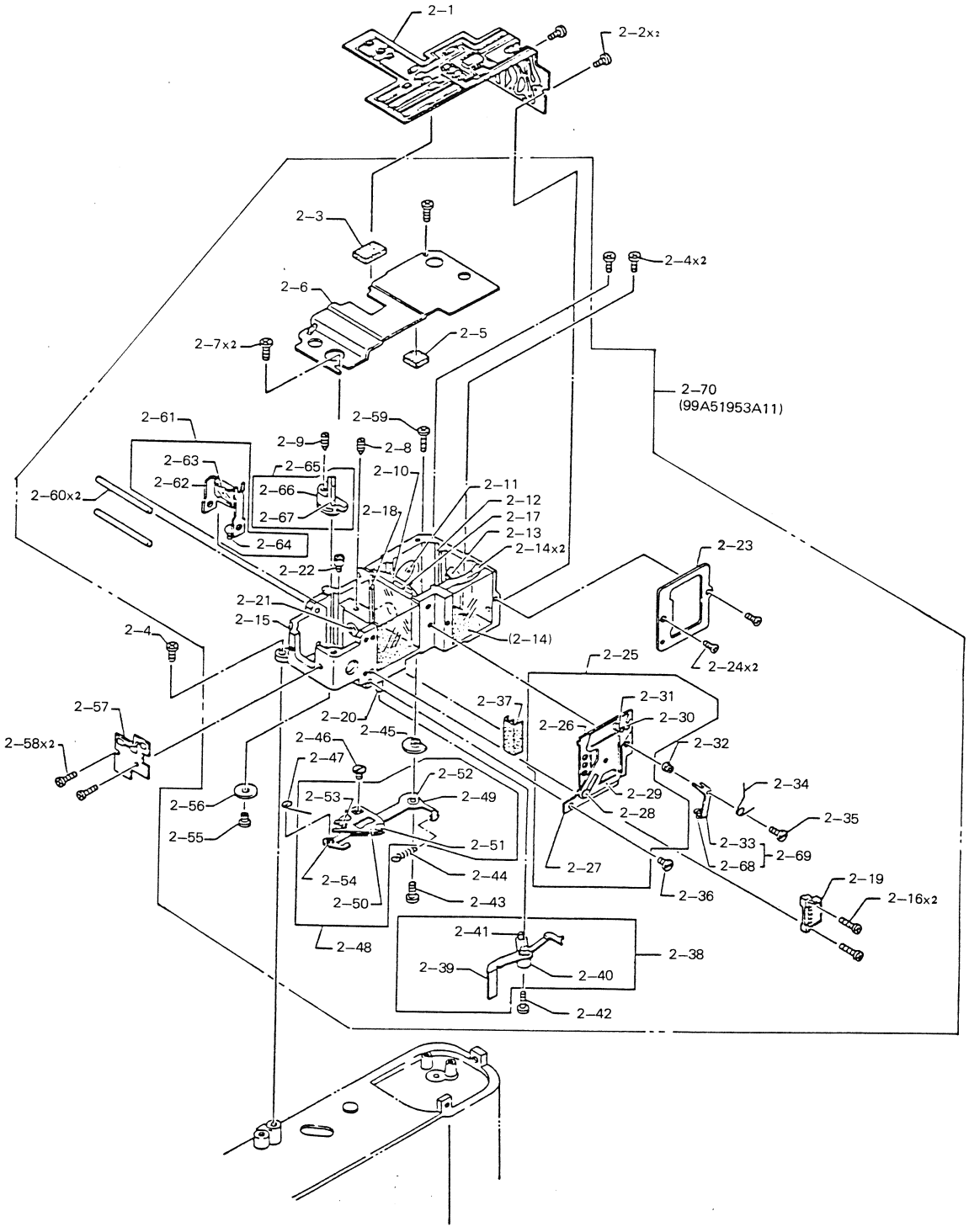
Ref No.	Part No.	Part Name		Q'ty	Remarks
1- 2	11B3288380	Shoe cover		1	GS645W
3	111M170401N	Set screw		3	GS645W
4	11B2252411	Shoe		1	GS645W
5	115A3286020	Contact seat assembly		1	GS645W
9	16B3286143	Film selector knob		1	GS645W
12	200M20	Steel ball		1	GS645W
13	50B3286153	Leaf spring		1	GS645W
14	113M170201S	Set screw		1	GS645W
15	6B3286224	Exposure counter window		1	GS645W
16	85B3286211	Base plate		1	GS645W
17	109B35871	Contact		1	GS645W
18	110M140121N	Set screw		1	GS645W
19	111M140251S	Set screw		1	GS645W
20	85B3286253	Holder		1	GS645W
21	113M140201S	Set screw		2	GS645W
22	50B3286240	Spring		1	GS645W
23	16B3286233	Shutter release		1	GS645W
24	32A3280100	Release bar assembly	1-25, 1-26	1	GS645W
27	53B3280360	Screw		1	GS645W
28	53B3280350	Screw		1	GS645W
29	53B3280350	Screw		1	GS645W
30	53B3280421	Set screw		1	GS645W
31	50B3280380	Friction spring		1	GS645W
32	81B3280402	Cover plate		1	GS645W
33	47A3280050	Film advance lever assembly	1-34, 1-35	1	GS645W
36	11M170503S	Set screw		2	GS645W
37	85B3280372	Lock plate		1	GS645W
38	23A3280630	Eyepiece assembly		1	GS645W
39	85B3286190	Stopper		1	GS645W
40	16B3286180	Button seat		1	GS645W
41	50B3286200	Spring		1	GS645W
42	200M12	Steel ball		1	GS645W

Fig. 1


1–30
1–31
1–32
1–34
1–33
1–35
1–36x2
1–37
1–50
1–2
1–3x3
1–4
1–5
1–40
1–41
1–42
1–54
1–38
1–43
1–28
1–8
1–9
1–29
1–53
1–52
1–27
1–15
1–12
1–23
1–16
1–13
1–22
1–17
1–55
1–56
1–14
1–18
1–57
1–39
1–21x2
1–58
1–20
1–59
1–19x2
1–24
1–25
1–26

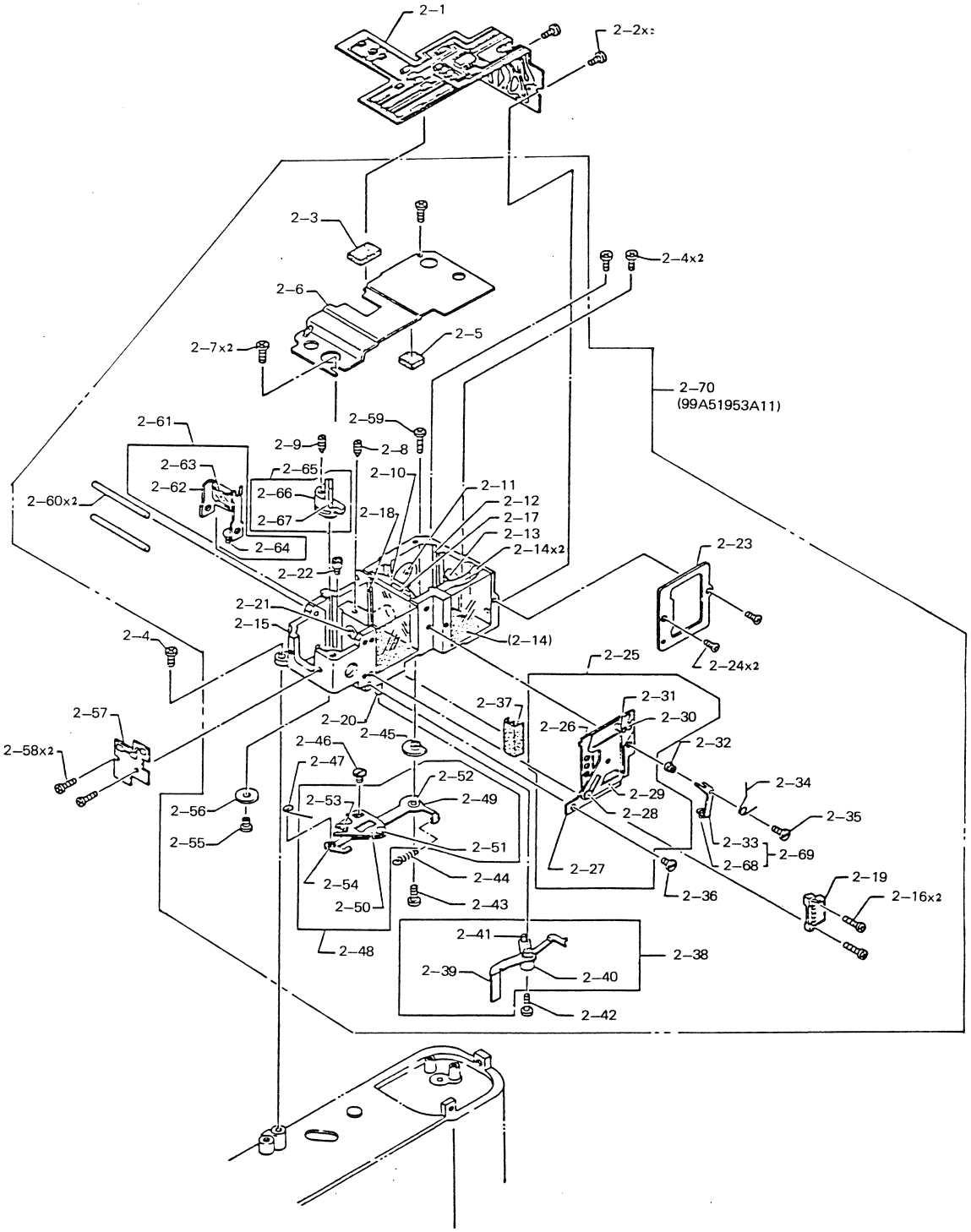
Ref No.	Part No.	Part Name	Q'ty	Remarks
1-50	303A4123911	Top cover assembly 1-2, 1-3$^{\times 3}$, 1-4, 1-5, 1-8,1-9,1-12,1-13,1-14, 1-15,1-16,1-17,1-18,1-19, 1-20,1-21,1-22,1-23,1-39, 1-40,1-41,1-42,1-43,1-52, 1-53,1-54,1-55,1-56,1-57, 1-58,1-59	1	
52	84B4123920	Window frame	1	
53	6B4123930	Window glass	1	
54	17B3288370	Pin	1	
55	112B2050650	Contact	1	
56	115B2050700	Insulation plate	1	
57	112B2050661	Contact	1	
58	55B2050671	Washer	1	
59	53B93480	Screw	1	

Fig. 2


2-1
2-2x2
2-3
2-4x2
2-6
2-5
2-7x2
2-70
(99A51953A11)
2-61
2-59
2-9
2-8
2-63
2-65
2-10
2-62
2-66
2-11
2-60x2
2-67
2-18
2-12
2-17
2-13
2-64
2-14x2
2-22
2-23
2-21
2-15
(2-14)
2-4
2-25
2-24x2
2-57
2-37
2-31
2-20
2-45
2-26
2-30
2-58x2
2-46
2-32
2-47
2-52
2-34
2-53
2-49
2-29
2-56
2-28
2-35
2-55
2-51
2-33
2-69
2-54
2-44
2-27
2-68
2-19
2-50
2-43
2-36
2-16x2
2-41
2-48
2-38
2-39
2-40
2-42

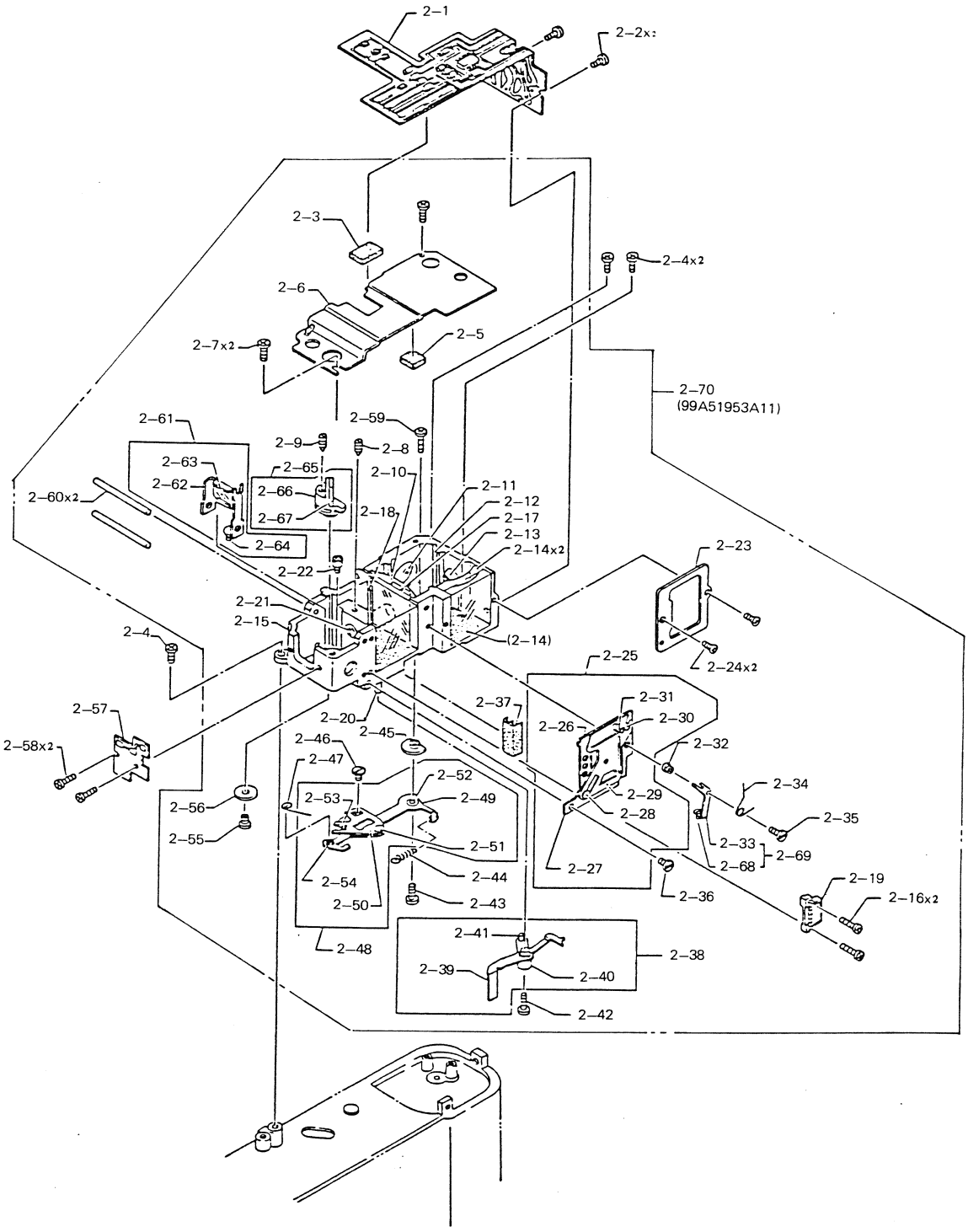
Ref No.	Part No.	Part Name	Q'ty	Remarks
2- 1	110A3288811	Flexible PCB assembly	1	GS645W
2	110M170251S	Screw	2	GS645W
3	27B4123070	Moquette	1	
4	110M200451S	Screw	3	GS645W
5	27B4125070	Moquette	1	
6	11B3287640	Cover	1	GS645W
7	110M170251S	Screw	3	GS645W
8	120M200503F	Screw	1	
9	53B32460	Adjust screw	1	
10	2B4212900	Prism system	1	
11	1B4212850	Eyepiece lens	1	
12	3B33C4060	Half mirror	1	
13	42B3287820	Aperture barrel	1	
14	1B4212840	Objective lens	2	
15	10B4124840	Range finder body	1	
17	81B4125060	Aperture	1	
18	85B4125030	Spacer	1	
20	32B4124870	Shaft	1	
21	1B4212880	Lens	1	
22	17B3287590	Eccentric pin	1	
23	11B4125040	Mask	1	
24	111M140251S	Screw	2	
25	29A4124760	Viewfinder frame assembly 2-26,2-27,2-28,2-29,2-30, 2-31	1	
26	5B4125020	Fixed frame	1	
27	29B3287740	Base plate	1	
28	17B2193400	Guide pin	1	
29	5B4125010	Moving frame	1	
30	17B2193400	Guide pin	1	
31	17B3287770	Guide pin	1	
32	24B4124970	Collar	1	

Fig. 2


2–1
2–2x2
2–3
2–4x2
2–6
2–5
2–7x2
2–70
(99A51953A11)
2–61
2–59
2–9
2–8
2–63
2–65
2–10
2–62
2–66
2–11
2–12
2–60x2
2–67
2–18
2–17
2–13
2–64
2–14x2
2–23
2–22
2–21
2–15
(2–14)
2–4
2–25
2–24x2
2–37
2–31
2–57
2–20
2–45
2–26
2–30
2–46
2–32
2–58x2
2–47
2–52
2–34
2–53
2–49
2–29
2–56
2–28
2–35
2–55
2–51
2–33
2–69
2–27
2–68
2–44
2–54
2–36
2–19
2–50
2–43
2–16x2
2–41
2–38
2–48
2–39
2–40
2–42

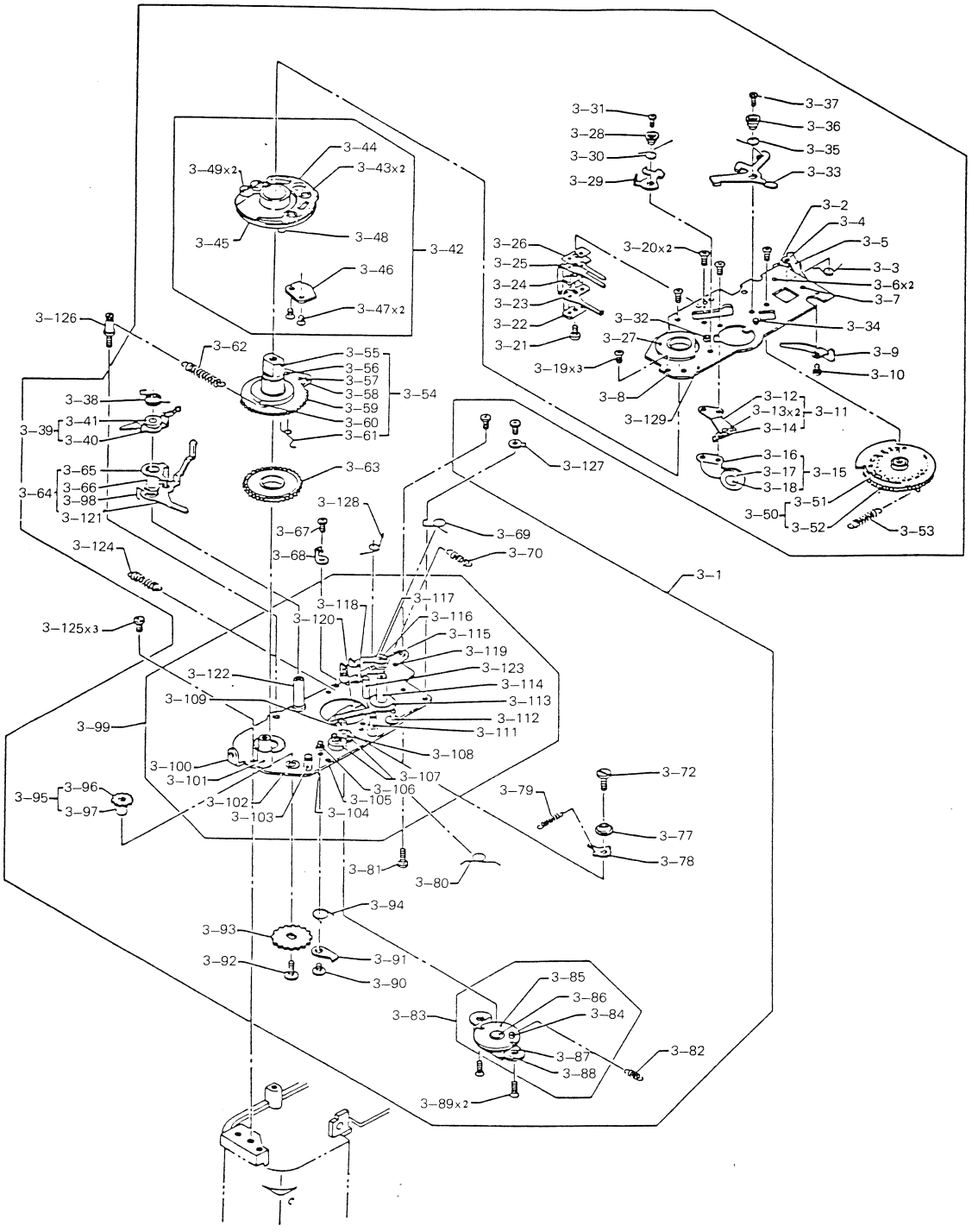
Ref No.	Part No.	Part Name	Q'ty	Remarks
2-33	47B4124990	Lever	1	
34	50B4125000	Spring	1	
35	53B4124960	Pin	1	
36	53B3287890	Screw	1	
37	27B3287872	Light shielding plate	1	
38	47A4124720	Linkage I assembly 2-39,2-40,2-41	1	
39	47B4124850	Linkage I	1	
40	42B4124860	Bushing	1	
41	17B4124950	Pin	1	
42	53B2193440	Screw	1	
43	11M140403S	Screw	1	
44	50B4124940	Spring	1	
45	24B4124930	Collar	1	
46	53B32770	Screw	1	
47	50B4124910	Spring	1	
48	47A4124741	Linkage II assembly 2-49,2-50,2-51,2-52,2-53	1	
49	47B4124880	Linkage II	1	
50	85B4124890	Adjust plate	1	
51	17B4124900	Pin	1	
52	24B4124920	Collar	1	
53	17B4125050	Eccentric pin	1	
54	17B3287690	Pin	1	
55	110M170251S	Screw	1	
56	55B2324850	Washer	1	
57	110A3289112	PCB assembly	1	
58	110M140251S	Screw	2	
59	111M200451S	Screw	1	
60	30B3287620	Guide rail	2	
61	21A3287520	Moving frame assembly 2-62,2-63,2-64	1	
62	21B3287630	Moving frame	1	
63	1B3304120	Moving lens	1	
64	17B3287650	Pin	1	

Fig. 2


2–1
2–2x2
2–3
2–4x2
2–6
2–5
2–7x2
2–70
(99A51953A11)
2–61
2–59
2–9
2–8
2–63
2–65
2–10
2–62
2–66
2–11
2–60x2
2–67
2–18
2–12
2–17
2–64
2–13
2–14x2
2–22
2–23
2–21
2–15
(2–14)
2–4
2–24x2
2–25
2–57
2–37
2–31
2–20
2–45
2–26
2–30
2–58x2
2–46
2–32
2–47
2–52
2–34
2–53
2–49
2–29
2–56
2–28
2–35
2–55
2–51
2–33
2–69
2–54
2–44
2–27
2–68
2–36
2–19
2–50
2–43
2–16x2
2–41
2–48
2–38
2–39
2–40
2–42

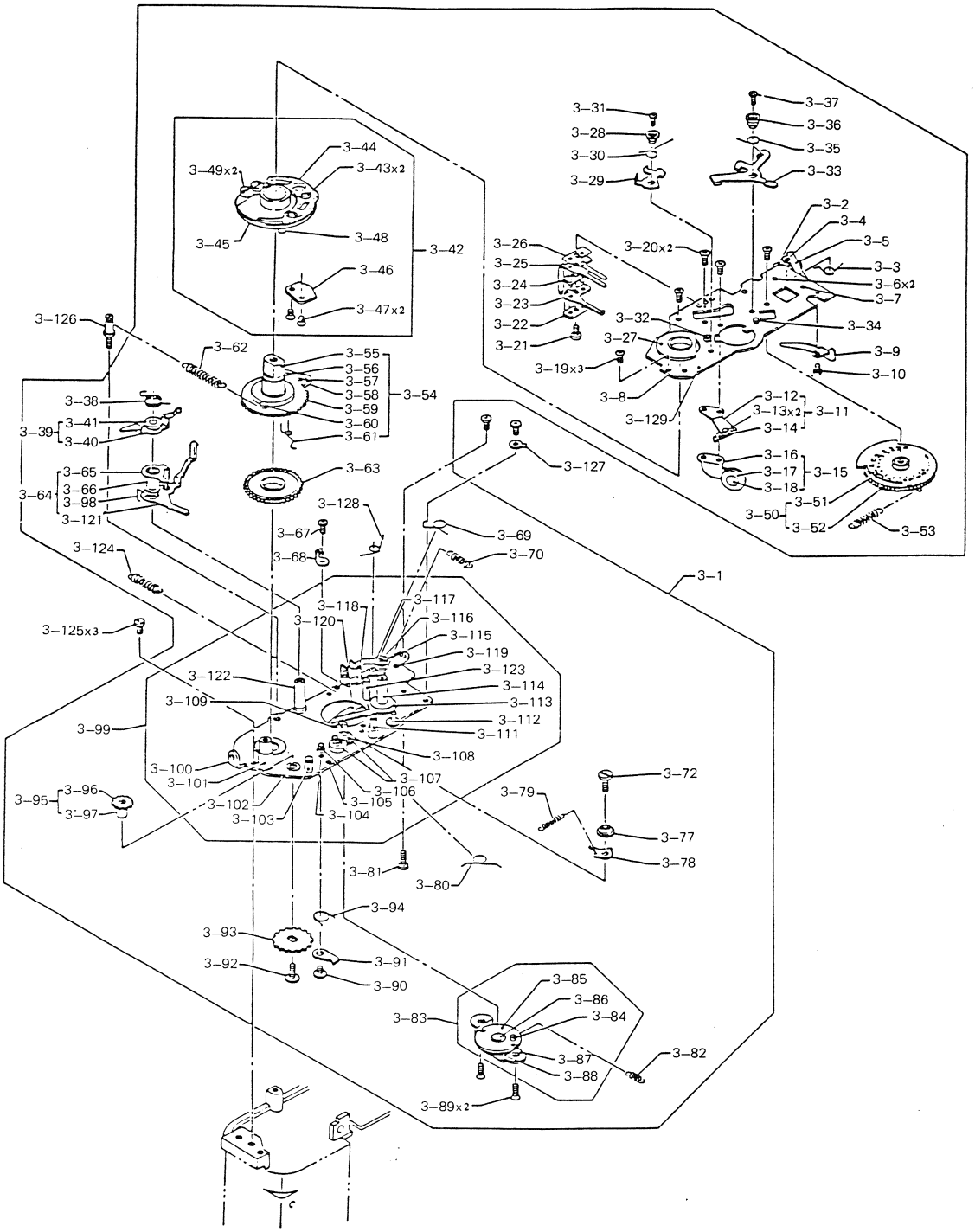
Ref No.	Part No.	Part Name	Q'ty	Remarks
2-65	10A3287540	Mirror base assembly 2-66, 2-67	1	
66	10B3287580	Mirror base	1	
67	3B3304130	Mirror	1	
68	17B4124980	Pin	1	
69	47A4124750	Lever assembly 2-33, 2-68	1	
70	99A51953A11	Viewfinder assembly	1	

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-72
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128
3-129

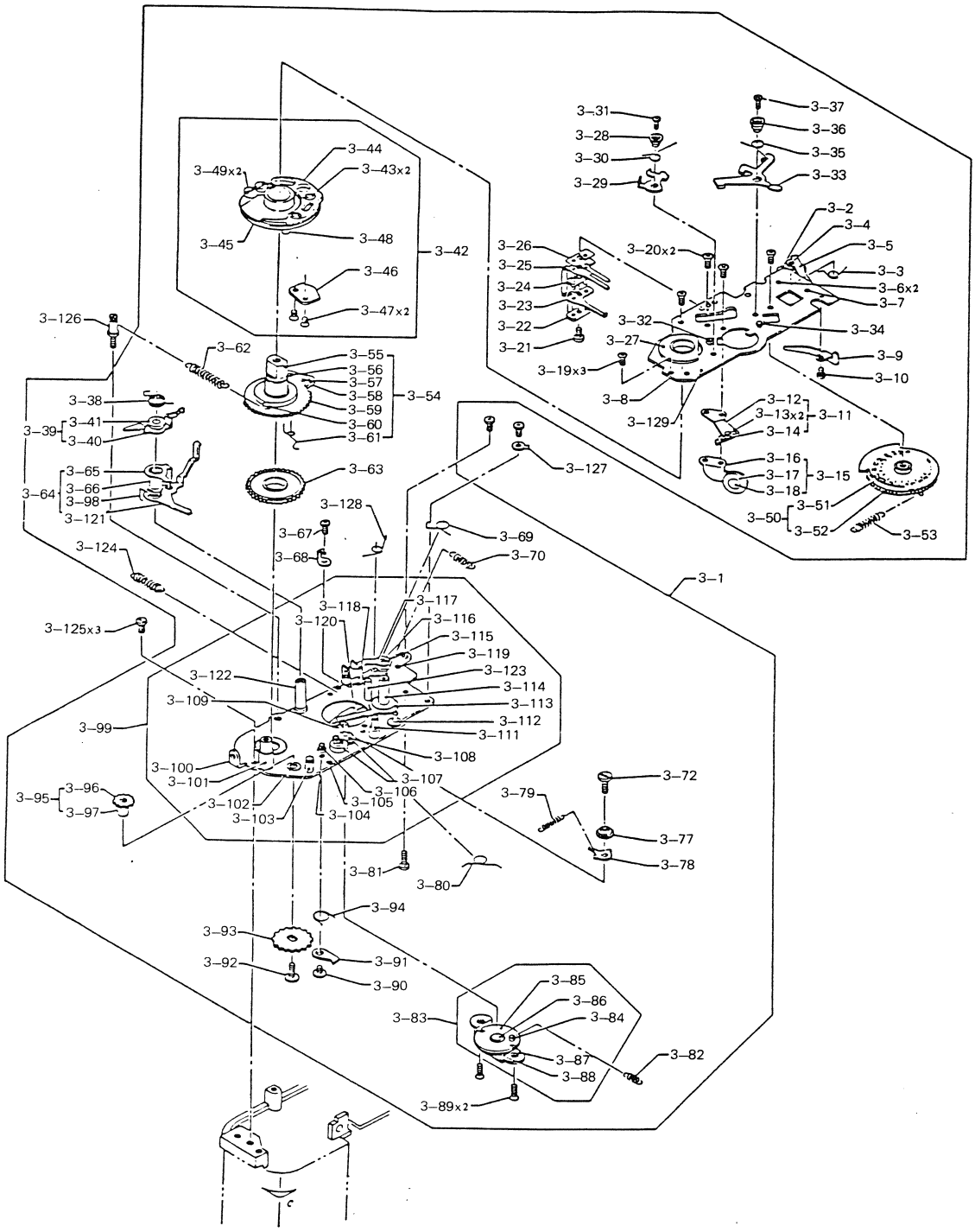
Ref No.	Part No.	Part Name		Q'ty	Remarks
3- 1	310A3662200	Film advance mechanism assembly		1	
3	50B3284080	Spring		1	GS645W
9	50B3284070	Leaf spring		1	GS645W
10	110M140121N	Set screw		1	GS645W
11	85A3284990	Release plate assembly	3-12, 3-13$^{\times 2}$, 3-14	1	GS645W
15	85A3285000	Pulley base assembly	3-16, 3-17, 3-18	1	GS645W
19	111M170401S	Set screw		3	GS645W
20	111M170201S	Set screw		2	GS645W
21	110M140303S	Set screw		1	GS645W
22	115B1278230	Insulation plate		1	GS645W
23	109B3284730	Contact		1	GS645W
24	115B127030	Insulator		1	GS645W
25	109B3284720	Contact		1	GS645W
26	109B3284820	Insulator		1	GS645W
28	42B3284910	Collar		1	GS645W
29	47B3284900	Lever		1	GS645W
30	50B3284921	Spring		1	GS645W
31	111M140251S	Set screw		1	GS645W
33	47B3286480	Lever		1	GS645W
34	17B29290	Shaft		1	GS645W
35	50B3284921	Spring		1	GS645W
36	42B3286500	Collar		1	GS645W
37	111M140251S	Set screw		1	GS645W
38	50B3286490	Spring		1	GS645W
39	47A3285140	Lever assembly	3-40, 3-41	1	GS645W
42	36A3285130	Large pulley assembly	3-43, 3-44, 3-45, 3-46, 3-47, 3-48, 3-49$^{\times 2}$	1	GS645W
44	85B3284560	Large cam		1	GS645W
46	85B3284550	Cam		1	GS645W
47	111M140201S	Set screw		2	GS645W
49	17B3284571	Lock pin		2	GS645W

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-72
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128
3-129

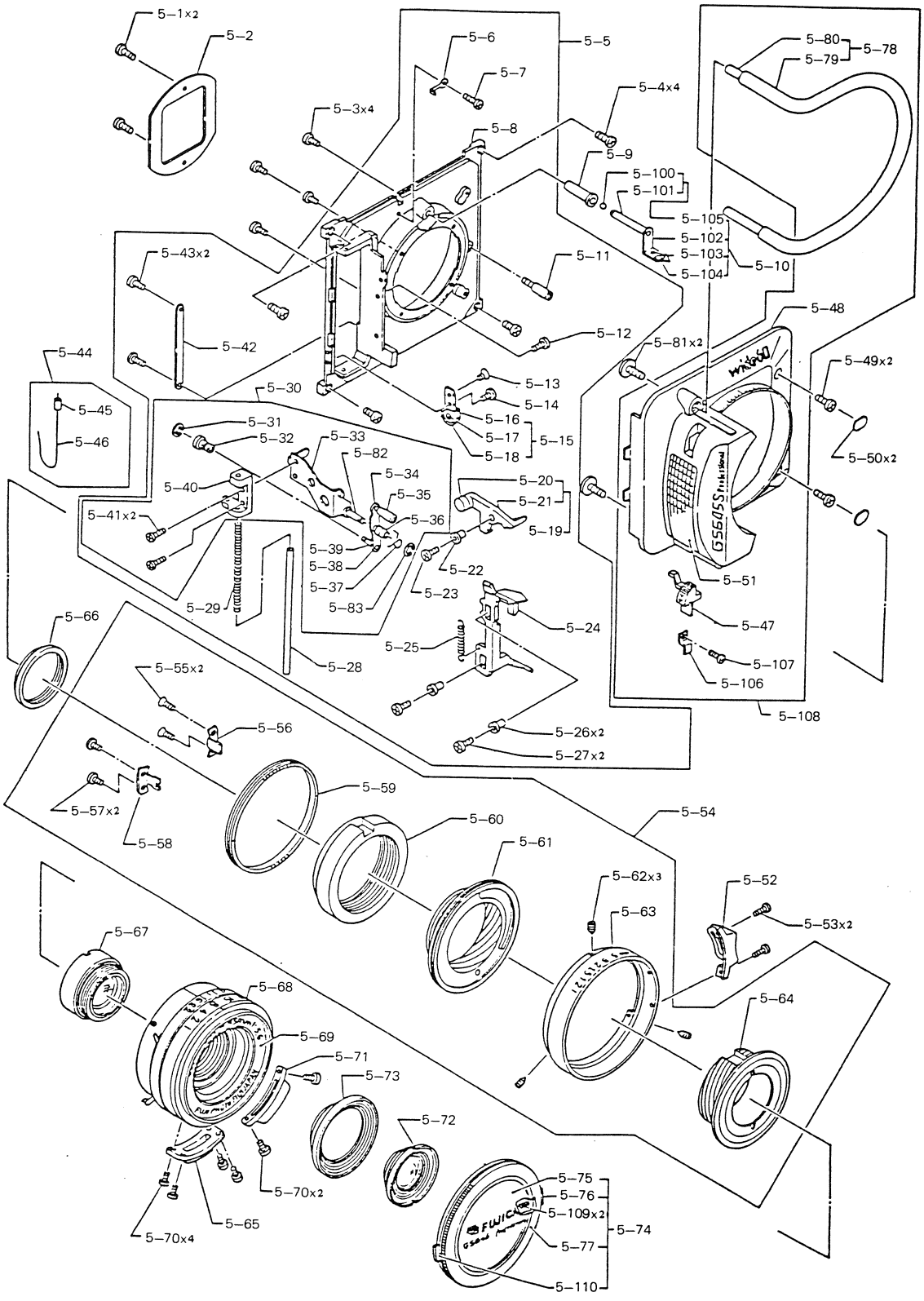
Ref No.	Part No.	Part Name		Q'ty	Remarks
3-50	34A3285050	Counter dial assembly	3-51, 3-52	1	GS645W
53	50B3284300	Spring		1	GS645W
54	34A3285080	Ratchet wheel assembly	3-55, 3-56, 3-57, 3-58, 3-59, 3-60, 3-61	1	GS645W
61	50B3284510	Spring		1	GS645W
62	50B3284661	Spring		1	GS645W
63	34B3284450	Gear		1	GS645W
64	47A3285090	Release lever assembly	3-65, 3-66, 3-98, 3-121	1	GS645W
67	110M170453S	Set screw		1	GS645W
68	111B72560	Staple		1	GS645W
69	50B3284270	Spring		1	GS645W
70	50B93500	Spring		1	GS645W
72	53B3284380	Set screw		1	GS645W
77	42B3284780	Collar		1	GS645W
78	85B3284360	Swing lever		1	GS645W
79	17B3284940	Spring		1	GS645W
80	50B3284430	Spring		1	GS645W
81	110M140453S	Set screw		1	GS645W
82	50B3284191	Spring		1	GS645W
83	41A3285030	Plate assembly	3-84, 3-85, 3-86, 3-87, 3-88	1	GS645W
89	110M170353S	Set screw		2	GS645W
90	53B3284810	Set screw		1	GS645W
91	45B1061	Claw		1	GS645W
92	53B29190	Set screw		1	GS645W
93	3433284120	Gear		1	GS645W
94	50B3284400	Spring		1	GS645W
95	34A3285110	Gear shaft assembly	3-96, 3-97	1	GS645W
98	50B3284672	Spring		1	GS645W
124	50B2458151	Spring		1	GS645W
125	110M200303S	Set screw		1	GS645W

Fig. 3


3-1
3-2
3-3
3-4
3-5
3-6x2
3-7
3-8
3-9
3-10
3-11
3-12
3-13x2
3-14
3-15
3-16
3-17
3-18
3-19x3
3-20x2
3-21
3-22
3-23
3-24
3-25
3-26
3-27
3-28
3-29
3-30
3-31
3-32
3-33
3-34
3-35
3-36
3-37
3-38
3-39
3-40
3-41
3-42
3-43x2
3-44
3-45
3-46
3-47x2
3-48
3-49x2
3-50
3-51
3-52
3-53
3-54
3-55
3-56
3-57
3-58
3-59
3-60
3-61
3-62
3-63
3-64
3-65
3-66
3-67
3-68
3-69
3-70
3-72
3-77
3-78
3-79
3-80
3-81
3-82
3-83
3-84
3-85
3-86
3-87
3-88
3-89x2
3-90
3-91
3-92
3-93
3-94
3-95
3-96
3-97
3-98
3-99
3-100
3-101
3-102
3-103
3-104
3-105
3-106
3-107
3-108
3-109
3-111
3-112
3-113
3-114
3-115
3-116
3-117
3-118
3-119
3-120
3-121
3-122
3-123
3-124
3-125x3
3-126
3-127
3-128
3-129

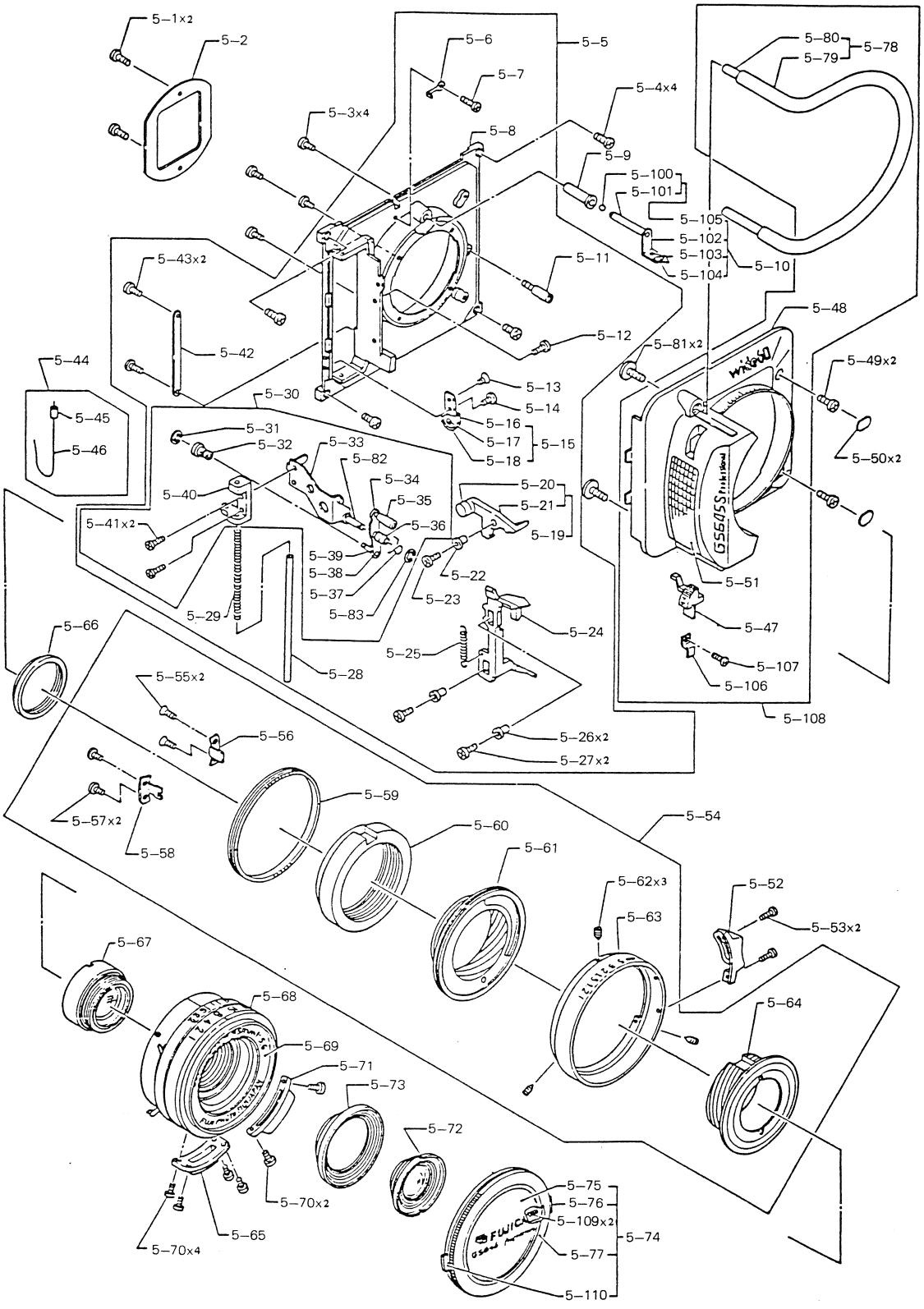
Ref No.	Part No.	Part Name	Q'ty	Remarks
3-126	53B3281730	Screw	1	GS645W
127	85B3280760	Staple	1	GS645W
128	50B3284330	Spring	1	GS645W
129	17B3284851	Stopper pin	1	GS645W

Fig. 5


5-1x2
5-2
5-3x4
5-4x4
5-5
5-6
5-7
5-8
5-9
5-10
5-11
5-12
5-13
5-14
5-15
5-16
5-17
5-18
5-19
5-20
5-21
5-22
5-23
5-24
5-25
5-26x2
5-27x2
5-28
5-29
5-30
5-31
5-32
5-33
5-34
5-35
5-36
5-37
5-38
5-39
5-40
5-41x2
5-42
5-43x2
5-44
5-45
5-46
5-47
5-48
5-49x2
5-50x2
5-51
5-52
5-53x2
5-54
5-55x2
5-56
5-57x2
5-58
5-59
5-60
5-61
5-62x3
5-63
5-64
5-65
5-66
5-67
5-68
5-69
5-70x2
5-70x4
5-71
5-72
5-73
5-74
5-75
5-76
5-77
5-78
5-79
5-80
5-81x2
5-82
5-83
5-100
5-101
5-102
5-103
5-104
5-105
5-106
5-107
5-108
5-109x2
5-110

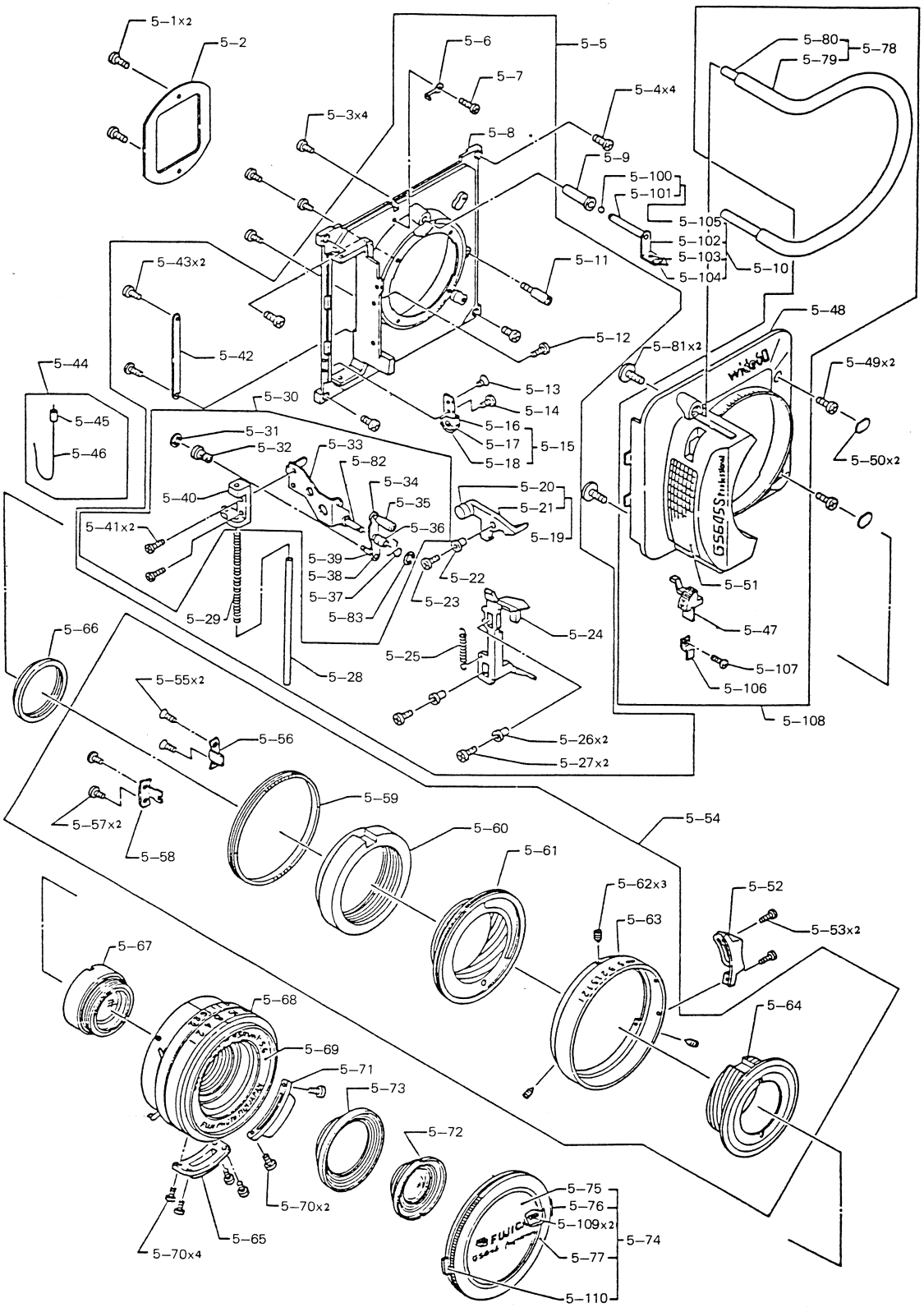
Ref No.	Part No.	Part Name		Q'ty	Remarks
5- 1	113M140303S	Screw		2	
2	27B4122920	Light shielding plate		1	
3	110M170501S	Screw		4	
4	110M2304535	Screw		4	
5	46A4123403	See-through assembly	5-6,5-7,5-8,5-11,5-12,5-13, 5-14,5-15,5-19,5-22,5-23, 5-24,5-25,5-26,5-27,5-28, 5-29,5-30,5-42,5-43×2	1	
6	111B72560	Staple		1	GS465W
7	110M170501M	Screw		1	GS465W
8	46B4123460	See-through		1	
9	47B4123490	Bushing		1	
10	85A4123450	Interlock plate assembly	5-102,5-103,5-104,5-105	1	
11	53B4123560	Stopper pin		1	
12	110M170501M	Screw		1	GS645W
13	111M170351S	Screw		1	GS645W
14	110M170351S	Screw		1	GS645W
15	85A3282110	Pulley base assembly	5-16,5-17,5-18	1	GS645W
16	85B3282320	Pulley base		1	GS645W
17	36B3284090	Pulley		1	GS645W
18	17B3284700	Shaft		1	GS645W
19	47A3661940	Bellcrank assembly	5-20,5-21	1	GS645W
20	17B3662081	Balancer		1	GS645W
21	47B3661940	Bellcrank		1	GS645W
22	32B3661920	Sleeve		1	GS645W
23	110M170501M	Screw		1	GS645W
24	47B4123490	Release lever		1	
25	50B4123670	Spring		1	
26	32B3661920	Sleeve		2	GS645W
27	110M170501M	Screw		2	GS645W
28	32B3282290	Shaft		1	GS645W
29	50B3662090	Spring		1	

Fig. 5


5-1x2
5-2
5-6
5-5
5-7
5-4x4
5-3x4
5-8
5-9
5-100
5-101
5-105
5-102
5-103
5-104
5-10
5-80
5-79
5-78
5-43x2
5-11
5-42
5-12
5-81x2
5-48
5-44
5-30
5-13
5-14
5-16
5-17
5-18
5-15
5-49x2
5-45
5-46
5-31
5-32
5-33
5-82
5-34
5-35
5-36
5-40
5-41x2
5-20
5-21
5-19
5-50x2
5-39
5-38
5-37
5-83
5-22
5-23
5-29
5-24
5-25
5-51
5-47
5-107
5-106
5-108
5-66
5-28
5-55x2
5-56
5-26x2
5-27x2
5-57x2
5-58
5-59
5-60
5-61
5-54
5-62x3
5-63
5-52
5-53x2
5-67
5-68
5-64
5-69
5-71
5-73
5-72
5-70x2
5-65
5-70x4
5-75
5-76
5-109x2
5-74
5-77
5-110

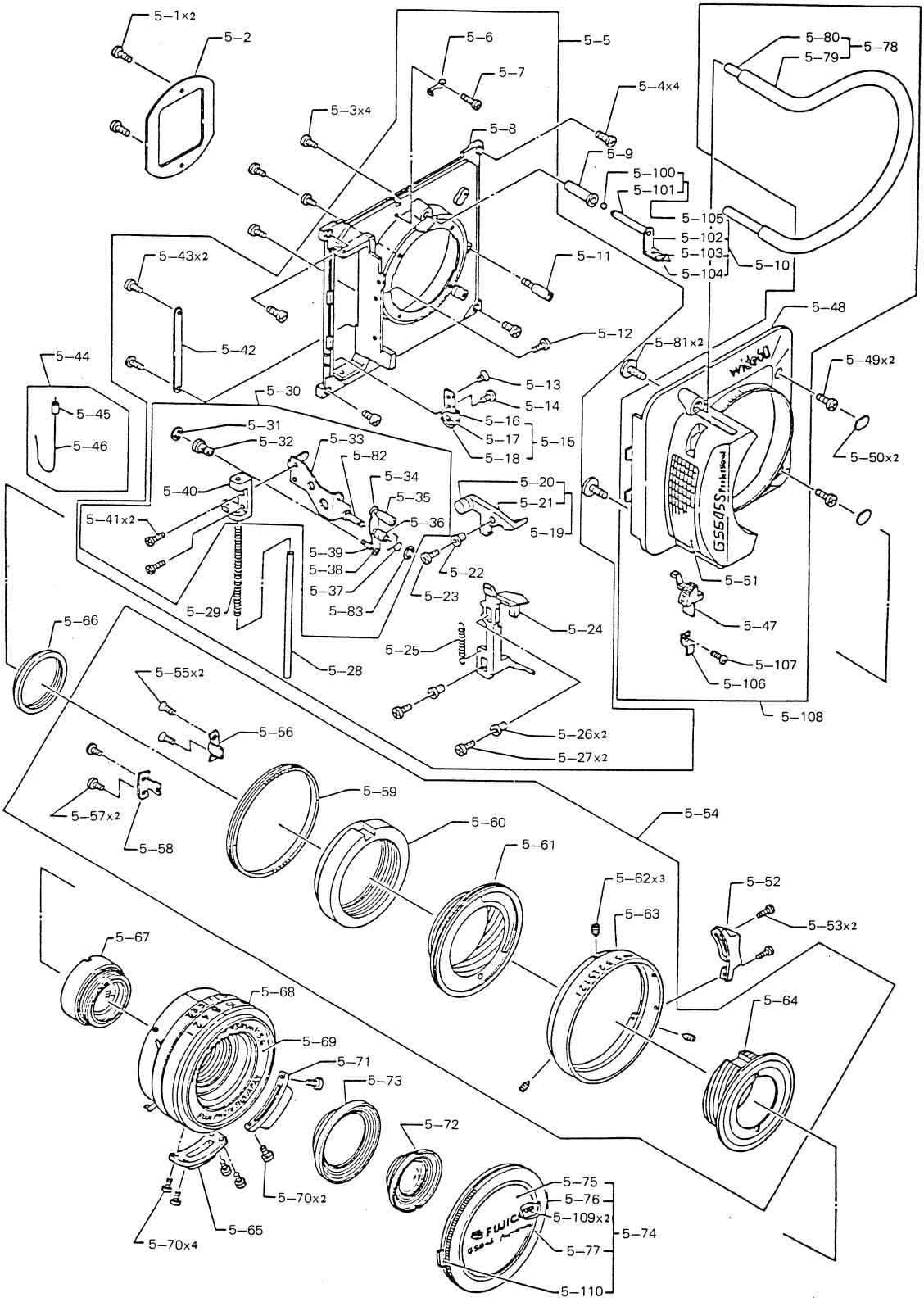
Ref No.	Part No.	Part Name		Q'ty	Remarks
5-30	47A4123411	Set lever assembly	5-31,5-32,5-33,5-34,5-35, 5-36,5-37,5-38,5-39,5-40, 5-41,5-42,5-82,5-83	1	
31	191M012T	E-clip		1	
32	82B4123680	Roller		1	
33	47B3661980	Set lever		1	GS645W
34	17B4123483	Set pin		1	
35	37B4123472	Roller		1	
36	32B3285220	Sleeve		1	
37	50B4123540	Spring		1	
38	47B4123530	Lever		1	
39	32B4123520	Shaft		1	
40	30B3662080	Guide		1	GS645W
41	110M140403S	Screw		2	
42	85B3662000	Guide plate		1	GS645W
43	110M170351S	Screw		2	GS645W
44	56A3280090	Wire assembly		1	GS645W
45	56B3284710	Stopper		1	GS645W
46	56B3280610	Wire		1	GS645W
47	82B4123023	Button		1	
48	11B4122935	Front cover		1	
49	110M200703S	Screw		2	GS645W
50	85B4123090	Cover plate		2	
51	59B4123041	Leather		1	
52	16B4122950	Knob		1	
53	53B3661140	Set screw		2	GS645W
54	21A4124100	Helicoid assembly	5-55,5-56,5-57,5-58,5-59, 5-60,5-61,5-62,5-63,5-64	1	
55	111M140253T	Screw		2	GS645W
56	30B3282980	Helicoid guide II		1	GS645W
57	110M140253T	Screw		2	GS645W
58	30B3282970	Helicoid guide I		1	GS645W
59	23B3282990	Knurled ring		1	GS645W

Fig. 5


5-1x2
5-2
5-3x4
5-4x4
5-5
5-6
5-7
5-8
5-9
5-10
5-11
5-12
5-13
5-14
5-15
5-16
5-17
5-18
5-19
5-20
5-21
5-22
5-23
5-24
5-25
5-26x2
5-27x2
5-28
5-29
5-30
5-31
5-32
5-33
5-34
5-35
5-36
5-37
5-38
5-39
5-40
5-41x2
5-42
5-43x2
5-44
5-45
5-46
5-47
5-48
5-49x2
5-50x2
5-51
5-52
5-53x2
5-54
5-55x2
5-56
5-57x2
5-58
5-59
5-60
5-61
5-62x3
5-63
5-64
5-65
5-66
5-67
5-68
5-69
5-70x2
5-70x4
5-71
5-72
5-73
5-74
5-75
5-76
5-77
5-78
5-79
5-80
5-81x2
5-82
5-83
5-100
5-101
5-102
5-103
5-104
5-105
5-106
5-107
5-108
5-109x2
5-110
GS645S

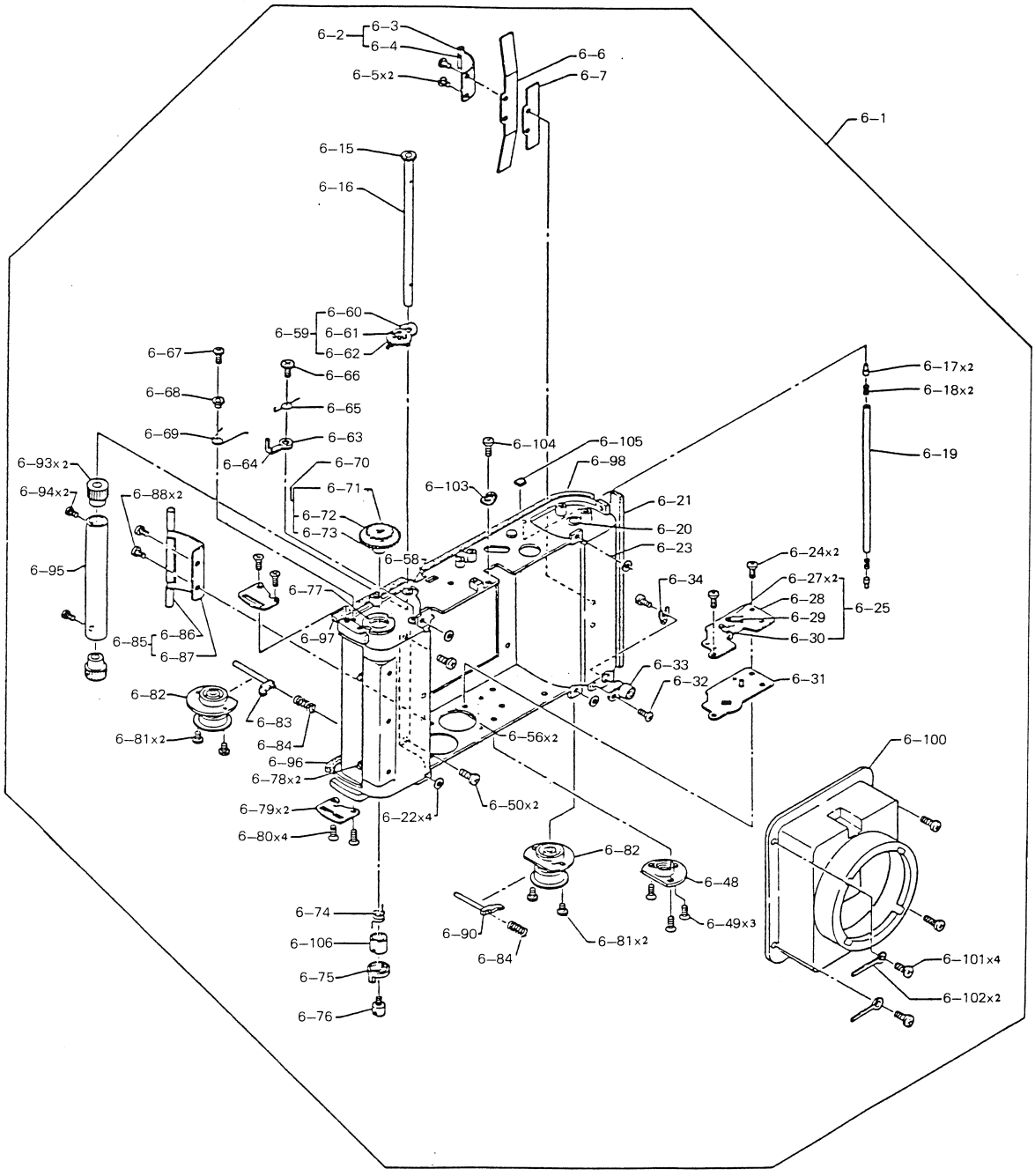
Ref No.	Part No.	Part Name		Q'ty	Remarks
5-60	21B4124140	Female helicoid		1	
61	21B4124150	Helicoid ring		1	
62	120M170301S	Screw		1	GS645W
63	23B4124170	Focusing ring		1	
64	21B4124160	Male helicoid		1	
65	16B4123120	Knob		1	
66	23B3661090	Hold ring		1	GS645W
67	21A4124230	Rear lens assembly		1	
68	38B4124250	Shutter		1	
69	23B4122920	Name ring		1	
70	53B3661170	Set screw		4	GS645W
71	16B4123110	Knob		1	
72	21A4124220	Front lens assembly		1	
73	23B4122942	Light shielding ring		1	
74	96A12177A01	Lens cap assembly	5-75,5-76,5-77,5-108,5-109	1	
75	58B3663620	Name plate		1	GS645W
76	82B3663600	Claw		1	GS645W
77	56B3663580	Lens cap		1	GS645W
78	18A4122991	Protector assembly	5-79, 5-80	1	
79	172B4123011	Rubber tube		1	
80	18B4123001	Protector		1	
81	53B4123060	Set screw		2	
82	32B4123510	Shaft		1	
83	191M012T	E-clip		1	
84	47A4123422	Lever assembly	5-31,5-32,5-34,5-35,5-36, 5-38,5-39	1	
85	17B4123500	Stop pin		1	
100	200M20	Steel ball		1	
101	17B4123600	Interlock bar		1	
102	85B4123611	Interlock plate		1	
103	17B4123630	Rivet		1	

Fig. 5


5-1x2
5-2
5-3x4
5-4x4
5-5
5-6
5-7
5-8
5-9
5-10
5-11
5-12
5-13
5-14
5-15
5-16
5-17
5-18
5-19
5-20
5-21
5-22
5-23
5-24
5-25
5-26x2
5-27x2
5-28
5-29
5-30
5-31
5-32
5-33
5-34
5-35
5-36
5-37
5-38
5-39
5-40
5-41x2
5-42
5-43x2
5-44
5-45
5-46
5-47
5-48
5-49x2
5-50x2
5-51
5-52
5-53x2
5-54
5-55x2
5-56
5-57x2
5-58
5-59
5-60
5-61
5-62x3
5-63
5-64
5-65
5-66
5-67
5-68
5-69
5-70x2
5-70x4
5-71
5-72
5-73
5-74
5-75
5-76
5-77
5-78
5-79
5-80
5-81x2
5-82
5-83
5-100
5-101
5-102
5-103
5-104
5-105
5-106
5-107
5-108
5-109x2
5-110
GS645S

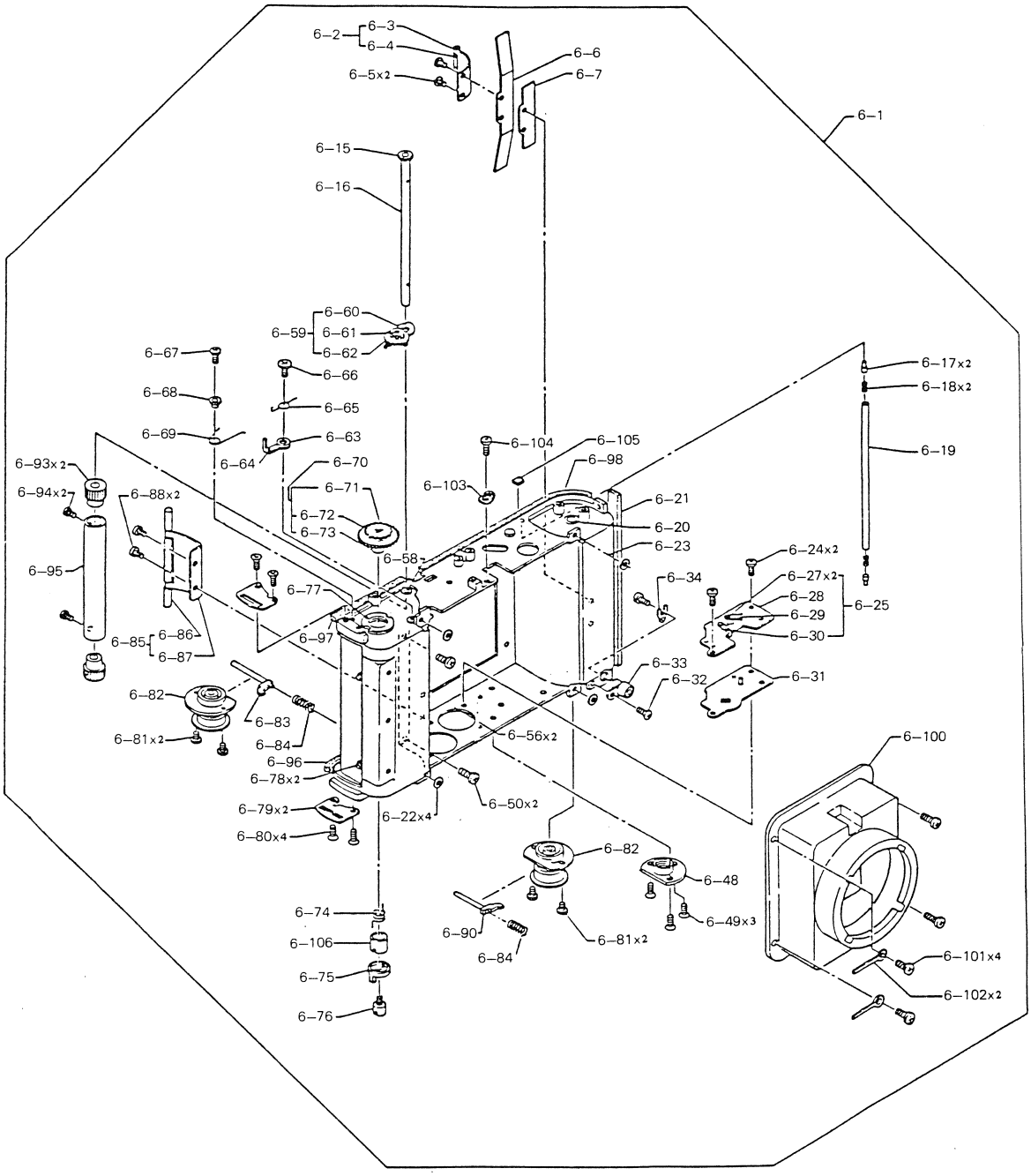
Ref No.	Part No.	Part Name	Q'ty	Remarks
5-104	85B4123620	Adjust plate	1	
105	17A4123590	Interlock bar assembly 5-100, 5-101	1	
106	85B4123081	Holder	1	
107	111M170251S	Screw	1	
108	11A4123051	Front cover assembly 5-47,5-48,5-51,5-78,5-81, 5-106, 5-107	1	
109	50B3663590	Spring	2	GS645W
110	82B3663610	Claw	1	GS645W

Fig. 6


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-15
6-16
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-58
6-77
6-97
6-85
6-86
6-87
6-88x2
6-93x2
6-94x2
6-95
6-82
6-83
6-81x2
6-84
6-96
6-78x2
6-79x2
6-80x4
6-22x4
6-50x2
6-56x2
6-74
6-106
6-75
6-76
6-103
6-104
6-105
6-98
6-21
6-20
6-23
6-17x2
6-18x2
6-19
6-24x2
6-27x2
6-28
6-29
6-30
6-25
6-34
6-33
6-32
6-31
6-100
6-82
6-48
6-49x3
6-90
6-84
6-81x2
6-101x4
6-102x2

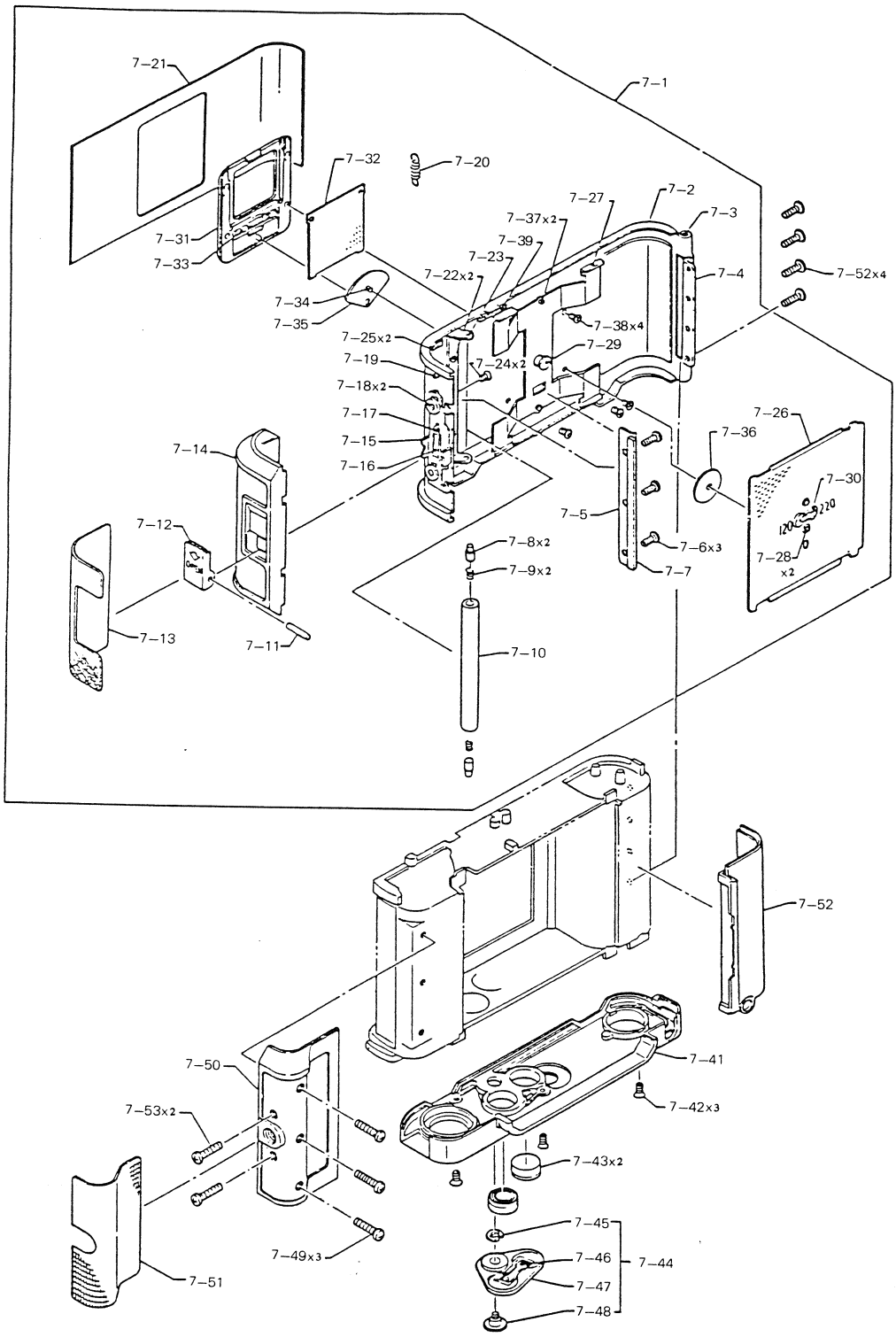
Ref No.	Part No.	Part Name	Q'ty	Remarks
6- 1	301A4123201	Camera body assembly	1	
2	50A3281090	Leaf spring assembly	1	GS645W
5	110M140251N	Set screw	2	GS645W
6	50B486960	Leaf spring	1	GS645W
7	55B3281930	Adjust plate	1	GS645W
15	34B3281390	Gear	1	GS645W
16	32B3281380	Shaft	1	GS645W
17	17B30161	Pin	2	GS645W
18	50B30170	Spring	2	GS645W
19	30B3281360	Roller	1	GS645W
21	27B3281851	Moquette	1	GS645W
22	55B3285350	Washer	4	GS645W
24	110M170251S	Set screw	2	GS645W
25	110A3289010	Battery PCB assembly	1	GS645W
31	115B3280550	Insulation plate	1	GS645W
32	111M170301N	Set screw	1	GS645W
33	112A 3281050	Synchro-socket assembly	1	GS645W
34	108B563570	Lug	1	GS645W
48	53B93823	Tripod socket	1	GS645W
49	111M200453S	Set screw	3	GS645W
50	110M170201S	Set screw	2	GS645W
59	34A3281030	Idle gear assembly	1	GS645W
63	42B3281660	Collar	1	GS645W
64	47B3281670	Lever	1	GS645W
65	50B3281450	Spring	1	GS645W
66	53B3281760	Set screw	1	GS645W
67	110M170353S	Set screw	1	GS645W
68	42B3281840	Collar	1	GS645W
69	50B3281830	Spring	1	GS645W
70	34A3281250	Gear assembly 6-71, 6-73	1	GS645W
71	34B3284120	Gear	1	GS645W
72	34B3281321	Ratchet wheel	1	GS645W

Fig. 6


6-1
6-2
6-3
6-4
6-5x2
6-6
6-7
6-15
6-16
6-17x2
6-18x2
6-19
6-20
6-21
6-22x4
6-23
6-24x2
6-25
6-27x2
6-28
6-29
6-30
6-31
6-32
6-33
6-34
6-48
6-49x3
6-50x2
6-56x2
6-58
6-59
6-60
6-61
6-62
6-63
6-64
6-65
6-66
6-67
6-68
6-69
6-70
6-71
6-72
6-73
6-74
6-75
6-76
6-77
6-78x2
6-79x2
6-80x4
6-81x2
6-82
6-83
6-84
6-85
6-86
6-87
6-88x2
6-90
6-93x2
6-94x2
6-95
6-96
6-97
6-98
6-100
6-101x4
6-102x2
6-103
6-104
6-105
6-106

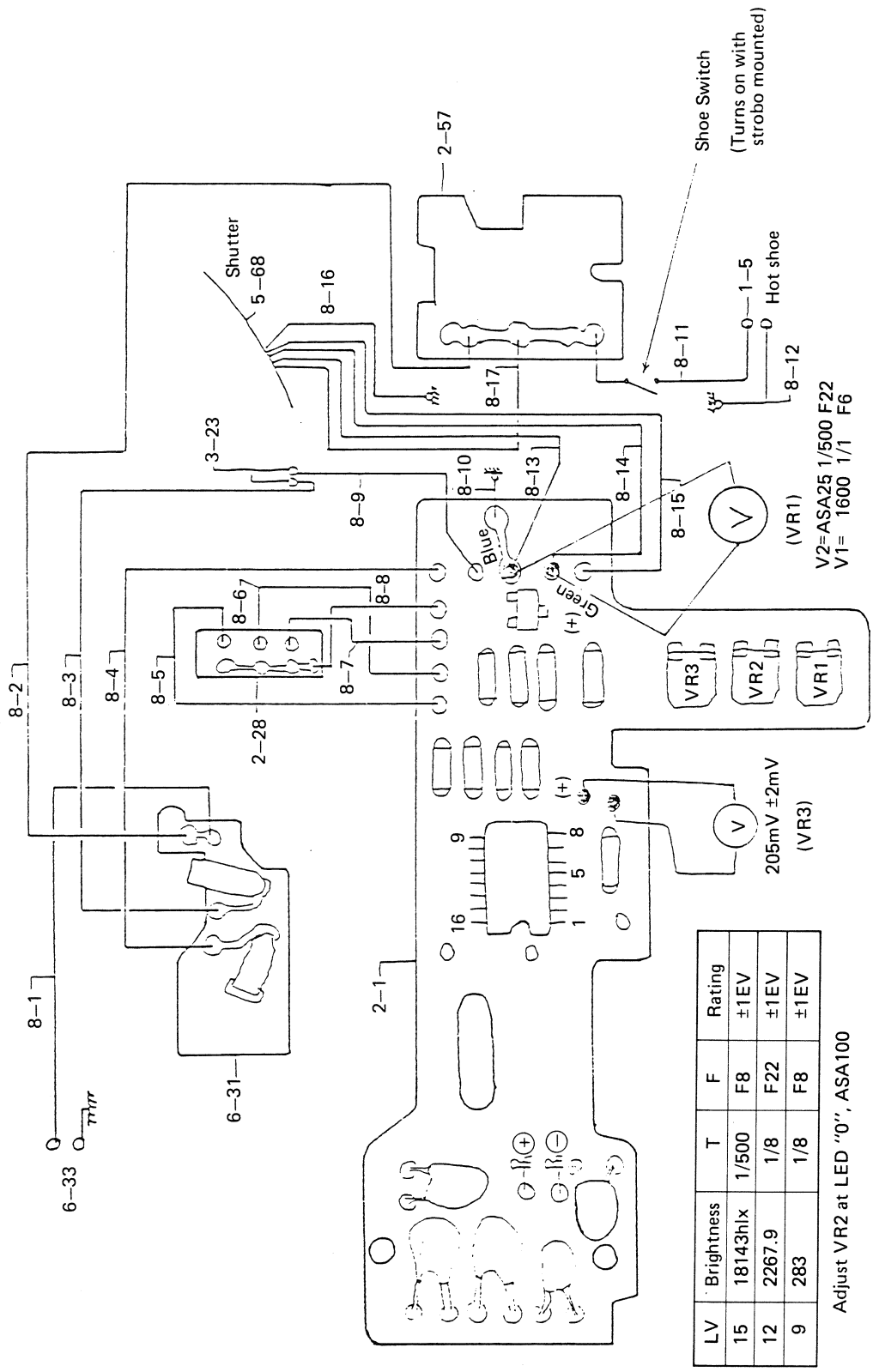
Ref No.	Part No.	Part Name	Q'ty	Remarks
6-73	32B3281310	Shaft	1	GS645W
74	50B3281330	Spring	1	GS645W
75	32B3281301	Spool shaft	1	GS645W
76	53B3281340	Screw	1	GS645W
77	42B3281290	Shaft holder	1	GS645W
79	41B3281231	Strap eyelet	2	GS645W
80	111M200453M	Set screw	4	GS645W
81	110M200351S	Set screw	2	GS645W
82	23A3281080	Guide ring assembly	2	GS645W
83	82B3281150	Release bar	1	GS645W
84	50B3281180	Spring	2	GS645W
85	37A3288420	Leaf spring assembly 6-86, 6-87	1	GS645W
90	82B3281160	Release bar	1	GS645W
93	36B3281400	Counter roller	2	GS645W
94	111M140401S	Set screw	2	GS645W
95	36B3281410	Counter drum	1	GS645W
96	27B3281810	Moquette	1	GS645W
97	27B3281820	Moquette	1	GS645W
98	27B3281800	Moquette	1	GS645W
100	27B3661740	Light shielding barrel	1	GS645W
101	110M170303S	Set screw	4	GS645W
102	111B72560	Lug	2	GS645W
103	111B72560	Lug	1	GS645W
104	110M170201S	Set screw	1	GS645W
105	51B2473230	Cushion	1	GS645W
106	42B3281600	Bushing	1	GS645W
107	17B3281610	Pin	1	GS645W
108	32A3281280	Spool shaft assembly I 6-75, 6-107	1	GS645W
109	32A3281061	Spool shaft assembly 6-70,6-74,6-76,6-106, 6-108	1	GS645W

Fig. 7


7-1
7-2
7-3
7-4
7-5
7-6x3
7-7
7-8x2
7-9x2
7-10
7-11
7-12
7-13
7-14
7-15
7-16
7-17
7-18x2
7-19
7-20
7-21
7-22x2
7-23
7-24x2
7-25x2
7-26
7-27
7-28 x2
7-29
7-30
7-31
7-32
7-33
7-34
7-35
7-36
7-37x2
7-38x4
7-39
7-41
7-42x3
7-43x2
7-44
7-45
7-46
7-47
7-48
7-49x3
7-50
7-51
7-52
7-52x4
7-53x2

Ref No.	Part No.	Part Name	Q'ty	Remarks
7- 1	302A3287000	Film chamber door assembly	1	GS645
3	32B32031	Hinge shaft	1	GS645
4	19B32020	Hinge	1	GS645
5	27B3287120	Light shielding plate	1	GS645
6	113M200501S	Set screw	3	GS645
7	27B32000	Moquette	1	GS645
8	17B30160	Shaft	2	GS645
9	50B30170	Spring	2	GS645
10	37B492633	Roller	1	GS645
11	32B3287340	Shaft	1	GS645
12	16B3287320	Open-close button	1	GS645
13	59B3287371	Leather	1	GS645
14	11B3281242	Cover frame	1	GS645
20	50B3287391	Spring	1	GS645
21	59B3287270	Leather	1	GS645
24	114M200501S	Set screw	2	GS645
25	27B3287280	Moquette	2	GS645
39	27B3287290	Moquette	1	GS645W
41	11B3280300	Bottom cover	1	GS645W
42	53B2189030	Set screw	3	GS645W
43	104K457690	Battery	2	GS645W
44	16A3280070	Battery cap assembly	1	GS645W
45	191M020T	E-clip	1	GS645W
48	53B3280320	Set screw	1	GS645W
49	110M231003S	Set screw	3	GS645W
50	11B4122981	Cover frame	1	GS645W
51	59B4123030	Leather	1	GS645W
52	11B3661050	Terminal cover	1	GS645W
53	110M230803S	Screw	2	

Fig. 8



LV	Brightness	T	F	Rating
15	18143hlx	1/500	F8	±1EV
12	2267.9	1/8	F22	±1EV
9	283	1/8	F8	±1EV

Ref No.	Part No.	Part Name	Q'ty	Remarks
8- 1	111B3280570	Lead wire (violet)	1	
2	111B3280560	Lead wire (white)	1	
3	111B3288830	Lead wire (black)	1	
4	111B3288820	Lead wire (red)	1	
5	111B3663080	Lead wire (gray)	1	
6	111B3663060	Lead wire (yellow)	1	
7	111B3663100	Lead wire (green)	1	
8	111B3663040	Lead wire (red)	1	
9	111B3280600	Lead wire (black)	1	
10	111B3289140	Lead wire (black)	1	
11	111B3280580	Lead wire (white)	1	
12	111B3280590	Lead wire (black)	1	
13		Lead wire (blue)	1	
14		Lead wire (green)	1	
15		Lead wire (yellow)	1	
16		Lead wire (black)	1	
17		Lead wire (gray)	1	

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6(S)-135

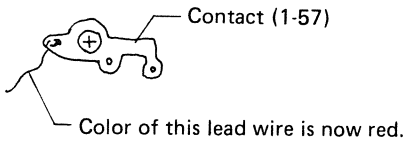
DATE. November 30, 1984

MODEL Fujica GS645S

SUBJECT Changed color of hot shoe lead wire

DESCRIPTION

Color of the white lead wire (8-11) connected to the positive (+) terminal of the hot shoe has been changed to red. This change is to avoid an erroneous wiring, and has been effected on those manufactured during September, 1984 (Body Serial No. 945) and thereafter.



It is requested that the color of the lead wire (8-11) be corrected to red on the parts list.

Ref No.	Part No.	Part Name	Q'ty	Remarks
8- 1	111B3280570	Lead wire (violet)	1	
2	111B3280560	Lead wire (white)	1	
3	111B3288830	Lead wire (black)	1	
4	111B3288820	Lead wire (red)	1	
5	111B3663080	Lead wire (gray)	1	
6	111B3663060	Lead wire (yellow)	1	
7	111B3663100	Lead wire (green)	1	
8	111B3663040	Lead wire (red)	1	
9	111B3280600	Lead wire (black)	1	
10	111B3289140	Lead wire (black)	1	
11	111B3280580	Lead wire (red)	1	
12	111B3280590	Lead wire (black)	1	
13		Lead wire (blue)	1	
14		Lead wire (green)	1	
15		Lead wire (yellow)	1	
16		Lead wire (black)	1	
17		Lead wire (gray)	1	

FUJI PHOTO FILM CO., LTD.

FUJICA TECHNICAL BULLETIN

NO. G6(S)-134

DATE. November 30, 1984

MODEL Fujica GS645S

SUBJECT Added washer

DESCRIPTION

Two washers are added in between the viewfinder frame and LED as shown below to improve operations of the viewfinder frame. The use of the washers has been effected on those manufactured during October, 1984 and thereafter (Body Serial No. 1100001).

The washers have been used on Fujica GS645 also.