

**CHECK POINTS
(INSPECTION STANDARD)**

B. CHECK POINTS (INSPECTION STANDARD)

CONTENTS

I. Appearance and Functional Quality

1. Finder	B- 3
2. R Knob	B- 4
3. Winding Lever	B- 4
4. Release Button	B- 5
5. Film Counter	B- 6
6. Rear Cover	B- 6
7. Key	B- 7
8. Pressure Plate	B- 7
9. Sprocket	B- 7
10. Spool	B- 8
11. Shutter Curtains	B- 8
12. Rewinding Clutch	B- 8
13. Mode Knob	B- 9
14. Select Knob	B- 9
15. Aperture Lever	B-10
16. Aperture Link Ring	B-10
17. Movable Mirror	B-11
18. B Mount	B-11
19. Mounting Seat of Manual Adaptor	B-11
20. Release Lock	B-11
21. Winder	B-11

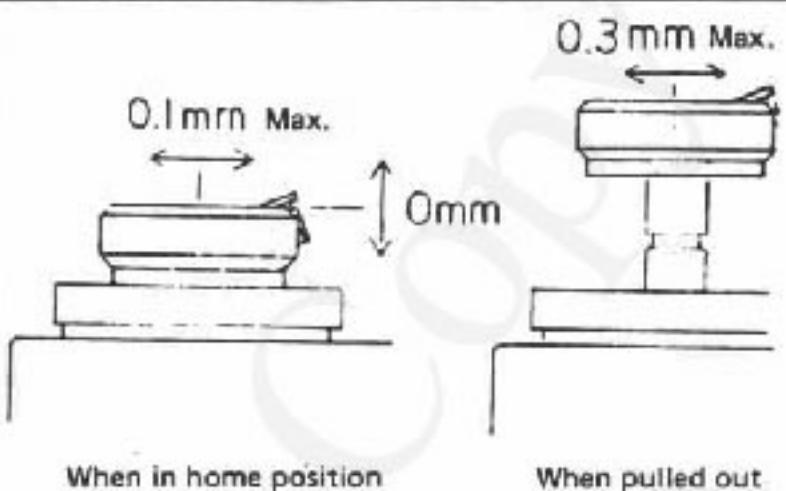
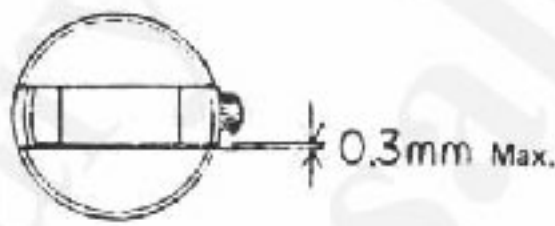
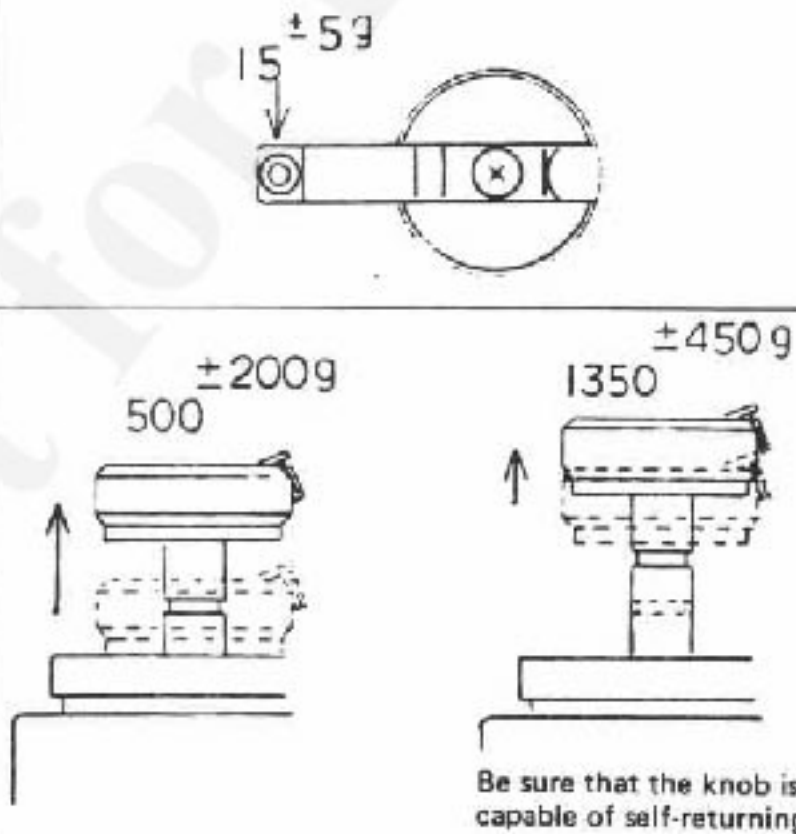

II. Functional Performance Quality

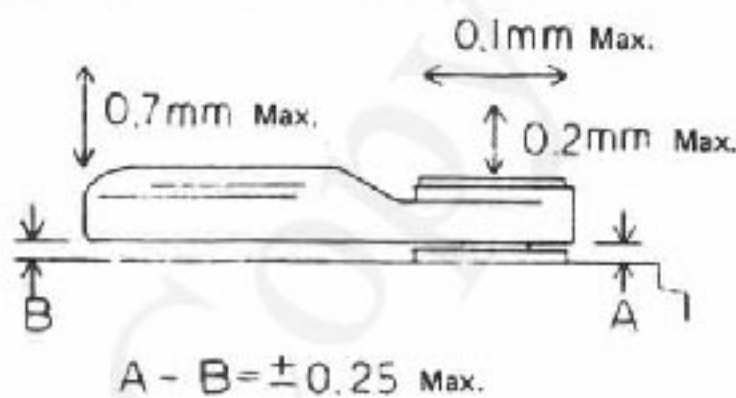

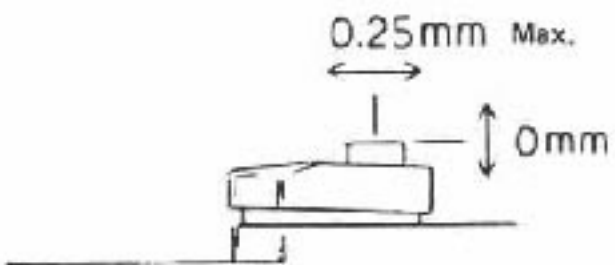
1. Depth for Initiating Release in the Core	B-13
2. Flange Back	B-13
3. Tunnel Distance	B-13
4. Vertical Deviation of Picture Image Face	B-13
5. Perforation Position	B-13
6. Distance between Picture Frames	B-13
7. Indicating Accuracy of Exposure Meter	B-14
8. Curtain Speed	B-15
9. Manual Timing	B-15

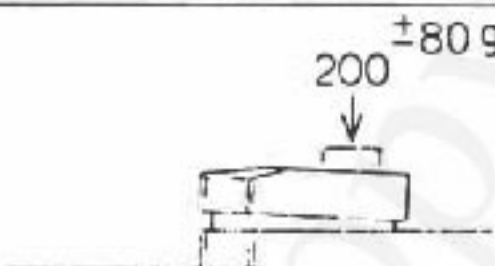

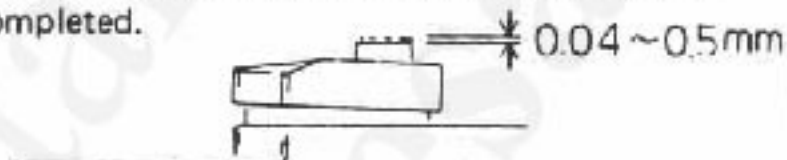

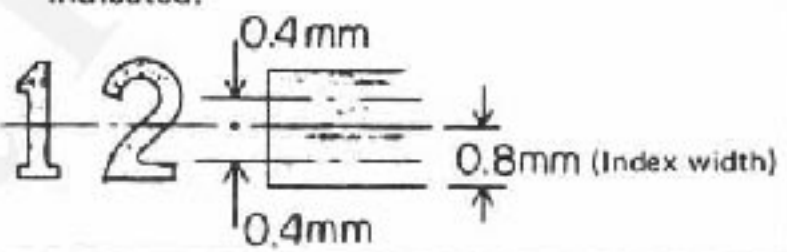
10. Exposure Time Variation	B-15
11. Erratic Exposure	B-15
12. Delay Time	B-15
13. Contact Efficiency	B-15
14. Contact Resistance	B-15
15. Insulation resistance	B-15
16. Manual Exposure Time where Voltage Varies	B-15
17. Auto Exposure Accuracy	B-15
18. ASA Selecting Accuracy	B-16
19. Temperature Characteristics	B-16
20. Humidity characteristics	B-16
21. Release Lock Voltage	B-16
22. Battery Check Voltage	B-16
23. Change in Exposure for Voltage Change	B-16
24. Current Consumption	B-16
25. Leakage Current	B-16
26. Protective Circuit	B-16
27. Maximum Exposure Time	B-16
28. Finder-indication Limiter Time	B-16
29. Self-timer Interval	B-16
30. Self Flicker Interval	B-16
31. Finder Viewing	B-16
32. One-side Blur	B-16
33. Accuracy of Focal Plane Position	B-17
34. Winder	B-17

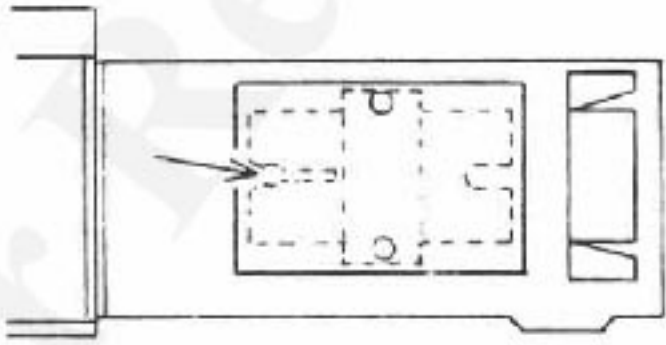
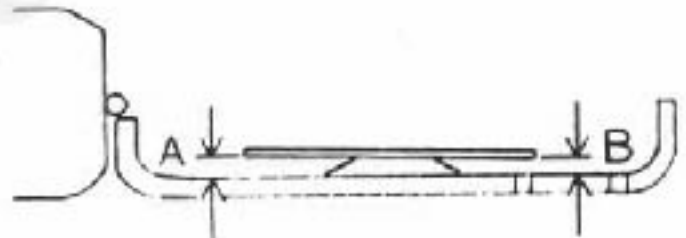
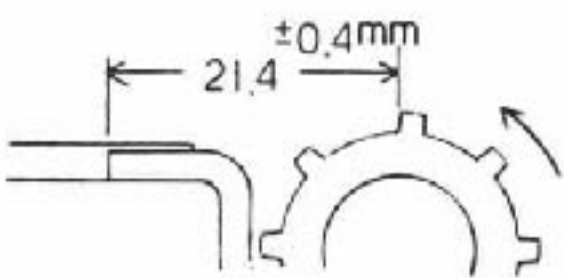
I. APPERANCE AND FUNCTIONAL QUALITY

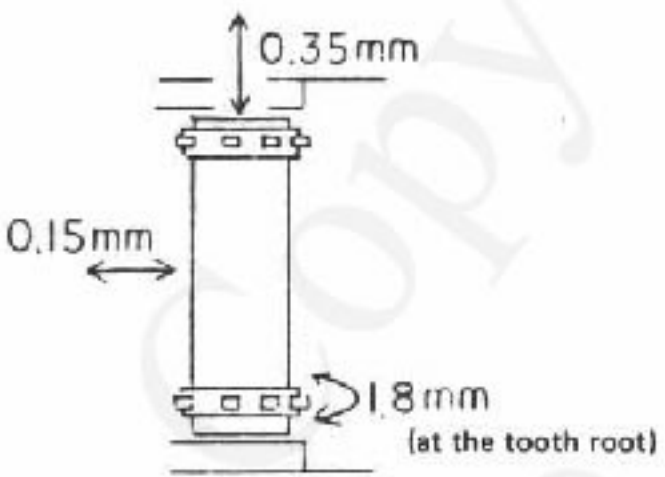
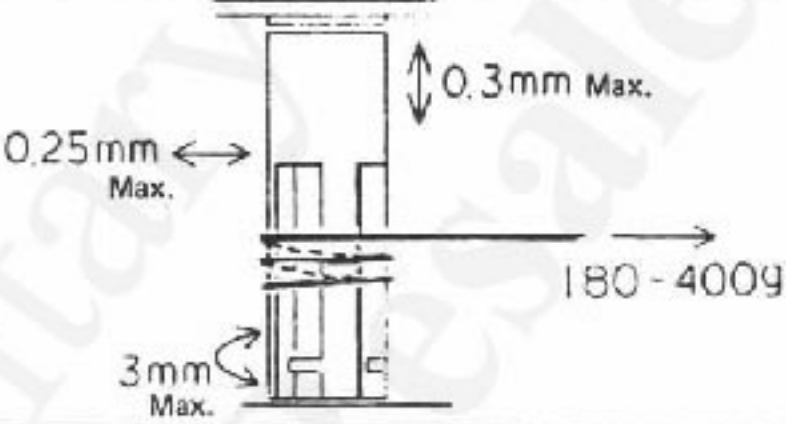
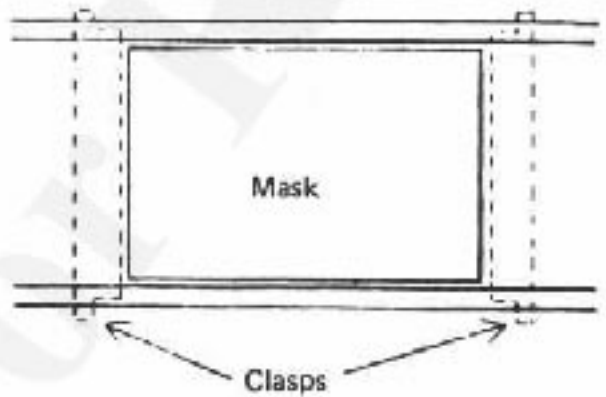
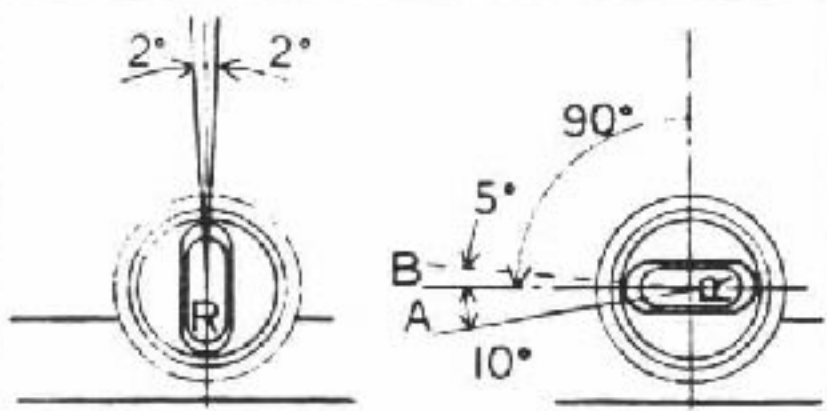
What to inspect	What to check	Checking method or criteria
1. Finder	1) Field of view	<p>Be sure there's no stain or dust on this face.</p> <p>Be sure there's no shading due to foreign matter.</p> <p>The pentaprism edge lines must be perfectly free from any flaw.</p> <p>Percentage of field: $93 \pm 2\%$ (W/50 mm, F1.8)</p> <p>The finder to be within the frame of true picture.</p>
	2) Indicating plate	<p>0 mm Min.</p> <p>This mark to be free from any obstruction.</p> <p>Be sure the plate is trued up as observed with naked eyes.</p>
	3) Indicating LED	<p>Position</p> <p>This dimension to be within the character width.</p> <p>(1) Be sure that light comes on always at one point. (Sometimes at two points.)</p> <p>(2) With a prescribed strobo connected to camera, be sure that the indicating LED for the strobo lights up upon the charging up of the strobo, i.e., when the strobo power source is turned on.</p> <p>Also, be sure that this LED flickers when light-checking action is in progress after the release button has been pressed.</p>

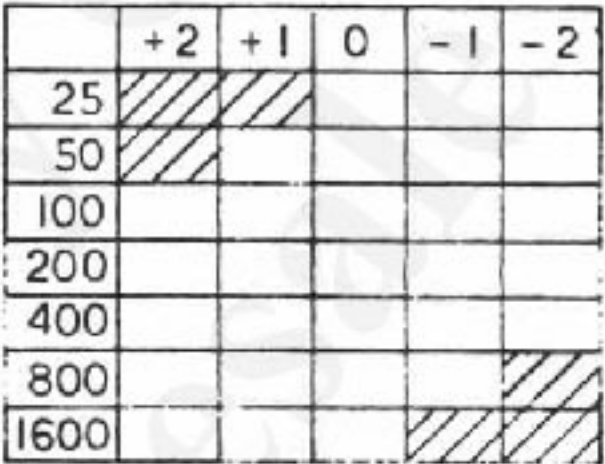

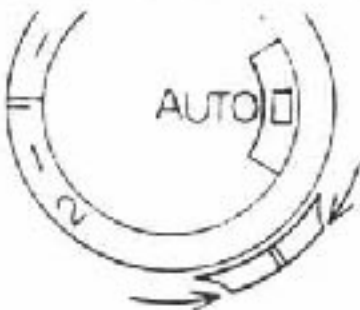
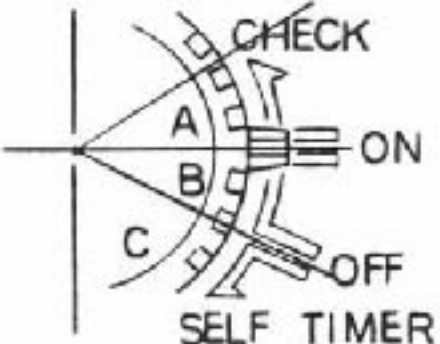
What to inspect	What to check	Checking method or criteria
2. R knob	1) R knob rattle	 <p>0.1mm Max.</p> <p>0mm</p> <p>0.3mm Max.</p> <p>When in home position</p> <p>When pulled out</p>
	2) Clearance between R knob and crank	 <p>0.3mm Max.</p>
	3) Smoothness of re-winding motion	Whether the camera is loaded with film or not, this motion must be smooth, free of any sticking.
	4) Friction	With the film removed, be sure that no more cranking force than is indicated is required.
	5) Force for pulling out the knob	 <p>15 ± 5g</p> <p>500 ± 200g</p> <p>1350 ± 450g</p> <p>Be sure that the knob is capable of self-returning.</p>
3. Winding lever	1) Lever retainer	 <p>Be sure there is no evidence of galling at these parts.</p>

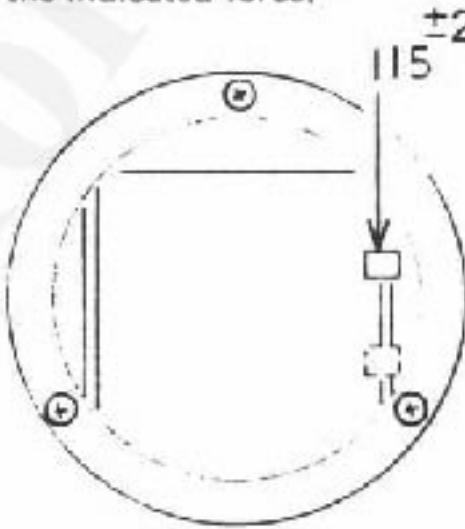
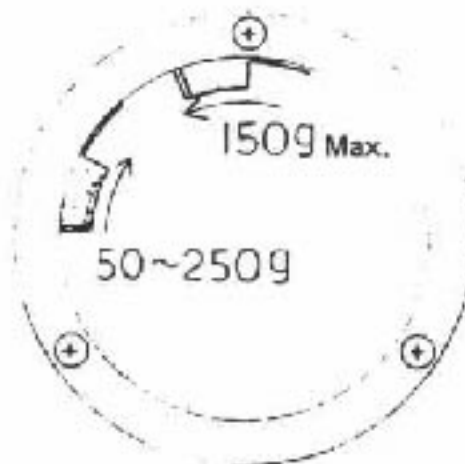
What to inspect	What to check	Checking method or criteria
(Winding lever)	2) Winding lever rattle	 <p>$A - B = \pm 0.25 \text{ Max.}$</p>
	3) Accuracy of winding action	<p>(1) Make sure that a single stroke of the lever accurately advances the film by one frame and charges the shutter and mirror.</p> <p>(2) Operate the lever rapidly to be sure that the shutter gets charged positively at each turning of the lever.</p>
	4) Smoothness of winding action	There shall be no initial sticking; and the lever shall move without any abnormal noise, squeak or hitch through its full stroke.
	5) Operating force	 <p>1000g Max.</p> <p>Measure the force, with the camera loaded with film.</p>
	6) Accuracy of partial winding	Wind the film by operating the lever by repeating partial stroke, and be sure that each stroke advances the film by a corresponding amount and locking the film in partially advanced position.
4. Release button	1) Button rattle	 <p>0.25mm Max.</p> <p>0mm</p>
	2) Accuracy of releasing action	<p>(1) Make sure that the shutter is positively released when the button is pressed.</p> <p>(2) Press the button hard and let it go gently to see the returning action occurs properly.</p>
	3) Smoothness of releasing motion	Be sure that the button moves without any sticking, squeaking or hitch.
	4) Button rotation	Be sure that the button will not rotate.

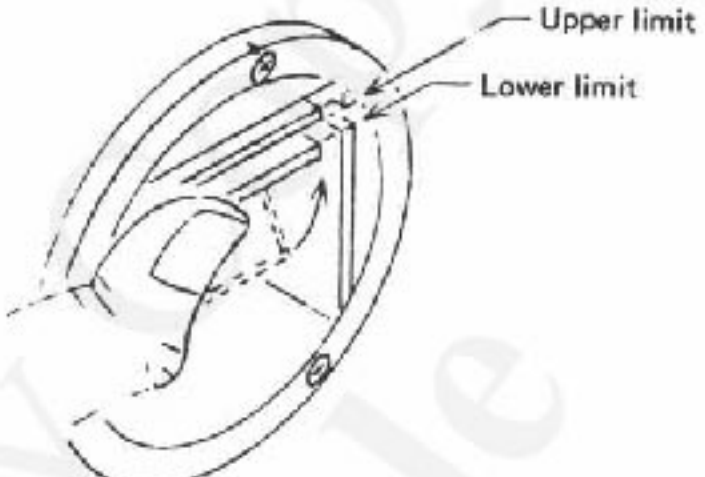
What to inspect	What to check	Checking method or criteria
(Release button)	5) Releasing force	
	6) Releasing position	<p>Be sure that releasing action occurs when, with 240 grams applied to its boss, the button is pressed to the indicated height.</p> 
	7) Locking position	<p>Make sure that the button becomes locked at the indicated position before the winding action is completed.</p> 
5. Film counter	1) Correspondence between index and graduated marks	<p>(1) Where "S" letter is provided, be sure that the index is within the width of this letter, when the back lid is opened and closed.</p>  <p>(2) Where letter "S" or an odd number is used, the deviation, if any, must be within the value indicated.</p> 
	2) "No.1" indication	After or before charging, open and close the back lid and advance three frames of film to see if "No.1" indication occurs as it should.
	3) Stopping position	Requirement: Pointing to (37) and "E" clearly visible.
	4) Accuracy of returning action	Open the back lid to be sure that the counter returns to "S" from any position.
6. Rear cover	1) Condition of skin	(1) Clearance: 0.2 mm max.
		(2) Swells and dents: Not to be appreciably large.
		(3) Bond: The skin should be free from any evidence of coming off.

What to inspect	What to check	Checking method or criteria
(Rear cover)	2) Rattle in fore-aft direction at the time of locking	With or without patrone, the key part should have no rattle.
	3) Hinge rattle	(1) Wooble: There should be no rubbing of the edges of the camera body. (2) Vertical: 0.15 max.
	4) Smoothness of open-close movement	Be sure that the cover moves without any hitch and that it moves smoothly with its own weight.
7. Key	1) Accuracy of action	Make sure that pulling the winding knob out to second position opens the back cover positively and that releasing the pull-out knob allows the key to return home.
	2) Force for closing the rear cover	With the patrone in, a force of 1 to 2.5 kg applied to the patrone part of the cover should close the cover.
8. Pressure plate	1) Direction of plate in place	Be sure that the fixed side is on the hinge side. 
	2) Trueness of plate in place	 $A - B = 2\text{ mm Max.}$
9. Sprocket	1) Tooth position	 $\pm 0.4\text{ mm}$ 21.4 Measure the amount of rattle by pushing it to the mask side.

What to inspect	What to check	Checking method or criteria
(Sprocket)	2) Rattle	 <p>Diagram showing sprocket rattle clearance. Vertical clearance at the top is 0.35 mm. Horizontal clearance on the sides is 0.15 mm. Horizontal clearance at the bottom (at the tooth root) is 1.8 mm.</p>
10. Spool	1) Rattle	 <p>Diagram showing spool rattle and preload. Vertical clearance is 0.3 mm Max. Horizontal clearance is 0.25 mm Max. A weight of 180 - 400g is applied. A 3 mm Max. dimension is also indicated.</p>
	2) Preload	
11. Shutter curtains	1) Curtain frame position	 <p>Diagram showing the shutter curtain frame position. A central rectangle is labeled 'Mask'. The frame is held by 'Clasps' on the sides.</p> <p>Be sure that, before and after charging, the clasps shy away from the mask.</p>
	2) Blur, fading and moire due to leading curtain	There should not be any appreciable blur, fading or moire.
	3) Curtain tensioning	Make sure that the curtain is neither tilted nor sagged and that it is properly tensioned.
12. Rewinding clutch	1) Trueness of rewinding clutch	 <p>Diagram showing the trueness of the rewinding clutch. Two views are shown. The left view shows a 2° angle. The right view shows a 90° angle, with 5° and 10° angles indicated. Points A and B are marked on the right view.</p> <p>A = ordinary range B = (seldom)</p>

What to inspect	What to check	Checking method or criteria
(Rewinding clutch)	2) Accuracy of setting on R side	Be sure that the clutch, when turned by more than 90°, stays firmly set without any tendency to move back. (The clutch should so stay also during winding.)
	3) Reliability of clutch action	Be sure that, with the clutch set on R side, its sprocket freewheels.
	4) Smoothness of action	Make sure that the clutch restores itself smoothly when the subsequent winding action is started.
13. Mode knob	1) Reliability of ASA dial	 <p>Each blank box represents a combination. Be sure that all combinations are available.</p>
	2) Offset between index and graduation mark	
	3) Accuracy of mode lever action	Make sure that a switch-over occurs for certain at each click position.
	4) Smoothness of mode lever motion	The lever should move without any hitch.
	5) Mode lever operating force	 <p>The mode lever should get out of arresting (click) position when acted on with a force of 0.57 ~ 0.82 kg at the arrowhead.</p>
14. Select knob	1) Angle of selecting action	 <p>A = B = C =</p>

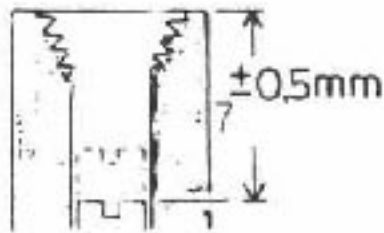
What to inspect	What to check	Checking method or criteria
(Select knob)	2) Knob operating force	Force for disengagement from arresting position (click): $350 \pm 50\text{g}$ Force for turning from one arresting position to another: $90 \pm 20\text{g}$
	3) Confirmation of ON-OFF action	Be certain that the indicating LED in the finder lights up when the change is being made from OFF to ON.
	4) Reliability of CHECK action	Audible sounding and LED lighting should occur without fail.
	5) Reliability of self-timer action	Be sure that the timer starts up upon releasing and operates as accompanied by the audible (sound) and visual (LED) indications.
	6) Self-timer delay	12 ± 3 seconds
	7) LED brightness	In the ambient conditions equivalent to BV15, the light should be clearly recognizable against the sun from a distance of 3 meters.
	8) Flickering interval for SELF mode	ON 250 ± 100 ms; OFF 250 ± 100 ms; Total 500 ± 150 ms
	9) Indication limiter time	45 ~ 120 sec. (tentative)
15. Aperture lever	1) Operating force	Aperture lever should move downward when subjected to the indicated force. 
16. Aperture link ring	1) Operating force	 $50 \sim 250\text{g}$

What to inspect	What to check	Checking method or criteria
17. Movable mirror	1) Smoothness of movement	There should be no hesitation, abnormal noise or hitch in its movement.
	2) Shutter releasing position	
	3) Mirror rebound upon rising	
18. B mount	1) Condition of mount screw	Be sure that the screw is free from any sign of stripping or other malcondition.
	2) Smoothness of removal and fitting	Check to be sure that the reference lens fits and comes off smooth, without any sticking or abrading tendency.
	3) Turning effort	The force required to turn the reference lens should be from 4 to 7 kg-cm (tentative).
19. Mounting seat of manual adaptor	1) Nicks and scratches	There should be neither nicks nor scratch marks in the mounting parts.
	2) Force for pushing in the adaptor	500 ~ 1400 g
	3) Force for pulling out the adaptor	400 ~ 1300 g
20. Release lock	1) Lock voltage	2 ± 0.05 V
	2) Accuracy of locking	Operate the select switch on and off and check to be sure that, at any position of SELF, — (a) Releasing is possible at any voltage from 3.2 V down to the lock voltage indicated above. (b) Locking occurs positively at a voltage level below the lock voltage.
21. Winder	1) Contact	(1) Be sure that the point face is below the contact seat by 0 ± 0.05 mm.
		(2) Contact seat should be below the lower plate by 0.1 ± 0.2 mm.

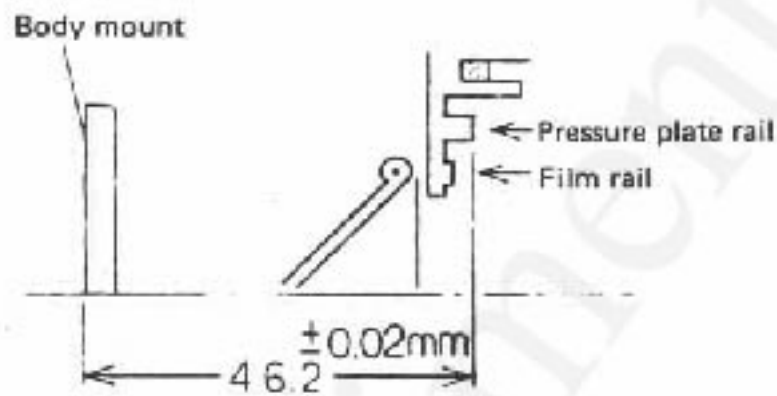
What to inspect	What to check	Checking method or criteria
(Winder)	2) Reliability of action	Check to be sure that no action occurs when the motor drive is attached and that the action takes place for certain when the winder is attached.
	3) Circuit continuity between contact points and insulation resistance	(1) Continuity to be noted with not more than 0.2 ohm indicated by the tester. (2) Insulation resistance to be at least 50 megohms at 500 volts.

II. FUNCTIONAL PERFORMANCE QUALITY

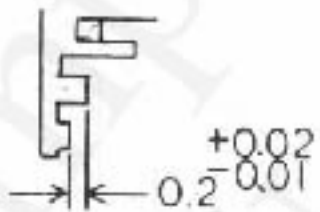
1. **Depth for initiating release in the core**
Releasing action to be initiated at the indicated depth.



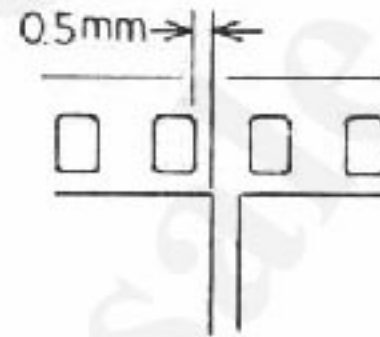
2. **Flange back**
From pressure plate to film rail face



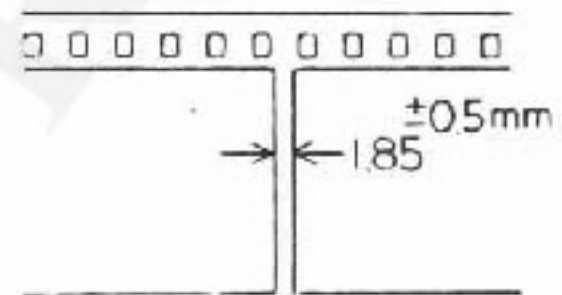
3. **Tunnel distance**



4. **Vertical deviation of picture image face**
The picture image face (frame) to be off perforations.
5. **Perforation position**
Picture frame must be at least 0.5 mm off the perforation.



6. **Distance between picture frames**



7. Indicating accuracy of exposure meter

7-1. Test conditions:

Voltage: 3.15 ± 0.005 V
 Previous illumination: 20,000 lux for 30 minutes or longer
 K value of light source box: $K = 1.3$

7-2. Indicating accuracy requirement:

LEDs should light for the combinations, as follows:

(a) Brightness accuracy (ASA100 F5.6)

Brightness	BV4	BV6	BV8	BV10	BV12	BV14	BV15
LED	1	2	8	30	125	500	1000

(b) Aperture actuating accuracy (ASA100 BV10)

Aperture	F1.8	F2	F2.8	F4	F5.6	F8	F11	F16
LED	250	250	125	60	30	15	8	4

Alternatively (ASA100 BV12)

Aperture	F1.8	F2	F2.8	F4	F5.6	F8	F11	F16
LED	1000	1000	500	250	125	60	30	15

(c) ASA conversion accuracy (F5.6 BV10)

ASA	25	50	100	200	400	800	1600
LED	8	15	30	60	125	125 250 500	250 500 1000

Alternatively (F5.6 BV12)

ASA	25	50	100	200	400	800	1600
LED	30	60	125	250	500	500 1000 and over	1000 and over

8. Curtain speed

Standard speed: 12.0 ms

Difference in speed between first curtain and second curtain to be $0 \cdot 8^{.15}$, with the former being faster.

9. MANUAL timing

With the tool manual adaptor, whose error is not greater than 1%, the following requirements should be met:

Time in second	Reference value for adjustment	Requirement on camera in use
1/8	74.8~209 ms (± 0.75)	(Same as the left)
1/500	1.17~3.27 ms (± 0.75)	(Same as the left)
1/1000	0.5 ~ 2 ms (± 1.0)	(Same as the left)
MINI	0.3 ~ 2.0 ms	
X	15 ~ 3- ms	

(Tentative)

10. Exposure time variation

1 ~ 1/1000 sec. }
X } 0.35 EV max.
AUTO }

(Use the tool manual adaptor to check for 1 ~ 1/1000 second range.)

11. Erratic exposure**12. Delay time**

The first curtain to start closing immediately upon the full opening of second curtain; and the switching-in to occur within 1.5 ms.

13. Contact efficiency

50% or greater for Int. 1 ms; the permissible minimum being 40%.

14. Contact resistance

The resistance is satisfactory if continuity can be noted at 3 volts.

15. Insulation resistance

At least 30 megohms at 50 volts

16. MANUAL exposure time where voltage varies

Time variation for 3.2 V down to lock voltage should be within 0.3 EV.

17. Auto exposure accuracy

The following requirements should be satisfied under the conditions of ASA100, F5.6, two new batteries of 3.15 ± 0.01 V and no previous illumination:

Brightness	Center value	Reference value for adjustment	Requirement on camera in use
BV 15	+0.3	-0.15 ~ +1.2 EV	-0.45 ~ +1.5 EV
BV 14	+0.3	-0.15 ~ +1.2 EV	-0.45 ~ +1.5 EV
EV 12	+0.1	-0.5 ~ +0.9 EV	
EV 11	0	-0.6 ~ -0.85 EV	-0.75 ~ +1.0 EV
EV 10	-0.1	-0.7 ~ +0.75 EV	
EV 8	-0.25	-0.9 ~ +0.65 EV	-1.0 ~ +0.75 EV
BV 6	-0.3	-1.2 ~ +0.4 EV	

18. ASA selecting accuracy

The following tabulated requirements are deviations from actually measured value under BV8, F5.6 and ASA 100:

ASA selected	Reference value for adjustment	Requirement on camera in use
400	-0.35 ~ +0.65EV	-0.35 ~ +0.65EV
800 *1	-0.75 ~ +1.25EV	-0.75 ~ +1.25EV
1600 *2		

NOTE:

*1. There must be a deviation of at least EV from actually measured value at ASA400.

*2. There must be a deviation of at least 0.3 EV from actually measured value at ASA800.

19. Temperature characteristics

Deviations from the values at normal temperature must be within the following limits:

1) MANUAL and X exposure

0.2 EV max. at -10°C

2) AUTO (ASA25 ~ 400)

At -20°C ~ +50°C

Equivalent of 1/250 and under 0.3 EV

Equivalent of 1/500 and under 0.4 EV

ASA800 ~ 1600

The limit is higher by 0.3 EV than the above-indicated limit.

20. Humidity characteristics

Leave the camera in a controlled atmosphere held at 20°C ~ 25°C and 90 ±5% relative humidity for 2 hours, after which the exposure time is to be measured to determine the deviation from the reference value noted before the camera is put to the test.

The deviation must be not greater than 1 EV for equivalent of AUTO, ASA100, 2 sec.

NOTE:

There should be no evidence of abnormal condition with respect to releasing action and speed.

21. Release lock voltage

2 ±0.05 V

22. Battery check voltage

This voltage to be not lower than the lock voltage but not higher than 2.2 volts.

(Check indication should cease in the above voltage range.)

23. Change in exposure for voltage change

This change must be less than 0.3 EV for the range from 3.2 V to pre-lock voltage in both AUTO and MANUAL modes.

24. Current consumption

Selector switch position	Current
OFF	mA
ON	mA
CHECK	mA
SELF TIMER	mA

25. Leakage current

Not greater than 1 μA when selector switch is OFF.

26. Protective circuit

Put in the batteries the other way around to reverse the polarity; under this condition, no rupture should occur in IC and capacitor.

27. Maximum exposure time

The shutter should close in 2 to 20 seconds in complete dark when operated in AUTO and ASA100.

28. Finder-indication limiter time

45 ~ 120 sec. (tentative)

29. Self-timer interval

12 ±3 sec.

30. SELF flicker interval

ON 250 ±100 ms; OFF 250 ±100 ms; and Total 500 ±150 ms.

31. Finder viewing

-0.5 to 0.5 dioptic value

32. One-side blur

Not greater than 0.25 mm as compared to the center.

33. Accuracy of focal plane position

Optical difference between film rail race and focal plane to be within the following limit:

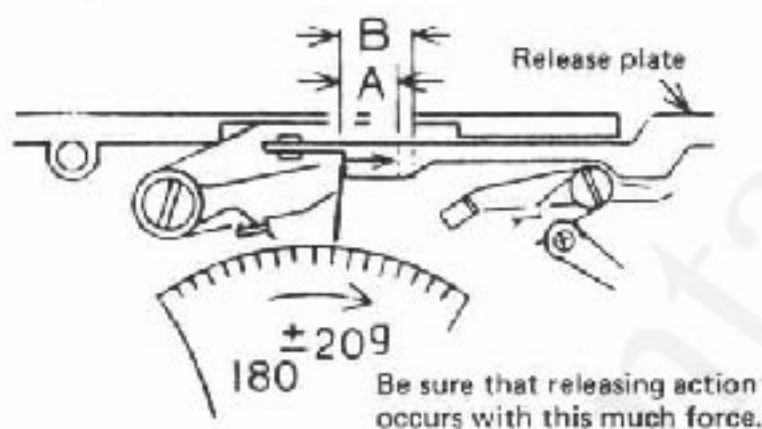
- 1) When tool is fitted. $+0.51 \pm 0.02$ mm
- 2) At center, when optical path is through focussing glass. $+0.05 \pm 0.02$ mm

34. Winder

Operating force and stroke of release plate.
(Check with bottom plate removed.)

A = Shutter releasing position 2 ± 0.4 mm

B = Stopping position 2.5 mm max.



ORDER OF DISASSEMBLY

C. ORDER OF DISASSEMBLY

CONTENTS



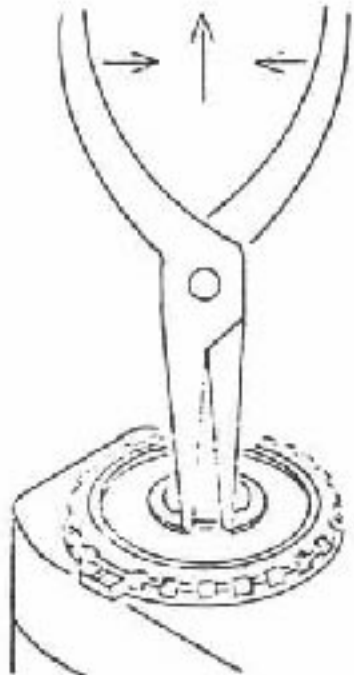
1. ZC200200 TOP COVER	C-2
2. ZC200500 REAR COVER	C-3
3. LC409100 FOCUSING SCREEN	C-4
4. ZJ131000 FRONT CASTING	C-6
5. ZC200300 FPC-1	C-8
6. ZJ132400 SHUTTER CURTAIN	C-9
7. ZJ132300 S BASE PLATE	C-11
8. CE127000 WINDING GEAR	C-12
9. ZJ131100 MS BASE PLATE (MAIN SW)	C-14
10. ZJ130400 SIDE PLATE L	C-15
ZC205100 SIDE PLATE R	C-15

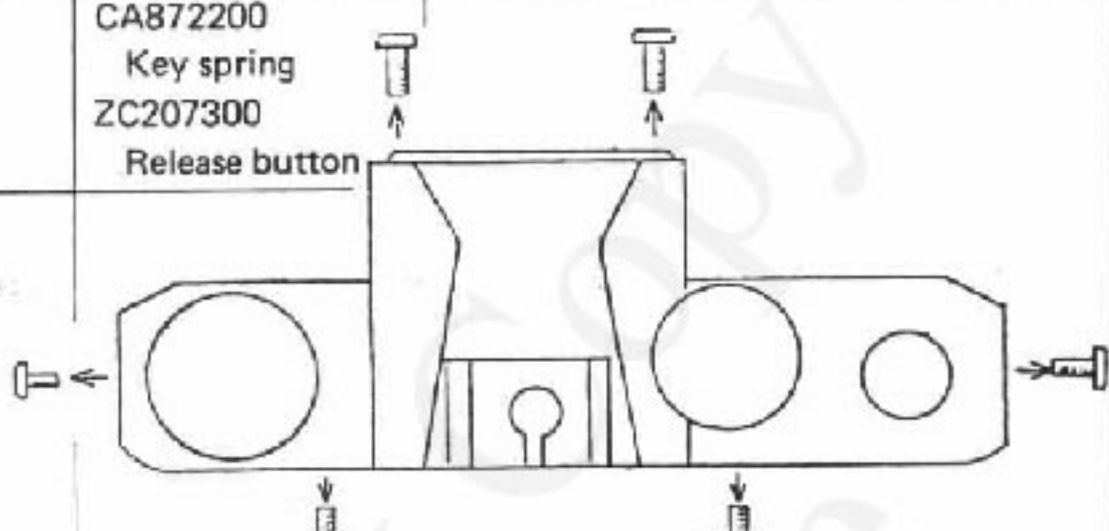
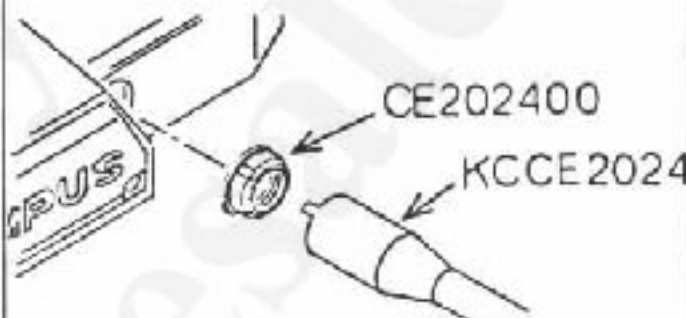
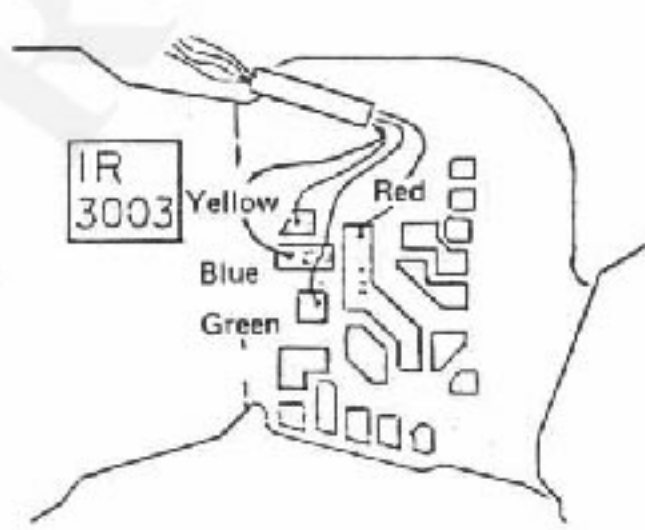
NOTE:



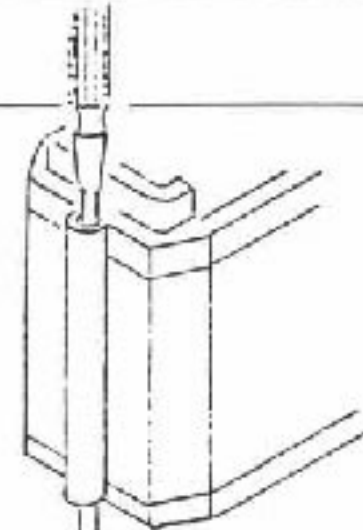
Indicates parts that should not be touched directly by bare hand because special surface treatment is applied. Wear fingerstalls or use tweezers.

1. ZC200200 Top Cover

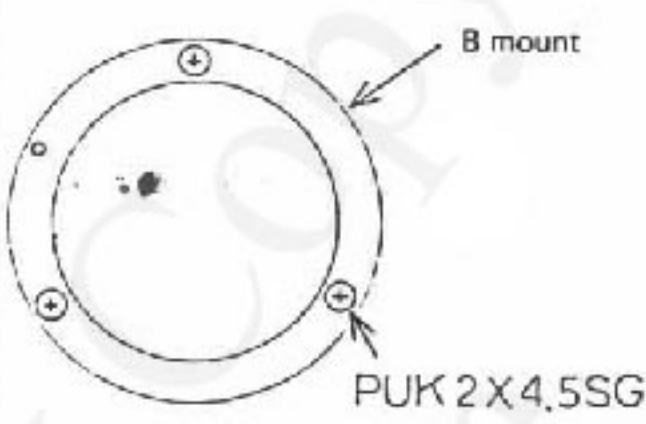

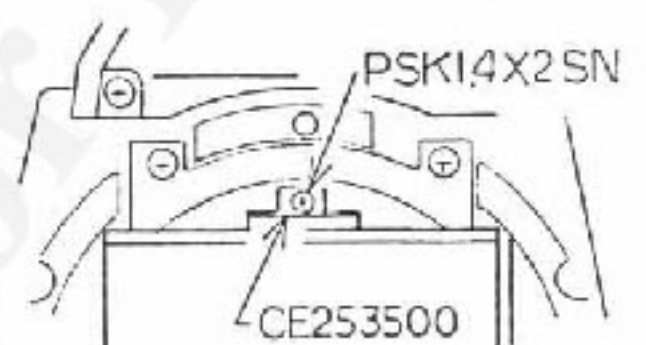
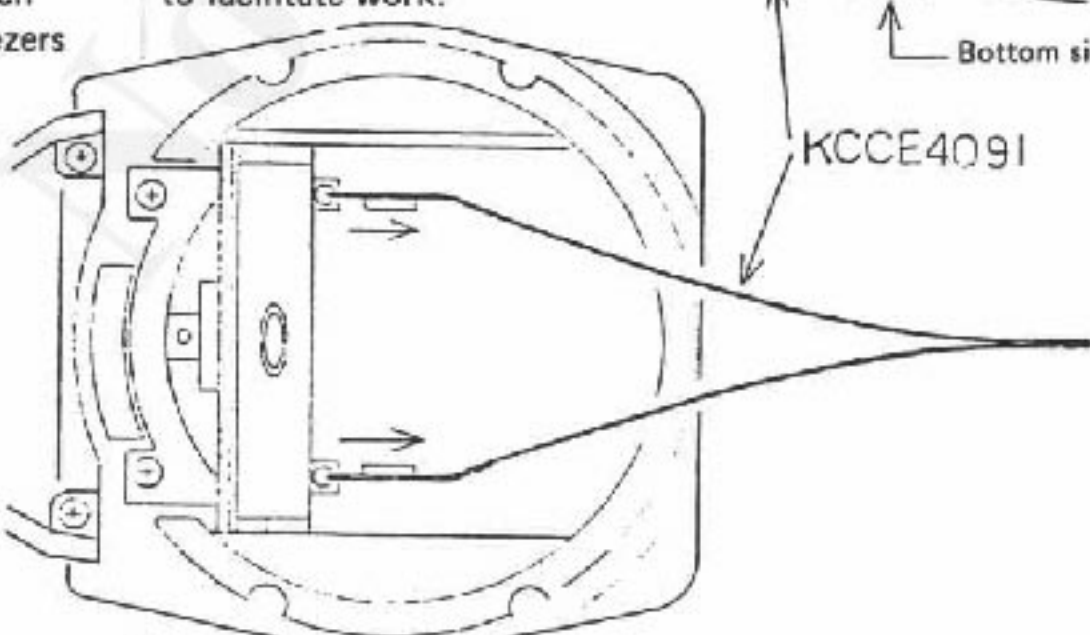
Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
CE200900 FW lever holder	1	KCCE 2009	ZC207200 Winding lever CE204200 FW lever washer	
CE201800 R screw	1	KCCE2119 R shaft holder	CE201700 R spring ZC208300 R knob	
SC0158 MR90	1	OT0065 Stop ring pliers	CE201600 (204300) R plate ZC208500 R change	

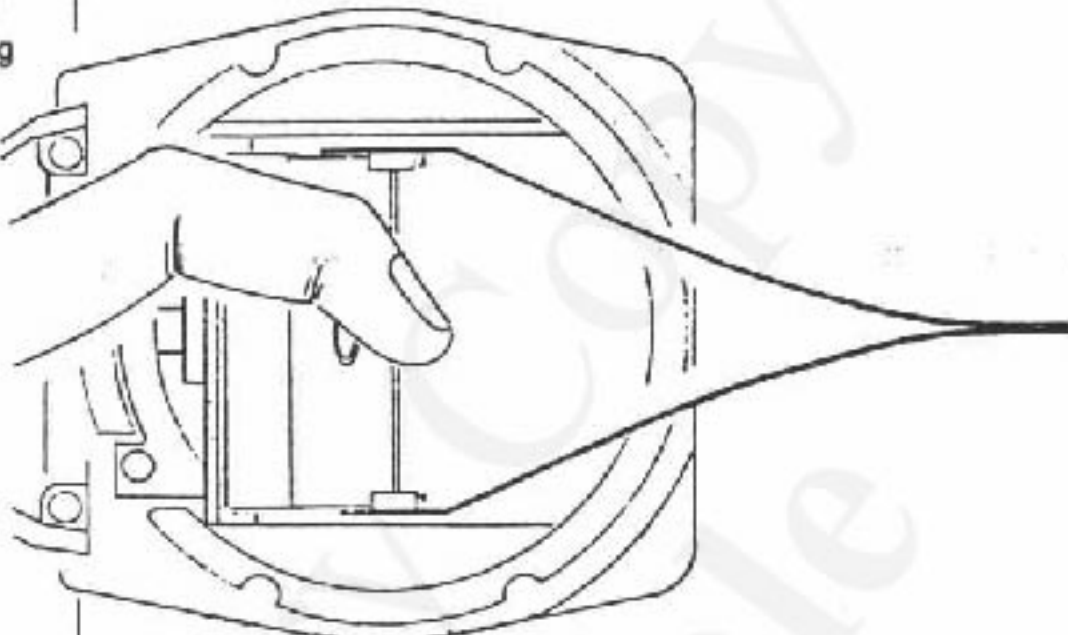
Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
PUK1.7-410SG Screw	4		CA872200 Key spring ZC207300 Release button	
PUK1.7-416SG M washer	2			
CE202400 M washer	1	KCCE2024 Driver		
Undo soldered connection of FPC.	4		ZC200200 Top cover	
CAUTION: Be sure to refer to VI-2, in which how to put on the top cover is explained. Putting on this cover incorrectly is likely to give rise to trouble.				

2. ZC200500 Rear Cover (Top cover, ZC200200, is assumed to be off.)

Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
PSK2x4SE Screw	2		ZJ133700 Bottom plate	
CE210800 Shaft	1	No. 2 screwdriver	ZC200500 Rear cover	

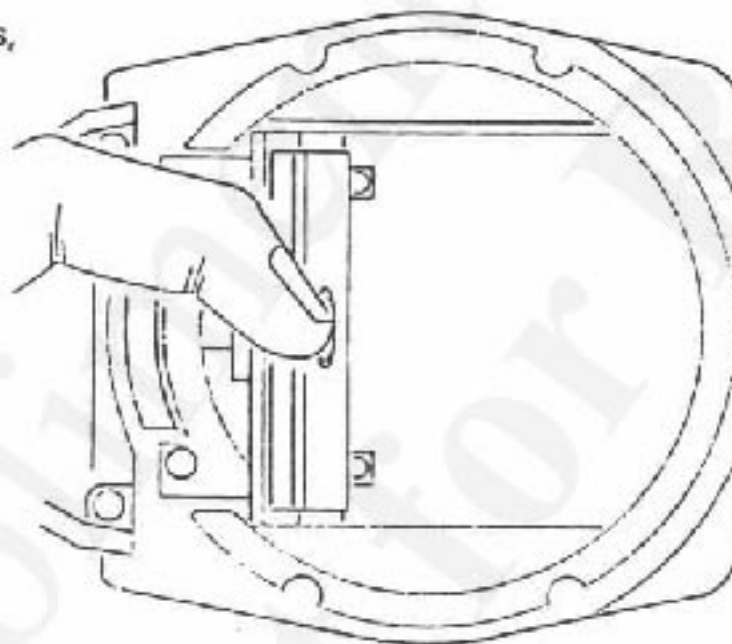
3. LC409100 Focussing Screen

Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
PUK2x4.5SG Screw	3		CE254600 B mount CE254500 Front cover ZJ130600 Connecting ring	 <p>B mount</p> <p>PUK 2 X 4.5SG</p>
CE252600 L cover	1		CE252600 L Cover might not come off easily because it is attached with PLYOBOND. To facilitate its removal, apply a small amount of the mixture liquid.	 <p>CE252600</p>
PSK1.4x2SN Screw	1		CE253500 F fastener	 <p>PSK1.4X2 SN</p> <p>CE253500</p>
LC409100 Focussing screen	1	KCCE4091 Screen tweezers	Lay the camera down on its side to facilitate work.	 <p>Bottom side</p> <p>KCCE4091</p>

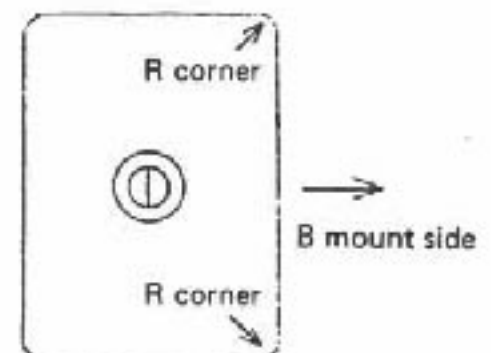
Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
		LC409100 Focussing screen		Pick the focussing screen with the forceps, as shown, and pull it up.

Fitting and setting the focussing screen in place.

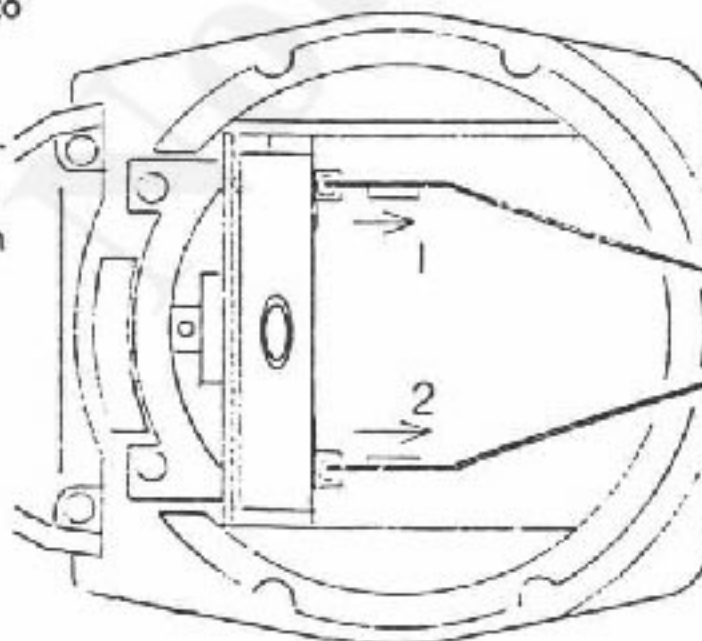
- (1) Using the tweezers, set the screen in place, as shown.



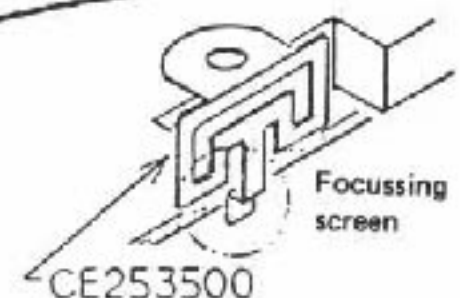
Position the screen with its matted face coming on pentaprism side, and insert it as shown.





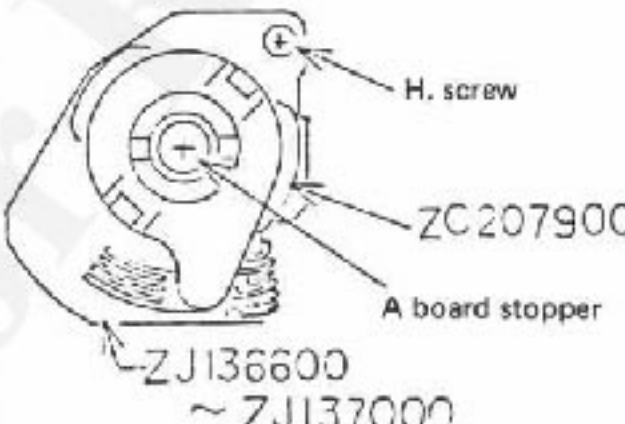
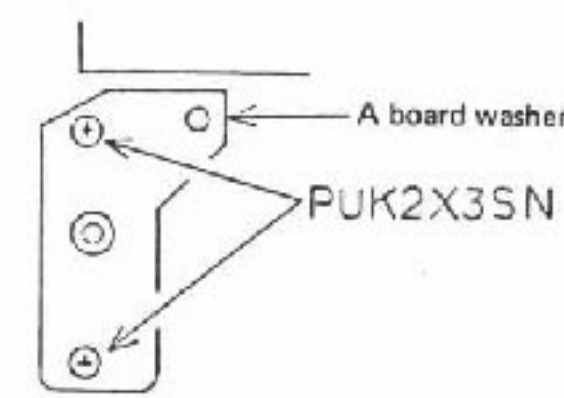
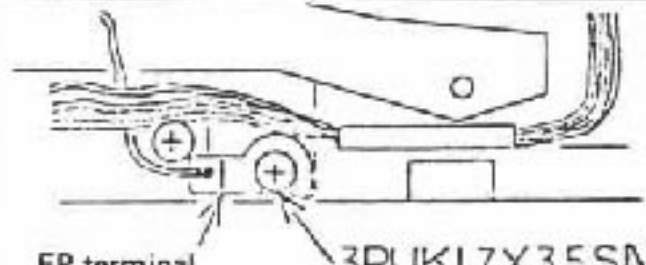
- (2) Hitch the tweezers to holes 1 and 2, and give a pull to these holes in the numbered order in order to true up the screen in place.

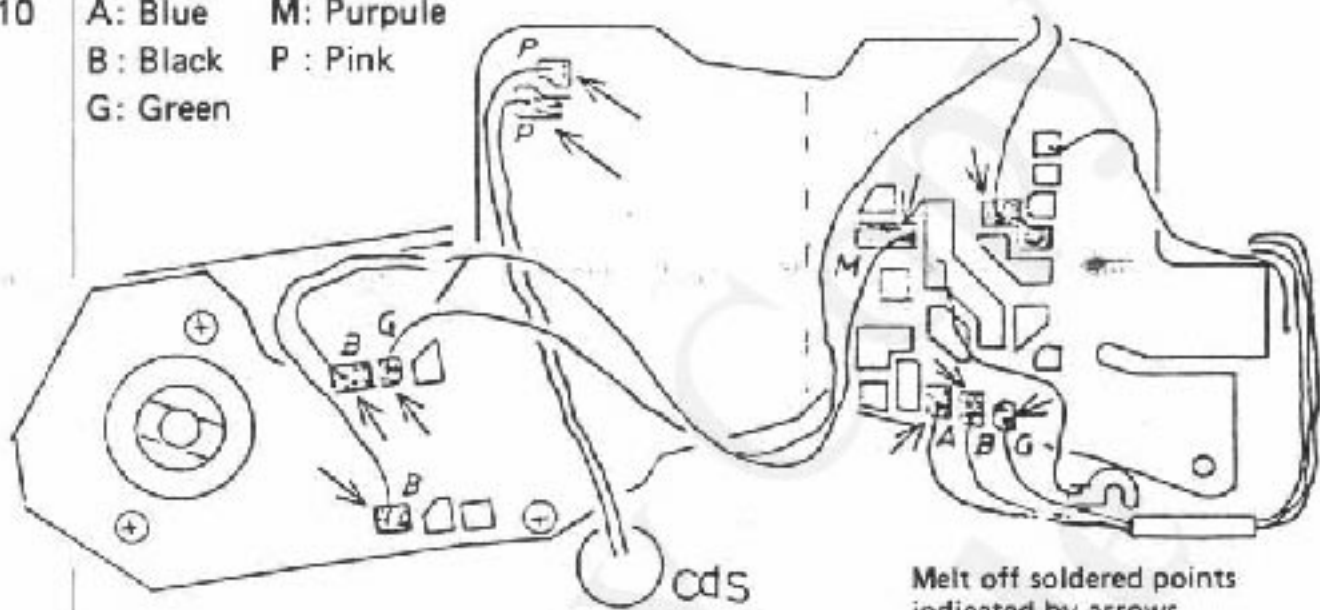
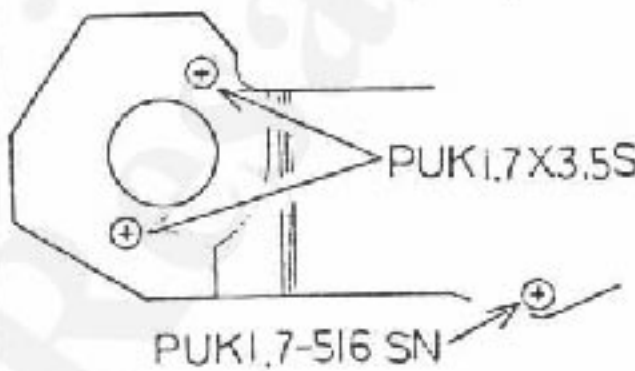
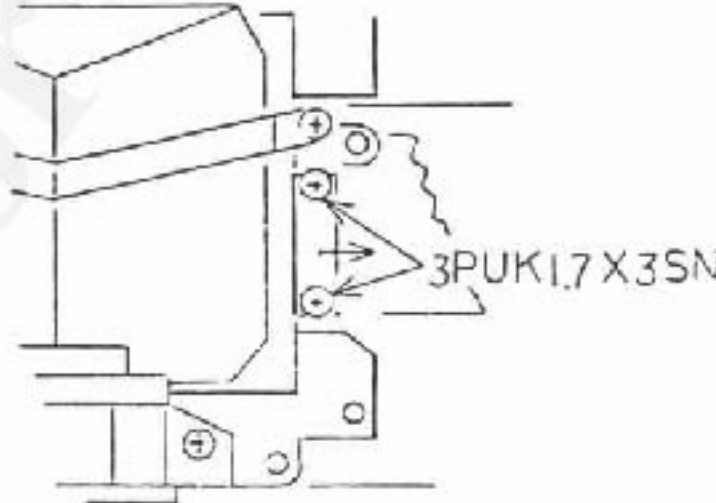
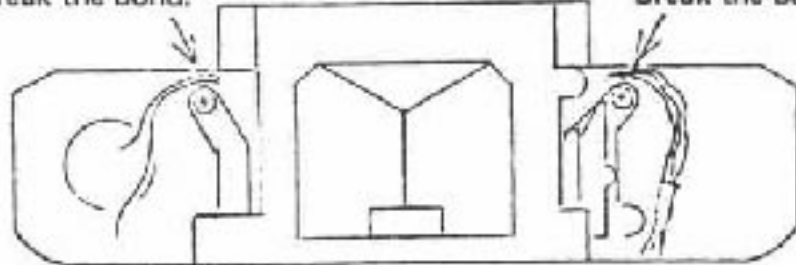
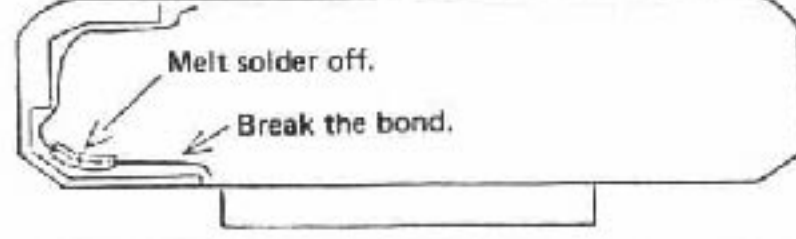



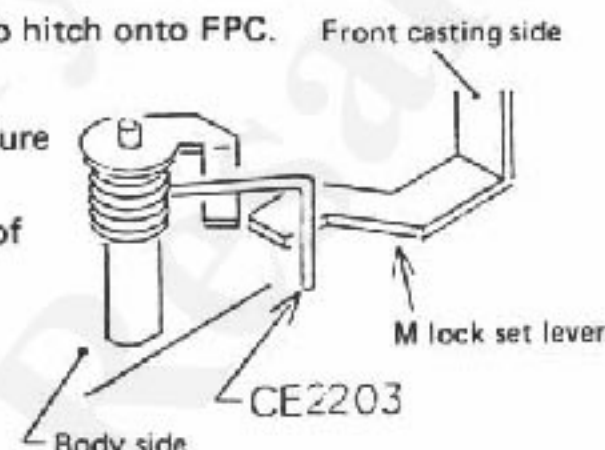
- (3) Position CE253500 F Fastener, as shown below:



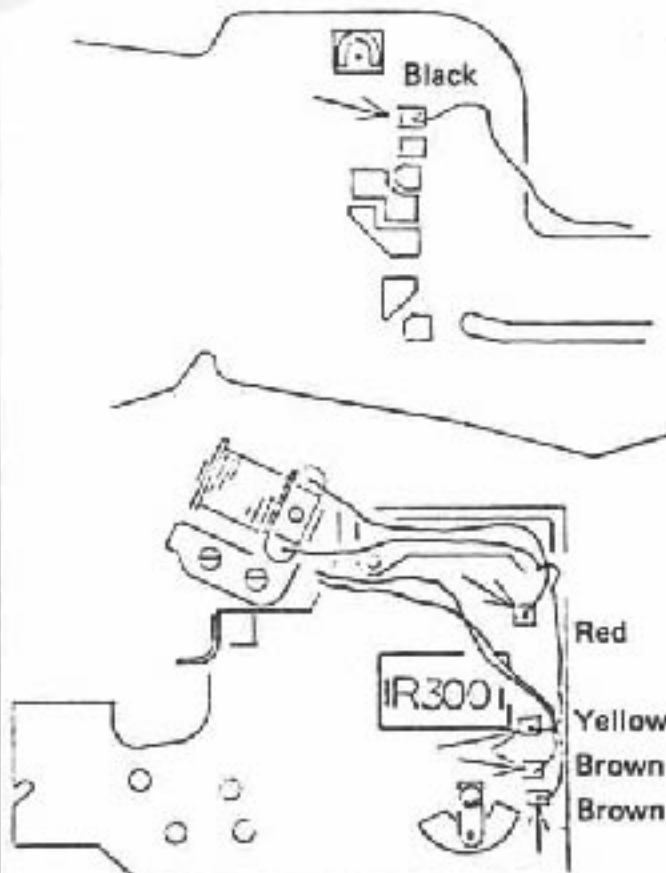
4. ZJ131000 Front Casting (Top cover, ZC2002, is assumed to be off.)

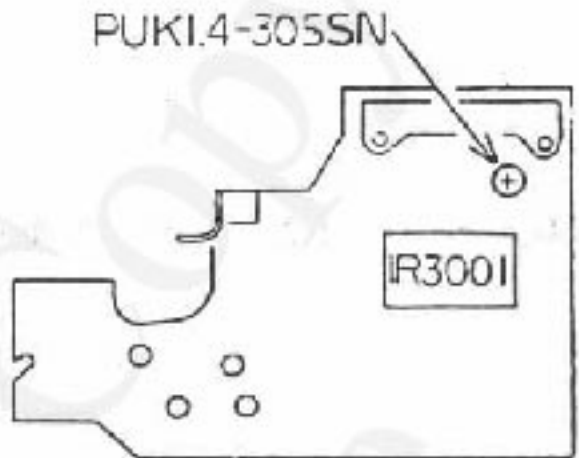
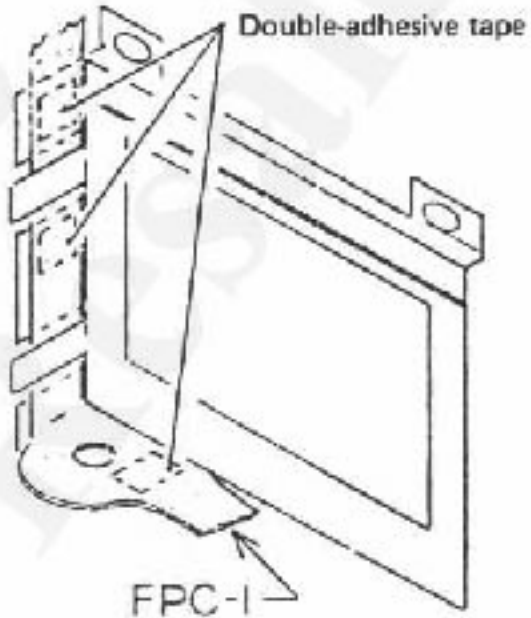
Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
CA915600 Light proof padding	2			 Light proof padding
ZC208400 Cover plate	1			1. Push up the mirror with a fingertip. (Be sure that the shutter is not in charged condition.)  Cover plate 2. Lift it in the arrow direction and take it out.
CE202800 H. screw CE203400 A board stopper	1 1		ZC207900 A holder ZJ136600 ~ ZJ137000 A board	 H. screw ZC207900 A board stopper ZJ136600 ~ ZJ137000
PUK2x3SN Screw	2		CE202500 A board washer	 A board washer PUK2X3SN
3PUK1.7x3.5SN (Be sure to re- move this.)	1		CA889700 FP terminal	 FP terminal 3PUK1.7X3.5SN

Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
Undo soldered connections and disconnect lead wires.	10	A: Blue B: Black G: Green M: Purple P: Pink		Melt off soldered points indicated by arrows.
PUK1.7x3.5SN Screw PUK1.7-516SN Screw	2 1		CE211800 R shaft holder CE211900 R shaft Others	
3PUK1.7x3SN Screw	2		CE231400 L frame	
Break the bond securing lead wires.	3			Break the bond.
Undo soldered connections.	1			Melt solder off. Break the bond.

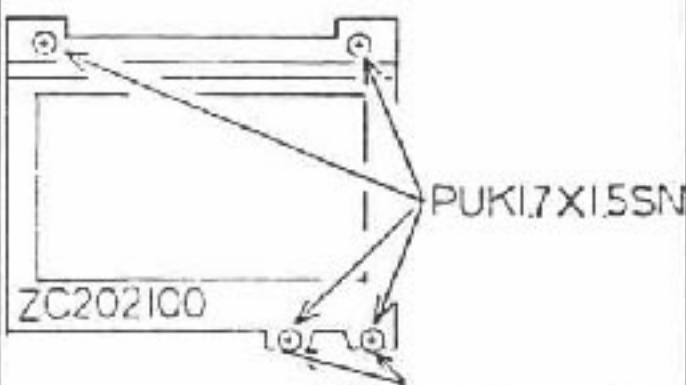
Parts to remove	Q'ty	Tool to use	Parts coming off	Remarks
CE211500 Front leather L CE211600 Front leather R CE915500 Front screw	1 1 4			<p>CA915500 Front leather L</p> <p>Front leather R</p> <ul style="list-style-type: none"> Remove the front cover by pulling it out from top side. Be sure not allow it to hitch onto FPC. <p>NOTE: When reassembling, be sure to hitch the M set lock lever onto the free end of CE220300.</p> 

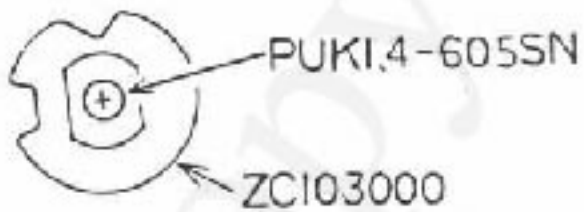
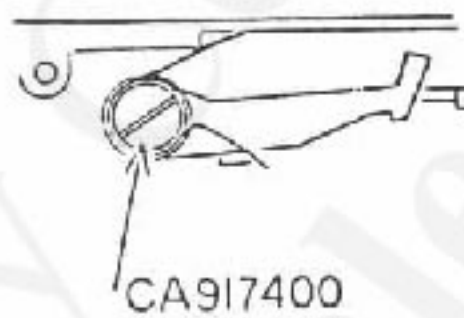
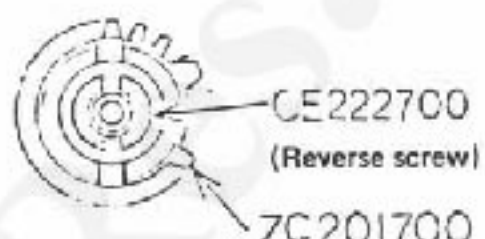
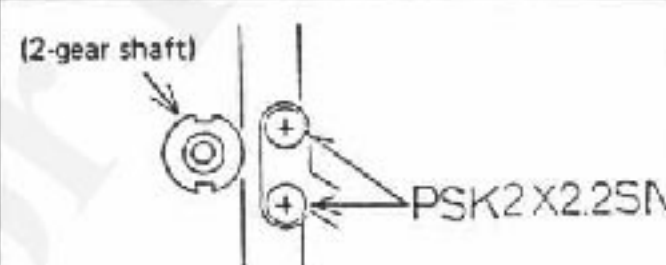
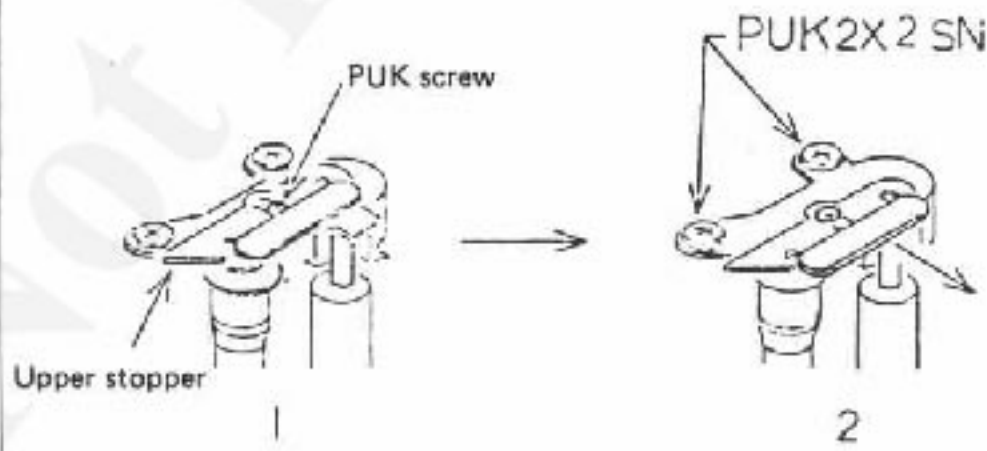
5. ZC200300 FPC-1 (ZJ131000 Front casting is assumed to be off.)

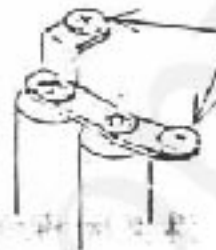
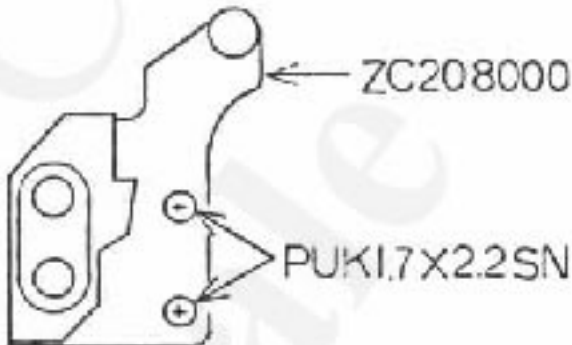
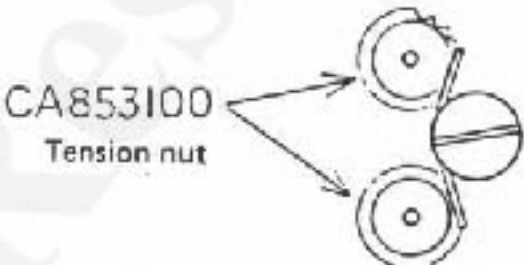
Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
Undo soldered connections and disconnect lead wires.			<p>(Brown lead wires need not be discriminated from each other when soldering them to the spots indicated.)</p>	

Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
PUK1.4-305SN Screw	1		ZJ200300 FPC-1	 <p>PUK1.4-305SN</p> <p>IR3001</p>  <p>Double-adhesive tape</p> <p>FPC-1</p> <p>(Bear in mind that tape whose both faces are adhesive is used in securing FPC-1 at the indicated locations.)</p>

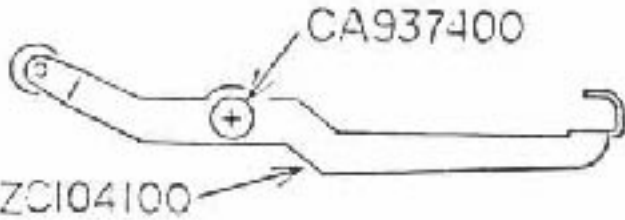
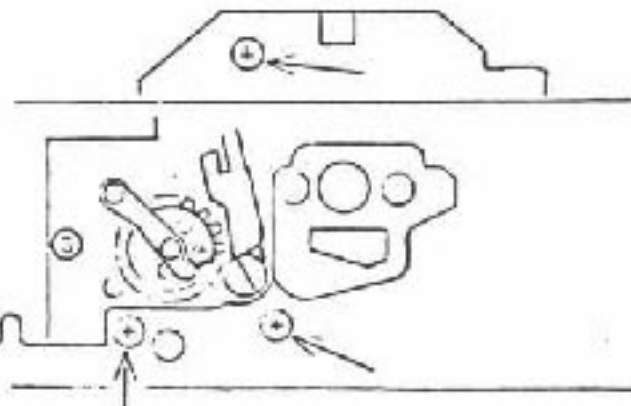
6. ZJ132400 Shutter Curtains (Be sure that ZJ200300 FPC-1 is in place.)

Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
PUK1.7x1.5SN Screw	4		ZK202100 Frame	 <p>PUK1.7x1.5SN</p> <p>ZK202100</p> <p>(Just loosen these screws.)</p>


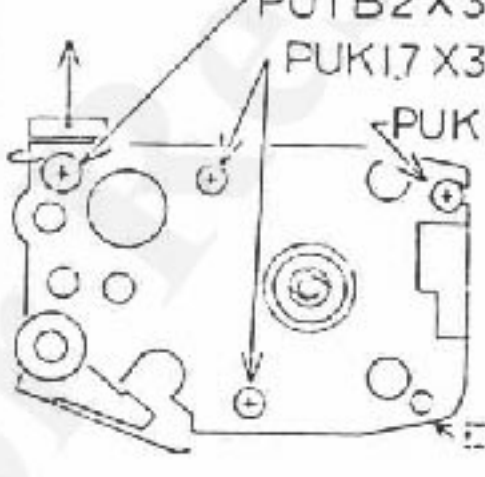
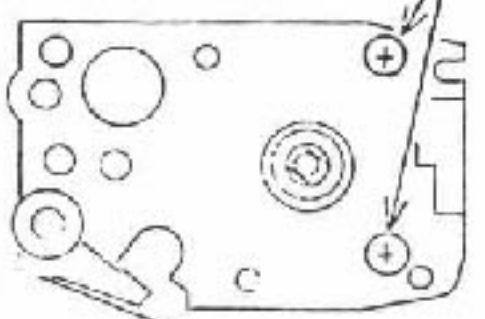
Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
PUK1.4-605SN Screw	1		ZC103000 3 gear CA885100 3 gear spring	
CA917400 L holder	1		CA882600 Lock spring CA882400 Lock lever CA917600 L holder washer CA882100 Lock spring	
CE222700 ME guide	1		ZC201700 2 gear B1 (11 pieces)	
PSK2x2.2SN Screw	2			
PUK2x2SN Screw	2			 <p>Displace the upper stopper in sliding direction while securing A and B; and then remove the two screws, PUK2x2SN.</p>

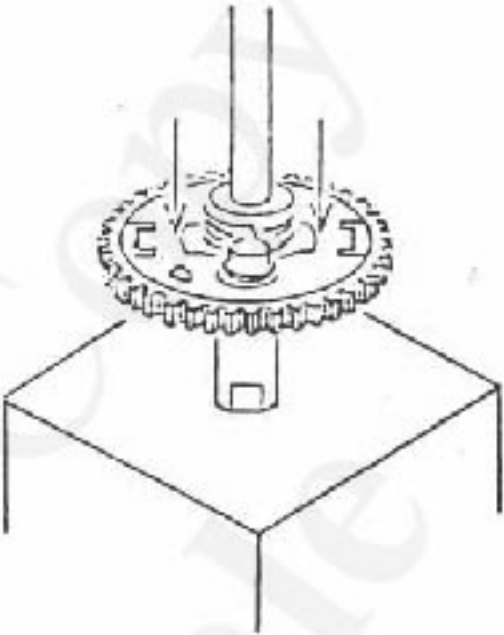
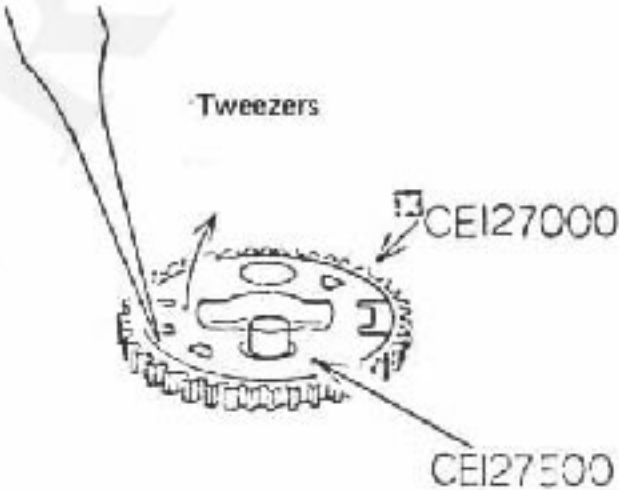
Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
PUK2x2SN Screw	2			 <p>PUK 2 X 2 SN</p>
PUK1.7x2.2SN Screw	2		ZC208000 SW base plate	 <p>ZC208000</p> <p>PUK1.7X2.2SN</p>
CA853100 Tension nut	2		ZJ132400 Shutter curtain CA852900 Roller B NW1.5-425UO	 <p>CA853100 Tension nut</p> <p>CA853100 Tension nut is secured rigid by means of ALON ALPHA, and may not come off easily: if so, prise it with No.4 screwdriver and break the shaft to permit its removal.</p>

7. ZJ132300 S base plate(The parts mentioned in the preceding pages are assumed to be all off.)


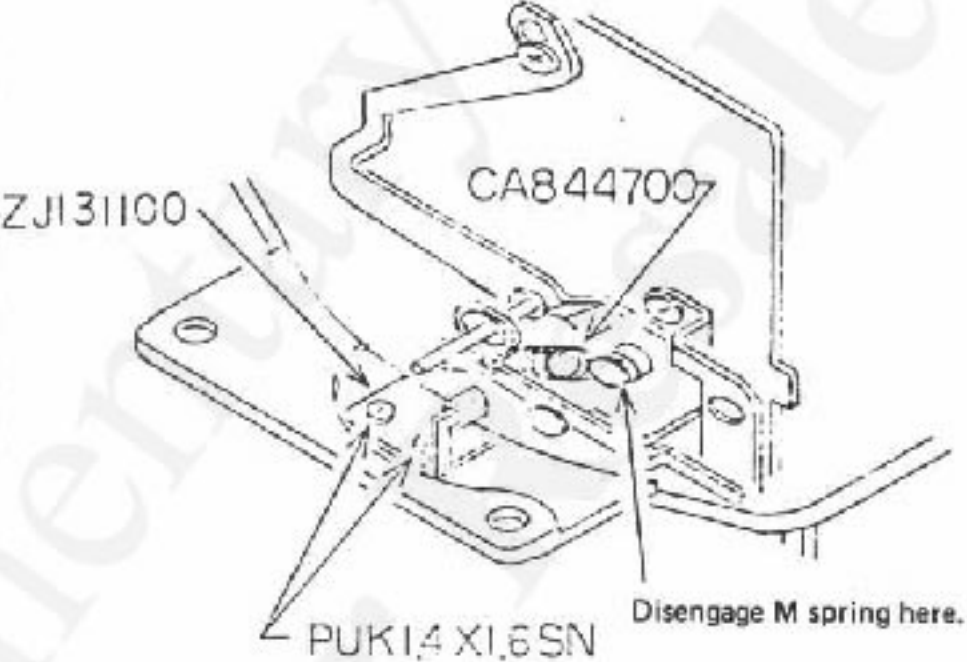
Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
CA937400 M lever shaft	1		ZC104100 KM lever	 <p>CA937400</p> <p>ZC104100</p>
PSK2x2.8SN Screw	3		ZJ132400 S base plate	
Undo the soldered connection of the black lead wire.	1			

8. CE127000 Winding Gear (ZC200200 Top cover is assumed to have been removed.)

Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
CE128900 Film counter stopper	1		CE236400 Fil counter CE128800 Film counter spring 2	 <p>1. Push out CE128900 in the arrow direction.</p> <p>2. Raise CE236400 Film counter and then let it go to remove tension from Film counter spring.</p> <p>3. Raise lug plate again, and take out lug spring.</p> <p>4. For the method of reassembly, refer to the repair procedure.</p>
PUK1.7x3SN Screw PUK1.7x4SB Screw PUTB2x3SN Screw	2 1 1		ZC200600 FW base ZC202700 K knob	 <p>Pull out K knob in the arrow direction, and pick out FW base.</p>
PUTB1.7x3SB Screw	2		CE126600 Lower base plate ZJ131700 Winding gear 1 ZC201000 Idler CE128300 Film counter gear	 <p>Removal of the screws indicated allows Upper base plate and Lower base plate to separate.</p>

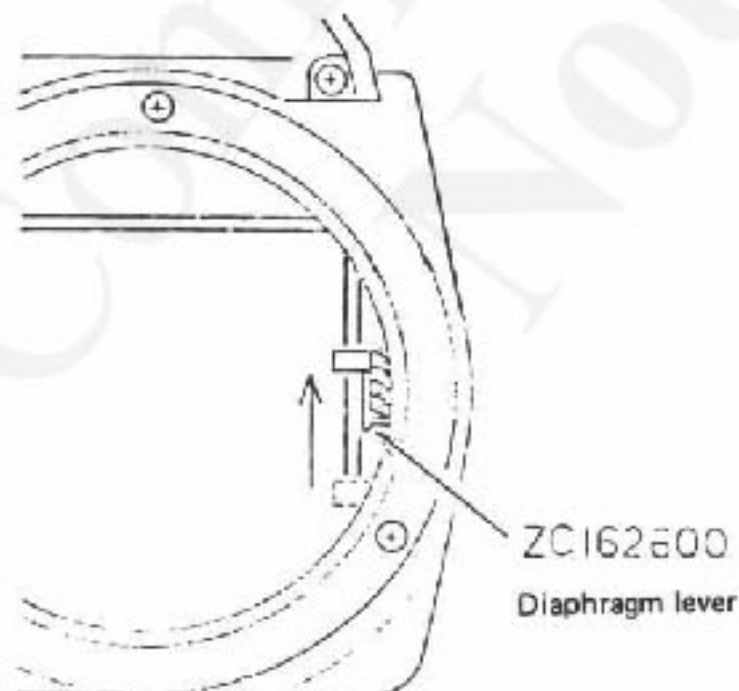
Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
			Winding shaft and winding gear come off.	 <ol style="list-style-type: none"> 1. Rest the winding shaft on the block, as shown. 2. Using such as forceps, push down the gear by putting the forceps to the two spots indicated by arrows.
			CE127500 Roll spring CE236500 Roll spring 2 CE236400 Film counter CE127400 Spring ZJ131600 Winding pawl ☐ CE127000 Winding gear	 <p>Using tweezers, lift CE127500 Roll spring and pick it out.</p> <p>For the method of reassembly, refer to the repair procedure.</p>

9. ZJ131100 MS Base Plate (Main Switch) (ZJ131000 Front casting is assumed to be off.)

Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
CE058200 F screw	2		CE057900 F contact CE066500 Insulator CA890000 Insulation washer	
CA844700 M spring (Disengage only one end of the spring, as shown.)	1/2			
PUK1.4x1.6SN Screw	2	ZJ131100 MS base plate		

9-1

Tips on removal of ZJ131100 M base plate:
Have the diaphragm lever, ZC162600, raised as shown on the left before removing ZJ131100 M base plate.



9-2

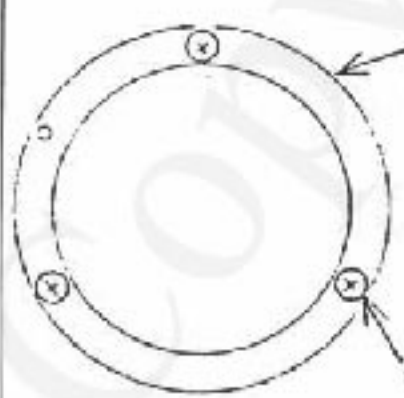
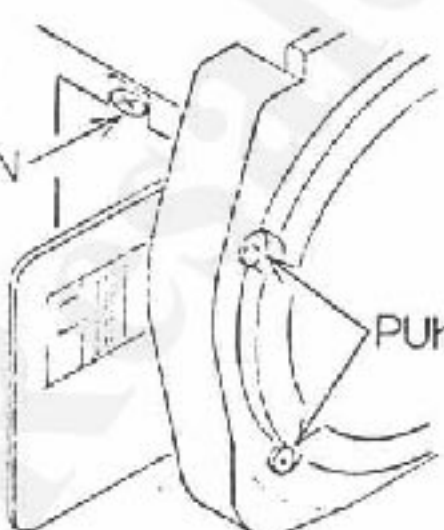
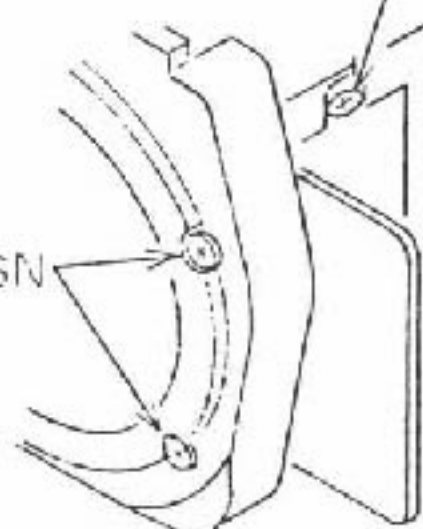
The job of re-hitching the hook eye of M spring, CA844700, onto the stud will be facilitated if a tool like this one is used.



Spring hitching tool

(Use this when re-hitching M spring.)

10. ZJ130400 Side Plate L, ZK205100 Side Plate R (ZJ131000 Front casting is assumed to be off.)

Parts of remove	Q'ty	Tool to use	Parts coming off	Remarks
(PUK2x4.5SG) Screw	3		CE254600 B mount CE254500 Front cover	 B mount PUK 2X4.5SG
PUK2x3SN Screw PUK2x3.5SN Screw	2 1		ZC205100 Side plate R	 PUK 2X3.5SN PUK 2X3SN
PUK2x3SN Screw PUK2x1.8SN Screw	2 1		ZJ130400 Side plate L	 PK U2X1.8SN PUK 2X3SN