



# CHECK POINTS

(INSPECTION STANDARD)

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CHECK POINTS  
(INSPECTION STANDARDS)

GENERAL FUNCTIONS


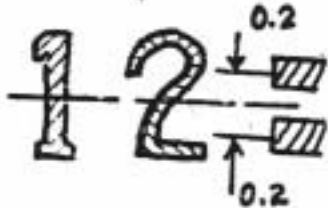
Major Check Point	Relative Functions to be checked	Checking Method or Points of Special Attention
1. Viewfinder	(1) Focus  (2) Eyepiece Frame	1) No dirt or filth on it. 2) No blurring at the rim of the viewfield. 3) The edge of the prism should not be observed conspicuously.  1) When focussed at $\infty$ or at a distance desired, there should be no discrepancy between the reading on the focusing ring and the actual distance from subject to the film surface.  1) No deformation, rattling, nor space between the top cover. The magnifier should be mounted onto it firmly.
2. R Knob (CA8725)		1) No rattling vertically. (Horizontal tolerance, B-F & R-L, should be 0.1mm or less in the stored position, and 0.3mm or less at the tip of the knob when pulled out.)  2) Smooth and accurate rotation for rewinding.  3) Can be pulled out or pushed in smoothly and accurately.  4) The knob can be further pulled out (second step) to unlock and open the rear cover, but should auto-

Major Check Point	Relative Functions to be checked	Checking Method or Points of Special Attention
		<p>atically return to the original position.</p>
	(1) R Lever (CA8726)	<ol style="list-style-type: none"> <li>1) Should be opened or closed smoothly and accurately.</li> <li>2) CA8731 (R lever spring) should be functioning effectively.</li> <li>3) The knob can be rotated smoothly.</li> </ol>
	(2) Opening and closing of the rear cover	<ol style="list-style-type: none"> <li>1) Accurate engagement. No friction against the top and the bottom covers. Should be smoothly operable with self-weight.</li> </ol>
	(3) Locking function	<ol style="list-style-type: none"> <li>1) Should be smoothly operable without an extreme friction, nor a squeak.</li> <li>2) When the R knob is pulled out for the second step, make sure it unlocks.</li> <li>3) When the R knob is released, the lock should return to its original position.</li> </ol>
3. Film Advance Lever (CA8749)		<ol style="list-style-type: none"> <li>1) Tolerance: <ul style="list-style-type: none"> <li>At the axis, vertically = 0.1 or less</li> <li>At the tip of the lever = 0.4 or less</li> <li>Horizontally, back &amp; forth, or right and left = 0.1 or less</li> </ul> </li> <li>2) Film should be advanced smoothly (without difficulty at the start of the lever motion, an extreme friction, uneven movement, or squeaks.)</li> </ol>

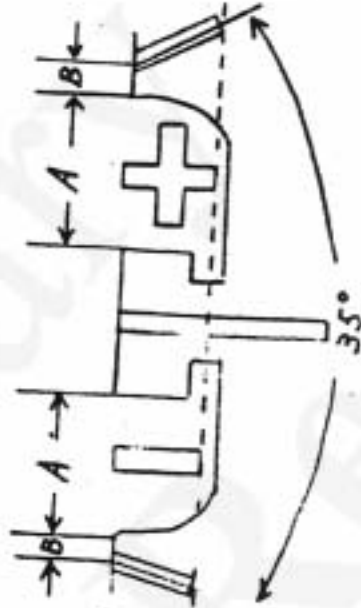
Major Check Point	Relative Functions to be checked	Checking Method or Points of Special Attention
		<p>3) Upon a full stroke or winding motion, film should be advanced by a full frame and the shutter and the mirror should be charged accurately.</p> <p>Further, even with a quick winding action, the shutter should be set accurately.</p>
		4) The film advance lever should return to its original position regardless of whether the film is loaded or not.
		5) The preadvancing movement of the lever should be smooth.
		6) In its still position, the lever should be in contact with the ASA dial or within 0.8 from the dial.
	(1) Room between CA8753 (Cover) and CA9083 (Holder)	1) During the film advancing motion, CA8753 and CA9083 should not hit each other.
	(2) Film advance by short strokes	1) Even with short strokes, the film should be advanced properly and locked in position accurately.
	(3) Prevention for double film-advance	1) Film cannot be advanced consecutively for the second frame without shutter release.
	(4) Film release	1) Upon shutter release, the film can be advanced for the subsequent frame.

Major Check Point	Relative Functions to be checked	Checking Method or Points of Special Attention
(5) Shutter release prior to or during the film advancing motion	1)	It should not allow the shutter release action prior to or during the film advancing motion. Be cautious at the point immediately prior to completion of the film advancing motion, particularly.
(6) Shutter Release	1)	No vertical tolerance, but 0.2 or less at the tip of the lever permissible.
	2)	Smooth and accurate release action (without friction, unevenness, squeak or other unusual noises).
	3)	The release button should not rotate.
	4)	Upon completion of the film advance movement, the shutter can be released. Other than that, the shutter release button may be pressed in only about 0.05 - 0.15 but not for the full stroke.
(7) Film Counter	1)	The number should progress by 1 accurately upon completion of the film advancing motion, but not when the rear cover is opened.
	2)	When the number plate stops at (37), "E" should also be visible.
	3)	When the rear cover is opened, the number should return, accurately, to the S position.

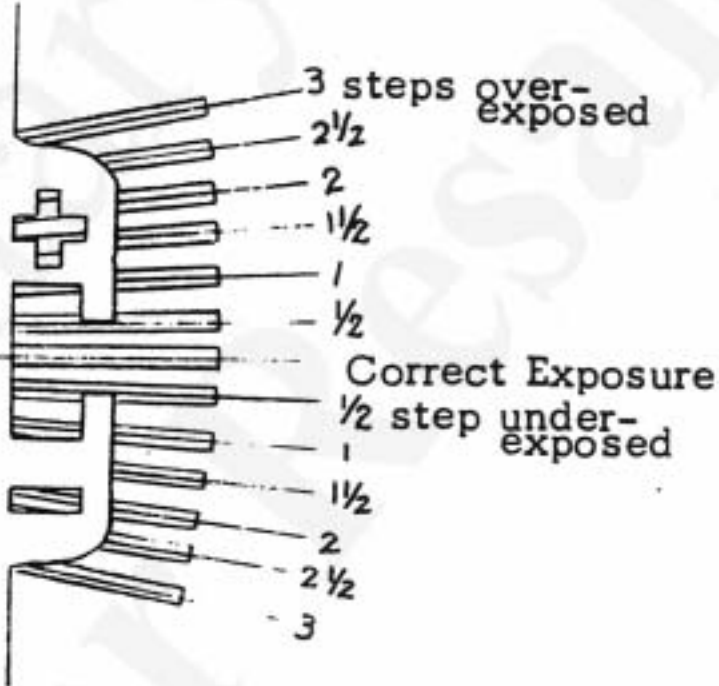


Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
	<p data-bbox="1131 494 2087 736">4) Upon closure of the rear cover and completion of charging (or even without charging) the first figure ("1") should appear in the window after advancement of 3 frames.</p> <p data-bbox="1131 793 2022 993">5) After opening and closure of the rear cover, the "S" should not be out of position against the index point any more than the figure width.</p> <div data-bbox="1458 1102 1633 1245" style="text-align: center;">  </div> <p data-bbox="1231 1379 1983 1579">At "1" and even numbers, the center of the index point should be within 0.2 from the center of the figure width.</p> <div data-bbox="1406 1639 1727 1844" style="text-align: center;">  </div> <p data-bbox="1231 1944 1950 2087">At odd numbers other than "1", the center of the index should be as illustrated.</p>	<p data-bbox="1131 2144 2022 2244">1) During the feeling test, it should not give unusual sound or shocks.</p>
4. ASA Dial (CA9007)		<p data-bbox="1131 2444 2033 2644">1) When the locking button is pressed, it can be moved in either direction smoothly and accurately to be set at the desired ASA value.</p>

Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
		<p>2) When the locking button is not pressed, the A dial would not rotate.</p> <p>3) The locking button should not go down CA9083 (Holder) and come off position.</p> <p>4) The tip of the index should be in line with the edge of the letters (figure).</p> <div data-bbox="1196 1096 1699 1262" style="text-align: center;"> </div> <p>5) Upon shifts of the ASA value, the exposure meter should give different values appropriately.</p>
5. Exposure Meter Switch Lever (CA8962)	(1) Exposure Meter Operation	<p>1) The S lever should be operated lightly, smoothly and accurately and be click-stopped. (Without extremely uneven movement, or stoppages.)</p> <p>2) Clicking should be felt. Even if it goes beyond, it should return to the clicking position.</p> <p>3) When the lever is click-stopped, the ON or OFF letters should be conspicuous and not hidden underneath the lever.</p> <p>1) By operation of the S lever, the meter should be turned ON or OFF accurately.</p> <p>2) The needle should not be stuck or tremble.</p>

Major Check Point	Relative Function to be checked	Checking Method Points of Special Attention
	<p>3) The meter should operate within the range indicated below.</p> 	<p>o <math>A \leq B</math></p> <p>o the tip of the needle at its lowest position should be in contact with the dotted line.</p>
(2) Time for Response	<p>1) Of a camera with MS5014 lens:</p>	<p>o Time required for stabilization of the needle at the proper value should be within about 3 seconds, when it is shifted from dark to BV10. (BV10 → ASA100 1/30 F5.6)</p> <p>o When shifted from BV4 to BV1, the time required for the needle stabilization at BV2 value should be within about 7 seconds.</p> <p>(BV4      ASA100 1/1 F4) (BV2      ASA100 1/1 F2)</p> <p>Refer to Item (5) in next page, Exposure Compensation.</p>



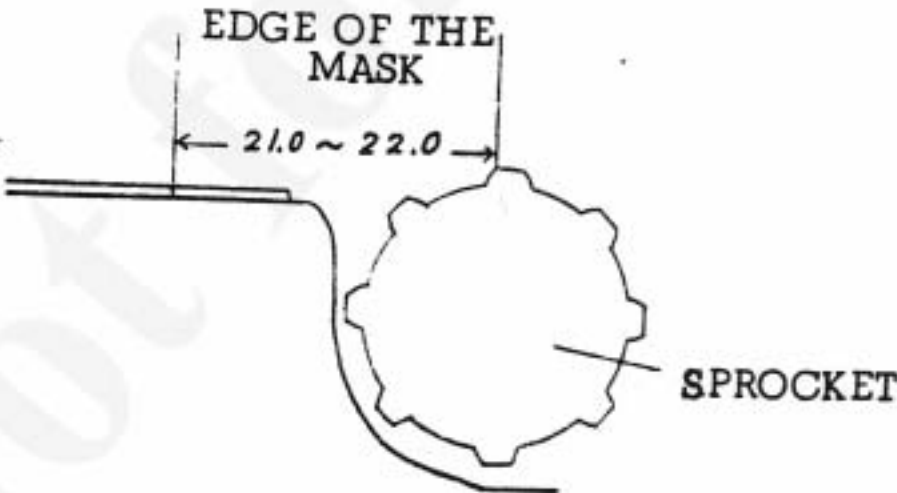
Major Check Point	Relative Function to be checked	Checking Method Points of Special Attention
	<p>(3) Balance of the mechanical part of the exposure meter</p> <p>(4) Exposure Compensation</p>	<p>When the camera is inclined 90° in all directions, the needle should be within 0.3EV or 1.5 times the needle width in comparison with its original position.</p> 
<p>6. Connecting Ring (CA8879)</p>	<p>(1) Operation of roller of cam gear</p>	<p>1) With the shutter speed B, CA8879 should turn as far as the stopper and return to the original position accurately.</p> <p>2) It should move smoothly (without an extreme unevenness or stoppage).</p> <p>1) It should operate smoothly in relation with the movement of CA8879.</p>
<p>7. Diaphragm Lever (CA8425)</p>		<p>1) Should work smoothly in relation with the shutter operation.</p> <p>2) When the lens is mounted and the shutter released, the aperture should be stepped down appropriately.</p>

Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
8. Focusing Screen		<ol style="list-style-type: none"> <li>1) With CA8912 (F-key) made effective, the focusing screen should accurately be located at the position of focus.</li> <li>2) CA8912 should be released without an extreme friction and the mounting block of the focusing screen should be lowered enabling the screen to be easily removed.</li> <li>3) CA8912 should accurately lock the screen frame with clicks.</li> </ol>
9. Shutter Dial (CA8878)	(1) Shutter Speed	<ol style="list-style-type: none"> <li>1) Should smoothly operate with accuracy (without an extreme friction, unevenness and squeaks). The only noise is that of the governor.</li> <li>2) Should be accurately click-stopped.</li> <li>3) Discrepancy between the center of the index and that of the letter.</li> </ol> <ol style="list-style-type: none"> <li>1) By ears, the following shutter speeds should give a clear difference in timing properly (without an extreme disorder). 1/1000, 1/60, 1/15, 1/4, 1/1, B.</li> </ol>
10. Mirror-up Knob (CA8917)		<ol style="list-style-type: none"> <li>1) The MU knob should move smoothly without extreme frictions, unevenness and/or stoppage, and clicks should be felt.</li> <li>2) By operation of the MU knob, the mirror should be raised and returned to the original position accurately.</li> </ol>



Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
		<p>5) Upon setting the timer lever, the start-lever will begin the operation of the self-timer.</p> <p>6) If the start-lever is pushed to the left during the timer operation, the timer should be stopped. But when the lever is returned to the correct position again, the timer should resume operation accurately.</p> <p>7) The self-timer should operate smoothly without uneven movement such hesitation or stoppage.</p> <p>8) The shutter should be released accurately by the self-timer.</p> <p>9) Upon shutter release by the self-timer, the release button should return to its original position.</p> <p>10) If the timer is started without the shutter fully charged, it will stop in the middle of its run but will start again when the film-advance motion is completed. It will then release the shutter.</p> <p>11) The total time of its operation, when fully set, will be 9 - 14 sec.</p> <p>12) After the shutter release, there should be a leeway in the run for less than 5 seconds.</p>
13. Film-re-winding Knob (CA9141)		1) When turned 90° or beyond, it should be accurately set and should not return to the original position. (Setting can be performed even during the film-advancing motion.)

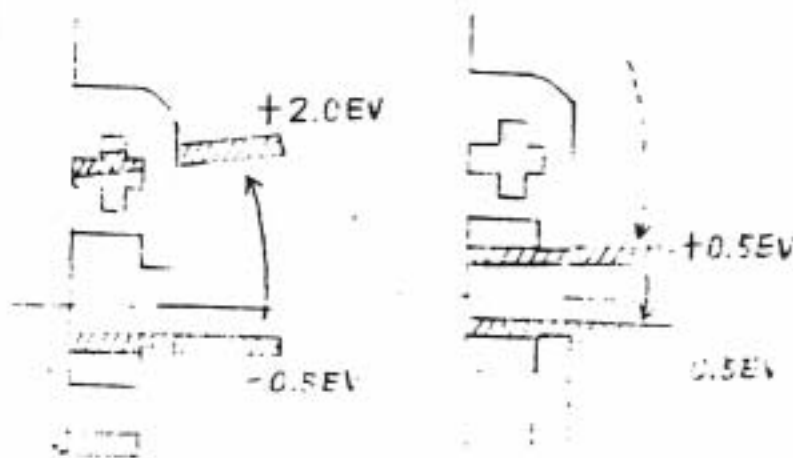


Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
		<p>2) The knob should return to the original position upon commencement of the next film-advancing motion.</p> <p>3) Without any uneven motion or hesitation, the knob should be operated smoothly and should be stopped in the proper position accurately.</p> <p>4) When the K knob is set, the sprocket should be released and made free in motion.</p>
(1) Sprocket teeth position	1)	When the sprocket comes closer to the mask at the stage where the film advance mechanism is locked, the sprocket teeth should be within the range shown below.
		 <p style="text-align: center;">EDGE OF THE MASK</p> <p style="text-align: center;">← 21.0 ~ 22.0 →</p> <p style="text-align: right;">SPROCKET</p>
		<p>It is regarded satisfactory if it is located rather towards the left, when viewed from the top. Make measurements as required with sliding calipers.</p>



Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
14. Rear Cover Mounting Pin (CA9099)	1) 2) 3)	1) The rear cover should be mounted or removed accurately with the mounting pin. 2) The mounting pin is to be pressed down smoothly without squeaks and extreme frictions. 3) The pin, once pressed down, should return to the original position by itself when released.
15. Pressure Plate (CA8710)	1) 2)	1) It should be properly mounted. 2) When visually inspected, there should be no deformity nor unevenness on the surface (especially no concavity).
16. Spool (CA7530)	1)	1) Spool force (180 - 400g x 6mm) In the feeling test, it should not be too heavy nor too light.
17. Shutter Curtain	1) 2) 3) 4) 5)	1) Should be of cloth on the side facing the film surface. 2) At any position in the picture frame, the amount of overlap of curtain edges (metal) should be over 2.5mm. 3) The curtains should not be slanted nor loose. 4) Prior or subsequent to film advancement, the edge metal should not appear within the mask. 5) When the shutter is wide open at a slow speed, the second curtain should not appear in the picture frame.

Major Check Point	Relative Function to be checked	Checking Method or Points of Special Attention
	(1) Shutter Speed	1) At the speed of 1/1000 sec., the film should be completely exposed in any position of the frame. (Visual inspection.)  2) Check the speed by 1/1000, 1/15 and 1/1. (Feeling test.)
18. Warning Switch for Exposure Meter		1) Place the mercury battery in the camera, turn off the main switch, set it at ASA 100 and the shutter speed of "B", and turn the aperture ring from F16 to Open slowly. At this time the needle should swing once toward and beyond 2EV before it is stabilized at the index of -0.5EV.  2) At this time, the aperture ring should be stopped at somewhere smaller than F2.8.  3) When the lens is stopped down gradually from the open position, the needle should come down once to a position lower than -0.5EV before it is stabilized at +0.5EV.



Functions and Features (Items to be checked by measuring instruments)

1. Film Advance Lever = operating force: 1000 gr. or less at the tip of the lever, when film is loaded.
  - " = returning force: 24-34 gr. at the beginning of the return stroke or thereabout.
  - " = pre-advancing force: 25g-50g at the tip of the lever.
2. Shutter-releasing Force = 200 - 300 gr.
3. Release Button = Overall Height:  $+1.5^{\pm 0.2}$  (from the tip of CA9083) (The plus sign (+) means that the button is extruding from CA9083)
  - " = Release Position:  $-0.05^{\pm 0.15}$  (from the tip of CA9083)
  - " Stopping Position: 0.5 or deeper (from the tip of CA9083)
4. CA9084 (Button Shaft) = Depth of Action: The shutter should be released at  $7 \pm 0.3$  from the tip of the button.
5. R-knob = Pulling Force: First Step  $350^{\pm 100}$  gr.  
 Second Step  $1200^{\pm 300}$  gr.
6. Self-timer = Setting Force: 600 gr. or below at the tip of the lever.
  - = Operating Force of the Start-Lever: 40 - 100 gr. at the tip of the lever.
7. Flange-back =  $46.0^{\pm 0.025}$

## 8. Accuracy of Meter Indications:

LSBL7 Light Source Box      K=1.3      ASA100

<u>BV</u>	<u>SS</u>	<u>F</u>	<u>Discrepancy</u>	<u>Accuracy</u>
15	1/500	8	0.3EV	±0.6EV
12	1/125	5.6	-	±0.6EV
9	1/4	11	-	±0.6EV
6	1/2	4	0.3EV	±0.6EV

For BV15 and BV6, check the discrepancy in indications which may occur according to the direction of rotations of the aperture ring and the shutter dial.

In case of BV12 and BV9, the shutter dial is turned and set starting from the 1/1000 side and the aperture ring from the F16 side.

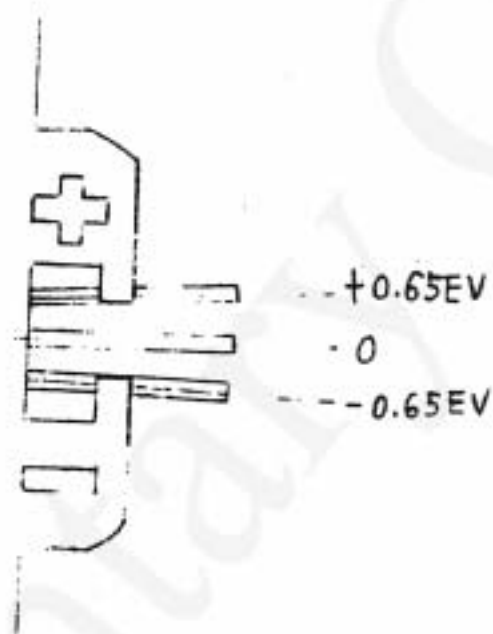
LSBL1 Light Source Box      K=1.3      ASA100 (90V)

<u>BV</u>	<u>SS</u>	<u>F</u>	<u>Discrepancy</u>	<u>Accuracy</u>
16	1/500	11	0.3EV	±0.6EV
14	1/125	11	-	"
12	1/125	5.6	-	"
10	1/125	2.8	-	"
8	1/2	11	-	"
6	1/2	5.6	0.3EV	"

For BV16 and BV6, check the discrepancy in indications which may occur according to the direction of rotations of the aperture ring and the shutter dial.

In cases of EV 14, 12, 10 and 8, the shutter dial is turned and set starting from the 1/1000 side and the aperture ring from the F16 side.

How to judge amount of compensation  
for proper exposure:



9. Curtain Speed: At the shutter speed of 1/1000, 11.7 - 12.1 ms for both the first and the second curtains.

10. Exposure Time:

Tolerance limit

1/1	1000ms	892 - 1100 ms
1/2	500	446 - 550
1/4	250	223 - 275
1/8	125	111 - 138
1/15	62.5	55.6 - 68.8
1/30	31.2	27.8 - 34.3
1/60	15.6	13.9 - 17.2
1/125	7.81	6.99 - 8.63
1/250	3.91	3.50 - 4.32
1/500	1.95	1.69 - 2.22
1/1000	0.98	0.79 - 1.20



11. Power Consumption: At BV16, 800 $\mu$ A or less

12. Leakage: 5 $\mu$ A or less

13. Contact efficiency:

X contact: 70% or above at the interval of 1 ms.  
in slow speed including 1/60 sec.

FP contact: 70% or above at the interval of 2.5 ms.

14. Insulation resistance: 30M $\Omega$  and above at 500V.

15. Contact resistance: Ascertain continuity at 3V.

16. Time lag: X contact: At 1/60 sec., it should be switched in within 1.5 ms. of the closing action of the second curtain, upon completion of the first curtain opening.

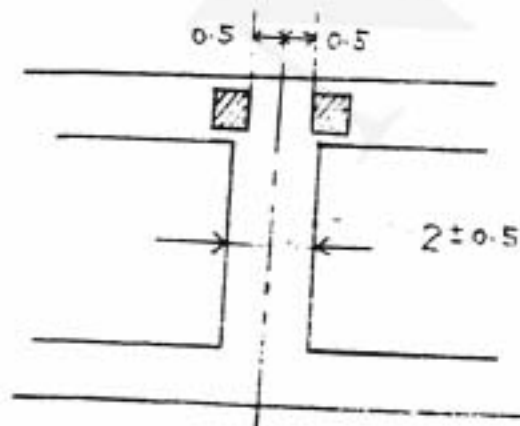
FP contact: It should be switched in at 8 - 14 ms. prior to commencement of the first curtain action.

17. Vertical discrepancy in positioning the actual picture:



The frame of the actual picture should not be overlapped with the perforation on the film.

18. Position of perforations: Perforations should be beyond 0.5mm from the center line between each frame.



19. Interval between picture frames:  $2 \pm 0.5$ mm



# ORDER OF DISASSEMBLY

ORDER OF DISASSEMBLY

- o Refer to the part number noted in the illustration of disassembly on the opposite side.
- o X mark at the head of the part number shows the part which should not be touched directly by fingers. Be sure to cover fingers with rubber sacks.

General Order of Disassembly

1.	Removal of CA8703 (Top-cover) .....	1
2.	Separation of CA8702 (Body front part) from (Die-cast body)....	2
3.	Disassembly of the shutter .....	4
4.	Disassembly of the film advance mechanism .....	9
5.	Disassembly of CA8702 (Body front part) .....	11
6.	Disassembly of CA8961 (Frame) and the exposure meter .....	17

Detailed Order of Disassembly

1. Removal of CA8703 (Top-cover)
  - 1) Remove CA9030 (Nut) - using the tool KC-CA9030G
  - 2) Remove CA8752 (Holder) - using the tool KC-CA8752G

Pay attention not to make scratches on CA9135 (Plate).  
If scratched, replacement is required.

Then will come off:

CA8753	(Ring)	}	in a unit
CA8749	(Lever)		
CA8751	(Cover)		
CA8750	(Washer)		
CA8806	(Screw)		
PSK2 x 2.2SB			

- 3) Remove CA8777 (Fastener)
- 4) Loosen two NU1.4 x 1.5SA on CA9007 (Dial) to remove CA9007. (CA9007 is screwed in.)
- 5) Open CA8705 (Cover) and remove CA8725 (Knob)  
Use the tool KC-0071M with care not to deform CA8733 (Shaft).

Then will come off:

CA8726	(Lever)
CA8730	(Pin)
CA8731	(Spring)

- 6) Remove two PSK1.7 x 4SH on CA8703 (Cover)  
CA8703 can be taken off with attachments.  
For attachment of CA8703, set the meter at ASA 100, turn off the meter switch, and mount the CA9005 (Ring) at 100.
- 7) Remove the following parts.

CA8722	(Spring)
CA9026 a - c	(Washer)
NW8.6 - 2136BO	

## 2. Separation of CA8702 (Body front part) from (Die-cast body)

- 1) Remove two PSK2 x 3SE and two PSK2 x 4SE on CA8704 (Plate).  
Then CA8704 and CA6345 (Cover) can be taken off.
- 2) Remove CA9071 (Stopper) using the tool KC-CA9071G.  
Pay attention not to make scratches on CA9134 (Plate).  
If scratched, replacement is required.

Then will come off:

CA9075 (Spring)  
CA9072 (Lever)

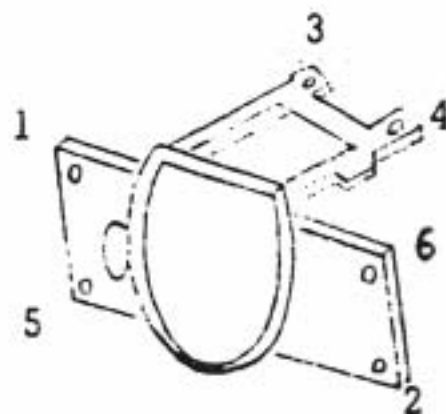
- 3) Peel off CA9102 (Leather), CA9103 (Leather).
- 4) Peel off CA8894 (Cover) and CA8893 (Plate), raising the mirror by CA8917 (Knob). (Glued with Everstic)
- 5) Remove two PSK1.7 x 3SO on CA8734 (Holder) and let CA8734 turn half way.
- 6) Take off (Lead wires) CA9115 (LW30R), CA9032 (LW45B) by removing solder.
- 7) Remove CA9036 LW100B from CA9125 (Contact point).
- 8) Remove four PUK2 x 3SO on CA8702 and two PUK2 x 6SO on CA8961 (Frame) respectively. Then Die-cast body can be separated from CA8702.

Docking of Die-cast body and CA8702.

Docking is made in the following mannger:

1. Keep the film-advancing mechanism in the state of being charged.
2. Let the small hole on CA8577 (Gear) face the lens (at the position of 1/1000).
3. CA8702 is set at shutter dial 1/1000.
4. CA8702 in the stage of mirror-up.

Setting CA8412 (Charge lever) and raising the mirror by CA8432 (Hook lever), you can proceed with docking. Further, at the docking, pay attention to deformation of EP Contact point and Lead-wires as well as the string from the meter. Fasten screws in accordance with the numbers illustrated below.





3. Disassembly of the shutter

(Lower side of the body)

- 1) Remove CA8867 (Shaft).

Then will come off:

CA8872 (Spring)  
XCA8865 (Lever)

- 2) Remove CA8864 (Shaft).

Then will come off:

CA8862 a b (Plate)  
NW1.8 - 336PO

- 3) Remove CA8826 (Spring) from CA8824 (Lever) and take off CA9052 (Screw).

Then will come off:

CA8826 (Spring)  
CA8824 (Lever)  
CA8821 (Lever)

Caution: XCA8820 (Shaft)

- 4) Remove CA8848 (Shaft).

Then will come off:

CA8849 (Spring)  
CA8842 (Lever)  
CA8847 (Holder)  
XCA8845 (Lever)

NW1.8 - 240PO

- 5) Remove CA8846 (Shaft).

Then will come off:

CA8844 a - c (Lever)  
NW1.8 - 240PO

- 6) Remove HK1.4 - 602SN of CA8836 (Gear).

Then will come off:

CA8836 (Gear)  
CA8851 (Spring)

(Refer to the illustration shown in the next page  
how to CA8851)

- 7) Remove two PSK1.4 x 1.8SO of CA8841 (Base plate) and CA8852 (Screw).

Then will come off:

CA8839 (Gear)

- 8) Remove CA8856 (Screw)

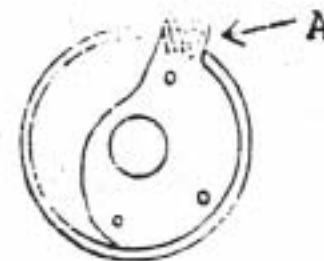
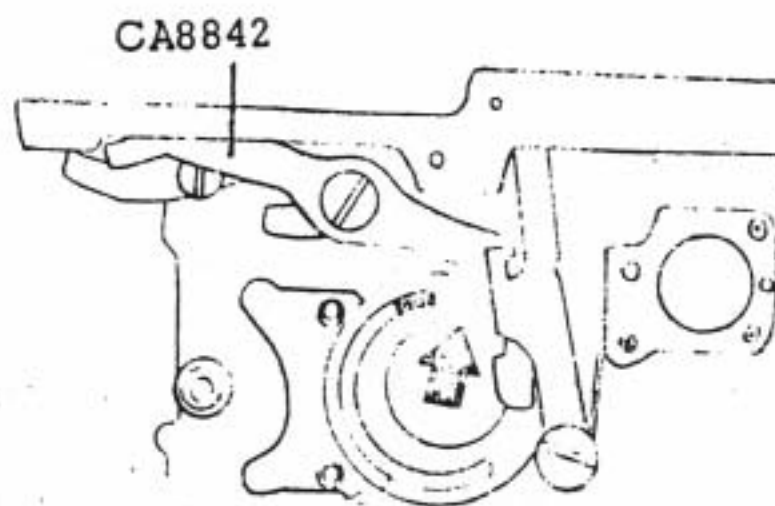
XCA8828 (Shaft)

B1 (Ball bearing) can be taken off.

Caution: XCA8827 (Shaft)

How to reassemble CA8839 (Gear):

After releasing shutter,  
reassemble CA8839 (Gear)  
so that the protrudent part  
of CA8840 (Plate) may be  
inserted between the boss  
of CA8547 (Gear) and  
CA8842 (Lever). (Insert  
A to the arrowed part as  
illustrated below)

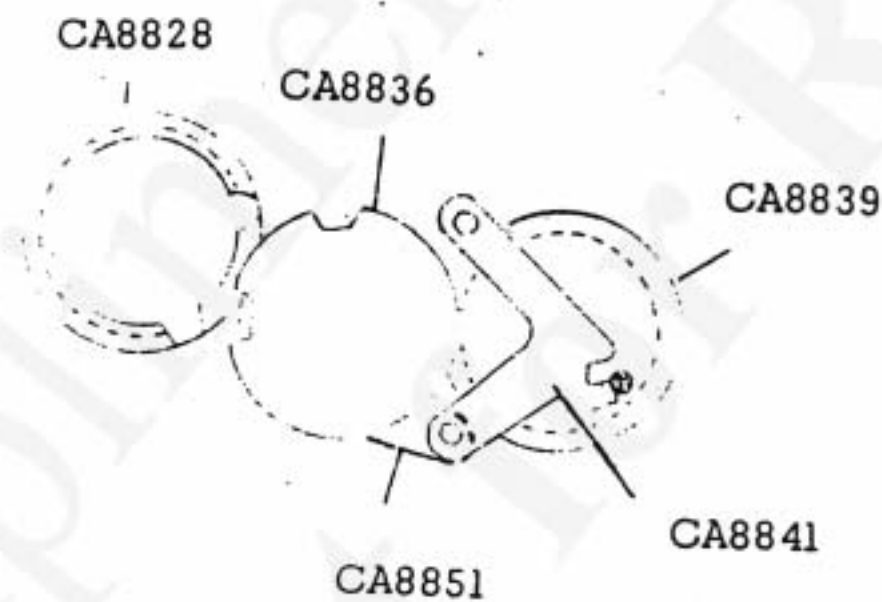


### How to reassemble CA8836 (Gear):

Let one end of CA8851 (Spring) engage on to the tooth of CA8836 (Gear) on the side indicated by the arrow.



With film winding mechanism locked, release the shutter by CA8595 (Lever), reassemble it as shown below.



(Removal of Governor)

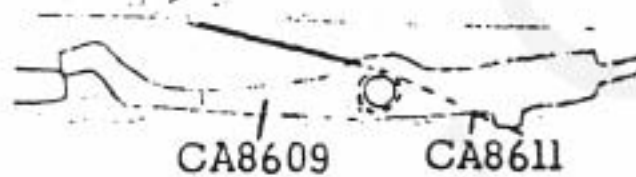
- 9) Remove PSK2 x 2SO and PSK1.4 x 2SO on (the governor).

Then will come off:

G30	(Governor)
XCA8609	(Lever)
CA8611	(Spring)

Caution: Pay attention to XCA8610 (Shaft). Assemble CA8609 while the film advance mechanism is charged.

Engage CA8611 (Spring) as shown in the illustration below.



- 10) Remove XCA8404 (Screw)

Then will come off in a unit.

CA8606 (Cam)  
 CA8605 (Cam)  
 CA8575 (Cam)  
 CA8576 (Cam)  
 CA8577 (Gear)

3PUK1.4 x 5.5SO  
 PUK1.4 x 2SO

- 11) Take off PSK1.4 x 2SO which fastens CA8543 (Shaft) and loosen XCA8545 (Screw) to remove the following parts.

XCA8567 S.M.L. (Shaft)  
 XCA8556 (Lever)

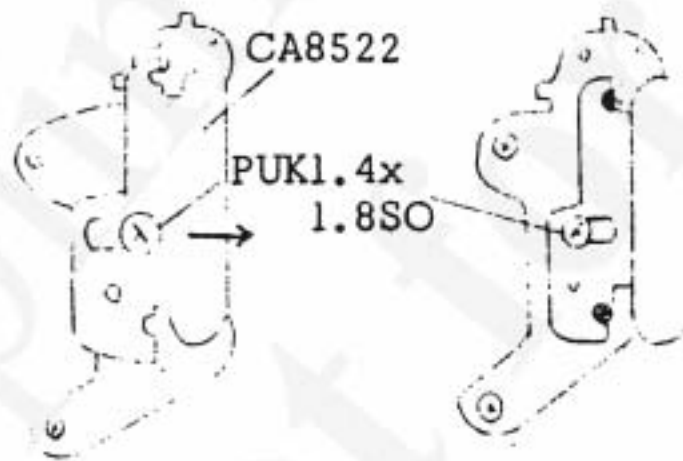
Caution: Simply loosen XCA8545 (Screw) alone, because if it is completely removed, CA8543 (Shaft) is separated.

After removing XCA8567 (Shaft), and XCA8556, XCA8545 should be always fastened again.

- 12) Remove XCA8843 (Shaft) using the tool KC-CA8843G.  
 Then comes off CA8543.

## (Removal of the Curtains)

- 13) Remove two PSK1.7 x 18SO on CA8540 (Frame) and loosen PUK1.7 x 1.8SO and CA8539 (Screw). Then comes off CA8540.
- 14) Remove CA7381 (Shaft). Then comes off CA8532 (Stopper).
- 15) Remove two CA8531 (Nut). (Adjustment of the tension and speed of the curtains.)
- 16) Remove two PUK2 x 2SO on CA8513 (Washer).
- 17) Remove two PUK2 x 2SO on CA8523 (Plate).
- 18) Remove HK1.4 - 101BO on CA8522 (Stopper) and loosen PUK1.4 x 1.8SO. Move CA8522 in the arrowed direction, let it tweeze the CA8519 (Shaft), CA8520 (Shaft) at their upper ends, and then tighten PUK1.4 x 1.8SO.



- 19) Remove two PUK2 x 2SO on CA8508 (Plate).

Then will come off CA8538 (Curtain), CA8600 (Curtain), and the following parts at the same time.

XCA8519	(Shaft)
XCA8520	(Shaft)
CA8517	(Stopper)
CA8510	(Roller)
CA8522	(Stopper)
CA8523	(Plate)
CA8529	(Roller)
CA7963	(Ring)



PUK1.4 x 1.8SO  
NW1.5 - 425UO

Caution: Pay careful attention to CA8538 (Curtain)'s assembly parts XCA8524 (Shaft), and to CA8600 (Curtain)'s assembly parts SCA8525 (Shaft).

(Removal of CA8501 Base plate)

- 20) Remove three PSK2 x 2.5SO which fastens XCA8501 under the main body. Then comes off XCA8501 with the following parts in a units.

CA8601 (Plate)  
CA8602 (Contact point)  
CA8603 (Contact point)  
CA8586 (Spring)  
XCA8578 (Lever)  
XCA8585 (Screw)  
CA8594 (Spring)  
XCA8592 (Claw)  
XCA8589 (Shaft)  
CA8590 (Spring)  
XCA8580 (Lever)  
XCA8588 (Screw)  
CA8612 (Lever)  
CA8614 (Screw)  
CA8615 (Spring)

NW1.4 - 334UO

CA8612 (Lever) should be reassembled with the shutter released.

4. Disassembly of the film advance mechanism

- 1) Remove CA8786 (Washer).

Then will come off in a unit:

CA8793 (Gear)  
CA8794 (Index)  
CA8795 (Spring)

- 2) Mount CA8749 (Lever) and tighten CA8752 (Fastener).

- 3) Remove PUK2 x 3SO and 3PUK1.7 x 4SO on CA8742 (Case).

Then will come off:

CA8742 (Case)  
CA8743 (Plate)  
CA9060 (Collar)

- 4) Remove CA8801 (Nut)

- 5) Remove three PUK1.7 x 2.5SO on XCA8775 (Base plate).

Then will come off in a unit:

CA8754 (Shaft)  
CA8775 (Base plate)  
CA8774 (Spring)  
CA8796 (Stopper)  
CA8797 (Washer)  
CA8781 (Shaft)  
CA8803 (Stopper)  
CA8799 (Stopper) and CA8800 (Stopper)  
CA8798 (Shaft)  
CA8723 (Bush)  
CA8783 (Spring)  
CA8778 (Lever)  
CA8784 (Gear)

HK1.4 - 604BO

Disassembly of the part removed in a unit:

Remove CA8752 (Fastener) and then CA8749 (Lever).  
CA8775 (Base plate) can be separated from CA8754  
(Shaft) and further CA8774 (Spring) and CA8723 (Bush)  
can be removed.

- 6) Remove two PUK1.7 x 1.8SO on CA9146 (Shaft) and CA8808 (Screw).  
Then comes off CA9146 (Shaft).

The steps 1) through 6) shown above may be followed without  
separating CA8702 (Body front part) from the Die-cast body.

- 7) Remove 3PUK1.7 x 3SO on CA9041 Base plate.

Then comes off CA9041.

- 8) Pressing CA8811 (Sprocket), remove CA8817 (Screw).

Then will come off:

CA8819 (Claw)  
CA8818 (Spring)  
CA8816 (Gear)

- 9) Pressing CA8811 (Sprocket), remove CA8788 (Gear)  
using the tool KC-CA8788G

- 10) Remove CA8780 (Holder)

Then will come off:

CA9049 (Spring)  
CA9047 (Claw)  
CA8779 (Shaft)  
CA8811 (Sprocket)

5. Disassembly of CA8702 (Body front part)

- 1) Remove two PSK2 x 3SO on V40 (Self-timer)

(For the new model, an extra piece is used fixing the self-timer from the front.)

Then comes off V40.

- 2) Remove two PUK2 x 4.5SO on CA9025 (Plate).

Then comes off CA9025.

Remove solder from the lead wire at the tube.

- 3) Pressing CA9130 (Holder) by fingers, remove CA9131 (Holder) and PUK1.7 x 2.2SO on CA9132 (Holder).

Care must be taken in handling it because of strong tension.

Then will come off :

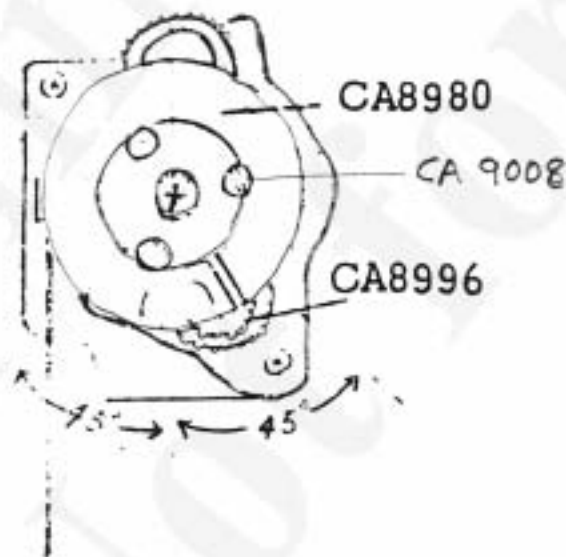
CA9130	(Holder)	} in a unit
CA9131	(Holder)	
CA9132	(Holder)	
CA9133	(Spring)	
CA8936	(Cover)	
LC4073	(Prism)	
CA8904	(Washer)	
CA8905	(Mask)	

- 4) Remove two PUK2 x 3.5SO and PUK2 x 6SO on CA8961 (Frame).  
Then come off CA8961 and the exposure meter mechanism in a unit.
- 5) Remove three CA9008 (Screw) to separate CA8980 (Pulley) from CA8961 (Frame). The position of the exposure meter mechanism may be adjusted by loosening CA9008 (Screw).  
(Coarse adjustment)

The position of CA8980:

The groove of CA8980 is to be positioned at the shutter speed 1/1000.

It should be positioned within the range shown below when CA8879 (Ring) is at the stopper.



- 6) Remove three CA8947 (Screw).

Then will come off:

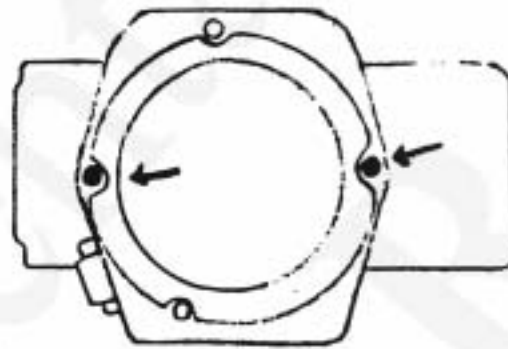
CA8877	(Mount)
CA8888	(Spring)
CA9114	(Screw)
CA8878	(Dial)

CA8947 is to be tightened from the top in order.

- 7) Remove two PUK1.7 x 2.5SO on CA8951 (Fastener).  
Then comes off CA8591.
- 8) Remove four PSK1.4 x 2SO on CA8876 (Cover).  
Then comes off CA8876.

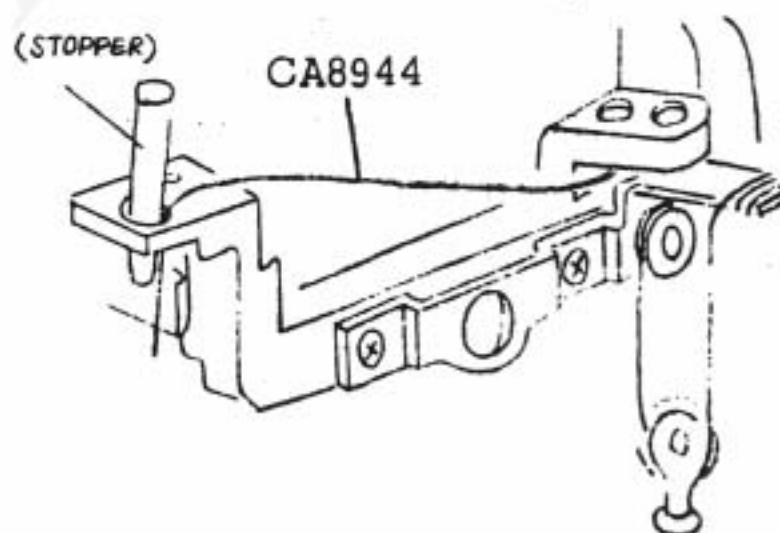
Caution: Two to four pieces of CA8960 (Lever) is used for room adjustment.

CA8960 is to be placed as shown below by arrows.  
A number of them may be set as necessary to adjust  
the room between CA8876 (Cover) and CA8878.



- 9) Remove CA8944 String from adhered part of CA8980 (Pulley). Then comes off CA8880 (Gear). In case of such a type of repair that will require removal of CA8944 adhered to CA8980 (Pulley) only and not that of CA8877, CA8878, and CA8880, it is advisable to take following measures so as to insure that the CA8944 will not be entangled or become off position.

Set the shutter at the speed of "B" and do not move it.  
Stick one end of the CA8944 into the CA8702 (Plate).  
Be careful not to cut the string at where it is stuck in.



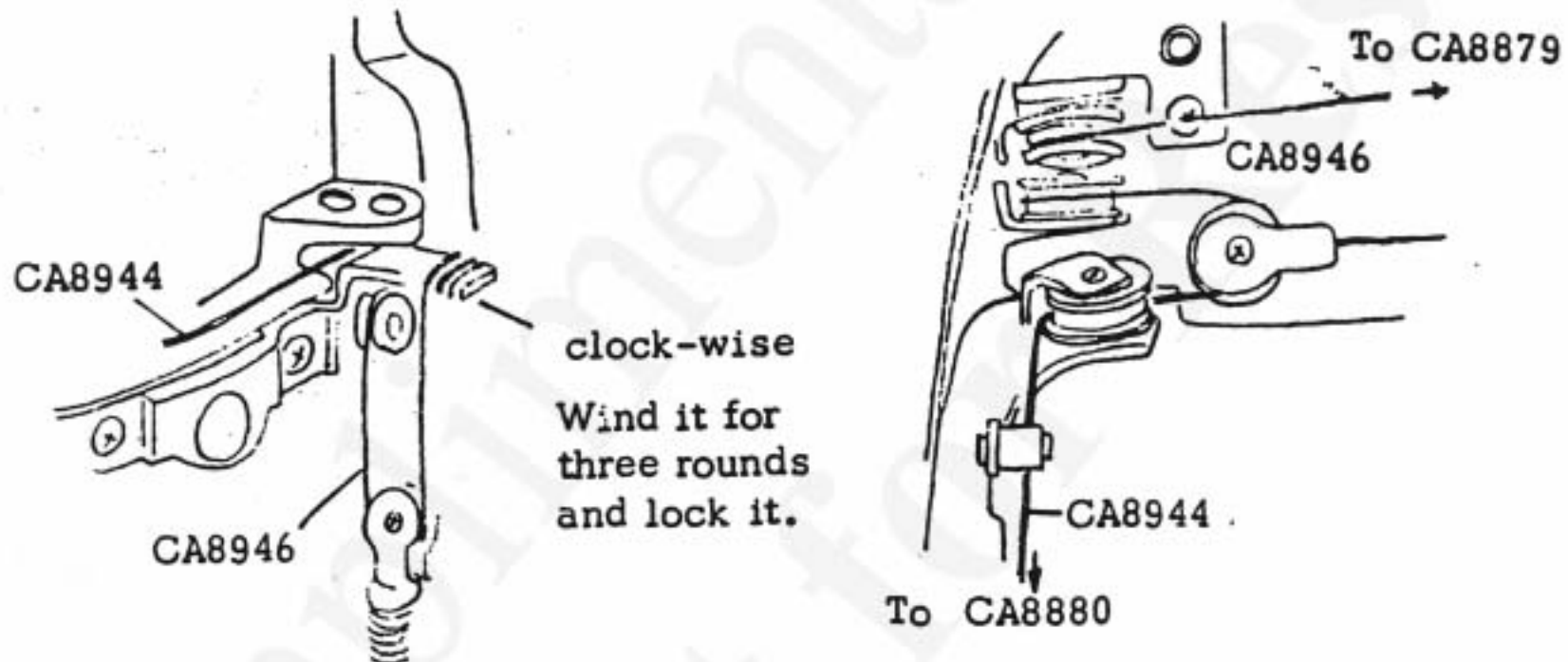


- 10) Remove adhesive, adhering CA8946 String with CA8949 (Plate), to separate them from each other.

Then will come off:

CA8879 (Ring)  
CA8938 (Spring)  
XCA8957 a - c (Roller) a - c  
XCA8933 a - f (Roller) a - f

CA8946 and CA8944 are to be connected as follows.



- 11) Remove PUK1.4 x 1.8SO and three PUK1.4 x 1.8SO on CA8882 (Plate).  
With care not to damage CA8914 (Damper) and CA8915 (Damper), remove CA8882.

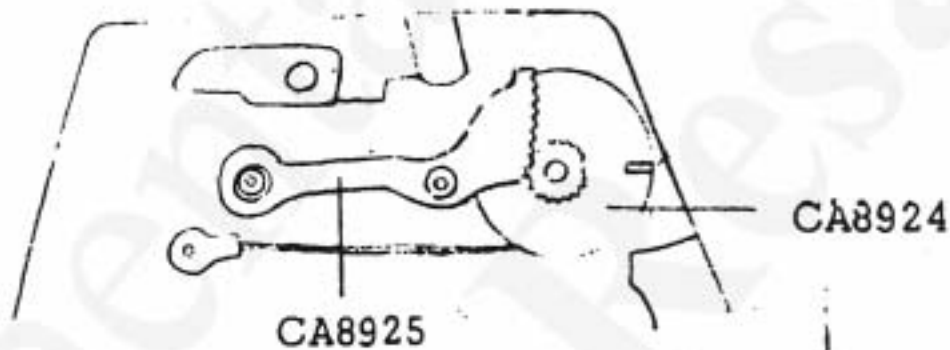
- 12) Remove CA8955 (Screw).

Then will come off:

XCA8925 (Gear)  
CA8924 (Pulley)

Positioning of CA8925 and CA8924:

When the groove of CA8924 comes to the position almost horizontal at the right hand side, the CA8925 should be in contact with Cam gear stopper



(Removal of CA8410 (Plate) CA8411 (Plate))

- 13) Remove two PUK1.7 x 1.8SO on CA8889 (Stopper).

Then comes off CA8889.

Positioning of CA8889 may be performed with a jig.

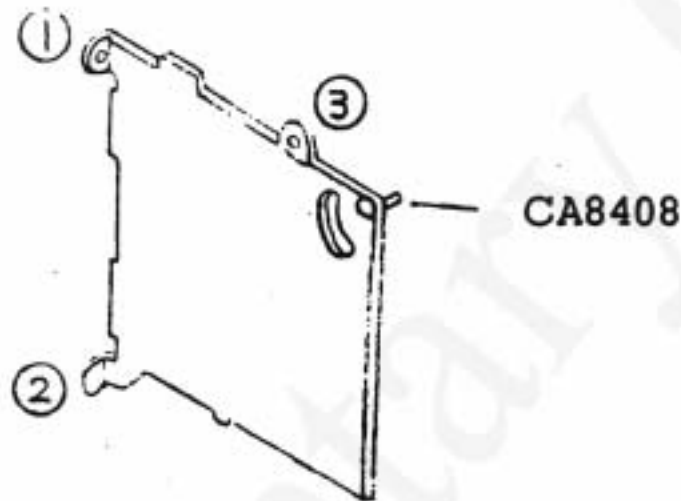
- 14) Remove XCA8404 (Screw) on CA8410.

- 15) Remove two PUK2 x 3SO and PUK2 x 2SO which fastens CA8410.

Then will come off:

CA8410 (Plate) and (Relative parts)  
CA8401 (Frame)  
CA8409 a - c (Washer) a - c

When assembling CA8410, tighten screws in the following order:

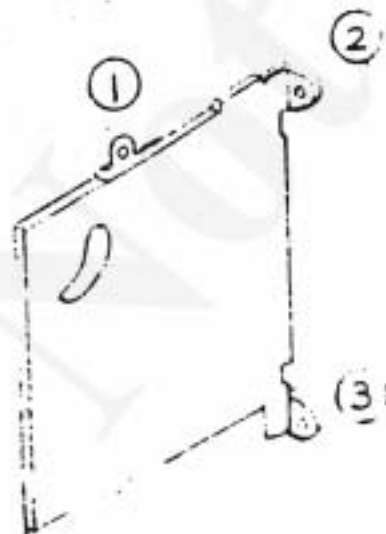


CA8408G (Pin) should be at  $5.53 \pm 0.05$  from surface of the fresnel lens. Use the measuring tool KC-CA8408G. If the appropriate value is not obtained, adjust tightness of screws.

- 16) Remove two PUK2 x 3SO and a PUK2 x SO which fix CA8411 in the position.

Then CA8411 and its attachments (parts) will come off.

When assembling CA8411, tighten screws in the following order:



The space (interval) between CA8410 and CA8411 should be  $39.6^{+0.2}_{-0.1}$ . Check it with the sliding calipers. If an appropriate value is not obtained, adjust tightness of screws.

6. Disassembly of CA8961 (Frame) and the exposure meter

- 1) Remove HK1.7 - 405SN on CA8981 (Holder).

Then comes off CA8981.

- 2) Remove CA9011 (Holder). Then comes off CA9010 (Cam).

- 3) Remove HK1.4 - 101SN on CA8995 (Base).

- 4) Remove two CA9142 (Screw).

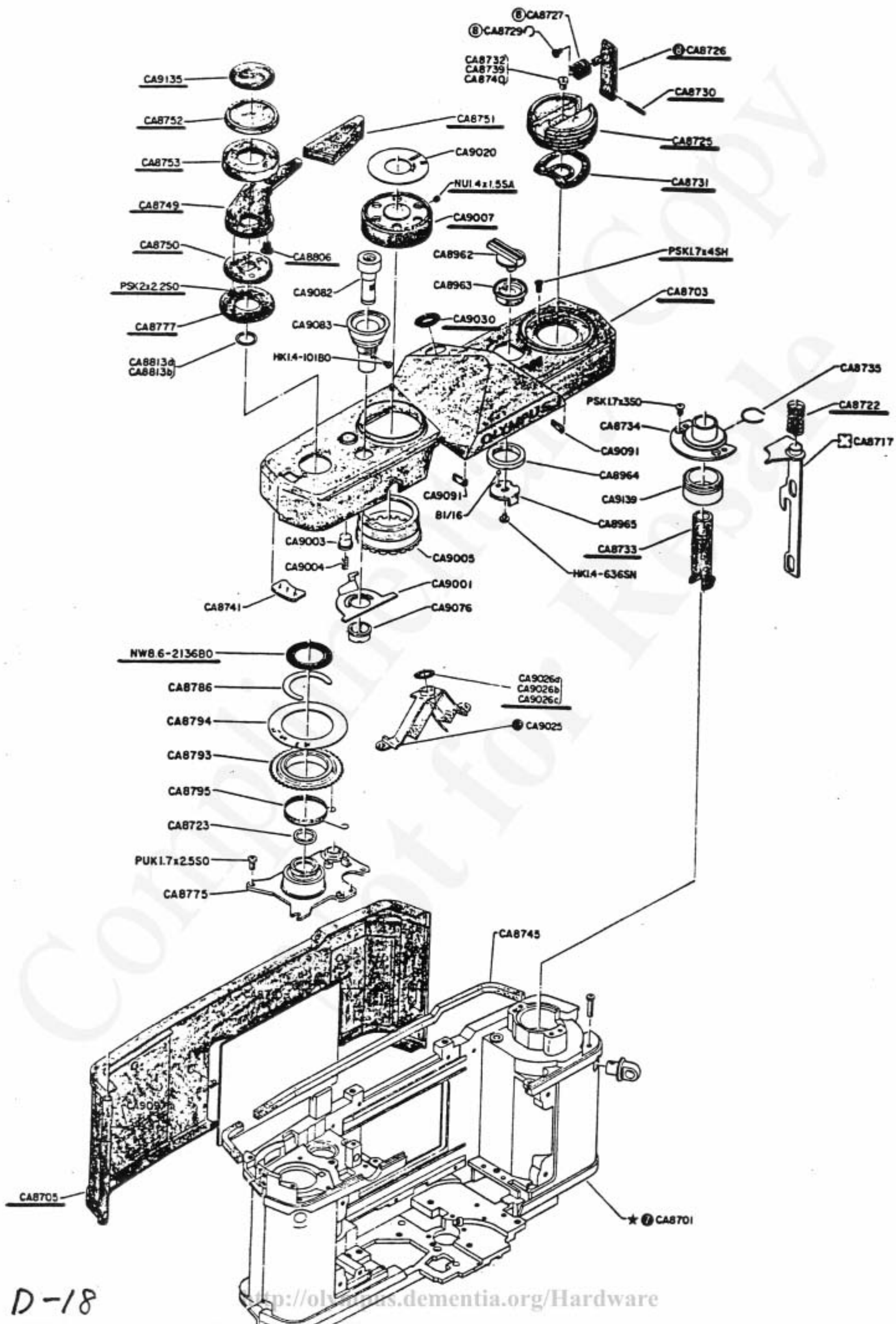
Then will come off in a unit:

CA8977	(Plate)
CA8996	(Gear)
CA8998	(Shaft)
CA8999	(Spring)

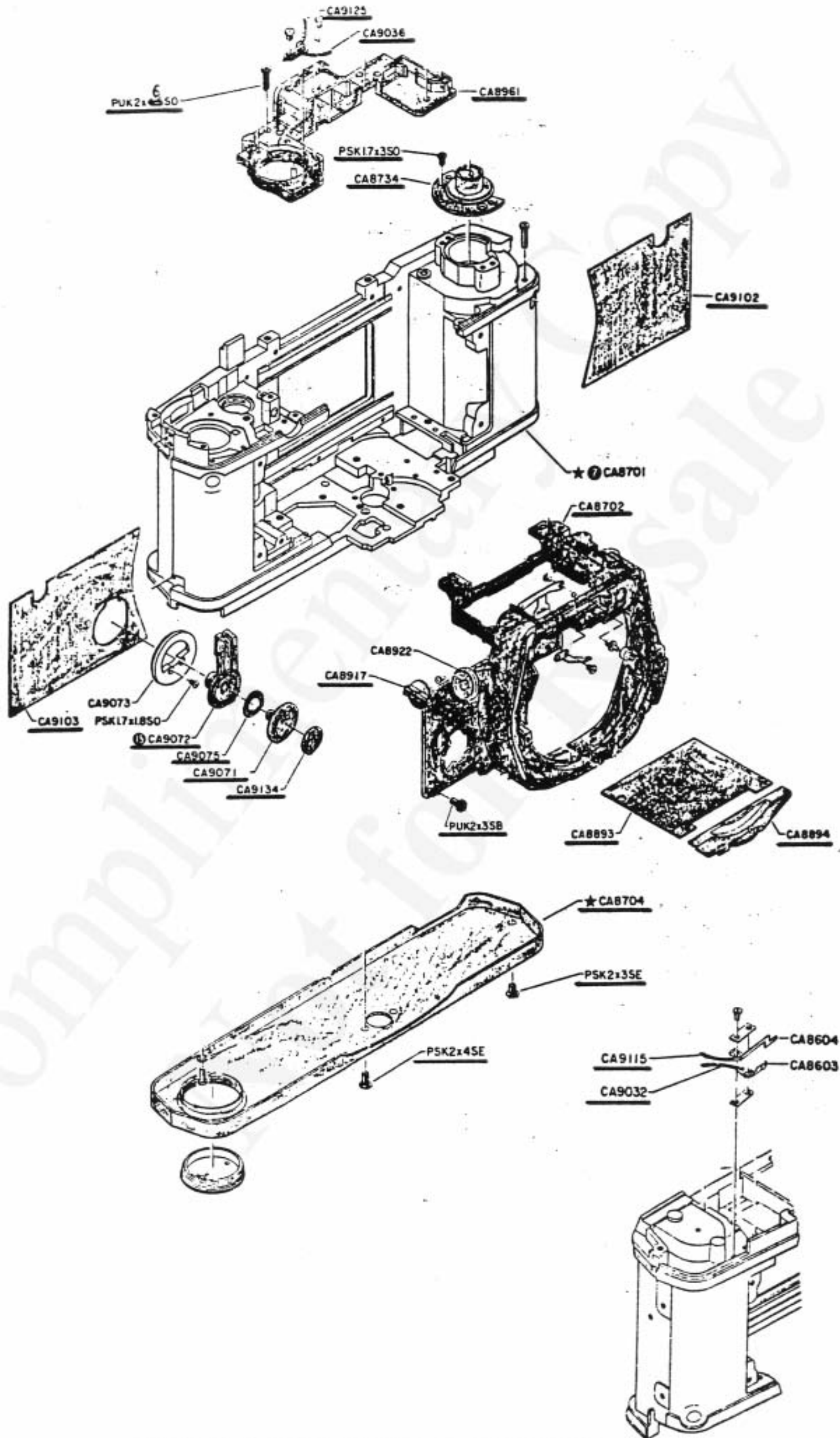
- 5) Remove CA9021 (Spring) from CA8995 (Base) #951 exposure meter mechanism is removed together with CA8982.

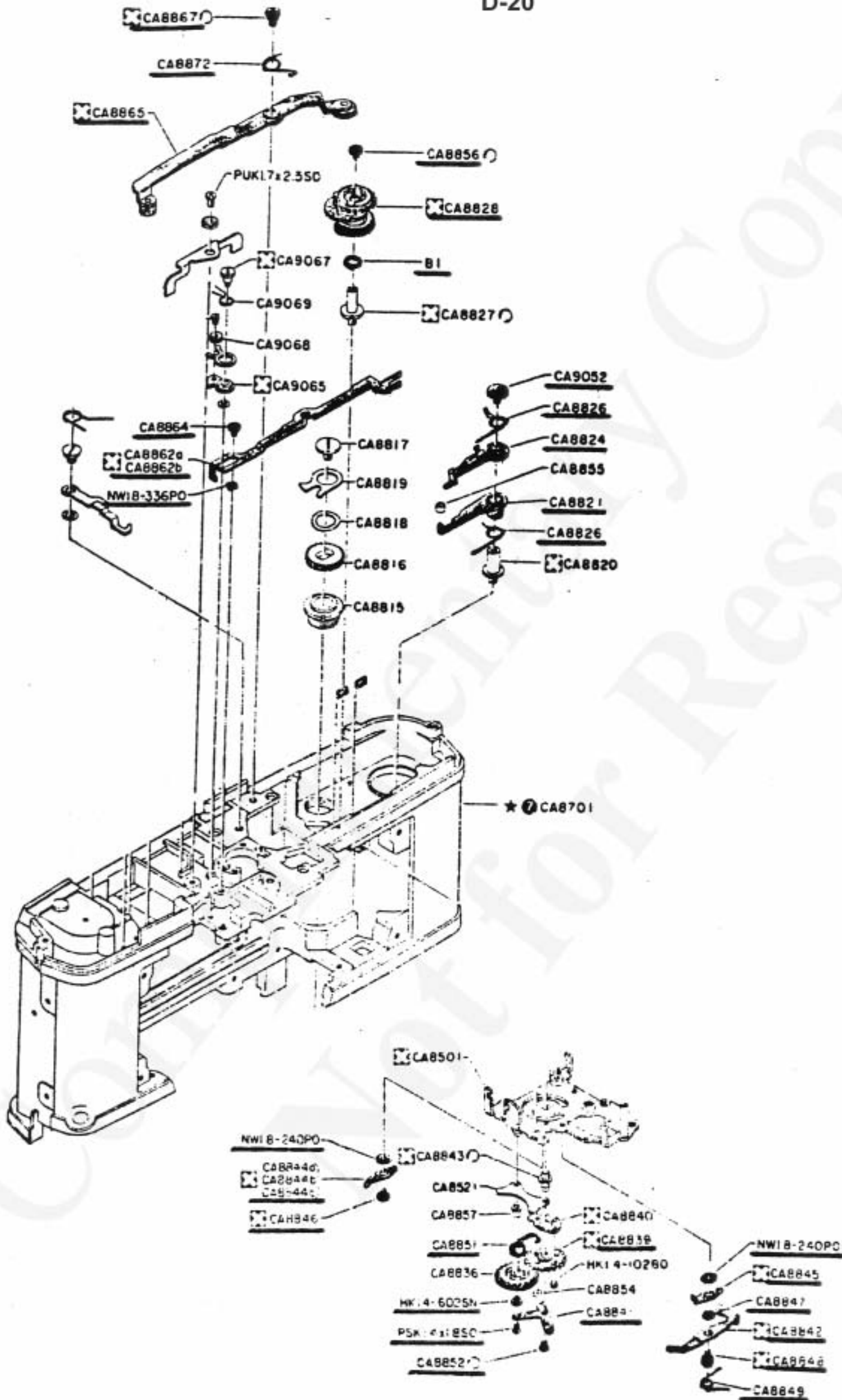
- 6) Remove two PUK2 x 3SO on CA8995.

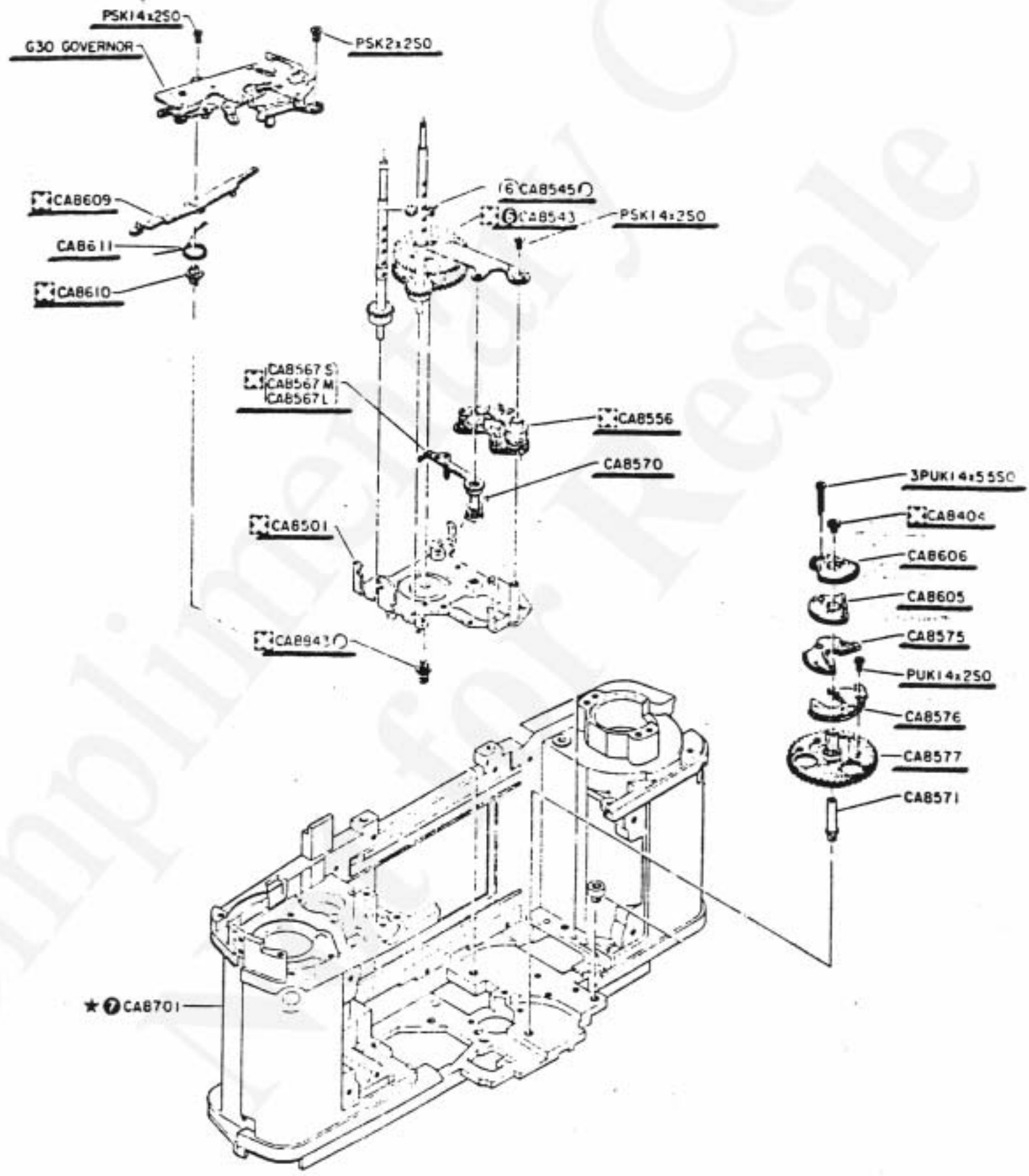
Then comes off CA8995.

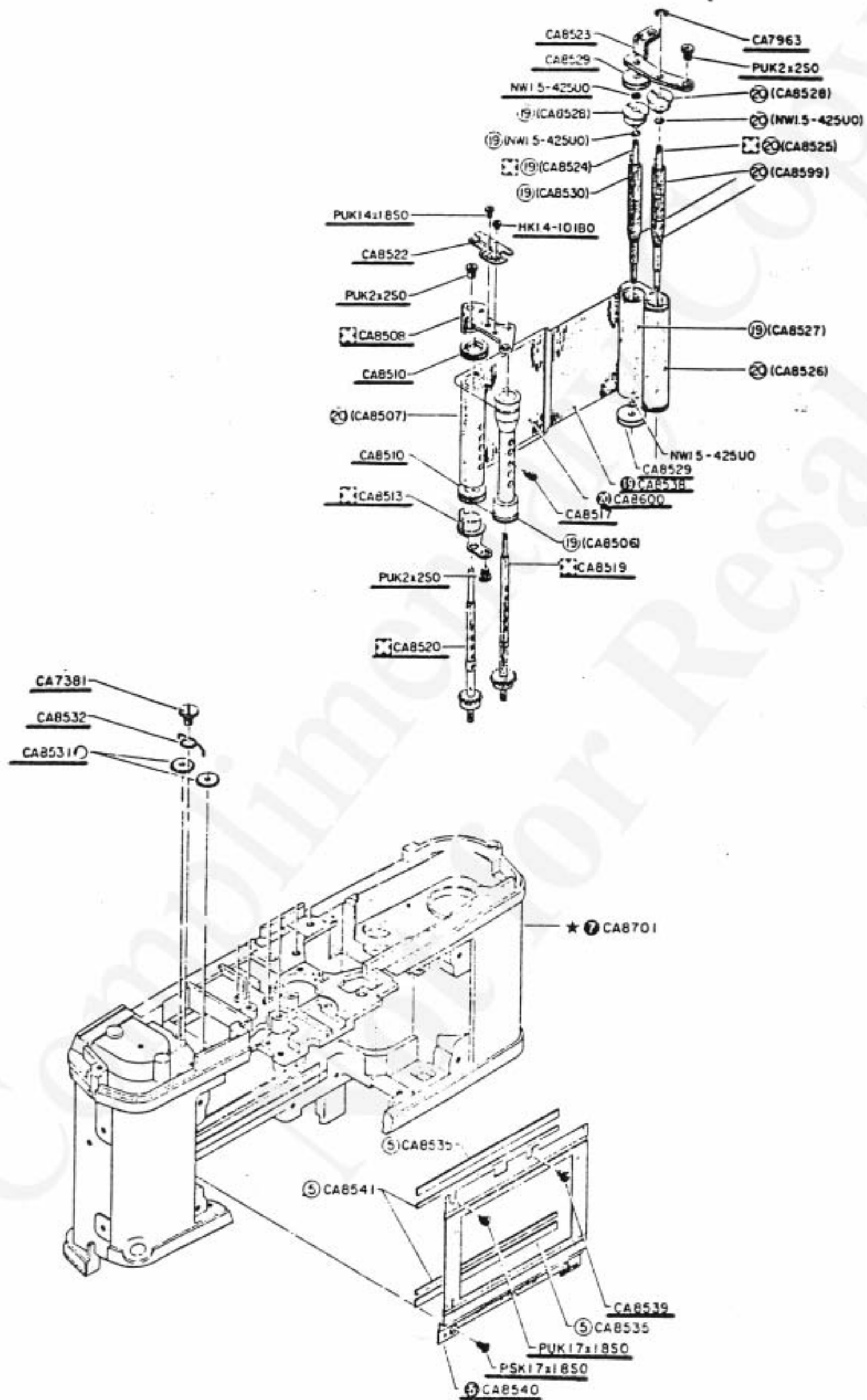


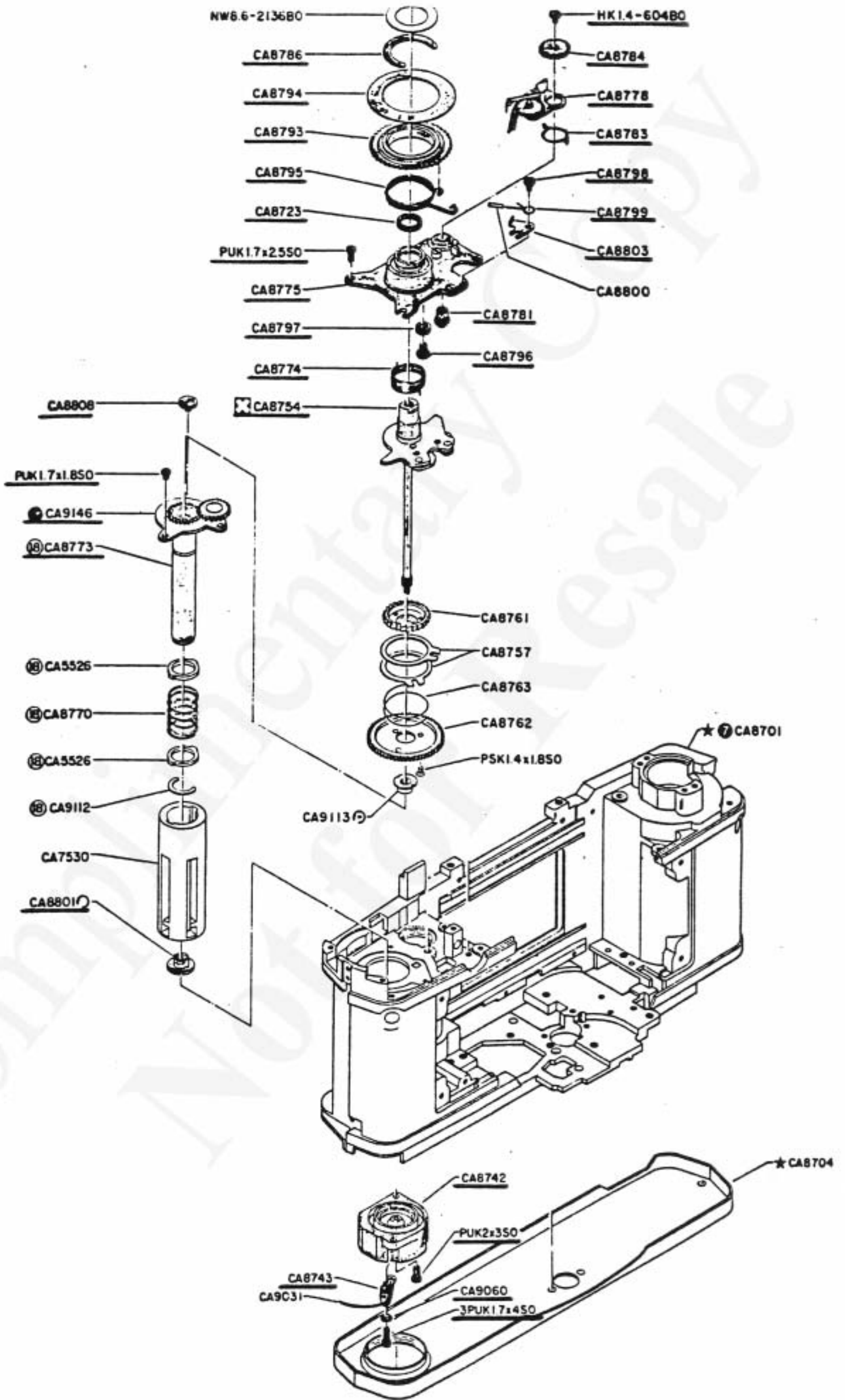




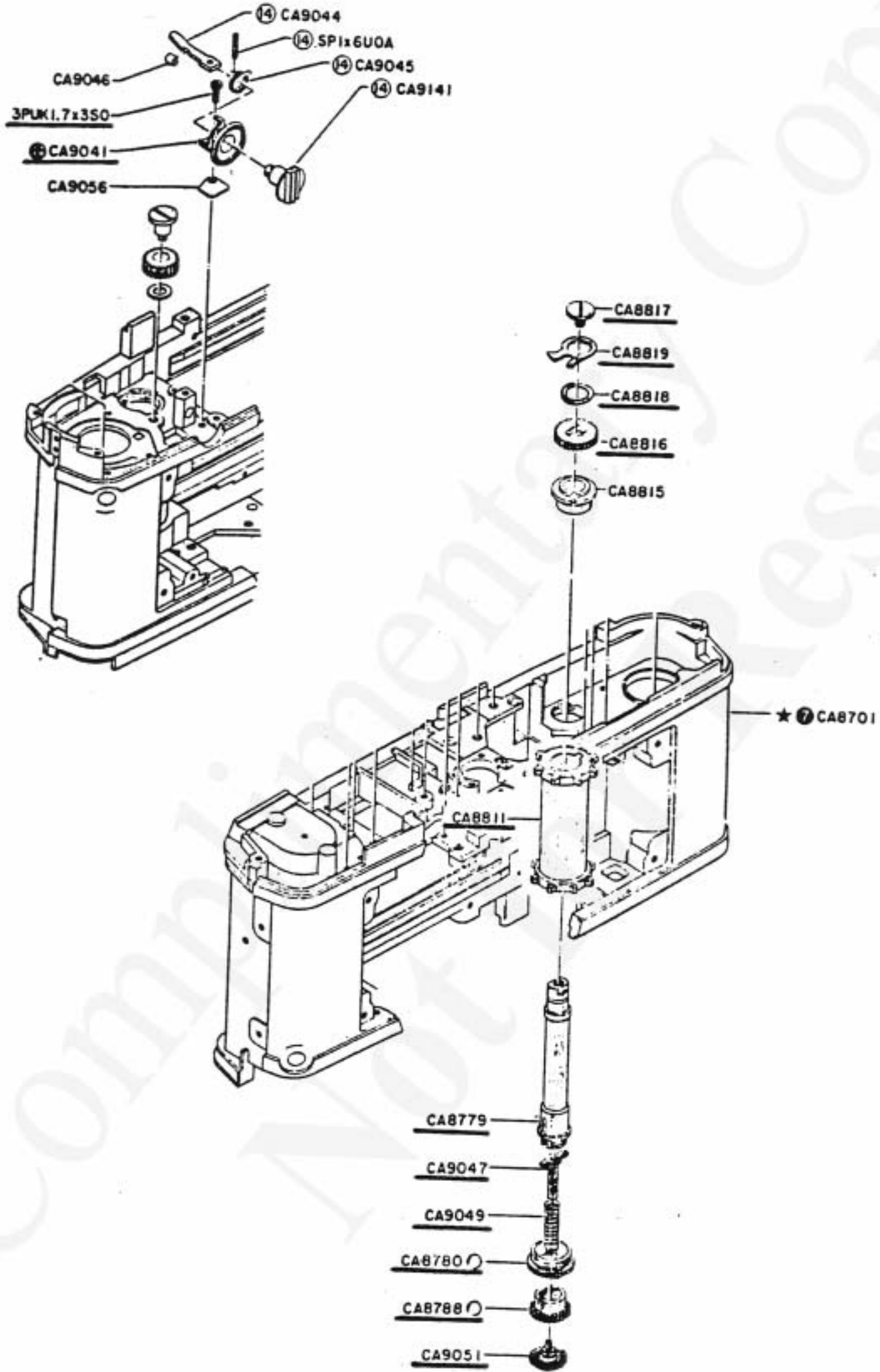












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