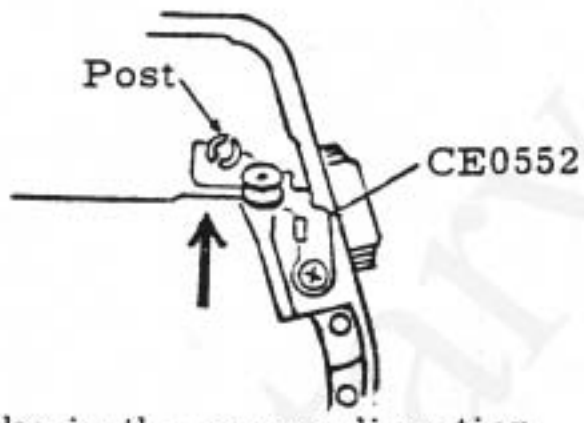
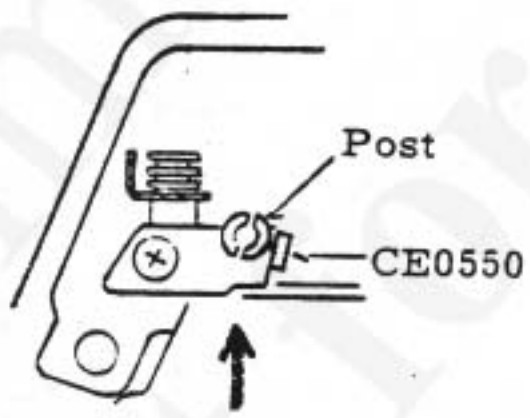
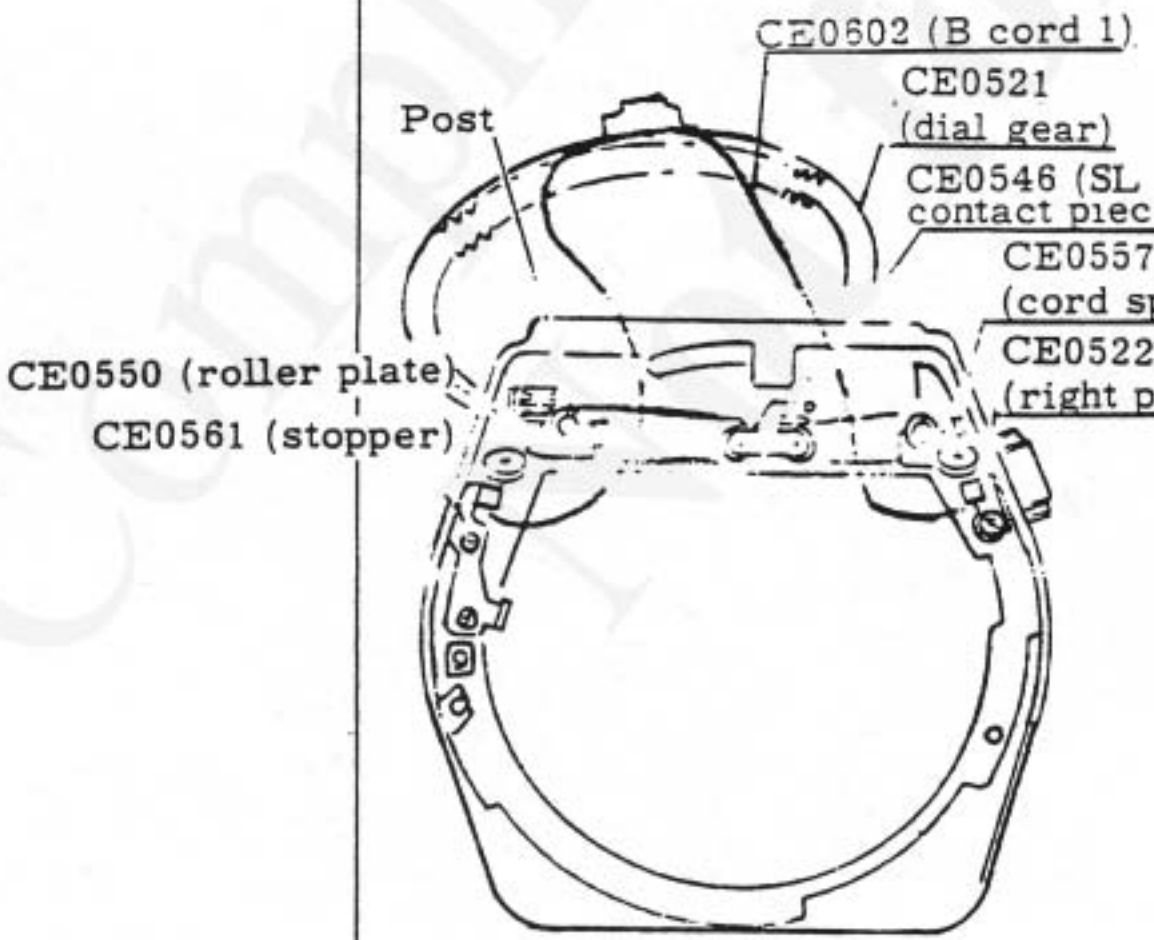
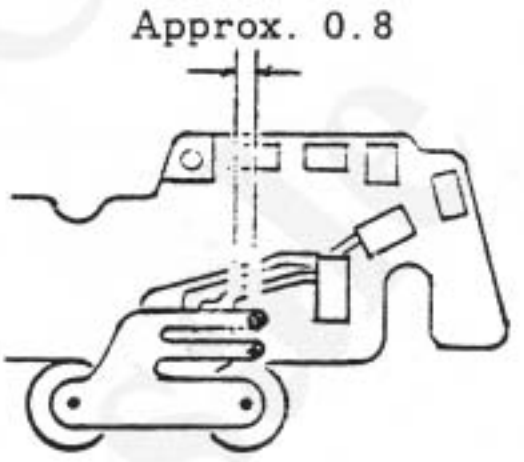
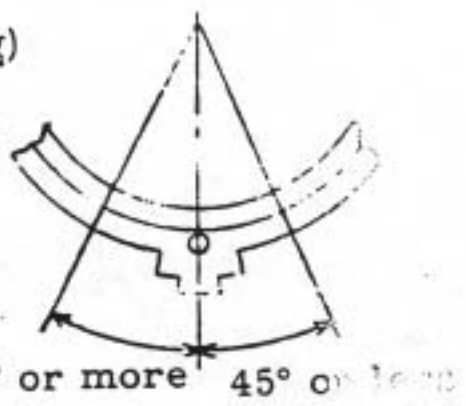
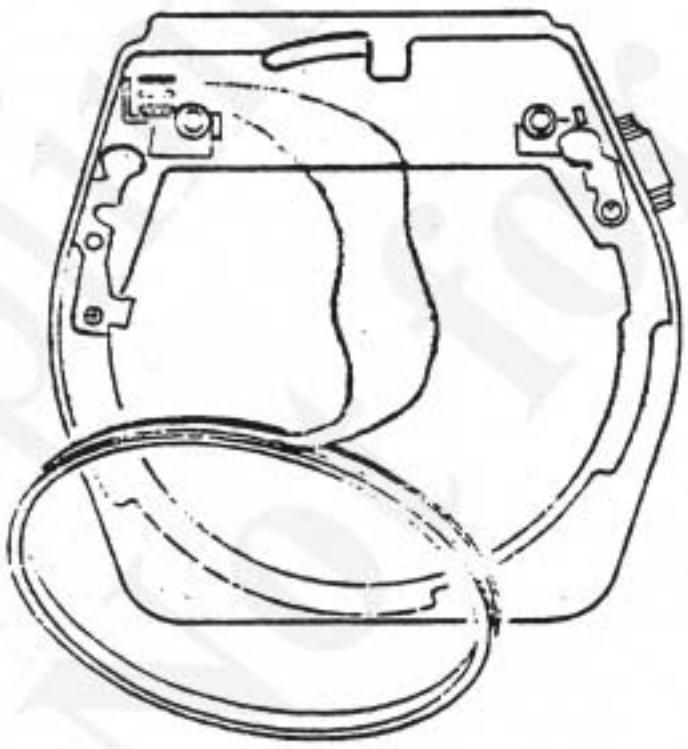
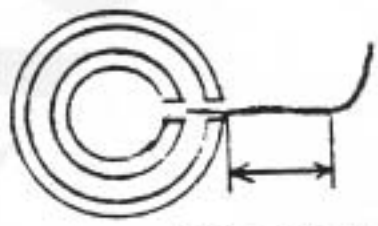
5. Improper changing of shutter speed

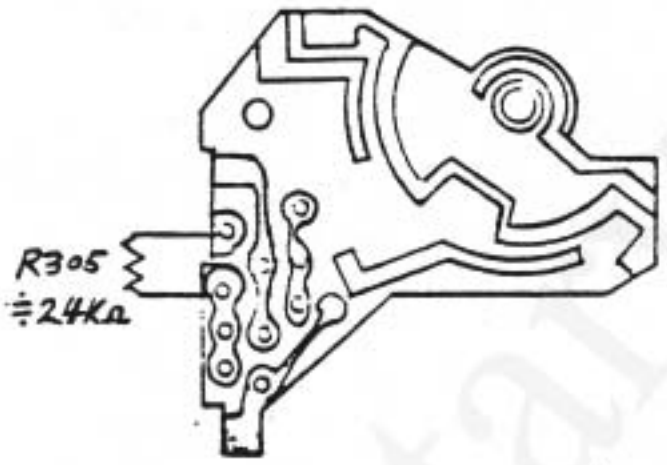
Cause	Remedy	Checkup
1) Improper position of CE0552 (right side plate)	After confirming that the roller operates normally. strike CE0552 against the post illustrated below and tighten it.  Strike in the arrow direction	
2) Improper position of CE0550 (roller plate)	After confirming that the roller operates normally. strike CE0550 against the post illustrated below and tighten it.  Strike in the arrow direction	
3) Poor insulation of CE0555 (circuit board B)	When CE0546 (SL contact piece) is attached. the insulation should be as follow. Between yellow LW and Main Body ... ∞ Ω Between blue LW and Main Body ... Conductive at "B" and ∞ at other shutter speeds. Between yellow LW and Blue LW ... Resistance value of each shutter speed is obtained. (This test should be done with the yellow and blue LWs disconnected from CE0591 SW circuit board).	When CE0546 (SL contact piece) is not attached. the insulation should be as follow. Between yellow LW and Main Body ... ∞ Ω Between blue LW and Main Body ... ∞ Ω Between blue LW and Yellow LW ... ∞ Ω

Cause	Remedy	Checkup
4) Defective CE0602 (B cord 1)	Replace on re-attach CE0602 in the following manner. (1) Wind CE0602 (cord) around the edge of CE0550 (roller plate). turn the post and pass the cord through CE0546 (SL contact piece). (2) Thread CE0602 (cord) through the roller (two positions) of CE0561 (stopper) and then through the roller (two positions) of CE0522. (3) Thread through CE0546 and then through CE0557 (cord spring) and wind two times. (4) Engage the cord in CE0521 (dial gear) and place it on CE0502 (front plate) to decide the cord length. and then glue to the cord winding portion of CE0557 (cord spring). Then cut off surplus length. (5) Referring to the checkup method at above right. decide the position of CE0546 and glue the cord to CE0521 (dial gear).  Gluing: Cemedine 3000RS	CE0546 (SL contact piece) should be in the position shown below when the shutter dial is set to 1/1000.  Gluing of the cord to CE0521 (dial gear): Drip 2 - 3 drops of Cemedine 3000RS into the gluing hole of CE0521. The gluing area should be more than 45° and less than 90° (20 - 30mm) as illustrated below. 

6. Improper coupling of CE0522 (coupling ring)

Cause	Remedy	Checkup
1) Defective CE0603 (B cord 2)	If CE0522 (coupling ring) operates normally, check CE0603. When it is found defective, replace or adjust it in the following manner. (1) Thread the upper part of cord through the lower roller, and the lower part of cord through the upper roller. respectively. in the condition with CE0522 (coupling ring) placed on CE0502 (front plate). (2) Thread the upper length through the B spring unit and wind it round B spring plate (three winds clockwise with care not to cross) and glue there. (3) Glue the lower length to CE0635 (pulley M).  	 Do not apply Cemedine here. When CE0522 (coupling ring) is struck against the stopper. the condition should be as shown at left.

7. Excessive indication difference between AUTO and MANUAL

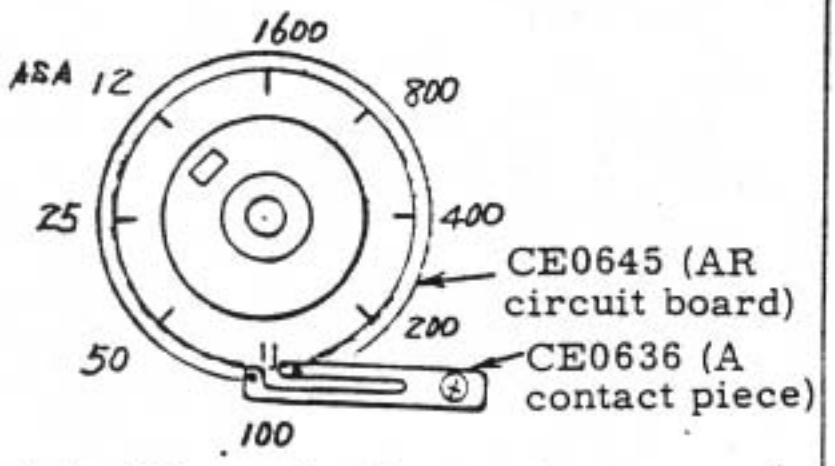
Cause	Remedy	Checkup
1) Improper adjustment of R306	Replace R306 to have the condition at right. 	Check Points at AUTO/ MANUAL. <table><tr><th>EV</th><th>(ASA)</th><th>Shutter Speed</th><th>FNO</th></tr><tr><td>8</td><td>100</td><td>1/30</td><td>2.8</td></tr><tr><td>11</td><td>"</td><td>1/60</td><td>5.6</td></tr><tr><td>14</td><td>"</td><td>1/125</td><td>11</td></tr><tr><td>16</td><td>"</td><td>1/500</td><td>11</td></tr></table> o Standard ... ±0.3EV for each check point. o Set to zero at MANUAL and switch to AUTO and see deviation from the center of each shutter speed value.

8. Excessive difference in going and returning meter needle deflection owing to aperture ring.

Cause	Remedy	Checkup
1) Insufficient tension of CA8999 (gear spring)	When the tension of CA8999 is insufficient. it may cause excessive unbalance in the meter needle reciprocating movement and improper returning of cord. CA8999 should be tensioned by two winds. and replaced if tension is too weak. It is recommended to tension after tentatively tightening the gear shaft. Remove CE0502 (front plate). whole set of meter unit. and then whole set of CE0626 (bottom plate M unit), and thereafter make the repair.	CA8999 should operate effectively and surely.

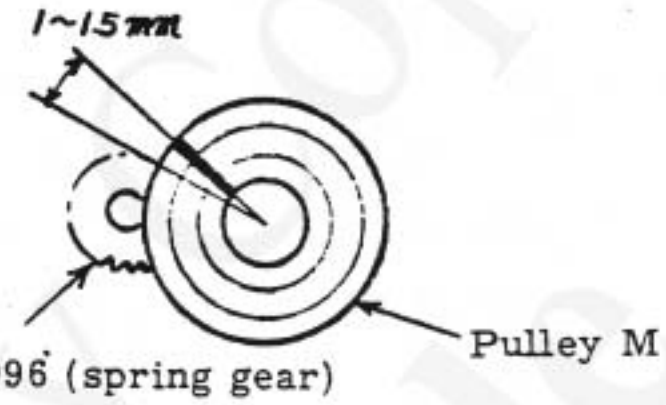
9. Others

1) Each ASA position of CE0645 (AR circuit board)



Each ASA setting is matched to CE0636 (A contact piece). The above illustration shows that CE0636 is matched to ASA 100.

2) Mounting of CE0635 (pulley M)



CE0635 (pulley M) should be set to 1 - 1.5mm with CA8996 (spring gear) as a reference.

3) Mounting of exposure meter

a. ASA = 12

b. Eccentric of CE0630 (A lever 2) = Center

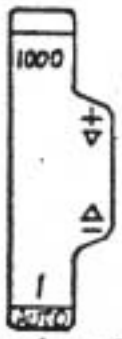
c. Engagement of M gear and CA8983 (P gear) = 2.5 teeth

d. Engagement of CE0633 (Q gear) and CA9000 (pulley gear) = 3.0 teeth

Set CA8981 (pulley holder) as above. and tighten PUK1.7-406SO. (See "ORDER OF DISASSEMBLY".)

4) Cleaning of CE0547 (viewfinder indication plate)

Use RIGROINE for cleaning. Never use mixed solution. (It can erase the characters.)



Viewfinder Indication Plate

5) Constant-voltage power supply:

The reference voltage of the exposure meter differs from that of the shutter because of the following reasons.

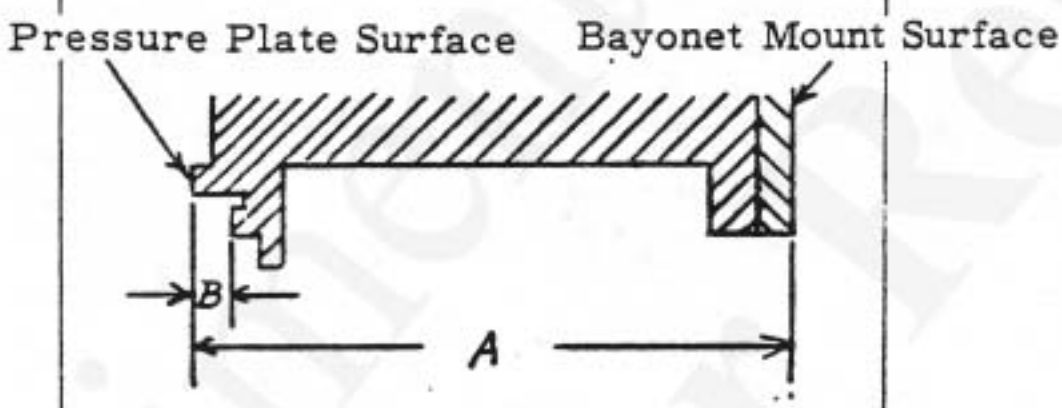
a. As the current consumption of the exposure meter is several 100μA. the battery can supply 3.15V without voltage drop.

b. As the current of about 10mA is consumed when the shutter operates. the battery suffers the voltage drop and supplies 3.10V instead of 3.15V.

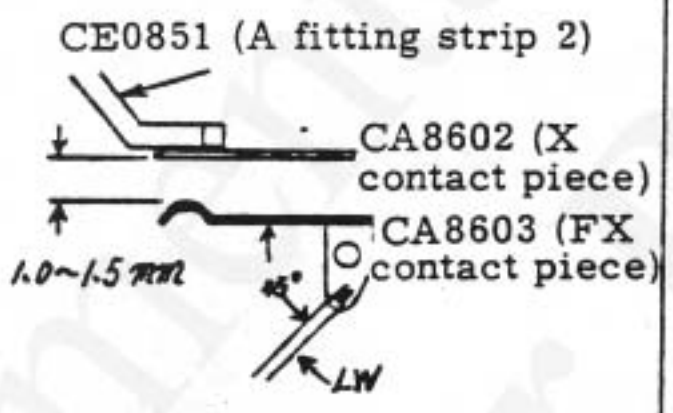
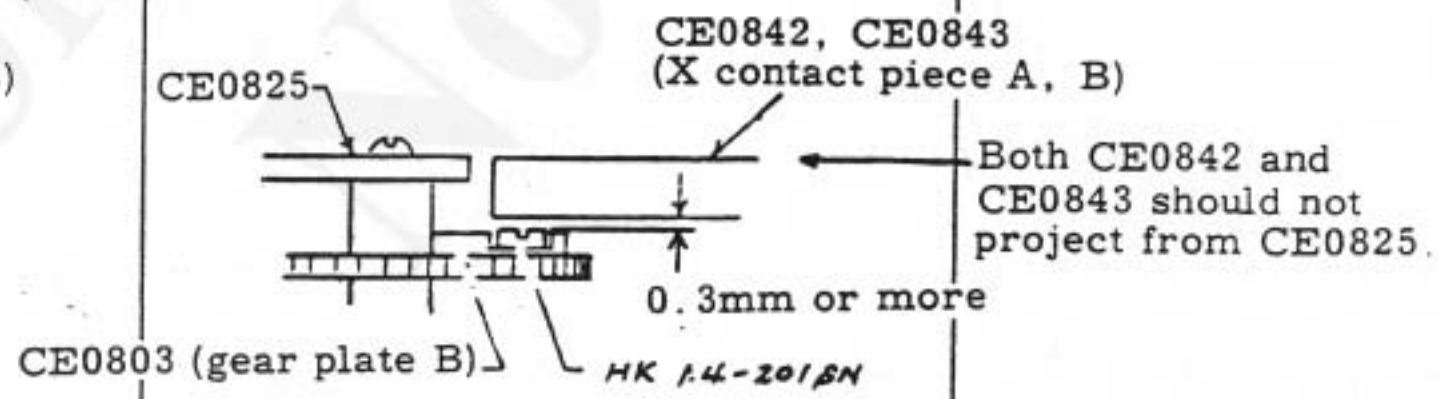
Owing to the above reasons. the power supply voltage should be set to 3.15V for the exposure meter and 3.10V for the shutter when the constant-voltage power supply is used.

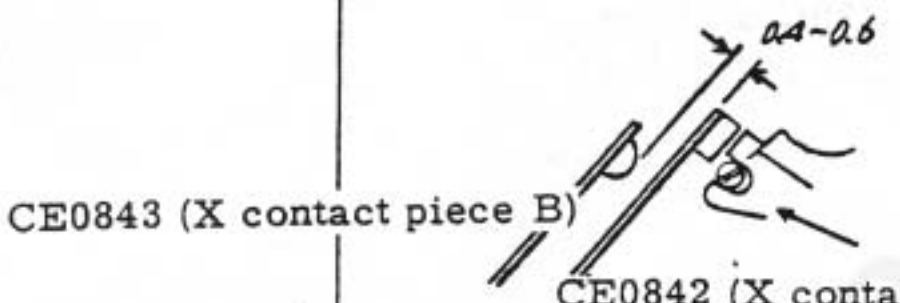
V. PERFORMANCES

1. Poor focusing

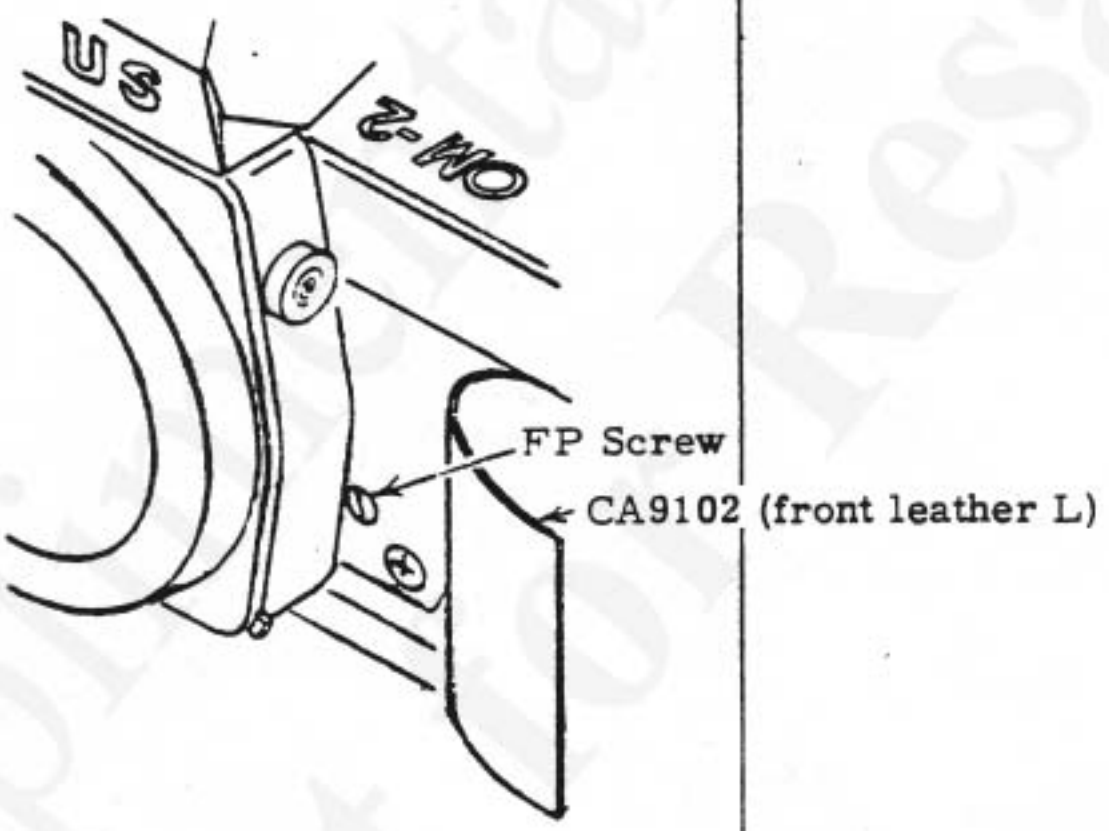
Cause	Remedy	Checkup
1) Adjustment of flange back	The distance from CA8877 (bayonet mount) to film pressure plate surface should be: $A = 46.2^{+0}_{-0.02}$ The distance from pressure plate surface to film rail surface should be: $B = 0.2^{+0.02}_{-0.01}$  Adjustment should be made with CA9106. CA9107 and CA9170 (spacer). (See the OM-1 Repair Manual.)	
2) Poor focusing in viewfinder	Select proper piece out of a - h series of CA9144 (front ring seat) and CE0535 (back ring seat). and adjust focusing. Apply pliobond on the side of the ring seat. (See the OM-1 Repair Manual 20-I-D43.)	

2. WX contacts not conductive

Cause	Remedy	Checkup
1) Conduction failure between CA8602 (X contact piece) and CA8603 (FX contact piece)	CA8602 and CA8603 should be as follow. a. CA8602 should be pushing CE0851 after winding. (If not. bend CA8602.) b. CA8602 should not project from the edge of A Lever 1 (CE0851 ASS'Y) c. The clearance between CA8602 and CA8603 should be within 1.0 - 1.5mm.  Lead wire should be soldered at an angle of 45°	When tested with WX tester. CA8602 and CA8603 should be conductive at shutter speed 1/60 sec. or slower, and not conductive at 1/125 sec. or faster. CA8602 and CA8603 should become conductive after the opening curtain finished running. X contact piece A and B should be conductive before the closing curtain runs. and become non-conductive as soon as the closing curtain starts to run.
2) Conduction failure between CE0842 (X contact piece A) and CE0843 (X contact piece B)	CE0842 and CE0843 should be as follow. (1) CE0842 and CE0843 should have a clearance of 0.3mm between HK screw of CE0803 (gear plate B) before winding.  (2) CE0842 and CE0843 should not project from CE0825 when winding is done.	

Cause	Remedy	Checkup
	(3) CE0842 should be contacted to CE0817 (closing claw B) and have a clearance of 0.4 - 0.6 between the metallic dowel of CE0843 before winding.  Adjustment is to be made by retightening PUK1.4 x 1.6SO of CE0842 and CE0843 or by bending CE0842 and CE0843.	
3) Insufficient contact efficiency	If the contact efficiency is less than the value described at right when measured by an insulation efficiency gauge. clean each contact piece or replace it.	1/60 sec. at an interval of 1ms: 60% or higher 1/30 sec. at an interval of 2.5ms: 70% or higher
4) Check for insulation and continuity	Check in the following procedures. (1) Check for insulation of FP contact Check with the shutter speed set to 1/1. (2) Check for continuity of X contact It should be conductive with 3V when the shutter is released at 1/60 or slower. (3) Check for insulation of X contact Set the shutter speed to 1/1. wind the closing curtain midway after the opening curtain run. and check insulation. (4) Check for switching of X/FP contacts Keeping condition (3). set the supply voltage to 3V and switch from X to FP. and check continuity of FP contact.	(1) Should be 30MΩ or more at 500V when measured by insulation efficiency gauge. (2) X contact should be conductive at 3V. (3) Should be 30MΩ or more when measured by insulation efficiency gauge. (4) X contact should not be conductive and FP contact conductive at 3V.

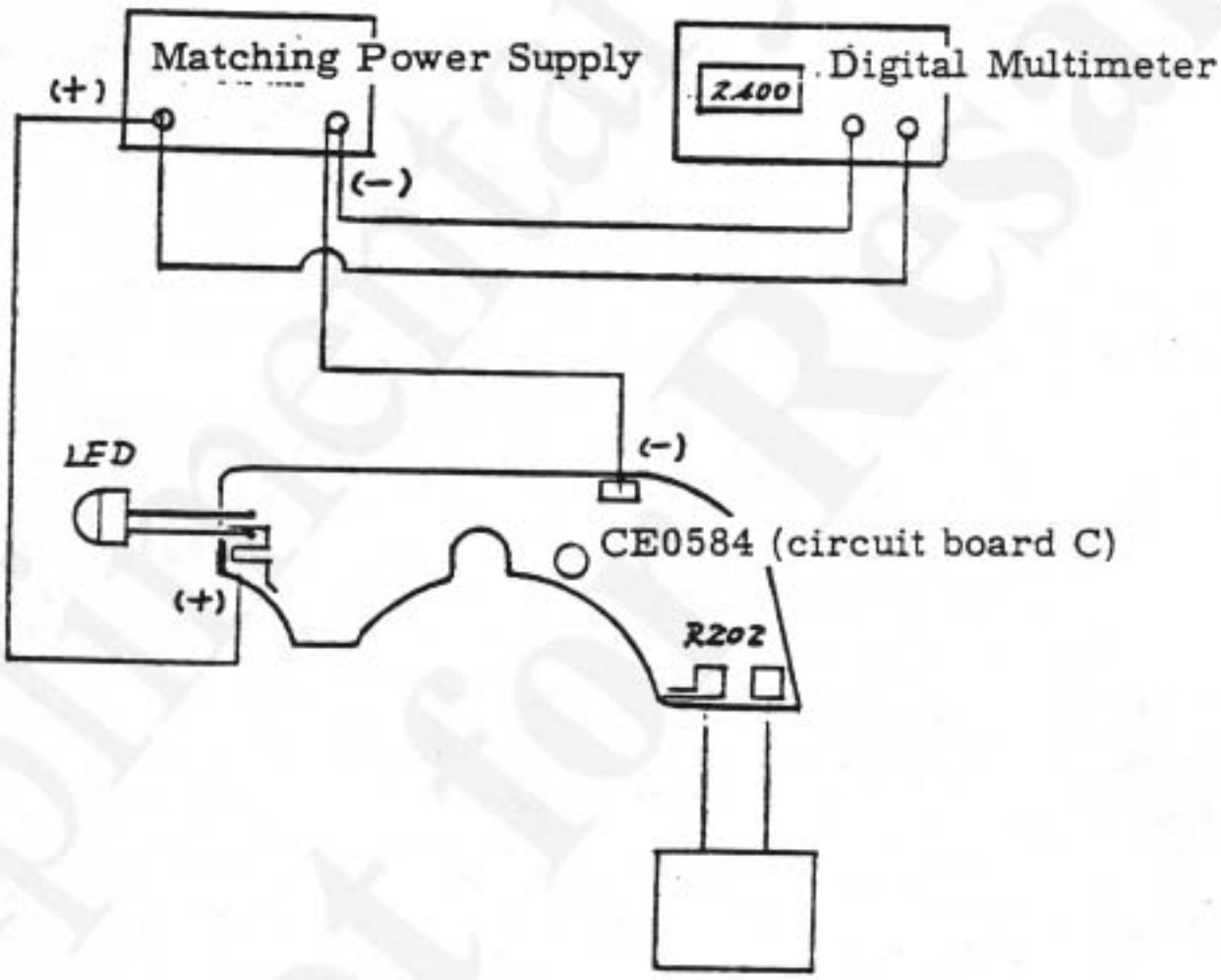
3. Improper time lag of FP contact

Cause	Remedy	Checkup
1) Improper adjustment of CE0532 (FP screw)	Peel off CA9102 (front leather L) around the reset button, and adjust by turning the FP screw with screw-driver No. 2. Clockwise turning: Becomes faster Counter-clockwise turning: Becomes slower  Caution: Take care not to tighten FP screw too deep. because it will be fallen into the inside of the camera body.	

VI. OTHERS

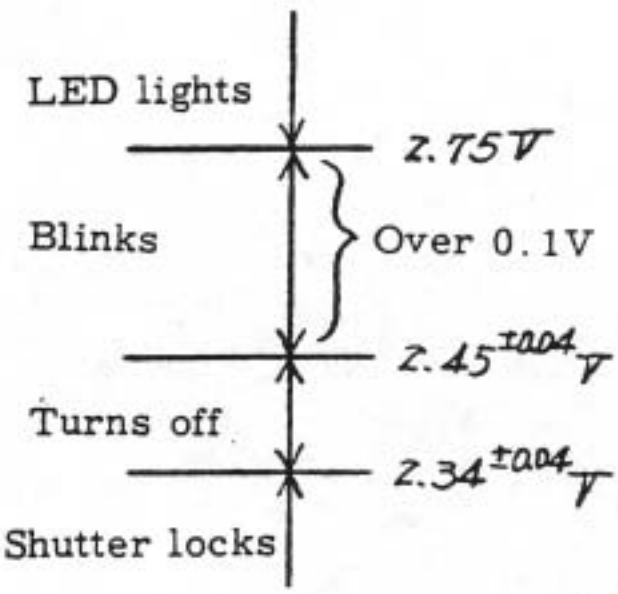
1. Improper battery checker indication

Cause	Remedy	Checkup
1) Improper matching of R202 (matching resistor)	After removing the whole set of CE0584 (circuit board C) from the body, remove R202 attached to CE0584 and wire it as illustrated below, and select a resistor with which the LED turns off at an voltage less than 2.4V.	Turn-off voltage: 2.45±0.04V Blinking voltage: Difference with the turn-off voltage is 0.1V or more and 2.75V or less.



The part wired to the resistor box in the above drawing is R202, which is available in the following 11 types.

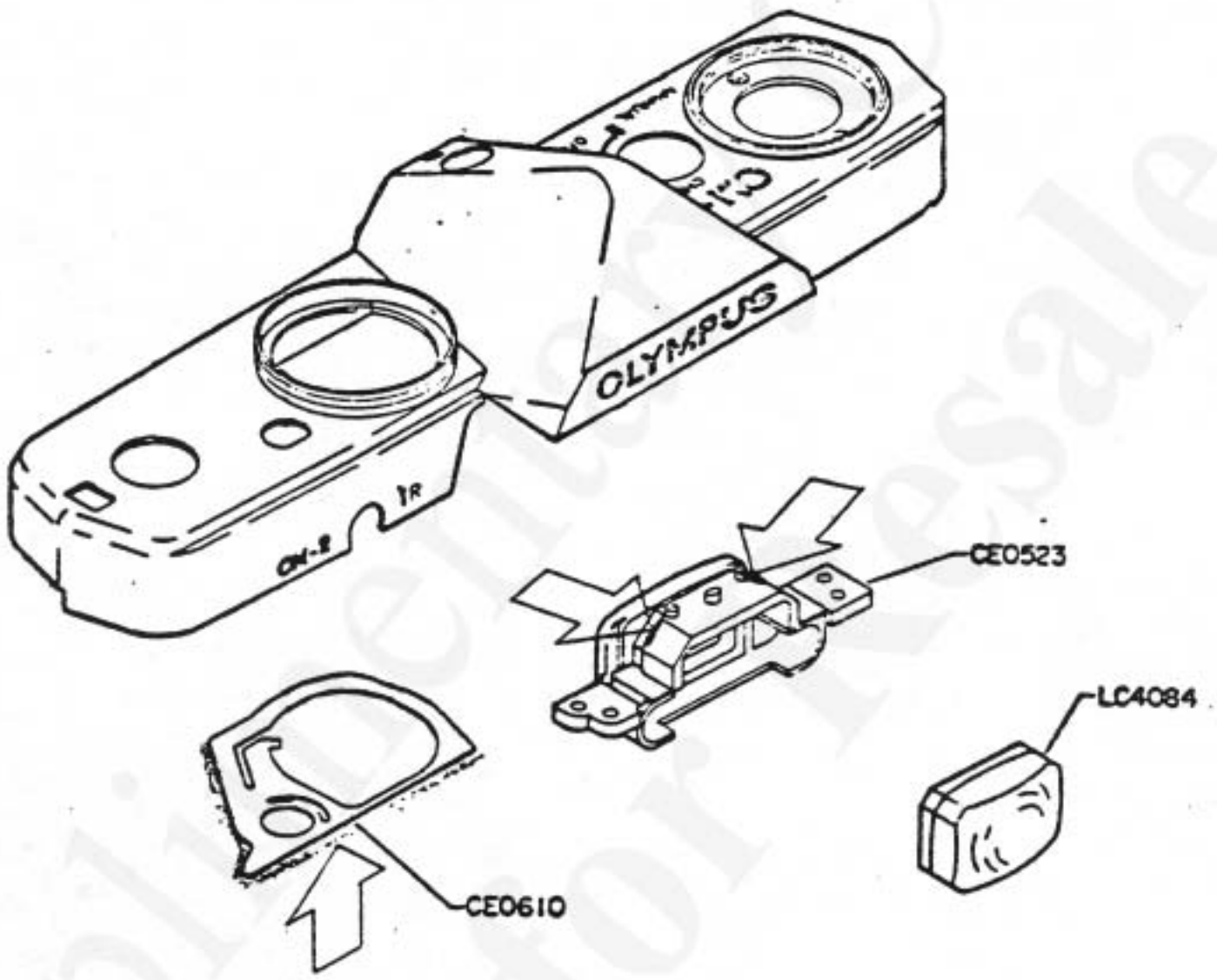
470Ω	±10%	1/16W
1.5KΩ	"	"
2.2 "	"	"
2.7 "	"	"
3.3 "	"	"
3.9 "	"	"
4.3 "	"	"
4.7 "	"	"
5.1 "	"	"
5.6 "	"	"
6.2 "	"	"

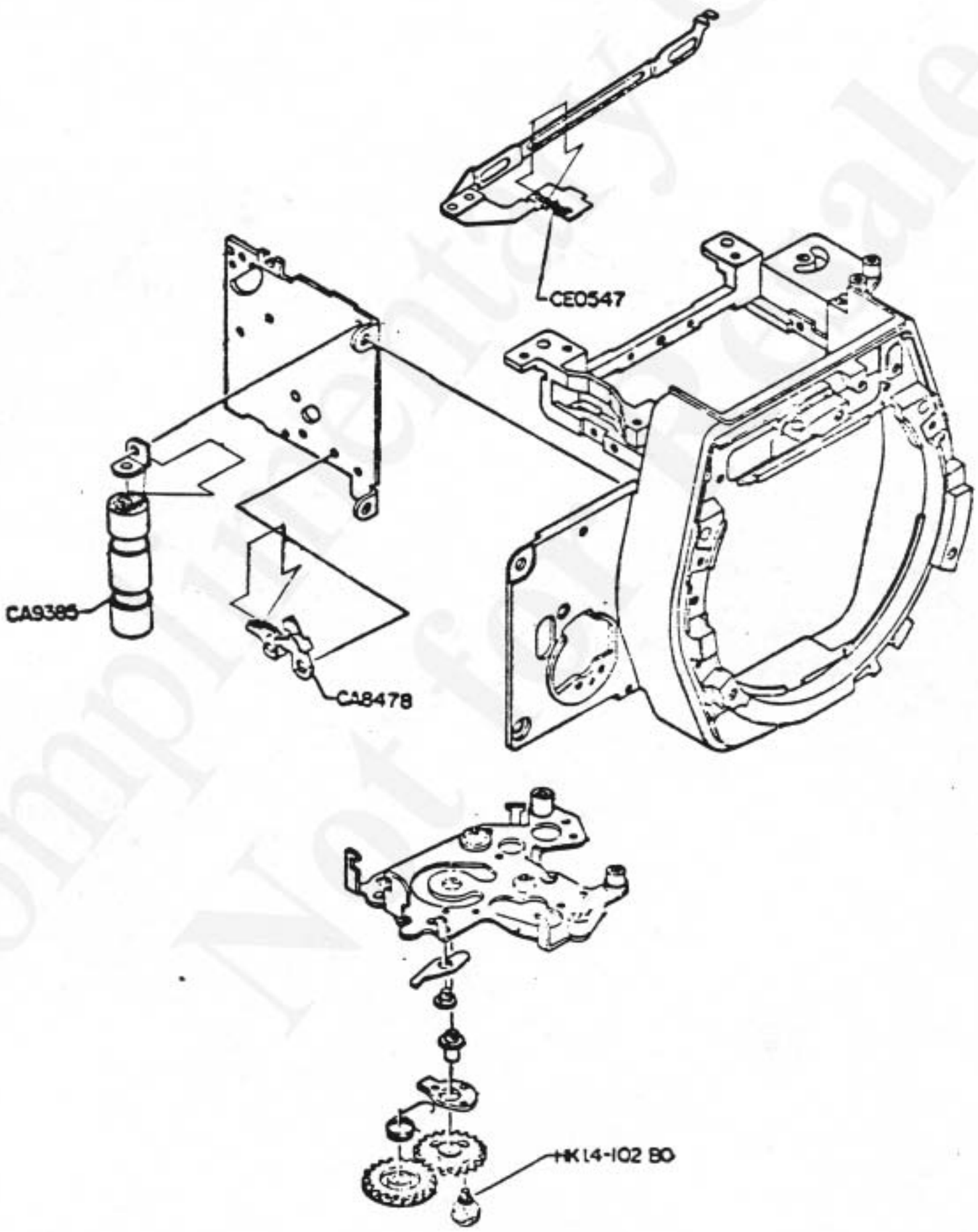


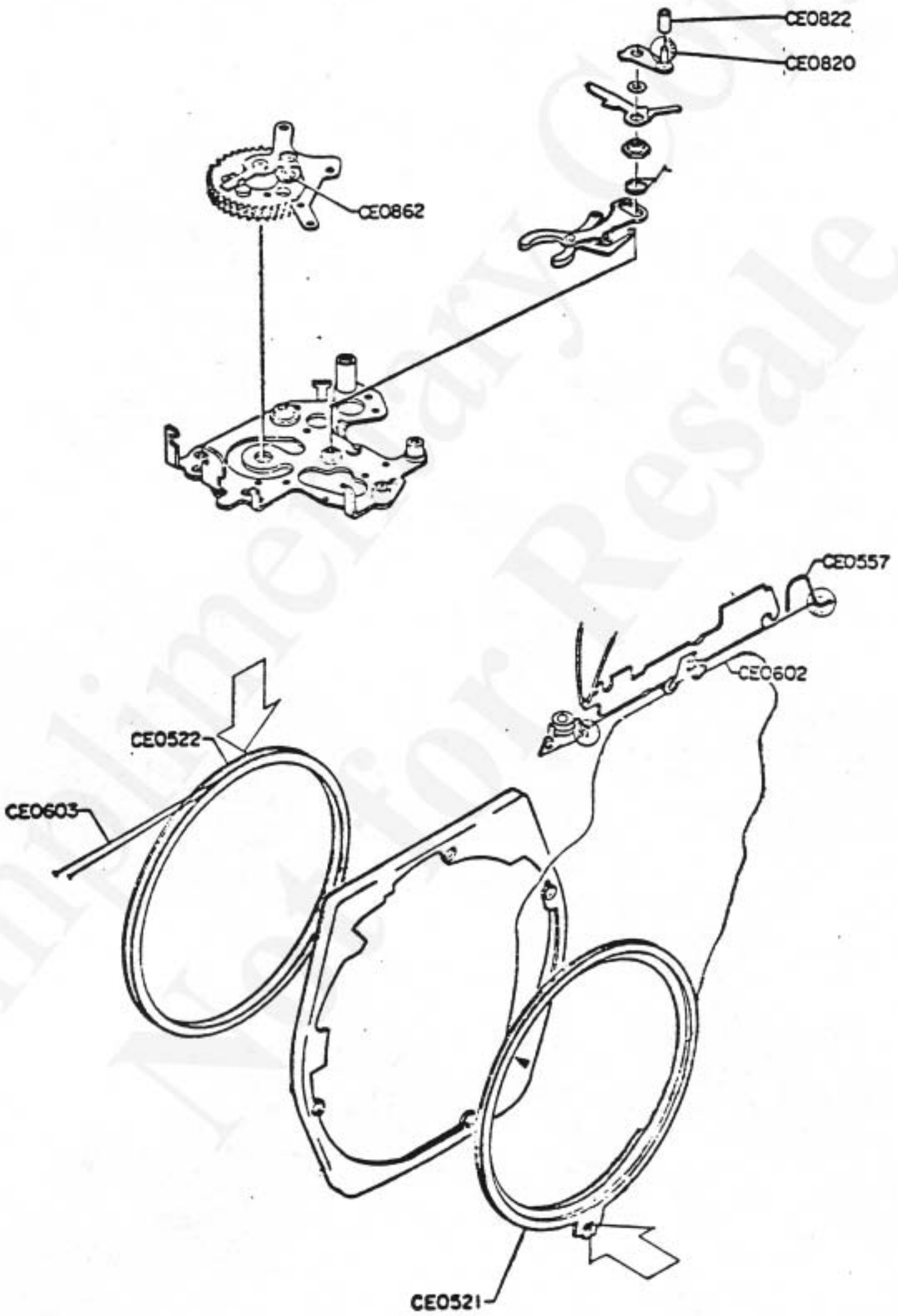
PARTS WHERE OIL, GREASE ETC. SHALL BE USED

CONTENTS

ARALDITE



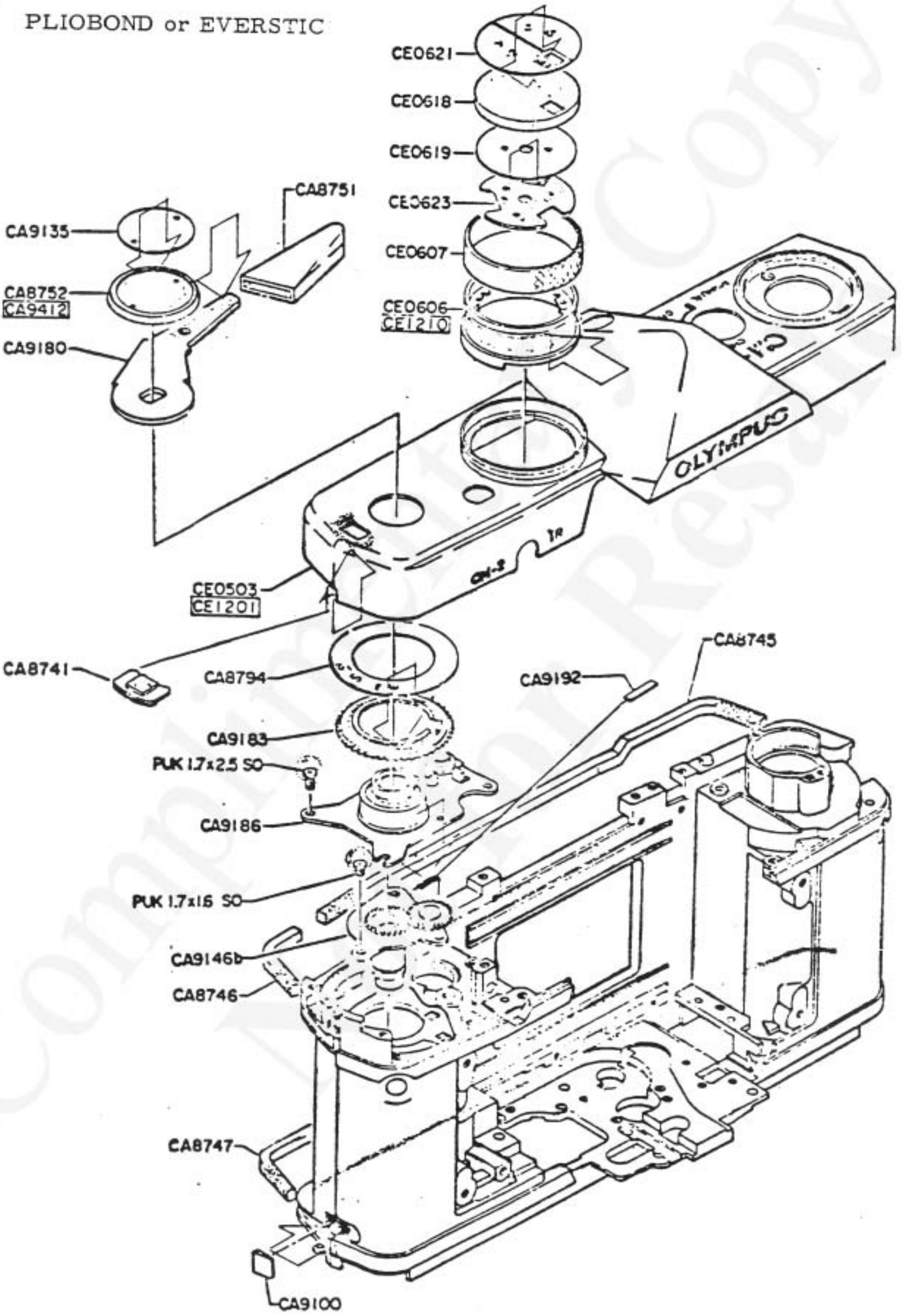




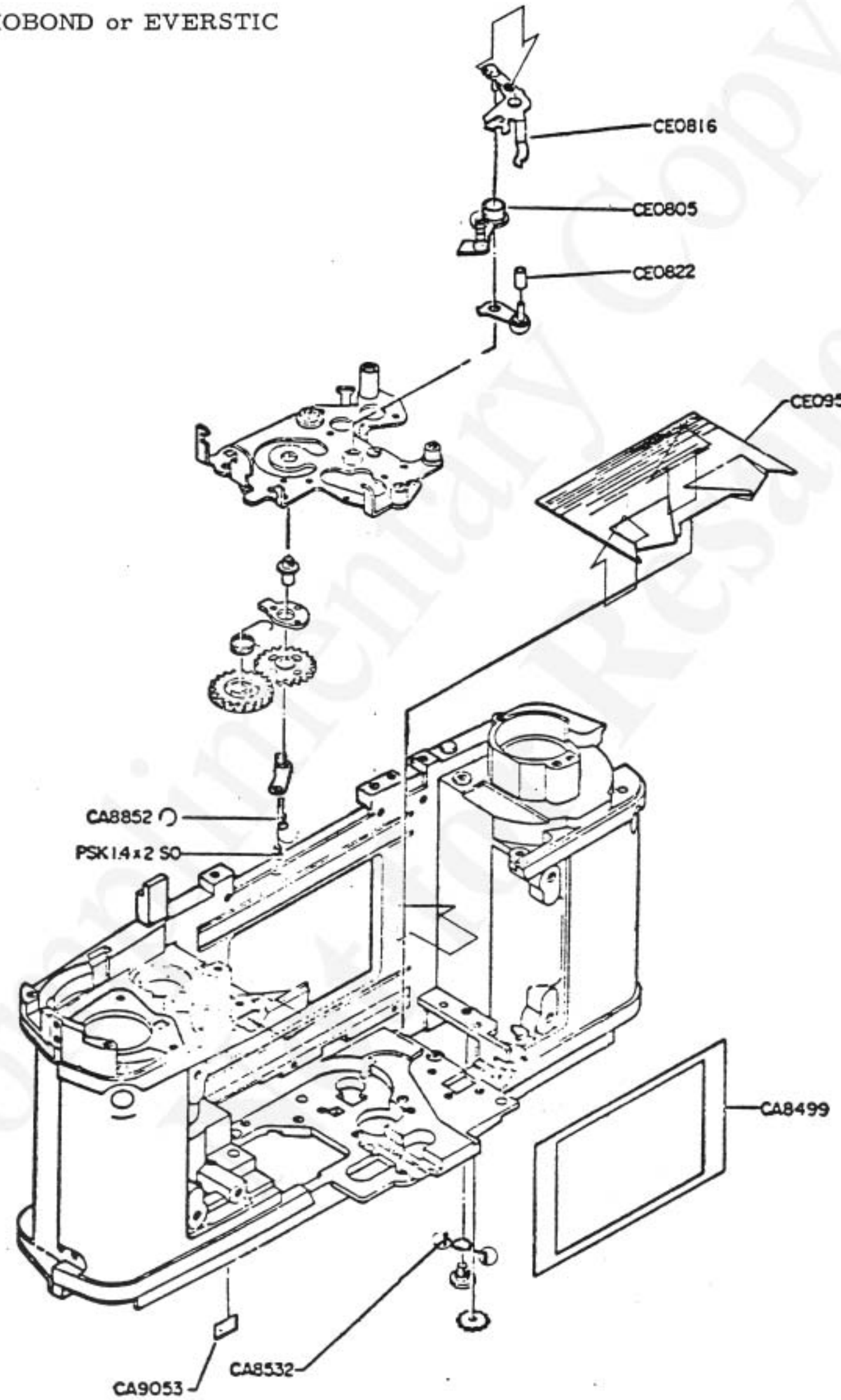
OLYMPUS
OM-2

PARTS WHERE OIL. GREASE. ETC. SHALL BE USED

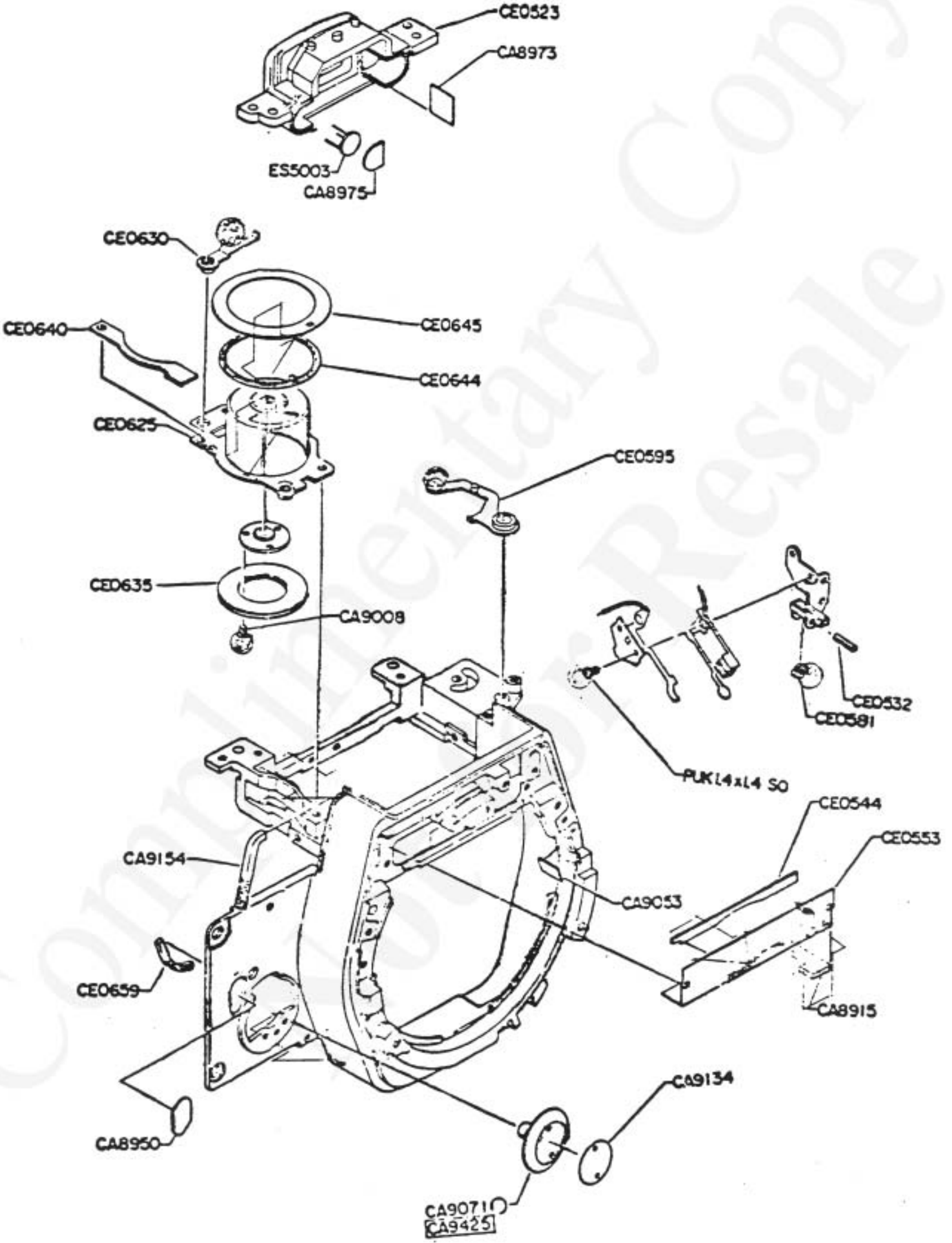
PLIOBOND or EVERSTIC



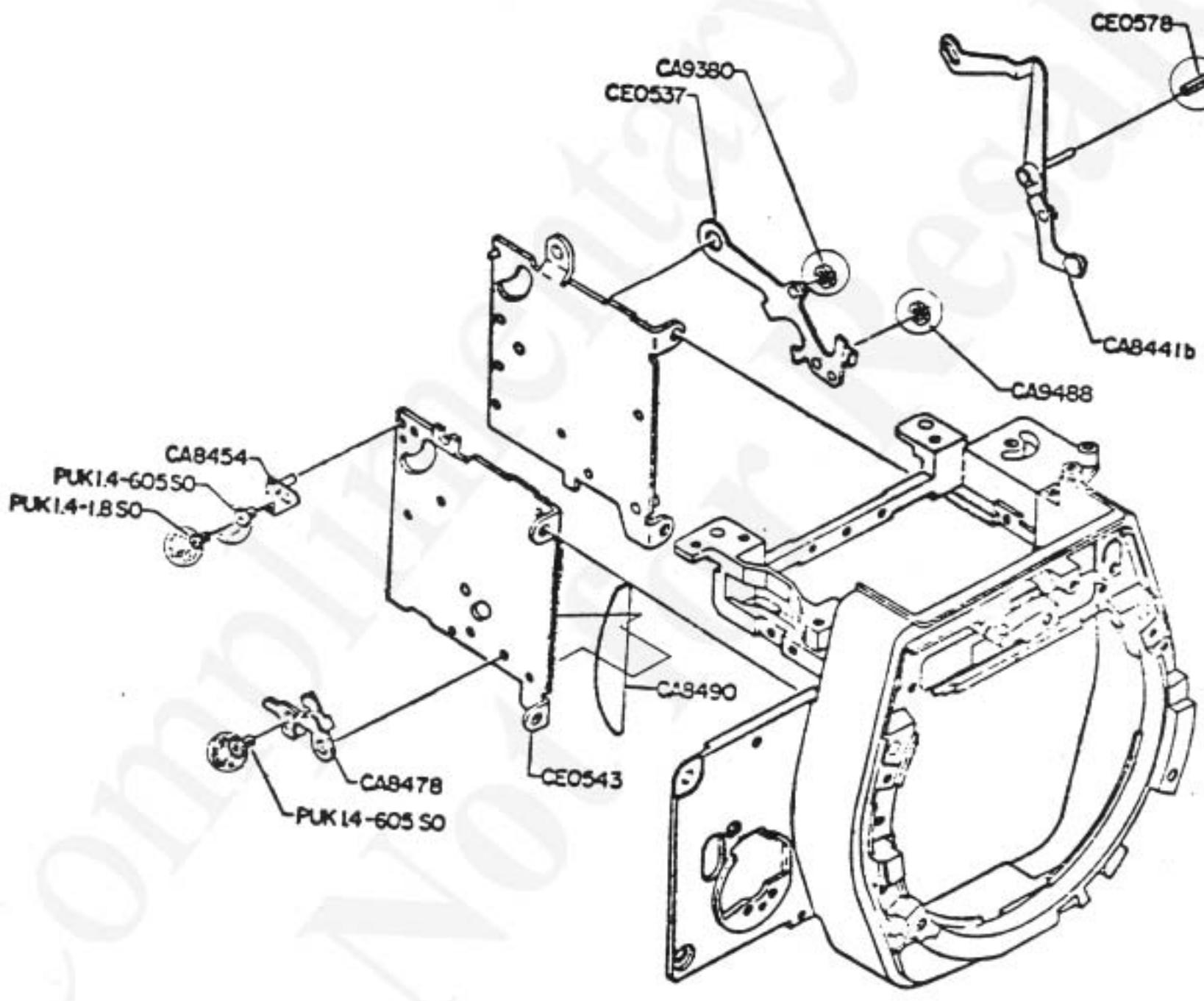
PLIOBOND or EVERSTIC



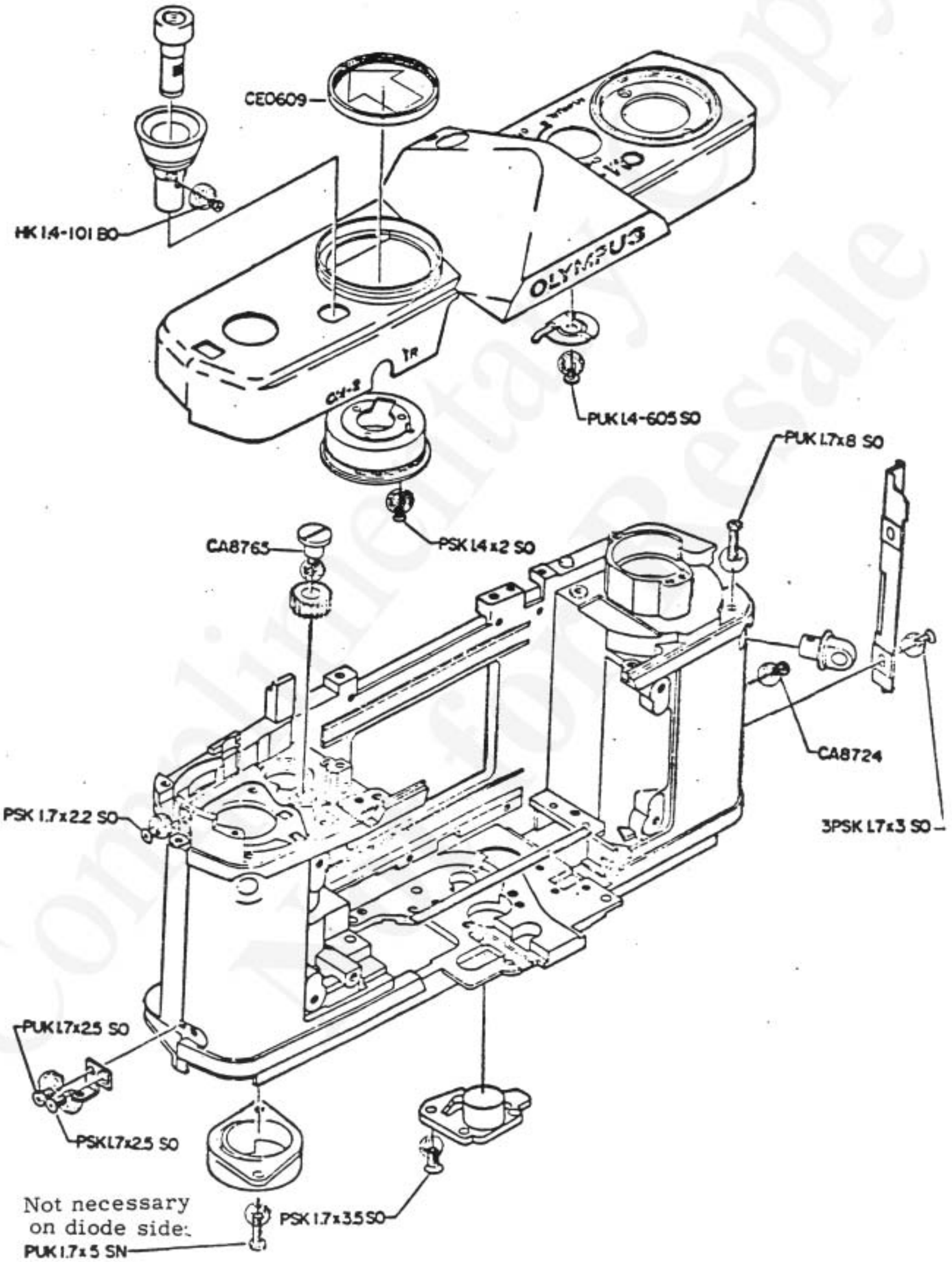
PLIOBOND or EVERSTIC



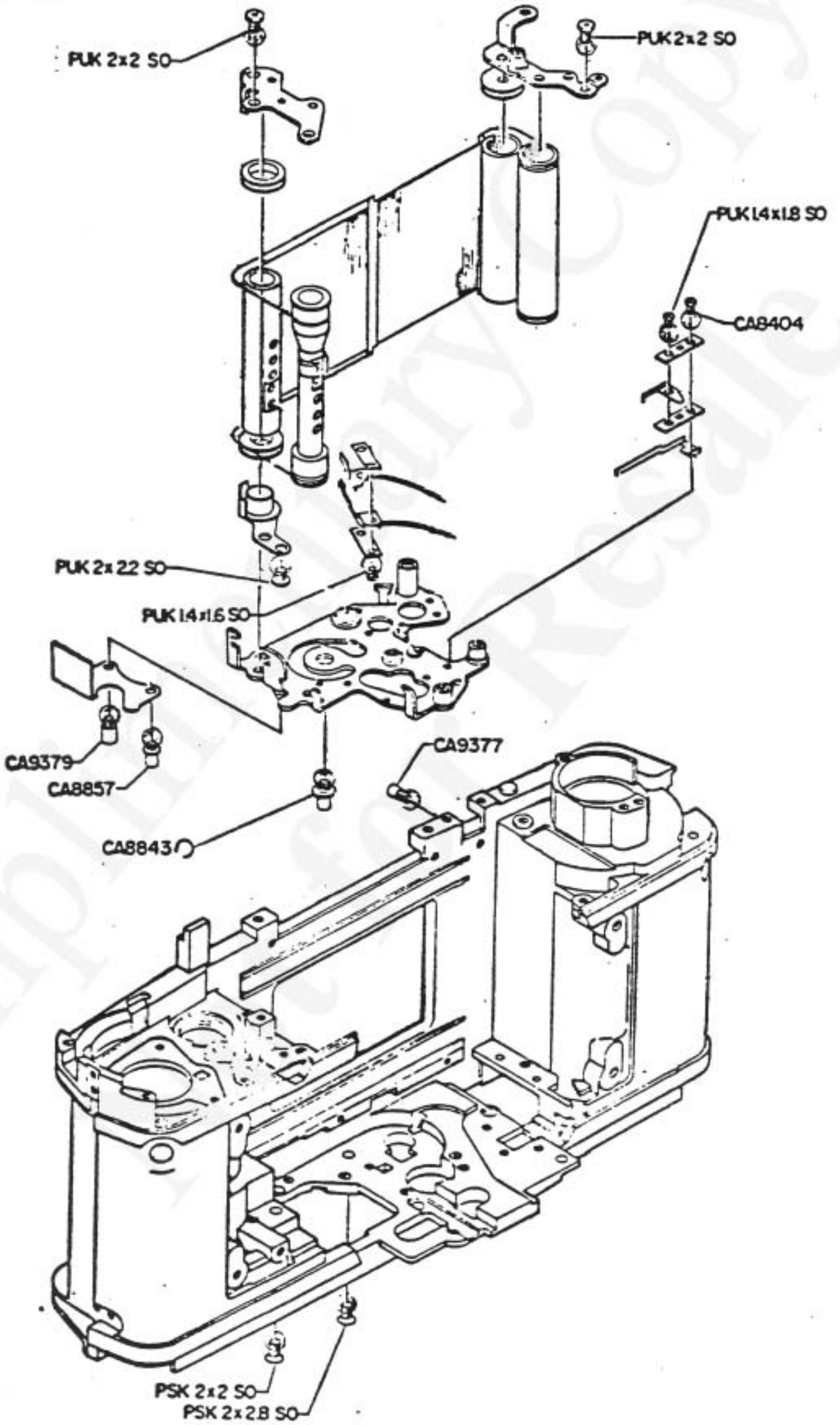
PLIOBOND or EVERSTIC



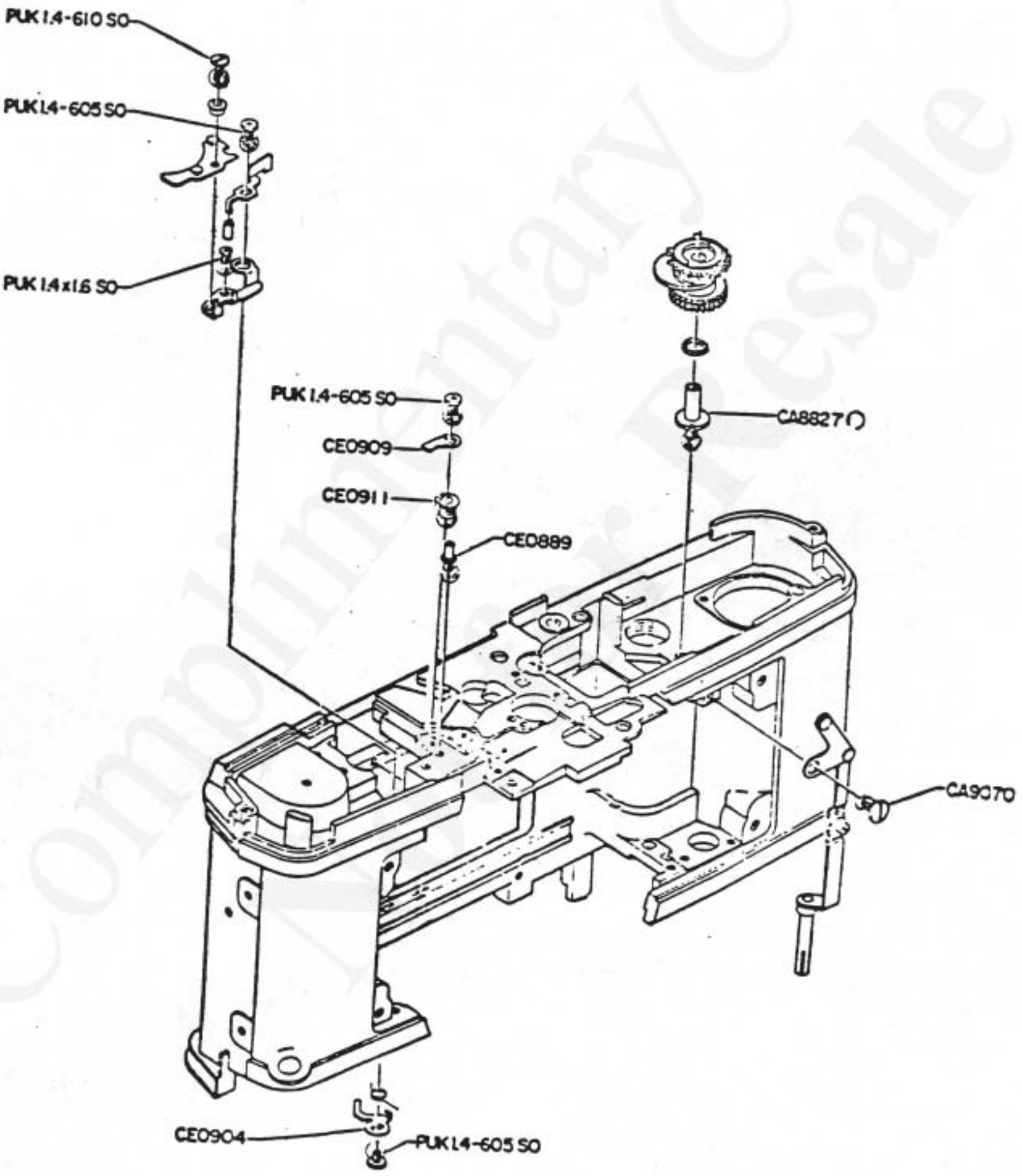
BELL LOCK SM



BELL LOCK SM



BELL LOCK SM



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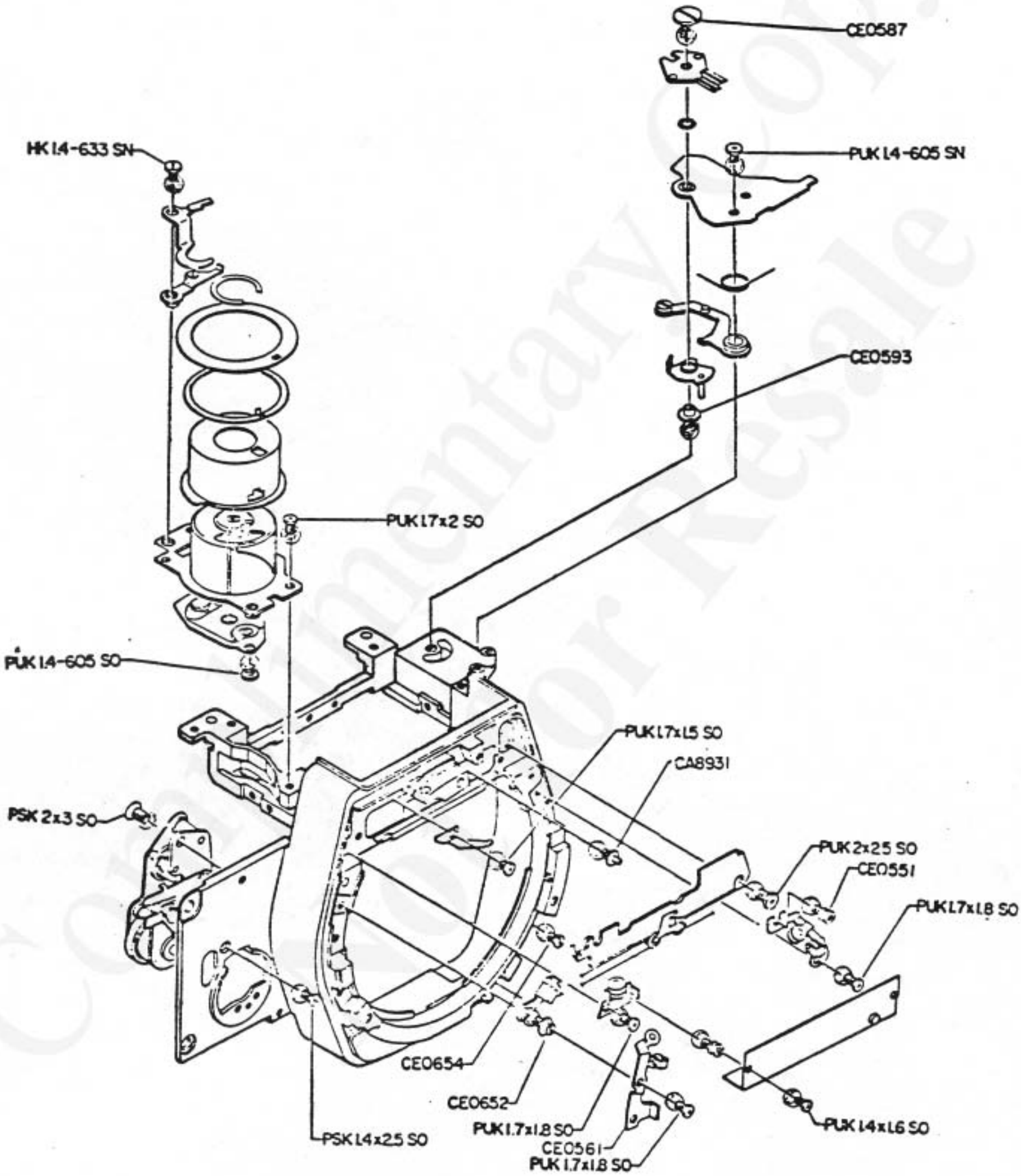
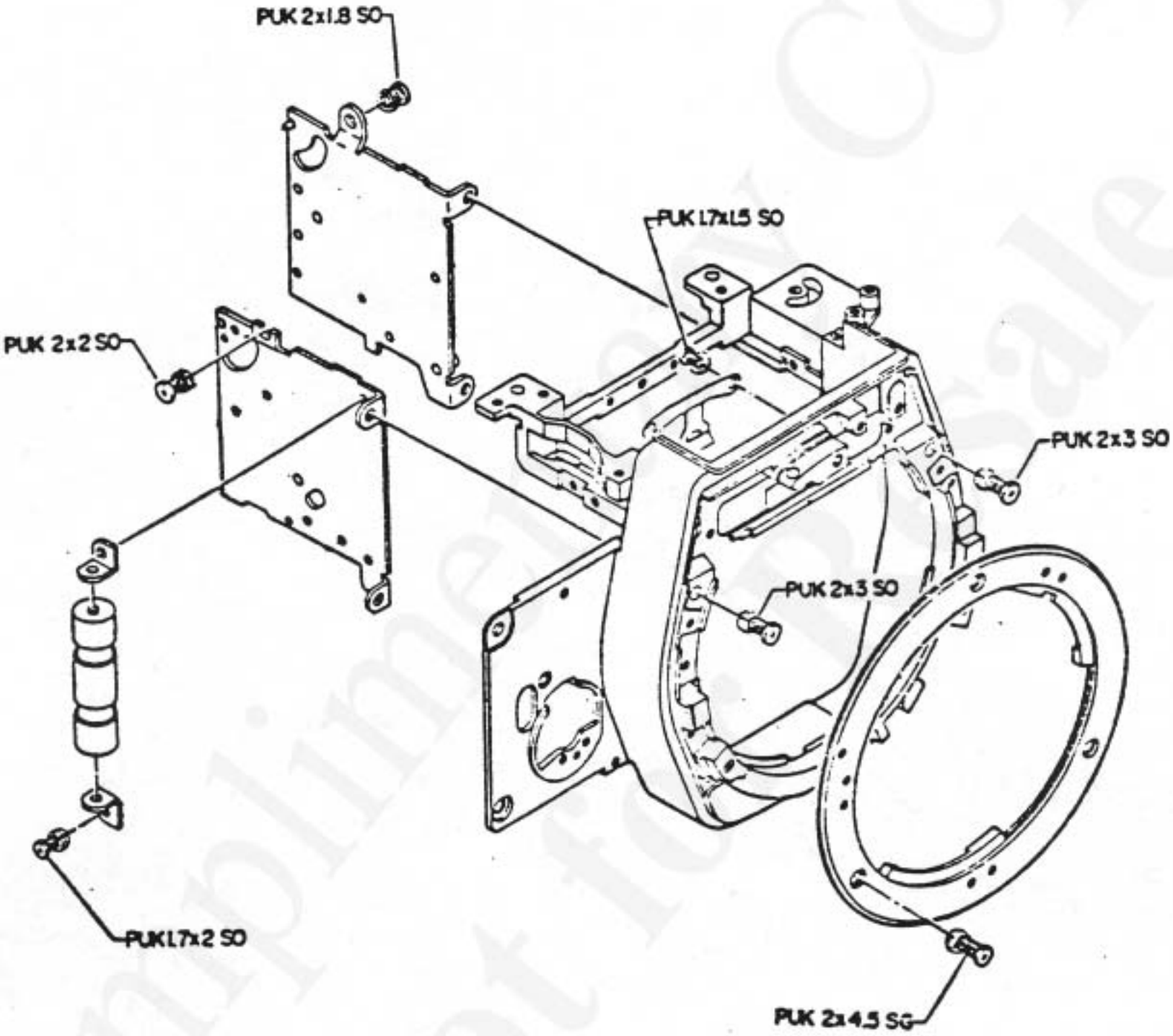
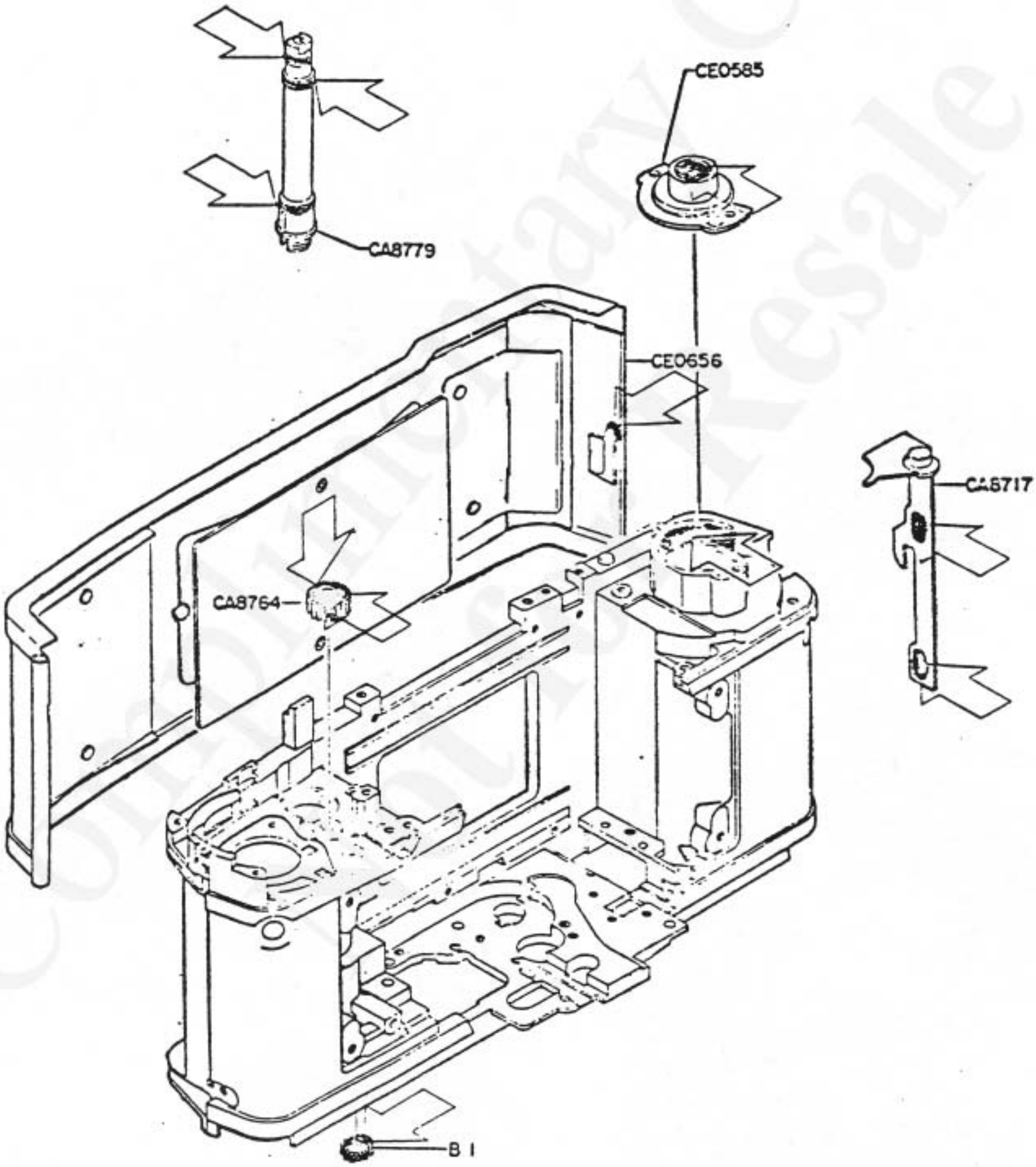
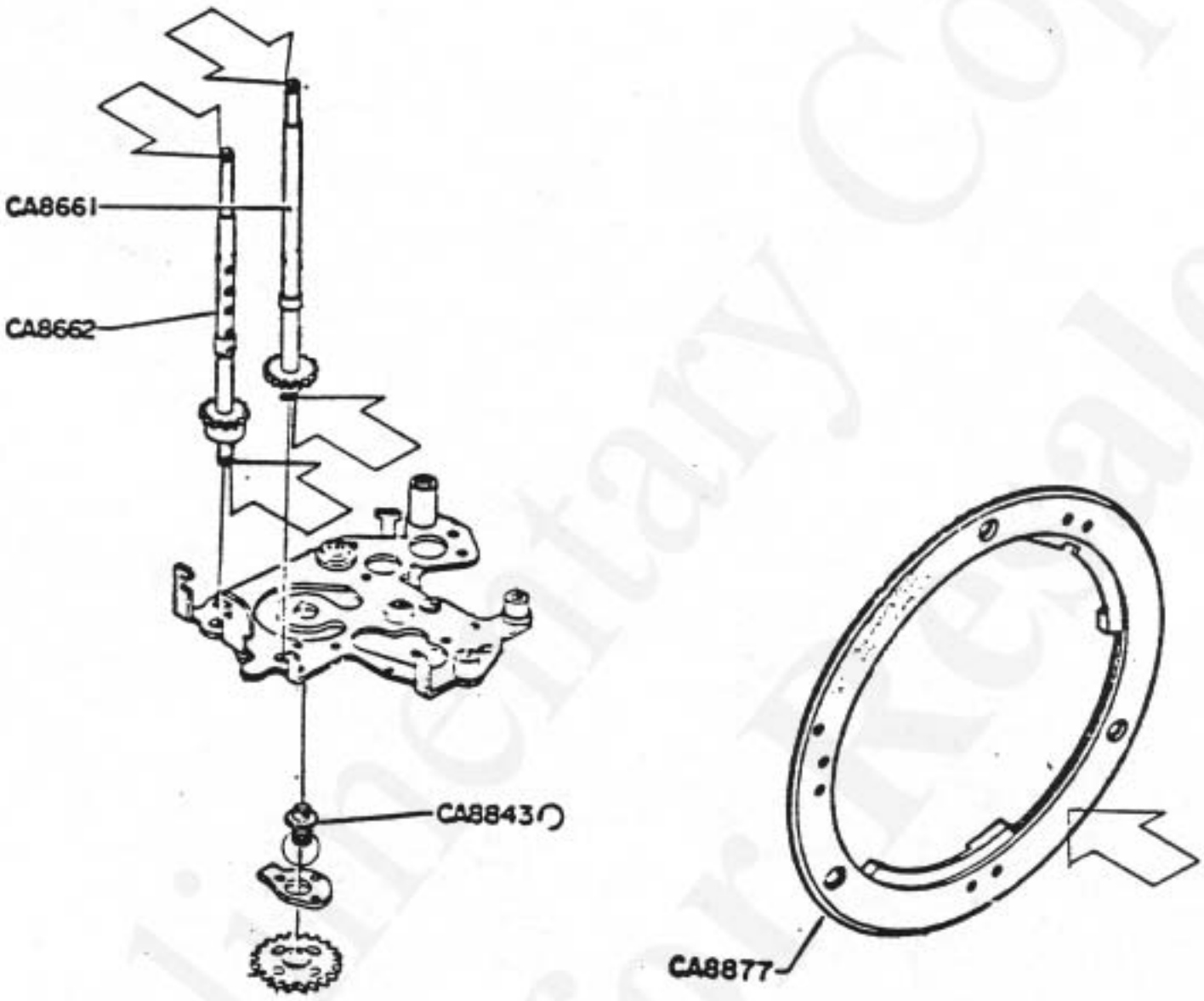


BELL LOCK SM

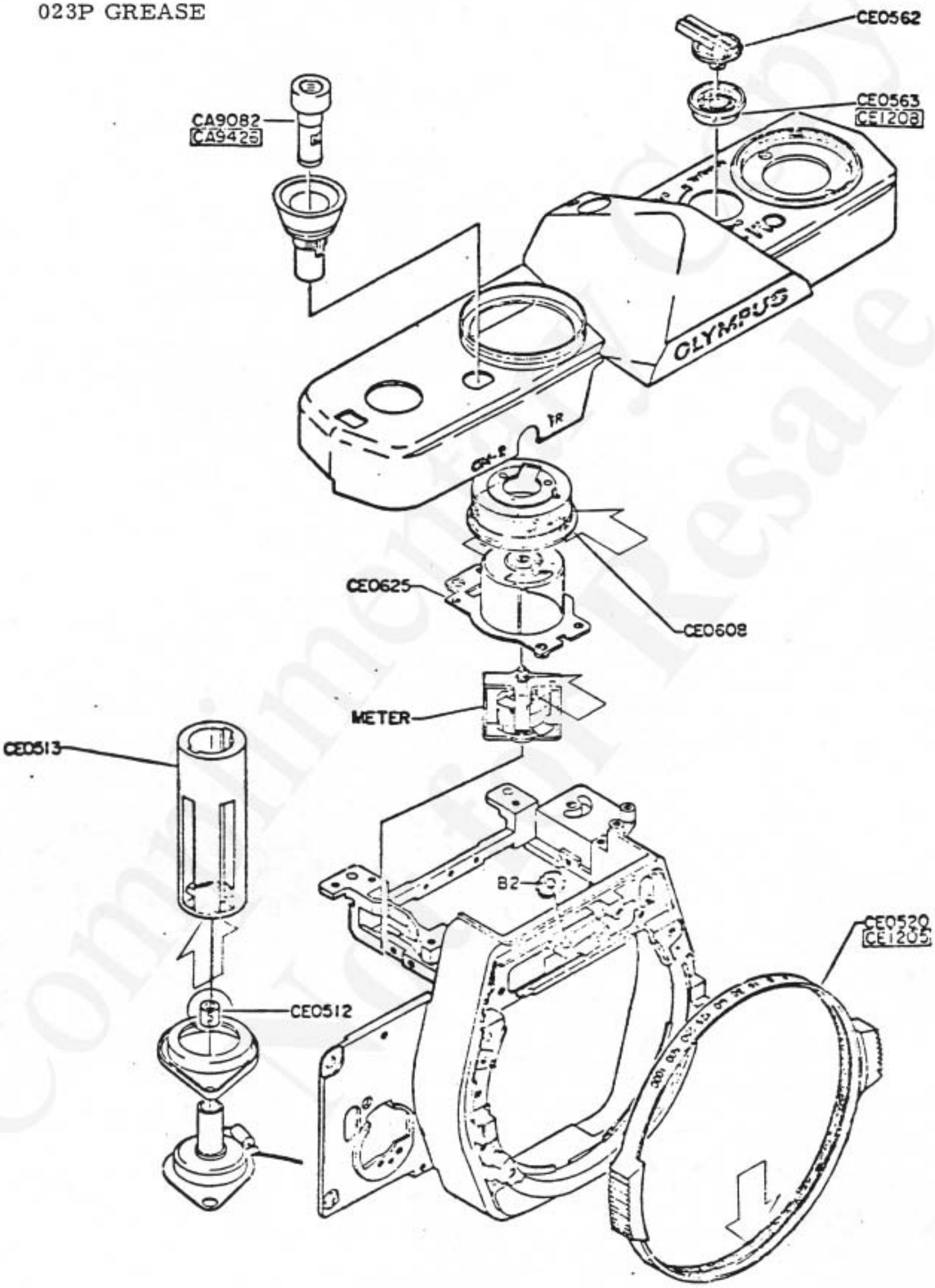


EP GREASE

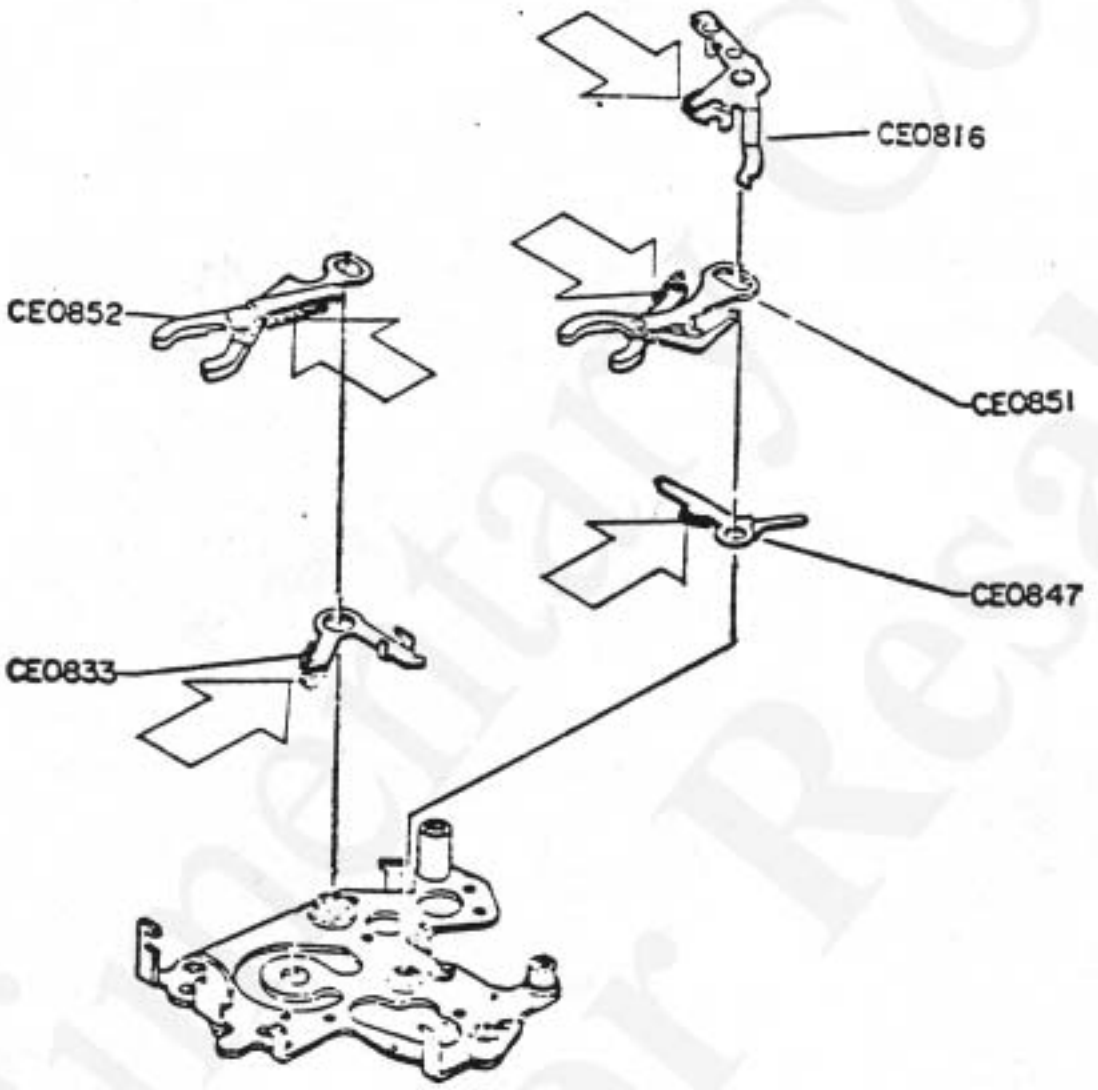




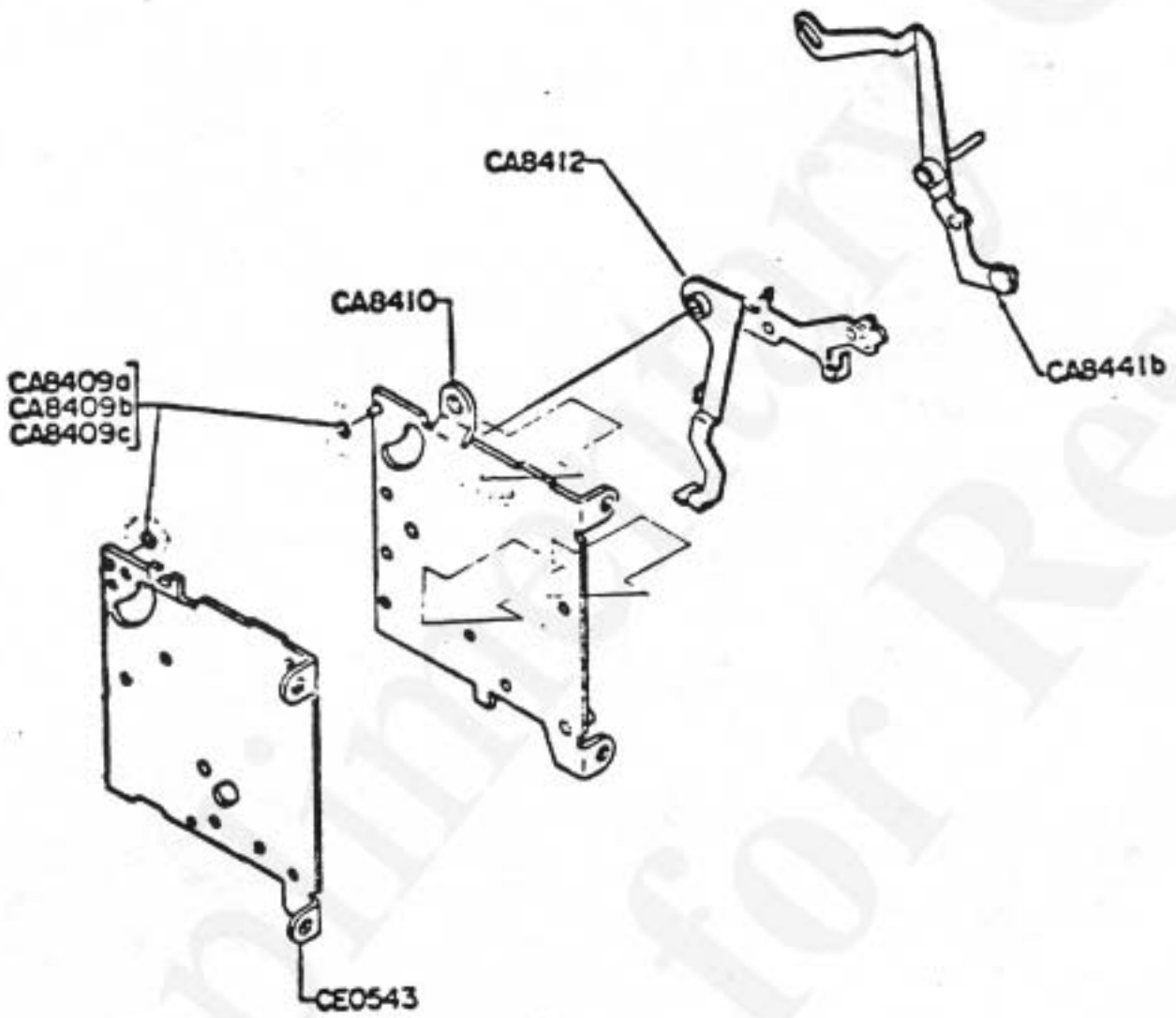
023P GREASE

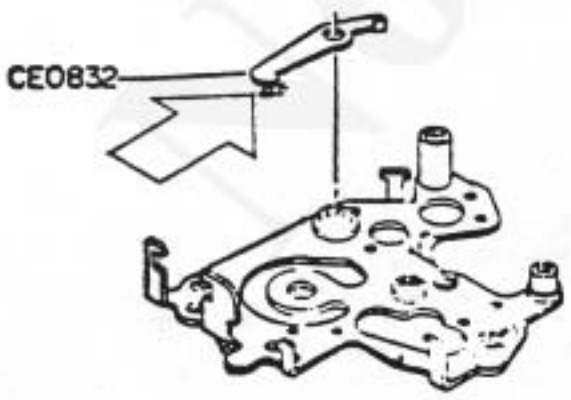


MOLYCOAT + COSMOLUBRIC

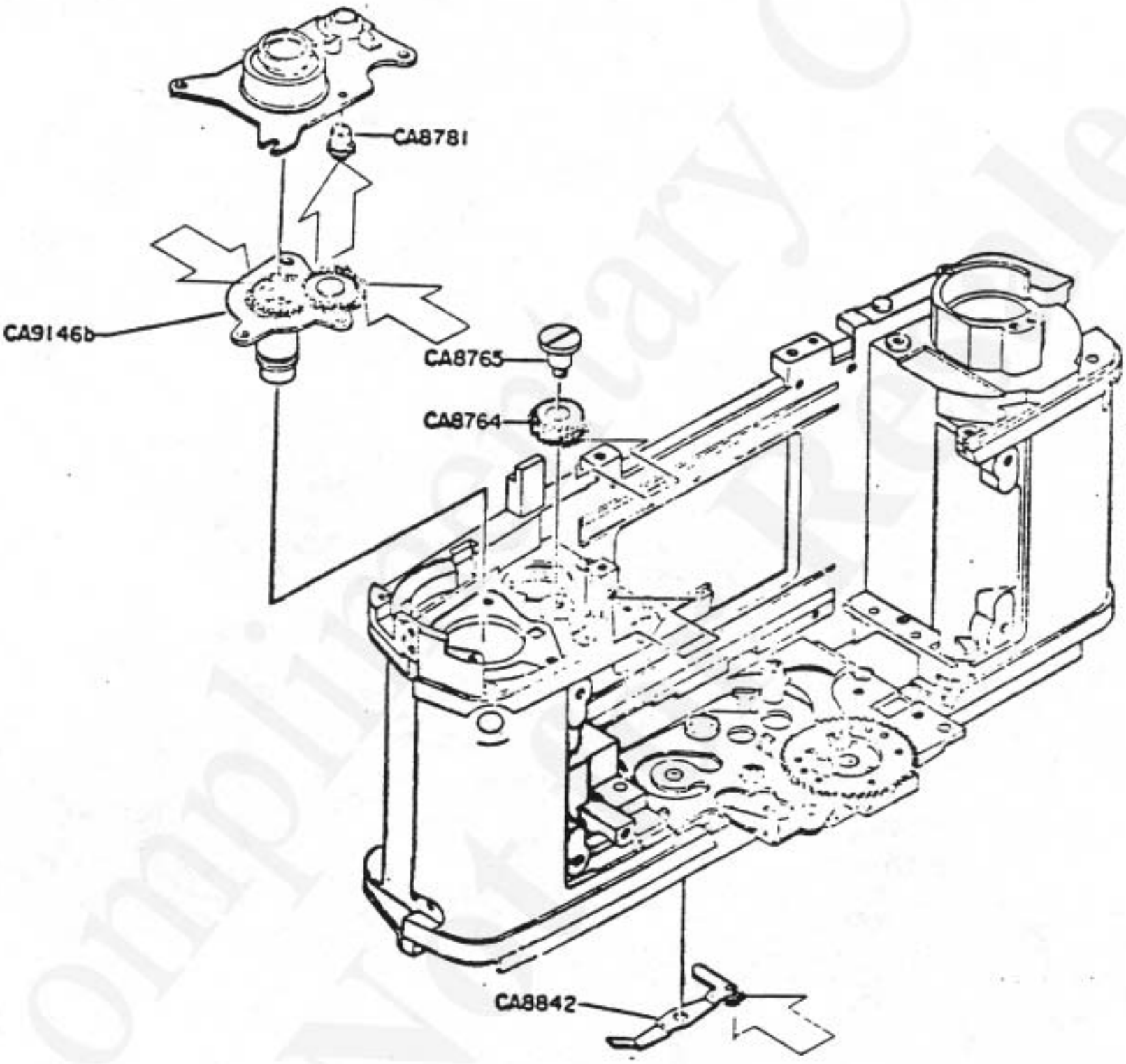


MOLYCOAT + 017P GREASE

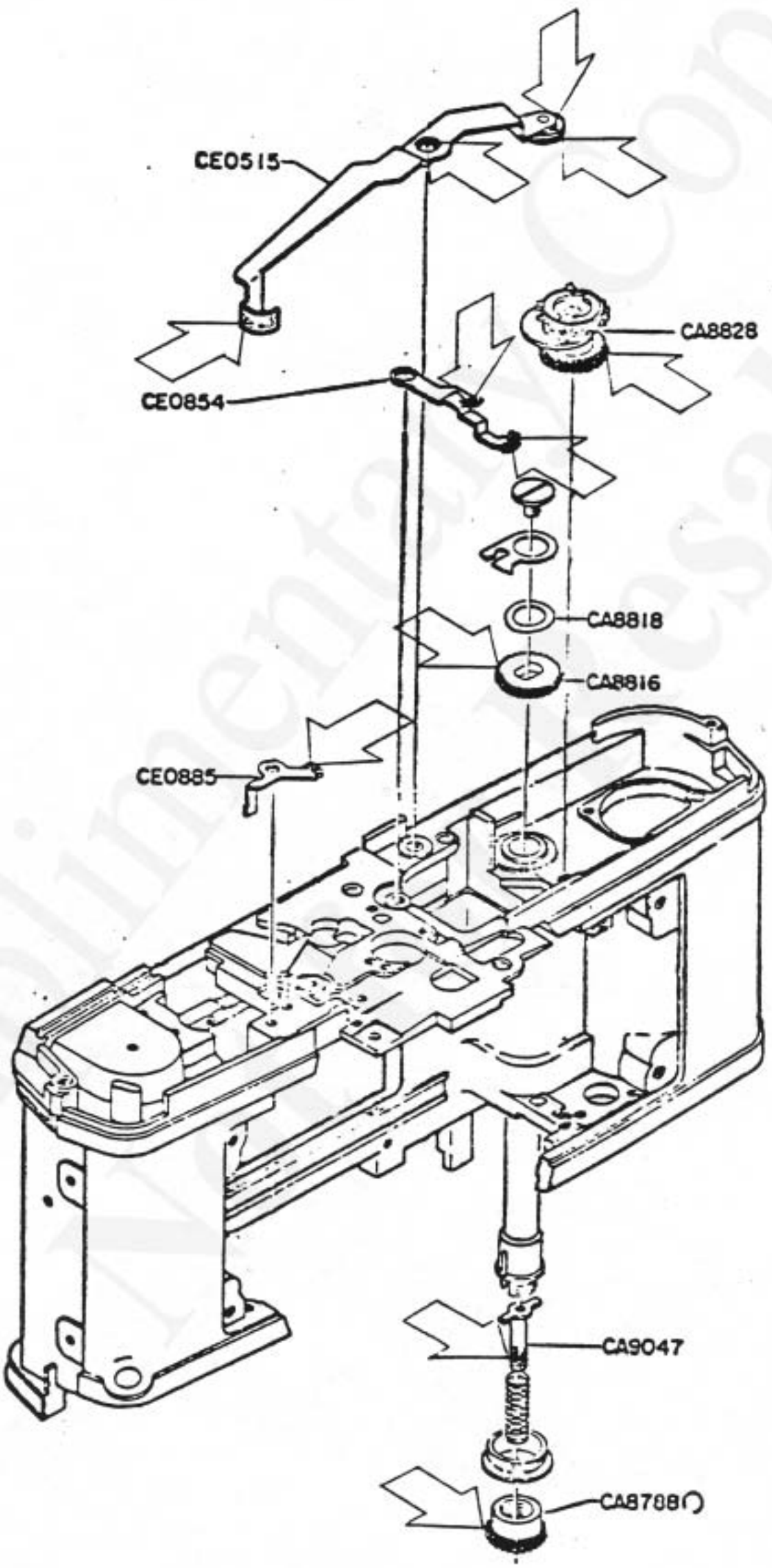




ROCOL PASTE

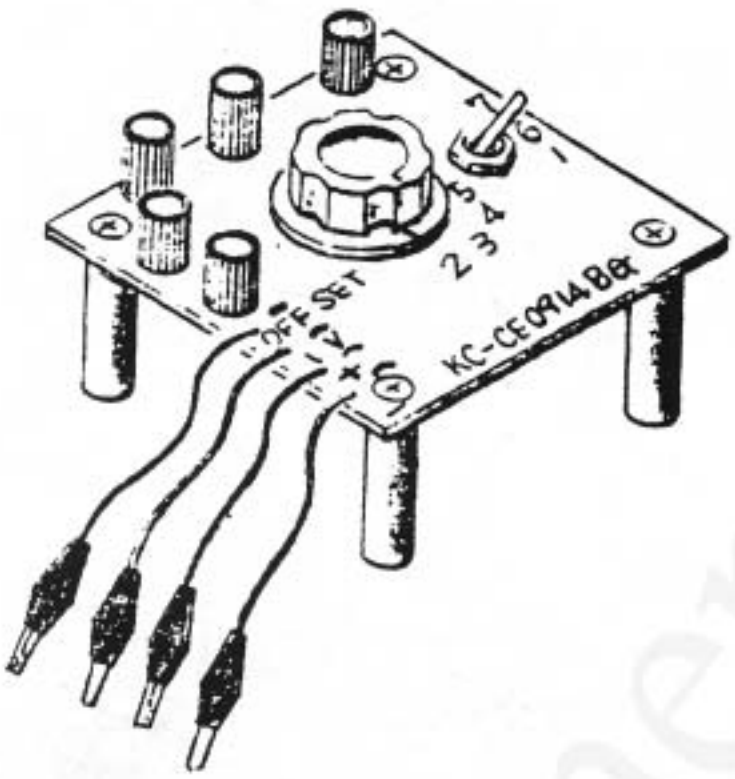
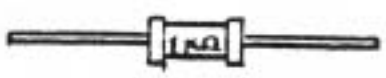


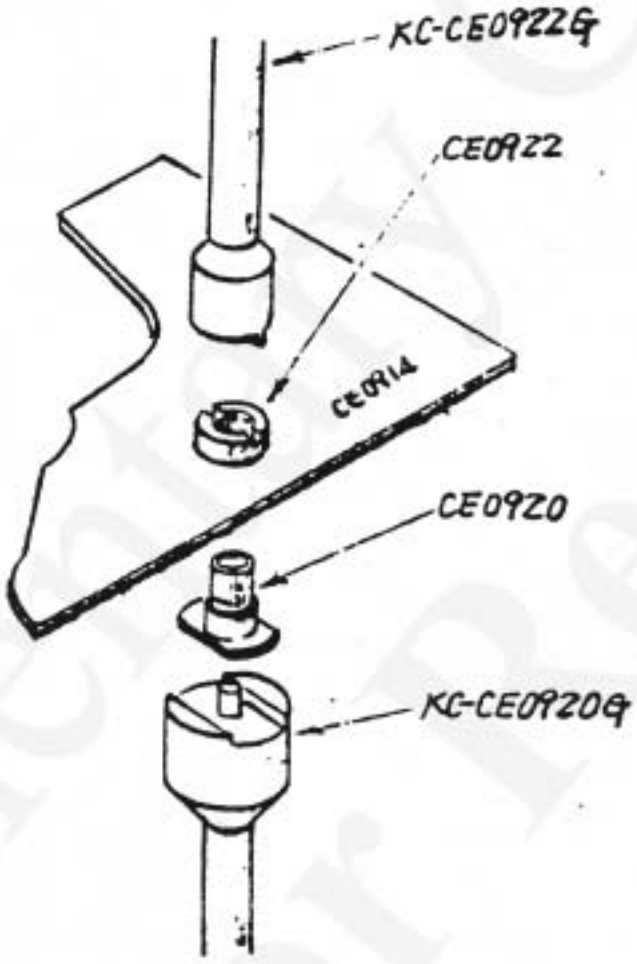
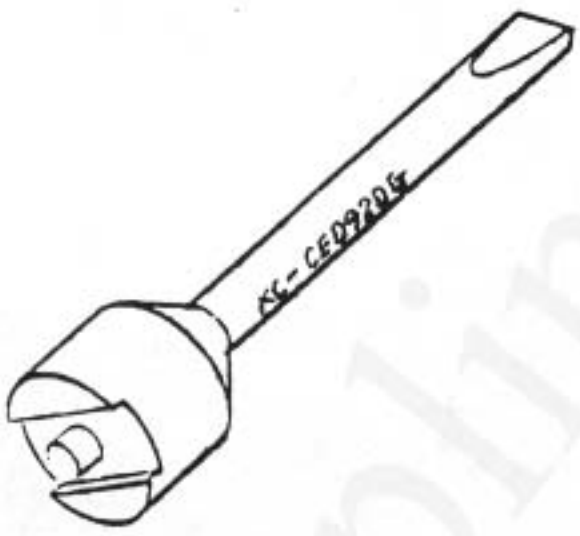
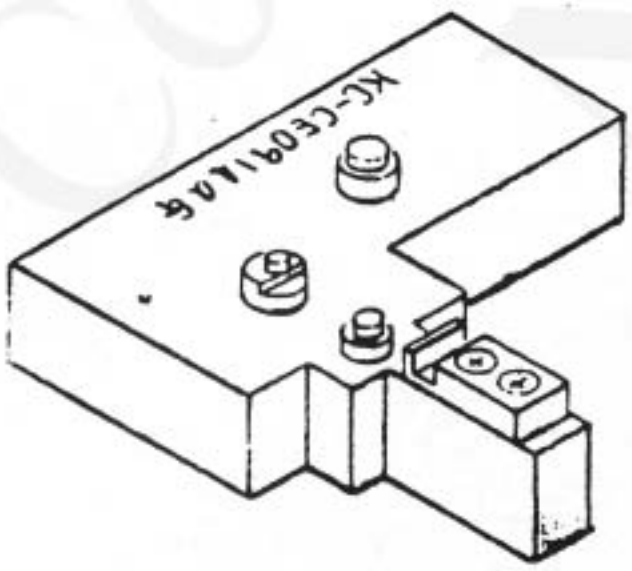
ROCOL PASTE



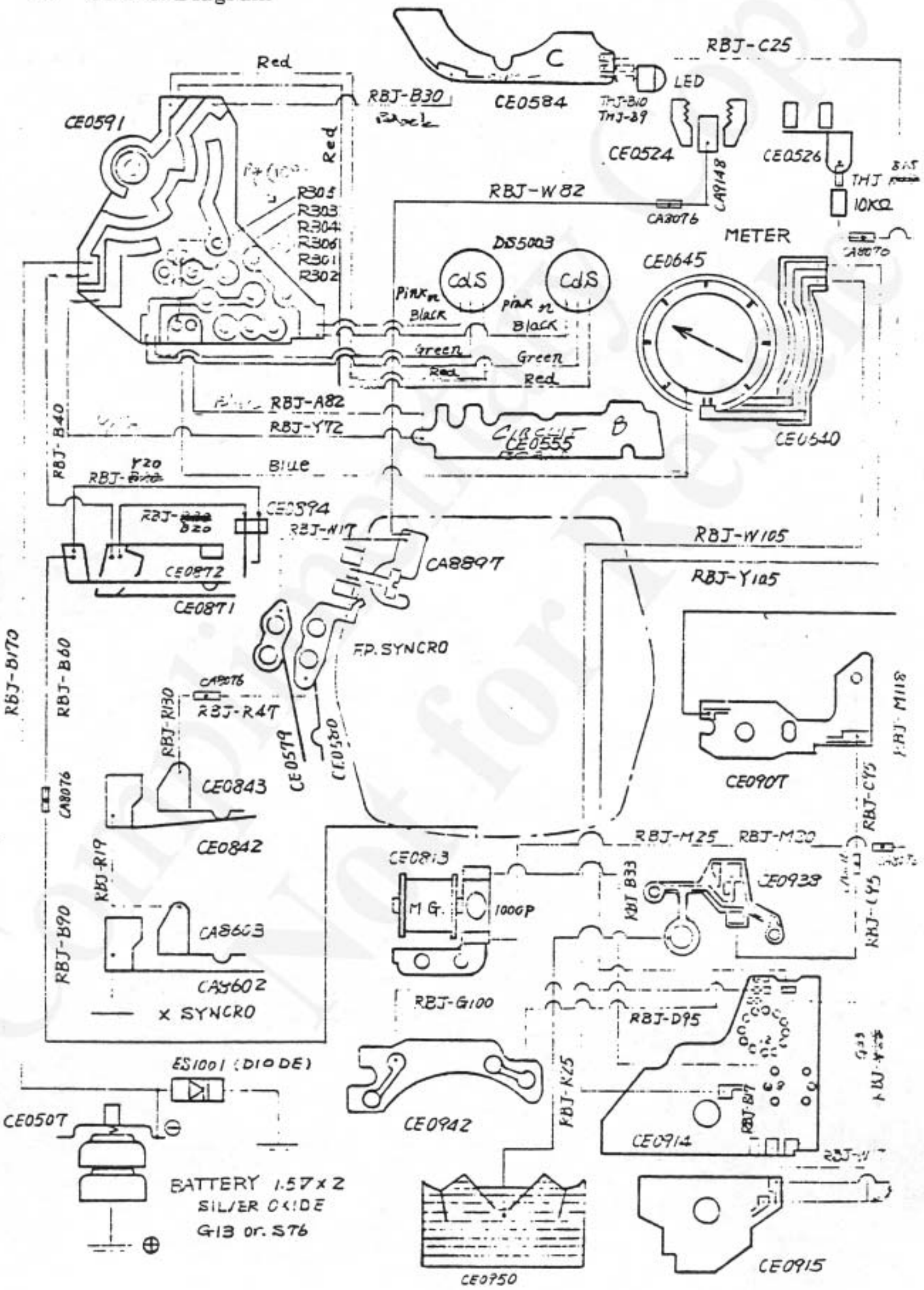
OLYMPUS
OM-2

SPECIAL TOOLS

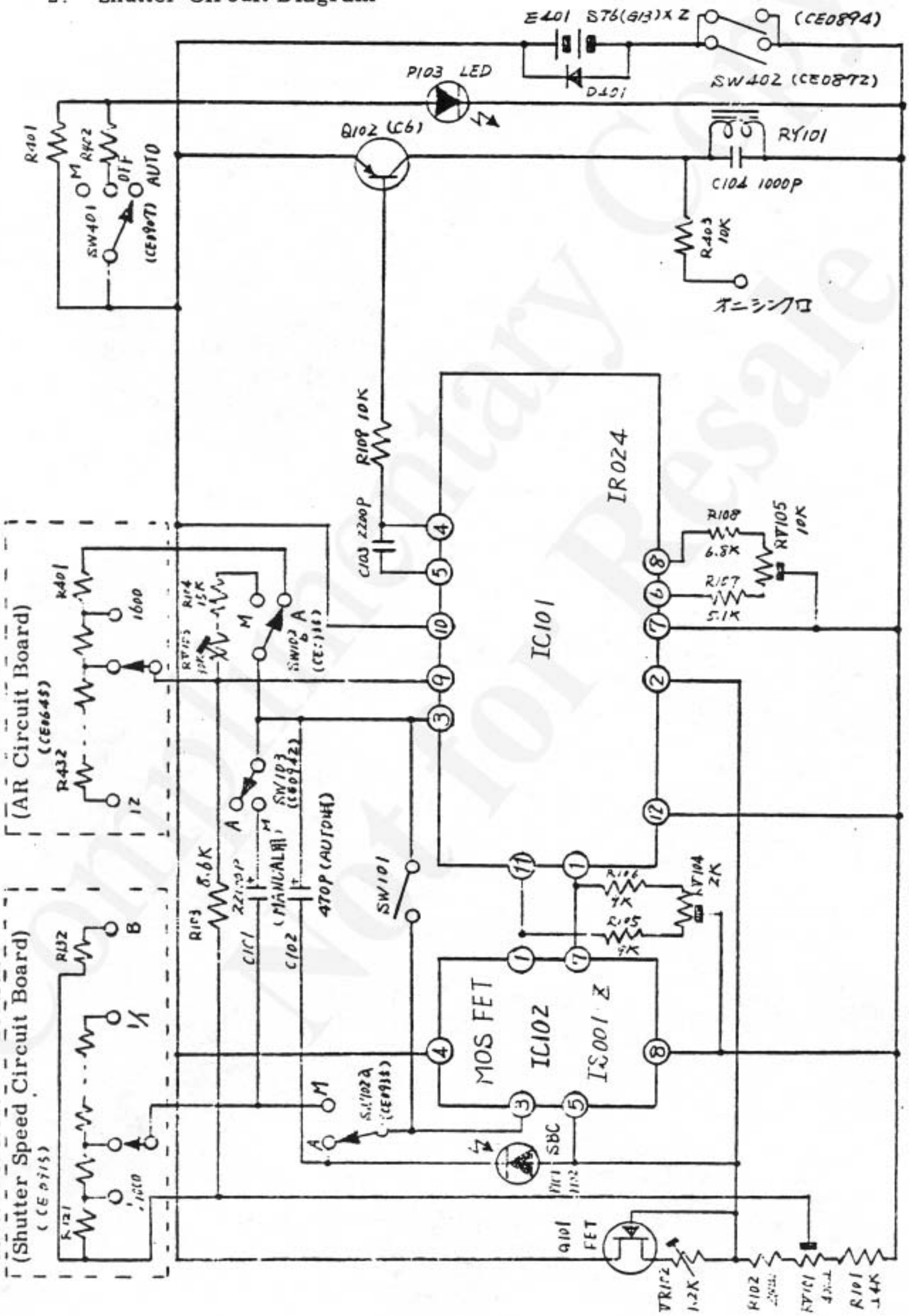
Name	Place Used & Usage	Remarks
KC-CE0914BG Matching Board 	Eliminates unnecessary electricity of IC upon matching and checking M circuit board. Usage See page 106.	
KC-CE0914CG Cord 	Used to connect the white LW (or circuit board A) to the left pin of SBC at the time of off set adjustment of the comparator of M circuit board. See page 104.	
KC-CE0914DG 51K Ω Cord 	Connects the yellow and white LWs when checking if the front casting (CE0502) is out of position or checking the operation of M circuit board by itself. See page 106.	This resistor is enough with 1 - 57KΩ because it is a substitution for AR circuit board (CE0645).
KC-CE0914EG 1K Ω Resistor 	To be connected to the (+) and (-) terminals of digital multimeter when making the operation check for M circuit board itself. See page 106.	This resistor is enough with 500 - 1KΩ because it is a subsitution for MG.

Name	Place Used & Usage	Remarks
KC-CE0922D Driver 	Used in being mounted to the driver chuck Q-0008 3.0ϕ. 	o To be newly manufactured. o Precautions on Usage Since the driver (CE0922) is soldered. turn KC-CE0920G to remove CE0920 upon disassembling or assembling.
KC-CE0920G Driver 		
KC-CE0914aG M Circuit Board Adjusting Tool 	Used upon soldering IC (IR-024 and IS-0001Z) to M circuit board. Usage When this tool is mounted on the M circuit board after inserting each pin of IC into the M circuit board. it is automatically set at the optimum height of IC. Then. it is to be soldered as it were.	o M circuit board and IC should be set with the space of about 0.3mm. o If the IC is mounted too high. it may cause short-circuit between the camera main body die-cast and IC. So. take sufficient care in mounting IC.

1. Circuit Diagram

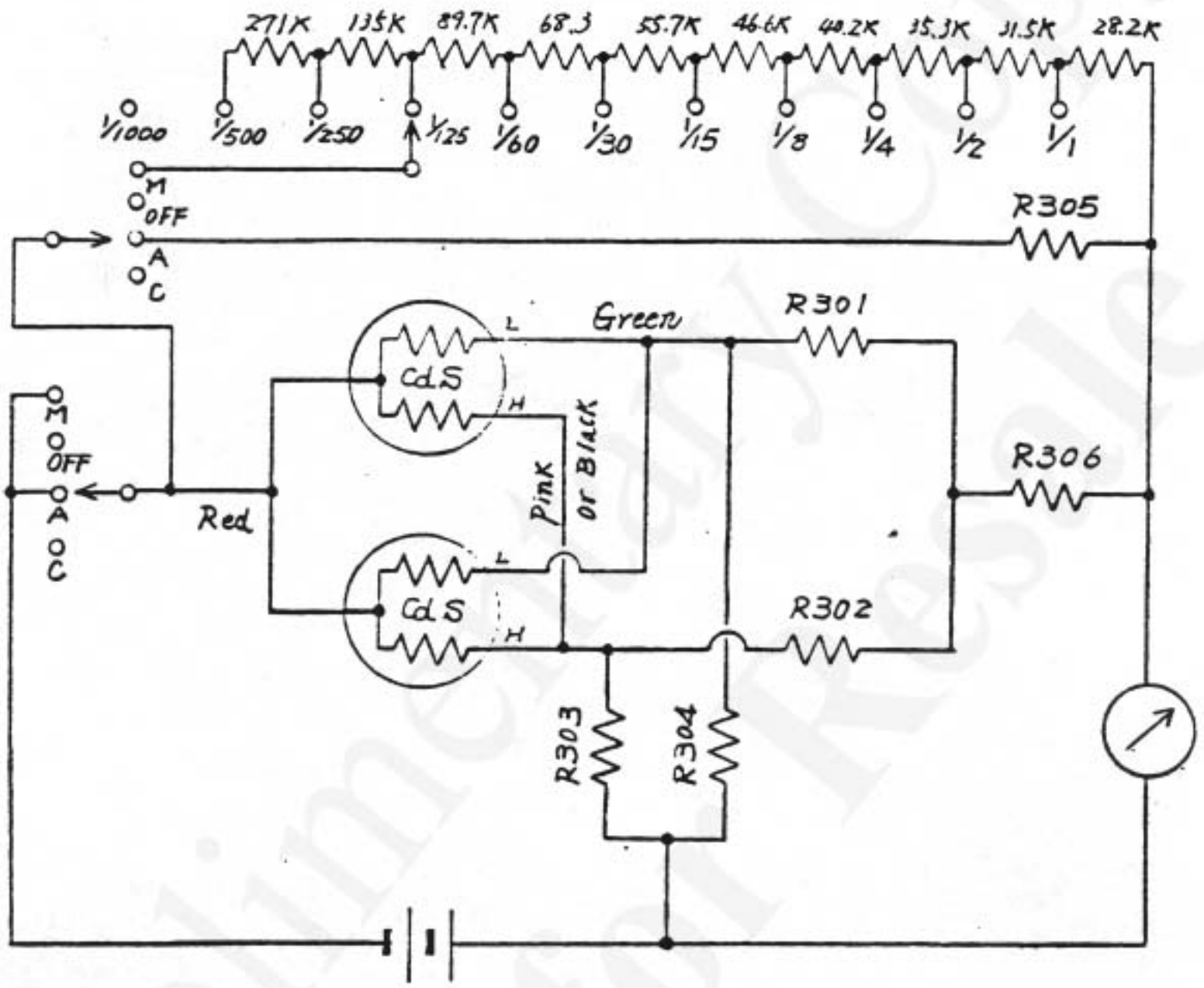


2. Shutter Circuit Diagram

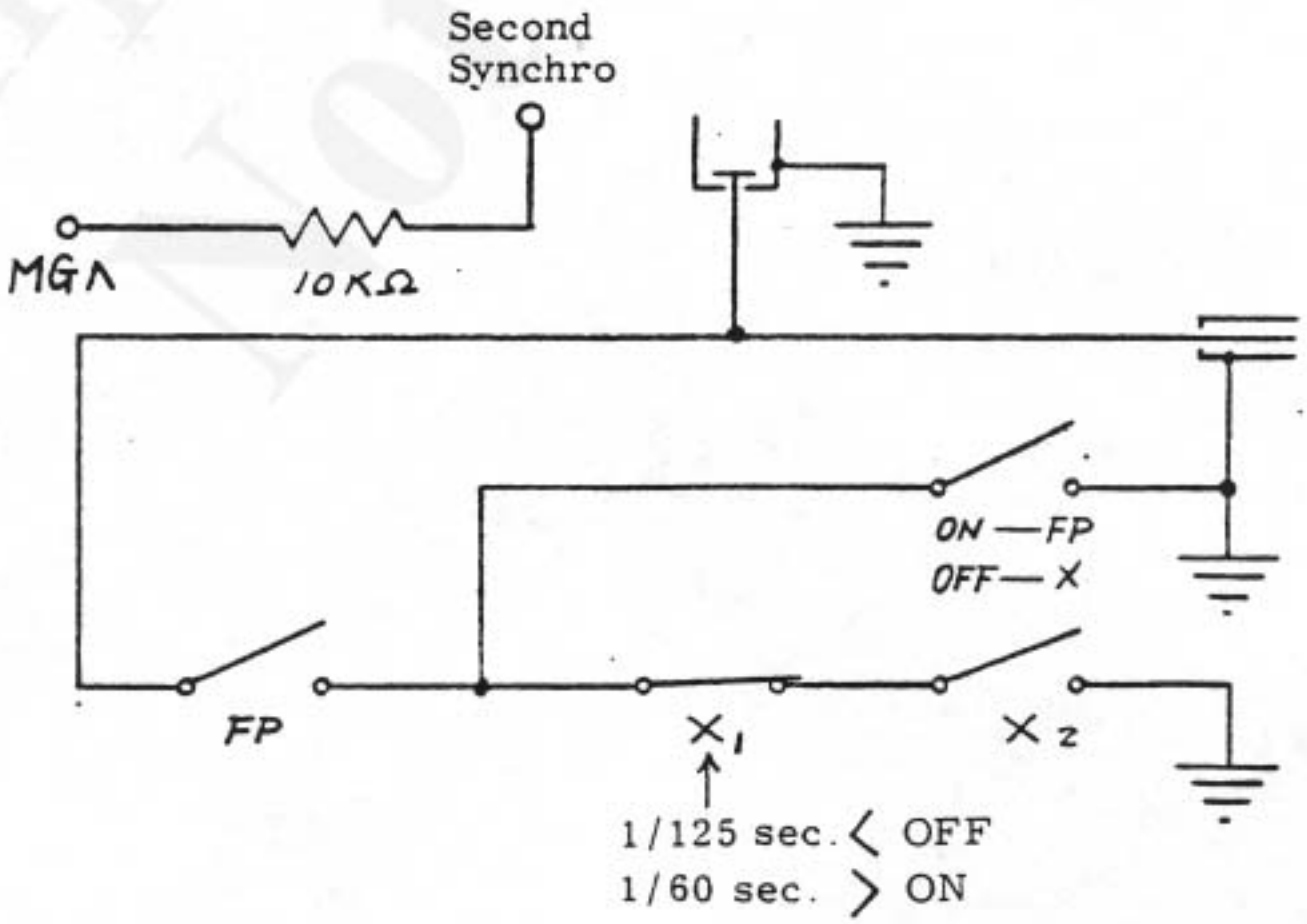


3. Meter Circuit Diagram

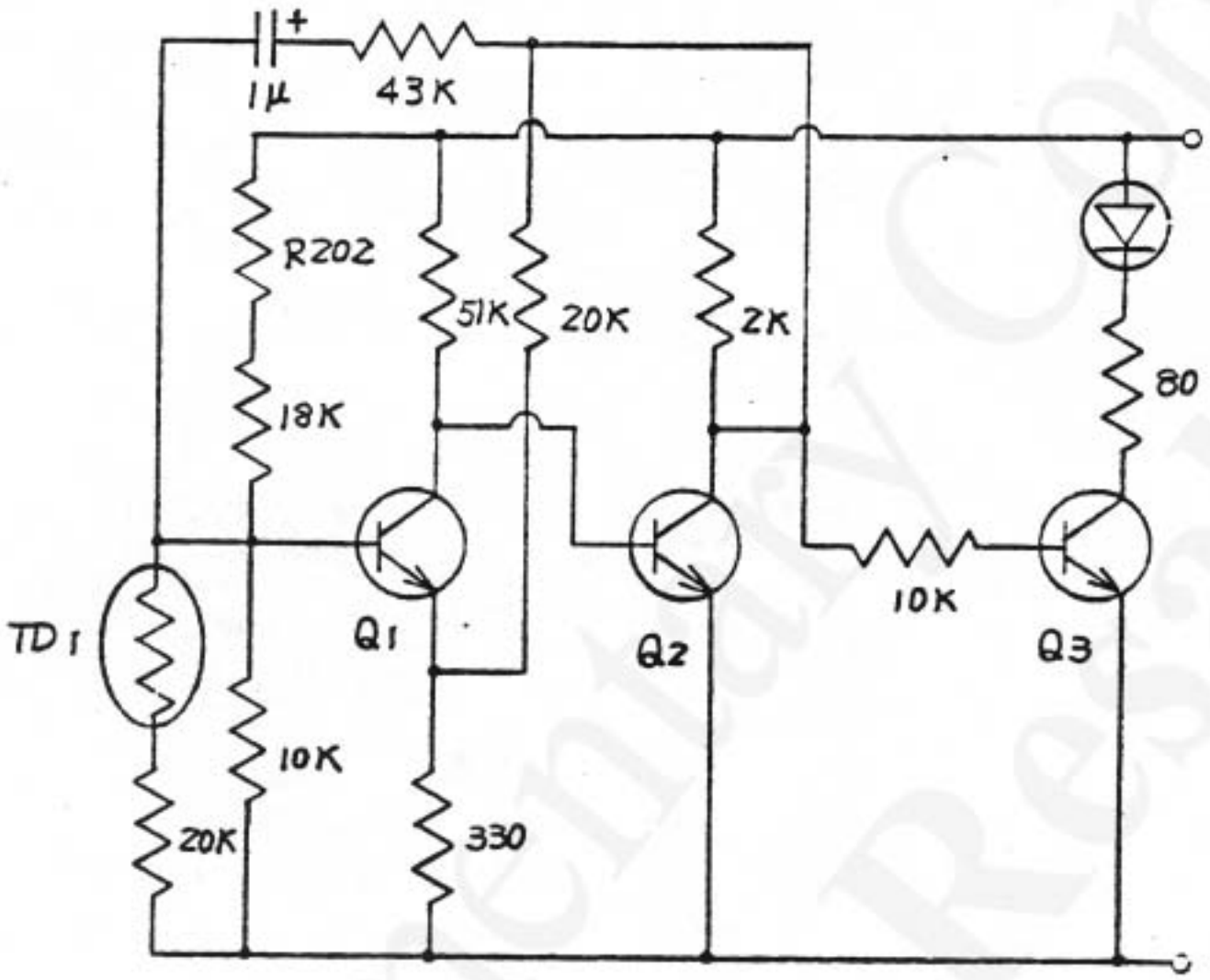
(CE0555 Base plate B)

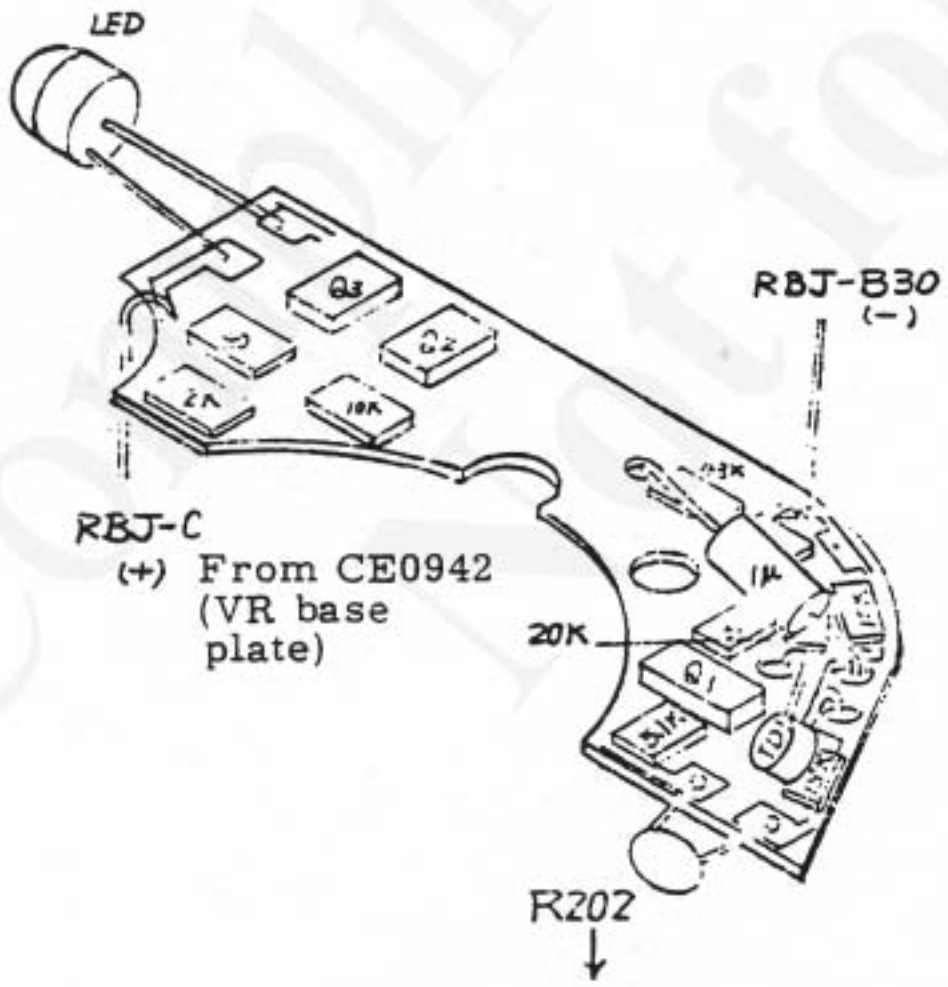


4. Synchro Circuit Diagram



5. Battery Checker Circuit Diagram





Q_1 Q_2	For oscillation
Q_3	For controlling LED
TD_1	Temperature compensation

	V_1		V_2
Q_1	OFF	Oscil-	ON
Q_2	ON	lation	OFF
Q_3	OFF	ON -OFF	ON
LED	OFF	ON -OFF	ON