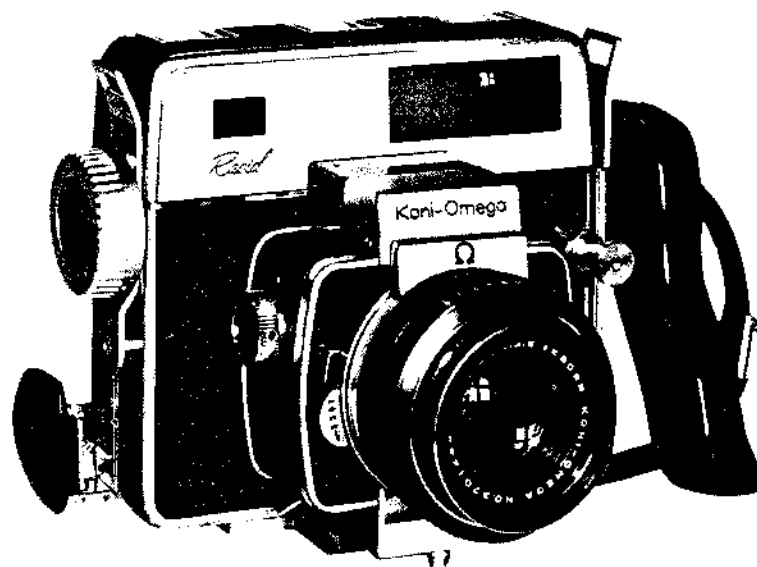


KONI-OMEGA

Repair Manual



KONISHIROKU PHOTO IND. CO., LTD.

Tokyo, Japan.

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1. GENERAL DESCRIPTION OF THE KONI-RAPID OMEGA

Outlined below are the mechanisms and subassemblies incorporated in the KONI-Rapid Omega camera.

The KONI-Rapid Omega consists of the following subassemblies which can be removed:

Main body components

- 1) Lens mount (B3100)
- 2) Shutter release mechanism (B3200)
- 3) Focusing mechanism (B3300)
- 4) Light barrier mechanism (B3500)
- 5) Shutter cocking mechanism (B3600)
- 6) Rangefinder coupling mechanism (B3800)
- 7) Camera body exterior (B3700)
- 8) Rangefinder base, viewfinder (R1000 -- R5000)

Backlid components

- 1) Pressure plate side (M2000)
- 2) Film counter mechanism (M2000)

Lens Barrel components

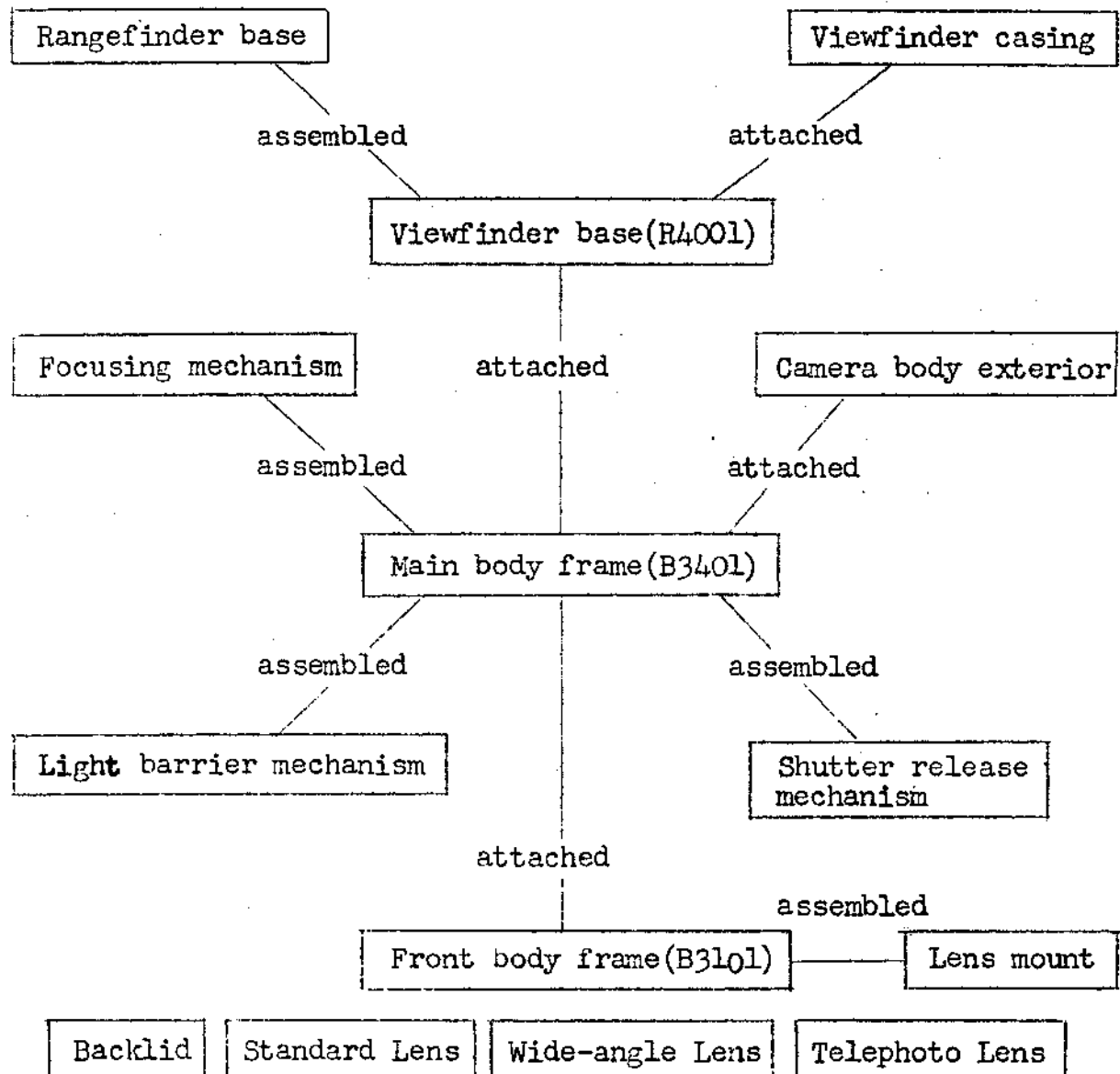
- 1) Lens barrel mechanism
- 2) Lens-shutter mechanism

The KONI-Rapid Omega is made up of five (5) die-cast portions, as follows, into which the various mechanisms are assembled:

- 1) Main body frame (B3401) contains the focusing, shutter release and light barrier mechanisms. The camera body exterior is attached after the related mechanisms have been duly coupled.
- 2) Front body frame (B3101) holds the lens mount and the shutter cocking mechanism.
- 3) Viewfinder base (R4001) holds the rangefinder coupling mechanism and the rangefinder base.

- 4) Viewfinder casing (R5001) contains the dust cover glass, the eyepiece lens and other parts.
- 5) Backlid frame (M2001) holds the pressure plate at the film-loading side and the film counter mechanism at the film take-up side.

Assembly process diagram



The various mechanisms and subassemblies are fitted to the main body frame (B3401) and are intercoupled. The backlid and lenses are removable.

With the lens of the camera facing the viewer, the shutter release mechanism is located in the righthand portion of the main body frame (B3401), beneath the shutter button. In the lefthand portion of the main body frame is the light barrier mechanism, while to the lower portion of the body frame is attached the linkages which couple the shutter cocking mechanism in the front body to the film take-up mechanism in the backlid. In between the viewfinder casing and the main body frame is assembled the die-cast viewfinder base, and coupling is effected with the focusing mechanism.

The focusing rack (B3311) of the focusing mechanism is secured to the front body frame by means of four(4) screws so that the front body slides in and out of the main body, the adjustment being effected by a pinion turned by a knob. The plunger lever of the backlid is in the form of a rack which is engaged by a pinion on the take-up spindle (subassembly 136). When the plunger is pulled out, the film is advanced one frame, and a claw on the plunger moves the film counter to the next indication.

Fig.1 Relation of the Mechanisms (1)

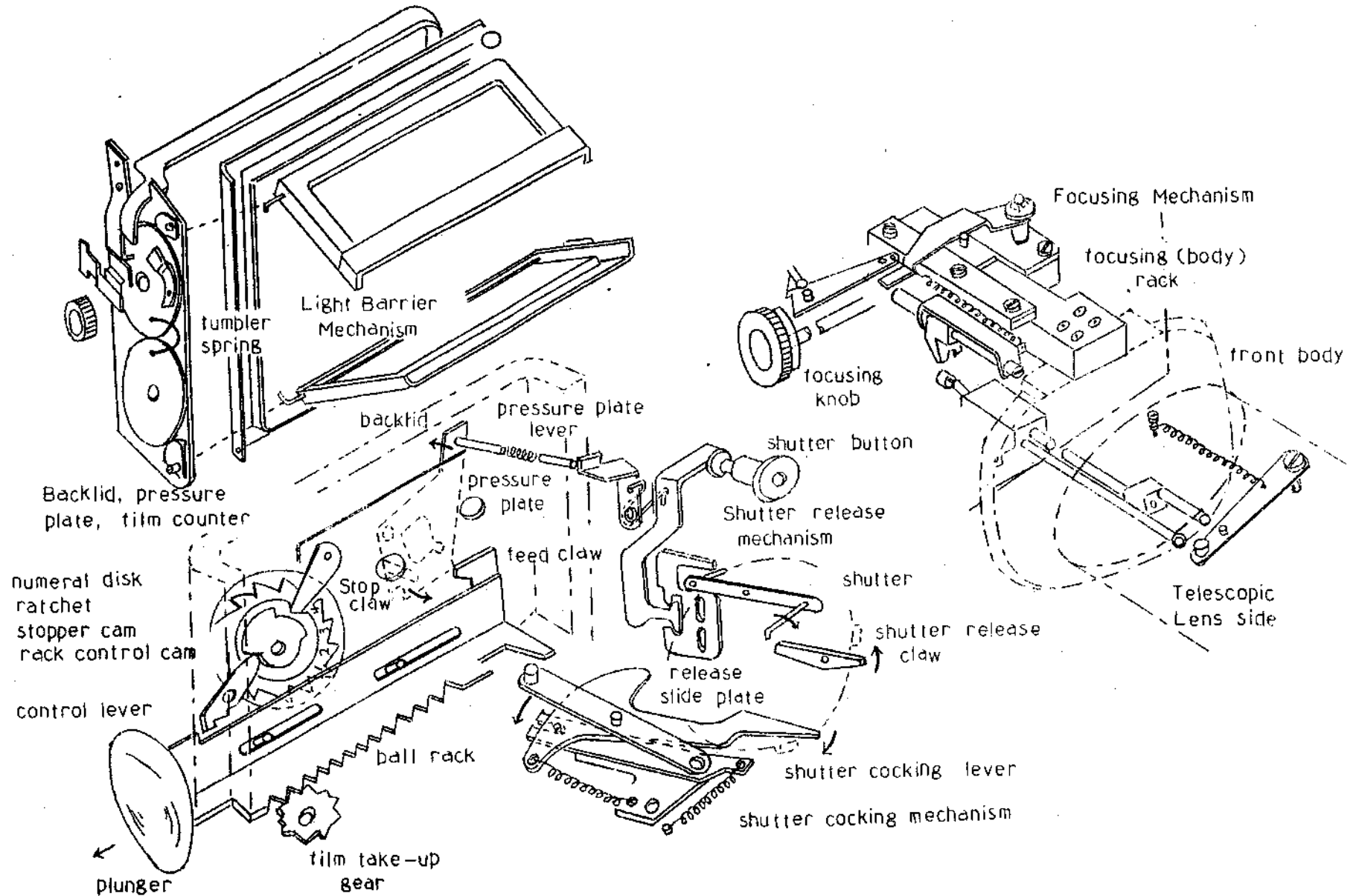
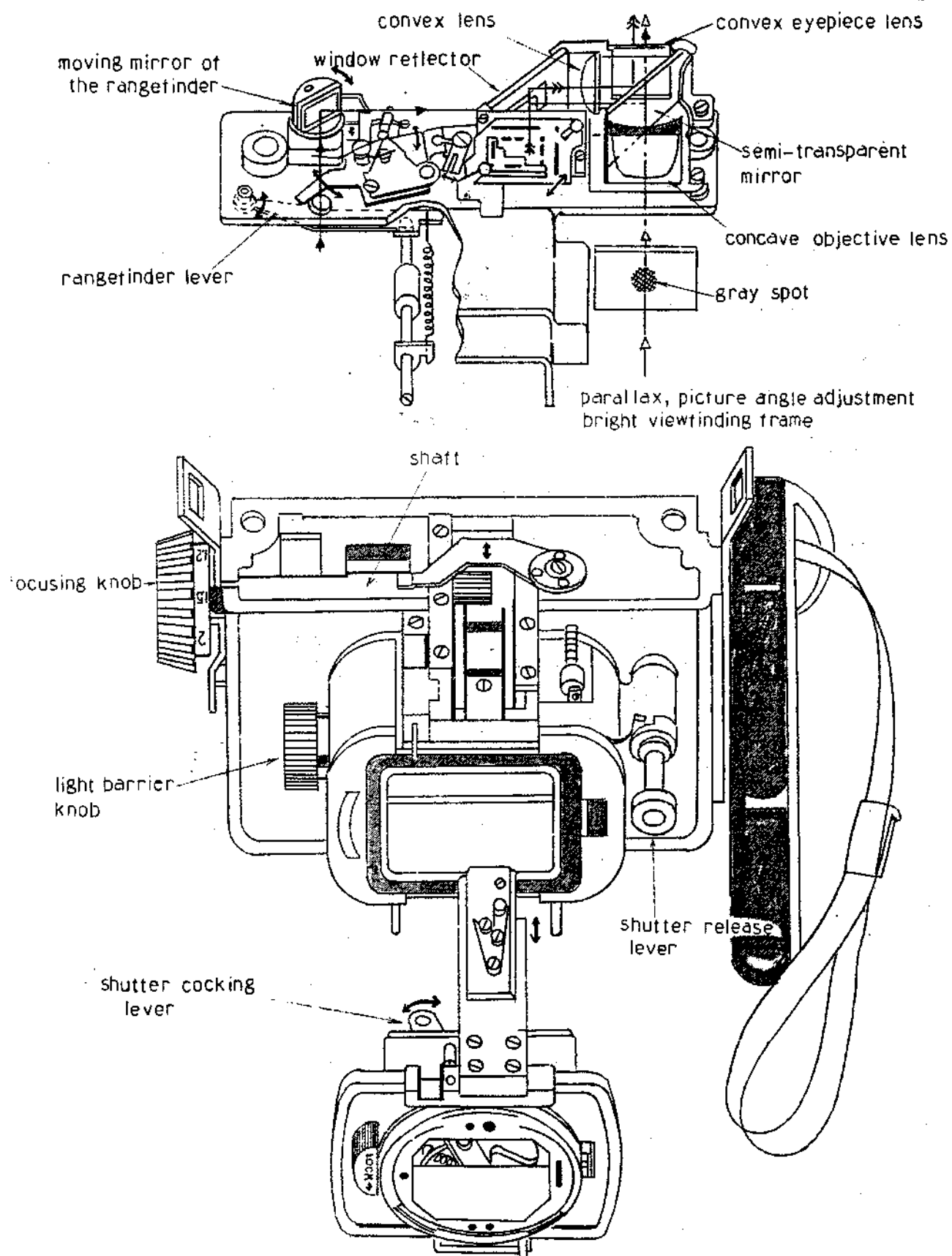


Fig.2 Relation of the Mechanisms (2)



2. MECHANISM SUBASSEMBLIES REPAIR ITEMS

	Item	Defect or malfunction
2.1.1	Front body lens mount	<ul style="list-style-type: none"> * Play of lens locked in mount * Lens will not lock in mount
2.1.2	Shutter release mechanism	<ul style="list-style-type: none"> * Shutter button action sluggish * Shutter not released
2.1.3	Focusing mechanism	<ul style="list-style-type: none"> * Focusing action sluggish * Flange back misfit * Front body misalignment * Play of front body during focusing * Excessive backlash of focusing knob
2.1.4	Light barrier mechanism	<ul style="list-style-type: none"> * Light barrier knob action irregular * Light barrier clashes when open, or permits passage of light when closed * Lock action failure
2.1.5	Shutter cocking mechanism	<ul style="list-style-type: none"> * Shutter cocking lever action faulty (loose, irregular) * Force insufficient to cock shutter
2.1.6	Rangefinder coupling mechanism	<ul style="list-style-type: none"> * Off infinity (∞) in conjunction with wide-angle lens * Failure to actuate rangefinder in conjunction with any of the lenses
2.1.7	Camera body exterior	
2.1.8	Rangefinder base, viewfinder	<ul style="list-style-type: none"> * Focusing images fail to merge laterally at infinity (∞)

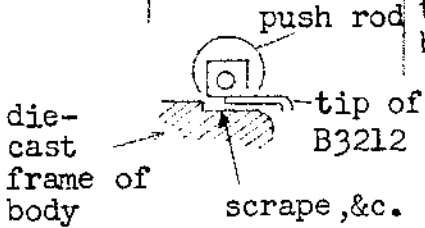
Item	Defect or malfunction
	<ul style="list-style-type: none"> * Focusing images merge at infinity (∞) but are misaligned vertically * Parallax correction inaccurate
2.1.9 Backlid assembly	<ul style="list-style-type: none"> * Backlid fails to catch securely to main body * Looseness of slide plate for film spool * Uneven or skewed winding of film * Loose winding of exposed film * Film counter numerals dislocated * Plunger action faulty * Failure to lock at tenth exposure
2.1.10 Lens barrel assembly	<ul style="list-style-type: none"> * Inaccurate cross-coupling of telescopic lens * Faulty focusing of lens * Faulty action of shutter release -- no release, action sluggish, action late * Irregular action of the aperture and shutter speed rings
2.1.11 Other	

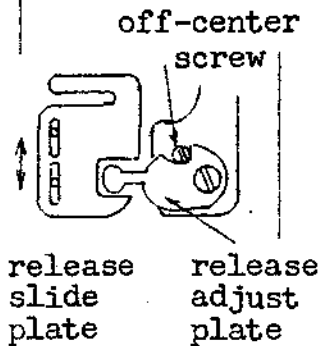
2.2 METHOD OF REPAIR

2.2.1 Front body lens mount

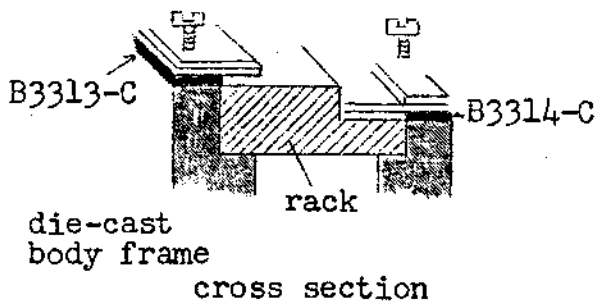
Trouble	Cause	Check	Remedy	Remarks
*Lens has play in mount (see Fig.D (3)(5) & (6))	Looseness of screw of lens mount plate (L4107)	Check lens mount plate of lens assembly	Tighten screw	For emergency repair, correct bend of spring
	Deformation of bayonet spring (B3104)	Check shape of the spring	If deformed, replace with new spring	
	Looseness of body mount plate (B3102)	Check looseness of body side plate	Tighten holding screw	
*Lens will not lock in mount (see Fig. D (3))	Defective positioning of body mount plate (B3102)	Check to see whether bayonet spring (B3104) has been screwed down with the bayonet washer (B3105) properly interposed	Parts B3104 and B3105 should fit snugly around the mount plate	
	Foreign matter lodged inside bayonet holding ring	Check for presence of sand or other foreign matter	Remove all foreign matter	

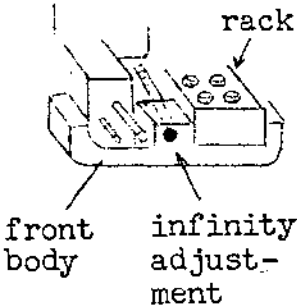
2.2.2 Shutter release mechanism

Trouble	Cause	Check	Remedy	Remarks
*Shutter button action sluggish (see Fig. C (4))	Roughness of pressure plate push rod	Check push rod for roughness or deformation	Replace with new push rod if defective	
	Scraping &c. of pressure plate actuating lever 	Check for contact of pressure plate lever tip with body frame	If tip touches when push rod is moved, correct shape of tip by bending	
	Presence of foreign matter between upper release plate(B3201) and lower plate(B3202)	Check for faulty action of mechanism between B3201 and B3202	If no dust &c. is found, apply lubricant (Molycote G) to inner faces of B3201 and B3202 and intervening parts	Specified release force: Max. pressure needed on shutter button at release point . . . Std. lens 2 kg Tele. lens 2 kg Wide. lens 2½ kg

Trouble	Cause	Check	Remedy	Remarks
*Shutter not released (release point adjustment) (see Fig. C (7))	Maladjustment of shutter release point.  off-center screw release slide plate release adjust plate	Check action range of release mechanism	Turn off-center screw, and set where shutter release functions	Set, after adjusting, with lacquer seal Slide plate is displaced vertically by rotation of eccentric screw

2.2.3 Focusing mechanism

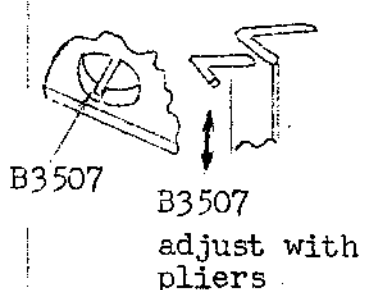
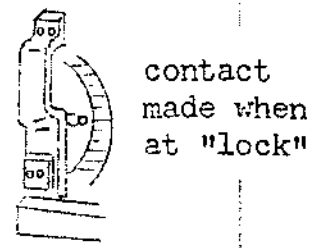
Trouble	Cause	Check	Remedy	Remarks
*Focusing action sluggish (see Fig. B (16) (17) (18))	Maladjustment of focusing rack holding screws  B3313-C die-cast body frame rack cross section B3314-C	Loosen screws so that rack slides smoothly without play	If too tight, fit shims (B3313-c, B3314-c) between holding plates and body frame Lubricant: Molycote G	Specified force for movement of front body: Max. 4 kg (measured by spring balance tied to string wound around focusing knob)

Trouble	Cause	Check	Remedy	Remarks
(see Fig. B(22) (25))	Maladjustment or defect of rack holding spring (B3315)	Check adjustment of spring adjustment screw (B3317)	Thickness of rack holding spring is 0.9mm Std. 0.8 or 1.0 Supplementary springs of 0.1 0.05 and 0.03 are used. Choose correct tension, and obtain proper smoothness of action by adjusting B3317 (adjust screw)	Lubricant: Molycote G body frame slide surface rack holding spring B3315 adjust screw B3317 rack
*Flange back misfit (infinity focusing not obtainable) (see Fig. B(30))	Maladjustment of front body infinity adjustment	Check dimensions with specified flange back gage or other precision instruments 	Set focusing knob at infinity (∞) and adjust infinity adjustment so that distance between aperture plane and lens mount plane (body mount plate B3102) is 66.8 mm ± 0.05 mm	After adjustment set with lacquer seal

Trouble	Cause	Check	Remedy	Remarks
*Backlash of focusing knob excessive	Wear of pinion spindle (B3302)	Check meshing of rack, pinion and related parts	Replace worn parts, or adjust eccentricity of focusing knob bearing (B3303)	

2.2.4 Light barrier mechanism

Trouble	Cause	Check	Remedy	Remarks
*Barrier knob action irregular	Light barrier tumbler spring (B3520) detached or broken	Check spring action	Replace	

Trouble	Cause	Check	Remedy	Remarks
*Barriers clash when moved, light leaks when closed	Mis-shaping of formed spring (B3504-A & -B) tip angles	Push barriers open toward lens. There must be adequate tension	Twist ends of formed springs (B3504-A & B) with pair of pliers and adjust tension in conjunction with revolving lugs (B3507-A & B)	When the light barriers close, the lower door leads the upper
			 <p>B3507 B3507 adjust with pliers</p>	
*Bayonet lock action faulty (see Fig. A (7))	Defective action of bayonet lock spring	See whether body lock lever is engaged by bayonet lock spring tip (B3521) when the lock stud (B3516) engages the spring	Adjust tip of bayonet lock spring so that it pre-sses against body lock lever when lock stud engages spring	
			 <p>contact made when at "lock"</p>	

2.2.5 Shutter cocking mechanism

Trouble	Cause	Check	Remedy	Remarks
*Looseness of shutter cocking lever (B3601) (shutter cannot be cocked)	Cocking lever return spring (B3609) detached	Remove bottom cover (B3404-B) and check action of cocking lever return spring	If detached, set correctly in position. If deformed or broken, replace	
*No force to cock shutter	Escapement spring (B3617) detached or broken	Check condition of spring	Re-set if detached, replace if defective	

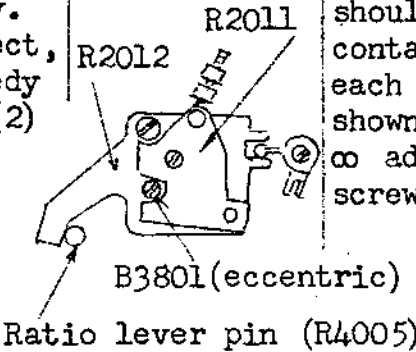
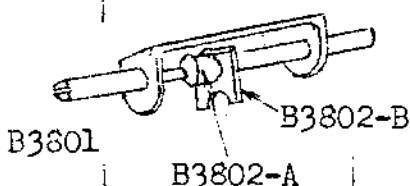
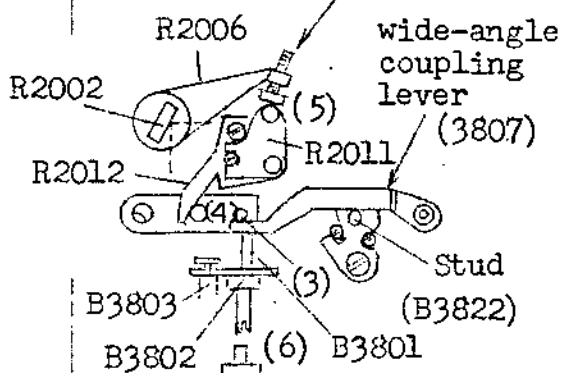
2.2.6 Rangefinder coupling mechanism

Trouble	Cause	Check	Remedy	Remarks
*Off infinity with wide-angle lens	Malfunction of the wide-angle coupling lever (B3807)	Wide-angle coupling is basic, so infinity indication will be off with other lenses	Adjust coupling pin regulator on the focusing rack by means of eccentric screw (B3821)	Set, after adjustment, with lacquer seal

eccentric screw (B3821)


wide-angle coupling lever

must touch here

Trouble	Cause	Check	Remedy	Remarks
<p>*None of the lenses couples with range finder (see Fig.E)</p>	<p>1) Maladjustment of adjustment plates A & B(R2011, R2012) of the range-finder base</p>	<p>Check lens side coupling pin action for accuracy. If correct, use remedy (1) or (2)</p>	<p>(1) Adjust eccentric screw (R2016)</p> 	<p>With focus set at infinity (∞) all parts should make contact with each other as shown below ∞ adjust screw(R2008)</p>
	<p>2) Maladjustment of coupling mechanism between body and lens</p> 	<p>Check by reference to drawing below</p>	<p>(2) adjust by means of screw between B3801 and B3802-A</p> 	<p>∞ fine adjustment screw (R2008)</p>

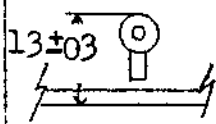
2.2.8 Rangefinder base, viewfinder

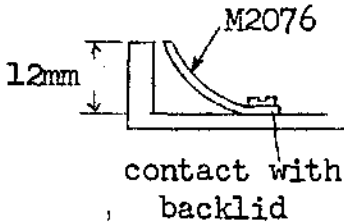
Trouble	Cause	Check	Remedy	Remarks
<p>*Lateral misalignment of focusing images</p> <p>(see Fig. E (22))</p>	<p>Maladjustment of infinity-adjustment (R2008)</p>	<p>Check with collimeter. If not available, use triangulation base length chart</p>	<p>Turn infinity adjustment screw (R2008), check merging of images. Re-check image match with each lens in turn. Adjustment possible from outside by removing viewfinder casing (R5005)</p>	<p>Triangulation base length chart is graphical presentation of 90-mm base figures of the KONI-Omega rangefinder</p>
<p>*Vertical misalignment of focusing images</p> <p>(see Fig. E (14))</p>	<p>Maladjustment of parallelism of reflector mirror axis (R2001)</p>	<p>Check with collimeter, or with distant object and triangulation base chart</p>	<p>Remove accessory clip on viewfinder casing above side-illumination window. Turn the adjusting screw of the reflector mirror axis</p>	<p>Specified accuracy of image alignment: within one(1) second, both laterally and vertically</p>

Trouble	Cause	Check	Remedy	Remarks
*Parallax correction inaccurate (see Fig. E (19))	Maladjustment or failure of parallax compensation arm (R3008)	See whether bright frame of the viewfinder shifts as focusing is changed	Adjust fork of parallax compensation arm(R3008) so that bright frame covers more than 85% of the real picture image at film gate  movable target target regulate	

2.2.9 Backlid assembly

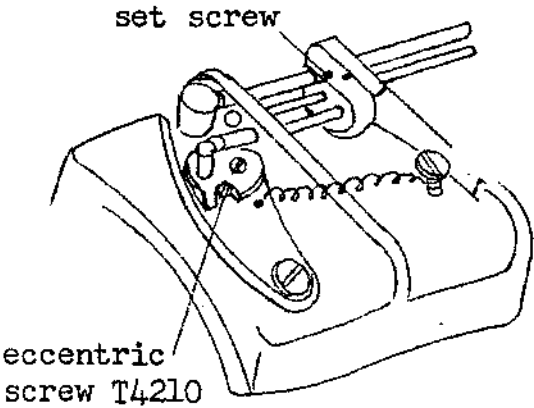
Trouble	Cause	Check	Remedy	Remarks
*Backlid fails to catch on main body (see Fig. G(23) (25))	Looseness of spring (M2028) of tumbler mechanism	Check operation of catch lever(M2046)	Secure spring(M2028) by tightening screw	Use adhesive

Trouble	Cause	Check	Remedy	Remarks
*Looseness of film spool slide plate (see Fig. G(4)(5))	Failure of slide plate spring	Check spring action	Correct deformation. Replace if broken	
*Film wound unevenly or skewed (see Fig. G (27))	Improper balancing of film guide spring (M2064)	Check strength and shape of spring	Adjust to the following dimensions: distance of upper side of roller from back-lid base plane(plane of contact with body frame) . . . 13 ± 0.3 mm at both upper and lower ends of roller 11 ± 0.4 mm when fully depressed 	

Trouble	Cause	Check	Remedy	Remarks
*Loose winding of exposed film (see Fig. G (29))	Film pressure spring (M2076) deformed or weakened	See whether spring tongue is erect as specified	Replace if shape not as follows: 	Contact with backlid should extend over 12 mm
*Dislocation of film counter numerals (see Fig. H (18))	Defective fit of numeral disk (M2045)	Check when plunger is fully withdrawn	Remove backlid outer panel, reset numeral disk by loosening screws	
*Faulty plunger action (length of stroke unchanged) Result: unequal intervals between pictures	Loose or broken regulator lever spring (M2057)	Check changing stroke of plunger action: 76.5 mm for 1st to 3rd pictures, 70 mm for 4th to 6th, 61.8 mm for 7th to 10th	Reset stopper spring if detached. Replace if damaged	

Trouble	Cause	Check	Remedy	Remarks
*Failure to lock at 10th picture	Defective action of stop claw M2084 2) Insecure numeral disk axle 3) Loose spring M2074	Check contact of stop claw with stop cam (M2081)	Set stop claw on periphery of stop cam. Tighten M2061. Re-set spring M2074	
*Film counter inactive	Drive ratchet spring loose or damaged	Check drive action	Re-set spring or replace if damaged	
*Plunger lever action sluggish	Rack slide damaged	Check for smoothness of slide action	Replace damaged part	

2.2.10 Lens barrel assembly

Trouble	Cause	Check	Remedy	Remarks
*Defective cross-coupling of telephoto lens	Defective adjustment of coupling pin	Check for accuracy with specified gage	Use specified gage for adjustment. For fine adjustments use eccentric screw T4210	Two(2) gages used. See section on gages and measurements
				
*Faulty focusing of lens	Defective adjustment of lens-side mount flanges	Check by fitting lens to properly adjusted camera body and observing projected image on ground glass screen (+ 0.2)	For the standard lens insert shim L4304 for obtaining proper focus. Shutter adjustment shim L4116 can be used. With telephoto lens, use T4303 washer.	Adjustment washers for lens mount. For all lenses: t = 0.05 t = 0.1 t = 0.2 For shutter adjustment t = 0.5 t = 0.2 t = 0.3 t = 0.1 t = 0.05

Trouble	Cause	Check	Remedy	Remarks
*Faulty action of shutter release	Looseness or deformation of release lever axle (W2507)	Check action for smoothness	Replace defective part	
*Irregular action of aperture and shutter-speed ring	Deformation of quick return spring W4123-c		Replace defective part	

3. DISMANTLING AND REASSEMBLING CAUTIONS

3.1 Lens mount

When fitting the camera body lens mount plate (B3102), see that the bayonet spring (B3104) and the bayonet washer (B3105) do not get caught in between. After completion of assembly, glue lightproofing braid around the periphery of the mount.

3.2 Shutter release mechanism

After adjusting to obtain the proper release point, apply lacquer seal to the head of the eccentric screw (B3204-B) to prevent loosening.

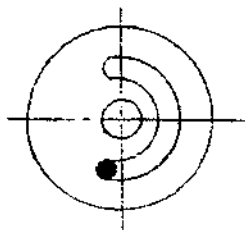
3.3 Focusing mechanism

After adjustment of the eccentric screw of the axle (B3303) of the focusing knob, do not fail to re-check the flanges of parallelism.

After dismantling of the main body and adjustment of focusing knob axle (B3033) apply lightproofing lacquer to all points vulnerable to leaks.

For reassembling after removal of pinion shaft B3302, use the ∞ position as guide for proper gear meshing.

The semicircular slot cut in the rear of the focusing knob B3301 is designed to take the stop pin. Assemble with the stop pin riding in the slot.



stop pin

3.4 Dismantling procedure

The dismantling procedure for removal of the pinion shaft B3302 is first to remove B3307 the lock screw B3309. Next peel off upper portion of cover leather (B3721) as shown in the drawing, remove two (2) set screws and set screw B3303 of the focusing shaft bearing, and adjust by changing the eccentricity of B3303.

3.5 Rangefinder coupling mechanism base

When fitting the rangefinder coupling mechanism in the main body frame, see that the tip of the wide-angle coupling lever comes in between coupling lever B3801 and the stud set on the ratio lever R4005. The forked portion of B3802 should fit the grooved end of coupling pin B3803.

4. ADHESIVES AND LUBRICANTS SPECIFICATIONS

1 Adhesives

Name	Composition	Usage
PLIDBOND	Rubber base synthetic rubber and synthetic resin *solvent: acetone MEK amylacetate	Molded resin parts, light- proofing paper
SUNDYNE 640	Rubber base Chloroprene rubber Phenol resin *solvent: toluol MEK	Camera exterior, cover leather, also for light- proofing paper
BOND E 2	Epoxy base Main ingredient: Bond E2-2 Hardener: Cl-1	Rangefinder parts

2 Lubricants

Name	Composition	Usage
MOLYCOTE G	Molybdenum disulfide and high-grade oil mixed in paste form	Drive mechanisms
HELICOID(FP) grease	Rodimol 33 40 Rodimol DOS 2 40 Molycote G 15 mixed into paste form	Racks, pinions, gears

5. PRODUCT DIMENSIONS AND TOLERANCES

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5.1 KONI-Omega Rapid Main Body Parts Dimensions & Tolerances

5.1.1 Filmwind Mechanism

Film advance plunger stroke

1st to 3rd exposures 76.5 \pm 0.2 mm

4th to 6th exposures 70.0 \pm 0.2 mm

7th to 10th exposures 61.8 \pm 0.2 mm

Film advance plunger friction force . . less than
3.5 kg

5.1.2 Shutter Release Mechanism

Force needed to operate shutter button (body)
at shutter release point . . .

Standard lens . . . less than 2 kg

Telephoto lens . . less than 2 kg

Wide-angle lens . . less than 2.5 kg

Shutter release point . . . 6.5 ⁺¹_{-0.5} mm from body
release
starting
point

Pressure of pressure plate
on film gate . . . not less than
500 g

With release button inactive, the pressure plate
must be at least 0.7 mm distant from the film
gate.

5.1.3 Focusing Mechanism

Force required on focusing knob to move front
body (lens) assembly . . not more than 4 kg

Focusing knob backlash . . not more than 1 mm
at periphery

With focusing knob set at ∞ , the distance from film gate to lens mount (flange back) should be 66.8 ± 0.08 mm as measured by specified gage.

Parallelism at fully extended position, as measured by specified gage, should be within 0.15 mm.

5.1.4 Lens Mount

Bayonet ring should work smoothly and accurately through specified arc upon application of force of less than 2.5 kg

No play is permissible between lens and camera body in the direction perpendicular to the optical axis. Rotary play along periphery of the lens barrel should be less than 0.2 mm.

Rangefinder coupling pin should, at ∞ setting, protrude 3.2 ± 0.2 mm above the mount contact surface, while the supplementary coupling pin of the telephoto lens should protrude 3.7 ± 0.2 mm.

Force required to actuate the body coupling mechanism should be less than 300 g at ∞ setting.

5.1.5 Range- Viewfinder

With focus adjustment set at ∞ (infinity) the range-finder focusing spot images should merge accurately at the center of the viewfinder field. Maximum permissible mismatch of spot images for standard, wide-angle and telephoto lenses is 2' in any direction with error in one direction only. Centering error should not exceed 1' in any direction.

With focus adjustment set at five (5) feet, the actual distance from camera to subject should be correct within ± 50 mm for the standard lens, and within ± 100 mm for the wide angle lens. For the telephoto lens, permissible error is ± 70 mm when focusing is set at 25 feet.

Viewfinder coverage of the subject, from infinity (∞) to close range (3.5 feet for standard lens, 12 feet for telephoto), should be not less than 85 per cent of the actual image at the film gate, and should never stray beyond the limits of the film gate image.

5.1.6 Other

All the above requirements should be fulfilled in a temperature range of from 0° to 45° C.

All mechanical movements should function in a temperature range of from -20° to 55° C, while normal performance should be obtained after two (2) hours at normal temperature ($25 \pm 5^{\circ}$ C) and humidity ($65 \pm 5\%$).

5.2 Standard Lens

At ∞ setting the coupling pin should protrude 3.2 ± 0.03 mm above the rear surface of the lens barrel (mounting plane) (see cut below)

There should be no play in the direction perpendicular to the optical axis, while maximum rotary play should be not more than 0.2mm at periphery.

Distance from film gate to flange . . . 66.6 ± 0.05 mm
Flatness of flange surface not more than
0.05 mm

Amount of lens movement . . . ∞ to 3.5 ft. 3.905 ± 0.07 mm

Projected image resolving power . . . more than 63
lines/mm at center
more than 16
lines/mm near
periphery

Standard Lens Barrel Coupling Pin Dimensions

5.3 Wide-Angle Lens

Amount of lens movement . . . ∞ to 3.5 ft.

3.905 ± 0.07 mm

Projected image resolving

power . . . more than 63 lines/mm
at center

more than 16 lines/mm
near periphery

5.4 Telephoto Lens

Amount of lens movement . . . ∞ to 12 ft. 9.831 ± 0.12 mm

Projected image resolving

power . . . more than 50 lines/mm
at center

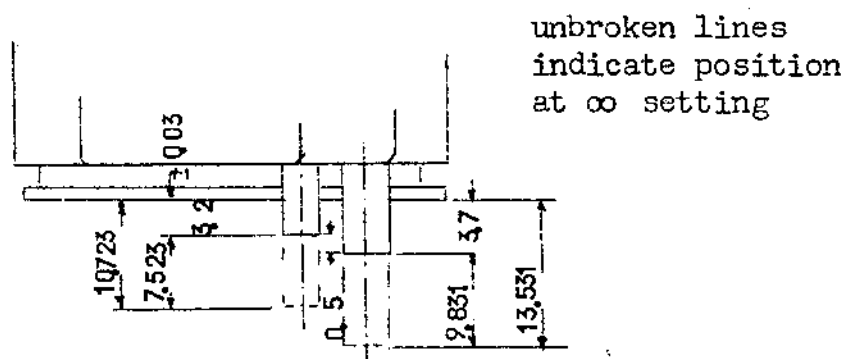
more than 12.5 lines/mm
near periphery

Telephoto lens coupling mechanism

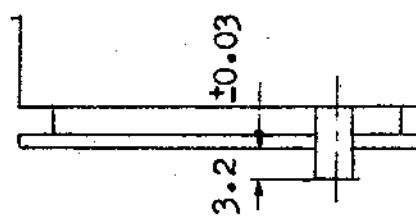
At ∞ setting the supplementary coupling pin should protrude 3.7 mm above the rear surface of the lens barrel (mounting plane), and when the height of the supplementary pin is 13.53 mm (equivalent to focus setting at 12 feet) the height of the main coupling pin should be 10.72 ± 0.03 mm (see cut below)

The acting force of the coupling pin should not be less than 350 g.

Telephoto Lens Barrel Coupling Pins Dimensions



Standard Lens Barrel Coupling Pins Dimensions



5.5 Backlid

The clutch should not slip when, with the spool attached to the filmwind spindle held firm, a force of 3 Kg. is applied to the plunger.

Pull force of the plunger, without film, should be from 250 to 400 g. Resistance of the film counter advance action should be less than 2 kg.

5.6 Other

Shutter cocking torque and shutter release resistance for the standard, telephoto and wide-angle lenses should be as follows:

cocking torque . . . less than 3.8 kg.cm
release resistance . less than 0.2 kg.cm

Exposure time (shutter action duration) at both "M" and "X" settings should be in the following ranges:

	<u>Duration</u>	<u>Permissible Error</u>
Maximum opening	1 to 1/125 Sec.	+50 to -30%
	1/250 to 1/500 Sec.	+80 to -40%

Action delay time: "M" setting: 16 ⁺⁴/_{-3.5} milliseconds

"X" setting: 16 ^{+0.5}/_{-0.45} milliseconds

Contact efficiency range:

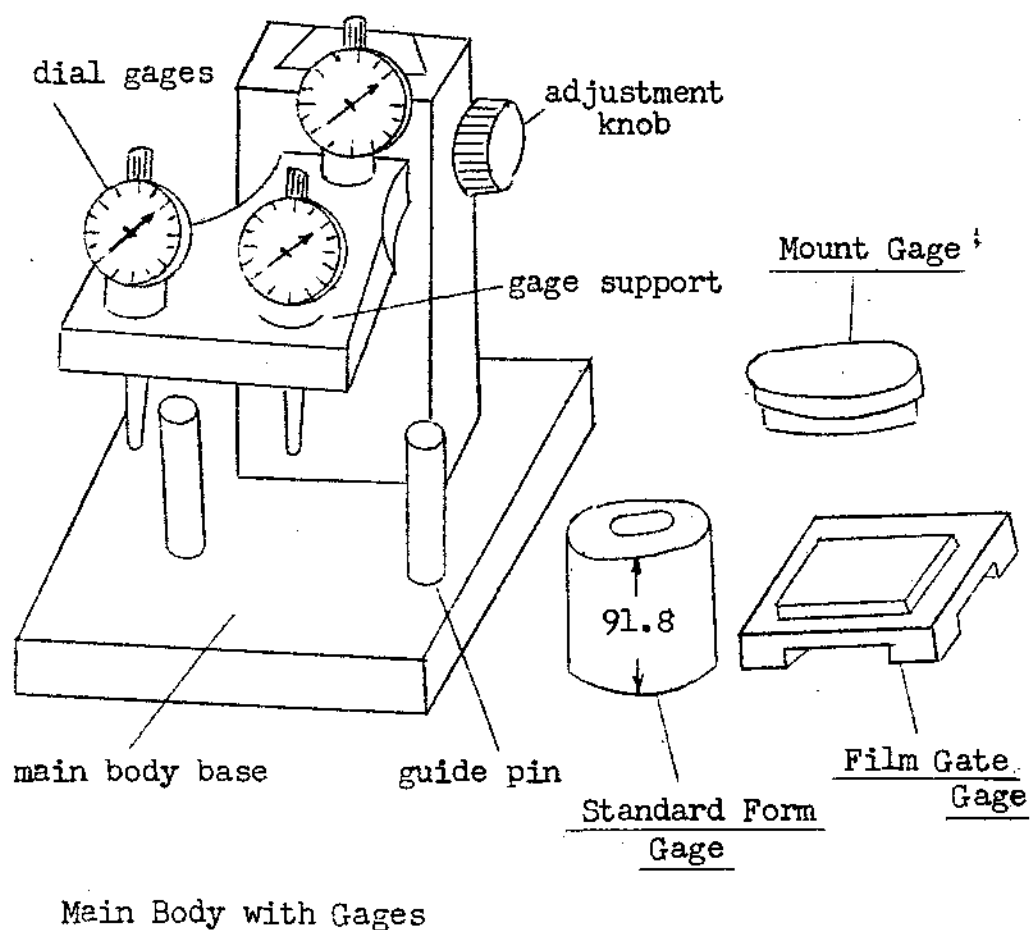
<u>Setting</u>	<u>Specified Duration</u>	<u>Contact Efficiency</u>
"X"	1 millisecond	not less than 70%
"M"	2.5 milliseconds	not less than 70%

6. GAGES AND MEASUREMENTS

Special Instruments: 1) Flange back gages
2) Telephoto lens coupling pin
adjustment gages
3) Ground glass focusing screen
4) 1-meter collimeter

6.1 Flange back measurement instruments

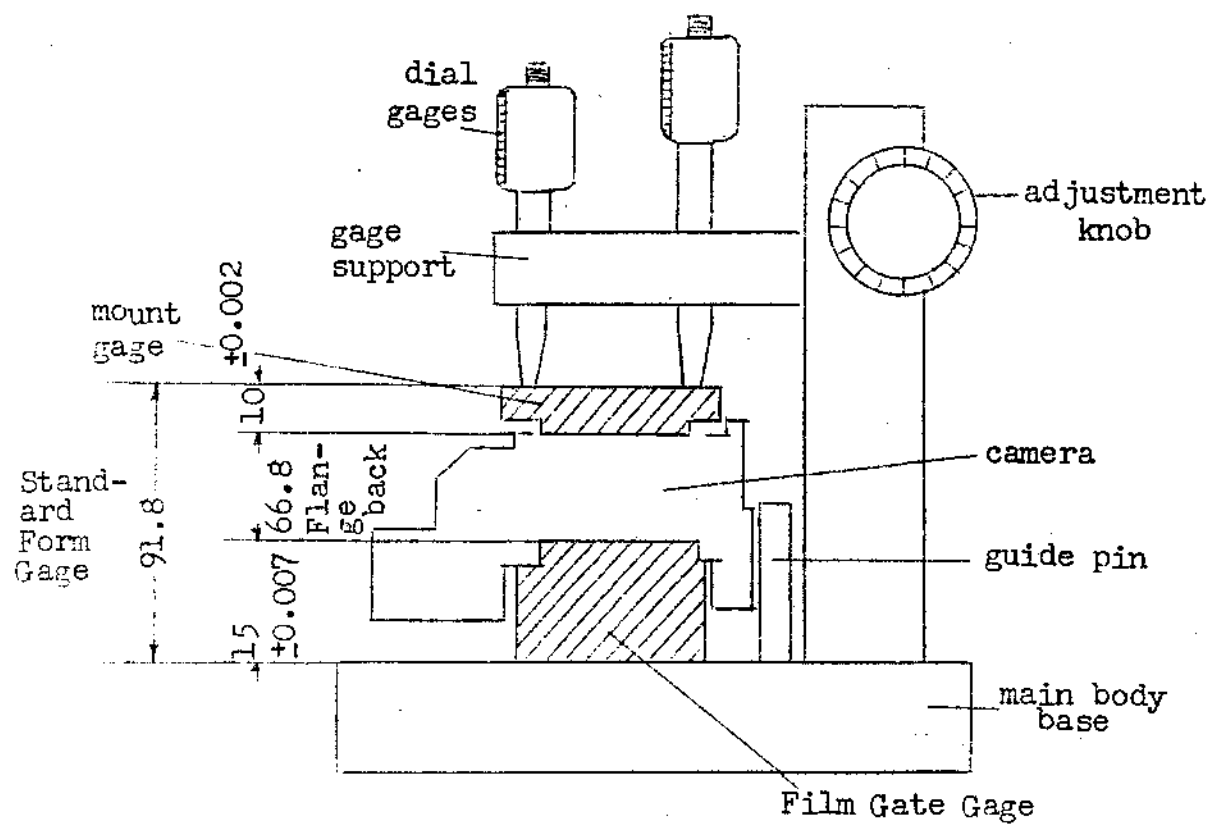
- | | |
|--|---|
| 1) Main body (vertical adjustment by rack and pinion) | 1 |
| 2) Dial gages (Peacock No. 47) | 3 |
| 3) Standard form gage (cylindrical, 91.8 ± 0.002 mm) | 1 |
| 4) Mount gage (bayonet receptacle) | 1 |
| 5) Film gate side gage (picture frame form) | 1 |



Measurement Procedure

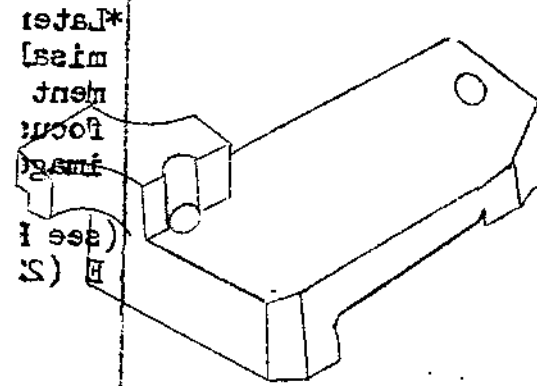
- 1) Remove backlid and lens of camera to be checked
- 2) Move gage support upward by turning adjustment knob, enough to position standard form gage
- 3) Place standard form gage on base; lower gage support gently so that gage tips touch cross-section of the form gage lightly; slightly turn back adjustment knob and turn the form gage around its axis
- 4) After form gage has settled on the base, adjust the 3 dial gages to zero point; dial gages should not be touched thereafter
- 5) Move gage support upward by turning the adjustment knob (no stop is provided)
- 6) Attach to the camera the film gate and mount gages; set camera focus at ∞ ; position camera, back down, on the base so that bottom touches guide pins
- 7) Lower the gage support gently so that dial gage tips touch the surface of the mount gage; compare readings with those obtained from the form gage (dial gage indications are in 1/100 mm)

Specified values: with focus setting at ∞ , all three gages not more than 0.02 mm
with focus setting at close range:
upper gages 1 and 2 not more than 0.05 mm
lower gage 3 not more than 0.15 mm

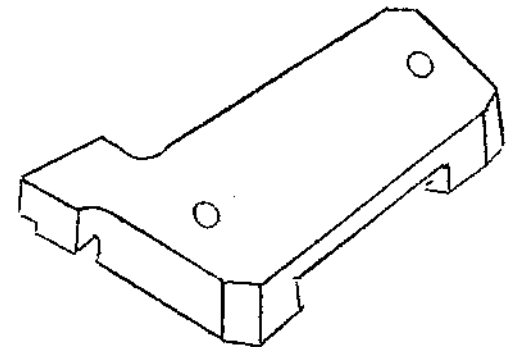


6.2 Telephoto Lens Coupling Pin Adjustment Gages

Set of two(2) gages: 1) coupling pin ∞ position gage
2) coupling pin close range position gage

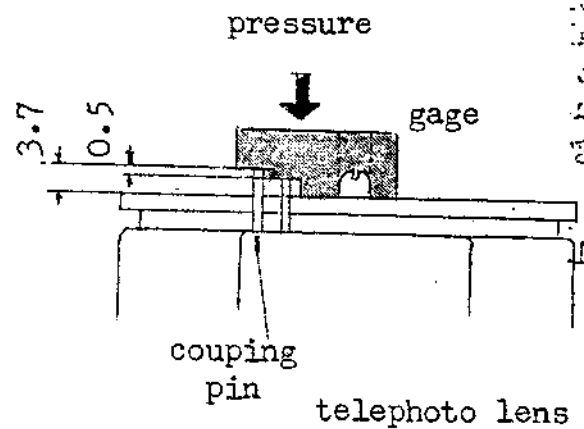
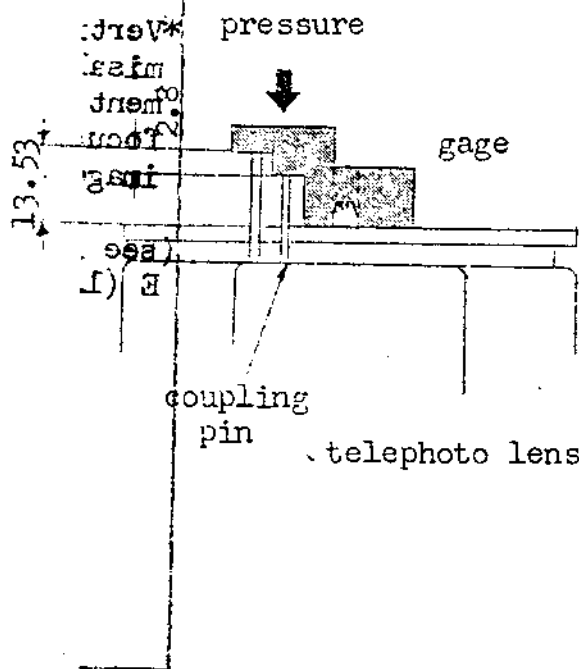


close range position gage



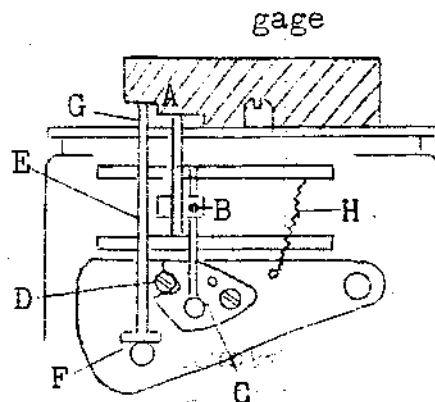
∞ position gage

diagrams of gages in use



Measurement Procedure

- 1) Remove cover of coupling mechanism (unnecessary if merely for check)
- 2) Apply ∞ position gage to upper surface of the mount, matching main coupling pin with hole in the gage
- 3) Adjust eccentric screw D so that points A and C make contact with the gage surface; if contact cannot be established, loosen set screw B and move the shaft to make contacts, then tighten set screw. Shaft F should contact gage at G and stud at F. The telephoto lens coupling is now adjusted at ∞ position
- 4) After ascertaining that ∞ setting has been obtained, with contacts established at points A, C, F and G, apply the close range position gage and observe displacement of coupling pins
- 5) With pressure applied to counter tension of spring H, check pins for precision of movement. All four contact points should be maintained, and the depressed position is that of the lens focused to closest range.



6.3 Ground Glass Focusing Screen

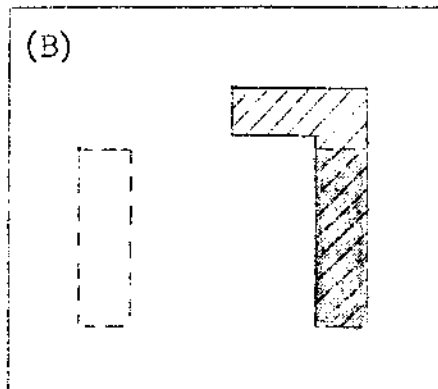
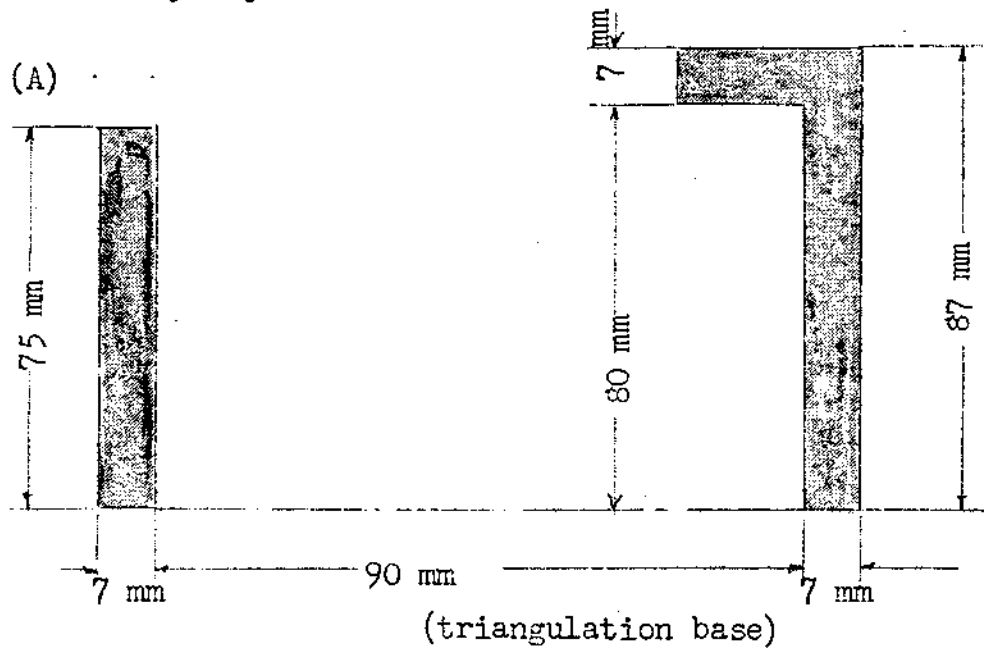
The ground glass focusing screen is 0.2mm closer to the lens than the plane of the camera film gate. This is to allow for the surface characteristics of roll film.

Although the mechanical distance from flange back to film gate is 66.8 mm, the real image projected by the lens is formed at a distance of 66.6 mm.

KONI-OMEGA Rapid ∞ setting check target
(triangulation base = 90 mm)

Rangefinder infinity (∞) setting check target

- (A) Reproduce on a white sheet of paper the pattern shown, in black, the dimensions being as indicated. Attach this target to a wall, and from a distance of from 5 to 7 meters sight through the camera viewfinder.
- (B) If, with the camera set at ∞ (infinity), the vertical lines merge into a single line, the camera is correctly adjusted.



7. SUBASSEMBLIES AND PARTS LISTS

Code	Subassembly Name	Parts Used
101	Main body	B3401, B3412, B3412-A B3415
102	Bayonet securing ring	B3103, B3116, B3117, B3118, B3116-A
103	Shutter release lever	B3109, B3110, B3111, B3113-1, B3119
104	Lower release base plate	B3201, B3211, B3210, B3210-A, B3210-B
105	Release lever	B3204, B3204-A, B3204-B B3205-A
106	Upper release base plate & pressure plate lever	B3202, B3205-B, B3207, B3212, B3212-A, B3220, B3221, B3212
107	Shutter button	B3215, B3217, B3217-A
108	Pressure plate push rod	B3208, B3208-A, B3208-B, B3209
109	Focusing rack	B3311, B3311-A, B3818, B3819, B3820, B3821, B3822
110	Formed side cover	B3408, B3513-2, B3723
111	Light barriers	B3415, B3121
112	Light barrier subassembly	B3501, B3502, B3503, B3503-B, B3503-C, B3503-D, B3503-J, B3504-A, B3504-B, B3505

Code	Subassembly Name	Parts Used
113	Light barrier working mechanism	B3506, B3507-A, B3507-B, B3508, B3509-A, B3509-B, B3510, B3511, B3512, B3515, B3516, B3517, B3519, B3521, B3531-1, B3522
114	Light barrier knob	B3513, B3513-1, B3514
115	Shutter cocking mechanism base plate	B3610, B3614, B3607, B3606-A, B3616
116	Shutter cocking lever mechanism	B3601, B3603, B3604, B3505, B3506, B3606-A, B3607, B3608
117	Strap eyelets	B3703, B3711, B3309
118	Hand grip	B3701, B3704, B3705, B3705-1, B3705-2, B3705-3, B3708, B3709
119	Wide angle lens coupling lever	B3806, B3807, B3807-A
120	Rangefinder coupling pin	B3801, B3802-A, B3802-B, B3803
121	Rangefinder base	R1001, R1002, R1003, R1004, R1005, R1007, R1008, R1009, R1010, R1011, R1012, R1013, R1014, R1015
122	Swivel mirror	R2001, R2002, R2003, R2004
123	Swivel mirror lever	R2006, R2007, R2008

Code	Subassembly Name	Parts Used
124	Swivel mirror lever	R2006, R2007, R2008
125	Rangefinder coupling adjustment	R2011, R2013, R2015, R2014, R2012, R2017, R2019, R2018
126	Ratio lever	R4005, R4006, R4007
127	Viewfinder casing	R5001, R5002, R5003, R5004, R5005, R5006, R5007, R5008, R5009, R5010, R5011, R5012, R5013, R5014
128	Protection cover	M2079, M2086, M2086-B, M2087, M2088, M2107, M2108
129	Decorative trim	M2085, M2085-A, M2052, M2054, M2091, M2090, M2099
130	Backlid die-casting	M2007, M2001, M2041, M2063, M2058, M2082
131	Spool slide plate	M2004, M2005
132	Spool support	M2003, M2006
133	Film guide spring	M2064, M2065, M2066
134	Backlid catch lever	M2048, M2049
135	Key slot plate	M2022, M2019

Code	Subassembly Name	Parts Used
136	Take-up spindle mechanism	M2009, M2011, M2013, M2015, M2016, M2017, M2010, M2014, M2012, M2018, M2021, M2094, M2023, M2022, M2019
137	Pressure plate	M2025, M2067, M2031 M2029
138	Numeral disk, cam, ratchet	M2044, M2045, M2059, M2081, M2100
139	Stopper	M2081, M2083
140	Pawl rack	M2032, M2038, M2070 M2039, M2051, M2105
141	Lever knob	M2056, M2055, M2103
142	Backlid catch knob	M2042, M2040, M2092
143	Standard lens front element and barrel	L1001, L1002, L1006, L1007
144	Standard lens rear element and barrel	L1003, L1004, L1008, L1009
145	Standard lens name plate	L4109, L4109-A, L4312
146	Cocking pin lever	L4119, L4120-A, L4120-B, L4311
147	Steel ball case	L4108, L4110, L4111, L4112, L4113, L4114, L4115, L4121, L4203, L4303, L4307

Code	Subassembly Name	Parts Used
148	Mounting plate	L4107, L4125, L4304
149	Release lever	L4201, L4202-A, L4202-B, L4204
150	Shutter	L1015, L4116, L4123-D, L4306
151	Aperture ring	L4122, L4123-1, L4123-2, L4123-A, L4123-B, L4123-C, L4308
152	Lens hood	L4301, L4302
153	Wide angle lens front element and barrel	W2001, W2002, W2007, W2008, W2011
154	Wide angle lens rear element and barrel	W2004, W2005, W2006, W2009, W2010, W2012
155	Shutter casing	W2502, W2510, W4116, W4205, W4209
156	Mounting plate	W2501, W4125
157	Release lever	W2505, W2506, W2506-A, W2507
158	Shutter	W2015, W4123-D, W4207
159	Aperture ring	W4122, W4123-1, W4123-2, W4123-A, W4123-B, W4123-C, W4210
160	Lens hood	W4201, W4202-1

Code	Subassembly Name	Parts Used
161	Telephoto lens front element and barrel	T3001, T3002, T3003, T3006, T3007, T3009, T3010, T3012
162	Telephoto lens rear element and barrel	T3004, T3005, T3008, T3011
163	Mounting plate	T4107, T4125, T4305
164	Steel ball case	T4108, T4110, T4111, T4112, T4113, T4114, T4115, T4121, T4126, T4303, T4309, T4306
165	Cocking pin lever	T4119, T4120-A, T4120-B
166	Shutter	T3015, T4123-D, T4116, T4308
167	Aperture ring	T4122, T4123-1, T4123-2, T4123-A, T4123-B, T4123-C, T4310
168	Release lever	T4201, T4202-A, T4202-B, T4203, T4204, T4311
169	Lens hood	T4301, T4301-A, T4302, T3006-A
170	Rangefinder coupling mechanism	T4205, T4206, T4207, T4208, T4209, T4210, T4211, T4212, T4213, T4214, T4215, T4216, T4217, T4218, T4219, T4220, T4221

8 Exploded view diagrams

Illustrated part Breakdown HOW TO MAKE THE BEST USE OF THIS LIST

This list will be at your service for way to assemble or disassemble KONI-OMEGA RAPID camera and also the way to place an order for the parts and/or sub-assembled parts you require.

In case of disassembling KONI-OMEGA RAPID camera: It is recommended that disassembling should made in accordance with the order of Figure A to K, and Figure Numbers of each drawing.

How to place an order for parts:

You are requested to indicate in your order sheet the name of camera model (KONI-OMEGA RAPID), parts number (Bxxxx) (Rxxxx) listed in the second column, and parts name described in the third or forth column of the list so that the correct parts could be delivered to you. No figure number is required.

How to place an order for assembled parts:

You are requested to indicate the name of camera model (KONI-OMEGA RAPID), the assembled parts number of three figures listed in the second column and also the assembled parts name of the third or forth column of the list, when you make the order sheet. No figure number is required.

Reference Note:

The following is the explanation to three kinds of figures described on the list.

- i) Bxxxx Parts Number
- ii) 2xxxx Parts Number of 5 figures
- iii) lxx Assembled Parts expressed by the number of 3 figures

i) Bxxxx

The series of number captioned above is for the parts excluding the ones previously called common parts such as pins, tacks and screws.

ii) 2xxxx The number of 5 figures

Pins, tacks and screws, etc. of KONI-OMEGA RAPID camera.

iii) lxx The number of 3 figures

The assembled parts are indicated with the number of 3 figures.

PINS, TACKS, and SCREWS, etc. of
KONI-OMEGA RAPID Camera

CLAIM NO.2223

Counter sunk head screws No.	Dimension			Material	Surface treat- ment	Num- bers	Summary Part
	Screw thread	Screw head	Thick- ness				
# 1	1.4 ϕ	2.5 ϕ	2.7	BsBM		2	B3505
# 2	1.7 ϕ	3 ϕ	3	"	Cr3	5	3612(3) R1012 3106
# 3	1.7 ϕ	3 ϕ	2.2	"	"	1	3612
# 4	1.7 ϕ	3 ϕ	4.7	BsBM		1	3202
# 5	2 ϕ	3.5 ϕ	3	"	Be	1	3409
# 7	2 ϕ	3.5 ϕ	3.5	BsBM		1	3919
# 8	2 ϕ	3.5 ϕ	4	"	Cr3	2	3119
# 9	2 ϕ	3.5 ϕ	5	"	Be	1	3415
# 11	2 ϕ	3.5 ϕ	10.5	BsBM		1	3510
# 12	2.3 ϕ	4 ϕ	3.2	"		2	3214
# 13	2.3 ϕ	3.5 ϕ	2.3	"	Cr3	4	3409(1) 3408(3)
# 14	2.3 ϕ	4 ϕ	7	"	"	2	3704
# 15	2.6 ϕ	4.5 ϕ	5.5	"	"	4	3712
# 16	2.6 ϕ	4.5 ϕ	7	"	Be	3	3102
# 17	3 ϕ	5 ϕ	5		Cr3	1	3703
# 18	3 ϕ	5 ϕ	9		"	1	3703
# 19	4 ϕ	7 ϕ	8		"	2	3702
# 20	2 ϕ	3.5 ϕ	4	SuM2D	"	2	3311-A
# 21	2.3 ϕ	3.5 ϕ	4.1	BsBM1	"	1	3711

CLAIM NO.2223

Flat fi- lister head screws No.	Dimention			Material	Sur- face treat- ment	Num- bers	Summary Part
	Screw thread	Screw head	Thick- ness				
# 1	1.4 ϕ	2.5 ϕ	3	BsBM	Be	2	B3503-B
# 2	1.7 ϕ	3 ϕ	2.5	SuM	Ni3	1	3204
# 5	2 ϕ	3.5 ϕ	2.2	BsBM		1	3506
# 6	2 ϕ	3.5 ϕ	4	"		2	3410
# 7	2 ϕ	3.5 ϕ	5	"		1	3309
# 8	2 ϕ	3.5 ϕ	5.5	"	Be	2	3415
# 9	2 ϕ	3.5 ϕ	7	SuM2D	Cr3	6	3313A(3) 3314A(3)
# 11	2.3 ϕ	4 ϕ	5	BsBM	Cr3	1	3305
# 12	2.3 ϕ	4 ϕ	5	"		1	
# 13	2.3 ϕ	4 ϕ	9	SuM2D	Cr3	4	3311

CLAIM NO.2223

Oual fi- lister head screws No.	Dimention			Material	Sur- face treat- ment	Num- bers	Summary Part
	Screw thread	Screw head	Thick- ness				
# 1	1.7 ϕ × 3 ϕ × 3.5			BsBM	Cr ₃ Black	2	B3106
# 3	2 ϕ × 3.5 ϕ × 4			BsBM	Cr	3	3404-B
# 4	2 ϕ × 3.5 ϕ × 4.2			"	Be	1	3117
Set screw							
# 1	2.3 ϕ × 2.2			SuM	Ni3	2	3301-1
# 3	3 ϕ × 13			SuM	Ni3	1	3301
# 4	2 ϕ × 3.2			"	"	1	3303
Stud pin							
# 1	1.1 ϕ × 2.5			SuSM		2	3501
# 2	2 ϕ × 10			"		2	3311
# 3	2 ϕ × 5.5			"		2	3703
# 4	2 ϕ × 12			"		1	3301
# 5	2 ϕ × 4			"	× 1	2	3311-A
Oual fi- llister head rivet							
# 1	1 ϕ × 1.7 ϕ × 2			BsBM		4	3522
Pan set screw							
# 1	2 ϕ × 6			SuM2D	Black Cr	1	3101
# 2	3 ϕ × 3			"	Ni3	1	3301

Standard lens Screw

CLAIM NO.3210

Counter sunk head screws No.	Dimension			Material	Surface treat- ment	Num- bers	Summary Part
	Screw thread	Screw head	Thick- ness				
# 1	2ϕ	3.5ϕ	$\times 2.6$	BsBM	Be	4	L4115
# 2	2ϕ	3.5ϕ	$\times 3.2$	"	"	8	L4107
# 3	2ϕ	3.5ϕ	$\times 4$	"		2	L4109
# 5	1.4ϕ	2.5ϕ	$\times 3$	BsBM	Be	3	L4124
Flat fi- llister head screw							
# 2	1.4ϕ	2.5ϕ	$\times 2$	BsBM		4	L4123 C L4123. D
# 5	1.7ϕ	2.5ϕ	$\times 2.5$	BsBM	Cr ₃	2	L4121
# 6	1.7ϕ	3ϕ	$\times 4$	"	Be	3	L4302
# 7	2ϕ	3.5ϕ	$\times 2.8$	"		2	L4121
# 8	1.7ϕ	3ϕ	$\times 1.5$	"	Be	2	L4115, 4310

Wide-angle lens Screw

CLAIM NO.3600

Counter sunk head screws No.	Dimention			Material	Surface treat- ment	Num- bers	Summary Part
	Screw thread	Screw head	Thick- ness				
# 2	$2\phi \times 3.5\phi \times 2.3$			BsBM	Be	4	2501
# 3	$1.4\phi \times 2\phi \times 1.2$			"	x 1	2	4205
Flat fi- llister head screw							
# 2	$1.4\phi \times 2.5\phi \times 2$			BsBM		4	4123-C 4123-D
# 4	$1.4\phi \times 2.5\phi \times 3.4$			SuM	Ni3	2	2505
# 5	$1.4\phi \times 2.5\phi \times 2.5$			BsBM	x 8	3	4124

Telephoto lens Screw

CLAIM NO.3601

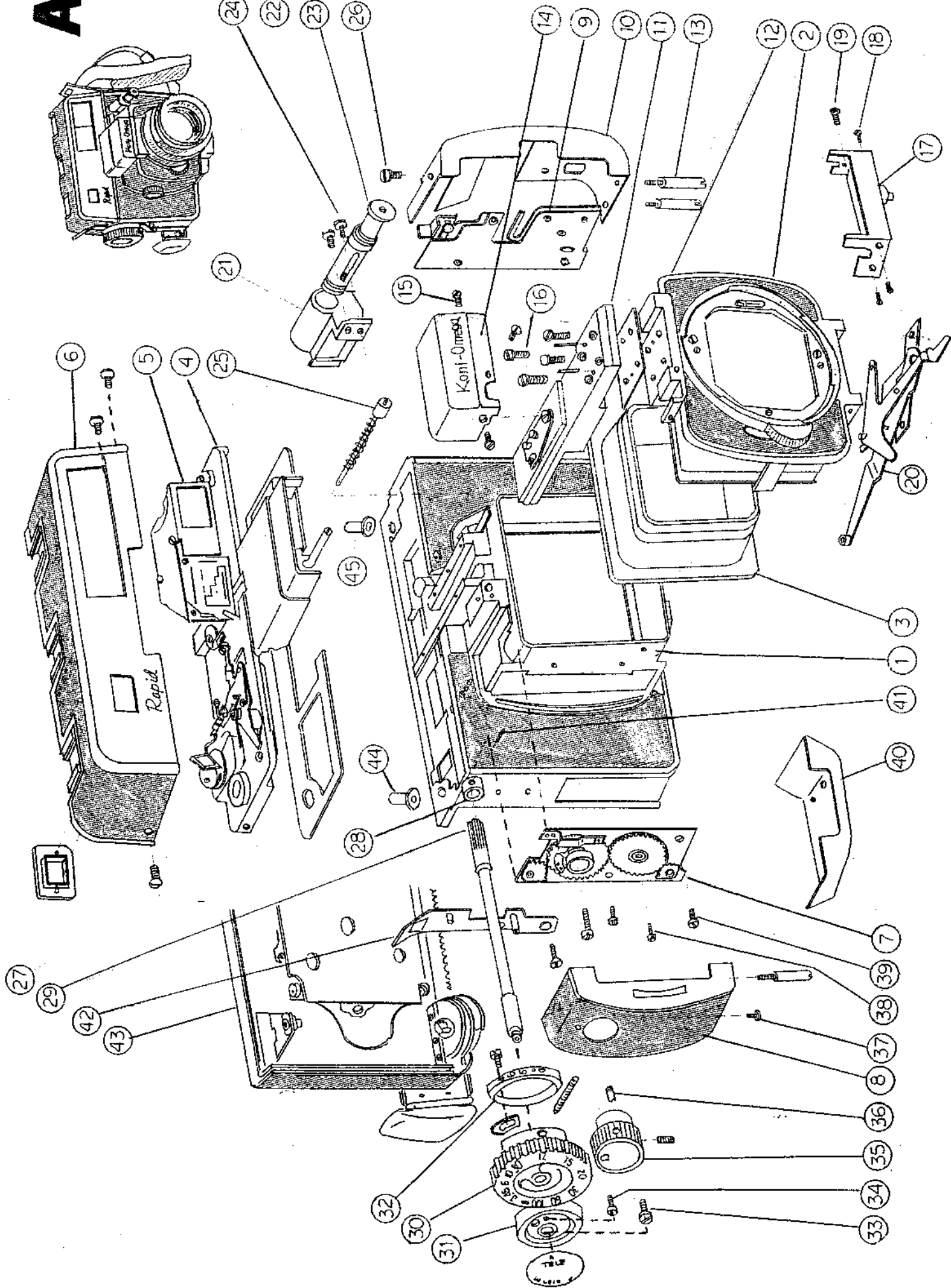
Counter sunk head screws No.	Dimention			Material	Surface treat- ment	Num- bers	Summary Part
	Screw thread	Screw head	Thick- ness				
# 1	1.4 ϕ x	2.5 ϕ x	1.5	BsBM	Cr ₃	6	4126
# 2	2 ϕ x	3.5 ϕ x	2	"	Be	4	4115
# 3	2 ϕ x	3.5 ϕ x	3.2	"	"	4	4107
# 4	2 ϕ x	3.5 ϕ x	5	"		2	4205
Flat fi- llister head screw							
# 2	1.4 ϕ x	2.5 ϕ x	2	BsBM		4	4123-D
# 5	1.7 ϕ x	3 ϕ x	2.5	BsBM	Cr ₃	2	4121
# 6	2 ϕ x	3.5 ϕ x	2.8	"		3	4121
# 7	1.4 ϕ x	2.5 ϕ x	2.5	"	x 8	3	4124
Oual fi- llister head screw							
# 1	1.7 ϕ x	2.5 ϕ x	2	BsBM	Cr ₃	4	4206
Flat round- head rivet							
# 1	2 ϕ x	3.5 ϕ x	2.5	SuM	Ni ₃	3	4119

PARTS LIST, KONI-OMEGA RAPID

A

Fig. No.	Subassembly or Part No.	Nomenclature	Fig. No.	Subassembly or Part No.	Nomenclature
A-1	101	Main body	A-32	B3301-1	Index ring
A-2	B3101	Front body	A-33	20007	2.3 ϕ \times 7 # 14 flathead screw
A-3	B3215	Light barrier frame	A-34	20008	2 ϕ \times 3.5 # 7 flathead screw
A-4	R4001	Viewfinder base	A-35	B3513	Light barrier knob
A-5	121	Rangefinder base	A-36	B3514	Knob set screw
A-6	127	Viewfinder casing	A-37	20009	2.3 ϕ \times 2.3 # 13 countersunk screw
A-7	113	Light barrier mechanism	A-38	20010	2 ϕ \times 3.5 # 7 countersunk screw
A-8	B3408	Formed side cover	A-39	20011	2 ϕ \times 3 # 5 flathead screw
A-9	106	Release base plate	A-40	B3404-B	Fixed bottom cover
A-10	B3409	Release side formed cover	A-41	20012	14 ϕ \times 2.7 # 1 pointed screw
A-11	109	Focusing rack	A-42	B3703	Strap eyelet
A-12	B3311-B	Rack shim plate	A-43	M2001	Backlid
A-13	B3405	Cover holding pin	A-44	B3403-2	Rangefinder base guide (right)
A-14	B3106	Cover	A-45	B3403-1	Rangefinder base guide (left)
A-15	20001	Small flathead screw			
A-16	20002	Small flathead screw			
A-17	B3612	Bottom cover			
A-18	20003	Countersunk screw			
A-19	20004	Countersunk screw			
A-20	116	Shutter cocking mechanism			
A-21	B3214	Shutter button frame			
A-22	B3215	Shutter button slide tube			
A-23	B3217	Shutter button			
A-24	20005	2.3 ϕ \times 3.2 # 13 countersunk screw			
A-25	B3208-A	Pressure plate force adjustment rod			
A-26	20006	2.3 ϕ \times 3.2 # 13 countersunk screw			
A-27	B3402	Camera body, viewfinder matching plate			
A-28	B3303	Focusing knob shaft bearing			
A-29	B3302	Focusing knob shaft			

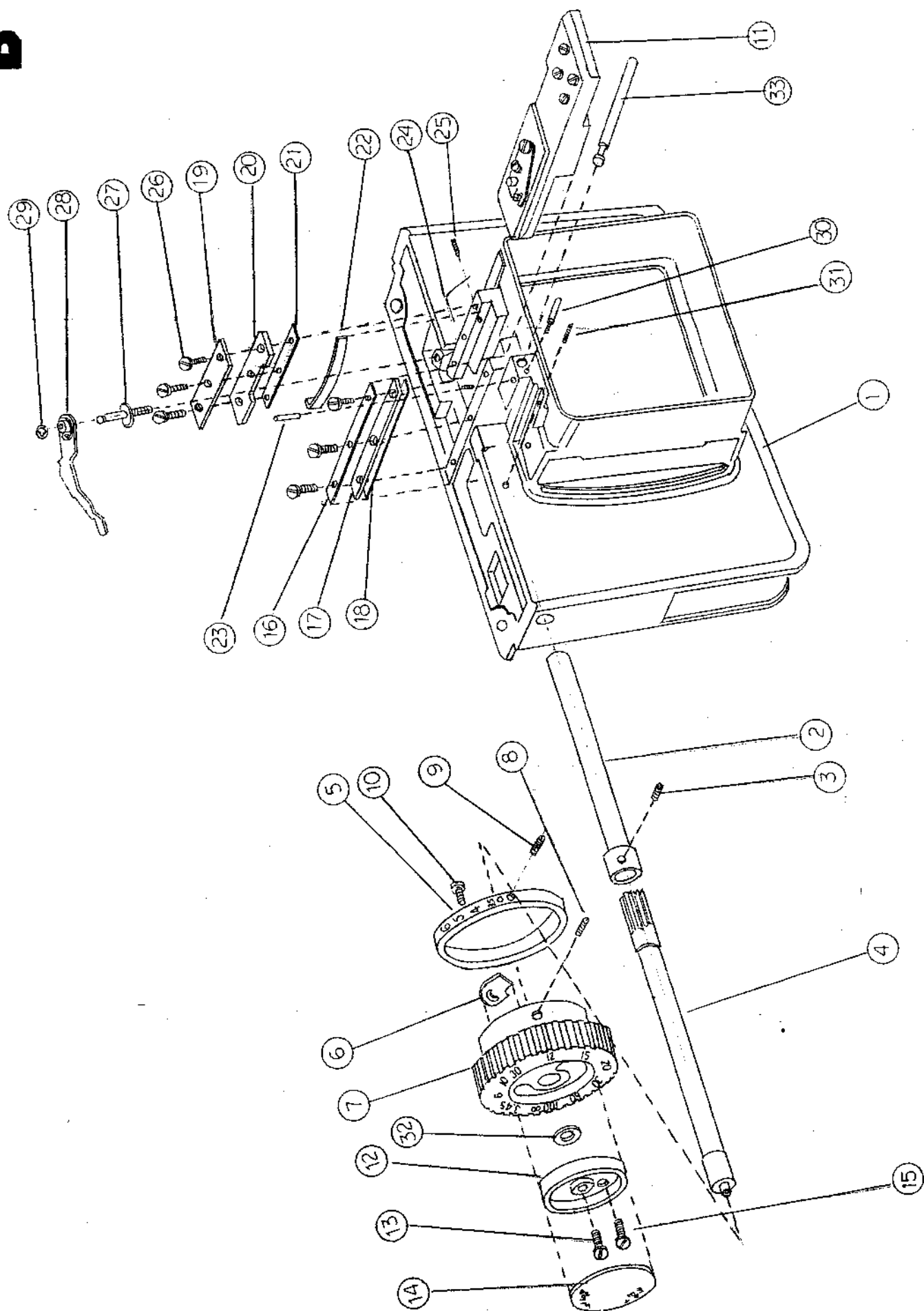
A



B

Fig. No.	Subassembly or Part No.	Nomenclature	Fig. No.	Subassembly or Part No.	Nomenclature
B-1	B3401	Main body die-cast frame	B-23	B3317	Rack holding spring screw
B-2	B3303	Focusing knob shaft bearing	B-24	B3823	Telephoto coupling pin set screw
B-3	20013	1.4 ϕ \times 2.7 # 1 pointed screw	B-25	B3317	Rack holding spring screw
B-4	B3302	Focusing knob shaft	B-26	20019	2 ϕ \times 5 # 9 flathead screw
B-5	B3301-1	Index ring	B-27	B3805	Coupling lever shaft
B-6	B3305	∞ adjustment plate	B-28	119	Wide angle lens coupling
B-7	B3301	Focusing knob	B-29	B3805-A	E spring collar lever
B-8	20014	1.7 ϕ \times 2.2 # .3 pointed screw	B-30	B3809	Telephoto index pin
B-9	20015	1.4 ϕ \times 2.7 # .1 pointed screw	B-31	20020	1.7 ϕ \times 4.7 # 4 pointed screw
B-10	20016	2 ϕ \times 10.5 # 11 flathead screw	B-32	B3308	Focusing knob collar
B-11	109	Focusing rack	B-33	B3303	Coupling pin
B-12	B3306	Focusing knob stopper			
B-13	20017	2.3 ϕ \times 7 # 14 flathead screw			
B-14	B3307	Interchangeable lens indication			
B-15	20018	2 ϕ \times 3.5 # 7 flathead screw			
B-16	B3313-B	Focusing rack holding plate (large)			
B-17	B3313-A	Focusing rack holding seat (large)			
B-18	B3313-C	Focusing rack holding shim			
B-19	B3313-D	Focusing rack holding plate			
B-20	B3314-A	Focusing rack holding seat (small)			
B-21	B3314-C	Focusing rack holding shim			
B-22	B3315	Focusing rack holding spring			

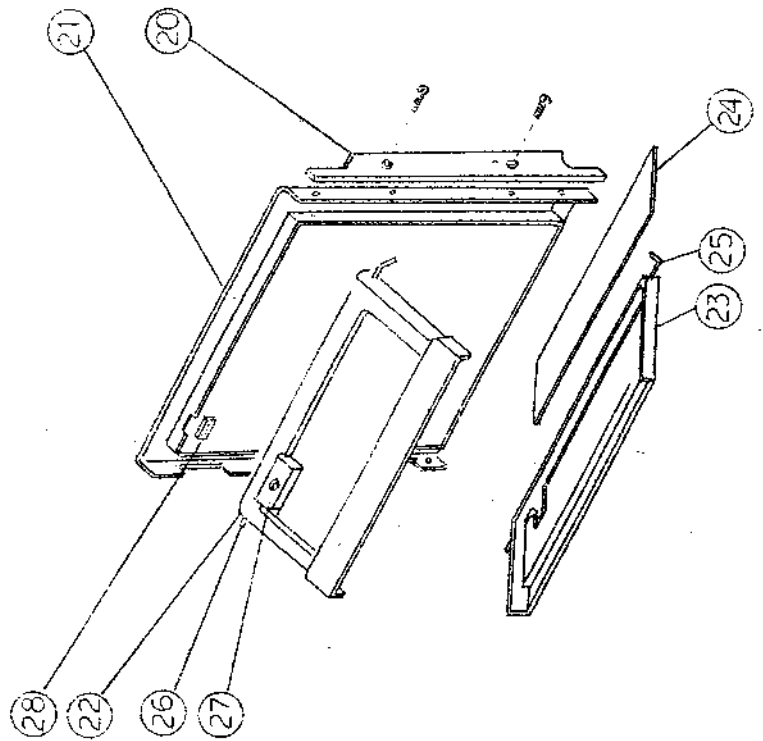
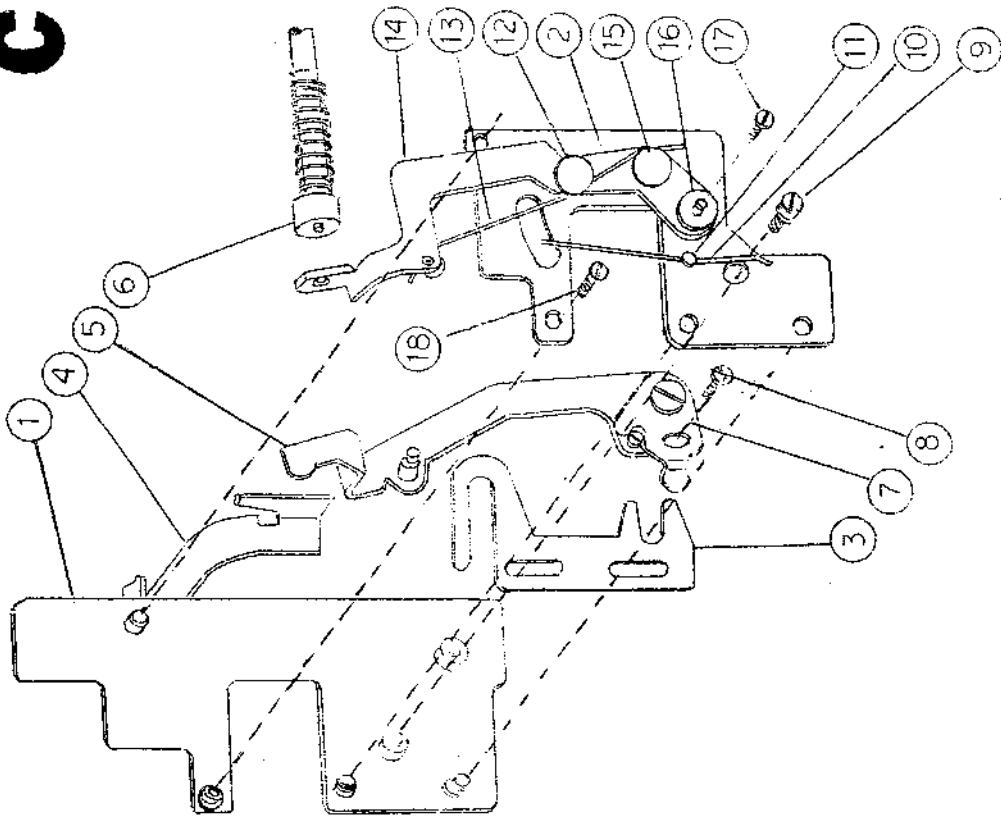
B



C

Fig. No.	Subassembly or Part No.	Nomenclature
C-1	104	Lower release base plate
-C-2	106	Upper release base plate
C-3	B3203	Release slide plate
C-4	B3523	Safety bar
C-5	105	Release lever
C-6	108	Pressure plate push rod
C-7	B3504-A	Formed spring A
C-8	20020	1.7 ϕ x 3 # 2 flathead screw
C-9	B3206	Base plate mounting screw
C-10	B3207	Release lever return spring
C-11	B3205-A	Release lever return spring stud A
C-12	B3205-B	Release lever return spring stud B
-C-13	B3221	Pressure plate spring
-C-14	B3212	Pressure plate actuating lever
C-15	B3205-B	Release lever return spring stud B
C-16	B3212	Pressure plate actuating lever pivot
C-17	20021	1.7 ϕ x 4.7 # 4 countersunk screw
C-18	20021-A	#4 Flat head screw
C-20	B3505	Light barrier hinge plate
C-21	B3501	Light barrier frame
C-22	B3502	Light barrier (upper)
C-23	B3503	Light barrier (lower)
C-24	B3503-D	Light barrier reflections prevention paper (lower)
C-25	B3504-B	Light barrier spring B
C-26	B3504-A	Light barrier spring A
C-27	B3503-B	Light barrier spring catch
C-28	B3503-J	Light seal

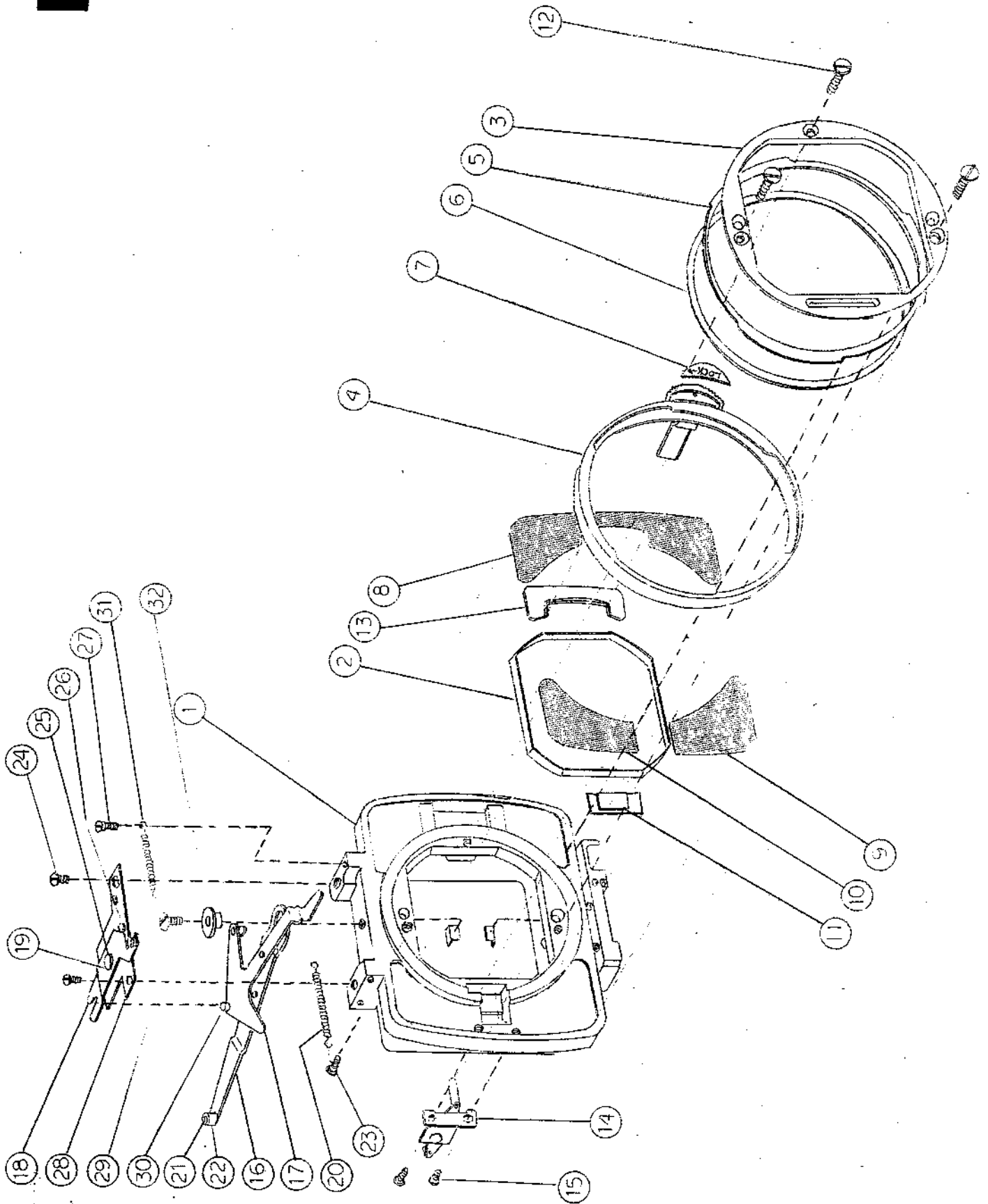
C



D

Fig. No.	Subassembly or Part No.	Nomenclature
D-1	B3101	Front body
D-2	B3101-A	Front body light seal
D-3	B3102	Body lens mounting plate
D-4	102	Bayonet securing ring
D-5	B3104	Bayonet spring
D-6	B3105	Bayonet collar
D-7	B3118	Bayonet sign plate
D-8	B3725	Front body covering leather (left)
D-9	B3726-A	Front body covering leather (right A)
D-10	B3726-B	Front body covering leather (right B)
D-11	B3115	Release mechanism cover
D-12	20023	2.6 ϕ x 7 # 16 countersunk screw
D-13	B3112	Release mechanism upper lid
D-14	B3119	Shutter button link pivot
D-15	20024	2 ϕ x 4 # 8 countersunk screw
D-16	B3601	Set lever A
D-17	B3605	Set lever B
D-18	B3614	Set lever C
D-19	B3614	Set lever C
D-20	B3617	Escapement spring
D-21	B3603	Roller pivot
D-22	B3604	Roller
D-23	B3619	Set lever return spring catch
D-24	B3611	Base plate holding screw
D-25	B3606	Stud A
D-26	B3606-A	Stud B
D-27	B3615	Spring catch
D-28	B3610	Cocking mechanism base plate
D-29	20022	3 ϕ x 5 # 17 countersunk screw
D-30	B3607	Stud C
D-31	B3609	Set lever return spring
D-32	B3602	Countersunk collar

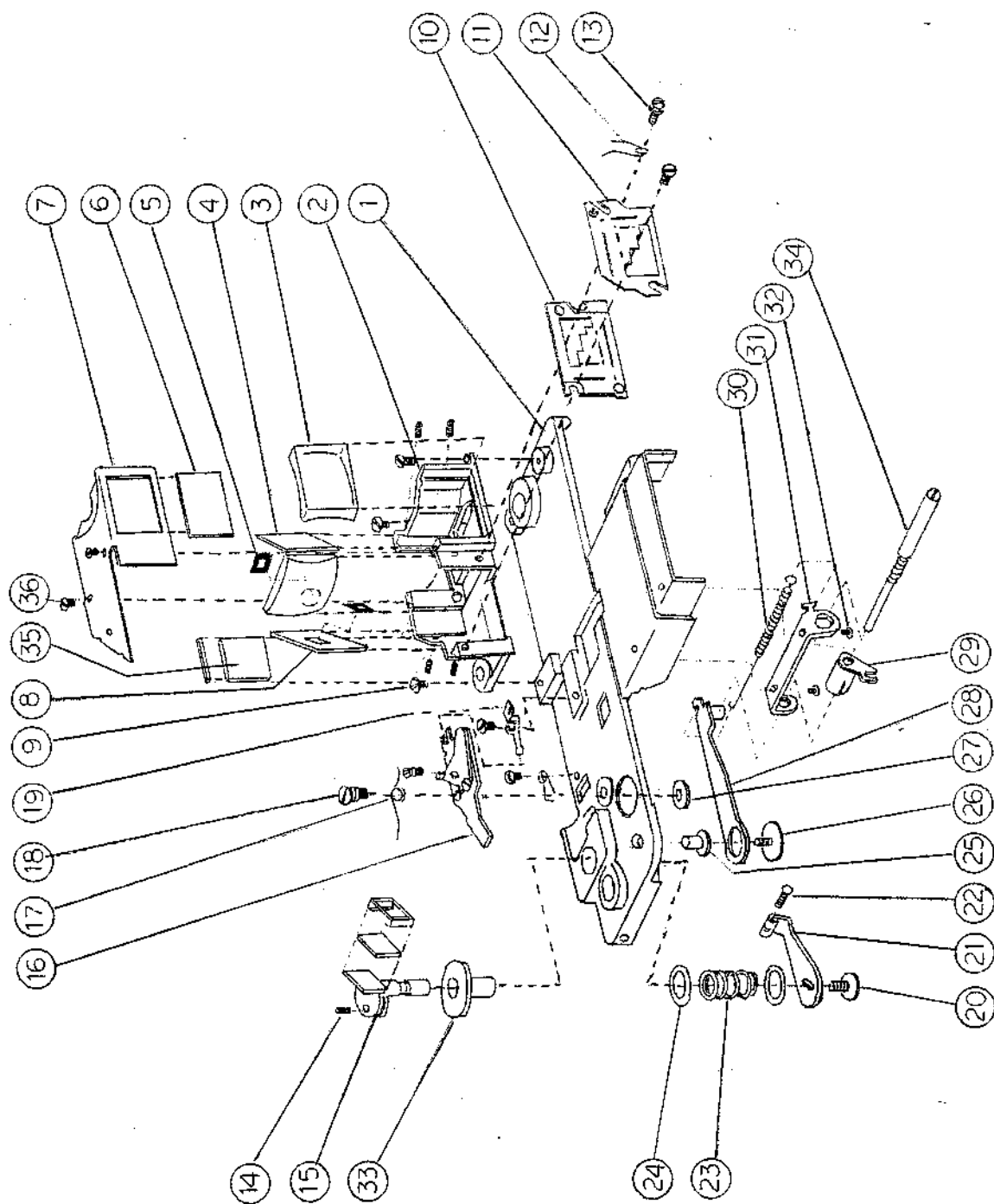
D



E

Fig. No.	Subassembly or Part No.	Nomenclature
E-1	R4001	Viewfinder base plate
E-2	121	Rangefinder base
E-3	R1002	Viewfinder lens
E-4	R1003	Semitransparent mirror
E-5	R1007	Masking paper
E-6	R1013	Color filter
E-7	R1012	Rangefinder housing
E-8	R1008	Target mirror
E-9	R1014	Mounting screw
E-10	R3002	Fixed target
E-11	R3003	Movable target
E-12	R3006	Target spring
E-13	R3005	Spring catch
E-14	R2004	Mirror
E-15	122	Swiveling mirror
E-16	125	Rangefinder coupling adjustment
E-17	R2019	Adjustment plate spring
E-18	R2017	Lever pivot
E-19	R3008	Parallax compensation coupling
E-20	R1015	End screw
E-21	124	Swivel mirror lever
E-22	R2008	∞ adjustment screw
E-23	R2020	Swivel mirror friction spring
E-24	R2022	Washer
E-25	R4003	Ratio lever pivot
E-26	R2007	Mirror lever holding screw
E-27	R2018	Holding nut
E-28	126	Ratio lever
E-29	3802-B	Coupling arm B
E-30	R4010	Tension spring
E-31	R4009	Rod guide plate
E-32	R4012	Rod guide plate mounting screw
E-33	R2021	Swivel mirror holder
E-34	3801	Rangefinder coupling pin
E-35	R1004	Eyepiece lens
E-36	R5013	Housing holding screw

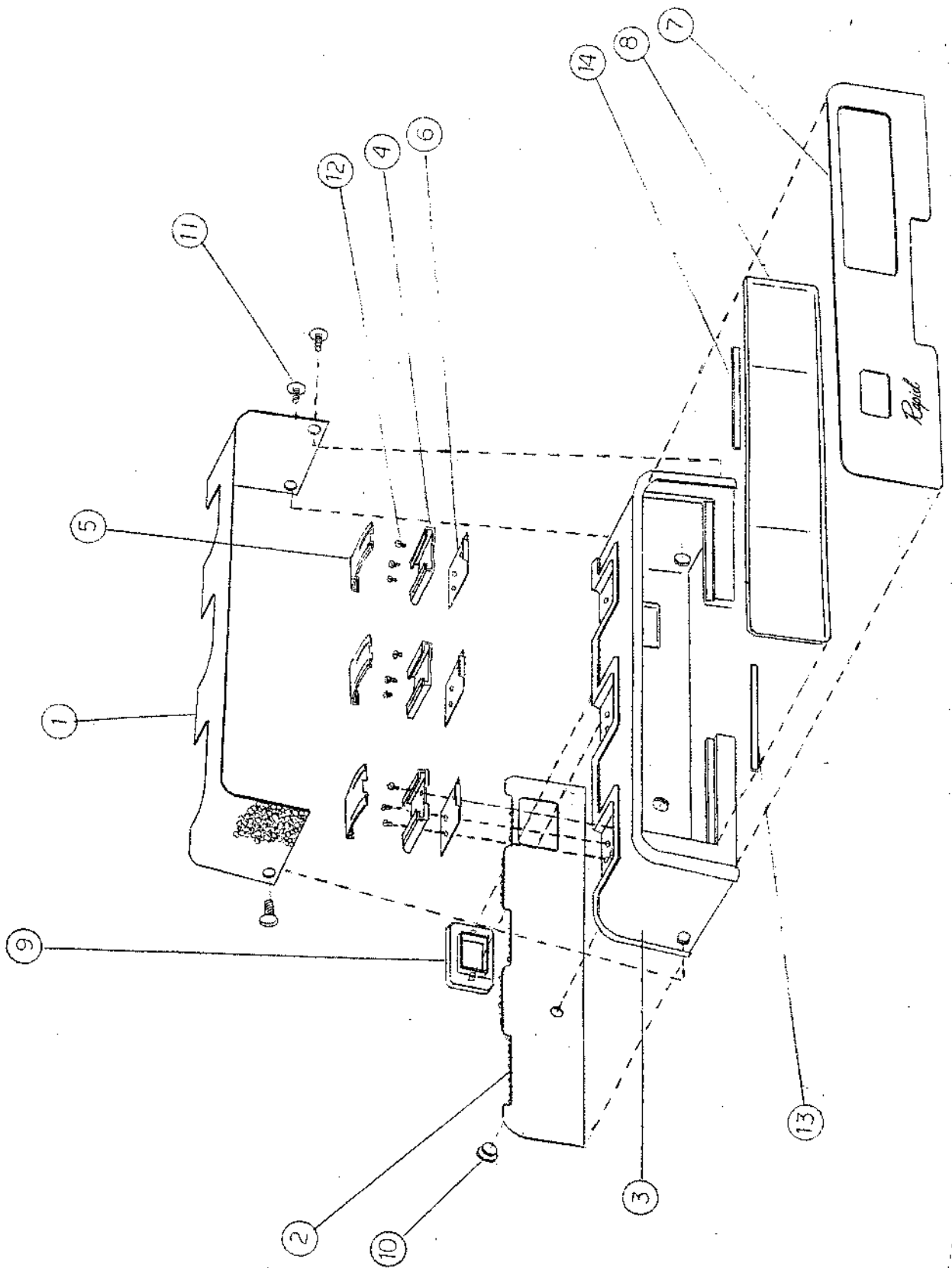
E



F

Fig. No.	Subassembly or Part No.	Nomenclature
F-1	B3727	Viewfinder cover leather (upper)
F-2	B3730	Viewfinder cover leather (rear)
F-3	R5001	Viewfinder casing
F-4	R5002	Accessory clip
F-5	R5003	Accessory clip spring
F-6	R5004	Accessory clip stopper
F-7	R5006	Front window frame
F-8	R5007	Dust cover glass
F-9	R5008	Eyepiece frame
F-10	R5005	Ornament screw
F-11	R5009	Viewfinder casing screw
F-12	R5010	Accessory clip holding screw
F-13	R5012	Wedge piece (small)
F-14	R5011	Wedge piece (large)
F-15	R5014	Eyepiece light seal

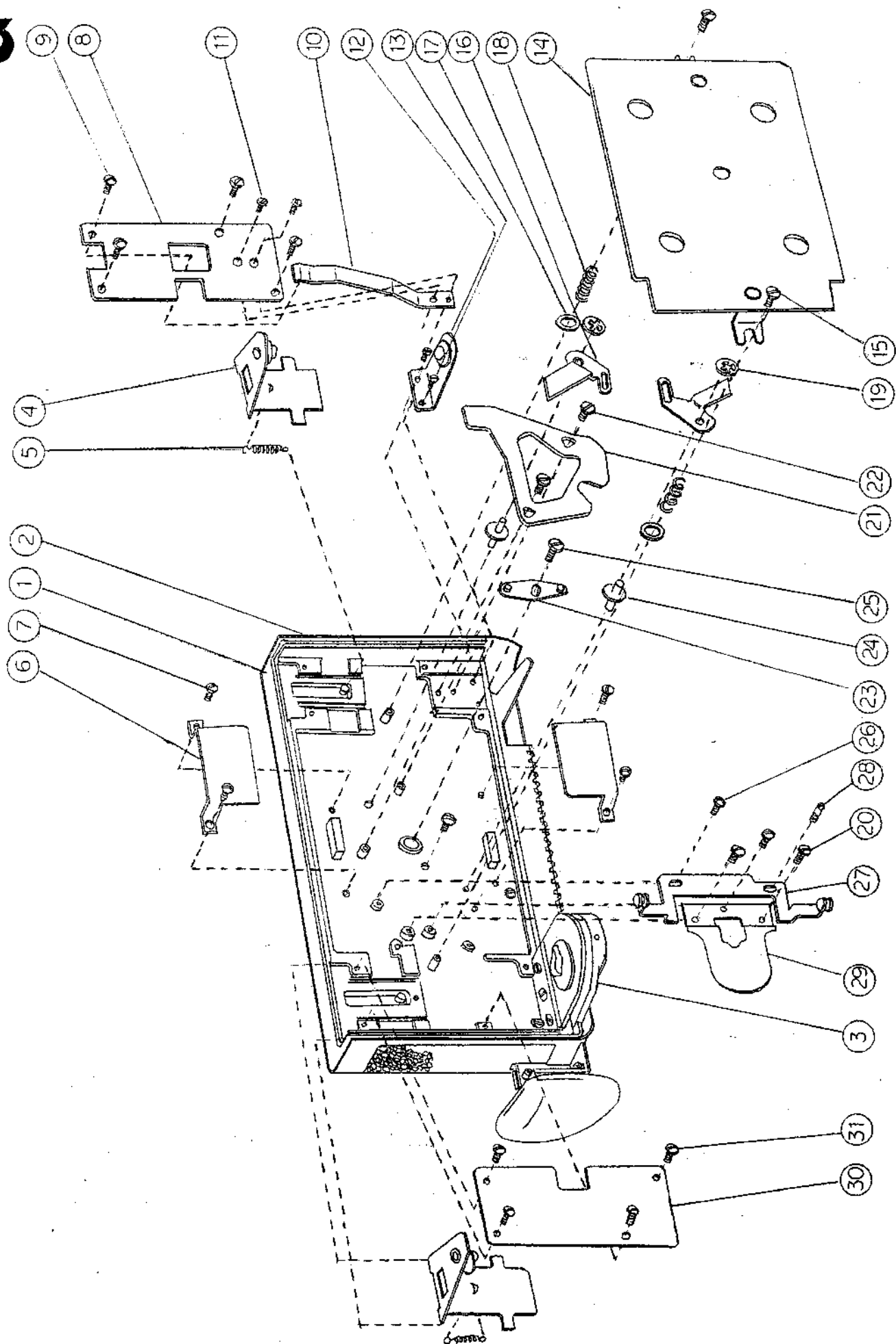
F



G

Fig. No.	Subassembly or Part No.	Nomenclature
G-1	M2001	Backlid die-cast frame
G-2	130	Backlid die-casting
G-3	136	Take-up spindle mechanism
G-4	131	Spool slide plate
G-5	M2074	Spool slide plate spring
G-6	M2069	Backlid catch lever guide plate
G-7	M2093	Countersunk roundhead screw
G-8	M2002	Spool slide plate cover
G-9	M2093	Countersunk roundhead screw
G-10	M2072	Formed flat spring
G-11	M2096	Small flathead screw
G-12	132	Spool support
G-13	M2097	Small countersunk screw
G-14	137	Pressure plate
G-15	M2028	Pressure plate mounting screw
G-16	M2046	Backlid catch lever
G-17	M2031	Pressure plate mounting washer
G-18	M2027	Pressure plate spring
G-19	M2005	Spool stud
G-20	M2093	Countersunk roundhead screw
G-21	M2047	Pressure plate lever
G-22	M2048	Backlid catch lever
G-23	M2048	Backlid catch lever
G-24	M2050	Catch lever pivot
G-25	M2028	Pressure plate mounting screw
G-26	M2093	Flat roundhead screw
G-27	M2064	Film guide spring
G-28	M2093	Flat roundhead screw
G-29	M2076	Film holding spring
G-30	M2008	Slide plate cover
G-31	M2093	Flat roundhead screw

G



H

Fig. No.	Subassembly or Part No.	Nomenclature	Fig. No.	Subassembly or Part No.	Nomenclature
H-1	129	Decorative trim	H-32	M2036	Rack guide pin
H-2	140	Pawl rack	H-33	M2034	Seat
H-3	138	Numeral disk, cam, ratchet	H-34	M2035	Rack slide plate
H-4	139	Stopper	H-35	M2111	Spring stopper
H-5	142	Backlid catch knob	H-36	M2071	Pawl spring
H-6	M2082	Stopper pivot	H-37	M2038	Pawl
H-7	M2041	Backlid lock shaft bushing	H-38	M2038	Small countersunk roundhead screw
H-8	M2074	Slide plate spring	H-39	M2033	Spring tension
H-9	M2073	Spring catch	H-40	M2121	Film window holding piece
H-10	M2043	Pawl rack stopper	H-41	M2091	Film window
H-11	M2028	Pressure plate support screw	H-42	M2114	Side piece securing collar
H-12	M2057	Regulating lever			
H-13	M2058	Regulating lever pivot			
H-14	M2070	Spring catch			
H-15	M2074	Slide plate spring			
H-16	M2116	Regulating lever stabilizer			
H-17	M2113	Small roundhead screw			
H-18	M2045	Numeral disk			
H-19	M2112	Numeral disk set screw			
H-20	M2062	Numeral disk axle washer			
H-21	M2061	Numeral disk pivot			
H-22	M2078	Lock knob spring			
H-23	M2085	Ornament plate			
H-24	M2077	Lock knob base plate			
H-25	M2098	Small countersunk screw			
H-26	M2055	Side piece			
H-27	M2056	Film advance lever knob			
H-28	M2104	Small countersunk round-head screw			
H-29	M2090	Cover leather			
H-30	M2060	Guide plate			
H-31	M2095	Small countersunk round-head screw			

H

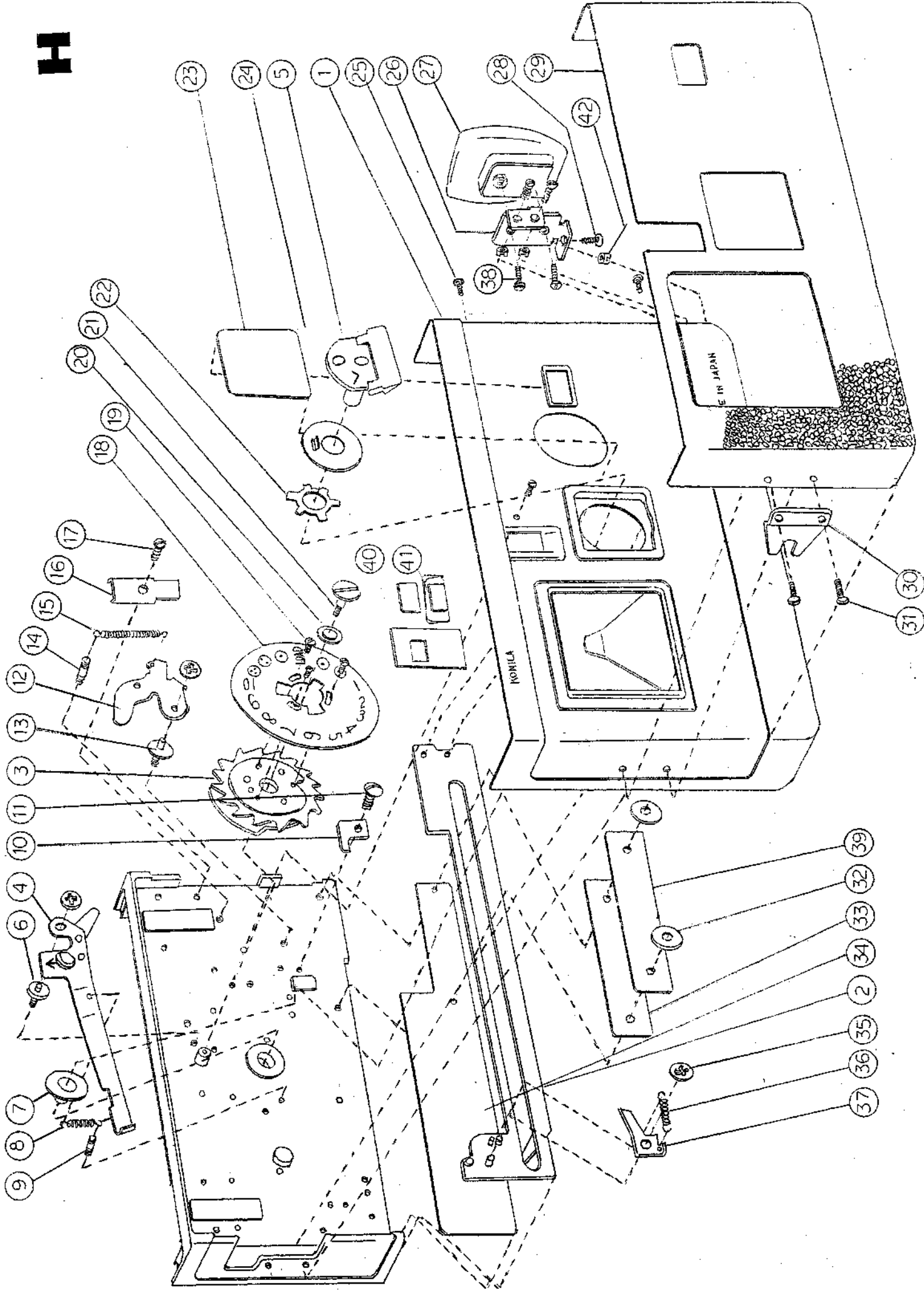


Fig. No.	Subassembly or Part No.	Nomenclature	Fig. No.	Subassembly or Part No.	Nomenclature
I-1	L4309	Standard lens lens cap	I-36	L4117	Spring catch stud
I-2	L1001	Front clamp	I-37	L4118	Return spring
I-3	L1006	No. 1 lens	I-38	L4111	Steel ball spacer (small)
I-4	L4002	Front middle frame	I-39	L4110	Steel ball casing
I-5	20023	# 9 flat head screw	I-40	L4108	Lens barrel tube
I-6	L4302	Front ring	I-41	L1003	Rear clamp
I-7	L4313	Lens hood seat	I-42	L1007	No.2, 3 lens
I-8	L4301	Built-in lens hood		L1008	
I-9	L4124	Shutter speed ring	I-43	L1009	No.4 lens
I-10	L4122	Aperture ring	I-44	L1004	Rear frame
I-11	L4308	Aperture ring lock screw	I-45	L1015	Set ring for lens shutter
I-12	L4308	Set mark plate	I-46	L4304	Mount adjustment
I-13	L1015	Standard lens shutter	I-47	L4107	Lens mount plate
I-14	L4116	Shutter adjustment	I-48	3210	# 2 counter sunk screw
I-15	L4123(2)	Aperture ring guide (2)	I-49	L4125	Body guide pin
I-16	L4123(1)	Aperture ring guide (1)	I-50	L4305	Mount plate light seal
I-17	20024	# 8 flat head screw	I-51	20029	# 3 flat head screw
I-18	L4115	Shutter casing	I-52	L4109(A)	Standard lens coupling pin
I-19	L4303	Lens barrel adjustment	I-53	L4312	Coupling pin collar
I-20	L4114	Steel ball spacer (large)	I-54	L4109	Name plate
I-21	L4112	Steel ball spacer	I-55	L4203	Release return spring stud
I-22	L4123(B)	Aperture ring guide (B)	I-56	L4204	Release return spring
I-23	L4123(C)	Aperture click stop spring (C)	I-57	L4202(B)	Release shaft (upper)
I-24	20025	# 2 flat head screw	I-58	L4201	Shutter release lever
I-25	L4310	Seat ring	I-59	L4202(A)	Release shaft (lower)
I-26	20026	# 8 flat head screw	I-60	20030	# 7 flat head screw
I-27	L4123(D)	Aperture ring plate (D)	I-61	L1015	Synchroflash plug piece
I-28	20027	# 2 flat head screw	I-62	L4121	Synchroflash plug piece
I-29	L4308	Aperture ring lock screw	I-63	20031	# 7 flat head screw
I-30	20028	# 5 counter sunk screw	I-64	L4121(B)	Synchroflash plug nut
I-31	L4120(A)	Cocking pin	I-65	L4120(B)	Nut
I-32	L4113	Steel ball casing			
I-33	L4307	# 7 flat head screw			
I-34	L4121(C)	Synchro plug plate			
I-35	L4121	Outside tube			

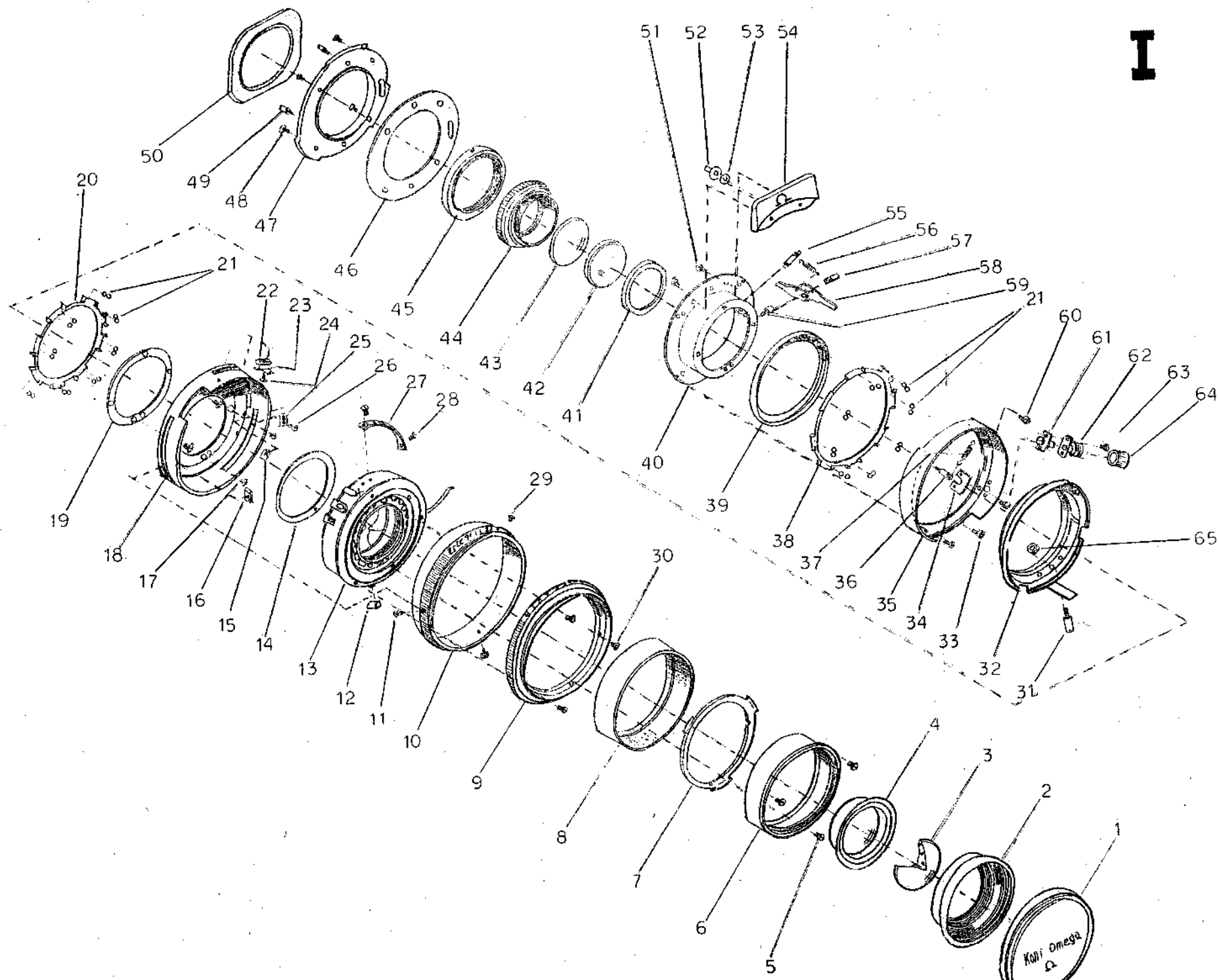
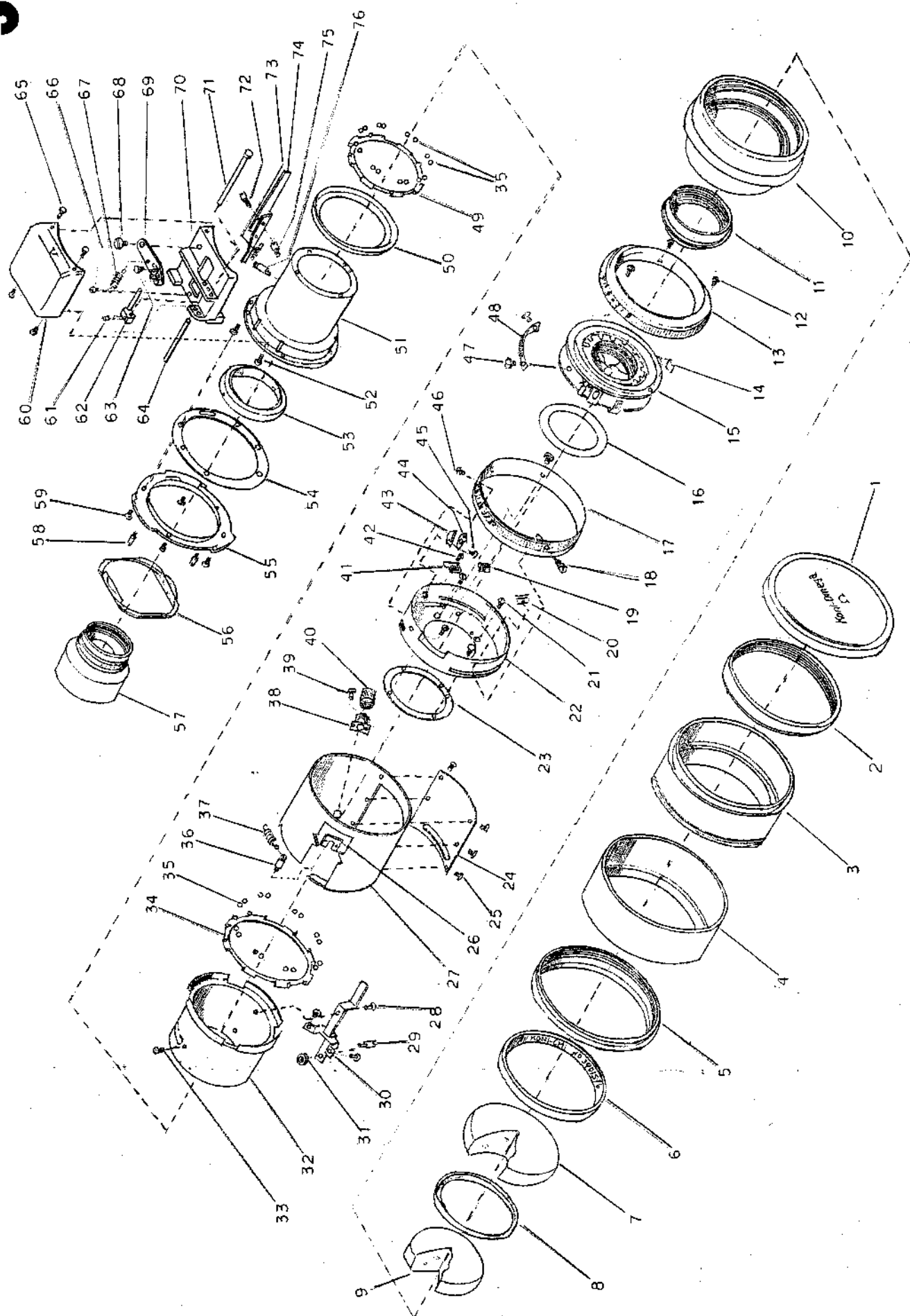


Fig. No.	Subassembly or Part No.	Nomenclature	Fig. No.	Subassembly or Part No.	Nomenclature
J-1	J4203	Telephoto lens lens cap	J-39	20035	# 5 flat head screw
J-2	J3006-A	Filter screw	J-40	J4121-B	Synchroflash plug nut
J-3	J4301	Lens hood inner tube	J-41	J4306	Release holder
J-4	J4301-A	Lens hood outer tube	J-42	20036-B	# 2 flat head screw
J-5	J4302	Lens hood mounting ring	J-43	J4123-B	Aperture ring guide (B)
J-6	J3009	Engraved ring	J-44	J4123-C	Aperture ring spring
J-7	J3001	No.1 lens	J-45	20037	# 2 flat head screw
J-8	J3010	No.2 lens clamp ring	J-46	J4310	Aperture ring lock screw
J-9	J3003	No.2 lens	J-47	20038	# 2 flat head screw
J-10	J3006	Lens barrel	J-48	J4123-D	Aperture click stop plate
J-11	J3007	No.3 lens clamp ring	J-49	J4111	Steel ball spacer (large)
J-12	20032	# 7 flat head screw	J-50	J4110	Steel ball casing
J-13	J4124	Engraved ring	J-51	J4108	Lens barrel tube
J-14	J4308	Set mark plate	J-52	3601	# 4 counter sunk screw
J-15	J3015	Telephoto lens shutter	J-53	J3011	No.5 lens clamp ring
J-16	J4116	Shutter adjustment	J-54	J4305	Mount adjustment
J-17	J4122	Aperture ring	J-55	J4107	Lens mount plate
J-18	J4123-A	Aperture actuating screw	J-56	J4304	Mount light seal
J-19	J4123-2	Aperture ring guide (2)	J-57	J3008	No.4 lens lens barrel
J-20	J4123-1	Aperture ring guide (1)	J-58	J4125	Camera body guide pin
J-21	20033	# 2 counter sunk screw	J-59	20039	# 3 counter sunk screw
J-22	J4115	Shutter casing	J-60	J4206	Coupling pin cover
J-23	J4303	Lens barrel adjustment	J-61	J4221	Set screw
J-24	J4124	Outer tube cover	J-62	J4212	Coupling shaft seat
J-25	20034	# 1 counter sunk screw	J-63	J4219	Lock screw
J-26	J4121-C	Aperture ring guide	J-64	J4213	Coupling shaft (short)
J-27	J4121	Lens barrel outer tube	J-65	20040	# 1 round flat head screw
J-28	20035	# 1 round flat rivet	J-66	J4216	Return spring pin
J-29	J4120-A	Cocking pin	J-67	J4215	Ratio lever return spring
J-30	J4119	Cocking lever	J-68	J4209	Ratio lever lock screw
J-31	J4120-B	Nut	J-69	J4207	Ratio lever
J-32	J4113	Steel ball casing (2)	J-70	J4205	RF coupling pin casing
J-33	20035-B	# 5 flat head screw	J-71	J4214	Coupling shaft (long)
J-34	J4114	Steel ball spacer (large)	J-72	J4202-B	Release pivot (upper)
J-35	J4112	Steel ball	J-73	J4204	Release return spring
J-36	J4117	Spring catch stud	J-74	J4210	Shutter release lever
J-37	J4118	Return spring	J-75	J4202-A	Release pivot (lower)
J-38	J4121-A	Synchroflash plug piece	J-76	J4203	Release return spring stud



K

Fig. No.	Subassembly or Part No.	Nomenclature	Fig No.	Subassembly or Part No.	Nomenclature
K-1	W4203-1	Wide-angle lens lens cap	K-37	W2506	Release lever
K-2	W2007	No.1 lens clamp ring	K-38	20047	# 2 counter sunk screw
K-3	W2001	No.1 lens	K-39	W4125	Body guide pin
K-4	W2011	Front lens lens barrel	K-40	W2015	Set ring for lens shutter
K-5	W2002	No.2 lens	K-41	W4208	Mount plate light seal
	W2003	No.3 lens	K-42	W2009	No.3 lens clamp ring
K-6	W2008	No.2 lens clamp ring		W2004	No.4 lens
K-7	W4201	Lens hood inner tube	K-43	W2005	No.5 lens
K-8	W4201-1	Lens hood outer tube	K-44	W2012	Rear lens lens barrel
K-9	20041	# 5 flat head screw	K-45	W2006	No.6 lens
K-10	W4124	Shutter speed ring	K-46	W2010	No.6 lens clamp ring
K-11	W4207	Set mark			
K-12	W2015	Wide-angle lens shutter			
K-13	W4116	Shutter adjustment			
K-14	20042	# 2 flat head screw			
K-15	W4123-D	Aperture click-stop plate			
K-16	W4122	Aperture ring			
K-17	W4210	Aperture ring lock screw			
K-18	W2502	Shutter casing			
K-19	L4121-C	Aperture ring guide			
K-20	20043	# 4 flat head screw			
K-21	W2505	Release pivot plate			
K-22	W2501	Lens mount plate			
K-23	W4123-1	Aperture ring guide (1)			
K-24	W4123-2	Aperture ring guide (2)			
K-25	W4210	Aperture ring lock screw			
K-26	20044	# 2 flat head screw			
K-27	W4123-C	Aperture ring spring			
K-28	W4123-B	Aperture ring guide			
K-29	W4121-B	Synchroflash plug nut			
K-30	20045	# 5 flat head screw			
K-31	W4121-A	Synchroflash plug piece			
K-32	W2015	Synchroflash plug piece			
K-33	20046	# 3 counter sunk screw			
K-34	W4205	Release limit plate			
K-35	W2506-A	Release lever A			
K-36	W2507	Release lever pivot			

K

