

## Illustrated Parts List



Publication No. 3746045A

## HOW TO USE THIS PUBLICATION

### I. CAUTIONS

This publication is intended for use by persons having the skills and equipment needed to service the subject product(s) safely and correctly. Users are cautioned that special tools and/or test equipment may be required for proper disassembly, reassembly, alignment or adjustment of the product.

### SPECIAL CAUTION FOR ELECTRICAL PRODUCTS

If the product herein described is electrically operated, its servicing will require extreme caution. Improper handling could result in serious or fatal personal injury or damage to the product.

### II. HOW TO FIND PART ORDER NUMBERS

Parts are illustrated on "exploded" drawings where each part is identified by a reference number (having three digits or fewer) or a designator. These reference numbers appear in numerical order in the parts lists (designators appear alphabetically), where they are cross-referenced to part order numbers and descriptions.

When the initials N.A.S. appear in the "Part Number" column, that part is Not Available Separately, and can be obtained only by ordering the assembly containing it. The part number of that assembly may be shown immediately to the right on the same line, in an "Included in Assembly" column, or at the end of the parts list(s).

In parts lists for optical products, quantities of each item are listed as used in the different mounts. The mounts are referred to as:

U = Vivitar-Universal Thread Mount  
N = Nikon F, Nikkormat Series Mount  
M = Minolta SRT/SR Series Mount

C = Canon FL/FD Series Mount  
K = Konica Autoreflex Series Mount  
O = Olympus OM Series Mount

Note that some parts are common to more than one mount. This commonality is shown in the parts lists so that service centers desiring to stock replacement parts can order economically.

### III. HOW TO ORDER PARTS

Please furnish the model number and serial number of the product for which parts are being ordered. For each part requested, please supply part order number, description, and required quantity.

Mail or phone parts orders to:

**Vivitar Central Parts Service  
2700 Pennsylvania Avenue  
Santa Monica, California 90406**

**Telephone: (213) 829-3672  
or (213) 870-0181**

# PARTS MANUAL

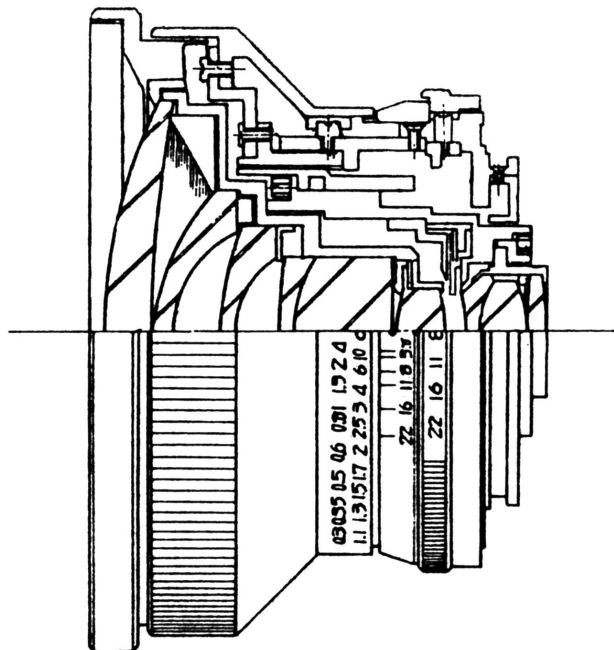
## VIVITAR AUTOMATIC FIXED MOUNT LENS

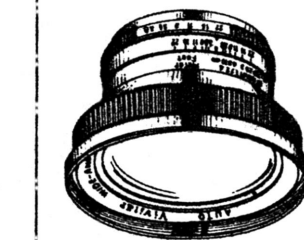
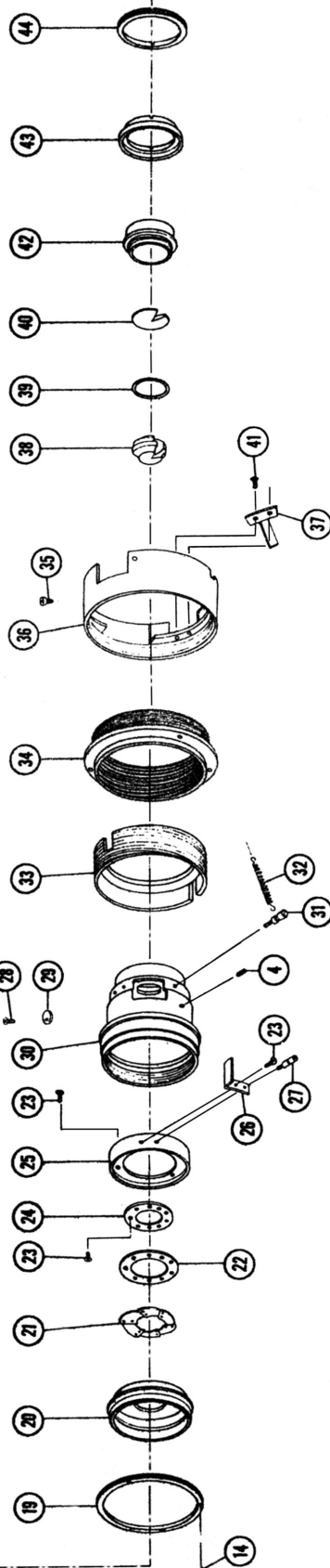
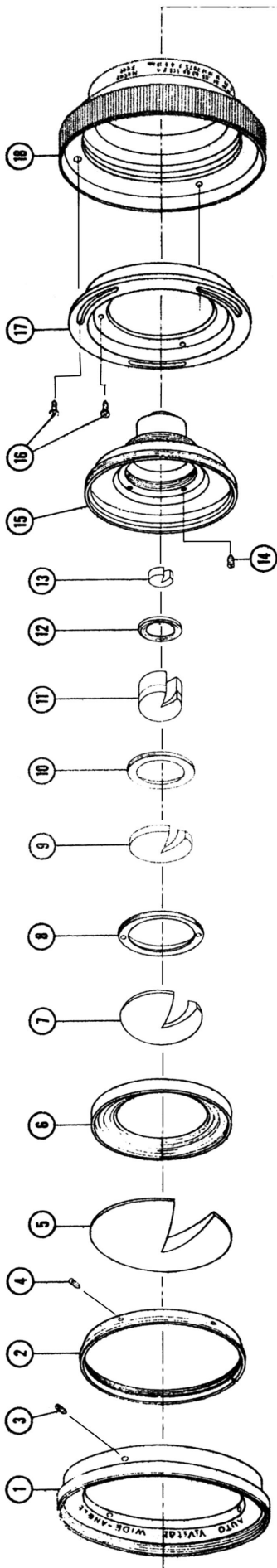
### 20MM F/3.8

#### GENERAL SPECIFICATIONS

Optical Construction . . . . .	9 elements in 7 groups
Angle of Acceptance . . . . .	95°
Aperture Range . . . . .	f3.8 to f22 (f/16 Automatic Models)
Minimum Focusing Distance from Film Plane . . . .	6 inches (152mm)
Weight . . . . .	13 ounces (369g)
Length at $\infty$ . . . . .	2-1/8 inches (54mm)
Maximum Barrel Diameter . . . . .	3-3/8 inches (86mm)
Accessory Size . . . . .	82mm

Product specifications are subject to change without notice





VIVITAR AUTOMATIC FIXED MOUNT LENS  
VIVITAR-UNIVERSAL THREAD MOUNT  
20MM F/3.8

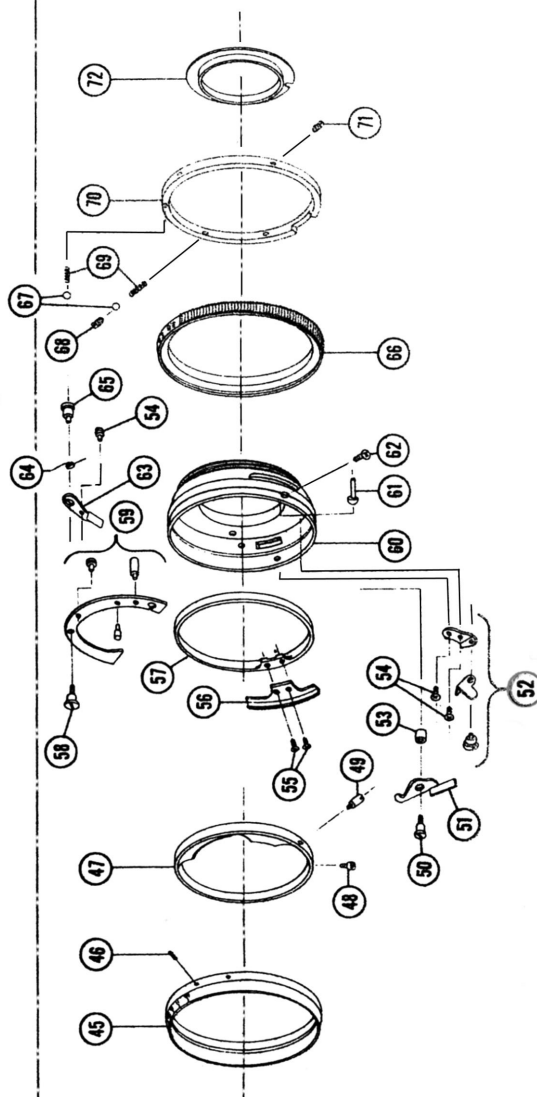
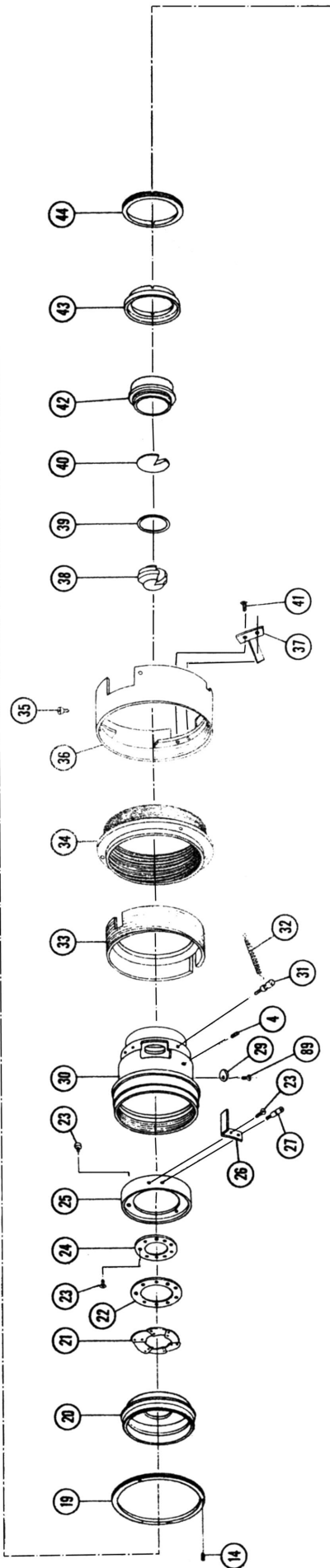
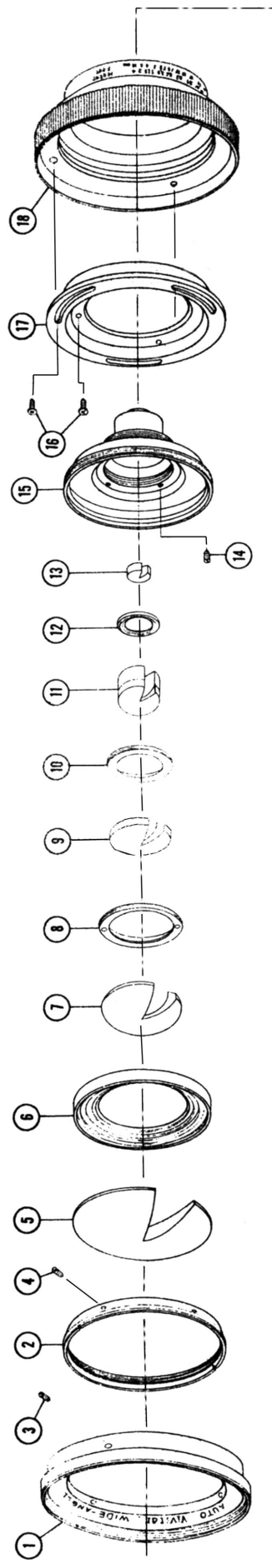


FIGURE 1  
-2-



VIVITAR AUTOMATIC FIXED MOUNT LENS  
 NIKON F/EL SERIES MOUNT  
 20MM F/3.8

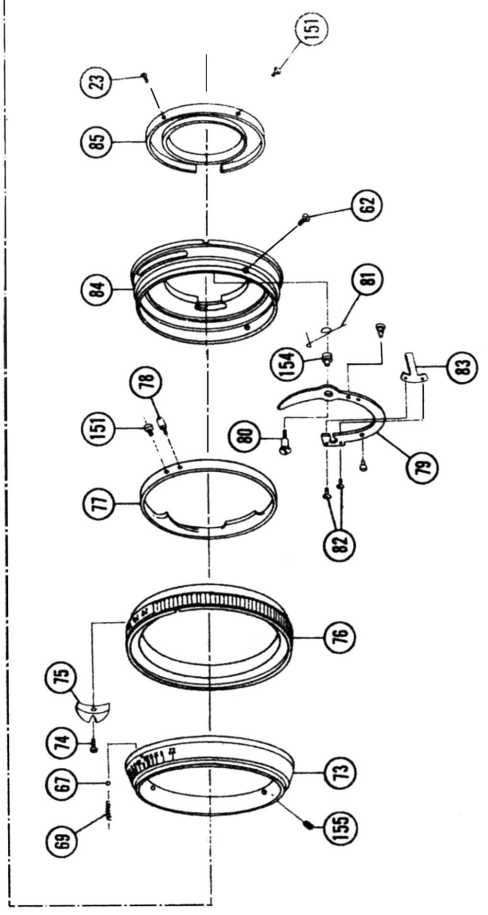
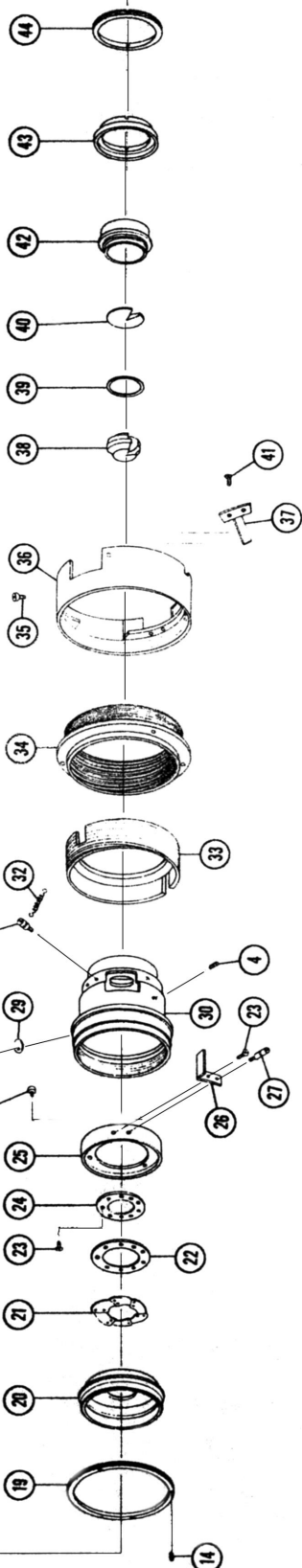


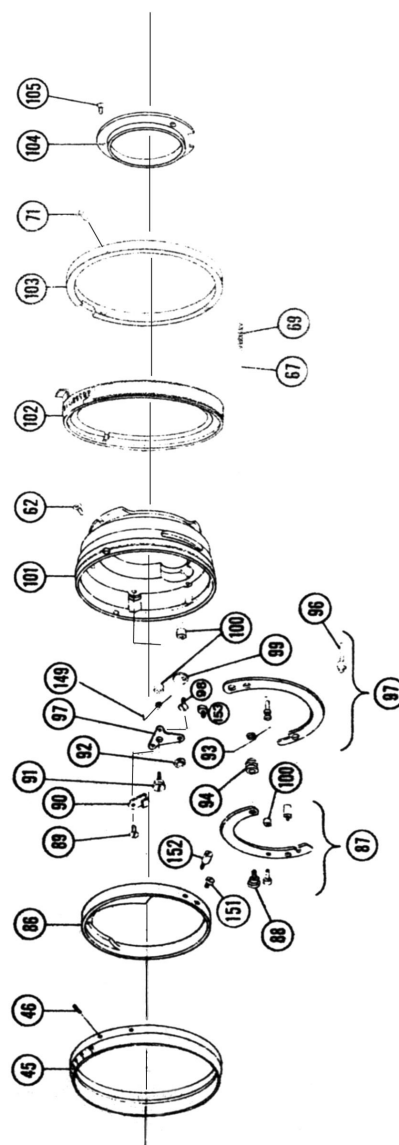
FIGURE 2  
 -3-



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VIVITAR AUTOMATIC FIXED MOUNT LENS  
MINOLTA SR/XK SERIES MOUNT  
20MM F/3.8



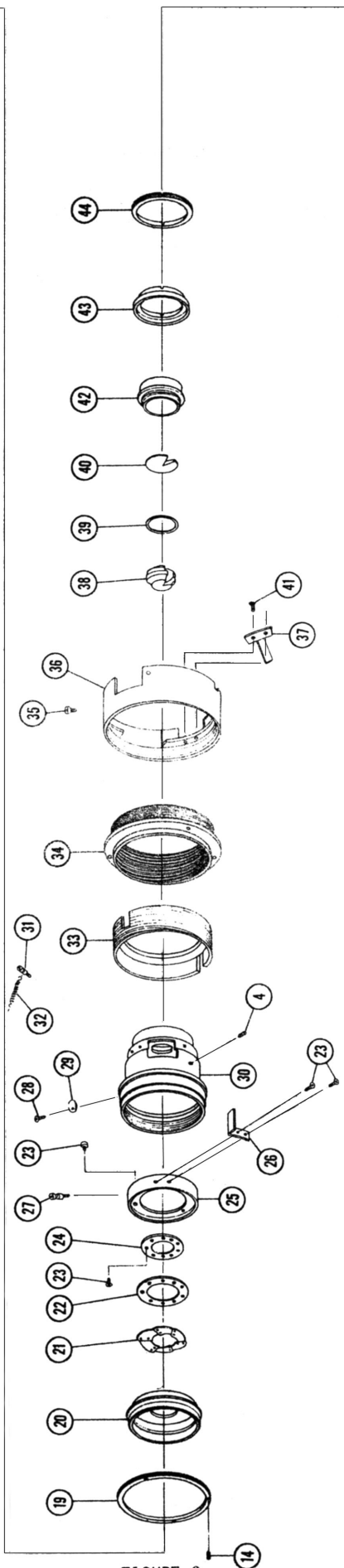
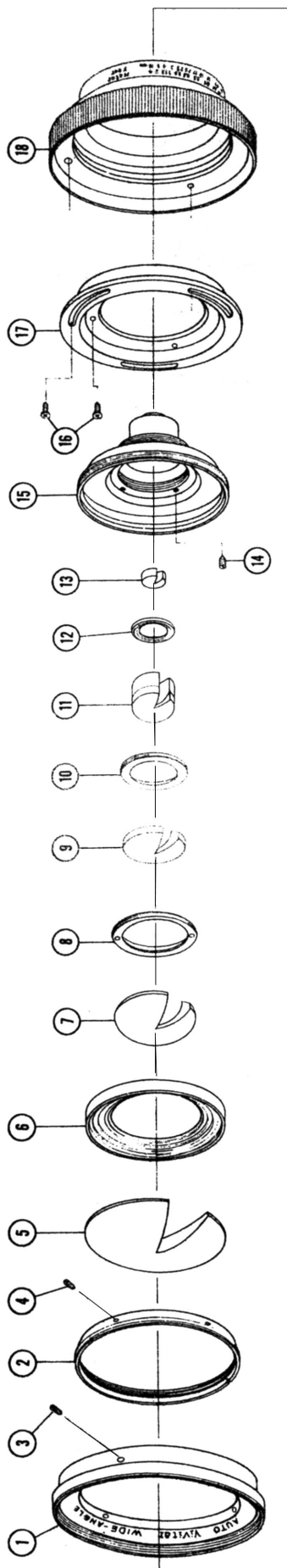
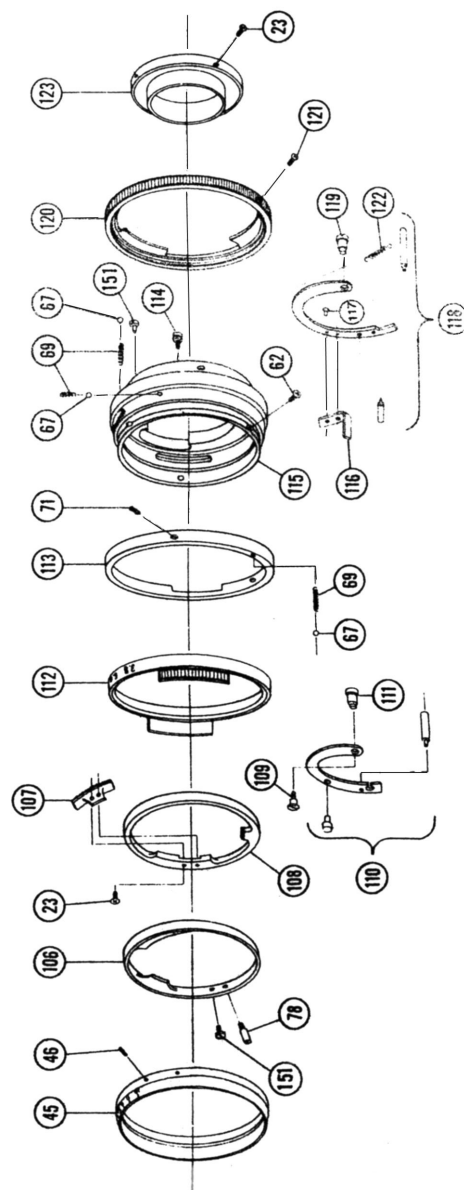


FIGURE 6

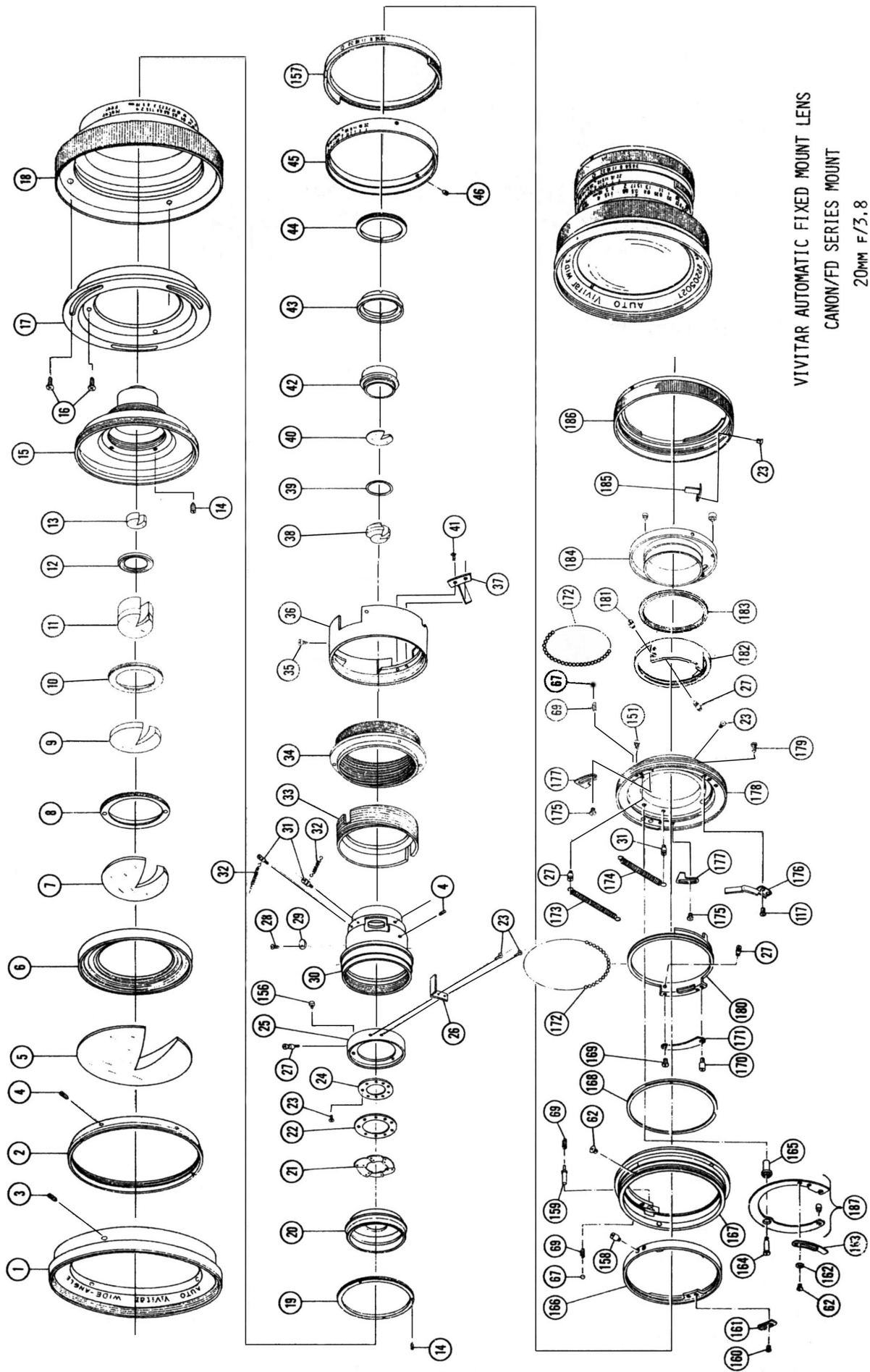


VIVITAR AUTOMATIC FIXED MOUNT LENS  
CANON/FL SERIES MOUNT  
20mm F/3.8









VIVITAR AUTOMATIC FIXED MOUNT LENS  
CANON/FD SERIES MOUNT  
20MM F/3.8

FIGURE 4  
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## PARTS LIST

## VIVITAR AUTOMATIC FIXED MOUNT LENS

20mm f/3.8

For Lenses Beginning  
With Serial No. 22-----

REFERENCE	DESCRIPTION	PART NUMBER	MOUNT & QUANTITY					
			U	N	M	C/FL	K	C/FD
1	RING, NAME	3513750	1	1	1	1	1	1
2	RING, 1st LENS RETAINER	3513790	1	1	1	1	1	1
3	SETSCREW M2.0 x 5.5	3513791	3	3	3	3	3	3
4	SETSCREW M1.4 x 1.5	3512976	6	6	6	6	7	6
5	LENS ELEMENT, FIRST	3513793	1	1	1	1	1	1
6	RING, SPACER	3513794	1	1	1	1	1	1
7	LENS ELEMENT, SECOND	3513795	1	1	1	1	1	1
8	RING, SPACER	3513797	1	1	1	1	1	1
9	LENS ELEMENT, THIRD	3513838	1	1	1	1	1	1
10	RING, SPACER	3513839	1	1	1	1	1	1
11	LENS ELEMENTS, FOURTH & FIFTH (CEMENTED DOUBLET)	3513840	1	1	1	1	1	1
12	RING, SPACER	3513841	1	1	1	1	1	
13	LENS ELEMENT, SIXTH	3513842	1	1	1	1	1	1
14	SETSCREW N1,4 x 2,0	3513843	6	6	6	6	6	6
15	HOUSING, FRONT LENS GROUP	3513844	1	1	1	1	1	1
16	SCREW, PAN HEAD M2.0 x 3.0	3513881	6	6	6	6	6	6
17	RING, SCALE CLAMPING	3513846	1	1	1	1	1	1
18	RING, FOCUS SCALE	3513847	1	1	1	1	1	1
19	RING, RETAINER	3513848	1	1	1	1	1	1
20	RING, BLADE RETAINER	3513849	1	1	1	1	1	1
21	BLADE, DIAPHRAGM	3513850	6	6				
	BLADE, DIAPHRAGM	3513953			6	6	6	6
22	RING, DIAPHRAGM BLADE	3513851	1	1	1	1	1	1
23	SCREW, FLAT HEAD M1.4 x 2.0	3512974	9	7	7	11	10	8
24	RING, DIAPHRAGM BLADE OPERATING	3513852	1	1	1	1	1	
25	MOUNT, BLADE OPERATING RING	3513853	1	1	1	1	1	
26	ARM, BLADE RING	3513854	1					
26	ARM, BLADE RING	3513855		1				
	ARM, BLADE RING	3513856			1	1		1
	ARM, BLADE RING	3513857					1	
27	SCREW, DIAPHRAGM SPRING HOOK	3513858	1	1	1		1	
	SCREW, DIAPHRAGM SPRING HOOK	3512782				1	1	1
28	SCREW, FLAT HEAD M1.4 x 2.5	3513859			2	1	1	1
29	CAM, ECCENTRIC	3513860	1	1	1	1	1	1
30	HOUSING, DIAPHRAGM	3513861	1	1	1	1	1	1
31	SCREW, DIAPHRAGM SPRING	3512835	1	1	1	1	1	3
32	SPRING, DIAPHRAGM	3513701	1	1	1	1	1	2
33	HELICOID, INNER	3513862	1	1	1	1	1	1
34	HELICOID, MIDDLE	3513863	1	1	1	1	1	1
35	SCREW, STOP	3513864	1	1	1	1	1	1

## PARTS LIST

## VIVITAR AUTOMATIC FIXED MOUNT LENS

20mm f/3.8

For Lenses Beginning  
With Serial No. 22-----

REFERENCE	DESCRIPTION	PART NUMBER	MOUNT & QUANTITY					
			U	N	M	C/FL	K	C/FD
36	HELICOID, OUTER	3513865	1	1	1	1	1	1
37	GUIDE, HELICOID	3513866	2	2	2	2	2	2
38	LENS ELEMENT, SEVENTH & EIGHTH (CEMENTED DOUBLET)	3513867	1	1	1	1	1	1
39	RING, SPACER	3513868	1	1	1	1	1	1
40	LENS ELEMENT, NINTH	3513869	1	1	1	1	1	1
41	SCREW, PAN HEAD M1.7 x 3.0	3512980	4	4	4	4	4	4
42	FRAME, REAR LENS GROUP	3513870	1	1	1	1	1	1
43	RING, ADJUSTMENT	3513871	1	1	1	1	1	1
44	RING, LOCKING	3513872	1	1	1	1	1	1
45	RING, DEPTH OF FIELD	3513873	1		1	1		1
46	SETSCREW M1.4 x 2.5	3512988	3		3	3	3	
47	CAM, DIAPHRAGM	3513874	1					
48	SCREW, SPECIAL HEAD	3512825	1	2	1	2		
49	SCREW, DIAPHRAGM CAM	3512848	1		1			
50	SCREW, SHAFT	3513721	1					
51	ARM, ACTUATOR	3513722	1					
52	ASSEMBLY, ACTUATOR CRANK	3513875	1					
53	SPACER, SHAFT	3513723	1					
54	SCREW, PAN HEAD M1.4 x 2.0	3513725						3
55	SCREW, FLAT HEAD M1.4 x 2.0	3512974	9	7	7	11	10	
56	LEVER, AUTO-MANUAL	3513877	1					
57	RING, AUTO-MANUAL	3513878	1					
58	SCREW, SHAFT	3513715	1					
59	ARM, DIAPHRAGM OPERATING	3513879	1					
60	PENTAX MOUNT	3513880	1					
61	PIN, DIAPHRAGM ACTUATOR	3513881	1					
62	SCREW, FLAT HEAD M1.7 x 2.5	3512985	3	3	7	3	3	
63	ARM, ACTUATOR	3513882	1					
64	SPRING	3513719	1					
65	SCREW, SHAFT	3513883	1					
66	RING, DIAPHRAGM	3513884	1					
67	BALL, STEEL 1.6	3512898	2	1	1	3	80	
68	SETSCREW M2.0 x 2.0	3512977	1					
69	SPRING, DETENT	3512857	2	1	1	3	1	
70	RETAINER, DIAPHRAGM RING	3513885	1					
71	SETSCREW M1.7 x 2.5	3513886	3		3	3		
72	COVER, REAR	3513887	1					
73	RING, DEPTH OF FIELD	3513888		1				
74	SCREW, COUPLER PLATE	3512818	1					
75	PLATE, COUPLER	3512817		1				

# PARTS LIST

## VIVITAR AUTOMATIC FIXED MOUNT LENS

20mm f/3.8

For Lenses Beginning  
With Serial No. 22-----

REFERENCE	DESCRIPTION	PART NUMBER	MOUNT & QUANTITY					
			U	N	M	C/FL	K	C/FD
76	RING, DIAPHRAGM	3513889		1				
77	CAM, DIAPHRAGM	3513890		1				
78	SCREW, DIAPHRAGM CAM PIN	3513891		1		1		
79	ARM, DIAPHRAGM OPERATING	3513892		1				
80	SCREW, SHAFT	3513893		1				
81	SPRING	3513845		1				
82	SCREW	3513894			2			
83	LEVER, DIAPHRAGM COUPLING	3513895		1				
84	NIKON MOUNT	3513896		1				
85	COVER, REAR	3513897		1				
86	CAM, DIAPHRAGM	3513898			1			
87	ARM ASSEMBLY, DIAPHRAGM OPERATING	3513899			1			
88	SCREW, SHAFT	3513900			1			
89	SCREW, FLAT HEAD M1.4 x 2.5	3513859	1	1		1		
90	LIFTER, MANUAL LEVER	3513902			1			
91	SCREW, SHAFT	3513903			1			
92	NUT, MANUAL LEVER	3513904			1			
93	SPRING, AUTO LEVER	3512832			1			
94	SPACER, LEVER	3513906			1			
95	ARM, DIAPHRAGM OPERATING	3513907			1			
96	KNOB, MANUAL LEVER	3513908			1			
97	LEVER, MANUAL DIAPHRAGM	3513909			1			
98	SCREW, FLAT FILISTER HEAD	3513910			1			
99	PLATE, COUPLING ARM	3513911			1			
100	COLLAR, SPACER	3513912			3			
101	MINOLTA MOUNT	3513913			1			
102	RING, DIAPHRAGM	3513914			1			
103	RETAINER, DIAPHRAGM RING	3513915			1			
104	COVER, REAR	3513916			1			
105	SCREW, PAN HEAD M1.4 x 2.0	3512986			3			
106	RING, DIAPHRAGM CAM	3513917					1	
107	LEVER, CHANGE	3513918					1	
108	RING, CHANGE	3513919					1	
109	SCREW, SHAFT	3513920					1	
110	ARM ASSEMBLY, DIAPHRAGM OPERATING	3513921					1	
111	SPACER, SHAFT	3513922					1	
112	RING, DIAPHRAGM	3513923					1	
113	RETAINER, DIAPHRAGM RING	3513924					1	
114	SCREW, SPRING HOOK	3513925					1	

PARTS LIST  
VIVITAR AUTOMATIC FIXED MOUNT LENS  
20mm f/3.8

For Lenses Beginning  
With Serial No. 22-----

REFERENCE	DESCRIPTION	PART NUMBER	MOUNT & QUANTITY					
			U	N	M	C/FL	K	C/FD
115	CANON MOUNT	3513926						1
116	ARM, DIAPHRAGM COUPLING	3513927						1
117	SCREW, PAN HEAD M1.4 x 2.5	3512990						2
118	LEVER ASSEMBLY, DIAPHRAGM COUPLING	3513928						1
119	SCREW, SHAFT	3513929						1
120	RING, LOCKING	3513930						1
121	SCREW, SIGNAL	3513931						1
122	SPRING	3513932						1
123	COVER, REAR	3513933						1
124	RING, DEPTH OF FIELD	3513934						1
125	SCREW, DIAPHRAGM	3513935						1
126	RING, AUTO STOP	3513936						1
127	PLATE, STOP	3513937						1
128	SCREW, SHAFT	3513938						1
129	WASHER	3512894						1
130	RING 1.5ø	3512893						1
131	ARM, LEVER	3513939						1
132	ARM ASSEMBLY, CAM SLOT	3513940						1
133	PLATE, DIAPHRAGM OPERATING	3513941						1
134	SCREW, SPRING HOOK	3513942						1
135	SCREW, STOP	3513943						1
136	BUTTON, LOCK	3512882						1
137	FRAME, KONICA MOUNT	3513944						1
138	PIN, GUIDE	3512872						1
139	SPRING	3512880						1
140	SCREW, BUTTON	3512879						1
141	RING, DIAPHRAGM ACTUATOR	3513945						1
142	PLATE, AUTO COUPLING	3513946						1
143	SCREW, PAN HEAD M1.7 x 3.0	3513947	4	4	4	4		8
144	RING, BALL RETAINER	3513948						1
145	RING, DIAPHRAGM	3513949						1
146	KONICA MOUNT	3513950						1
147	SCREW, MOUNT STOP	3512891						1
148	COVER, REAR	3513951						1
149	SPRING	3513952			1			
150	SPRING	3512885						1
151	SCREW	3512825	1	2	1	2		
152	POST, SCREW	3512848	1		1			
153	SCREW	3513910			1			
154	SHAFT, SCREW	3513893		1				

## PARTS LIST

## VIVITAR AUTOMATIC FIXED MOUNT LENS

20mm f/3.8

For Lenses Beginning  
With Serial No. 22-----

REFERENCE	DESCRIPTION	PART NUMBER	MOUNT & QUANTITY					
			U	N	M	C/FL	K	C/FD
155	SETSCREW M1.4 x 3.0	3514018	3					
156	SCREW, LOCATING	3513876						1
157	RING, DIAPHRAGM	3513954						1
158	SCREW, POST	3512875						1
159	PIN, AE DISCRIMINATION	3513905						1
160	SCREW	3512984						2
161	PLATE, STOP	3513985						1
162	WASHER	3512870						2
163	PLATE, TIP	3513992						1
164	SHAFT, SCREW	3513755						1
165	BUSHING, SHAFT	3N.A.S.						1
166	RING, CAM	3514027						1
167	FRAME, MOUNT	3514046						1
168	RING, BALL RETAINER	3513749						1
169	SCREW, SHOULDER	3512840						1
170	SCREW, POST	3513987						1
171	PLATE, DIAPHRAGM CAM	3514034						1
172	BALL, STEEL 1.2Ø	3512899						240
173	SPRING	3513758						1
174	SPRING	3513837						1
175	SCREW	3513757						4
176	SPRING, DETENT	3500003						1
177	PLATE, STOP	3513759						2
178	MOUNT, CANON FD	3513991						1
179	SCREW	3512971						3
180	RING, DIAPHRAGM SETTING	3514028						1
181	POST, SCREW	3512864						1
182	RING, MANUAL SETTING	3513972						1
183	RING, BALL RETAINER	3513762						1
184	RING, REAR COVER	3514031						1
185	LEVER, SIGNAL	3513764						1
186	RING, LOCKING	3512758						1
187	LEVER ASSEMBLY, DIAPHRAGM OPERATING	3513990						1



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