INC
JAA75451－R.3381.A

作成承認印	配布許可印
ニコンカメラサービス部 GM	

AF Zoom-Nikkor 35-80mm f/4-5.6 D

(NEW)

Ai-s

REPAIR MANUAL

修　理　指　針

Nikon | NIKON CORPORATION
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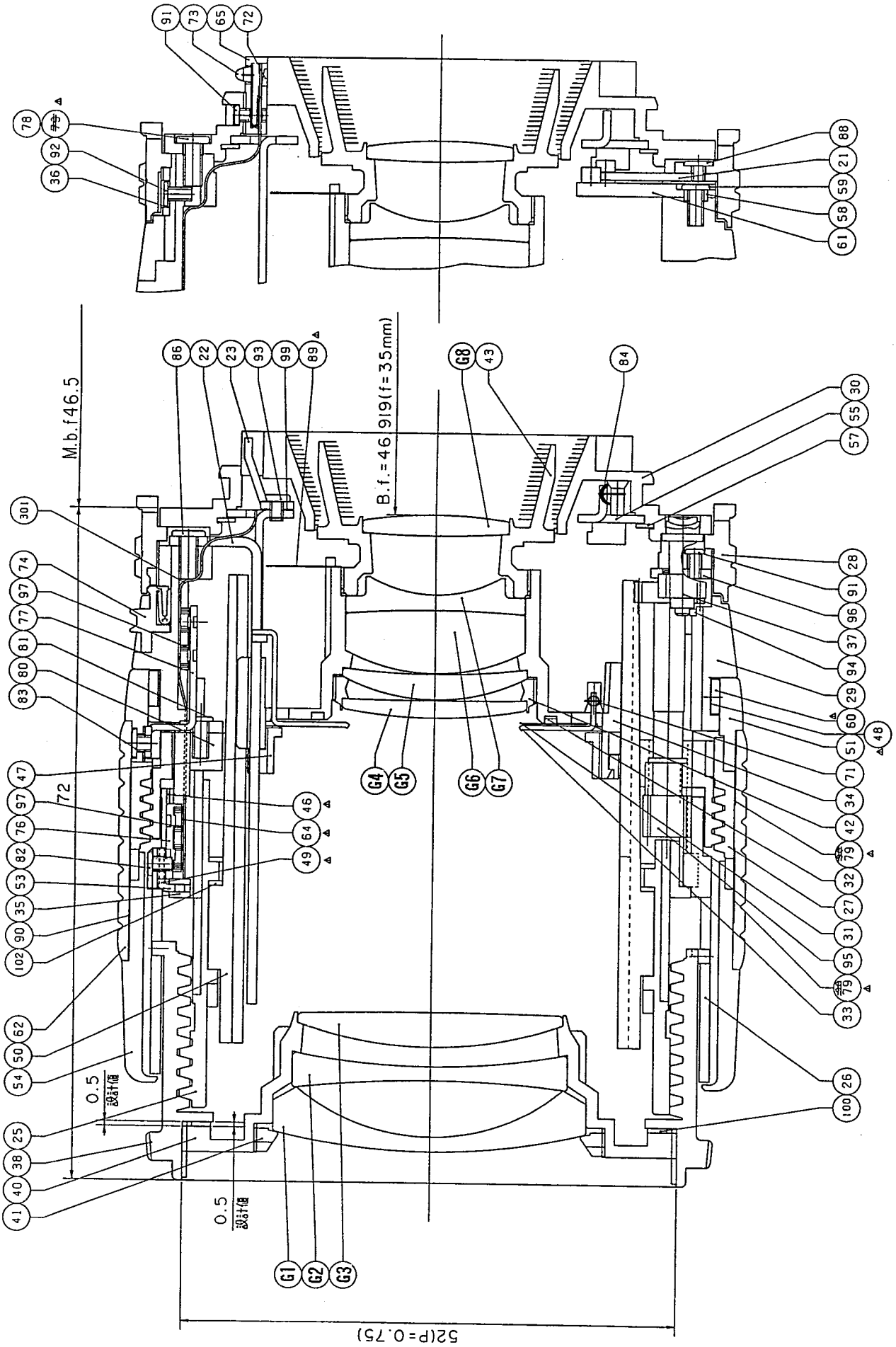
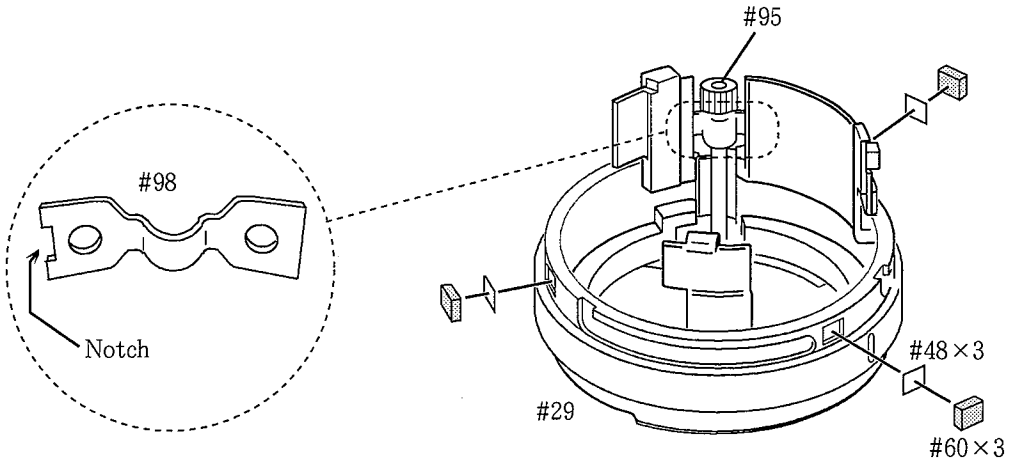
組立図 Constrcution of the Lens



DISASSEMBLING／ASSEMBLING／ADJUSTMENT

Note: As for disassembling, assembling and adjustment, please refer to the exploded diaphragm and the repair manual of JAA75251 (AF28-80/3.5-5.6D).
The following explanation shows only the description which is different from that of JAA75251.

AF GEAR #95, ZOOM RUBBER #60



ADJUSTMENT OF APERTURE OPENING

① Remove the bayonet mount group.

② Loosen the screws #88×2, and move #21, or bend the Aperture Lever and adjustment of aperture opening.

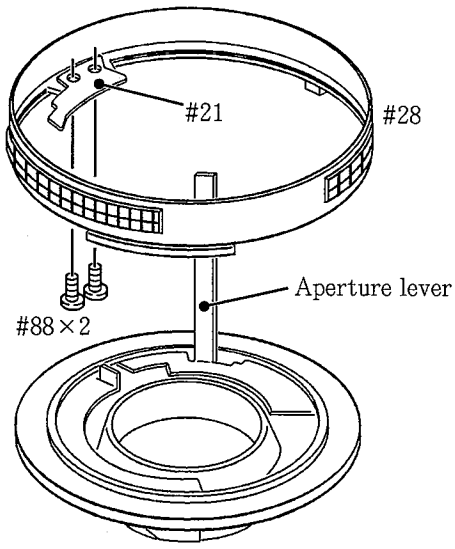
- Aperture diameter should be within the allowable range when the diaphragm ring is rotated forward and backward.
- Aperture lever should be within the allowable range when the aperture lever is snapped by your finger.

Note: When the aperture lever is wrongly bent, the aperture diameters do not fit on both sides of 35mm and 80mm.

③ After adjustment, secure screws #88×2 using Screw Lock.

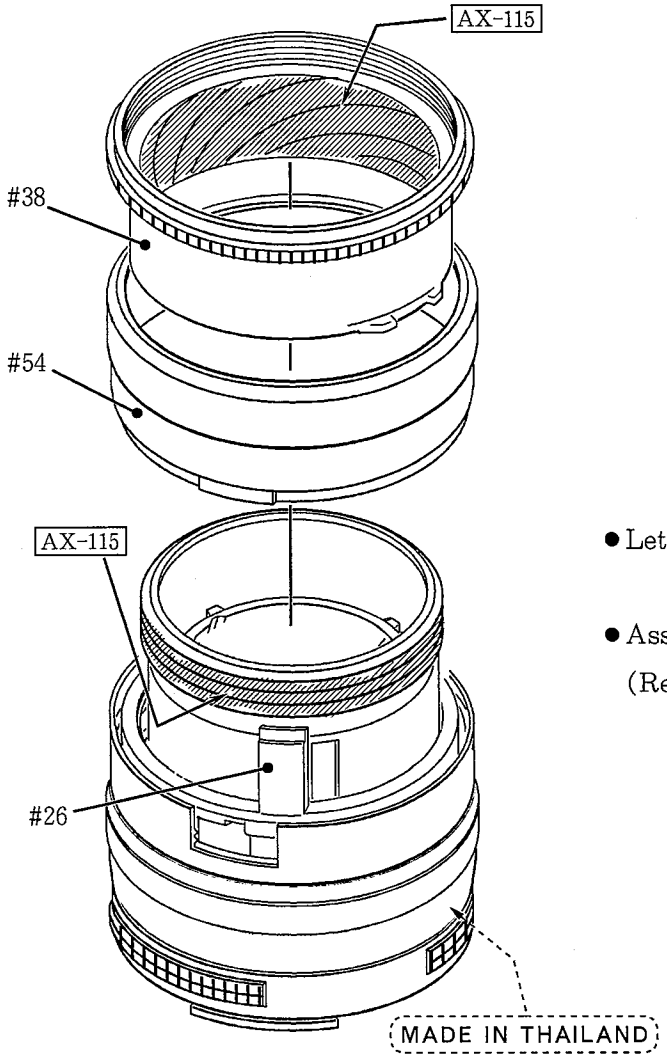
④ Mount the bayonet mount group.

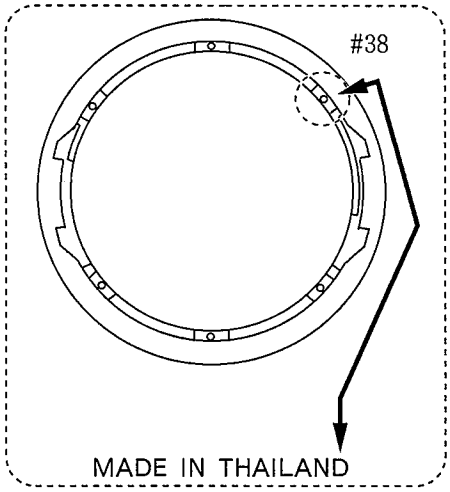
Aperture setting		Inscribed circle diameter (mm)	Toleance (mm)
35mm	80mm		
4	5.6	17.90	19.16 ～ 16.98
5.6	8	12.37	14.24 ～ 10.75
8	11	8.44	10.01 ～ 7.11
11	16	6.13	7.49 ～ 5.01
16	22	4.33	5.29 ～ 3.54
22	32	3.06	3.74 ～ 2.50



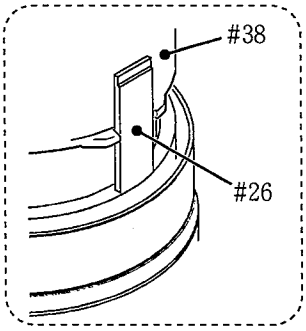
Bayonet mount group

FILTER RING #38, ZOOM RING #54

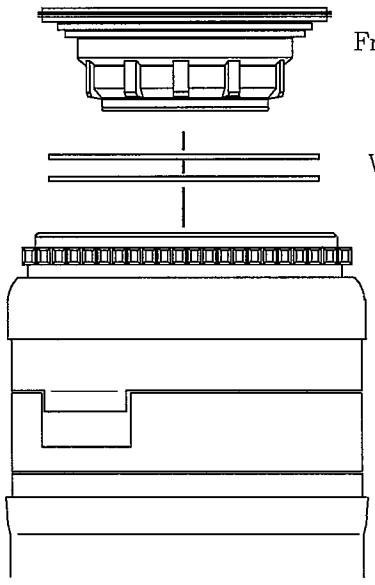




- Let the both above positions meet together.
- Assemble #38 until it attaches to #26.
  (Refer to the figure below)



FRONT LENS GROUP



ADJUSTMENT OF SHIFT FOCUS (TELE AND WIDE)

1. Set focus ring at infinity (∞), and set aperture to full aperture.
2. Read the value on both Wide and Tele sides respectively.
3. Calculate the following equation.

$$(A-B) \div 1.84 = C$$

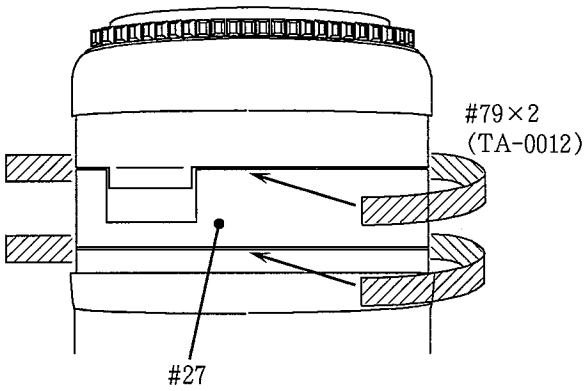
A＝Value of Tele side (mm)
B＝Value of Wide side (mm)
C＝Amount (mm) of adjustment of 1st lens group washer #100

4. Adjust the thickness of washer #100 by the value C calculated from the above equation.
   If the value C is positive, thicken the washer by the value, and if negative, thin the washer.

Note: Insert thin washer between thick washers when mounting washer #100.

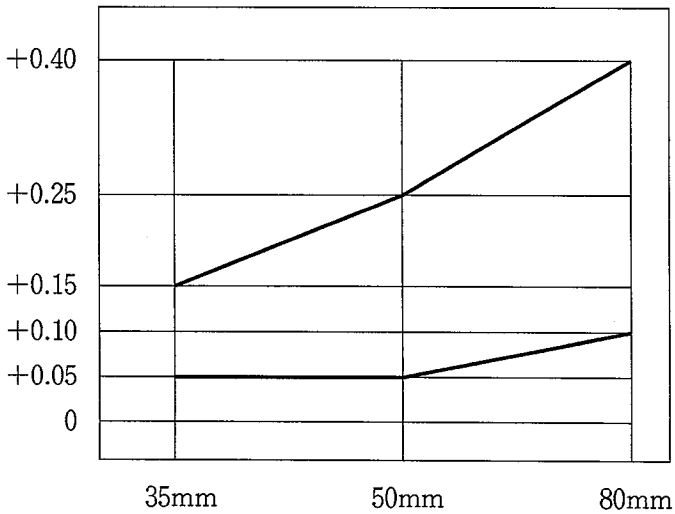
(Refer to page L2)

ADJUSTMENT OF BACK FOCUS



1. Set focus ring at infinity (∞), and set aperture to full aperture.
2. Set the zoom ring to Wide (35mm), read the value.
3. Adjustment moving helicoid ring back and forth while rotating the #27.
4. Read the values of Wide and Tele sides. Check to see if they are within the standard value range.
5. Secure #27 with adhesive tape #79×2 (TA-0002).

Focal length (f)	Standard (mm)
35mm	+0.05 ～ +0.15
50mm	+0.05 ～ +0.25
80mm	+0.10 ～ +0.40



INSPECTION OF ENCODER SIGNAL

※ Use an F90 (N90) camera body and checking & adjustment programs for F90／N90 to display encoder signal on the computer monitor when making an inspection.

Inspection method

- Start the checking & adjustment programs for F90／N90 and select " E. Checking of AF lens communication ". Make inspection according to instructions as shown on the display.

- Encoder signals should be as described in the table below when the zoom and distance scale are set to specified positions.

Zoom ring / Distance scale position	f＝35mm			f＝50mm			f＝80mm		
	Encoder signal								
	1	2	3	1	2	3	1	2	3
Most infinity position	17h	16h	03h	17h	17h	03h	17h	9Dh	03h
Most close distance position							17h	9Dh	47h

◎ If encoder signal values are different from those shown in the table, following causes moust be considered.
Distance brush is mounted in the wrong position, distance brush or FPC is defective, encoder patterns on the FPC are contaminated, or the FPC is fixed in the wrong position.