Fig. 1



set screw in nosepiece, revealed when lens focussed at near point Loosening this screw allows entire nosepiece to be unscrewed (CCW)

This entire barrel & contents moves in – out when focus ring is turned

Fig. 2



2 of 3 screws holding brass retaining ring?

holes for spanner wrench.
Appears to hold first element ??

Nikkor MF 50mm/1.8

The 3 screws holding brass retaining ring (fig. 1) have been removed. This allows one to lift off the focus ring.

Fig. 3



Focus ring. Note the ridge at arrow tip. The brass retaining ring rests on this shelf and compresses the focus ring against the focussing helicoid.

This is the focussing helicoid. See fig. 4. The arrow tip points to the hole for the screws that attach the brass retaining ring.

NOTE: You do not need to completely remove the brass ring and the focussing ring in order to adjust focussing errors. See the notes on last page.

Nikkor MF 50mm/1.8

Focus ring removed.

Fig. 4



Note stop in chrome ring. This limits focus excursion.

Focus helicoid. Turning it clockwise extends the lens group for close focus

Lens assembly in its helicoid.

NOTES: If you only need to correct focussing errors (lens wont focus to infinity or focusses past infinity) the disassembly pictured here is not necessary and, in fact, will only complicate your life. Following is the procedure I suggest to repair a lens which will not focus to infinity.

- 1. Remove nose-piece as shown in fig. 1.
- 2. Set the focus ring at infinity.
- 3. Loosen (but do not remove) the screws holding the brass retaining ring. Loosen them just enough that the focus ring can be rotated freely without moving the lens assembly.
- 4. Turn the focus ring (clockwise) until it hits the stop at the close focus end of the range.
- 5. Gently snug down one or two of the screws in the retaining ring; just enough that the lens assembly moves when the focus ring is turned.
- 6. Mount the lens on camera. Go outside and focus on some object 500+ meters away. Go slowly and do not push the focus much past infinity while making the adjustment.
- 7. Remove the lens from camera. Take care that you do not turn the focus ring from the setting found at step 6.
- 8. Loosen the screws in retaining ring until, again, the focus ring turns freely without moving the lens assembly.
- 9. Turn the focus ring (CCW) until it hits the stop at infinity. Be sure the lens assembly does not turn. If it does, back to step 4 and repeat.
- 10. Now tightly snug down the screws in the retaining ring. You are just about done. Remount the lens on a camera and take it outside for a final test.
- 11. Final step; replace the nose-piece. But there's one last gotcha. Make sure the lens focus is set at infinity when screwing the nose-piece back on. When the nose-piece bottoms out, back it off a full turn and then tighten the set screw. This will avoid binding at infinity focus.

If you have the opposite problem: Lens focusses past infinity & wont focus at close range. Reverse the instructions at steps 2 & 4.

Good luck.