

Lab Report

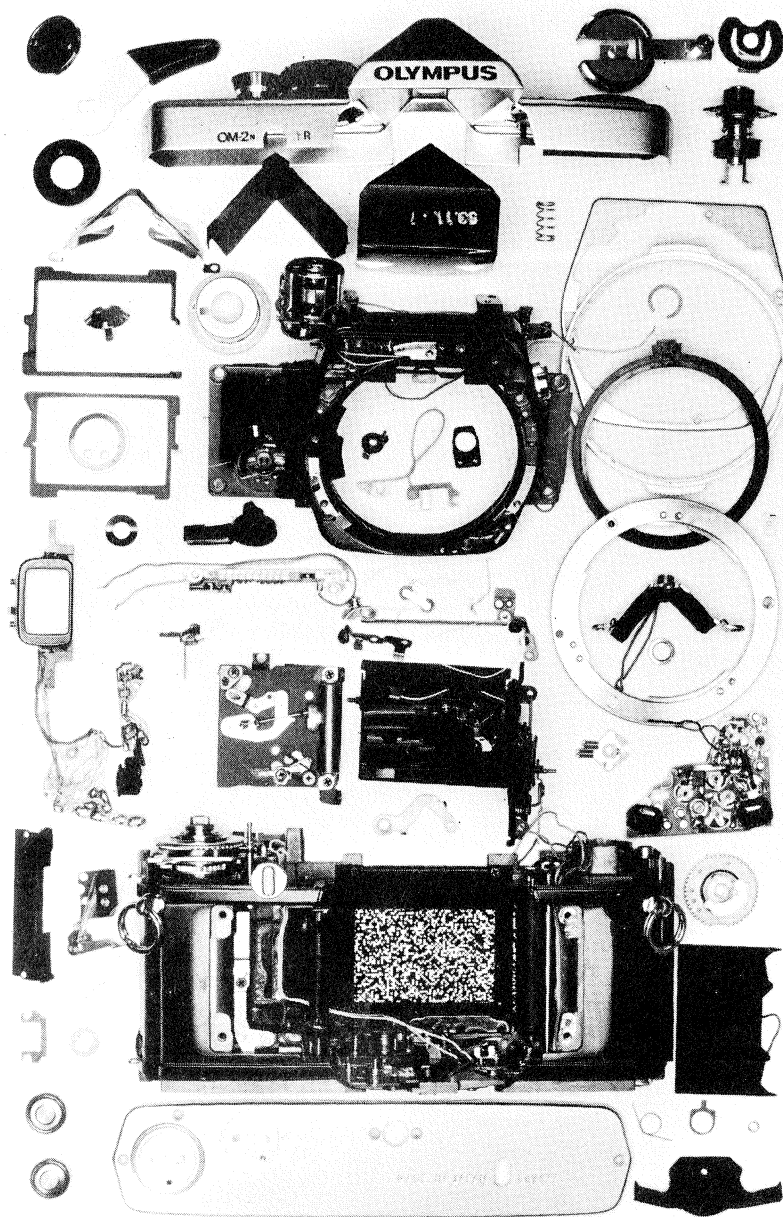
(continued)

Stripdown Report

	Interior	Exterior	
Material choice:	Good	Good	Seal against dirt: Poor/Fair
Assembly, Finish:	Good	Good	Repair access: Good/Fair

Do frequently made adjustments require major stripdown? No

Modular construction? Partly Replace key parts easily? Most



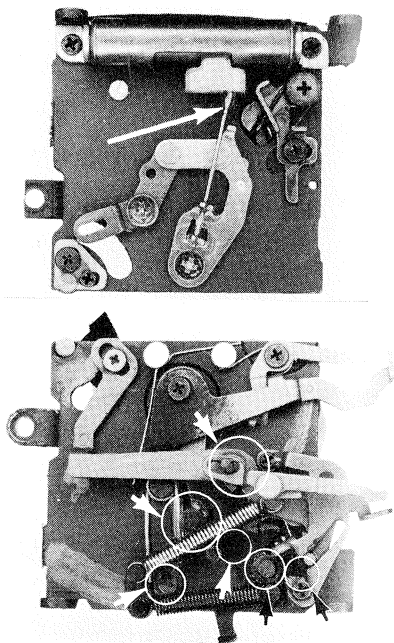
Surprisingly few electronic components are used in the OM-2N, many of whose functions are electronically governed. Camera employs uncommon construction, minimum number of parts—most of which are skeletonized for minimal weight.

Since it uses four photocells in its unique metering system, and an electronically governed shutter that responds to manual and automatic-exposure system commands, you would think that the OM-2N would be crammed full of electronic devices. Not so; it has a surprisingly small number of such components, being at heart a masterpiece of mechanical compactness.

The electronic guidance of the shutter speeds, the exposure determinations made from image-forming light reflected from the film, and the communication between the camera and its flash units have been accomplished with very few electronic components, compared to similar cameras.

It is constructed like no other camera (except the OM-1), and seems to have been inspired by the credo of getting much from little. Wherever possible parts have been "skeletonized" (removal of material except where weakness would re-

/ continued on page 192



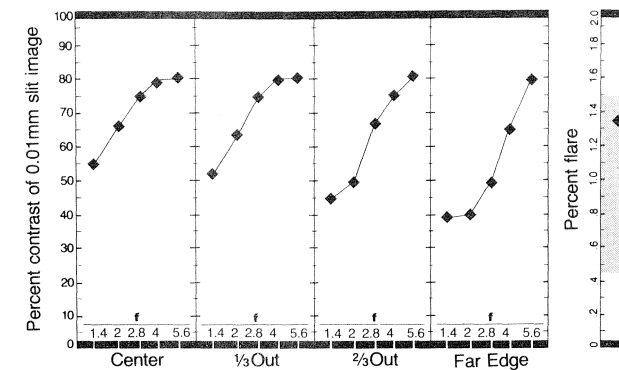
Noise and vibration reduction measures in OM-2N's mirror box include circled regions containing resilient cushions at impact points on one side of box. Other side has pneumatic cylinder coupled to mirror operating lever through plastic-tipped spring-wire (arrow). Cylinder damps mirror action in both directions.

Lens Performance

G. Zuiko Auto-S 50-mm f/1.4 Ser. No. 677156

Dimensions: O.D. 60.5 mm (2.38 in.), L. 40 mm (1.57 in.) Weight: 230 g (8.05 oz.) Filter size: 49 mm
Close working limit: 353 mm (13.89 in.) Close limit field size: 164x250 mm (6.45x9.84 in.)
Focal length: Marked: 50 mm Measured: 52.00 mm f-number: Marked: f/1.4 Measured: f/1.53 T-number: T-1.65

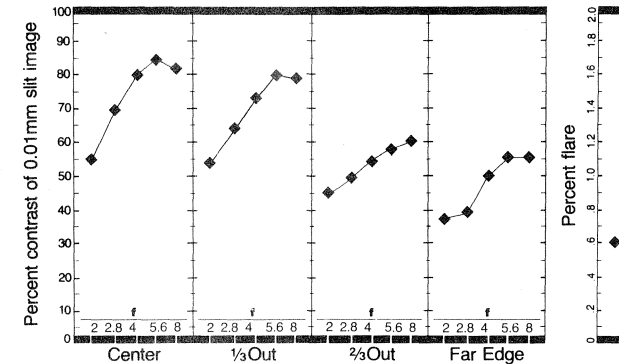
Aberration	1/3 out	2/3 out	Far edge	Notes
Coma	2.8	4	5.6	Critical
Astigmatism	2	1.4	1.4	f-stops
Lat. chrom.	None	None	None	
Long. chrom.	blue—red = 0.07 mm			Focus shift
Spherical	f/1.4—f/4 = + 0.03 mm			
Distortion	Moderate barrel			
Vignetting	None beyond f/3.5			
Centering	Slightly off			



Zuiko MC Auto-W 28-mm f/2.0 Ser. No. 115614

Dimensions: O.D. 60.0 mm (2.36 in.), L. 43.5 mm (1.71 in.) Weight: 249 g (8.71 oz.) Filter size: 49 mm
Close working limit: 199 mm (7.83 in.) Close limit field size: 177x269 mm (6.96x10.59 in.)
Focal length: Marked: 28 mm Measured: 28.54 mm f-number: Marked: f/2 Measured: f/2.04 T-number: T-2.15

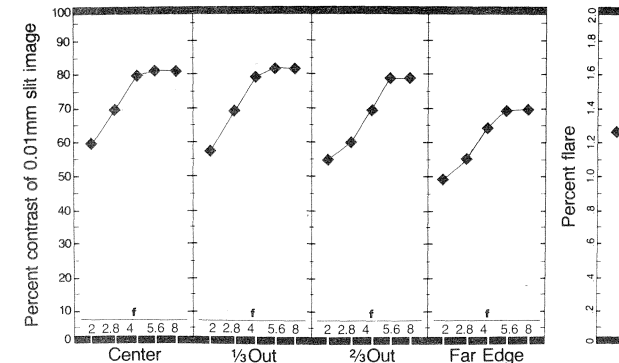
Aberration	1/3 out	2/3 out	Far edge	Notes
Coma	3.5	3.5	5.6	Critical
Astigmatism	2	2	5.6	f-stops
Lat. chrom.	Very slight	Slight	Moderate	
Long. chrom.	blue—red = 0.07 mm			Focus shift
Spherical	f/2—f/5.6 = + 0.04 mm			
Distortion	Moderate barrel			
Vignetting	None beyond f/4.5			
Centering	Near-perfect			



Zuiko MC Auto-T 85-mm f/2.0 Ser. No. 117235

Dimensions: O.D. 60.0 mm (2.36 in.), L. 48.0 mm (1.89 in.) Weight: 264 g (9.24 oz.) Filter size: 49 mm
Close working limit: 730 mm (28.74 in.) Close limit field size: 186x279 mm (7.32x10.98 in.)
Focal length: Marked: 85 mm Measured: 85.61 mm f-number: Marked: f/2.0 Measured: f/2.09 T-number: T-2.20

Aberration	1/3 out	2/3 out	Far edge	Notes
Coma	2.8	2.8	4	Critical
Astigmatism	2	2	4	f-stops
Lat. chrom.	None	Slight	Moderate	
Long. chrom.	blue—red = 0.10 mm			Focus shift
Spherical	f/2—f/5.6 = + 0.02 mm			
Distortion	None			
Vignetting	None beyond f/3.5			
Centering	Perfect			



Mechanical: Each lens uses an all-aluminum focusing helicoid with twin parallel focusing guide arms. The auto-diaphragm systems are strong, simple devices with shock-absorbing resilient plastic bumpers.

Both the 28-mm f/2 and the 85-mm f/2 feature floating-element construction, where the spacing between certain

groups of elements changes during focusing. The change is pronounced in the 28-mm f/2, whose rear group, except for the last element, shifts. A more subtle shift occurs with the 85-mm f/2, whose entire rear group shifts. In each case the shift is continuous, and in step with the focusing action, but at a different rate.