OMEGA



TECHNICAL GUIDE

No. 20 1960

CALIBRE 245 (R 13,5 T 1 PC AM 17 j.)





The chief purpose of this Guide is to stress the developments brought to calibre 244. This new calibre embodies all the technical improvements realised in course of the last few years and therefore ranks among the most modern watch movements.

CHARACTERISTICS

Measurements

Total diameter 18.00 mm
Outermost casing diameter 17.50 mm
Width 13.50 mm
Height 3.25 mm
Diameter of worm on winding stem 0.90 mm

Number of vibrations

19800 per hour

Ebauche

The thickness of plate has been increased for the winding stem hole to be entirely located within the plate; however, the thickness of bridges has been reduced in the same proportion.

Jewelling

Centre, third and fourth wheel jewels, upper and lower, and also the escape wheel jewel upper have been superseded by jewels of standard sizes.

Escapement

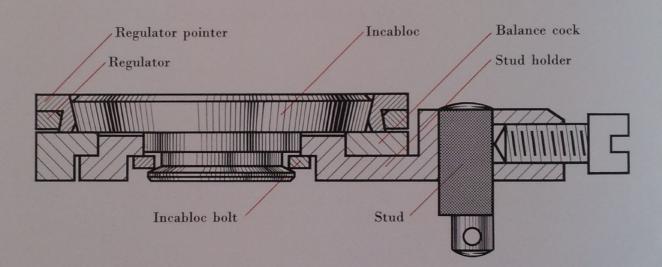
The banking pins have been done away with and replaced by limitation cheeks in the plate so as to obtain the utmost regularity in the functioning of the pallet from one movement to another.

Balance hairspring

The whole assembly is non-magnetic and includes a ring balance (screwless) in beryllium-bronze.

Shock-protecting device

Incabloc in which the diameter of the jewel-holes has been reduced in order to improve the extent of vibration of balance. The Incabloc lower is no longer fitted by a screw on the plate but merely pressure-set into position.



Movable stud-holder

Regulating device and plates

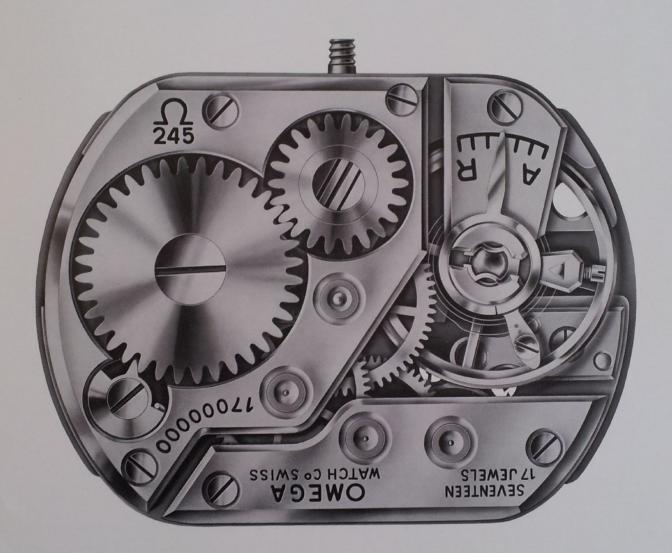
The movable stud-holder, the advantages of which are described in Technical Guide No. 13, has required a new regulator designed in two parts; it is fitted with two pins, between which the hairspring goes through, and with a regulator key, the duty of which is to prevent the hairspring from leaving the pins.

Winding and handsetting

The thickness of the setting lever spring blade has been reduced so as to permit smoother handsetting. Such setting lever springs thus altered are also used in calibres 244 and 252.

Barrel

Includes a stainless mainspring thanks to the six turns of which the movement will run 45 hours instead of 38 previously.



Gear-train

The number of balance vibrations reduced from 21600 to 19800 has called for a complete change in the wheel train. As a matter of fact, the third, fourth and escape wheels are no longer riveted but pressureset on to their respective pinions.

SPARE PARTS

The repair parts lately turned out for this new calibre are:

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245 1000		245 1001		45 003	245 1030	245 1106	245 1200	245 1208
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245 1224	245 1225	245 1226	245 1227	245 1228	245 1240	245 1243	245 1305	245 1317
8	+		0	0-	20-		•	*
245 1363	245 1321	245 1327	245 1331	245 1332	245 1333	245 1341	245 1346	245 1347
3		0	9		9	6		9
2052		4042	4043		4261	42	62	4263

245.1000	Plate	245.1363	Stud holder		
245.1001	Barrel bridge	245.1321	Balance staff		
245.1003	Train wheel bridge	245.1327	Balance with hairspring		
245.1030	Cock (balance bridge)	245.1331	245.1331 Regulator (regulator circle)		
245.1106	Winding stem	245.1332	245.1332 Regulator pointer (regulator body) 245.1333 Two piece regulator		
245.1200	Barrel with arbor	245.1333			
245.1208	Mainspring	245.1341	In-settings, upper and lower		
245.1224	Centre wheel with cannon pinion, height 4.57	245.1346	Incabloc, lower		
245.1225	Centre wheel with cannon	245.1347	Incabloc, upper		
	pinion H1, height 4.82	2052	Barrel bridge screw		
245.1226	Centre wheel with cannon	2052	Train bridge screw		
215 2225	pinion H2, height 5.05	2052	Cock screw (balance bridge screw)		
245.1227	Centre wheel with cannon pinion H3, height 5.32	4042	Centre wheel jewel, upper		
245.1228	Centre wheel with cannon	4043	Centre wheel jewel, lower		
	pinion H4, height 5.57	4261	Third wheel jewel, upper		
245.1240	Third wheel	4262	Third wheel jewel, lower		
245.1243	Fourth wheel	4261	Fourth wheel jewel, upper		
245.1305	Escape wheel, pivoted	4262	Fourth wheel jewel, lower		
245.1317	Hairspring stud	4263	Escape wheel jewel, upper		