

A COMPANY OF THE **SWATCH GROUP** 

#### **CALIBERS**

#### 1010-1011-1012-1020-1021-1022

1010 27.90 T1 RA SC PC CAL CORR 17 p.
1011 27.90 T1 RA SC PC CAL CORR STS BULL. 23 p.
1012 27.90 T1 RA SC PC CAL CORR STS 23 p.
1020 27.90 T1 RA SC PC CALD CORR CORJ STS 17 p.
1021 27.90 T1 RA SC PC CALD CORR CORJ STS BULL 23 p.
1022 27.90 T1 RA SC PC CALD CORR CORJ STS 23 p.

ø 27.90 mm	1 2 3
Frequency	28'800 A/h









 casing diameter:
 27,90 mm

 height 1010 - 1011 - 1012:
 4,25 mm

 height 1020 - 1021 - 1022:
 4,80 mm

 frequency:
 28 800 A/h

angle of lift of balance: running time: thread diameter of winding stem:

1022

48 h mini 0,90 mm

52°

Calibers 1010 to 1022 have been developed on mathematical bases. Indeed, a method of calculation has been perfected in our laboratories whereby maximum data is obtained with regard to the chief features of the various movement parts. Thus, having the most information possible, the constructor is able to carry out his research under better-controlled conditions than previously. Trial series have confirmed the advantages of this method for, with the said caliber, we are securing timekeeping results which have as yet never been achieved by movements of the same category.

Moreover, let us mention that, if this new caliber presents obvious similarities to caliber 1000, it has nevertheless been entirely reconceived and can in no way be compared with it.

#### English

Op.		Part		Lubrication			
	Order of assembling operations		Fixing device			Remarks	ĺ
No.		No.		point	code		

### 1.0. WHEEL TRAIN

center second pinion	7217				
friction spring for center second pinion	1255	1 screw 3442	funct.	1.00	
fourth wheel	1243				
third wheel	1240				
center wheel	1216				
escape wheel	1305				
stop lever	1123				under wheel tr. bridge 1003
wheel train bridge	1003	2 screws 2584			
	friction spring for center second pinion fourth wheel third wheel center wheel escape wheel stop lever	friction spring for center second pinion  fourth wheel  third wheel  tenter wheel  escape wheel  stop lever  1255  1243  1240  1240  1216  1216  1305	friction spring for center second pinion  fourth wheel  third wheel  tenter wheel  escape wheel  stop lever  1255  1 screw 3442  1243  1240  1240  1216  1216  1305  1305	friction spring for center second pinion  fourth wheel  third wheel  tenter wheel  escape wheel  stop lever  1255  1 screw 3442  funct.  1243  1240  1240  1216  1305  1305	friction spring for center second pinion  fourth wheel  third wheel  tenter wheel  escape wheel  stop lever  1255  1 screw 3442  funct.  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1

#### 2.0. **MOTOR**

2.1.	barrel with arbor	1200		pivots	1.00	see 2.1.0.
2.2.	wig-wag pinion	1151			1,2,10,118	see 2.2.0.
2.3.	wig-wag pinion spring	1153	1 screw 2050			recess tangent to barrel in upper side plate
2.4.	barrel bridge	1001	2 screws 2584			
2.5.	setting wheel ring for crown wheel	1156				
2.6.	setting wheel for crown	1151	1 screw 2485	pivot	2.00	
2.7.	crown wheel	1101	1 screw 2485	pivot	2.00	fit beforehand on crown wh. core 1102
2.8.	click spring	1105				
2.9.	click	1104				
2.10.	ratchet wheel	1100	1 screw 2557			

# 3.0. WINDING MECHANISM

3.1.	winding pinion	1108		1.00	
3.2.	clutch wheel	1107		1.00	
3.3.	winding stem	1106		1.00	
3.4.	setting lever	1109	funct.	1.00	
3.5.	yoke	1111	pivot+funct.	1.00	
3.6.	date corrector yoke	1568	star+funct.	1.00	different for cal. 1010 and 1020
3.7.	yoke spring	1112	funct.	1.00	

Эр.		Part	T	Lubrication		Demonstra
No.	Order of assembling operations	No.	Fixing device	point	code	Remarks
						•
3.8.	yoke spr. for date corr.	1576		funct.	1.00	
3.9.	setting lever spring	1110	1 screw 2585	funct.	1.00	
3.10.	pressure spring for setting lever	1132	2 screws 2585	funct.	1.00	
4.0.	ESCAPEMENT					
4.1.	pallet fork	1316				
4.2.	pallet cock	1005	2 screws 2441			
5.0.	OILING	-	1	Lawer	1.00	
5.1.	center wheel			lower	1.00	
5.2.	third wheel			lower	1.00	
5.3.	fourth wheel	-		lower	1.00	
5.4.	escape wheel			lower	1.00	
5.5. 5.6.	center wheel third wheel			upper	1.00	
5.7.	fourth wheel			upper upper	1.00	
5.8.	escape wheel			upper	1.00	
5.9.	pallet fork			pallets	2.00	
5.10.	incabloc			lower	1.02	
6.0.	ADJUSTMENT					
6.1.	fitting of regulator assembly					see 6.1.0.
6.2.	oil incabloc			upper	1.02	
6.3.	fit stud to balance-cock					
6.4.	fit balance cock on plate					
	<del>                                     </del>	+	1			

8.0. AUTOMATIC UNIT

see 8.0.0.

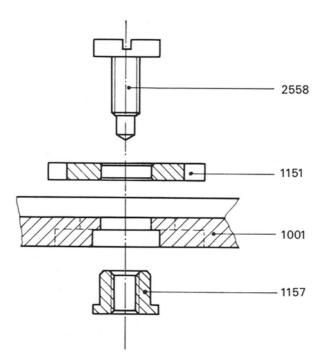
#### 2.1.0. **Barrel**

The spring in neotal is self-lubricated.

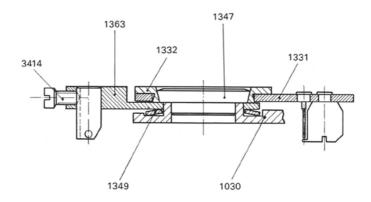
Oil (1.00) the bearings of the arbor (drum and cover pivots).

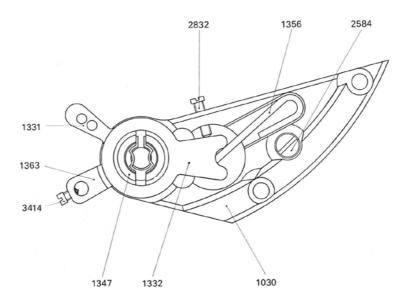
### 2.2.0. **Wig-wag pinion** (1151)

This pinion, located on the barrel bridge (1001), can move about in the oblong hole which serves to guide it. It is fixed by means of a screw (2558) and a lock-nut in the shape of a core (1157). The spring of the wig-wag pinion (1153), screwed on the plate (1000), acts on the pivot of the screw (2558) which, for this purpose, is longer than the core of the wig-wag pinion (1157).



### 6.1.0. Fitting of the regulator assembly





1030 balance cock

2584 screw for balance cock

1363 stud-holder

3414 screw for stud

1331 regulator (circle)

1332 regulator pointer

1349 friction gasket for stud-holder

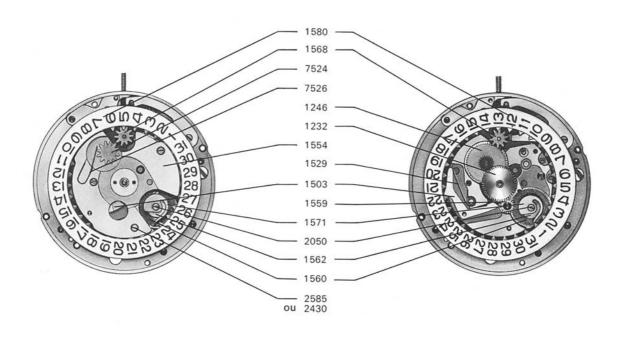
1347 incabloc upper

1356 spring for regulator-adjuster

2832 screw for regulator-adjuster

# $7.\ 0.\ 0.\ Wheel\ train\ and\ time\ display\ mechanism$

Op.	Order of assembling		Fixing	Lubrication	inamentina etimotoja kirja, vivilaina, italiaasinait vi	Remarks	
No.	operations	No. device po		point code		nemarks	
7.0.1.	cannon pinion of third wheel	1230	snap-on			support upper side of pivot	
7.0.2.	center cannon pinion	1219		tube	1.00	different for cal. 1010 and 1020	
7.0.3.	minute wheel	1246		post	1.00		
7.0.4.	date indicator driving wheel	1560			1		
7.0.5.	cam for date indicator driving wheel	1562				post in slit of wheel	
7.0.6.	day star driving wheel	1571	1 screw 2050		:	only in cal. 1020 post in hole of cam	
7.0.7.	double date setting wheel	1559		post	1.00		
7.0.8.	hour wheel	1232			!		
7.0.9.	date jumper (and days - cal. 1020)	1503				different for cal. 1010 and 1020	
7.0.10.	date jumper spring	1529		funct.	1.00		
7.0.11.	date indicator	1580			•		
7.0.12.	date indicator guard	1554	3 screws 2585 (1010) 2430 (1020)		:	different for cal. 1010 and 1020	
7.0.13.	day corrector	7524		pivot	1.00	only in cal. 1020	
7.0.14.	day corrector spring	7526			:	only in cal. 1020	
7.0.15.	day star and dial-disc	1516			:	only in cal. 1020	
7.0.16.	day star guard	1555	2 screws 2586			only in cal. 1020	



# 8. 0. 0. Automatic unit

Op.	Order of assembling	Part	Fixing	Lubrication		
No.	operations	device	point	code	Remarks	
8.0.1.	driving gear for ratchet wheel	1437		upper lower	1.00	1
8.0.2.	winding gear	1464		upper lower	1.00	
8.0.3.	large connecting pinion for winding wheel	1453		upper lower	1.00	Mounted on the upper bridge for automatic
8.0.4.	small connecting pinion for winding wheel	1454		upper lower	1,00	device 1031
8.0.5.	lower bridge for automatic device	1033	2 screws 2584			
8.0.6.	unit on movement		2 screws 2584			
8.0.7.	intermediate connecting pinion for winding wheel	1477				
8.0.8.	rotor	1026		pivot	1.00	
8.0.9.	banking ring for rotor	1478	1 scr. 2578			

