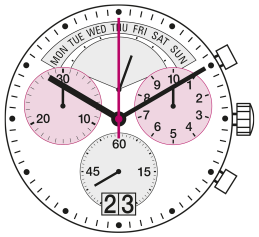
RONDA mastertech 8000

XXL Chronographs, Retrograde and Big Date

Caliber 8040.N – 15'''



Product Specifications

Analog quartz movement	
Line	mastertech
Caliber	8040.N
Size	15'''
Version Swiss Made	13 Jewels / gold plated
Standard battery life	48 months
Hand fitting height	1

Features

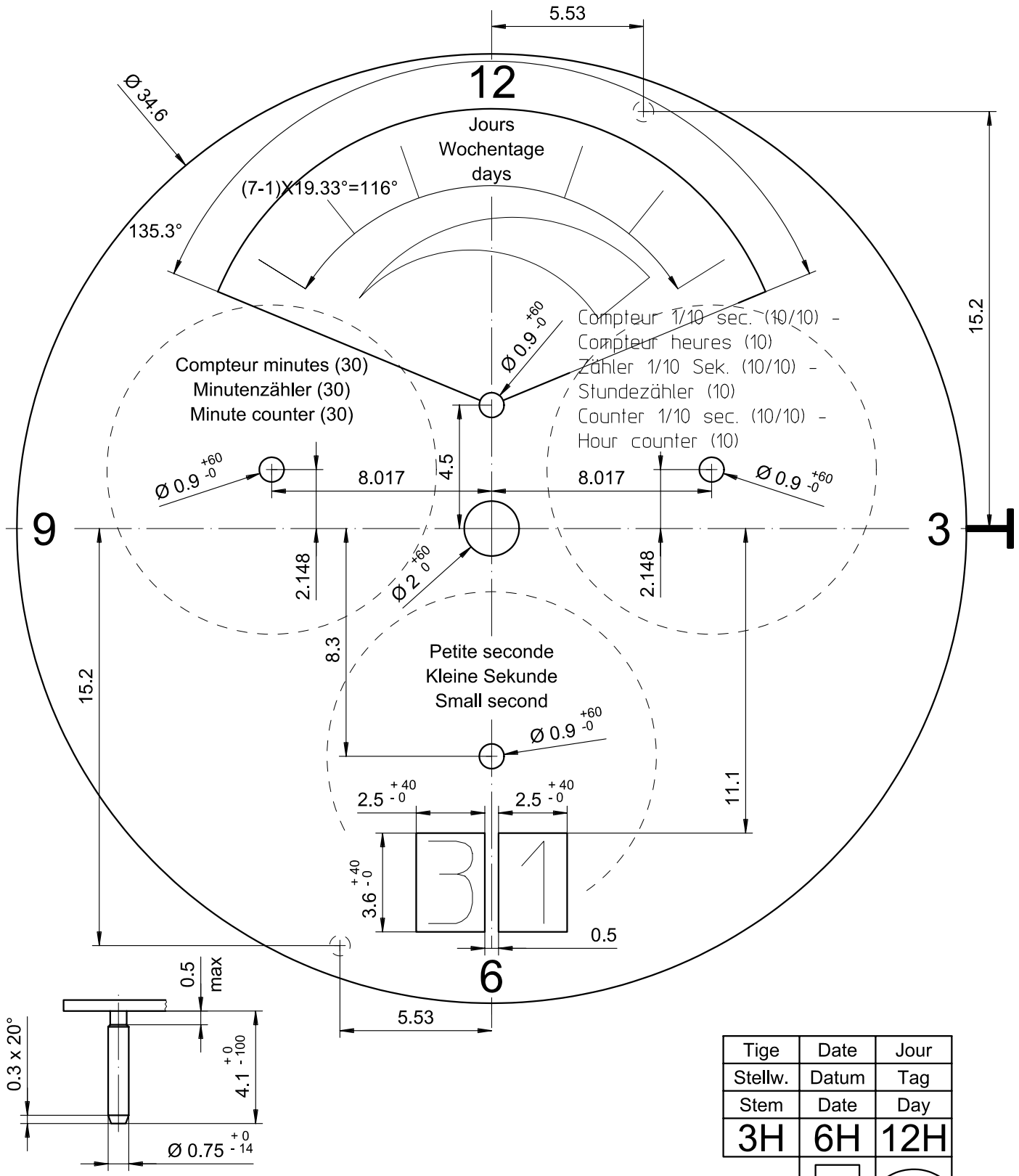
- Very long battery life
- Repairable metal watch movement
- Power saving mechanism with pullled out stem: Reduction of consumption approximately 70%
- Very easy handling by two pushers
- Big date with quick change

Functions

- Chronograph
- Center stop second (1/1 sec)
- 1/10 seconds up to 30 minutes
- 30 minute counter
- 10 hour counter
- ADD and SPLIT functions
- 3 eyes
- Day indicator
- Big date
- Small second
- Day Retrograde
- Retrograde

Technical Specifications

Diameter Total	34.60 mm
Case fitting	33.80 mm
Movement height	5.60 mm
Height over standard battery	5.60 mm
Movement rest	0.60 mm
Height over stem	3.30 mm
Length of stem travel	1.00 mm
Stem thread	0.90 mm
Standard battery	395
Standard battery life	48 months
Battery voltage	1.5 V
Current consumption – typical	1.48 µA (Date Mechanism not in Gear)
Current consumption – maximum	2 µA (Date Mechanism not in Gear)
Useful torque second – typical	6 µNm
Useful torque minute – typical	300 µNm
Useful torque center stop second – typical	7 µNm
Operating temperature	0 - 50 °C
Instantaneous rate	-10/ +20 sec/month
Resistance to magnetic fields	18.8 Oe
Resistance against shock	NIHS 91-10



Tige	Date	Jour
Stellw.	Datum	Tag
Stem	Date	Day
3H	6H	12H

Epaisseur du cadran selon hauteur de l'aiguillage
Zifferblattdicke gemäss Zeigerwerkhöhen
Dial thickness according to hand fitting heights

Cadran
Zifferblatt
Dial

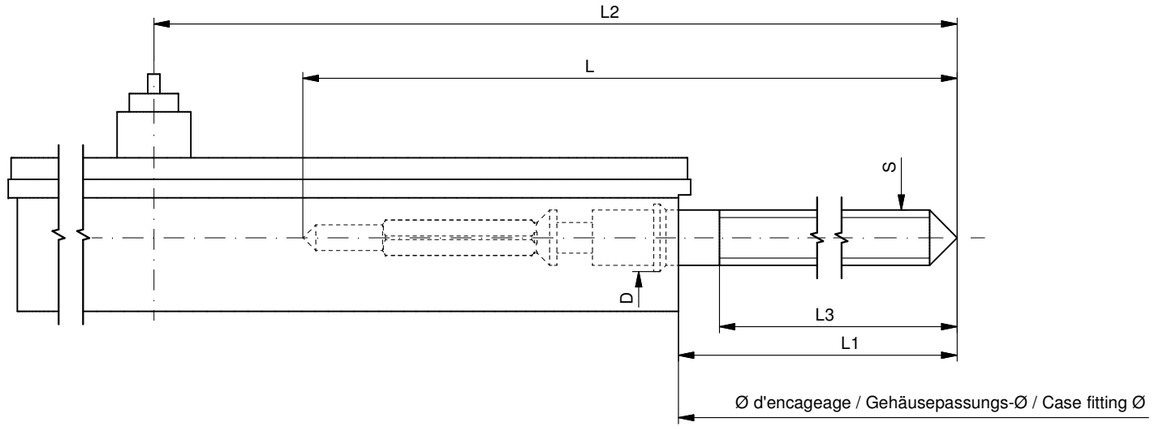
15'''

Issued	16 Mai 2008	mg
Modified	12 Feb 2010 ÄA 5198	fl
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA | 8040.N

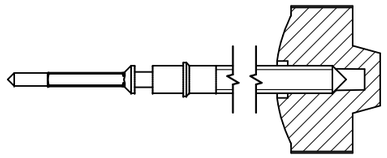
Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.804 00



Tige de travail (intégrée dans le mouvement)
Arbeitstellwelle (im Werk eingebaut)
Working stem (implemented in the movement)

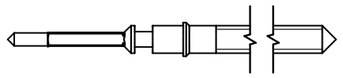
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.203.CO	21.30	11.67	28.57	11.12	0.90	1.10



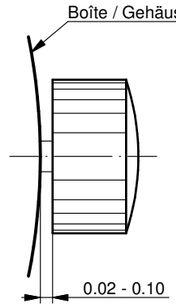
Couleur de la couronne Kronenfarbe Crown color	gris foncé dunkelgrau dark grey
Code	UN 7005

Tige (normale) / Stellwelle (normal) / Stem (normal)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.203	21.30	11.67	28.57	11.12	0.90	1.10



Couronne normale
Normale Krone
Normal crown

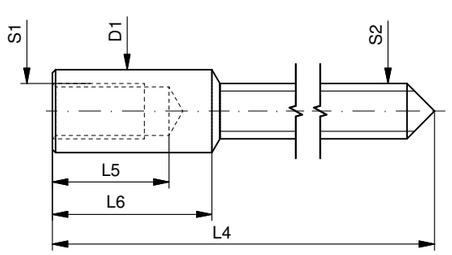


Couronne vissée
Geschraubte Krone
Screwed crown

Force ⇦ min. Kraft ⇦ min. Force ⇦ min.	10 N
Force ⇦ max. Kraft ⇦ max. Force ⇦ max.	15 N

Rallonge de tige / Stellwelle Verlängerung / Stem extension

No. d'article Artikelnummer Part number	L4	L5 (min)	L6	S1	S2	D1
3000.040	12.00	1.90	2.60	0.90	0.90	1.35



Tige / Stellwelle / Stem
(dimensions / forces)
(Dimensionen / Kräfte)
(dimensions / forces)

RONDA 8040.B, 8040.N

Issued	07 Sep 2012	ds5222
Modified	25 Apr 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	

No.	5030.023	01

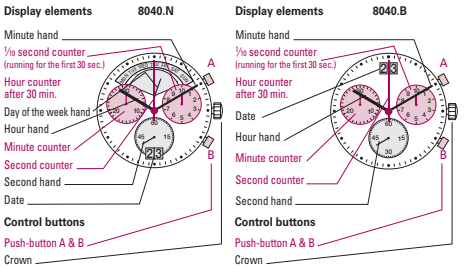
RONDA mastertech – Movement Cal. 8040.N & 8040.B

User's Manual English

You have decided to buy a watch, which was assembled by a watchmaker using a Ronda movement. Please note that no watches are produced or distributed under the Ronda brand.

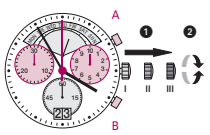
In case of repairs, guarantee claims and questions concerning the functioning of a watch, purchasers and consumers should contact their retailer or the watch manufacturer, for which the relevant information can be found in the sales or guarantee documentation provided with the watch.

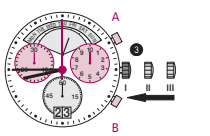
Description of the display and control buttons



01

Setting the time





❶* Pull out the crown to position **III** (the watch stops).

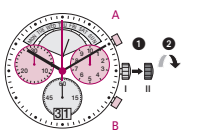
❷ Turn the crown until you reach the correct time **8:45**.

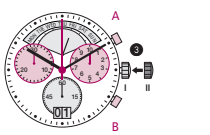
❸* Push the crown back into position **I**.

Please note:
* In order to set the time to the exact second, ❶ must be pulled out when the second hand is in position «60». Once the hour and minute hands have been set, ❸ must be pushed back into position **I** at the exact second.

02

Setting the date (quick mode)





❶ Pull out the crown to position **II** (the watch continues to run).

❷ Turn the crown anticlockwise until the correct date 01 appears.

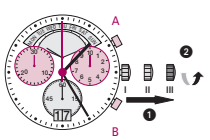
❸ Push the crown back into position **I**.

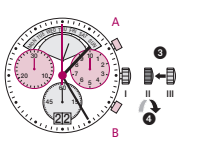
Please note:
During the date changing phase between approx. 8 PM and 12 PM; the date must be set to the date of the following day.

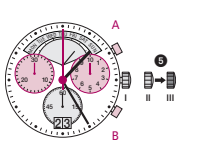
An extreme acceleration in setting the date with quick mode can induce a false date indication. The synchronization is re-established by setting the date from 01 till 31 (crown in position II).

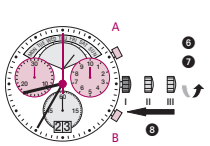
03

Setting the date, day of the week (8040.N), time









Example:
– Date / time on the watch: 17 / 01:25 / **MON**
– Present date / time: 23 / 20:35 / **SAT**

❶ Pull out the crown to position **III** (the watch stops).

❷ Turn the crown until yesterday's day of the week **FRI** appears.

❸ Push the crown to position **II**.

❹ Turn the crown anticlockwise until yesterday's date appears 22.

❺* Pull out the crown to position **III** (the watch stops).

❻ Turn the crown until the correct date 23 and day of the week **SAT** appears.

❼** Continue to turn the crown until the correct time 8:35 PM appears.

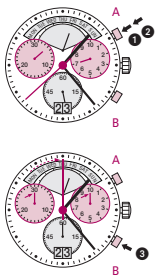
❽ Push the crown back into position **I**.

Please note:
* To set your watch to the exact second, please refer to the chapter entitled «setting the time».
** Please observe the AM/PM clock rhythm.

04

Chronograph: Basic function

(Start / Stop / Reset)



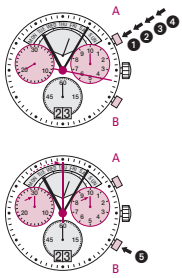
Example:
❶ **Start:** Press push-button **A**.

❷ **Stop:** to stop the timing, press push-button A once more and read the chronograph counters:
4 min / 38 sec / 7/10 sec

❸ **Zero positioning:**
Press push-button **B**.
(The chronograph hands will be reset to their zero positions.)

05

Chronograph: Accumulated timing

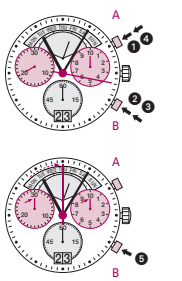


Example:
❶ **Start:** (start timing)
❷ **Stop:** (e.g. **15** min **5** sec following ❶)
❸ **Restart:** (timing is resumed)
❹* **Stop:** (e.g. **5** min **12** sec following ❸)
= **20 min 17 sec**
(The accumulated measured time is shown)
❺ **Reset:**
The chronograph hands are returned to their zero positions.

Please note:
* Following ❹, the accumulation of the timing can be continued by pressing **push-button A** *(Restart / Stop, Restart / Stop, ...).*

06

Chronograph: Intermediate or interval timing

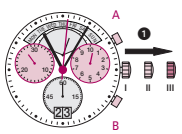


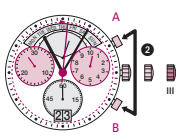
Example:
❶ **Start:** (start timing)
❷ **Display interval:**
e.g. **20 minutes 17 seconds** (timing continues in the background)
* ❸ **Making up the measured time:**
(the chronograph hands are quickly advanced to the ongoing measured time.)
❹ **Stop:** (Final time is displayed)
❺ **Reset:**
The chronograph hands are returned to their zero position.

Please note:
* Following ❸, further intervals or intermediates can be displayed by pressing **push-button B** *(display interval / make up measured time, ...).*

07

Adjusting the chronograph hands to zero position

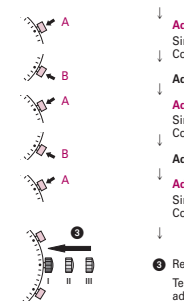




Example:
One or several chronograph hands are not in their correct zero positions and have to be adjusted (e.g. following a battery change).

❶ Pull out the crown to position **III** (all chronograph hands are in their correct or incorrect zero position.)

❷ Keep push-buttons **A and B** depressed **simultaneously** for at least 2 seconds (the second counter hand rotates by 360° → corrective mode is activated.)



Adjusting the second counter hand
Single step A **1 x short**
Continuous A **long**

Adjusting the next hand B

Adjusting the 1/10 second counter hand (position 3h)
Single step A **1 x short**
Continuous A **long**

Adjusting the next hand B

Adjusting the minute counter hand (position 9h)
Single step A **1 x short**
Continuous A **long**

❸ Returning the crown to position **I**

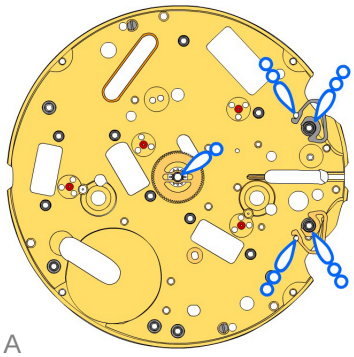
Termination of the chronograph hands adjustment (can be carried out at any time).

08

CE

07/2017

Battery type: 395 / SR927SW
Accuracy: +20 / -10 seconds per month



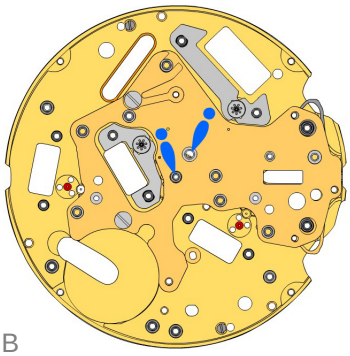
A

2000.700.CO
1. Main plate

3406.038
2. Pusher jumper A
Put the yellow jumper between the two posts on the closer side.

3406.030
3. Pusher jumper B
Put the grey jumper between the two posts on the further side.

3305.364.CO
4. Canon pinion (Aig.1)



B

2030.029
5. Center bridge
Center bride held by 2 screws 4000.250.

4000.250
6. Screw

3406.040
7. Friction spring
Friction spring held by 1 screw 4000.250.

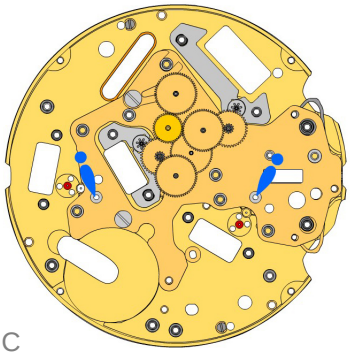
4000.250
8. Screw

3622.055
9. Stator

3622.054
10. Stator chrono
Mark |1| on stator.

3715.119.RK
11. Rotor

3715.119.RK
12. Rotor



C

3147.073.CO
13. Intermediate wheel

3147.074.CO
14. Intermediate wheel chrono

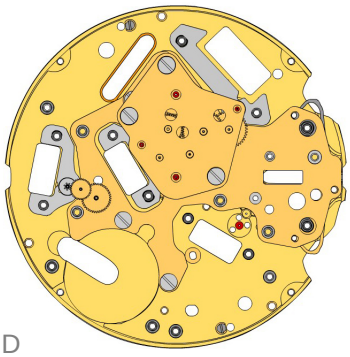
3122.067.CO
15. Third wheel

3136.180.CO
16. Chronograph wheel

3136.179.CO
17. Second wheel

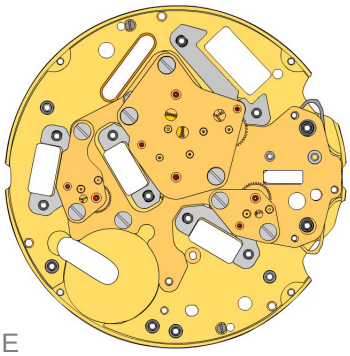
3136.178.CO
18. Small second wheel

3004.203.CO
19. Reverse wheel



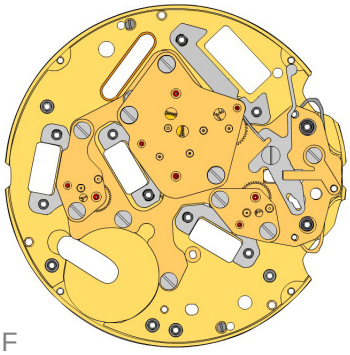
D

2020.188.G 20.		Train wheel bridge Train wheel bridge held by 2 screws 4000.250.
4000.250 21.		Screw
3622.039 22.		Stator counter (cpt 6h and 9h and chrono)
3402.012.CO 23.		Minute counting wheel (30min)
3715.120.RK 24.		Rotor
3147.076.CO 25.		Intermediate wheel (counter 30min)



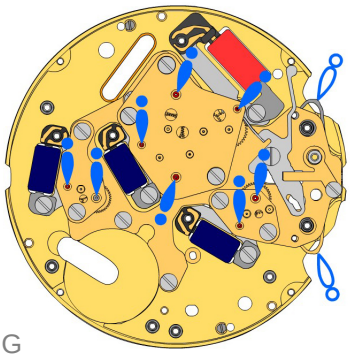
E

2020.191.G 26.		Counter train wheel Bridge (2h30) Train wheel bridge held by 2 screws 40000.250. Mark |2|.
4000.250 27.		Screw
3622.039 28.		Stator counter
3402.013.CO 29.		Counting wheel (1/10 s)
3715.120.RK 30.		Rotor
3147.075.CO 31.		Intermediate wheel (counter 1/10 s)
2020.190.G 32.		Counter train wheel bridge Train wheel bridge held by 2 screws 40000.250. Mark |1|.
4000.250 33.		Screw



F

3016.029 34.		Stop lever Stop lever held by 1 screw 4000.249.
4000.249 35.		Screw
2130.222 36.		Maintaining plate Maintaining plate held by 1 screw 4000.248.
4000.248 37.		Screw



G

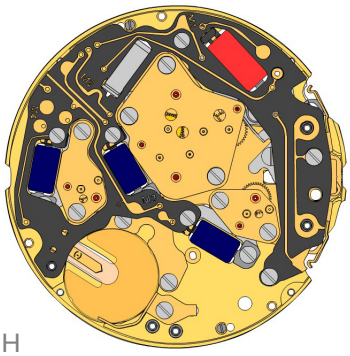
3621.072.RK
38.
Coil centre
Attention: Please hold the coil only on the grey coil core.

3621.055.RK
39.
Coil counter
Attention: Please hold the coil only on the grey coil core.

3621.055.RK
40.
Coil counter
Attention: Please hold the coil only on the grey coil core.

3621.055.RK
41.
Coil counter
Attention: Please hold the coil only on the grey coil core.

4000.250
42.
Screw



H

3603.089
43.
Battery insulator

3601.134
44.
Pusher contact spring

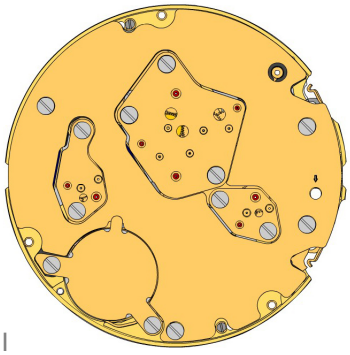
3612.218
45.
Electronic module
Electronic module held by 6 screws.

4000.248
46.
Screw
4 screws 4000.248 for pressing the module on the coils.

4000.250
47.
Screw
2 screws 4000.248 for pressing the module on the 2 posts.

3601.132.G
48.
Lateral bridle
Lateral bridle held by 1 screw 4000.250.

4000.250
49.
Screw



I

3603.090
50.
Circuit insulator

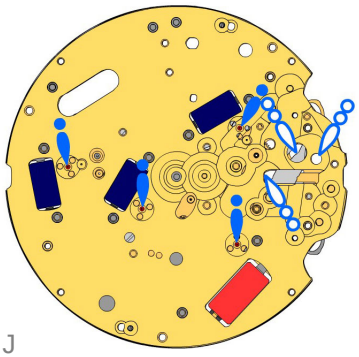
2130.206.G.M01.8040N
51.
Electronic module cover
Electronic module cover held by 4 screws 4000.250.

4000.250
52.
Screw

3600.010.HGF
53.
Battery 395

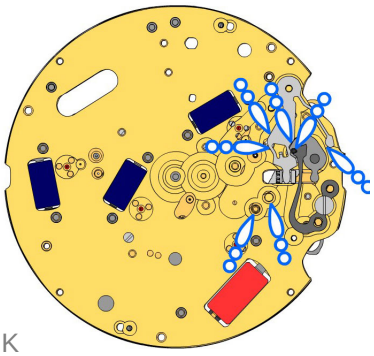
3601.133.G
54.
Bridle +
Bridle + held by 2 screws 4000.250.

4000.250
55.
Screw



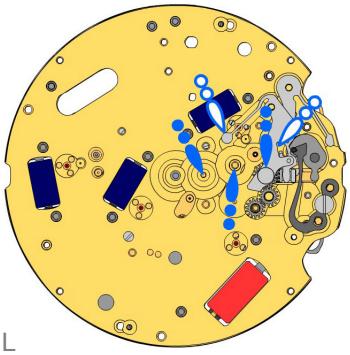
J

2000.700.CO 56.		Main plate .



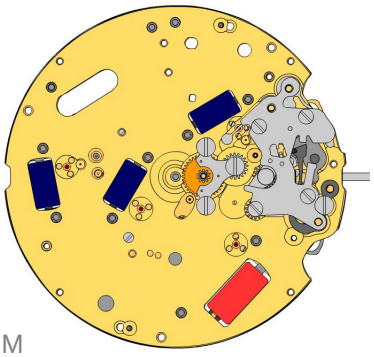
K

3017.054.CO 57.		Setting lever
3001.046 58.		Sliding pinion
3015.088 59.		Yoke (3 positions)
3905.063 60.		Setting lever jumper Lever held by 1 screw 4000.282.
4000.282 61.		Screw

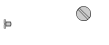
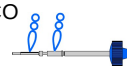


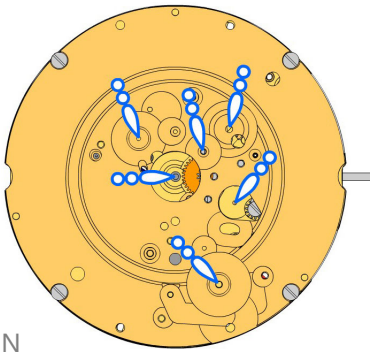
L

3004.200 62.		Corrector setting wheel
3004.200 63.		Corrector setting wheel
3015.087.CO 64.		Setting wheel yoke



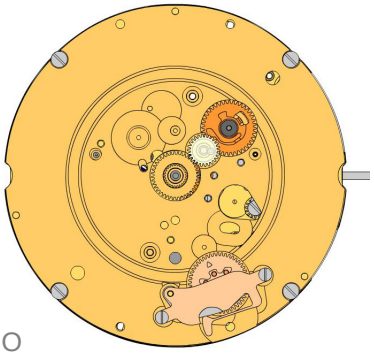
M

2130.208 65.		Setting mecanism cover Setting meca cover held by 4 screws 4000.305.
4000.305 66.		Screw
3000.203.CO 67.		Setting stem
3004.222 68.		Intermediate setting wheel
3007.079.CO 69.		Minute wheel
2130.209 70.		Minute train bridge Minute train bridge held by 3 screws 4000.278.
4000.278 71.		Screw



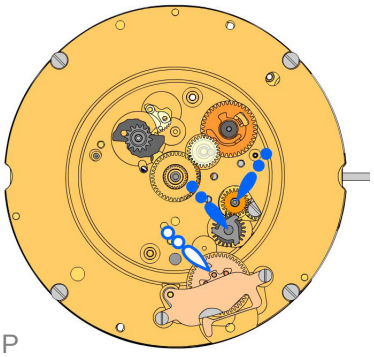
N

2000.672.G 72.		Main plate retro Minute plate retro held by 4 screws 4000.248.
4000.248 73.		Screw



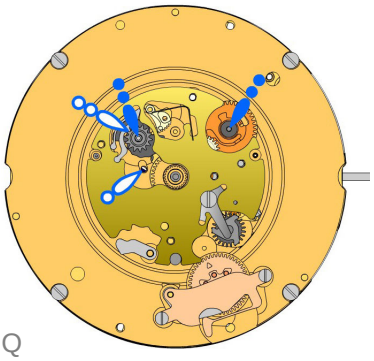
O

3004.220 74.		Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.072 75.		Tens jumper
2130.187 76.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.279. Tensioning the spring arm.
4000.279 77.		Screw
3301.292.CO 78.		Hour wheel
3004.208.CO 79.		Date indicator driving wheel
3147.061 80.		Intermediate date wheel



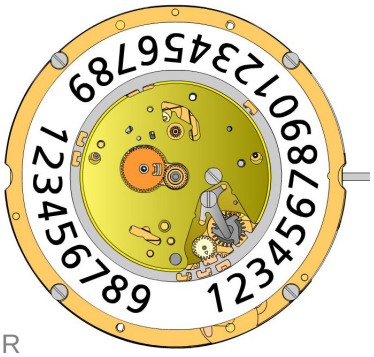
P

3404.006.CO 81.		Day cam Place parts as shown on graphics.
3406.032 82.		Day rack
3406.031 83.		Day rack lever
3147.066.CO 84.		Date corrector setting wheel
3507.059.CO 85.		Date corrector wheel

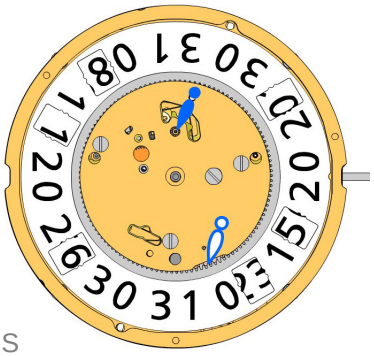


Q

2130.191 86.		Date indicator plate
3905.068 87.		Date corrector spring Date corrector spring held by 1 screw 4000.244.
4000.244 88.		Screw
3905.066 89.		Day rack lever spring Tensioning the spring arm.
3500.068 90.		Date jumper
3500.069 91.		Day jumper Tensioning the spring arm.



R



S

3504.234.AD.1.A
92. Units indicator (standard)
Nick of the indicator at 3 o`clock.

2130.192
93. Date indicator maintaining plate
Date indicator maintaining plate held by 1 screw4000.250.

4000.250
94. Screw

3905.064
95. Date jumper spring
Insert the date jumper spring in the previous opening.

3907.047
96. Day finger flange
Stem pos III: Turn crown forwards until the date jumps. Stem pos II:
Move the date until the nick is at 3 o`clock.

3004.211
97. Day finger
Position the end of the teeth against the day came pinion while turning softly in counterclockwise direction.

3004.212
98. Days driving wheel
Insert the tooth of the wheel in the flange gap, while turning softly in counterclockwise direction to ensure correct position of the day finger.

3401.086.FI
99. Day indicator pinion

3147.062
100. Tens intermediate wheel
Arrow positioning radially outwards.

3504.231.AD.1.A
101. Tens indicator (standard)
Nick of the indicator at 3 o`clock.

3315.003
102. Friction spring

2130.193.G
103. Date mecanism maintaining plate
Date maca maintaining plate held by 3 screws 4000.320.

4000.320
104. Screw

3506.077.G
105. Intermediate Dial support
Polished version first.

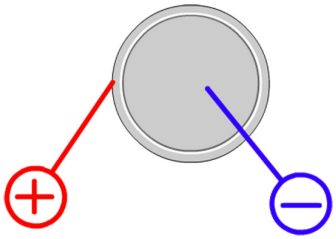
3506.076.G
106. Dial support

8200
107. Moebius 8200

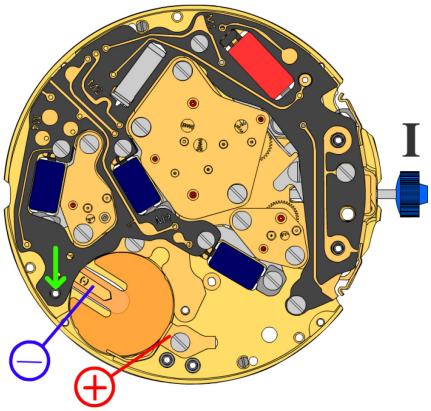
9014
108. Moebius 9014

124
109. Jismaa 124

9020
110. Moebius 9020

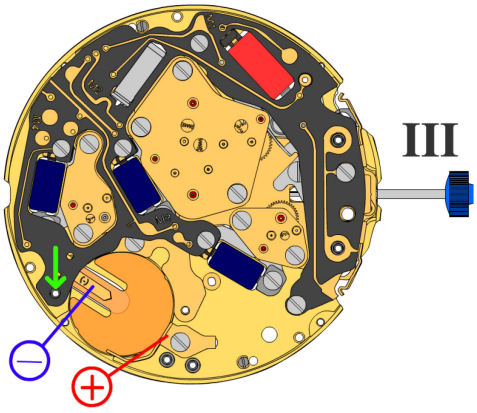


Battery	**395**
Voltage	**1.55 V**



Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

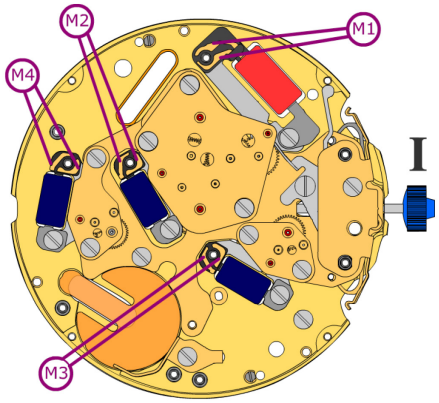
Typical consumption	***1.48 µA***
Maximal consumption	***2.00 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**



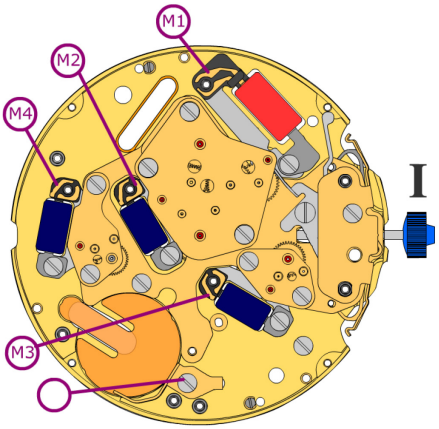
Setting stem in position III, 60 s measuring interval:

Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***

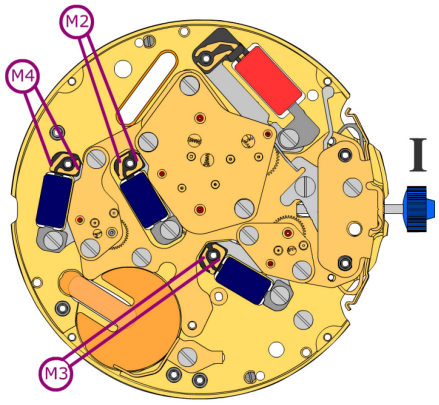
Hold down the electrical module to allow the electronic flow.



Coil resistance M1	**1.50 kΩ .. 1.70 kΩ**
Coil resistance M2	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M3	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M4	**1.68 kΩ .. 1.88 kΩ**

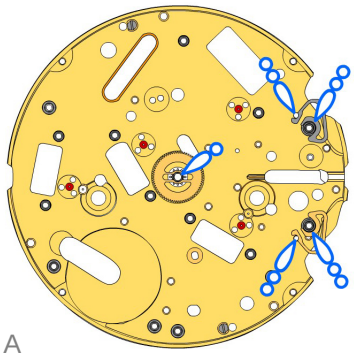


Coil isolation M1/M2/M3/M4	**∞ kΩ**



Signal generator (4.9 ms, 8 Hz):

Lower working voltage limit M2/M3/M4	**1.20 V**



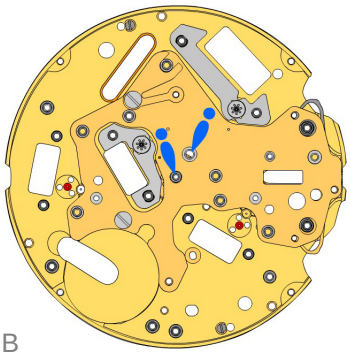
A

2000.700.CO
1. Main plate

3406.038
2. Pusher jumper A
Put the yellow jumper between the two posts on the closer side.-#13;

3406.030
3. Pusher jumper B
Put the grey jumper between the two posts on the further side.

3305.364.CO
4. Canon pinion (Aig.1)



B

2030.029
5. Center bridge
Center bride held by 2 screws 4000.250.

4000.250
6. Screw

3406.040
7. Friction spring
Friction spring held by 1 screw 4000.250.

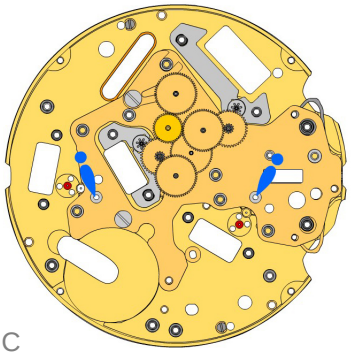
4000.250
8. Screw

3622.055
9. Stator

3622.054
10. Stator chrono
Mark |1| on stator.

3715.119.RK
11. Rotor

3715.119.RK
12. Rotor



C

3147.073.CO
13. Intermediate wheel

3147.074.CO
14. Intermediate wheel chrono

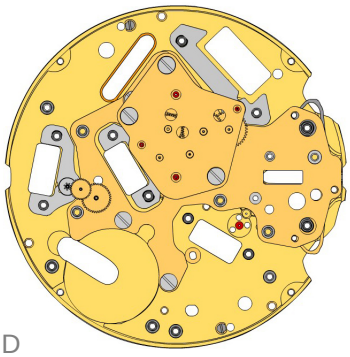
3122.067.CO
15. Third wheel

3136.180.CO
16. Chronograph wheel

3136.179.CO
17. Second wheel

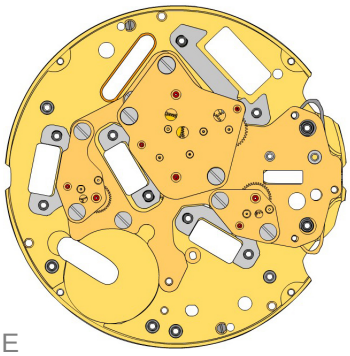
3136.178.CO
18. Small second wheel

3004.203.CO
19. Reverse wheel



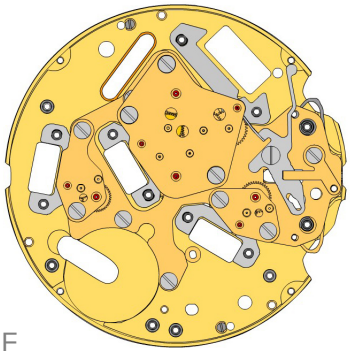
D

2020.188.G 20.		Train wheel bridge Train wheel bridge held by 2 screws 4000.250. Mark |2|.
4000.250 21.		Screw
3622.039 22.		Stator counter (cpt 6h and 9h and chrono)
3402.012.CO 23.		Minute counting wheel
3715.120.RK 24.		Rotor
3147.076.CO 25.		Intermediate wheel (counter 30min)



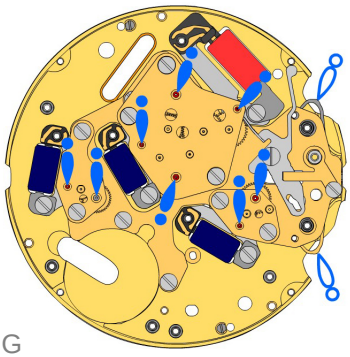
E

2020.191.G 26.		Counter train wheel Bridge Train wheel bridge held by 2 screws 40000.250. Mark |2|.
4000.250 27.		Screw
3622.039 28.		Stator counter
3402.013.CO 29.		Counting wheel (1/10 s)
3715.120.RK 30.		Rotor
3147.075.CO 31.		Intermediate wheel (counter 1/10 s)
2020.190.G 32.		Counter train wheel bridge Train wheel bridge held by 2 screws 40000.250. Mark |2|.
4000.250 33.		Screw



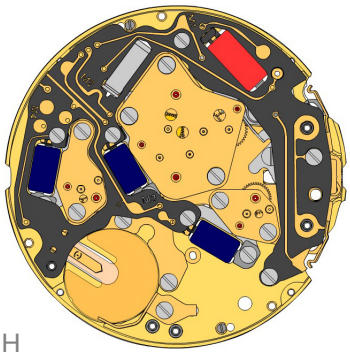
F

3016.029 34.		Stop lever Stop lever held by 1 screw 4000.249.
4000.249 35.		Screw
2130.222 36.		Maintaining plate Maintaining plate held by 1 screw 4000.248.
4000.248 37.		Screw



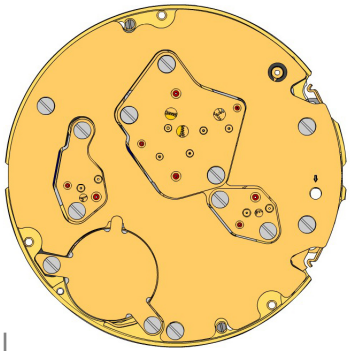
G

3621.072.RK 38.		Coil centre Attention: Please hold the coil only on the grey coil core.
3621.055.RK 39.		Coil counter Attention: Please hold the coil only on the grey coil core.
3621.055.RK 40.		Coil counter Attention: Please hold the coil only on the grey coil core.
3621.055.RK 41.		Coil counter Attention: Please hold the coil only on the grey coil core.
4000.250 42.		Screw



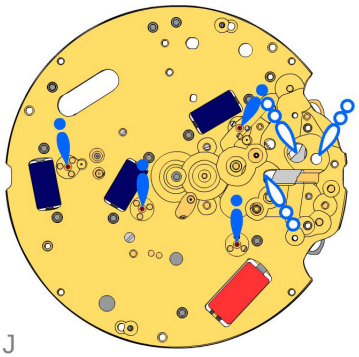
H

3603.089 43.		Battery insulator
3601.134 44.		Pusher contact spring
3612.218 45.		Electronic module Electronic module held by 6 screws. (Electronic measurements may be realised now.)
4000.248 46.		Screw 4 screws 4000.248 for pressing the module on the coils.
4000.250 47.		Screw 2 screws 4000.248 for pressing the module on the 2 posts.
3601.132.G 48.		Lateral bridle Lateral bridle held by 1 screw 4000.250.
4000.250 49.		Screw



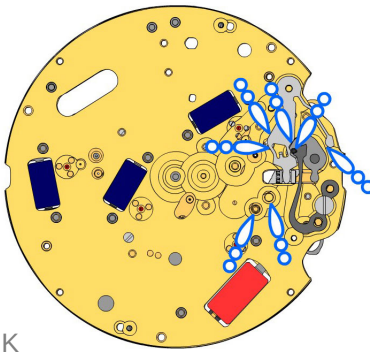
I

3603.090 50.		Circuit insulator
2130.206.G.M01.8040N 51.		Electronic module cover Electronic module cover held by 4 screws 4000.250.
4000.250 52.		Screw
3600.010.HGF 53.		Battery 395
3601.133.G 54.		Bridle + Bridle + held by 2 screws 4000.250.
4000.250 55.		Screw



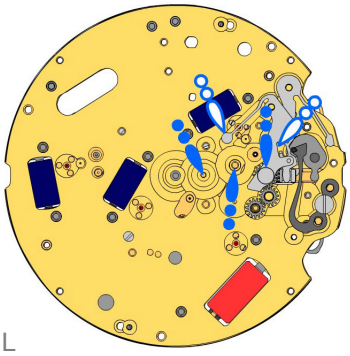
J

2000.700.CO 56.		Main plate



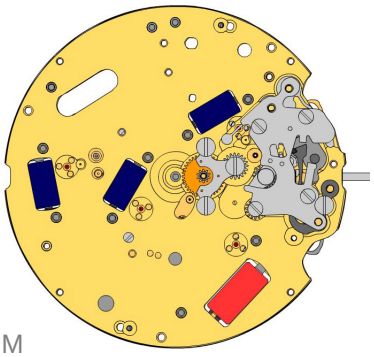
K

3017.054.CO 57.		Setting lever
3001.046 58.		Sliding pinion
3015.088 59.		Yoke (3 positions)
3905.063 60.		Setting lever jumper Lever held by 1 screw 4000.282.
4000.282 61.		Screw

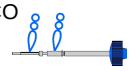


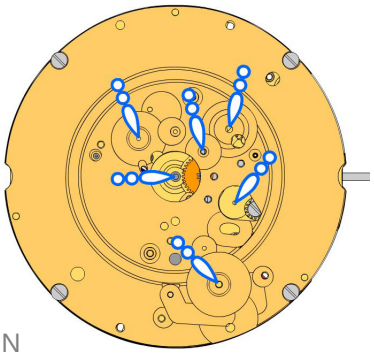
L

3004.200 62.		Corrector setting wheel
3004.200 63.		Corrector setting wheel
3015.087.CO 64.		Setting wheel yoke



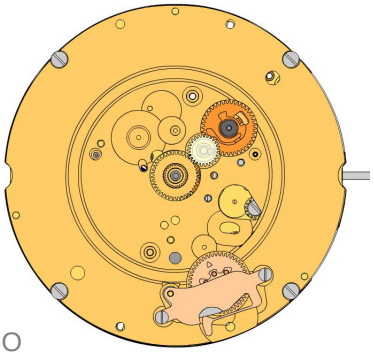
M

2130.208 65.		Setting mecanism cover Setting meca cover held by 4 screws 4000.305.
4000.305 66.		Screw
3000.203.CO 67.		Setting stem
3004.222 68.		Intermediate setting wheel
3007.079.CO 69.		Minute wheel
2130.209 70.		Minute train bridge Minute train bridge held by 3 screws 4000.278.
4000.278 71.		Screw



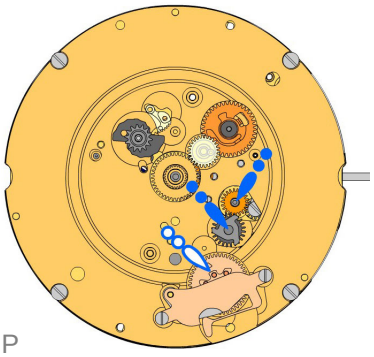
N

2000.672.G 72.		Main plate retro Minute plate retro held by 4 screws 4000.248.
4000.248 73.		Screw



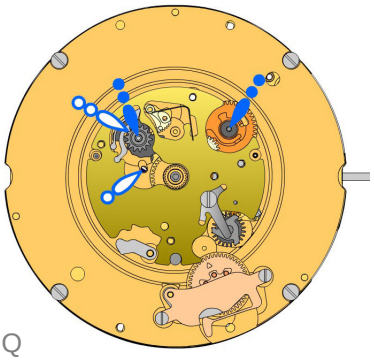
O

3004.220 74.		Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.072 75.		Tens jumper
2130.187 76.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.279. Tensioning the spring arm.
4000.279 77.		Screw
3301.292.CO 78.		Hour wheel
3004.208.CO 79.		Date indicator driving wheel
3147.061 80.		Intermediate date wheel



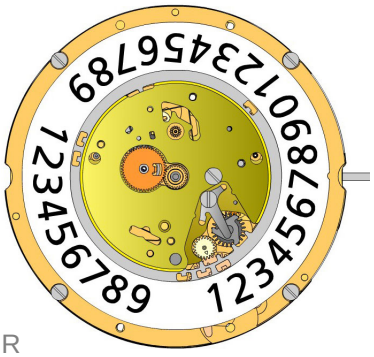
P

3404.006.CO 81.		Day cam Place parts as shown on graphics.
3406.032 82.		Day rack
3406.031 83.		Day rack lever
3147.066.CO 84.		Date corrector setting wheel
3507.059.CO 85.		Date corrector wheel

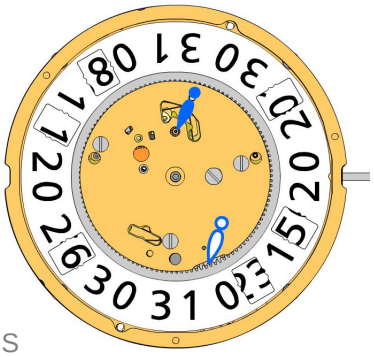


Q

2130.191 86.		Date indicator plate
3905.068 87.		Date corrector spring Date corrector spring held by 1 screw 4000.244.
4000.244 88.		Screw
3905.066 89.		Day rack lever spring Tensioning the spring arm.
3500.068 90.		Date jumper
3500.069 91.		Day jumper Tensioning the spring arm.

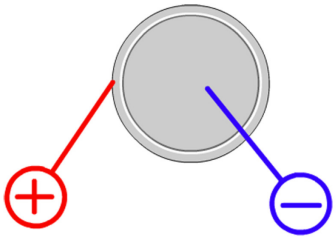


R

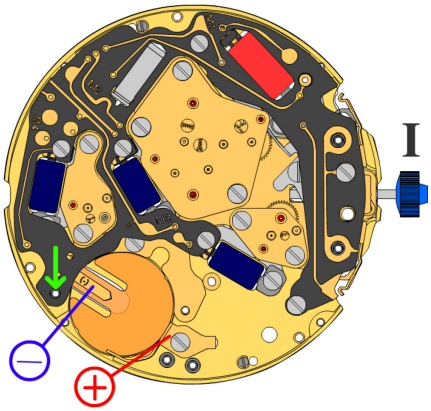


S

3504.234.AD.1.A 92.		Units indicator (standard) Nick of the indicator at 3 o`clock.
2130.192 93.		Date indicator maintaining plate Date indicator maintaining plate held by 1 screw.
4000.250 94.		Screw
3905.064 95.		Date jumper spring Insert the date jumper spring in the previous opening.
3004.244 96.		Day finger Stem pos III: Turn crown forwards until the date jumps. Stem pos II: Move the date until the nick is at 3 o`clock. Position the end of the teeth against the day came pinion while turning softly in counterclockwise direction.
3004.212 97.		Days driving wheel Insert the tooth of the wheel in the flange gap, while turning softly in counterclockwise direction to ensure correct position of the day finger.
3401.086.FI 98.		Day indicator pinion
3147.062 99.		Tens intermediate wheel Arrow positioning radially outwards.
3504.231.AD.1.A 100.		Tens indicator (standard) Nick of the indicator at 3 o`clock.
3315.003 101.		Friction spring
2130.193.G 102.		Date mecanism maintaining plate Date maca maintaining plate held by 3 screws 4000.320.
4000.320 103.		Screw
3506.077.G 104.		Intermediate Dial support Polished version first.
3506.076.G 105.		Dial support
8200 106.		Moebius 8200
9014 107.		Moebius 9014
124 108.		Jismaa 124
9020 109.		Moebius 9020

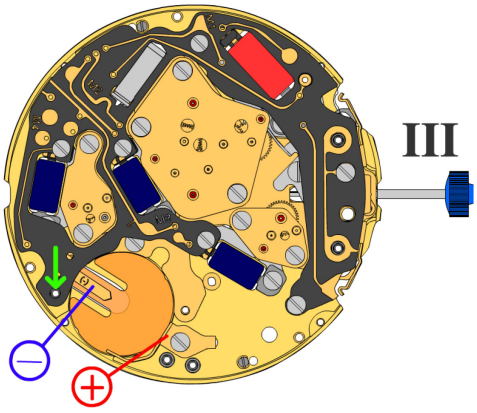


Battery	**395**
Voltage	**1.55 V**



Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

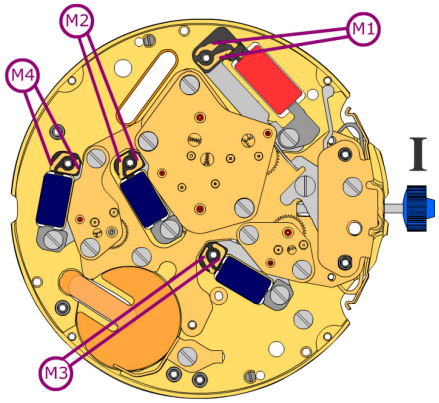
Typical consumption	***1.48 µA***
Maximal consumption	***2.00 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**



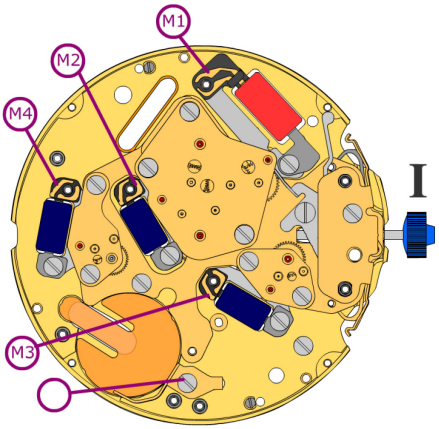
Setting stem in position III, 60 s measuring interval:

Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***

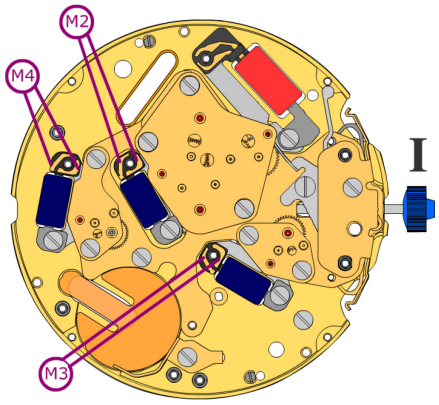
Hold down the electrical module to allow the electronic flow.



Coil resistance M1	**1.50 kΩ .. 1.70 kΩ**
Coil resistance M2	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M3	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M4	**1.68 kΩ .. 1.88 kΩ**



Coil isolation M1/M2/M3/M4	**∞ kΩ**



Signal generator (4.9 ms, 8 Hz):

Lower working voltage limit M2/M3/M4	**1.20 V**