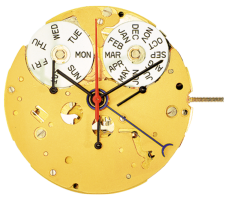
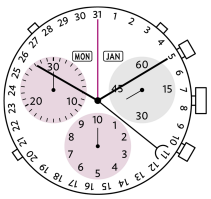
Quartz Movements
Chronographs
RONDA startech

Caliber 5040.F – 12½'''





Product Specifications

Analog quartz movement	
Line	startech
Caliber	5040.F
Size	12½'''
Version Swiss Made	13 Jewels / gold plated
Standard battery life	54 months
Standard hand fitting height	3

Features

- Repairable metal watch movement
- Power saving mechanism with pulled out stem: Reduction of consumption approximately 70%
- Very easy handling by two pushers

Functions

- 30 minute counter
- Center stop second (1/1 sec)
- 10 hour counter
- 1/10 seconds up to 30 minutes
- ADD and SPLIT functions
- Chronograph
- Day indicator
- Small second
- Month indicator
- Date by hand

Quartz Movements
Chronographs
RONDA startech

Caliber 5040.F – 12½'''

Technical Specifications

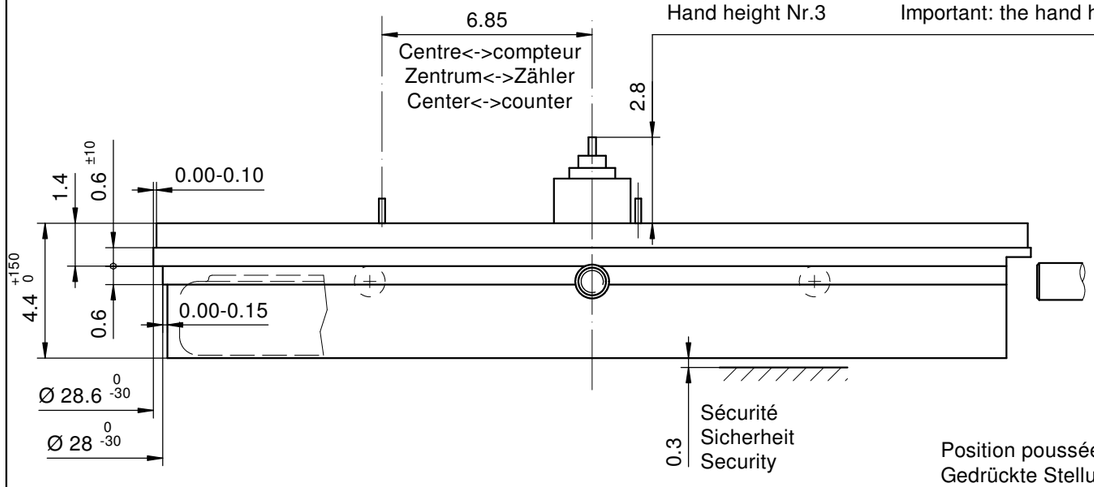
Diameter Total	28.60 mm
Case fitting	28.00 mm
Movement height	4.40 mm
Height over standard battery	4.40 mm
Movement rest	0.60 mm
Height over stem	1.90 mm
Length of stem travel	0.90 mm
Stem thread	0.90 mm
Useful torque second – typical	6 µNm
Useful torque minute – typical	300 µNm
Useful torque center 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

Battery Specifications

Standard battery	No. 395
Standard battery life	54 months
Battery voltage	1.5 V
Current consumption – typical	1.32 µA (Date Mechanism not in Gear)
Current consumption – maximum	1.65 µA (Date Mechanism not in Gear)

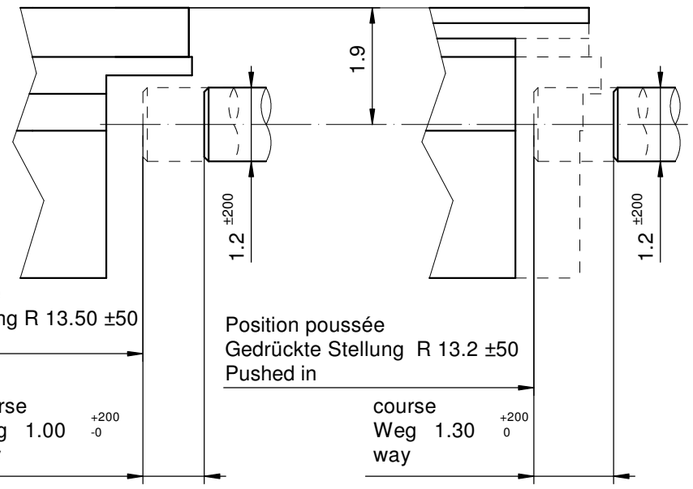
Aiguillage No.3
Zeigerwerkhöhe Nr.3
Hand height Nr.3

Important: l'aiguillage peut varier selon le modèle
Wichtig: die Zeigerwerkhöhe kann bei verschiedenen Modellen unterschiedlich sein
Important: the hand height can vary between different models



Poussoirs
Drücker A, B
Pushers

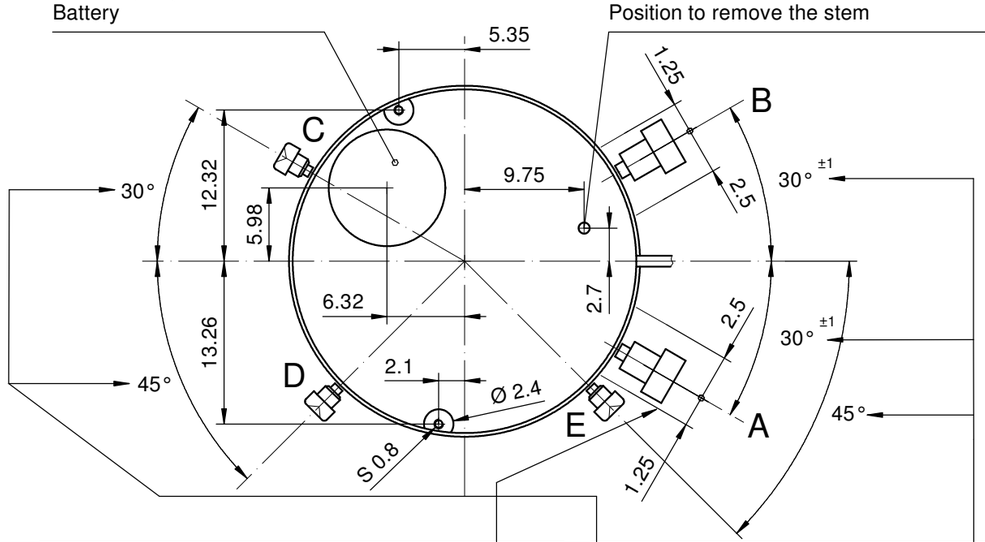
Correcteur
Korrektor C, D, E
Corrector



Pile
Batterie (395) Ø 9.50 x 2.60mm
Battery

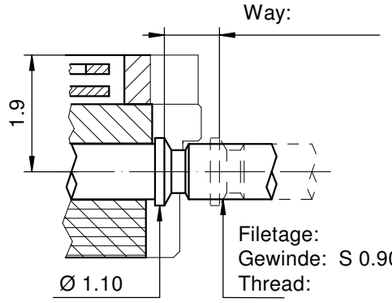
Côté fond de boîte
Seite Gehäuseboden
Case back side

Position pour extraire la tige
Position zum Entfernen der Stellwelle
Position to remove the stem

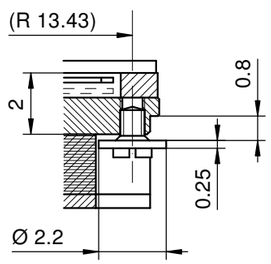


Stellwelle
Tige
Stem

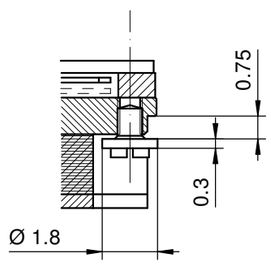
Chemin:
Weg: 0.90
Way:



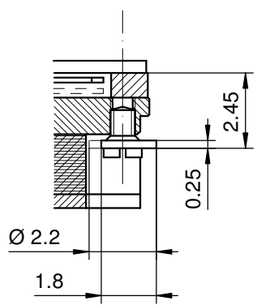
Vis
Schraube Nr. 4000.310
Screw



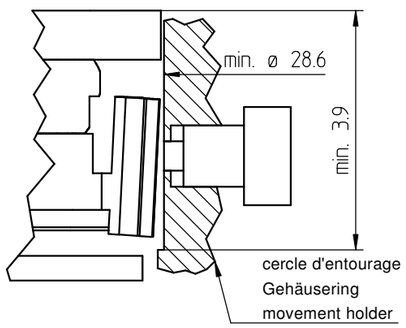
Vis
Schraube Nr. 4000.195
Screw



Vis
Schraube Nr. 4000.194
Screw



Dégagement cercle d'entourage pour poussior
Freistellung Gehäusering für Drücker
Opening movement holder for pusher



L'angle indiqué pour la direction du poussoir et la position doivent être respectés.
Pour un angle de 0°- 30° des poussoirs A et B, voir plan 5000.345. Pour un angle plus petit des correcteur E et D, voir plan 5000.386

Der angegebene Winkel für die Drückerrichtung und die Position müssen eingehalten werden. Für einen Drückerwinkel von 0°- 30° bei A und B, siehe Zeichnung 5000.345. Für einen kleineren Korrektorwinkel bei E und D, siehe Zeichnung 5000.386.

The indicated angle of the pusher direction and the position must be fullfiled. For pusher angles of 0°- 30° by pusher A and B, see drawing 5000.345
For smaller corrector angles by corrector E and D, see drawing 5000.386

Sécurité entre l'aiguille des secondes et le verre:
Sicherheit zwischen Sekundenzeiger und Glas: 0.30mm
Security between second hand and glass:

Le cadran doit être tenu par la boîte
Das Zifferblatt muss durch die Schale gehalten werden
The dial must be hold by the case

La course du poussoir doit être limitée dans le poussoir lui-même. Sa position poussée doit être controlée.

Die Weglänge des Drückers ist im Drücker selbst zu begrenzen. In der gedrückten Stellung ist seine Position zu kontrollieren

The way of the pusher has to be limited in the pusher itself. Its position must be checked while pushed in.

Cage
Uhrwerkgestell 12½'''
Frame

Issued	09 Jul 2004	mg
Modified	05 Sep 2016 ÄA 34777	dh
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	

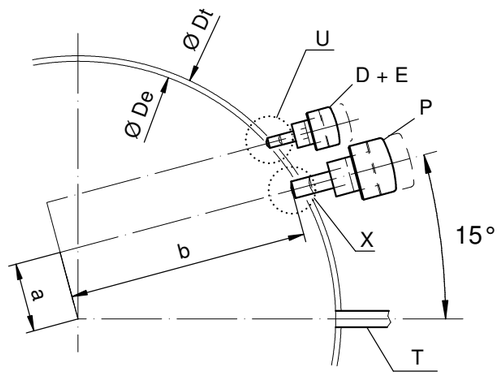
RONDA | 5040.F

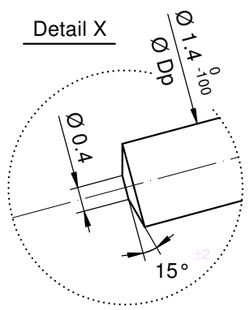
Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5000.342 03

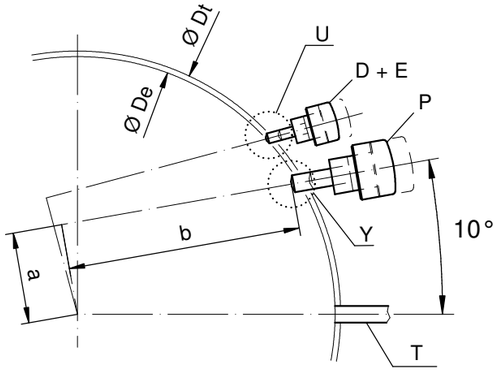
Detail zu Drücker A

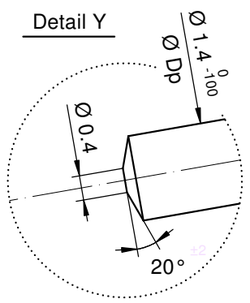
Angle poussoir A Winkel Drücker A Angle pusher A		15°
Ø Dp	a	b
1.30	3.83	12.92
1.40	3.86	12.91



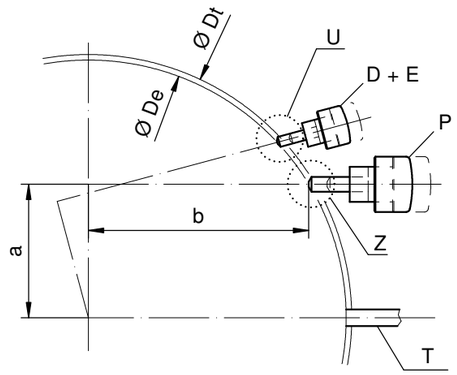


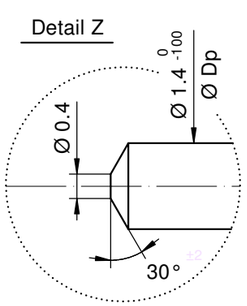
Angle poussoir A Winkel Drücker A Angle pusher A		10°
Ø Dp	a	b
1.30	5.06	12.52
1.40	5.10	12.50



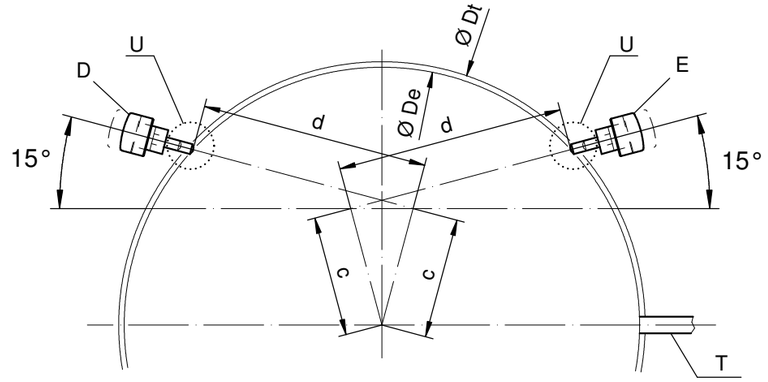


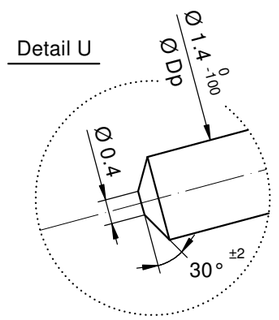
Angle poussoir A Winkel Drücker A Angle pusher A		0°
Ø Dp	a	b
1.30	7.40	11.43
1.40	7.45	11.40





Detail zu Korrektor D + E





Angle correcteur D Winkel Korrektor D Angle crrector D		
Ø Dp	c	d
1.30	7.27	11.16
1.40	7.27	11.15

Angle correcteur E Winkel Korrektor E Angle crrector E		
Ø Dp	c	d
1.30	7.27	11.46
1.40	7.27	11.45

Ø De: diamètre d'encageage
Durchmesser der Gehäusepassung
fitting-diameter

Ø Dp: diamètre du poussoir
Drückerdurchmesser
pusher-diameter

Ø Dt: diamètre total
Totaldurchmesser
total-diameter

P: poussoir en position poussée
Drücker in gedrückter Stellung
pusher in pressed position

T: tige de mise à l'heure
Stellwelle
stem

Angle des correcteurs D+E & poussoir A
Winkel der Korrektoren D+E & Drücker A
Angle of correctors D+E & pusher A

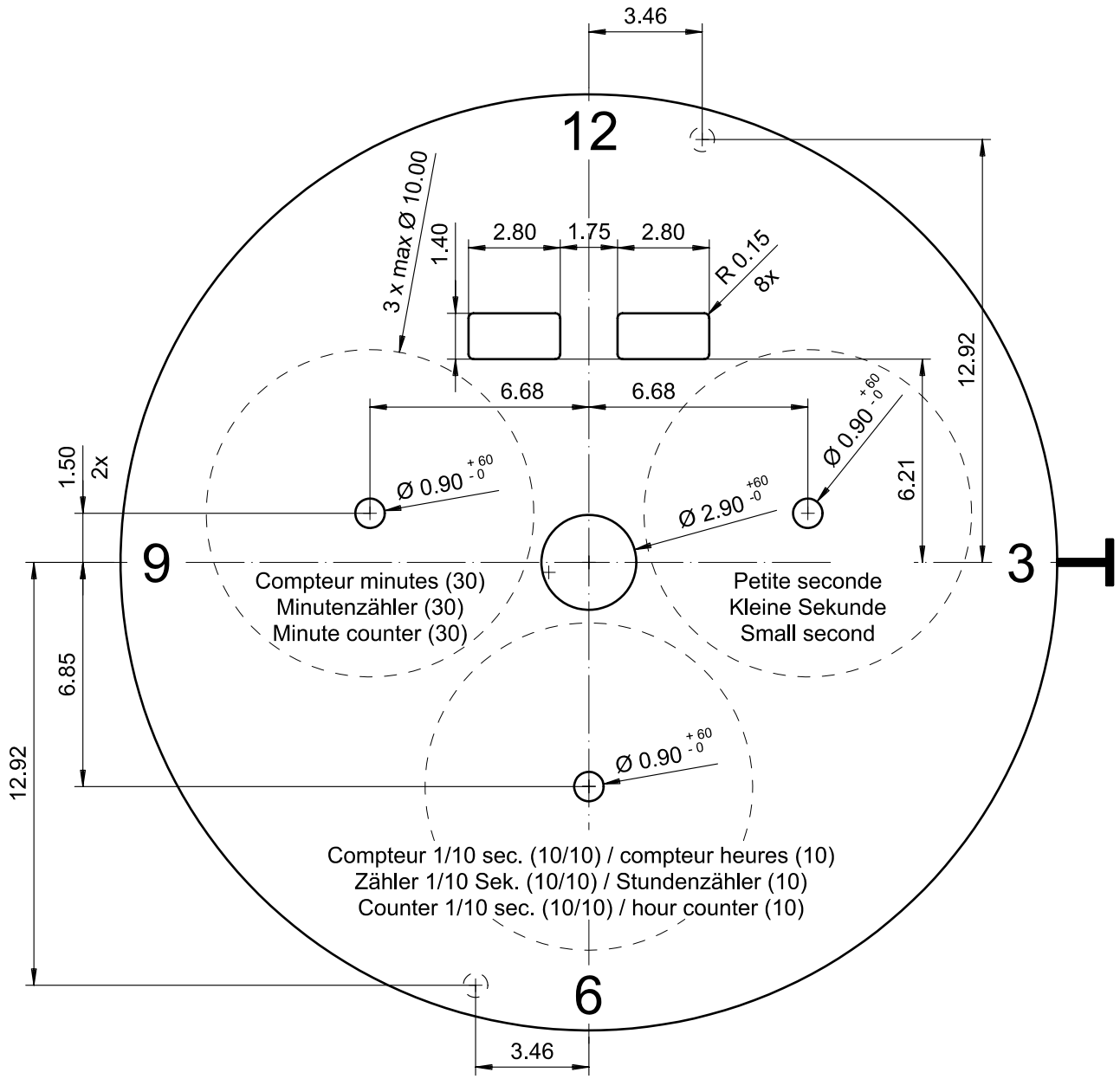
NW

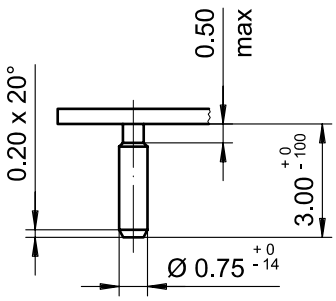
Issued	23 Jun 2009	ps
Modified	17 Mai 2013 ÄA 13305	mc
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	

RONDA | 5040.F

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5000.386 01





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

Tige	Jour	Mois
Stellw.	Tag	Monat
Stem	Day	Month
3H	12H	12H

Cadran
Zifferblatt
Dial

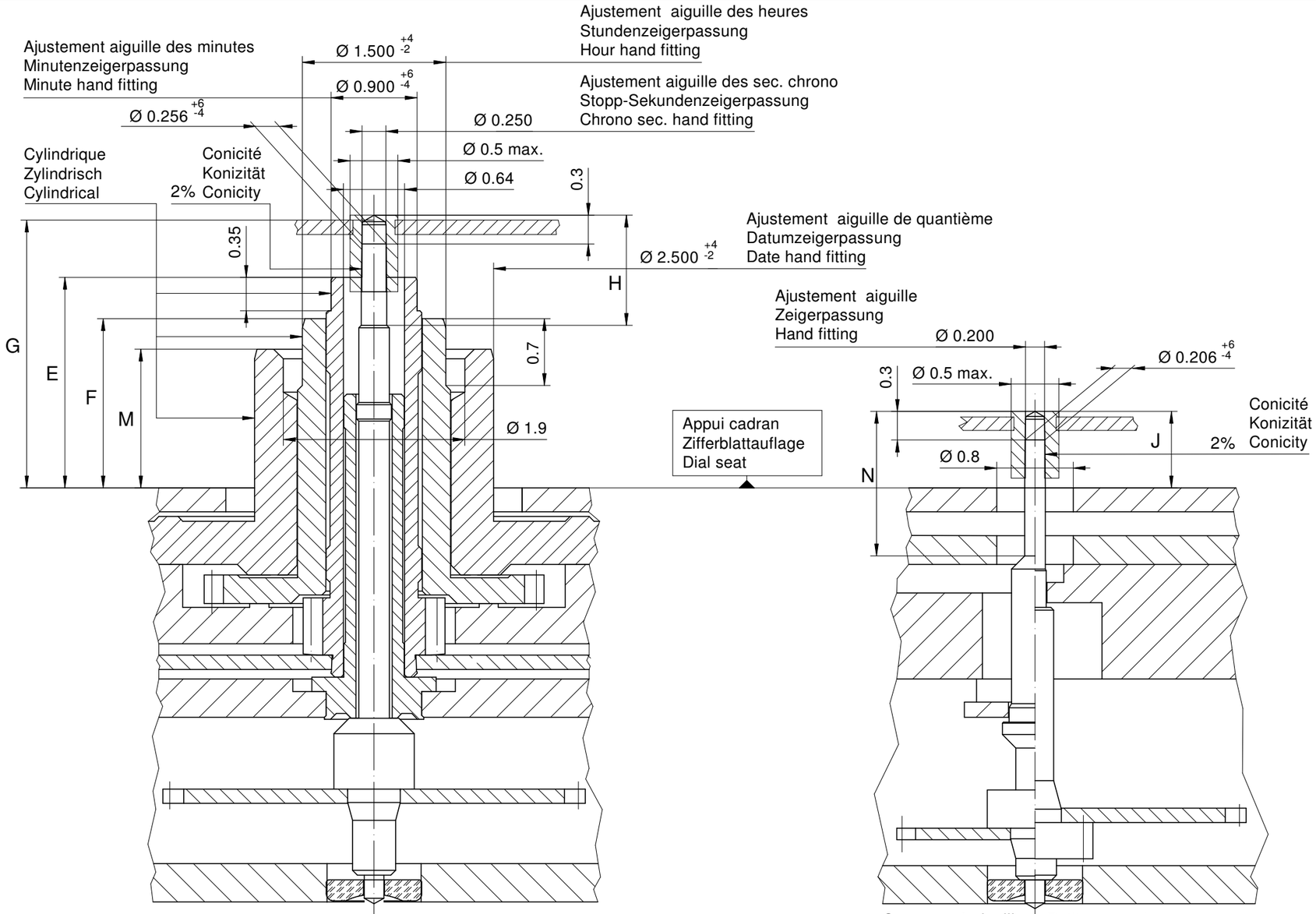
12½‴

Issued	13 Dez 2006	cw
Modified	08.Mai 2007 ÄA 1974	cm
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA | 5040.F

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.730 02



Aiguillages
Zeigerwerkhöhe
Hand fitting height

	Dépassement Höhe über Zifferblattauflage Height over dial seat							
	Pignon des secondes chrono Stopp-Sekundentrieb Chrono second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Roue indicateur de quantième Datumzeigerrad Date indicator wheel			Petite seconde Kleine Sekunde Small second	1 aig. 1 Zeiger 1 Hand Pignon compteur Zählertrieb Counter pinion
No	G	E	F	M	H	N	J	J
3	2.85	2.20	1.77	1.45	1.15	1.50	0.80	0.80
-								

Aiguillages
Zeigerwerkhöhe
Hand fitting height

	Peinture comprise / inkl. Farbe / Paint included						
	Epaisseur maximum du cadran Maximale Zifferblattdicke Maximum dial thickness						
No	Sous l'aiguille des secondes chrono Unter Stopp-Sekundenzeiger Under chrono second hand	Sous l'aiguille des minutes Unter Minutenzeiger Under minute hand	Sous l'aiguille des heures Unter Stundenzeiger Under hour hand	Sous l'aiguille de quantième Unter Datumzeiger Under date hand	Sous l'aiguille de petite seconde Unter kleine Sekundenzeiger Under small second hand	Sous l'aiguille compteur 1 aiguille Unter Zeiger 1 Zeiger Zähler Under hand 1 hand counter	Epaisseur des aiguilles Zeigerdicke Hands thickness
3	2.35	1.80	1.35	1.05	0.40	0.40	0.15
-							

	Aig. des sec. chrono Stopp-Sekundenzeiger Chrono second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Aig. de quantième Datumzeiger Date hand	Aig. petite secondes Kleine Sekundenzeiger Small second hand	Aiguille compteur (1 aig.) Zähler Zeiger (1 Zeiger) Counter hand (1 hand)	Lors de la pose d'aiguilles, le mouvement doit être soutenu. Beim Zeigersetzen muss das Werk abgestützt werden. The movement needs to be supported for hand setting.
mg max.	10	30	30	30	10	10	Masse / Masse / Weight *
µNm max.	0.06	0.80	0.80	0.40	0.07	0.02	Balourd / Unwucht / Unbalance *
gmm ^{2} max.	1.0	-	-	1.0	0.4	1.0	Inertie / Massenträgheit / Inertia *
N max.	30	40	40	40	30	30	Force de chassage / Aufpresskraft / Force

Aiguillages
Zeigerwerkhöhen 12½'''
Hand fitting heights

Issued	09 Jul 2004	mg	
Modified	15 Okt 2014 ÄA 13275	dh	
Released	Yes		
Tolerance	µm		
Scale	20 : 1 (A3H)		

RONDA 5040.F

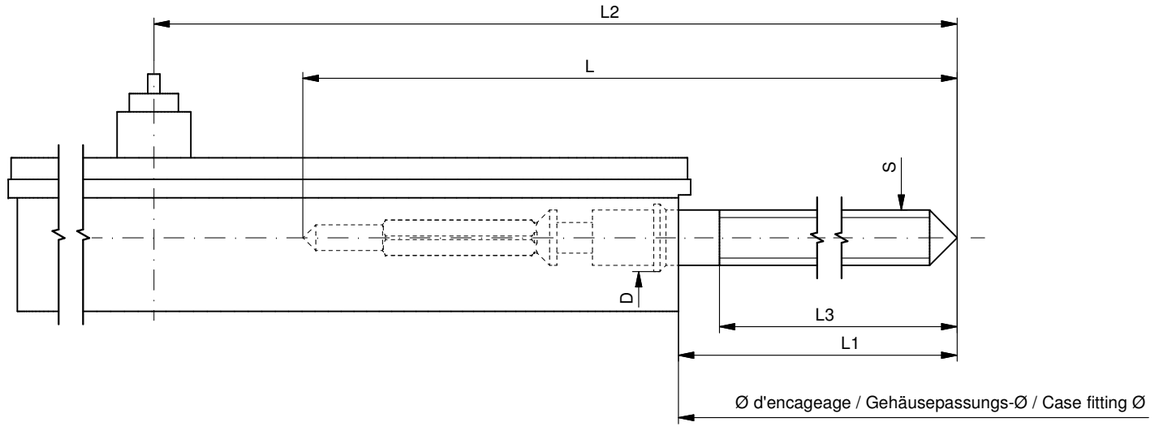
Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 3316.089 04

* En cas de données différentes, veuillez contacter le service après-vente

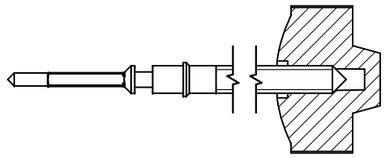
* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

* In case of different values, please contact the customer service



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

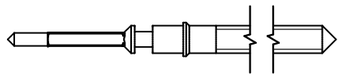
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.177.CO	20.00	10.23	24.23	10.15	0.90	1.10



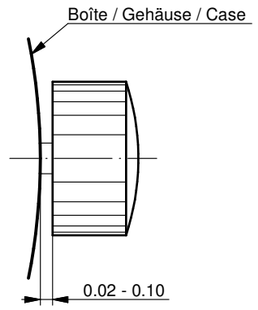
Couleur de la couronne Kronenfarbe Crown color	bleu foncé dunkelblau dark blue
Code	UN 5002

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

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.177	20.00	10.23	24.23	10.15	0.90	1.10
3000.191	32.00	22.23	36.23	22.15	0.90	1.10



Couronne normale
Normale Krone
Normal crown

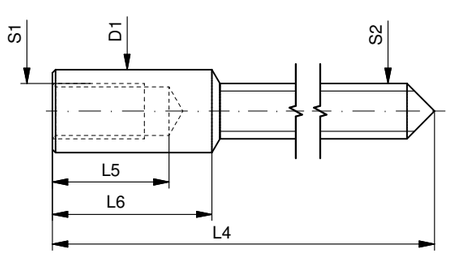


Couronne vissée
Geschraubte Krone
Screwed crown

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

5010.B, 5020.B, 5021.D, 5030.D,
5040.B, 5040.D, 5040.E, 5040.F,
5050.B, 5050.C, 5051.C, 5130.B, 5130.D

Issued	05 Sep 2012	ds5222
Modified	17 Mär 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No.	5030.019	01

Movement holder
Removing setting stem
H5XXX.1T

Movement holder
Setting hands
H5XXF.1A

Fitting dial and hands

- Crown in position II
- Wind minute hand forwards, until a click is heard before weekday changes
- Press corrector C, until next month appears
- Remove working hand
- Fit dial
- Set date hand on 1
- Point the other hands towards 12 o'clock
- Wind crown forwards, until actual time is displayed
- Wind hands forwards to actual time
- Zero chronograph hand**
- Crown in position I
- Set date*

Date switching duration

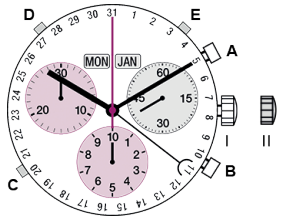
Date/Month	*~2hrs*
Weekday	*~2hrs*

***Set date**

- Corrector C → to correct date
- Corrector D → to correct weekday
- Corrector E → to correct month

****Zeroing the Chronograph hand**

A. Activate pushers A and B for 2 seconds at the same time
   (Chrono seconds hand rotates once)
B. Pusher A → to correct chrono seconds hand
C. Pusher B → to jump to hour hand
D. Pusher A → to correct hand's position
E. Pusher B → to jump to minute hand
F. Pusher A → to correct hand's position



General Instructions

Removing the setting stem can only be effected in Pos. I.

The use of supporting screws is essential when mounting the hands.

Permitted hand setting strengths:

Hr / min. hands: <40N

Other hands: <30N

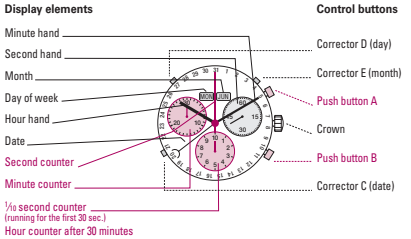
RONDA startech – Movement Cal. 5040.F

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.

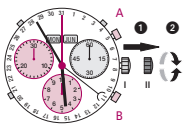
In case of repairs, guarantee claims and questions concerning the functioning of a watch, purchasers and consumers should contact their retailer or the watch manufacturer, for which the relevant information can be found in the sales or guarantee documentation provided with the watch.

Description of the display and control buttons



01

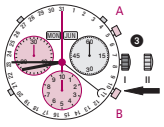
Setting the time



❶* Pull out the crown to position **II** (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.

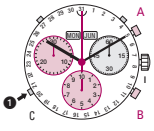
02

Setting the date (quick mode)

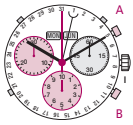
Example after a change of month:

– Date on watch: 31

– Current date: 1



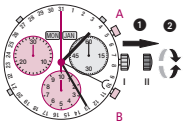
❶ Press the corrector C once to adjust the date 1 day forward.



Please note:
The date for the following day must be set during the date changing phase between approx 9:00 PM and 00:20 AM.

03

Setting the time, date, day of week and month

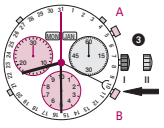


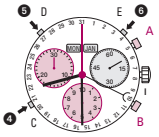
Example:
– On the watch: 10/MON/JAN/1:25 AM
– Current: 20/THU/OCT/8:30 PM

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

❷** Turn crown until the current time is shown.

❸* Push crown to position **I** (watch continues to run).

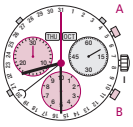




❹ Press the corrector **C** to gradually advance the date hand.

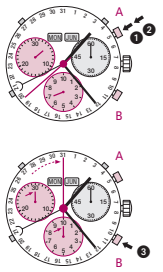
❺ Press the corrector **D** to gradually advance the day of week.

❻ Press the corrector **E** to gradually advance the month.



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)

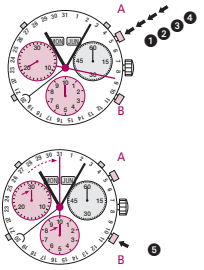
Example:

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 sek / 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)

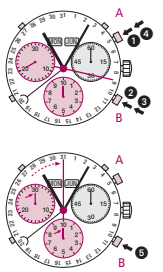
❸ **Restart:** (timing is resumed)

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)

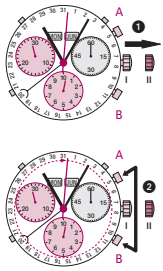
❸ **Making up the measured time:**
(The chronograph hands are quickly advanced to the ongoing measured time.)

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

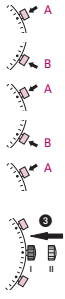


Adjusting the chronograph hands to zero position

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 **II** (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 6h)
Single step A **1 x short**
Continuous A **long**

Adjusting the next hand B

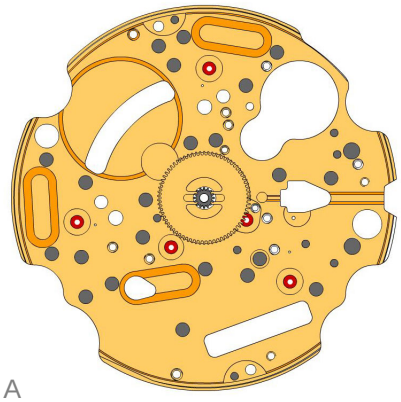
Adjusting the minute counter (position 9h)
Single step A **1 x short**
Continuous A **long**

❸ Returning the crown to position **I**
Termination of the chronograph hands adjustment (can be carried out at any time).

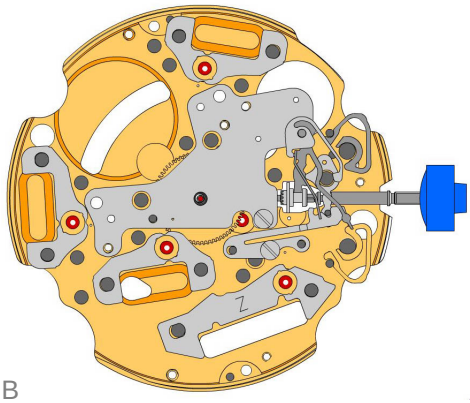
08

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

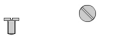
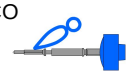
11/2022

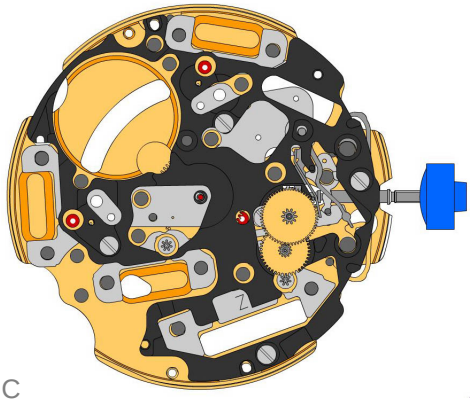


A



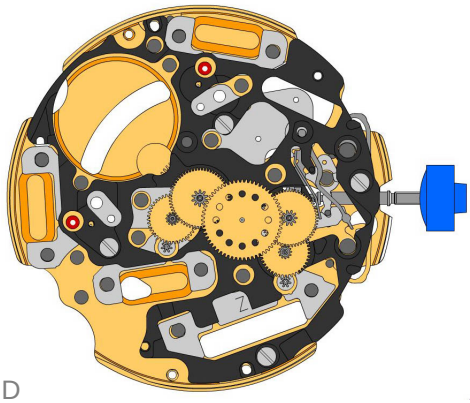
B

2000.576 1.		Main plate Parts 2000.576, 3015.072 and 3905.058 must be exchanged together.
3305.287.CO 2.		Cannon pinion with driver (Aig.3)
2030.017.CO 3.		Centre bridge Centre bridge held by 1 screw 4000.250. Parts 2030.017.CO and 3402.009.CO must be exchanged together.
4000.250 4.		Screw
3001.045 5.		Sliding pinion
3000.177.CO 6.		Setting stem
3017.049 7.		Setting lever
3905.053 8.		Setting lever jumper (2 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 9.		Screw
3015.072 10.		Yoke (2 positions) Parts 2000.576, 3015.072 and 3905.058 must be exchanged together.
3905.058 11.		Yoke spring Tensioning the spring arm. Parts 2000.576, 3015.072 and 3905.058 must be exchanged together.
3406.030 12.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 13.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 14.		Stator Mark |Z| on stator.
3622.039 15.		Stator (counter 6h, 9h, chrono)
3622.039 16.		Stator (counter 6h, 9h, chrono)
3622.039 17.		Stator (counter 6h, 9h, chrono)



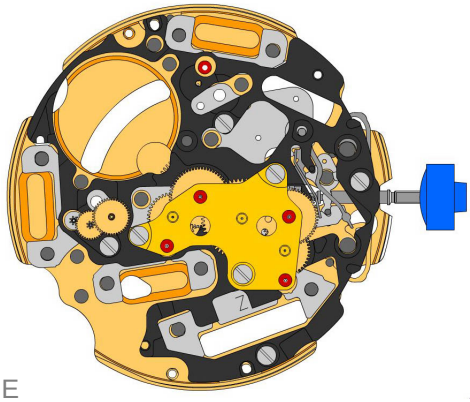
C

3603.079 18.		Plastic bracket Plastic bracket held by 4 screws 4000.250.
4000.250 19.		Screw
3715.094.RK 20.		Rotor
3715.094.RK 21.		Rotor
3147.046.CO 22.		Intermediate wheel
3136.142.CO 23.		Second wheel (long)



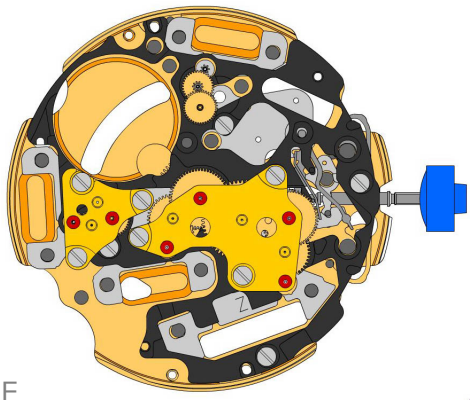
D

3147.047.CO 24.		Intermediate wheel (chrono)
3136.150.CO 25.		Chronograph wheel (Aig.3)
3122.056.CO 26.		Third wheel



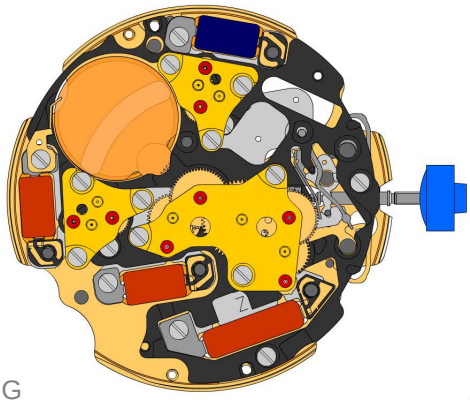
E

2020.148.G 27.		Train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 28.		Screw
3715.095.RK 29.		Rotor
3147.048.CO 30.		Intermediate wheel (counter)
3402.006.CO 31.		Minute counting wheel



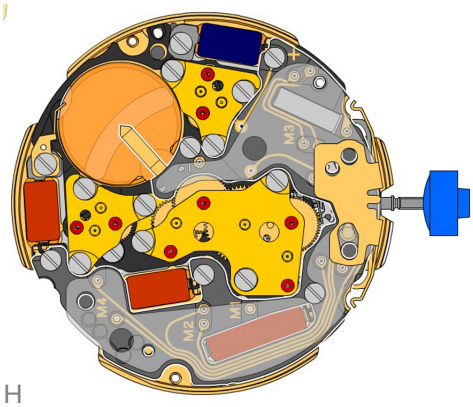
F

2020.149.G 32.		Counter train wheel bridge Counter train wheel bridge held by 3 screws 4000.250.
4000.250 33.		Screw
3715.095.RK 34.		Rotor
3147.053.CO 35.		Intermediate wheel (counter 1/10sec)
3402.009.CO 36.		Counting wheel 1/10 sec Parts 2030.017.CO and 3402.009.CO must be exchanged together.



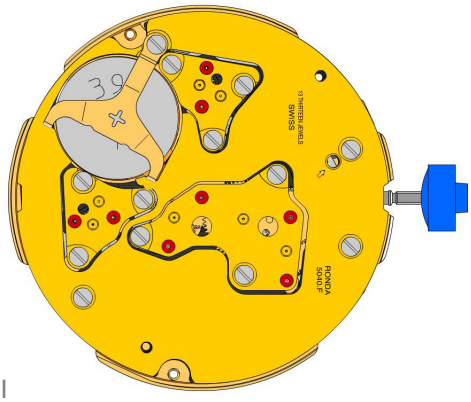
G

2020.149.G 37.		Counter train wheel bridge Counter train wheel bridge held by 3 screws 4000.250.
4000.250 38.		Screw
3621.053.RK 39.		Coil Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 40.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 41.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.055.RK 42.		Coil (counter 6h) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
4000.250 43.		Screw
3601.118 44.		Contact strip Contact strip held by 1 screw 4000.250.
4000.250 45.		Screw
3603.034 46.		Battery insulator

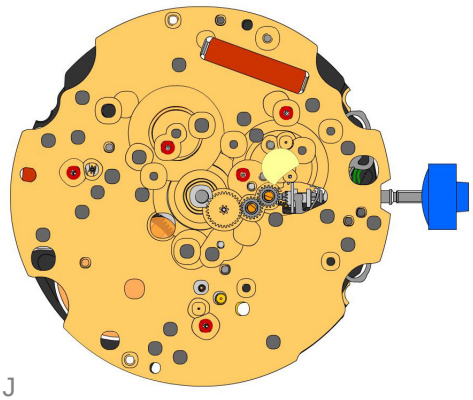


H

3612.144.5040 47.		Electronic module Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now.
4000.248 48.		Screw
3603.069 49.		Circuit insulator
3601.107.G 50.		Pusher contact spring

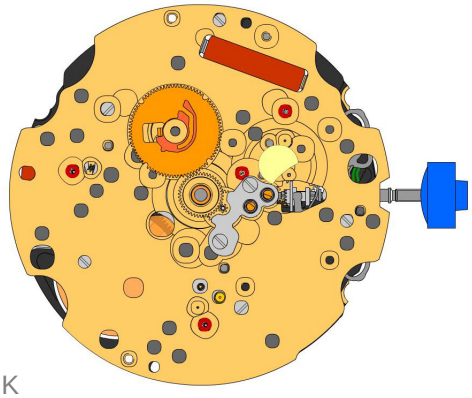


2130.137.G.M01.5040F 51.		Electronic module cover Electronic module cover held by 3 screws 4000.250.
3600.010.HGF 52.		Battery 395
3601.109.G 53.		Bridle + Bridle held by 1 screw 4000.250.
4000.250 54.		Screw



J

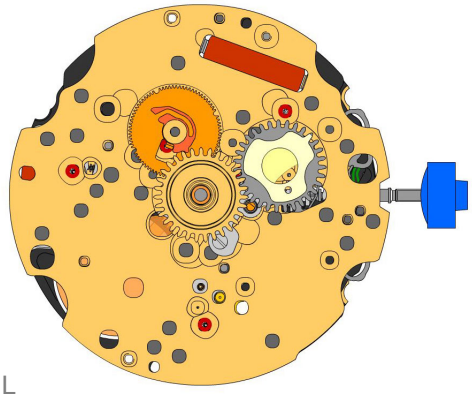
2000.576 55.		Main plate
3004.164 56.		Setting wheel
3004.164 57.		Setting wheel
3007.078.CO 58.		Minute wheel



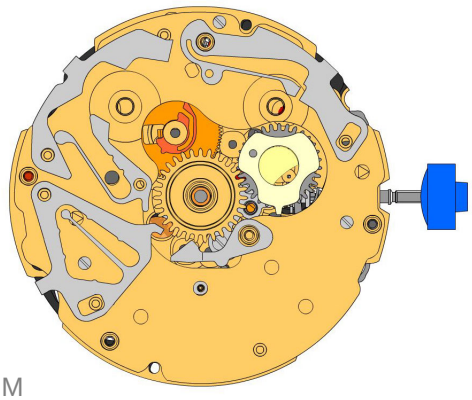
K

2130.177 59.		Minute train bridge Minute train bridge held by 4 screws 4000.319.
4000.319 60.		Screw
3301.247 61.		Hour wheel (Aig.3)
3004.171.CO 62.		Date indicator driving wheel

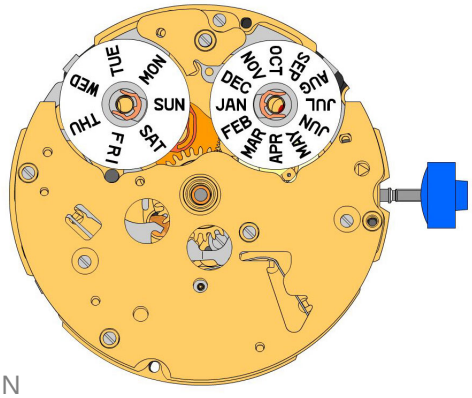
3004.173 63.		Month driving wheel
3004.174 64.		Month finger Ridges at the bottom side from the month meshed in both gaps of the month driving wheel.
3301.248 65.		Date indicator wheel



L



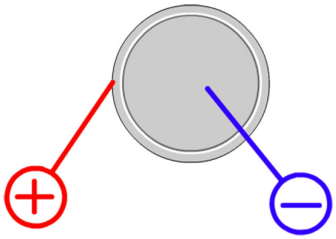
M



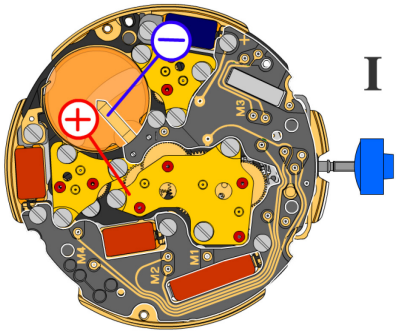
N

2130.155.CO 66.		Date platform Date platform held by 3 screws 4000.282.
4000.282 67.		Screw
3507.054 68.		Month corrector
3507.055 69.		Day corrector
3507.056 70.		Date corrector
3500.053 71.		Day jumper
3500.065 72.		Date jumper
2130.157.G 73.		Combined maintaining plate Combined maintaining plate held by 4 screws 4000.286.
4000.286 74.		Screw
2130.166.G 75.		Corrector maintaining plate Corrector maintaining plate held by 1 screw 4000.286.
4000.286 76.		Screw
3905.059 77.		Date jumper spring Insert the date jumper spring in the provided opening.
3508.153.AA.E.A 78.		Day indicator (standard)
3508.154.AE.E.A 79.		Month indicator(standard)
3909.028 80.		Pillar spring clip
3909.028 81.		Pillar spring clip

8200 82.		Moebius 8200
9014 83.		Moebius 9014
124 84.		Jismaa 124
9020 85.		Moebius 9020

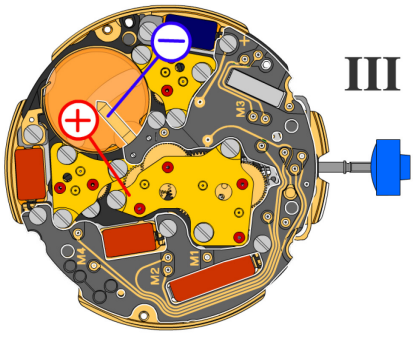


Battery	**395**
Voltage	**1.55 V**



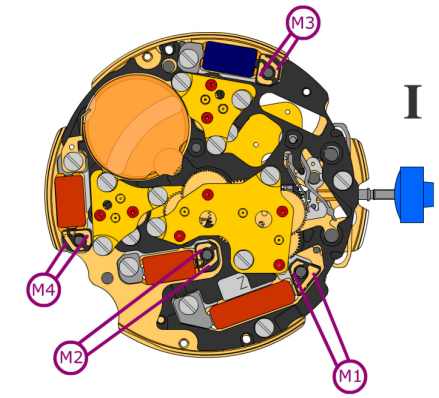
Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

Typical consumption	***1.32 µA***
Maximal consumption	***1.65 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**

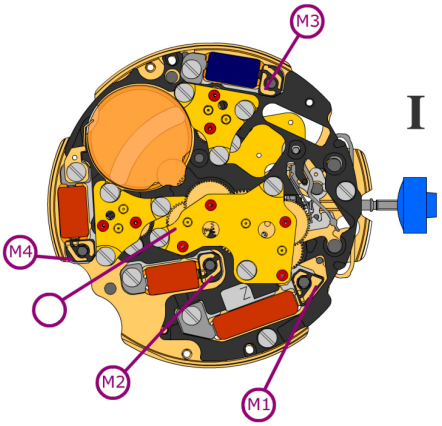


Setting stem in position III, 60 s measuring interval:

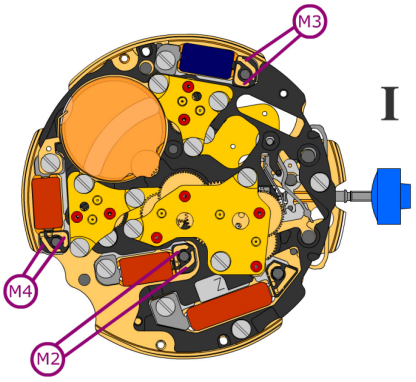
Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***



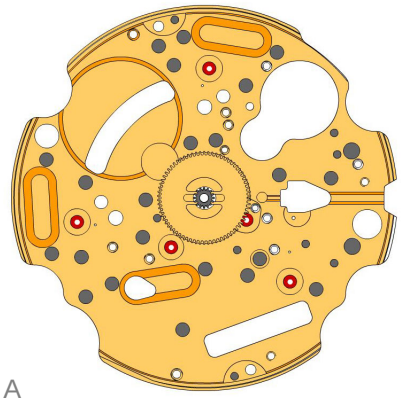
Coil resistance M1	**1.90 kΩ .. 2.10 kΩ**
Coil resistance M2	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M3	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M4	**1.68 kΩ .. 1.88 kΩ**



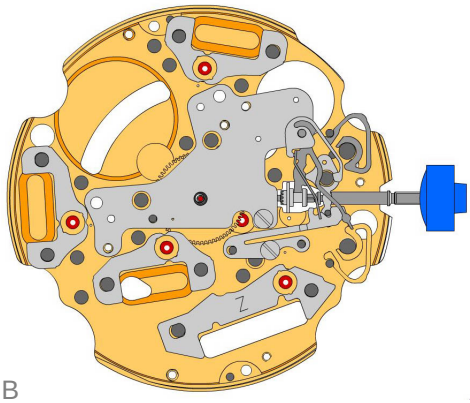
Coil isolation M1/M2/M3/M4	**∞ kΩ**



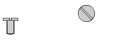
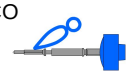
Signal generator (4.9 ms, 8 Hz):	
Lower working voltage limit M2/M3/M4	**1.20 V**

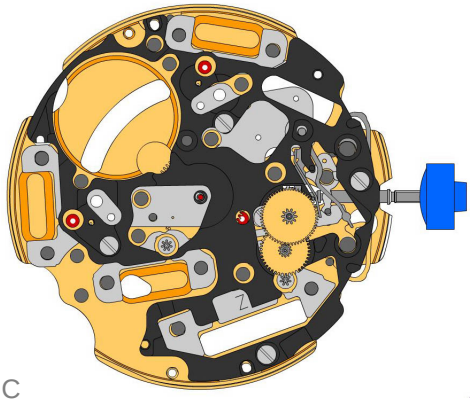


A



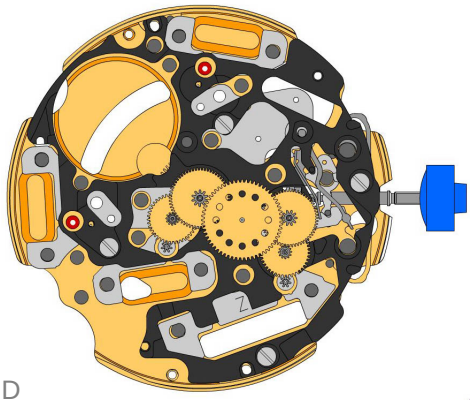
B

2000.576.G 1.		Main plate
3305.287.CO 2.		Cannon pinion with driver (Aig.3)
2030.017.CO 3.		Centre bridge Centre bridge held by 1 screw 4000.250. Parts 2030.017.CO and 3402.009.CO must be exchanged together.
4000.250 4.		Screw
3001.045 5.		Sliding pinion
3000.177.CO 6.		Setting stem
3017.049 7.		Setting lever
3905.053 8.		Setting lever jumper (2 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 9.		Screw
3015.080 10.		Yoke (2 positions)
3905.067 11.		Yoke spring
3406.030 12.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 13.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 14.		Stator Mark |Z| on stator.
3622.039 15.		Stator (counter 6h, 9h, chrono)
3622.039 16.		Stator (counter 6h, 9h, chrono)
3622.039 17.		Stator (counter 6h, 9h, chrono)



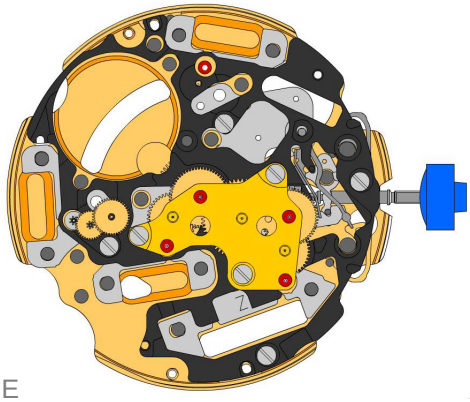
C

3603.079 18.		Plastic bracket Plastic bracket held by 4 screws 4000.250.
4000.250 19.		Screw
3715.094.RK 20.		Rotor
3715.094.RK 21.		Rotor
3147.046.CO 22.		Intermediate wheel
3136.142.CO 23.		Second wheel (long)



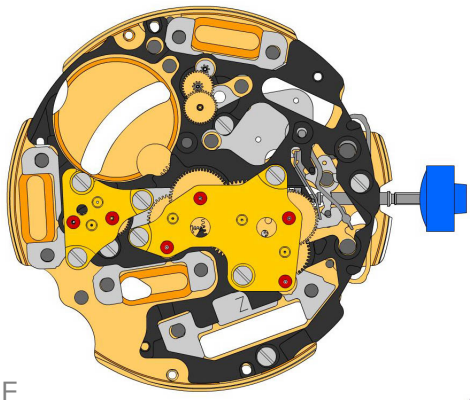
D

3147.047.CO 24.		Intermediate wheel (chrono)
3136.150.CO 25.		Chronograph wheel (Aig.3)
3122.056.CO 26.		Third wheel



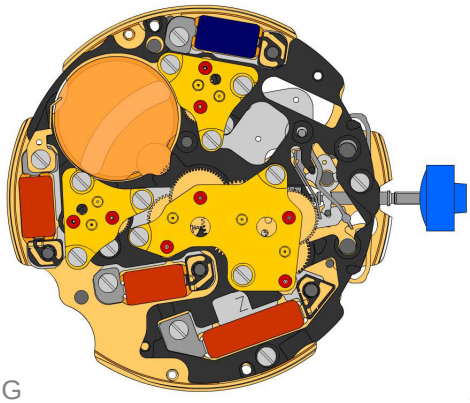
E

2020.148.G 27.		Train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 28.		Screw
3715.095.RK 29.		Rotor
3147.048.CO 30.		Intermediate wheel (counter)
3402.006.CO 31.		Minute counting wheel



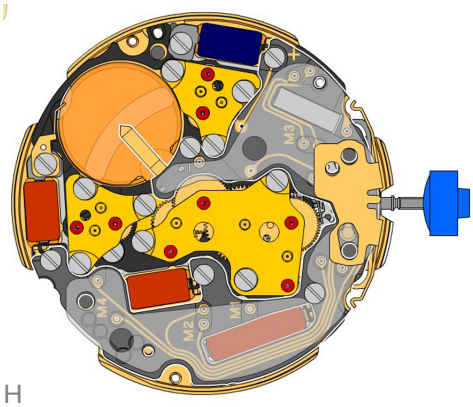
F

2020.149.G 32.		Counter train wheel bridge Counter train wheel bridge held by 3 screws 4000.250.
4000.250 33.		Screw
3715.095.RK 34.		Rotor
3147.053.CO 35.		Intermediate wheel (counter 1/10sec)
3402.009.CO 36.		Counting wheel 1/10 sec Parts 2030.017.CO and 3402.009.CO must be exchanged together.



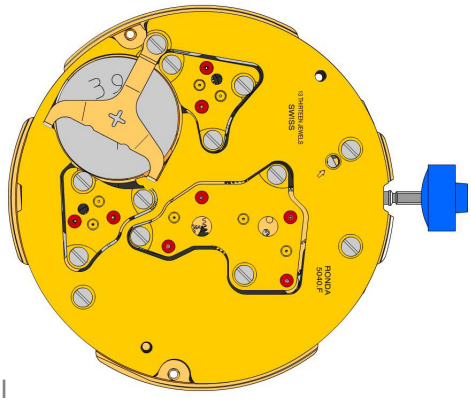
G

2020.149.G 37.		Counter train wheel bridge Counter train wheel bridge held by 3 screws 4000.250.
4000.250 38.		Screw
3621.053.RK 39.		Coil Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 40.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 41.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.055.RK 42.		Coil (counter 6h) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
4000.250 43.		Screw
3601.118 44.		Contact strip Contact strip held by 1 screw 4000.250.
4000.250 45.		Screw
3603.034 46.		Battery insulator

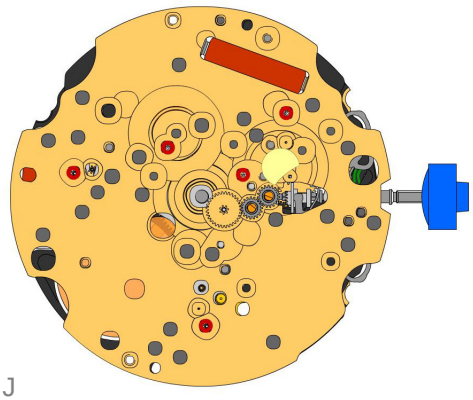


H

3612.144.5040 47.		Electronic module Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now.
4000.248 48.		Screw
3603.069 49.		Circuit insulator
3601.107.G 50.		Pusher contact spring

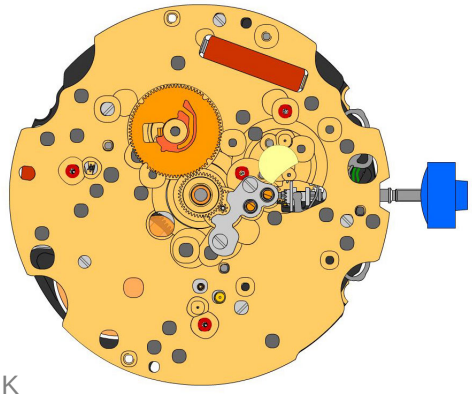


2130.137.G.M01.5040F 51.		Electronic module cover Electronic module cover held by 3 screws 4000.250.
3600.010.HGF 52.		Battery 395
3601.109.G 53.		Bridle + Bridle held by 1 screw 4000.250.
4000.250 54.		Screw



J

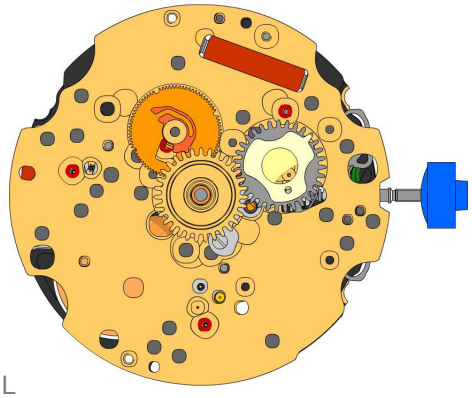
2000.576.G 55.		Main plate
3004.164 56.		Setting wheel
3004.164 57.		Setting wheel
3007.078.CO 58.		Minute wheel



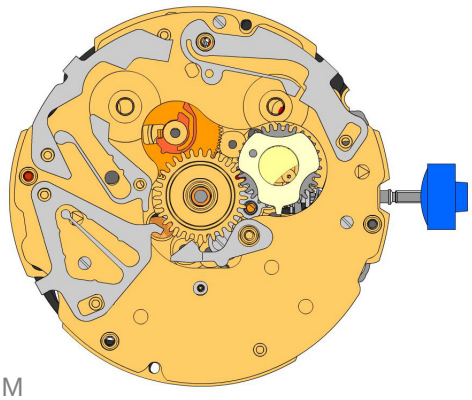
K

2130.177 59.		Minute train bridge Minute train bridge held by 4 screws 4000.319.
4000.319 60.		Screw
3301.247 61.		Hour wheel (Aig.3)
3004.171.CO 62.		Date indicator driving wheel

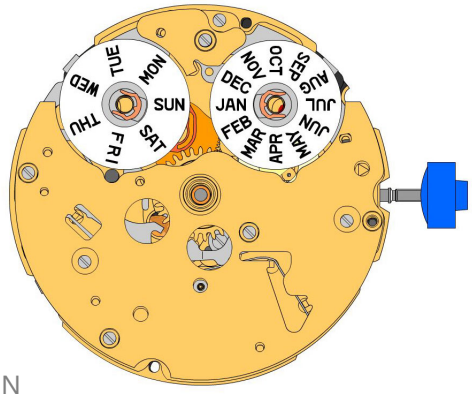
3004.173 63.		Month driving wheel
3004.174 64.		Month finger Ridges at the bottom side from the month meshed in both gaps of the month driving wheel.
3301.248 65.		Date indicator wheel



L



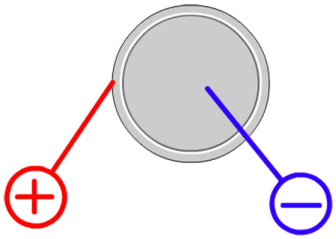
M



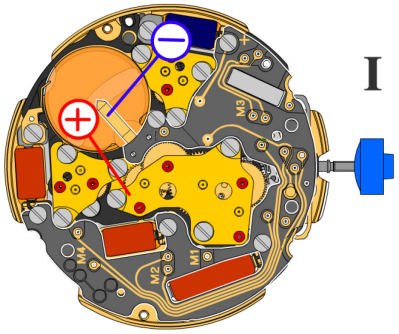
N

2130.155.CO 66.		Date platform Date platform held by 3 screws 4000.282.
4000.282 67.		Screw
3507.054 68.		Month corrector
3507.055 69.		Day corrector
3507.056 70.		Date corrector
3500.053 71.		Day jumper
3500.065 72.		Date jumper
2130.157.G 73.		Combined maintaining plate Combined maintaining plate held by 4 screws 4000.286.
4000.286 74.		Screw
2130.166.G 75.		Corrector maintaining plate Corrector maintaining plate held by 1 screw 4000.286.
4000.286 76.		Screw
3905.059 77.		Date jumper spring Insert the date jumper spring in the provided opening.
3508.153.AA.E.A 78.		Day indicator (standard)
3508.154.AE.E.A 79.		Month indicator(standard)
3909.028 80.		Pillar spring clip
3909.028 81.		Pillar spring clip

8200 82.		Moebius 8200
9014 83.		Moebius 9014
124 84.		Jismaa 124
9020 85.		Moebius 9020

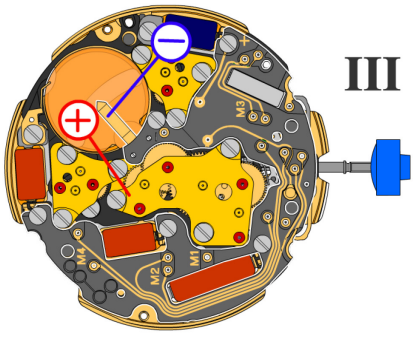


Battery	**395**
Voltage	**1.55 V**



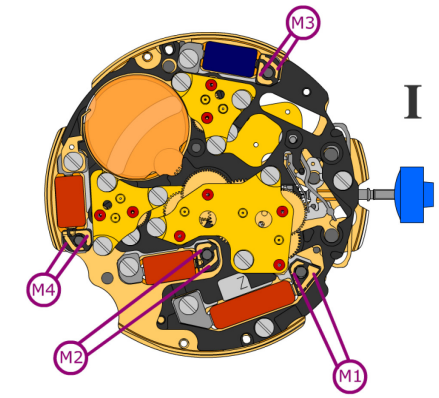
Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

Typical consumption	***1.32 µA***
Maximal consumption	***1.65 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**

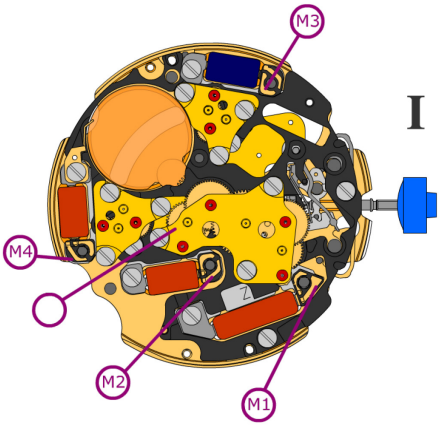


Setting stem in position III, 60 s measuring interval:

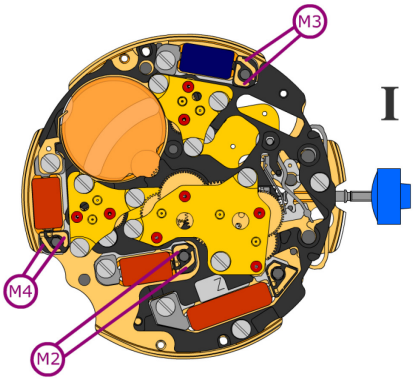
Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***



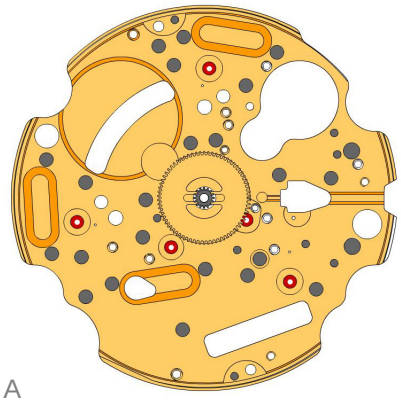
Coil resistance M1	**1.90 kΩ .. 2.10 kΩ**
Coil resistance M2	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M3	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M4	**1.68 kΩ .. 1.88 kΩ**



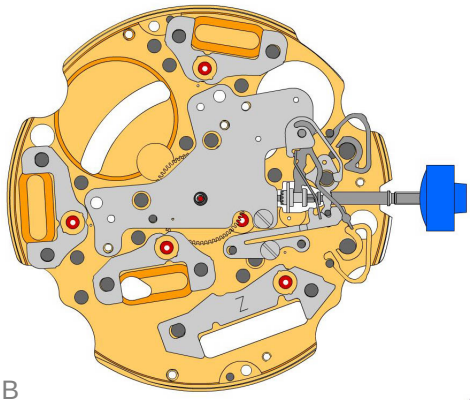
Coil isolation M1/M2/M3/M4	**∞ kΩ**



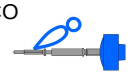
Signal generator (4.9 ms, 8 Hz):	
Lower working voltage limit M2/M3/M4	**1.20 V**

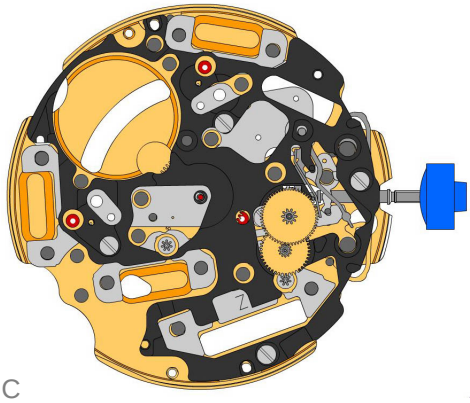


A



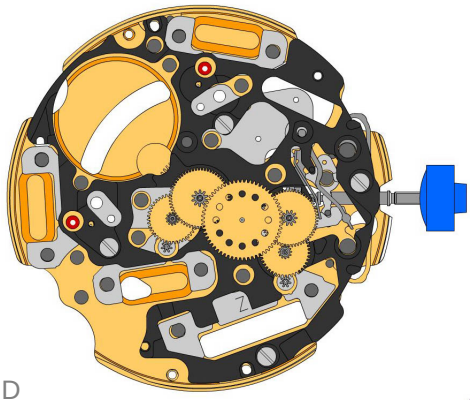
B

2000.576.G 1.		Main plate
3305.287.CO 2.		Cannon pinion with driver (Aig.3)
2030.039.CO 3.		Centre bridge Centre bridge held by 1 screw 4000.250.
4000.250 4.		Screw
3001.045 5.		Sliding pinion
3000.177.CO 6.		Setting stem
3017.049 7.		Setting lever
3905.053 8.		Setting lever jumper (2 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 9.		Screw
3015.080 10.		Yoke (2 positions)
3905.067 11.		Yoke spring Tensioning the spring arm.
3406.030 12.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 13.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 14.		Stator Mark |Z| on stator.
3622.039 15.		Stator (counter 6h, 9h, chrono)
3622.039 16.		Stator (counter 6h, 9h, chrono)
3622.039 17.		Stator (counter 6h, 9h, chrono)



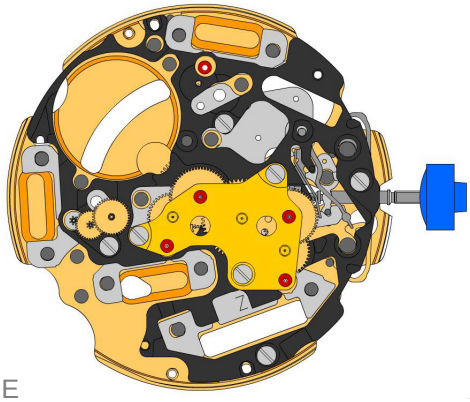
C

3603.079 18.		Plastic bracket Plastic bracket held by 4 screws 4000.250.
4000.250 19.		Screw
3715.094.RK 20.		Rotor
3715.094.RK 21.		Rotor
3147.046.CO 22.		Intermediate wheel
3136.142.CO 23.		Second wheel (long)



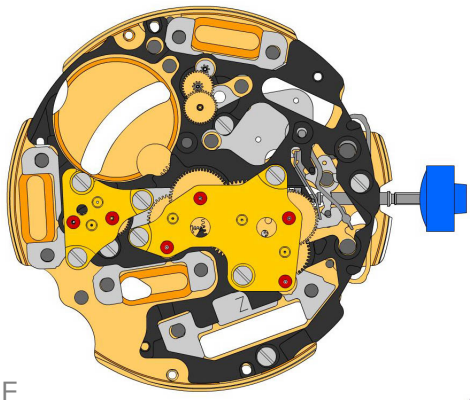
D

3147.047.CO 24.		Intermediate wheel (chrono)
3136.150.CO 25.		Chronograph wheel (Aig.3)
3122.056.CO 26.		Third wheel



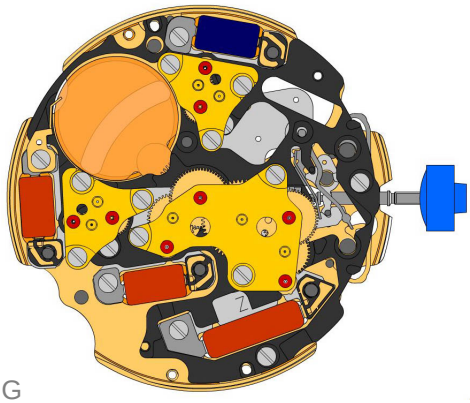
E

2020.148.G 27.		Train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 28.		Screw
3715.095.RK 29.		Rotor
3147.048.CO 30.		Intermediate wheel (counter)
3402.006.CO 31.		Minute counting wheel



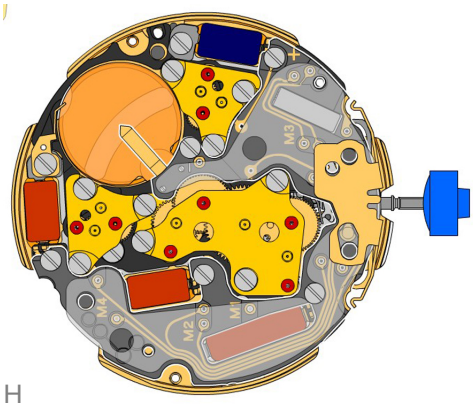
F

2020.149.G 32.		Counter train wheel bridge Counter train wheel bridge held by 3 screws 4000.250.
4000.250 33.		Screw
3715.095.RK 34.		Rotor
3147.053.CO 35.		Intermediate wheel (counter 1/10sec)
3402.016.CO 36.		Counting wheel 1/10 sec



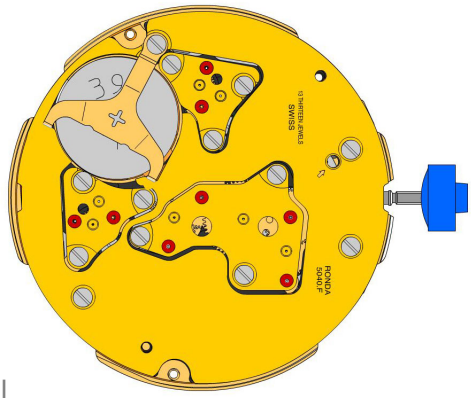
G

2020.149.G 37.		Counter train wheel bridge Counter train wheel bridge held by 3 screws 4000.250.
4000.250 38.		Screw
3621.053.RK 39.		Coil Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 40.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 41.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.055.RK 42.		Coil (counter 6h) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
4000.250 43.		Screw
3601.118 44.		Contact strip Contact strip held by 1 screw 4000.250.
4000.250 45.		Screw
3603.034 46.		Battery insulator

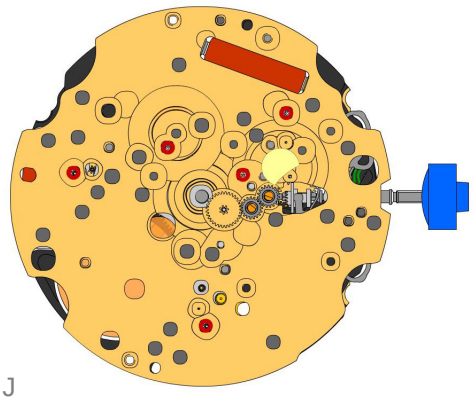


H

3612.144.5040 47.		Electronic module Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now.
4000.248 48.		Screw
3603.069 49.		Circuit insulator
3601.107.G 50.		Pusher contact spring

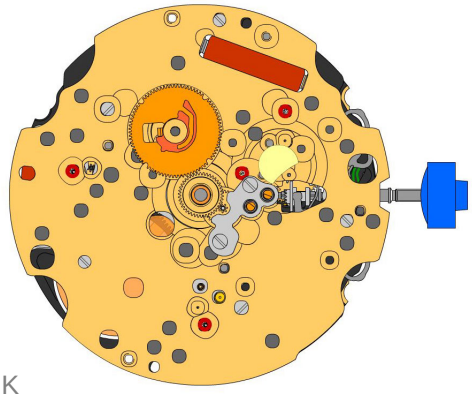


2130.137.G.M01.5040F 51.		Electronic module cover Electronic module cover held by 3 screws 4000.250.
3600.010.HGF 52.		Battery 395
3601.109.G 53.		Bridle + Bridle held by 1 screw 4000.250.
4000.250 54.		Screw



J

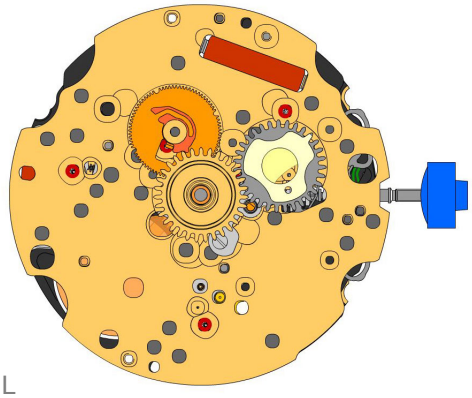
2000.576.G 55.		Main plate
3004.164 56.		Setting wheel
3004.164 57.		Setting wheel
3007.078.CO 58.		Minute wheel



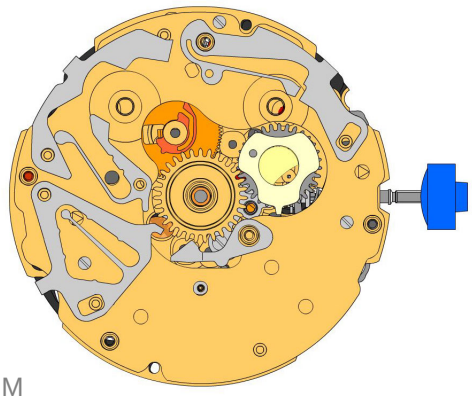
K

2130.177 59.		Minute train bridge Minute train bridge held by 4 screws 4000.319.
4000.319 60.		Screw
3301.247 61.		Hour wheel (Aig.3)
3004.171.CO 62.		Date indicator driving wheel

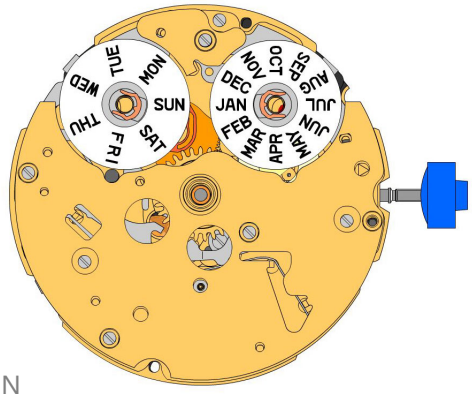
3004.173 63.		Month driving wheel
3004.174 64.		Month finger Ridges at the bottom side from the month meshed in both gaps of the month driving wheel.
3301.248 65.		Date indicator wheel



L



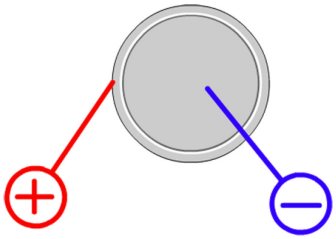
M



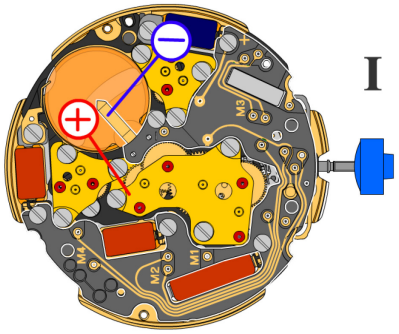
N

2130.155.CO 66.		Date platform Date platform held by 3 screws 4000.282.
4000.282 67.		Screw
3507.054 68.		Month corrector
3507.055 69.		Day corrector
3507.056 70.		Date corrector
3500.053 71.		Day jumper
3500.065 72.		Date jumper
2130.157.G 73.		Combined maintaining plate Combined maintaining plate held by 4 screws 4000.286.
4000.286 74.		Screw
2130.166.G 75.		Corrector maintaining plate Corrector maintaining plate held by 1 screw 4000.286.
4000.286 76.		Screw
3905.059 77.		Date jumper spring Insert the date jumper spring in the provided opening.
3508.153.AA.E.A 78.		Day indicator (standard)
3508.154.AE.E.A 79.		Month indicator(standard)
3909.028 80.		Pillar spring clip
3909.028 81.		Pillar spring clip

8200 82.		Moebius 8200
9014 83.		Moebius 9014
124 84.		Jismaa 124
9020 85.		Moebius 9020

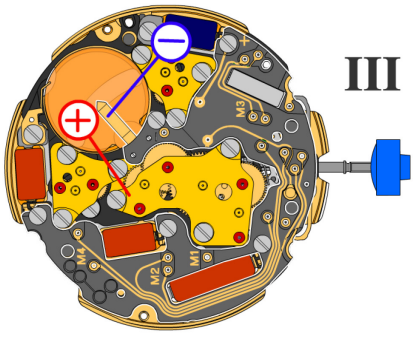


Battery	**395**
Voltage	**1.55 V**



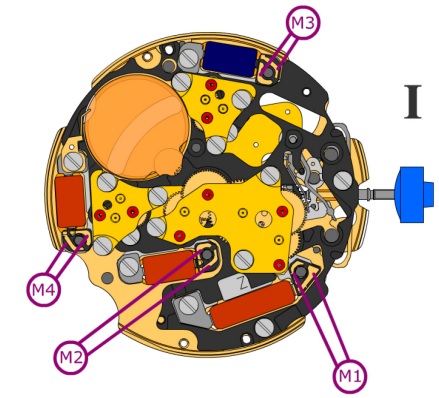
Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

Typical consumption	***1.32 µA***
Maximal consumption	***1.65 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**

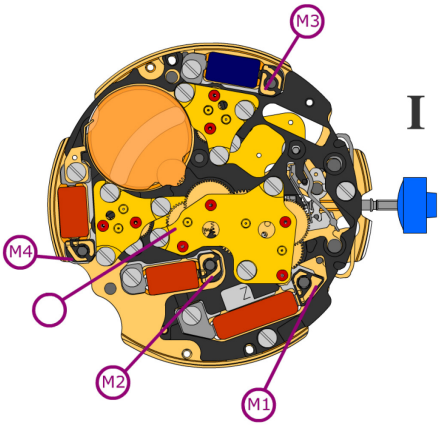


Setting stem in position III, 60 s measuring interval:

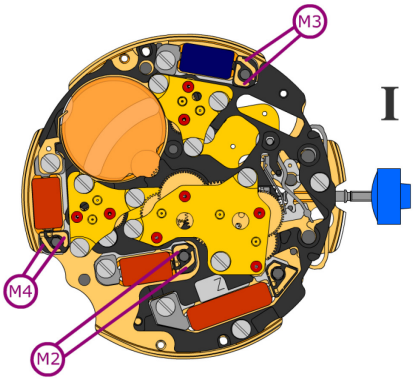
Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***



Coil resistance M1	**1.90 kΩ .. 2.10 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**