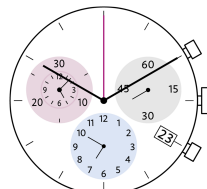
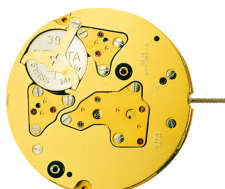


# Quartz Movements

## 计时功能

### 朗达 明星系列

型号 5130.D - 12□"



## 产品规格

指针式石英机芯

系列

明星系列

型号

5130.D

尺寸

12□"

版本 瑞士制造

13 钻石 / 金色

版本 瑞士零件 远东组装

6 钻石 / 银色

电池寿命

48 月

标准针高

2

## 特点

- 金属机芯，可修理
- 拉停把心省电功能：节省大概70%耗电
- 两个按掣简易操作

## 功能

- 响闹
- 30分钟 / 12小时计时小眼
- 中心大秒计时（1/1秒）
- 12小时计时小眼
- 积累及分段计时
- 计时
- 日历
- 小秒针

# Quartz Movements

## 计时功能

### 朗达 明星系列

型号 5130.D - 12□”

#### 技术规格

机芯直径	28.60 mm
内罩座位直径	28.00 mm
机芯厚度	4.40 mm
电池以上厚度	4.40 mm
机芯座位	0.60 mm
把中	1.90 mm
把心行程	0.90 mm
把心螺纹直径	0.90 mm
秒针运行扭力 - 一般情况下	6 $\mu$ Nm
分针运行扭力 - 一般情况下	300 $\mu$ Nm
计时大秒针运行扭力 - 一般情况下	7 $\mu$ Nm
运作温度	0 - 50 ° C
误差率	-10/ +20 秒/月
防磁度	18.8 Oe
防震度	NIHS 91-10

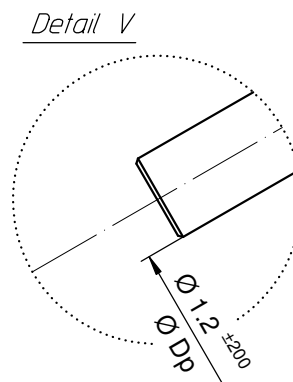
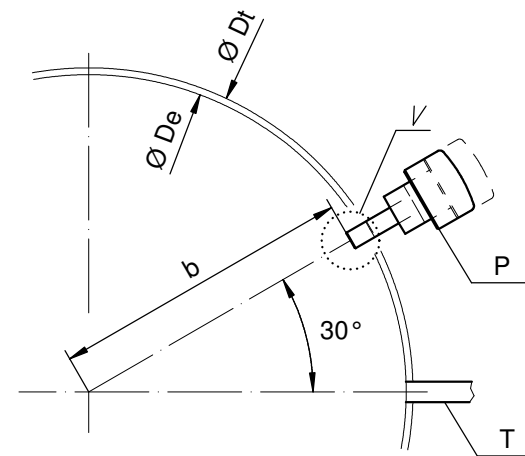


#### 电池规格

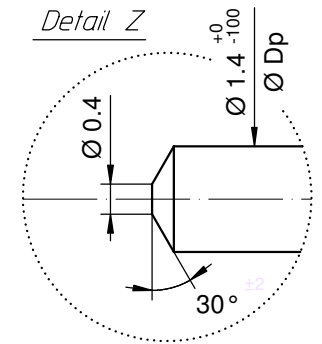
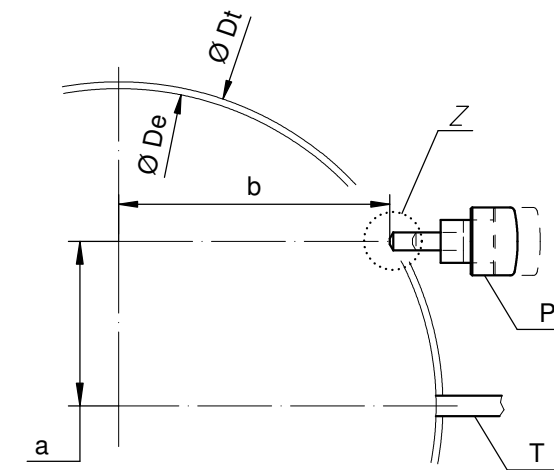
电池类型	型号 395
电池寿命	48 月
电压	1.5 V
电耗 - 一般情况下	1.48 $\mu$ A (日历不在跳动当中)
电耗 - 上限	1.65 $\mu$ A (日历不在跳动当中)



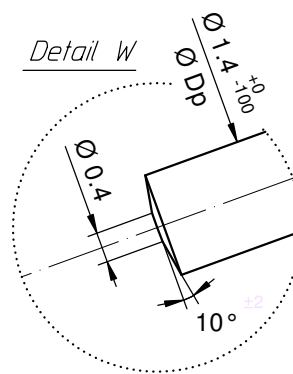
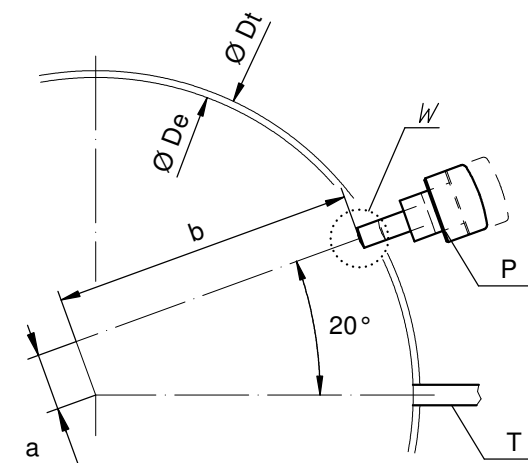
Angle Winkel Angle	30°	
Ø Dp	b	
1.00	13.50	
1.10	13.50	
1.20	13.50	
1.30	13.50	
1.40	13.50	



Angle Winkel Angle	0°	
Ø Dp	a	b
1.30	7.40	11.43
1.40	7.45	11.40



Angle Winkel Angle	20°	
Ø Dp	a	b
1.30	2.57	13.22
1.40	2.59	13.21



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

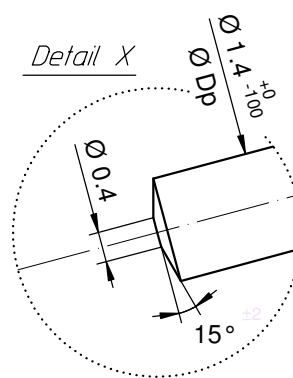
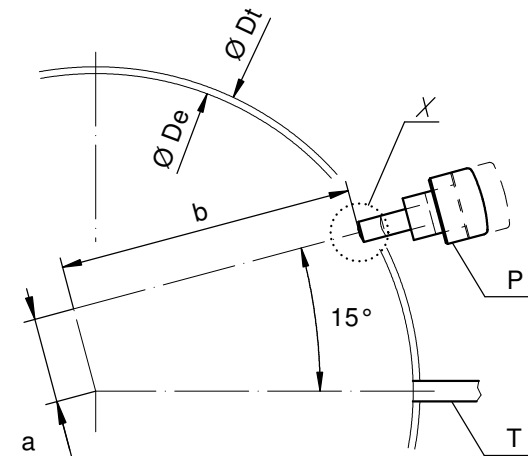
Ø Dp: diamètre du poussoir  
Drückerdurchmesser  
pusher-diameter

Ø Dt: diamètre total  
Totaldurchmesser  
total-diameter

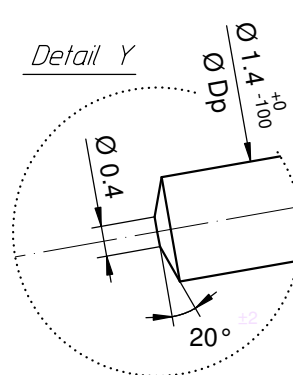
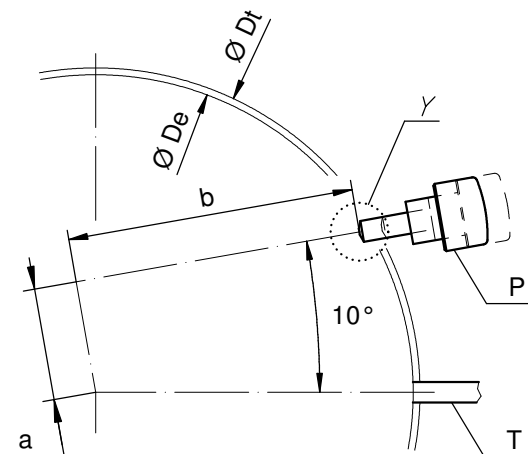
P: poussoir en position poussée  
Drücker in gedrückter Stellung  
pusher in pressed position

T: tige de mise à l'heure  
Stellwelle  
stem

Angle Winkel Angle	15°	
Ø Dp	a	b
1.30	3.83	12.92
1.40	3.86	12.91



Angle Winkel Angle	10°	
Ø Dp	a	b
1.30	5.06	12.52
1.40	5.10	12.50

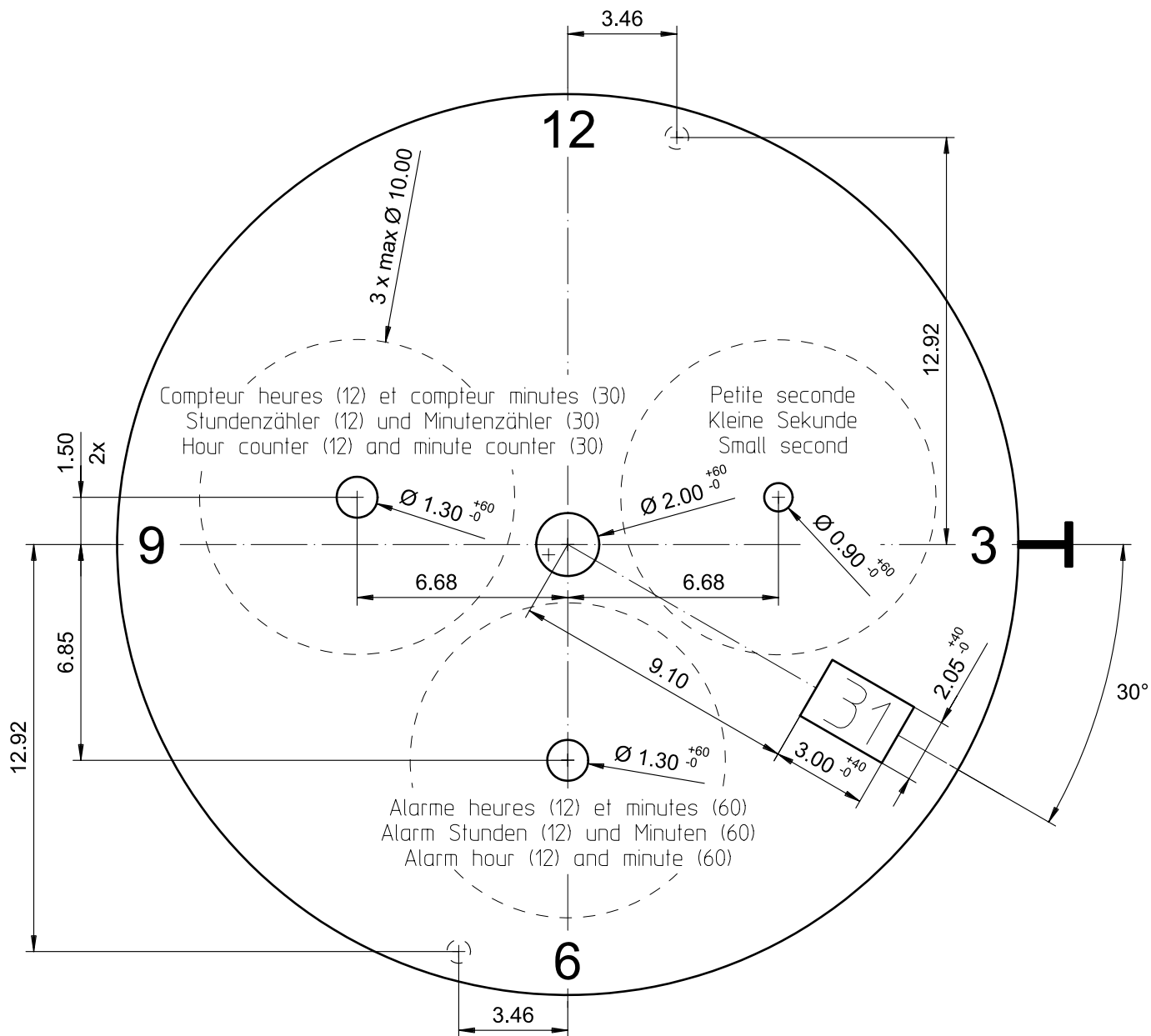


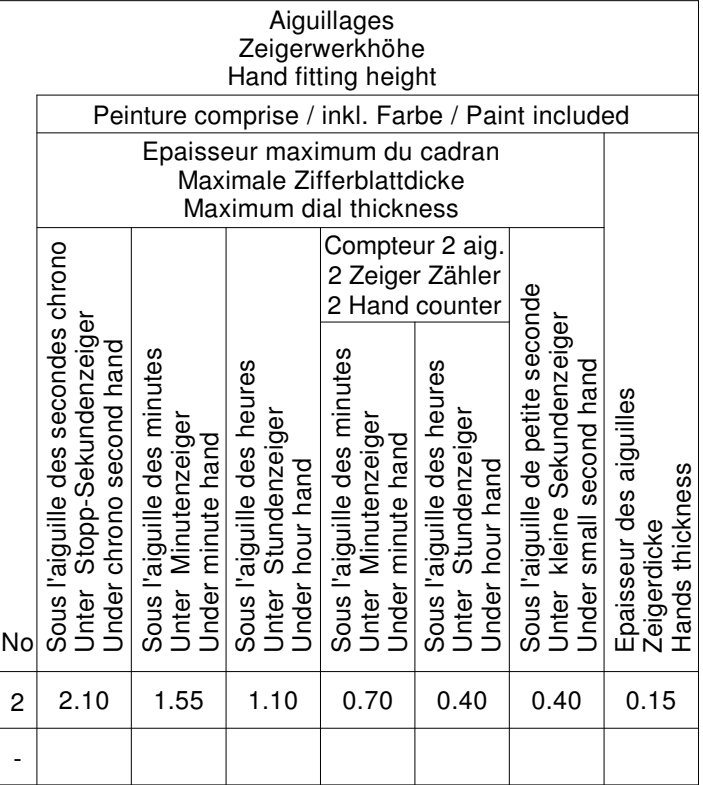
Angle des poussoirs A et B  
Winkel der Drücker A und B  
Angle of pusher A and B

RONDA

4xxx.x, 5xxx.x

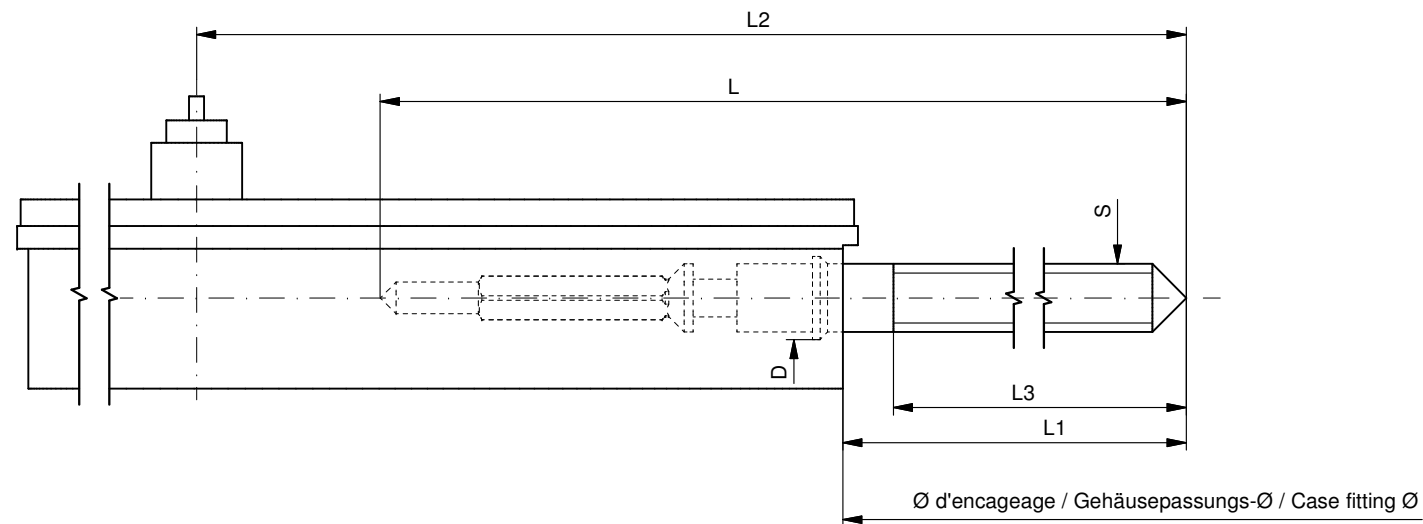
Issued	06 Sep 2004	mk
Modified	30.März 2005 ÄA 1784	mk
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5000.345	01





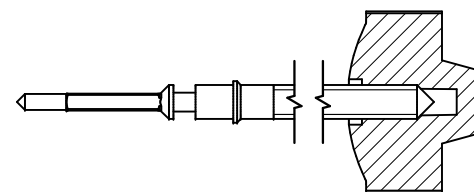
Aiguillages Zeigerwerkhöhe 12½" Hand fitting heights		Issued	14 Nov 2003	mk
		Modified	15 Okt 2014 ÄA 13275	dh
		Released	Yes	
		Tolerance	µm	
		Scale	20 : 1 (A3H)	
RONDA	5020.B, 5130.D, 5130.B	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	3316.081	07

\* 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)  
Arbeitsstellwelle (im Werk eingebaut)  
Working stem (implemented in the movement)

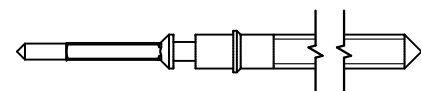
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.177.CO	20.00	10.23	24.23	10.15	0.90	1.10



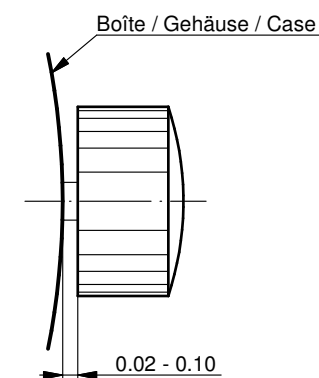
Couleur de la couronne Kronenfarbe Crown color	bleu foncé dunkelblau dark blue
Code	UN 5002

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

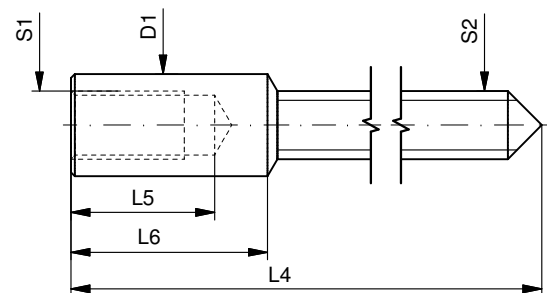


Couronne vissée  
Geschraubte Krone  
Screwed crown

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 (dimensions / forces)  
Stellwelle (Dimensionen / Kräfte)  
Stem (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  
Änderungen vorbehalten  
Modifications reserved

No.	5030.019	01
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**Movement holder**  
Removing setting stem  
H5XXX.1T



**Movement holder**  
Setting hands  
H5XXX.1A4



**PCB-Alarm**  
Installing Piezo function for  
H5XXX.1A4  
H5XXX.1P

## Fitting dial and hands

- Crown in position III
- Wind hour hand forwards, until date changes
- Remove working hand
- Mount dial
- Point all hands towards 12 o'clock
- Fit time
- Zero chronograph hand\*
- Crown in position III
- Install alarm reference time\*\*
- Set date
- Crown in position I

## Date switching duration

First and tenth digit discs

~2hrs

## \*Zeroing the Chronograph hand

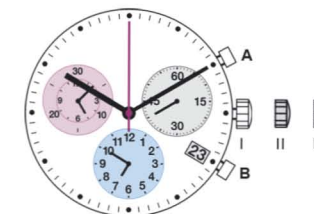
- Press pushers A and B for 2 seconds at the same time  
(Chrono seconds hand rotates once)
- Pusher A → to correct chrono seconds hand
- Pusher B → to jump to hour and minute hands
- Pusher A → to correct hand position

**Details:** See Instruction Manual

## \*\*Setting alarm reference time

- Press pusher B min. 2 secs (Reference time mode is activated)
- Using pusher B, synchronise reference time with actual time:
  - Short press (< 1 sec.) → +1 minute
  - Medium press (1-2 secs) → +1 hour
  - Long press (> 2 secs) → continuous

**Details:** See Instruction Manual



## 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

During quick date correction (setting stem in position II), a date switching speed of 5 d/s must not be exceeded.

## Alarm reference time tip

The reference time runs in the background, behind the watch time, on which the ALARM time is based. So with every new time setting, the reference time must be freshly synchronised.

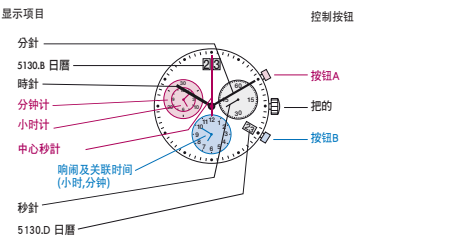
朗达 明星系列 - 机芯型号 5130.D&5130.B

中文 使用手册

瑞士朗达是一个机芯供应商, 没有参与制造或分销成表.

若有任何手表相关之疑问, 如维修、保证期内投诉或手表功能问题, 请联络手表零售商、服务中心或制造商. 所有联络资料可向您的销售员查询或参考保证文件.

显示和控制按钮描述



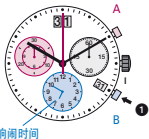
多功能机芯

Cal. 5130.D 及 5130.B 是结合响闹及计时功能所有的功能可以由两个控制及把的控制.

原本状态 (计时指针在零位置)  
- 按下按钮A 开始计时  
- 按下按钮B 开启 / 关闭响闹功能

计时功能启动  
当按下按钮A 按钮B 亦同时运作  
当完成计时及计时指针还到零位置, 按钮功能再一次返回<<原本状态>>

当计时功能启动时, 不能调较响闹时间



响闹时间

响闹功能开启 / 关闭

- 1 按下按钮启动 / 关闭响闹功能:
  - 2次响声 → 响闹功能启动
  - 1次响声 → 响闹功能关闭

注意:  
响闹设定的时间最多可以比要求的响闹时间早12小时  
当到达响闹时间, 信号会持续20秒.  
2分钟后信号会重复发出  
当按下按钮后, 信号便会立刻停止.

设定关联时间

- 1 把的拉至位置III (秒针表停止运行, (秒针表停止运行. 显示会由响闹时间转为关联时间))
- 2 启动调较模式  
按下按钮最少2秒. 当分钟针前进一分钟, 表示调较模式已启动.
- 3 短按(小於一秒):  
关联时间逐分钟前进  
中按(秒-2秒):  
关联时间前进1小时  
长按(多於2秒):  
关联时间持续前进直至放开按钮

- 4 推把的回位置I (显示会由关联时间转为响闹时间) 会有响闹功能关闭信号发出

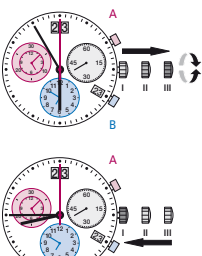
注意:  
关联时间必须要与实际时间同步, 意思是如果要重设关联时间必须要同时设定关联时间, 然后才去设定响闹时间.

什么是关联时间?

时针及分针是显示现在的时间

同时地关联时间是在背后运作; 响闹时间是参考关联时间, 所以设定时间后必须更正相同的关联时间

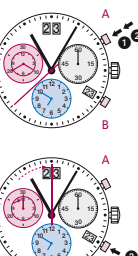
如果关联时间与现在时间不同步, 响闹信号便不会在设定的响闹时间发出



设定时间

- 1 把的拉至位置III (腕表停止运行).
- 2 转动把的至正确时间 8:45.
- 3 推把的回位置I

注意:  
为了设定准确的秒数, 1 当秒针指向 „60“. 短把的设定完小时及分钟后, 2 必须在正确的秒数将把的推回位置I



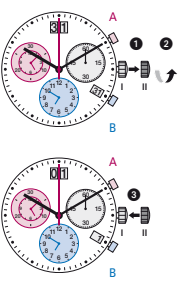
计时器(基本功能)

(开始 / 停止 / 还原)

- 例子:
  - 1 开始: 按下按钮 A.
  - 2 停止: 再按下按钮A 停止计时, 然后阅读计时计:  
4小时 / 20分 / 38秒

- 3 返回零位置:  
按下按钮 B.  
(计时指针会还到零位置).

注意:  
当计时功能启动时, 不能使用响闹功能

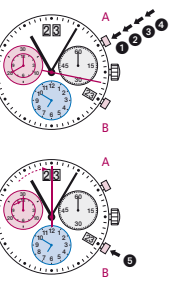


设定日期 (快速模式)

- 1 把的拉至位置II (腕表仍然运行)
- 2 转动把的至正确日期
- 3 推把的回位置I

注意:  
9.00PM至12.00PM为日历转换时段,若在这时段内设定日期,必须比正确日期多转一天

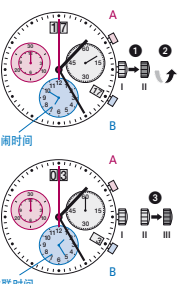
5130.B: 过快转换日期可能引致日期显示错误. 转换日期由01至31(位置II)可以使日期再次同步



计时器:  
计算累积时间

- 例子:
  - 1 开始: (开始计时)
  - 2 停止: (例子: 15分 5秒 1 后)
  - 3 再开始: 继续计时)
  - 4 停止: (例子: 5分 12秒 3 后)  
= 20分 17秒  
(显示累积计算时间)
  - 5 还原:  
计时指针会还原到零位置.

注意:  
\* 步骤 2 后, 可再按下按钮 B 继续计算累积时间 (再开始 / 停止; 再开始 / 停止; ...)



设定时间及日期

- 例子:
  - 腕錶的日期及时间 17 / 1:25 AM
  - 现时的日期及时间 04 / 10:39 PM

- 1 把的拉至位置III(腕表仍然运行)
- 2 转动把的至昨天的日期 3

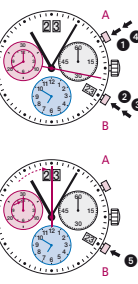
- 3 把的拉至位置III (腕表停止运行. 会由显示响闹时间转为关联时间)

- 4 转动把的至正确日期 04
- 5 转动把的至现时的时间 0:39PM

- 6 推把的回位置I (会由显示关联时间转为响闹时间)

注意:  
设定时间后必须更正相同的关联时间 (请看章节标题<<设定关联时间>>)

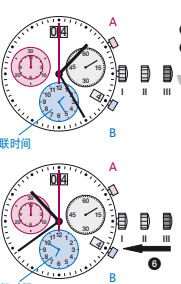
\* 请注意AM/PM时间



计时器:  
计算分段时间

- 例子:
  - 1 开始: (开始计时)
  - 2 显示分段时间: (指针停止, 计时器仍然在背 后运行)
  - 3 追时: (计时指针会迅速到达持续计算的时间).
  - 4 停止: (显示最后的时间)
  - 5 还原: 计时指针返回零位置

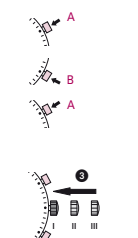
注意:  
\* 步骤 3 后, 可再按下按钮 B 继续计算分段时间 (显示分段时间 / 追时; ...)



调较计时指针到零位置

例子:  
当有计时指针不在零位置时, 便需要调较计时指针 (例如: 更换电池后).

- 1 把的拉至位置III (计时指针在 / 不在零位置). (会由显示响闹时间转为关联时间)
- 2 同时及持续按下按钮 A 及 B 最少 2 秒 (中心秒针会转动360° → 修正模式启动).



调较中心秒针  
单步前进 1x 短按  
连续前进 长按

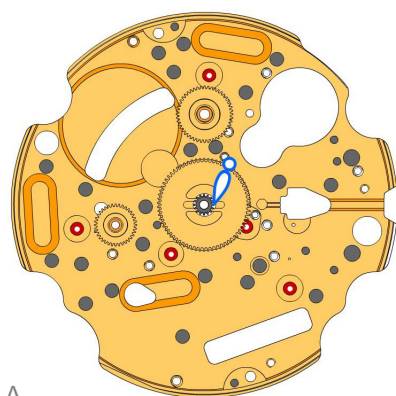
调较下一支指针  
单步前进 1x 短按  
连续前进 长按

- 3 推把的回位置I 结束调较计时指针 (能在任何时候执行)

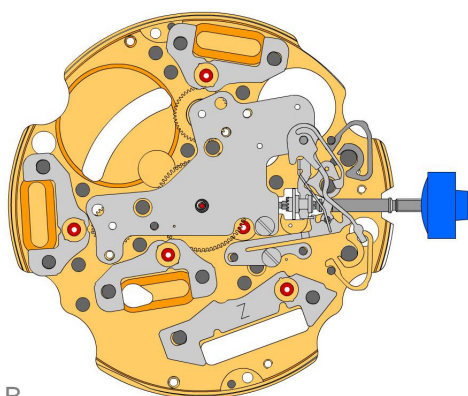


电池种类: 395 (直径 9.5mm x 2.6mm / SR 927 SW)  
误差规格: +20 / -10 秒 (每月)






















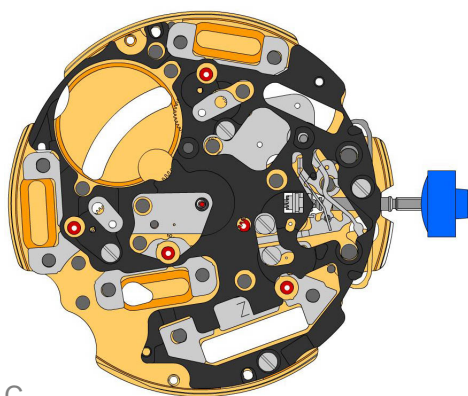


A



B

2000.574.G 1.		Main plate
3305.282.CO 2.		Cannon pinion with driver (Aig.2)
3301.243 3.		Hour wheel (counter 12h) (Alarm)
3301.244 4.		Hour wheel (counter 24h) (Chrono)
2030.017.CO 5.		Centre bridge Centre bridge held by 1 screw 4000.250.
4000.250 6.		Screw
3001.055.FI 7.		Sliding pinion
3000.177.CO 8.		Setting stem
3017.049 9.		Setting lever
3905.049 10.		Setting lever jumper (3 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 11.		Screw
3015.081 12.		Yoke (3 positions) Parts 3015.081 and 3905.067 must be exchanged together.
3905.067 13.		Yoke spring Tensioning the spring arm. Parts 3015.081 and 3905.067 must be exchanged together.
3406.030 14.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 15.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 16.		Stator Mark [Z] on stator.
3622.039 17.		Stator (counter 6h, 9h, chrono)
3622.039 18.		Stator (counter 6h, 9h, chrono)
3622.039 19.		Stator (counter 6h, 9h, chrono)



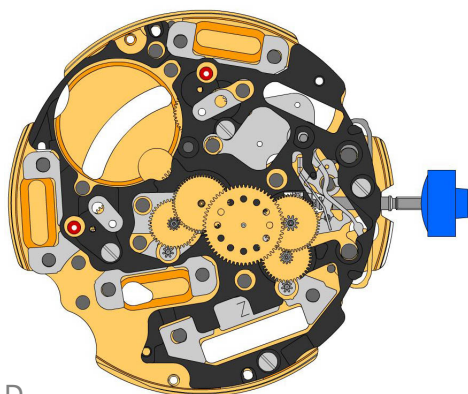
C

3603.079  
20.  Plastic bracket  
Plastic bracket held by 4 screws 4000.250.

4000.250  
21.  Screw

3715.094.RK  
22.  Rotor


3715.094.RK  
23.  Rotor




D

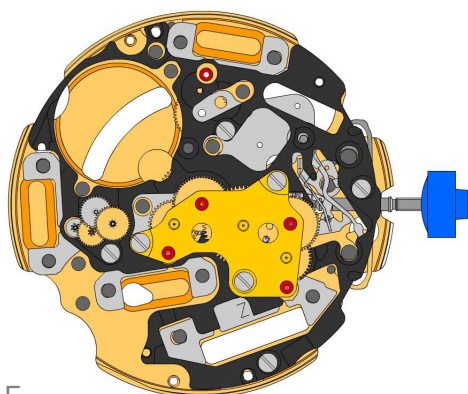
3147.046.CO  
24.  Intermediate wheel

3136.142.CO  
25.  Second wheel (long)


3147.047.CO  
26.  Intermediate wheel (chrono)

3136.144.CO  
27.  Chronograph wheel (Aig.2)

3122.056.CO  
28.  Third wheel



E

2020.148.G  
29.  Train wheel bridge  
Train wheel bridge held by 3 screws 4000.250.

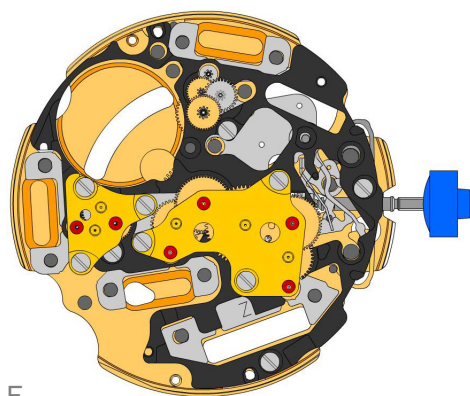
4000.250  
30.  Screw

3715.095.RK  
31.  Rotor

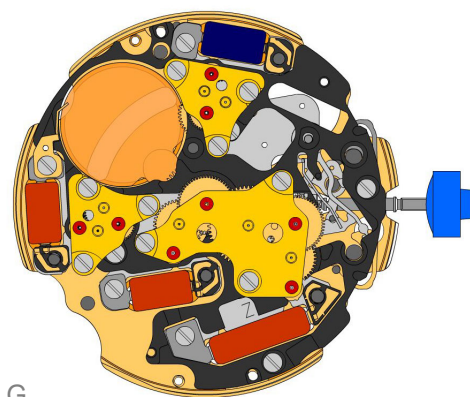
3147.048.CO  
32.  Intermediate wheel (counter)

3007.056.CO  
33.  Minute wheel (counter 24h)

3402.008.CO  
34.  Minute counting wheel



F



G

2020.149.G  
35.



Counter train wheel bridge  
Counter train wheel bridge held by 3 screws 4000.250.

4000.250  
36.



Screw

3715.095.RK  
37.



Rotor

3147.048.CO  
38.



Intermediate wheel (counter)

3007.055.CO  
39.



Minute wheel (counter 12h)

3402.007.CO  
40.



Minute counting wheel

4000.250  
41.



Screw

2020.149.G  
42.



Counter train wheel bridge  
Counter train wheel bridge held by 3 screws 4000.250.

4000.250  
43.



Screw

3621.053.RK  
44.



Coil  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

3621.054.RK  
45.



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  
46.



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  
47.

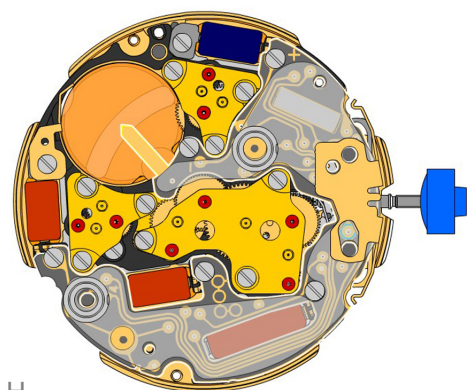


Coil (counter 6h)  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

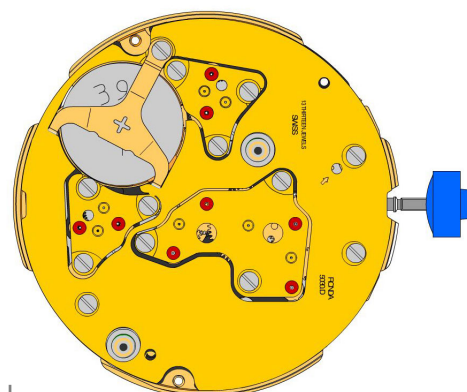
4000.250  
48.















Screw

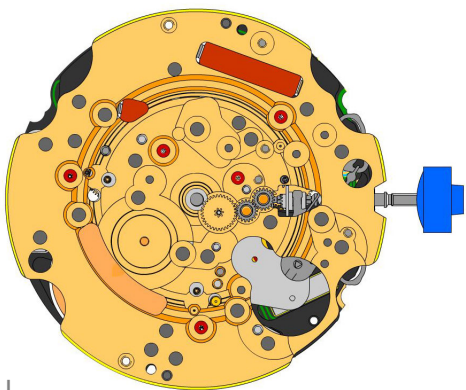


H







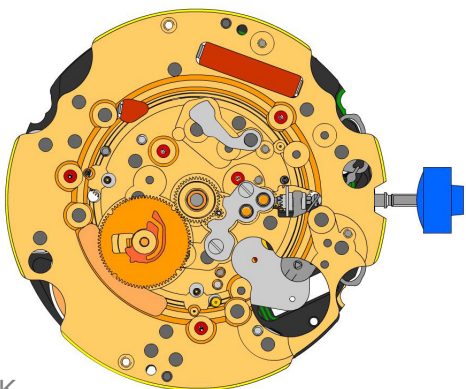
I

3601.118 49.		<b>Contact strip</b> Contact strip held by 1 screw 4000.250.
3603.034 50.		<b>Battery insulator</b>
3612.176.5130 51.		<b>Electronic module</b> Electronic module held by 5 screws 4000.250. Electronic measurements may be realised now.
4000.248 52.		<b>Screw</b>
3603.069 53.		<b>Circuit insulator</b>
3603.070 54.		<b>Contact insulator</b>
3603.070 55.		<b>Contact insulator</b>
3601.107.G 56.		<b>Pusher contact spring</b>
2130.159.G.M01.5130D 57.		<b>Electronic module cover</b> Electronic module cover held by 3 screws 4000.250.
3600.010.HGF 58.		<b>Battery 395</b>
3601.109.G 59.		<b>Bridle +</b> Bridle + held by 1 screw 4000.250.
4000.250 60.		<b>Screw</b>









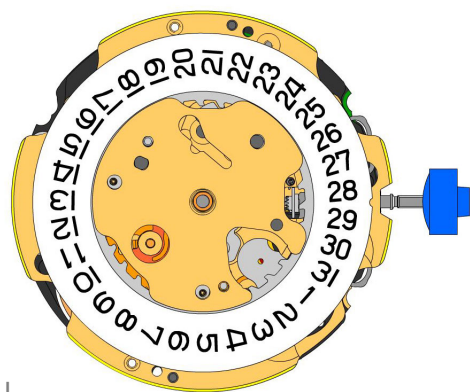
J

2000.574.G 61.		Main plate
3004.164 62.		Setting wheel
3004.164 63.		Setting wheel
3007.054.CO 64.		Minute wheel

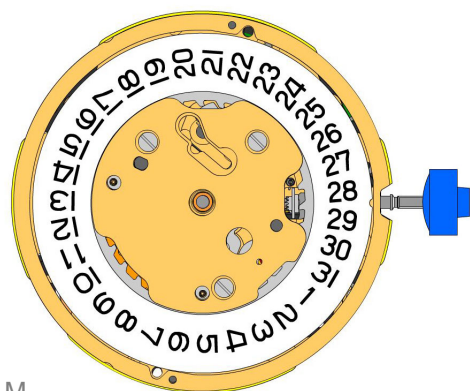


K

2130.143 65.		Minute train bridge Minute train bridge held by 2 screws 4000.250.
4000.305 66.		Screw
3301.242 67.		Hour wheel (Aig.2)
3315.016 68.		Friction spring
3004.224.CO 69.		Date indicator driving wheel
3500.049 70.		Date jumper



L



M

3504.208.AB.1.A  
71.



Date indicator (standard)  
Nick of the indicator at 3 o'clock.

2130.141  
72.



Date indicator maintaining plate  
Date indicator maintaining plate held by 1 screw 4000.250.

3905.070  
73.



Date jumper spring  
Insert the date jumper spring in the provided opening.

2130.140.G  
74.



Date mechanism maintaining plate  
Date mechanism maintaining plate held by 2 screws 4000.250.

4000.250  
75.



Screw

3506.072.G  
76.



Dial support

8200  
77.



Moebius 8200

9014  
78.



Moebius 9014

124  
79.

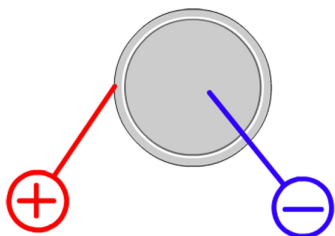


Jismaa 124

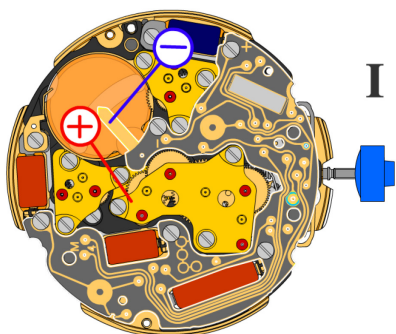
9020  
80.



Moebius 9020

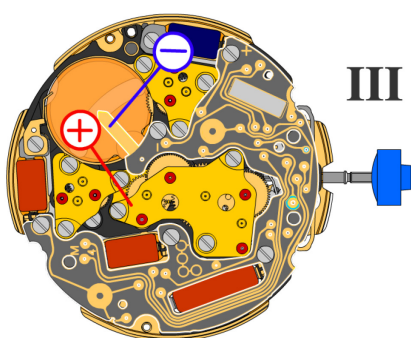


Battery	<b>395</b>
Voltage	<b>1.55 V</b>



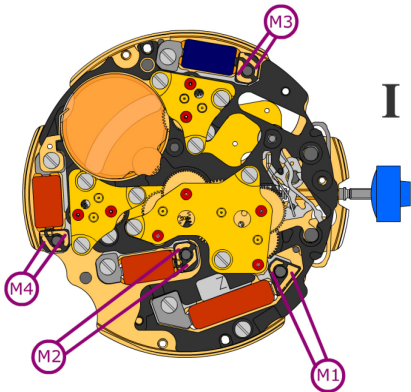
*Setting stem in position I, calendar not in gear,  
60 s measuring interval for rate and consumption:*

Typical consumption	<b>1.48 <math>\mu</math>A</b>
Maximal consumption	<b>1.65 <math>\mu</math>A</b>
Rate	<b>-10s/M. .. +20s/M.</b>
Lower working voltage limit	<b>1.20 V</b>



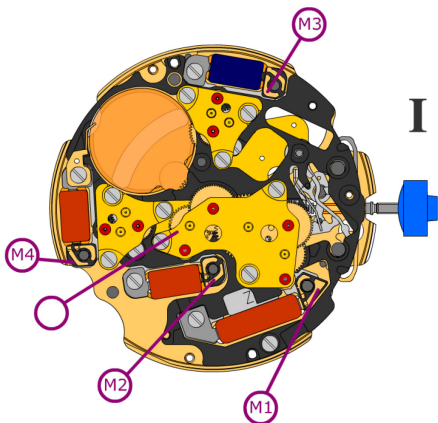
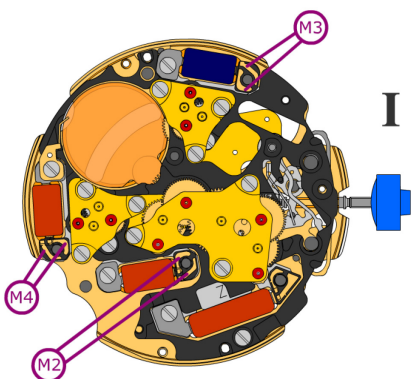
*Setting stem in position III, 60 s measuring interval:*

Typical consumption	<b>0.10 <math>\mu</math>A</b>
Maximal consumption	<b>0.30 <math>\mu</math>A</b>

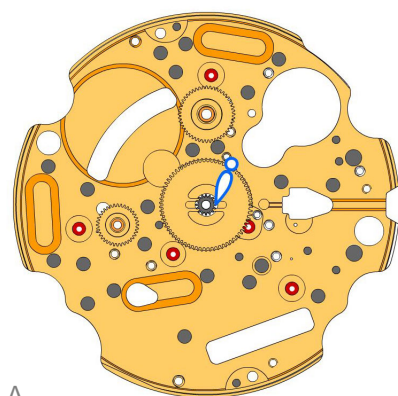

Coil resistance M1 **1.90 k $\Omega$  .. 2.20 k $\Omega$** 

Coil resistance M2 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

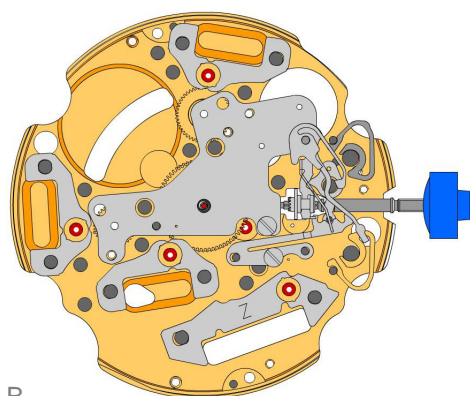
Coil resistance M3 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

Coil resistance M4 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

Coil isolation M1/M2/M3/M4  **$\infty$  k $\Omega$** 

*Signal generator (4.9 ms, 8 Hz):*




















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

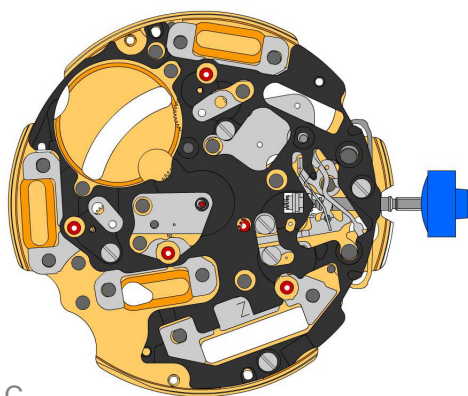


A



B

2000.574.G 1.		Main plate
3305.282.CO 2.		Cannon pinion with driver (Aig.2)
3301.243 3.		Hour wheel (counter 12h) (Alarm)
3301.244 4.		Hour wheel (counter 24h) (Chrono)
2030.017.CO 5.		Centre bridge Centre bridge held by 1 screw 4000.250.
4000.250 6.		Screw
3001.055.FI 7.		Sliding pinion
3000.177.CO 8.		Setting stem
3017.049 9.		Setting lever
3905.049 10.		Setting lever jumper (3 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 11.		Screw
3015.081 12.		Yoke (3 positions)
3905.067 13.		Yoke spring Tensioning the spring arm.
3406.030 14.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 15.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 16.		Stator Mark [Z] on stator.
3622.039 17.		Stator (counter 6h, 9h, chrono)
3622.039 18.		Stator (counter 6h, 9h, chrono)
3622.039 19.		Stator (counter 6h, 9h, chrono)



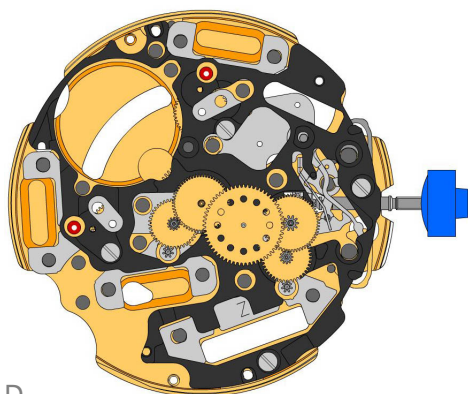
C

3603.079  
20.  Plastic bracket  
Plastic bracket held by 4 screws 4000.250.

4000.250  
21.  Screw

3715.094.RK  
22.  Rotor


3715.094.RK  
23.  Rotor




D

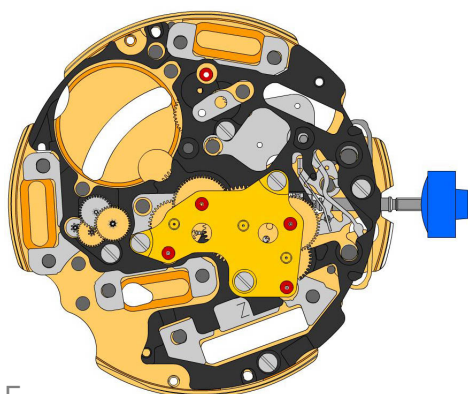
3147.046.CO  
24.  Intermediate wheel

3136.142.CO  
25.  Second wheel (long)


3147.047.CO  
26.  Intermediate wheel (chrono)

3136.144.CO  
27.  Chronograph wheel (Aig.2)

3122.056.CO  
28.  Third wheel



E

2020.148.G  
29.  Train wheel bridge  
Train wheel bridge held by 3 screws 4000.250.

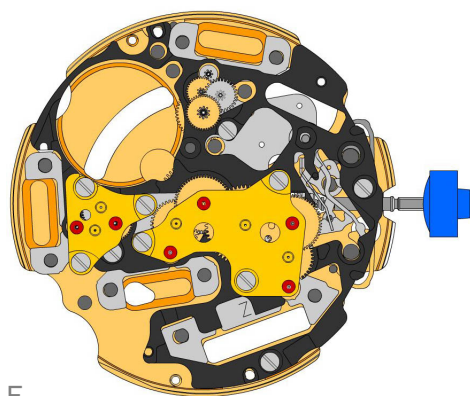
4000.250  
30.  Screw

3715.095.RK  
31.  Rotor

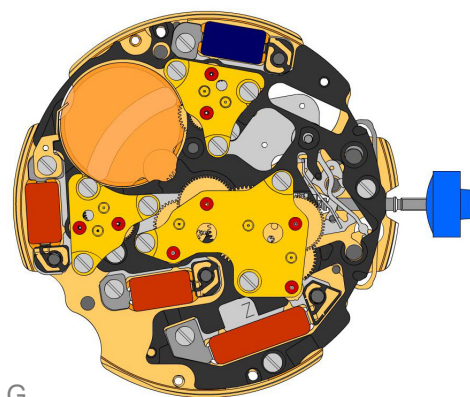
3147.048.CO  
32.  Intermediate wheel (counter)

3007.056.CO  
33.  Minute wheel (counter 24h)


3402.008.CO  
34.  Minute counting wheel




F



G


2020.149.G  
35.  Counter train wheel bridge  
Counter train wheel bridge held by 3 screws 4000.250.

4000.250  
36.  Screw


3715.095.RK  
37.  Rotor

3147.048.CO  
38.  Intermediate wheel (counter)


3007.055.CO  
39.  Minute wheel (counter 12h)


3402.007.CO  
40.  Minute counting wheel


4000.250  
41.  Screw


2020.149.G  
42.  Counter train wheel bridge  
Counter train wheel bridge held by 3 screws 4000.250.

4000.250  
43.  Screw

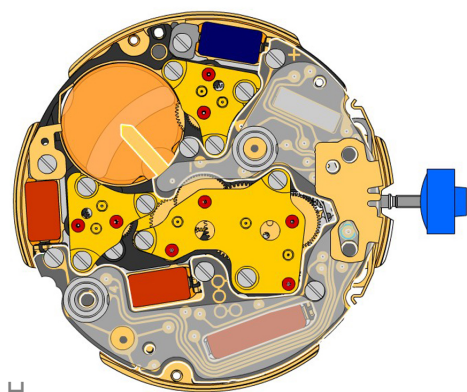
3621.053.RK  
44.  Coil  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

3621.054.RK  
45.  Coil (counter 9h, chrono)  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

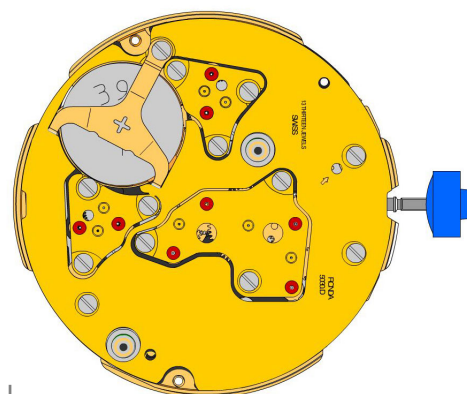
3621.054.RK  
46.  Coil (counter 9h, chrono)  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

3621.055.RK  
47.  Coil (counter 6h)  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.













4000.250  
48.  Screw

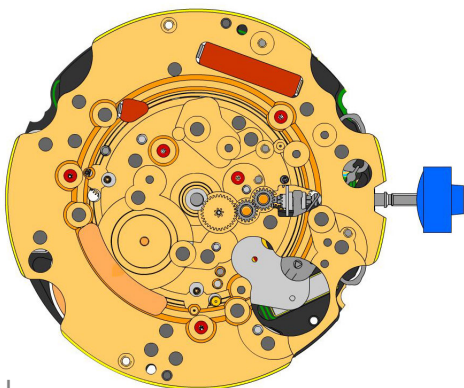


H







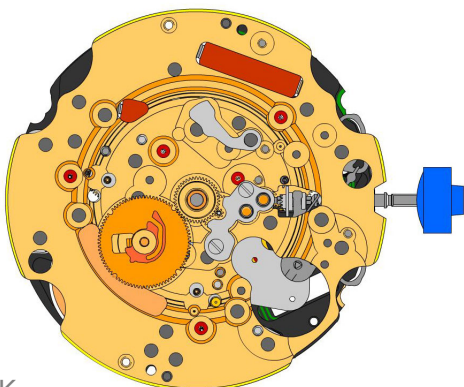
I

3601.118 49.		<b>Contact strip</b> Contact strip held by 1 screw 4000.250.
3603.034 50.		<b>Battery insulator</b>
3612.176.5130 51.		<b>Electronic module</b> Electronic module held by 5 screws 4000.250. Electronic measurements may be realised now.
4000.248 52.		<b>Screw</b>
3603.069 53.		<b>Circuit insulator</b>
3603.070 54.		<b>Contact insulator</b>
3603.070 55.		<b>Contact insulator</b>
3601.107.G 56.		<b>Pusher contact spring</b>
2130.159.G.M01.5130D 57.		<b>Electronic module cover</b> Electronic module cover held by 3 screws 4000.250.
3600.010.HGF 58.		<b>Battery 395</b>
3601.109.G 59.		<b>Bridle +</b> Bridle held by 1 screw 4000.250.
4000.250 60.		<b>Screw</b>









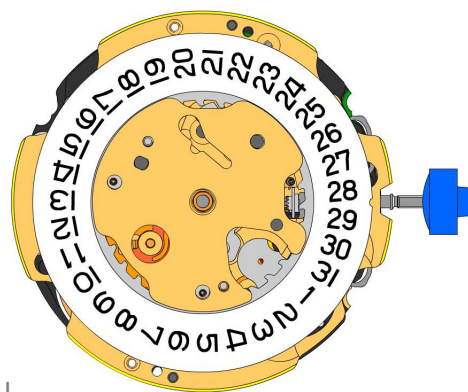
J

2000.574.G 61.		Main plate
3004.164 62.		Setting wheel
3004.164 63.		Setting wheel
3007.054.CO 64.		Minute wheel

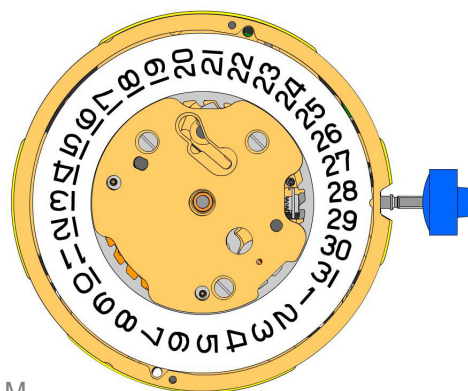


K

2130.143 65.		Minute train bridge Minute train bridge held by 2 screws 4000.250.
4000.305 66.		Screw
3301.242 67.		Hour wheel (Aig.2)
3315.016 68.		Friction spring
3004.224.CO 69.		Date indicator driving wheel
3500.049 70.		Date jumper



L



M

3504.208.AB.1.A  
71.



Date indicator (standard)  
Nick of the indicator at 3 o'clock.

2130.141  
72.



Date indicator maintaining plate  
Date indicator maintaining plate held by 1 screw 4000.250.

3905.070  
73.



Date jumper spring  
Insert the date jumper spring in the provided opening.

2130.140.G  
74.



Date mechanism maintaining plate  
Date mechanism maintaining plate held by 2 screws 4000.250.

4000.250  
75.



Screw

3506.072.G  
76.



Dial support

8200  
77.



Moebius 8200

9014  
78.



Moebius 9014

124  
79.

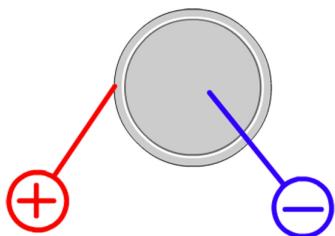


Jismaa 124

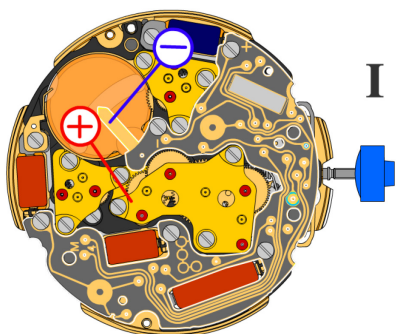
9020  
80.



Moebius 9020

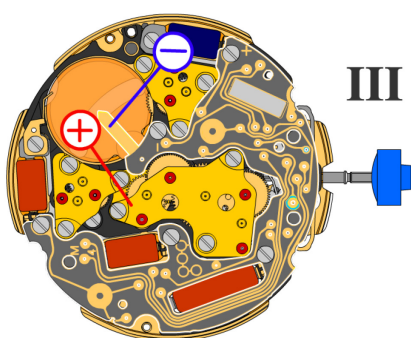


Battery	<b>395</b>
Voltage	<b>1.55 V</b>



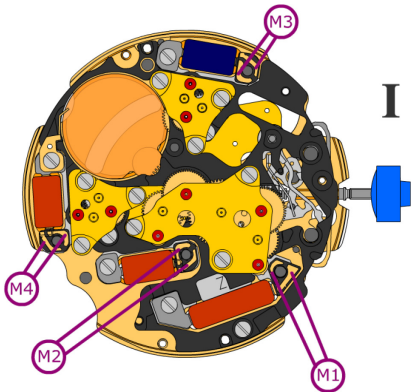
*Setting stem in position I, calendar not in gear,  
60 s measuring interval for rate and consumption:*

Typical consumption	<b>1.48 <math>\mu</math>A</b>
Maximal consumption	<b>1.65 <math>\mu</math>A</b>
Rate	<b>-10s/M. .. +20s/M.</b>
Lower working voltage limit	<b>1.20 V</b>



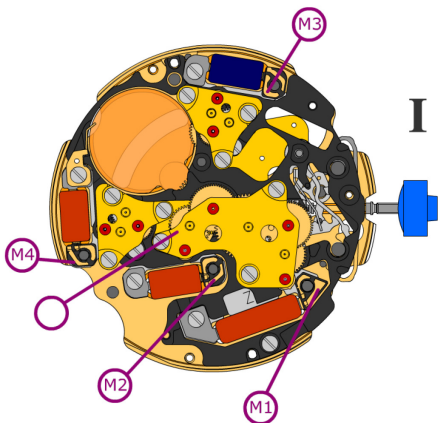
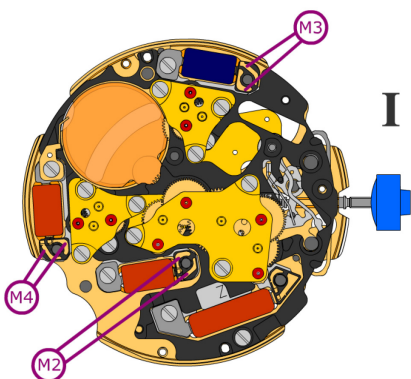
*Setting stem in position III, 60 s measuring interval:*

Typical consumption	<b>0.10 <math>\mu</math>A</b>
Maximal consumption	<b>0.30 <math>\mu</math>A</b>


Coil resistance M1 **1.90 k $\Omega$  .. 2.20 k $\Omega$** 

Coil resistance M2 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

Coil resistance M3 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

Coil resistance M4 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

Coil isolation M1/M2/M3/M4  **$\infty$  k $\Omega$** 

*Signal generator (4.9 ms, 8 Hz):*

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