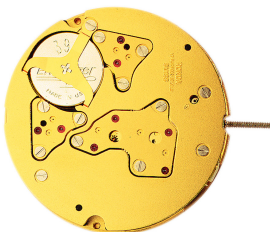
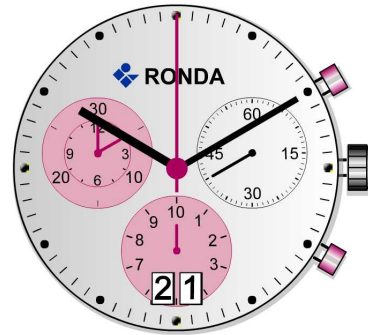


Specification

12 ½"


Dimensions and battery

∅ Total	28.60 mm
∅ Case fitting	28.00 mm
Movement height	4.40 mm
Movement rest	0.60 mm
Height of stem	1.90 mm
Stem: Thread / Distance	0.90 mm / 0.90 mm
Battery / Autonomy	Nr. 395 / 48 Months

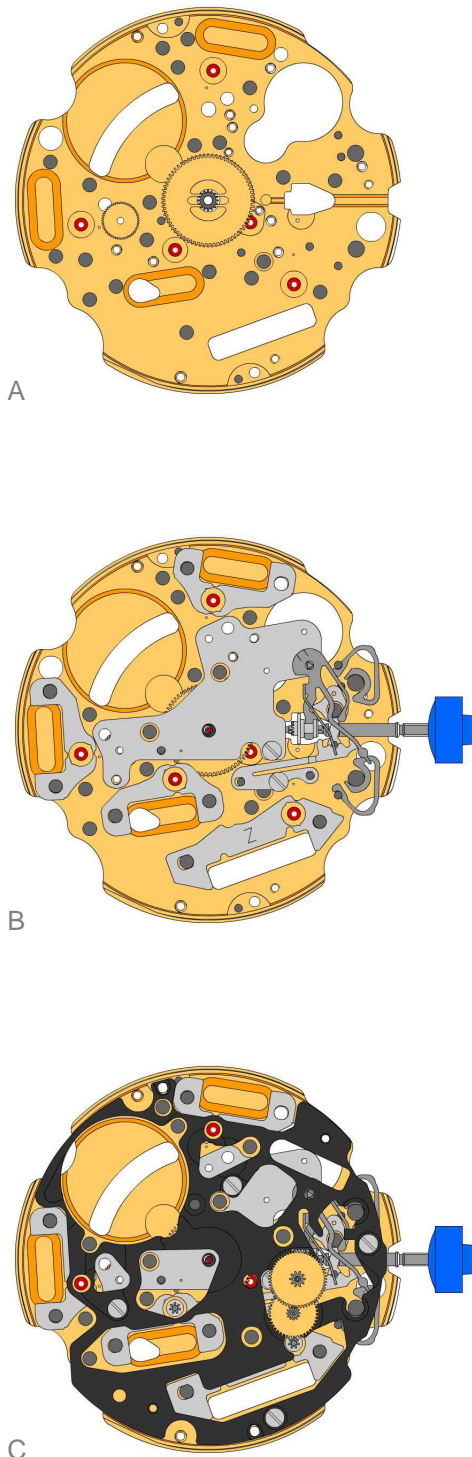
Performances




















	Small second (M1): 4.0 - 6.7 µNm
Torque T	Minute hand (M1): 200 - 300 µNm
	Counter (M2, M4): 3.0 - 4.6 µNm
	Counter (M3): 1.5 - 2.5 µNm
Operating temperature	0°C - 50°C
Res. against magn. fields	18.8 Oe = 1500 A/m
Resistance against shock	NIHS 91 - 10

Functions

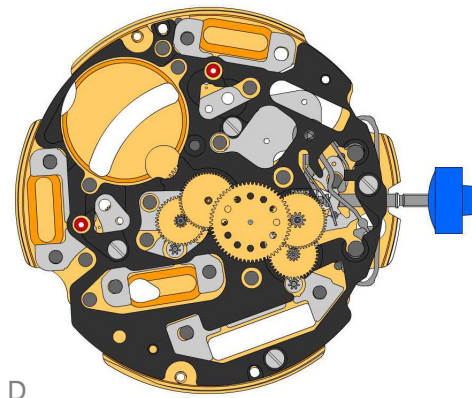
Position I (crown)	Neutral
Position II (crown)	Setting the date (quick mode)
Position III (crown)	Setting time and adjusting chrono hands
Pusher A	START / STOP / ADD
Pusher B	ZERO POSITIONING / SPLIT

Assembling



1. 2000.574.CO Main plate

2. 3305.282.CO Cannon pinion with driver (Aig 2)
 Moebius 8200 grease must be placed between the steel tube and the brass wheel. The steel tube must be placed into the center hole of the main plate.

3. 3301.244 Hour wheel (counter 24h)

4. 2030.017.CO Centre bridge
 Use one screw 4000.250 to fix the center bridge.

5. 3001.041 Sliding pinion
 The sliding pinion must be held using a tweezers, until the stem is inserted.

6. 3000.177.CO Handsetting stem
 Prior to the insertion of the stem, some grease must be placed on the square part of the stem.

7. 3017.049 Setting lever
 The cam on the setting lever must be inserted into the cut out on the stem. (the setting lever must be greaced)

8. 3905.049 Setting lever jumper (3 positions)
 The setting lever jumper (3 positions) must be tensioned and inserted into the setting lever. Use one screw 4000.250 to fix the setting lever.

9. 4000.250 Screw

10. 3015.076 Yoke (3 positions)
 The yoke must be inserted below, into the cut out of the sliding pinion.

11. 3905.058 Yoke spring
 The yoke spring must be positioned on the yoke. The opposite end of the yoke must be positioned around the pillar of setting lever. Use Moebius 8200 to grease the yoke.

12. 3406.030 Pusher jumper
 2 pieces. Use Jismaa 124 to grease the pusher jumper.

13. 3622.040 Stator

14. 3622.039 Stator (counter 6h and 9h and chrono)
 3 pieces

15. 3603.065 Plastic bracket
 Use 4 screws 4000.250

16. 4000.250 Screw

17. 3715.094.RK Rotor (centre and chrono)
 Use an antimagnetic tweezers to place the 2 rotors.

18. 3147.046.CO Intermediate wheel

19. 3136.142.CO Second wheel (long)


Assembling



20. 3147.047.CO Intermediate wheel (chrono)



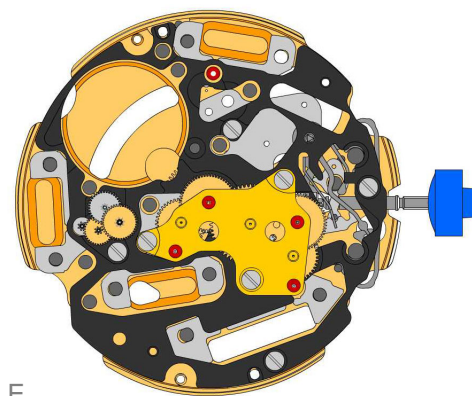
21. 3136.144.CO Chronograph wheel (Aig 2)



22. 3122.056.CO Third wheel



23. 2020.148 Train wheel bridge
 Attention: Prior to the fastening process of the bridge, all 7 pins of the wheels must be visible in the 7 holes in the bridge. Use 3 screws 4000.250.



24. 3715.095.RK Rotor (counter 6h and 9h)
 Use an antimagnetic tweezers to place the rotor.



25. 3147.048.CO Intermediate wheel (counter)



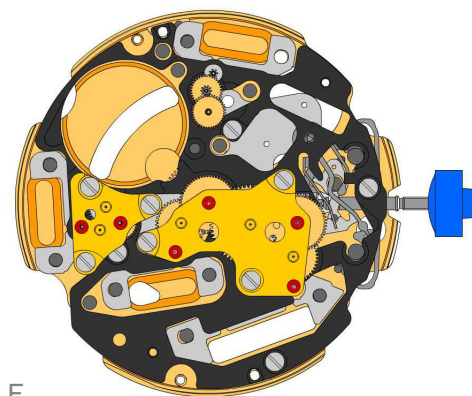
26. 3007.056.CO Minute wheel (counter 24h)



27. 3402.008.CO Minute counting wheel



28. 2020.149 Counter train wheel bridge
 Attention: Prior to the fastening process of the bridge, all 4 pins of the wheels must be visible in the 4 holes of the bridge. Use 3 screws 4000.250.



29. 3715.095.RK Rotor (counter 6h and 9h)
 Use an antimagnetic tweezers to place the rotor.



30. 3147.053.CO Intermediate wheel (counter 1/10sec)



31. 3402.009.CO Counting wheel 1/10 sec



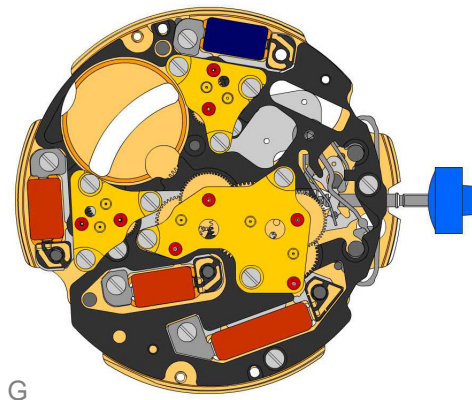
32. 2020.149 Counter train wheel bridge
 Attention: Prior to the fastening process of the bridge, all 4 pins of the wheels must be visible in the 4 holes of the bridge. Use 3 screws 4000.250.



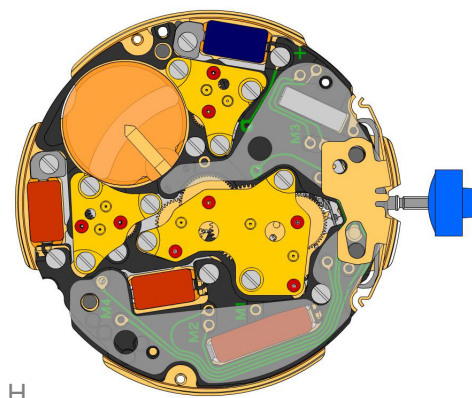
33. 4000.250 Screw



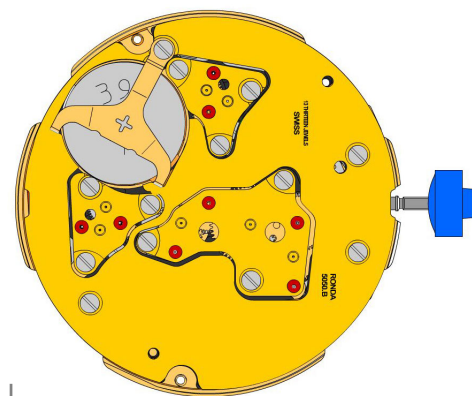
Assembling



- 34. 9014.000 **Moebius 9014**
Use Moebius 9014 on bearing of all rubis
- 35. 3621.053.RK **Coil**
The wire of the coil (red area) is very sensitiv to mechanical impacts. Hold the coil only outside the red area. Fix the coil by 1screw 4000.250.
- 36. 3621.054.RK **Coil (counter 9h and chrono)**
The wire of the coil (red area) is very sensitiv to mechanical impacts. Hold the coil only outside the red area. Fix each of the 2 coils by 1screw 4000.250.
- 37. 3621.055.RK **Coil (counter 6h)**
The wire of the coil (blue area) is very sensitiv to mechanical impacts. Hold the coil only outside the blue area. Fix the coil by 1screw 4000.250.
- 38. 4000.250 **Screw**

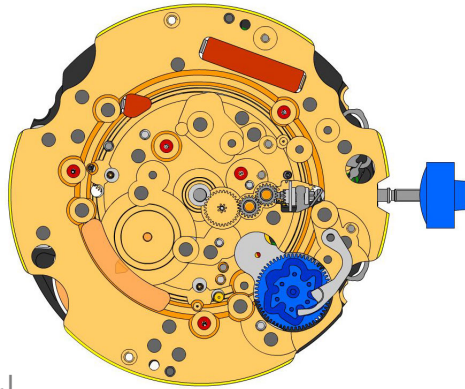


- 39. 3603.034 **Battery insulator**
- 40. 3612.144.5050 **Electronic module**
After assembly of the electronic module it is the best time to perform the electrical measurements. Use 5 screws 4000.248 to fix the electronic module.
- 41. 4000.248 **Screw**
- 42. 3603.069 **Circuit insulator**
- 43. 3601.107 **Pusher contact spring**
Make shure, that the pusher contact spring is placed correctly onto the pillars.



- 44. 2130.137.5050.B **Electronic module cover (counter 6h/9h)**
Make shure, that the pusher contact spring is not displaced during attachment of the electronic module cover. Use 3 screws 4000.250 to fix the electronic module cover
- 45. 3600.010 **Battery**
Use a plastic tweezers to place the battery (to avoid short circuit of battery).
- 46. 3601.109 **Bridle +**
Insert the two brackets of the battery bridle under the electronic module cover and fasten the battery bridle by 1 screw 4000.250.
- 47. 4000.250 **Screw**

Assembling



48. 2000.574.CO Main plate



49. 9014.000 Moebius 9014
 Use Moebius 9014 on bearing of all rubis



50. 3004.164 Setting wheel
 Use Moebius 9020 on both setting wheels



51. 3007.054.CO Minute wheel
 Use Moebius 9020



52. 2130.143 Minute train bridge
 Use 2 screws 4000.305



53. 4000.305 Screw



54. 3004.181 Tens indicator driving wheel
 The short tooth of the tens indicator driving wheel must point to the center of the movement.



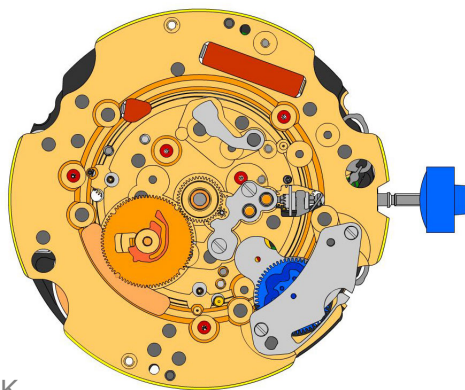
55. 3500.059 Tens jumper
 Moebius 8200 grease must be placed between the tens jumper and the tens indicator driving wheel.



56. 2130.142 Tens jumper maintaining plate
 Make shure, that the tens indicator driving wheel is not blocked prior to the fastening process. Use 2 screws 4010.306. Place the spring loaded bracket outside of the tens jumper.



57. 4010.306 Screw



58. 3301.242 Hour wheel (Aig 2)
 Use Moebius 9020



59. 3315.016 Hour wheel friction spring
 Must be placed onto the hour wheel



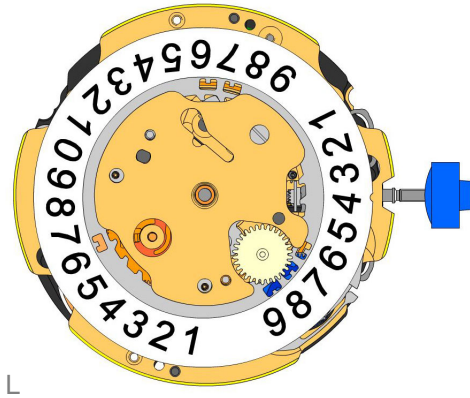
60. 3004.176.CO Date indicator driving wheel
 Moebius 9020 must be used in the center of this wheel



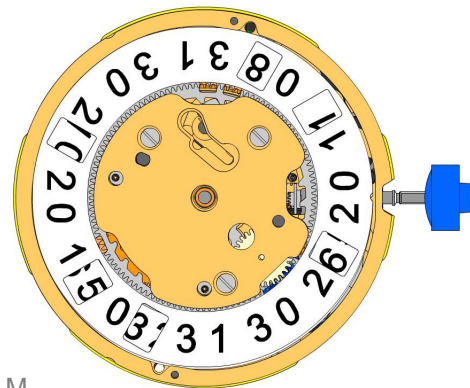
61. 3500.049 Date jumper
 Moebius 8200 grease must be placed between the date jumper and the date jumper spring














Assembling



L



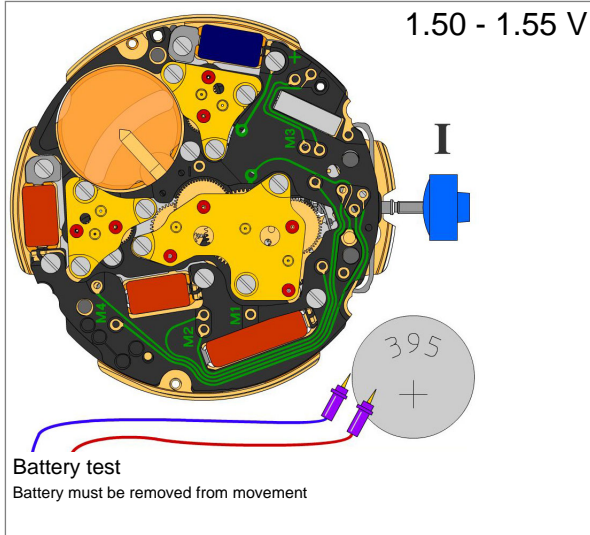
M

- 62. 3504.214.AD **Units indicator**

 Teaths must be greaced using Moebius 8200. The "half moon" cut out on the unit indicator must point to the stem (position 3h).
- 63. 3147.054 **Tens intermediate wheel**

- 64. 2130.141 **Date indicator maintaining plate**
 use 1 screw 4000.250

- 65. 3905.050 **Date jumper spring**
 Insert the spring into the opening of the date indicator maintaining plate

- 66. 3504.215.AD **Tens indicator (T3/G12)**

 The "half moon" cut out on the tens indicator must point to the stem (position 3h).
- 67. 2130.140 **Date mechanism maintaining plate**
 Assure that the tens intermediate wheel is not blocked, prior to the fastening process. Use 2 screws 4000.250 to fix the date indicator maintaining plate

- 68. 3506.072 **Dial support**

- 69. 4000.250 **Screw**

- 70. 9010.000 **Moebius 8200**
 Microgliss D5 can be used

- 71. 9018.000 **Jismaa 124**
 Greace Moebius or Microgliss D5 an be used

- 72. 9020.000 **Moebius 9020**


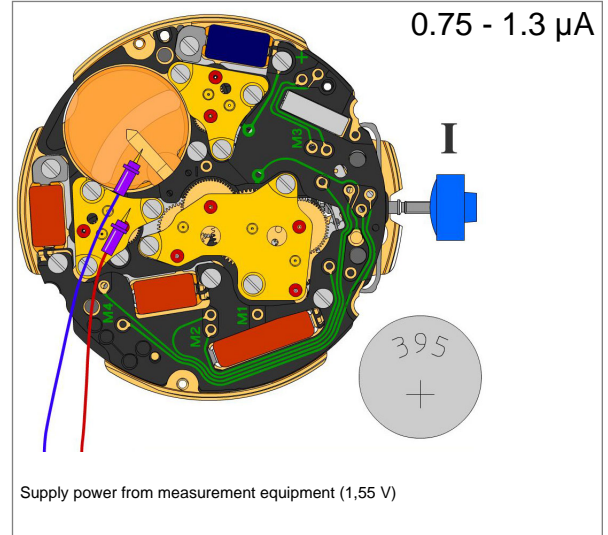
N

Electrical checking

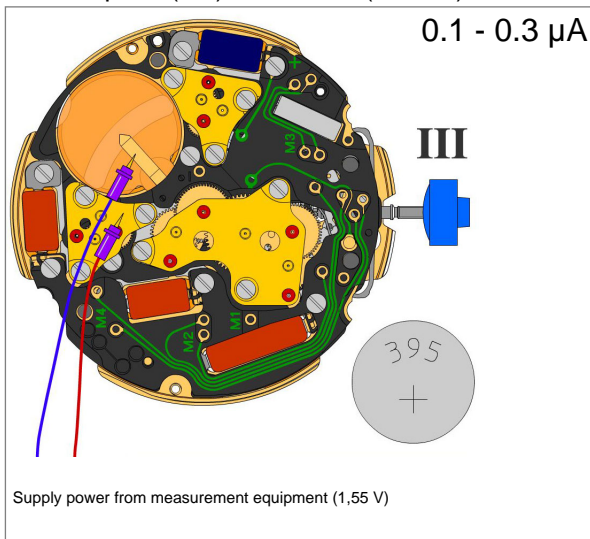
Voltage of battery



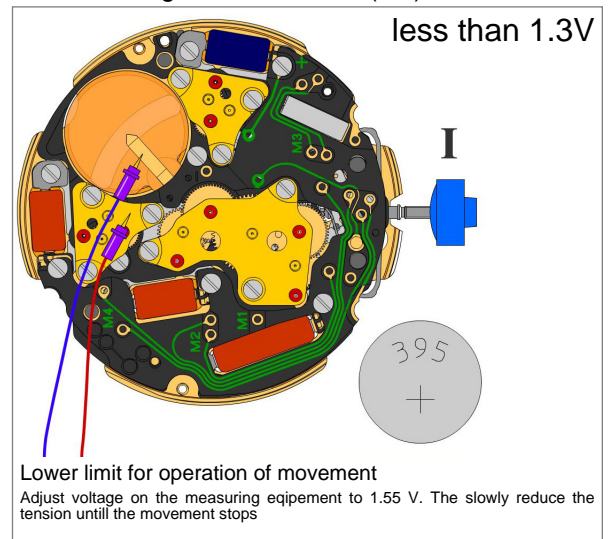
Consumption (M1) of movem. (Pos. I)



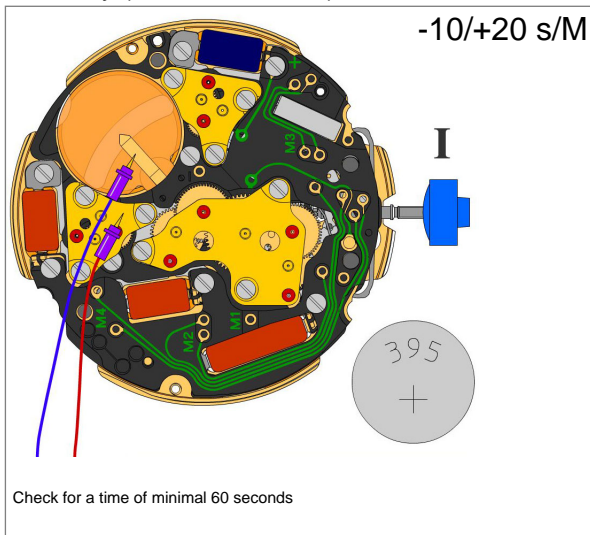
Consumption (M1) of movem. (Pos. III)



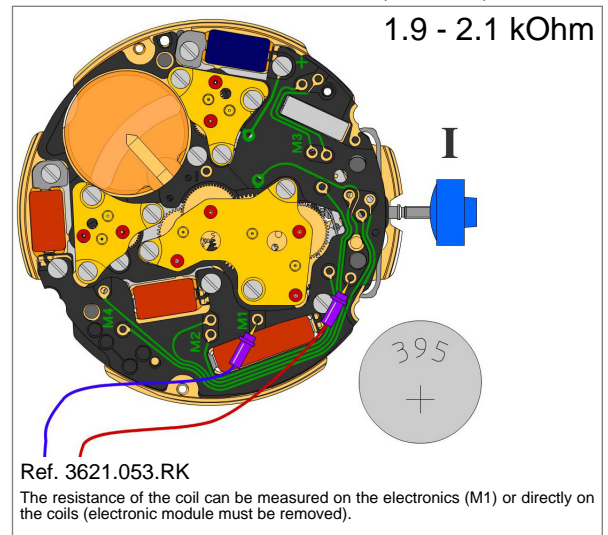
Lowest voltage for movement (M1)



Accuracy (seconds / month)



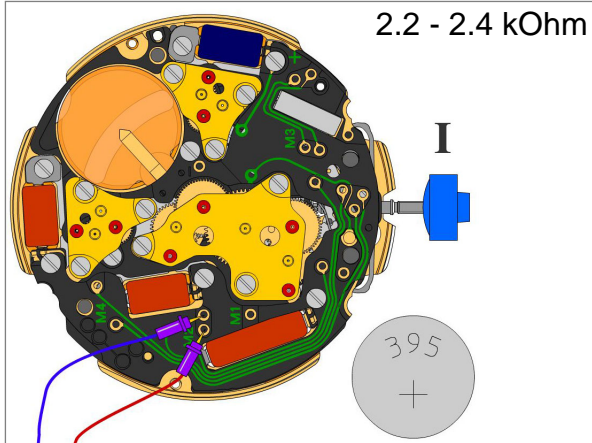
Resistance of the coil: motor 1 (movem.)



Electrical checking

Resistance of the coil: motor 2 (counter)

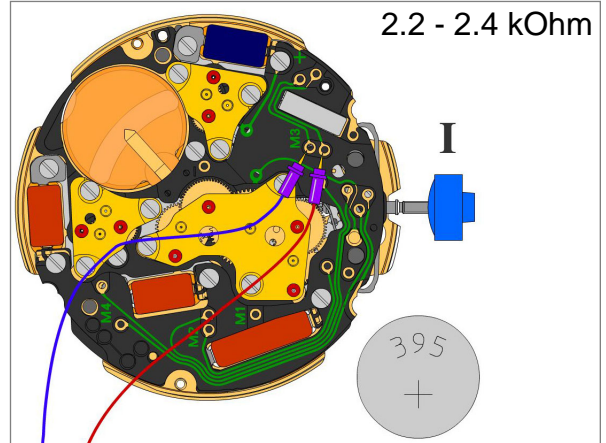
2.2 - 2.4 kOhm



Ref. 3621.054.RK
 The resistance of the coil can be measured on the electronics (M2) or directly on the coils (electronic module must be removed).

Resistance of the coil: motor 3 (counter)

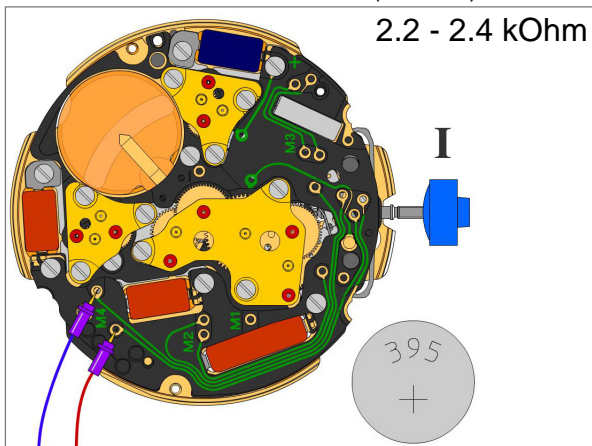
2.2 - 2.4 kOhm



Ref. 3621.055.RK
 The resistance of the coil can be measured on the electronics (M3) or directly on the coils (electronic module must be removed).

Resistance of the coil: motor 4 (counter)

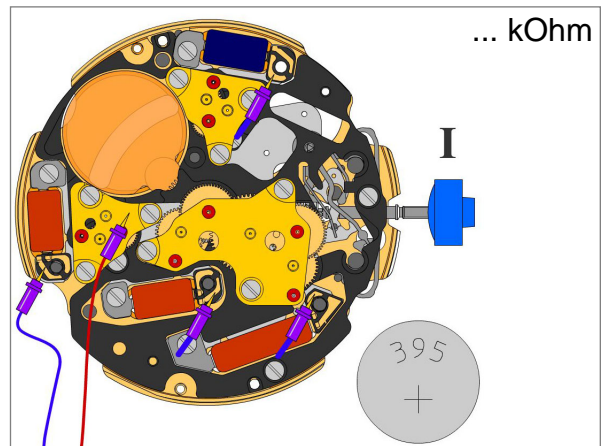
2.2 - 2.4 kOhm



Ref. 3621.054.RK
 The resistance of the coil can be measured on the electronics (M4) or directly on the coils (electronic module must be removed).

Coil insulation: motor 1, 2, 3 and 4

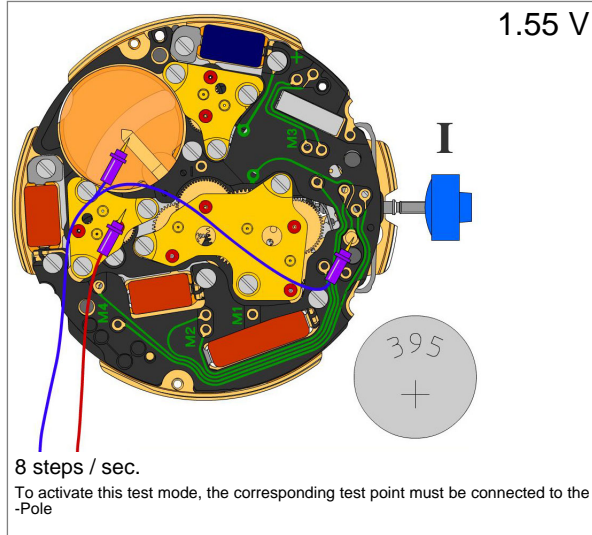
... kOhm



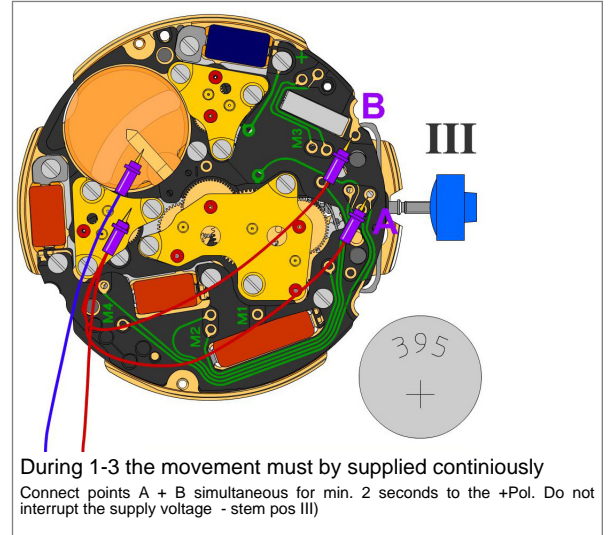
indefinite high
 The resistance between each coil and +pole must be measured (electronic module must be removed)

Test of the motors

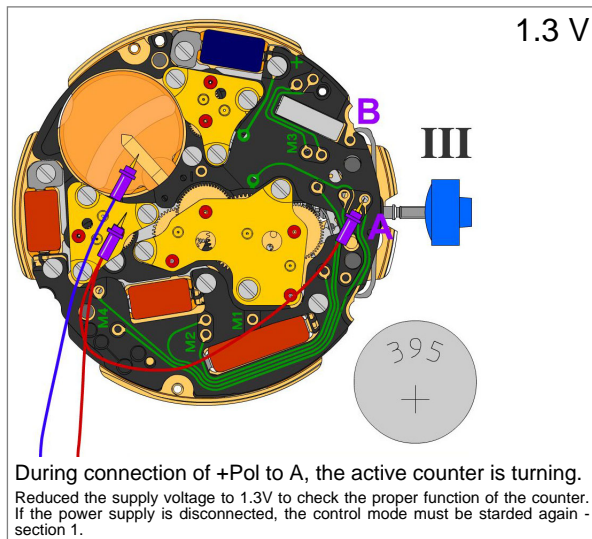
Accelerated test of movement (M1)



1. Activation of control mode (pos III)



2. Check of active counter



3. Change to the next counter

