RONDA

Technical Instructions   7004.N

15 '''

Technical Specifications

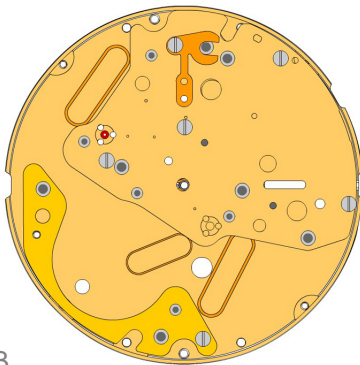|	
ø Total	34.60 mm
ø Case fitting	33.80 mm
Movement height	5.60 mm
Height over battery	5.60 mm
Movement rest	0.60 mm
Height of stem	3.30 mm
Height of stem / travel	0.90 mm / 1 mm
Battery / Voltage	Nr. 381 / 1.5V
Autonomy (theoretical)	48 months
Instantaneous rate (25°C)	-10/+20 sec/month
Current cons. (typ.)	1.43µA (date mechanisme not in gear)
Current cons. (max.)	3.1µA
Torque sec.	10µNm (typ)
Torque minute	500µNm (typ)
Operating temperature	0°C - 50°C
Resist. to magn. fields	18.8 Oe = 1500 A/m
Resistance to shock	NIHS 91 - 10

functions

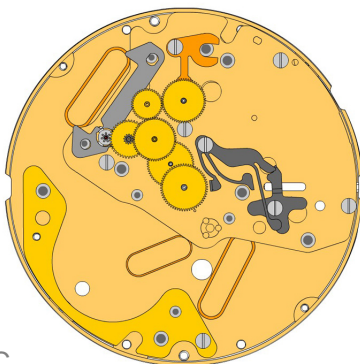|	
Position I (crown)	Neutral
Position II (crown)	Setting the date (quick mode)
Position III (crown)	Setting the time and retrograde day
	Bigdate
	Retro

CE

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Technical Instructions   7004.N

Assembling
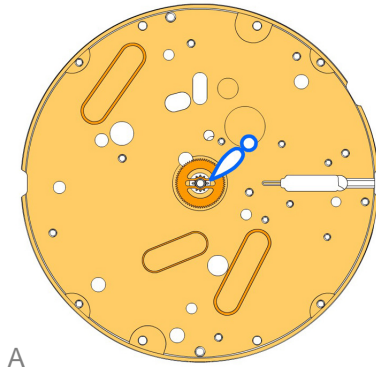
A

B

C

1. 2000.669.G — **Main Plate**
Use Moebius 9014 on bearing of all rubis

2. 3305.329 — **Cannon pinion with driver B (Aig. 1)**
Moebius 8200 greace must be placed between the steel tube and the wheel. The steel tube must be placed into the center hole of the main plate.

3. 2030.028.CO — **Centre Bridge**
Use 3 screws 4000.250.

4. 4000.250 — **Screws**

5. 3406.039 — **Sliding attachement**
Use 1 screw 4000.250.

6. 2130.181 — **Combined maintaining plate**
Use 1 screw 4000.250.

7. 4000.250 — **Screw**

8. 3016.028 — **Lever for setting lever**
"If the stem and the mechanism is already placed on the backside, place the stem into the middle position. Then use 1 screw 4000.249 to fix the lever for setting lever."

9. 4000.249 — **Screw**

10. 3016.027 — **Stop lever**
Position the Stop lever under the ?Lever for setting lever? and fix the Stop lever by using 1 screw 4000.249. The reset arm of the Stop lever must be placed according to the picture. Use Moebius 8200 at the contact point of the 2 levers.

11. 4000.249 — **Screw**

12. 3622.044 — **Stator**

13. 3715.105.RK — **Rotor**
Use an antimagnetic tweezers to place the rotor.

14. 3147.060.CO — **Intermediate wheel**

15. 3122.062.CO — **Third wheel**

16. 3136.174.CO — **Centre second wheel (Aig. 1)**

17. 3004.203.CO — **Seconde intermediate wheel**

18. 3136.182.CO — **Small second wheel axle**

19. 3136.173.CO — **Centre second wheel (Aig. 1)**

D

E
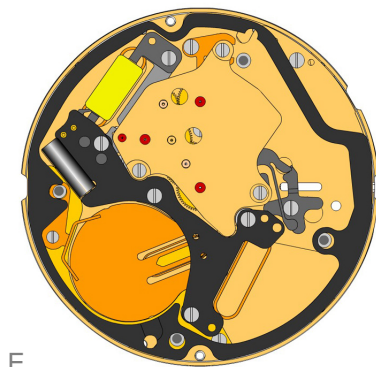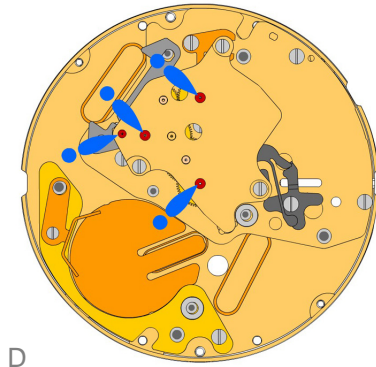
20.	2020.170.FI	Train wheel bridge 4 jewels
		Attention: Prior to the fastening process of the bridge, all 4 pins of the wheels must be visible in the 4 holes in the bridge. Use 3 screws 4000.250
21.	4000.244	Screws
22.	9014.000	Moebius 9014
23.	3603.080	Battery insulator
24.	3601.120.G	Battery clamp (+)
		Use 1 screw 4000.248
25.	4000.248	Screw
26.	3503.071	Tube
		2 pieces
27.	3612.196	Electronic module (small second)
		The coil is integrated into the electronic module. Use 5 screws 4000.250.
28.	4000.250	Screws
29.	3603.081	Spacer
30.	2130.183.G	Electronic module cover
		Use 4 screws 4000.244
31.	3600.032	Battery
		Use a plastic tweezers to place the battery (to avoid short circuit of battery).

Assembling
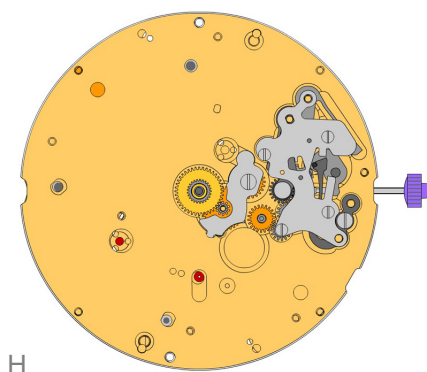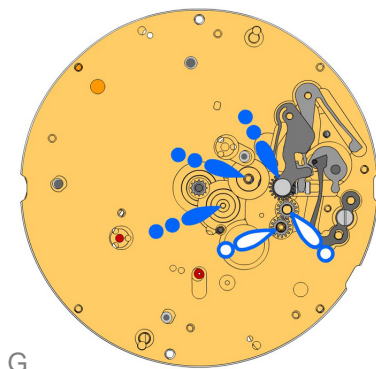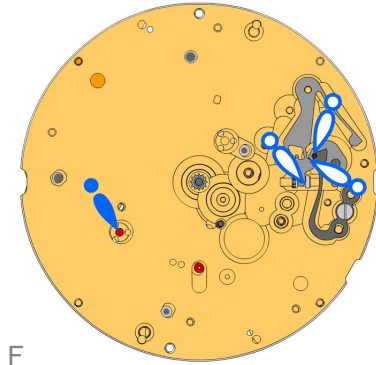
32.	2000.669.G	Main Plate
33.	3017.054.CO	Setting lever
34.	3905.063	Setting lever jumper (3 positions)
		The setting lever jumper must be tensioned and inserted into the setting lever. Use one screw 4000.250. Use Moebius 8200 to grease
35.	4000.282	Screw
36.	3001.046	Sliding pinion

37.	3015.077	Yoke (3 positions)
		The yoke must be inserted into the cut out of the sliding pinion. Tense the spring and connect in the main plate. Use Moebius 8200
38.	3004.200	Corrector setting wheel
		Use Moebius 8200 on both setting wheels.
39.	3015.078.CO	Rocking bar (3 positions)
		Moebius 8200 greace must be placed between both levers. oiling wheel with Moebius 9020.
40.	2130.194	Setting mechanism cover
		Use 4 screws 4000.305
41.	4000.305	4 Screws
42.	3000.194.CO	Stem
		Prior to the insertion of the stem, some greace must be placed on the square part of the stem.
43.	3004.204	Intermediate setting wheel
		Use moebius 9020.
44.	3007.079.CO	Minute wheel
		Use moebius 9020.
45.	2130.185	Minute train bridge
		Insert the minute train bridge in the main plate and fix it with 1 screw 4000.278.
46.	4000.278	Screw
47.	3301.296.CO	Hour wheel (Aig. 1)
		Use moebius 9020.
48.	3147.066.CO	Date corrector setting wheel

F

G

H

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Assembling
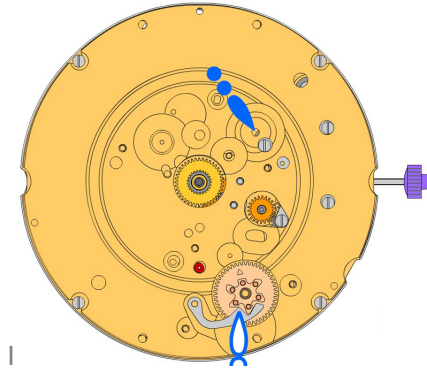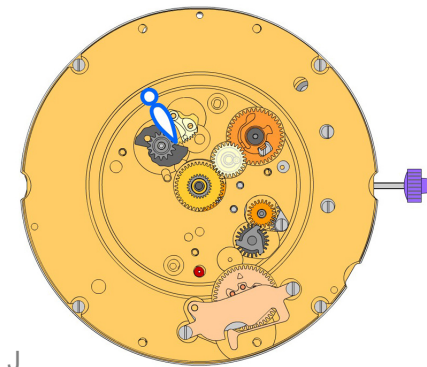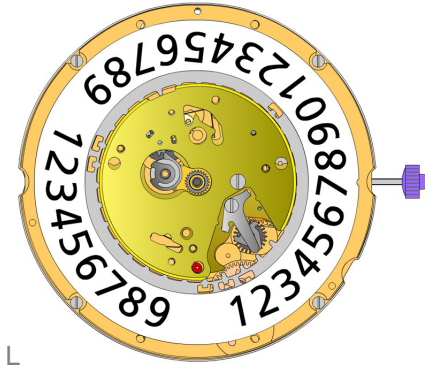
49. 2000.672.G   Main plate retro (12h)
Use 4 screws 4000.248

50. 4000.248   Screw

51. 3004.209   Tens indicator driving wheel
The short tooth of the tens indicator driving wheel must point to the center of the movement.

52. 3500.073   Tens jumper
Moebius 8200 greace must be placed between the tens jumper and the tens indicator driving wheel.

I

53. 2130.187   Tens jumper maintaining plate
Use 2 screws 4000.279. Place the spring loaded bracket outside of the tens jumper.

54. 4000.279   Screw

55. 3004.208.CO   Date indicator driving wheel
Oil must be placed at the pins before inserting the wheel.

56. 3147.061   Intermediate date wheel

57. 3404.006.CO   Day cam (12h)

58. 3406.032   Day rack
Moebius 8200 must be placed between cam and rack. Orientation of the parts like indicated.

59. 3406.031   Day rack lever

60. 3507.059.CO   Date corrector wheel

J

61. 2130.191   Date indicator plate (12h)

62. 3905.068   Date corrector spring
Use 1 screw 4000.244.

63. 3905.066   Day rack lever spring
The Days rack lever spring must be tensioned and inserted as shown.

64. 3500.069   Day jumper
Moebius 8200 greace must be placed between cam and day jumper.

65. 3500.068   Date jumper

66. 3504.234.AD   Units indicator (T3/G6)
Teaths must be greaced using Moebius 8200. The 'half moon' cut out on the unit indicator must point to the stem (position 3h).

K

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Assembling

67. 2130.192   Date indicator maintaining plate
Use 1 screw 4000.250.

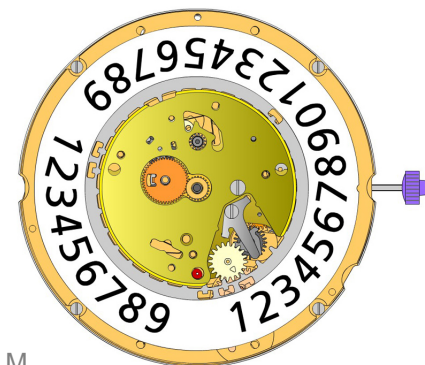**68.** 4000.250   Screw

69. 3905.064   Date jumper spring
Insert the spring into the opening of the date indicator maintaining plate.

70. 3907.047   Day finger flange
"Turn the unit indicator forward by 30 days (quick mode). Then pull the stem and adjust the time slowly until the date jump is executed ? after the date jump stop turning the stem immediately! The ?half moon? cut on the units indicator is now again pointing to the stem."

71. 3004.211   Day finger
"Position the day finger as indicated and turn the day finger until it is in contact with the day cam. By this method the time gab between change of date and change of day indicator can be minimized."

L

72. 3004.212   Days driving wheel
"Insert this wheel and assure, its bended down arm is properly inserted into the counterpart on then Day finger. Make sure that during insertion of this wheel, the Day finger is in contact with the day cam. This can be done by slightly turning this wheel (counter clock wise) while inserting."

73. 3401.082.FI   Day indicator pinion

74. 3147.062   Tens intermediate wheel

75. 3315.003   Hour wheel friction spring

M
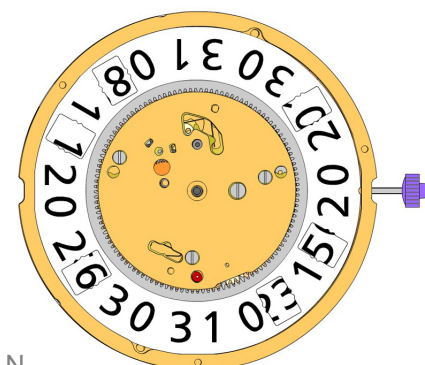
76. 3504.231.AD   Tens indicator (T3/G6)
The 'half moon' cut out on the tens indicator must point to the stem (position 3h).

77. 2130.193.G   Date mecanism maintaining plate (12h)
Use 3 screws 4000.320.

78. 4000.320   Screw

79. 3506.077.G   Dial support

80. 3506.076.G   Intermediate dial support

N

81. 9010.000   Moebius 8200
Microgliss D5 can be used

82. 9014.000   Moebius 9014
Use Moebius 9014 on bearing of all rubis

83. 9018.000   Jismaa 124
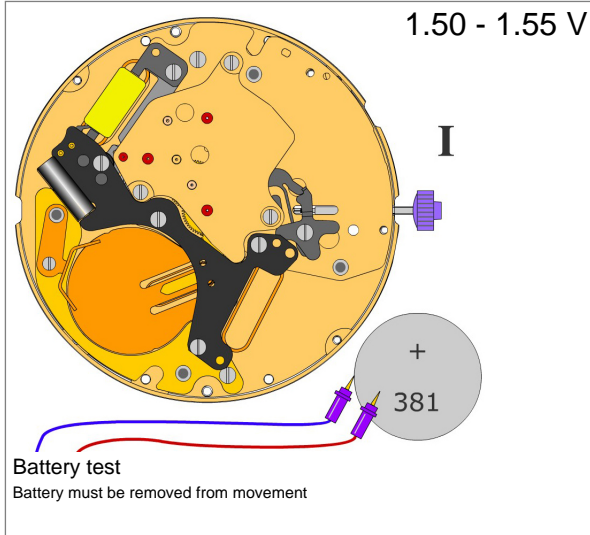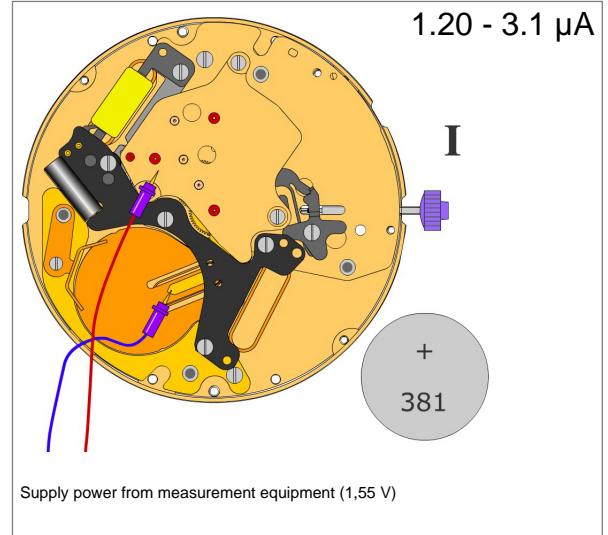Greace Moebius or Microgliss D5 an be used

84. 9020.000   Moebius 9020
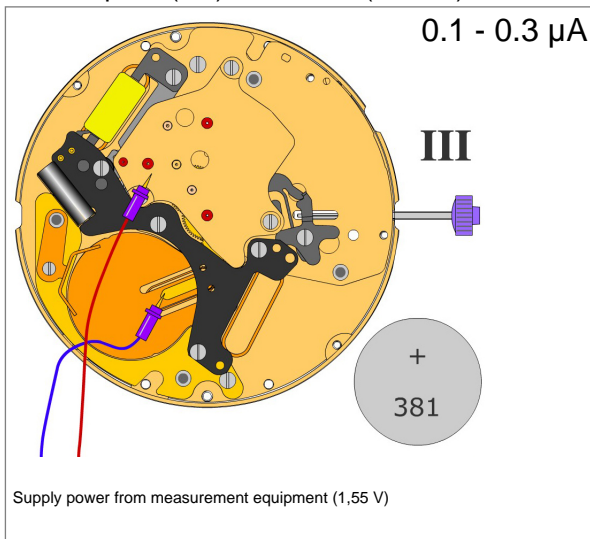
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Electrical checking

Voltage of battery

1.50 - 1.55 V

I

+
381

Battery test
Battery must be removed from movement

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

1.20 - 3.1 µA

I

+
381

Supply power from measurement equipment (1,55 V)

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

0.1 - 0.3 µA

III

+
381

Supply power from measurement equipment (1,55 V)

Lowest voltage for movement (M1)

less than 1.3V

I

+
381

Lower limit for operation of movement
Adjust voltage on the measuring eqipement to 1.55 V. The slowly reduce the tension untill the movement stops

Accuracy (seconds / month)

-10/+20 s/M

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+
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Check for a time of minimal 60 seconds
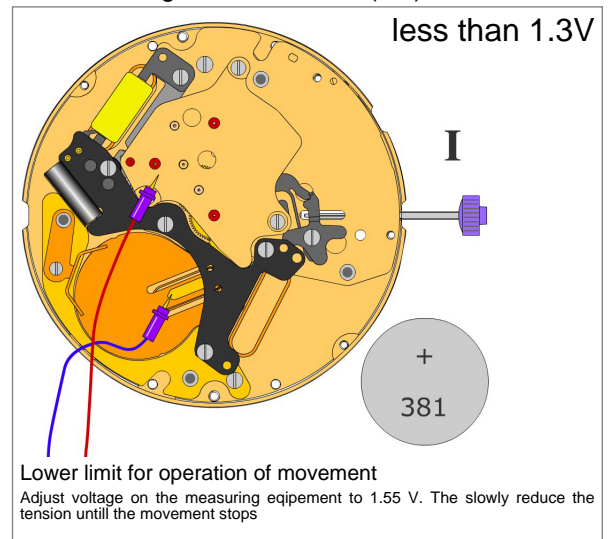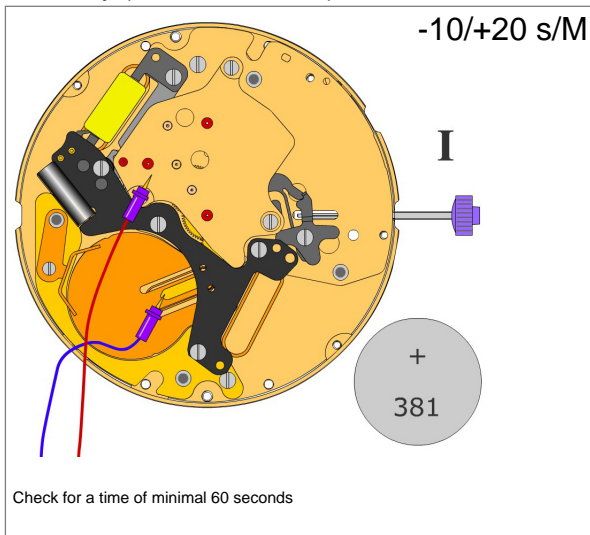
Resistance of the coil: motor 1 (movem.)

1.5 - 1.7 kOhm

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381

Ref. 3621.053.RK
The resistance of the coil can be measured on the electronics.

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Electrical checking
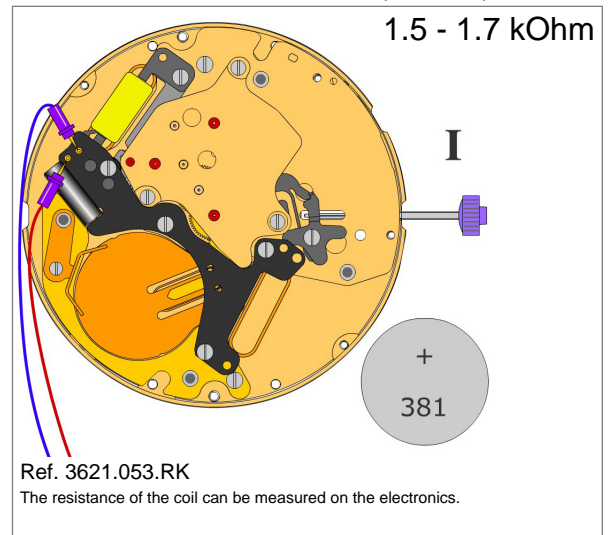
Coil insulation: motor 1 (M1)

... kOhm

I

+
381

indefinite high
The resistance between each coil and +pole must be measured.
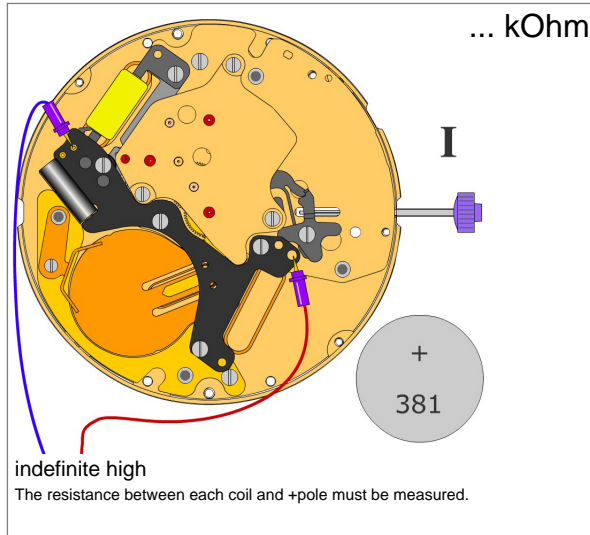
Accelerated test of movement (M1)

1.55 V

I

+
381

8 steps / sec.
To activate this test mode, the corresponding test point must be connected to the
-Pole