



Technical information

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QUARTZ

CALIBRE 5035

CALIBRE 5055



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CALIBRE 5035

DATE INDICATOR MECHANISM – principle identical with that of calibre 3035

Rapid date corrector

Centre second hand jumping forward every second

Rolex mobile frame step-by-step motor

Stop-second device

– Overall diameter	29.75 mm
– Case-fitting diameter	29.00 mm
– Overall height	6.35 mm
– Number of jewels	11
– Frequency of quartz	32'768 Hz
– Integrated electronic circuit	C-MOS
– Output: polarized pulses	1 pulse/s.
– Duration of impulse	9.8 ms
– Silver oxyde battery	1.55 V
– Service life of battery	over 24 months
– Adjustment by trimmer	$\approx \pm 2$ s/d
– State (loss or gain) when worn in normal conditions after 1 year	less than 1 min.
– Operating range	$- 5^{\circ} \text{ C} \dots 55^{\circ} \text{ C}$
– Operating in magnetic fields up to about	1000 Oe

Movement seen from above (Fig. 1) and from below with date indicator (Fig. 2).



Fig. 1

Scale
1.25: 1



Fig. 2



CALIBRE 5055 - derived from calibre 5035

DAY-DATE CALENDAR MECHANISM – principle identical with that of calibre 3055
Rapid date corrector

– Overall diameter	29.75 mm
– Case-fitting diameter	29.00 mm
– Overall height	7.11 mm

Movement seen from below with Day-Date calendar mechanism (Fig. 3) and without indicators (Fig. 4).



Fig. 3

Scale
1.25: 1



Fig. 4



CALIBRES 5035 and 5055

Functions of the handsetting stem

Position 1:
crown unscrewed



no function

Position 2:
crown pulled out
to first catch



backward motion:
correction of
date indication

forward motion:
no function

Position 3:
crown pulled out
to second catch



stop-second
(no current supply
to motor)

setting to time

crown pushed in: restarting of the motor with reset function; the second hand starts up after exactly one second.

The battery consumption is strongly reduced when the crown is in position 3, because only the electronic module and the quartz remain fed. Therefore, the watches must be stored with the crown pulled out to the second catch.

List of special ROLEX tools which can be ordered from the Technical Information Department

- Ref. 1009 Tool for taking off Oyster bezels (can be used for all Oyster bezels)
- 2003 * Key for calendar-wheel nut
- 2004 * Tool for extracting the cam stud
- 2005 ** Reamer for the day indicator
- 2023 Screwdriver for the trimmer
- 2024 Movement-holder

* Same tool as for calibres 1556-1575, 3035-3075

** Same tool as for calibres 1556, 3055



PARTIAL SERVICE OF THE CALIBRES 5035 and 5055

1. Opening the case

The back can be untightened without removing the bracelet from the case by means of a ROLEX Oyster opener Ref. 1001, 1003 or 1008, with jig. Ref. 1008/11.

No scraps of metal or dust must penetrate the watch; if necessary, clean the case before opening it.

- 1.1 Withdraw the spring lug from the clasp to separate the two parts of the bracelet.
- 1.2 Unscrew the back of the case.

2. Checking the battery voltage in place

Measure the voltage of the battery with a voltmeter or any instrument equipped with a voltmeter:

- 2.1 Place the positive voltmeter test lead terminal on the movement, for example in the notch of the screw for case and the negative terminal on the top side of the battery (Fig. 5). The voltage must be at least 1.55 volt.

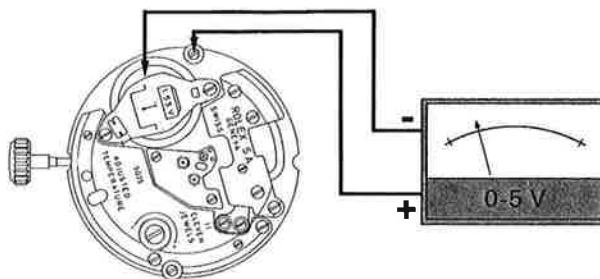


Fig. 5

3. Changing the battery

Use non-magnetic tweezers for the movement and plastic tweezers for the battery.

- 3.1 Remove the two screws of the battery bridle (No. 56013) and withdraw the bridle (No. 6013) with its printed circuit (No. 6012) which may fall out from it. Unscrew or tighten the screws one by one so that they are not drawn into the motor by the magnets.
- 3.2 Check the appearance of the printed circuit which is housed under the bridle; it should be changed if there are traces of oxidation.
Proceed as follows when putting the printed circuit back in place:
 - Insert the little tongue of the circuit, with the metalised side of the circuit on the same side as the battery, in the corresponding aperture of the bridle.
 - Press gently, with a leather buff, on the centre of the circuit and slide the circuit under the two protruding tongues of the bridle (Fig. 6).

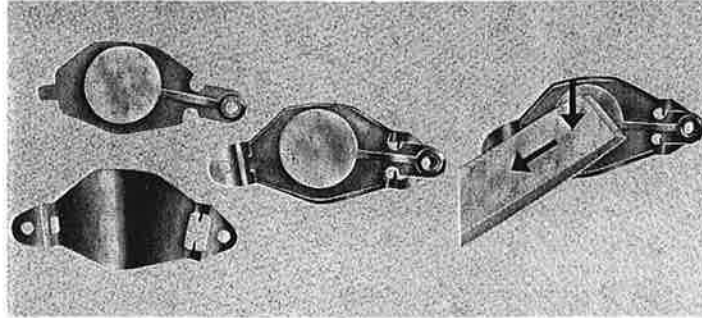


Fig. 6

- 3.3. Remove the used battery (No. 6014) by turning over the movement.
- 3.4. Check that the battery housing is clean.
- 3.5. Check the appearance of the new battery.

It should not be distorted in any way and the gasket should be clean and free of any traces of white crystals or yellowish liquid.

- 3.6. Check its voltage which must be at least 1.55 volt (Fig. 7).

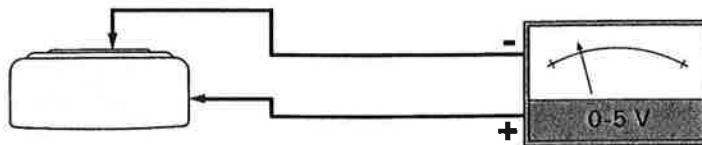


Fig. 7

- 3.7. Insert the battery with the positive (+) side at the bottom of the housing.
- 3.8. Replace the battery bridle.

Use only genuine ROLEX-packaged battery.

Never touch the battery with the fingers, use plastic tweezers to avoid short circuits.

Store the battery in a dry and cool place, but never in the refrigerator.

A number of three figures indicating the date of manufacture is marked on the rim of the battery. The first two figures refer to the month and the third one to the last figure of the year.

4. **Checking and adjusting the frequency of the quartz with the trimmer**
 - 4.1. Check the daily rate of the watch on a timing machine for quartz watches.



- 4.2. Make any correction that may be necessary by turning the screw of the trimmer (Fig. 8) in the corresponding direction with the ROLEX tool Ref. 2023. The trimmer is a rather fragile element therefore only press gently on it.

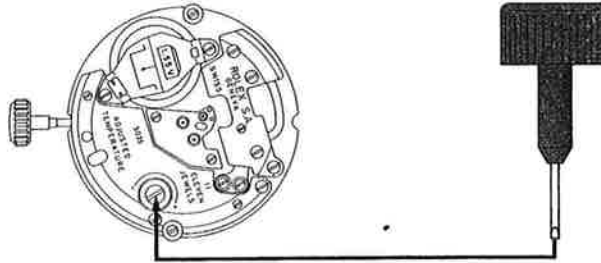


Fig. 8

The progression of the correction is not linear and the extent of the angle of the adjustment to be made depends on the position of the trimmer at the start. So turn the screw of the trimmer gently and only a few degrees at a time. When the maximum fast or slow point is reached, the correction operates in the opposite direction.

If the correction required is greater than can be made with the trimmer, $\approx \pm 2$ s/d, it will be necessary to change the electronic module.

However it should be noted that a loss of several seconds, which does not show up on a timing machine, can be the result of intermittent stopping (loss of seconds). In this case proceed as indicated on page 28, paragraph "Watch stops, second hand vibrates but does not move forward, or loss of seconds".

IMPORTANT

The temperature inversion point of the quartz is at $26 \pm 2^\circ \text{C}$. Our watches are adjusted to the temperature of the watch when worn, which is around 28°C . Temperatures below or above the inversion point will make the watch lose time, as illustrated in the diagram below (Fig. 9).

However, if the temperature when the watch is worn is noticeably different from normal, information from the customer should be sought before making the adjustment.

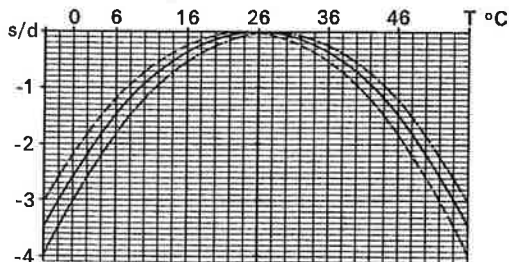


Fig. 9

5. Changing the dial

If a customer wishes to have a different * dial, proceed as follows:

- * The indicators should match the colour of the new dial; if necessary change these. For the changing of Day-Date indicators see page 10, § 6.



- 5.1. Pull out the button to the second catch (position 3) to stop the movement and remove the handsetting stem by pressing on the stud of the setting lever.
- 5.2. Take the movement out of the case.
- 5.3. Put the handsetting stem back in place, then in position 3.
- 5.4. Take off the hands and the dial.
- 5.5. Put on the new dial and screw up the two dial screws tightly.
The dial should be well centred.
A slight modification to the centring of the indicator(s) in the aperture(s) of the dial can be carried out by slightly bending the arm of the respective jumper to give a different orientation to the beak.
- 5.6. Check the endshake of the hour wheel.
For the 5055 calibre, this endshake must not exceed 0.03 mm; hour wheel seats Nos. 5123-1, 5123-2, 5123-3 and 5123-4 (thickness: 0.02, 0.03, 0.04 and 0.05 mm) limiting the endshake are available.
- 5.7. Fit the hour and minute hands so that the date, respectively the day, change at midnight. Tolerance: $-1 +2$ minutes.
- 5.8. The second hand should be fitted as follows:
 - Push it down with slight pressure only.
 - Check its alignment with the minute-circle for one revolution.
 - Correct any misalignment by pushing the hand laterally, without forcing it.

The second hand must be correctly in line with the minute-circle of the dial.

- Drive the hand in perpendicularly all the way and again check alignment.
If alignment is no longer correct after the hand has been driven in all the way, it can no longer be displaced laterally without causing serious damage to the escapement; in such a case, therefore, the second hand must be removed and the driving-in operation recommenced.

6. Changing the Day-Date indicators

If a customer wishes to have the day indicator in another language, proceed as follows:

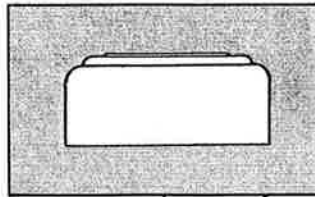
- 6.1. Pull out the button to the second catch (position 3) to stop the motor and remove the handsetting stem by pressing on the stud of the setting lever.
- 6.2. Take the movement out of the case.
- 6.3. Put the handsetting stem back in place, then in position 3.
- 6.4. Take off the hands, dial and day indicator (No. 5135) and, if applicable, also the date indicator (No. 5134).
- 6.5. Put on the new day indicator and, if applicable, also the new date indicator.
The indicator should be very flat and able to move freely, without any sideshake on the assembled star wheel. If necessary, enlarge the size of the centre-holes; use a Rolex reamer ref. 2005 for the centre-hole of the day indicator.
The indicators should fall freely when the movement is turned over. To fit the dial and hands proceed as instructed on page 9 and 10 § 5.5. and the following.
Correcting an imperfect change of date and day:
 - If an indicator jumps too far: strengthen the tension of the corresponding jumper.
 - If an indicator does not jump far enough: reduce the tension of the corresponding jumper (for correct tension of jumpers see page 25, Fig. 22).



WORKING PRINCIPLES OF THE ROLEX QUARTZ MOVEMENT

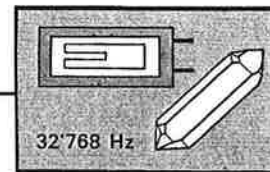
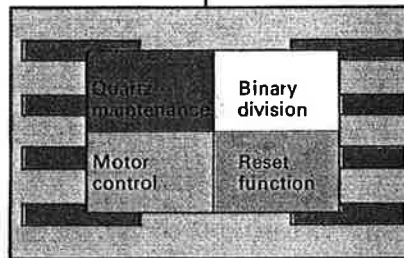
I. Power source

Battery 1.55 V



II. Electronic module

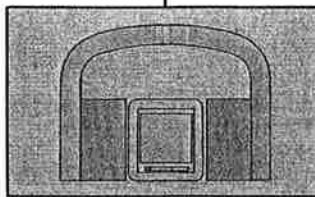
Integrated circuit



Quartz resonator

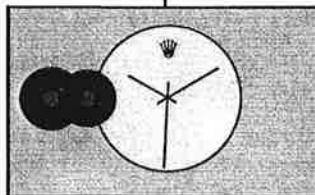
III. Transducer

ROLEX
Step-by-step motor



IV. Analog display

Train
and
hands





COMPLETE SERVICE OF THE CALIBRE 5035

7. Dismantling

Do not put the following components in the cleaning baths: electronic module (No. 6005), motor (No. 6011), printed circuit (No. 6012), battery bridle (No. 6013), battery (No. 6014), date indicator (No. 5099). These parts can be cleaned with cleaning paste.

The pallet fork can be put in the cleaning machine if it is fixed in a protective holder Ref. 3000 (pallet forks are delivered in this holder).

- 7.1. Unscrew and take off the case back.
- 7.2. Place the handsetting stem in position 1.
- 7.3. Remove the battery bridle (No. 6013) with its circuit (No. 6012) and battery (No. 6014).
- 7.4. Remove the handsetting stem by pressing on the stud of the setting lever and take the movement out of the case, then put the handsetting stem back in place, then in position 3. Take off the hands and the dial. Tighten the dial screws again.
- 7.5. Turn the bolt and remove the date indicator (No. 5099).
- 7.6. Remove the date indicator seating (No. 5098).
- 7.7. Remove the date jumper (No. 5095).
- 7.8. Remove the calendar wheel nut (No. 5093)—left-hand thread—with the ROLEX key Ref. 2003.
- 7.9. Remove the date wheel mounted (No. 5094) by slightly disengaging the cam yoke (No. 6044).
- 7.10. Remove the cam yoke with its jewel (No. 95090) by disengaging the cam yoke spring (No. 5091).
The cam yoke spring should be left in place.
- 7.11. Remove the hour wheel (No. 6024) and the cannon-pinion (No. 6025).
- 7.12. Remove the two gilt connecting screws (No. 56011-3) and the two exterior bridge screws (No. 56011-2) fixing the motor.
- 7.13. Take off the upper bridge (No. 6003) of the electronic module by unscrewing the four screws (Nos. 56005-1 and 56005-2).
- 7.14. Position the movement with the handsetting stem at 6 o'clock (Fig. 10), tip the pallet fork to the left, holding the motor by the armature take it off by raising it carefully; make sure that the spiral wires do not touch the pallet fork and get bent.



Fig. 10

Cleaning the motor: see page 15.

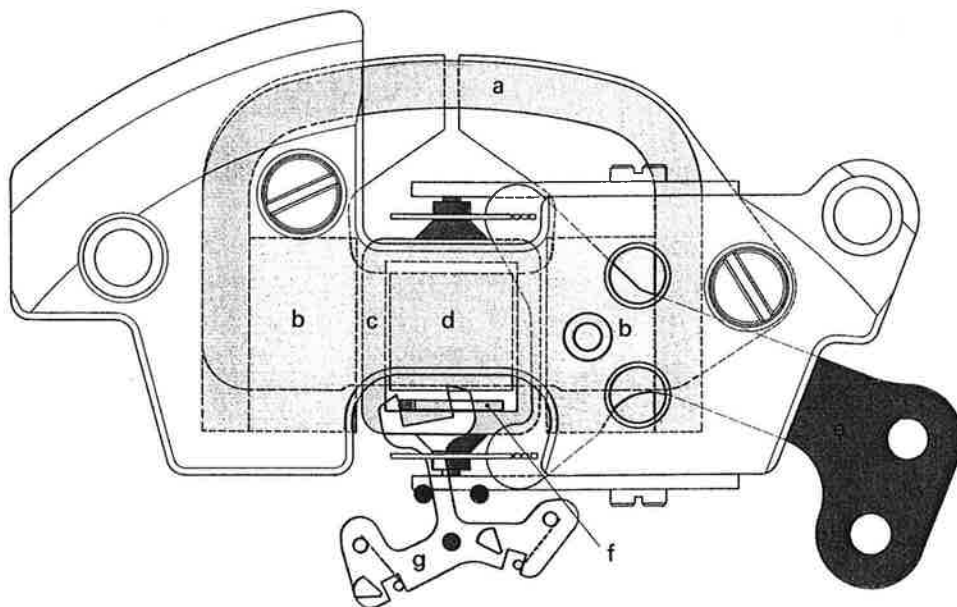
Place the motor, which has powerful magnets, out of reach of the metal parts.

- 7.15. Take out the electronic module (No. 6005) and the lower bridge of the module (No. 6004) by turning the movement over.
- 7.16. Take out the train bridge (No. 6001).
- 7.17. Take out the second wheel (No. 6023), the pallet fork (No. 6041) and the third wheel (No. 6022).
- 7.18. Take out the centre bridge (No. 6002) and the centre wheel (No. 6021).
- 7.19. Take out the jumper for setting lever, mounted (No. 6043), the minute wheel (No. 6026), the setting wheel (No. 6027), the yoke spring (No. 5041), the yoke (No. 5039), the handsetting stem (No. 5025), the sliding pinion (No. 6028) and the handsetting pinion (No. 6029).

The setting lever mounted (No. 6042) and its spring (No. 5037) should be left in place.



DIAGRAM OF THE MOTOR



- a) Metal carcass
- b) Permanent magnets
- c) Mobile frame
- d) Core
- e) Printed circuit
- f) Finger
- g) Pallet fork

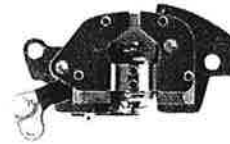


8. Cleaning the motor No. 6011 (Fig. 11)

motor seen from above



motor seen from below



Scale
1.5:1

Fig. 11

The pivots of the mobile frame being not oiled, the motor does not require periodical cleaning. However it is important to make sure that no scraps of metal stick to the motor.

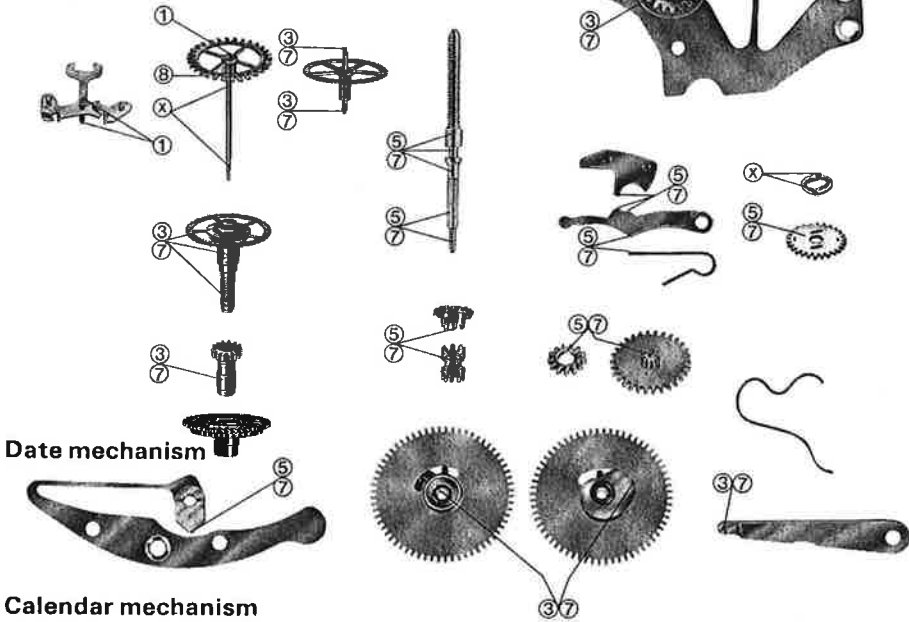
The components of the motor cannot be obtained separately.

- 8.1. Take off the two screws of the upper bridge, turn the module over.
- 8.2. Separate the lower bridge from the upper bridge, being careful not to damage the coil and the permanent magnets.
- 8.3. Remove one of the lateral bridges, unscrewing its screw.
- 8.4. Remove the printed circuit with the coil, unscrewing the screw.
- 8.5. Clean the pivots of the mobile frame (hold it by its finger) and the jewels of the lateral bridges.
The condition of the surface of the pivots does not affect the performance of the motor.
- 8.6. Carefully clean the stator (permanent magnets and core) with cleaning paste.
- 8.7. Reassemble the motor without oiling the pivots of the mobile frame.



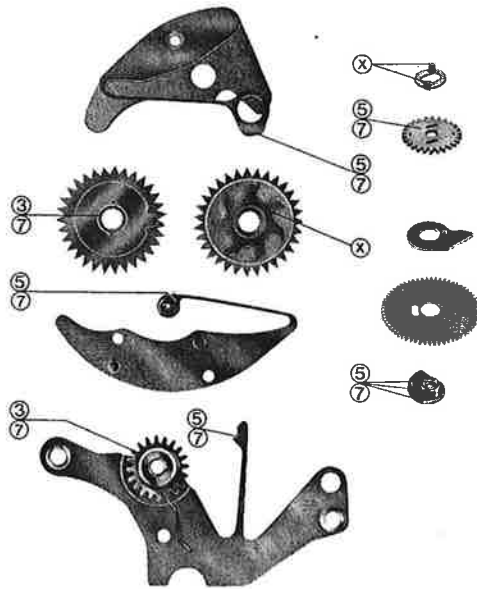
OILING CHART

Movement



Date mechanism

Calendar mechanism



- ① SYNT-A-LUBE 9010
- ② PML 163
- ③ Grease MR 2 or KT 22
- ④ FHMR 3
- ⑤ Grease Moebius 9415
- ⊗ Do not oil
- Ⓐ Do not dismantle

The lubricants ③ and ⑤ can be replaced by the oil ⑦.

These oils and greases can be ordered from the Technical Information Department



9. Reassembling of the movement

For lubrication, see diagram on page 16.

Make sure that all screws are tight, but do not force the motor connecting screws (No.56011-3) otherwise this could damage the printed circuit.

- 9.1. Grease and fit the handsetting stem, the handsetting stem pinion and the sliding pinion.
- 9.2. Oil and fit the centre wheel and the centre bridge.
- 9.3. Oil the pivot-shank of the centre wheel, the setting wheel and the minute stud.
- 9.4. Fit the cannon pinion, the setting wheel and the minute wheel.
- 9.5. Fit the yoke, the yoke spring and the mounted jumper for the setting lever and check the friction of the cannon pinion.
- 9.6. Fit the third wheel, lightly oil the shoulder on the pinion side of the second wheel and put it in place, oil the lower pivot of the pallet fork, fit the latter with the bridge, then check the endshakes.

The two pins fixed to the movable blades have been carefully positioned in the factory. Their position should on no account be modified because it determines the regularity with which the second hand jumps and the performance of the escapement.

- 9.7. Oil the lower and upper pivots of the centre wheel, the upper pivots of the second wheel and of the pallet fork.
- 9.8. Fit the lower bridge of the module and then the electronic module.
- 9.9. Check the stop-second function (Fig. 12).

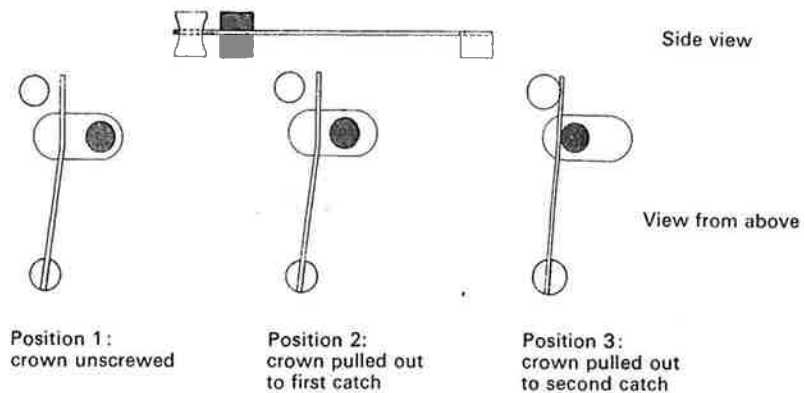


Fig. 12



9.10. Check whether there are impulses at the output of the electronic module (Fig. 13).

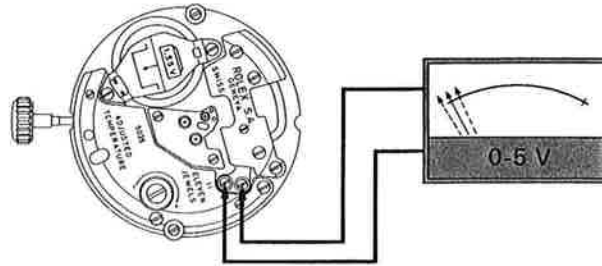


Fig. 13

9.11. Measure the resistance of the coil which must range between 1200-1500 Ω (Fig. 14).

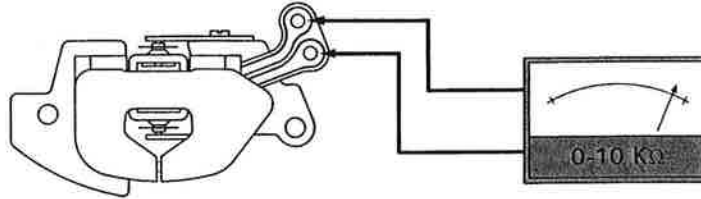


Fig. 14

9.12. Check the insulation of coil in relation to the finger and in relation to the metal carcass (Fig. 15). The resistance must be > (bigger) than 100 K Ω .

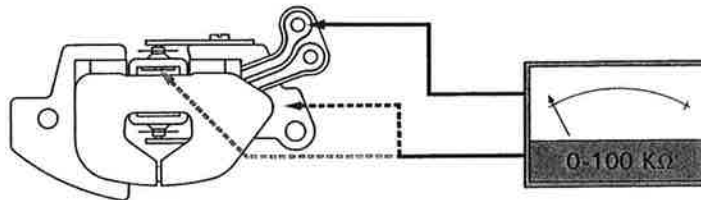


Fig. 15

9.13. Check the sideshake of the mobile frame.

9.14. Check the two spiral wires which convey the current to the coil. They should not touch one another.



- 9.15. Fit the motor after checking and a possible cleaning. Cleaning the motor see page 15. To fit the motor easier, tip the pallet fork and the finger to the left (Fig. 16).

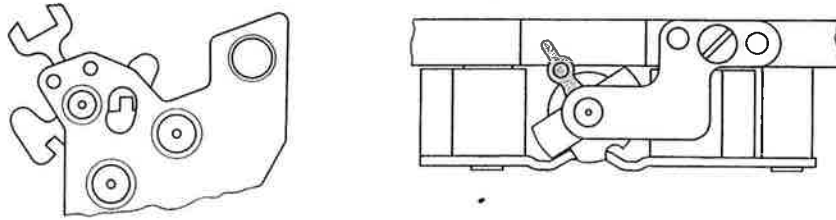


Fig. 16

- 9.16. Fit the upper bridge of the electronic module.
9.17. Screw up the two connecting screws.
9.18. Measure total consumption at a voltage of 1.55 V with the external supply stabilised (Fig. 17). It should be \leq to $9 \mu\text{A}$ (equal or smaller).

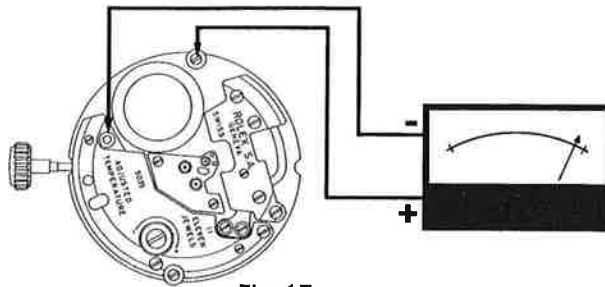


Fig. 17

- 9.19. Fit the handset stem in position 3 (no current supply to motor) and measure the consumption of the electronic module (Fig. 18) which should be \leq to $3 \mu\text{A}$.

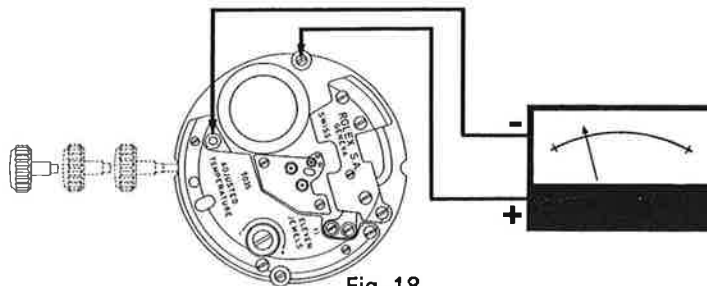


Fig. 18

* Damaged motors are exchanged at a special price at our Spare Parts Division.



- 9.20. After an overhaul use a new battery to ensure maximum running time.
The battery should not be distorted in any way and the gasket should be clean and free of any traces of white crystals or yellowish liquid.
- 9.21. Check the voltage of the battery, see page 8, Fig. 7.
- 9.22. Insert the battery, with the positive pole side (+) at the bottom of the housing.
- 9.23. Fit the bridle with its printed circuit, see pages 7 and 8, Fig. 6.
- 9.24. To grease the teeth of the second wheel, proceed as follows:
 - Stop the watch.
 - Grease the five teeth that are visible.
 - Set the watch going for 10 seconds (5 teeth).
 - Stop the watch.
 - Grease again five teeth and continue the procedure for one turn of the wheel.

Each tooth should be lubricated and the quantity of grease required is substantially more than that needed for an escapement wheel of a mechanical watch.

- 9.25. If necessary, adjust the frequency at an ambient temperature approaching 28° C, see page 8, paragraph 4.

10. Reassembling of the date indicator mechanism

For lubrication, see diagram on page 16.

- 10.1. Place the corrector on the corrector wheel after having greased this latter one, with the two guide marks on the wheel facing upwards, put in place and check that the corrector moves freely.
- 10.2. Fit the cam yoke, its countersink for the jewel towards the dial side, by disengaging the spring of the cam yoke, then put in place the jewel for cam yoke.
- 10.3. Oil the cam yoke spring resting point on the cam yoke, the hole and the rim of the jewel of the yoke and the cam stud. Oil the pivoting point of the intermediate setting wheel fixed to the setting jumper.
- 10.4. Oil the outside of the cannon-pinion and fit the hour wheel.
- 10.5. Fit the mounted date wheel, slightly disengaging the cam yoke.
- 10.6. Screw the nut and check throughout a complete turn that the mounted date wheel has the correct endshake. Correcting the endshake, see page 22.
- 10.7. Fit the date jumper.
- 10.8. Fit the date indicator seating.
- 10.9. Lightly grease the beak of the date jumper.
- 10.10. Fit the date indicator by disengaging the beak of the date jumper and close the bolt.
- 10.11. Fit the dial and screw the two dial screws up tight.



- 10.12. Check the freedom and endshake of the hour wheel as well as the changing of the date.

Correcting a faulty changing of the date:

- The indicator jumps too far: strengthen the tension of the date jumper.
- The indicator does not jump far enough: reduce the tension of the date jumper.

Correct tension of the jumper, Fig. 19.

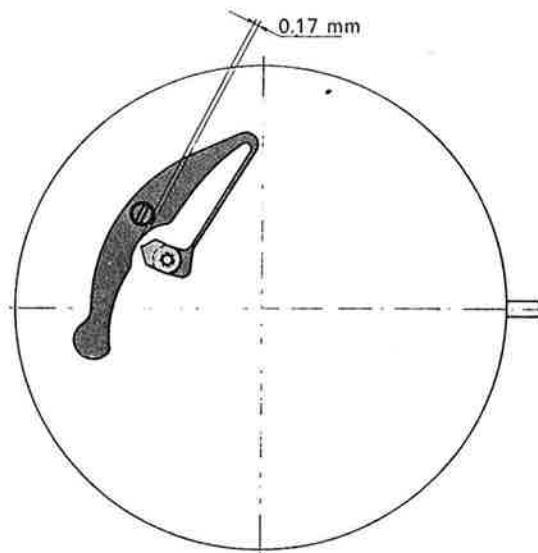


Fig. 19

To centre the date indicator position the eccentric or slightly bend the arm of the date jumper in order to position the beak.

- 10.13. Press in the hour and minute hands, preferably on a ROLEX movement holder Ref. 2024, in such a way as to ensure that the date changes at midnight. Tolerance -1 $+2$ minutes.
- 10.14. Press in the second hand slightly.
- Check its alignment throughout one full turn of the dial.
 - Correct any possible misalignment by pushing the hand in a lateral direction but without forcing it.

The second hand should line up well with the minute-marks on the dial.

- Press the hand well home perpendicularly and check the alignment again.

If the alignment is no longer correct after the hand has been pressed home, the hand cannot be moved laterally without seriously damaging the escapement; it will therefore be necessary to take the second hand off and start the process from the beginning again.

- 10.15. Re-check the change of date after casing up.



11. Correcting the endshake of the mounted date wheel of calibre 5035 and of the cam with cannon, calendar wheel and calendar finger of calibre 5055

The height of the cam stud (No. 5092) can be adjusted:

- By driving in the cam stud with a jewel fitting tool to reduce the endshake.
- By pulling out the cam with the ROLEX tool Ref. 2004 (Fig. 20) to increase the endshake.



Fig. 20

Instructions for use

Screw – left-hand thread – the tip of the tool onto the cam stud.

Screw the knurled nut until it touches the tool and then, in spite of the resistance, go on turning slowly so as to extract the stud.

(1/8 of a turn = about 0.03 mm)

12. Casing up

- 12.1. Fit the movement into the case, which should have been previously reconditioned (polishing and satin-finishing of case and bracelet, testing for water-resistance). Insert the handsetting stem and screw the crown onto the tube in order to centre the movement.
- 12.2. Lock the case screws (No. 55053) by unscrewing them.
- 12.3. Screw on and tighten the case back, then carry out the final water-resistance test.
If the bezel has to be removed for the reconditioning of the case, it is recommended to use the ROLEX OYSTER bezel remover Ref. 1009.

The washer of the crystal must be changed if the bezel is removed.



COMPLETE SERVICE OF THE CALIBRE 5055

13. Dismantling

Do not put the following components in the cleaning baths: electronic module (No. 6005), motor (No. 6011), printed circuit (No. 6012), battery bridle (No. 6013), battery (No. 6014), day and date indicators (No. 5135 and 5134). These parts can be cleaned with cleaning paste.

The pallet fork can be put in the cleaning machine if it is fixed in a protective holder Ref. 3000 (pallet forks are delivered in this holder).

- 13.1. Unscrew and take off the case back.
- 13.2. Place the handsetting stem in position 1.
- 13.3. Remove the battery bridle (No. 6013) with its circuit (No. 6012) and the battery (No. 6014).
- 13.4. Remove the handsetting stem by pressing on the stud of the handsetting lever and take the movement out of the case, then put the handsetting stem back in place, then in position 3. Take off the hands and the dial. Tighten the dial screws again.
- 13.5. Remove the day and date indicators (Nos. 5135 and 5134).
- 13.6. Remove the assembled star wheels (No. 5131).
- 13.7. Remove the indicator seating (No. 6076).
- 13.8. Remove the day and date jumpers (Nos. 5136 and 5128).
- 13.9. Remove the calendar wheel nut (No. 5093) – left-hand thread – with the ROLEX key Ref. 2003.
- 13.10. Remove the calendar finger (No. 5132), the calendar wheel (No. 5127) and the cam with cannon (No. 5126) by slightly disengaging the cam yoke (No. 6044).
- 13.11. Remove the jewel of the cam yoke (No. 95090) and the cam yoke by disengaging the spring of the cam yoke (No. 5091).
The cam yoke spring should be left in place.
- 13.12. Remove the hour wheel (No. 6072) and the cannon pinion (No. 6074).
- 13.13. Remove the date corrector (No. 5129) and its wheel (No. 5097).
- 13.14. Dismantle the movement as indicated on paragraphs 7.12. to 7.18. pages 12 and 13.
- 13.15. Take out the jumper for setting lever, mounted (No. 6075), the minute wheel (No. 6026), the setting wheel (No. 6027), the yoke spring (No. 5041), the yoke (No. 5039), the handsetting stem (No. 5025), the sliding pinion (No. 6028) and the handsetting pinion (No. 6029).
The setting lever mounted (No. 6042) and its spring (No. 5037) should be left in place.



14. Reassembling of the movement

See pages 17-20.

15. Reassembling of the calendar mechanism

For lubrication, see diagram on page 16.

- 15.1. Check the tension of the corrector spring (Fig. 21) and the liberty of the corrector. The corrector spring is riveted to the jumper for setting lever mounted. Change the whole jumper if the spring does not work properly.

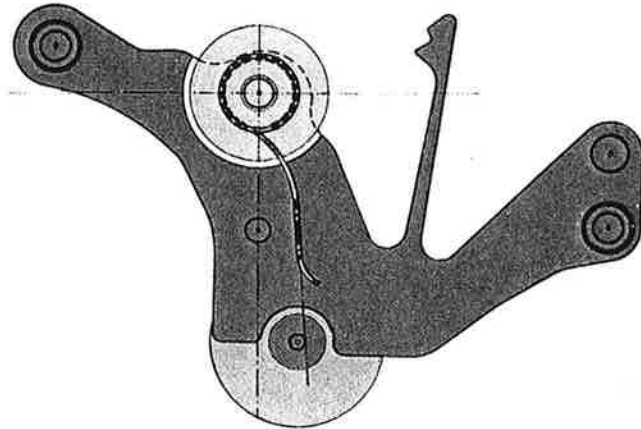


Fig. 21

- 15.2. Place the corrector on the corrector wheel after the latter has been greased, with the two guide marks on the wheel facing upwards, put in place and check that the corrector moves freely.
- 15.3. Fit the cam yoke, its countersink for the jewel towards the dial side, by disengaging the spring of the cam yoke, then put in place the jewel for cam yoke.
- 15.4. Oil the cam yoke spring supporting point on the cam yoke, the hole and the rim of the jewel of the yoke and the cam stud. Oil the pivoting point of the intermediate handsetting wheel fixed to the handsetting jumper.
- 15.5. Oil the outside of the cannon pinion and fit the hour wheel.
- 15.6. Fit the cam with cannon by slightly disengaging the cam yoke, the wheel and the calendar finger.



- 15.7. Screw the nut and check throughout a complete turn that the wheel and the calendar finger have the correct endshake. Correcting the endshake, see page 22.
- 15.8. Fit the date and day jumpers.
 - The arms of the two jumpers should be parallel to the plate.
 - The tension of the jumpers should correspond to the diagram Fig. 22.

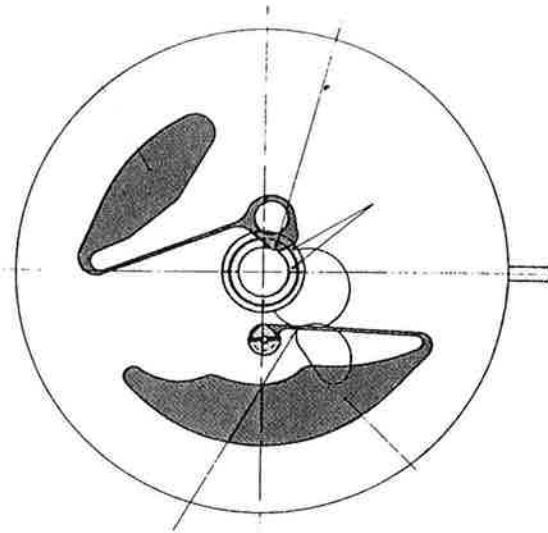


Fig. 22

- 15.9. Fit the indicator seating.
- 15.10. Lightly grease the teeth of the assembled star wheels.
- 15.11. Fit the assembled star wheels and see that the beaks of the jumpers engage the star wheels.
- 15.12. Fit the day and date indicators.
- 15.13. Fit the dial and screw the two dial screws up tight.
- 15.14. Check the freedom and endshake of the hour wheel which should not exceed 0.03 mm, see page 10, paragraph 5.6.
- 15.15. Check the changing of the day and date.
 - Correcting a faulty changing of the date and day:
 - The indicator jumps too far: strengthen the tension of the corresponding jumper.
 - The indicator does not jump far enough: reduce the tension of the corresponding jumper.
 - If it works badly, see page 10, paragraph 6.
- 15.16. Press in the hour and minute hands, preferably on a ROLEX movement holder Ref. 2024, in such a way as to ensure that the date and day change at midnight. Tolerance -1 +2 minutes.



15.17. Press in the second hand slightly.

- Check its alignment throughout one full turn of the dial.
- Correct any possible misalignment by pushing the hand in a lateral direction but without forcing it.

The second hand should line up well with the minute - marks on the dial.

- Press the hand well home perpendicularly and check the alignment again.

If the alignment is no longer correct after the hand has been pressed home, the hand cannot be moved laterally without seriously damaging the escapement; it will therefore be necessary to take the second hand off and start the process from the beginning again.

15.18. Re-check the changing of the day and date after casing up.

16. Casing up

Carry out casing up according to instructions on page 22.

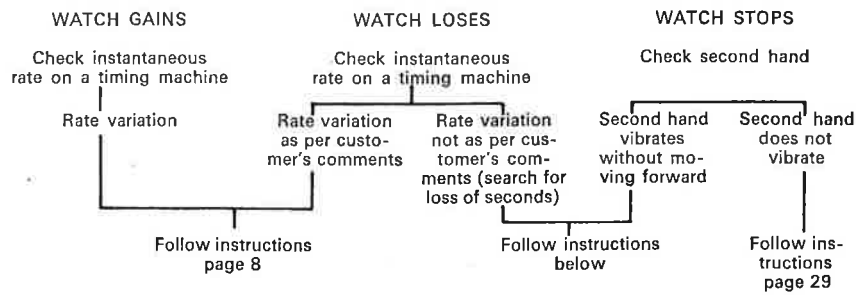


RECAPITULATION OF TESTS

	Instrument	Measurement	Remarks
1. Voltage of battery (pages 7 and 8, Fig. 5 and 7)	Voltmeter	1.55 V min.	
2. Resistance of coil (mobile frame) (page 18, Fig. 14)	Ohmmeter	1200-1500 Ω	motor out of movement
3. Insulation of coil in relation to the finger and in relation to the metal carcass (page 18, Fig. 15)	Ohmmeter	> 100 K Ω	motor out of movement
4. Impulse at the output of the electronic module (page 18, Fig. 13)	Voltmeter	Oscillating movement of the hand	connected to terminals of motor (2 gilt screws)
5. Consumption of movement at stabilised voltage of 1.55 V (page 19, Fig. 17)	Current integrator	9 μ A max.	motor and electronic module
6. Consumption of electronic module at stabilised voltage of 1.55 V (page 19, Fig. 18)	Current integrator	3 μ A max.	handsetting stem in position 3, no current supply to motor
7. Adjusting frequency, powered by battery (pages 8 and 9, Fig. B)	Timing machine	± 0.05 s/d	at temperature around 28° C, see page 9, 5 IMPORTANT



**STEPS TO FOLLOW FOR:
FREQUENCY ADJUSTMENT, DETECTION AND REMEDYING OF BREAKDOWNS,
BASED ON INSTANTANEOUS CHECK ON A TIMING MACHINE OR/AND CUSTOMER'S COMMENTS**



Watch stops, second hand vibrates but does not move forward or loss of seconds

Remove case back	n.o.k. = faulty o.k. = not faulty	m.w. = movement works m.n.w. = movement does not work
1. Check voltage of battery	n.o.k. → change battery o.k. → see 2) below	m.w. → see 6) below m.n.w. → see 2) below
2. Check handfitting	n.o.k. → correct handfitting o.k. → see 3) below	m.w. → see 6) below m.n.w. → see 3) below
3. Remove pallet fork and see if motor works	n.o.k. → overhaul or change motor o.k. → change pallet fork, possibly also second wheel	m.w. → see 6) below m.n.w. → see 4) below m.w. → see 6) below m.n.w. → see 4) below
4. Uncase and check freedom of train	n.o.k. → dismantle, clean, change the possibly defective part o.k. → see 5) below	m.w. → see 6) below m.n.w. → see 5, below
5. Check the date indicator/ calendar mechanism and handsetting mechanism	n.o.k. → dismantle, clean, change the possibly defective part o.k. → see 6) below	m.w. → see 6) below m.n.w. → see 1) and start checking procedure again
6. Reassemble, case up, check and if necessary adjust the frequency. Screw on and tighten the case back and check water-resistance.		



Watch stops, second hand does not move at all

Remove case back

n.o.k. = faulty
o.k. = not faulty

m.w. = movement works
m.n.w. = movement does not work

1. Check voltage of battery, see p. 4	n.o.k. → change battery	m.w. → see 9) below m.n.w. → see 2) below
	o.k. → see 2) below	
2. Remove battery bridge and check its circuit	n.o.k. → change bridge circuit	m.w. → see 9) below m.n.w. → see 3) below
	o.k. → see 3) below	
3. Uncase, check handfitting	n.o.k. → correct handfitting	m.w. → see 9) below m.n.w. → see 4) below
	o.k. → see 4) below	
4. Check stop second function, see p. 17 Fig. 12	n.o.k. → correct function, possibly change electronic module	m.w. → see 9) below m.n.w. → see 5) below
	o.k. → see 5) below	
5. Check whether there are impulses at the output of the electronic module, see page 18 Fig. 13	n.o.k. → change electronic module	m.w. → see 9) below m.n.w. → see 6) below
	o.k. → see 6) below	
6. Remove the motor, see page 12, § 7.14., carry out the controls page 18, § 9.11. and 9.12. and make sure the motor is clean	n.o.k. → change the motor	m.w. → see 9) below m.n.w. → see 7) below
	o.k. → see 7) below	
7. Check the good condition and freedom of train and pallet fork	n.o.k. → dismantle, clean, change the possibly defective part	m.w. → see 9) below m.n.w. → see 8) below
	o.k. → see 8) below	
8. Check the date indicator/calendar mechanism and handsetting mechanism	n.o.k. → dismantle, clean, change the possibly defective part	m.w. → see 9) below m.n.w. → see 1) and start checking again
	o.k. → see 9) below	
9. Reassemble, case up, check and if necessary adjust the frequency. Screw on and tighten the case back and check water-resistance.		



TECHNICAL REMINDER CONNECTED WITH THE ROLEX QUARTZ MOVEMENT

Battery

The battery takes the place of the barrel in a mechanical watch. Whilst a large part of the power is used to make the mechanical parts of the movement move, the purely electronic functions require little power.

The large hands and the important safety factors of ROLEX watches require comparatively more power than other calibres. Because of this the battery selected is relatively big.

Apart from its size, voltage and theoretical capacity, there are other parameters to batteries which are not generally mentioned. This means that it is dangerous to use a different battery from the one recommended, even if it is called "an equivalent" by the supplier of a competitive brand.

Even the best of batteries is essentially the least reliable element of a movement. The only way of predicting how it will behave in a watch is to make statistical tests (e.g. for premature discharge) when it is selected.

Batteries should be stored in a dry place; humidity causes self-discharge.

At the present stage of technical development, silver oxide watch batteries cannot be guaranteed to be leak-proof after three years because the effects of aging on the part of the plastic which acts as a leak-proofness and insulating gasket are impossible to check.

Electronic module

As its name suggests, an electronic module groups together all the electronic parts of the watch, chief of these being the integrated circuit which controls the system. The parts which are associated with it but cannot be integrated are the quartz, which is the frequency standard, the trimmer, with which it is possible to make small corrections to the frequency, and the resetting contact.

The integrated circuit contains the following principal functions: the oscillator, which in association with the quartz and the trimmer produces the standard frequency, the divider, which converts it into a signal of 1 Hz (1 impulse per second) and the 1 Hz impulse amplifier, to the terminals of which the motor is connected.

The low consumption of the purely electronic oscillator/divider circuits makes them more vulnerable to any polluting agents accidentally deposited on certain of the connections of the integrated circuit, chiefly on those involving the quartz circuit. Therefore the electronic module should not be touched by hand and should not be washed.



Finally, it should be noted that the quartz resonator is as shock-resistant as other parts of the watch. Should there be a deviation caused by a big shock, any resulting alteration to the frequency can normally be corrected with the trimmer.

Motor

The motor, the second wheel and the pallet fork form the transducer. Every second the motor receives an impulse which makes the coil (mobile frame) rock at 45° alternatively in each direction. The finger fixed to the mobile frame transmits its power by means of the pallet fork to the second wheel bearing the second hand.

The movable pins of the pallet fork ensure that the second wheel is held 100 % tight and thus protected against shock. The finger has a little magnet which keeps the pallet fork at the banking until the next impulse.



Technical information

Information technique
Información técnica
Technische Information
Informazione tecnica

QUARTZ

CALIBRE 5035

CALIBRE 5055

QUARTZ MOVEMENTS WITH ANALOG DISPLAY

CHARACTERISTICS AND INSTRUCTIONS CONCERNING:

- REPLACING THE BATTERY AND ADJUSTING THE FREQUENCY OF THE QUARTZ
- CHANGING THE DIAL AND THE INDICATORS

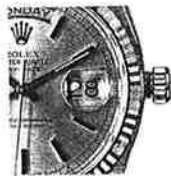


CALIBRES 5035 and 5055

Functions of the handsetting stem

Position 1 :

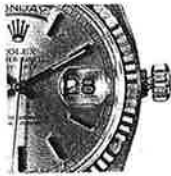
crown unscrewed



no function

Position 2 :

crown pulled out
to first catch

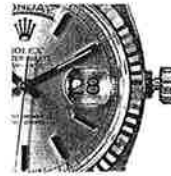


backward motion:
correction of
date indication

forward motion:
no function

Position 3 :

crown pulled out
to second catch



stop-second
(motor disconnected)

setting to time

crown pushed in: motor start-up with reset function; the second hand starts up after exactly one second.

The battery consumption is strongly reduced when the crown is in position 3, because only the electronic module and the quartz remain fed. Therefore, the watches must be stored with the crown pulled out to the second catch.

List of special ROLEX tools which can be ordered from the Technical Information Department

- Ref. 2001 Tool for centring the day indicator
- 2003 Key for calendar-wheel nut
- 2004 Tool for extracting the cam stud
- 2005 Reamer for the day indicator
- 2023 Screwdriver for the trimmer
- 2024 Movement-holder



CALIBRE 5035

DATE INDICATOR MECHANISM – principle identical with that of calibre 3035

Rapid corrector

Centre second hand jumping forwards every second

ROLEX mobile-frame step-by-step motor

Stop-second device

– Overall diameter	29.75 mm
– Case-fitting diameter	29.00 mm
– Overall height	6.35 mm
– Number of jewels	11
– Frequency of quartz	32'768 Hz
– Integrated electronic circuit	C-MOS
– Output: polarized pulses	1 pulse/sec.
– UCAR 357 silver-oxide battery	1.55 V
– Service life of battery	over 24 months
– Adjustment by trimmer	± 2 to ± 3 s/d
– State (loss or gain) when worn in normal conditions after 1 year	less than 1 min.
– Operating range	-5° C + 55° C

Movement seen from above (Fig. 1) and from below with indicator (Fig. 2).

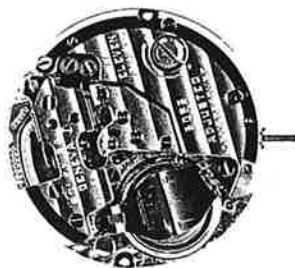


Fig. 1

Scale
1.25 : 1



Fig. 2



CALIBRE 5055 - derived from calibre 5035

DAY-DATE CALENDAR MECHANISM – principle identical with that of calibre 3055
Rapid date corrector

- Overall diameter	29.75 mm
- Case-fitting diameter	29.00 mm
- Overall height	7.11 mm

Movement seen from below with Day-Date calendar mechanism without indicators (Fig. 3) and with indicators (Fig. 4).

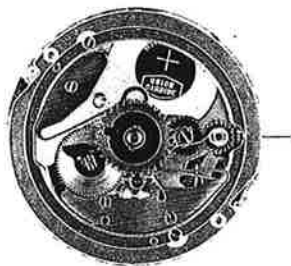


Fig. 3

Scale
1.25 : 1



Fig. 4



1. Opening the case

The back can be untightened without removing the bracelet from the case by means of a ROLEX staking tool Ref. 1001, 1003 or 1008, with jig Ref. 1008/11.

- Withdraw the spring lug from the clasp to separate the two parts of the bracelet.
- Unscrew the back of the case.

No scraps of metal or dust must penetrate the watch; if necessary, clean the case before opening it.

2. Changing the battery

Use non-magnetic tweezers for the movement and plastic tweezers for the battery.

- Unscrew the two screws of the battery bridle (No. 56013) and withdraw the bridle (No. 6013).

Unscrew or screw up the screws one after the other so that they are not attracted into the motor by the two magnets.

The printed circuit (No. 6012) housed beneath the battery bridle may come out; put it back in place as follows:

- Turn over the bridle and the printed circuit.
- Insert the small tongue of the circuit in the corresponding aperture of the bridle.
- Apply a slight pressure on the centre of the circuit with a leather buff and slide the circuit under the two protruding tongues of the bridle (Fig. 5).
- Remove the used battery (No. 6014) by turning over the movement.
- Check that the battery housing is clean.
- Check the condition of the new battery and its voltage, put in place, with the negative pole (gilt side) upwards.
- Replace the battery bridle.

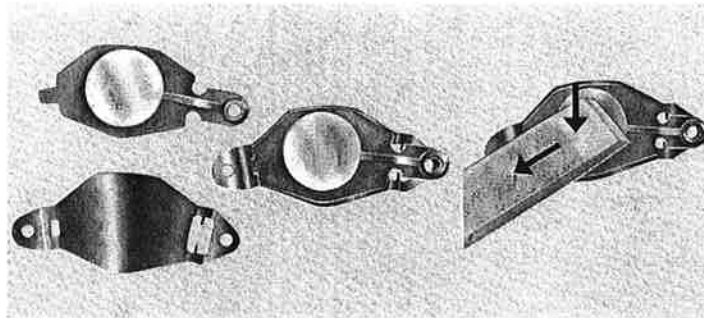


Fig. 5



Use only genuine ROLEX-packaged batteries. Never touch the battery with your fingers.

Batteries must be stored in a cool, dry place. Do not store them in a refrigerator.

3. Checking the battery voltage

Measure the voltage of the new battery with a voltmeter or any instrument equipped with a voltmeter, for example ROLEX TME 200.

- Place the positive voltmeter test lead terminal on the movement, for example in the notch of the casing clamp, and the negative terminal on the gilt side of the battery (Fig. 6). The voltage must be at least 1.55 volts. Slight excess voltage of the battery will be absorbed after the movement has been functioning for a few hours.

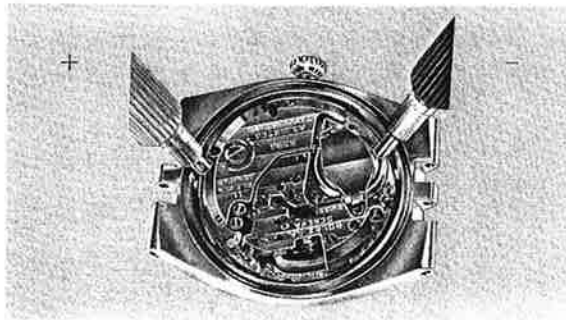


Fig. 6

4. Adjusting the frequency of the quartz with the trimmer

Control the daily rate of the watch on a timing-machine, for example ROLEX TME 200, Quartz Printer etc.

- Effect the correction by turning the trimmer screw (Fig. 7) in the desired direction with the ROLEX screwdriver Ref. 2023. Do not press down too hard on the trimmer.

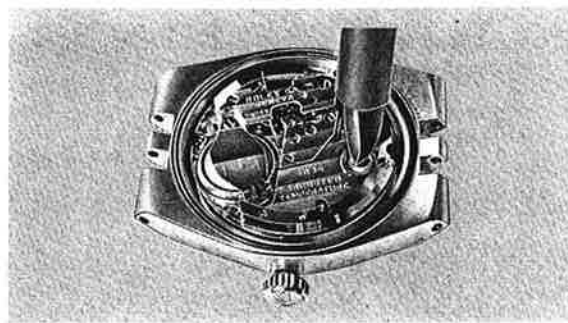


Fig. 7



Correction is not linear, and the angle of correction to be effected depends on the initial position of the trimmer. For this reason, turn the trimmer screw cautiously and only a few degrees at a time.

The trimmer has an adjustment range of 4 s/d (seconds per day).

IMPORTANT

After changing the battery, do not make any correction of the daily rate based on instantaneous rating. This is because interruption of the power supply and possible excess voltage of a new battery affects the quartz frequency; it requires two to three days to settle down.

The zero temperature coefficient point of the quartz is at $25 \pm 3^\circ \text{C}$. Our watches are set at 28°C , which is the average temperature of the watch on the wrist. If the conditions in which the watch is actually worn are very different, a slight variation in its daily rate will result. In this case, a correction may be necessary and must be made according to the data supplied by the client.

5. Changing the dial

If a client desires a different dial*, proceed as follows:

- Open the case as per page 5, paragraph 1.
- Pull out the crown to the second catch to stop the motor.
- Extract the handsetting stem and take the movement out of the case.
- Remove the hands and the dial.
- Fit the new dial and drive its two screws very tight.
- Check the endshake of the hour wheel.
For the Day-Date calibre, this endshake must not exceed 0.03 mm; hour wheel seats Nos. 5123-1, 5123-2, 5123-3 and 5123-4 (thickness: 0.02, 0.03, 0.04 and 0.05 mm) limiting the endshake are available.
- Fit the hour and minute hands so that the date, respectively the day, change at midnight. Tolerance: $\pm 1 \text{ min}$.

The second hand should be fitted as follows:

- Push it down with slight pressure only.
- Check its alignment with the minute-circle on one revolution.
- Correct any misalignment by pushing the hand laterally, without forcing it.

The second hand must be correctly in line with the minute-circle of the dial.

* The indicators must match the colour of the new dial, and consequently may have to be changed, see page 8, paragraph 6.



-
- Drive the hand in perpendicularly all the way and again check alignment.

If alignment is no longer correct after the hand has been driven in all the way, it can no longer be displaced laterally without causing serious damage; in such a case, therefore, the second hand must be removed and the driving-in operation recommenced.

6. Changing the Day-Date indicators

If a client desires a day indicator in another language, proceed as follows:

- Pull out the crown to the second catch to stop the motor.
- Remove the hands, the dial and the day indicator No. 5135, respectively also the date indicator No. 5134.
- Fit the new day indicator, and respectively also the new date indicator.

The indicators must be very flat and free of sideshake on the assembled star wheels. If necessary, enlarge the holes, using the ROLEX reamer Ref. 2005, for the day indicator hole.

The indicators must fall freely when the movement is turned upside down.

To fit the dial and hands, proceed as described on page 7, paragraph 5.

JAN 22 1982

Hello Mary,

Here is the information you requested re: oiling of cal. 5035:

- Setting and calendar mechanism (steel on steel friction): light grease, like Moebius 8200
- Second wheel:
 - Long pivot – no oil
 - Movement side pivot – Moebius 9010
 - Teeth – Moebius 9415
- Intermediate wheel – both pivots – Moebius 9010
- Center wheel – Microgliss D5
- Posts (i.e. minute wheel post – brass on steel) – Microgliss D5

Regards,
Bernhard

Ø 29,75 mm Ht. 7,11 mm Fréquence 32.768 Hz

Boîte de fournitures N° 5055



Dérivé du calibre
Based on calibre
Derivado del calibre
Abgeleitet vom Kaliber
Derivato dal calibro

5035



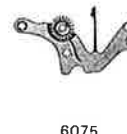
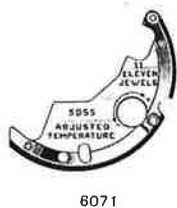
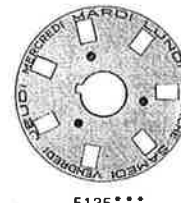
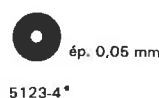
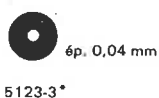
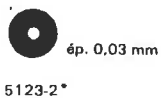
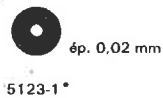
gravé sur le pont supérieur du module
engraved on the upper module bridge
grabado sobre el puente superior de módulo
graviert auf der Oberen Baugruppe Brücke
inciso sul ponte superiore del modulo

5055



Electronique	Quartz	Calendrier	Seconde au centre	11 pierres
<i>Electronic</i>	<i>Quartz</i>	<i>Calendar</i>	<i>Centre second</i>	<i>11 jewels</i>
Electrónica	Cuarzo	Calendario	Segundero central	11 piedras
<i>Elektronisch</i>	<i>Quarz</i>	<i>Kalender</i>	<i>Zentrumsekunde</i>	<i>11 Steine</i>
Elektronica	Quarzo	Calendario	Secondi al centro	11 pietre

1:1



2:1



Calibre de base
Basic calibre
Calibre de base 3055
Grundkaliber
Calibro di base

** 5134 = 5134-1 - 5134-203
*** 5135 = 5135-101 - 5135-234

Calibre 5055

Même pièce calibre	N°	Français	English	Español	Deutsch	Italiano
3055	5123-1	Assise de roue des heures	<i>Hour wheel seating —</i>	Asiento de rueda de horas	<i>Auflage für Stundenrad</i>	Appoggio della ruota delle ore
3055	5123-2	Assise de roue des heures	<i>Hour wheel seating —</i>	Asiento de rueda de horas	<i>Auflage für Stundenrad</i>	Appoggio della ruota delle ore
3055	5123-3	Assise de roue des heures	<i>Hour wheel seating —</i>	Asiento de rueda de horas	<i>Auflage für Stundenrad</i>	Appoggio della ruota delle ore
3055	5123-4	Assise de roue des heures	<i>Hour wheel seating —</i>	Asiento de rueda de horas	<i>Auflage für Stundenrad</i>	Appoggio della ruota delle ore
3055	5126	Came avec tube	<i>Cam with cannon</i>	Leva con tubo	<i>Nocken mit Rohr</i>	Camma con tubo
3055	5127	Roue calendrier	<i>Calendar wheel</i>	Rueda calendario	<i>Kalenderrad</i>	Ruota calendario
3055	5128	Sautoir de quantième	<i>Date jumper</i>	Muelle flexible de fecha	<i>Datumraste</i>	Scatta-data
3055	5129	Correcteur de quantième	<i>Date corrector</i>	Corrector de fecha	<i>Datumkorrektor</i>	Correttore della data
3055	5131	Etoiles assemblées	<i>Assembled star wheels</i>	Estrellas ensambladas	<i>Sternrad montiert</i>	Stelle montate
3055	5132	Doigt de calendrier	<i>Calendar finger</i>	Dedo de calendario	<i>Kalenderfinger</i>	Dito del calendario
3055	5134-1	Indicateur de quantième champagne	<i>Date indicator champagne</i>	Indicador de fecha champañia	<i>Datumanzeiger champagne</i>	Indicatore della data champagne
3055	5134-101	Indicateur de quantième champagne, arabe	<i>Date indicator champagne, arabic</i>	Indicador de fecha champañia, árabe	<i>Datumanzeiger champagne, arabisch</i>	Indicatore della data champagne, arabo
3055	5134-102	Indicateur de quantième champagne, chinois	<i>Date indicator champagne, chinese</i>	Indicador de fecha champañia, chino	<i>Datumanzeiger champagne, chinesisch</i>	Indicatore della data champagne, cinese
3055	5134-103	Indicateur de quantième champagne, persan	<i>Date indicator champagne, persian</i>	Indicador de fecha champañia, persa	<i>Datumanzeiger champagne, persisch</i>	Indicatore della data champagne, persiano
3055	5134-2	Indicateur de quantième argenté	<i>Date indicator silvered</i>	Indicador de fecha plateado	<i>Datumanzeiger versilbert</i>	Indicatore della data argentato
3055	5134-201	Indicateur de quantième argenté, arabe	<i>Date indicator silvered, arabic</i>	Indicador de fecha plateado, árabe	<i>Datumanzeiger versilbert, arabisch</i>	Indicatore della data argentato, arabo
3055	5134-202	Indicateur de quantième argenté, chinois	<i>Date indicator silvered, chinese</i>	Indicador de fecha plateado, chino	<i>Datumanzeiger versilbert, chinesisch</i>	Indicatore della data argentato, cinese
3055	5134-203	Indicateur de quantième argenté, persan	<i>Date indicator silvered, persian</i>	Indicador de fecha plateado, persa	<i>Datumanzeiger versilbert, persisch</i>	Indicatore della data argentato, persiano
3055	5135-101	Indicateur du jour champagne, anglais	<i>Day indicator champagne, english</i>	Indicador del día champañia, inglés	<i>Tagesanzeiger champagne, englisch</i>	Indicatore dei giorni champagne, inglese
3055	5135-102	Indicateur du jour champagne, espagnol	<i>Day indicator champagne, spanish</i>	Indicador del día champañia, español	<i>Tagesanzeiger champagne, spanisch</i>	Indicatore dei giorni champagne, spagnolo
3055	5135-103	Indicateur du jour champagne, français	<i>Day indicator champagne, french</i>	Indicador del día champañia, francés	<i>Tagesanzeiger champagne, französisch</i>	Indicatore dei giorni champagne, francese
3055	5135-104	Indicateur du jour champagne, italien	<i>Day indicator champagne, italian</i>	Indicador del día champañia, italiano	<i>Tagesanzeiger champagne, italienisch</i>	Indicatore dei giorni champagne, italiano
3055	5135-105	Indicateur du jour champagne, allemand	<i>Day indicator champagne, german</i>	Indicador del día champañia, alemán	<i>Tagesanzeiger champagne, deutsch</i>	Indicatore dei giorni champagne, tedesco
3055	5135-106	Indicateur du jour champagne, danois	<i>Day indicator champagne, danish</i>	Indicador del día champañia, danés	<i>Tagesanzeiger champagne, dänisch</i>	Indicatore dei giorni champagne, danese
3055	5135-107	Indicateur du jour champagne, suédois	<i>Day indicator champagne, swedish</i>	Indicador del día champañia, sueco	<i>Tagesanzeiger champagne, schwedisch</i>	Indicatore dei giorni champagne, svedese

Calibre 5035

Même pièce calibre	N°	Français	English	Español	Deutsch	Italiano
	6023	Roue de seconde	<i>Second wheel</i>	Rueda de segundos	<i>Sekundenrad</i>	Ruota dei secondi
	6024	Roue des heures avec double denture	<i>Hour wheel with double toothing</i>	Rueda de horas con doble endentado	<i>Stundenrad mit Doppelzahnung</i>	Ruota delle ore con doppia dentatura
	6025	Chaussée	<i>Cannon pinion</i>	Cañón de minutos	<i>Minutenrohr</i>	Pignone calzante
	6026	Roue de minuterie	<i>Minute wheel</i>	Rueda de minutería	<i>Wechselrad</i>	Ruota della minuteria
	6027	Renvoi	<i>Setting wheel</i>	Rueda de transmisión	<i>Zeigerstellrad</i>	Rinvio
	6028	Pignon coulant	<i>Sliding pinion</i>	Piñón corredizo	<i>Kupplungstrieb</i>	Pignone scorrevole
	6029	Pignon de mise à l'heure	<i>Handsetting pinion</i>	Piñón de puesta en hora	<i>Zeigerstelltrieb</i>	Pignone di messa all'ora
	6041	Ancre	<i>Pallet fork</i>	Ancora	<i>Anker</i>	Ancora
	6042	Tirette montée	<i>Setting lever mounted</i>	Tirete ajustado	<i>Winkelhebel montiert</i>	Tiretto montato
	6043	Sautoir de tirette monté	<i>Jumper for setting lever, mounted</i>	Muelle flexible de tirete, ajustado	<i>Raste für Winkelhebel, montiert</i>	Scatto del tiretto montato
	6044	Bascule de came	<i>Yoke for cam</i>	Báscula de leva	<i>Wippe für Nocken</i>	Bascula della camma
	6045	Rivet de bascule de came	<i>Rivet for cam yoke</i>	Remache de báscula de leva	<i>Nockenwippeniet</i>	Ribattino della bascula della cama
	6051	Goupille de limitation	<i>Banking pin</i>	Pasador de limitación	<i>Begrenzungsstift</i>	Copiglia di limitazione
	6052	Pied taraudé de pont de rouage	<i>Tapped foot for train wheel bridge</i>	Pie terrajado de puente del rodaje	<i>Gewindebuchse für Räderwerkbrücke</i>	Piedino filettato del ponte del ruotismo
	6053	Pied taraudé de fixation du moteur	<i>Tapped foot for fixing the motor</i>	Pie terrajado de fijación del motor	<i>Gewindebuchse für Motor</i>	Piedino filettato di fissaggio del motore
2030	54414	Vis de circuit imprimé (moteur)	<i>Screw for printed circuit (motor)</i>	Tornillo de circuito impreso (motor)	<i>Schraube der Zusatzschaltung (Motor)</i>	Vite del circuito stampato (motore)
3035	55037	Vis de ressort de tirette	<i>Screw for setting lever spring</i>	Tornillo de muelle de tirete	<i>Schraube für Winkelhebelfeder</i>	Vite della molla del tiretto
3035	55052	Vis de cadran	<i>Screw for dial</i>	Tornillo de esfera	<i>Schraube für Zifferblatt</i>	Vite del quadrante
3035	55053	Vis de fixation	<i>Screw for case</i>	Tornillo de fijación	<i>Schraube für Werkbefestigung</i>	Vite di fissaggio
3035	55095	Vis: — de sautoir de tirette — de sautoir de de quantième — et de l'assise de l'indicateur	<i>Screw:</i> — <i>for setting lever jumper</i> — <i>for date jumper</i> — <i>and for indicator seating</i>	Tornillo: — de muelle flexible de tirete — de muelle flexible de fecha — y del asiento del indicador	<i>Schraube:</i> — <i>für Winkelhebel-raste</i> — <i>für Datumraste</i> — <i>und für Auflage der Anzeige</i>	Vite: — dello scatto del tiretto — dello scatta-data — e d'appoggio dell'indicatore
3035	55097	Vis de roue de correcteur	<i>Screw for corrector wheel</i>	Tornillo de rueda de corrector	<i>Schraube für Korrektorräd</i>	Vite della ruota del correttore
	56000	Jeu de vis	<i>Set of screws</i>	Juego de tornillos	<i>Schrauben-Satz</i>	Gioco di viti
	56001	Vis de pont de rouage	<i>Screw for train wheel bridge</i>	Tornillo de puente de rodaje	<i>Schraube für Räderwerkbrücke</i>	Vite del ponte del ruotismo
	56002	Vis: — de pont de centre — de module électronique, longue — de pont supérieur du moteur — de fixation du moteur	<i>Screw:</i> — <i>for centre bridge</i> — <i>for electronic module, long</i> — <i>for upper motor bridge</i> — <i>for fixing the motor</i>	Tornillo: — de puente de centro — de módulo electrónico, largo — de puente superior de motor — de fijación del motor	<i>Schraube:</i> — <i>für Zentrumbrücke</i> — <i>für Elektronik-Baugruppe, lang</i> — <i>der oberen Motorbrücke</i> — <i>zum Befestigen des Motors</i>	Vite: — del ponte di centro — del modulo elettronico, lunga — del ponte superiore del motore — di fissaggio del motore

Calibre 5035

Même pièce calibre	N°	Français	English	Español	Deutsch	Italiano
		— et de bride (pile)	— and for bridle (battery)	— y de brida (pila)	— und für Bügel (Batterie)	— e della brida (pila)
	56005-2	Vis de module électronique, courte	<i>Screw for electronic module, short</i>	Tornillo de módulo electrónico, corto	<i>Schraube für Elektronik-Baugruppe, kurz</i>	Vite del modulo elettronico, corta
	56011-3	Vis de connexion du moteur	<i>Screw for connecting the motor</i>	Tornillo de conexión del motor	<i>Schraube zum Anschliessen des Motors</i>	Vite della connettitura del motore
	56015	Vis de support de pile	<i>Screw for battery support</i>	Tornillo de soporte de pila	<i>Schraube für Batterieträger</i>	Vite del supporto per la pila
3035	95013	Pierre de roues: — moyenne, dessus, dessous — de seconde, dessus	<i>Jewel for:</i> — <i>third wheel, upper, lower</i> — <i>second wheel, upper</i>	Piedra de ruedas: — primera, encima, debajo — de segundos, encima	<i>Stein für:</i> — <i>Kleinbodenrad, oben, unten</i> — <i>Sekundenrad, oben</i>	Pietra dei ruote: — mediana, sopra, sotto — dei secondi, sopra
3035	95090	Pierre de bascule de came	<i>Jewel for cam yoke</i>	Piedra de báscula de leva	<i>Stein für Nocken-Wippe</i>	Pietra della bascula della camma
	96021	Chaton combiné de roue de centre, dessus	<i>Combined in-setting for centre wheel, upper</i>	Chatón combinado de rueda de centro, encima	<i>Kombiniertes Steinfutter für Minutenrad, oben</i>	Castone combinato per ruota di centro, sopra
	96021-1	Pierre de roue de centre, dessous	<i>Jewel for centre wheel, lower</i>	Piedra de rueda de centro, debajo	<i>Stein für Minutenrad, unten</i>	Pietra della ruota di centro, sotto
	96041	Pierre d'ancre, dessus-dessous	<i>Jewel for pallet fork, upper-lower</i>	Piedra de ánora, encima-debajo	<i>Stein für Anker, oben-unten</i>	Pietra d'ancora, sopra-sotto