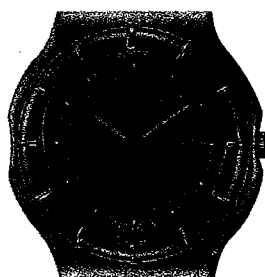


TECHNICAL INFORMATION

CITIZEN QUARTZ

Cal. No. 2840✳



51. OUTLINE

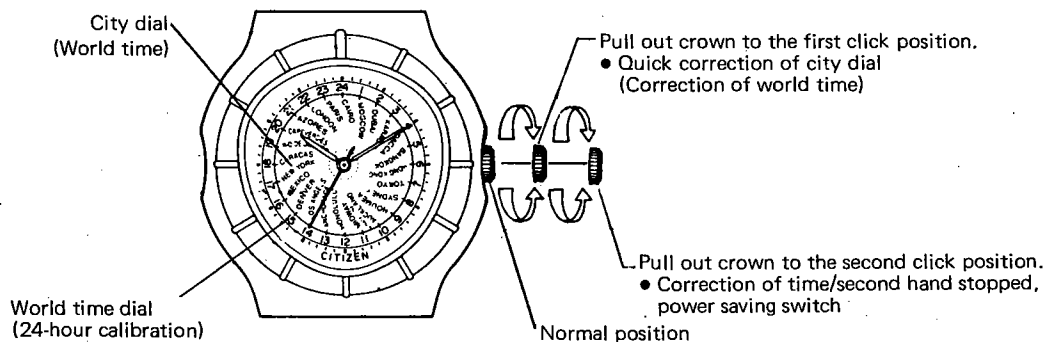
This is an analog quartz watch equipped with the world time indicating function (World timer) which can show the time in 24 cities instantly.

52. SPECIFICATIONS

Caliber No.	2840A-01	
Type	Analog quartz watch (with a center second hand)	
Module size (mm)	29.5 x 21.7 x ϕ 23.7 Thickness: 2.6t	
Accuracy	\pm 20 sec./month at normal temperature	
Oscillation	32,768 Hz	
Integrated circuit	C/MOS-LSI (1 unit)	
Effective temp. range	-10°C ~ +60°C (14°F ~ 140°F)	
Converter	Bipolar step motor	
Adjustment of time rate	DFC (without control terminals)	
Measurement of time rate	10 seconds	
Additional functions	Date (with quick setting device)	No
	Day (with quick setting device)	No
	World time indication	Yes
	Second hand stopping device	Yes
	Power saving switch	Yes
	Power cell life indicator	No
Power cell	Part No.	280-56
	Cell code	SR716SW
	Size (mm)	ϕ 7.8 x 1.6t
	Voltage	1.55V
	Capacity	19mAH
	Lifetime	About 2 years
Value of current	Current consumed by module: 1.2 μ A max.	
Value of coil resistance	1.6k Ω ~ 2.2k Ω	
Remarks		

53. HANDLING INSTRUCTIONS

3-1. Name of each part



3-2. How to read watch

Division	Indicating method	Scale of indication
Time	12-hour system (Hands): Top is 12 o'clock, bottom is 6 o'clock.	Scale of outmost ring
World time	24-hour system (City dial): Top is 24:00, bottom is 12:00.	Indication by numbers

3-3. Setting of time and city dial (world time)

Pull out the crown by two steps, and set the hour hand to the time nearest to the desired time (e.g. 1:00 PM), then set the minute hand at 12 o'clock (00 second). At this time, move the minute hand forward by four – five minutes, then reverse it to the position of 12 o'clock (00 minute).

Push back the crown by one step, and turn the city dial counterclockwise to set the position of the desired city to the same time as the hour hand. (For example, in case of London time, set the position of LONDON of the city dial to 13:00.)

When setting the city dial (world time), take care of the division of the morning and afternoon.

* Since the scale of the city dial is divided in hours, the time in each city can be adjusted more accurately by setting the minute hand to the position of 00 minute.

Note: The time can be set more accurately by setting it by turning the minute hand and city dial in reverse directions.

3-4. Setting to the present time

Pull out the crown by two steps so that the second hand will stop at the position of 0 second. Set the hour hand and minute hand to the present time. At this time the city dial (world time) is also corrected automatically.

After completing the setting, push back the crown to the normal position.

3-5. Quick correction of city dial (World time)

Pull out the crown by one step and turn it to the right or left, and the city dial can be corrected quickly.

When correcting the city dial quickly by turning it clockwise, move it forward by two – three hours and then reverse it to the correct position (for more accurate adjustment).

When correcting quickly by turning the city dial counterclockwise, this operation is not necessary.

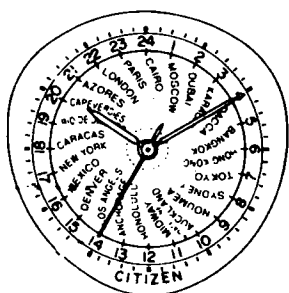
After finishing the quick correction of the city dial, push back the crown to the normal position.

Note that the city dial (world time) has the 24-hour system.

3-6. Examples of setting and reading of watch

[Example of setting]

Setting to 10 in the afternoon in London



1. Set the city dial to the correct time (See 3-3).
2. Since the time is indicated by the 24-hour system, set the hands to 10 o'clock as shown at left. At this time, confirm LONDON of the city dial indicates 22:00.

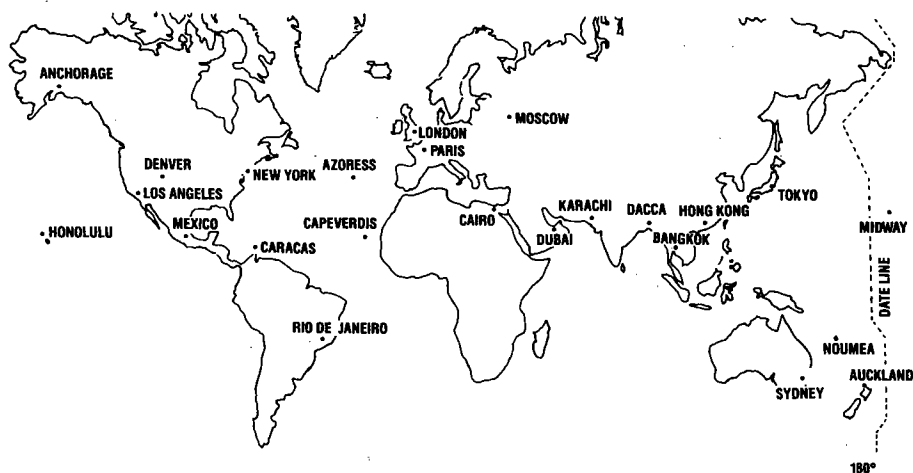
(Reading)

At this time, the watch indicates five in the afternoon of the same day as New York time and London time and seven in the morning of the next day as Tokyo time.

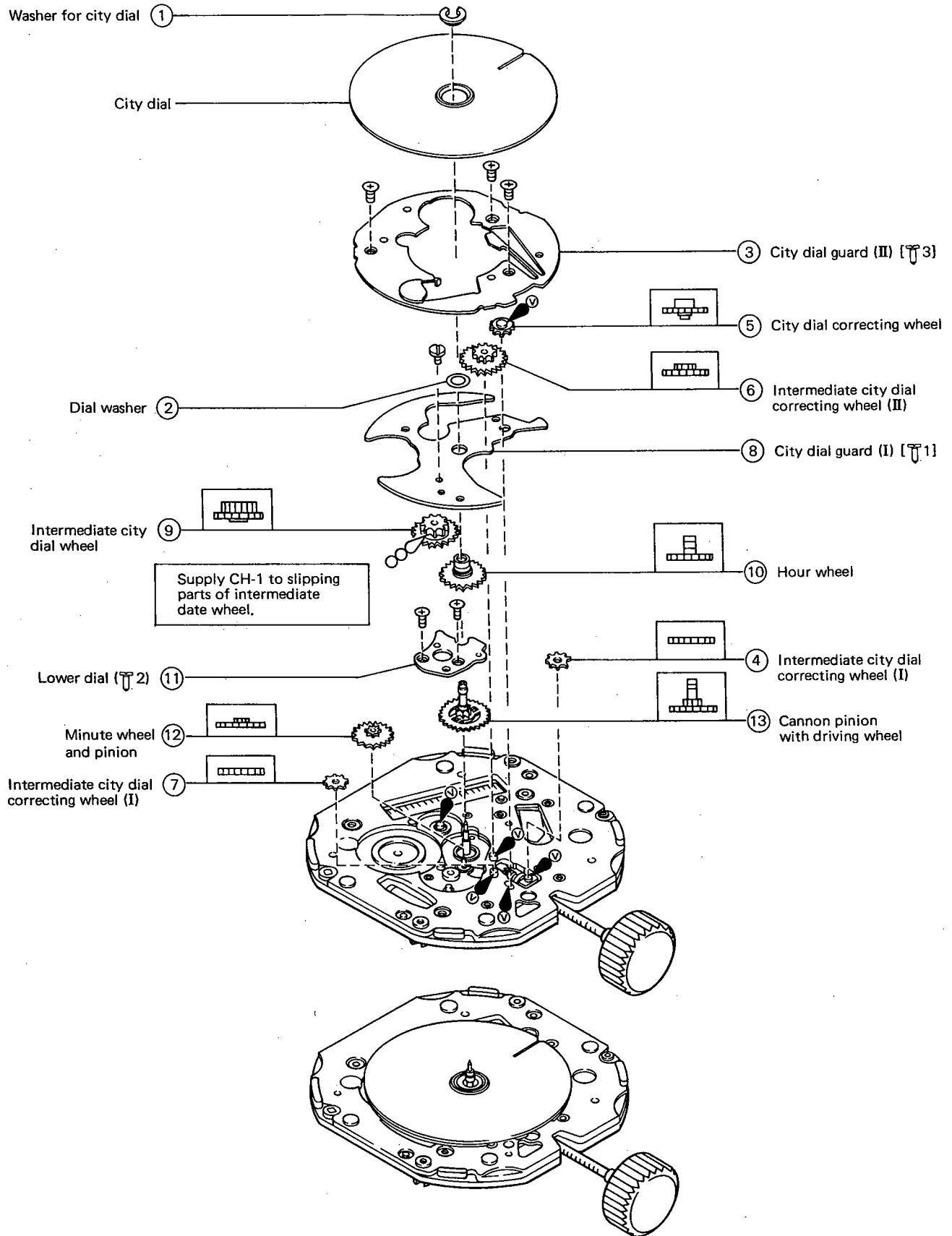
The most large time difference is made between Auckland and Midway on both sides of the date line, and it is 23 hours. (When the time in Auckland is 10:00 in the morning, that in Midway is 11:00 in the morning of the previous day.)

* Note that this watch does not regard the summer time system (the day-light saving time system).

Locations of 24 cities on the city dial



54. DISASSEMBLY AND ASSEMBLY OF MODULE



* For the disassembly and assembly of the battery side, see Cal. No. 2850.

§5. TROUBLESHOOTING AND ADJUSTMENT

Inspect and adjust this watch according to Cal. No. 28***. However, for the current consumption and coil resistance, see the **§2. SPECIFICATIONS** (Page 1).

CITIZEN WATCH CO., LTD.

Tokyo, Japan