TIME MODULE

Cal. YT62A

ϕ27.0 mm
H 4.89 mm

Date: 29/May/'06

S.EPSON Products

MOVEMENT SPECIFICATIONS

CAL. YT62A

AGS-Automatic Generating System 12‴ Size Movement / Three Hands (H/M/S) / Calendar

1. MOVEMENT DIMENSIONS

*Outside diameter	ϕ27.6mm
*Casing diameter	ϕ27.0mm
*Total height	4.89mm

2. TIME STANDARD

*Type of quartz oscillator	Tuning fork
*Frequency of quartz oscillator	32,768 Hz
*Accuracy	±20 seconds per month (on wrist)
*Operating temperature range	−5℃ to +50℃
*Regulation device	Nil (Pre-adjusted)

3. INDICATOR / FUNCTIONS

*3 Hands	Hour / Minute / Second
*Calendar	Instant setting device for date calendar
*Reset switch	
*Automatic generating system	Quick-start function
*Power depletion warning function	
(Second hand moves at 2-second intervals when voltage is 0.625 ±0.015V)	
*Setting mechanism	Crown at normal position : Free
	Crown pulled out 1st click : Instant date change
	Crown pulled out 2nd click : Time setting / Reset
*Indicator	Press button at 2H position
*Working time	Approx. 6 months (After fully charged)

4. FEATURES

*Jewels	6 Jewel
*Anti-magnetism	Over 1600A/m (Direct current magnetic field)
*Maximum unbalance of hands	Second hand : 3 mg･mm
	Minute hand : 70 mg･mm
*Driving current consumption	Approx. 0.57μA (1.4V)
*Operation stopping voltage	0.45 V

5. POWER SUPPLY

*Type / Size	Titanium-lithium-ion second battery
	ϕ9.5 × t 2.05 mm
*Capacity	4.5mAh
*Nominal voltage	1.5V

6. SEPARATED PARTS (Parts code)

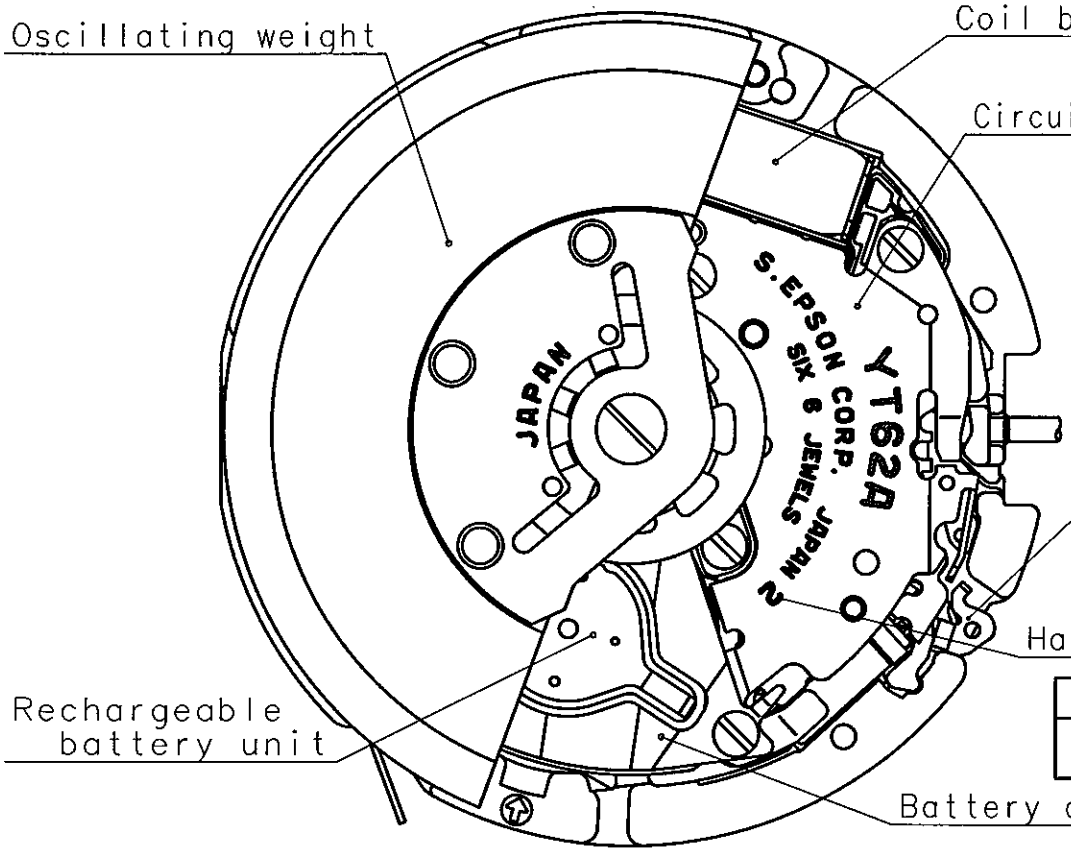
*Hand setting stem	0351652
*Holding ring for dial	0866780
*Connecting spring	4281500

7. TEST OF ACCURACY

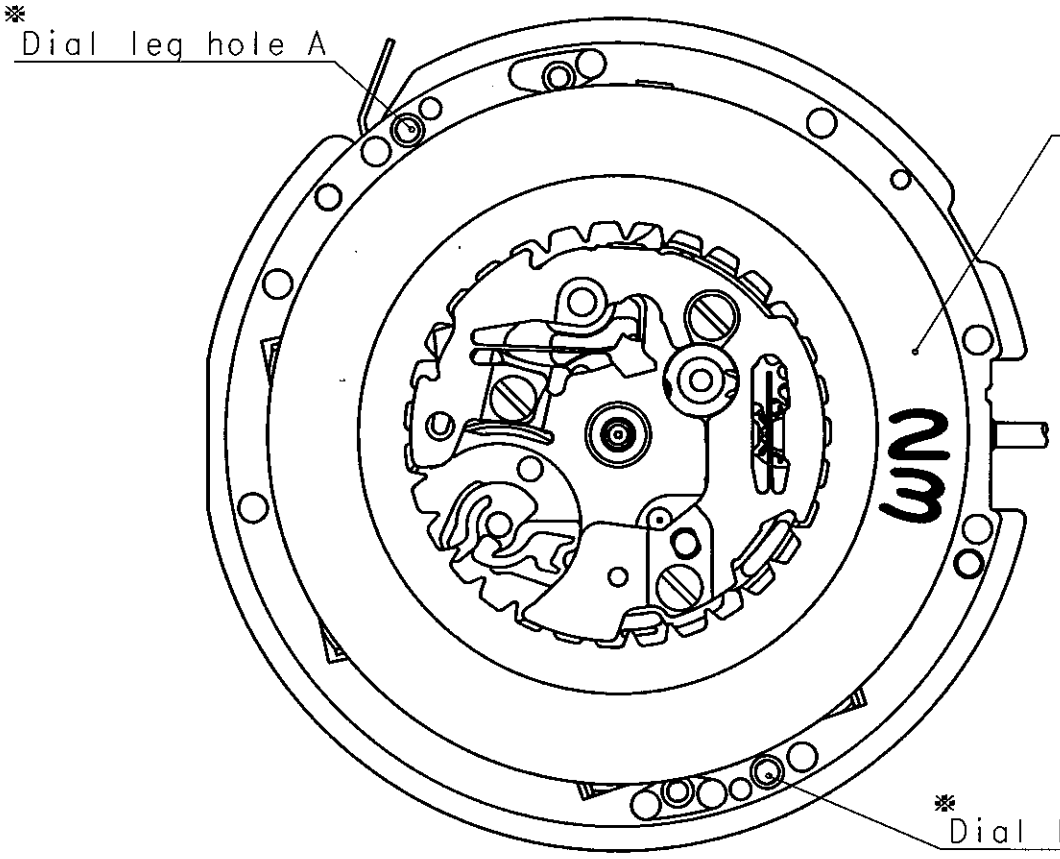
*Equipment to be used	SEIKO quartz tester QT-99,
	Greiner quartz timer-C , Witschi Q-tester 4000
*Duration of measurement	10 seconds
*Microphone to be used	Electromagnetic detection type

All specifications are subject to change without notice.

Cal. YT62A	Appearance	Date: 9/Feb./'00 Rev.:00

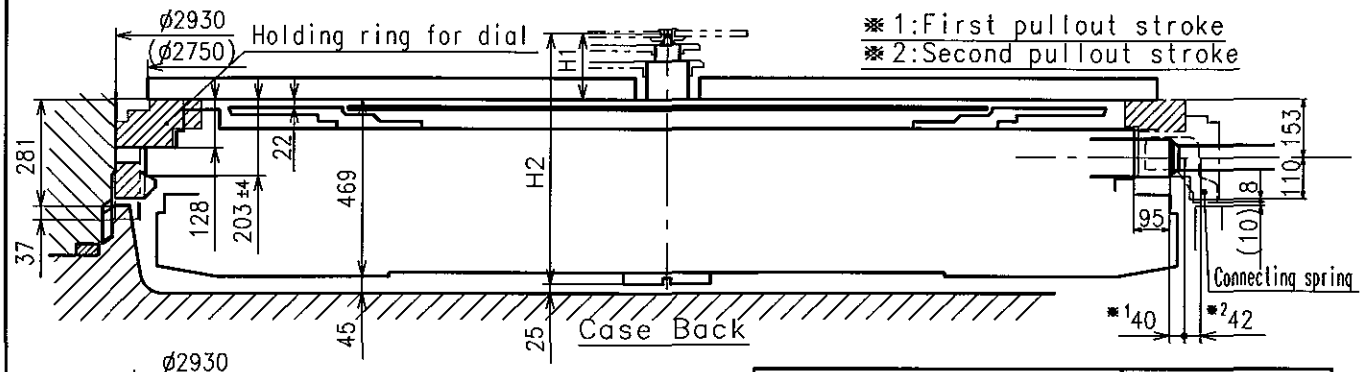


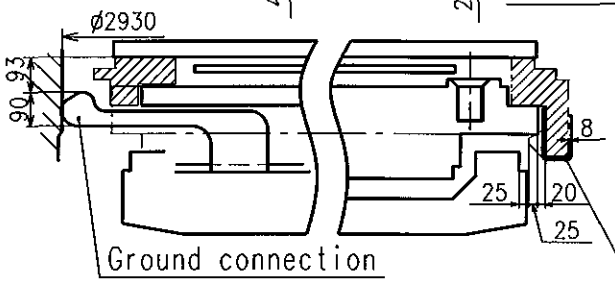
	Mark
Type(M)	2



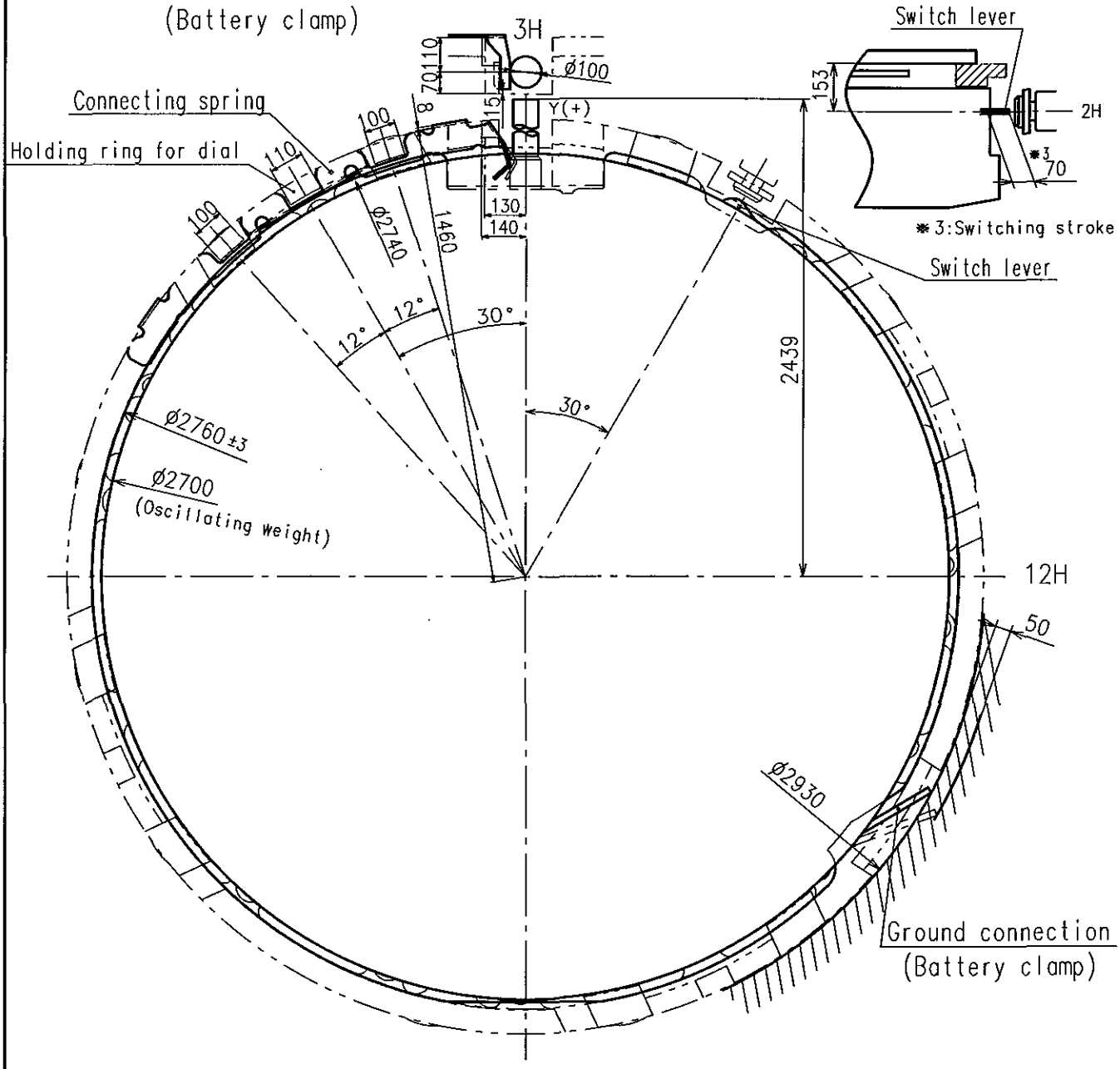
※ :Combination of dial leg hole A-B

Cal. YT62A	Casing	Date:24/Feb./'00 Rev.:01





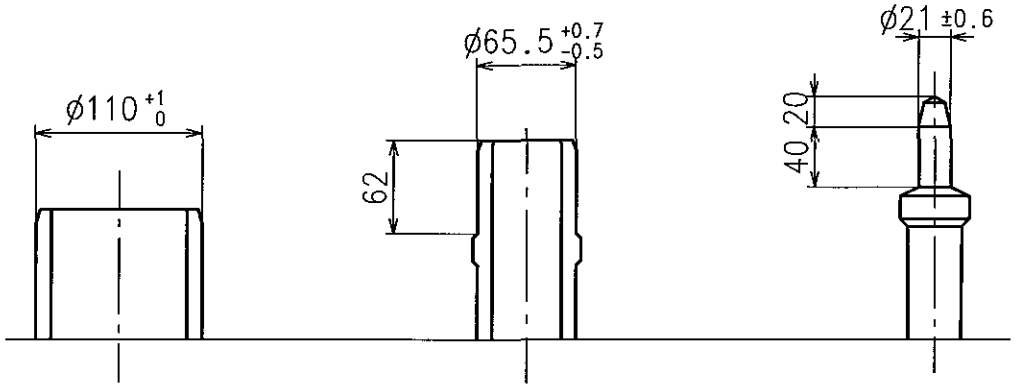
Center post		Type M (2) YT62A1*
Maximum height from dial suppot	H1	175
Total height incl.movement	H2	664



Unit : 1=1/100mm

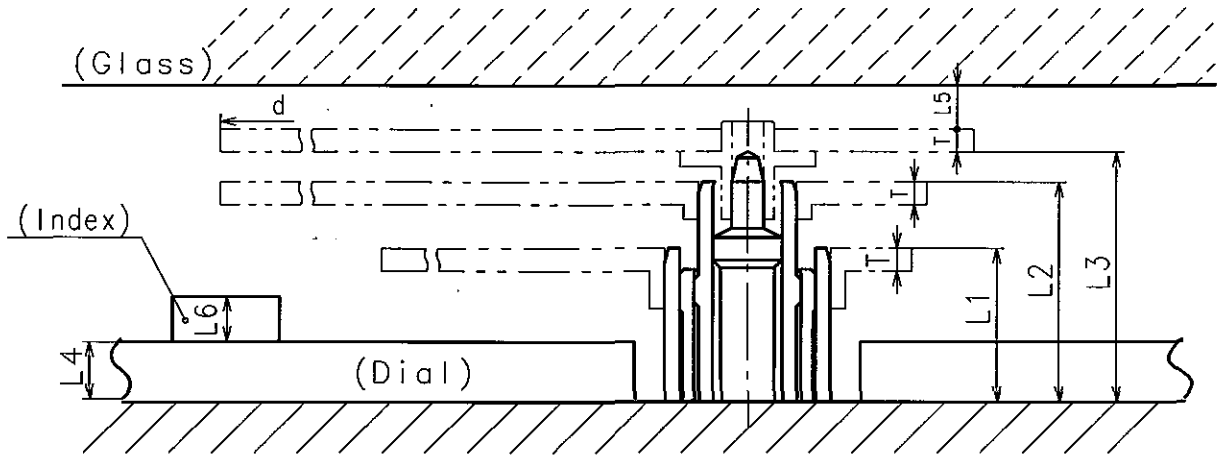
Cal. YT62A	Hand fitting	Date: 9/Feb./'00 Rev.:00

※Minute hand unbalance ≦ 70μg·m (0.7 μN·m)
※Second hand unbalance ≦ 3μg·m (0.03μN·m)



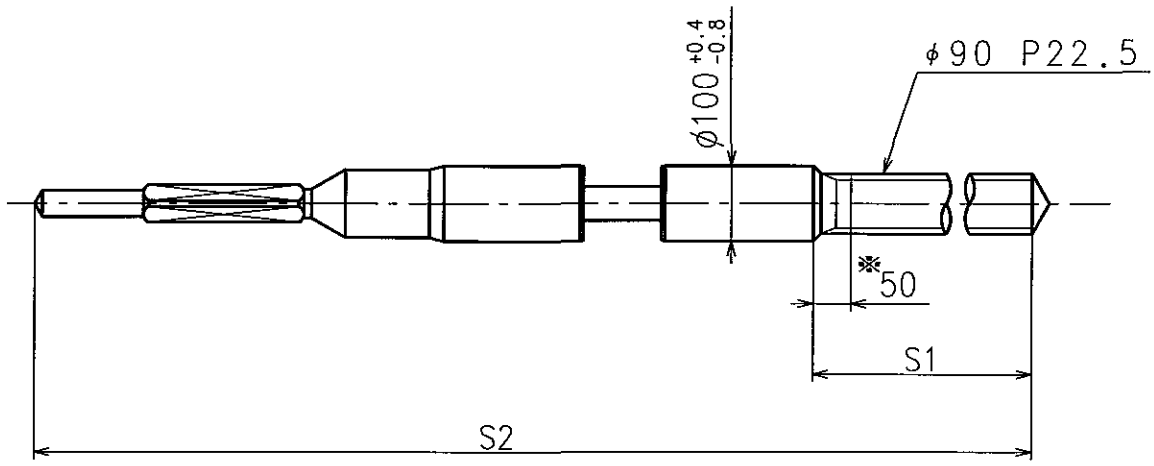
Hour wheel　　Center wheel　　Fourth wheel

	Parts No.		
	Hour wheel	Center wheel	Fourth wheel
Type M (2) YT62A1*	0271670	0221676	0241670



	L1	L2	L3	L4	L5	L6	T	d
Type M (2) YT62A1*	102	146	166	40	MIN: 50	MAX: 50	15	MAX: ø2500

Cal. YT62A	Hand setting stem	Date: 9/Feb./'00 Rev.:00



※ Not threaded

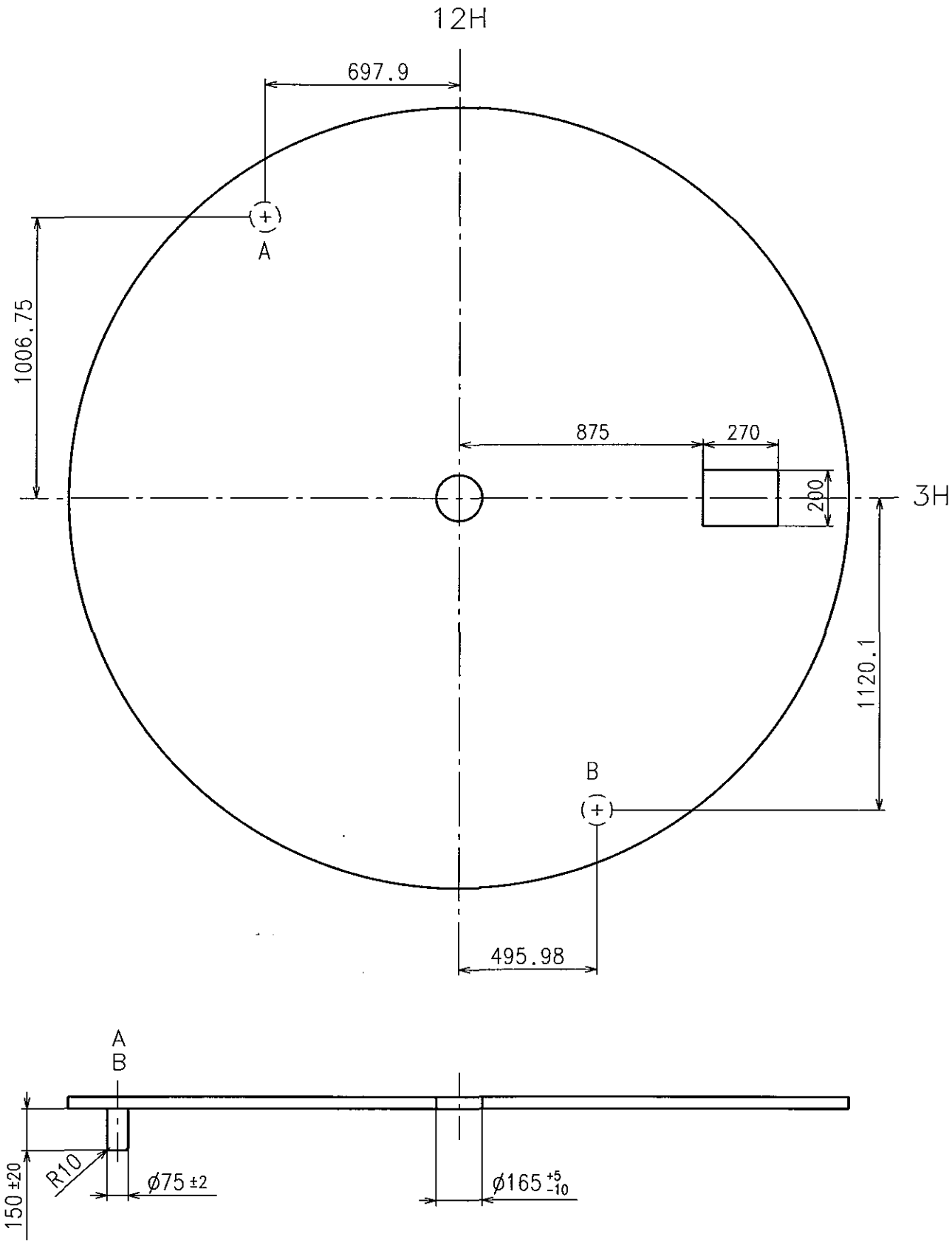
	Part No.	S1	S2
Standard	0351652	1109	2220

Material : Steel

Hardness : Vickers 550±50

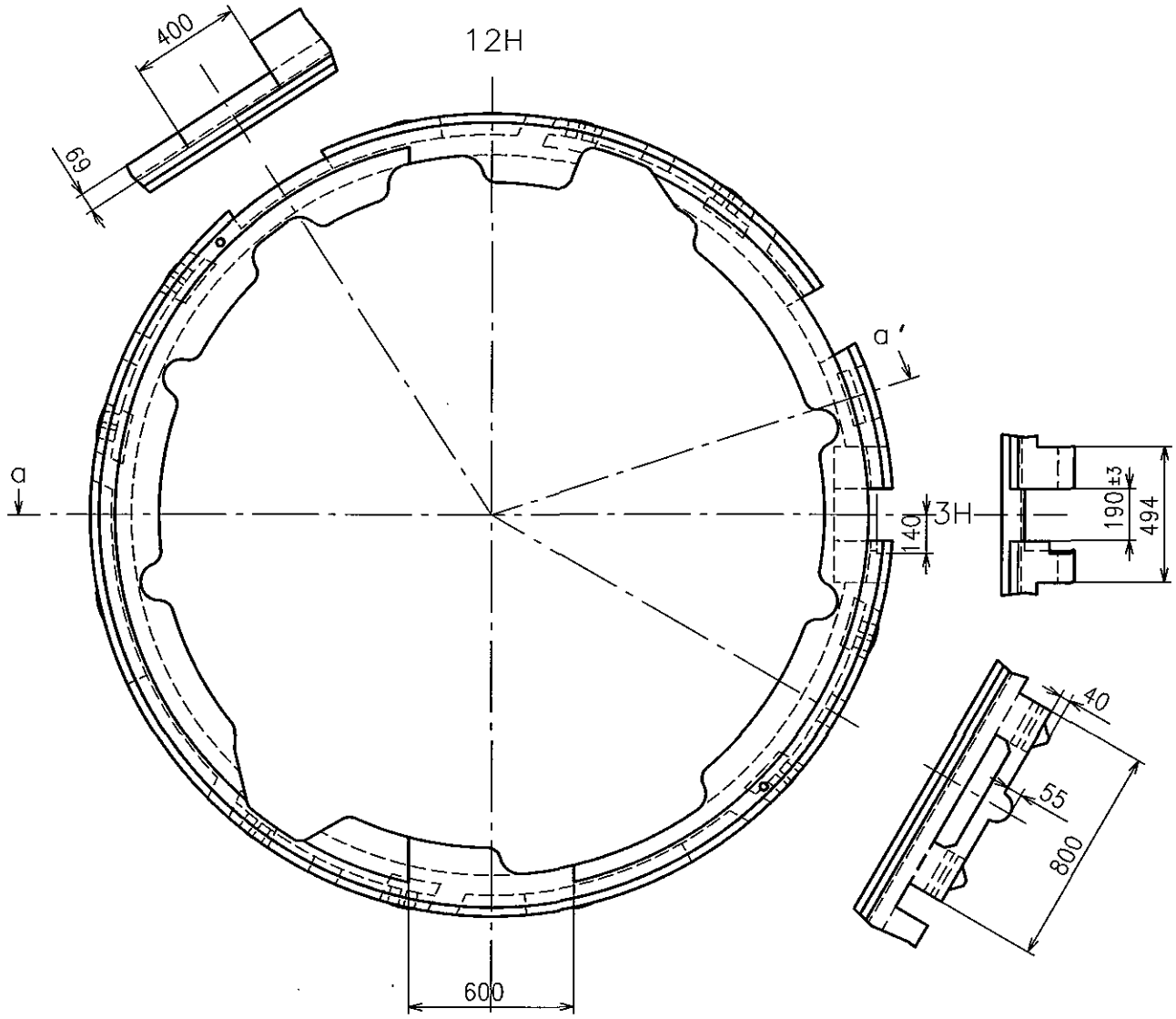
Unit : 1=1/100mm

Cal. YT62A	Dial	Date: 9/Feb./'00
		Rev.:00

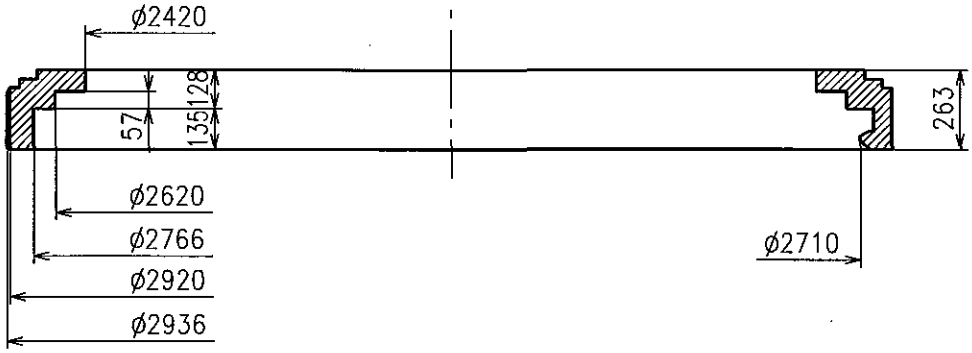


Unit : 1=1/100mm

Cal. YT62A	Holding ring for dial	Date: 9/Feb./'00 Rev.:00



a-a' SECTION

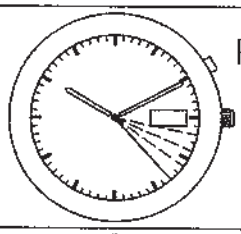
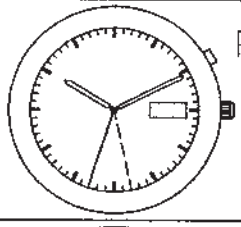
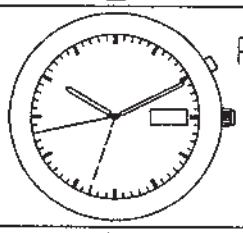
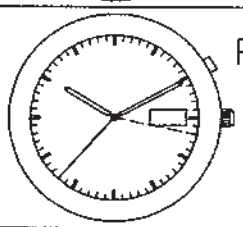
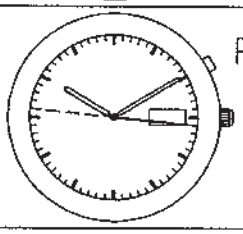


Unit : 1=1/100mm

Power reserve indicator

1. How to use Push the button at 2H position.
2. Indication
   1) By pressing the button, the second hand advances quickly by a certain amount of seconds depending on the power reserve in watches.
   2) The second hand starts to move quickly from the position of where it is now.
   3) After the second hand moves quickly by a certain amount of seconds, it stops on the spot until the current time catches up with the time the second hand indicates.

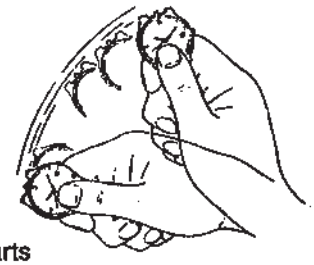
3. Relationship between the quick movement of the second hand and power reserve

Indication	Power reserve
No move 	The watch may run down soon. Please be sure to recharge the watch. The second hand moves two-second interval.
5 seconds 	Approximately more than 1 day of power reserve is available. The second hand moves one-second interval.
10 seconds 	Approximately more than 7 days of power reserve is available. The second hand moves one-second interval.
20 seconds 	Approximately 1 month of power reserve is available. The second hand moves one-second interval.
30 seconds 	Approximately 4 to 6 months of power reserve is available. The second hand moves one-second interval.

4. Recheck the power reserve

   You can immediately press the button again to recheck the power reserve one more time.

1. When you start to use the stoped watch



(1) Swing the watch from side to side rhythmically as shown in the illustration.
The second hand starts moving at two-second interval after several swinging of the watch.
However, it is still lack of energy.

(2) Please swing the watch further more even if the second hand starts moving at one-second interval.
It is recommended that the watch be swung more than 200 times. (*)

(*) This is the general guideline, because it depends on the strength of swinging.

(3) While the watch is swung causes the automatic power generating system to work, and the watch is powered by the electrical energy.

(4) Before using the watch, please set the time and calendar.

(5) Please check the quantity of battery before you stop carrying the watch.

2. How to restart the watch which has been left unused for a long time

The capacitor continues to discharge and the voltage decrease ever after the watch has stopped.
In order to restart the watch which has been left for a long time since the watch had stopped, it may be necessary to swing the watch more than the general guidelines above.

The watch which has been left for (A) since the watch had stopped, requires (B) swings.

(A)		(B)
1 year	=>	more 250 times
more than 3 years	=>	more 850 times
more than 5 years	=>	more 1450 times

3. Power depletion warning function (BLD)

When the voltage falls to a certain level, the second hand moves at two-second interval.
If you find the second hand moving at two-second interval while the watch is in use or while it has been left unused, the watch may run down soon.
Please be sure to swing the watch and recharge the battery.

Continuance time under the BLD wathc condition
Approx. 24 hours

<Note>

If the watch is swung extremely quickly with vigor, it may run down in 24 hours.