

# MIYOTA

## Cal. 8218 / 8219

AUTOMATIC & MANUAL WINDING MOVEMENT WITH DATE



### Basic specification

Calibre	8218	8219
Ligne	11-1/2	
Overall diameter	Φ26.0mm	
Case fitting diameter	Φ25.6mm	
Total height	5.67mm	
Small second	○	○
24 Hour Hand	N/A	○
Date	○	○
Vibration frequency	21600 vibrations per hour	
Jewels	21 Jewels	

### Function

Automatic & manual winding  
Display by means of hands: hour, minute, small second, 24H(8219).  
Date calendar  
Shock-absorber for balance staff

### Technical characteristics

#### Hands fitting force

Second hand Max. 30N  
Minute hand Max. 50N  
Hour hand Max. 50N

Lift angle 49°

Casing Non-corresponding to "Divers' watches" defined by ISO6425

### Time performance

Accuracy	-20~+40 seconds/day
Posture difference	Under 50 seconds/ day
Running time	More than 40 hours

※Accuracy of the mechanical watch is different from the daily rate of the quartz watch and the accuracy will change maximum of several ten seconds during rewinding the spring, then the accuracy of the half winding condition will be different from that of full winding condition.

### <Time performance measurement condition>

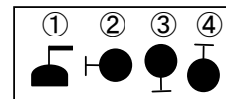
#### Accuracy

Measure within lapse of 10 ~ 60 minutes from full winding.

#### Posture difference

Measure accuracy in 4 different postures shown on the right picture within lapse of 10 ~ 60 minutes from full winding.

※Direction of 4 postures ①Date Dial side Up ②6 o'clock side up ③9 o'clock side up ④3 o'clock side up



#### Running time

Measure the running time from full winding.

※The mainspring becomes fully wound by rotating the ratchet wheel 7.5 times (turning the crown 40 times).

## Automatic winding structure

Winding direction : Counter-clockwise (seeing from case back side)



## Operating method

### For 8218 / 8219

#### (1) Winding the Mainspring

Automatic winding watch can also be hand wound by turning the crown in "A" position.

Wind 15 ~ 20 times clockwise. It will start to move naturally after shaking slightly.

#### (2) Setting the Time

1. Pull the crown to "C" position.
2. Turn the crown to set the hour and minute hands.

#### (3) Setting the Date

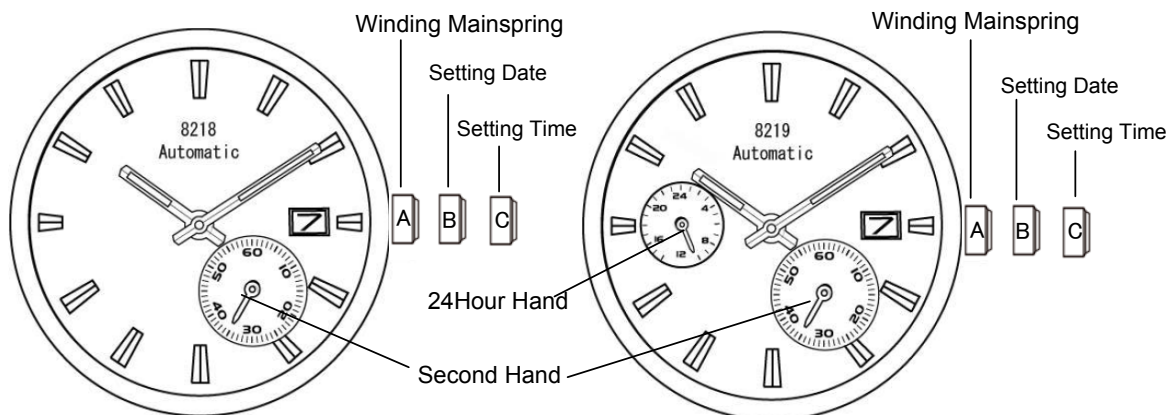
1. Pull the crown to "B" position.
2. Turn the crown counter-clockwise to set the date.

\*If the date is set between the hours of around 9:00 PM and 1:00 AM, the date may not change on the following day.

3. After the date has been set, push the crown back to the normal position.

### For 8219

When the time is set, 24hour hand at 9 o'clock moves linked with center hour hand.



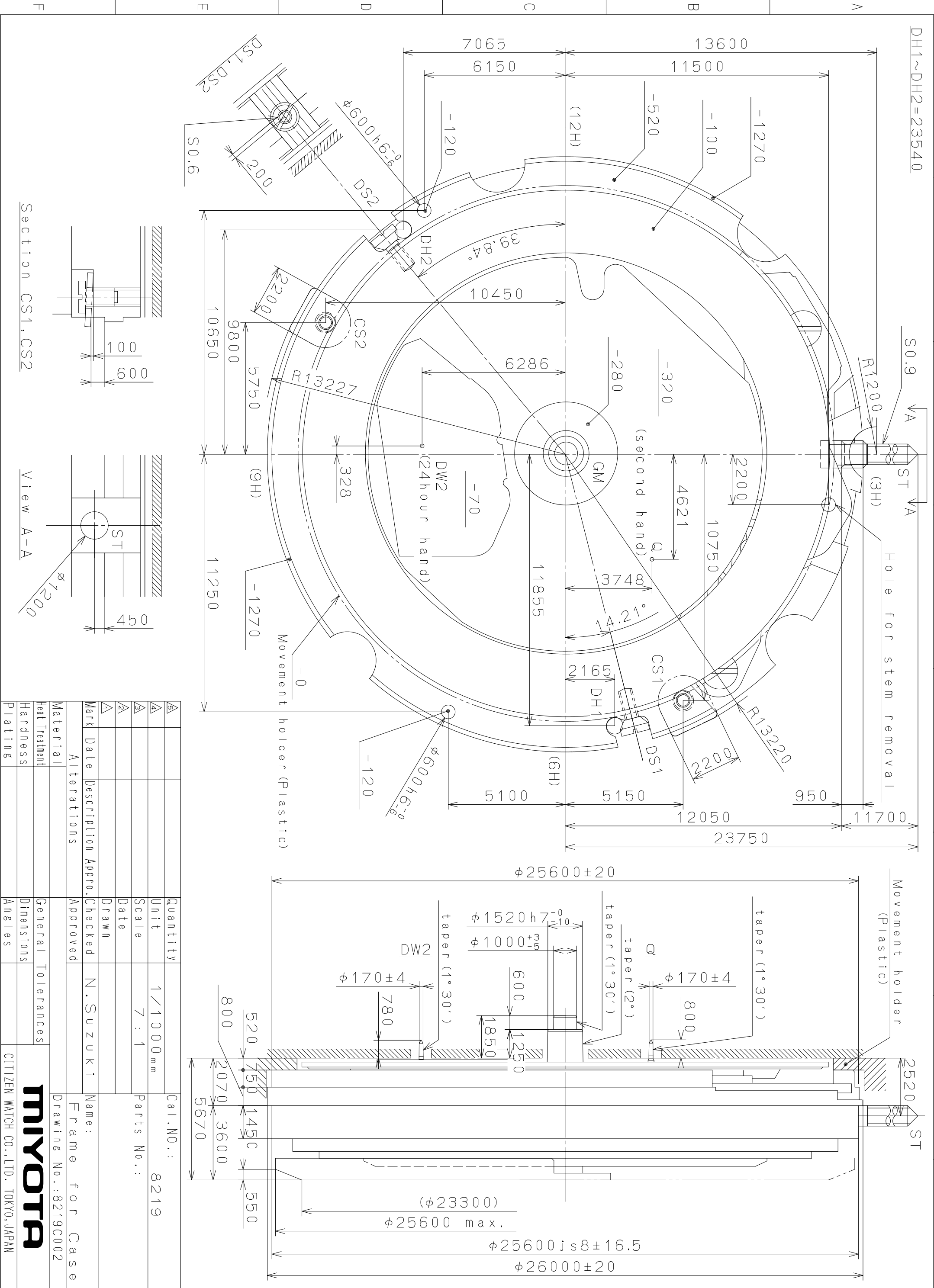
## Separated parts

Winding Stem	065-212	×1
Movement Holder	500-710	×1
Screw	929-610	×2

These specifications might be changed without prior notice.

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This drawing is provisional and subject to our reconfirmation and/or revision without notice.

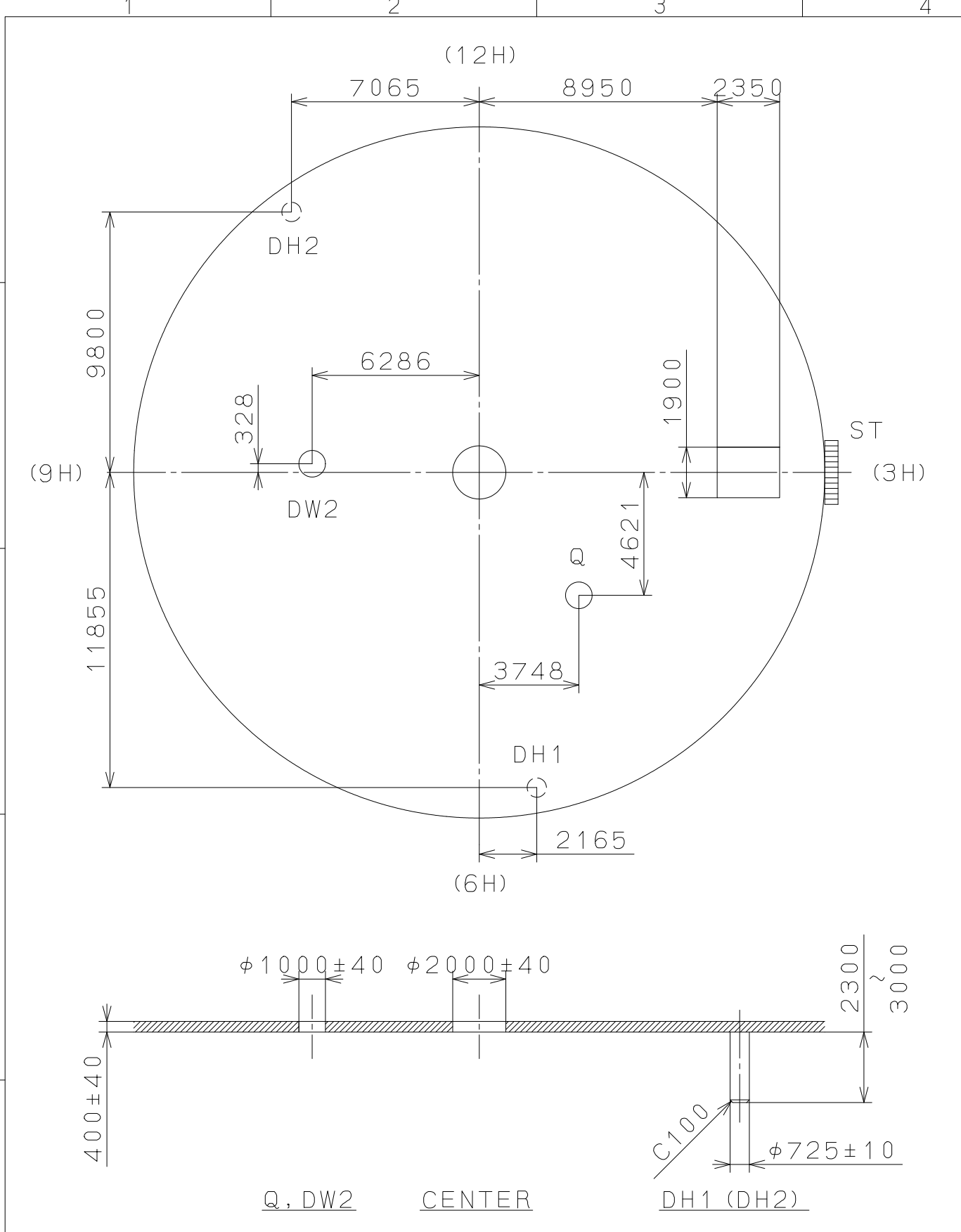


Alterations	Description	Appr.	Checked	Drawn	N. Suzuki	Name:	Frame for Case
Material							Drawing No.: 8219C002
Heat Treatment							
Hardness							
Plating							
Quantity	Unit	1 / 1000 mm	Scale	7 : 1	Parts No.:	8219	Cal. NO.:
Date	Date		Date				
Mark	Date		Date				

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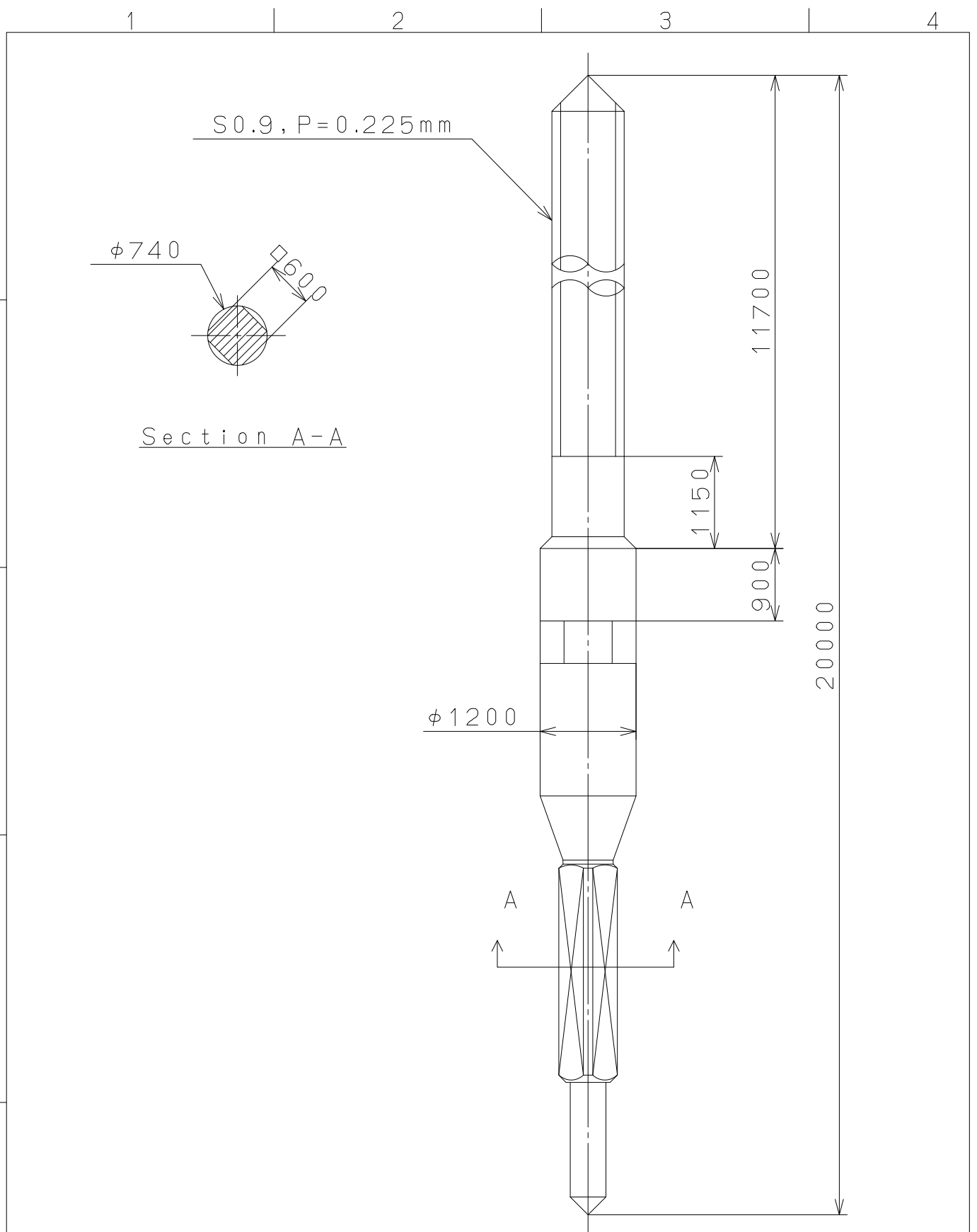
This drawing is provisional and subject to our reconfirmation and/or revision without notice.



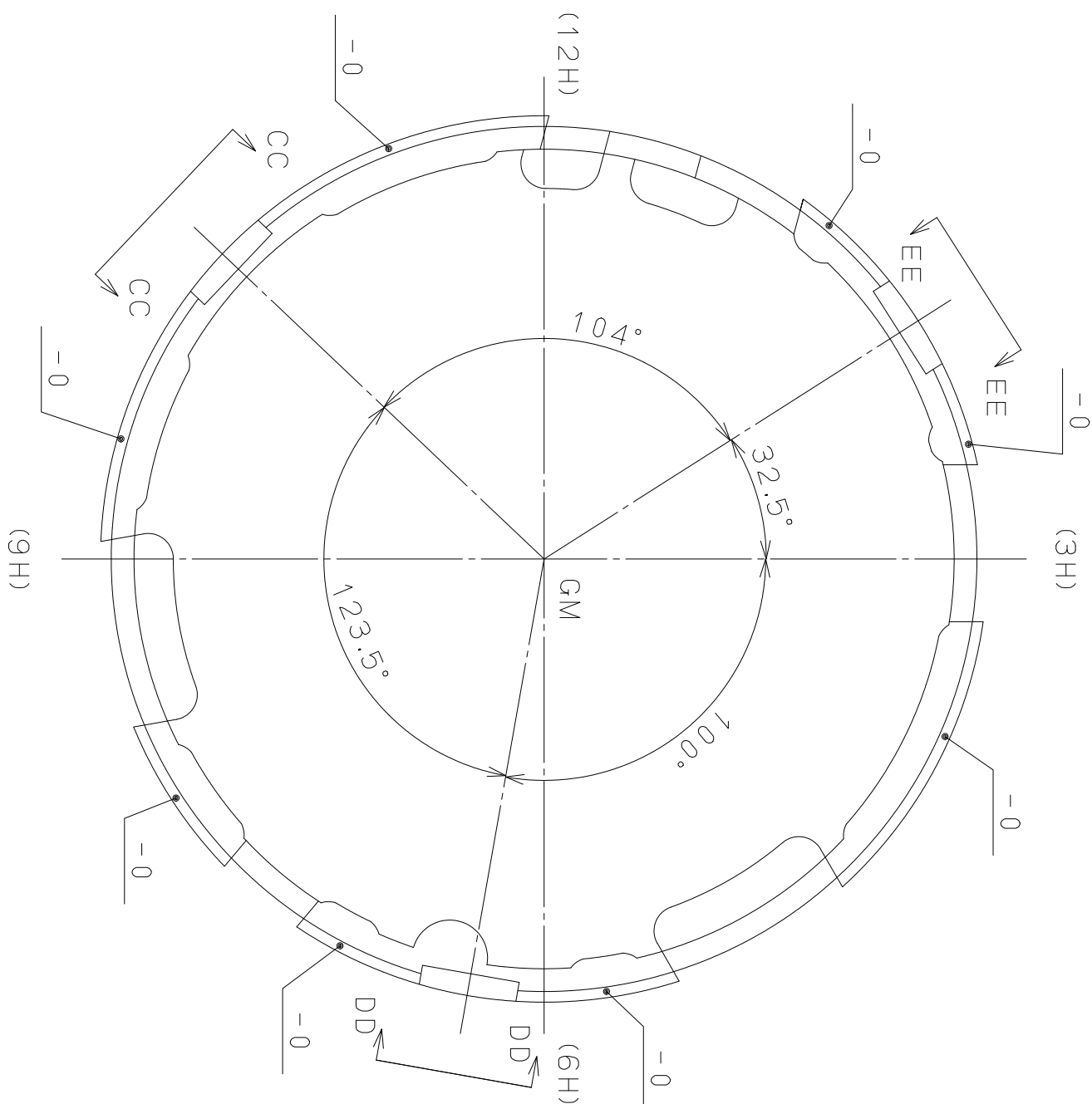
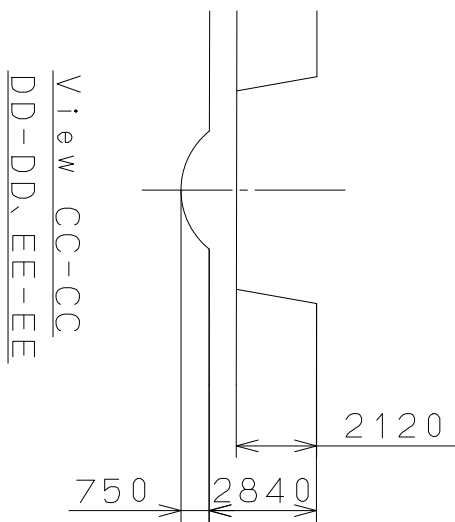
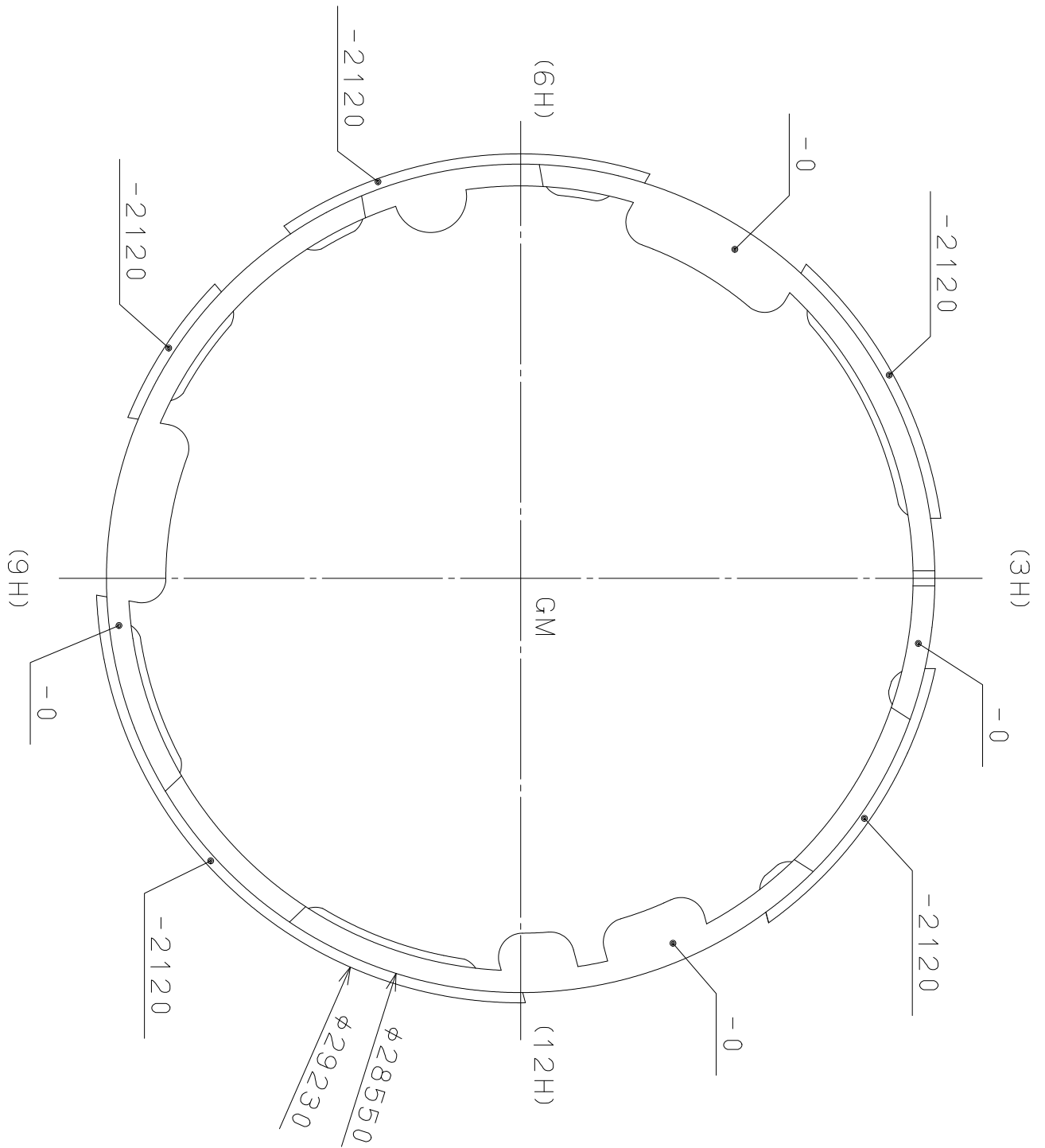
△			Quantity		Cal.NO.:
△			Unit	1/1000mm	8219-21A
△			Scale	5:1	Parts No.:
△			Date		
△			Drawn		
Mark	Date	Description	Appr.	Checked	Name:
		Alterations	Approved	N. Suzuki	Indications for Dial
Material					Drawing No.: 8219D000
Heat Treatment			General Tolerances	<b>MIYOTA</b> CITIZEN WATCH CO., LTD. TOKYO, JAPAN	
Hardness			Dimensions		
Plating			Angles		

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△5			Quantity		Cal.NO.:
△4			Unit	1/1000mm	
△3			Scale	15:1	Parts No.:
△2			Date		065-212
△1			Drawn		
Mark	Date	Description	Appr.	Checked	Name:
		Alterations	Approved	N. Suzuki	SETTING STEM
Material					Drawing No.: 2120S001
Heat Treatment			General Tolerances	<b>MIYOTA</b> CITIZEN WATCH CO., LTD. TOKYO, JAPAN	
Hardness			Dimensions		
Plating			Angles		



Quantity	1/1000 mm	Cal. NO.:
Unit	Scale	Parts No.:
Scale	5 : 1	500-710
Date	Date	Name:
Drawn	Checked	Casing Holder
Approved	Checked	Drawing No.: 8200E002
Alterations		
Material		
Heat Treatment		
Hardness		
Plating		
General Tolerances		
Dimensions		
Angles		
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