

# MIYOTA

## Cal. 90S5



AUTOMATIC & MANUAL WINDING MOVEMENT  
WITH FRONT VIEW SKELETON

### Basic specification

Ligne	11-1/2"
Overall diameter	Φ26.0mm
Case fitting diameter	Φ25.6mm
Total height	3.90mm
Vibration frequency	28800 vibrations per hour
Jewels	24 Jewels

### Function

Automatic & manual winding  
Display by means of hands: hour, minute, second.  
Front view skeleton  
Stop second device  
Shock-absorber device for balance staff

### Technical characteristics

#### Balanceable weight of hands

Second hand	Max. 0.60μN · m
Minute hand	Max. 1.25μN · m
Hour hand	Max. 1.50μN · m

#### Hands fitting force

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

Lift angle 51°

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

### Time performance

Accuracy	-10 ~ 30 seconds/day
Posture difference	Under 40 seconds/ day
Running time	More than 42 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>

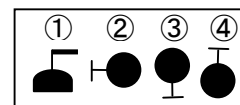
#### Accuracy

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 winded by rotating the ratchet wheel 7.5 times (turning the crown 40 times).

## Automatic winding structure

**Winding direction :** Clockwise (seeing from case back side)



## Operating method

Winding the mainspring, adjusting the hand, date is done by the below procedure.

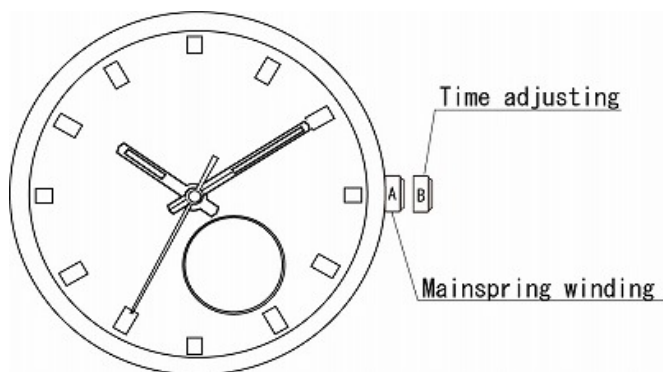
### (1) Winding the mainspring

Automatic winding watch can be also manual-winded by turning the crown in "A" position.

Wind 15 ~ 20 times clockwise until second hand starts to move naturally.

### (2) Adjusting time

Rotate the crown in "B" position and adjust the standard time.



## Separated parts

Plastic movement holder	500-002 x 1
Winding stem	065-A05 x 1
Screw for dial fixing	929-808 x 2
Spacer	212-A47 x 1

These specifications might be changed without prior notice.

**CITIZEN WATCH CO., LTD.**