

MIYOTA

MOVEMENT SPECIFICATIONS

CAL.FS60/61

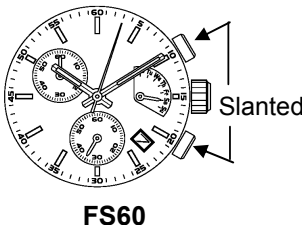
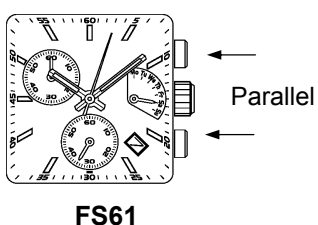
10-1/2 LIGNE, 3 EYES CHRONOGRAPH
ANALOGUE QUARTZ, 0 JEWEL

MANUFACTURED IN JAPAN

1.BASIC SPECIFICATIONS

(1) CaL. No.

*TO CONFIRM WITH MOV'T DRAWING ATTACHED

CALIBRE	FS60	FS61
PUSHER	SLANTED	PARALLEL
Ligne	10-1/2	
Overall diameter	Φ 23.7X22.0mm (3H-9H)	
Case fitting diameter	Φ 23.3X22.0mm (3H-9H)	
Date	O	
Total height	5.10mm	5.25mm
Figure (push button placed angle)	 <p>Slanted</p> <p>FS60</p>	 <p>Parallel</p> <p>FS61</p>
Battery & Life	SR626SW 2YEARS*	

* based on 1 hour/day chronograph use

(2) Time standard

Type of quartz : Tuning fork type quartz crystal

Frequency : 32,768Hz

Accuracy : +/-20 s/month worn under normal circumstances

(3) Balanceable weight of hand

Minute hand Max. 0.4 μN.m

Center Chrono Second hand Max. 0.035 μN.m

Day hand Max. 0.040 μN.m

Other small hands Max. 0.020 μN.m

(4) Function

Chronograph 1/1 sec. Basis (Up to 59 min. 59 sec.)

Powercell Saving Reset Mechanism(PSRM)

Over-loading Compensation Device(OLCD)

Digital Frequency Control(DFC) for time adjustment

2.SEPARATED PARTS

Setting stem x1

Code	065-549
Length from movement center to far end of setting stem	20.00mm
Thread.....	Φ0.9mm x 9.06mm

3.OTHERS

* Measurement of time rate

The unit(gate) time of measurement must be set at "10 sec." or integer fold value of 10 sec. owing to the DFC system, and the measurement must be performed in the form of complete watch.

* Marking on movement

JAPAN
MIYOTA CO.
FS60/61
NO JEWELS

* Typical clearance

Mov't - Caseback	minimum 200 microns
Top of hands - Glass	300 - 400 microns *
* subject to the glass, case structure, and the length of hand	

* Note

Please use aluminum material hand for Chrono second hand

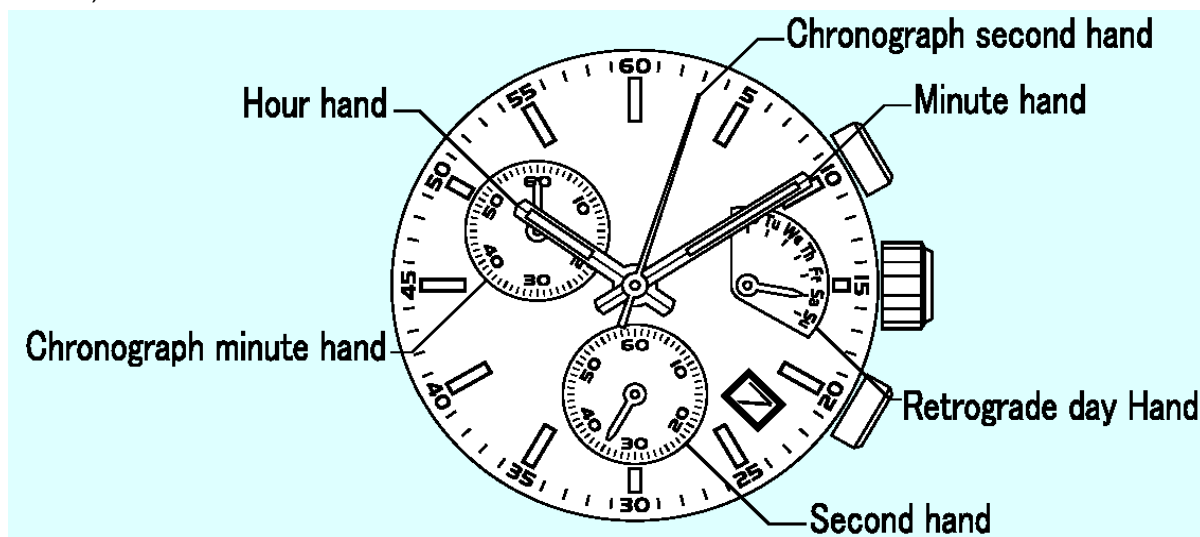
* TACHYMETER

The tachymeter is the device which measures the speed of an automobile. Knowing is how many seconds the car covers a distance of 1km, the meter can measure the approximate average speed per hour during a journey (up to the maximum measurable range of tachymeter is 60 seconds.)

If the chronograph is started at the same time as measurement, and stopped after 1 km, the average speed per hour can be determined according to the position of the second hand. If the car covers the distance of 1km in 45 seconds, the average hourly speed during the journey will be about 80 km.

4 INSTRUCTION MANUAL

A) DISPLAYS AND BUTTONS



B) SETTING THE TIME

1. Pull the crown to the 2nd Click Position so that the second hand stops at (0) position.
2. Turn the crown to set the hour and minute hands.

C) SETTING THE DATE

1. Pull the crown to the 1st Click Position.
2. Turn the crown 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.

D) SETTING THE DAY

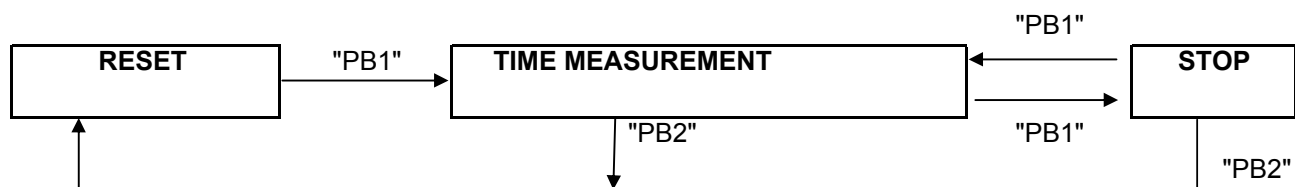
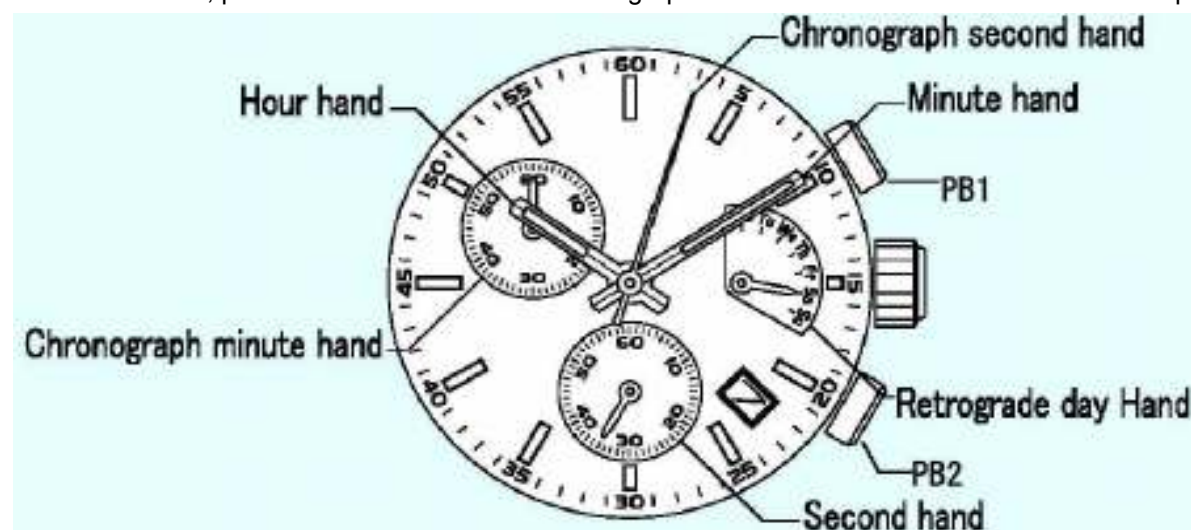
1. Pull the crown to the 1st Click Position.
2. Turn the crown counterclockwise to set the day.
 - * If the day is set between the hours of around 11:00 PM and 2:00 AM, the day may not change on the following day.
3. After the day has been set, push the crown back to the Normal Position.

E) USING THE CHRONOGRAPH

This chronograph is able to measure and display time in 1/1 second united up to maximum of 1 hour.

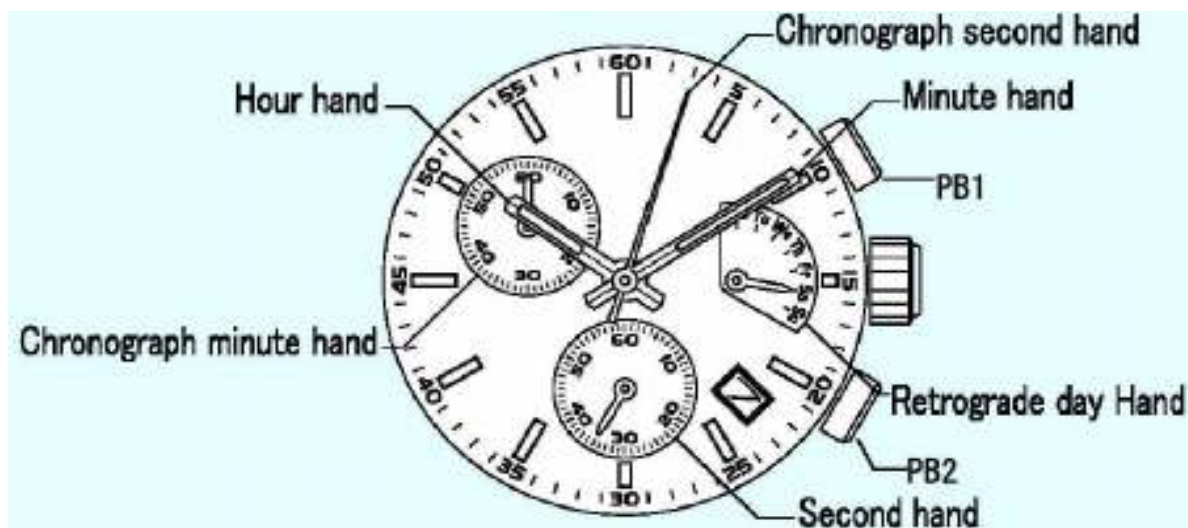
Measuring time with the chronograph

1. The chronograph can be started and stopped each time button "PB1" is pressed.
2. To reset, press button "PB2" and the chronograph second & minute hands return to their 0 positions.



F) CHRONOGRAPH RESET (INCL. AFTER REPLACING BATTERY)

This procedure should be performed when the chronograph second hand do not return to the 0 second position after the chronograph has been reset, and including after the battery has been replaced.



1. Pull the crown out to the 2nd position.
2. Press button "PB1" to set the chronograph second hand to the 0 position.
3. The chronograph hands can be advanced rapidly by continuously pressing button "PB1".
4. Once the hands have been zeroed, reset the time and return the crown to its normal position.

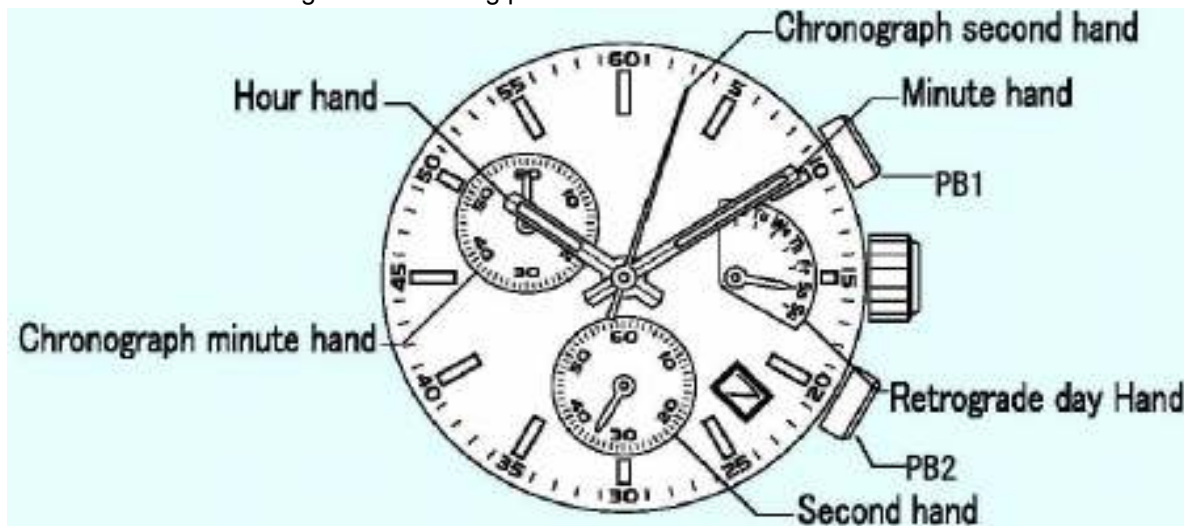
* Do not return crown to normal position while chronograph second hand return to 12:00 (ZERO) position.

Hand stops on the way when crown are returned to normal position and these positions are recognized as 12:00 (ZERO) position.

G) FITTING METHOD OF HANDS

Place the module on case.

then fit the hands according to the following procedure.



1. After the dial assembling, push "PB1" first and then "PB2" to make sure all the hands is not moving.
 2. Pull out the crown to the 2nd Click Position.
 3. Turn the crown clockwise, and stop it just after the date changes. (When the date starts changing, turn the crown very slowly. And stop it when it changes the date.)
 4. Fit the hour hand, minute hand and chronograph second hand at the 12-o'clock position.
 5. Fit the second hand and chronograph minute hand at 60th(ZERO) position.
 6. Fit the retrograde day hand as indicating the day scale.
- *The retrograde day hand can be set any angle.
*The angle from Monday to Sunday is always 120°.

When fitting the hands, remove the case back and place the movement on work stand.

These specifications might be changed without prior notice.

CITIZEN WATCH CO., LTD.