# Cal. FS13/14 FS23/24 <br> HIGH HAND CHRONOGRAPH SERIES 

## 1. Basic Specification

| CAL. | FS13 <br> HIGH HAND | FS14 <br> HIGH HAND | FS23 <br> HIGH HAND | FS24 <br> HIGH HAND | FS03 <br> HIGH HAND | FS04 <br> HIGH HAND |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Push Buttons | SLANTED | PARALLEL | SLANTED | PARALLEL | SLANTED | PARALLEL |
| Total height | 5.10 mm | 5.25 mm | 5.10 mm | 5.25 mm | 4.13 mm | 4.28 mm |
| Ligne | 10 1/2'" |  |  |  |  |  |
| Overall diameter | ¢ $23.7 \mathrm{~mm} \times 22.0 \mathrm{~mm}$ ( $3 \mathrm{H}-9 \mathrm{H}$ ) |  |  |  |  |  |
| Case fiting diameter | Ф23.3mm $\times 22.0 \mathrm{~mm}$ (3H-9H) |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | eye position is | ne as FS10/11 | eye position is | ne as FS20/21 | eye position is | me as FSOO/01 |
| Date | $\bigcirc$ |  |  |  |  |  |
| Bateery \& Life | SR626SW 2YEARS * |  |  |  |  |  |

*based on 1 hour/day chronograph use

## <TIME STANDARD>

Type of quartz: Tuning fork type quartz crystal
Frequency: $\quad 32,768 \mathrm{~Hz}$
Accuracy : $\quad \pm \mathbf{2 0}$ second / month worn under normal circumstances

## < Balanceable weight of hand >

Minute hand Max. $0.4 \mu \mathrm{~N} . \mathrm{m}$
Second hand Max. $0.035 \mu$ N.m
Other small hands Max. $0.02 \mu$ N.m

## < Function >

Chronograph $1 / 1 \mathrm{sec}$. 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 | $065-549 \times 1$ |
| :---: | :---: |
| Length trom movement <br> center to far end of setting <br> stem$\quad 20.00 \mathrm{~mm}$ |  |
| Thread | $\Phi 0.9 \mathrm{~mm} \times 9.06 \mathrm{~mm}$ |

## 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.
( CAL. NO.)
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 1 km , the meter can measure the approximate average speed per hour during a jorney ( up to the maxinum 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 1 km in 45 seconds, the average hourly speed during the journey will be about 80 km .

## 4．Instruction Manual

## 【Displays and Buttons】



A）SETTING THE TIME
1．Pull the crown out to the 2nd Click Position．
2．Turn the crown to set the hour and minute hands．
B）SETTING 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．
1．Pull the crown out to the 1st Click Position．
2．Turn the crown clockwise to set the date．
3．After the date has been set，push the crown back to the normanl position．

## C）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 the zero positions．


## E）CHRONOGRAPH RESET（INCL．AFTER REPLACING BATTERY）

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

1．Pull the crown to the 2nd Click Position．
2．Press the button＂PB1＂once to set the chronograph second hand ahead one scale，or keep pushing to to set the chronograph second hands quickly．
3．Once the chronograph second hand has 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．




(6H)


## DH1 (DH2)


This drawing is provisional and subject to our reconfirmation and or revision without notice.
SO.
9, $P=0.225 \mathrm{~mm}$

$(0$
Section $A-A$

|  |
| :--- | :--- | :--- |

