TIME MODULE

Revised on : 23. Jan. 2019

TECHNICAL GUIDE

&

PARTS CATALOGUE

Cal.NE57A

AUTOMATIC MECHANICAL

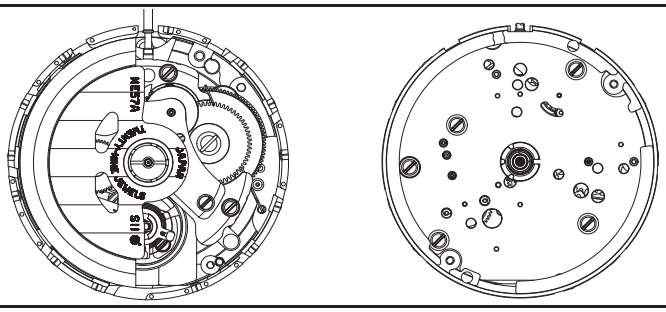
SII Products

PARTS CATALOGUE / TECHNICAL GUIDE
Cal.NE57A

TIME MODULE

[SPECIFICATION]

Version-02

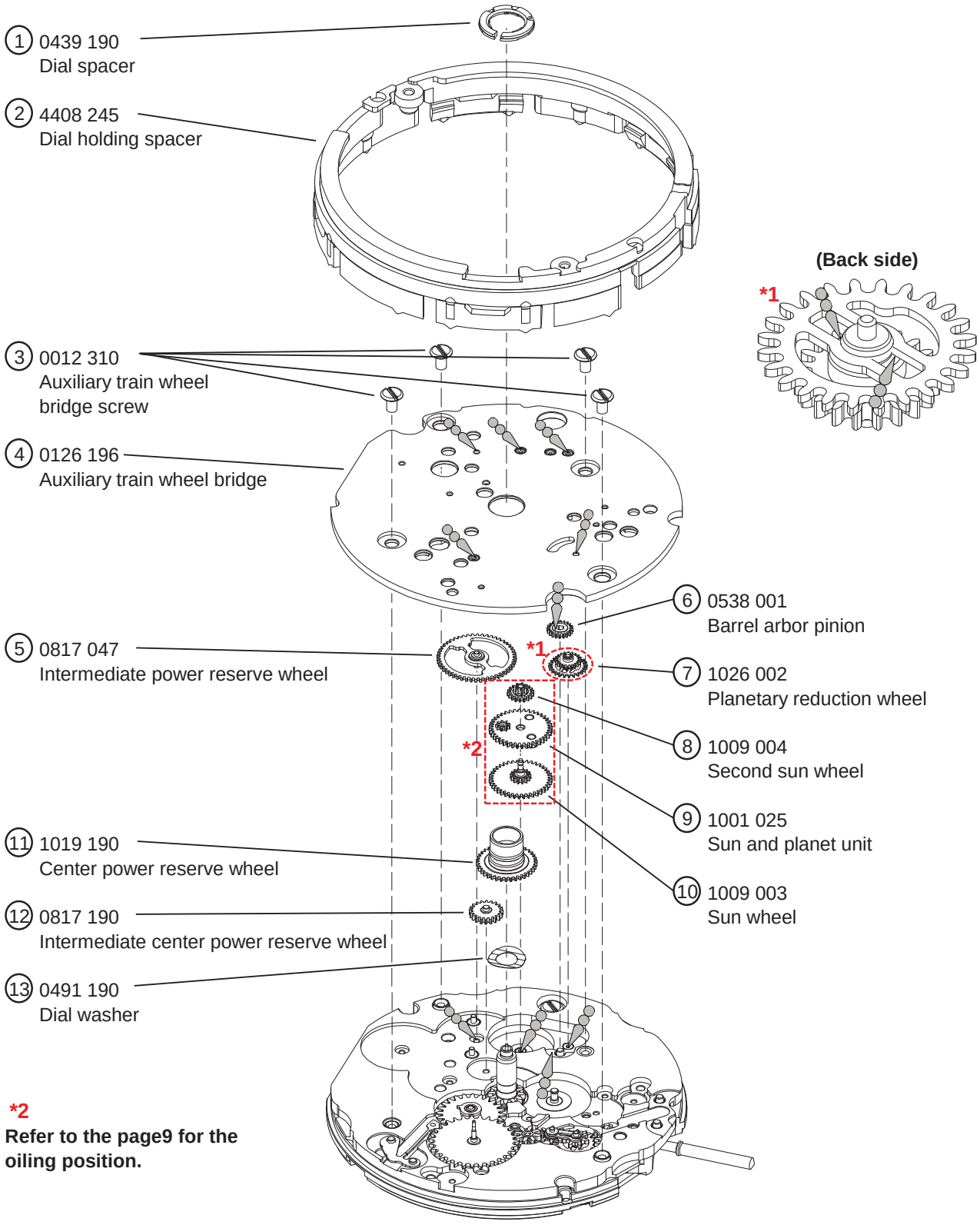
Item \ Cal. No.		NE57A	
Movement			
Movement size	Outside diameter	Φ27.40mm	
	Casing diameter	Φ29.36mm (with dial holding spacer)	
	Total height	6.63 mm	
Time indication		3 Hands (Hour , Minute , Second) Date calendar hands Power reserve hand (Center position)	
Basic function		Manual winding Automatic winding with ball bearing Stop second device Quick date correction	
Frequency		21,600 vibrations per hour	
Accuracy	Static accuracy	-20~+40 seconds per day * Measurement should be done within 10~60 minutes after fully wound up. * All measurements are made without the calendar in function.	
	Measurement position	Direction of 3 positions. (1) Dial up (2) 9 o'clock up (3) 6 o'clock up	
	Lift angle	53 deg.	
	Measurement time	20 seconds * Equipment to be used : Witschi WATCH EXPERT	
	Posture difference	Difference is under 60 seconds within max value and min value. * Measurement should be done within 10~60 minutes after fully wound up. * Direction of 4 positions. (1) 12 o'clock up (2) 9 o'clock up (3) 6 o'clock up (4) 3 o'clock up	
	Isochronisms (24h-0h)	-20~+40 seconds per day. * Direction of position. : Dial up * Difference of static accuracy of 24h and 0h	
Duration time		More than 41 hours … Mainspring after fully wound up. * Posture to confirmation : Dial up	
Winding the mainspring		<< Movements >> ・Fully wound up by turning the crown minimum 55 times. ・Fully wound up by turning the ratchet wheel screw 8 times. << Complete Watch >> A winding machine is needed to wind up the mainspring. Full wind up conditions ・Rotary speed : 30 rpm ・Operating time: 60 minutes	
Jewels		29 jewels	
Crown position		Counterclockwise	Clockwise
	Normal position	Free	Manual winding
	First click	Date setting	Free
	Second click	Time setting	Time setting

Disassembling procedures Figs. (1) → (61)

Reassembling procedures Figs. (61) → (1)

Type of oil
- Moebius 9010
- S-6
- S-4

Oil quantity mark
- NORMAL QUANTITY
- SUFFICIENT QUANTITY



(1) 0439 190
Dial spacer

(2) 4408 245
Dial holding spacer

(3) 0012 310
Auxiliary train wheel bridge screw

(4) 0126 196
Auxiliary train wheel bridge

(5) 0817 047
Intermediate power reserve wheel

(6) 0538 001
Barrel arbor pinion

(7) 1026 002
Planetary reduction wheel

(8) 1009 004
Second sun wheel

(9) 1001 025
Sun and planet unit

(10) 1009 003
Sun wheel

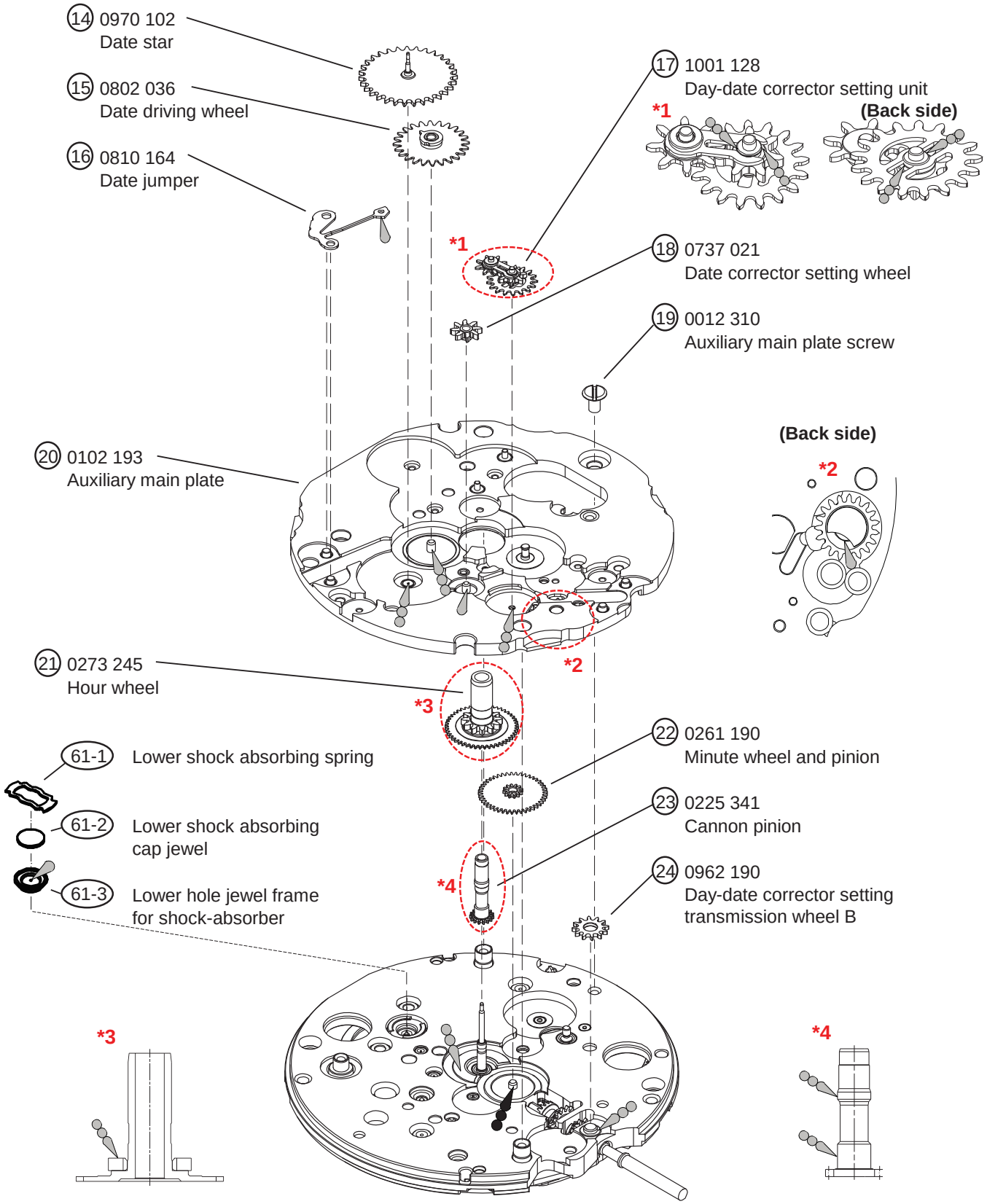
(11) 1019 190
Center power reserve wheel

(12) 0817 190
Intermediate center power reserve wheel

(13) 0491 190
Dial washer

***2**
Refer to the page9 for the oiling position.

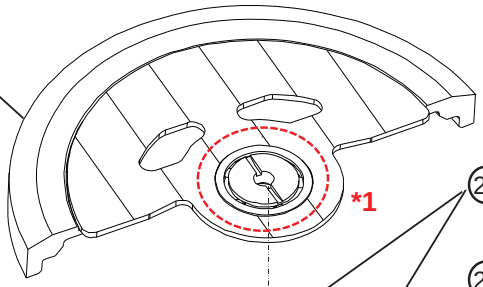
Type of oil	Oil quantity mark
Moebius 9010	NORMAL QUANTITY
S-6	SUFFICIENT QUANTITY
S-4	

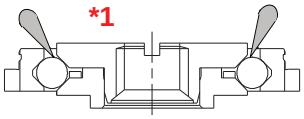


Type of oil
Moebius 9010
S-6
S-4

Oil quantity mark
NORMAL QUANTITY
SUFFICIENT QUANTITY

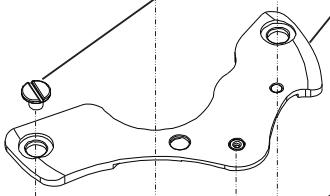
25 **Oscillating weight with ball bearing**
Refer to page 7 for each parts code
***Refer to the page11 for assembling position**





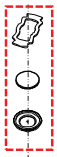
26 0012 354
Automatic train bridge screw

27 0191 183
Automatic train bridge

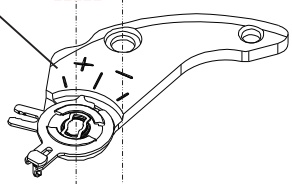


31 0012 100
Balance bridge screw

*2

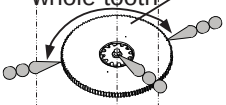


32 0171 354
Balance cock



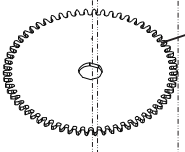
28 0514 183
Second reduction wheel and pinion

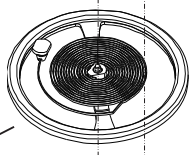
whole tooth



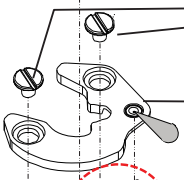
29 0012 919
Ratchet wheel screw

30 0285 051
Ratchet wheel

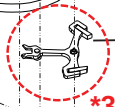




33 0012 354
Pallet bridge screw

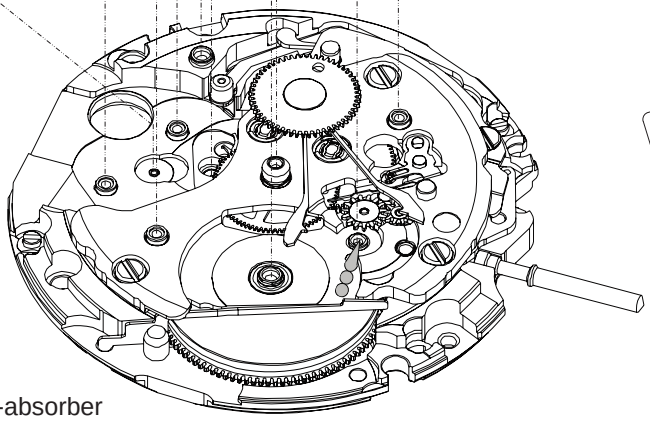


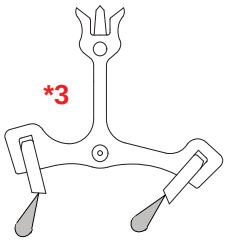
34 0161 300
Pallet bridge



35 0301 009
Pallet fork

*3





32-1 0310 186
Balance complete with stud

***2**

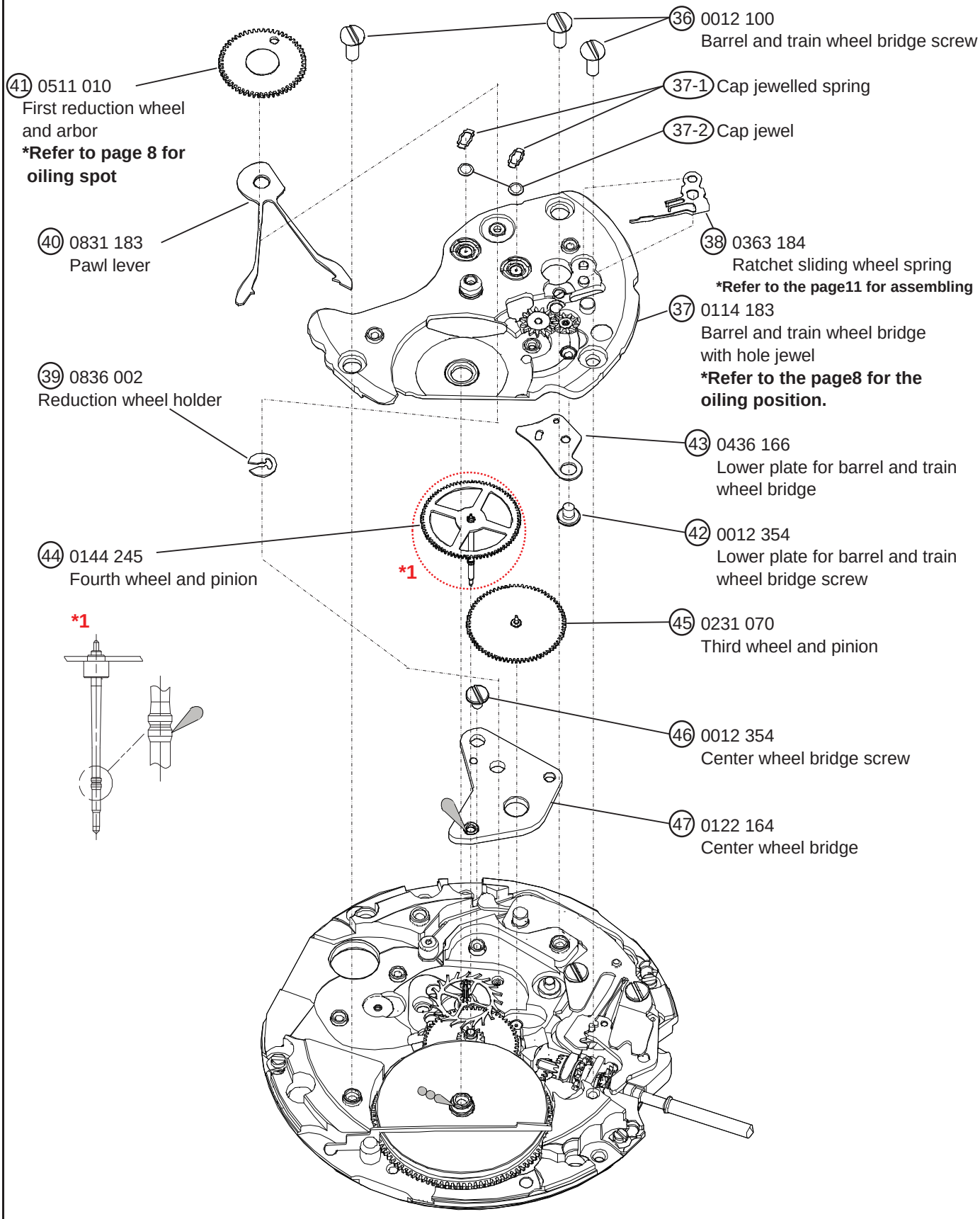
32-2
Upper shock absorbing spring

32-3
Upper shock absorbing cap jewel

32-4
Upper hole jewel frame for shock-absorber

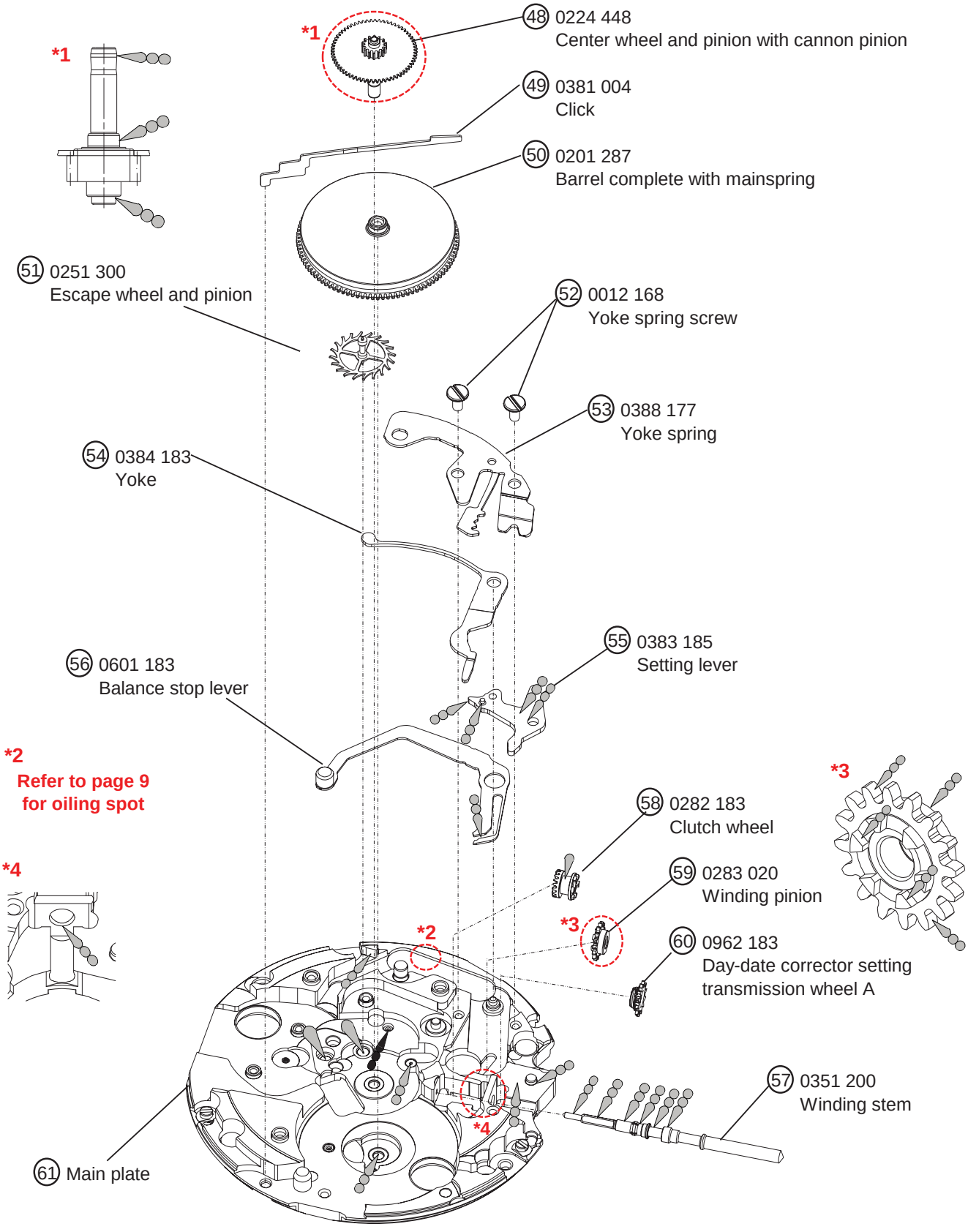
Type of oil
Moebius 9010
S-6
S-4

Oil quantity mark
NORMAL QUANTITY
SUFFICIENT QUANTITY



Type of oil
Moebius 9010
S-6
S-4

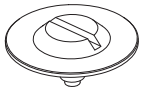
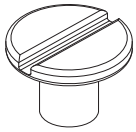
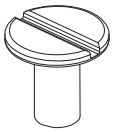
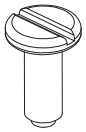
Oil quantity mark
NORMAL QUANTITY
SUFFICIENT QUANTITY



㉕ Oscillating weight with ball bearing (P-4)

Parts code	Marking
1509 324	Japan mark
1509 325	Malaysia mark

● List of screws

Parts No	Name	Parts No	Name
0012 919 	㉙ Ratchet wheel screw	**0012 354** 	㊻ Center wheel bridge screw
			㉝ Pallet bridge screw (×2)
0012 168 	㊷ Yoke spring screw (×2)		㊷ Lower plate for barrel and train wheel bridge screw
			㉖ Automatic train bridge screw (×2)
0012 100 	㊱ Barrel and train wheel bridge screw (×3)	**0012 310** 	⑲ Auxiliary main plate screw
	㉛ Balance bridge screw		③ Auxiliary train wheel bridge screw (×4)

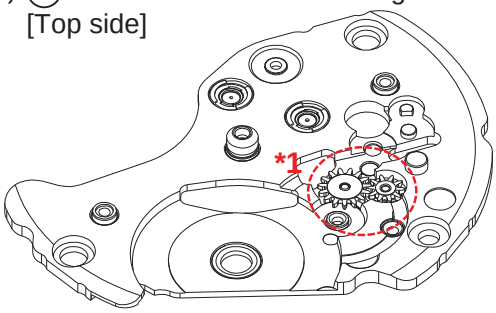
***All parts code are subject to change without notice.**

Type of oil	Oil quantity mark
Moebius 9010	NORMAL QUANTITY
S-6	SUFFICIENT QUANTITY
S-4	

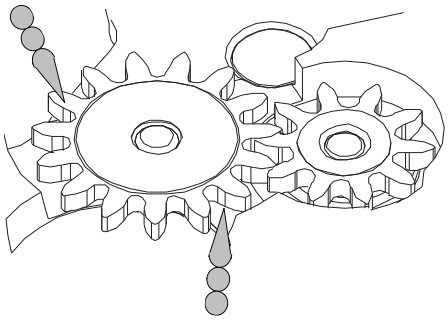
1.Oiling spot

(1) (37) Barrel and train wheel bridge with hole jewel

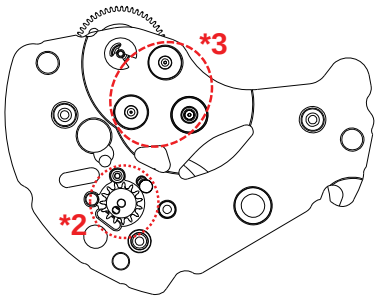
[Top side]



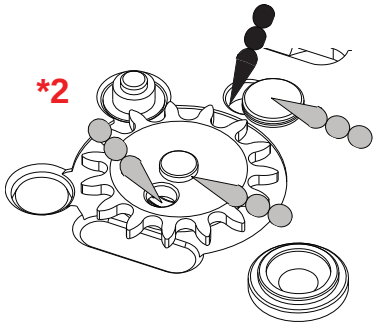
*1



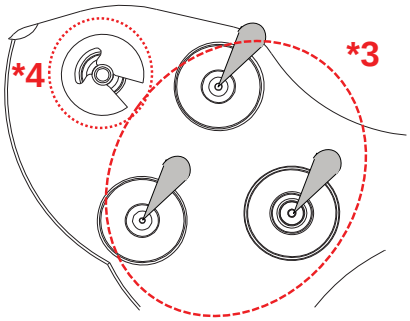
[Back side]



*2

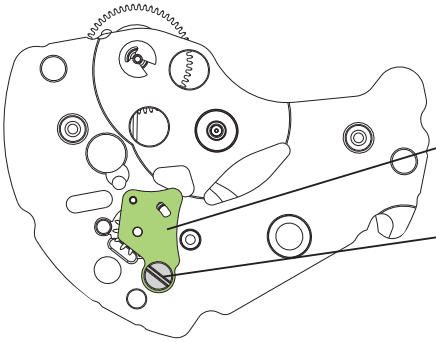


*4 *3



Note

*2 **After oiling, set lower plate for barrel and train wheel bridge & screw.**

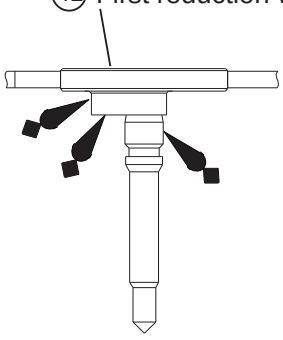


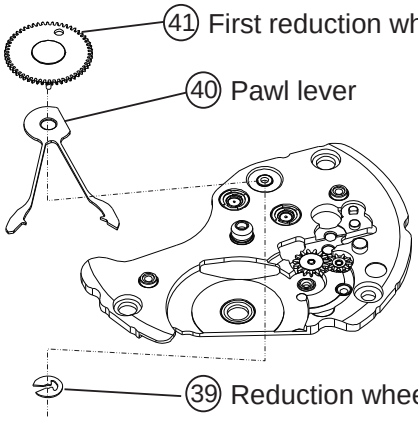
(43) Lower plate for barrel and train wheel bridge

(42) Lower plate for barrel and train wheel bridge screw

*4 **After oiling, set <u>first reduction wheel and arbor</u> & <u>pawl lever</u> & <u>reduction wheel holder</u>.**

(41) First reduction wheel and arbor





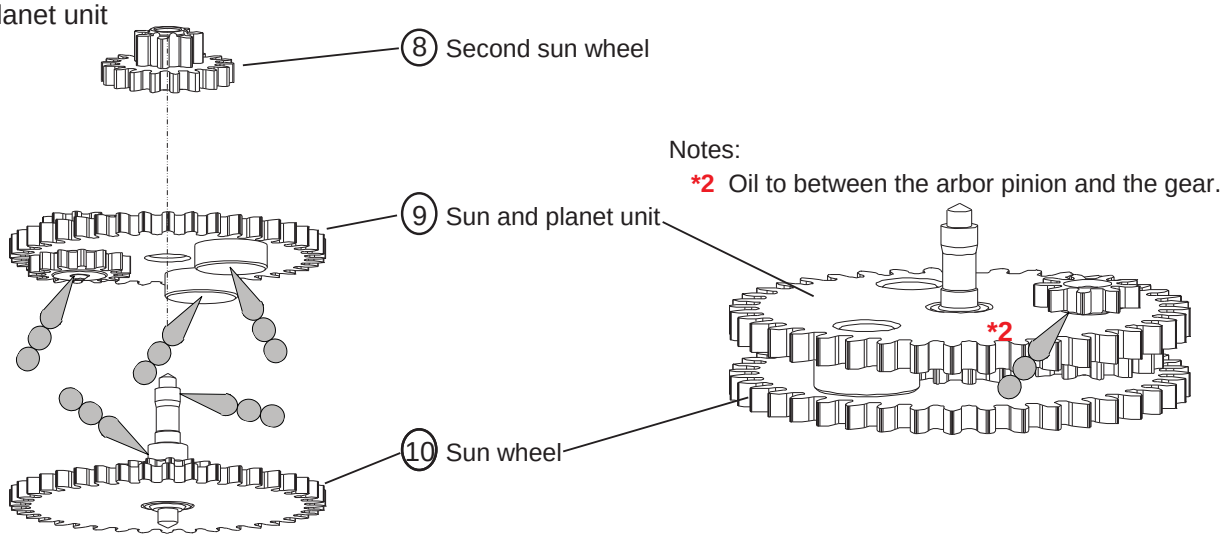
(41) First reduction wheel and arbor

(40) Pawl lever

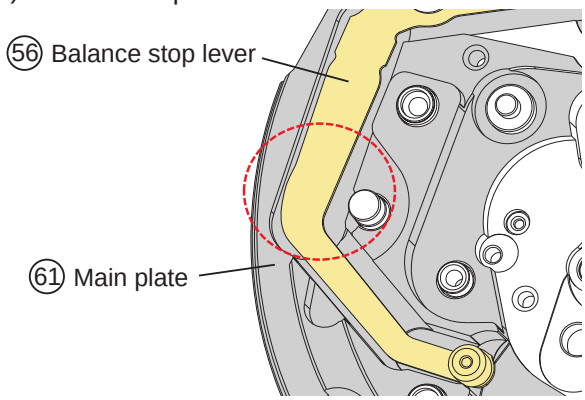
(39) Reduction wheel holder

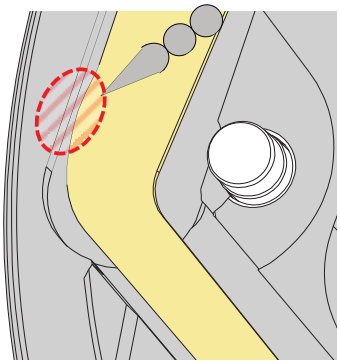
Type of oil		Oil quantity mark	
Moebius 9010	S-6 S-4	NORMAL QUANTITY SUFFICIENT QUANTITY	

(2) Planet unit



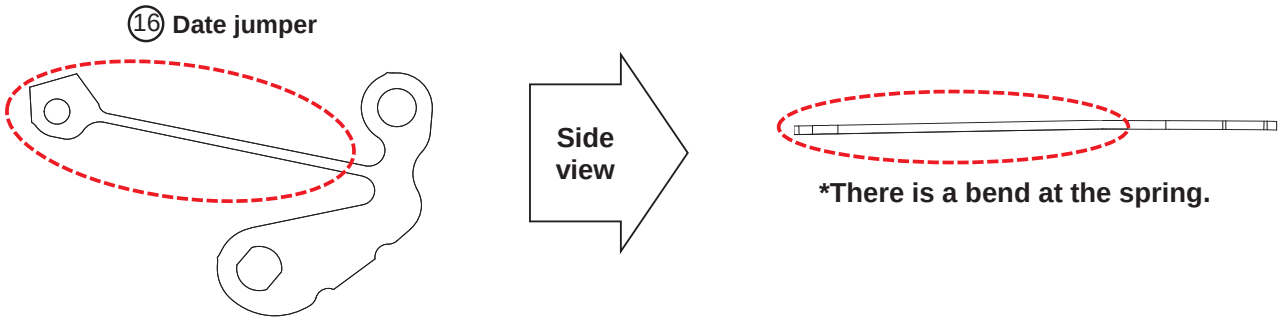
(3) Balance stop lever





Contact part of main plate and balance stop lever

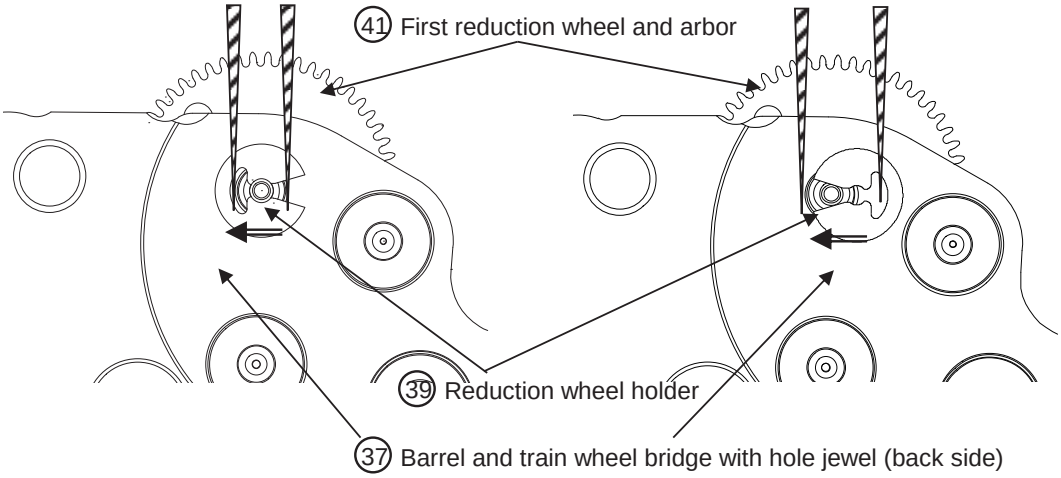
2.Method of identifying date jumper



***There is a bend at the spring.**

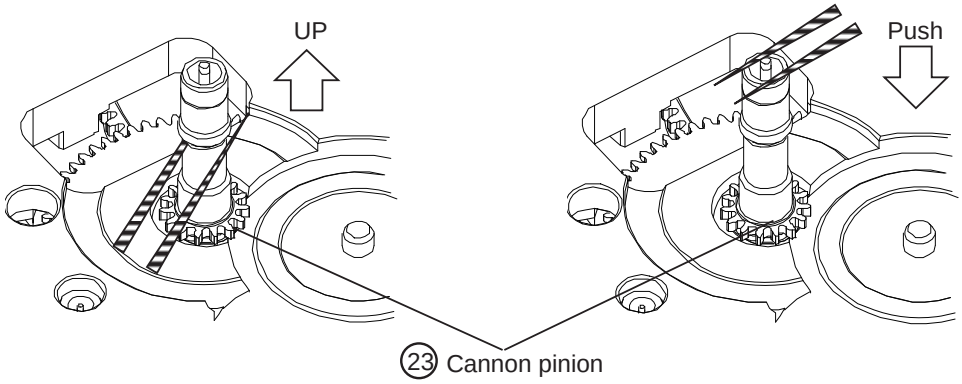
3.Disassembling / assembling of the first reduction wheel and arbor

<< Disassembling >> **<< Assembling >>**



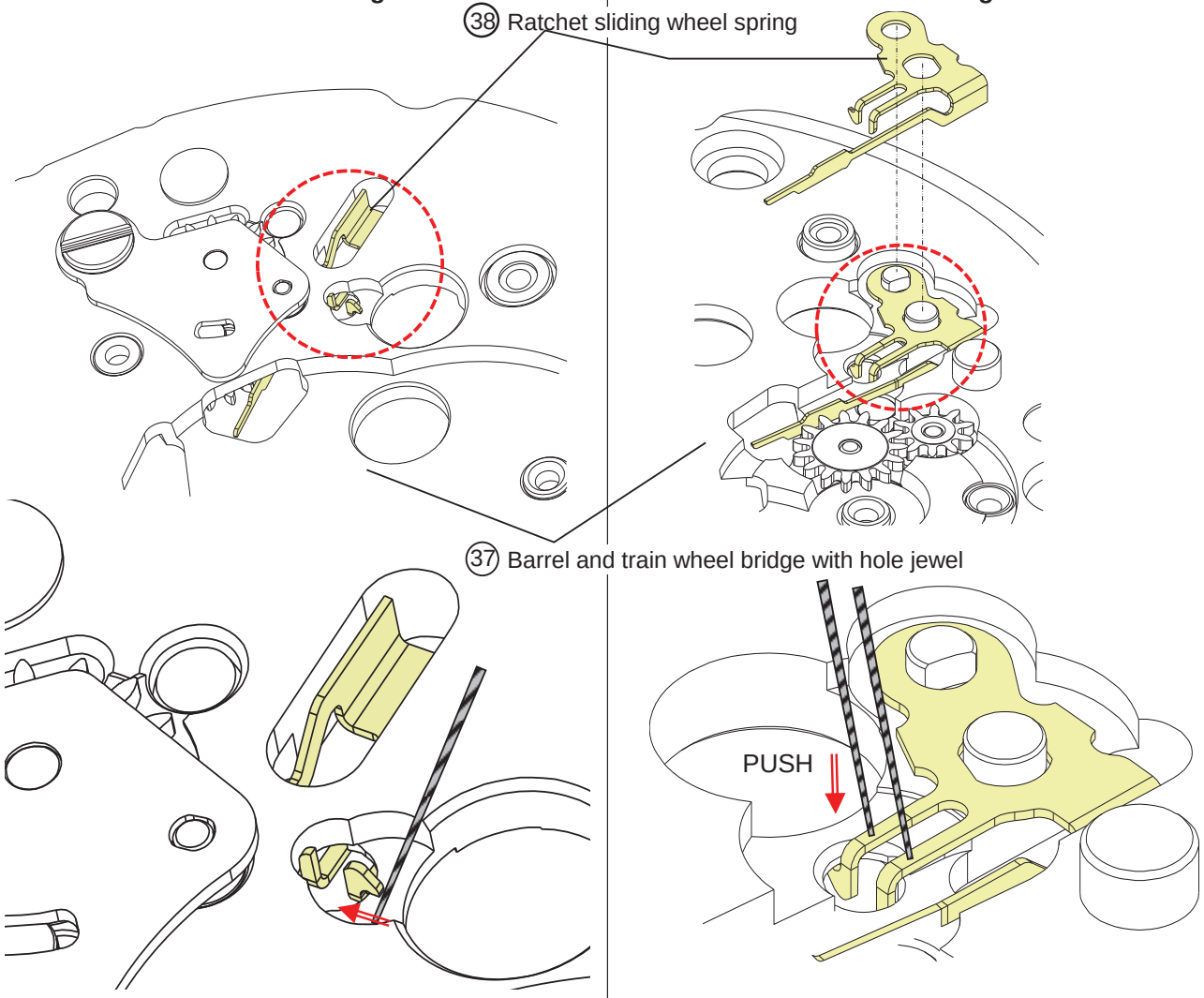
4.Disassembling / assembling of the cannon pinion

<< Disassembling >> **<< Assembling >>**



5.Disassembling / assembling of the Ratchet sliding wheel spring.

<< Disassembling >> **<< Assembling >>**



Remove the hook of the ratchet sliding wheel spring from barrel and train wheel bridge with hole jewel.

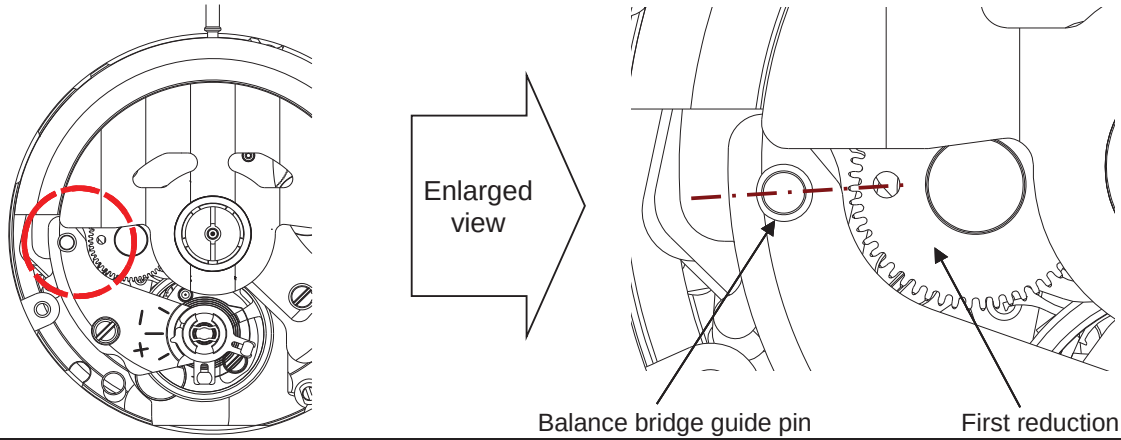
The hooks of the ratchet sliding wheel spring are hung up on barrel and train wheel bridge with hole jewel.

6.Assembling position of oscillating weight

・Before assembling oscillating weight.

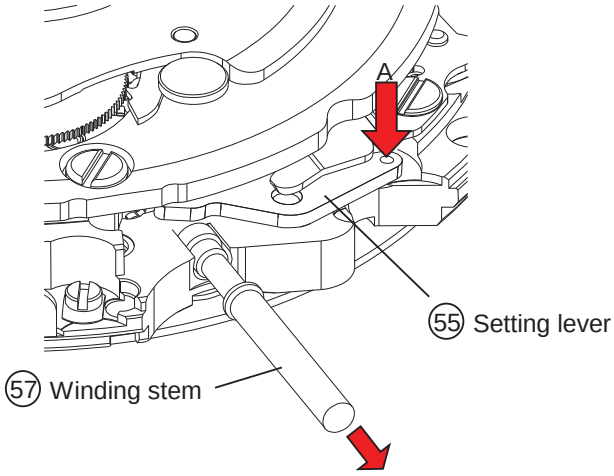
Match the center of the oscillating weight and winding stem.

Set the hole of first reduction wheel gear on the imaginary line toward the balance bridge guide pin.

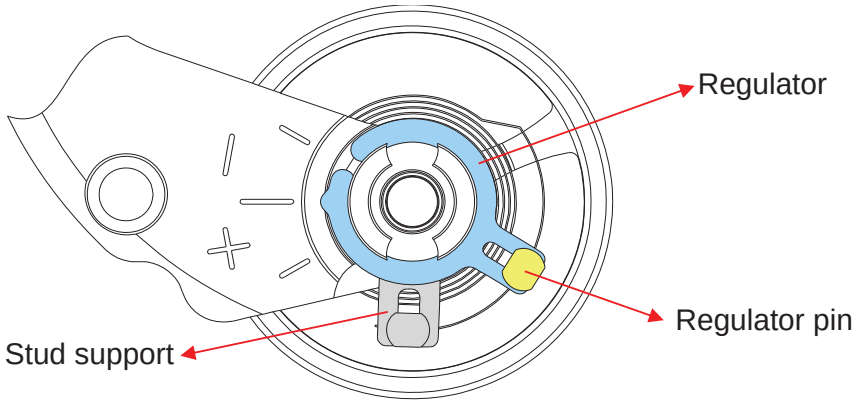


7.To remove the winding stem

1) Set the winding stem to normal position.
2) Pull out the winding stem, while pushing "A"

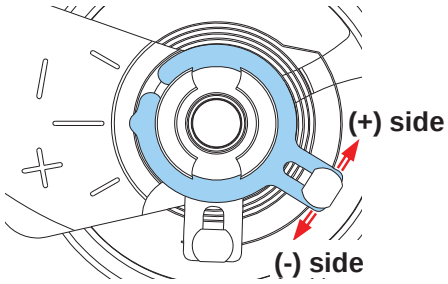


8.Accuracy adjustment

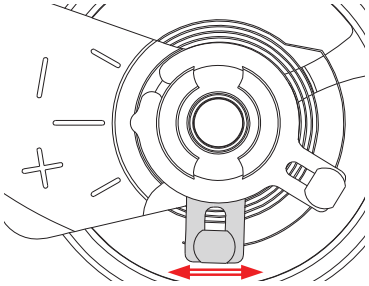


Note:

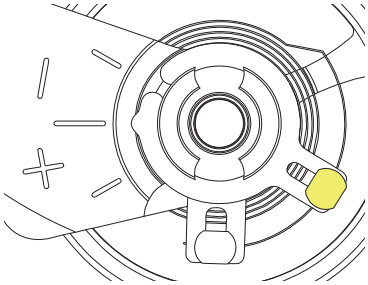
・Regulator … Time adjustment



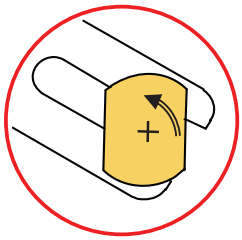
・Stud support … Beat error adjustment



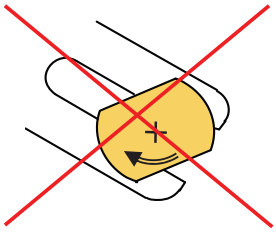
・Regulator pin … Gap adjustment of balance spring and regulator pin



Anticlockwise rotation



No clockwise rotation



9.To wind up the mainspring

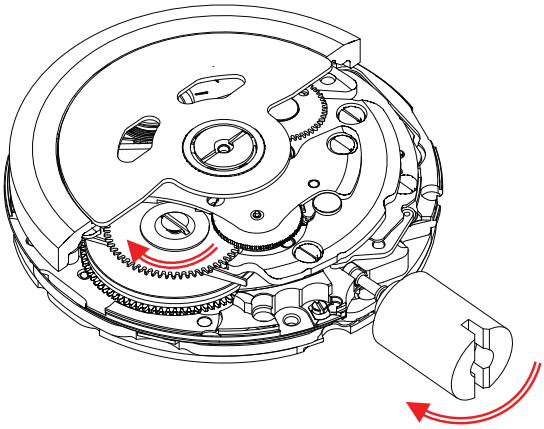
<<Movement>>

The mainspring would be fully wound up by turning the ratchet wheel screw 8 times clockwise. (Manual winding or Screwdriver)

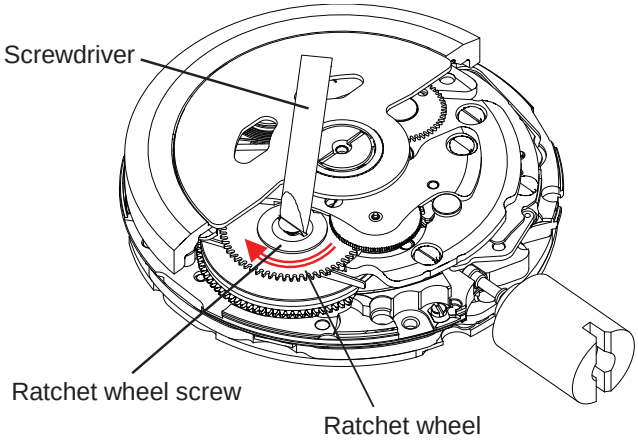
Manual winding … Rotate crown clockwise at normal position by minimum 55 times. (Equal to ratchet wheel screw 8 times)

Screwdriver winding … Turn the ratchet wheel screw 8 times clockwise.

[Manual winding]



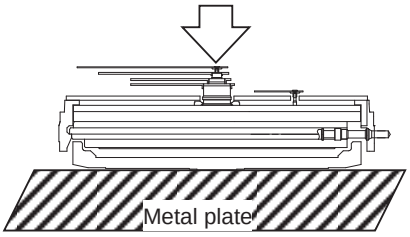
[Screwdriver winding]



10.How to attach hands

Place the movement directly on a flat metal plate or something similar to attach the hands.
We recommend the use of movement holder to attach hands.
For hands attachment, please use a special equipment.
When the movement receives a strong shock, it may be damaged.

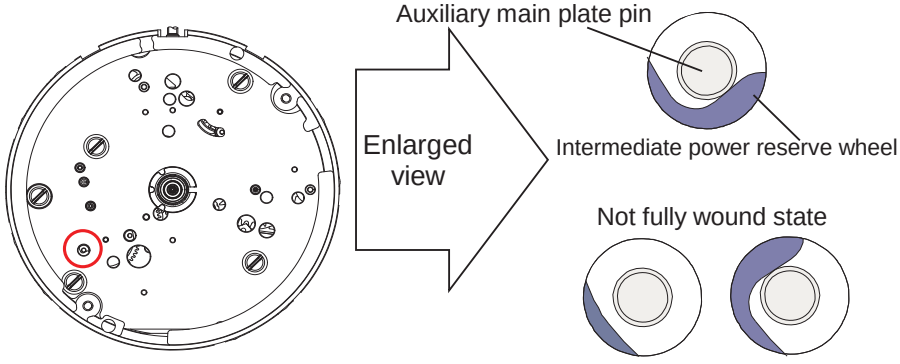
Static weighting



<<Note: Power reserve hand setting>>

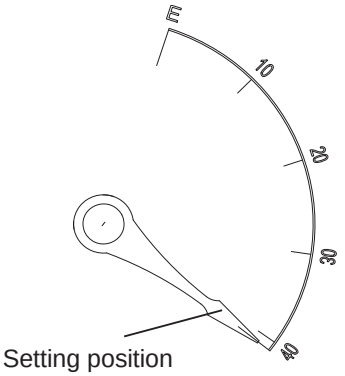
(1)The mainspring should be fully wound up before setting power reserve hand.
(2)Set power reserve hand at the fully wound up position of the dial graduation.

[HOW TO CHECK]



[Hand setting position]

[Image design]



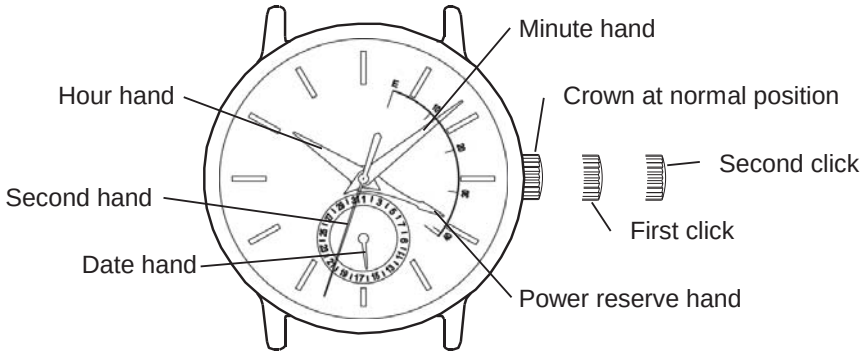
11.Accuracy measurement condition

Static Accuracy : -20~+40 seconds per day

Measurement Conditions

1) Measurement should be done within 10~60 minutes after fully wound up.
2) Lift angle : 53 deg.
3) Measurement position : (1) Dial up (2) 9 o'clock up (3) 6 o'clock up
4) Minimum measurement Time : 20 seconds
5) Stabilizing Time :
Leave the watch for at least 20 seconds to stabilize after you change its measurement position.

[NE57A operation manual]



1.How to set the time

1) Pull out the crown to the second click position.
2) Turn the crown to set hour and minute hands.
(Check that AM/PM is set correctly.)
3) Push the crown back into the normal position.
*When time setting is performed in counterclockwise, date hands reverses.
Please reset by date correction.

2.How to set the Date hands

1) Pull out the crown to the first click position.
2) Turn the crown to left for date setting.
* Do not set the calendar between 9:00 P.M. and 2:00 A.M. If the setting of the calendar is made during this period, the date will not change to the next date. Please set the calendar after changing the time other than the above period.
4) Push the crown back into the normal position.

3.To wind up the mainspring

a) Manual winding … Rotate the crown clockwise at normal position.
Wind turning the ratchet wheel screw 8 times. It will start to move naturally after shaking slightly.
b) To wind up with winding machine.
Full wind up conditions
・Rotary speed : 30 rpm
・Operating time : 60 minutes