## Movement

<table>
<thead>
<tr>
<th>Movement size</th>
<th>Outside diameter</th>
<th>Casing diameter</th>
<th>Total height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(27.40\text{mm})</td>
<td>(29.36\text{mm} (with dial holding spacer))</td>
<td>5.32mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cal. No.</th>
<th>NH35</th>
<th>NH36</th>
<th>NH37</th>
<th>NH38</th>
<th>NH39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time indication</td>
<td>3Hands (hour, minute, second)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Date calendar</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Day calendar</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>24hour indicator</td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic function</th>
<th>Manual winding</th>
<th>Automatic winding with ball bearing</th>
<th>Stop-second device</th>
<th>Quick date correction</th>
<th>Quick day-date correction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

### 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.
- **Posture difference**
  - Direction of 3 positions: (1) Dial up, (2) 9 o'clock up, (3) 6 o'clock up
- **Isochronisms (24h-0h)**
  - 20~40 seconds per day
  - *Measurement position: Dial up
  - *Direction 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

- <<Movement >>
  - 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

- 24 jewels

### Crown position

<table>
<thead>
<tr>
<th>Normal position</th>
<th>Counterclockwise</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clockwise</td>
<td>Manual winding</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First click</th>
<th>Counterclockwise</th>
<th>Date setting</th>
<th>Date setting</th>
<th>Date setting</th>
<th>Time setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clockwise</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second click</th>
<th>Counterclockwise</th>
<th>Time setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clockwise</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
<<NH35/36/37>>

1. 0963 300 …Cal.NH36 only  
Snap for day star with dial disk

2. Day star with dial disk …Cal.NH36 only  
Refer to page 8 for each parts code

3. 0989 070 …Cal.NH36 only  
Intermediate wheel for day corrector

4. 0012 354  
Date indicator maintaining plate screw

5. 0808 183  
Date indicator maintaining plate

6. Date dial  
Refer to page 8 for each parts code

7. 0810 333  
Date jumper

Disassembling procedures Figs.  
NH35/37 4 → 19  
NH36 1 → 19

Reassembling procedures Figs.  
NH35/37 19 → 4  
NH36 19 → 1

Type of oil  
Moebius 9010

NORMAL QUANTITY

S-6

S-4

Oil quantity mark  
SUFFICIENT QUANTITY

Moebius 9010  
NORMAL QUANTITY

S-6

S-4

Reassembling procedures Figs.  
NH35/37 4 → 19  
NH36 1 → 19

Disassembling procedures Figs.  
NH35/37 19 → 4  
NH36 19 → 1
*[1] Type of oil
Moebius 9010 S-6
S-4

Oil quantity mark
NORMAL QUANTITY SUFFICIENT QUANTITY

<<NH35/36/37>>
14 Hour wheel
Refer to page 9 for each parts code

15 0261 190
Minute wheel and pinion

16 Refer to page 9 for each parts code

17 Refer to page 9 for each parts code

18 Cannon pinion
Refer to page 8 for each parts code

8 0962 025
Day-date corrector setting transmission wheel E

9 0012 485
Guard for day-date corrector setting transmission wheel screw

10 0836 183
Guard for day-date corrector setting transmission wheel

11 0962 185
Day-date corrector setting transmission wheel C

12 0962 023
Day-date corrector setting transmission wheel B

13 0737 183
Day-date corrector wheel

19 4408 172
Dial holding spacer

1 Lower shock absorbing spring

2 Lower shock absorbing cap jewel

3 Lower hole jewel frame for shock-absorber

Version-06
Cal.NH3 series
<<NH38/39>>

1. 0012 354 Hour wheel guard screw

2. 0376 184 Hour wheel guard

3. Hour wheel
   Refer to page 9 for each parts code

4. 0261 190 Minute wheel and pinion

5. 0817 300 ...Cal.NH39 only
   Intermediate 24hour wheel and pinion

6. 0157 184 ...Cal.NH39 only
   24hour wheel

7. Cannon pinion
   Refer to page 8 for each parts code

8. 4408 172 Dial holding spacer

*1 Lower shock absorbing spring

*2 Lower shock absorbing cap jewel

*2 Lower hole jewel frame for shock-absorber

Disassembling procedures Figs.
NH38/39 1 → 8
Reassembling procedures Figs.
NH38/39 8 → 1

Type of oil
- Moebius 9010

Oil quantity mark
- NORMAL QUANTITY
- S-6
- S-4
- SUFFICIENT QUANTITY

Version-05
Cal.NH3 series

SII Products
Oscillating weight with ball bearing
Refer to page 8 for each parts code

0012 354
Automatic train bridge screw

0012 100
Balance bridge screw

0191 183
Automatic train bridge

Second reduction wheel and pinion

0171 353
Balance cock

0161 300
Pallet bridge screw

0161 300
Pallet bridge

0301 009
Pallet fork

8-1
Balance complete with stud
Refer to page 8 for each parts code

8-2
Upper shock absorbing spring

8-3
Upper shock absorbing cap jewel

8-4
Upper hole jewel frame for shock-absorber

SII Products
First reduction wheel and arbor
Refer to page 10 for oiling spot

Cap jewelled spring
Cap jewel

Pawl lever

Reduction wheel holder

Fourth wheel and pinion
Refer to page 8 for each parts code

Barrel and train wheel bridge screw

Cap jewelled spring
Cap jewel

Ratchet sliding wheel spring

Barrel and train wheel bridge with hole jewel
Refer to page 10 for oiling spot

Lower plate for barrel and train wheel bridge

Lower plate for barrel and train wheel bridge screw

Third wheel and pinion
Click

Barrel complete with mainspring

Type of oil
Moebius 9010

Oil quantity mark
NORMAL QUANTITY
SUFFICIENT QUANTITY

Moebius 9010 S-6 NORMAL QUANTITY
S-4 SUFFICIENT QUANTITY
### Day star with dial disk…Cal.NH36 only (P-2)

<table>
<thead>
<tr>
<th>Parts code</th>
<th>Position of crown</th>
<th>Position of day frame</th>
<th>Color of letters</th>
<th>Color of background</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>0160 495</td>
<td>3H</td>
<td>3H</td>
<td>MON~FRI</td>
<td>Black</td>
<td>White</td>
</tr>
</tbody>
</table>

### Date dial… Cal.NH35 / NH36 / NH37 (P-2)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Position of crown</th>
<th>Position of day frame</th>
<th>Color of letters</th>
<th>Color of background</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0878 208</td>
<td>3H</td>
<td>3H</td>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>NH36</td>
<td>0878 206</td>
<td>3H</td>
<td>3H</td>
<td>Black</td>
<td>White</td>
</tr>
</tbody>
</table>

### Cannon pinion…NH35/36/37 (P-3)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Parts code</th>
<th>Cal.</th>
<th>Parts code</th>
<th>Parts code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0225 420</td>
<td>NH37</td>
<td>NH36</td>
<td>0225 426</td>
<td></td>
</tr>
</tbody>
</table>

### Cannon pinion…NH38/39 (P-4)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Parts code</th>
<th>Cal.</th>
<th>Parts code</th>
<th>Parts code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0225 420</td>
<td>NH38</td>
<td>NH39</td>
<td>0225 426</td>
<td></td>
</tr>
</tbody>
</table>

### Oscillating weight with ball bearing (P-5)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Marking</th>
<th>Cal.</th>
<th>Parts code</th>
<th>Marking</th>
<th>Cal.</th>
<th>Parts code</th>
<th>Marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0509 467</td>
<td>Japan mark</td>
<td>NH36</td>
<td>0509 463</td>
<td>Japan mark</td>
<td>NH37</td>
<td>0509 470</td>
<td>Japan mark</td>
</tr>
<tr>
<td></td>
<td>0509 468</td>
<td>Malaysia mark</td>
<td></td>
<td>0509 464</td>
<td>Malaysia mark</td>
<td></td>
<td>0509 471</td>
<td>Malaysia mark</td>
</tr>
<tr>
<td>NH38</td>
<td>0509 476</td>
<td>Japan mark</td>
<td>NH39</td>
<td>0509 473</td>
<td>Japan mark</td>
<td></td>
<td>0509 474</td>
<td>Malaysia mark</td>
</tr>
<tr>
<td></td>
<td>0509 477</td>
<td>Malaysia mark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Balance complete with stud (P-5)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Cal.</th>
<th>Parts code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0310 183</td>
<td>NH38</td>
<td>0310 184</td>
</tr>
<tr>
<td>NH36</td>
<td></td>
<td>NH39</td>
<td></td>
</tr>
<tr>
<td>NH37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Center wheel and pinion with cannon pinion (P-7)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Cal.</th>
<th>Parts code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0224 203</td>
<td>NH37</td>
<td>0224 205</td>
</tr>
<tr>
<td>NH36</td>
<td></td>
<td>NH39</td>
<td></td>
</tr>
<tr>
<td>NH38</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Setting lever (P-7)

<table>
<thead>
<tr>
<th>Cal.</th>
<th>Parts code</th>
<th>Cal.</th>
<th>Parts code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH35</td>
<td>0383 185</td>
<td>NH38</td>
<td>0383 186</td>
</tr>
<tr>
<td>NH36</td>
<td></td>
<td>NH39</td>
<td></td>
</tr>
<tr>
<td>NH37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Remarks: Different parts for each CAL.

<table>
<thead>
<tr>
<th>Page No</th>
<th>NH35</th>
<th>NH36</th>
<th>NH37</th>
<th>NH38</th>
<th>NH39</th>
<th>Parts code</th>
<th>Parts name</th>
<th>Parts form</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-3</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0273 182</td>
<td>Hour wheel</td>
<td><img src="0273_182_184.png" alt="" /></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0273 183</td>
<td>0273 182 ⇒ 0273 184 (Height difference)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>0273 184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>0273 183</td>
<td>0273 183 ⇒ 0273 185 (Height difference)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>0273 185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-3</td>
<td>O</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0817 300</td>
<td>Intermediate date driving wheel and pinion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>O</td>
<td>0802 183</td>
<td>Date indicator driving wheel</td>
<td></td>
</tr>
<tr>
<td>P-3</td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>0157 182</td>
<td>24hour wheel</td>
<td></td>
</tr>
</tbody>
</table>

### List of screw

<table>
<thead>
<tr>
<th>Page No</th>
<th>Parts code</th>
<th>Parts name</th>
<th>Parts form</th>
<th>Page No</th>
<th>Parts code</th>
<th>Parts name</th>
<th>Parts form</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-2</td>
<td>0012 354</td>
<td>Date indicator maintaining plate screw (x4)</td>
<td></td>
<td>P-3</td>
<td>0012 485</td>
<td>Guard for day-date corrector setting transmission wheel screw (x2)</td>
<td></td>
</tr>
<tr>
<td>P-4</td>
<td>0012 100</td>
<td>Ratchet wheel screw</td>
<td></td>
<td>P-5</td>
<td>0012 919</td>
<td>Balance bridge screw</td>
<td></td>
</tr>
<tr>
<td>P-5</td>
<td>0012 168</td>
<td>Yoke spring screw (x2)</td>
<td></td>
<td>P-6</td>
<td>0012 100</td>
<td>Barrel and train wheel bridge screw (x3)</td>
<td></td>
</tr>
</tbody>
</table>

---

SII Products
1. Oiling spot

- Barrel and train wheel bridge with hole jewel

Note

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

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

Type of oil

<table>
<thead>
<tr>
<th>Type of oil</th>
<th>Oil quantity mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moebius 9010</td>
<td>NORMAL QUANTITY</td>
</tr>
<tr>
<td></td>
<td>S-6</td>
</tr>
<tr>
<td></td>
<td>S-4</td>
</tr>
</tbody>
</table>

Moebius 9010

NORMAL QUANTITY

S-6

SUFFICIENT QUANTITY

S-4
2. Setting 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.

3. To remove the winding stem
   1) Set the winding stem to normal position.
   2) Pull out the winding stem, while pushing "A"
4. Disassembling / assembling of the First reduction wheel and arbor

**<< Disassembling >>**

- First reduction wheel and arbor
- Reduction wheel holder
- Barrel and train wheel bridge with hole jewel (back side)

**<< Assembling >>**

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

**<< Disassembling >>**

- Ratchet sliding wheel spring
- Barrel and train wheel bridge with hole jewel

**<< Assembling >>**

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

Remove the hook of the ratchet sliding wheel spring from barrel and train wheel bridge with hole jewel.
6. 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
7. 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.

8. 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.

*Install the 24hour hand … Cal.NH37 & NH39
Pull out the crown to the second click position and rotation it clockwise to install 24hour hand.

9. 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.

10. About the handling … Cal.NH38 & 39

○ Part is processed as a mirror surface. It is damaged when touching with tweezers.
Please be careful about the handling.
1. How to set the time
   1) Pull out the crown to the second click position. …Cal.NH35 & NH36 & NH37
   (Pull out the crown to the first click position. …Cal.NH38 & NH39)
   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.

2. How to set the Date …Cal.NH35 & NH36 & NH37
   1) Pull out the crown to the first click position.
   2) Turn the crown to left for date setting.
   3) Turn the crown to right for day setting. …Cal.NH36 only
      *Do not set the date between 9:00 P.M. and 4:00 A.M. as this will cause a malfunction.
   3) 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