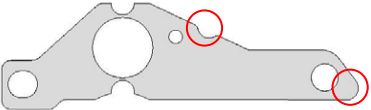
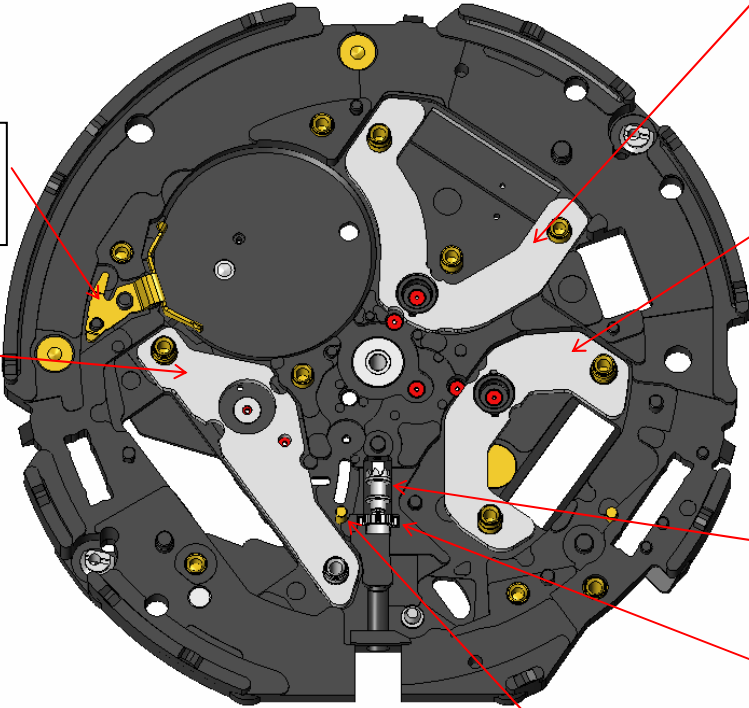

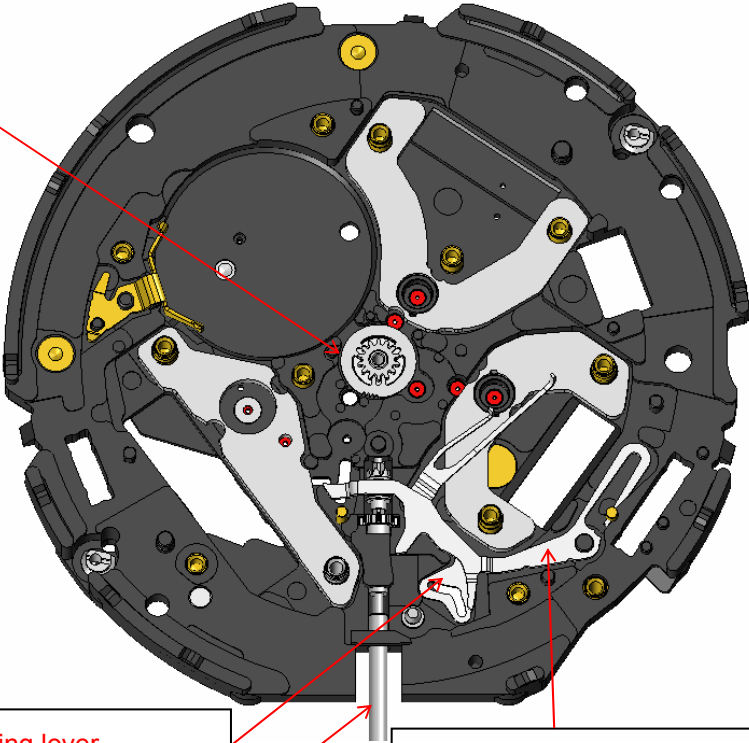
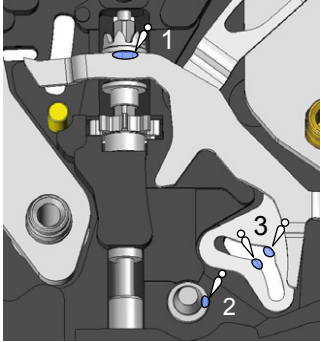
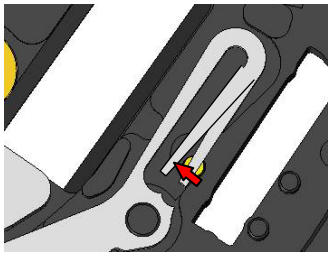
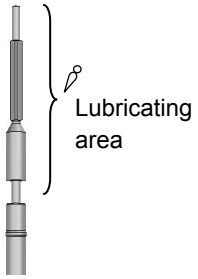
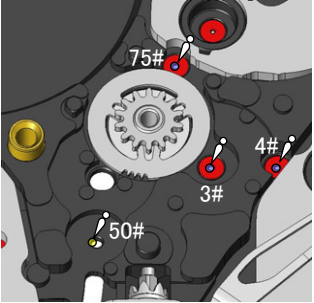


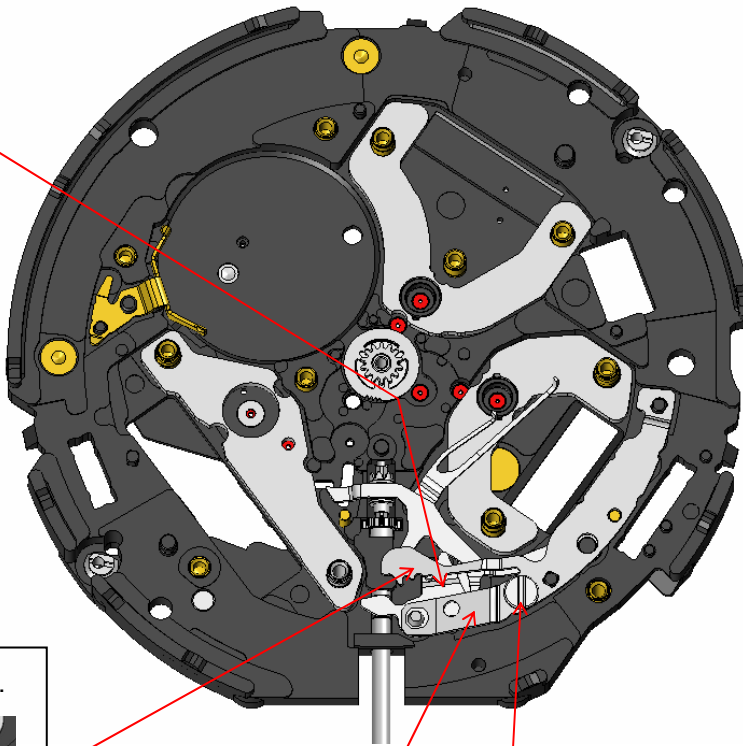
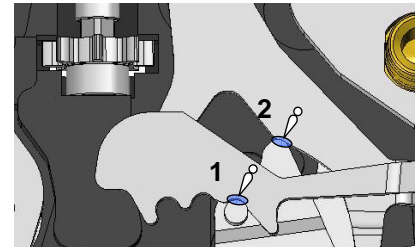
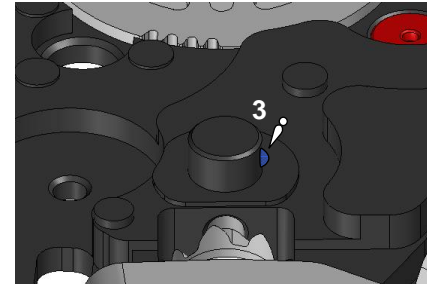
7D** Technical Instruction

No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS	
	Assembling the switching unit		
91	Set the main plate.	<p><91> Set the main plate.</p>	
	↓		
90	Set the lead pin for RZ1.		
	↓		
89	Set the hour and minute stator.	<p><86> Set the rechargeable battery connection (+).</p>	
	↓		
88	Set the second stator.		<p><88> Set the second stator. * When mounting, take care not to distort or deform the second stator. (To prevent deterioration of the motor)</p>
	↓		
87	Set the generating stator.	<p><87> Set the generating stator. *Distinction from the 5J-series counterpart See the red-circled parts, which are shaped to identify the 7J-series generating stator.</p>	
	↓		
86	Set the rechargeable battery connection (+).		
	↓		
85	Set the 1 st intermediate wheel for calendar corrector.	<p>*When mounting, take care not to distort or deform the generating stator. (To prevent deterioration of electric power generation)</p>	
	↓		
84	Set the clutch wheel.		<p><84> Set the clutch wheel.</p>
			<p><85> Set the 1st intermediate wheel for calendar corrector.</p>
			<p><90> Set the lead pin for RZ1. *Ensure that the lead pin for RZ1 is tightly mounted without any clearance.</p>

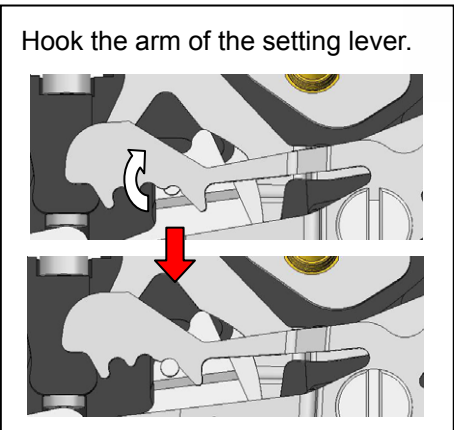
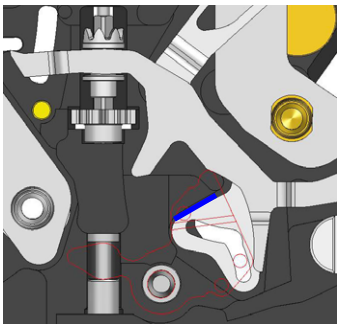


7D** Technical Instruction

No.	PROCESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS	
Assembling the switching unit			
83	Set and lubricate the winding stem.	<p><82> Set and lubricate the center wheel & pinion. * Lubricating point: convex part (Refer to the illustration below.) * Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing) * Lubricating point: inner edge of the ring (Refer to the illustration below.) * Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing)</p> 	
82	Set and lubricate the center wheel & pinion.		
81	Set the train wheel setting lever.		
80	Set the yoke and hook the arm of it.		
Lubricating points of the switching unit-1			
	-Stem of the setting lever		
	-Point of contact between the yoke and clutch wheel		
	-Lower pivots of the wheels (4#, 3#, 50#, 75#)		
	-Guiding slit of the train wheel setting lever		<p>2. Axes of the setting lever *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing)</p> <p>3. Guiding slit of the train wheel setting lever *Type of oil, oil quantity: A0-3I-2 (To prevent parts from wearing)</p>
		<p><81> Set the train wheel setting lever.</p>	
			<p><80> Set the yoke and hook the arm of it. Securely set the arm of the yoke inside the pin, taking care not to deform or damage the yoke.</p> 
		<p><83> Set and lubricate the winding stem. *Type of oil, oil quantity: A0-3 Lubricate the entire profile of the winding stem. (To prevent parts from wearing) *Securely install the winding stem, giving it gentle rotations so that the flat face of the winding stem will be engaged with both the clutch wheel and the 1st intermediate wheel for calendar corrector.</p> 	<p>4. Lower pivots of the wheels (4#, 3#, 50#, 75#) *Type of oil, oil quantity: A0-3II-1 (To maintain good performance)</p> 

No.	PROCESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS			
79	Set the setting lever. ↓	<p data-bbox="425 239 761 271"><79> Set the setting lever.</p> <p data-bbox="425 279 761 558">*Before setting the setting lever, put the train wheel setting lever inside the frame of the main plate (as illustrated in blue). This will make the engagement between the pin of the setting lever and the guiding slit of the train wheel setting lever easier.</p> 	<div data-bbox="1601 247 2139 287">Lubricating points of the switching unit-2</div> <ol data-bbox="1601 319 2139 574" style="list-style-type: none"> 1. Point of engagement between the yoke and setting lever *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing) 2. Point of contact between the yoke and setting lever *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing)  <ol data-bbox="1601 861 2139 957" style="list-style-type: none"> 3. Axis of the setting wheel *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing) 		
78	Set the setting lever spring. ↓				
77	Tighten the setting lever spring. (33#) ↓				
	Hook the arm of the setting lever. ↓				
	Lubricating points of the switching unit-2				
	-Point of engagement between the yoke and setting lever				
	-Point of contact between the yoke and setting lever				
	-Axis of the setting wheel				

<79> Set the setting lever.
*Before setting the setting lever, put the train wheel setting lever inside the frame of the main plate (as illustrated in blue). This will make the engagement between the pin of the setting lever and the guiding slit of the train wheel setting lever easier.

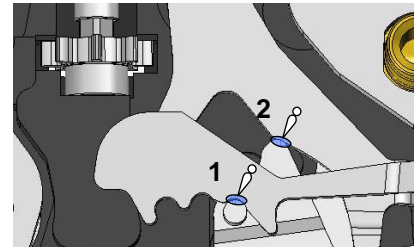


<78> Set the setting lever spring.

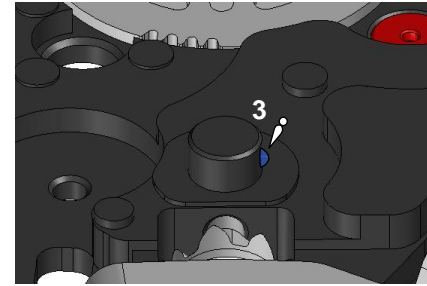
<77> Tighten the setting lever spring.

Lubricating points of the switching unit-2

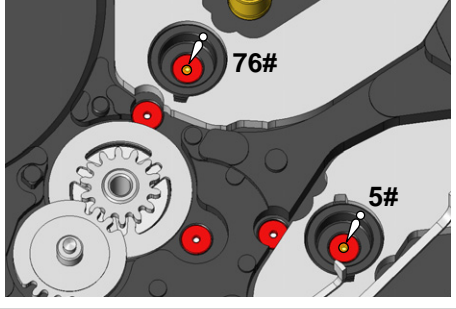
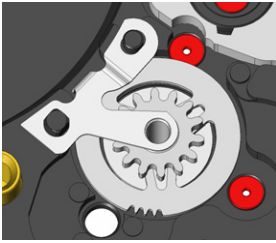
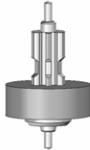
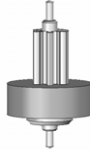
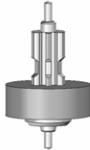
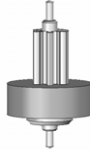
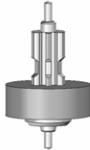
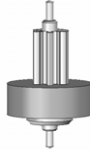
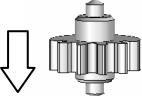
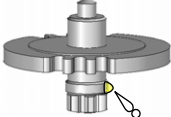
1. Point of engagement between the yoke and setting lever
*Type of oil, oil quantity: A0-3II-1
(To prevent parts from wearing)
2. Point of contact between the yoke and setting lever
*Type of oil, oil quantity: A0-3II-1
(To prevent parts from wearing)




3. Axis of the setting wheel
*Type of oil, oil quantity: A0-3II-1
(To prevent parts from wearing)



7D** Technical Instruction

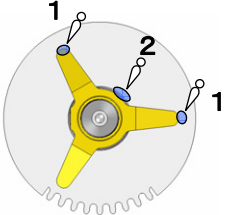
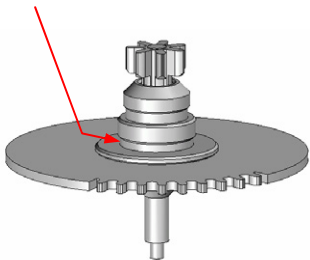
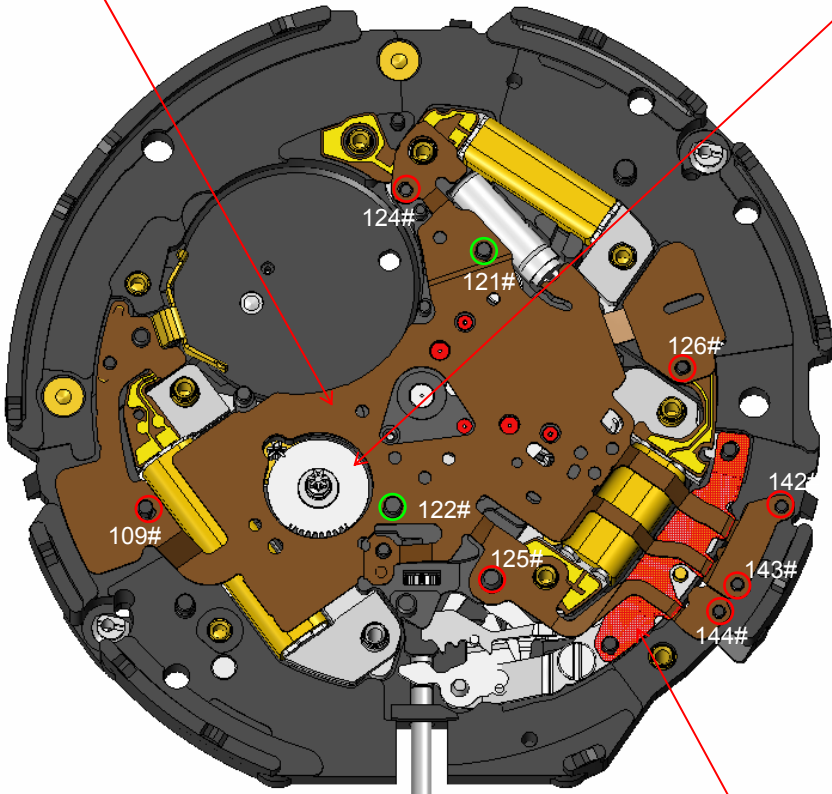
No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS					
	Assembling the wheels						
	Lubricate the lower pivots of the wheels.	<p>Lubricate the lower pivots of the wheels. *Type of oil, oil quantity: A0-2II-1 (To maintain good performance)</p> 					
	↓						
76	Set the spacer for center wheel and pinion.						
	↓						
75	Set and lubricate the minute wheel & pinion.						
	↓						
74	Set the intermediate minute wheel.						
	↓						
73	Set the setting wheel.	<p><76> Set the spacer for center wheel and pinion. *Firmly press down the point of engagement to securely set it without any clearance.</p> 					
	↓						
72	Set the hour and minute rotor.						
	↓						
71	Set the second rotor.						
	↓						
70	Set the generating rotor.						
		<p><70> Set the generating rotor.</p>					
		<p><71> Set the second rotor. * Make sure to set the correct rotor. (The second rotor and the hour and minute rotor are different in their specification.)</p>					
		<p><72> Set the hour and minute rotor. *Make sure to set the correct rotor. (The hour and minute rotor and the second rotor are different in their specification.)</p> <p>Distinction between the hour and minute rotor and the second rotor</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Hour and minute rotor</td> <td style="text-align: center;">Second rotor</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> </table>		Hour and minute rotor	Second rotor		
Hour and minute rotor	Second rotor						
							
		<p><73> Set the setting wheel. *The setting wheel is reversible.</p>					
		<p><74> Set the intermediate minute wheel. *Make sure the intermediate minute wheel is put in the correct direction. (See the illustration below.)</p> 					
		<p><75> Set and lubricate the minute wheel & pinion. *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing)</p> 					

7D** Technical Instruction

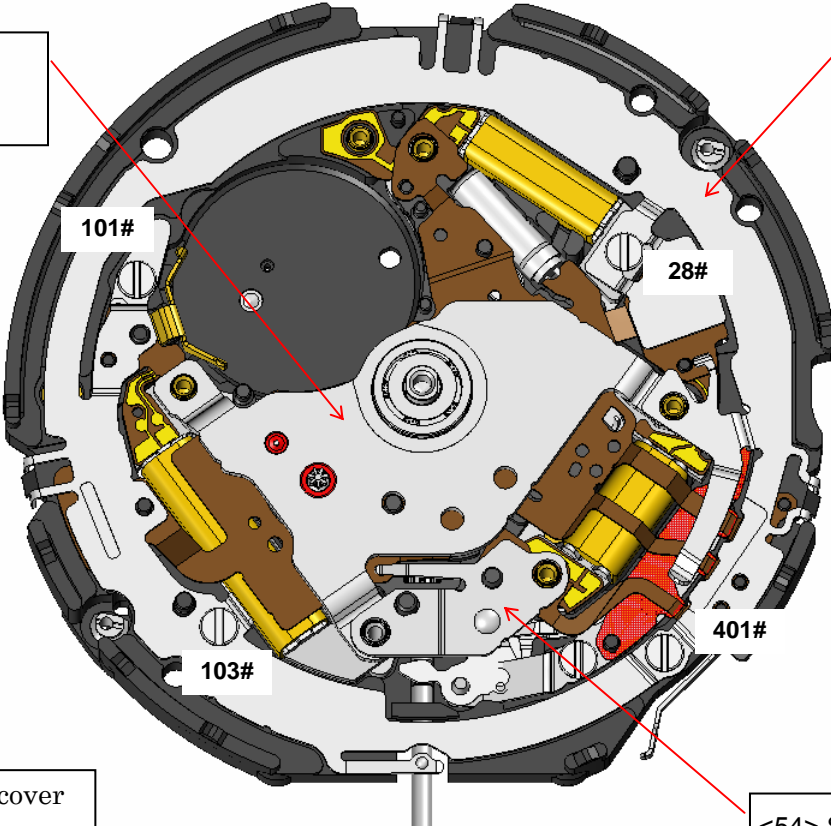
No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS
69	Set the 3rd wheel & pinion.	<div data-bbox="450 260 1016 325" style="border: 1px solid black; padding: 5px;"> <67> Set the intermediate second wheel. </div> <div data-bbox="1160 244 1800 359" style="border: 1px solid black; padding: 5px;"> <69> Set the 3rd wheel & pinion. * The 3rd wheel & pinion has three holes for distinction from the 5J2-series counterpart. </div>
68	Set the 4th wheel & pinion.	<div data-bbox="1285 387 1977 512" style="border: 1px solid black; padding: 5px;"> <68> Set the 4th wheel & pinion. *The 4th wheel & pinion has four holes for distinction from the 5J2- series counterpart. </div>
67	Set the intermediate second wheel.	
66	Lubricate the second wheel & pinion.	<div data-bbox="1621 592 2112 671" style="border: 1px solid black; padding: 5px;"> <64> Tighten the train wheel bridge screw. </div>
65	Set the train wheel bridge and check the pivot hole.	
64	Tighten the train wheel bridge screw.	
		<div data-bbox="405 986 949 1155" style="border: 1px solid black; padding: 5px;"> <66> Lubricate the second wheel & pinion. *Lubricating points: convex part (Refer to the illustration below.) *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing) </div>
		<div data-bbox="994 1090 1413 1166" style="border: 1px solid black; padding: 5px;"> <65> Set the train wheel bridge and check the pivot hole. </div>
		<div data-bbox="443 1185 562 1422" style="text-align: center;">  </div> <div data-bbox="600 1201 936 1393" style="padding-left: 20px;"> Lubricate with an appropriate amount of oil, as excessive lubrication may cause the second hand to wiggle while the watch resumes from power save mode. </div>

No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS
	Lubricate the upper pivots of the wheels. (5#, 76#, 4#, 3#, 74#, 75#, Tips of the teeth of the pinion of generating rotor 66#)	<div data-bbox="421 252 880 651" data-label="Text"> <p>Check each coil block resistance. *Measure the coil block resistance after securely installing each coil block to the movement. Hour and minute coil block Coil block for driving: 1.00kΩ-1.25kΩ Coil block for detection: 270Ω- 330Ω Second coil block 2.00kΩ - 2.45kΩ Generating coil block 360Ω - 420Ω</p> </div> <div data-bbox="987 252 1547 400" data-label="Text"> <p><62> Set the second coil block. *When mounting the second coil block, take care not to deform or deform the coil block core. (To prevent deterioration of the motor)</p> </div> <div data-bbox="1574 252 2145 603" data-label="Text"> <p>Lubricate the upper pivots of the wheels. ◆ 5#, 76# *Type of oil, oil quantity: A0-2II-1 (To maintain good performance) ◆ 4#, 3#, 74#, 75# *Type of oil, oil quantity: A0-3II-1 (To maintain good performance) ◆ Tips of the teeth of the pinion of the generating rotor (66#) *Type of oil, oil quantity: A0-3II-2 (To prevent parts from wearing)</p> </div>
63	Set the hour and minute coil block.	
62	Set the second coil block.	
61	Set the generating coil block.	
	Check each coil block resistance.	
		<div data-bbox="1574 619 2145 978" data-label="Image"> </div>
		<div data-bbox="1547 1007 2085 1086" data-label="Text"> <p>Pattern for checking the coil for detection</p> </div>
		<div data-bbox="1547 1145 2152 1297" data-label="Text"> <p><63> Set the hour and minute coil block. *When mounting the hour and minute coil block, take care not to distort or deform the coil block core. (To prevent deterioration of the motor)</p> </div>
		<div data-bbox="405 1273 846 1457" data-label="Text"> <p><61> Set the generating coil block. *When mounting the generating coil block, take care not to deform or deform the coil block core. (To prevent deterioration of the motor)</p> </div>
		<div data-bbox="1547 1342 2107 1422" data-label="Text"> <p>Pattern for checking the coil for driving</p> </div>
		<div data-bbox="734 624 1480 1342" data-label="Image"> </div>

7D** Technical Instruction

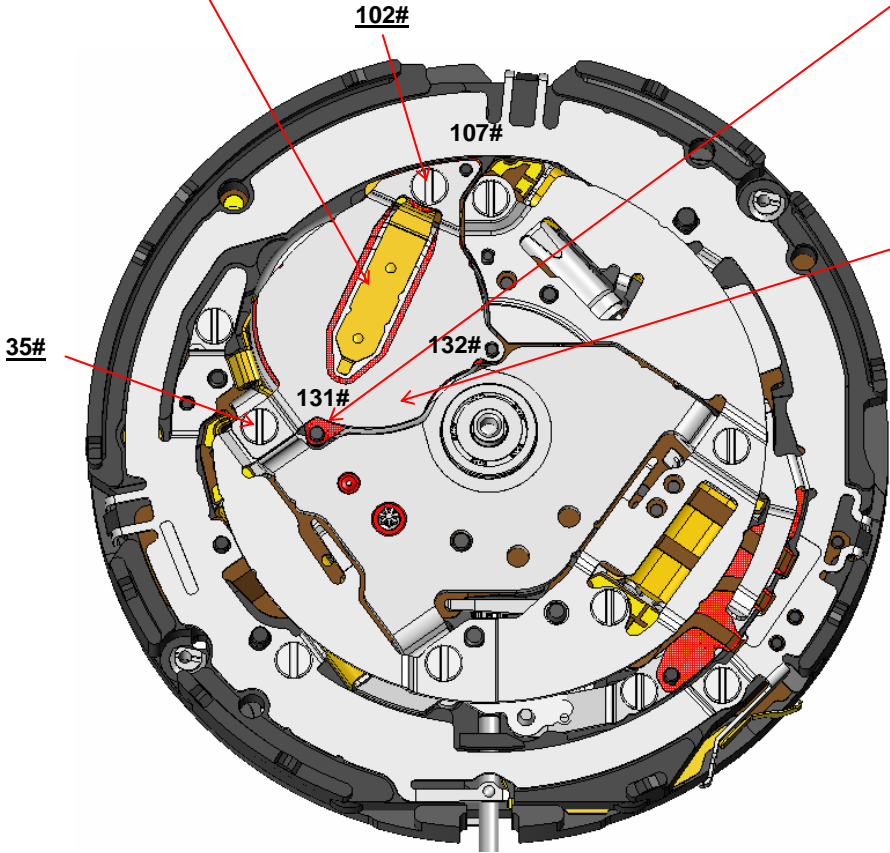
No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS
	Assembling the circuit	
60	Set the insulator for circuit block. ↓	<div data-bbox="436 236 1547 424" style="border: 1px solid black; padding: 5px;"> <p><59> Set the circuit block. *Firmly press down the points of engagement to securely set it in position.</p> <p>Positioning guide tubes : 121#, 124# (green-circled in the illustration.) Points of engagement : 109#, 124#, 125#, 126#, 142#, 143#, 144# (red-circled in the illustration)</p> </div>
	Check the current consumption for the circuit block. ↓	
59	Set the circuit block. ↓	
58	Set and lubricate the intermediate wheel for generating rotor.	<div data-bbox="1630 236 2152 1318" style="border: 1px solid black; padding: 5px;"> <p><58> Set and lubricate the intermediate wheel for generating rotor. Position (1) shown in the illustration below *Type of oil, oil quantity: A0-3II-2 (To prevent parts from wearing) Position (2) shown in the illustration below *Type of oil, oil quantity: A0-3II-1 (To prevent parts from wearing)</p>  <p>*Distinction between the 7D-series intermediate wheel for generating rotor and the 5J-series counterpart At the position shown by the red arrow, the 7D-series intermediate wheel for generating rotor has a groove, while the 5J-series counterpart does not.</p>  </div>
		
		<div data-bbox="1395 1362 1912 1422" style="border: 1px solid black; padding: 5px;"> <p><60> Set the insulator for circuit block.</p> </div>

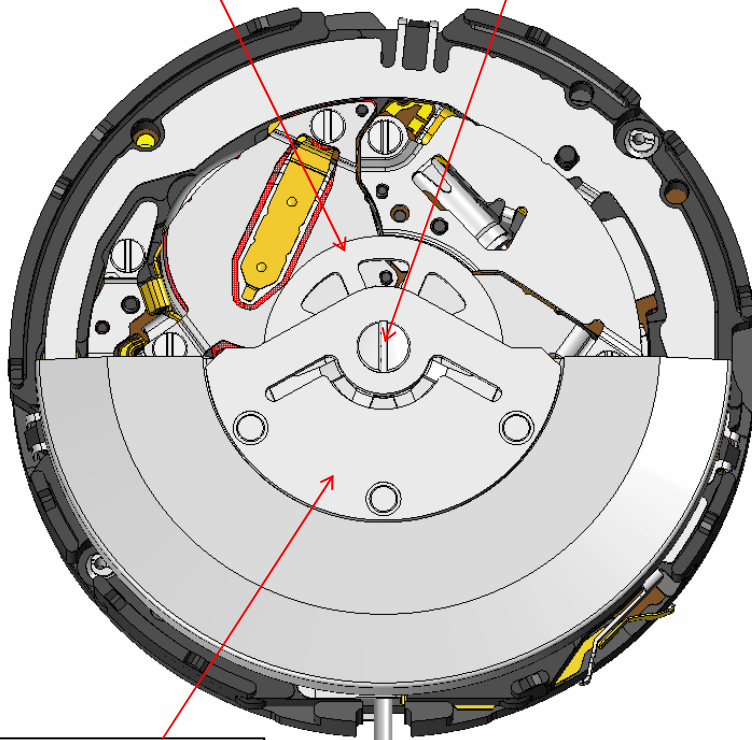
No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS
57	Set the oscillating weight bridge and check the pivot hole.	
	↓	
56	Set the circuit block cover C.	
	↓	<div data-bbox="432 432 887 544" data-label="Text"> <p><57> Set the oscillating weight bridge and check the pivot hole.</p> </div>
55	Tighten the circuit block cover C screws. (28#, 101#, 103#, 401#)	
	↓	
54	Set the circuit block cover D.	<div data-bbox="1697 280 2136 746" data-label="Image"> </div>
		<div data-bbox="432 1174 936 1294" data-label="Text"> <p><55> Tighten the circuit block cover C screws. (28#, 101#, 103#, 401#)</p> </div>
		<div data-bbox="1585 1198 2022 1270" data-label="Text"> <p><54> Set the circuit block cover D.</p> </div>



No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS
	Lubricate the upper pivots of the wheels. (66#, 65#, bearings of the wheels)	<div data-bbox="795 402 1500 1104" data-label="Image"> </div> <div data-bbox="1534 268 2132 300" data-label="Text"> <p>Lubricate the upper pivots of the wheels.</p> </div> <div data-bbox="1534 331 2132 715" data-label="List-Group"> <ol style="list-style-type: none"> 1. 66# upper pivot *Type of oil, oil quantity: A0-3II-2 (To prevent parts from wearing) 2. 65# upper pivot *Type of oil, oil quantity: A0-3II-2 (To prevent parts from wearing) 3. 65# pinion *Type of oil, oil quantity: A0-3II-3 (To prevent parts from wearing) 4. Bearings of the wheels *Type of oil, oil quantity: A0-3II-3 (To prevent parts from wearing) </div> <div data-bbox="1534 750 2132 810" data-label="Text"> <p>Note) Additionally, you may lubricate the gap between the inner ring axis and the outer ring axis.</p> </div> <div data-bbox="1624 813 2083 1204" data-label="Image"> </div>
↓	Measure the current consumption.	

7D* * Technical Instruction

No.	PROSESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS
	Assembling the power section	
7	Set the rechargeable battery unit.	<div data-bbox="488 268 1283 440" style="border: 1px solid black; padding: 5px;"> <p><7> Set the rechargeable battery unit. *Stretching out the plus terminal to mount the rechargeable battery unit. *Take care not to deform the minus terminal when removing the rechargeable battery unit. (Remove the battery portion first.)</p> </div>
	↓	
6	Set the insulator for rechargeable battery.	<div data-bbox="1518 400 2159 616" style="border: 1px solid black; padding: 5px;"> <p><6> Set the insulator for rechargeable battery. *Firmly press down the points of engagement (132#, 107#) to securely set it in position. -Positioning guide tubes: 131#, 132# -Points of engagement: 132#, 107#</p> </div>
	↓	
5	Set the rechargeable battery clamp.	
	↓	
4	Tighten the rechargeable battery clamp screws. (102#, 35#)	<div data-bbox="1532 676 2159 882" style="border: 1px solid black; padding: 5px;"> <p><5> Set the rechargeable battery clamp. *Firmly press down the point of engagement (132#) to securely set it in position. -Positioning guide tubes: 132#, 107# -Point of engagement: 132#</p> </div>
		<div data-bbox="1532 1043 2136 1219" style="border: 1px solid black; padding: 5px;"> <p><4> Tighten the rechargeable battery clamp screws. (102#, 35#)</p> </div>
		

No.	PROCESS	ILLUSTRATIONS AND SPECIAL INSTRUCTIONS	
3	Set the oscillating weight wheel. ↓		
2	Set the oscillating weight. ↓		
1	Tighten the oscillating weight screw. ↓		
	Check the performance of power generation. ↓	<p>Check the performance of power generation. * The increase in voltage after spinning the oscillating weight should not be less than 50 mV.</p>	
	Check the movement of the oscillating weight. ↓	<p>Check the movement of the oscillating weight. *Ensure that the oscillating weight rotates smoothly without any friction or resistance.</p>	
	Charge the rechargeable battery.		
		<p>Charge the rechargeable battery. * Charge the rechargeable battery until the voltage reaches 1.3V or higher by using a recharger or by your hand movement. (To check the PTP movement)</p>	
		<p><2> Set the oscillating weight.</p>	