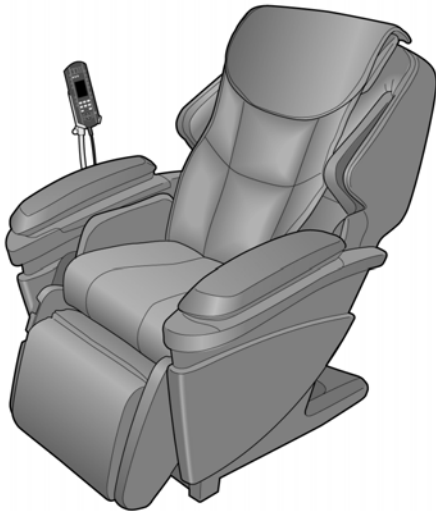


Service Manual

Massage Lounger

Model No. **EP-MA73**

Destination : Canada, USA



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by **⚠** in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

TABLE OF CONTENTS

	PAGE	PAGE
1 Specifications	2	
2 Technical Descriptions	3	
3 Location of Controls and Components	4	
4 Operating Instructions.....	8	
5 Service Mode	9	
6 Troubleshooting Guide.....	22	
7 Service Fixture & Tools.....	39	
8 AIR.....	40	
9 Disassembly and Assembly Instructions	44	
10 Exploded View and Replacement Parts List	75	

1 Specifications

Power Supply		AC 120 V 60 Hz
Rated Current		3.2 A
Upper Body Massage	Massage area (Up-Down)	Approx. 78 cm (30.7 in.) (The massage heads move a total of approx. 62 cm (24.4 in.))
	Massage area (Left-Right)	Distance between massage heads during operation (including width of massage heads) Neck, shoulder, back, lower back: Approx. 5 cm - 21 cm (2.0 in.- 8.3 in.) Distance between massage heads (including width of massage heads) during back roll and up-and-down movement: Approx. 5 cm - 17 cm (2.0 in.- 6.7 in.)
	Massage area (Forward-Back)	Projected amount of massage head (Intensity adjustable) Approx. 10 cm (3.9 in.)
	Massage speed	Knead: From approx. 4 times/min - approx. 73 times/min Tap: From approx. 190 times/min - approx. 520 times/min (one side) Moving speed: From approx. 1cm/s - approx. 5cm/s
Air Massage	Air Pressure (Calf)	3: Approx. 32 kPa 2: Approx. 29 kPa 1: Approx. 17 kPa (It may vary with the area slightly.)
Reclining angle		Backrest: Approx. 120° - 170° Leg rest (Leg & sole massage section): Approx. 5° - 85° Leg rest (Flat section): Approx. 15° - 95°
Automatic shut-off		Around 16 minutes (automatically ends)
Dimensions	When not reclined (H x W x D)	Approx. 115 cm x 90 cm x 122 cm (45.3 in. x 35.4 in. x 48 in.)
	When reclined (H x W x D)	Approx. 66 cm x 90 cm x 202 cm (26 in. x 35.4 in. x 79.5 in.)
Weight of unit		Approx. 85 kg (187.2 lbs)
Dimensions of box (H x W x D)		Approx. 75 cm x 74 cm x 160 cm (29.5 in. x 29.1 in. x 63 in.)
Weight in box		Approx. 100 kg (220.3 lbs)
Maximum user weight		Approx. 120 kg (264.3 lbs)

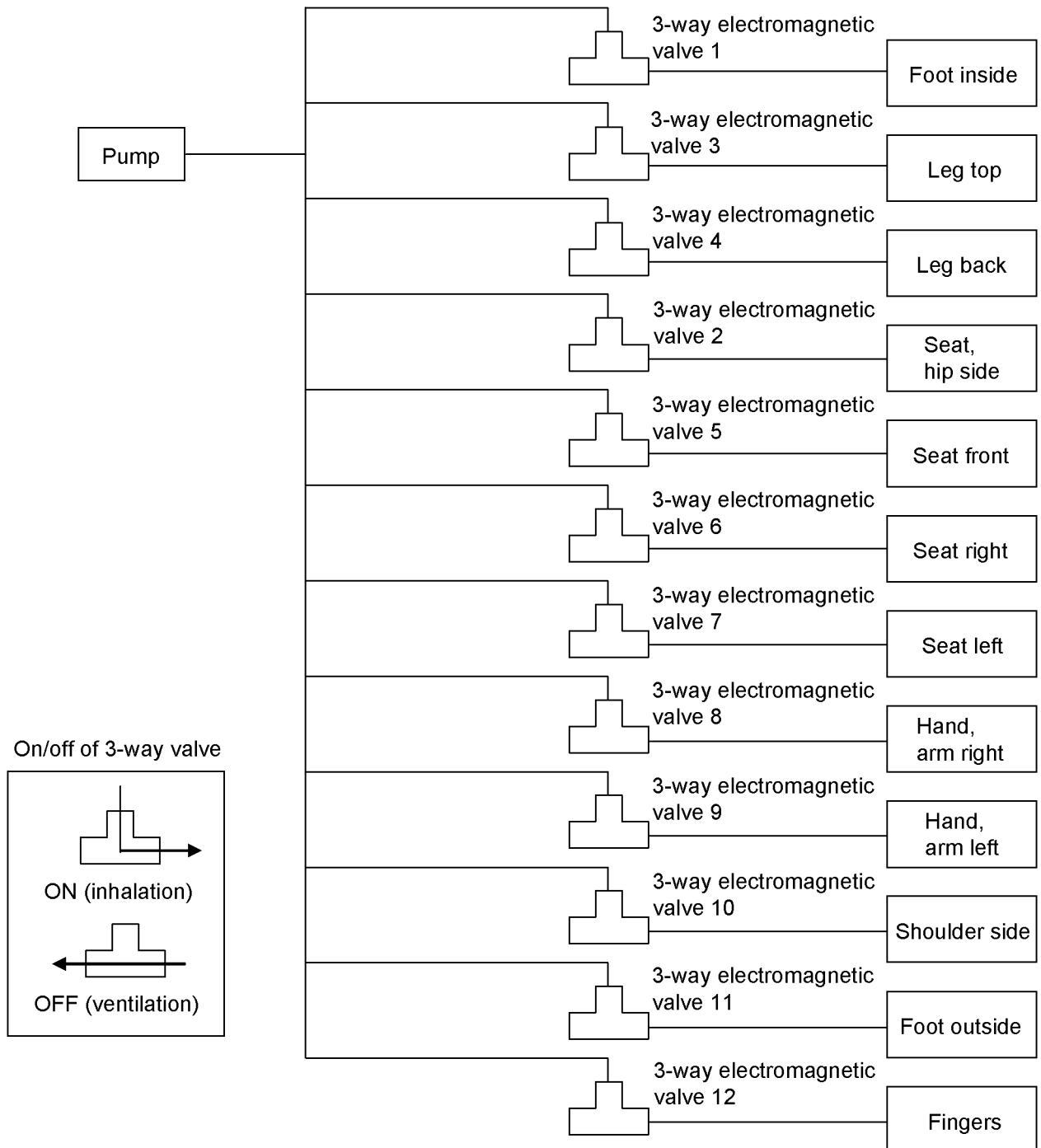
For those who weigh 100 kg (220.3 lbs) or more, the product operations may make more noise and the fabric cover may wear faster.

2 Technical Descriptions

2.1. Operation of Electromagnetic Valves and Air Bags

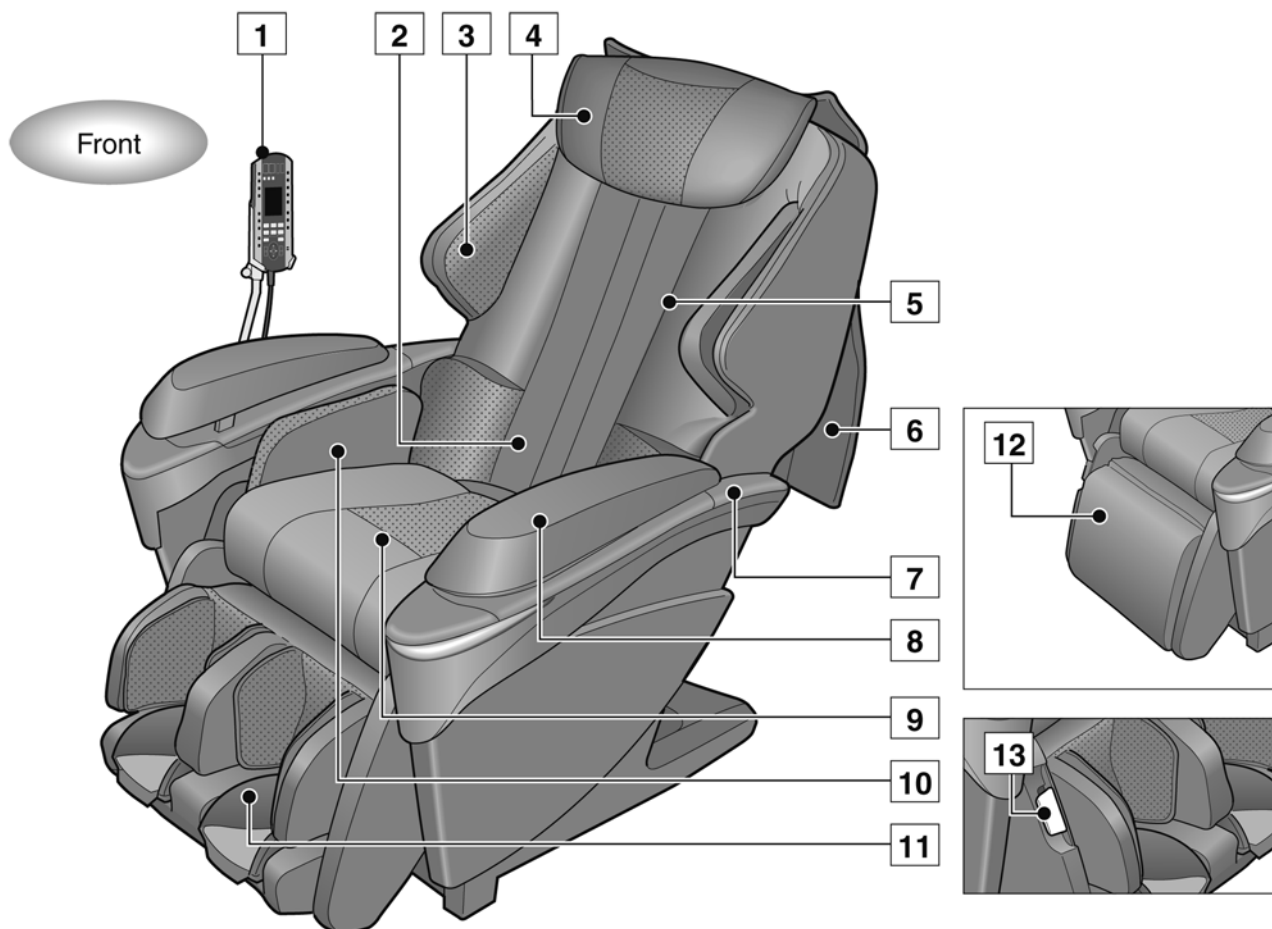
Air massage is operated driving the Pump unit x 1pc, 3-way 3-roll electromagnetic valve, and 3-way 4-roll electromagnetic valve.

1. When the operation stops, the Pump and all the Electromagnetic valves are OFF.
2. While the Reclining lift motor and the Ottoman lift motor operates, the control of air stops.
(Air is in the ventilation.) However, when the leg stretch operates, the Lift motor operates controlling the air.
3. When in the operation by the Controller Off/on switch, and the Electric reclining lift and the Electric ottoman lift are operated, the Pump stops. (The air pressure is maintained.)



3 Location of Controls and Components

3.1. Massage Lounger



1 Controller

2 Retracted position of massage heads

3 Shoulder side massage section

- Includes integrated air massage function.

4 Pillow

5 Backrest

- Massage heads:
 - Includes the massage mechanism.
 - Includes "Heat" massage heads.
- Air bag for lower back massage is built in.

6 Comfort cushion

7 Armrest

- Moves with the backrest.

8 Hand & arm massage section

- Includes integrated air massage function.

9 Seat

- Air bag for seat/thigh massage is built in.

10 Seat & thigh side massage section

- Includes integrated air massage function.

11 Leg rest-Leg & sole massage section

- Includes air massage function.
- Position can be adjusted by sliding sole massage section.
- Includes built-in "Heat" (heater) section.

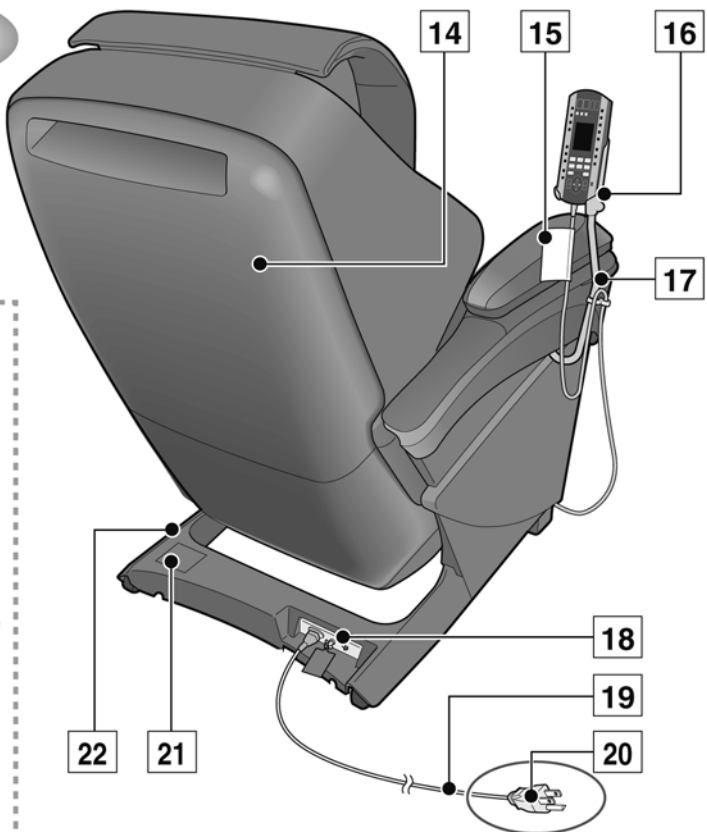
12 Leg rest-Flat section

- Use the unit as a comfort chair by rotating and storing when not using for massaging.

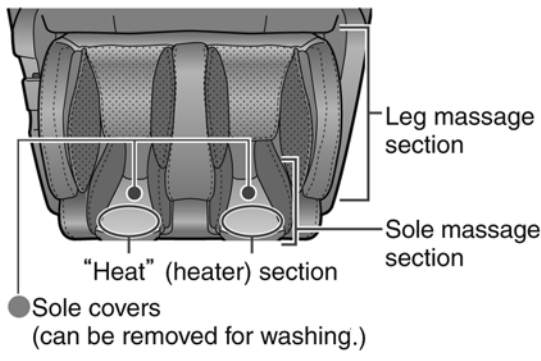
13 Leg rest rotation lock release lever

- Rotate the leg rest manually while pulling the lever.
(Flat section ⇔ Leg & sole massage section)

Back

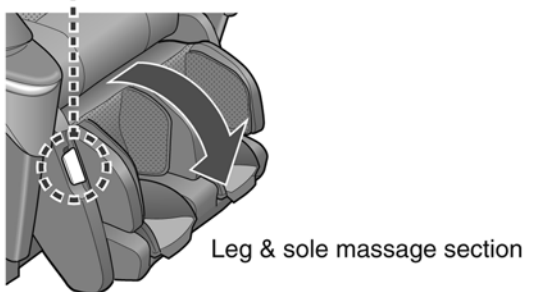


Leg rest-Leg & sole massage section

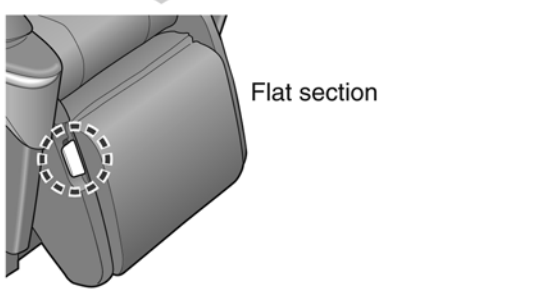


Can be stored when not using for massage

Leg rest is rotated manually while pulling on the leg rest rotation lock release lever.



Leg & sole massage section



Flat section

- 14 Back cover
- 15 Caution sticker
- 16 Controller holder
- 17 Controller stand
- 18 Power switch section
- 19 Power cord
- 20 Power plug
- 21 Rating sticker
- 22 Leg cover

18 Power switch section

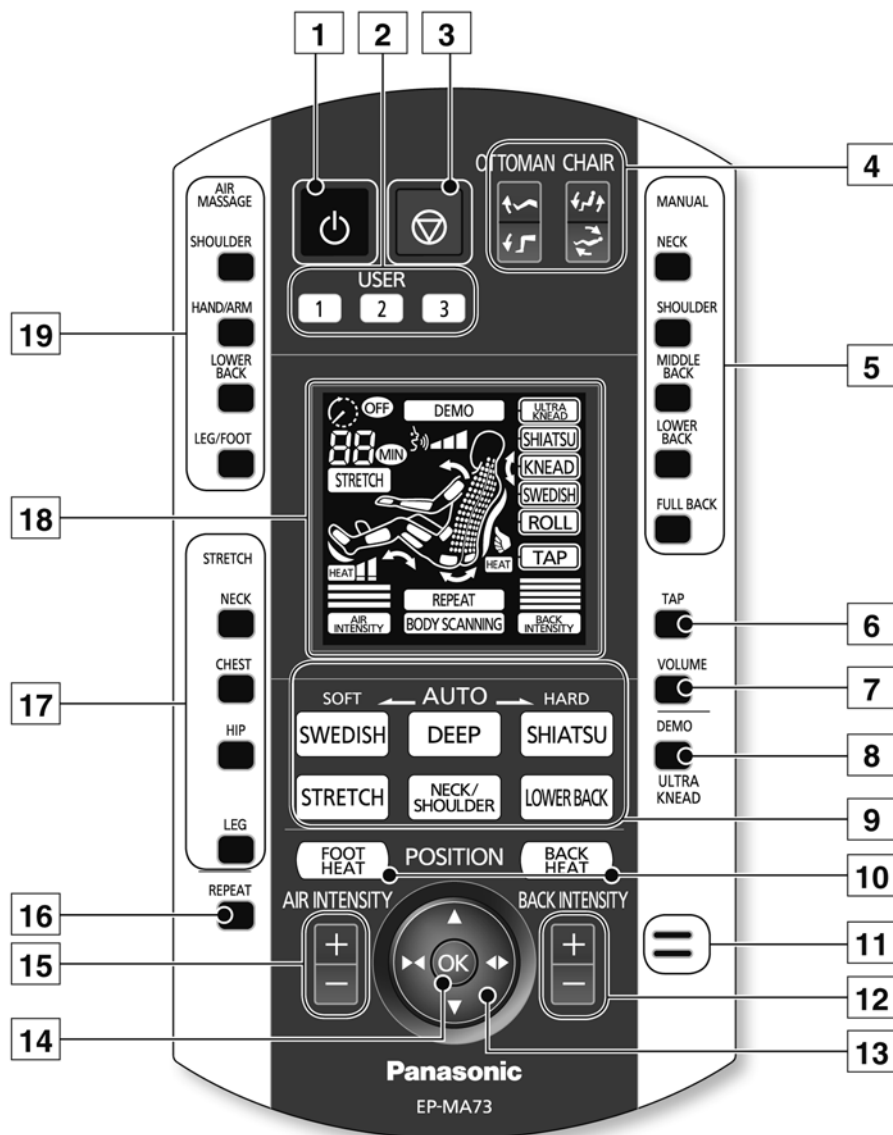
- Lock switch
- Power switch
- Lock switch key
- Lock switch key tag

● For preventing children from swallowing it by accident.

● Lock switch is set to "open" and power switch is set to "on" prior to leaving the factory.

3.2. Controller

* Display language on the controller may differ depending on the region the unit was purchased.



● This illustration is when all lamps are illuminated.

1 On/Off button

2 USER buttons

3 Quick stop button

● Press this button to stop the massage immediately.

4 OTTOMAN/CHAIR controllers

5 MANUAL selection button

6 TAP button

7 Voice guidance volume controller

8 DEMO button

9 AUTO selection buttons

10 BACK HEAT ("Heat" message heads)

On/Off button

"Foot Heat" On/Off button

11 Speaker

12 Back massage intensity controller

13 POSITION button

14 OK button

15 Air massage intensity controller

16 REPEAT button

17 STRETCH selection On/Off buttons

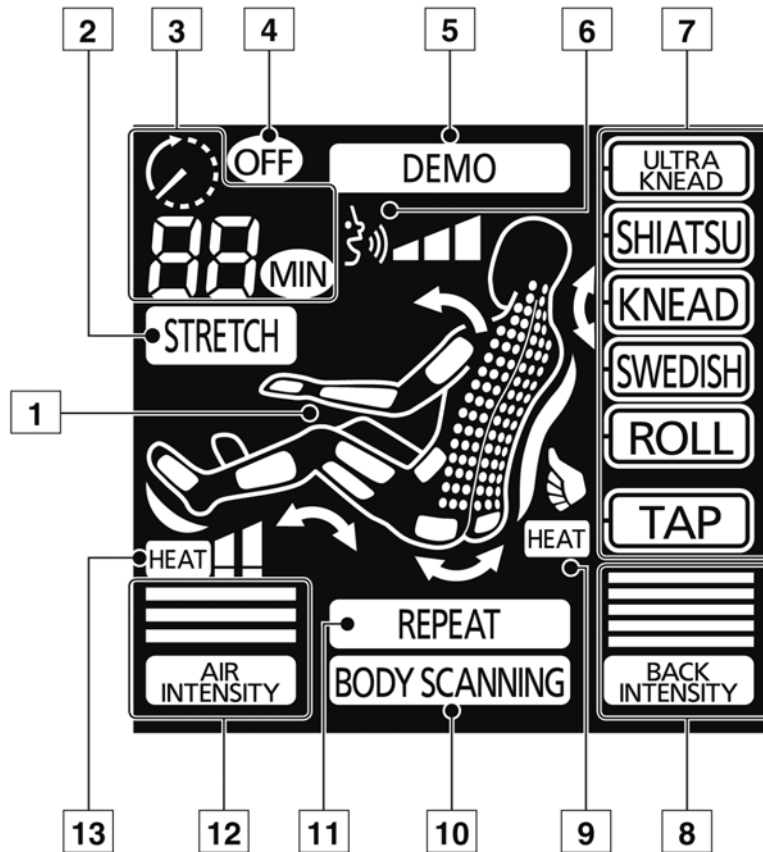
● "Neck", "chest", "hip", "leg" stretch.

18 Display

19 AIR MASSAGE selection On/Off buttons

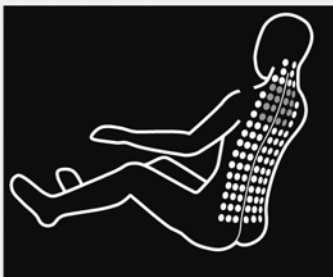
● "Shoulder", "arm", "lower back", "leg/foot" air.

3.3. Display



● This illustration is when all lamps are illuminated.

1 Massage area display



Current approximate massage position flashes.



Currently selected air massage parts light up. Current air massage position flashes.



Currently selected stretch parts light up. Current stretch position flashes.

2 Stretch action display

3 Remaining time display

4 Massage ending display

5 Demo course (ULTRA KNEAD) display

6 Voice guidance volume display

7 Operation display

- Currently performing massage actions light up while massaging.
- Currently selected action's frame is flashed when manual operation is selected.

8 Back intensity display

9 "Heat" massage heads display

10 Body scanning display

11 Repeat display

12 Air intensity display

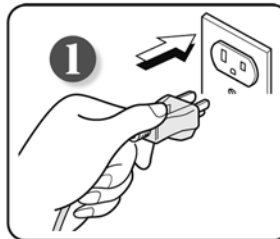
13 "Foot Heat" display

4 Operating Instructions

4.1. Turning on the Power

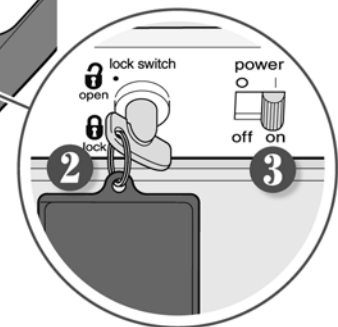
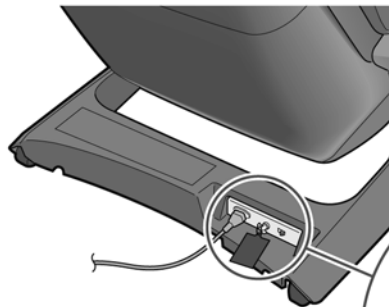
- 1 Insert the power plug into the power outlet.**

- Always be sure to insert into an AC 120 V plug.



- 2 Confirm the lock switch key is set to the “open” position.**

- 3 Confirm the power switch is set to the “on” position.**



- 4 Press  on the controller twice.**

- Press once, and then press again approx. 1 second later. Backrest will rise automatically.

5 Service Mode

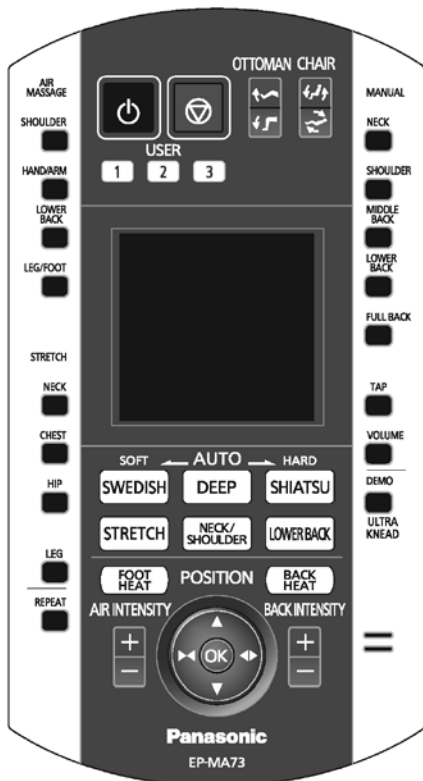
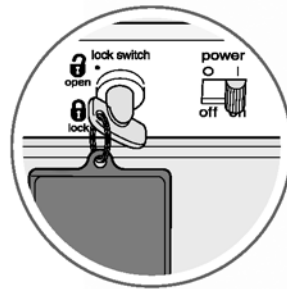
5.1. Preparation of Secret Mode

Before proceeding to each Secret Modes, execute the following Preparation of the Secret Mode. Insert the Power plug to the power source and turn on the Switch on the Power source switch box.

1. Turn on the Switch on the Power source switch box.
 2. While pushing the buttons of SWEDISH and STRETCH, keep pushing the Off/On button for more than three seconds. (SWEDISH, STRETCH, and USER3 lights and it buzzes three times.)
 3. Push NECK, then SHOULDER of MANUAL, and at final push the OK button. (CO is displayed on the screen.)
- * You can choose each operation modes in the Secret Mode list by pushing the BACK INTENSITY button. After choosing, push the OK button.

You can resume to the Secret Mode list by pushing the OK button for more than three seconds.

Power source switch box



<Secret Mode list>

①	Display of total usage time	[C0]
②	Input of total usage time	[C2 01]
③	Display of each operation time	[C3]
④	Display of malfunction analysis	
④—1	Display of abnormal stop	[C4]
④—2	Display of abnormal stop operation	[C6]
④—3	Display of motor stalled	[C7]
④—4	Display of sensor malfunction	[C8]
⑤	Massage mechanism block operation test	[CA]
⑥	Adjustment of body pressure sensor	[CC]
⑦	Massage mechanism block manual operation	[CE]
⑧	Packing mode	[00]

5.2. Display of total usage time [C0]

1. Proceed the procedures 1-4 of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till C0 appears, and push the OK button.
3. Push the OK again, then 1,000's place, 100's place, ten's place, and single's place are shown every time you push the OK button.

Example: Total usage time is 526 hours. (0526 is shown.)

Controller		Push OK	Push OK	Push OK	Push OK
Display	88	88 MIN	88 MIN	88 MIN	88 MIN
Operation	Ready	Place of 1,000	Place of 100	Place of 10	Place of 1

※. "MIN" is also shown

Buzzer: it beeps "pp".

5.3. Display of each operation time [C3]

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till C3 appears, and push the OK button twice.
3. Then, push the BACK INTENSITY and choose from 01 to 08, and from 11 to 16.
4. Push the OK again, then 1,000's place, 100's plate, ten's place, and single's place are shown every time you push the OK button.
5. If you push the OK, again, it buzzes once, then the operation resumes to 3.

Example: Total usage time of the Tapping motor is 526 hours. (0526 is shown.)

Controller		BACK INTENSITY	OK	OK	OK	OK
Display	00	04	00 MIN	05 MIN	02 MIN	06 MIN
Operation	Ready	4 is shown, which means the total usage time of the Tapping motor.	Place of 1,000 0 is shown.	Place of 100 5 is shown.	Place of 10 2 is shown.	Place of 1 6 is shown.

※. "MIN" is also shown

Buzzer: it beeps "pp".

C3	01	Total usage time of Width motor	Display of the total usage time of Width motor	0 - 9999
	02	Total usage time of Intensity motor	Display of the total usage time of Intensity motor	0 - 9999
	03	Total usage time of Up/down motor	Display of the total usage time of Up/down motor	0 - 9999
	04	Total usage time of Tapping motor	Display of the total usage time of Tapping motor	0 - 9999
	05	Total usage time of Ottoman lift	Display of the total usage time of Ottoman lift motor	0 - 9999
	06	Total usage time of Reclining lift	Display of the total usage time of Reclining lift motor	0 - 9999
	07	Total usage time of Pump	Display of the total usage time of Pump	0 - 9999
	08	Total usage time of Massage block heater	Display of the total usage time of Massage block heater	0 - 9999
	09	Total usage time of Foot heater	Display of the total usage time of Foot heater	0 - 9999
	11	Total usage time of SWEDISH	Display of the total usage time of SWEDISH	0 - 9999
	12	Total usage time of DEEP	Display of the total usage time of DEEP	0 - 9999
	13	Total usage time of SHIATSU	Display of the total usage time of SHIATSU	0 - 9999
	14	Total usage time of STRETCH	Display of the total usage time of STRETCH	0 - 9999
	15	Total usage time of NECK/SHOULDER	Display of the total usage time of NECK/SHOULDER	0 - 9999
	16	Total usage time of LOWER BACK	Display of the total usage time of LOWER BACK	0 - 9999
	17	Total usage time of DEMO mode	Display of the total usage time of DEMO mode	0 - 9999

5.4. Display of malfunction analysis-1 [C4]

Category of abnormal stop is shown.

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till C4 appears, and push the OK button. Any of the following is shown.

Entry		Operation mode	Explanation of the summary	Condition	
Type	No.			Display	Contents
C4		Display of abnormal stop contents	Display of the abnormal stop information	0	Normal
				1	Motor stalled
				2	Sensor malfunction
				3	Communication error
				4	Sub PCB malfunction
				5	Abnormal load
				6	Massage block heater error
				7	Foot heater error

* If there is something wrong with the Motors or Sensors, go to C7 or C8.

5.5. Display of malfunction analysis-2 [C6]

It is shown at which operation the Massage block stops abnormally.

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till C6 appears, and push the OK button. Any of the following is shown.

Entry		Operation mode	Explanation of the summary	Condition	
Type	No.			Display	Contents
C6		Display of abnormal stop operation contents	It is shown at which operation the Massage block stops abnormally.	0	Normal
				1	Massaging
				2	Upward movement
				3	Downward movement
				4	Wider movement
				5	Narrower movement
				6	Stronger movement
				7	Weaker movement

5.6. Display of malfunction analysis-3 [C7]

It is shown which parts were stalled in the abnormal stop.

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till C7 appears, and push the OK button. Any of the following is shown.

Entry		Operation mode	Explanation of the summary	Condition	
Type	No.			Display	Contents
C7		Display of the stalled parts	It is shown which parts were stalled.	0	Normal
				1	Up/down motor
				2	Width motor
				3	Intensity motor
				4	Tapping motor
				5	Ottoman lift motor
				6	Continuous Ottoman lift motor
				7	Reclining lift motor
				8	Continuous Reclining lift motor

5.7. Display of malfunction analysis-4 [C8]

It is shown in which sensing is when the abnormal stop occurred.

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till C7 appears, and push the OK button. Any of the following is shown.

Entry		Operation mode	Explanation of the summary	Condition	
Type	No.			Display	Contents
C8		Display of the kinds of sensor abnormal	It is shown at which sensor operations the Massage block stopped.	00	Normal
				01	Up/down sensor detects no change.
				02	Up/down sensor detects abnormal change.
				03	Abnormal sensing in the beginning of the Up/down motor
				04	Width sensor detects no change.
				05	Width sensor detects abnormal change.
				06	Abnormal sensing in the beginning of the Width motor
				07	Intensity sensor detects no change.
				08	Intensity sensor detects abnormal change.
				09	Abnormal sensing in the beginning of the Intensity motor
				10	Abnormal rotation speed of the Tapping motor
				11	Normal Ottoman sensor
				12	Ottoman sensor detects abnormal change.
				13	Reclining sensor detects no change.
				14	Reclining sensor detects abnormal change.
				15	Massage block heater error
16	Foot heater error				

*U10 display does not mean abnormal stops. Therefore, it is not memorized in the Microcomputer.

5.8. Display of function analysis-5 [C9]

It is shown in which operation the massage chair stopped abnormally and what malfunction has occurred.

1. Proceed the procedures 1-3 of 5.1. Preparation of Secret mode.
2. Push the button of BACK INTENSITY till C9 appears, and push the OK button.
3. Again, push the OK button, then push the button of BACK INTENSITY till the necessary number appears, and push the OK button.

Entry		Operation mode	Explanation of the summary
Type	No.		
C9	01	Display of the abnormal stop operation	Display of Program courses, massaging, and parts
	02	Display of the accumulative abnormal stop operation	Display of the past memorized five abnormal stops
	03	Delete of the display of the accumulative abnormal stop operation	-

When 01 is selected, the operation is displayed when abnormal stop occurred.

If no abnormal stop occurs, nothing is displayed.

When 02 is selected, the past five memorized abnormal stops are displayed.

(Example of the display is shown below.)







After the memory is full of five abnormal stops, the oldest memory is deleted when a new memory is memorized.

When 03 is selected, all the memorized abnormal stops are deleted.

* Abnormal stop information except the total operation time and each operation time is deleted.

Example: Total usage time of the abnormal stop operation

(Latest error: motor stalled (1), previous error: motor stalled(1), two error before: communication error occur.)

Controller		OK	BACK INTENSITY	OK	OK	OK
Display						
Operation	Ready	Modes can be selected by BACK INTENSITY button.	Select the display of the accumulative abnormal stop operations.	Previous error, Motor lock (1) is displayed.	Previous error, Motor lock (1) is displayed.	Two error before, communication error (3) is displayed.

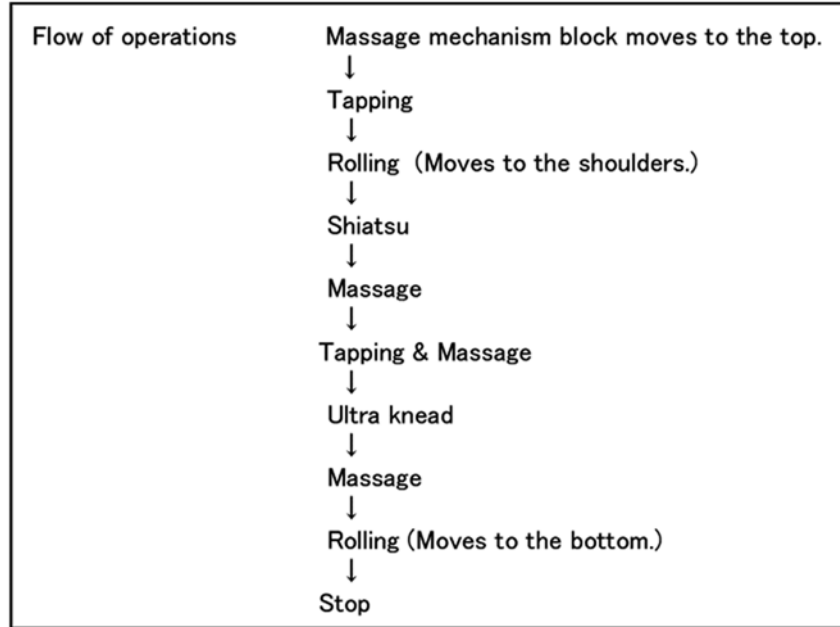
Buzzer: it beeps "pp".

5.9. Checking after assembly [CA]

Check if the Massage mechanism block is properly assembled or there is nothing wrong with the Sensors or Motors.

* Detect failures in Sensors or Motors.

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till CA appears, and push the OK button.
3. Massage mechanism block starts operating. If there is nothing wrong, it stops normally.
4. If you stop the operation halfway, push the buttons of Off/On or Stop on the Controller.



5.10. Adjustment of Body pressure sensor [CC].

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till CC appears, and push the OK button.
3. Push the OK button again.

Caution: Be careful to check if there is no pressure applied on both right and left Massage balls and push the OK button.

If the OK button is pushed with the pressure on the Massage balls, it may cause the malfunction that shoulder position is not accurate in sensing.

4. Push the Off/On button on the Controller. The adjustment is done.

5.11. Manual mode [CE]

Manual mode is used to remove or install the Massage mechanism block from or to the Massage chair, or to check each operations.

1. Proceed the procedures of 5.1. Preparation of Secret Mode.
2. Push the button of BACK INTENSITY till CE appears, and push the OK button.
3. You can check each operations by pushing the following Switches.
 - Reclining switch (Back Up/down), Ottoman switch (Ottoman Up/down)
 - Position switch (Upward, downward, narrower, wider)
 - Back intensity (Strong, weak)
 - Massage block heater (Off, on)
 - Foot heater (Off, on)
 - Manual (Neck, shoulder, middle back, lower back, full back, tap)

Checking the temperature of the Heater

1. You can check the temperature of the Heater if you push the OK button after 5.12.2 then push the REPEAT button and the ULTRA KNEAD button. However, if the Massage block heater OFF/ON button is not pushed, the normal temperature is displayed.
2. To stop the operation, push the Off/on button or the stop button.

*** In the case of Right arm : 12°C Left arm : 11°C**

Controller	REPEAT	REPEAT	REPEAT	REPEAT	REPEAT	OK
Display	CE	88 →	88 →	88 →	88 →	
Operation		The place of 10 of the CN101 Arm temperature is shown.	The place of 1 of the CN101 Arm temperature is shown.	The place of 10 of the CN102 Arm temperature is shown.	The place of 1 of the CN102 Arm temperature is shown.	



* Caution Values on the display is the temperature when the REPEAT button and the ULTRA KNEAD button are pressed for the first time.

Controller	ULTRA KNEAD	ULTRA KNEAD	ULTRA KNEAD	ULTRA KNEAD	ULTRA KNEAD	OK
Display	CE	88 →	88 →	88 →	88 →	
Operation		The place of 10 of the CN101 Arm temperature is shown.	The place of 1 of the CN101 Arm temperature is shown.	The place of 10 of the CN102 Arm temperature is shown.	The place of 1 of the CN102 Arm temperature is shown.	



* Caution Values on the display is the temperature when the REPEAT button and the ULTRA KNEAD button are pressed for the first time.

5.12. Checking the Heater

Check if the Heater increases its temperature properly by the list of the room temperature and its time till it reaches designated temperatures.

(Our criterion is that the spot touching the human body is 50 °C (122°F). However, there is the balance 5 °C (41°F) in the Heat sensor and the spot of the human body touching the Massage ball, therefore in the list 45 °C (113°F) is used as criterion.)

● **Standard: Heater should reach 45°C (113°F) in designated periods.**

Temperatures	Display of the Controller (Room temperature)
(Room temperature)	Time till it reaches designated temperatures.
15–20°C (59–68°F)	Less than 164 seconds (2 minutes 44 seconds)
20–25°C (68–77°F)	Less than 150 seconds (2 minutes 30 seconds)
25–30°C (77–86°F)	Less than 141 seconds (2 minutes 21 seconds)
30–35°C (86–95°F)	Less than 129 seconds (2 minutes 9 seconds)

Caution:

- Carry out the checking with nobody sitting or without operation of the Massage mechanism block.
- Heater massage balls need to be cool enough (normal temperature).
- The balance between right/left Massage balls is within ± 5 °C (41°F). If the values are within this range, it is not faulty.

Checking procedures

1. Start CE mode of the Secret Mode of the Controller.
2. If you push the REPEAT button for several times,,,,,,
For example,
<CE> → Once <02> → Twice <05> → Thrice <2> → Fourth <4>
This means that one of Heal balls is 25 °C (77°F) and the other is 24 °C (75°F). If you push OK, it resumes to the beginning.
* You can know the original temperatures of the Massage balls.
3. Push the button of Massage block heater OFF/ON and turn on the switch, and measure the time of the increase of the temperature.
4. Repeat the procedures of 2. and measure the time till 45 °C (113°F) is shown.
5. Check the Massage block heater by the list. For example, if the room temperature is 20 °C (68°F) and 45 °C (113°F) is shown within 150 seconds, it can be judged "Good".

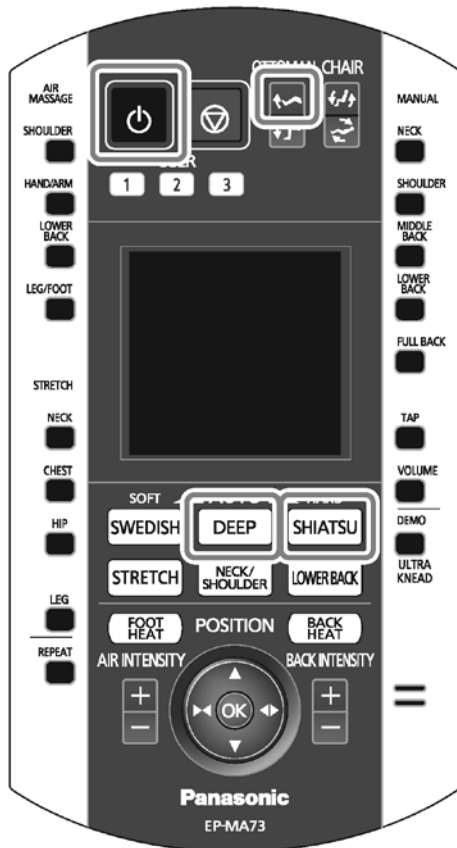
5.13. Packing mode [00]

Proceed the following procedures of Preparation of Secret mode.

1. Insert the Power cord to the power source, and turn on the Power source switch box.
2. While pushing the buttons of DEEP and SHIATSU, keep pushing the button of Off/On for more than three seconds.
(USER 1, 2, 3 buttons light, and buzzer sounds once.)
3. Push the button of Ottoman upward.

* Packing conditions are as the following list.

* Push the Quick Stop button to stop the operation.



Massage block	Backrest	Ottoman
Stop a little higher than the lowest position	Fall down	Move down

5.14. Error Display

If there is something wrong with each Sensors, each Motors, Power source and Signal lines, the following error codes blink for approximately 10 seconds.

Use this chart just for your reference.

Error codes	Malfunction	Phenomena	Controller	Wrong parts	Reusable	
F30	Body pressure sensor *including the loose connectors	Operation stops	Flashes	Extra weight	YES	
F31				No weight (Nobody on the Massage chair)		
F11				Connection cords, etc.		
F12	Sub PCB Hz sensor error			Sub PCB	NO	
F03	Massage block heater error (Heater disconnection, short-circuit)(Thermistor poor connection)			Heater/Thermistor		
F04	Massage block heater error (Thermistor disconnection)			Thermistor		
F05	Massage block heater error (Thermistor short-circuit)			Main PCB		
F06	Massage block heater error (Triac 301 on the Main PCB short-circuit)					
F71	Foot heater error (Heater malfunction)					
F72	Foot heater error (Thermistor poor connection)			Thermistor		
F73	Foot heater error (Thermistor disconnection)			Sub PCB		YES
F74	Foot heater error (Thermistor short-circuit)					
F75	Foot heater error (Transistor short-circuit)					
F76	Foot heater error (Sensor wire error)					
F33	Sensor malfunction	Sensor wire				
F34		Tapping sensor				
F35		Ottoman sensor				
F36		Reclining sensor				
F37		Width sensor				
F38		Up/down sensor				
F14		Motor stall	Intensity sensor			
F15			Ottoman motor			
F16	Reclining motor					
F17	Ottoman motor continuously ON					
F18	Reclining motor continuously ON					
U10	Seat sensor	Tapping motor	YES			
		Body pressure sensor				

* How to cancel the condition of "NO" for reusable

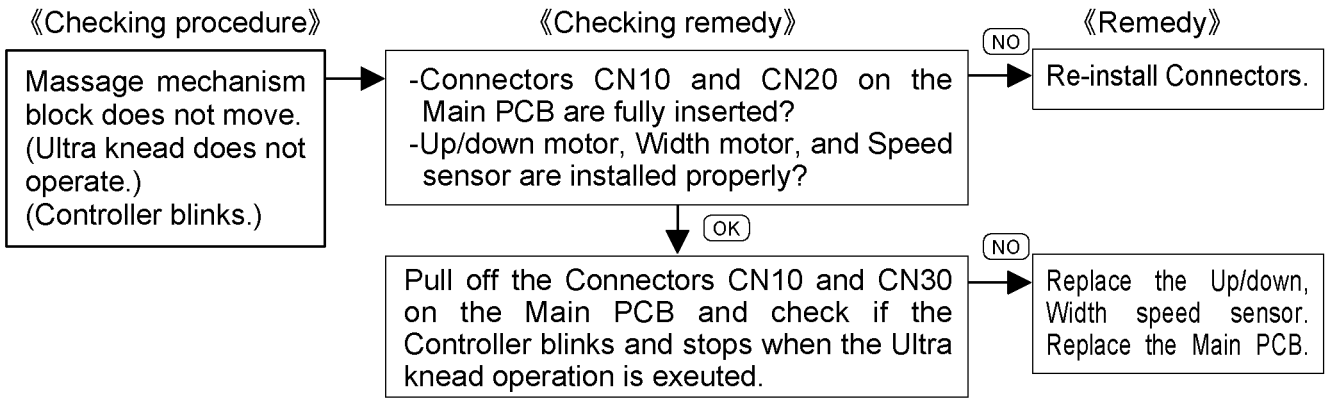
Proceed the procedures 1-3 of 5.1. Preparation of Secret mode, and push the Quick Stop button.

Even after the old part was replaced with new one, you need to proceed these procedures to use the products, otherwise F meaning errors is displayed, which unable to use products.

5.15. Self-Diagnosis list

Entry		Operation mode	Explanation of the summary	Display
Type	No.			
C0		Display of total operation time	Display of total operation time	0 - 9999
C3	01	Operation time of Width motor	Display of total operation time of Width motor	0 - 9999
	02	Operation time of Intensity motor	Display of total operation time of Intensity motor	0 - 9999
	03	Operation time of Up/down motor	Display of total operation time of Up/down motor	0 - 9999
	04	Operation time of Tapping motor	Display of total operation time of Tapping motor	0 - 9999
	05	Operation time of Ottoman lift	Display of total operation time of Ottoman lift motor	0 - 9999
	06	Operation time of Reclining lift	Display of total operation time of Reclining lift motor	0 - 9999
	07	Operation time of Pump	Display of total operation time of Pump	0 - 9999
	08	Operation time of Massage block heater	Display of total operation time of Massage block heater	0 - 9999
	09	Operation time of Foot heater	Display of total operation time of Foot heater	0 - 9999
	11	Operation time of SWEDISH	Display of total operation time of SWEDISH	0 - 9999
	12	Operation time of DEEP	Display of total operation time of DEEP	0 - 9999
	13	Operation time of SHIATSU	Display of total operation time of SHIATSU	0 - 9999
	14	Operation time of STRETCH	Display of total operation time of STRETCH	0 - 9999
	15	Operation time of NECK/SHOULDER	Display of total operation time of NECK/SHOULDER	0 - 9999
	16	Operation time of LOWER BACK	Display of total operation time of LOWER BACK	0 - 9999
	17	Operation time of DEMO course	Display of total operation time of DEMO course	0 - 9999
	C4		Display of abnormal stop	Display of abnormal stop
		01: Motor stall		
		02: Sensor faulty		
		03: Communication error		
		04: Sub PCB faulty		
		05: Sensing abnormal load		
		06: Massage block heater error		
		07: Foot heater error		
C6		Display of abnormal stop operation	Display of the operation in which sudden stop occurred	00: OK
				01: Massaging
				02: Upward
				03: Downward
				04: Wider
				05: Narrower
				06: Stronger
				07: Weaker
C7		Display of stalled parts	Display of stalled parts	00: OK
				01: Up/down motor
				02: Width motor
				03: Intensity motor
				04: Tapping motor
				05: Ottoman lift motor
				06: Ottoman lift CONTINUE
				07: Reclining lift motor
				08: Reclining lift CONTINUE

Entry		Operation mode	Explanation of the summary	Display
Type	No.			
C8		Display of Sensor faulty	Display of the sensor condition in which abnormal stop occurred	00: OK
				01: Up/down sensor no change
				02: Up/down sensor abnormal change
				03: Abnormal when Up/down motor starts
				04: Width sensor no change
				05: Width sensor abnormal change
				06: Abnormal when Width motor starts
				07: Intensity sensor no change
				08: Intensity sensor abnormal change
				09: Abnormal when Intensity motor starts
				10: Tapping motor rotation faulty
				11: Ottoman sensor no change
				12: Ottoman sensor abnormal change
				13: Reclining sensor no change
				14: Reclining sensor abnormal change
				15: Massage block heater error
				16: Foot heater error
C9	01	Display of abnormal stop condition	Display of the Controller condition when abnormal stop occurred	
	02	Display of accumulative abnormal stop conditions	Display of accumulative abnormal stop conditions	
	03	Delete of the display of accumulative abnormal stop conditions	Delete of the display of accumulative abnormal stop conditions	
CA		Checking after assembly	Checking each operations	
CC		Adjustment of Pressure sensor	Deciding the standard of the Massage sensor	
CE		Moving Massage mechanism block freely	Moving Massage mechanism block manually	
00		Packing	Backrest reclines and Massage mechanism block moves to the storage position	



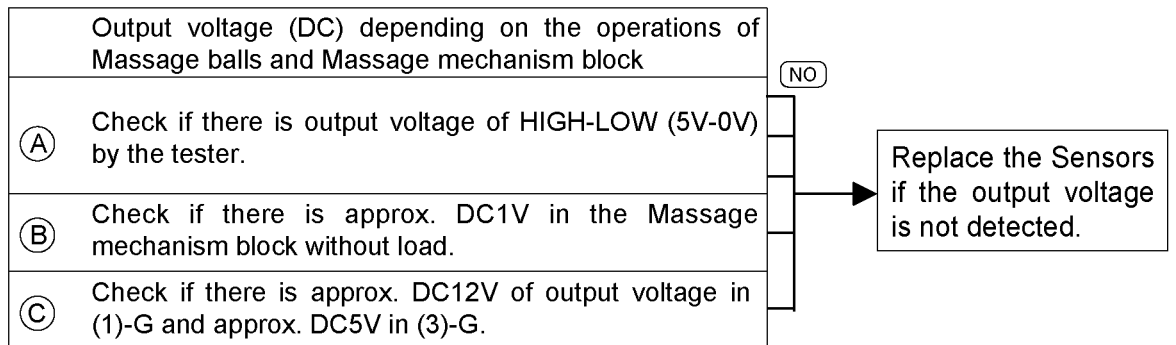
Check with Soft tapping, widest, stronget or weakest, and Massage block lowest.

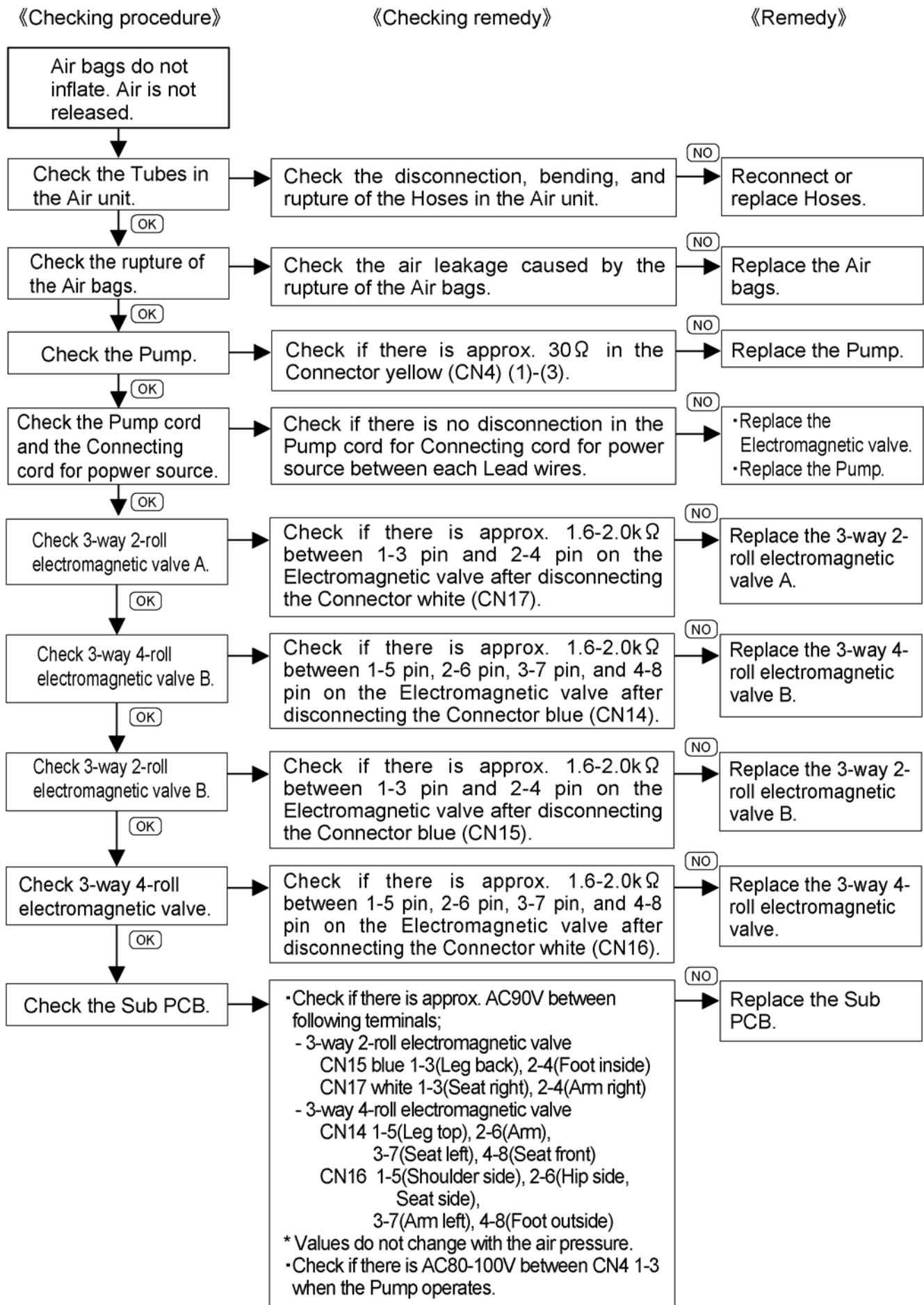
Check each Sensor plates.

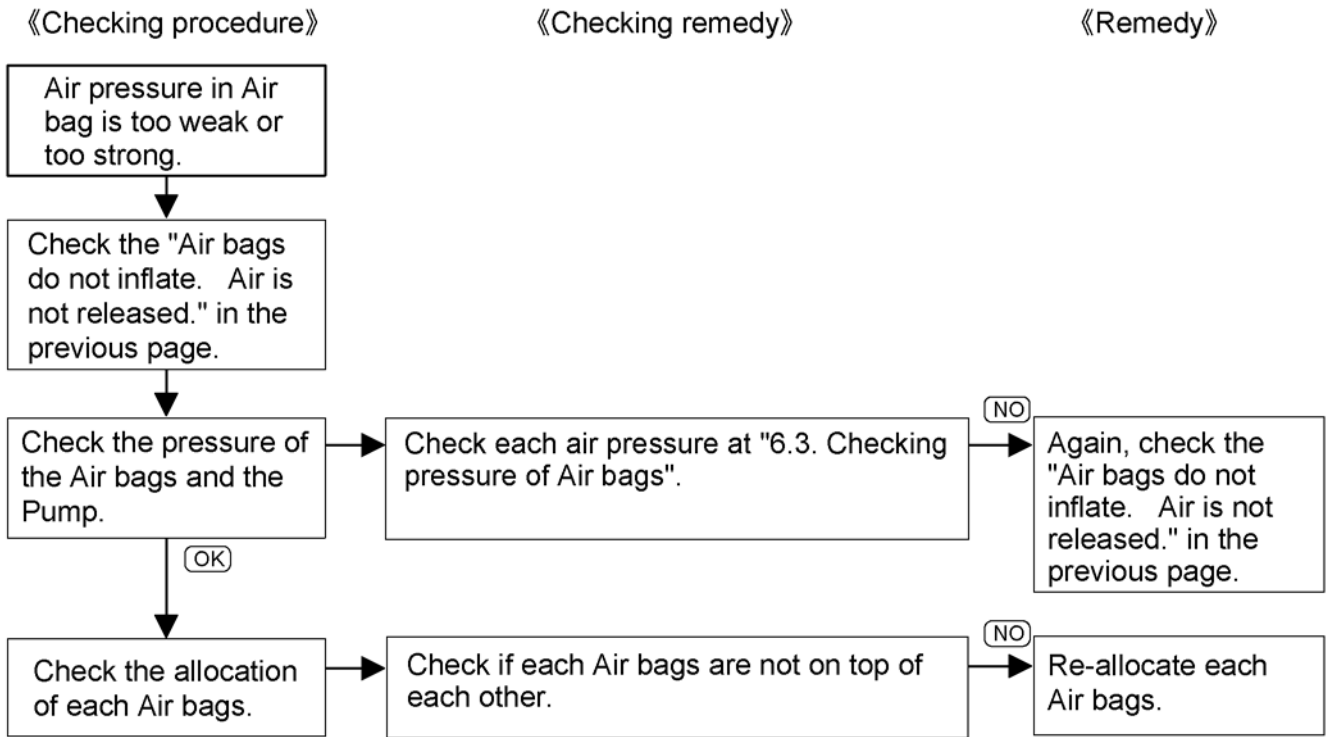
- Intensity sensor
- Up/down sensor
- Width sensor
- Body pressure sensor
- Tapping sensor

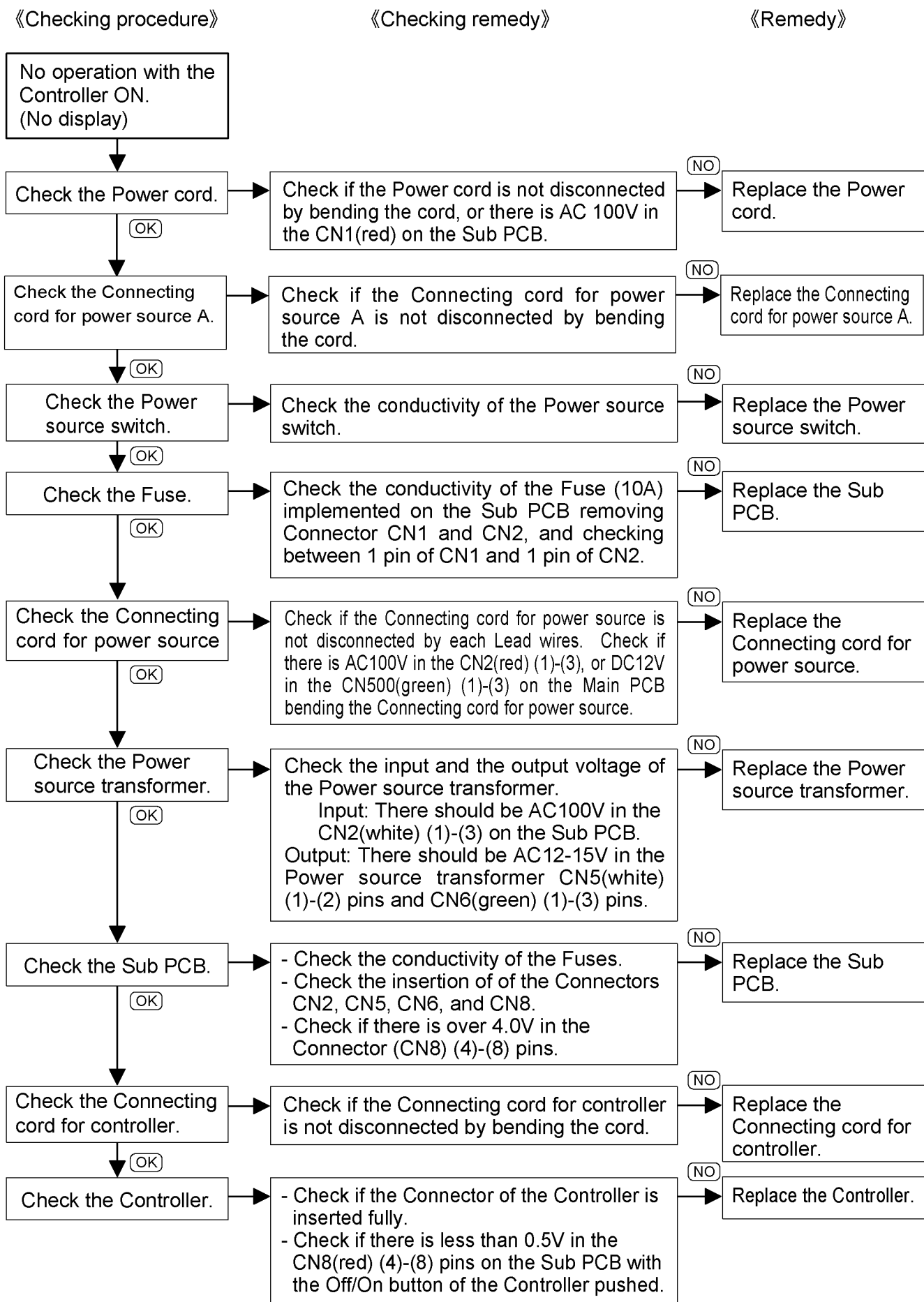
Sensor	Pin No.	Color of Lead wire	G	
Intensity sensor (CN103)	(4)	O	JP100	(A)
Up/down sensor (CN106)	(4)·(6)·(7)·(8)	O·G·Bu·P		
Width sensor (CN109)	(5)·(6)·(7)	Y·G·Bu	JP100	(B)
Body pressure sensor (CN113)	(3)	R		
Tapping sensor (CN104)	(1)	B	JP100	(C)
	(3)	R		

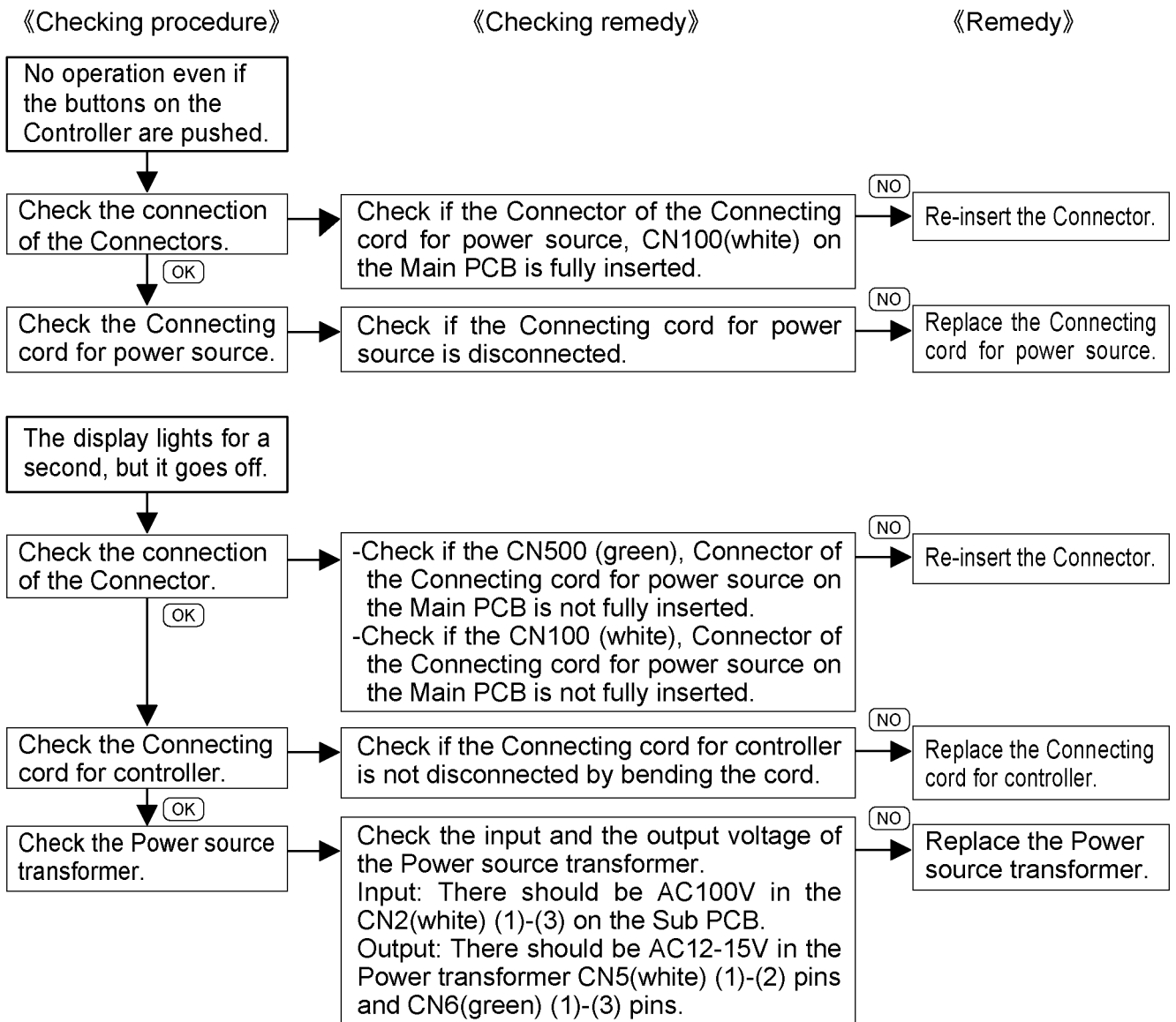
O-Orange, G-Green, Bu-Blue, P-Purple, Y-Yellow, R-Red, B-Black

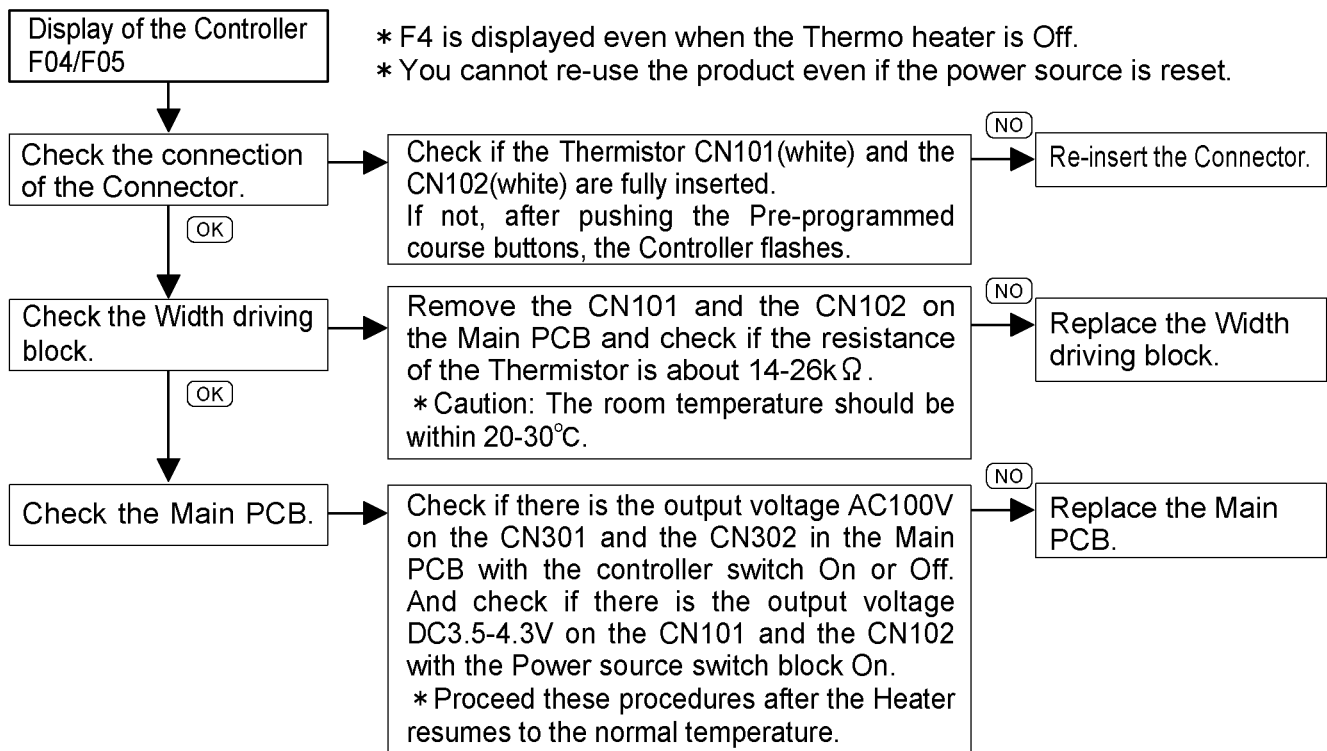
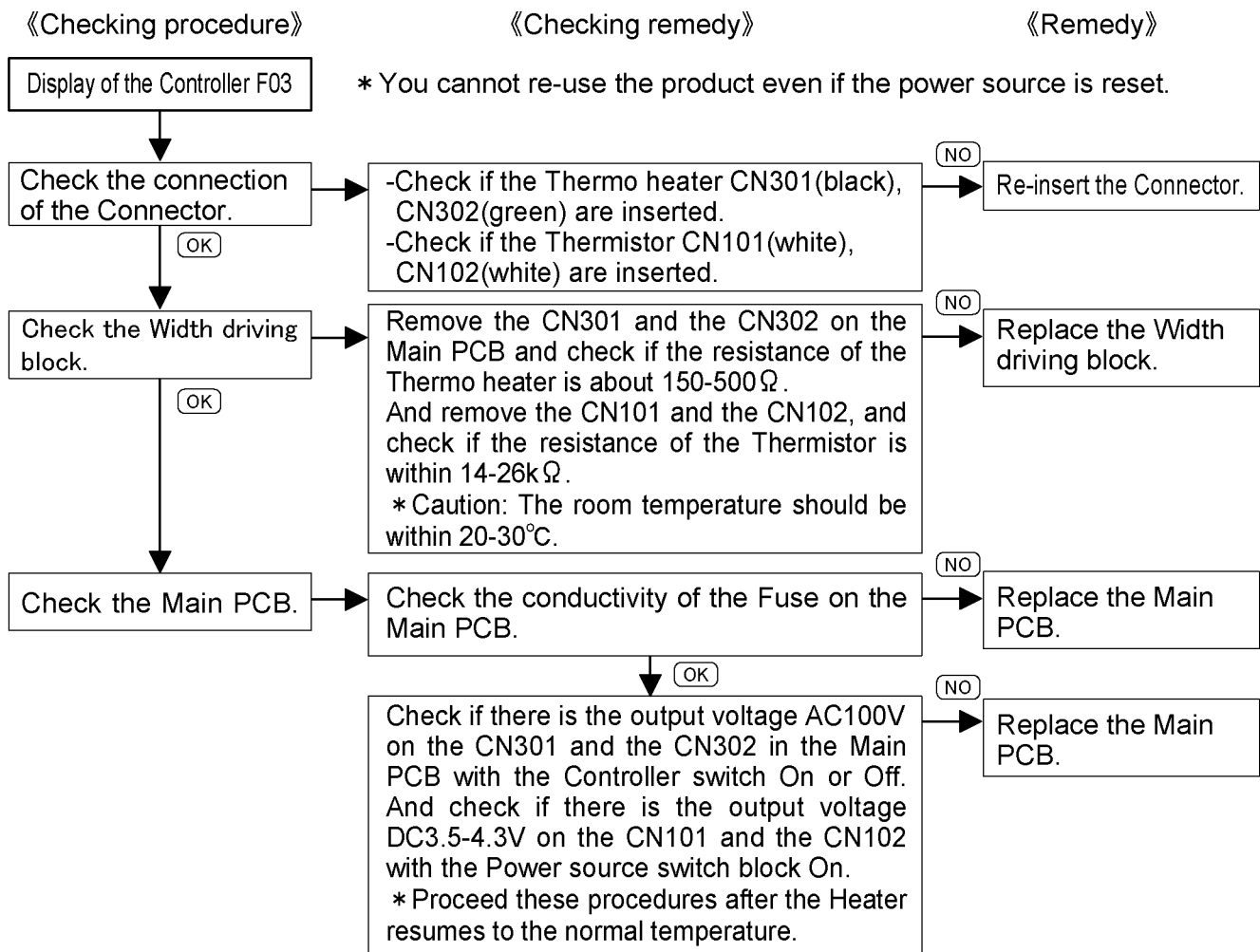


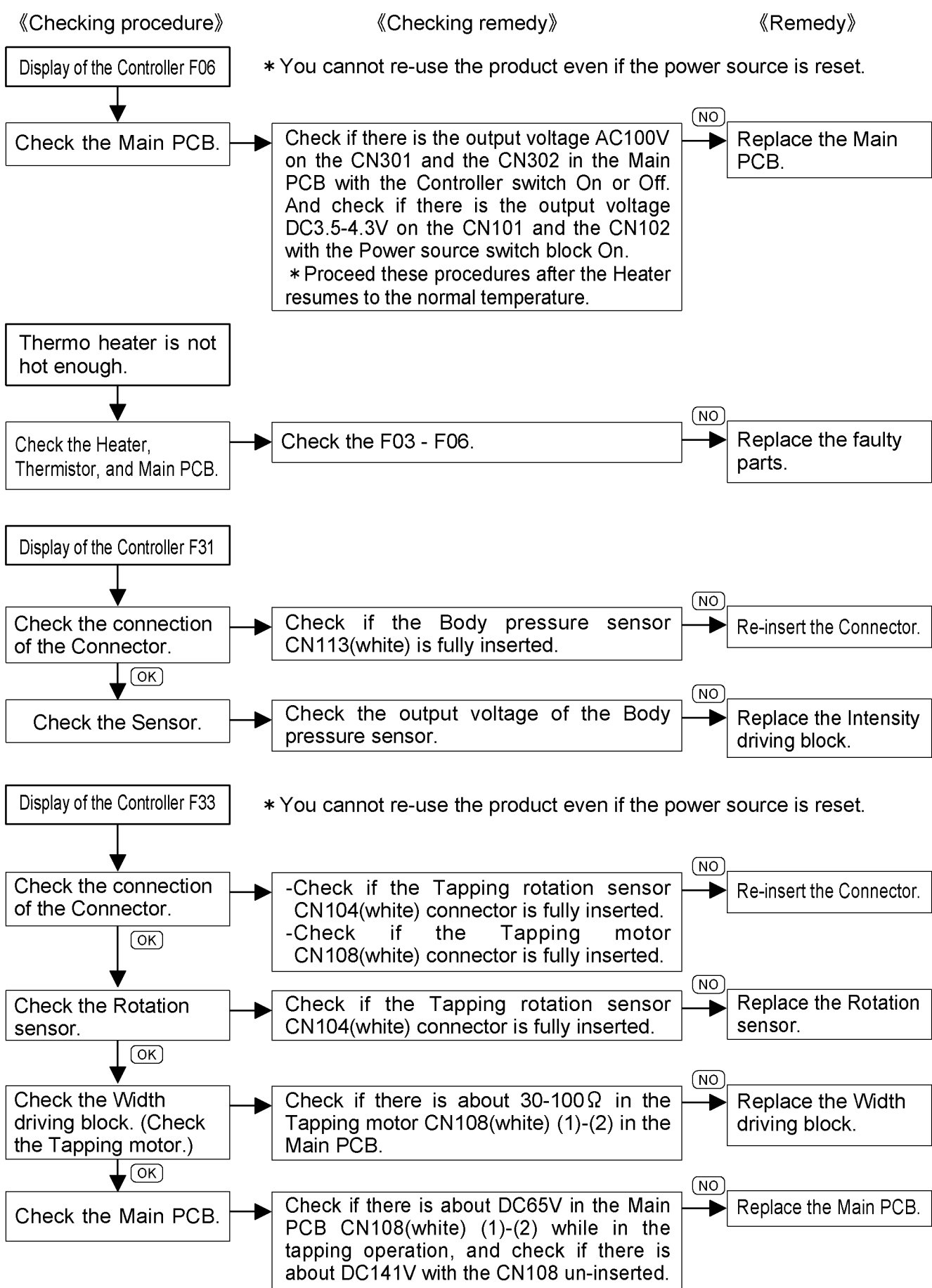


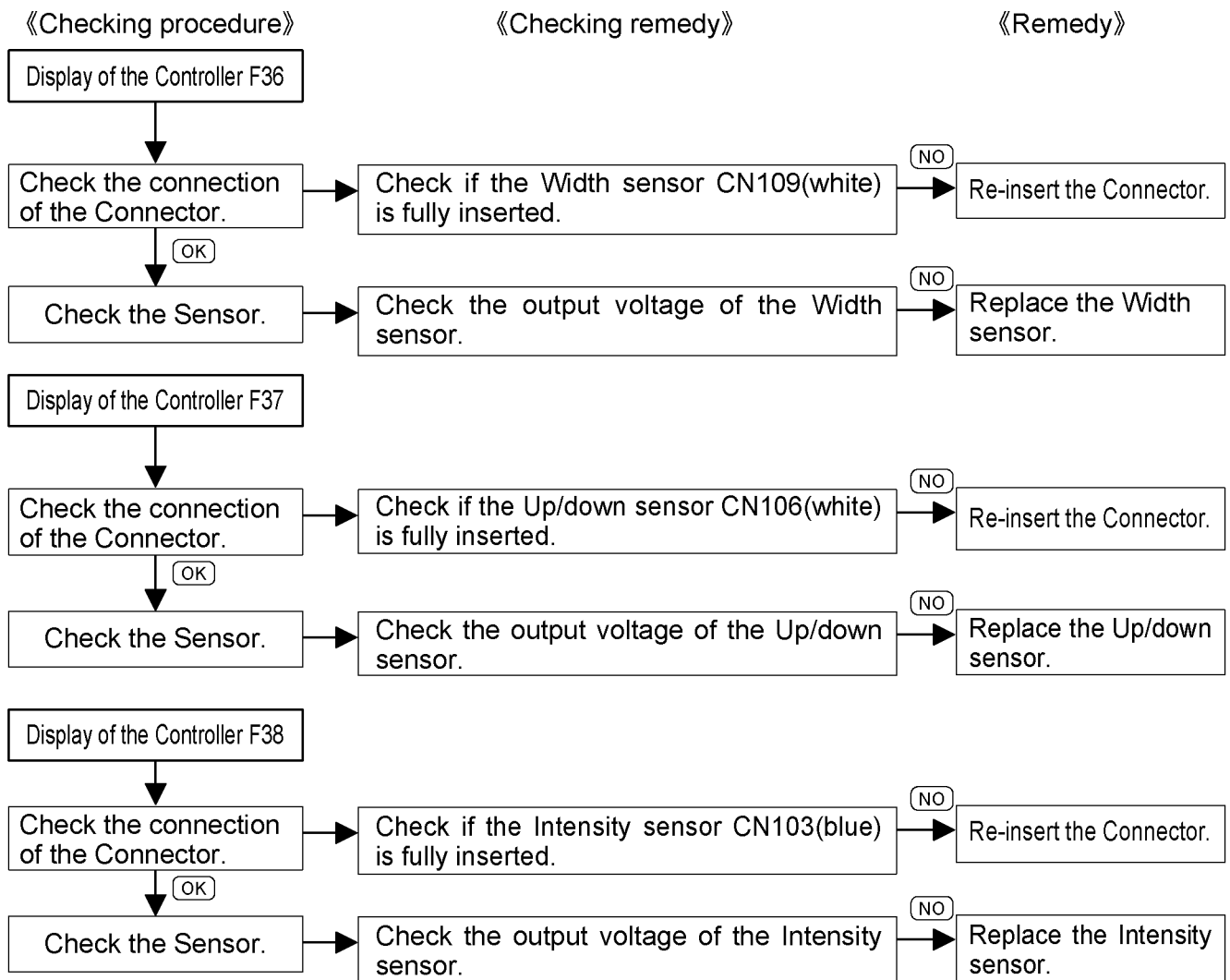








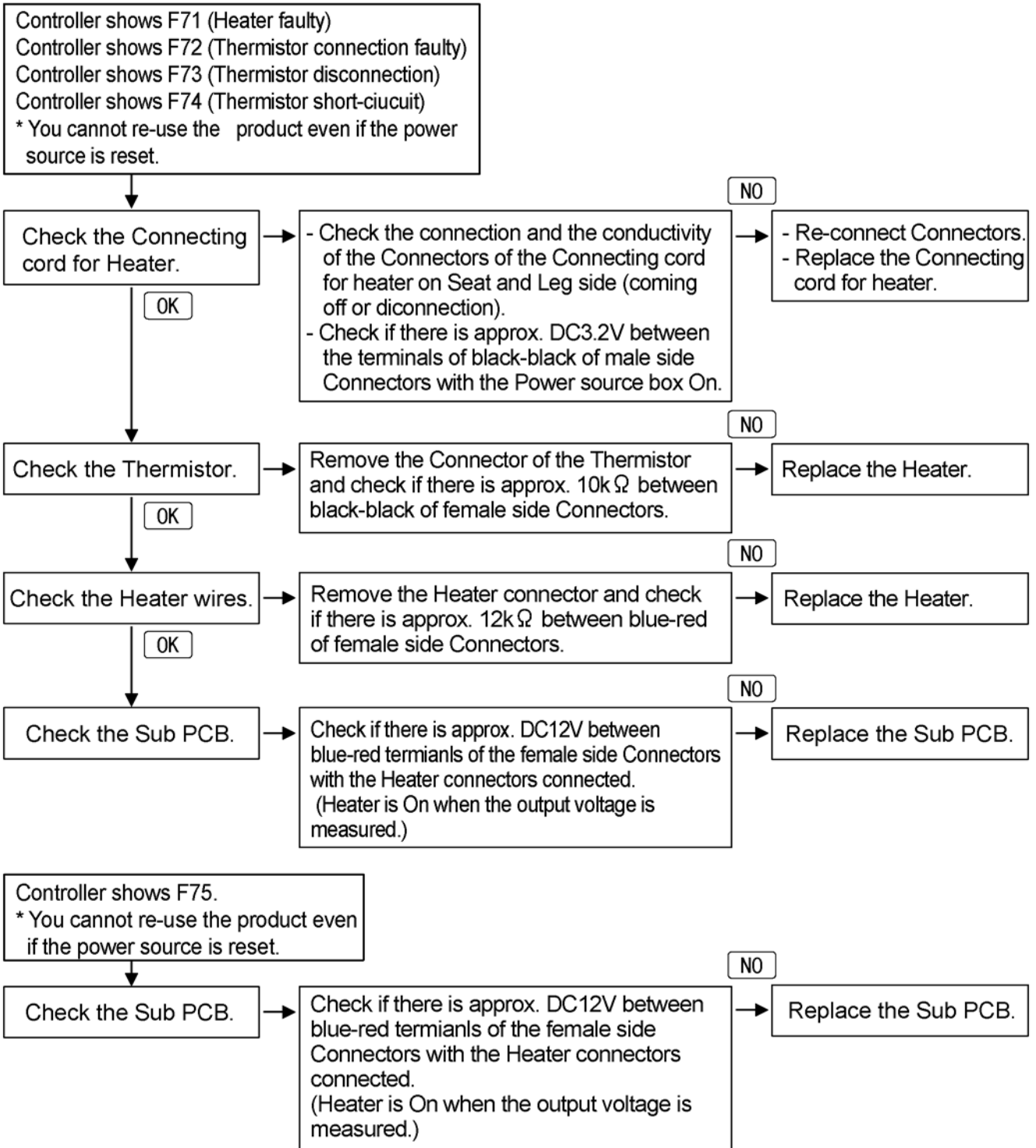




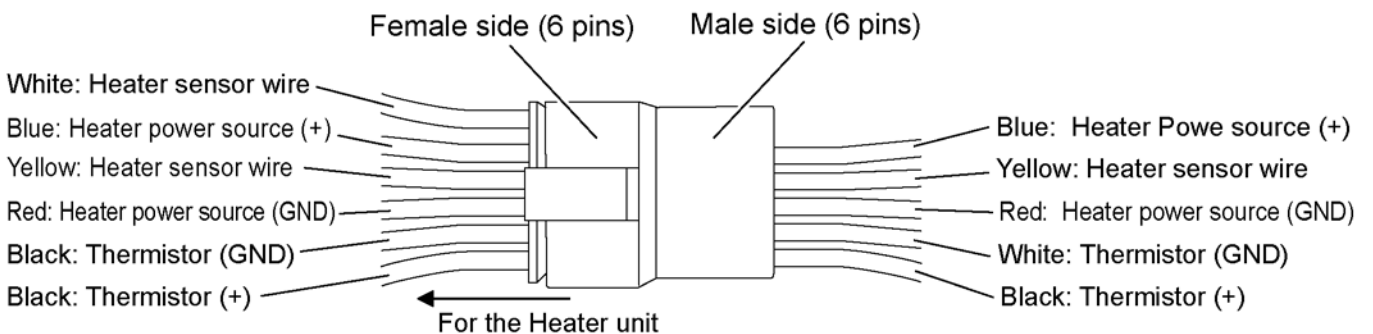
《Checking procedure》

《Checking remedy》

《Remedy》



* Details of Connectors in the Unit with Foot heater.



《Checking procedure》

《Checking remedy》

《Remedy》

Controller shows F76.
(Short circuit of the Heater sensor wire)
* You cannot re-use the product even if the power source is reset.

Check the Connecting cord for Heater.

OK

Check the Sub PCB.

Remove the Connector of the Heater and check if there is approx. 139kΩ between white and yellow.
* Heater sensor wire is wound around the Heater wire.

NO

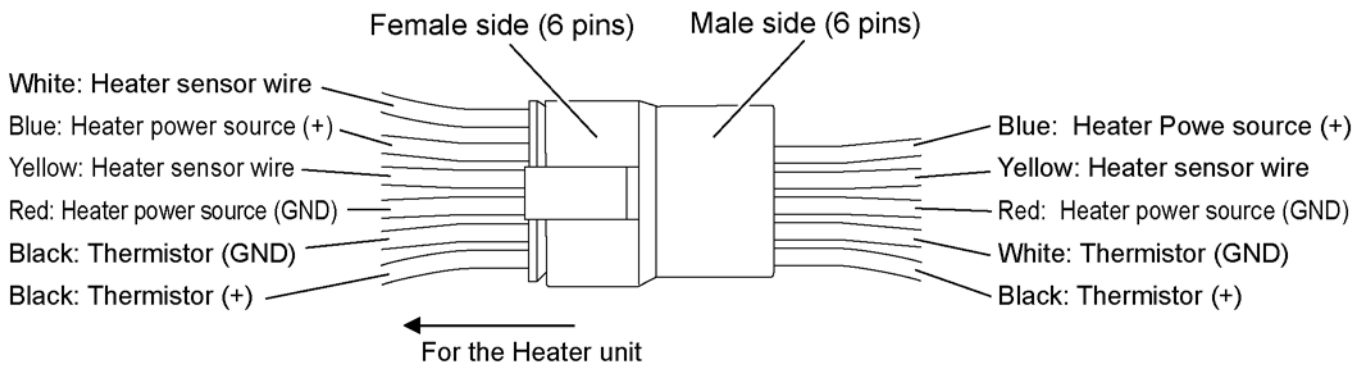
Replace the Heater unit.

Check if there is approx. DC12V between blue-red terminals of the female side Connectors with the Heater connectors connected.
(Heater is On when the output voltage is measured. Approx. DC3.2V is measured with the Power source BOX on.)

NO

Replace the Sub PCB.

* Details of Connectors in the Unit with Foot heater.



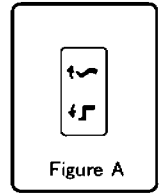
《Checking procedure》

《Checking remedy》

《Remedy》

Ottoman lift does not operate. (Controller flashes.)
* Display of the F34 error

When the Ottoman/Reclining lift units and the Under microcomputer feels the abnormality by the extra load, the Controller flashes, and the Reclining and the Ottoman move in the opposite directions of the original movements and they stop for about three second. In this case, the protection against the extra load of the Under microcomputer functions, therefore you should re-set it before the re-start.



Check the connection of the Connector.

Check if the Sub PCB CN11 (white) is fully inserted.

NO

Re-insert the Connector.

OK

Check the Sub PCB.

Check if there is about DC110V in the CN11(white)(1)-(3) in the Sub PCB with the Connector removed while the Ottoman button (Figure A) is kept pushed.

NO

Replace the Sub PCB.

OK

Check the Ottoman lift unit.

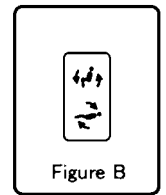
Check if there is about 30Ω in the Ottoman lift unit CN11(white)(1)-(3). And check if there is about 5V in the Ottoman lift sensor CN13(4)-GND, 0C in (5)-GND, and 0V in (6)-GND.

NO

Replace the Ottoman lift unit.

Reclining does not operate. (Controller flashes.)
* Display of the F35 error

When the Ottoman/Reclining lift units and the Under microcomputer feels the abnormality by the extra load, the Controller flashes, and the Reclining and the Ottoman move in the opposite directions of the original movements and they stop for about three second. In this case, the protection against the extra load of the Under microcomputer functions, therefore you should re-set it before the re-start.



Check the connection of the Connector.

Check if the Sub PCB CN10(blue) is fully inserted.

NO

Re-insert the Connector.

OK

Check the Sub PCB.

Check if there is about DC110V in the CN10(blue)(1)-(2) in the Sub PCB with the Connector removed while the Reclining button (Figure B) is kept pushed.

NO

Replace the Sub PCB.

OK

Check the Lift unit.

Check if there is about 30Ω in the Lift unit motor CN10(blue)(1)-(2). And check if there is about 5V in the Reclining sensor CN12(4)-GND and 0C in (5)-GND.

NO

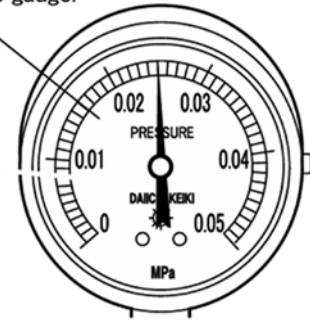
Replace the Lift unit.

6.2. Checking the Pressure of the Air bags

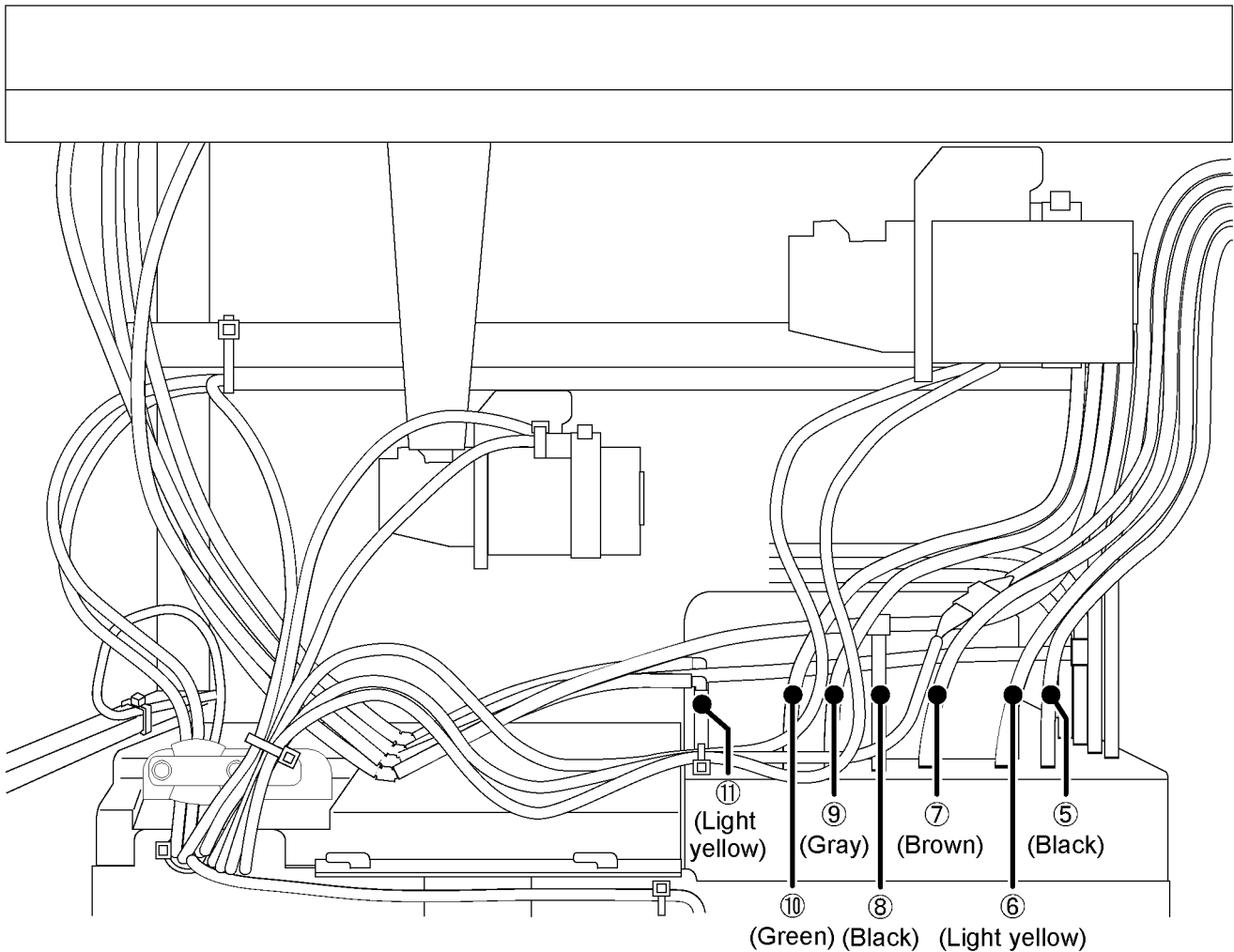
You can find the pressure leakage of the Air bags by this checking.
Remove the Under cover and the Side cover.

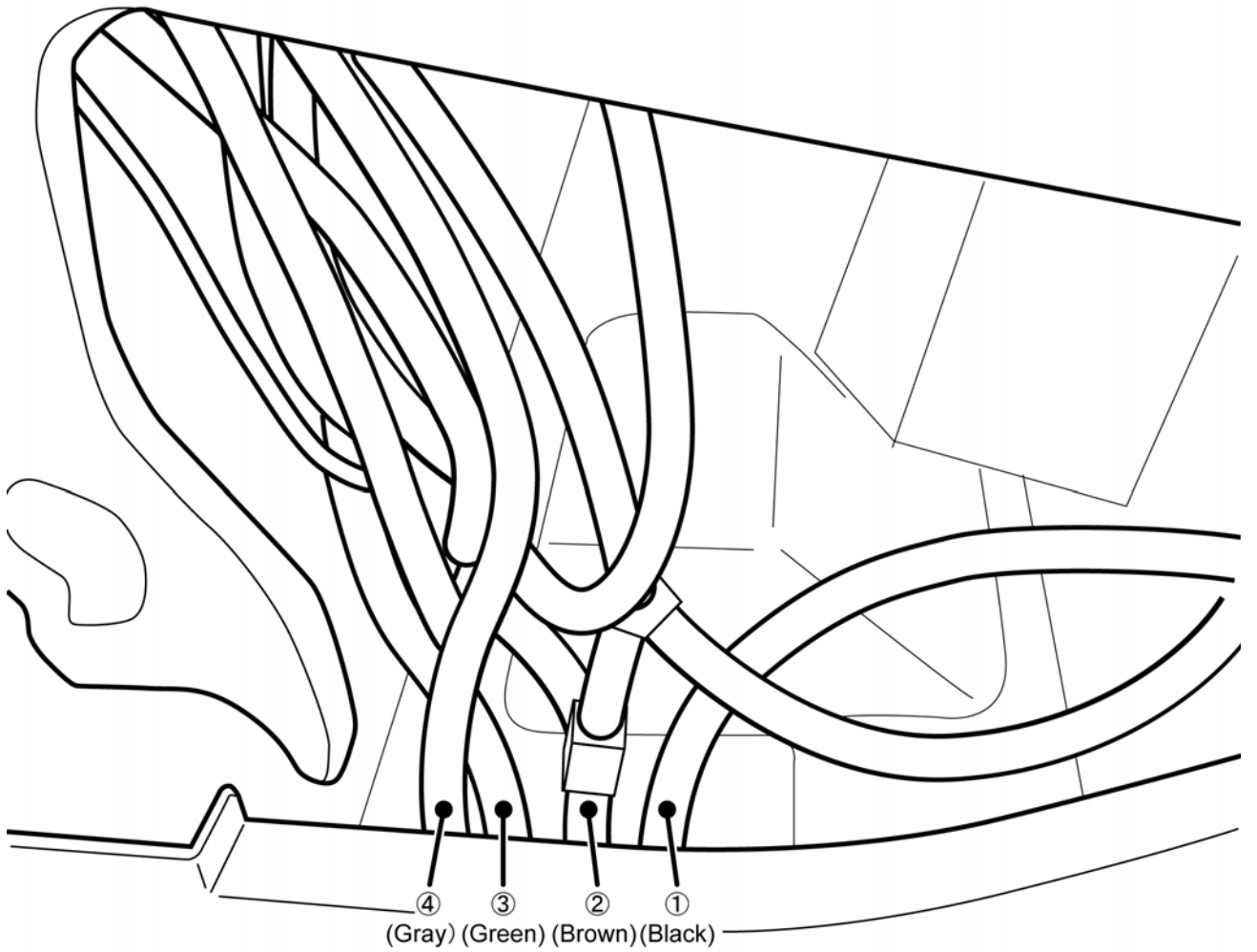
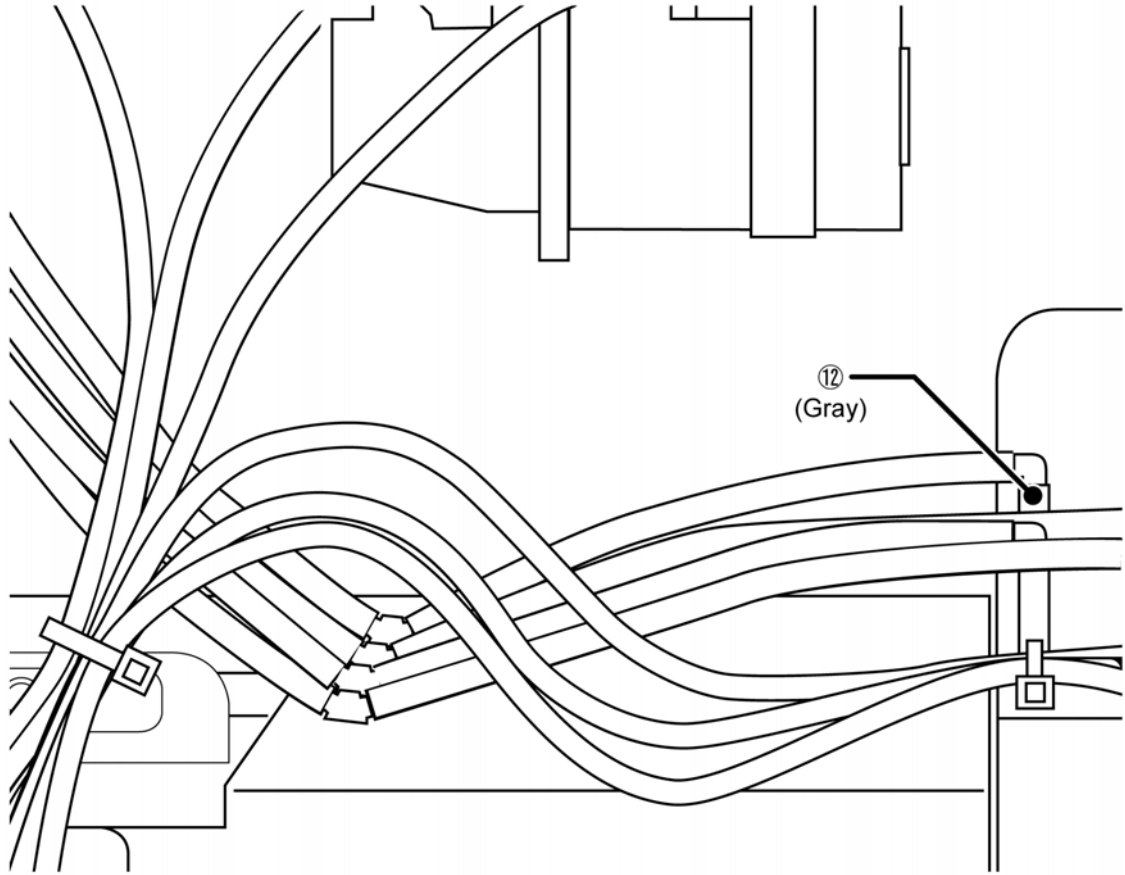
Connect the Air pressure gauge (WEP000S8908) and the Hose (WEP000K8917) to the Hose from the Under box, which you want to check the air pressure.

Air pressure gauge.



1. Push the Off/On button on the Controller and push the buttons of the operations (shoulder, hand/arm, lower back, and leg/foot) that you check.
2. Push the AIR INTENSITY button on the Controller, and check the air pressure. If the values are within the tolerance, there is nothing wrong with Air bags, Pump, and Air hoses. If not, the following reasons are assumed:
 - Hoses between Air bags and Pump are bent and loose.
 - Operation failure of each Electromagnetic valves
 - Operation failure of Pump and decrease of the output voltage of the Sub PCB
 - Rupture of each Air bags





* Pressure levels are as follows;

(50Hz)

Areas	Air bags	Pressure intensity patterns	Strong 1	Strong 2	Strong 3	Hose No.	Hose color
Leg	Foot inside	2nd	16.6±6	27.4±7	28.5±7	(6)	Light yellow
	Foot outside	2nd	16.1±6	26.9±7	28.9±7	(4)	Gray
	Leg top	2nd	16.3±6	26.9±7	28.4±7	(7)	Brown
	Leg back	2nd	16.0±6	26.8±7	28.2±7	(5)	Black
Hand/Arm	Hand/Arm left	2nd	18.3±6	29.8±7	31.2±7	(3)	Green
	Hand/Arm right	2nd	18.3±6	29.8±7	30.8±7	(12)	Gray
	Hand	2nd	18.3±6	29.3±7	30.8±7	(8)	Black
Seat/Hip	Seat front	2nd	19.7±6	31.7±7	32.2±7	(10)	Green
	Seat left	3rd	6.0±5	11.6±6	13.9±6	(9)	Gray
	Seat right	3rd	6.0±5	11.6±6	13.9±6	(11)	Light yellow
	Seat side & Hip	4th	18.4±6	29.1±7	29.7±7	(2)	Brown
Shoulder	Shoulder side	1st	12.7±6	24.4±7	28.8±7	(1)	Black

(60Hz)

Areas	Air bags	Pressure intensity patterns	Strong 1	Strong 2	Strong 3	Hose No.	Hose color
Leg	Foot inside	2nd	17.6±6	30.7±7	33.0±7	(6)	Light yellow
	Foot outside	2nd	16.7±6	29.9±7	33.1±7	(4)	Gray
	Leg top	2nd	17.6±6	31.0±7	33.3±7	(7)	Brown
	Leg back	2nd	16.7±6	29.3±7	30.8±7	(5)	Black
Hand/Arm	Hand/Arm left	2nd	21.3±6	34.6±7	36.2±7	(3)	Green
	Hand/Arm right	2nd	21.1±6	34.2±7	35.7±7	(12)	Gray
	Hand	2nd	21.1±6	33.9±7	35.6±7	(8)	Black
Seat/Hip	Seat front	2nd	24.1±6	35.9±7	36.5±7	(10)	Green
	Seat left	3rd	4.6±2	11.3±5	13.6±5	(9)	Gray
	Seat right	3rd	4.6±2	11.3±5	13.6±5	(11)	Light yellow
	Seat side & Hip	4th	21.2±6	33.6±7	34.3±7	(2)	Brown
Shoulder	Shoulder side	1st	10.6±6	26.2±7	32.9±7	(1)	Black

* Note: Hose are subject to change without notice.

- Air supply list by Switch mode (MANUAL)

Areas	Air bags	Switch mode (MANUAL)			
		Shoulder	Hand/Arm	Hip	Leg
Shoulder	Shoulder side right/left	○ Right/left are pressed at the same time)	×	×	×
Hand/Arm	Hand/Arm left	×	○ (*1)	×	×
	Hand/Arm right	×	○ (*1)	×	×
	Hand	×	○ (*2)	×	×
Seat/Hip	Seat front	×	×	○	×
	Seat left	×	×	○	×
	Seat right	×	×	○	×
	Seat side & Hip	×	×	○	×
Leg	Foot inside/Leg bottom inside	×	×	×	○
	Foot outside/Leg bottom outside	×	×	×	○
	Leg top/Foot sole	×	×	×	○
	Leg back	×	×	×	○

○ : means that air is supplied to Air bags.

× : means that air is not supplied to Air bags.

*1 : Air is supplied to each right/left Air bags one by one, therefore both do not swell at the same time.

*2 : Air is supplied to right/left Air bags at the same time.

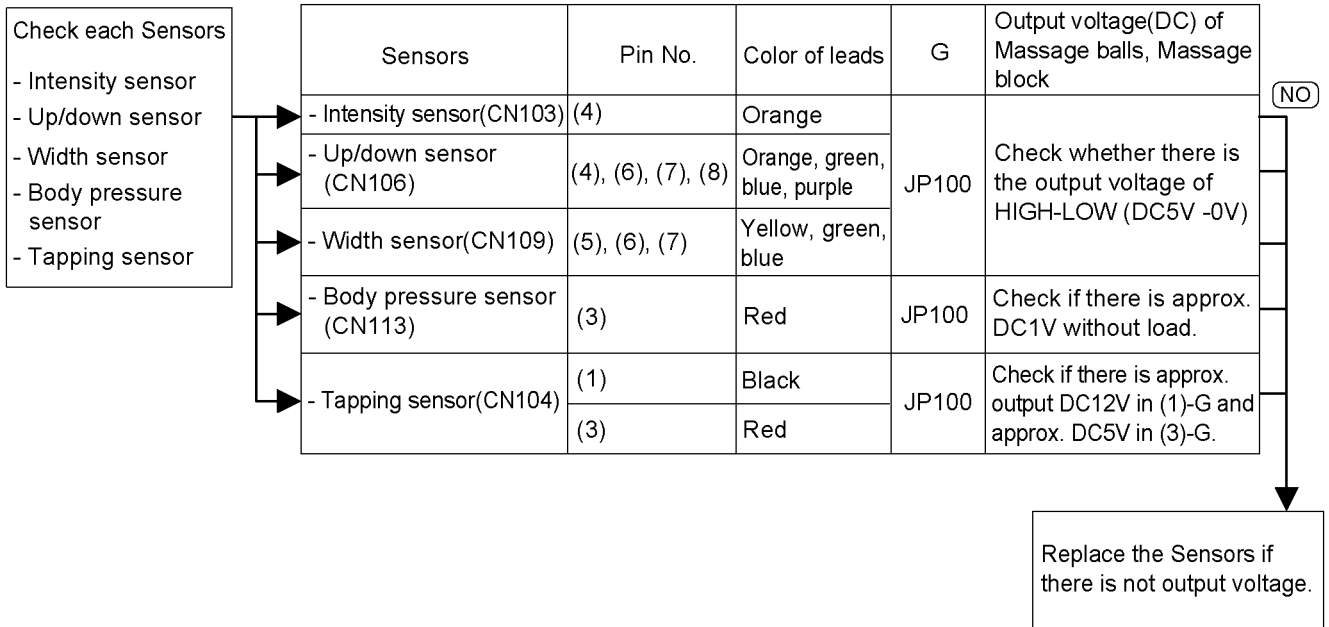
6.3. Checking the Sensors

Procedures

1. Push the Off/On button on the Controller.
2. Check following Connectors (pin No.) and check whether there is the output voltage of HIGH-LOW (DS5V - 0V) when moving each Sensor boards.

Sensors	Connector No.	Pin No.	Color of leads	G	Output voltage	Output voltage
Up/down sensor	CN106(White)	(4),(5),(6),(7),(8),(9)	Orange, yellow, green, blue, purple, white	C106(-)	Check whether there is the output voltage of HIGH-LOW (DC5V -0V)	Replace the Sensors if there is no output voltage.
Intensity snesor	CN103(Blue)	(4),(5),(6),(7)	Orange, yellow, green, blue	C106(-)		
Width sensor	CN109(White)	(4),(5),(6),(7)	Orange, yellow, green, blue	C106(-)		
Up/down motor speed sensor	CN10(Black)	(4)	Orange	C106(-)		
Width motor speed sensor	CN30(Yellow)	(4)	Orange	C106(-)		
Tapping rotation sensor	CN104(White)	(4)	Orange	C106(-)		
Body pressure sensor	CN113(White)	(3)	Red	C106(-)	Check if there is approx. DC1V without load.	
Up/down motor rotation sensor	CN12(White)	(3),(4),(5)	Red, orange, yellow	C106(-)	Check whether there is the output voltage of HIGH-LOW (DC5V -0V)	
Intensity motor rotation sensor	CN41(Blue)	(3),(4),(5)	Red, orange, yellow	C106(-)		
Width motor rotation sensor	CN1(White)	(3),(4),(5)	Red, orange, yellow	C106(-)		

Check with Soft tapping, widest, stronget or weakest, and Massage block lowest.



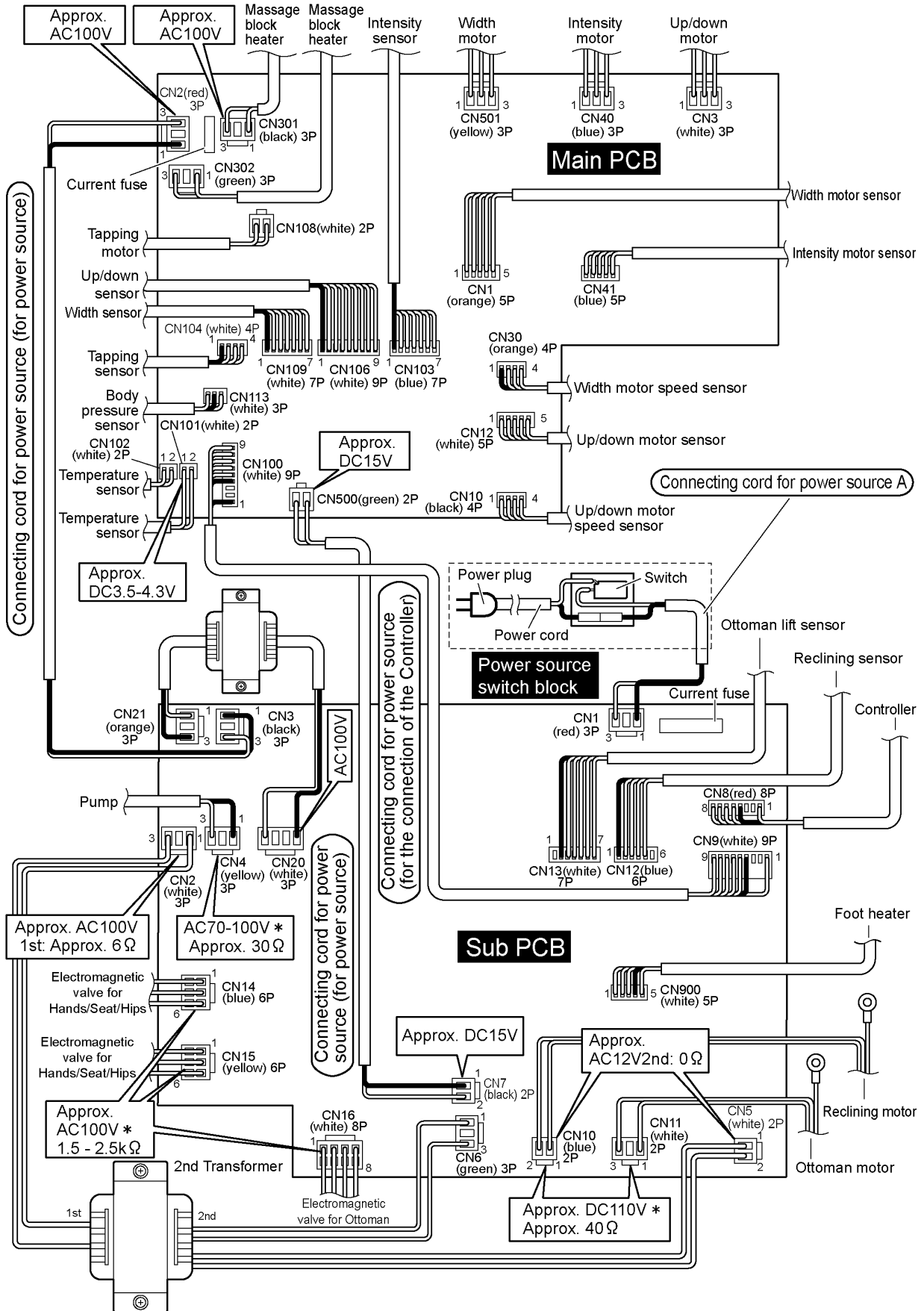
6.4. Wiring diagram of Main PCB and Sub PCB

The following values are in the standby conditions with the Off/On switch on the Controller pushed.

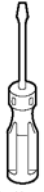
Values with * are when each operations are executed.

(Output voltages are approximate.)

Remove Connectors to check the resistance of the parts.



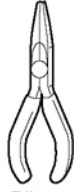
7 Service Fixture & Tools



Slotted screwdriver



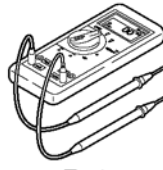
Phillips screwdriver



Pliers



Cutter



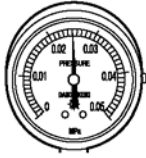
Tester



13mm box driver
(for Up/down shaft)



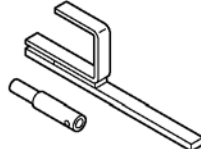
10mm box driver
(for Massage mechanism block)



Air pressure gauge
(WEP000S8908)



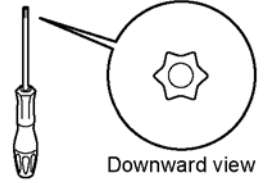
Spanner
(for Rear frame)



Massage mechanism
block loading tool
(WEP000S8967)



Torque wrench
(for Up/down bolt)



Torx screwdriver T10
(for Power source switch box)



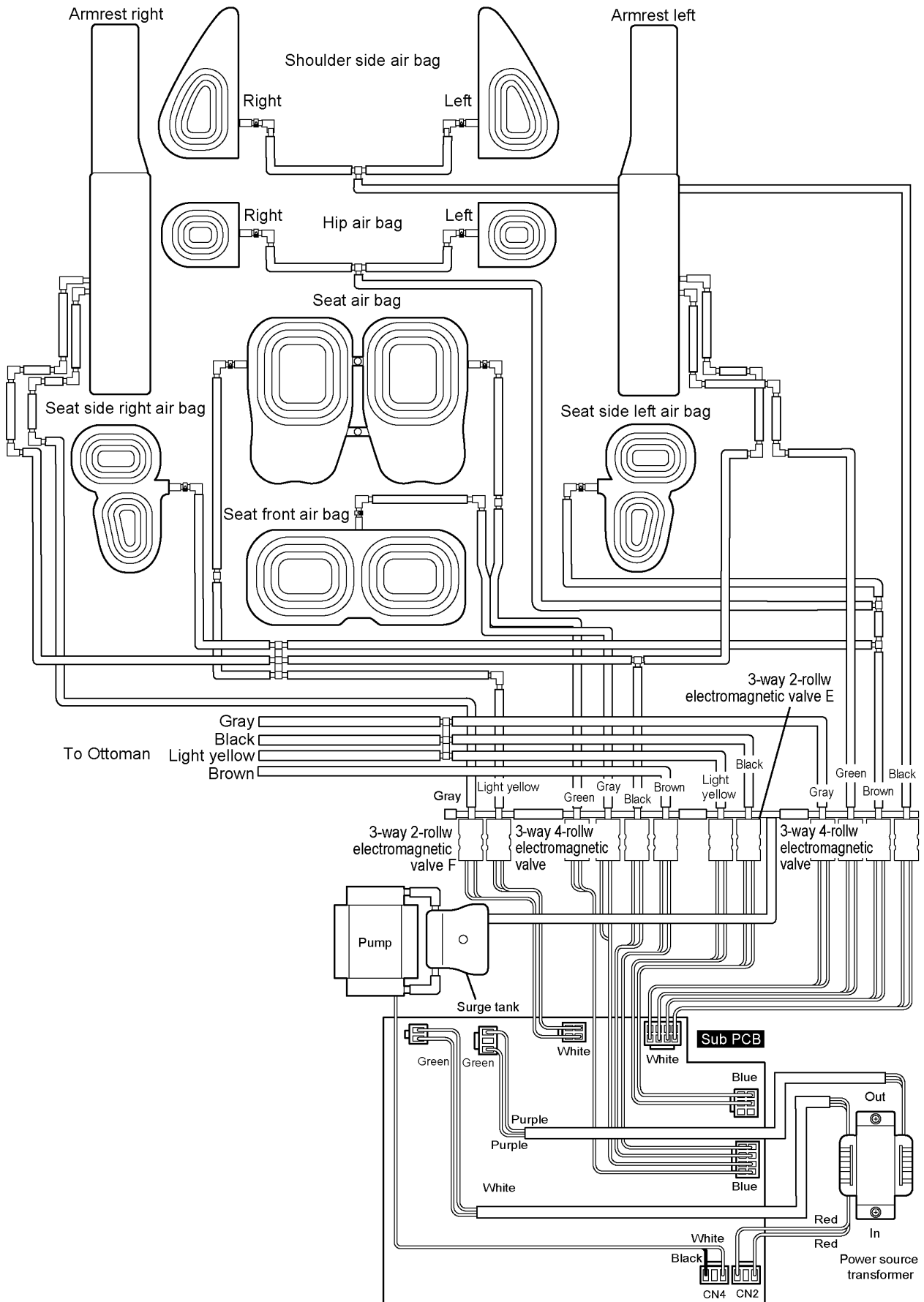
5mm Allen wrench
(for Leg pipe disassembly)



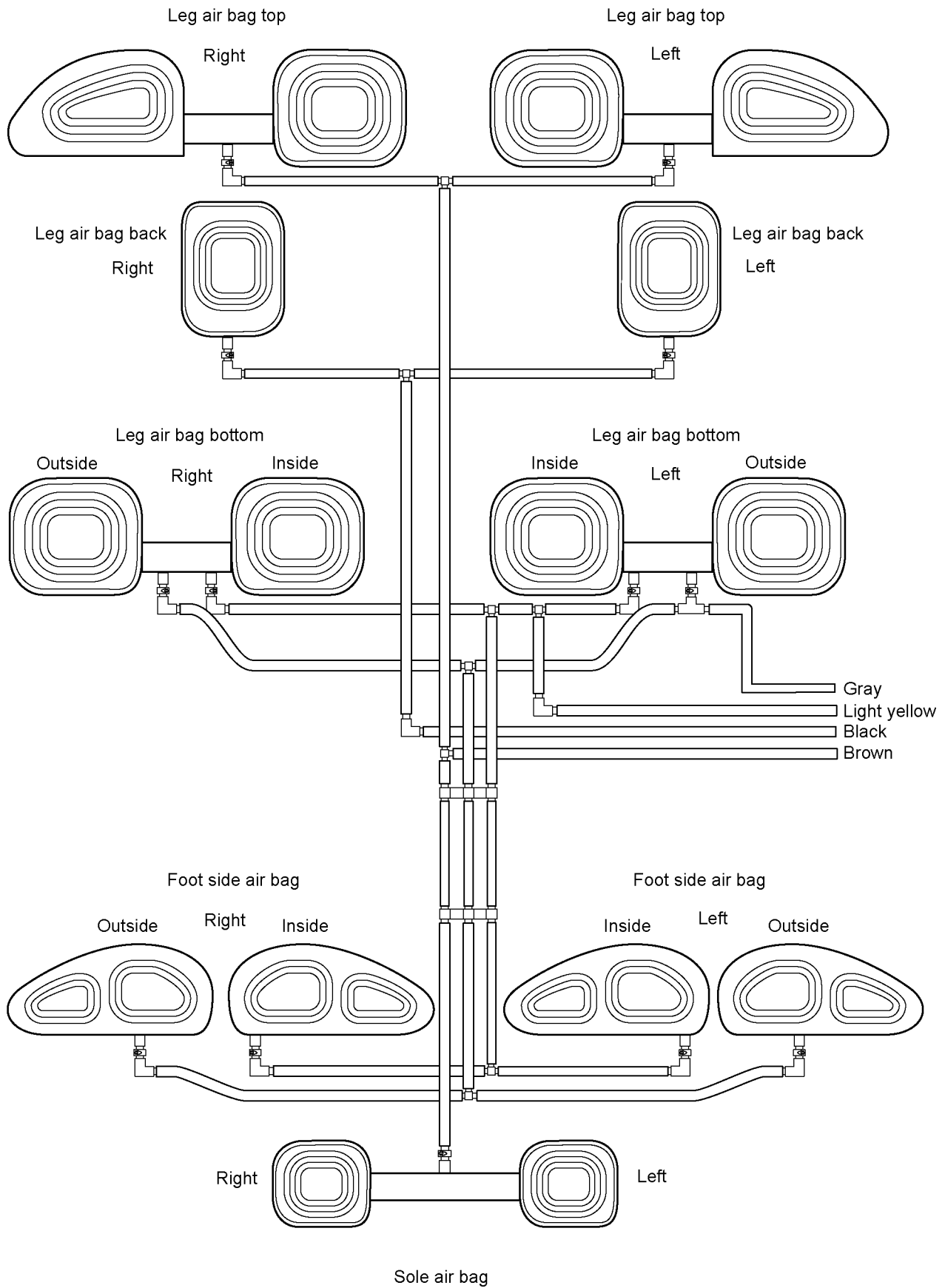
4mm Allen wrench
(for Controller stand, Armrest)

8 AIR

8.1. Air tube allocation (Main body)

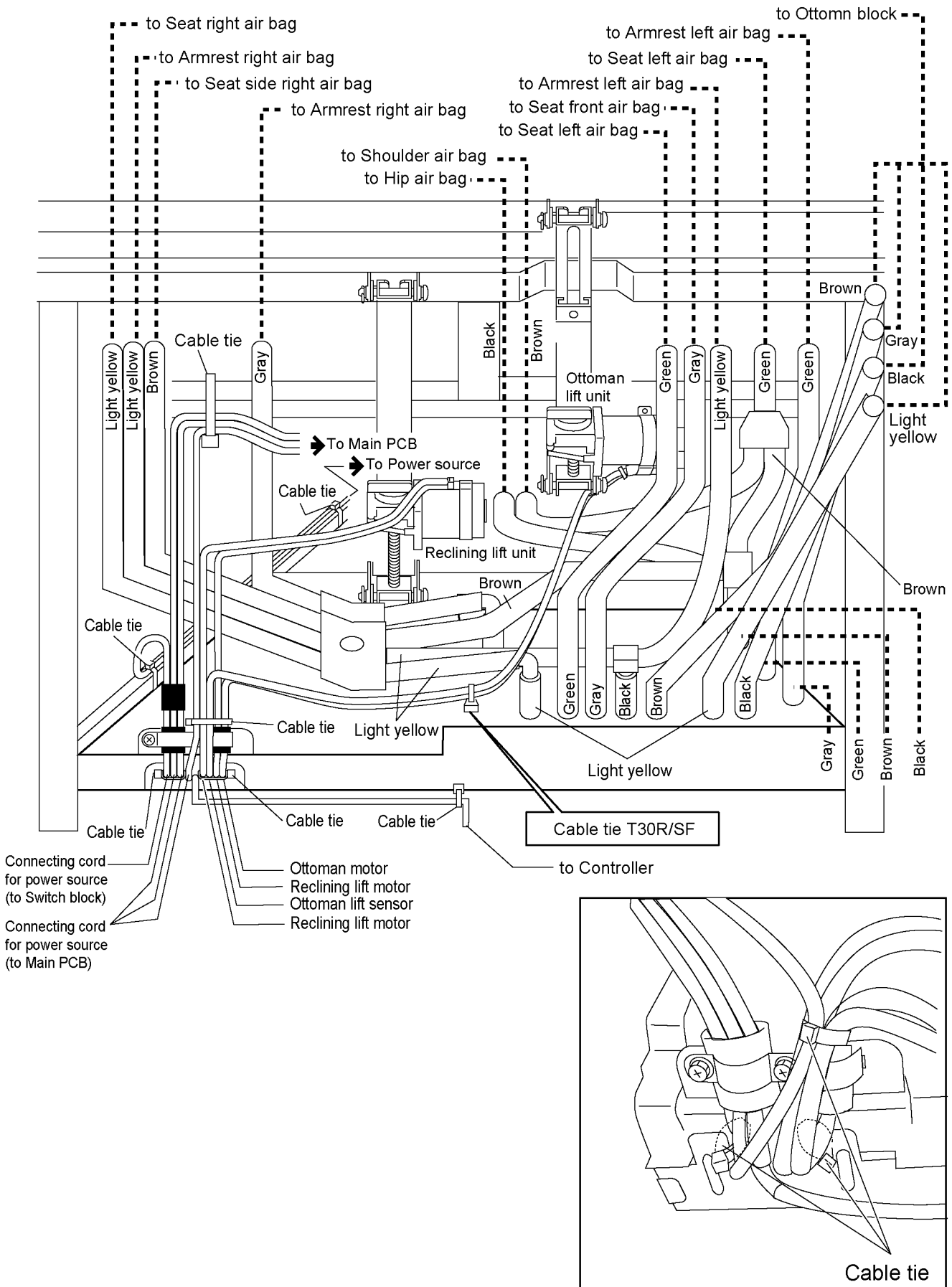


8.2. Air tube allocation (Ottoman)

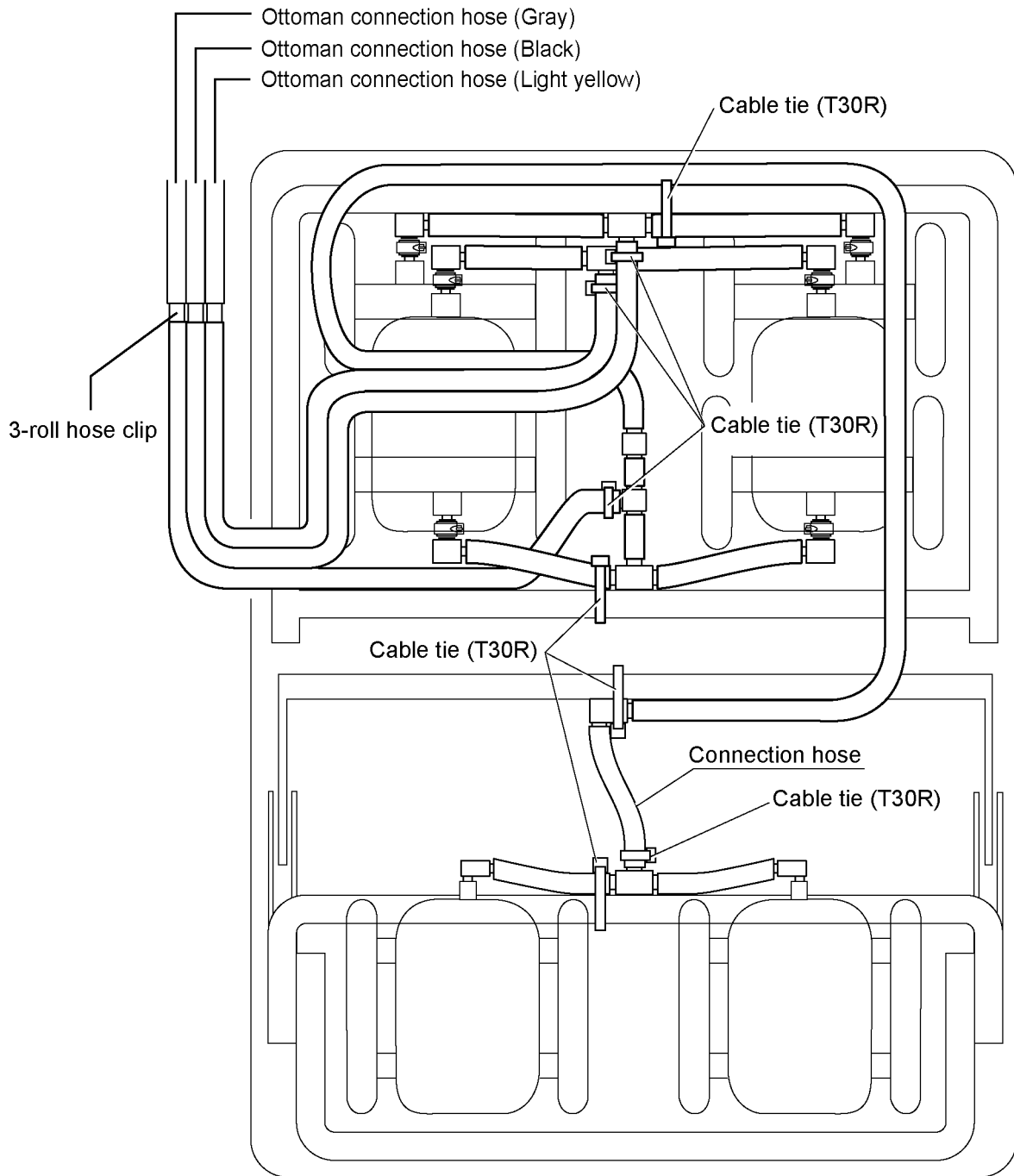


8.3. Air tubes and Wiring (Connecting cord for power source - Sub PCB, Power source switch box)

Front view



8.4. Ottoman hose allocation



* Rear view of Ottoman

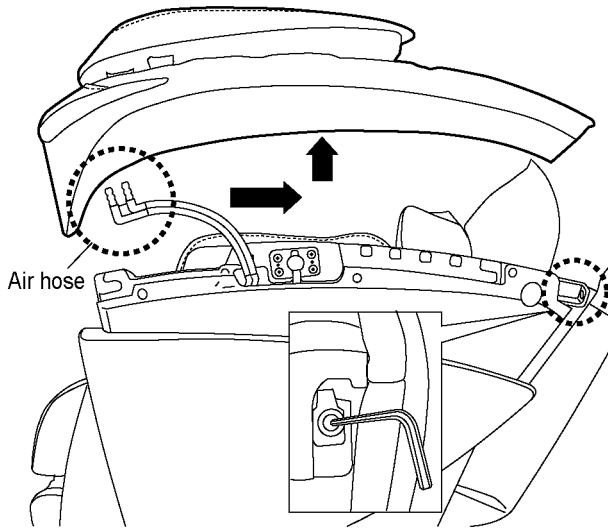
9 Disassembly and Assembly Instructions

Caution in Disassembly/Assembly

- Be careful not to cut the cloth, Hoses, or Lead wires when cutting cable ties.
- Bind the cable ties on the white tapes on the Lead wires.

9.1. Removing the Armrests

1. Remove Air hoses (two each on right/left sides).
2. Remove a screw each on right/left sides of the back of the Armrests.
3. Slide the Armrest backward (→) and lift it upward (↑) to remove it.

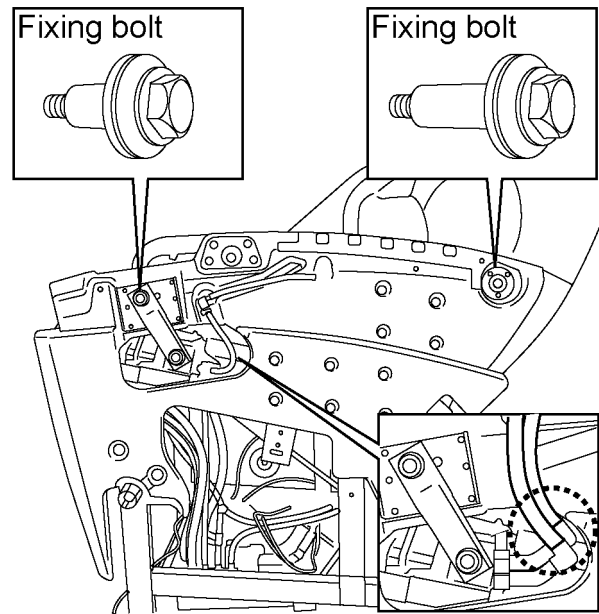


9.3. Removing the Elbow bases

1. Remove the Armrest.
2. Remove the Side cover.
3. Remove two bolts each on right/left sides of the Elbow bases and two Belts on right/left sides, and remove the Elbow base.

Caution

- When installing the Elbow base, be sure to install the shorter bolt on the front and the longer bolt on the back.

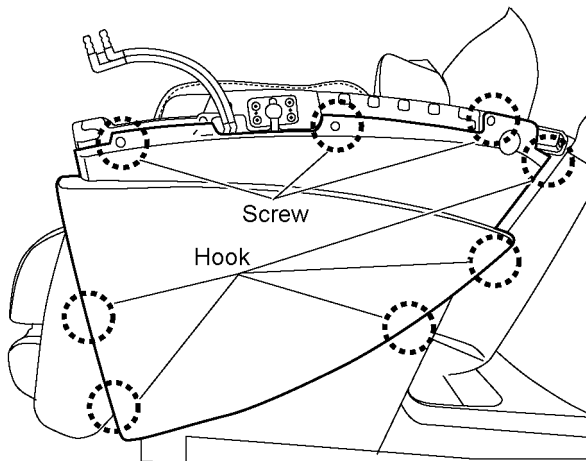


9.2. Removing the Side covers

1. Remove the Armrests.
2. Remove three screws each on right/left sides and five hooks each on right/left sides.

Caution

- The work would be easy if you insert the hook in the front of the Side cover (two each on right/left) first.

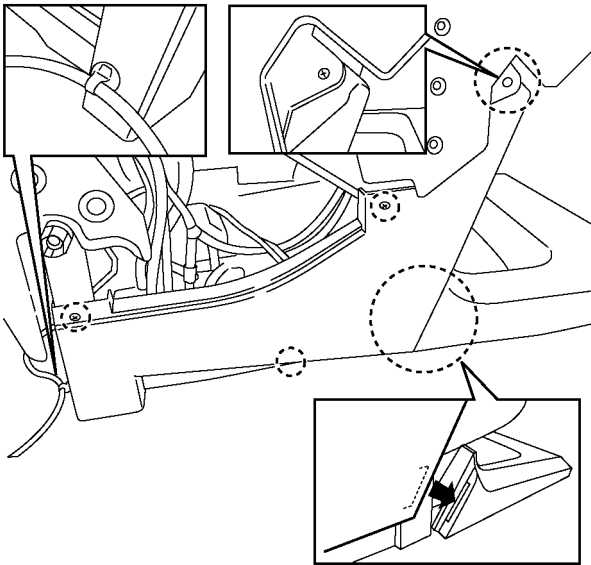


9.4. Removing the Leg covers (right/left)

1. Remove the Armrest.
2. Remove the Side cover.
3. Remove three screws each on right/left sides installing the Leg cover and the Frame, and one screw each on right/left installing the Inside cover and the Frame.

Caution

- When tightening screws installing the Leg cover and then Inside cover, be sure to have the Leg cover inside and the Inside cover outside.
- When installing the Leg cover, fit the Leg cover into the Frame and slide it backward so that hooks fit together.

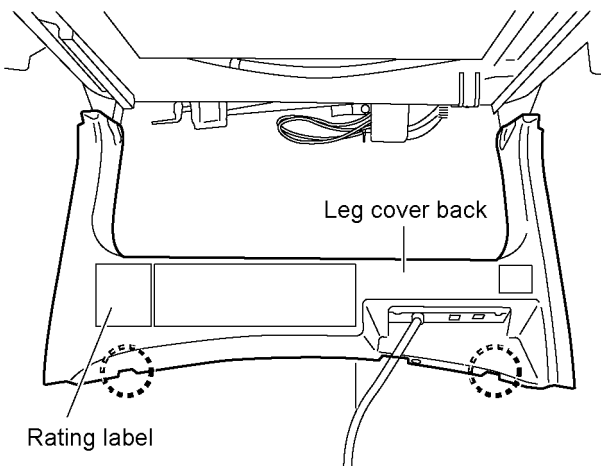


9.5. Removing the Leg cover back

1. Remove two screws fixing the Leg cover.

Caution

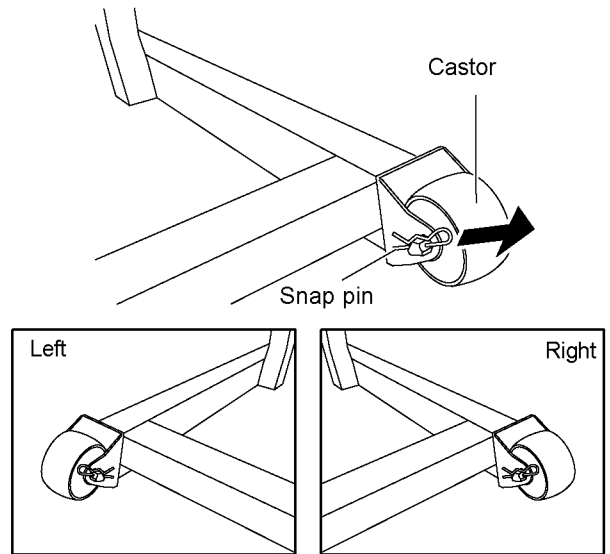
- Install the Leg cover back first before installing the Leg cover right/left.



2. Pull off a pin and a snap pin each on right/left sides fixing the Castor, and remove the Castor.

Caution

- Be careful of the directions of the snap pin when installing it.

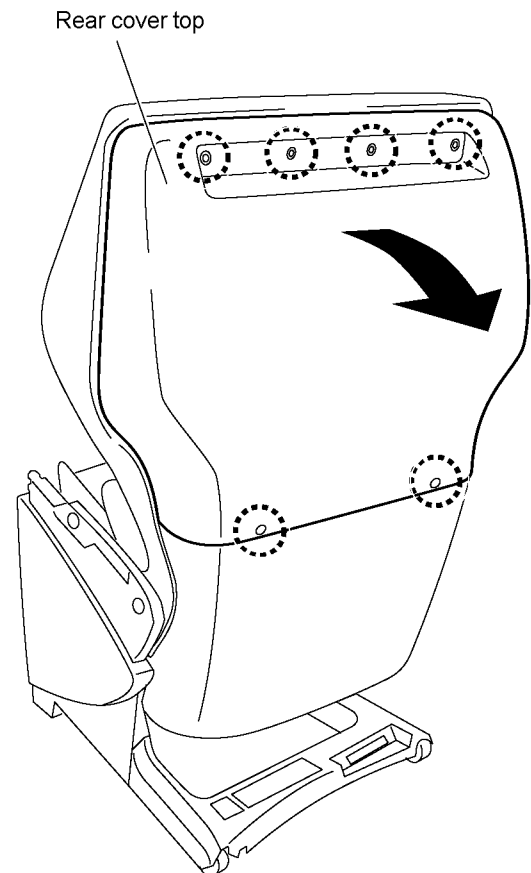


9.6. Removing the Rear cover

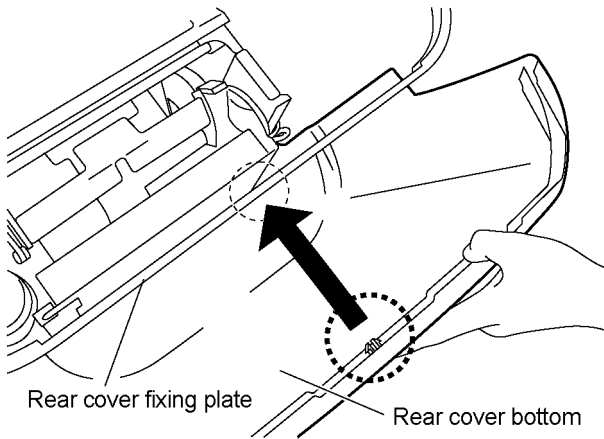
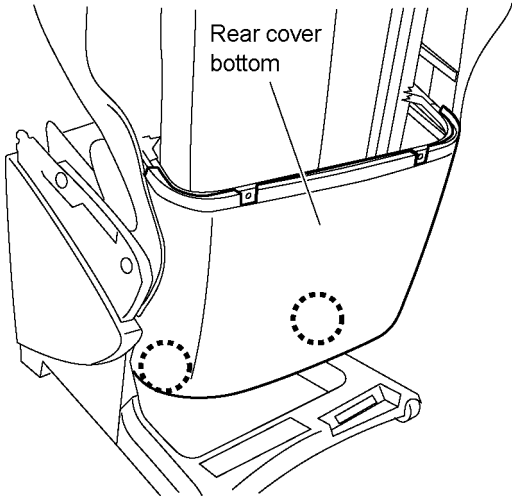
1. Remove four screws on the Rear cover top and two screws on the Rear cover bottom, and pull out the Rear cover top.

Caution

- Remove the bottom screws first when removing screws.

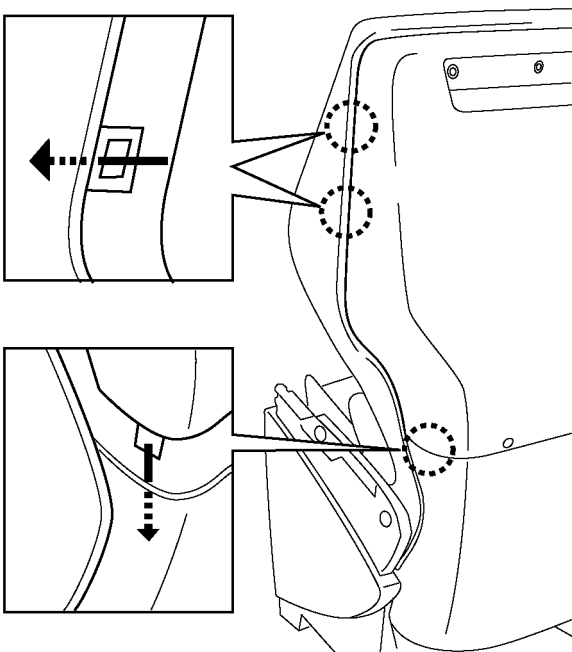


- Remove two Pushturn rivets on the Rear cover bottom, and pull out the Rear cover bottom being careful of the hooks.



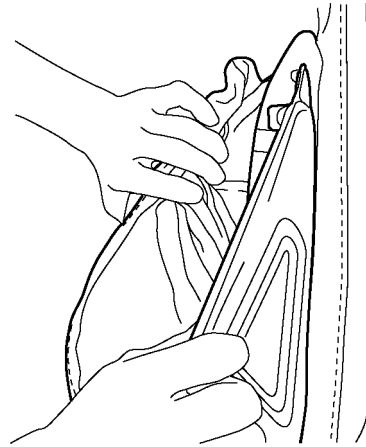
Caution

- When assembling, move the Massage mechanism block to the highest position. And be sure to have the hooks inside when installing the Rear covers.

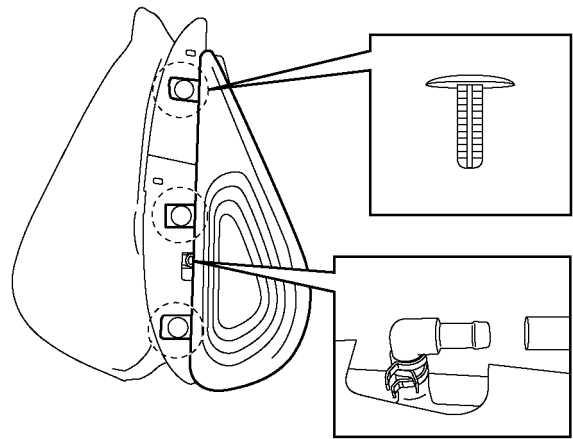


9.7. Removing the Shoulder side air bags

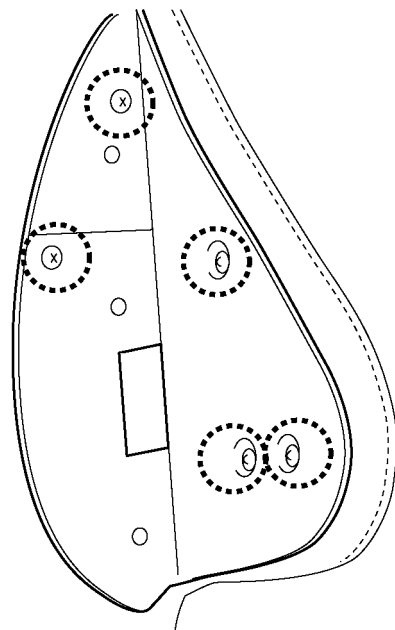
- Flip over the Shoulder side cloth and remove the Shoulder side air bag.



- Remove three Brushclips each on right/left sides and one Hose each on right/left sides, and remove the Shoulder air bag.

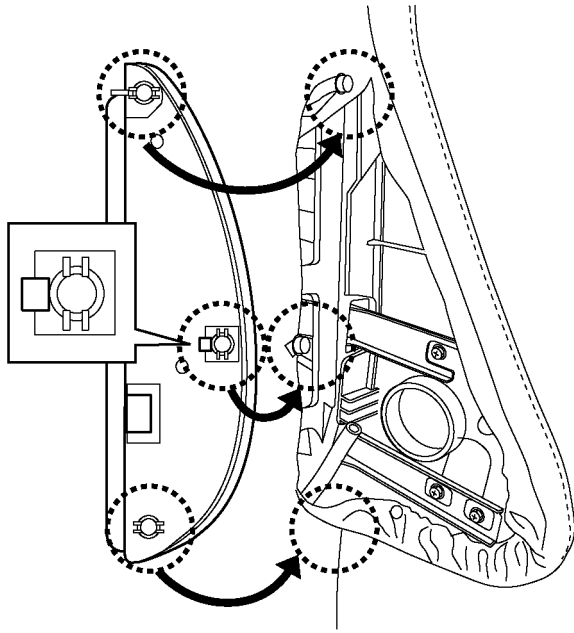


- Remove five screws each on right/left sides of the Side cover inside.

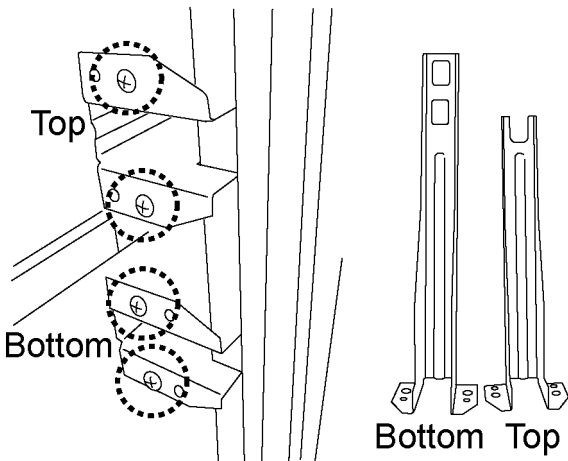


Caution

- Be careful of three hooks each on right/left sides of inner side of the Side cover inside when installing.



- When removing the Shoulder side plate, remove four screws each on right/left sides on the back side of the Rear frame and remove the Shoulder side plate.



9.8. Removing the Seat side unit

1. Remove the Armrest.
2. Remove the Side cover.
3. Remove the Elbow base.
4. Remove seven screws fixing the Inside cover and the Inside cover fitting.

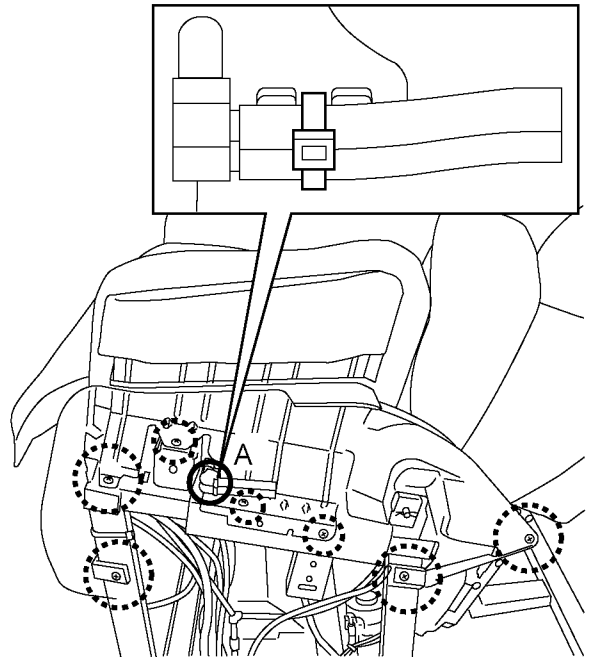
Caution

- When you installing the Seat side unit, the work would be easier if you tighten seven screws halway first and tighten them fully.

5. Cut Cable ties and remove two Hoses each of right/left sides.

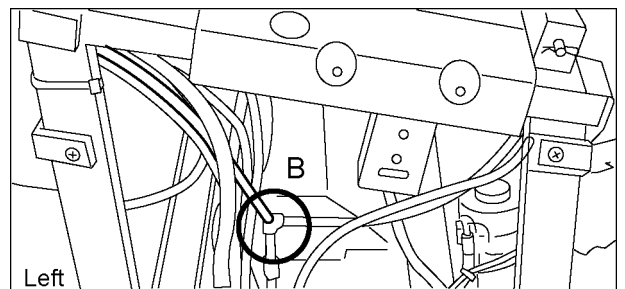
Caution

- When assembling, pass the Hose through the hole of A.



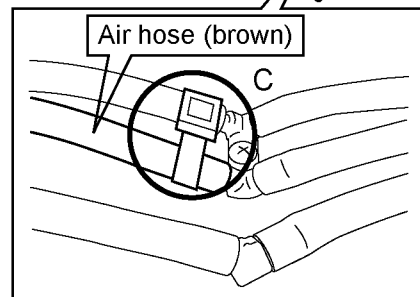
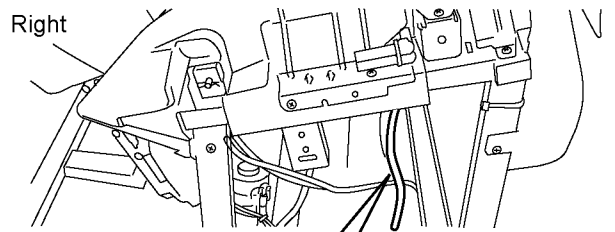
9.8.1. Removing the Seat side unit left

1. Proceed the procedures of Removing the Seat side unit.
2. In the position of B, remove the green Hose and remove the Seat side unit.



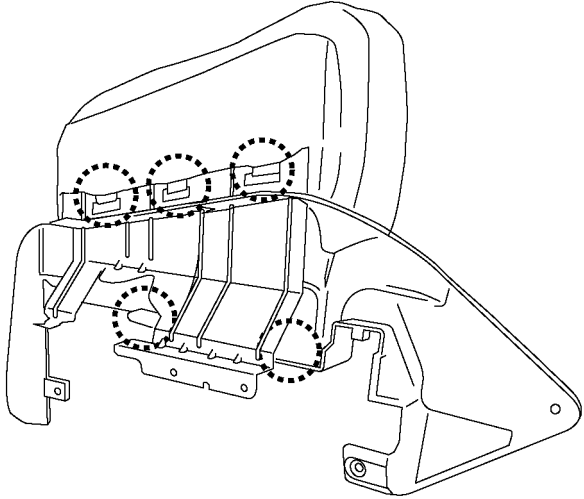
9.8.2. Removing the Seat side unit right

1. Proceed the procedures of Removing the Seat side unit.
2. In the position of C, cut the Cable tie and remove the brown Hose and remove the Seat side unit.



9.9. Removing the Seat side air unit

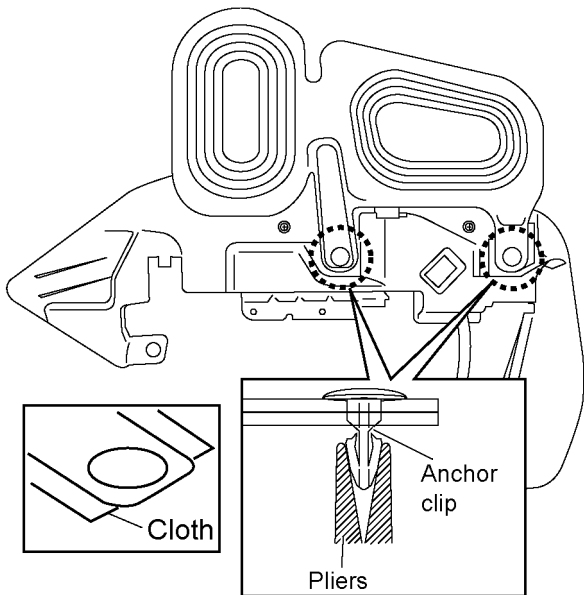
1. Remove the Armrest.
2. Remove the Side cover.
3. Remove the Elbow base.
4. Remove the Seat side unit.
5. Remove five J-shaped hooks each on right/left sides.



6. Turn over the Seat side unit and remove two anchor clips, and remove the Seat side cloth.

Caution

- When installing anchor clips, pierce Air bags and cloth together.

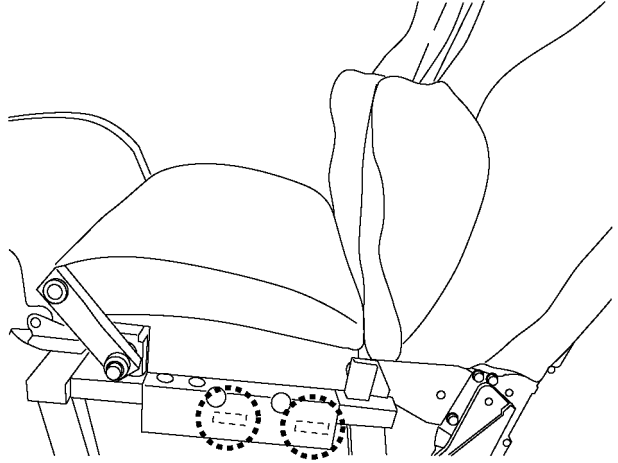


7. Remove the Air bag and the Hose.

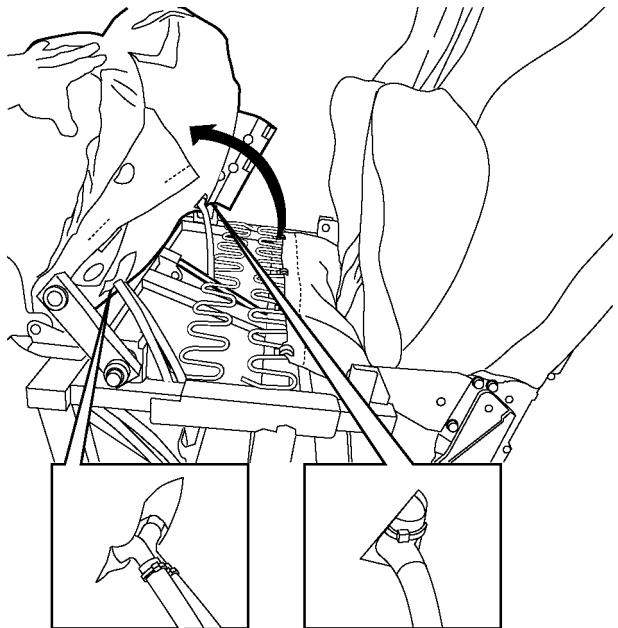
9.10. Removing the Seat

You can also remove the Seat cushion.

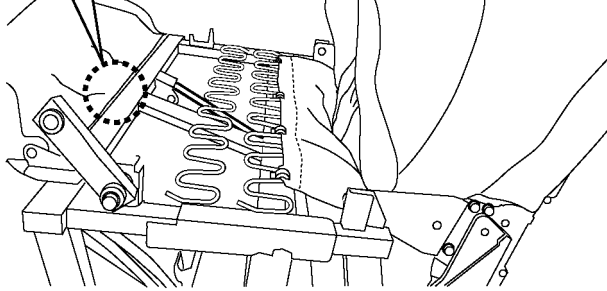
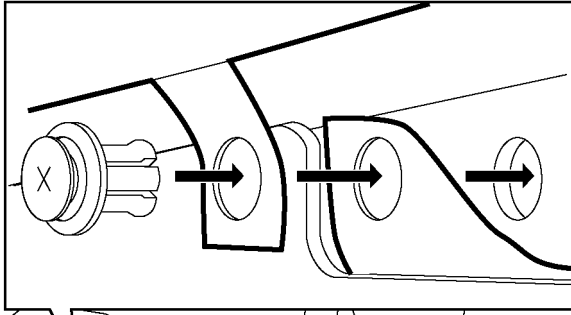
1. Remove the Armrests.
2. Remove the Side covers.
3. Remove the Elbow bases.
4. Remove the Seat side units.
5. Remove two J-hooks each on right/left sides.



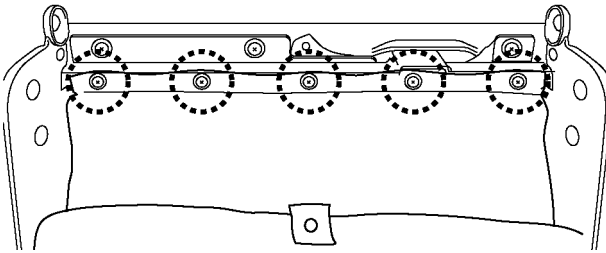
6. Lift the Seat and cut Cable ties, and remove Hoses, two at left one at right.



7. Remove one Push-turn rivet, which installs the Seat.

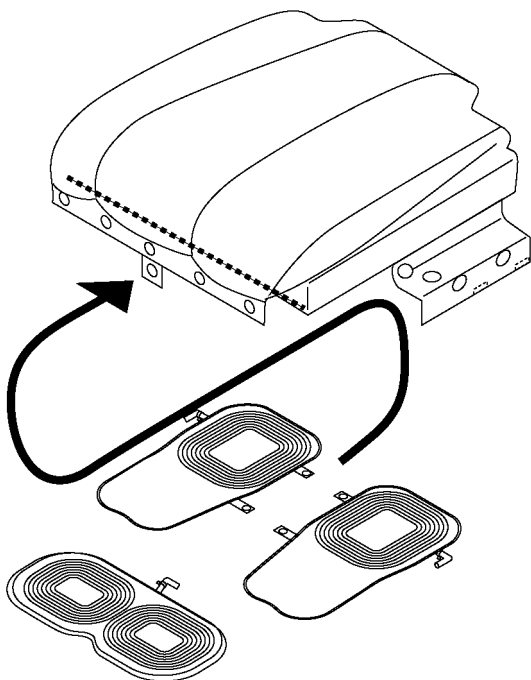


8. Lift the Seat and remove five Push-turn rivets on the Frame, and remove the Seat.



Removing the Seat air bag

9. Open the zippers on the Seat, and remove the Seat air bags.

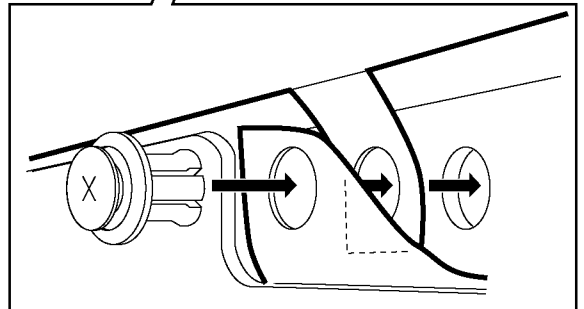
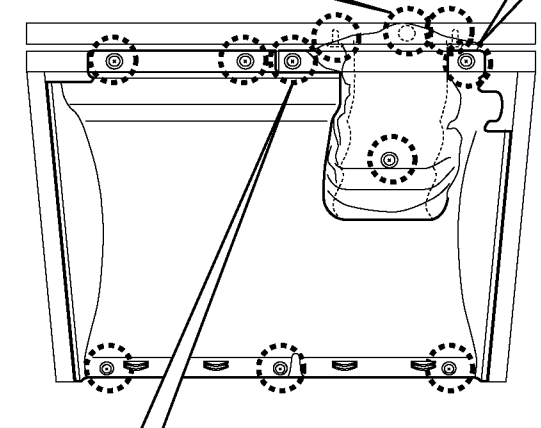
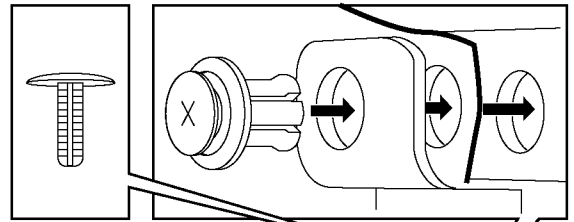


9.11. Removing the Under cover front

1. Remove the Armrest.
2. Remove the Side cover.
3. Remove the Elbow base.
4. Remove the Seat side unit.
5. Remove the Seat.
6. Turn on the switch and lift the Ottoman to the highest point with the Controller.
7. Remove one Brushclip and ten Push-turn rivets, which install the Under cover front.

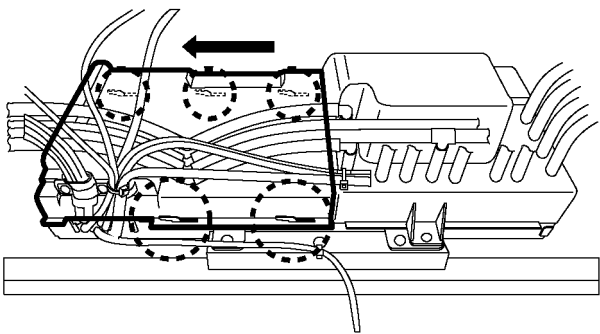
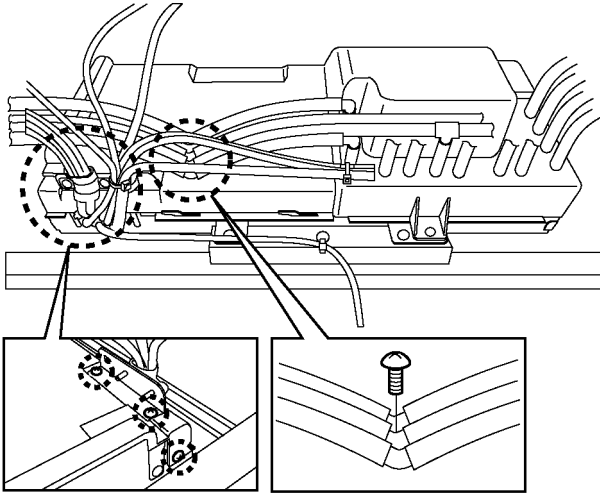
Caution

- Rotate the Ottoman with the Ottoman rotation lever so that the work would be easy when removing Push-turn rivets.

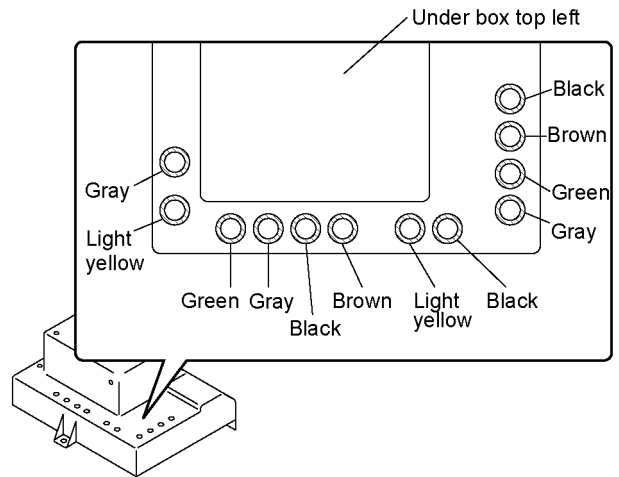


9.12. Removing the Under box

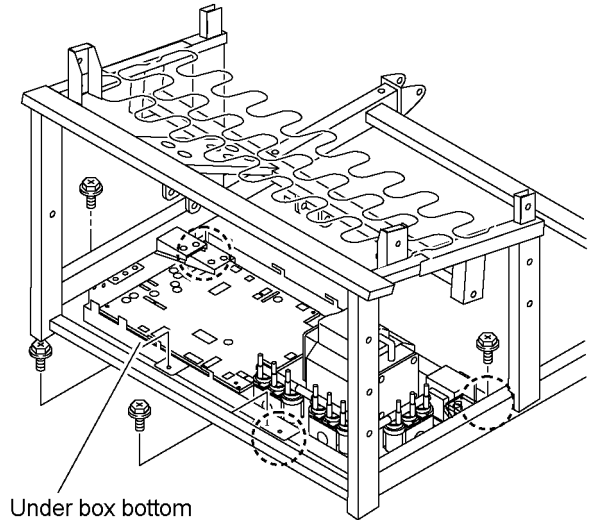
1. Remove the Armrests.
2. Remove the Side cover.
3. Remove the Elbow bases.
4. Remove the Leg covers.
5. Removing the Seat side unit.
6. Remove the Seat.
7. Remove the Under cover front.
8. Remove one screw on the L-shaped 3-row joint on the Under box top left.
9. Remove three screws on the right of the Under box top right, and remove the Under box with attention to five hooks.



- Be careful of the arrangement of the Hoses when installing them.



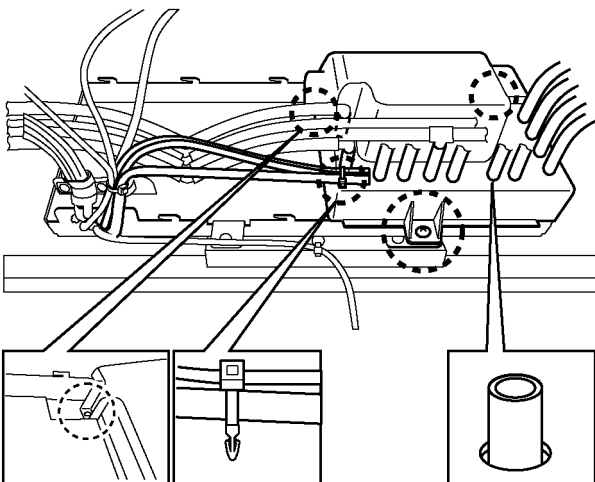
11. Remove three screws on left, and remove the Under box.
12. Remove four Under box bottom fixing screws, and take out the Under box bottom from front.



10. Pull out all the Hoses connected to the Under box top left.

Caution

- Be careful not to bend pipes of the Electromagnetic valve.



9.13. Removing the Rear cover

You can remove the Hip air bags. (Procedure 7 or later)

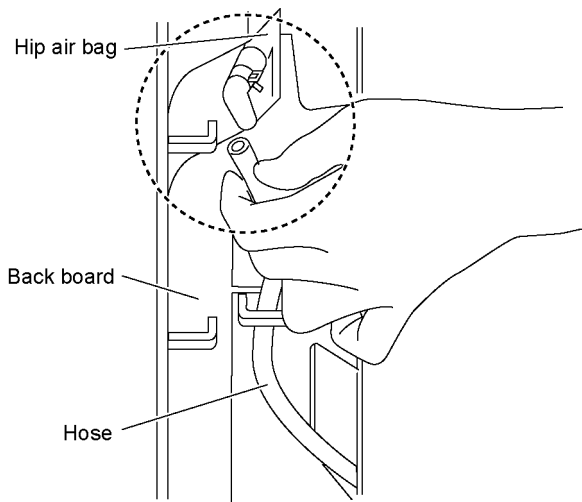
1. Remove the Rear cover.

Caution

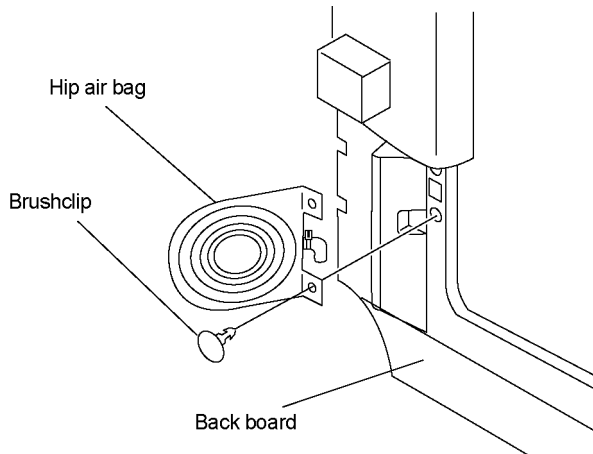
- Work after moving the Massage mechanism block to the lowest position.
2. Remove the Armrests.
 3. Remove the Side cover.
 4. Remove the Elbow bases.
 5. Remove the Seat side units.
 6. Remove the Seat. (Procedures 1-4)

Removing the Hip air bag

7. Fasten one clamp each on right/left sides with pliers on one Hose each on right/left sides of the Hip air bags.



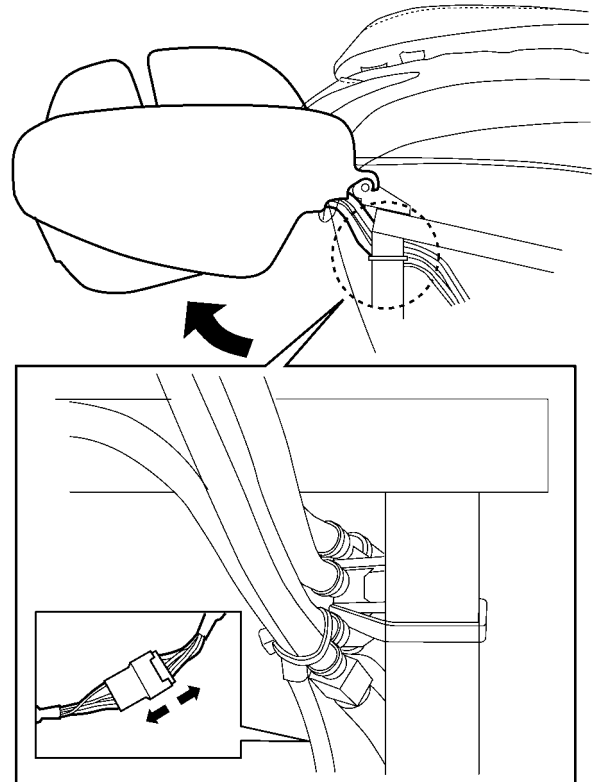
8. Remove two Brushclips each on right/left sides, and remove the Hip air bag.



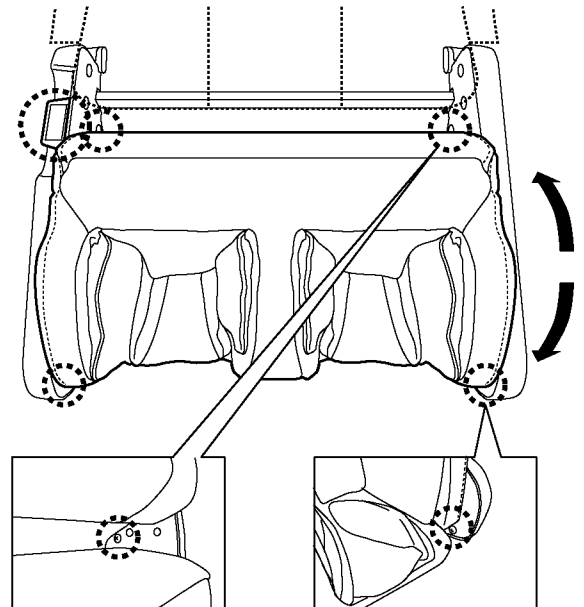
9.14. Removing the Ottoman

1. Remove the Armrests.
2. Remove the Side covers.
3. Remove the Elbow bases.
4. Remove the Seat side units.
5. Remove the Seat.
6. Remove the Under cover front.

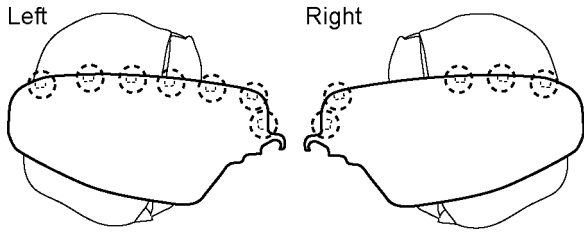
7. Lift the Ottoman, and remove four Hoses and one Connector, which are connected to the Ottoman.



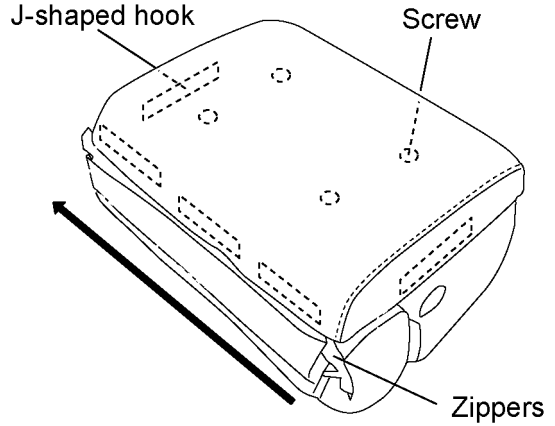
8. Pull the Ottoman rotation lever and rotate the ottoman, and remove two screws each on right/left sides, which install the inner sides of the Ottoman base covers.



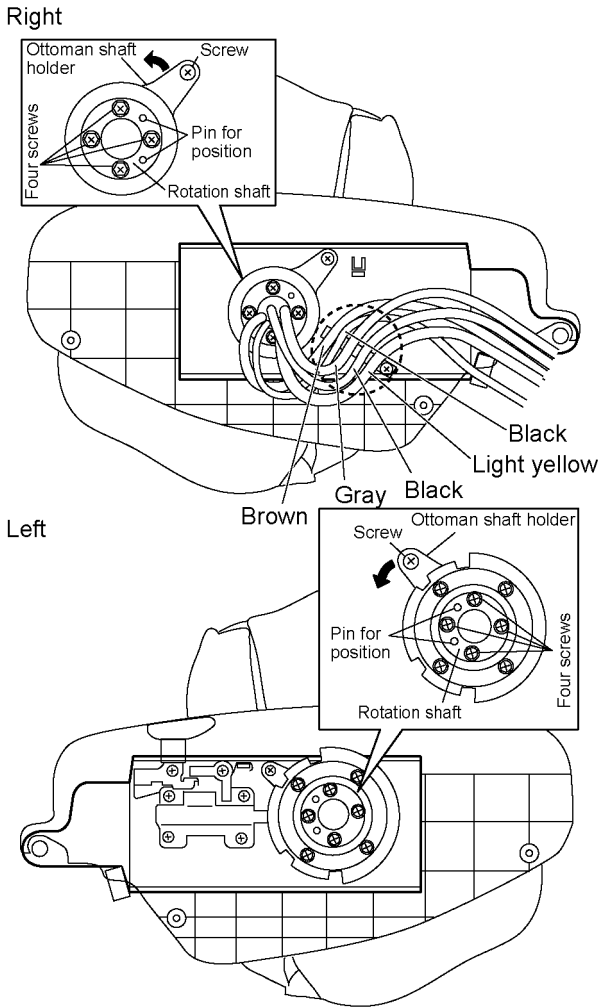
9. Remove the Ottoman base cover with care to five Hooks on right and seven Hooks on left.



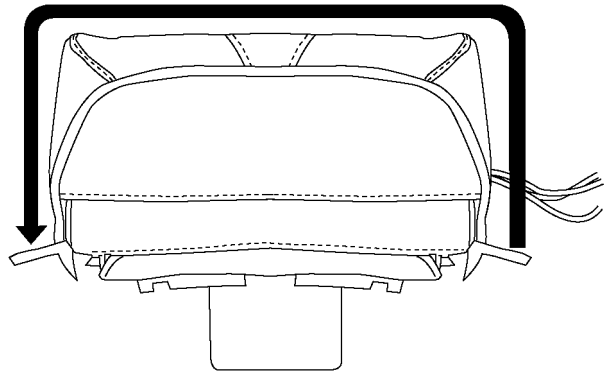
12. Remove four screws and remove the Cushion.



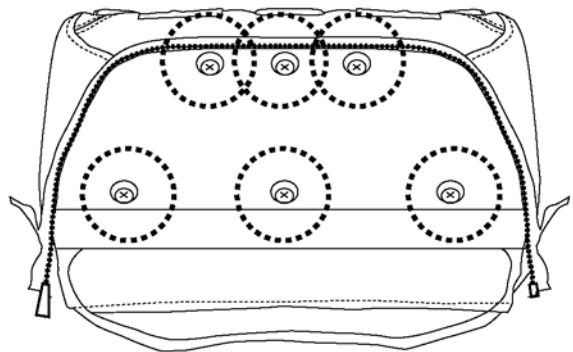
10. Remove four screws each on right/left sides, which install the Rotation shaft, and remove the Ottoman.



13. Pull out the tip of the zippers and cut Cable ties, and open the zippers.



14. Remove six screws, which install the Foot under cover, and remove the Cover.

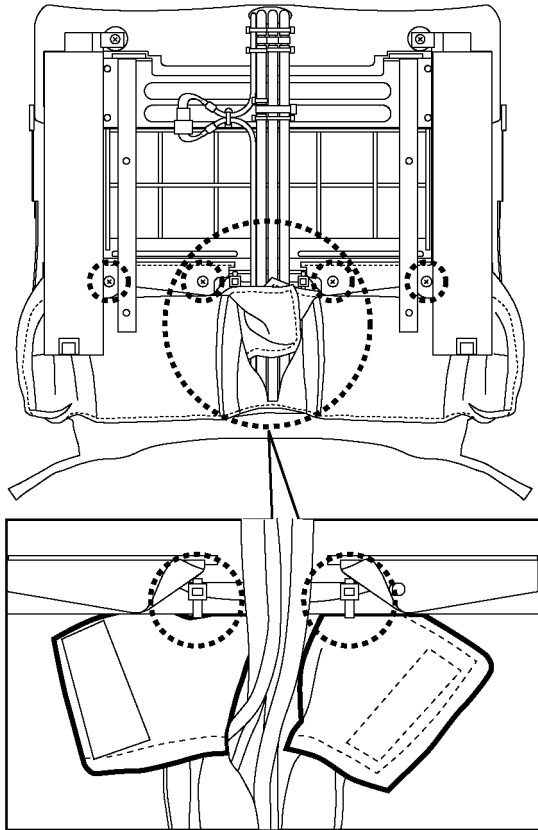


11. Pull out the tip of the zippers and cut Cable ties, and open the zippers. Remove five J-shaped hooks and open the Cover.

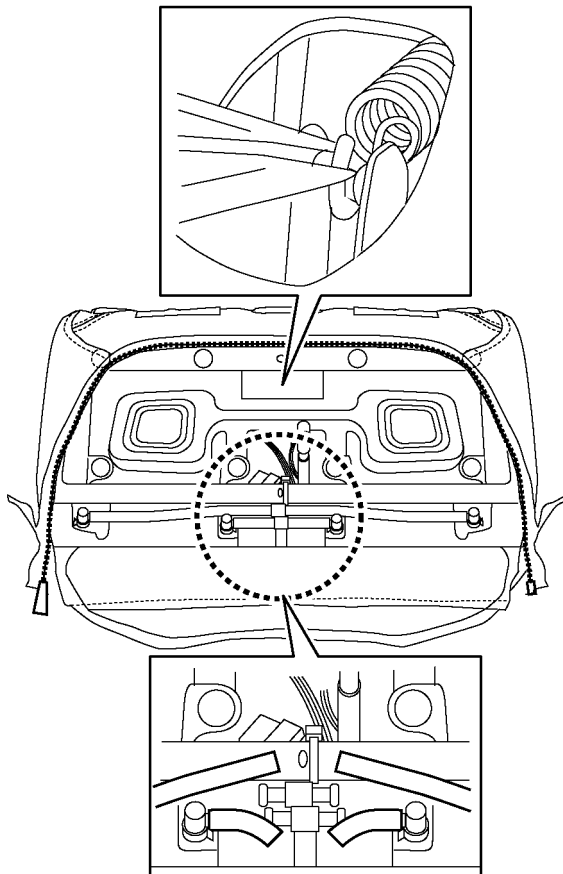
Caution

- When in assembly, pass the tips of the zippers through the hole of the rubber. Bind the left tip of the zippers with a Cable tie.

15. Remove Magic Tapes, and cut two Cable ties.



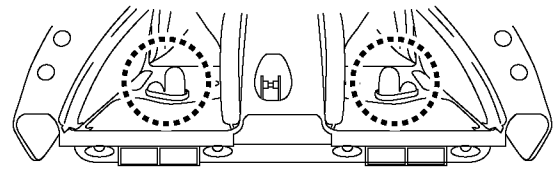
16. Remove four Hoses, one Connector, and the Multiaction spring, and remove the Foot cloth.



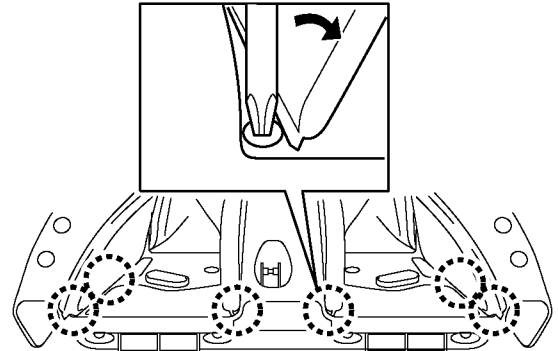
17. Remove the Shiatsu sheets.

Caution

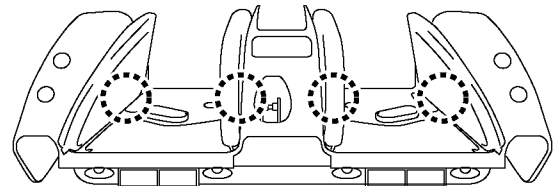
- Be careful of the directions when in assembly.



18. Insert a screwdriver putting between the Foot air bags and the Foot cover, and remove six screws, which fix the Foot heater.



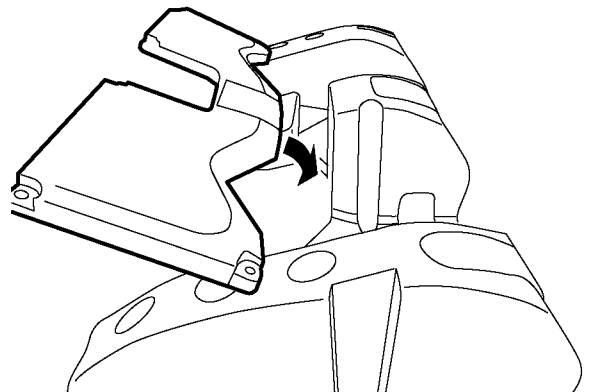
19. Remove two Anchor clips each on right/left sides on back, which fix the Foot air bags.



20. Remove the Foot heater.

Caution

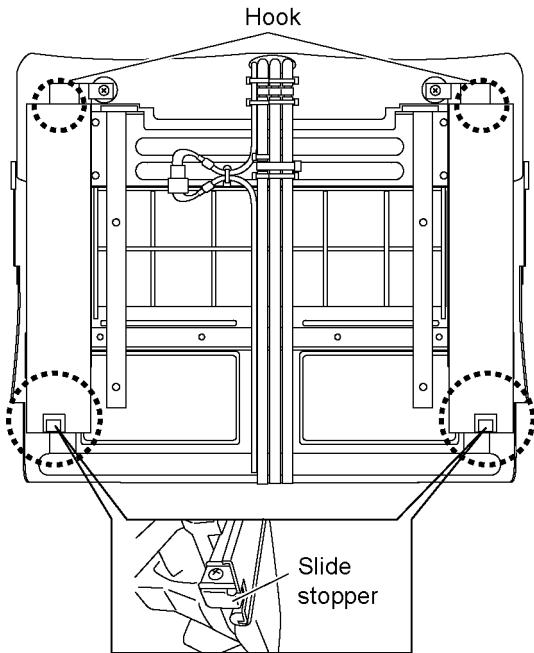
- Work would be easy in assembly if the Foot heater is inserted from the back.



21. Remove two Anchor clips each on right/left sides in the front, which fix the Foot air bags, and remove the Foot air bags.

Caution

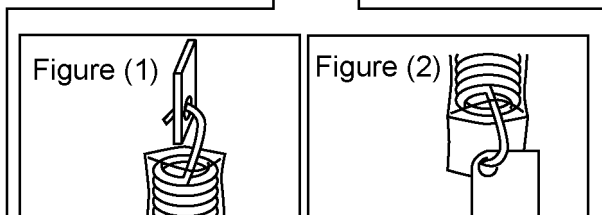
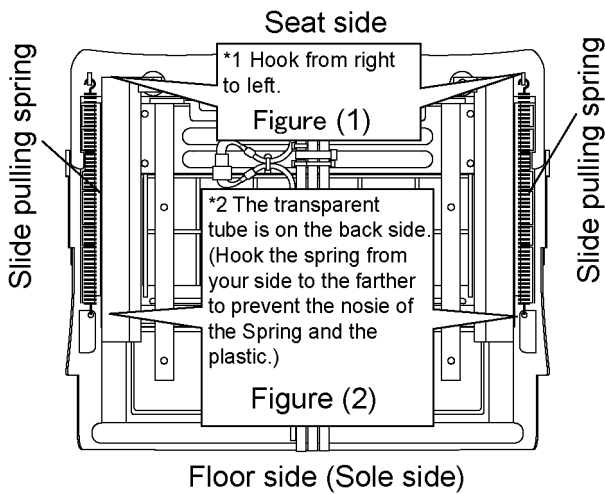
- Be careful of the install of the Air bags when in assembly.



22. Remove two screws, which install the Slide stopper, and remove the right/left Slide spring cover.

Caution

- Hook the Hook first, and tighten screws when in assembly.

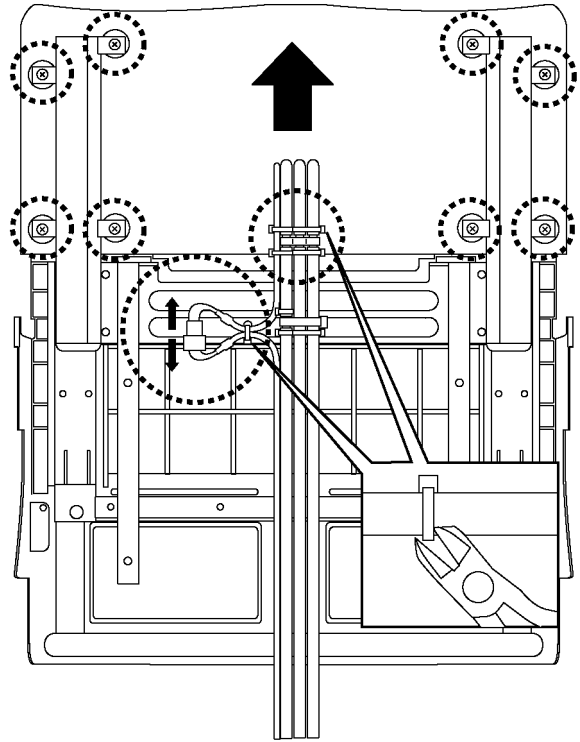


Caution in installing the Slide pulling spring

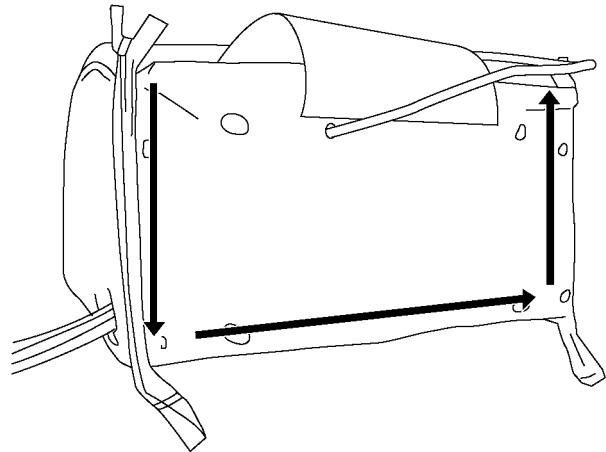
- Be careful of the directions of the Spring hook *1 on the Seat side (Right/left opposite).
- Be careful of the directions of the Transparent tube on the Floor side (Sole side) *2.

23. Remove the right/left Slide pulling springs.

24. Slide the frame so that the screws on the rail are visible, and remove four screws each on right/left sides and cut Cable ties. Then remove three Hoses and one Connector.

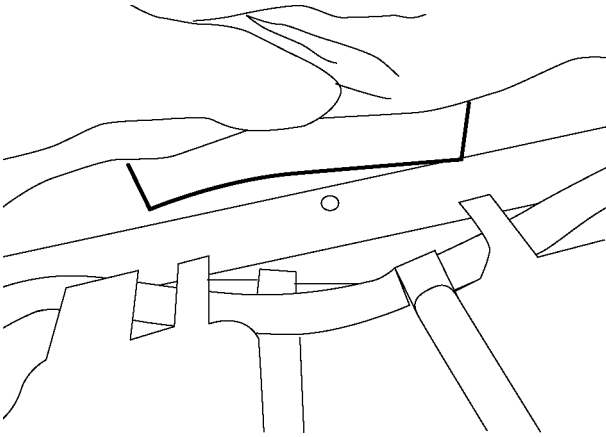


25. Pull out the tip of the zippers of the Leg cloth from inside and cut the Cable tie, and open the zippers. And remove the Foot cloth.

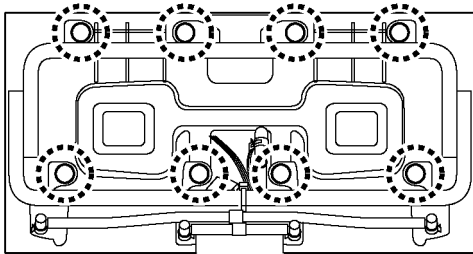


Caution

- When in assembly, put the plate of the Cloth between the Frame and the Leg cover.

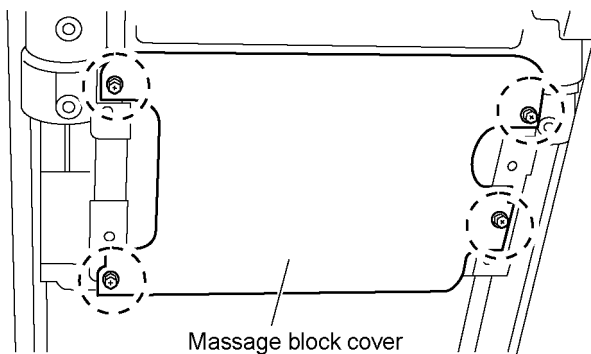


26. Remove eight Hoses and eight Anchor clips, and remove the Air bags.

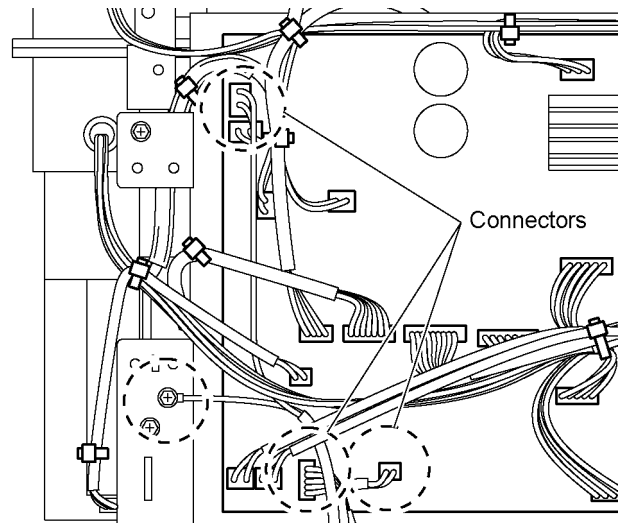


9.15. Removing the Massage mechanism block

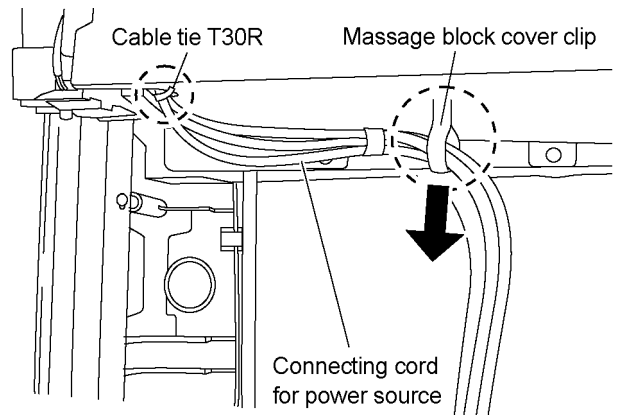
1. Proceed all the procedures of 9.6. Removing the Rear cover.
2. Push the Lower button of the Controller, and move the Massage mechanism block to the lowest position.
3. Remove four screws, and remove the Massage block cover.



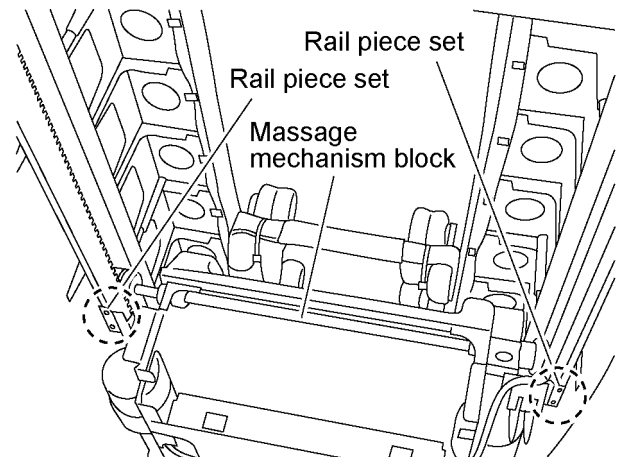
4. Remove the Fixing screw for the Connecting cord for power source and the Ground wire, and remove three Connectors.



5. Cut the Cable tie T30R, and remove the Connecting cord for power source from the Massage block cover clip.



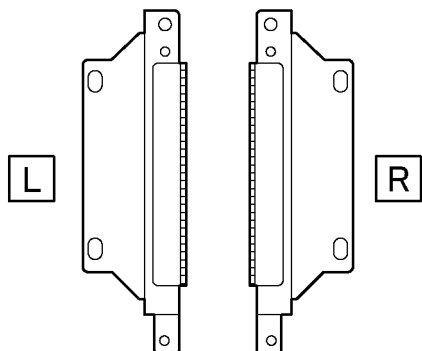
6. Remove four screws each on right/left sides, and remove Rail piece sets (right/left sides).



Caution

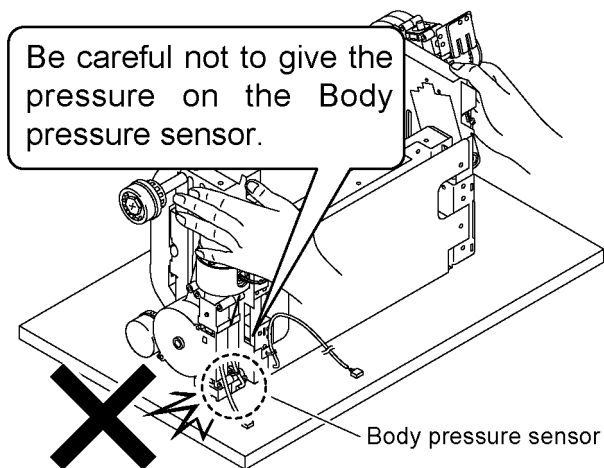
Hold the Massage mechanism block by hand not to have it fall down.

Be careful of the directions of the Rail piece set left/right.



Caution in handling the Massage mechanism block

Be sure to handle the Massage mechanism block carefully so that the PCB of the Pressure sensor is not pushed to the desk or given extra pressure when putting the Massage mechanism block, which could lead to the crack of the PCB. This may eventually cause the malfunction such as “The Body pressure levels on the Controller does not increase.” “It does not scan,” or “The operation is not stable.” etc.

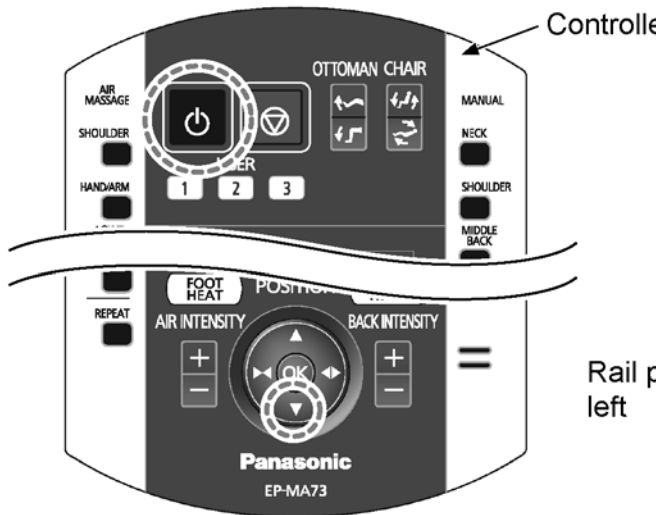


9.16. Adjusting the Up/down sensor gear

When the Massage mechanism block is removed from the Chair, the position of the Up/down sensor gear changes resulting in the change of the up/down stop position. When installing the Massage mechanism block on the Rear frame, be sure to adjust the position with the Up/down sensor gear.

Removing the Massage mechanism block

1. Before removing the Massage mechanism block from the Rear frame, push the button of Off/On on the Controller twice to move the Massage mechanism block to the lowest position
or use the secret mode (CE) to move the Massage mechanism block to the lowest position.



2. First, remove four screws, which install the Rail piece set left, and remove the Rail piece left. Then, install the Massage block jig.
* You can unload the Massage mechanism block without the Massage block jig, which prevents the fall of the Massage mechanism block after the Rail piece set right is removed.
3. Remove four screws, which install the Rail piece set right, and remove the Rail piece set right.
4. Remove the Massage mechanism block from the Rear frame.

Caution: Hold the Guide roller right when removing the Massage mechanism block so that the spring does not come out.

Installing the Massage mechanism block

1. Before installing the Massage mechanism block on the Rear frame, push the button of Off/On on the Controller twice to move the Massage mechanism block to the lowest position.

Caution: If you do not carry out this procedure and install the Massage mechanism block on the Rear frame and operate it, the Massage mechanism block overruns and its gears become cracked not recognizing the up/down positions.

2. Install the Massage mechanism block on the Rear frame.

3. Install the Massage block jig on the left rail.

4. First, tighten four screws on the Rail piece set right.

5. Then, tighten four screws on the Rail piece set left.

6. Move the Massage mechanism block to the highest position using the Secret mode (CE).

(Push the button of ▲ longer to move the Massage mechanism block to the highest position till the P-P-P sound is heard.)

Caution: Check if the Massage mechanism block is installed horizontally moving the block. (Refer to the figure 1.)

* If the Massage mechanism block is not installed horizontally, it may lead to the abnormal noises or malfunction.

7. Check the positions that the Massage mechanism block stops and adjust the height with the Sensing gear.

Caution: If the Massage mechanism block overruns, the Up/down worm gear becomes cracked.

* One thread of the Up/down sensor gear gives a stroke change of 4mm (0.1575in.).

- When the Massage mechanism block has been raised excessively, turn the Up/down sensor gear counterclockwise to adjust.
- When the Massage mechanism block has been lowered excessively, turn the Up/down sensor gear clockwise to adjust.

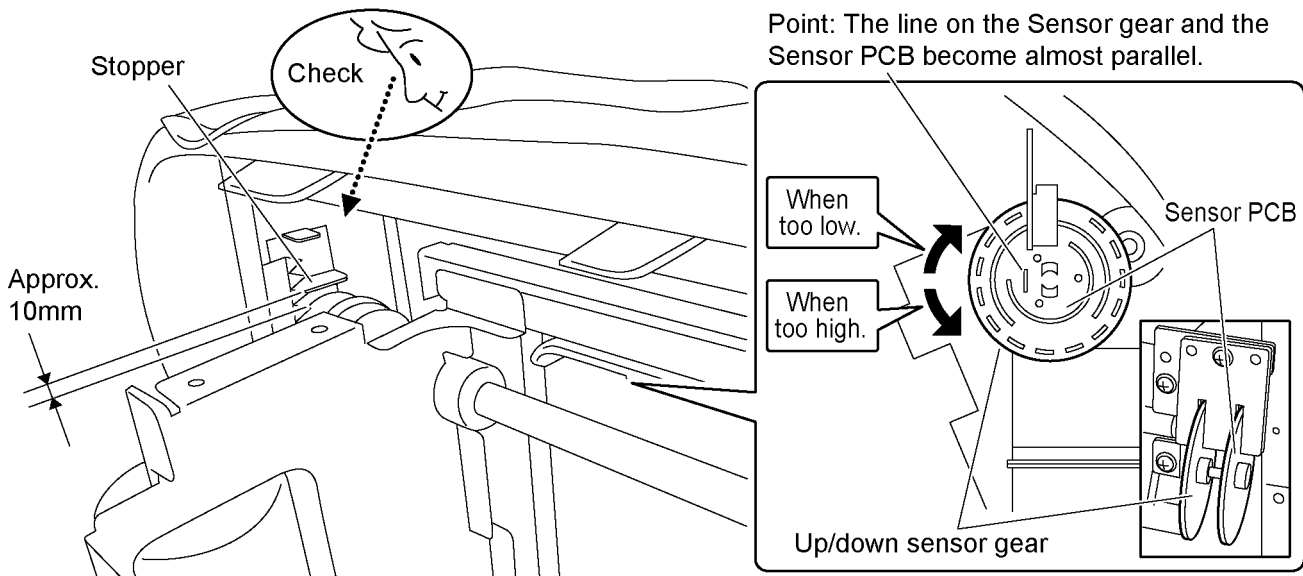
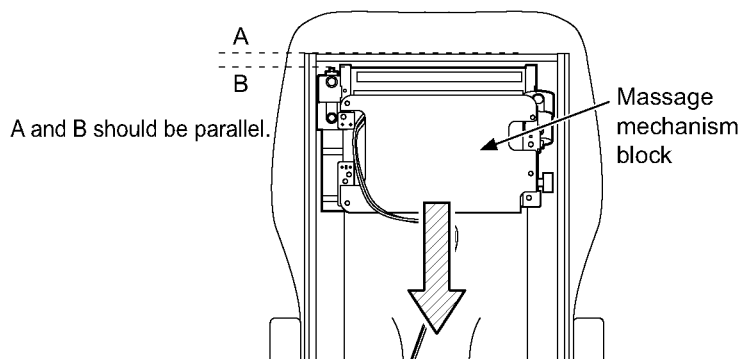


Figure 1



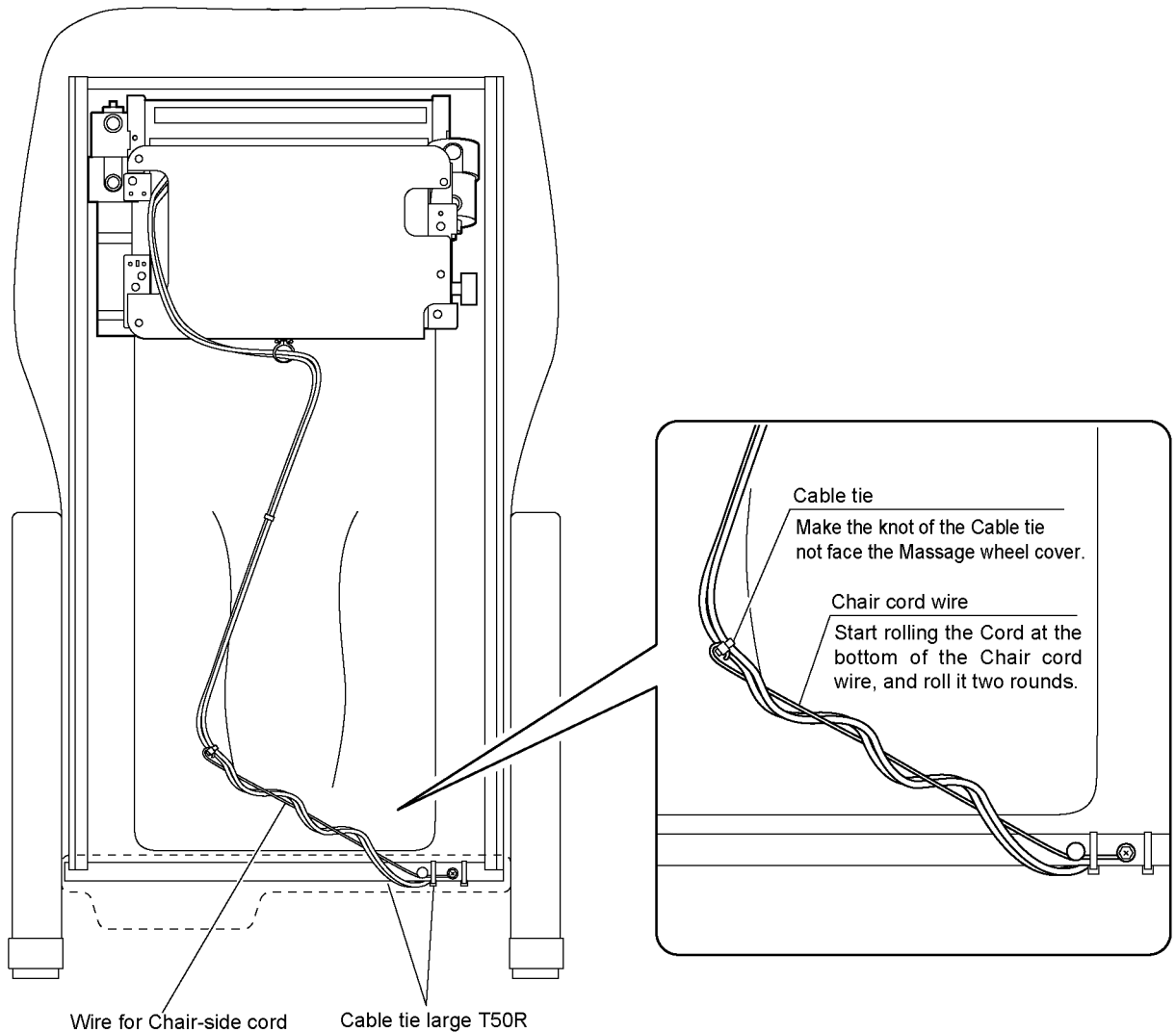
9.17. Tips in installing the Connecting cord for power source

Move the Massage mechanism block to the highest position.

* After installing the Connecting cord for power source, be sure to move the Massage mechanism block up and down pushing the ▲ and ▼ buttons on the Controller by Secret mode (CE) so as to check whether each Connecting cords do not touch Belts or the Rear cover fixing plate or are not hooked on the Up/down pinions on both right/left sides. And check also if each Connecting cords are not extremely tense when the Massage mechanism block is at the highest position.

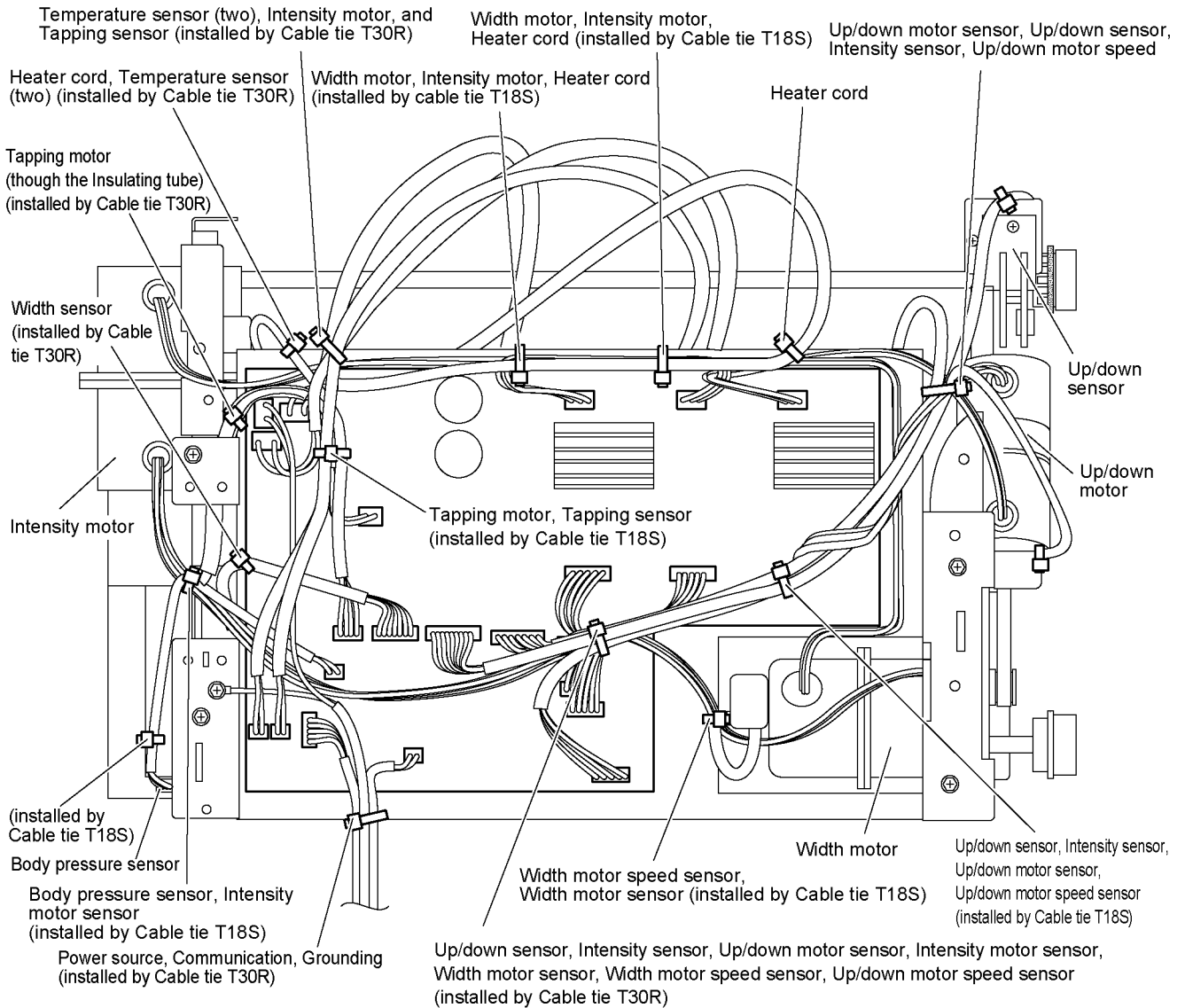
Caution

When installing the Rear cover, move the Massage mechanism block to the highest position first so as to prevent the hooking of each Connecting cords. And wind the cord around the wire. If you wind the wire around the cord, the wire becomes bent.



9.18. Allocation of the Lead wires of the Massage mechanism block

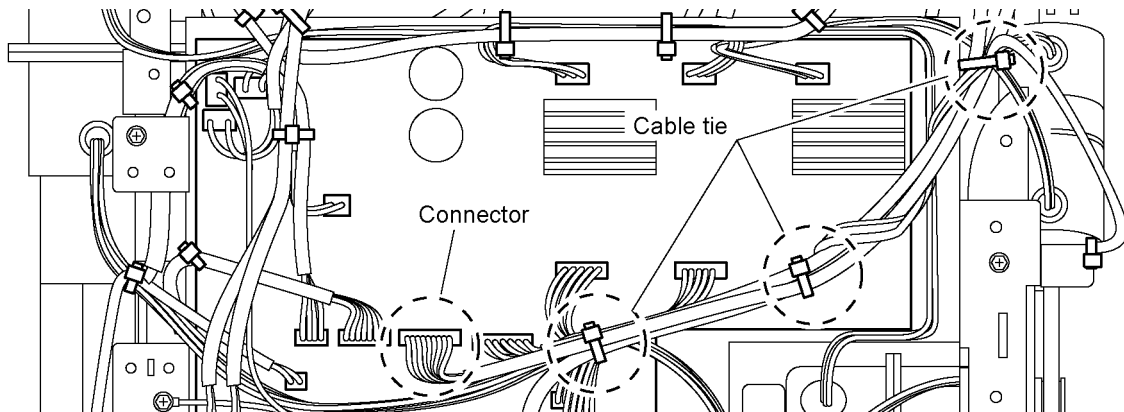
Allocation of the Lead wires of the Main PCB, each Motors, other parts, Cable ties are as follows:



9.19. Tips of disassembly and assembly of the Massage mechanism block

9.19.1. Removing the Up/down sensor

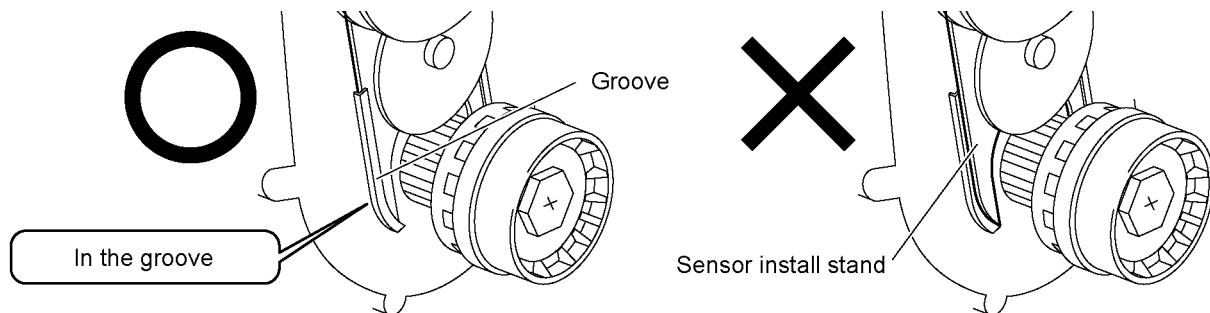
1. Disconnect the connector (CN106) on the Main PCB.
2. Cut the Cable tie T30R x 2, T18S x1, which bind the Lead wires.



3. Remove two screws on the Up/down gear box B and the Up/down sensor install stand, and remove the Up/down sensor.

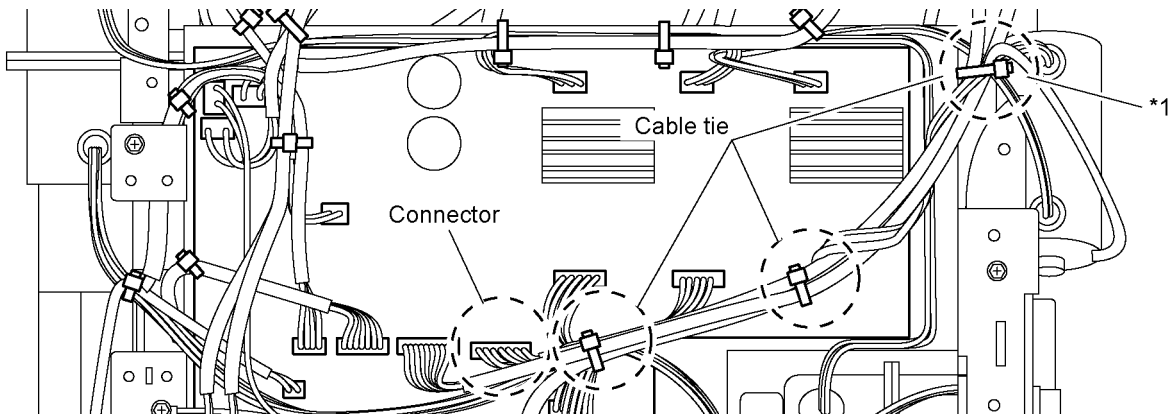
Caution in installing

When installing the Up/down sensor, make the leg of the sensor install stand fit into the groove of the Up/down gear box B.

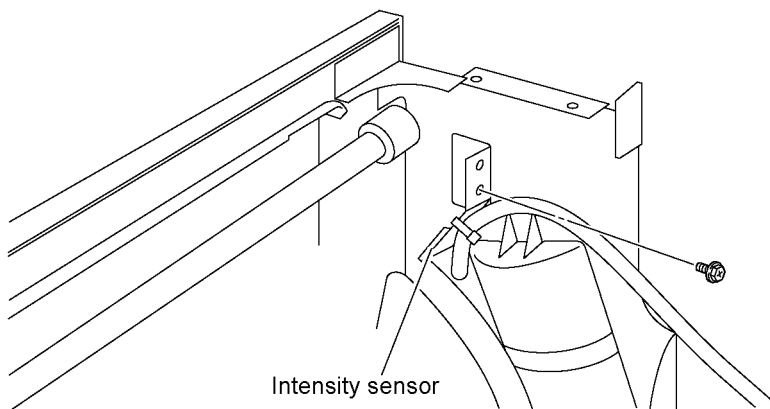


9.19.2. Removing the Intensity sensor

1. Disconnect the Connector (CN103) on the Main PCB.
2. Cut the Cable tie T30R x 2, T18S x 1, which bind the Lead wires.



3. Remove the Install screw on the Message block frame and the Intensity sensor install stand.

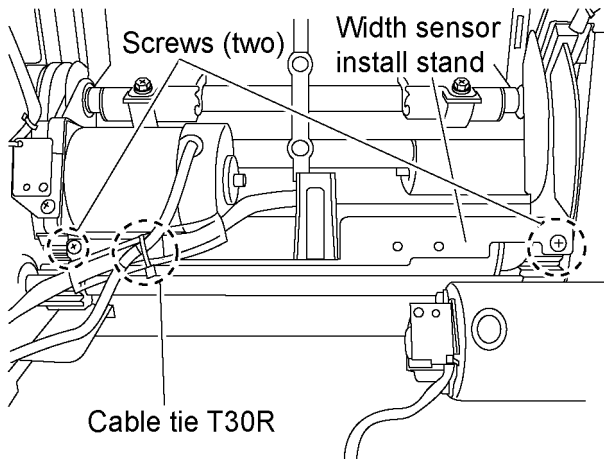


Caution in installing

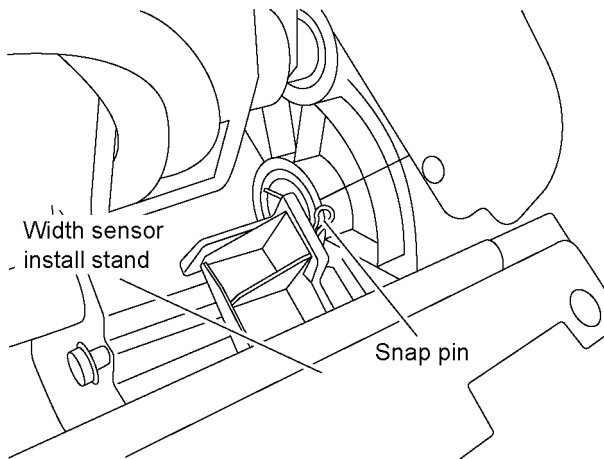
- The Message block frame and the Intensity sensor should be installed firmly.
(Otherwise, it leads to the overrun in the direction of the Strong.)
- When installing each Lead wires with Cable ties check if Lead wires are not abnormally pulled or hooked operating the Massage mechanism block in the directions of strong or weak.
(Pay special attention on the *1, because the Wire moves in the operation.)

9.19.3. Removing the Width sensor

1. Disconnect the all the Connectors on the Main PCB.
2. Cut the Cable tie T30R, T18S binding each Lead wires.
3. Remove four screws on the Main PCB install stand.
4. Cut the Cable tie T30R on the Width sensor install stand.
5. Remove two Width sensor install screws.



6. Remove the Snap pin on the Width sensor plate.

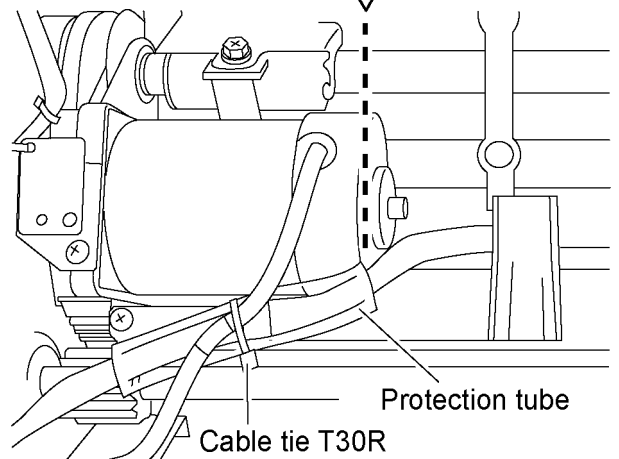


Caution in installing

- When you install Lead wires with Cable ties, operate the Massage mechanism block in the Intensity-strong/weak directions to check if the Lead wires are not tense or hooked.
- Pass the Connecting cord for Width sensor through the Protection tube, and install the tube with the Connecting cord for Tapping motor by the Cable tie T30R. Bind them on the white tape.

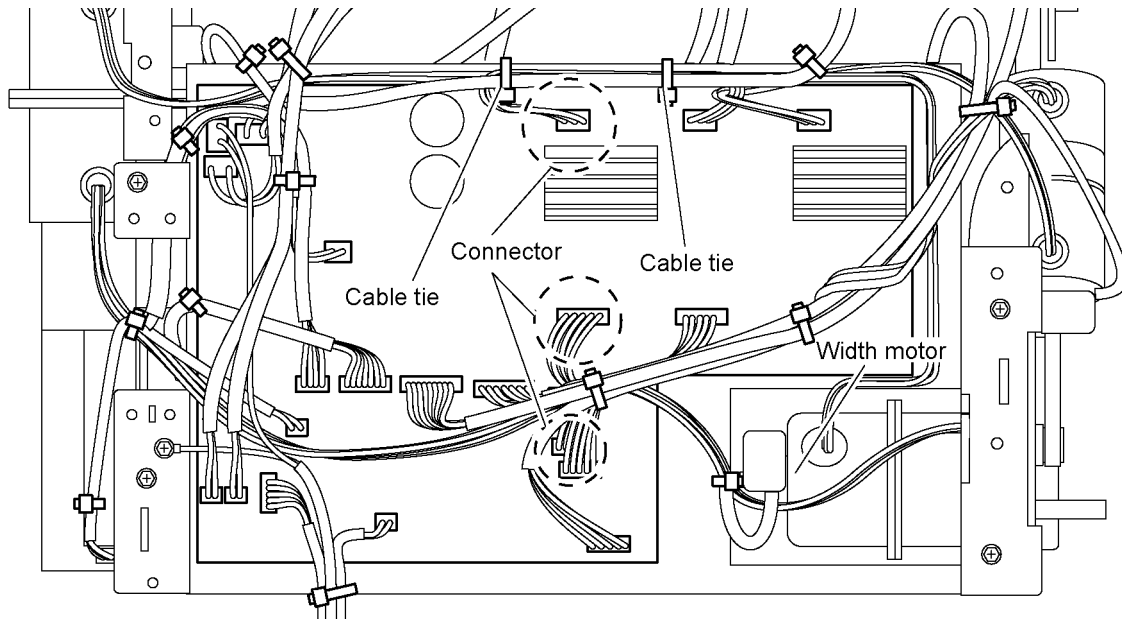
(If they are not bound properly, the Wires can get caught in the Intensity gear and the pinion.)

These side of the Tapping motor and the side of the Protection tube should be on the same line as the figure.



9.19.4. Removing the Width motor

1. Disconnect the Connectors (CN501, CN1, CN30) on the Main PCB.
2. Cut the Cable ties (T18S, T30R) binding the Lead wires.
3. Remove the Width belt.
4. Remove two Install screws on the Width motor.

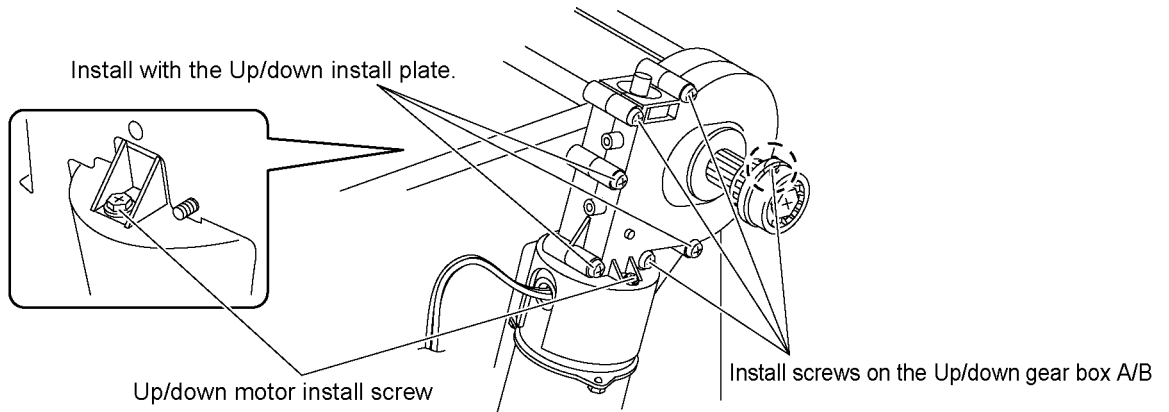


9.19.5. Removing the Up/down gear block

* You cannot replace Up/down shaft or Up/down motor without disassembling the Up/down gear block.

* Proceed the Procedure of 1-4 of 9.19.3 Removing the Width sensor.

1. Remove the Massage mechanism block from the Rear frame.
2. Remove 10 screws on the Up/down driving install plate and the Intensity driving install plate.
3. Remove two screws on the Up/down sensor install plate.
4. Remove three screws on the Up/down gear box and the Up/down driving install plate.
5. Remove four Install screws on the Up/down gear box A/B.
6. Remove two Install screws on the Up/down gear box and the Up/down motor.
(One is the Grounding screw.)



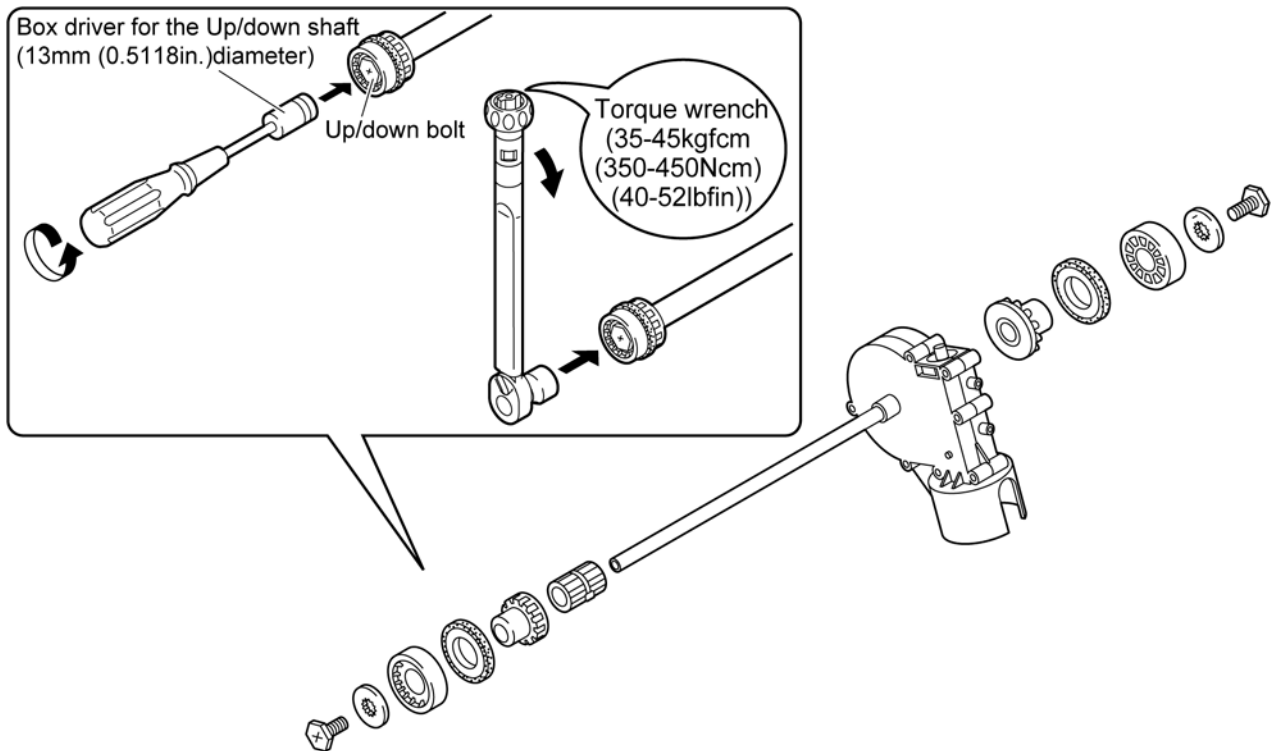
9.19.6. Removing the Up/down shaft (Up/down shaft bolt)

* Remove the Massage mechanism block from the Massage chair before executing this work.

1. Remove the Up/down shaft bolt on the Pinion B/C with the 13mm-Box driver and a Phillips screwdriver.

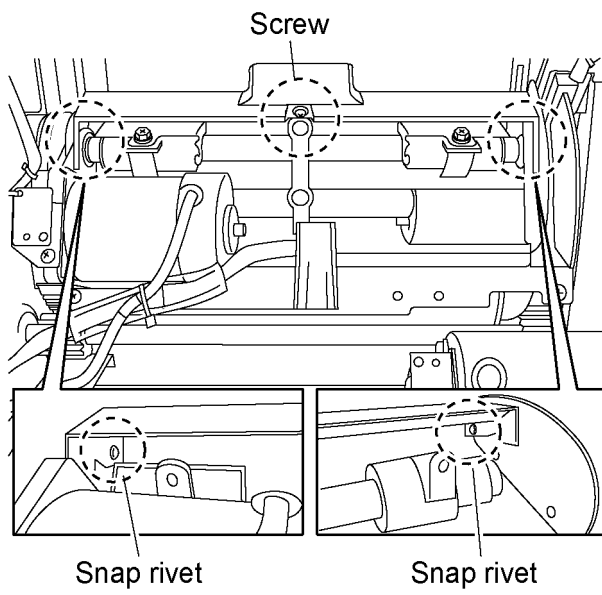
Caution in installing

- The Up/down shaft bolt may be broken if it is tightened too much.
Tighten the Up/down shaft bolt at 35-45kgfcm (350-450Ncm) (40-52lbf·in) with a torque wrench.



9.19.7. Removing the Grease cover

1. Set the Intensity position at strongest.
2. Remove one screw and two Snap rivets.



Caution

When you install the Snap rivets, be sure to insert them fully.

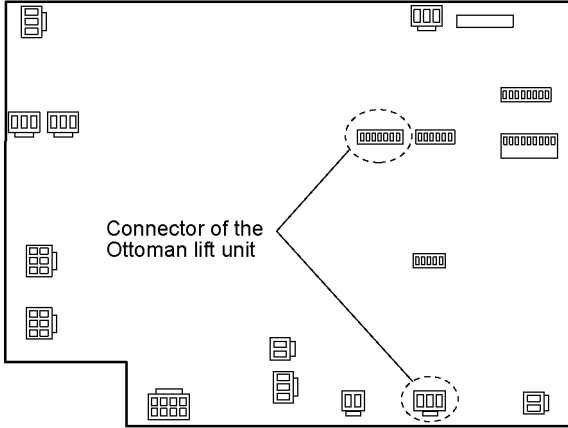
If not, the Snap rivets are loosened during the operation, and it leads to the abnormal vibration noise like Bbbbbbbb.

9.20. Removing each Lift units

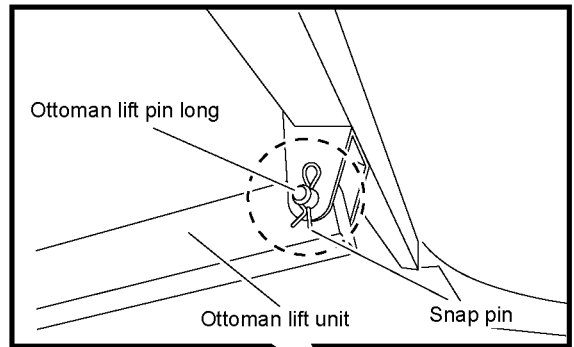
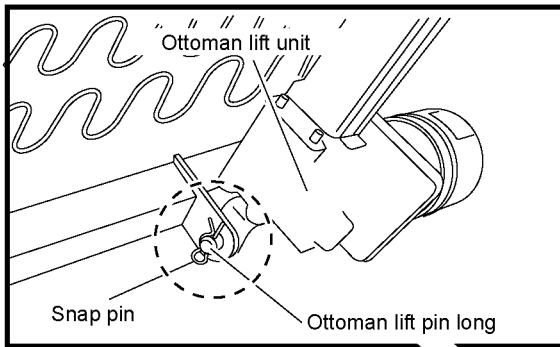
9.20.1. Removing the Ottoman lift unit

1. Proceed all the procedures of 9.15. Removing the Massage mechanism block.
 * **The work would be safe and easy if the Massage mechanism block is removed.**
2. Proceed the procedures of 1-7 of 9.12. Removing the Under box, and disconnect the Connectors of the Ottoman lift unit (CN11, CN13) and removing the Grounding terminal on the Sub PCB.

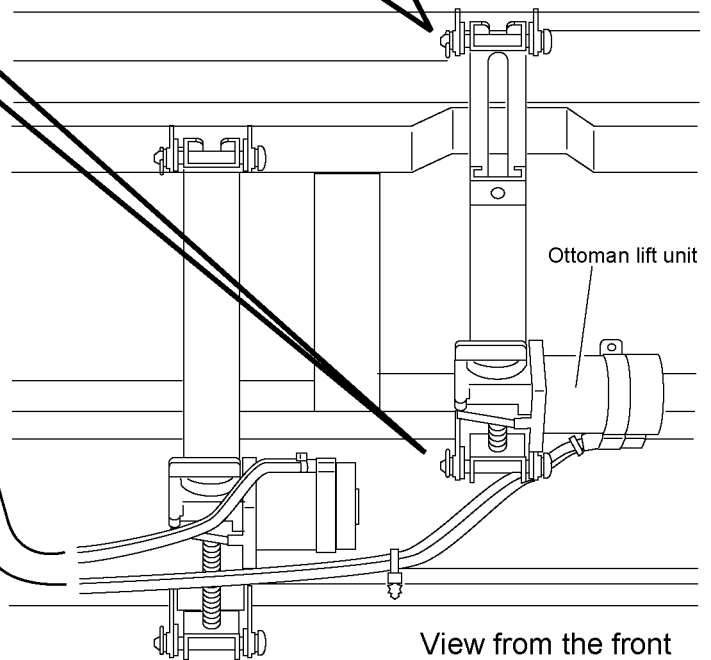
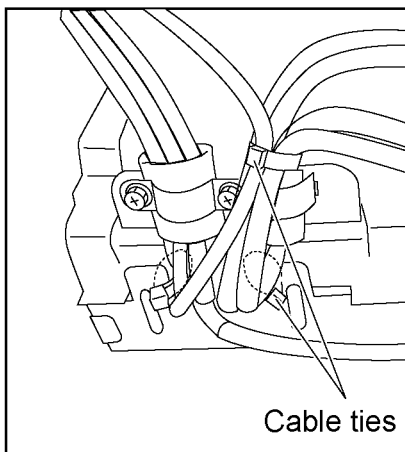
Sub PCB



3. Remove the Ottoman pin long and the Snap pin, and you can remove the Ottoman lift unit.
 * **It would be easier to remove the Ottoman lift unit after removing the Massage mechanism block.**



Caution in installing
 Be careful of the binding of Cable ties.



Caution in installing
 When you install the Snap pin, bend the Snap pin at approx. 45 degree.

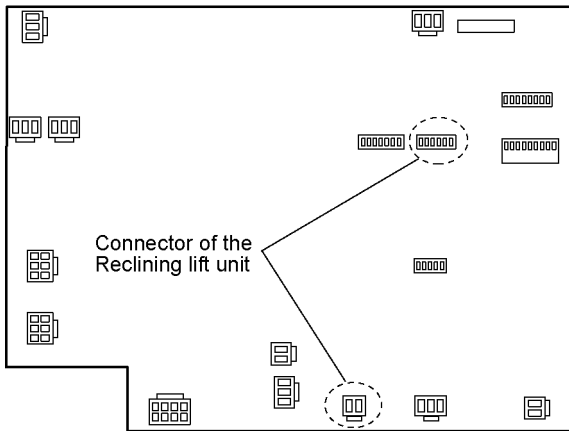
9.20.2. Removing the Reclining lift unit

1. Proceed all the procedures of 9.15. Removing the Massage mechanism block.

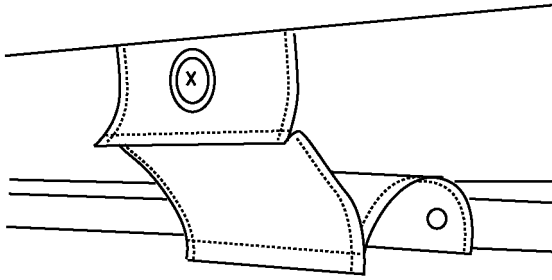
* **The work would be safe and easy if the Massage mechanism block is removed.**

2. Proceed the procedures of 1-7 of 9.12. Removing the Under box, and disconnect the Connectors of the Reclining lift unit (CN10, CN12) and remove the Grounding terminal on the Sub PCB.

Sub PCB

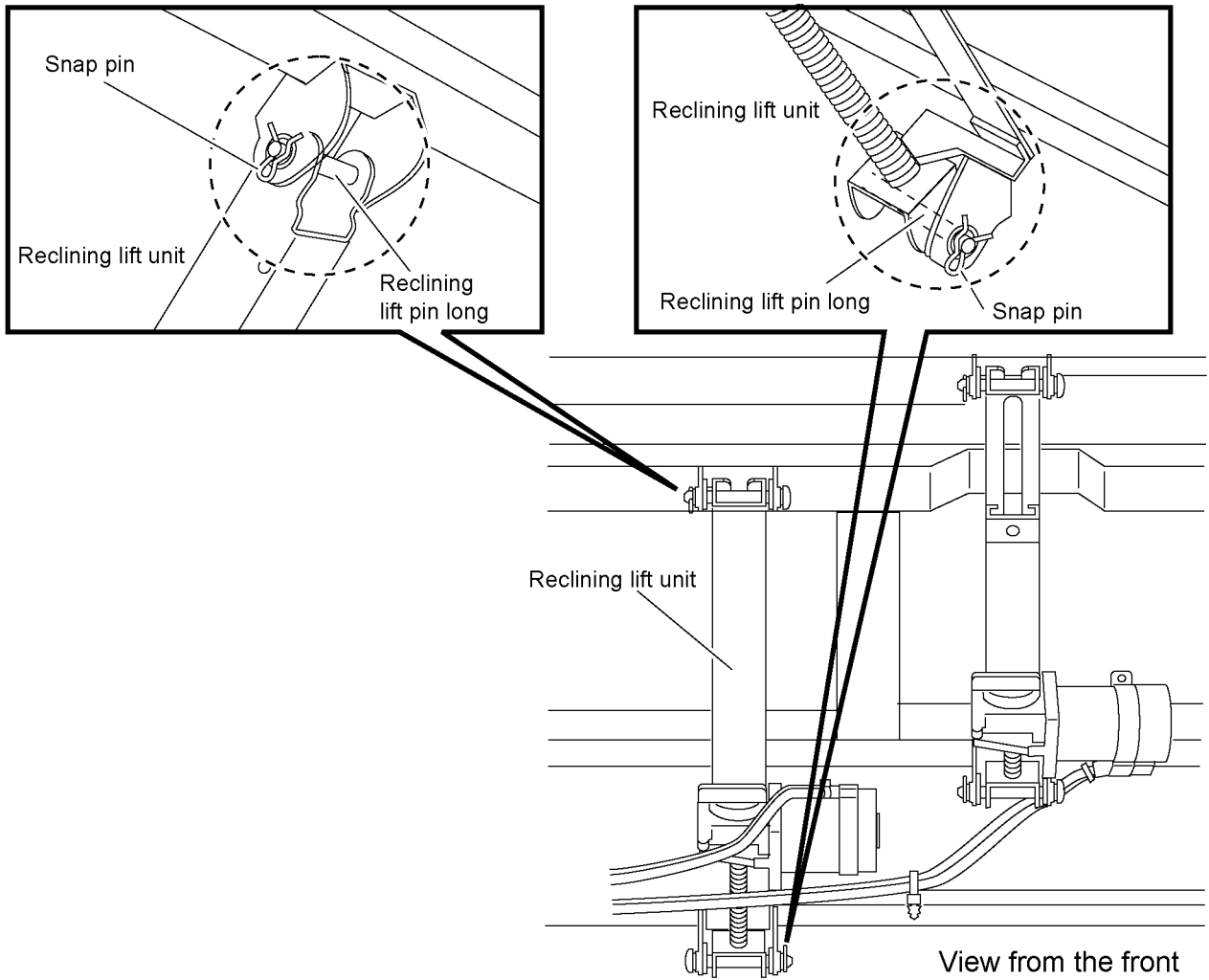


3. Remove one Push-rivet.



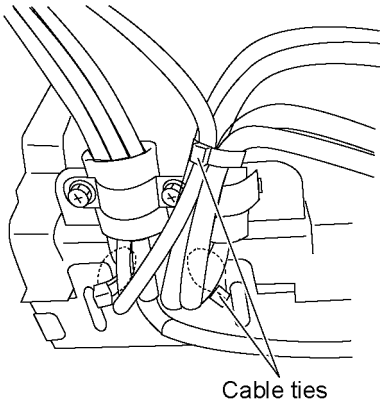
4. Remove the Ottoman lift pin long and the Snap pin, and you can remove the Lift unit.

*** It would be easier to remove the Reclining lift unit after removing the Massage.**



Caution in installing

Be careful of the binding of Cable ties.



Caution in installing

When you install the Snap pin, bend the Snap pin at approx. 45 degree.

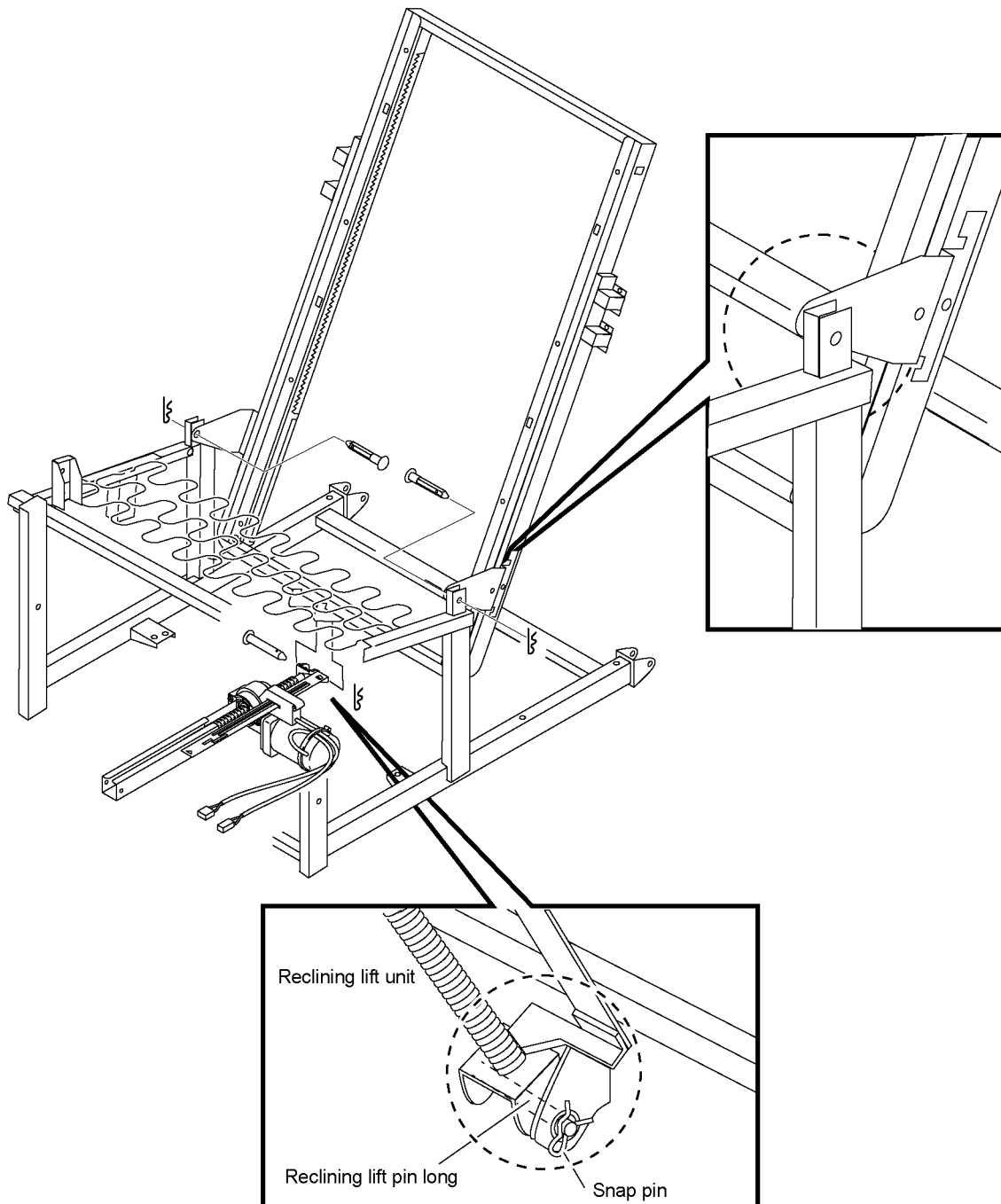
9.21. Removing the Rear frame

1. Proceed all the procedures of 9.11. Removing the Under cover front, 9.13. Removing the Rear cover and 9.15. Removing the Massage mechanism block.

* **Remove the Massage mechanism block before removing the Rear frame.**

2. Pull out three Pins from the Rear frame.

* **Be careful of the Rear frame, which may fall down after Pins are pulled out.**

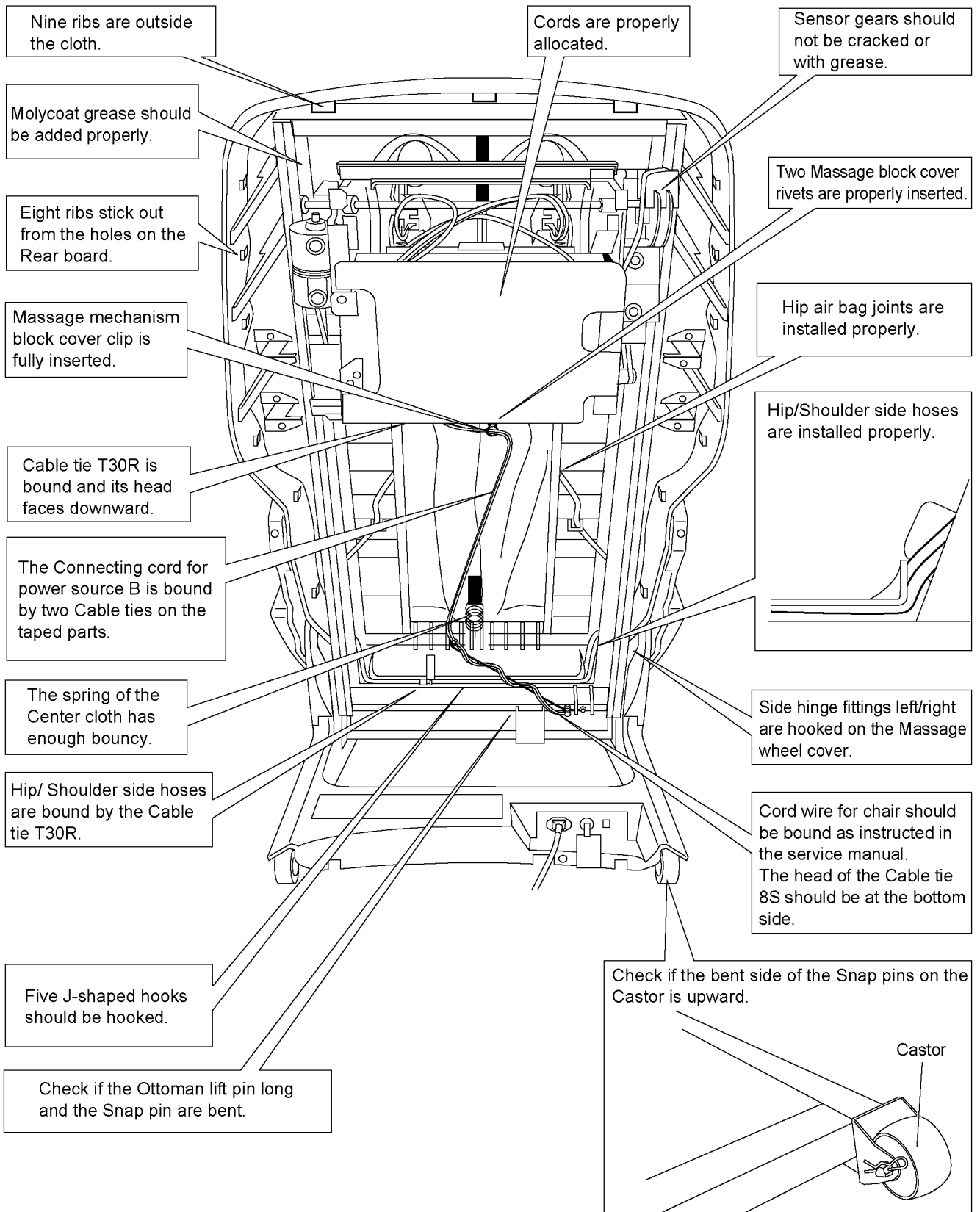


Caution in installing

When you install the Snap pin, bend the Snap pin at approx. 45 degree.

9.22. Appearance checking

Check if Cable ties, Screws, Connectors, and Hoses are properly installed.



9.23. Grease

Grease up the parts (■) when in repair.

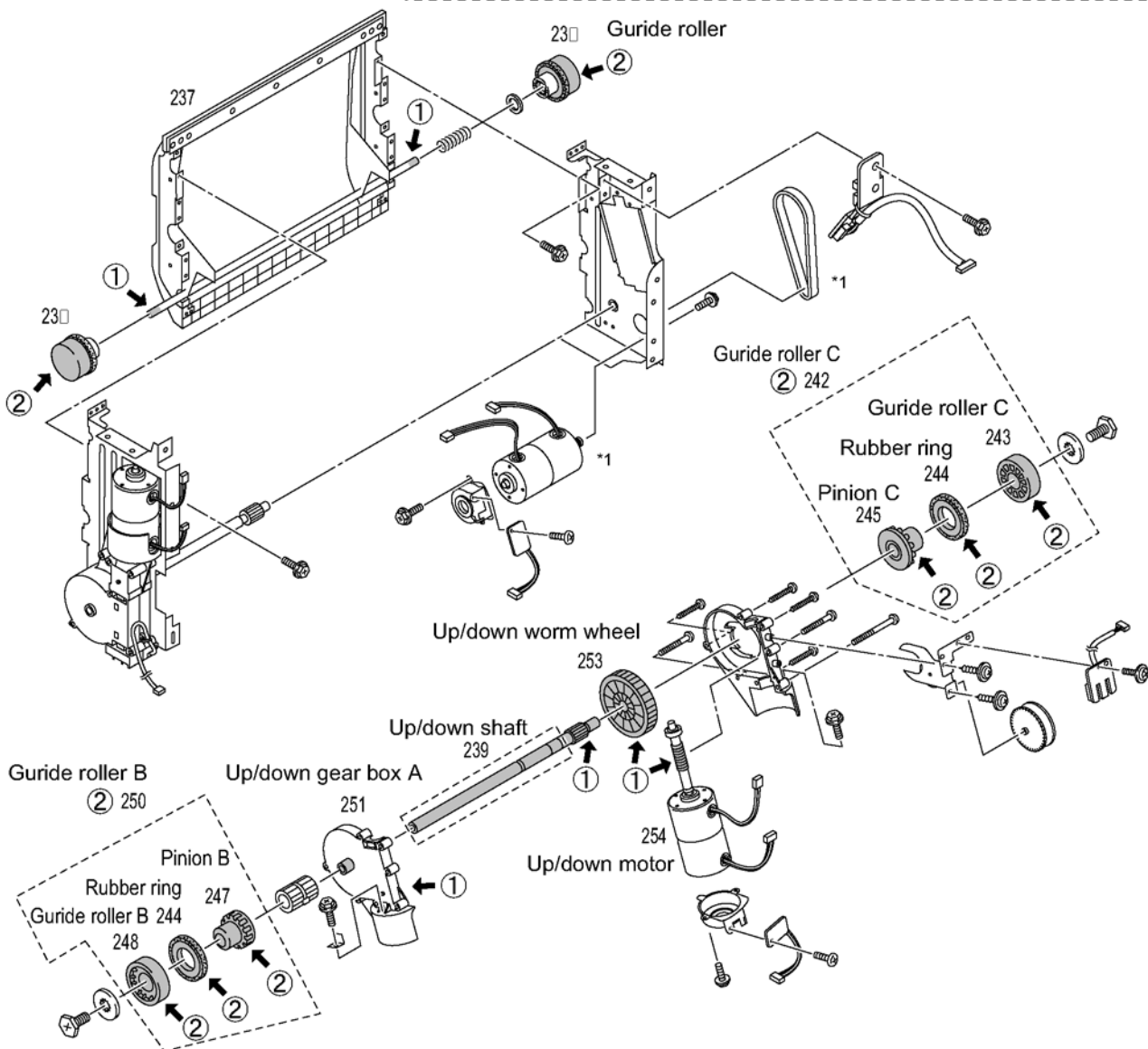
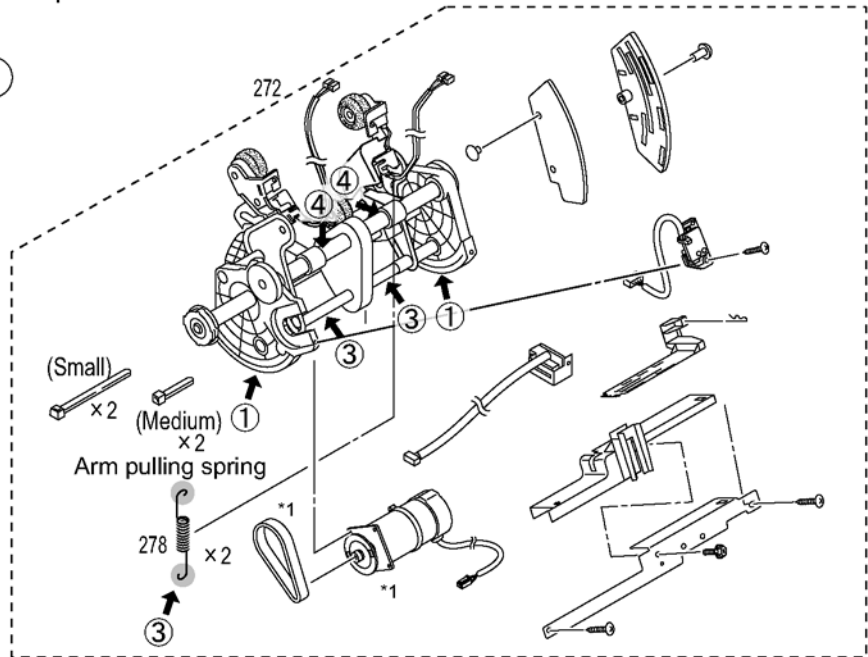
Massaged mechanism block

Caution:

Do not apply grease on the *1.
If the grease is applied on the Belts or the Motor pulleys, they may be slippery.

Grease

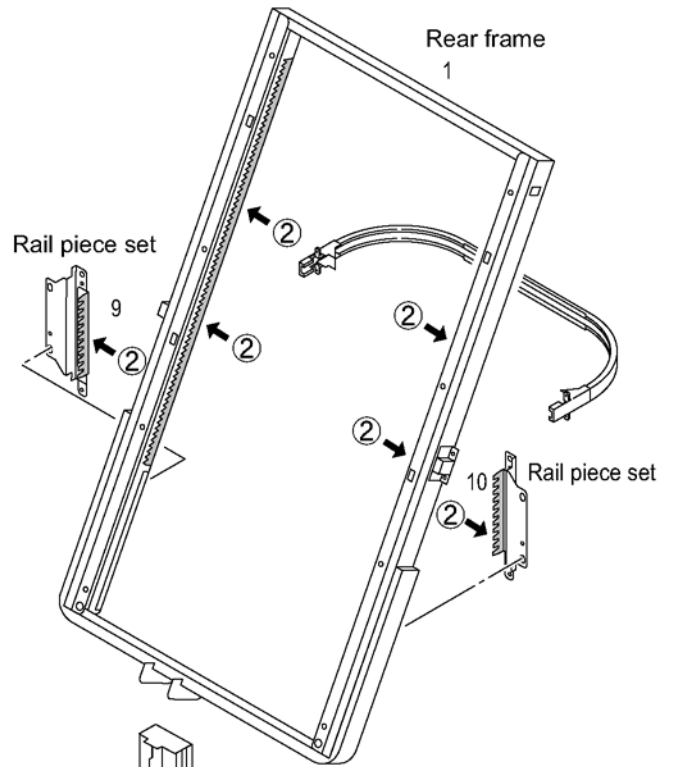
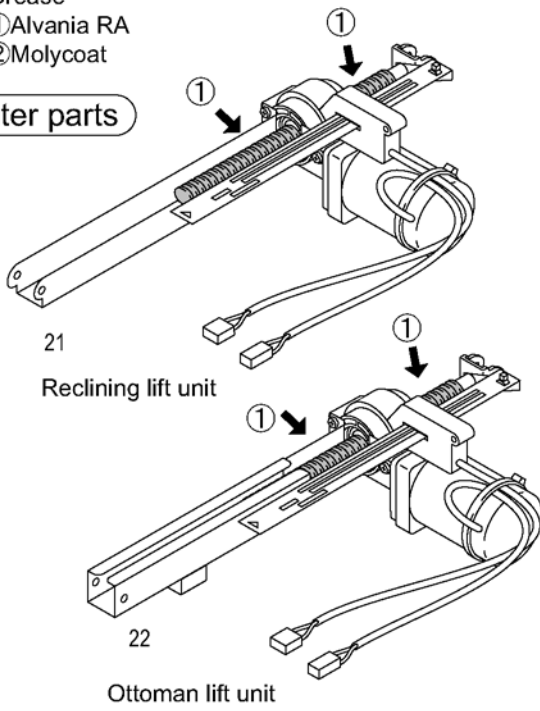
- ①Alvania RA
- ②Molycoat
- ③E Paste
- ④Molycoat/ E Paste



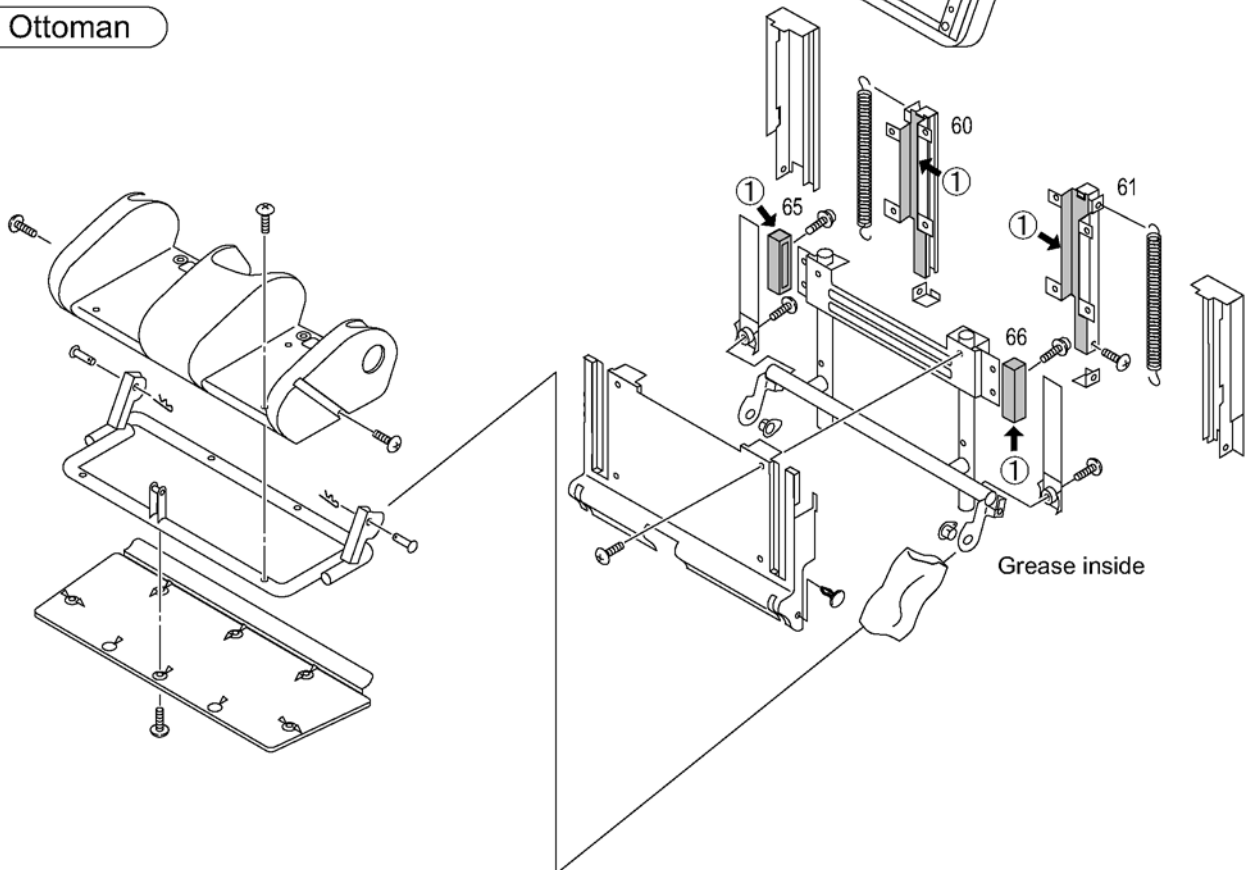
Grease up the parts (■) when in repair.

- Grease
①Alvania RA
②Molycoat

Outer parts



Ottoman




No.	Part name	Grease	Grease No.		
22	Ottoman lift unit	Alvania (Light brown)	WEP003T8907		
241	Main frame (Connection shaft)				
257	Up/down worm wheel				
258	Up/down motor worm wheel				
276	Intensity gear (Fan-shaped two)				
21	Reclining lift unit				
243	Up/down shaft				
255	Up/down gear cover A				
60, 61	Slide guide right, Slide guide left				
65, 66	Foot slider right, Foot slider left				
1, 9, 10	Rear frame (Guide roller), Rail piece set			Molycoat (White)	WEP003W8927
240	Guide roller				
248, 249, 251, 252	Rubber ring, Pinion C, Pinion B, Guide roller B				
250	Guide roller B block				
247	Guide roller C				
246	Guide roller C block				
276	Arm slide shaft (two)	E Paste (Yellow)	WEP003Y8947		
276	Width spring				
282	Arm pulling spring				
276	Tapping shaft	Molycoat/ E Paste (4:6 Mixed)	WEP003Y8977		

10 Exploded View and Replacement Parts List

When ordering replacement part(s), please use part number shown in this parts list.

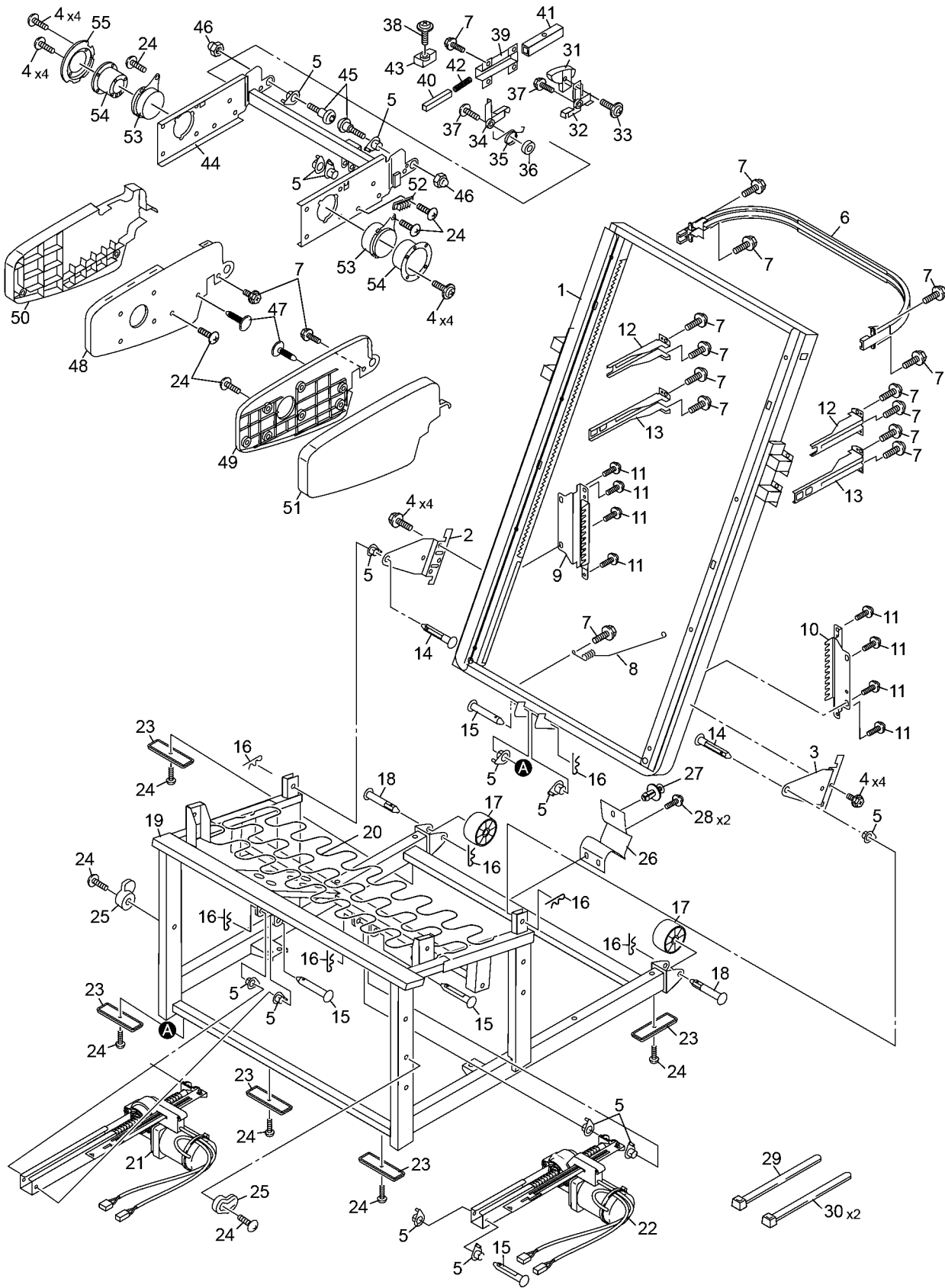
Note : Important Safety Notice

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

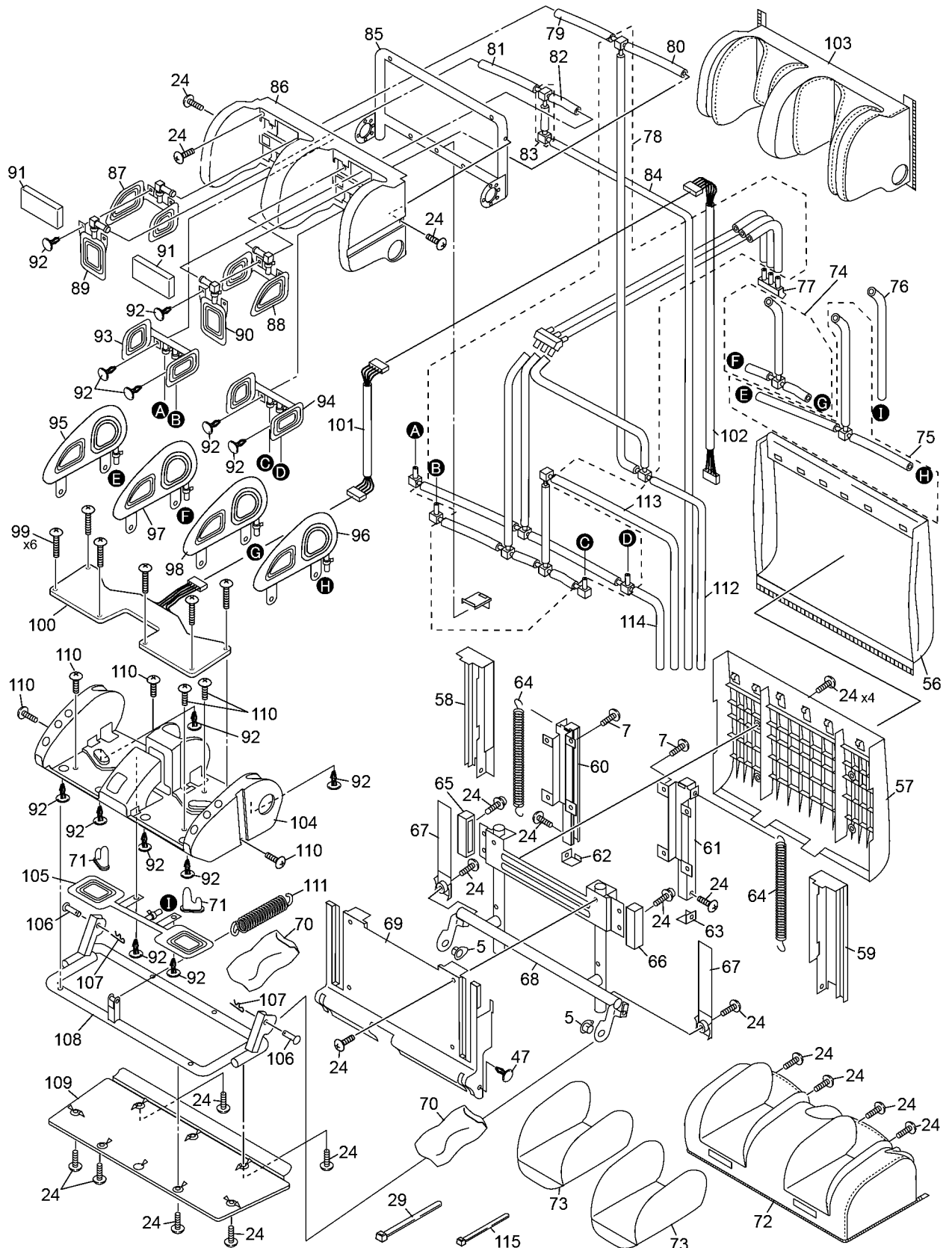
About "U" in the remarks column

"U" indicates parts that can be replaced by user.

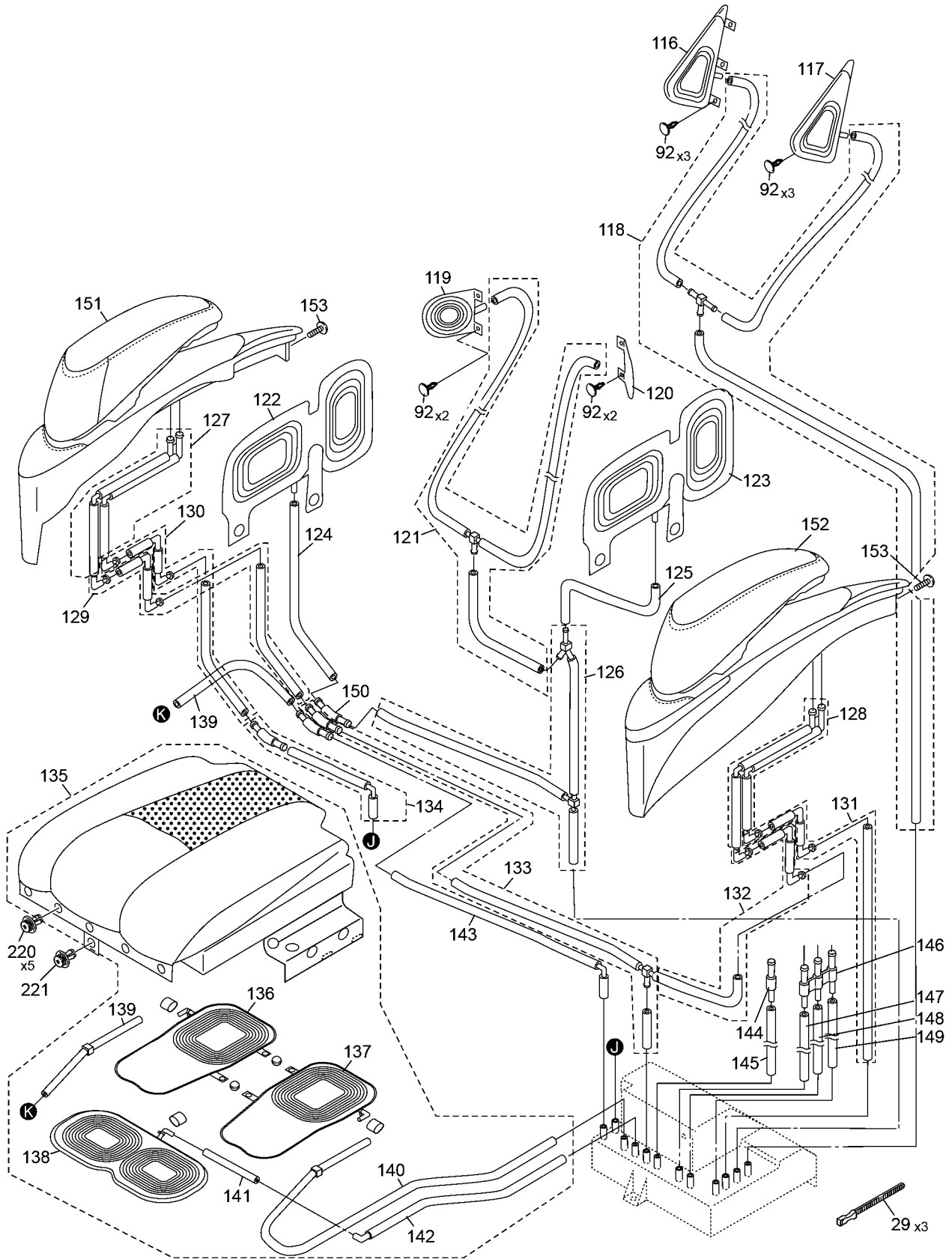
10.1. Exploded View-1



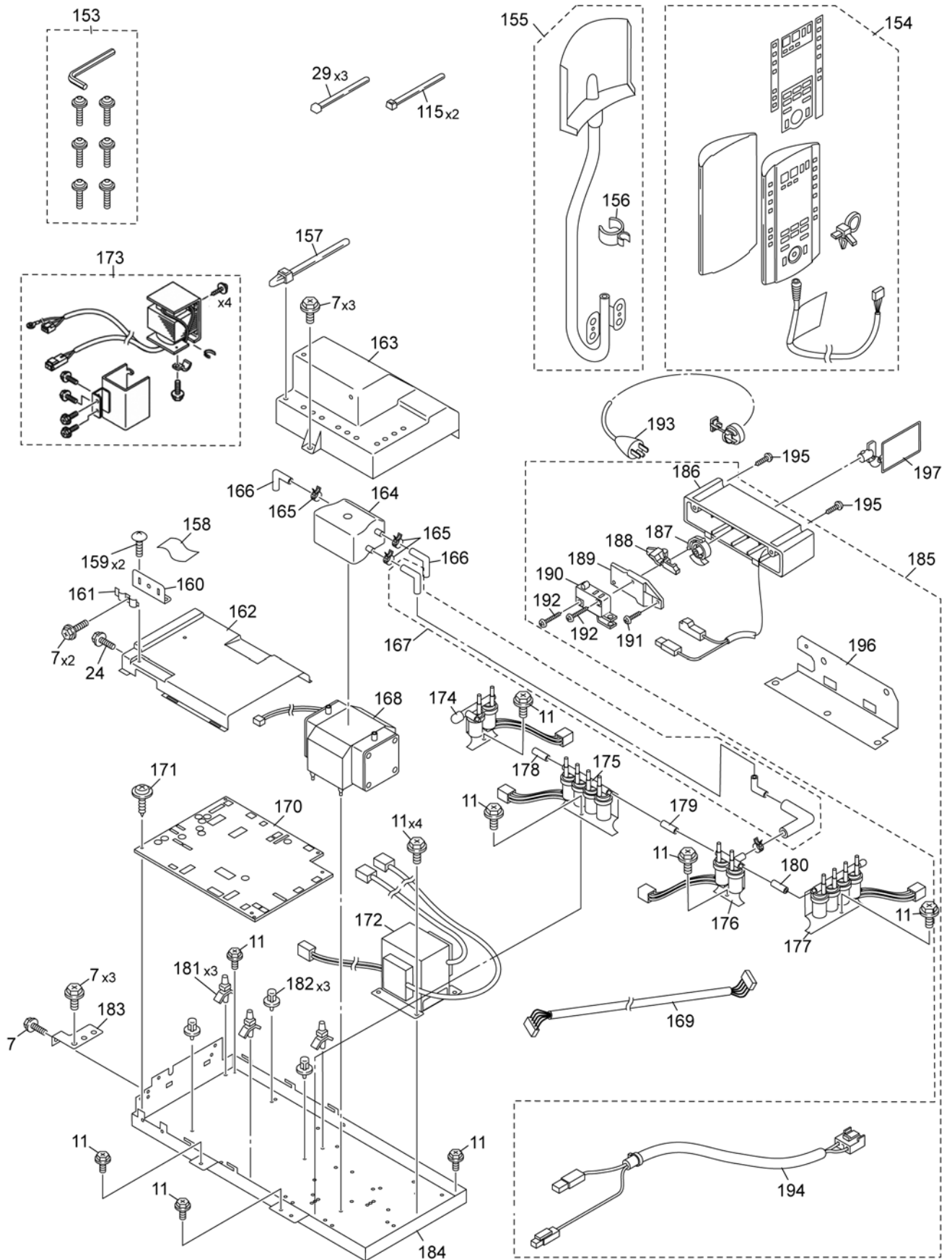
10.2. Exploded View-2



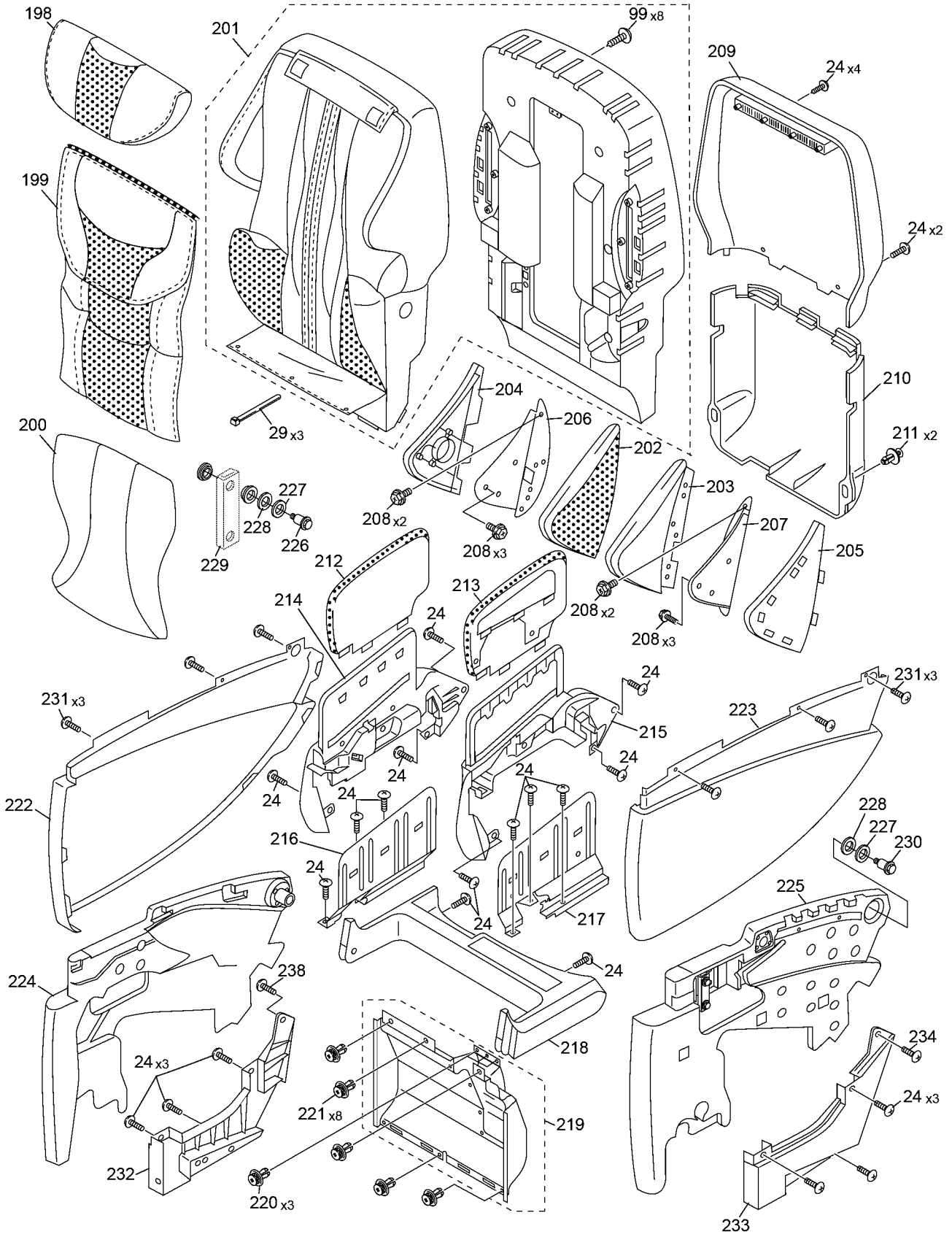
10.3. Exploded View-3



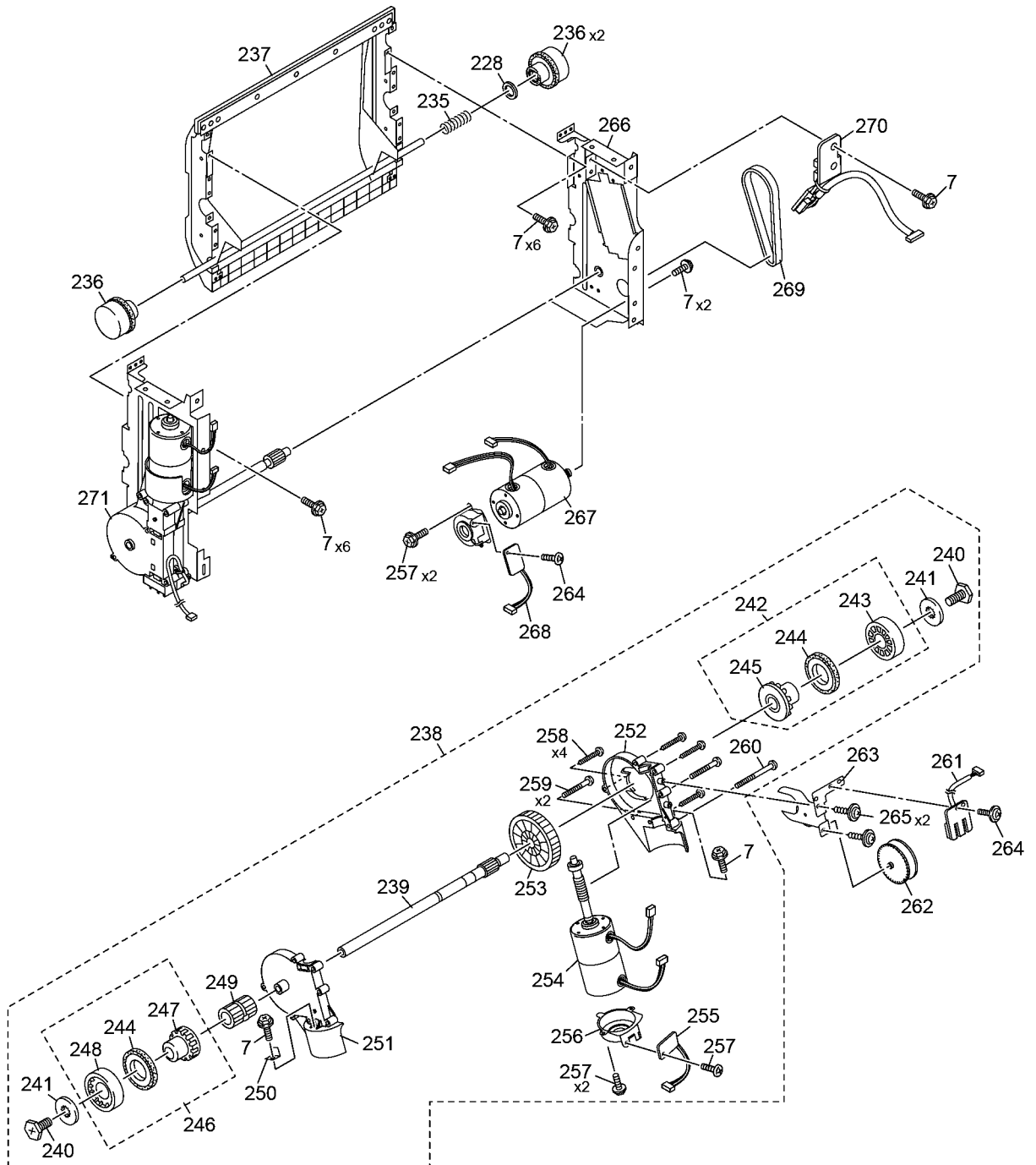
10.4. Exploded View-4



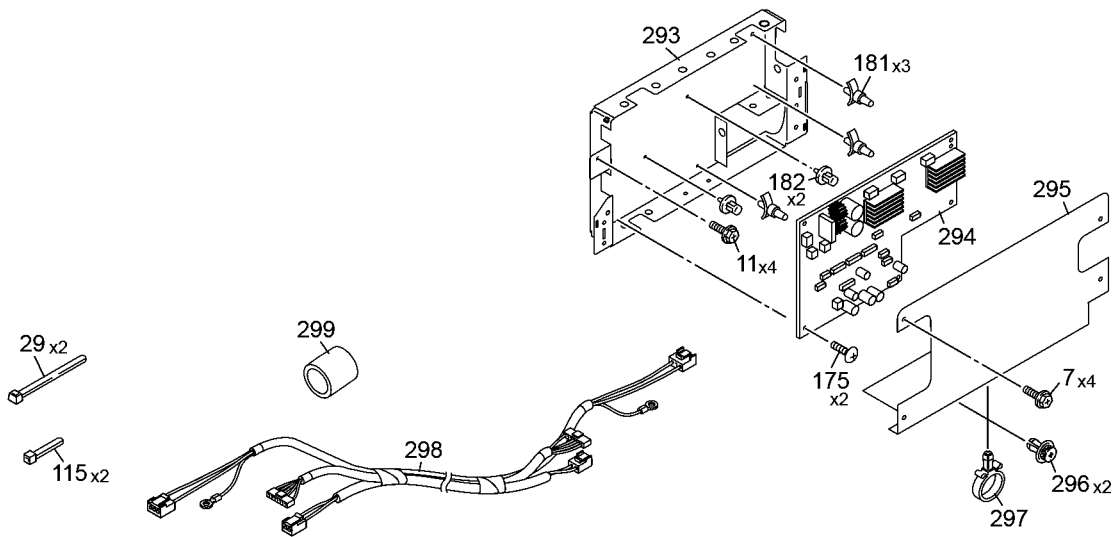
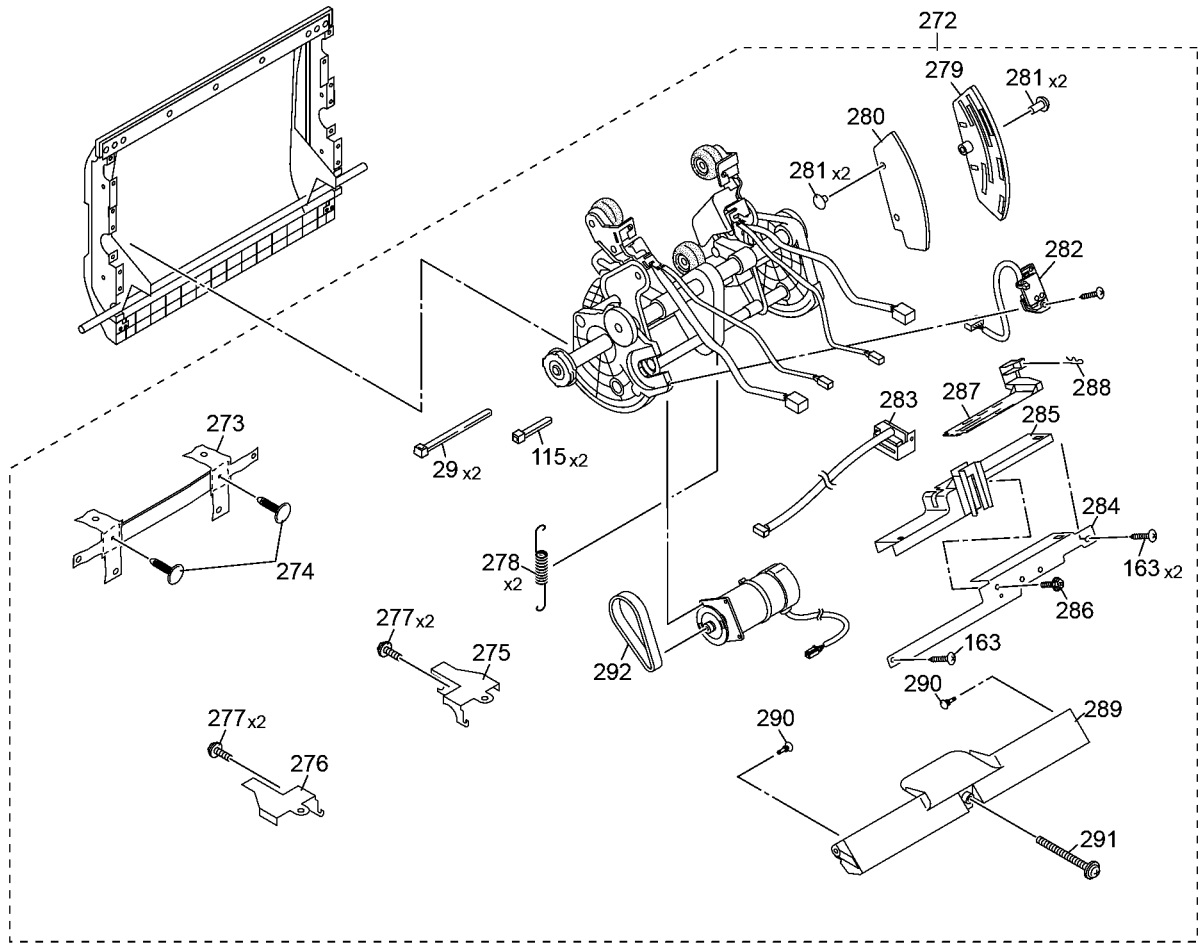
10.5. Exploded View-5



10.6. Exploded View-6



10.7. Exploded View-7



10.8. Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	1	WEPMA70L0087	REAR FRAME	1	
	2	WEP3530L0007	SIDE HINGE FITTING RIGHT	1	
	3	WEP3530L007	SIDE HINGE FITTING LEFT	1	
	4	WEP3530L6717	SCREW, STAINLESS	20	
	5	WEP3200L0887	RESIN BUSHING	12	
	6	WEPMA70L0267	REAR COVER FIXING PLATE	1	
	7	WEP2000L9567	SCREW, STAINLESS	55	
	8	WEP2005L0687	CHAIR SIDE CORD WIRE	1	
	9	WEPMA50L0767	RAIL PIECE RIGHT	1	
	10	WEPMA50L0777	RAIL PIECE LEFT	1	
	11	WEP273L608	SCREW, STAINLESS	16	
	12	WEPMA70L3787	SHOULDER SIDE PLATE SMALL	2	
	13	WEPMA70L3797	SHOULDER SIDE PLATE LARGE	2	
	14	WEPMA70L0907	REAR FRAME HOLDING PIN	2	
	15	WEP300L047	OTTOMAN LIFT PIN LONG	4	
	16	WEP585H0369	SNAP PIN	8	
	17	WEPMS40K3908	CASTOR	2	
	18	WEPMS40L098	HINGE PIN A MO	2	
	19	WEPMA70K0097	UNDER PIPE	1	
	20	WEPMA70L0497	S SHAPED SPRING	1	
	21	WEPMA73L5388	RECLINING LIFT UNIT	1	
	22	WEPMA73L5288	OTTOMAN LIFT UNIT	1	
	23	WEP578K3377	BOTTOM PLATE	5	
	24	WEP350S9027	SCREW, STAINLESS	35	
	24	WEP350S9027	SCREW, STAINLESS	12	
	25	WEPMA70L0057	ELBOW SIDE FIXING BRACKET	2	
	26	WEPMA70K3807	UNDER CLOTH	1	
	27	WEP596K0457	PUSH TURN RIVET	15	
	28	WEP3510L9687	SCREW, STAINLESS	1	
	29	WEP005W8517	CABLE TIE MEDIUM	3	
	30	WEP005W8527	CABLE TIE LARGE	1	
	31	WEPMA70K1578	LOCK RELEASE LEVER HEAD	1	
	32	WEPMA70L1567	LOCK RELEASE LEVER B	1	
	33	WEPMA70L9647	SCREW, STAINLESS	1	
	34	WEPMA70L1587	LOCK RELEASE LEVER A	1	
	35	WEPMA70L1197	LOCK RETURN SPRING	1	
	36	WEPMA70L0877	LEVER PIVOT	2	
	37	WEP2110L9588	SCREW, STAINLESS	2	
	38	WEP3200L9667	SCREW, STAINLESS	1	
	39	WEPMA70L0597	LOCK PIN HOLDING FRAME	1	
	40	WEPMA70L0387	LOCK PIN	1	
	41	WEPMA70L0437	LOCK PIN RAIL	1	
	42	WEPMA70L0607	LOCK PIN SPRING	1	
	43	WEPMA70L0727	LOCK PIN COVER	1	
	44	WEPMA73L0297	OTTOMAN BASE FRAME	1	
	45	WEP3530L0927	HINGE PIN B	2	
	46	WEP3530L6937	V LOCK NUT	2	
	47	WEP3200K0457	BRUSH CLIP	6	
	48	WEPMA70K3048	OTTOMAN BASE COVER IN R	1	
	49	WEPMA70K3088	OTTOMAN BASE COVER IN L	1	
	50	WEPMA73K3118	OTTOMAN BASE COVER OUT R	1	
	51	WEPMA73K3188	OTTOMAN BASE COVER OUT L	1	
	52	WEPMA73L0277	FOUR ROW HOSE CLIP	1	
	53	WEPMA70L1207	OTTOMAN SHAFT HOLDER	2	
	54	WEPMA70L1187	ROTATION SHAFT	2	
	55	WEPMA70L1267	ROTATION DISC	1	
	56	WEPMA73K3298	OTTOMAN FOOTREST CLOTH	1	

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	57	WEPMA70L0327	OTTOMAN REAR COVER	1	
	58	WEPMA70L0407	SLIDE SPRING COVER RIGHT	1	
	59	WEPMA70L0587	SLIDE SPRING COVER LEFT	1	
	60	WEPMA70L0107	SLIDE GUIDE RIGHT	1	
	61	WEPMA70L0127	SLIDE GUIDE LEFT	1	
	62	WEPMA70L1507	SLIDE STOPPER RIGHT	1	
	63	WEPMA70L1517	SLIDE STOPPER LEFT	1	
	64	WEPMA73L0177	SLIDE RETURN SPRING	2	
	65	WEPMA70L1407	FOOT SLIDER RIGHT	1	
	66	WEPMA70L1427	FOOT SLIDER LEFT	1	
	67	WEPMA70K0617	SLIDE BASE COVER CR	2	
	68	WEPMA73L0247	SLIDE PIPE	1	
	69	WEPMA73K0397	SLIDE BASE COVER A	1	
	70	WEPMA70K3307	SLIDE HINGE CLOTH	2	
	71	WEPMA73L0627	SOLE SHIATSU BLOCK	2	
	72	WEPMA73K3778	FOOT CLOTH BLACK	1	
	73	WEPMA73K3738	SOLE COVER	2	
	74	WEPMA73L0957	FOOT SIDE HOSE INSIDE	1	
	75	WEPMA73L0857	FOOT SIDE HOSE OUTSIDE	1	
	76	WEPMA73L0877	FOOT SOLE HOSE CONNECTION	1	
	77	WEPMA73L0197	L SHAPED 3 ROW JOINT	1	
	78	WEPMA73L0747	LEG HOSE	1	
	79	WEPMA73L0887	LEG BACK HOSE RIGHT	1	
	80	WEPMA73L0907	LEG BACK HOSE LEFT	1	
	81	WEPMA73L0497	LEG TOP HOSE RIGHT	1	
	82	WEPMA73L0897	LEG TOP HOSE LEFT	1	
	83	WEPMA73L0687	LEG BACK HOSE	1	
	84	WEPMA73L0607	LEG BACK HOSE CON LONG	1	
	85	WEPMA73L0347	LEG PIPE	1	
	86	WEPMA73L0557	LEG COVER	1	
	87	WEPMA73L0847	LEG AIR BAG TOP RIGHT	1	
	88	WEPMA73L0927	LEG AIR BAG TOP LEFT	1	
	89	WEPMA73L0827	LEG AIR BAG BACK RIGHT	1	
	90	WEPMA73L0837	LEG AIR BAG BACK LEFT	1	
	91	WEPMA70L0317	LEG UNDER URETHANE	4	
	92	WEP3200L0467	ANCHOR CLIP	16	
	93	WEPMA73L0947	LEG AIR BAG BOTTOM R	1	
	94	WEPMA73L0967	LEG AIR BAG BOTTOM L	1	
	95	WEPMA73L0977	FOOT SIDE AIR BAG OUT R	1	
	96	WEPMA73L0987	FOOT SIDE AIR BAG OUT L	1	
	97	WEPMA73L0867	FOOT SIDE AIR BAG IN R	1	
	98	WEPMA73L0997	FOOT SIDE AIR BAG IN LEFT	1	
	99	WEP2200L9697	SCREW	8	
	100	WEPMA73L2508	HEATER	1	
	101	WEPMA73L2907	HEATER CONNECTION CORD	1	
	102	WEPMA73L2057	HEATER CONNECTION CORD	1	
	103	WEPMA73K3758	LEG CLOTH BLACK	1	
	104	WEPMA73L0567	FOOT COVER	1	
	105	WEPMA73L0597	FOOT SOLE AIR BAG	1	
	106	WEP3200L0937	HINGE PIN MINI D	2	
	107	WEP585H0368	SNAP PIN	2	
	108	WEPMA73L0307	FOOT PIPE	1	
	109	WEPMA73L0237	FOOT UNDER COVER	1	
	110	WEP3530L9677	SCREW, STAINLESS	8	
	111	WEPMA70L0187	MULTI ACTION SPRING	1	
	112	WEPMA73L0617	LEG TOP HOSE CON LONG	1	
	113	WEPMA73L0637	HOSE INSIDE CON LONG	1	
	114	WEPMA73L0647	HOSE OUTSIDE CON LONG	1	
	115	WEP005W8507	CABLE TIE SMALL	10	
	116	WEPMA73L0648	SHOULDER SIDE AIR BAG R	1	

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	117	WEPMA73L0658	SHOULDER SIDE AIR BAG L	1	
	118	WEPMA73L0577	SHOULDER SIDE HOSE	1	
	119	WEPMA70L0987	HIP AIR BAG RIGHT	1	
	120	WEPMA70L0857	HIP AIR BAG LEFT	1	
	121	WEPMA73L0757	HIP HOSE	1	
	122	WEPMA70L0117	SEAT SIDE AIR BAG RIGHT	1	
	123	WEPMA70L0137	SEAT SIDE AIR BAG LEFT	1	
	124	WEPMA73L0797	SEAT SIDE AIR HOSE RIGHT	1	
	125	WEPMA73L0807	SEAT SIDE AIR HOSE LEFT	1	
	126	WEPMA73L0937	SEAT HIP CONNECTION HOSE	1	
	127	WEPMA73L0767	PLUG HOSE RIGHT	1	
	128	WEPMA73L0777	PLUG HOSE LEFT	1	
	129	WEPMA73L0707	ELBOW HOSE RIGHT A	1	
	130	WEPMA73L0727	ELBOW HOSE RIGHT B	1	
	131	WEPMA73L0717	ELBOW HOSE LEFT A	1	
	132	WEPMA73L0657	ELBOW HOSE LEFT B	1	
	133	WEPMA73L0547	ELBOW R CONNECTION HOSE B	1	
	134	WEPMA73L0537	ELBOW R CONNECTION HOSE A	1	
	135	WEPMA73K3618	SEAT	1	
	136	WEPMA70L0897	SEAT AIR BAG RIGHT	1	
	137	WEPMA70L0977	SEAT AIR BAG LEFT	1	
	138	WEPMA70L0677	SEAT FRONT AIR BAG	1	
	139	WEPMA73L0737	SEAT HOSE RIGHT	1	
	140	WEPMA73L0697	SEAT HOSE LEFT	1	
	141	WEPMA73L0527	SEAT FRONT HOSE	1	
	142	WEPMA73L0517	SEAT HOSE FRONT	1	
	143	WEPMA73L0917	SEAT RIGHT CON HOSE	1	
	144	WEPMA73L0477	I-SHAPED JOINT	1	
	145	WEPMA73L0587	HOSE SEAT UNDER	1	
	146	WEPMA70L0197	3 ROW I SHAPED JOINT	1	
	147	WEPMA73L0787	LEG HOSE TOP SEAT UNDER	1	
	148	WEPMA73L0337	LEG HOSE BACK SEAT UNDER	1	
	149	WEPMA73L0817	FOOT HOSE SEAT UNDER	1	
	150	WEPMA70L0147	L SHAPED 2 ROW JOINT	1	
	151	WEPMA73K3608	ARMREST RIGHT BLACK	1	
	152	WEPMA73K3718	ARMREST LEFT BLACK	1	
	153	WEPMA70L7937	INSTALL SCREW SET	1	
	154	WEPMA73K4408	PC BOARD W/COMPONENT	1	
	155	WEPMA73K7187	CONTROLLER STAND	1	
	156	WEPMA70K7197	CORD CLIP	1	
	157	WEP005W8537	CABLE TIE MEDIUM	1	
	158	WEP3530L0217	EDGE PROTECTION TUBE	1	
	159	WEP2200L9697	SCREW	1	
	160	WEPMA70L3147	CORD INSTALL STAND S	1	
	161	WEP3530L3137	CORD FIXING FITTING	1	
	162	WEPMA70L0287	UNDER BOX TOP RIGHT	1	
	163	WEPMA73L0257	UNDER BOX TOP LEFT	1	
	164	WEPMA73L0287	SURGE TANK	1	
	165	WEP3210L0357	HOSE CLAMP	4	
	166	WEPMA50L0787	L SHAPED HOSE C	2	
	167	WEPMA73L0708	L SHAPED HOSE 1	1	
	168	WEPMA50L4477	PUMP	1	
	169	WEPMA73L2077	HEATER CONNECTION CORD	1	
	170	WEPMA73L2178	PC BOARD W/COMPONENT	1	
	171	WEP2000L6017	SCREW, STAINLESS	10	
	172	WEPMA73L2268	POWER SOURCE TRANSFORMER	1	
	173	WEPMA73L2258	SUB TRANSFORMER	1	
	174	WEPMA73L2457	3 WAY 2 ROW VALVE A	1	
	175	WEPMA73L2447	3 WAY 4 ROW VALVE B	1	
	176	WEPMA73L2467	3 WAY 2 ROW VALVE B	1	

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	177	WEPMA70L2437	3 WAY 4 ROW VALVE	1	
	178	WEPMA73L0677	HOSE CONNECTION MEDIUM	1	
	179	WEPMA73L0507	HOSE CONNECTION	1	
	180	WEPMA73L0667	HOSE CONNECTION SMALL	1	
	181	WEP2110L0517	BOARD SUPPORT	3	
	182	WEP2000L6967	PCB BUSHING C	3	
	183	WEPMA70L0637	GROUNDING PLATE	1	
	184	WEPMA70L3518	UNDER BOX BOTTOM	1	
	185	WEPMA70K2007	POWER SOURCE SWITCH BLOCK	1	
	186	WEPMA70K3097	POWER SOURCE COVER	1	
	187	WEPMA70K3287	LOCK BUTTON	1	
	188	WEPMA70K3257	SWITCH	1	
	189	WEP3510L2327	MICRO SWITCH SHEET	1	
	190	WEPMA70L2027	MICRO SWITCH	1	
	191	WEP3510S9087	SCREW, STAINLESS	1	
	192	WEP2400L9067	SCREW, STAINLESS	2	
	193	WEP3530K2058	POWER CORD	1	
	194	WEPMA70L2868	POWER SOURCE CORD A	1	
	195	WEP3010S9087	SCREW, STAINLESS	2	
	196	WEPMA70L0077	INSTALL PLATE	1	
	197	WEP353MH7867	LOCK KEY	1	
	198	WEPMA73K3698	HEADREST BLACK	1	
	199	WEPMA73K3628	RELAX CUSHION BLACK	1	
	200	WEPMA73K3668	CUSHION BLACK	1	
	201	WEPMA73K3898	MASSAGE WHEEL COVER	1	
	202	WEPMA73K3198	SHOULDER SIDE CLOTH R	1	
	203	WEPMA73K3208	SHOULDER SIDE CLOTH L	1	
	204	WEPMA70L3217	SIDE COVER OUTSIDE R	1	
	205	WEPMA70L3227	SIDE COVER OUTSIDE L	1	
	206	WEPMA70K3237	SIDE COVER INSIDE RIGHT	1	
	207	WEPMA70K3247	SIDE COVER INSIDE LEFT	1	
	208	WEPMA50K9537	SCREW, STAINLESS	12	
	209	WEPMA73K3178	REAR COVER TOP BLACK	1	
	210	WEPMA73K3168	REAR COVER BOTTOM BLACK	1	
	211	WEP3010K0997	SCREW-RIVET	2	
	212	WEPMA73K3818	SEAT SIDE CLOTH RIGHT BLACK	1	
	213	WEPMA73K3828	SEAT SIDE CLOTH LEFT BLACK	1	
	214	WEPMA70K3837	INSIDE COVER RIGHT	1	
	215	WEPMA70K3847	INSIDE COVER LEFT	1	
	216	WEPMA70L0027	INSIDE COVER FITTING RIGHT	1	
	217	WEPMA70L0067	INSIDE COVER FITTING LEFT	1	
	218	WEPMA73L3138	LEG COVER BACK	1	
	219	WEPMA70K3767	UNDER COVER FRONT	1	
	220	WEP2110K0447	PUSH-TURN RIVET	7	
	221	WEP596K0457	PUSH-TURN RIVET	15	
	222	WEPMA70K3057	SIDE COVER RIGHT BLACK	1	
	223	WEPMA70K3067	SIDE COVER LEFT BLACK	1	
	224	WEPMA73K3918	ELBOW BASE RIGHT	1	
	225	WEPMA73K3928	ELBOW BASE LEFT	1	
	226	WEPMA70L6037	HEX WASHER BOLT	2	
	227	WEPMA70L6337	LINK DISC SPRING	6	
	228	WEP1270L6527	PLAIN WASHER	7	
	229	WEPMA70L1557	ELBOW LINK PIPE	2	
	230	WEPMA70L6047	HEX WASHER HEAD BOLT	4	
	231	WEPMA50S9137	SCREW, STAINLESS	6	
	232	WEPMA73T3137	LEG COVER RIGHT BROWN	1	
	233	WEPMA73T3157	LEG COVER LEFT BROWN	1	
	234	WEPMA70L9687	SCREW, STAINLESS	2	
	235	WEP3530L0167	GUIDE ROLLER SPRING	1	
	236	WEP3530L0157	GUIDE ROLLER	2	

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	237	WEPMA50L0047	MAIN FRAME	1	
	238	WEPMA70L1467	UP/DOWN GEAR	2	
	239	WEPMA73L0378	UP/DOWN SHAFT	1	
	240	WEP3510L6057	UP/DOWN SHAFT BOLT	2	
	241	WEPMA70L3537	FITTING	2	
	242	WEPMA70L1457	GUIDE ROLLER C BLOCK	1	
	243	WEP3530H1927	GUIDE ROLLER C	1	
	244	WEP578AL0317	RUBBER RING	2	
	245	WEPMA70L1447	PINION C	1	
	246	WEPMA70L1547	GUIDE ROLLER B BLOCK	1	
	247	WEPMA70L0427	PINION B	1	
	248	WEP3530H1937	GUIDE ROLLER B	1	
	249	WEP2200L0337	UP/DOWN SHAFT HOLDER B	1	
	250	WEP3510L0187	GROUNDING PLATE	1	
	251	WEP3200L1767	UP/DOWN GEAR BOX A	1	
	252	WEPMA73L1798	UP/DOWN GEAR BOX B	1	
	253	WEPMA73L1418	UP/DOWN WORM WHEEL	1	
	254	WEP3530L1007	UP/DOWN MOTOR	1	
	255	WEPMA70L2198	UP/DOWN MOTOR SPEED SENSOR	1	
	256	WEP3530L1807	MOTOR SPEED SENSOR COVER	2	
	257	WEP3530S6027	SCREW, STAINLESS	4	
	258	WEP596L9537	SCREW, STAINLESS	4	
	259	WEP2200L9677	SCREW, STAINLESS	2	
	260	WEP3200L9677	SCREW, STAINLESS	1	
	261	WEPMA70L2188	UP/DOWN SENSOR	1	
	262	WEP3510L1397	UP/DOWN SENSOR GEAR	1	
	263	WEP3200L1847	UP/DOWN SENSOR INSTALL STAND	1	
	264	WEP590L6017	SCREW, STAINLESS	6	
	265	WEP760N9607	SCREW, STAINLESS	2	
	266	WEP3510L0227	UP/DOWN SHAFT INSTALL PLATE	1	
	267	WEP3530L1037	WIDTH MOTOR	1	
	268	WEPMA70L2148	WIDTH MOTOR SPEED SENSOR	1	
	269	WEPMA70L1108	WIDTH BELT	1	
	270	WEPMA70L4958	INTENSITY SENSOR	1	
	271	WEPMA70L1478	INTENSITY DRIVING BLOCK	1	
	272	WEPMA73L1438	WIDTH DRIVING BLOCK	1	
	273	WEPMA50L0337	PROTECTION CLOTH	1	
	274	WEP3200K0457	BRUSH CLIP	2	
	275	WEPMA50L0207	ECCENTRIC LINK PLATE RIGHT	1	
	276	WEPMA50L0217	ECCENTRIC LINK PLATE LEFT	1	
	277	WEP3510S9057	SCREW, STAINLESS	2	
	278	WEP3200L0157	ARM PULLING SPRING	2	
	279	WEP3510L0477	INTENSITY SENSOR PLATE	1	
	280	WEP3510L0507	GREASE COVER	1	
	281	WEP3510L0497	SNAP RIVET	2	
	282	WEPMA70L2208	ROTATION SENSOR	1	
	283	WEPMA70L2138	WIDTH SENSOR INSTALL STAND	1	
	284	WEP3510L1887	WIDTH SENSOR INSTALL STAND B	1	
	285	WEP3510L1897	WIDTH SENSOR GREASE COVER	1	
	286	WEP3510L9067	SCREW, STAINLESS	1	
	287	WEP3510L0487	WIDTH SENSOR PLATE	1	
	288	WEP2110L0367	SNAP PIN	1	
	289	WEPMA50L0577	TAPPING SHAFT COVER	1	
	290	WEPMA50L0527	SNAP RIVET	2	
	291	WEP3530S9537	SCREW, STAINLESS	1	
	292	WEP2200L3417	UP/DOWN BELT	1	
	293	WEPMA73L0038	PCB INSTALL PLATE	1	
	294	WEPMA73L2108	PC BOARD W/COMPONENT	1	
	295	WEP3510L0547	MESSAGE BLOCK COVER	1	
	296	WEP3510K0997	SCREWRIVET	1	

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	297	WEP780L0447	MESSAGE BLOCK COVER CLIP	1	
	298	WEPMA70L2898	POWER SOURCE CONNECTION CORD	1	
	299	WEPMA10L5048	FERRITE CORE	1	
		WEPMA73K3768	OTTOMAN BLOCK BLACK	1	
		WEPMA73L4138	MESSAGE MECHANISM BLCOK	1	
		WEPMA73K8238	PACKAGING	1	
		WEPMA73L8798	OPERATING INSTRUCTIONS	1	