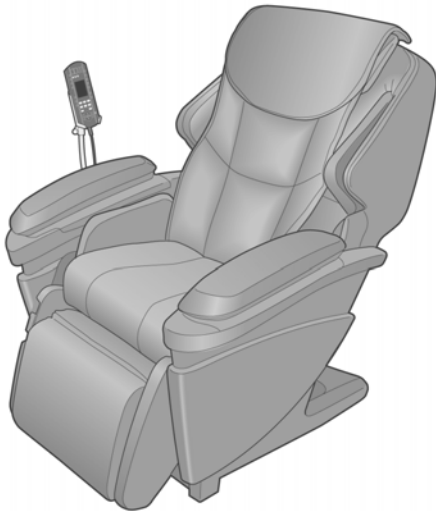


Service Manual

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.

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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) |

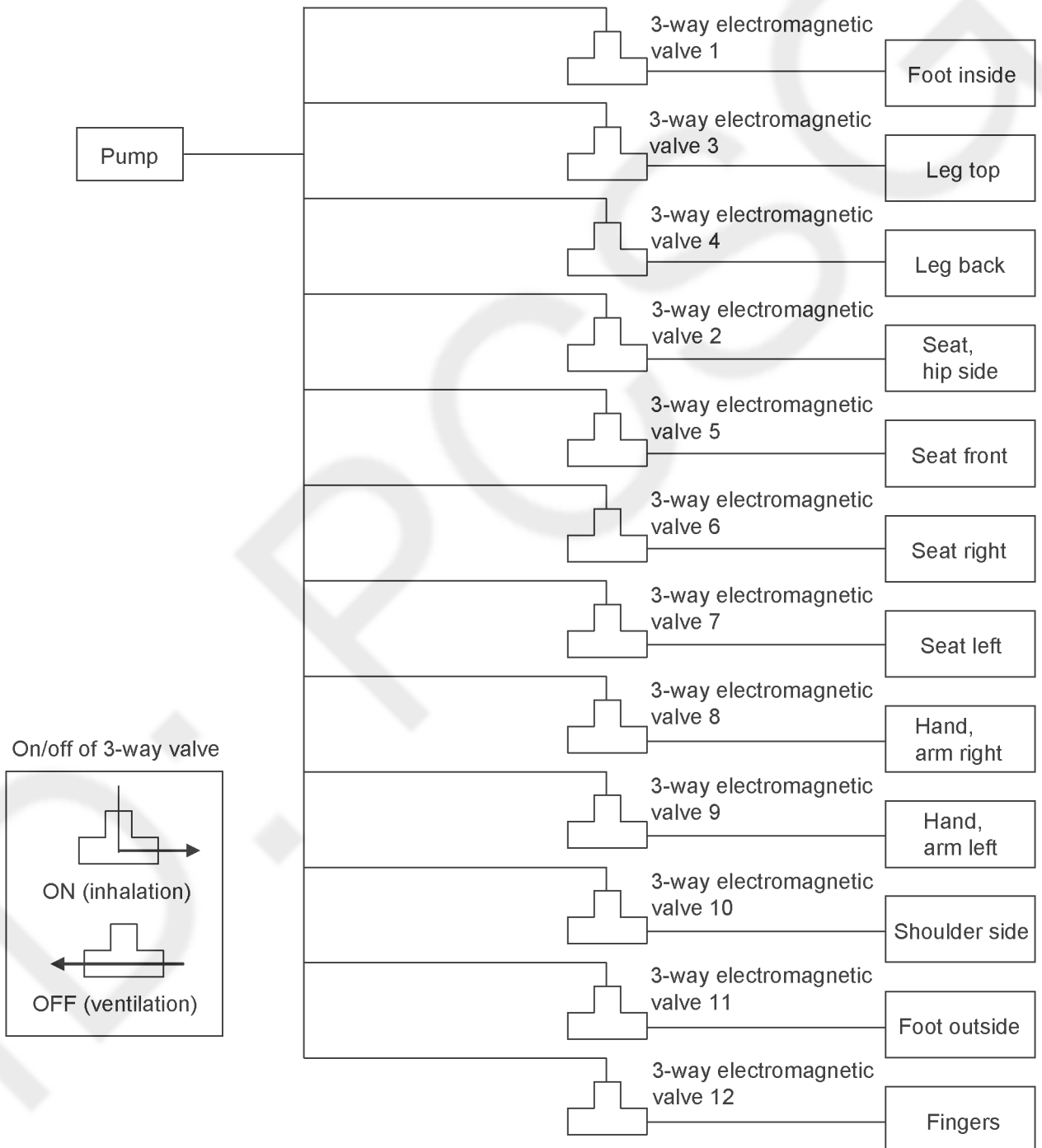
For those who weigh 100 kg (220.3 lbs) or more, the product operations may make more noise and the fabric cover may wear faster.

2 Technical Descriptions

2.1. Operation of Electromagnetic Valves and Air Bags

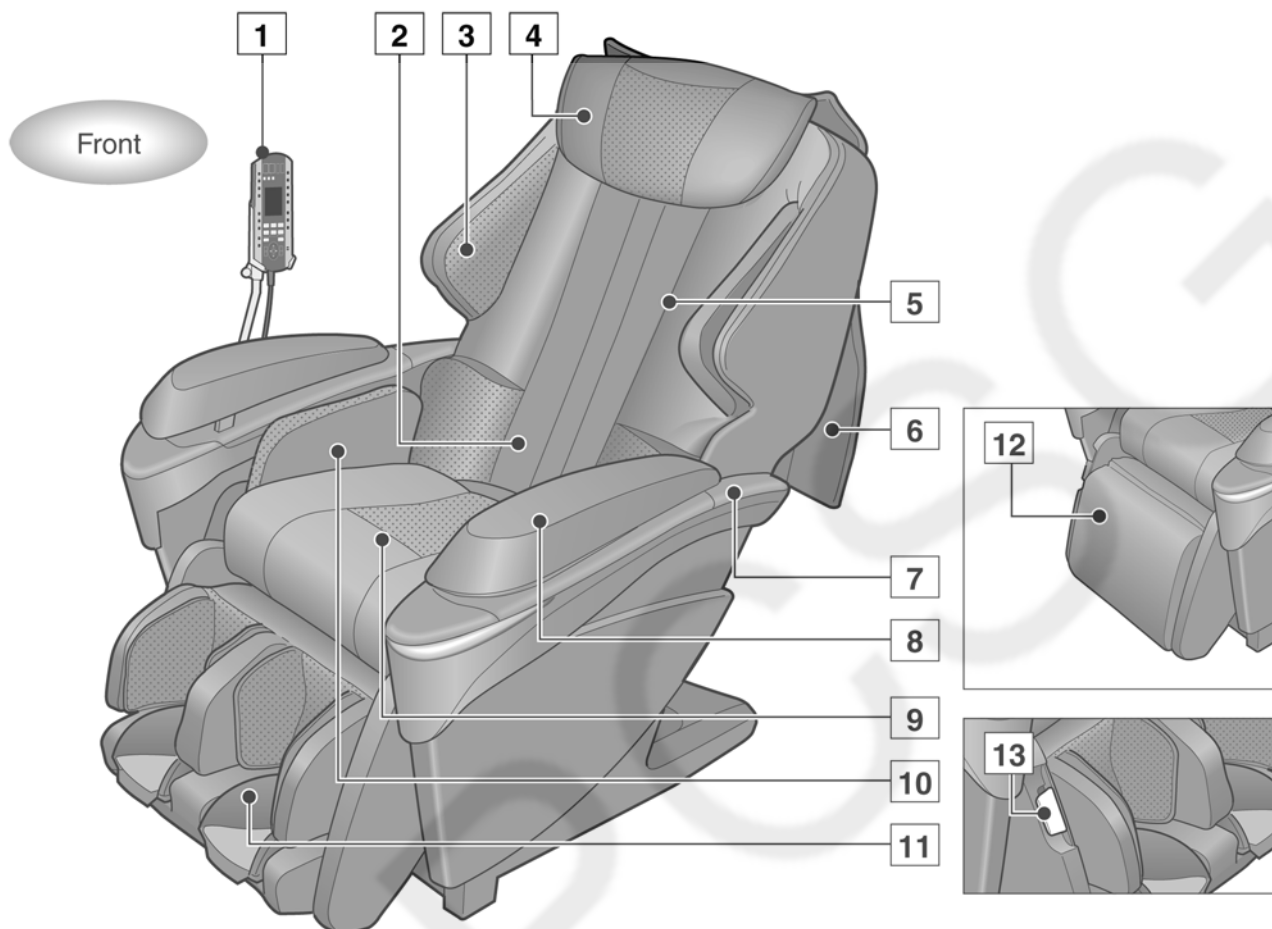
Air massage is operated driving the Pump unit x 1pc, 3-way 3-roll electromagnetic valve, and 3-way 4-roll electromagnetic valve.

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.

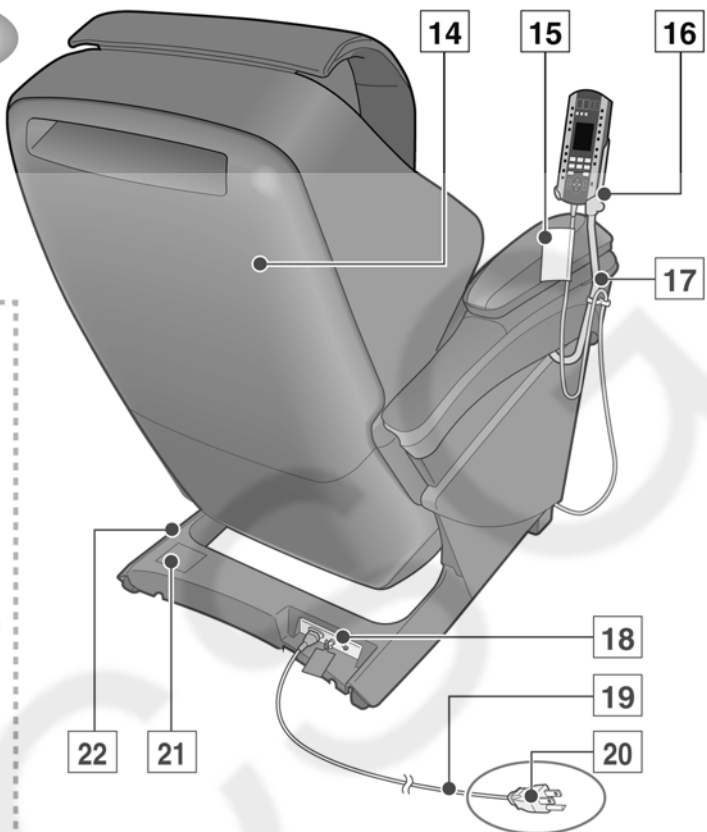
12 Leg rest-Flat section

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

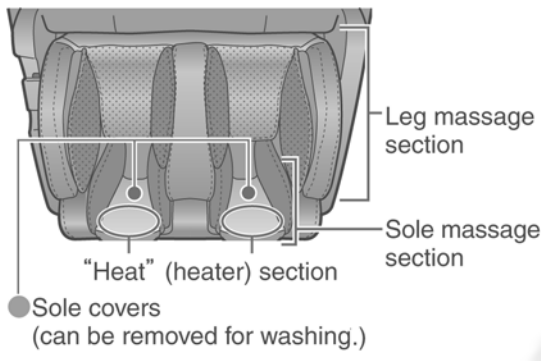
13 Leg rest rotation lock release lever

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

Back

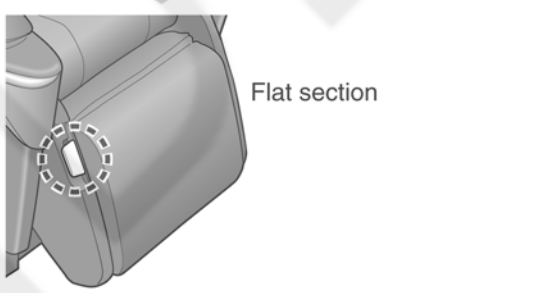
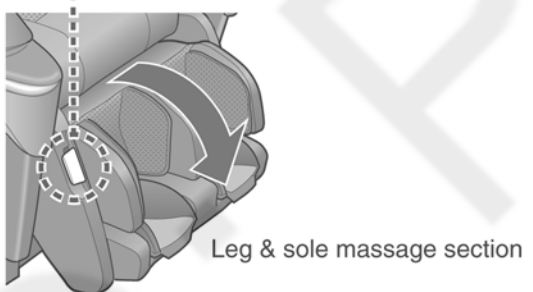


Leg rest-Leg & sole massage section



Can be stored when not using for massage

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



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

18 Power switch section

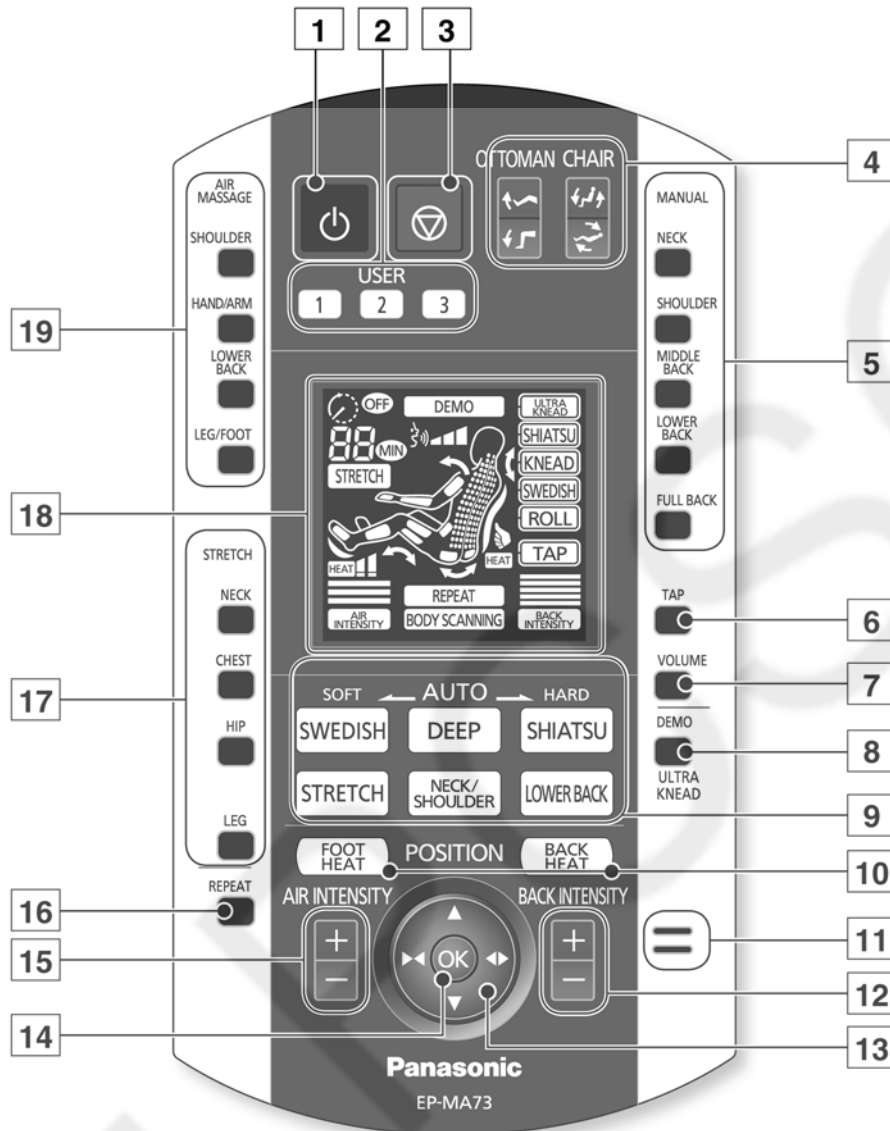
- Lock switch
- Power switch
- Lock switch key
- Lock switch key tag

● 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" massage 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

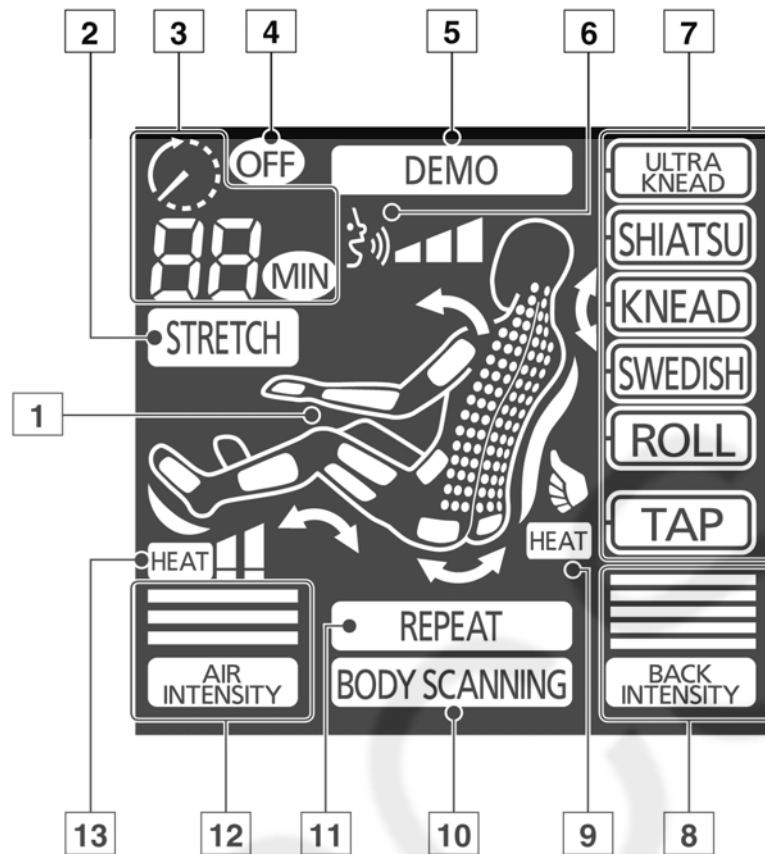
● "Neck", "chest", "hip", "leg" stretch.

18 Display

19 AIR MASSAGE selection On/Off buttons

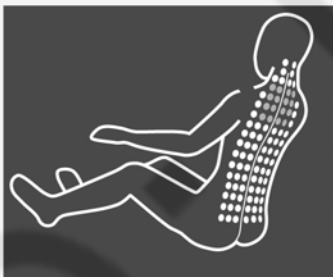
● "Shoulder", "arm", "lower back", "leg/foot" air.

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

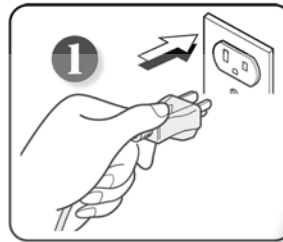
13 "Foot Heat" display

4 Operating Instructions

4.1. Turning on the Power

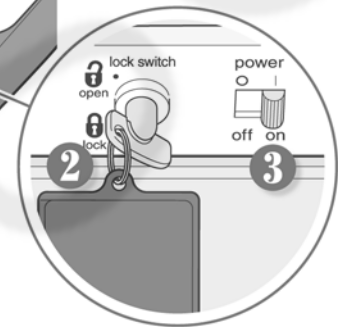
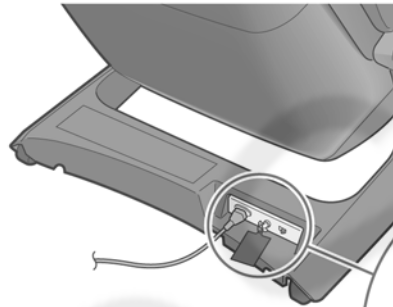
1 Insert the power plug into the power outlet.

- 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

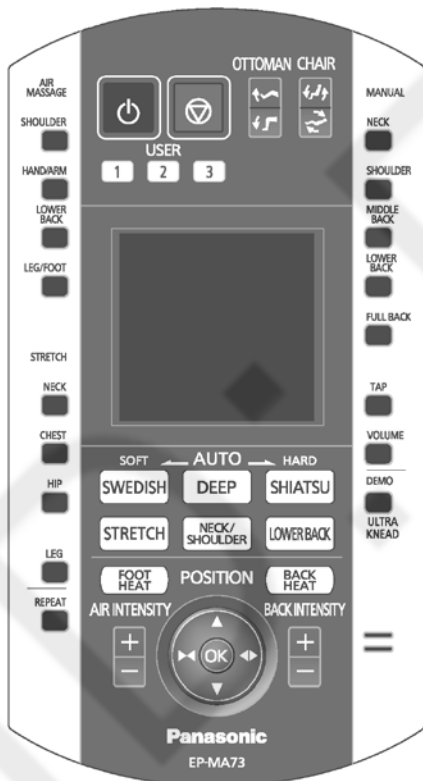
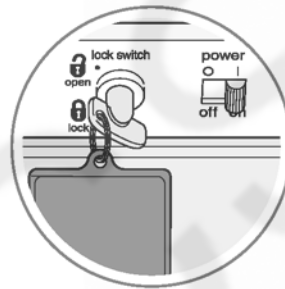
5.1. Preparation of Secret Mode

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 | Code | Operation | Display | Range |
|----|------|--|---|----------|
| 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. |

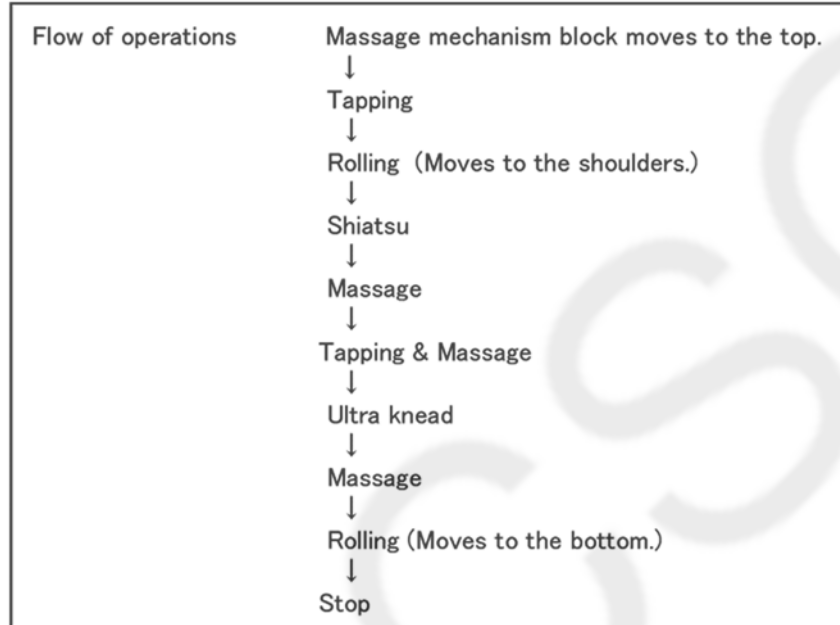
Buzzer: it beeps "pp".

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 | 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 | 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".

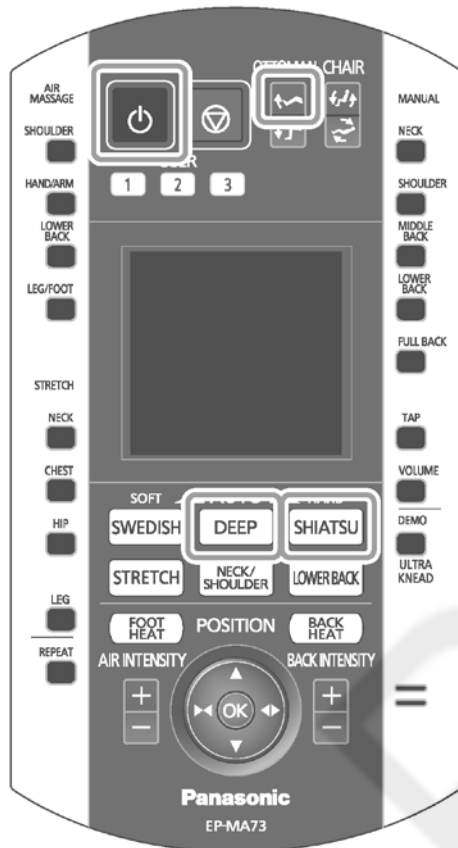
5.13. Packing mode [00]

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) | | | | | Heater/Thermistor |
| F72 | Foot heater error (Thermistor poor connection) | | | Thermistor | | YES |
| F73 | Foot heater error (Thermistor disconnection) | | | Sub PCB | | |
| F74 | Foot heater error (Thermistor short-circuit) | | | | | |
| F75 | Foot heater error (Transistor short-circuit) | | | | | |
| F76 | Foot heater error (Sensor wire error) | Sensor wire | | | | |
| F33 | Sensor malfunction | Tapping sensor | | | | |
| F34 | | Ottoman sensor | | | | |
| F35 | | Reclining sensor | | | | |
| F36 | | Width sensor | | | | |
| F37 | | Up/down sensor | | | | |
| F38 | | Intensity sensor | | | | |
| F14 | | Motor stall | Ottoman motor | | | |
| F15 | Reclining motor | | | | | |
| F16 | Ottoman motor continuously ON | | | | | |
| F17 | Reclining motor continuously ON | | | | | |
| F18 | Tapping motor | | | | | |
| U10 | Seat sensor | Body pressure sensor | | | | |

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

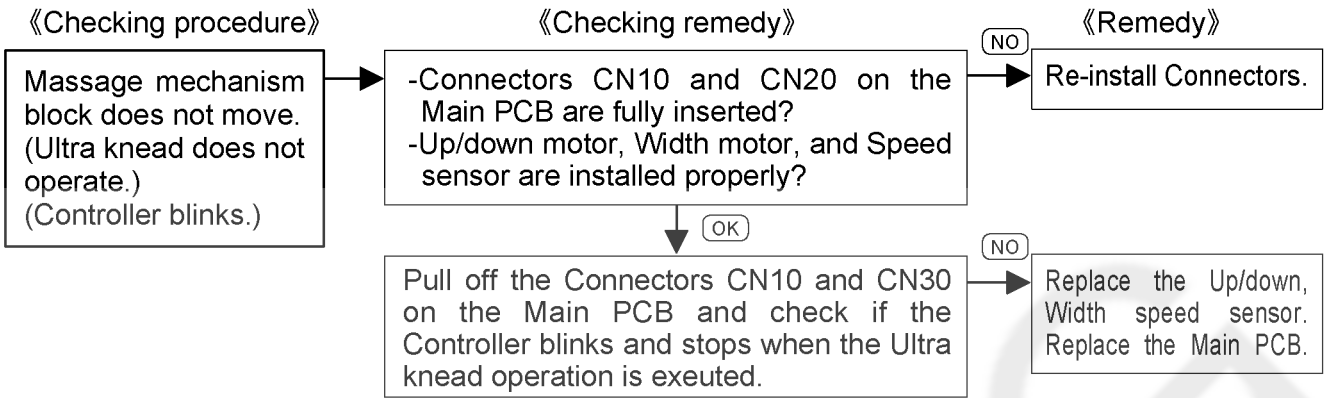
Proceed the procedures 1-3 of 5.1. Preparation of Secret mode, and push the Quick Stop button.

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 |
| 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 | |



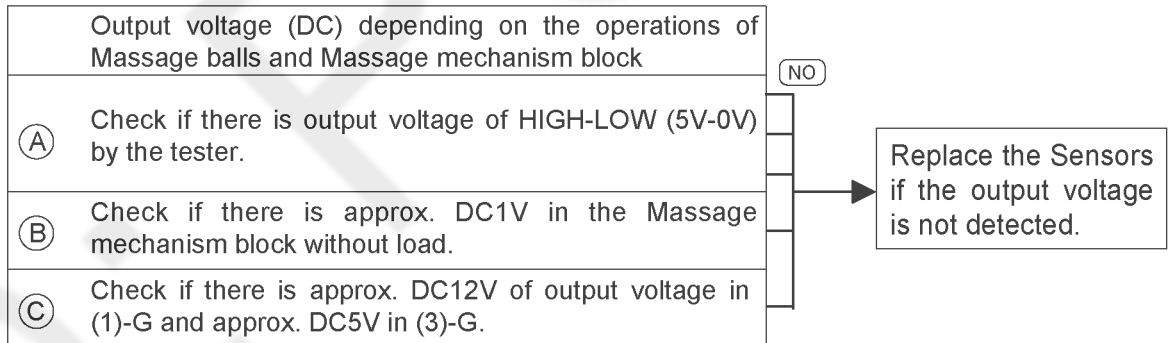
Check with Soft tapping, widest, strongest or weakest, and Massage block lowest.

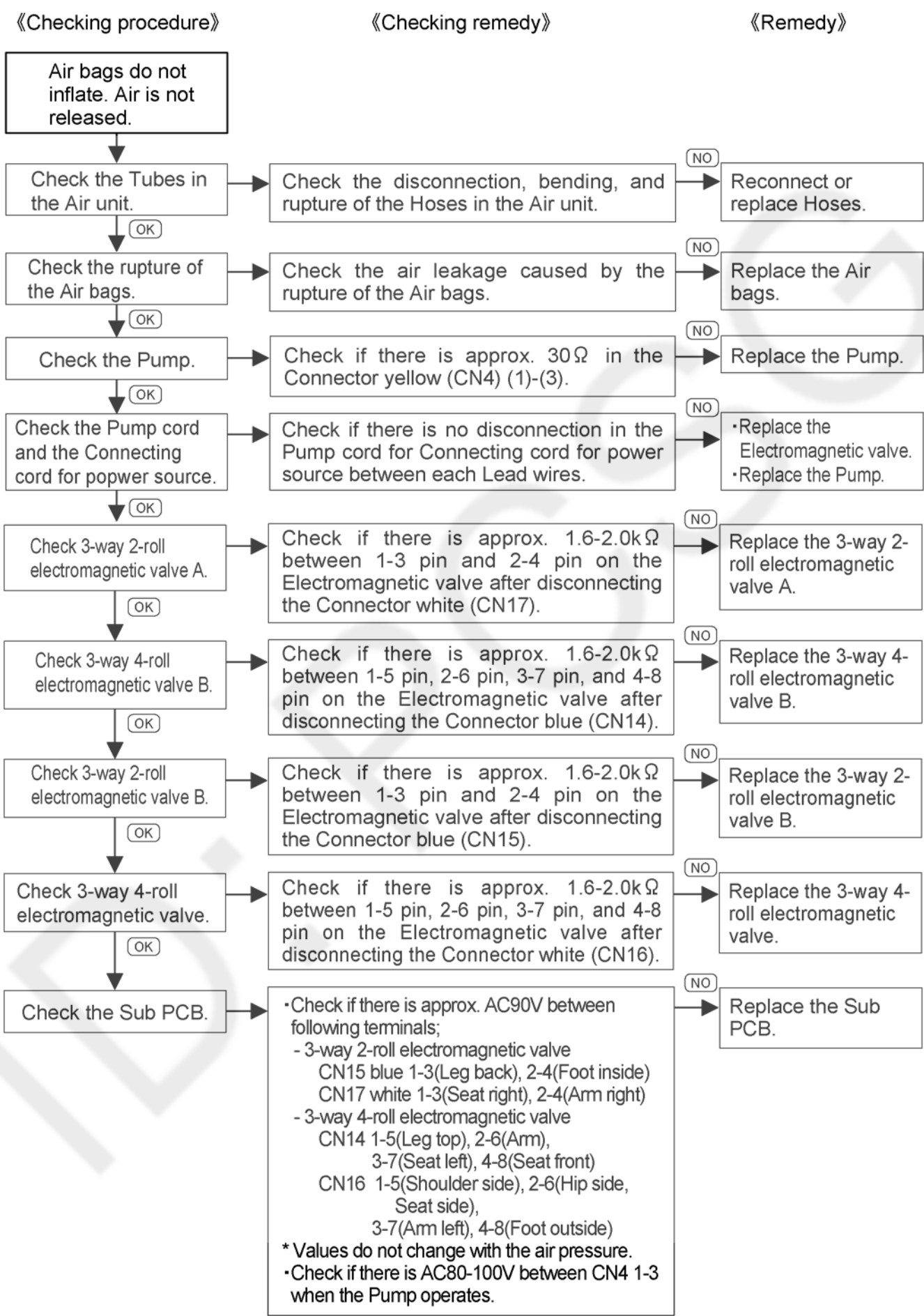
Check each Sensor plates.

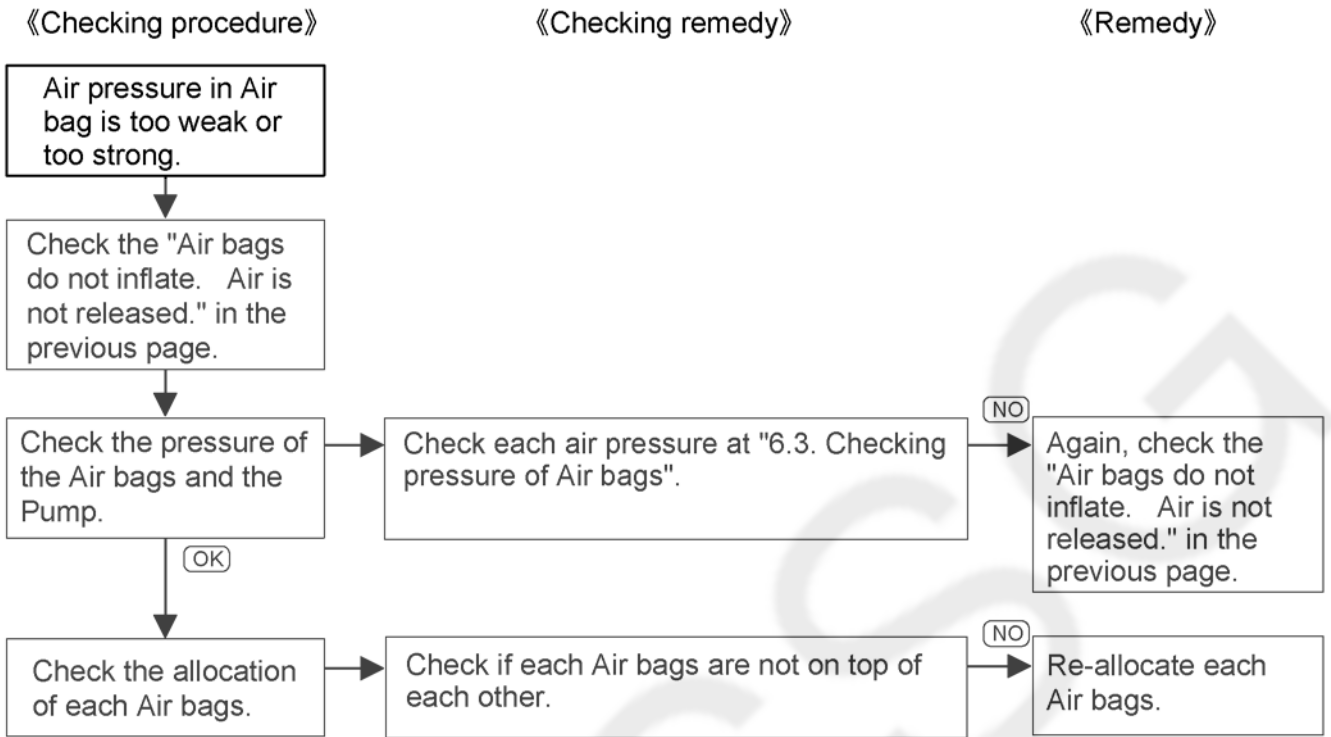
- Intensity sensor
- Up/down sensor
- Width sensor
- Body pressure sensor
- Tapping sensor

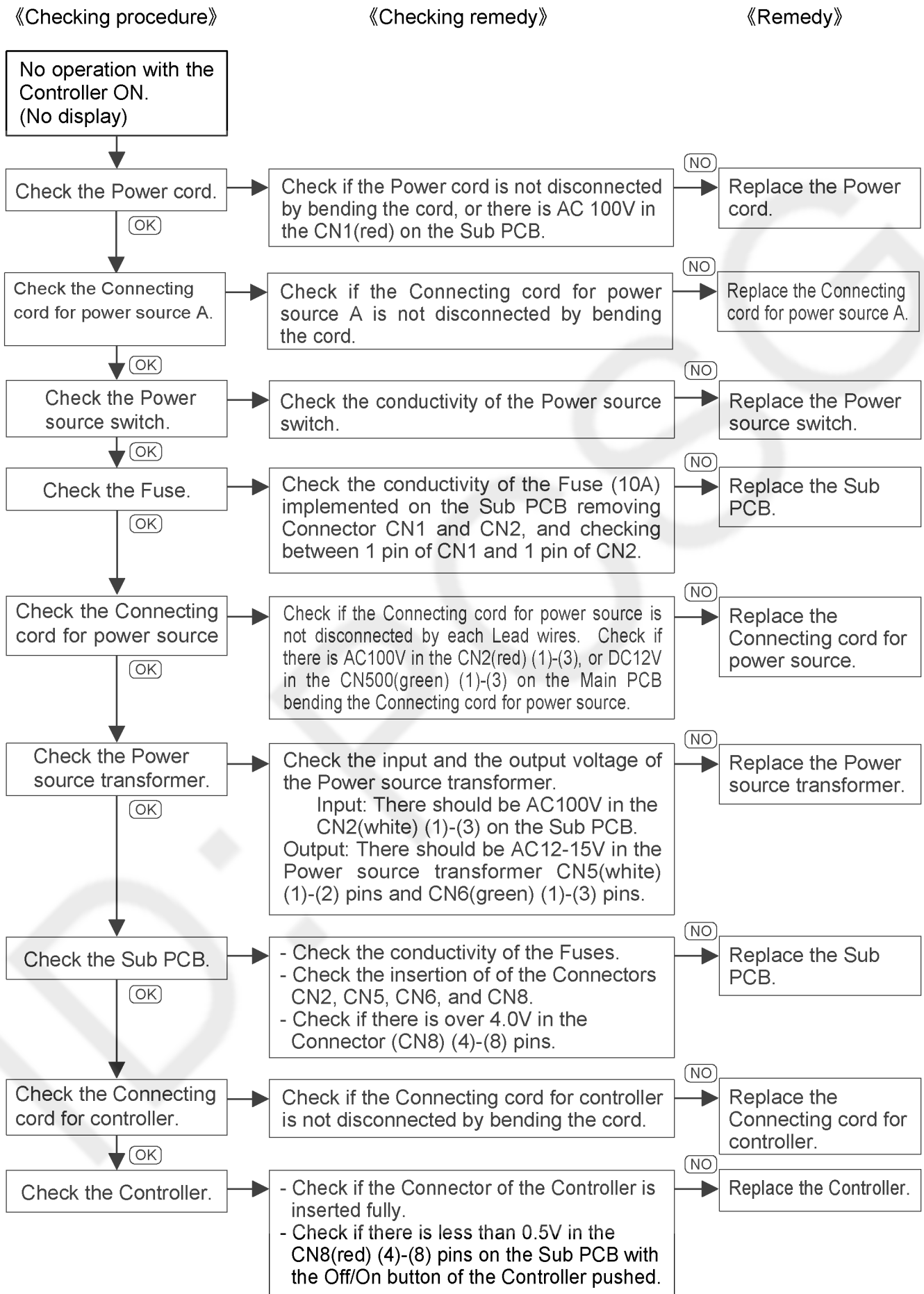
| Sensor | Pin No. | Color of Lead wire | G | |
|------------------------------|-----------------|--------------------|-------|-----|
| Intensity sensor (CN103) | (4) | O | | |
| Up/down sensor (CN106) | (4)·(6)·(7)·(8) | O·G·Bu·P | JP100 | (A) |
| Width sensor (CN109) | (5)·(6)·(7) | Y·G·Bu | | |
|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

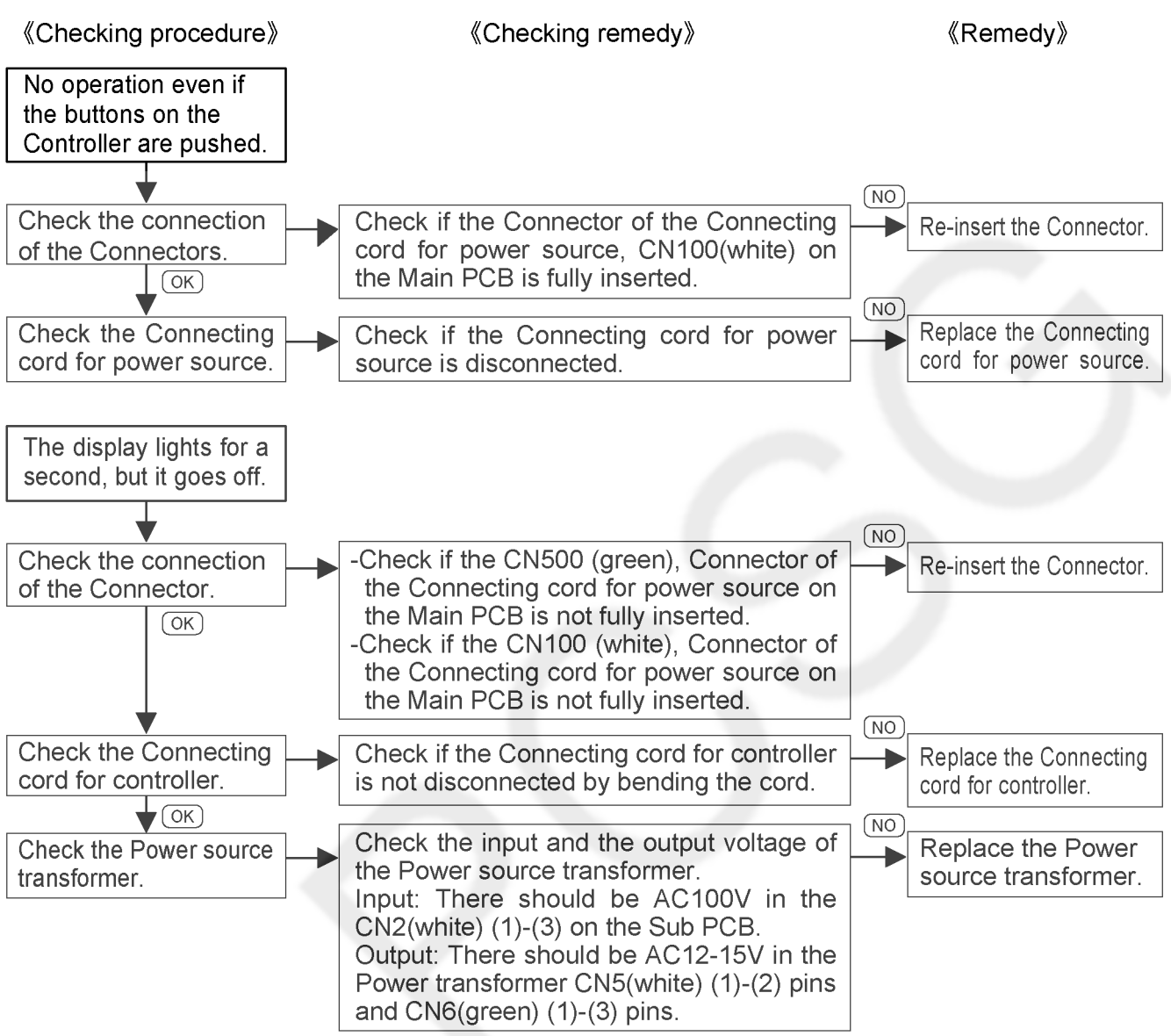
O-Orange, G-Green, Bu-Blue, P-Purple, Y-Yellow, R-Red, B-Black

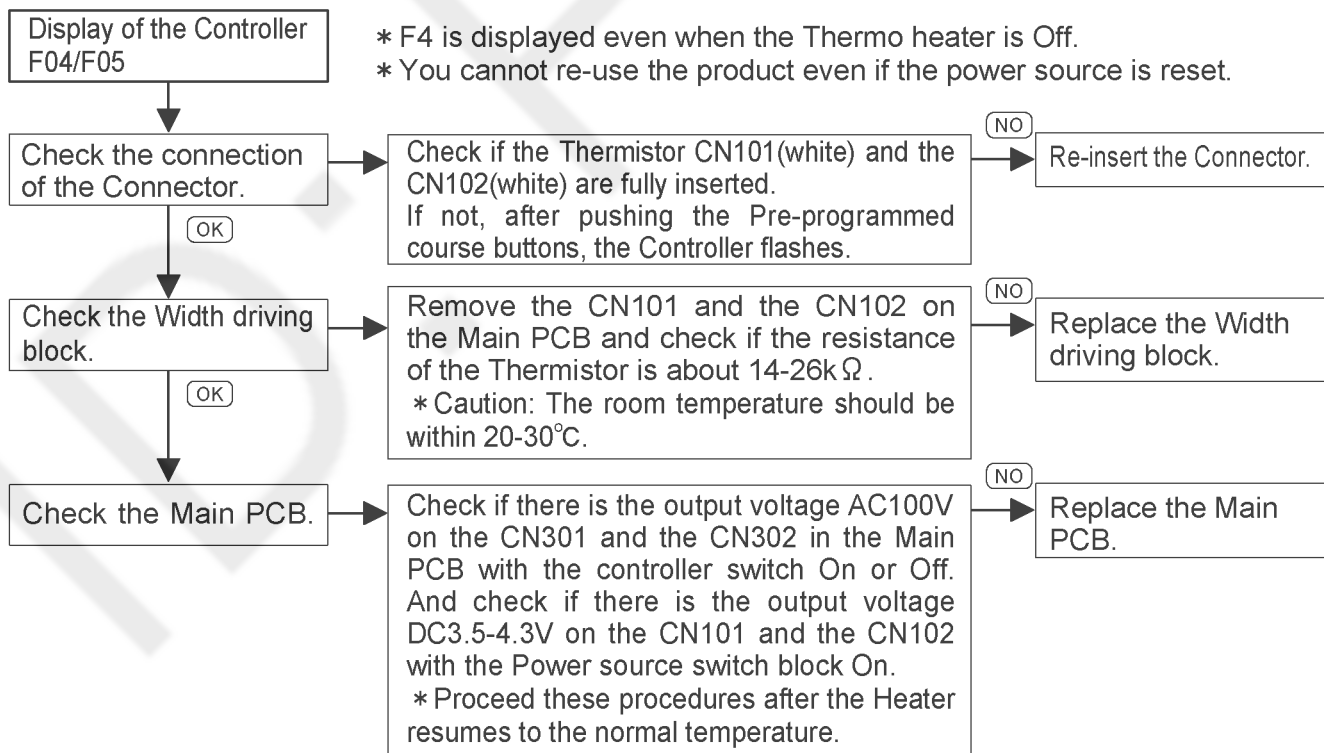
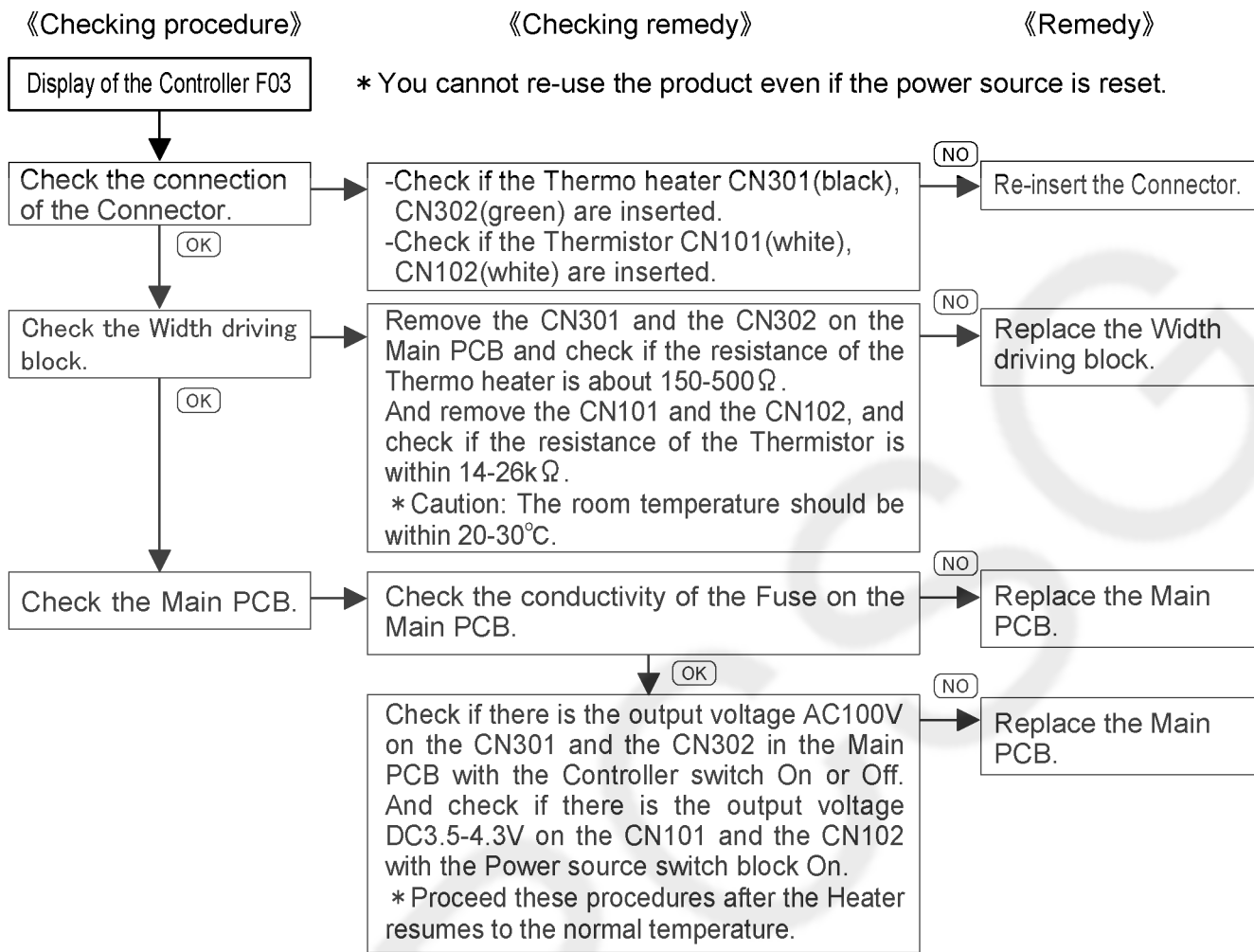


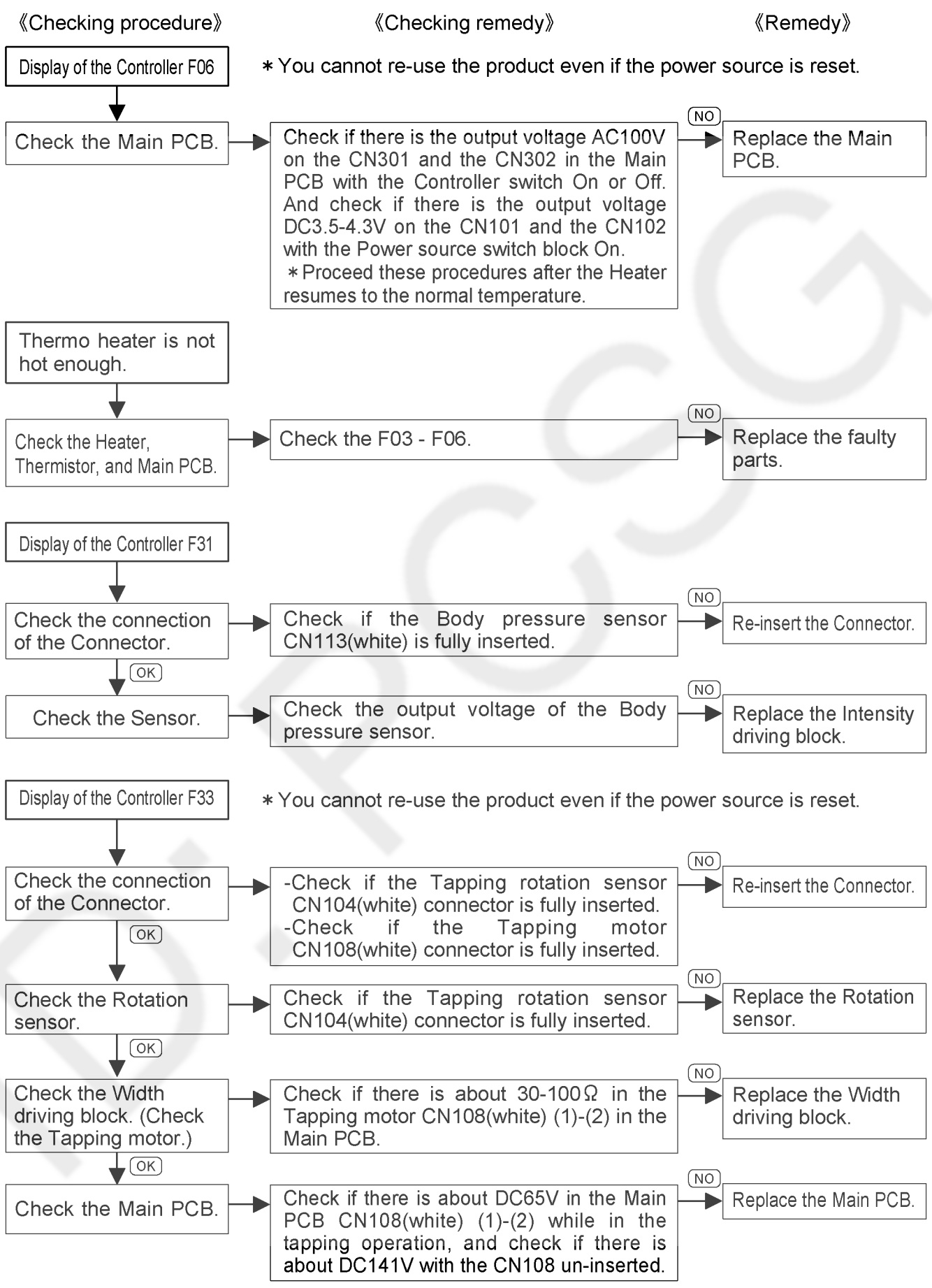


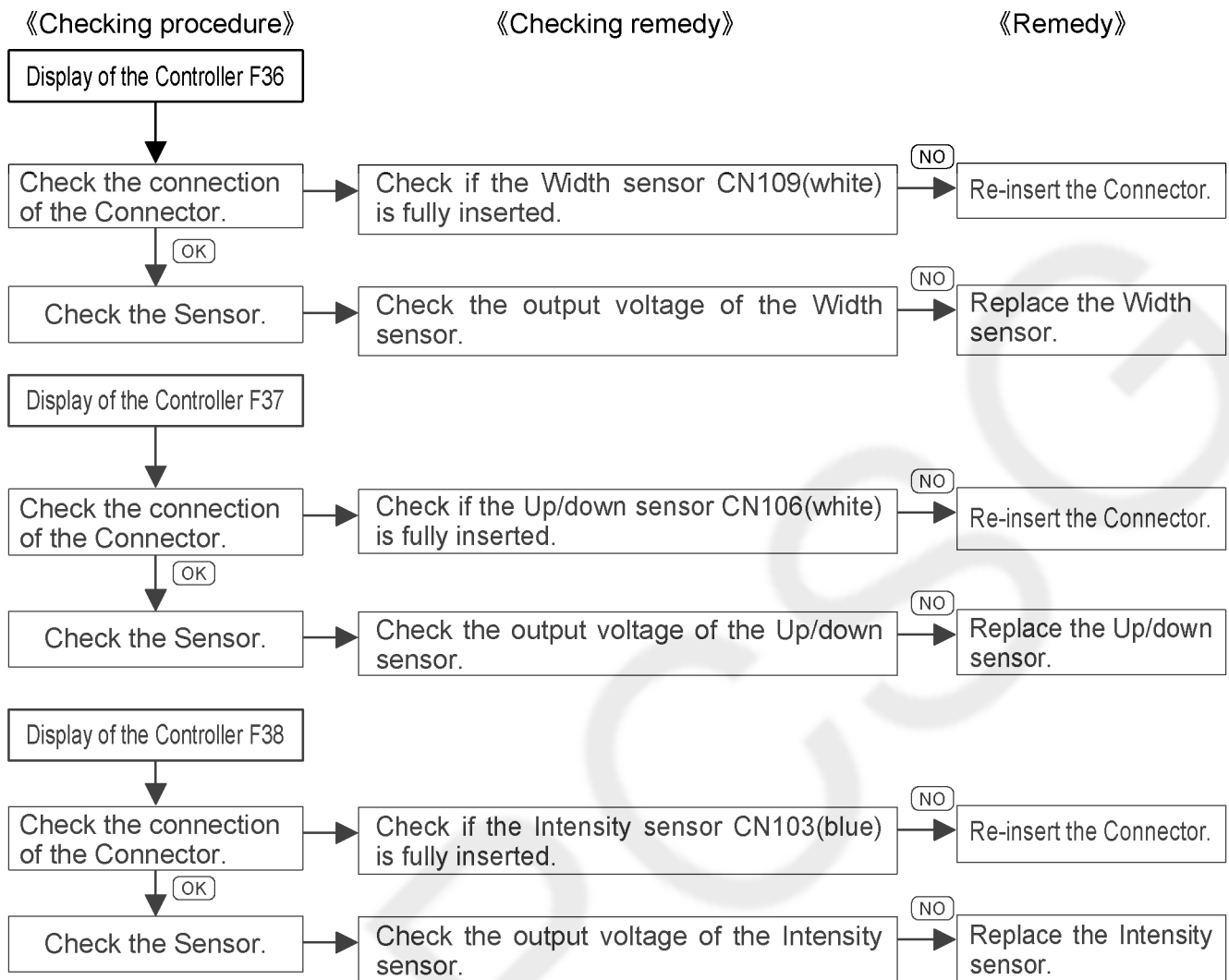








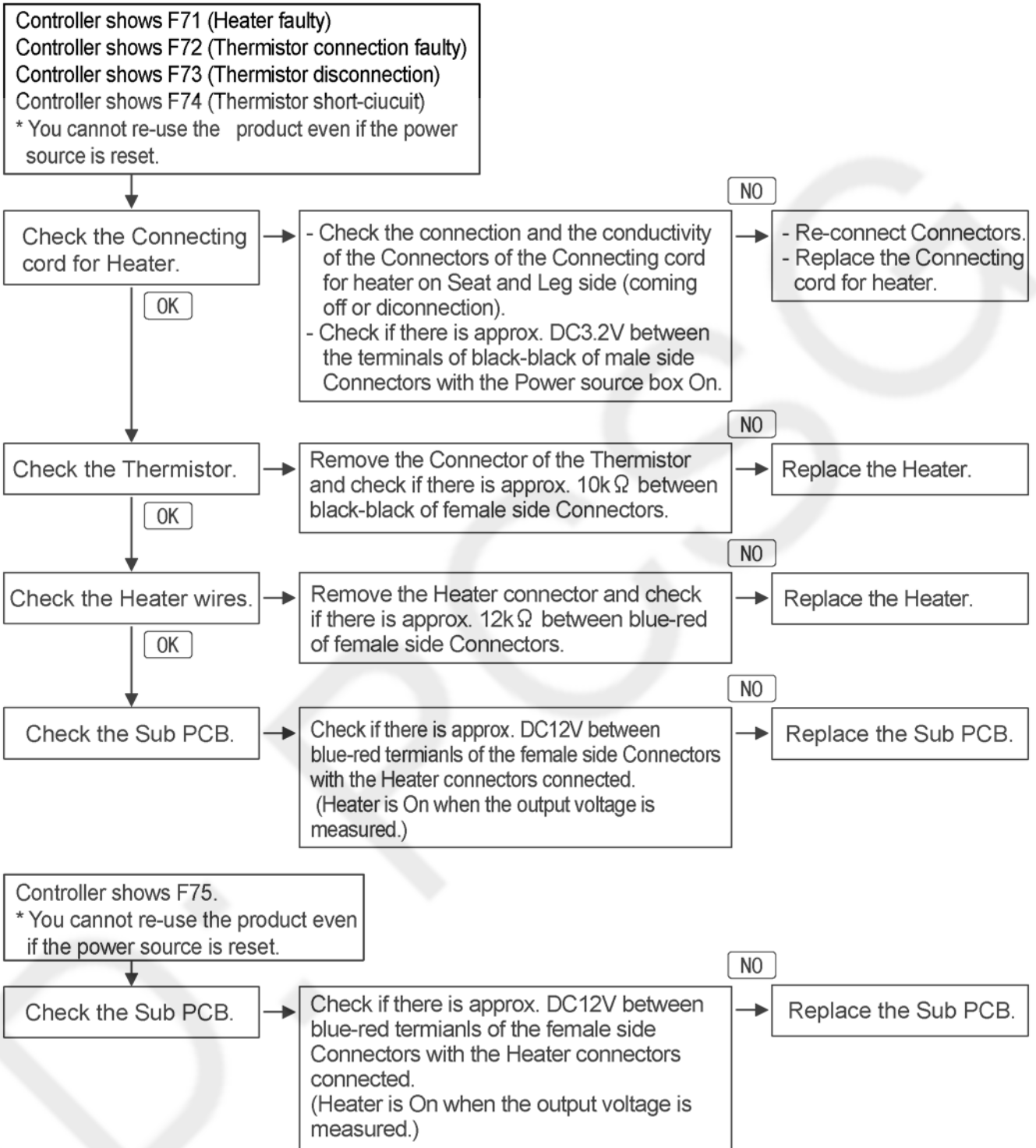




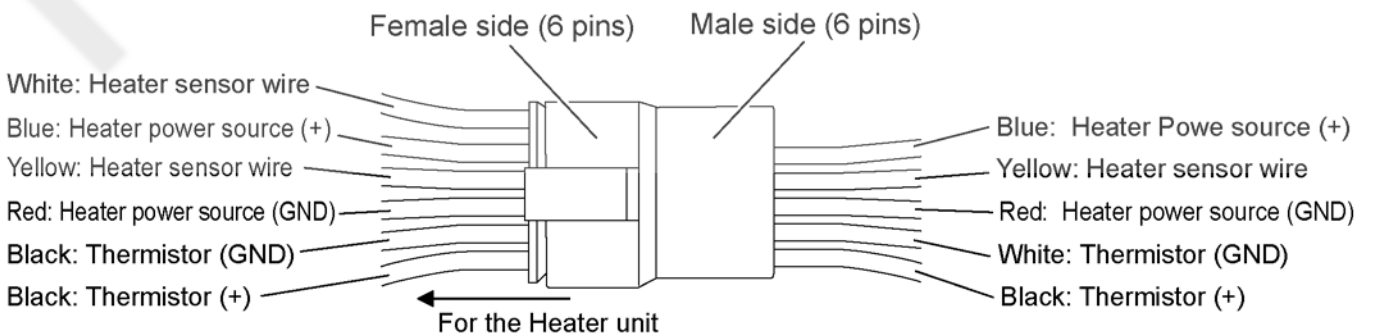
《Checking procedure》

《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

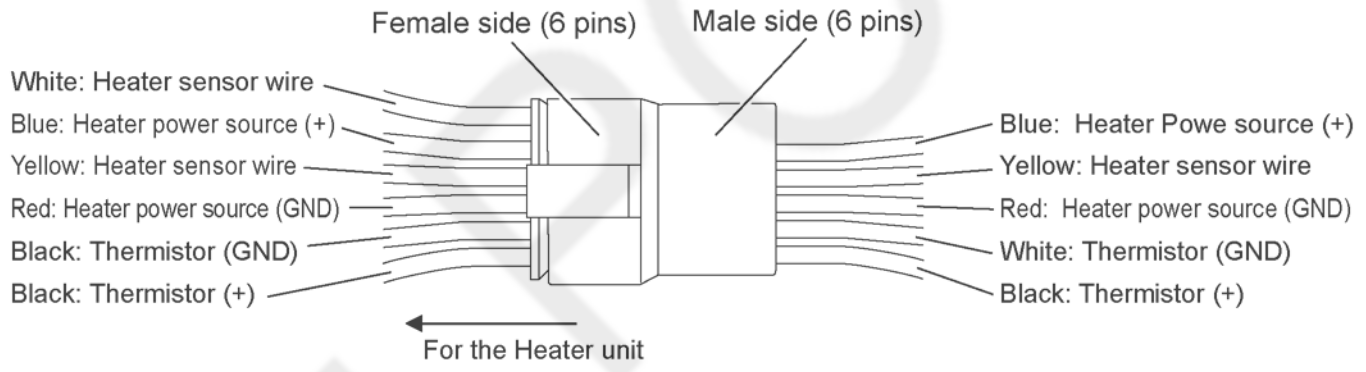
Replace the Heater unit.

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.



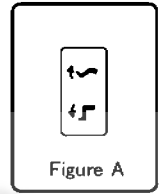
《Checking procedure》

《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.

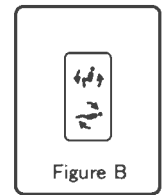
Check if there is about 30Ω in the Ottoman lift unit CN11(white)(1)-(3). And check if there is about 5V in the Ottoman lift sensor CN13(4)-GND, 0C in (5)-GND, and 0V in (6)-GND.

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

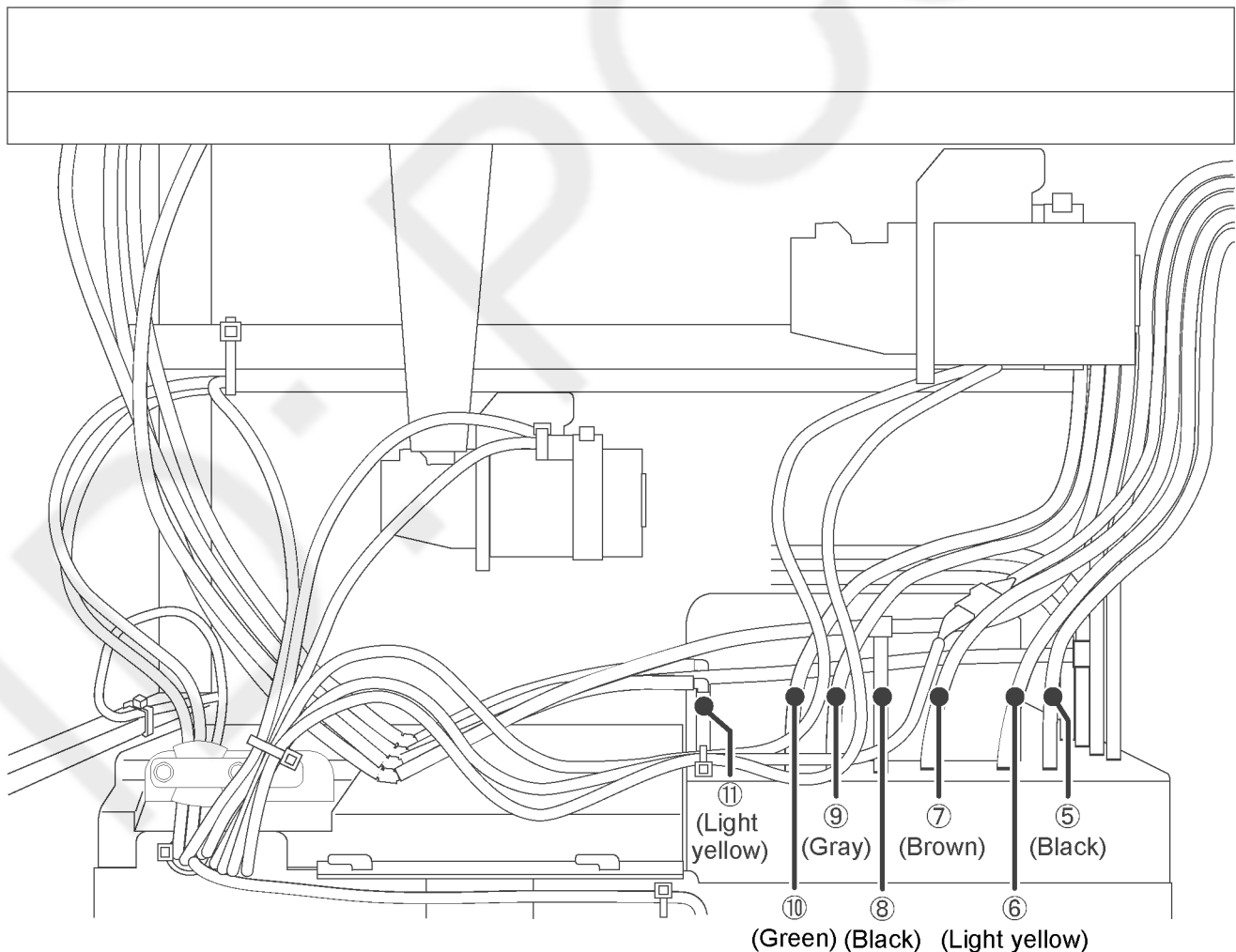
You can find the pressure leakage of the Air bags by this checking.
Remove the Under cover and the Side cover.

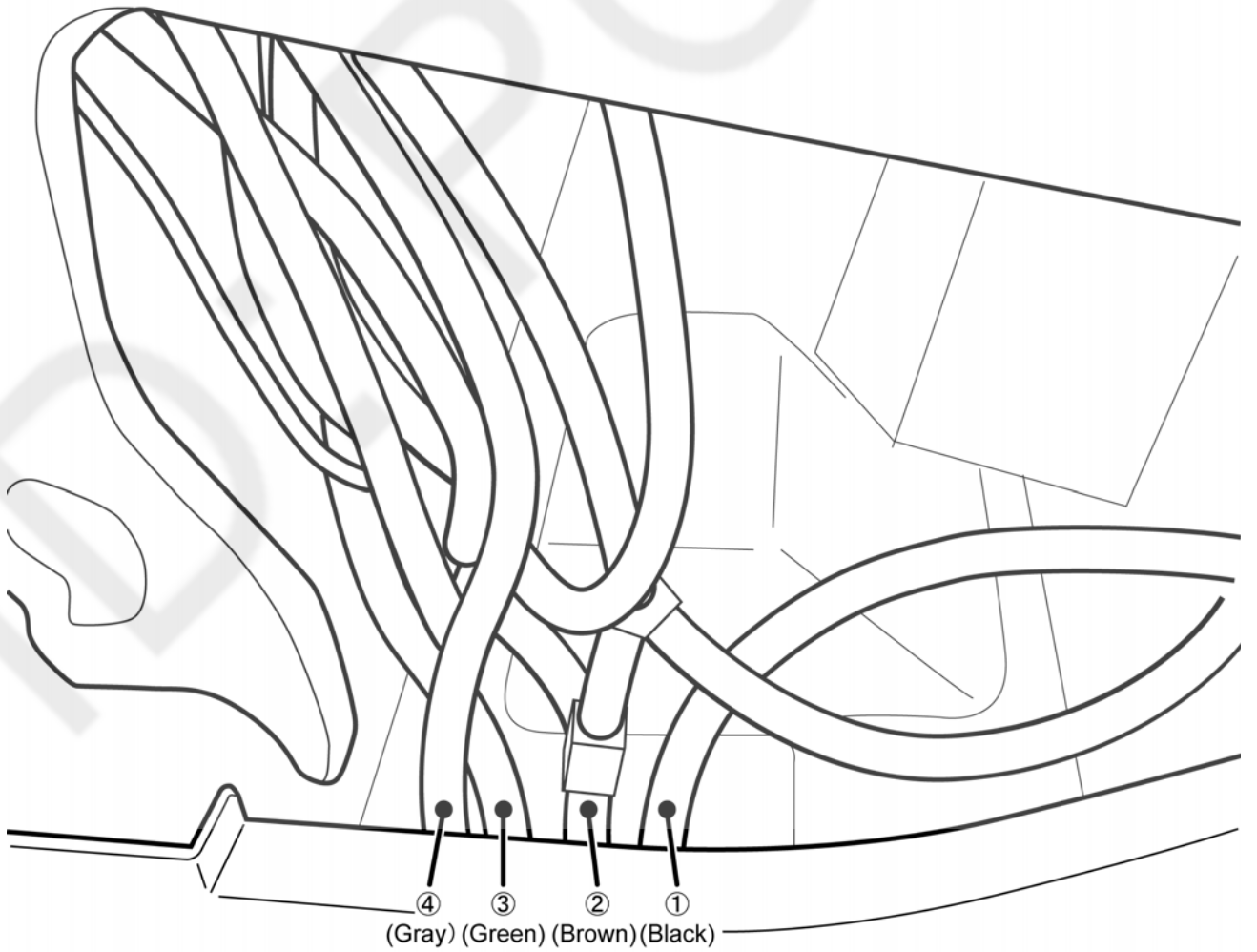
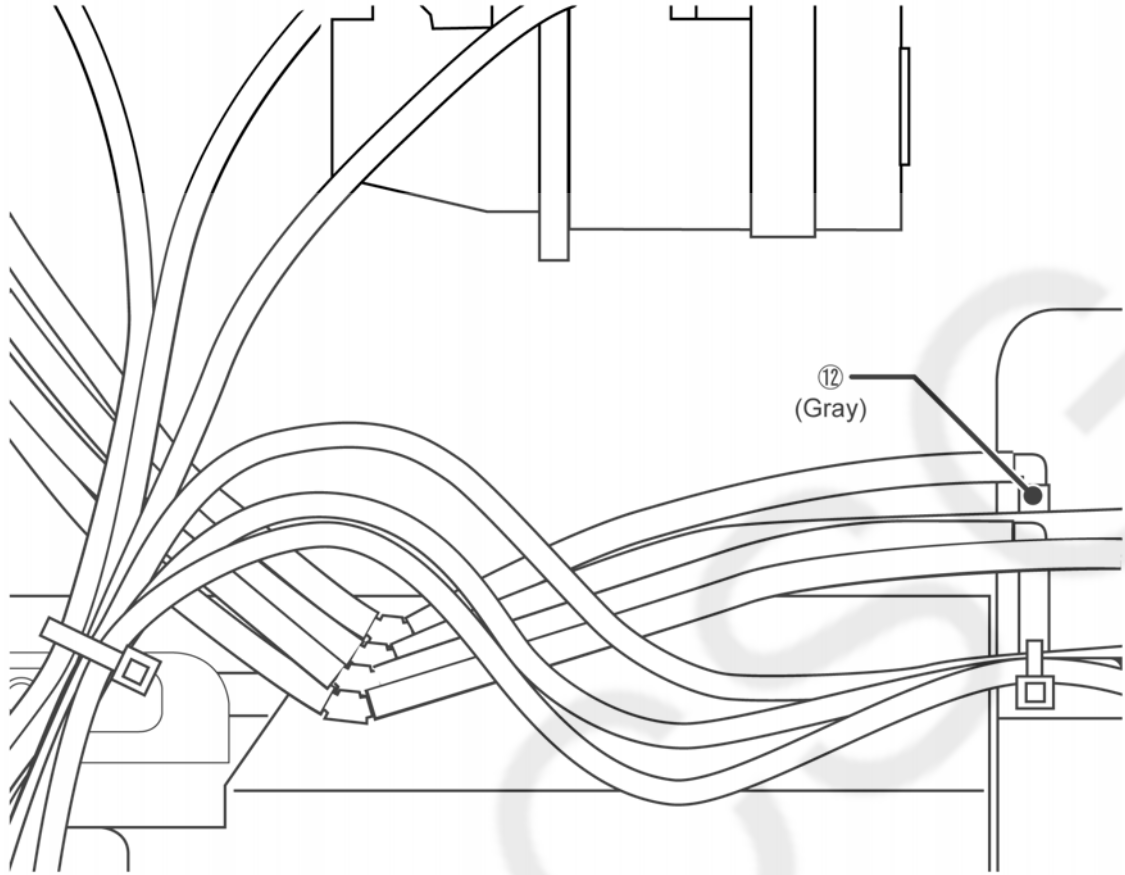
Connect the Air pressure gauge (WEP000S8908) and the Hose (WEP000K8917) to the Hose from the Under box, which you want to check the air pressure.

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.

| Check each Sensors | Sensors | Pin No. | Color of leads | G | Output voltage(DC) of Massage balls, Massage block | |
|--|--------------------------------|--------------------|-----------------------------|-------|--|----|
| - Intensity sensor - Up/down sensor - Width sensor - Body pressure sensor - Tapping sensor | - Intensity sensor(CN103) | (4) | Orange | JP100 | Check whether there is the output voltage of HIGH-LOW (DC5V -0V) | NO |
| | - Up/down sensor (CN106) | (4), (6), (7), (8) | Orange, green, blue, purple | | | |
| | - Width sensor(CN109) | (5), (6), (7) | Yellow, green, blue | | | |
| | - Body pressure sensor (CN113) | (3) | Red | JP100 | Check if there is approx. DC1V without load. | |
| | - Tapping sensor(CN104) | (1) | Black | JP100 | Check if there is approx. output DC12V in (1)-G and approx. DC5V in (3)-G. | |
| | (3) | Red | | | | |

Replace the Sensors if there is not output voltage.

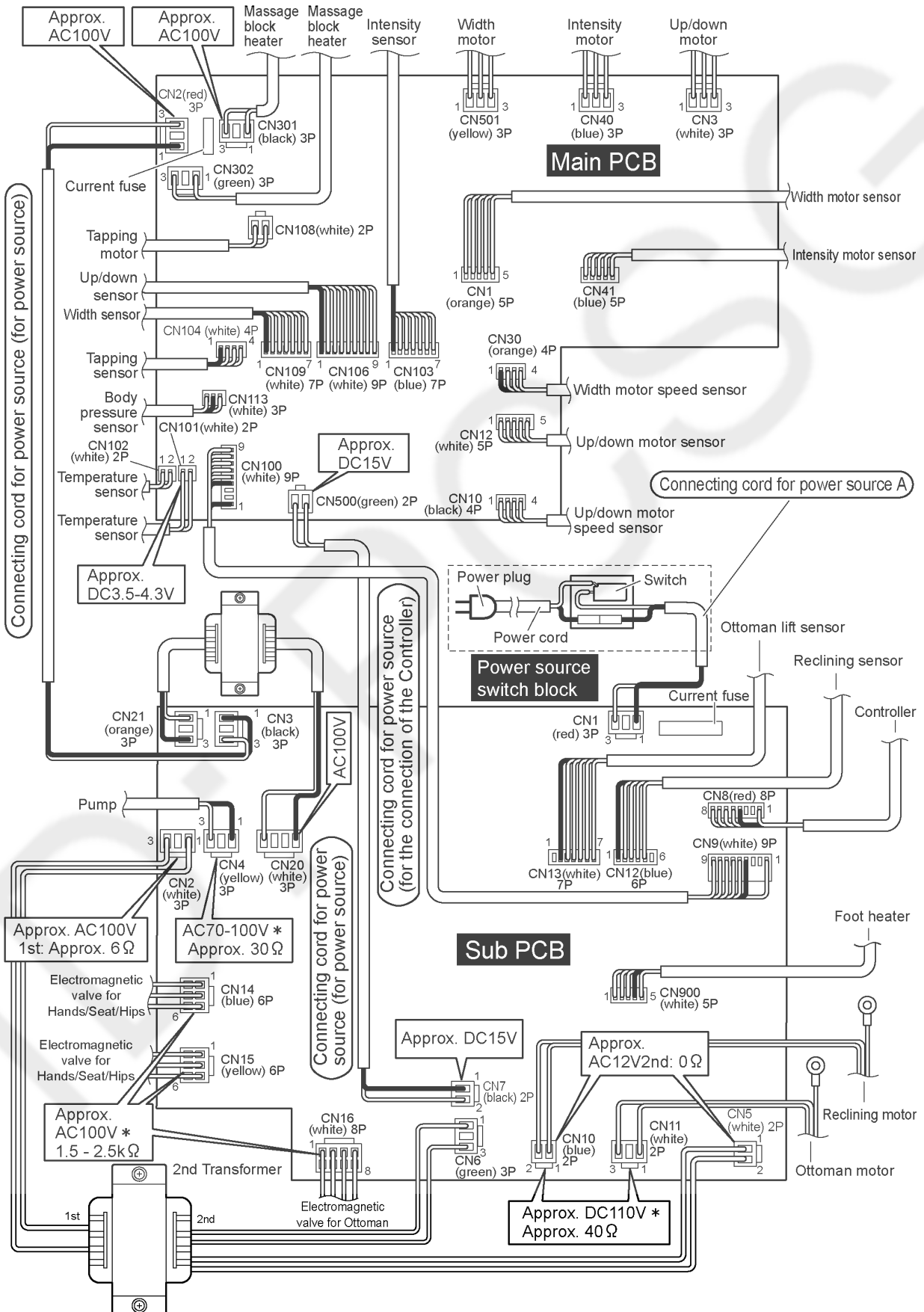
6.4. Wiring diagram of Main PCB and Sub PCB

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

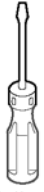
Values with * are when each operations are executed.

(Output voltages are approximate.)

Remove Connectors to check the resistance of the parts.



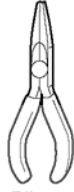
7 Service Fixture & Tools



Slotted screwdriver



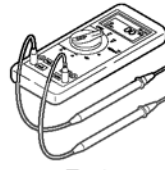
Phillips screwdriver



Pliers



Cutter



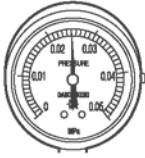
Tester



13mm box driver
(for Up/down shaft)



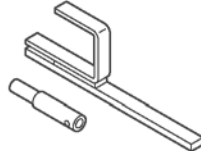
10mm box driver
(for Massage mechanism block)



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)



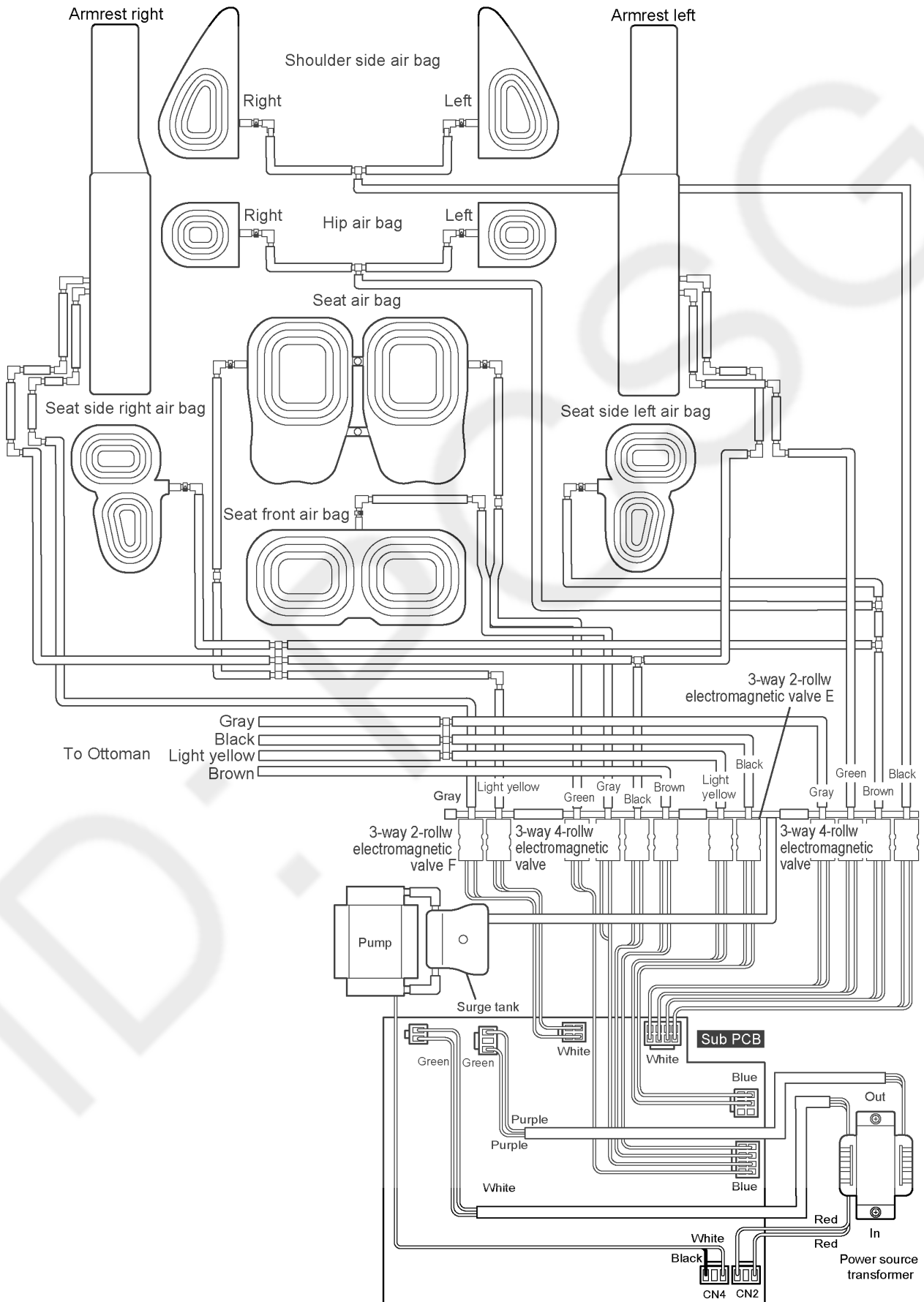
5mm Allen wrench
(for Leg pipe disassembly)



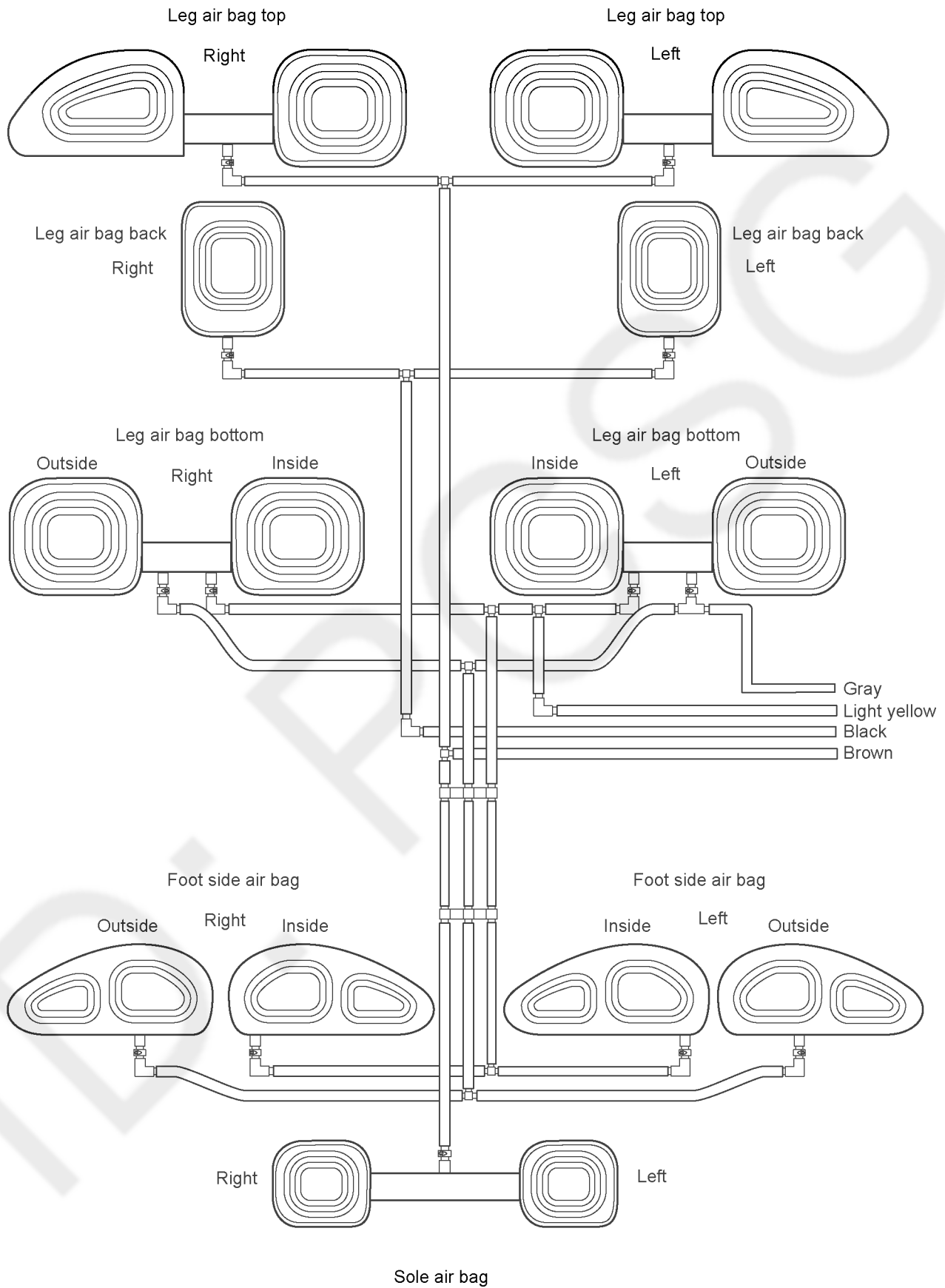
4mm Allen wrench
(for Controller stand, Armrest)

8 AIR

8.1. Air tube allocation (Main body)

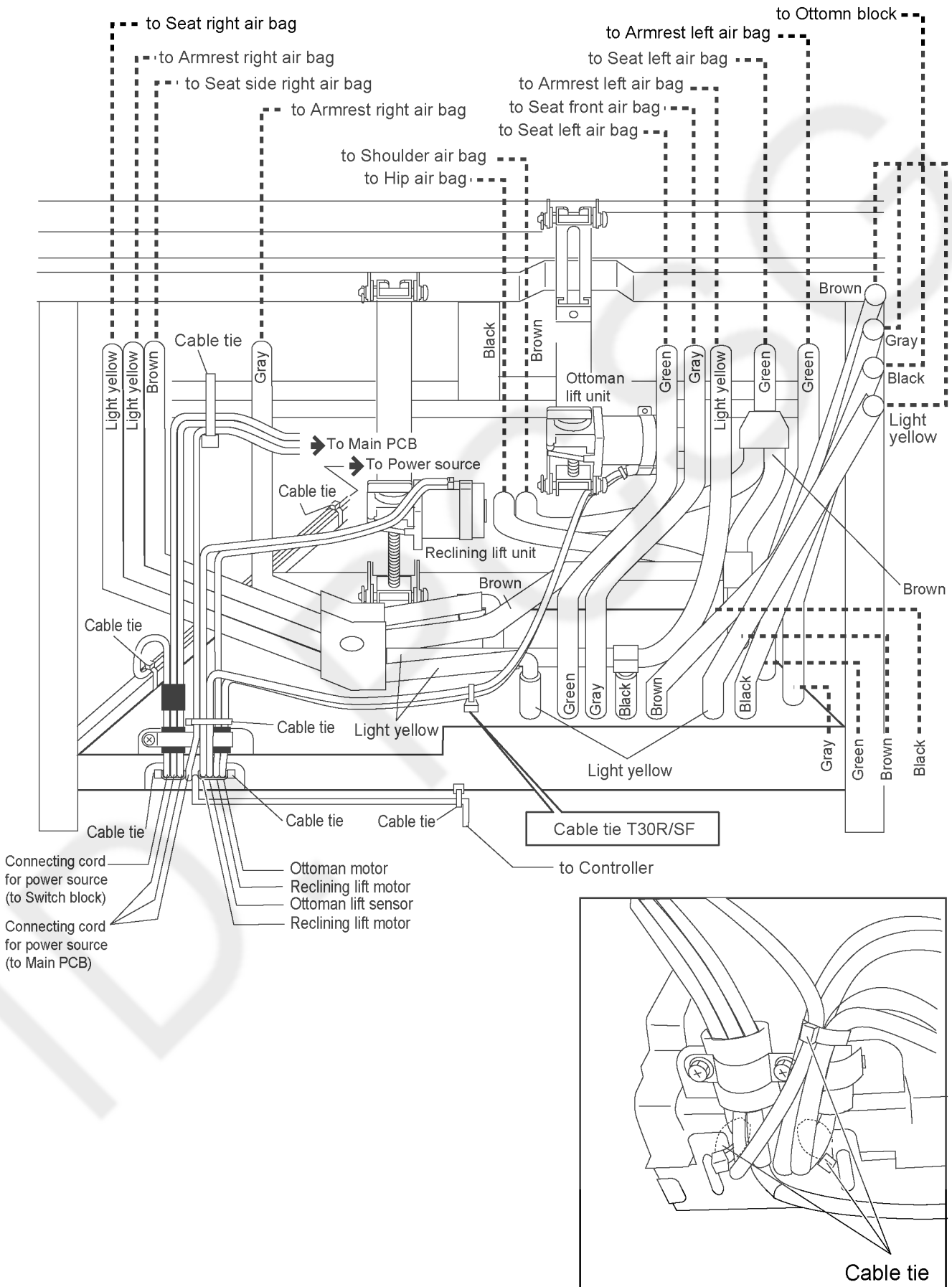


8.2. Air tube allocation (Ottoman)

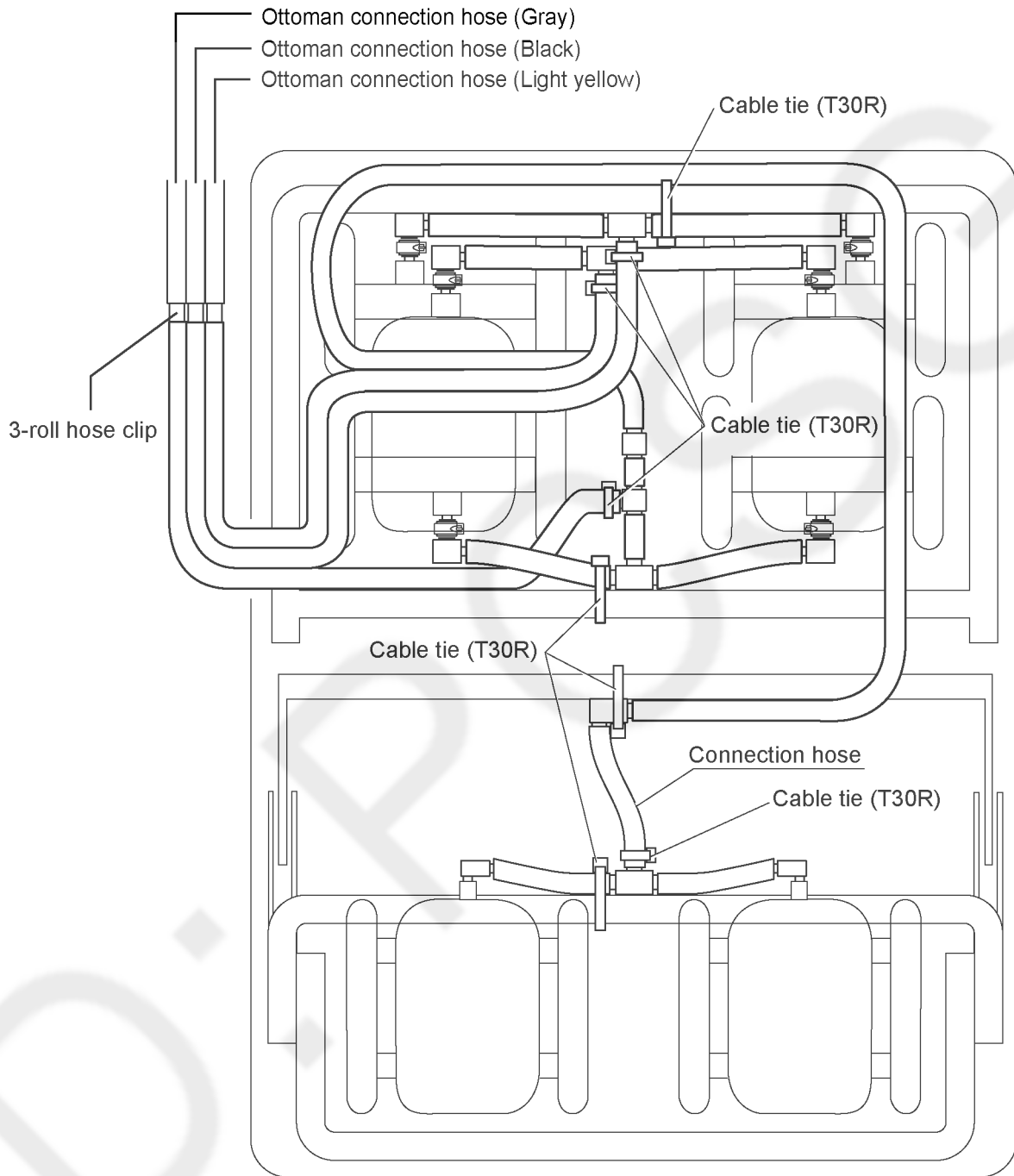


8.3. Air tubes and Wiring (Connecting cord for power source - Sub PCB, Power source switch box)

Front view



8.4. Ottoman hose allocation



* Rear view of Ottoman

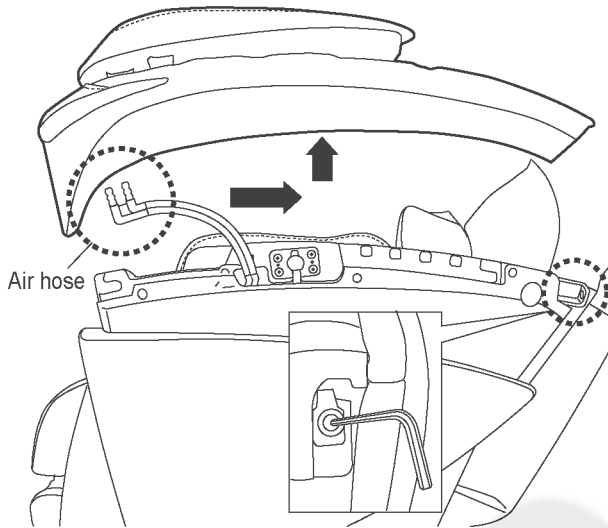
9 Disassembly and Assembly Instructions

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.

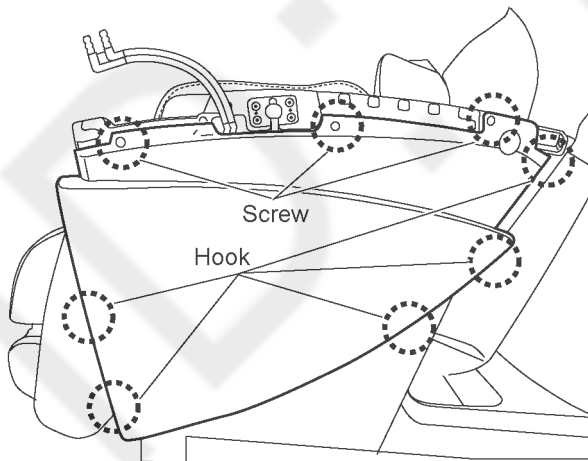


9.2. Removing the Side covers

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.

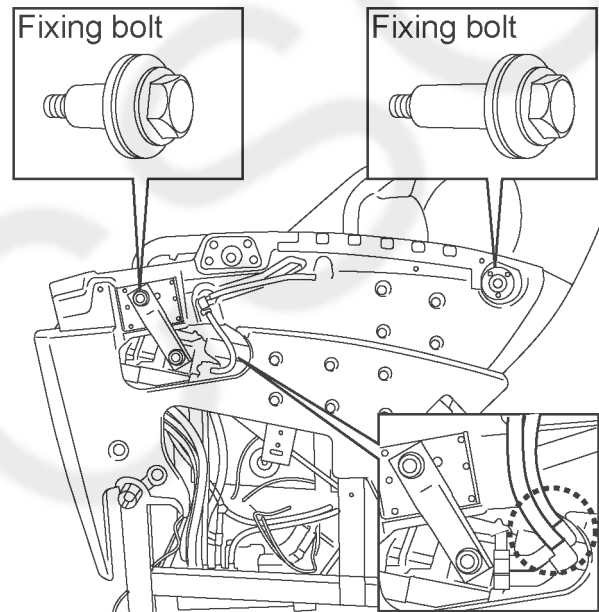


9.3. Removing the Elbow bases

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.

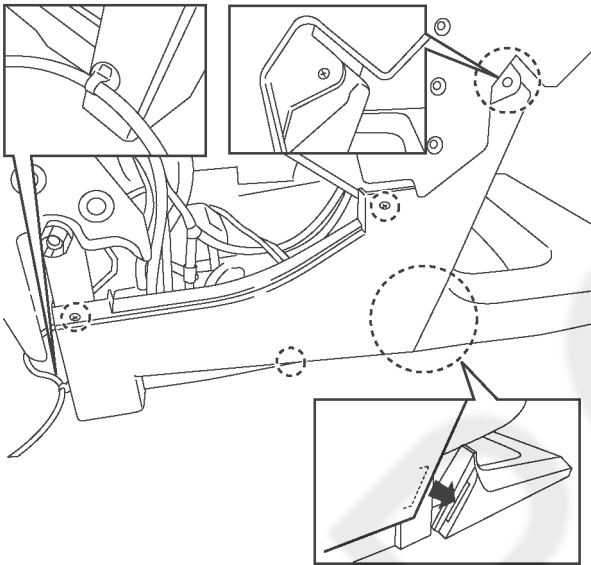


9.4. Removing the Leg covers (right/left)

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.

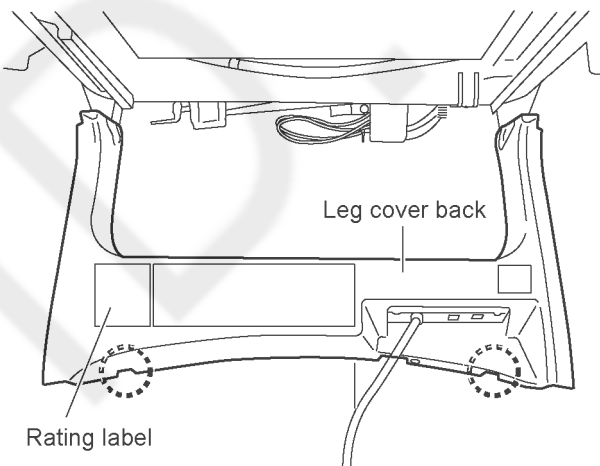


9.5. Removing the Leg cover back

1. Remove two screws fixing the Leg cover.

Caution

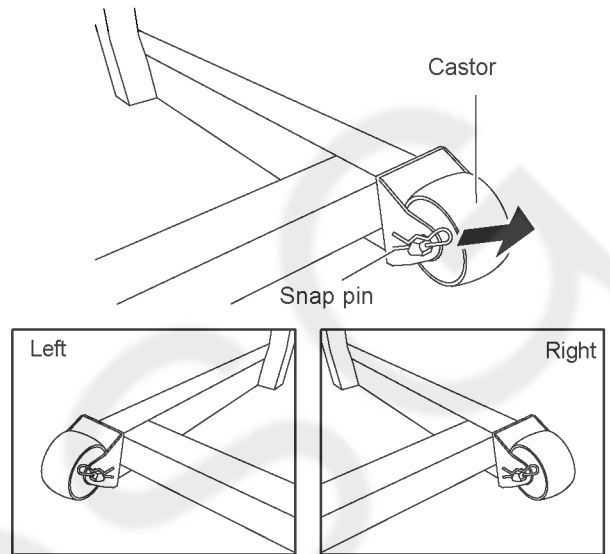
- Install the Leg cover back first before installing the Leg cover right/left.



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.

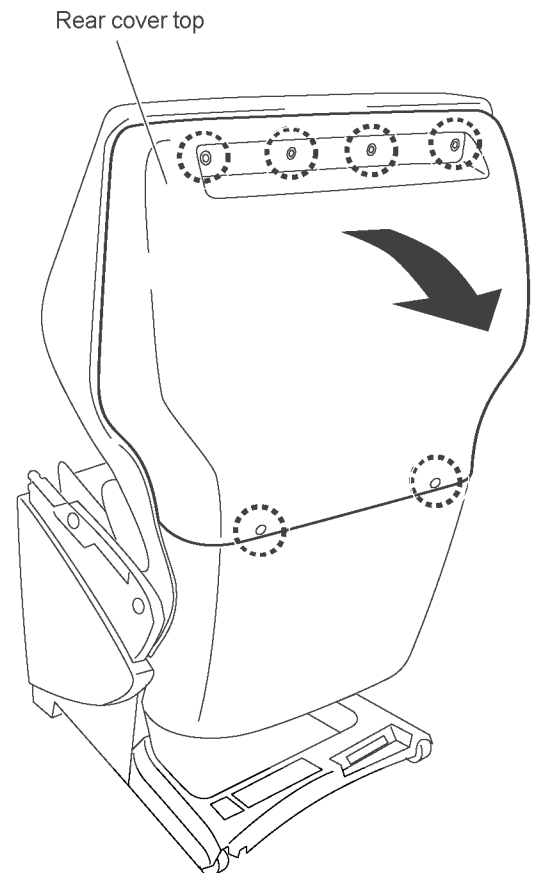


9.6. Removing the Rear cover

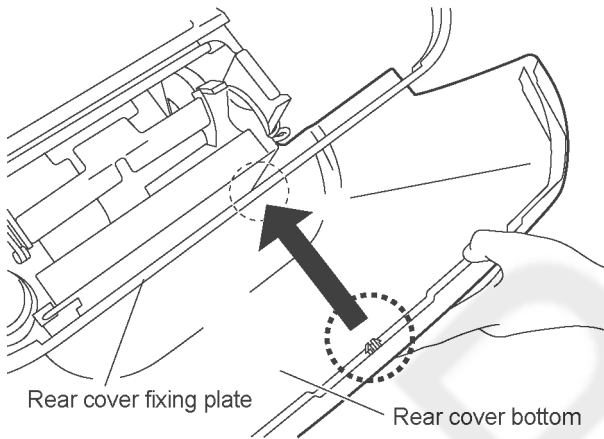
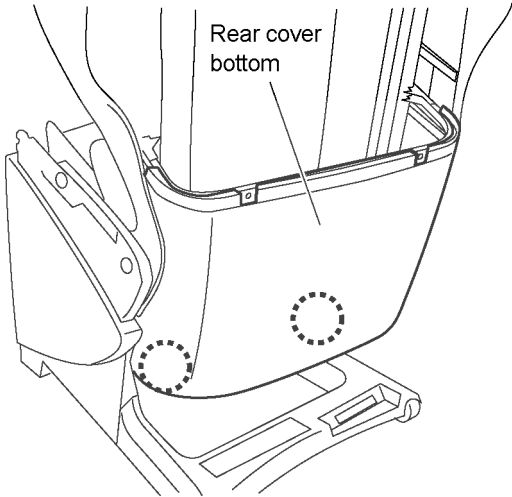
1. Remove four screws on the Rear cover top and two screws on the Rear cover bottom, and pull out the Rear cover top.

Caution

- Remove the bottom screws first when removing screws.

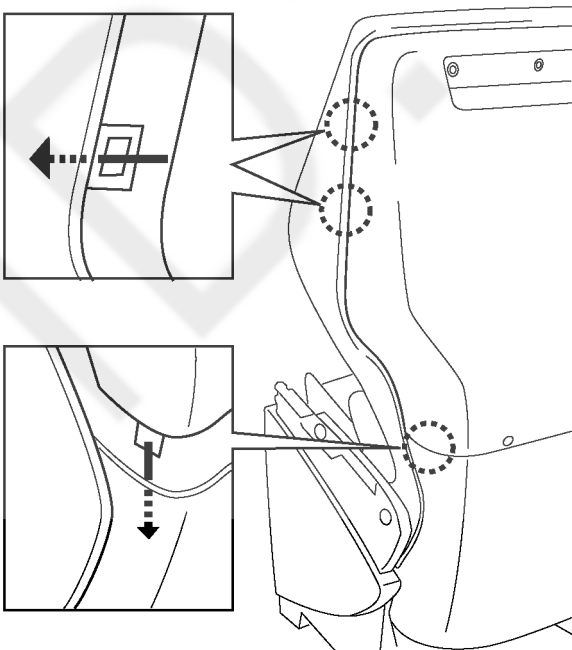


- Remove two Pushturn rivets on the Rear cover bottom, and pull out the Rear cover bottom being careful of the hooks.



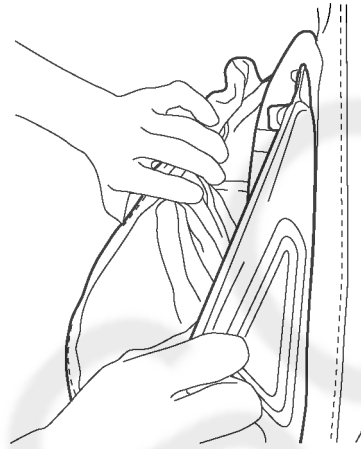
Caution

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

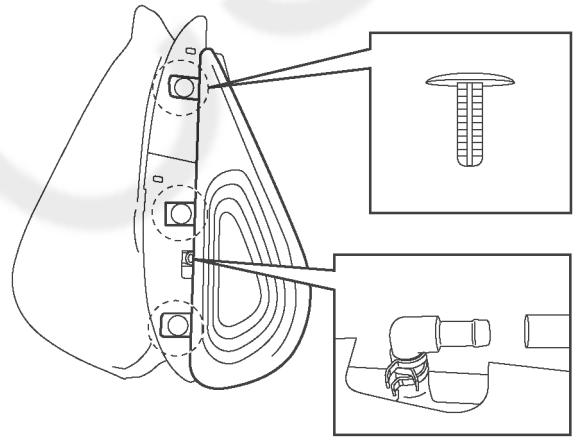


9.7. Removing the Shoulder side air bags

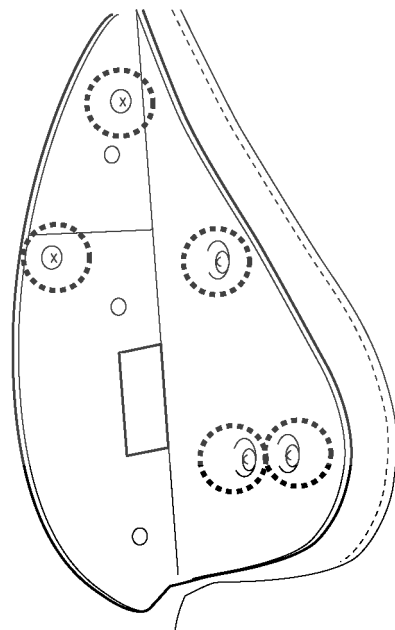
- Flip over the Shoulder side cloth and remove the Shoulder side air bag.



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

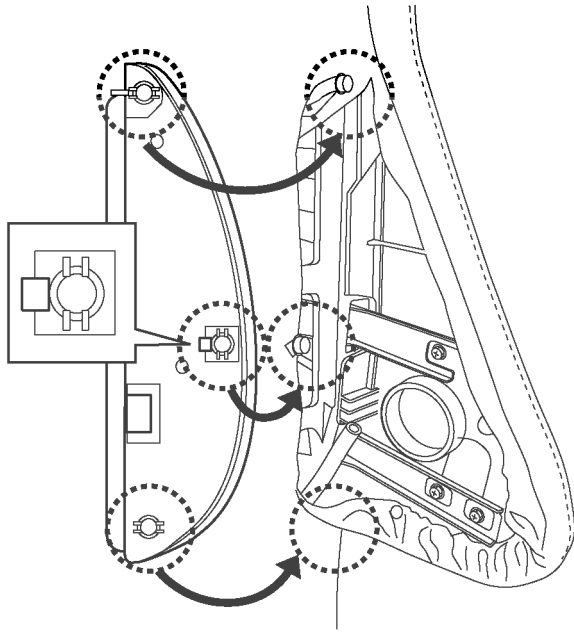


- Remove five screws each on right/left sides of the Side cover inside.

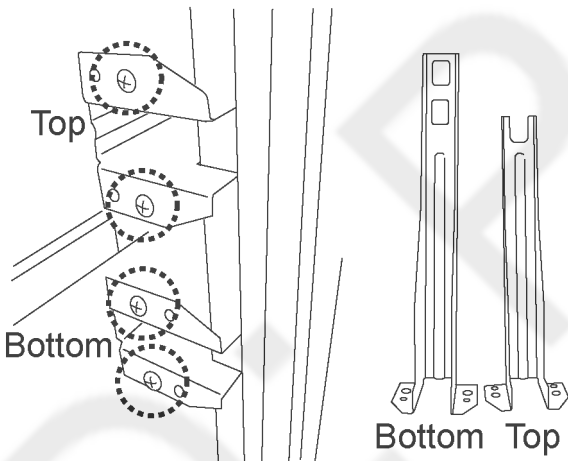


Caution

- 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.

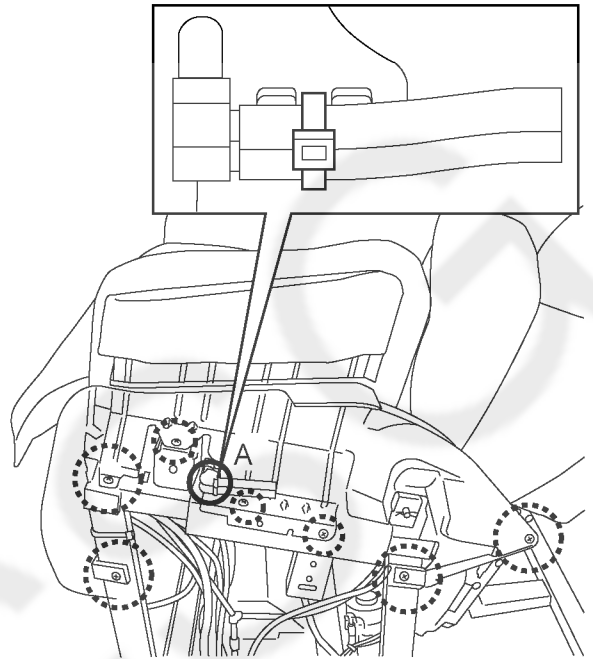
Caution

- 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.

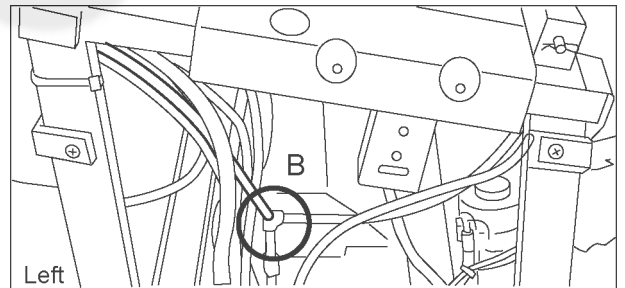
Caution

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



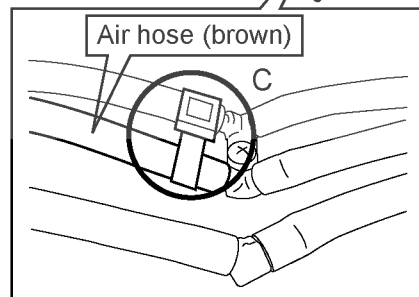
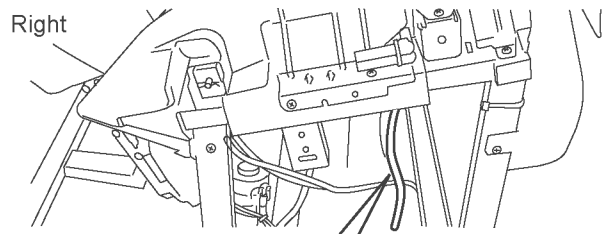
9.8.1. Removing the Seat side unit left

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.



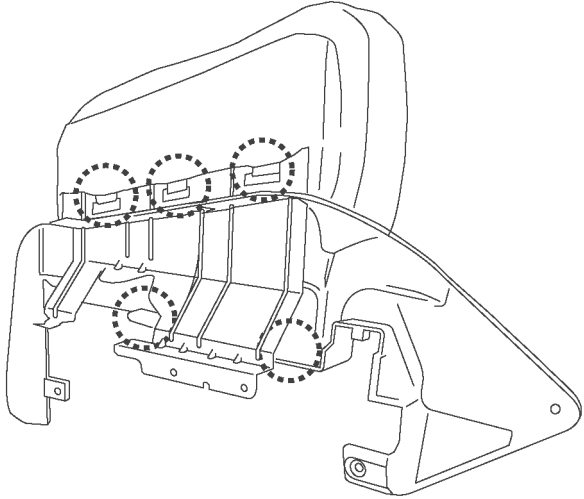
9.8.2. Removing the Seat side unit right

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

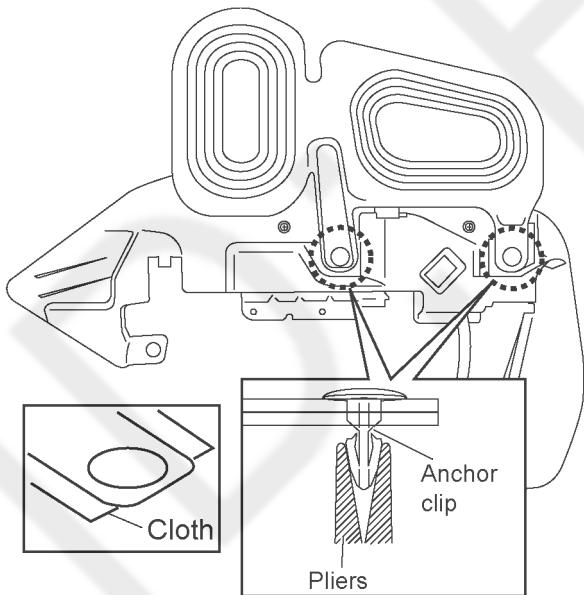
1. Remove the Armrest.
2. Remove the Side cover.
3. Remove the Elbow base.
4. Remove the Seat side unit.
5. Remove five J-shaped hooks each on right/left sides.



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.

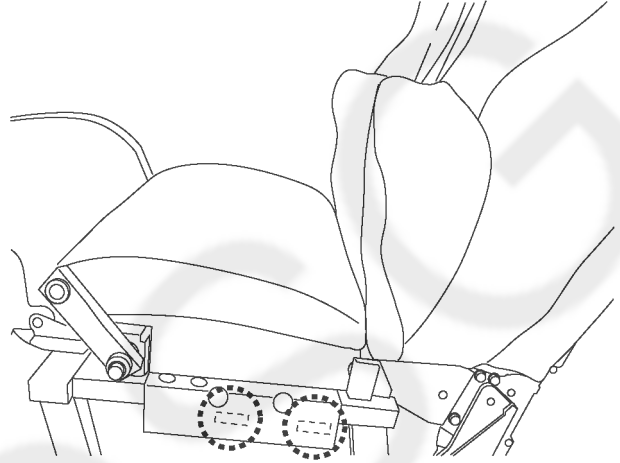


7. Remove the Air bag and the Hose.

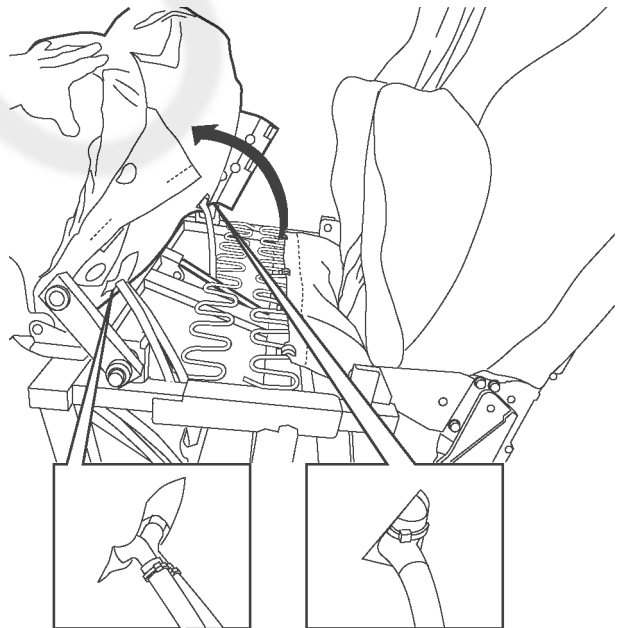
9.10. Removing the Seat

You can also remove the Seat cushion.

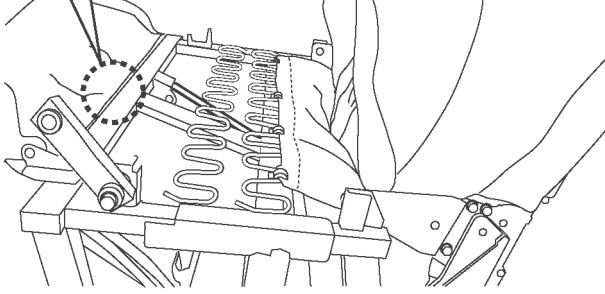
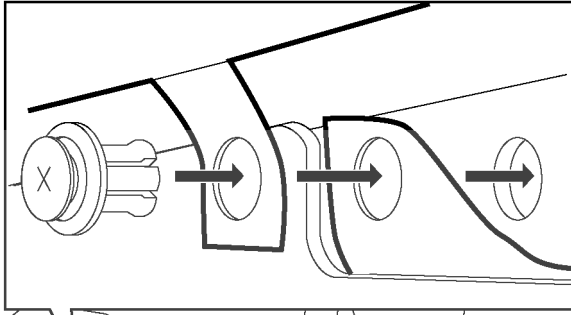
1. Remove the Armrests.
2. Remove the Side covers.
3. Remove the Elbow bases.
4. Remove the Seat side units.
5. Remove two J-hooks each on right/left sides.



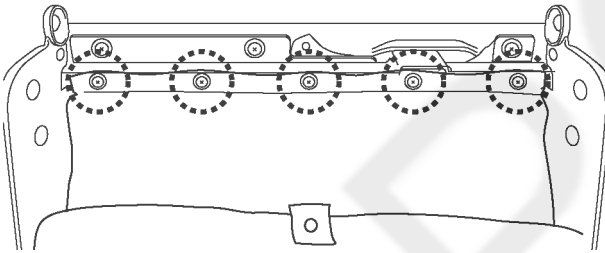
6. Lift the Seat and cut Cable ties, and remove Hoses, two at left one at right.



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

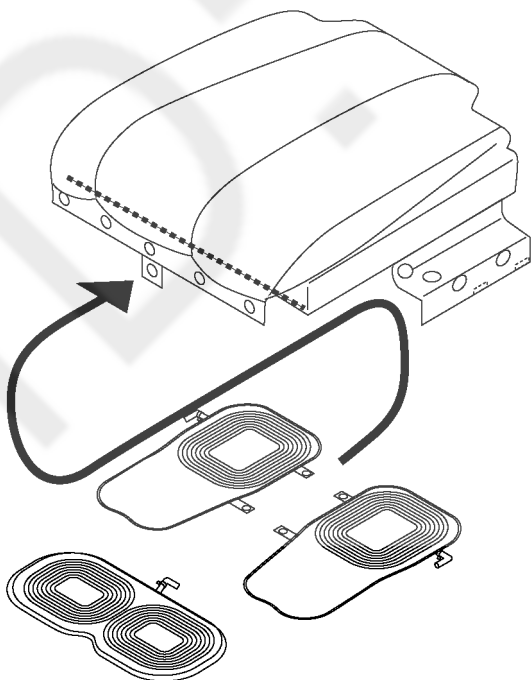


8. Lift the Seat and remove five Push-turn rivets on the Frame, and remove the Seat.



Removing the Seat air bag

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

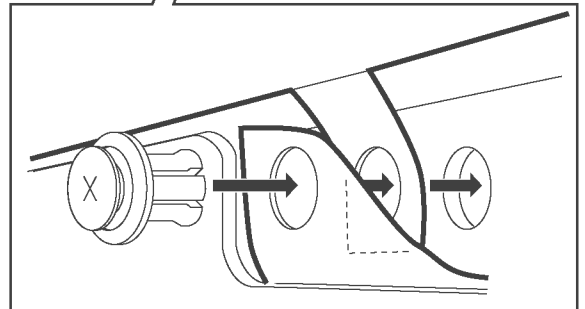
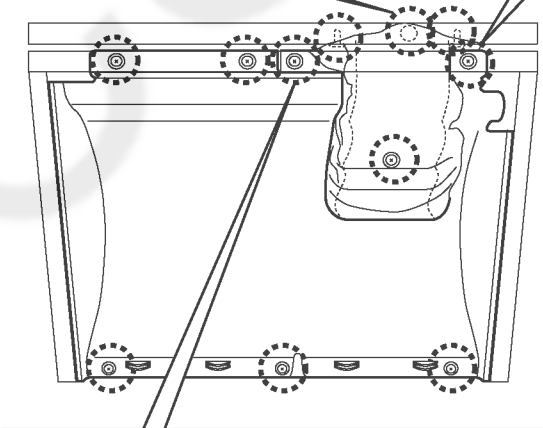
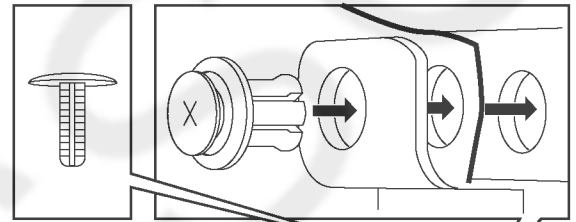


9.11. Removing the Under cover front

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.

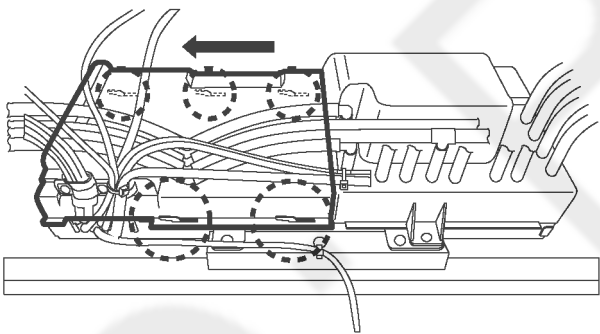
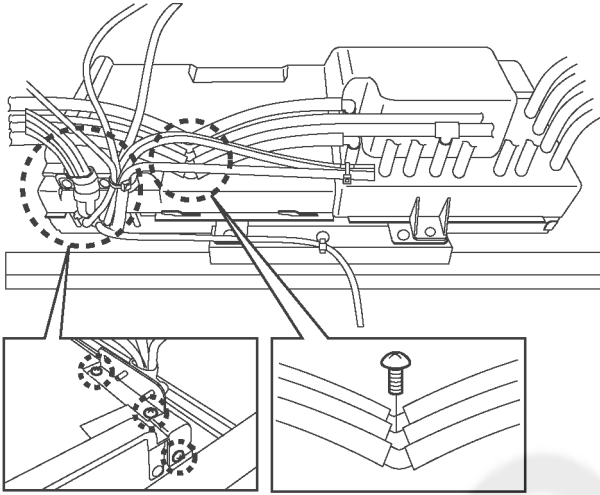
Caution

- 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

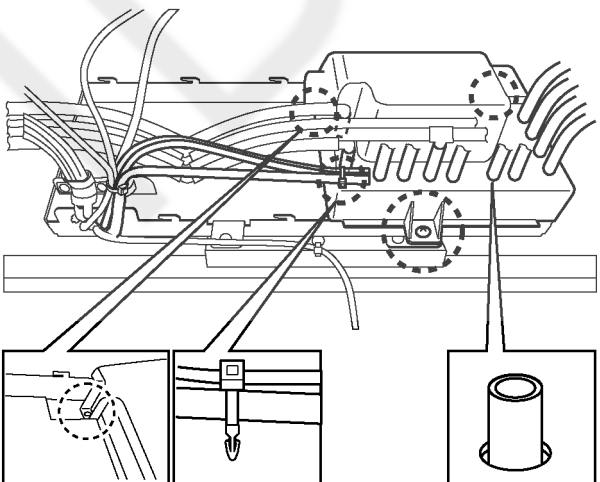
1. Remove the Armrests.
2. Remove the Side cover.
3. Remove the Elbow bases.
4. Remove the Leg covers.
5. Removing the Seat side unit.
6. Remove the Seat.
7. Remove the Under cover front.
8. Remove one screw on the L-shaped 3-row joint on the Under box top left.
9. Remove three screws on the right of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



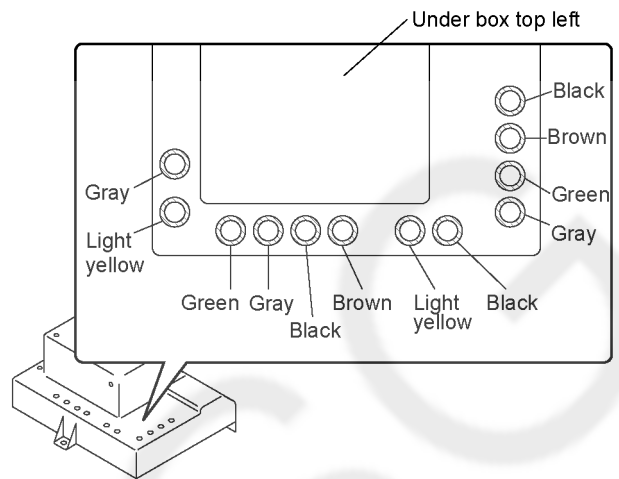
10. Pull out all the Hoses connected to the Under box top left.

Caution

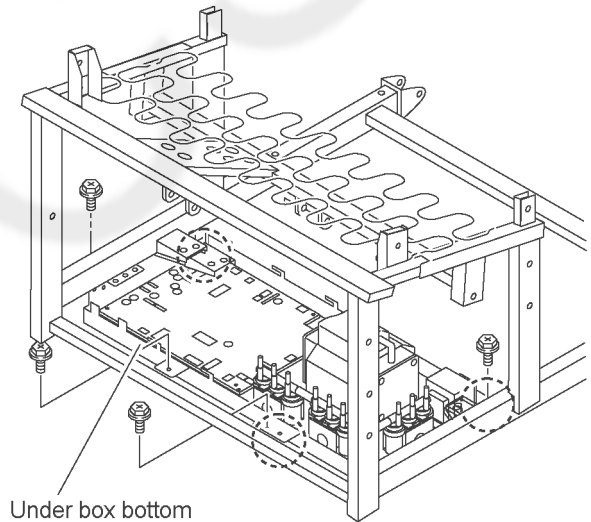
- Be careful not to bend pipes of the Electromagnetic valve.



- 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.



9.13. Removing the Rear cover

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

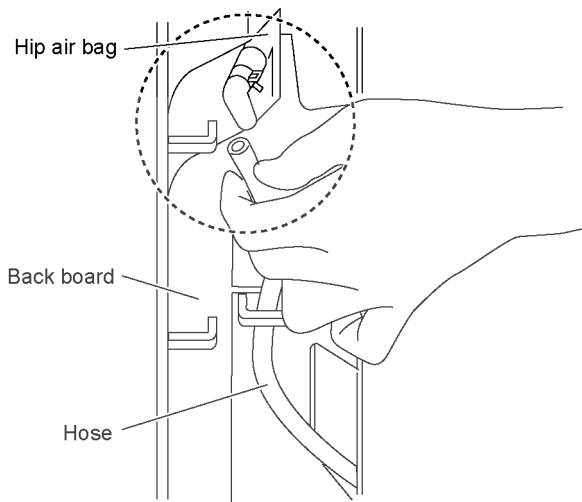
1. Remove the Rear cover.

Caution

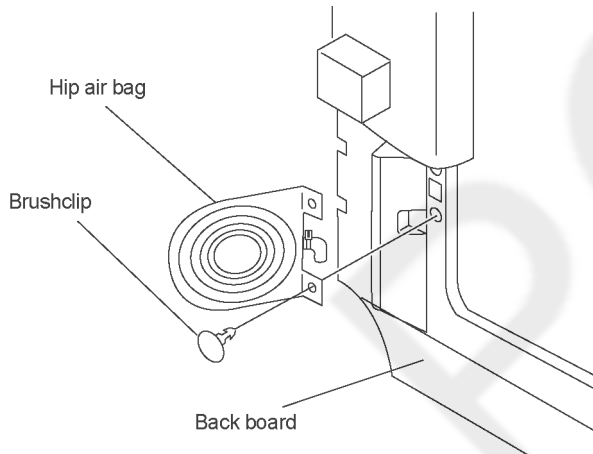
- Work after moving the Massage mechanism block to the lowest position.
2. Remove the Armrests.
 3. Remove the Side cover.
 4. Remove the Elbow bases.
 5. Remove the Seat side units.
 6. Remove the Seat. (Procedures 1-4)

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.



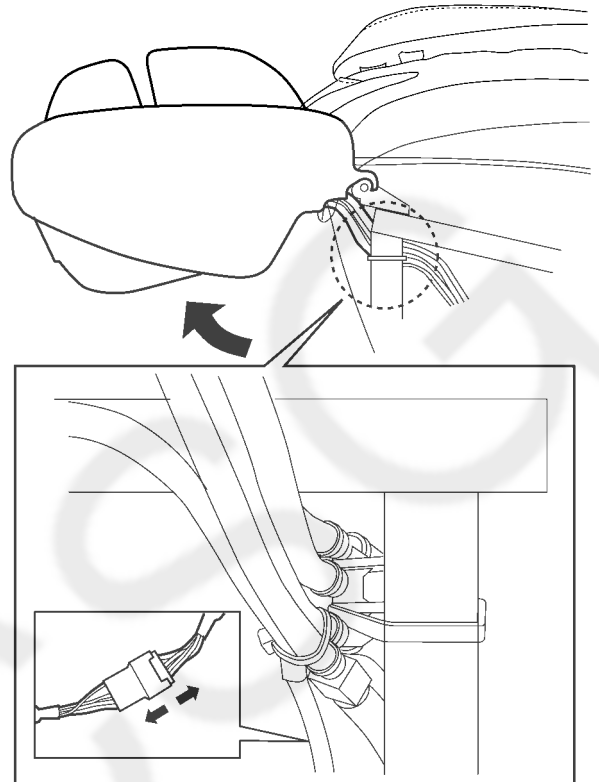
8. Remove two Brushclips each on right/left sides, and remove the Hip air bag.



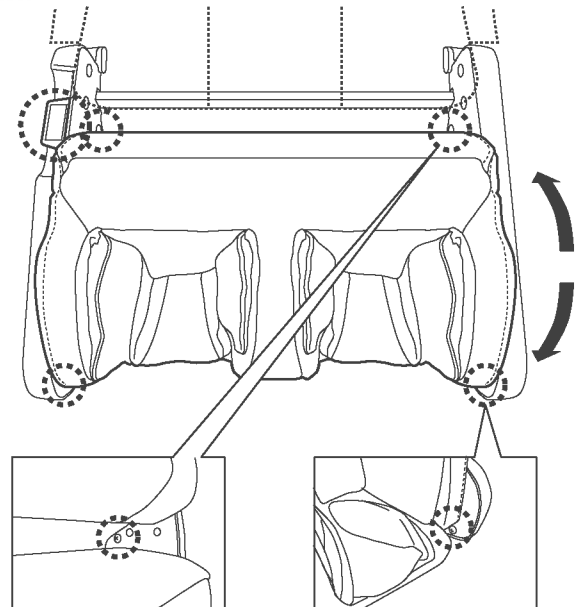
9.14. Removing the Ottoman

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.

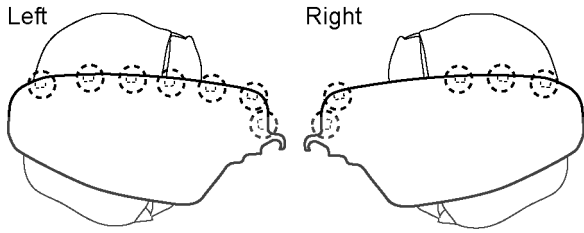
7. Lift the Ottoman, and remove four Hoses and one Connector, which are connected to the Ottoman.



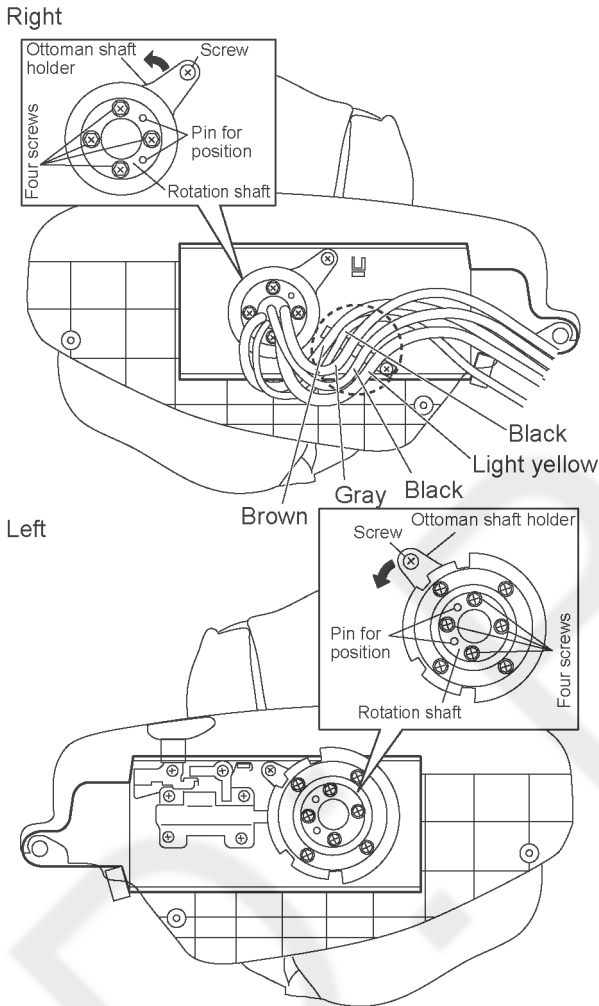
8. Pull the Ottoman rotation lever and rotate the ottoman, and remove two screws each on right/left sides, which install the inner sides of the Ottoman base covers.



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



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

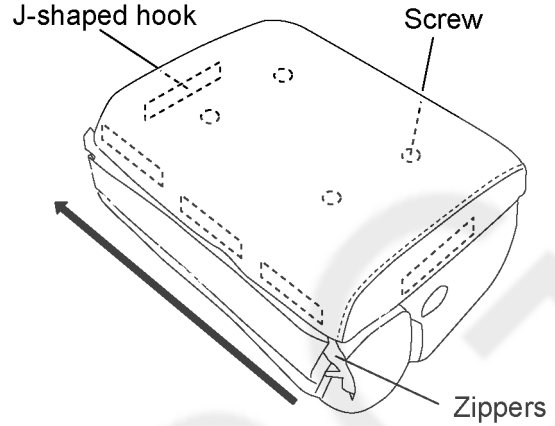


11. Pull out the tip of the zippers and cut Cable ties, and open the zippers. Remove five J-shaped hooks and open the Cover.

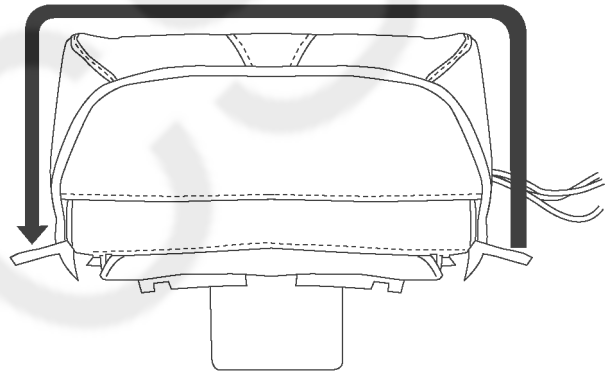
Caution

- 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.

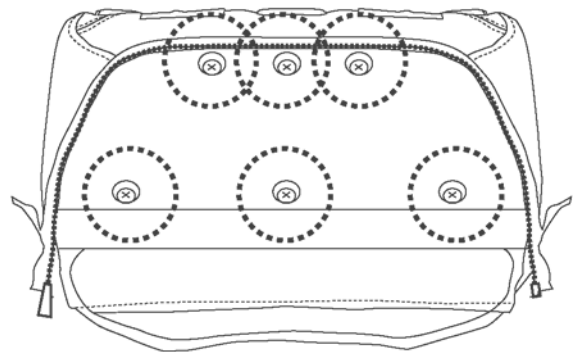
12. Remove four screws and remove the Cushion.



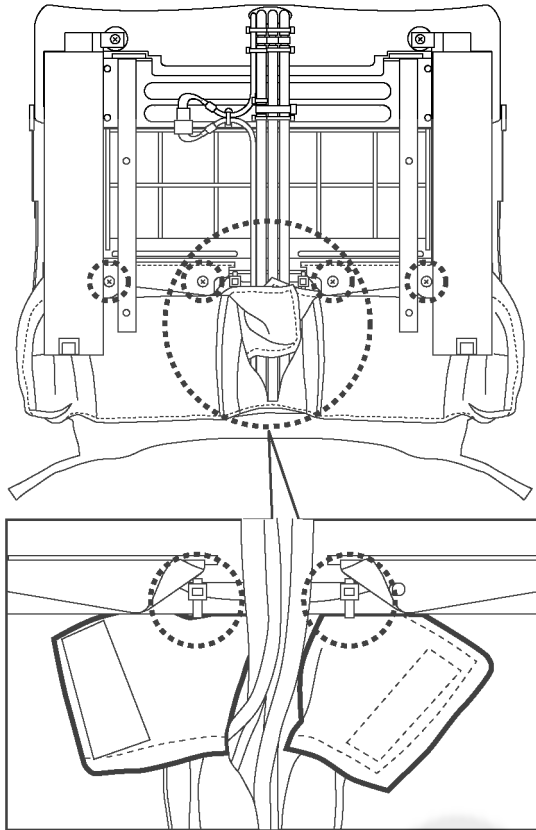
13. Pull out the tip of the zippers and cut Cable ties, and open the zippers.



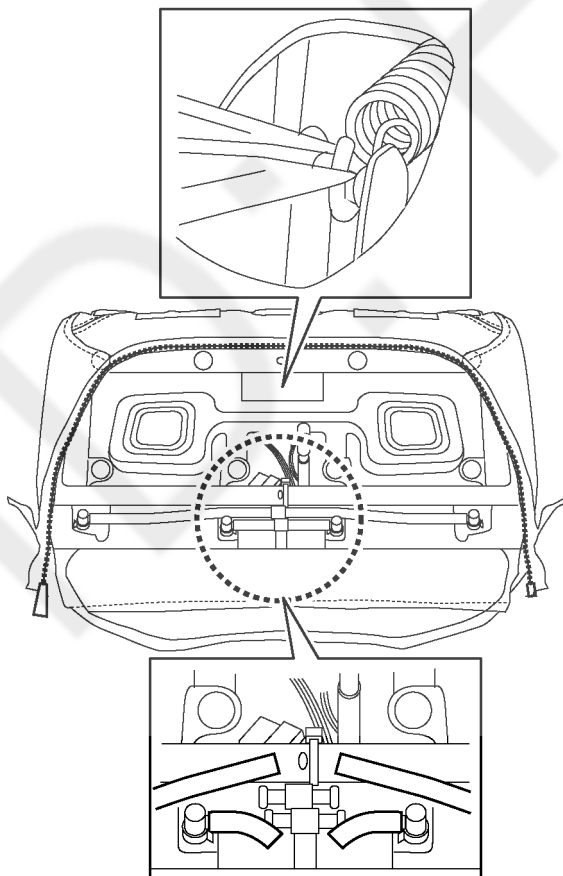
14. Remove six screws, which install the Foot under cover, and remove the Cover.



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



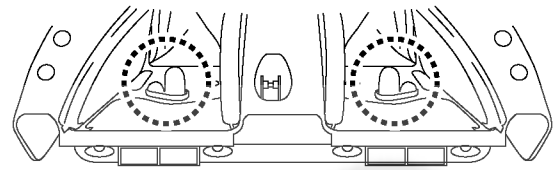
16. Remove four Hoses, one Connector, and the Multiaction spring, and remove the Foot cloth.



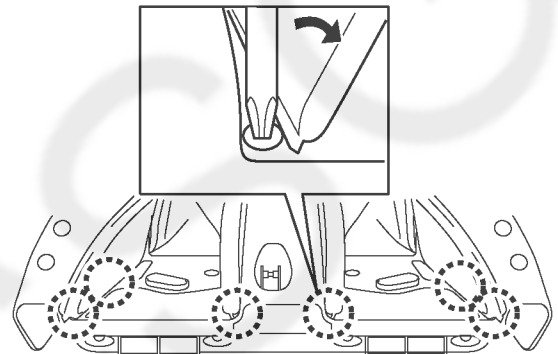
17. Remove the Shiatsu sheets.

Caution

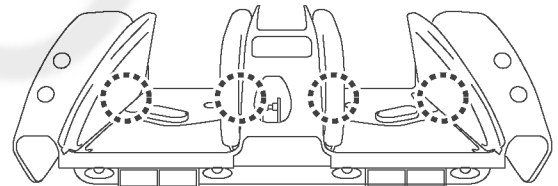
- Be careful of the directions when in assembly.



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



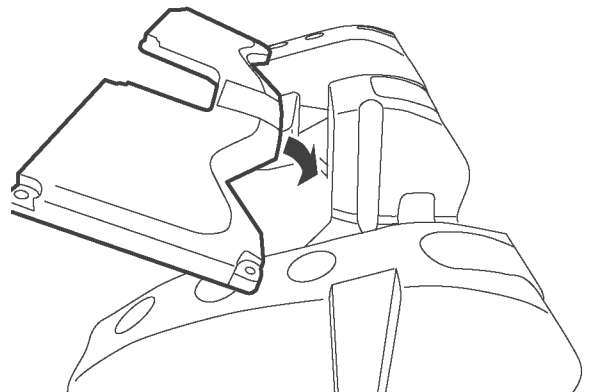
19. Remove two Anchor clips each on right/left sides on back, which fix the Foot air bags.



20. Remove the Foot heater.

Caution

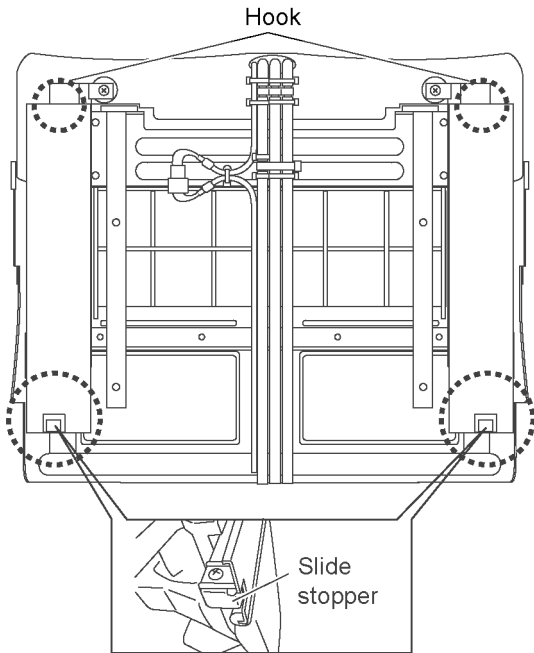
- Work would be easy in assembly if the Foot heater is inserted from the back.



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

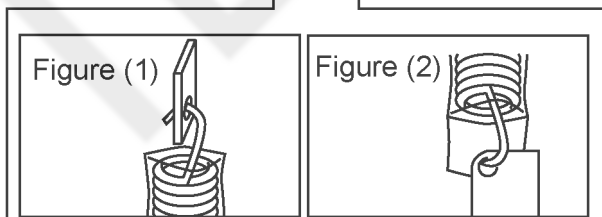
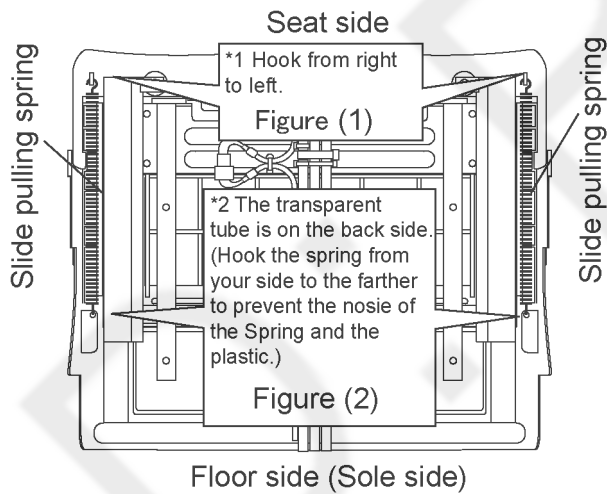
- Be careful of the install of the Air bags when in assembly.



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.

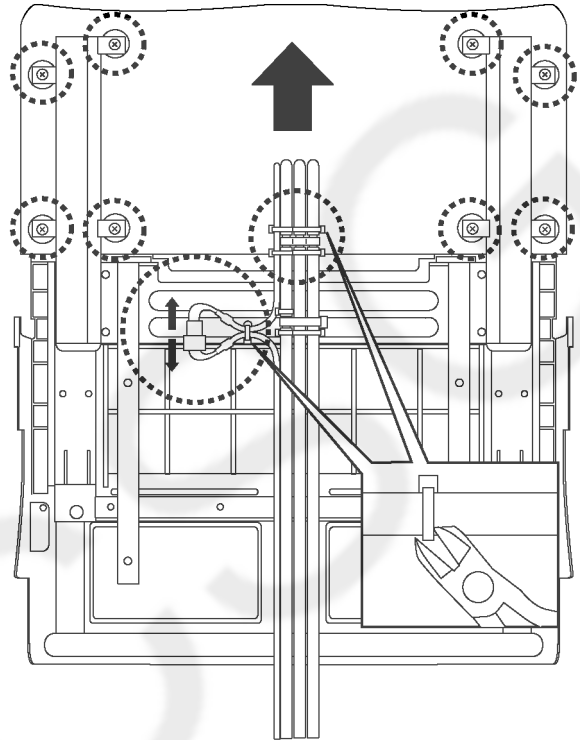


Caution in installing the Slide pulling spring

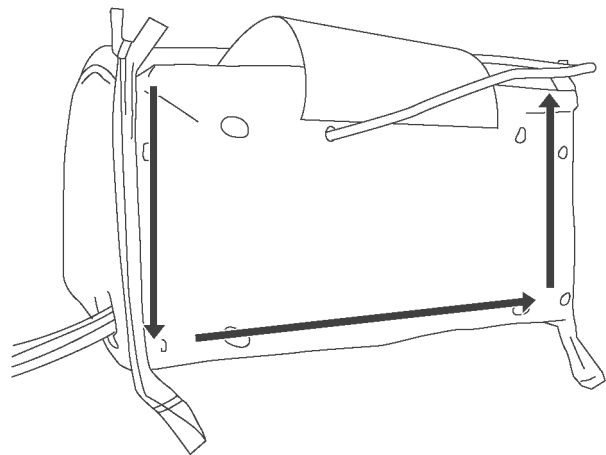
- Be careful of the directions of the Spring hook *1 on the Seat side (Right/left opposite).
- Be careful of the directions of the Transparent tube on the Floor side (Sole side) *2.

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.

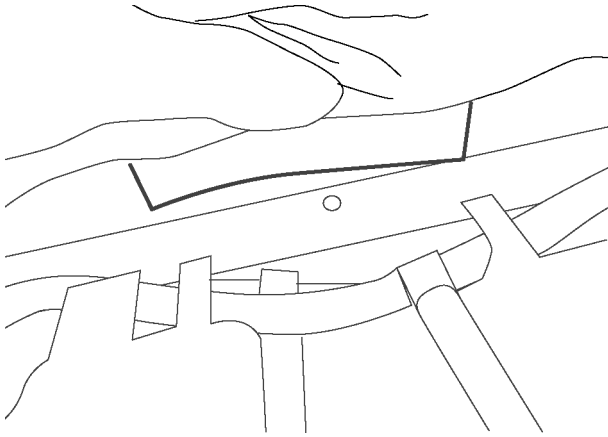


25. Pull out the tip of the zippers of the Leg cloth from inside and cut the Cable tie, and open the zippers. And remove the Foot cloth.

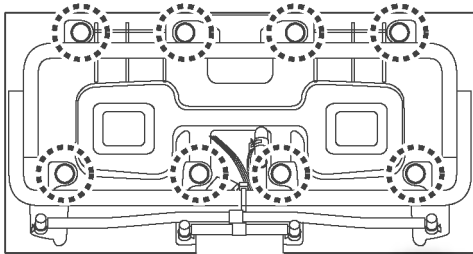


Caution

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

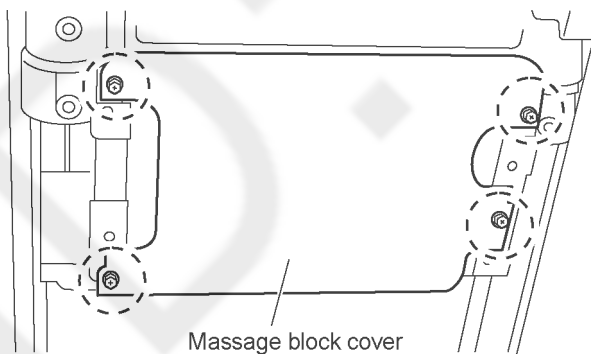


26. Remove eight Hoses and eight Anchor clips, and remove the Air bags.

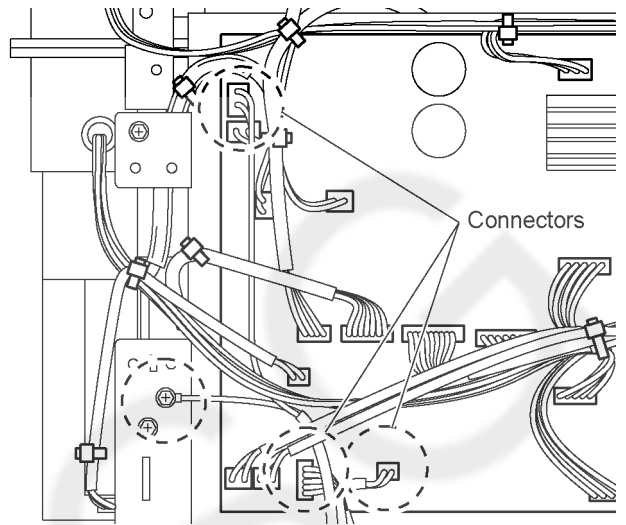


9.15. Removing the Massage mechanism block

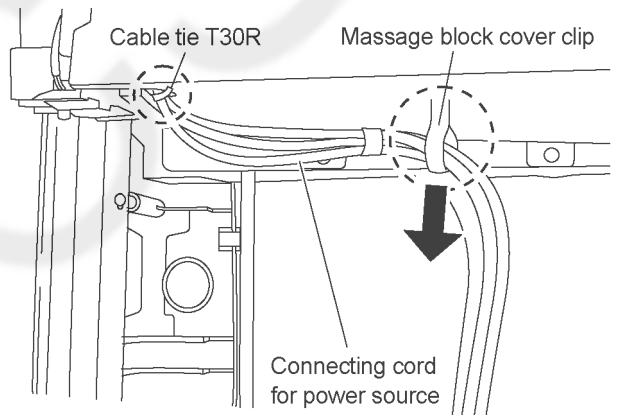
1. Proceed all the procedures of 9.6. Removing the Rear cover.
2. Push the Lower button of the Controller, and move the Massage mechanism block to the lowest position.
3. Remove four screws, and remove the Massage block cover.



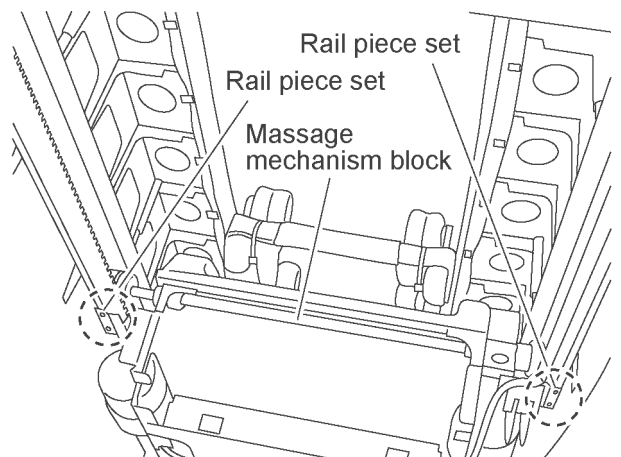
4. Remove the Fixing screw for the Connecting cord for power source and the Ground wire, and remove three Connectors.



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



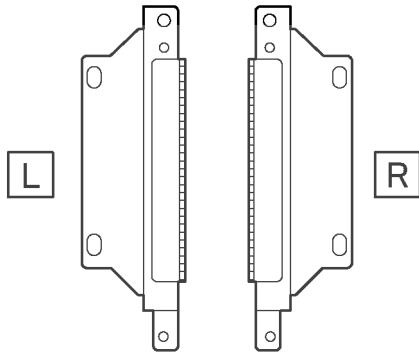
6. Remove four screws each on right/left sides, and remove Rail piece sets (right/left sides).



Caution

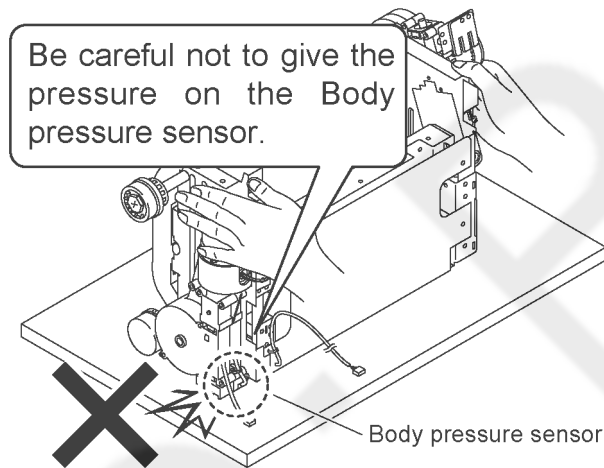
Hold the Massage mechanism block by hand not to have it fall down.

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.

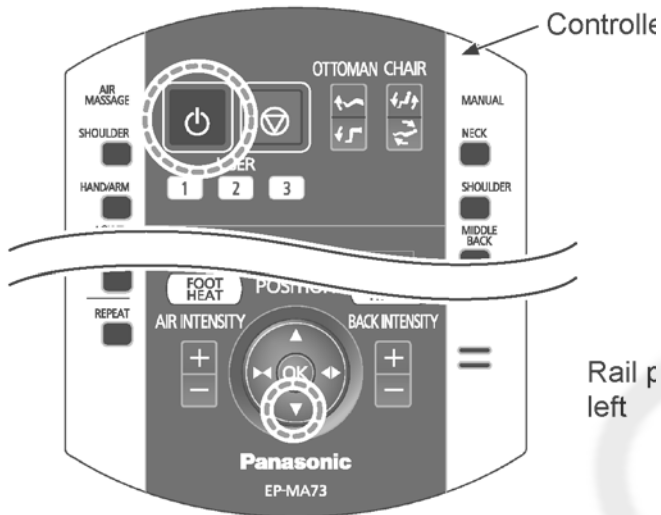


9.16. Adjusting the Up/down sensor gear

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.

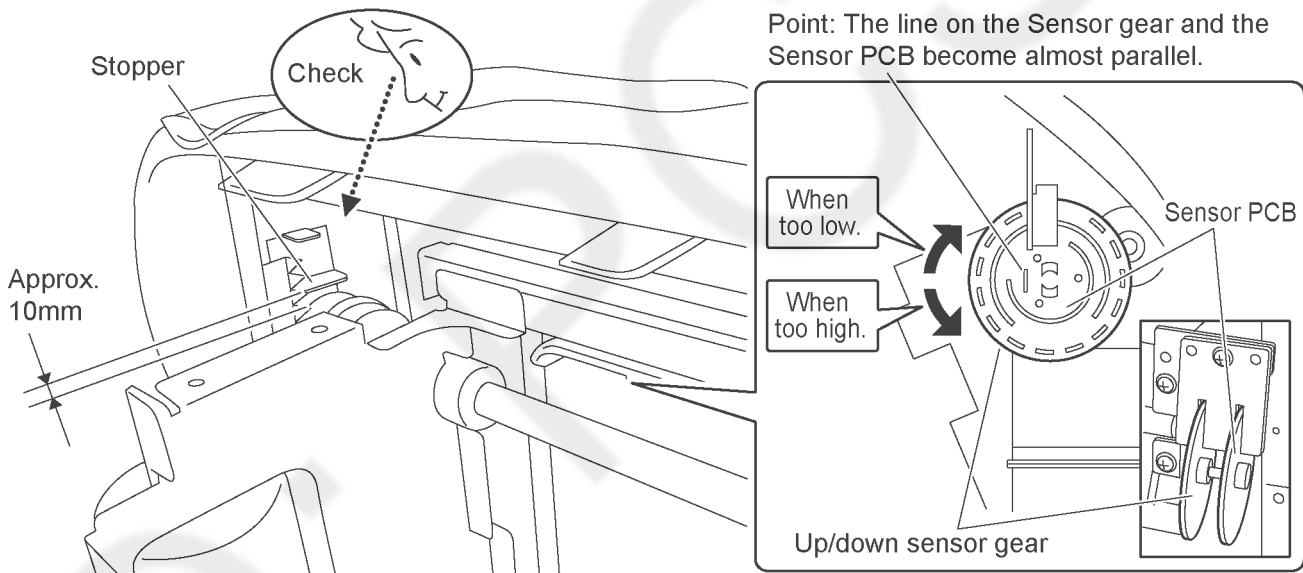
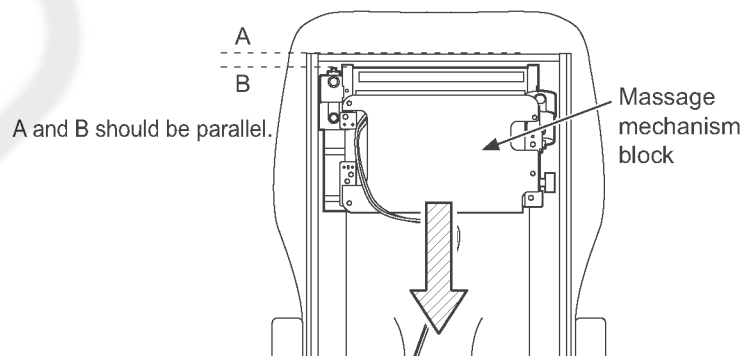


Figure 1



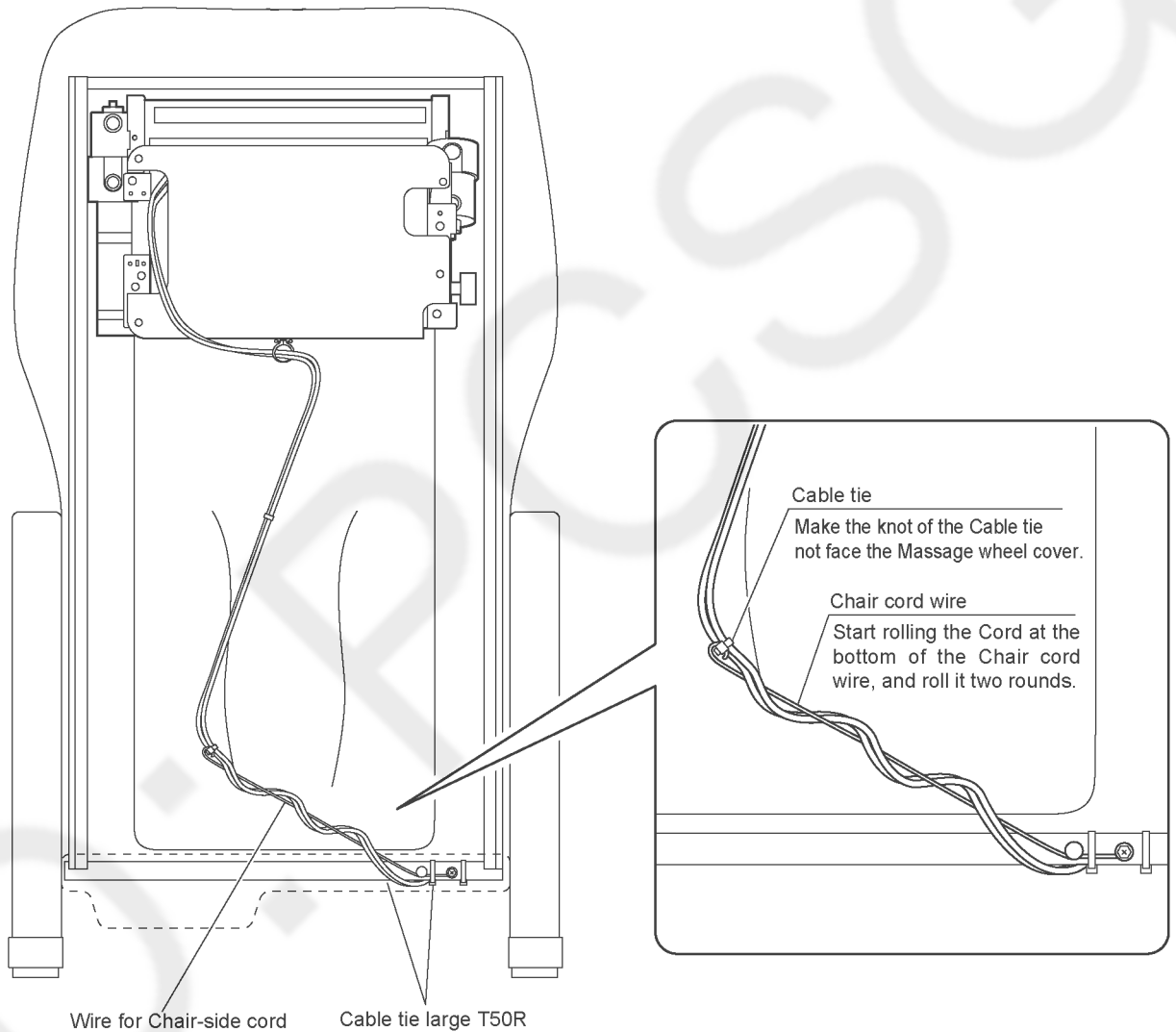
9.17. Tips in installing the Connecting cord for power source

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.

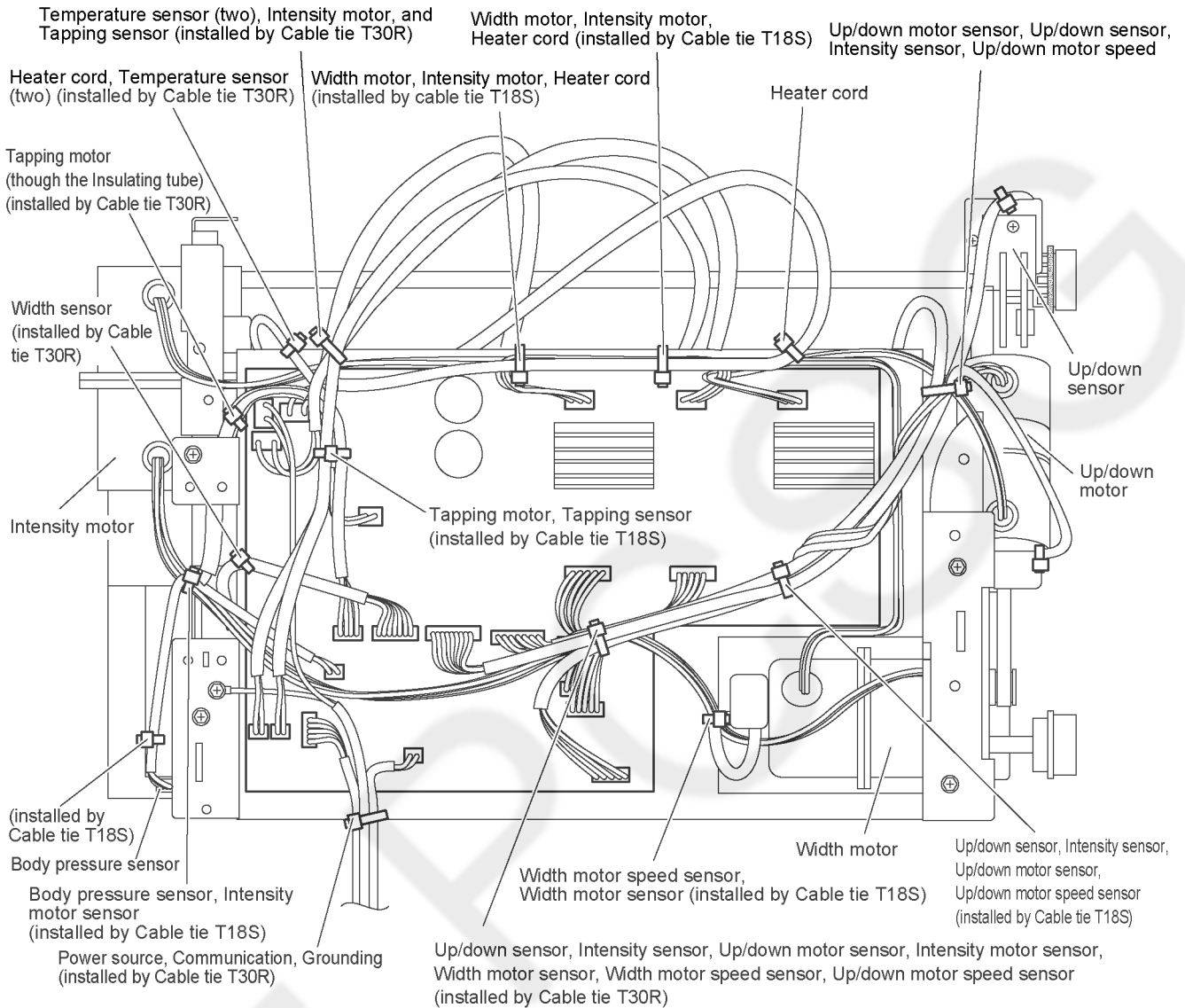
Caution

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

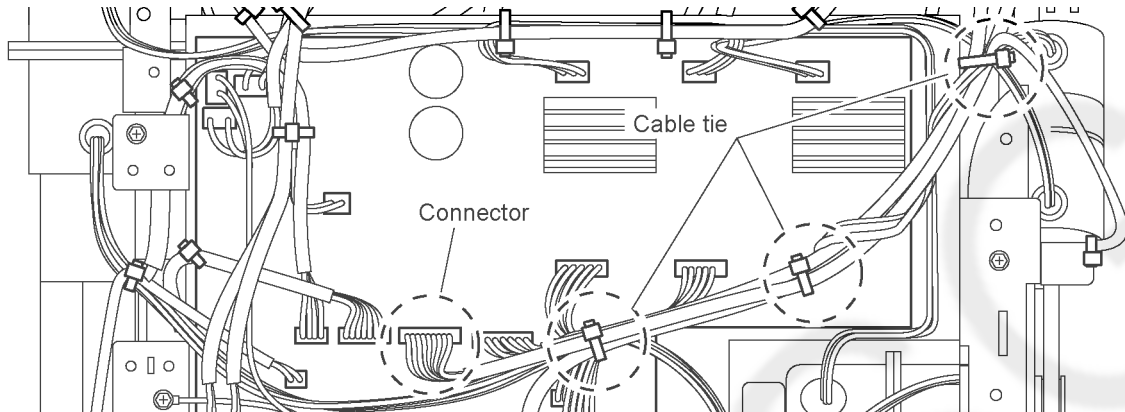
Allocation of the Lead wires of the Main PCB, each Motors, other parts, Cable ties are as follows:



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

9.19.1. Removing the Up/down sensor

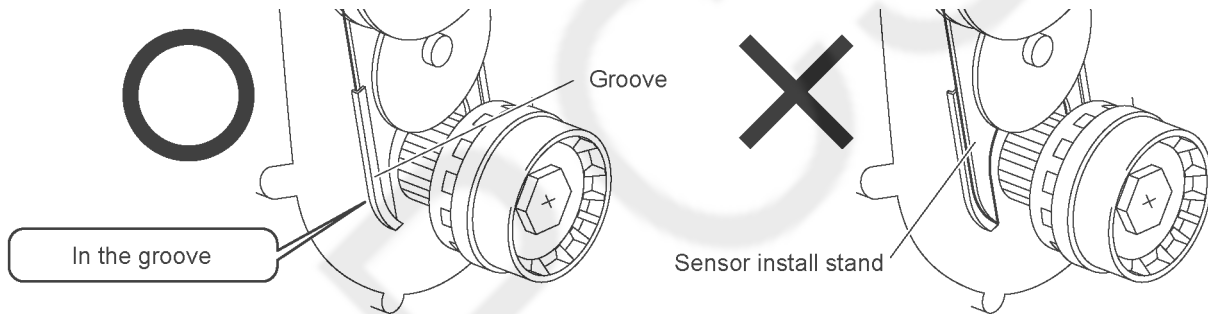
1. Disconnect the connector (CN106) on the Main PCB.
2. Cut the Cable tie T30R x 2, T18S x1, which bind the Lead wires.



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

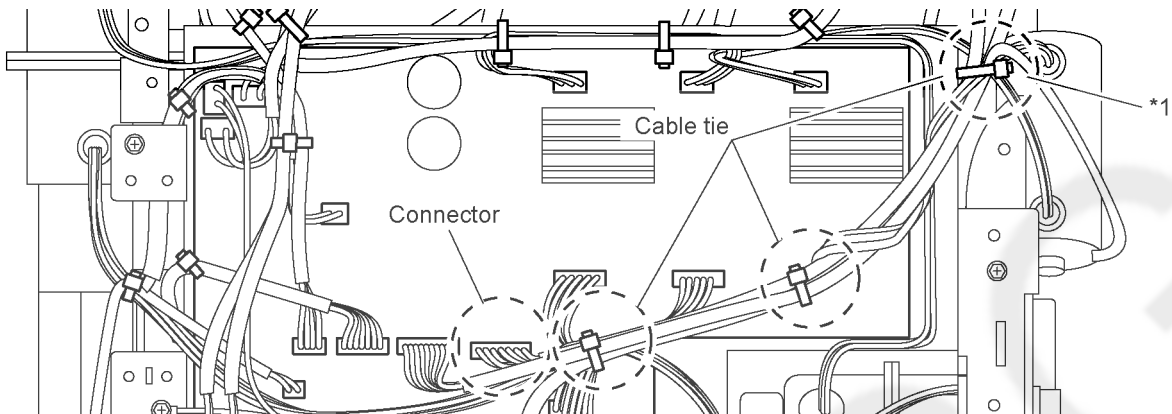
Caution in installing

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.

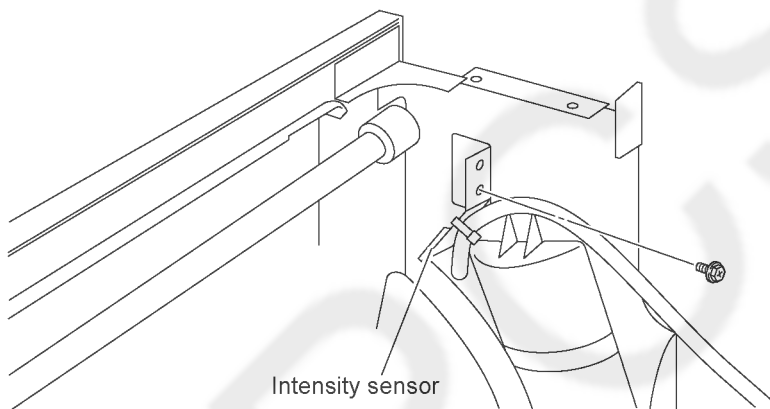


9.19.2. Removing the Intensity sensor

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.

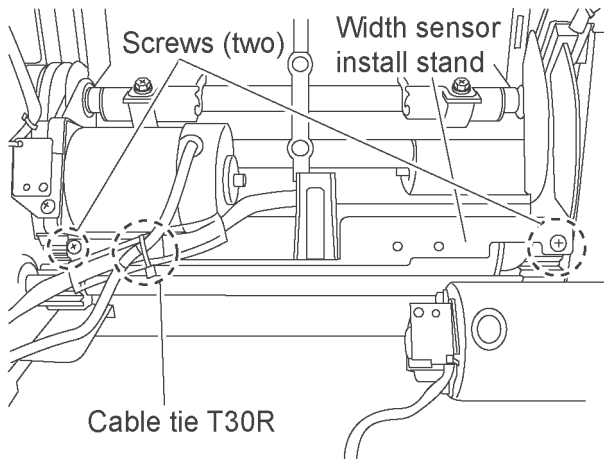


Caution in installing

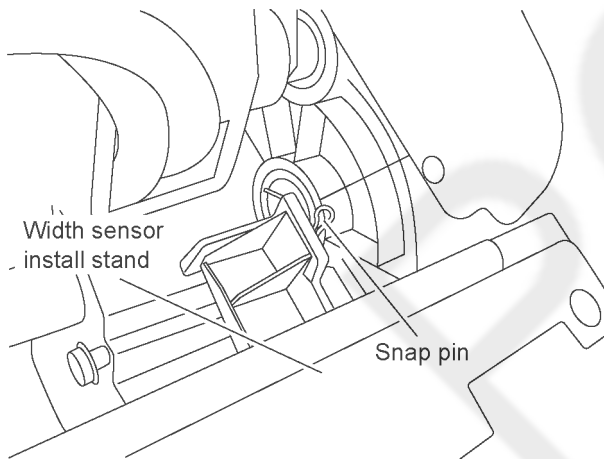
- The Message block frame and the Intensity sensor should be installed firmly.
(Otherwise, it leads to the overrun in the direction of the Strong.)
- When installing each Lead wires with Cable ties check if Lead wires are not abnormally pulled or hooked operating the Massage mechanism block in the directions 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.

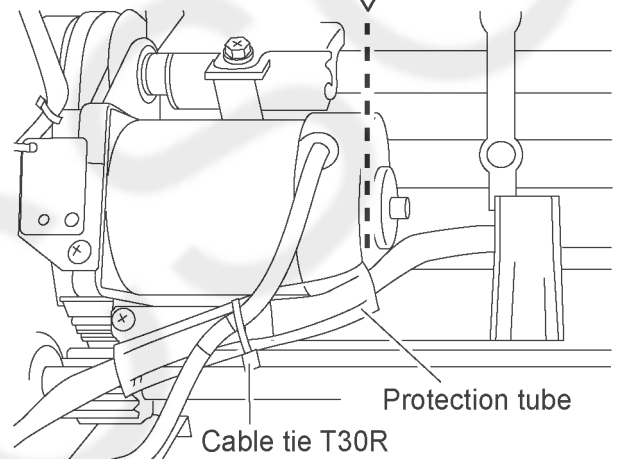


Caution in installing

- 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.

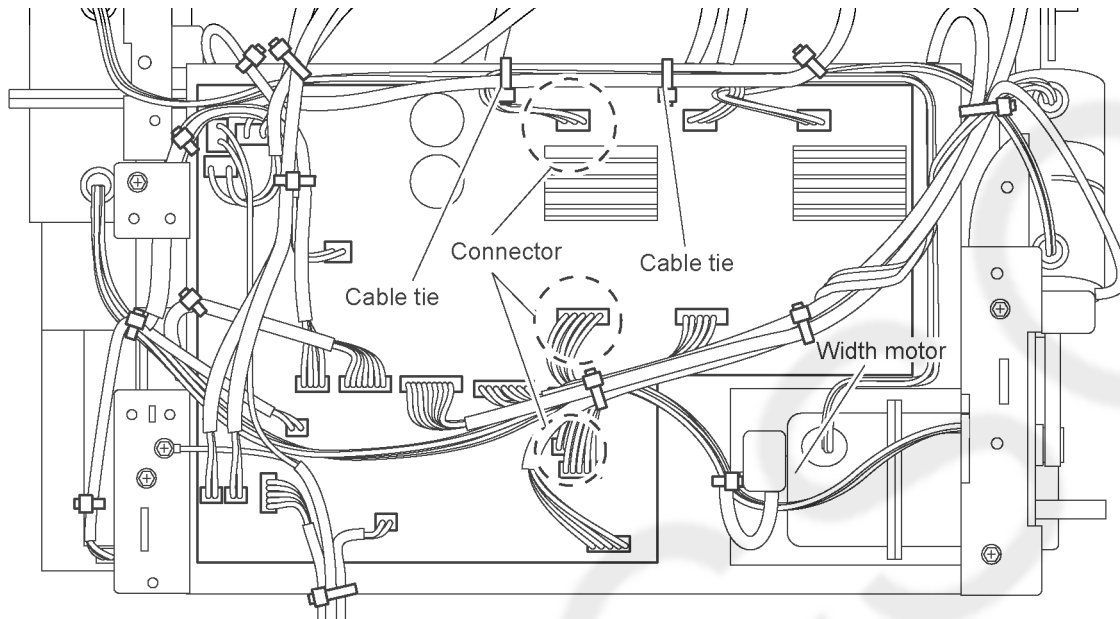
(If they are not bound properly, the Wires can get caught in the Intensity gear and the pinion.)

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.

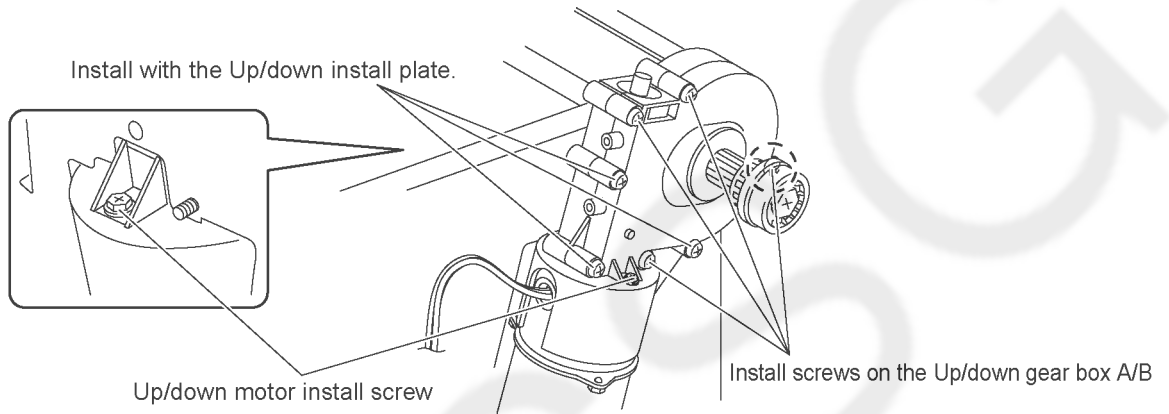


9.19.5. Removing the Up/down gear block

* 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.)



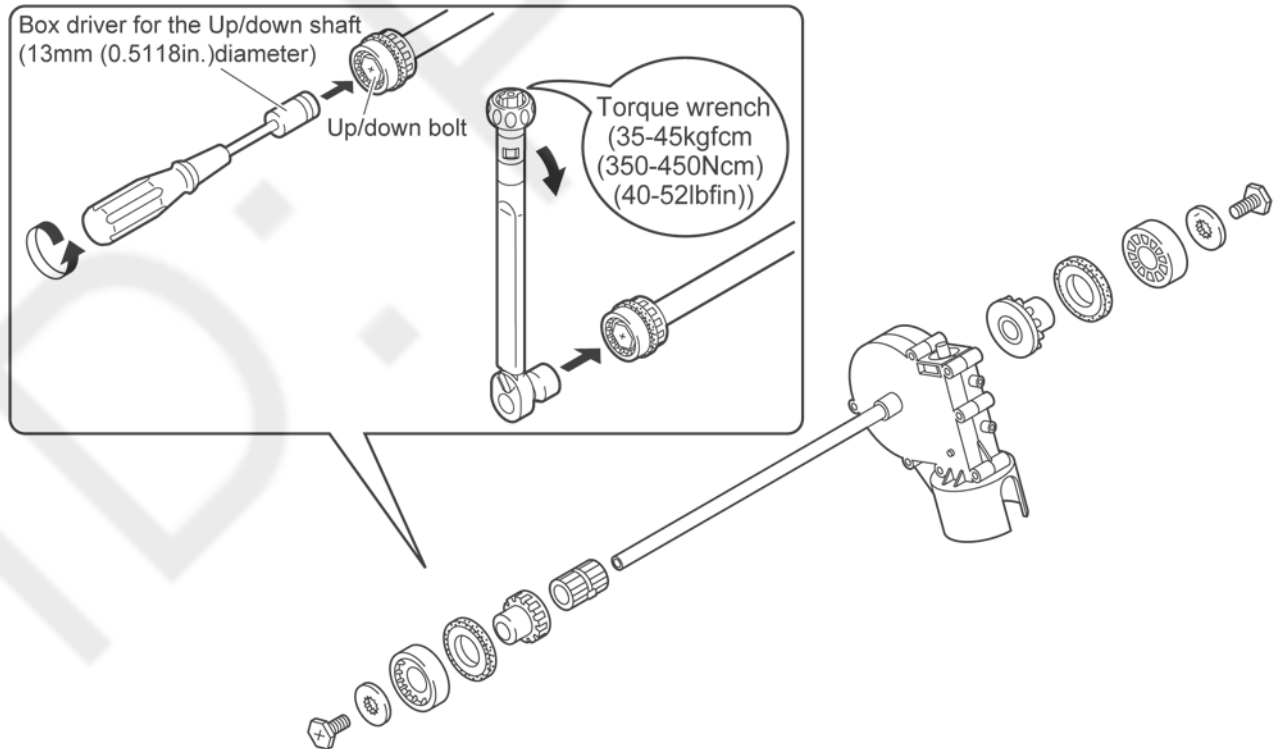
9.19.6. Removing the Up/down shaft (Up/down shaft bolt)

* 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.

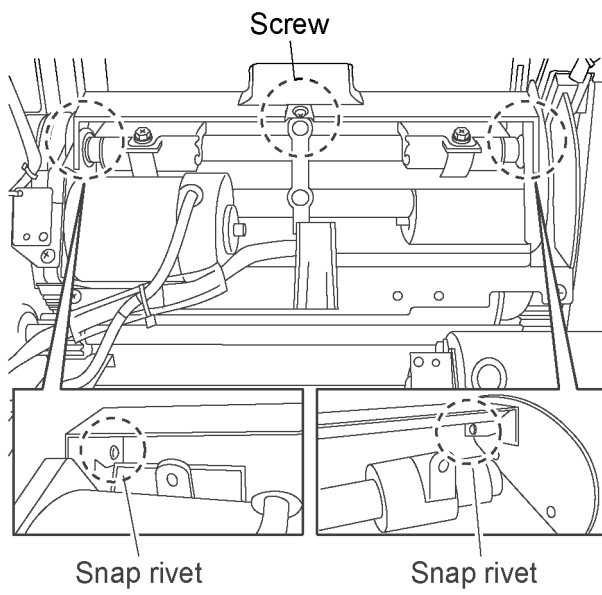
Caution in installing

- 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.

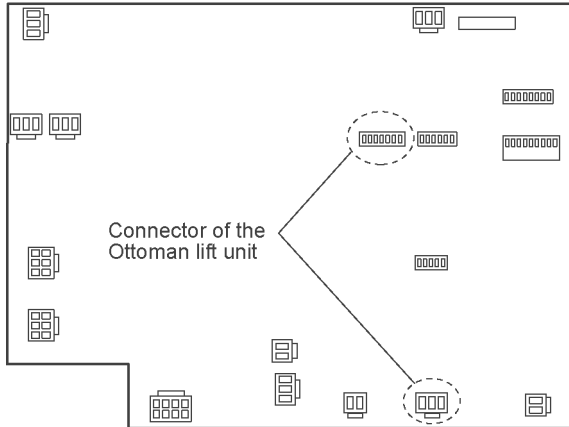
If not, the Snap rivets are loosened during the operation, and it leads to the abnormal vibration noise like Bbbbbbbb.

9.20. Removing each Lift units

9.20.1. Removing the Ottoman lift unit

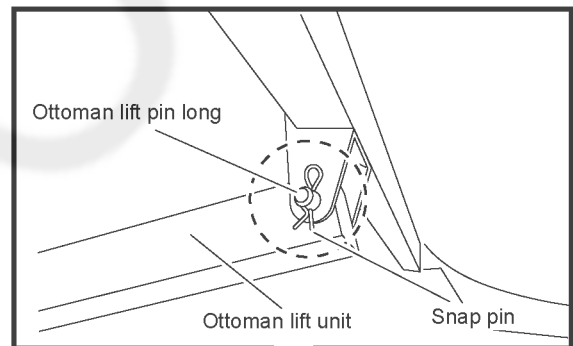
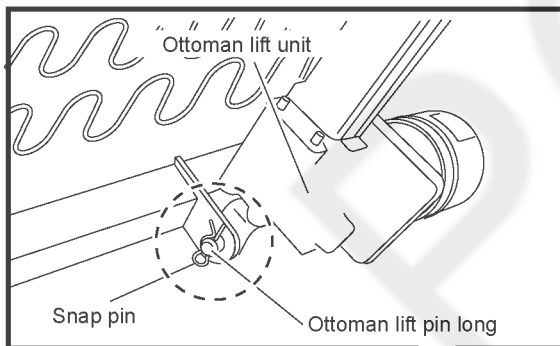
1. Proceed all the procedures of 9.15. Removing the Massage mechanism block.
* **The work would be safe and easy if the Massage mechanism block is removed.**
2. Proceed the procedures of 1-7 of 9.12. Removing the Under box, and disconnect the Connectors of the Ottoman lift unit (CN11, CN13) and removing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

Sub PCB

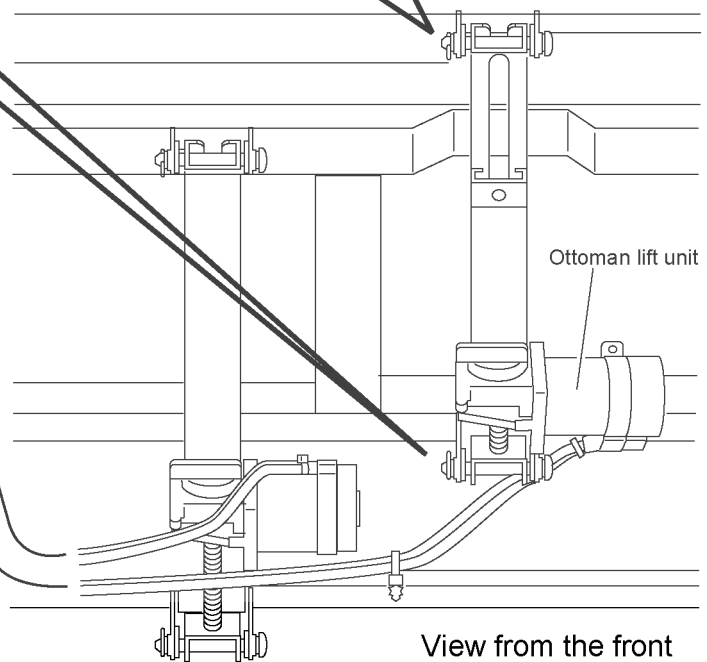
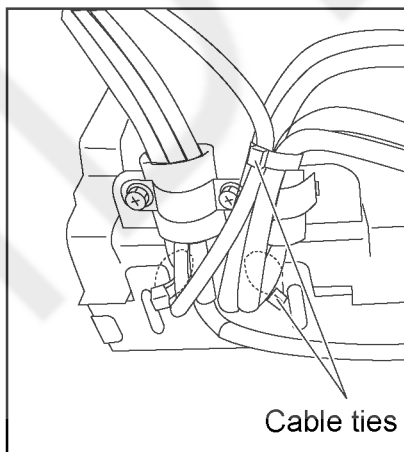


3. Remove the Ottoman pin long and the Snap pin, and you can remove the Ottoman lift unit.

* **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.

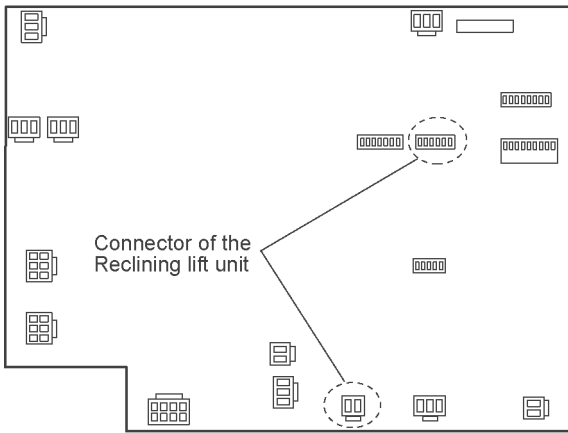
9.20.2. Removing the Reclining lift unit

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

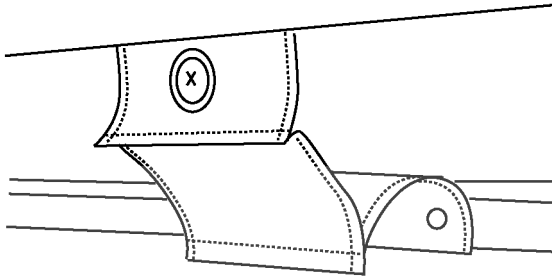
*** The work would be safe and easy if the Massage mechanism block is removed.**

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

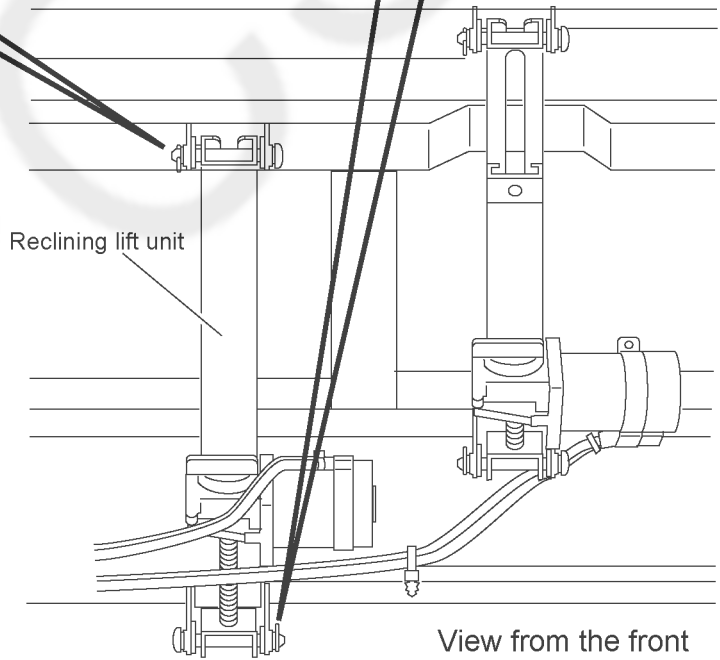
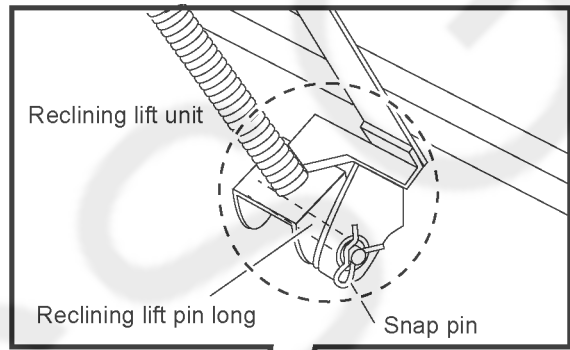
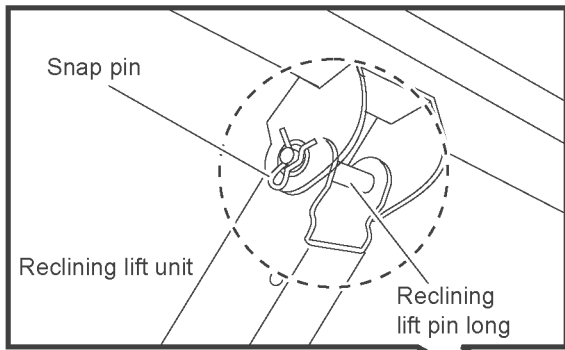


3. Remove one Push-rivet.



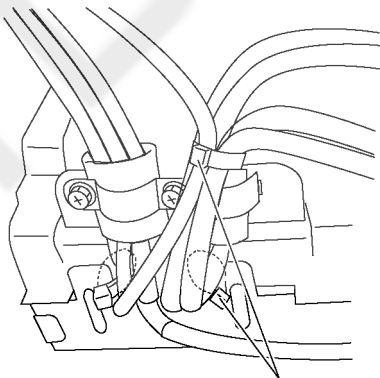
4. Remove the Ottoman lift pin long and the Snap pin, and you can remove the Lift unit.

* 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.



Cable ties

Caution in installing

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

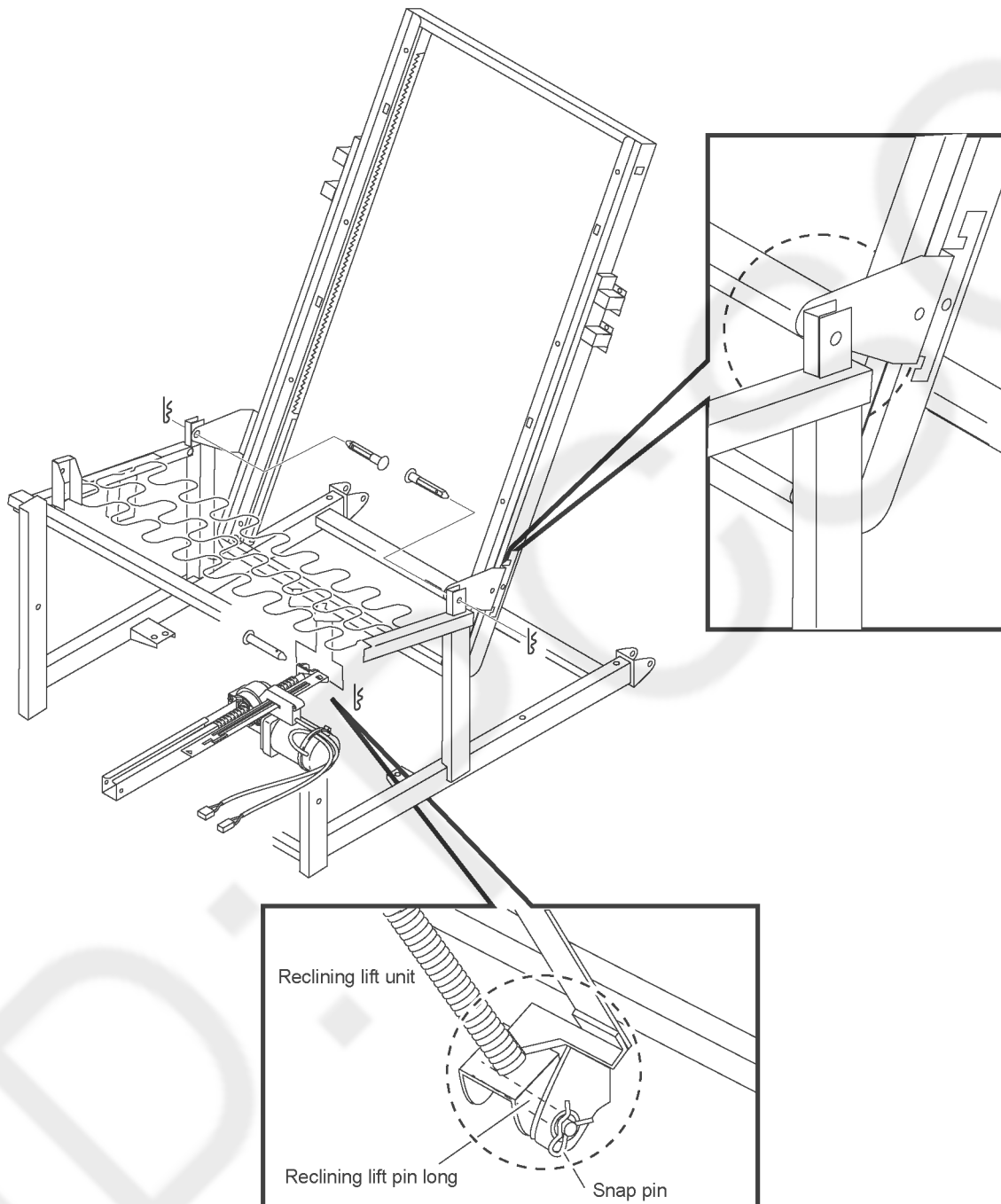
9.21. Removing the Rear frame

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.**

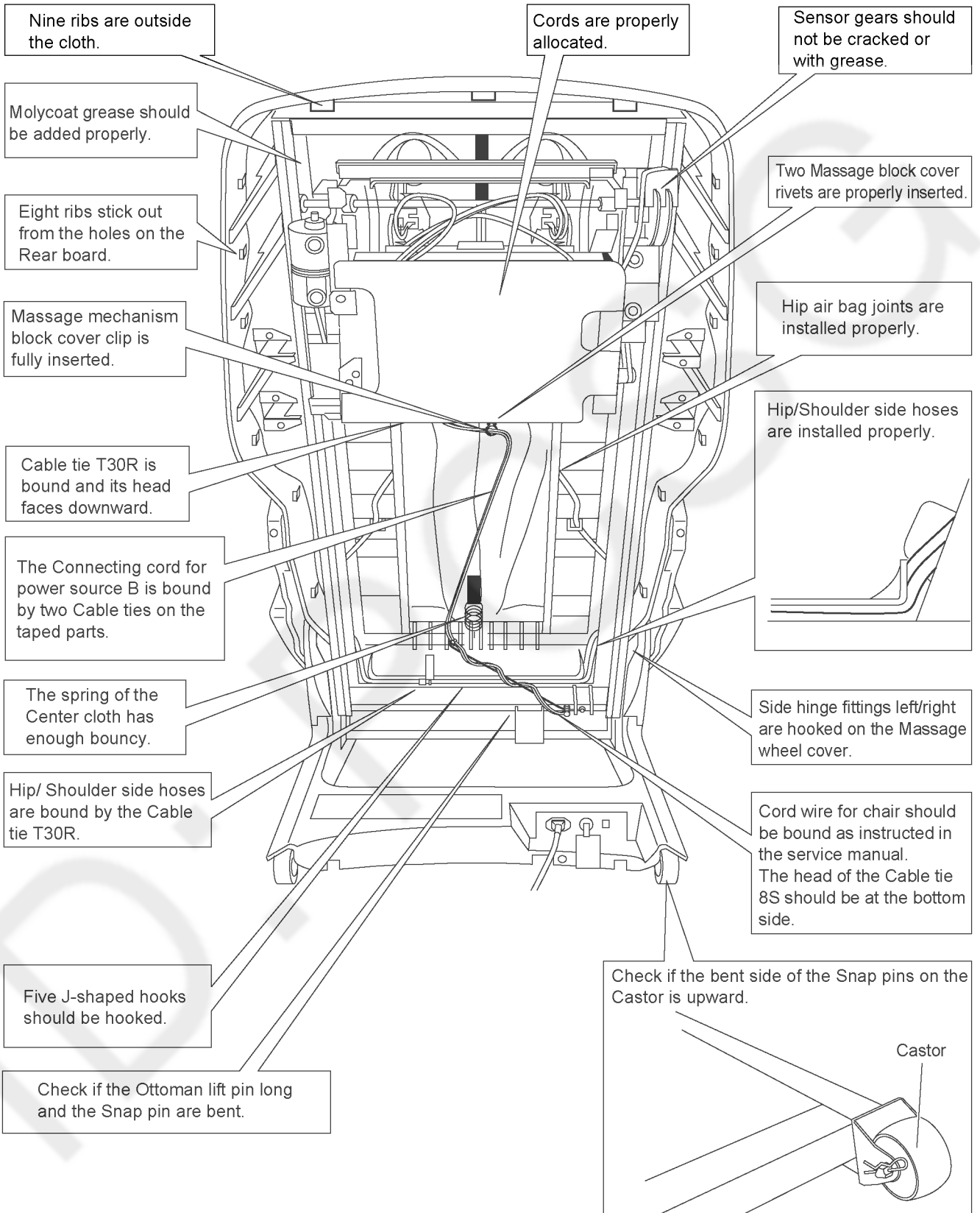


Caution in installing

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.

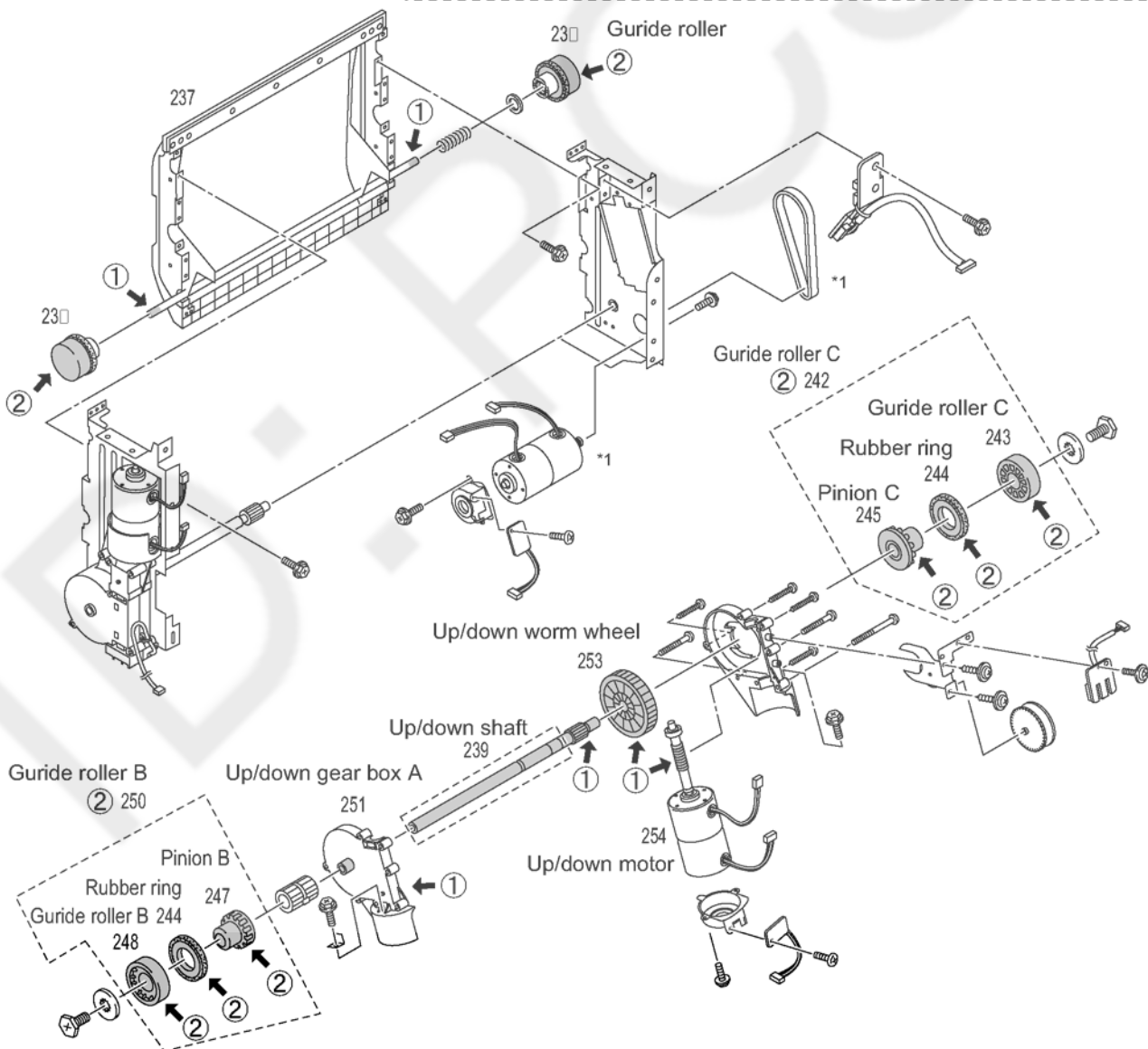
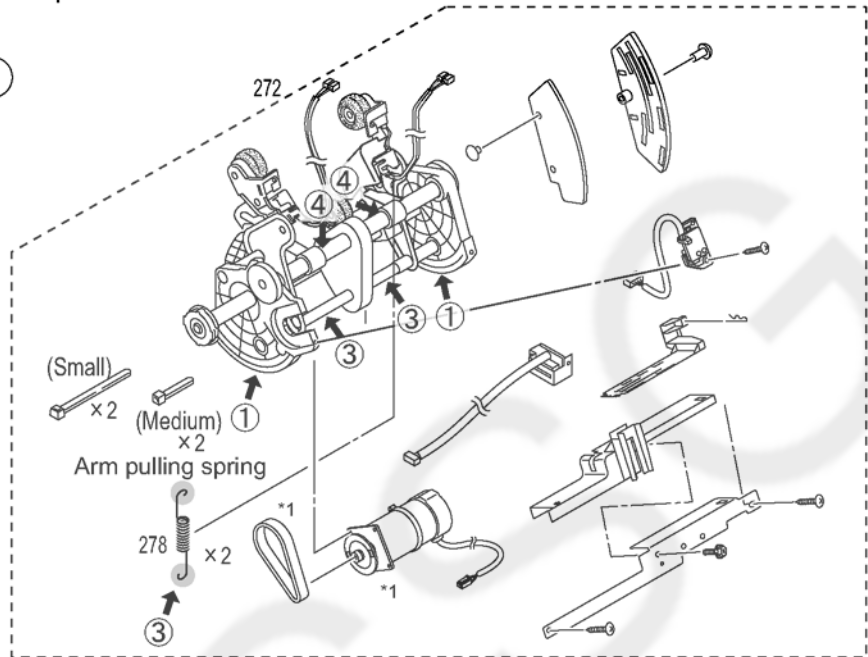
Massaged mechanism block

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

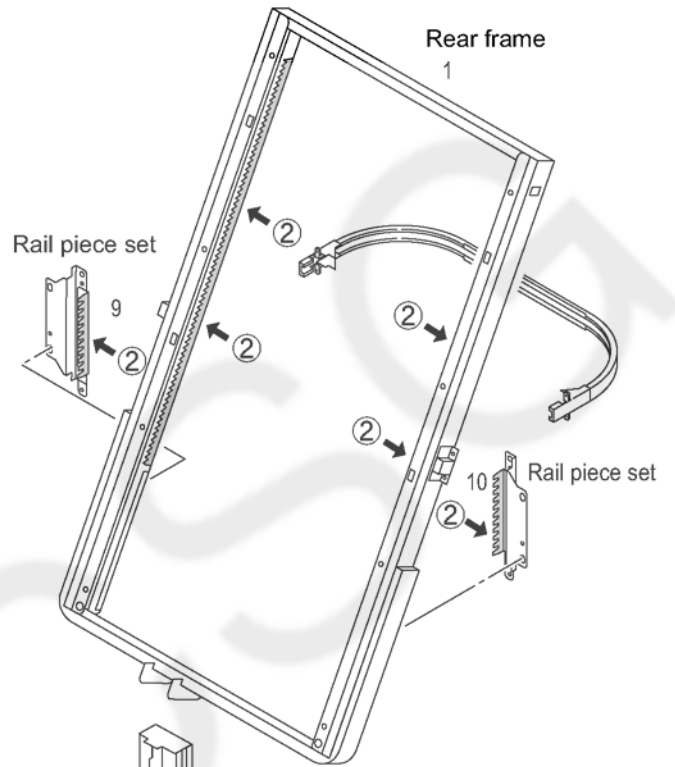
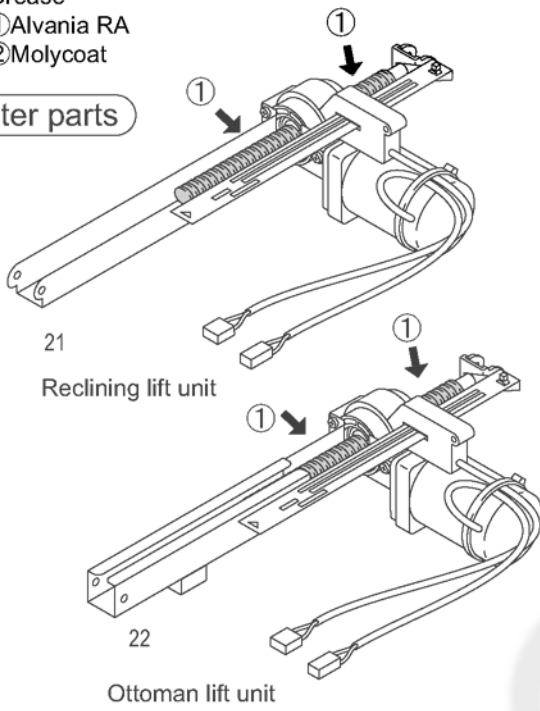
- ① Alvania RA
- ② Molycoat
- ③ E Paste
- ④ Molycoat/ E Paste



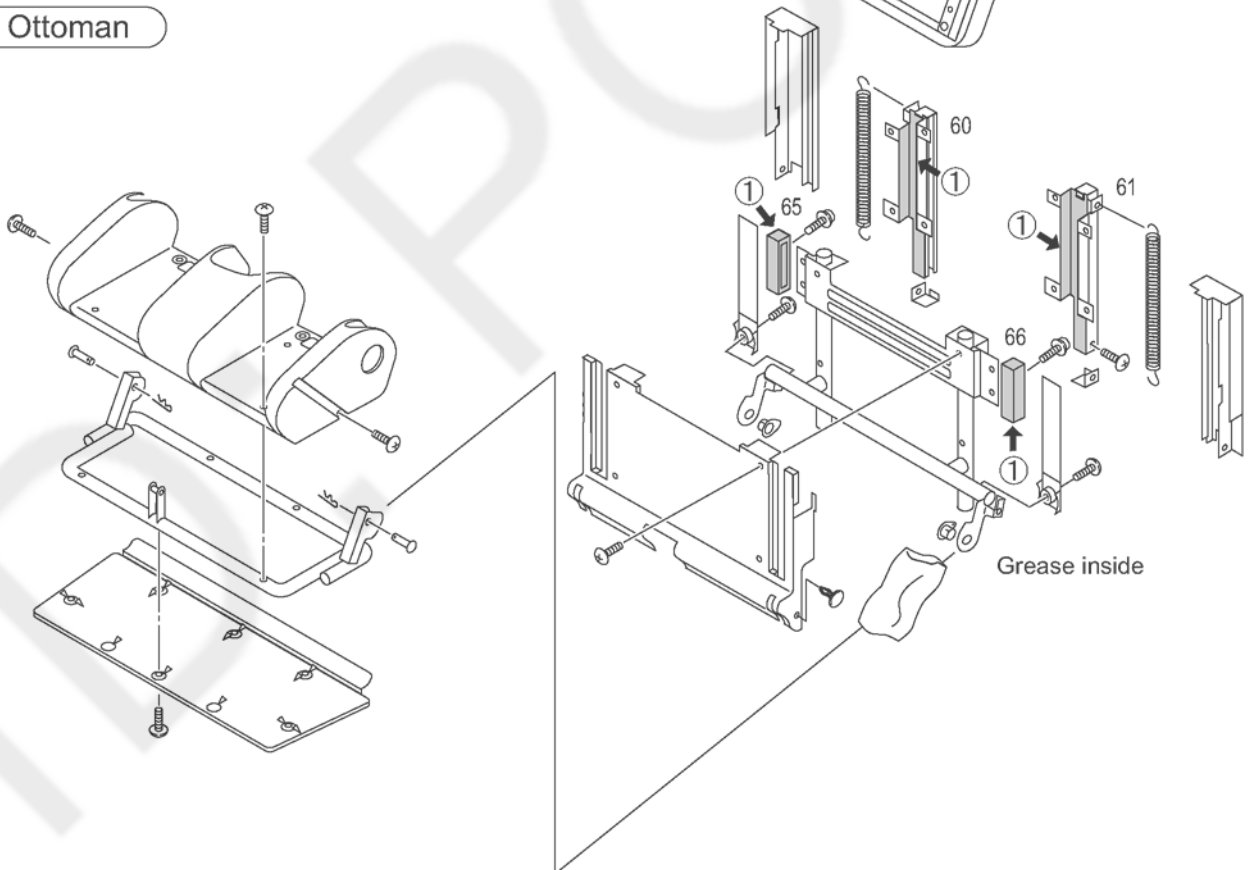
Grease up the parts (■) when in repair.

- 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 | | |
| 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.

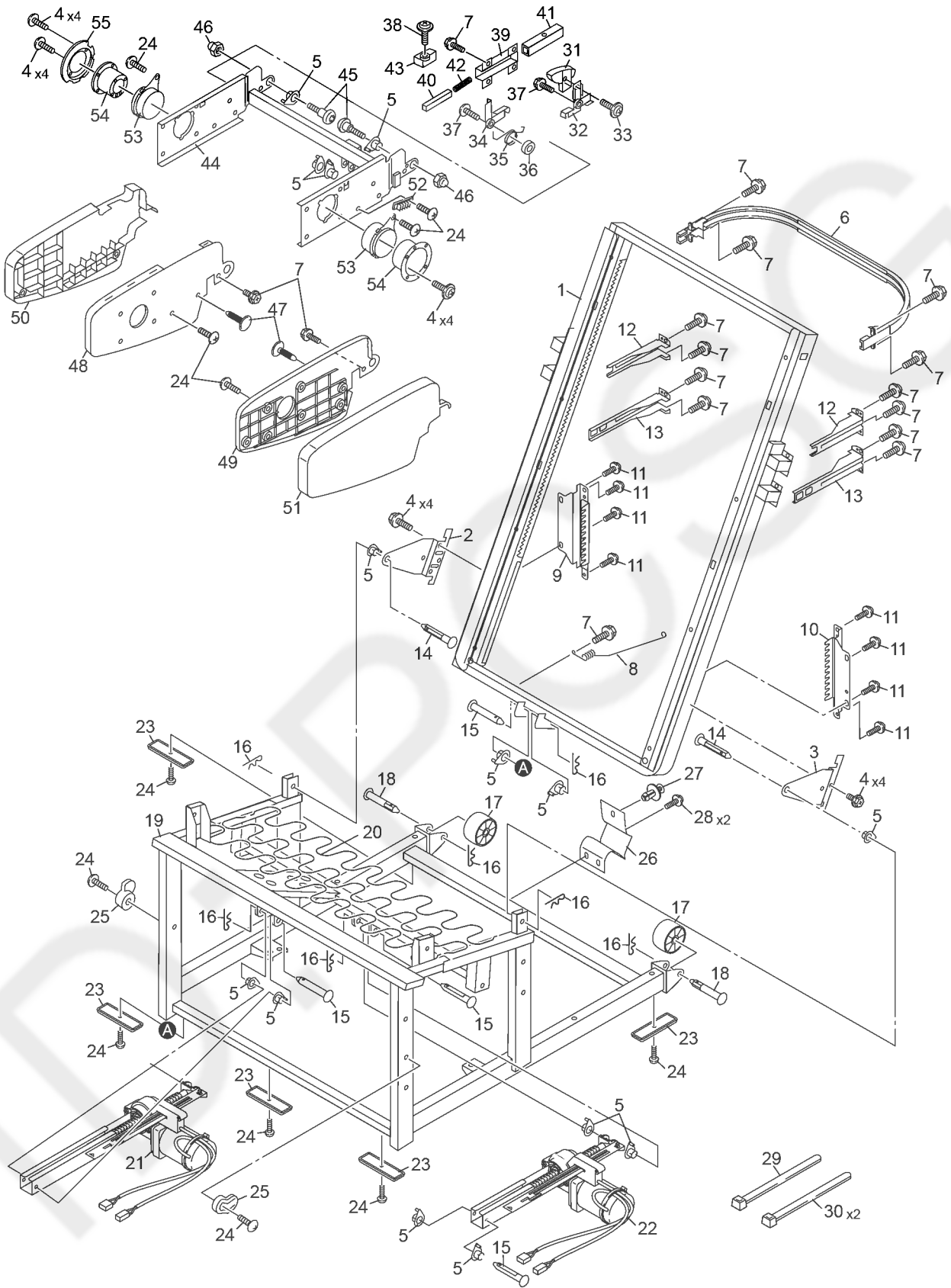
Note : Important Safety Notice

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

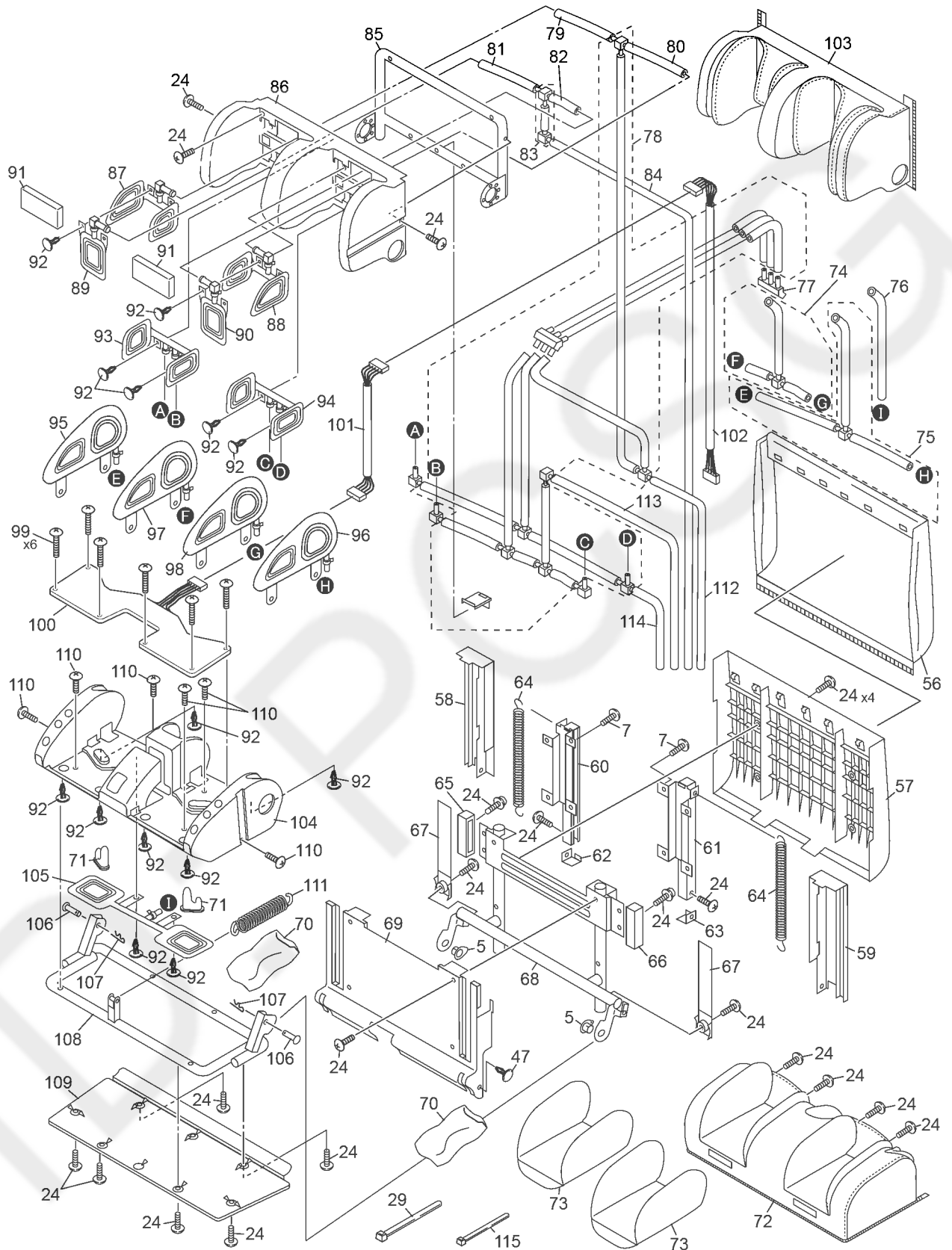
About "U" in the remarks column

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

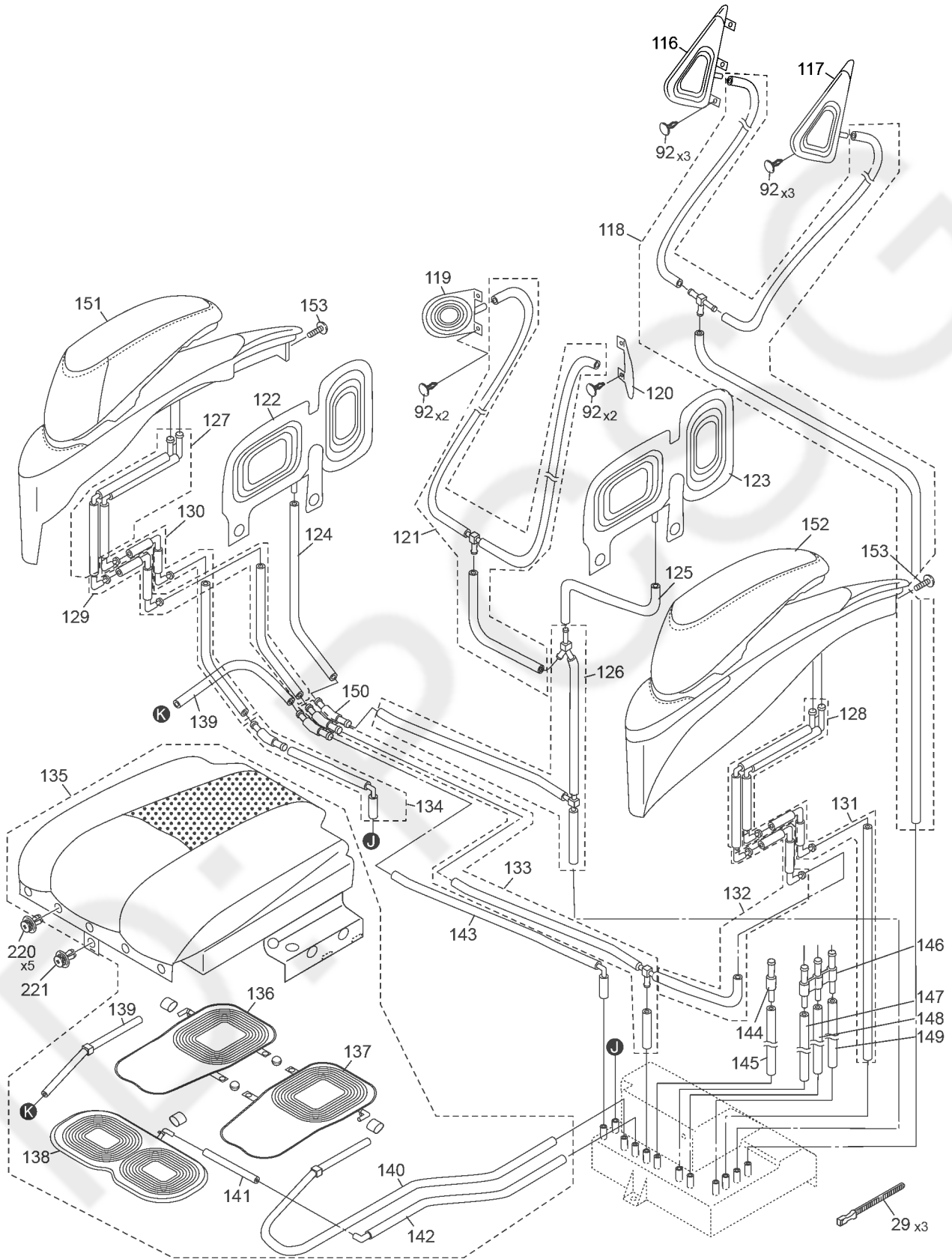
10.1. Exploded View-1



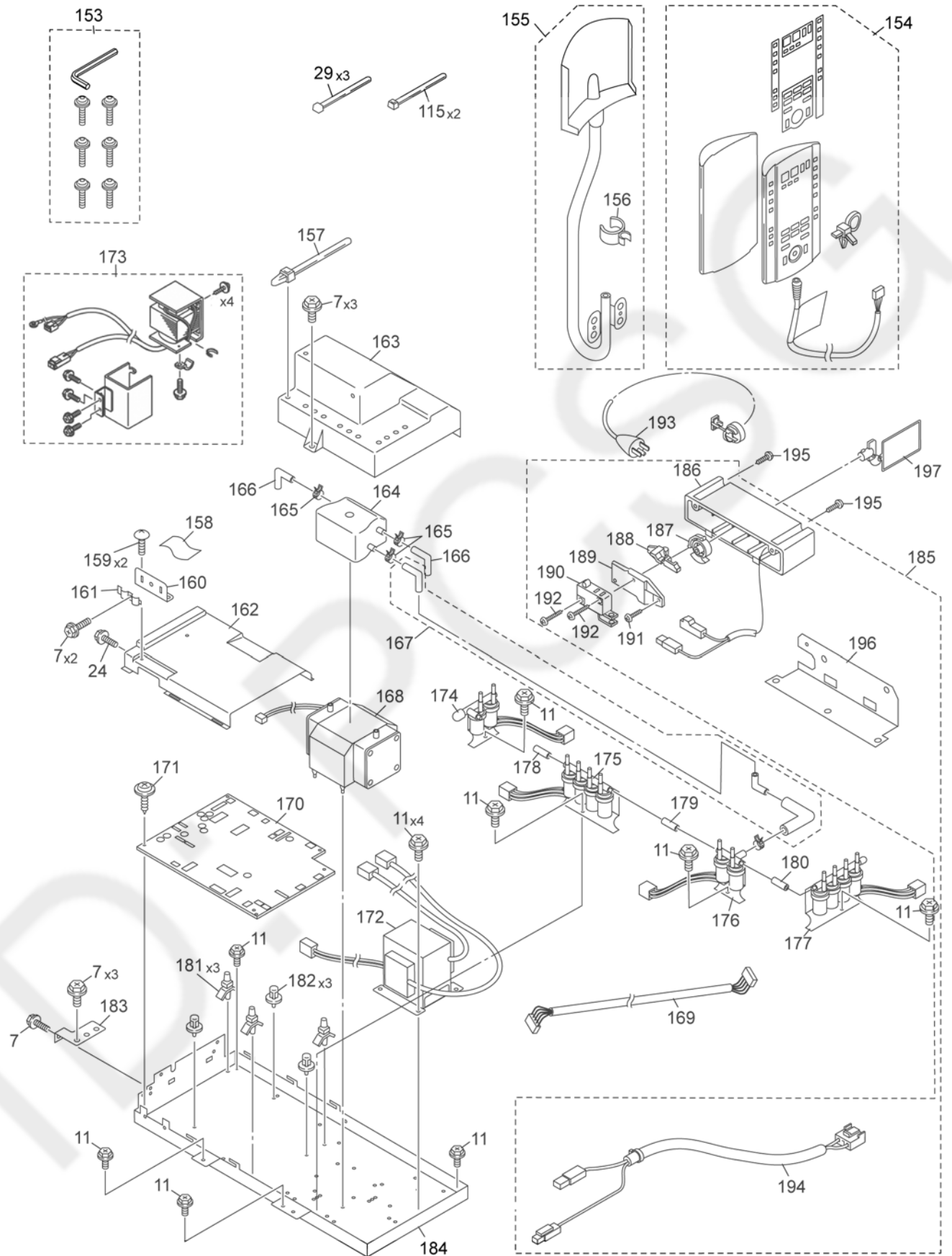
10.2. Exploded View-2



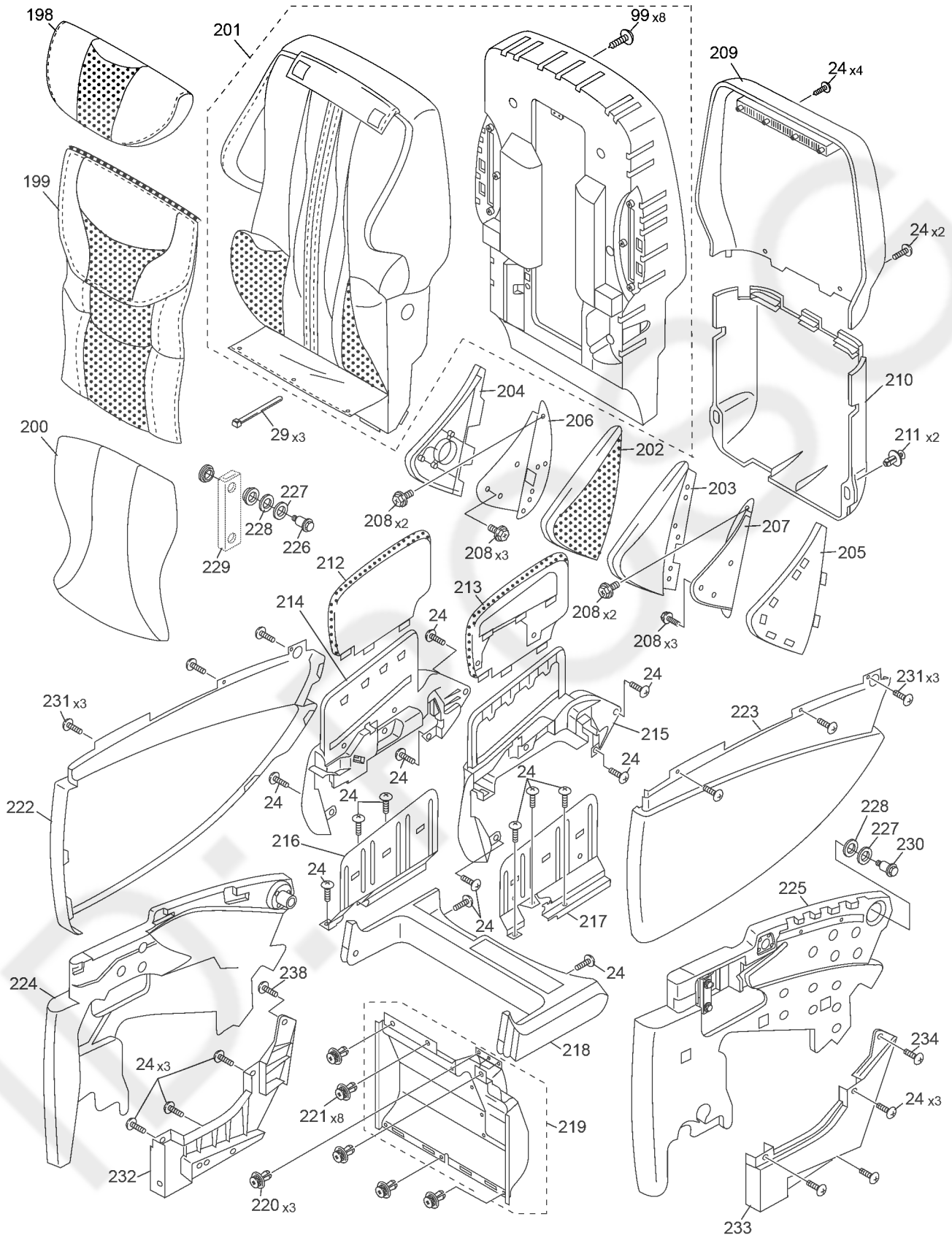
10.3. Exploded View-3



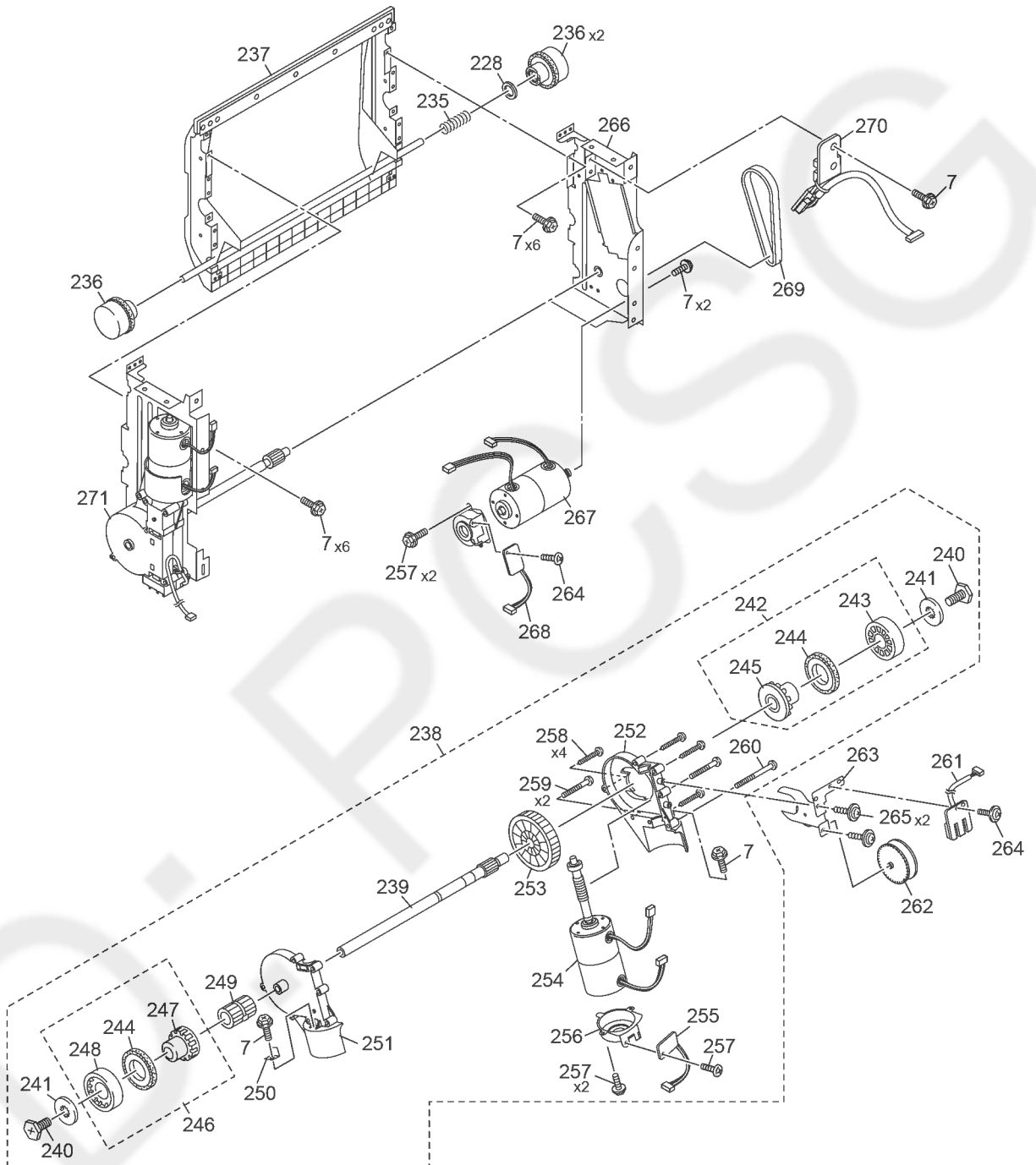
10.4. Exploded View-4



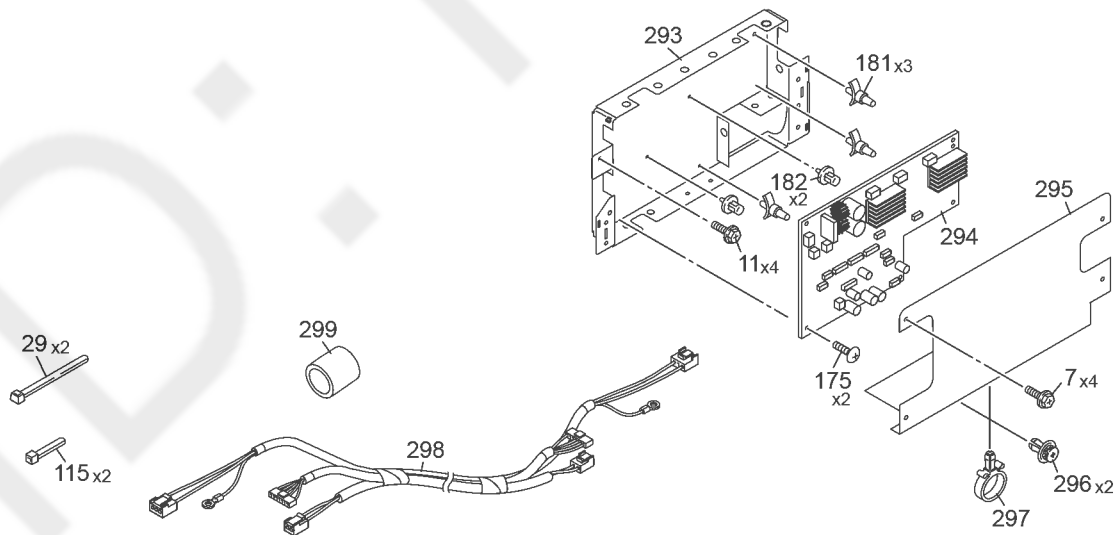
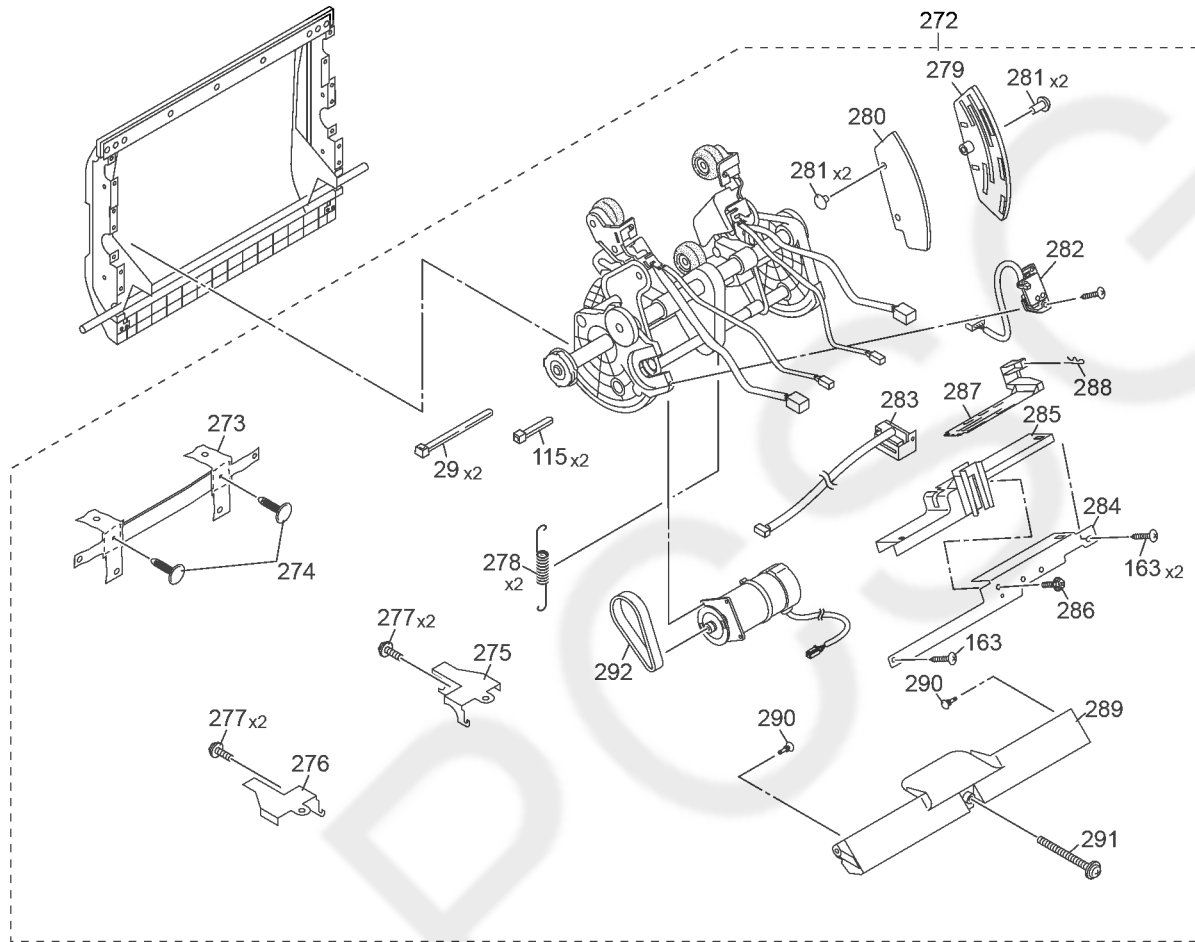
10.5. Exploded View-5



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 | |