

CORDLESS INFLATOR DMP180

REPAIR MANUAL



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2 CAUTION

Repair the machine in accordance with "Instruction manual" or "Safety instructions".

Follow the instructions described below in advance before repairing:

- Wear gloves.
- In order to avoid wrong reassembly, draw or write down where and how the parts are assembled, and what the parts are.
- It is also recommended to have boxes ready to keep disassembled parts by group.
- Handle the disassembled parts carefully. Clean and wash them properly.
- Remove Battery, except when it is necessary to check the operation of the machine.

3 NECESSARY REPAIRING TOOLS

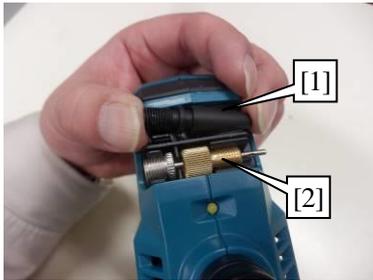
Code No.	Description	Use for
1R311	Retaining ring pliers L	removing Tube
781036-5	Wrench 10	removing Hose

4 REPAIR
4-1 Battery
4-1-1 Disassembling

- 1 Remove the battery.

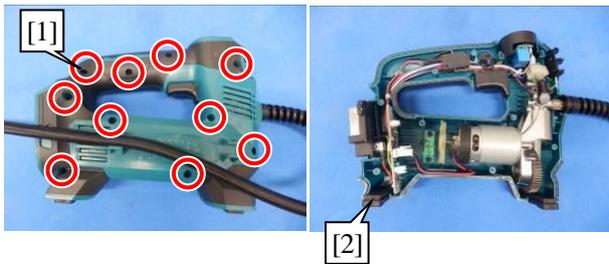
4-2 Motor and Pump section
4-2-1 Disassembling

Fig.1



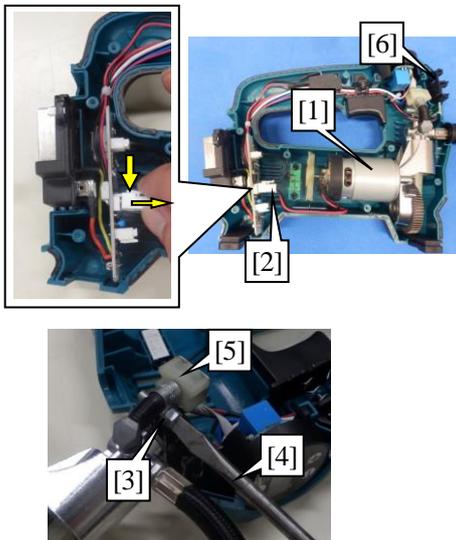
- 1 Remove Swim ring adapter [1] and Ball adapter [2] from Fixed bracket.

Fig.2



- 2 Remove Screws 3x14 [1] (10 pcs), then remove Housing.
- 3 Remove Mats [2] (2 pcs).

Fig.3

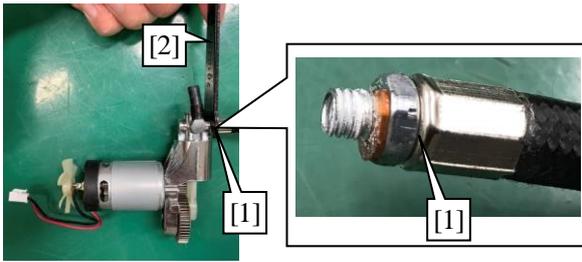


- 4 Remove Lead wires of Motor assembly [1] to release the lock by pinching the claw on the connector of PCB [2].
- 5 Loosen the screw on Clamp [3] with a slotted screwdriver [4], then remove Tube on the side of Pressure sensor [5] with 1R311, and then pull out Tube. Remove Fixed bracket [6].
- 6 Remove Motor assembly [1] from Housing.

Note

Note that Rubber (Cylinder) may come off (be left on Housing side) when Motor assembly [1] is removed from Housing.

Fig.4



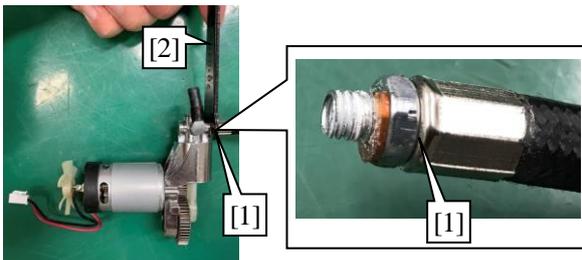
- 7 Loosen and remove Hose [1] with Wrench 10 [2] (781036-5).

Note

- Only a thin wrench [2] can be inserted, so be careful when loosening.
- As adhesive is applied to the thread on Hose end, be careful when you loosen it.

4-2-2 Assembling

Fig.5

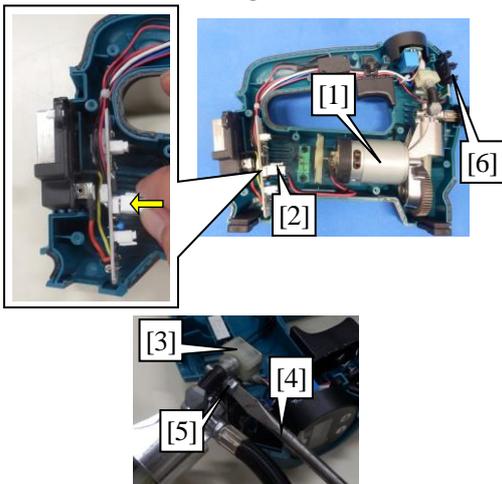


- 1 Remove the old screw lock adhesive on the thread of Hose end [1], then apply a high strength adhesive (Loctite 272), and then tighten the joint portion with Wrench 10 [2] (781036-5).

Note

- Only a thin wrench can be inserted, so be careful when tightening.

Fig.6



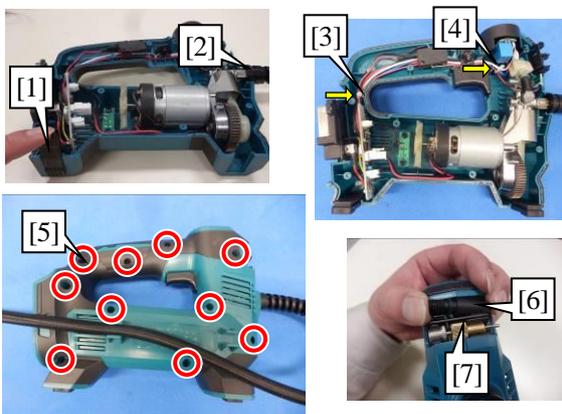
- 2 Connect Lead wires of Motor assembly [1] to the connector of PCB [2].
- 3 Insert the tube on the side of Pressure sensor [3] into Pump section. Assemble Clamp [5], then tighten the screw with a slotted screwdriver [4]. Assemble Fixed bracket [6].

Note

- When inserting the tube, be careful to tighten it because only a thin wrench can be inserted.

- 4 Assemble Motor assembly [1] to Housing.

Fig.7

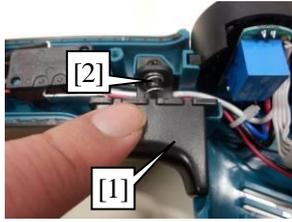


- 5 Assemble Mats [1] (2 pcs). Assemble the pipe guard of Air pipe assembly [2] to Housing.
- 6 Bundle Lead wires with Cable ties [3], [4].
- 7 Align Housing R with Housing L, then tighten Screws 3x14 [5] (10 pcs).
- 8 Assemble Swim ring adapter [6] and Ball adapter [7] to Fixed bracket.

4-3 Switch/ Sensor, Terminal section/ Board

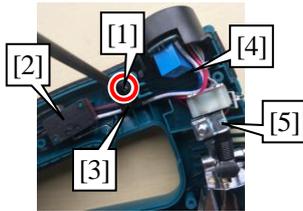
4-3-1 Disassembling

Fig.8



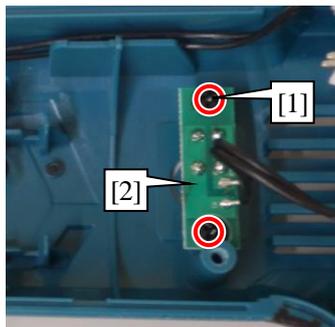
- 1 Remove Switch trigger [1] carefully so that Spring [2] does not pop out.

Fig.9



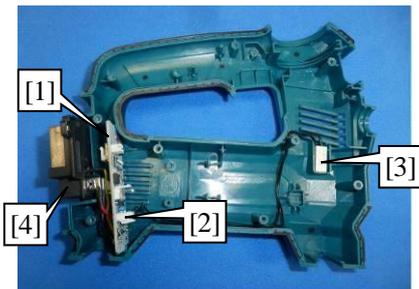
- 2 Remove Screw 3 *10 [1], then remove the following parts:
 - Switch [2]
 - Trigger spring-fixed block [3]
 - Digital display [4]
 - Clamp [5]

Fig.10



- 3 Loosen Screws 3 *10 [1] (2 pcs), then remove Power on/off [2].

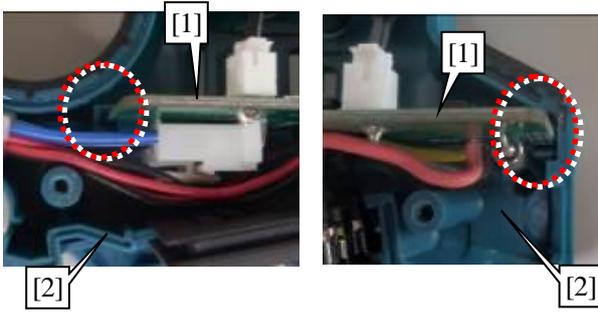
Fig.11



- 4 Disconnect Connector [2] from PCB board [1], then remove Terminal protector [3].
- 5 Remove PCB board [1] and Battery terminal [4] from Housing.

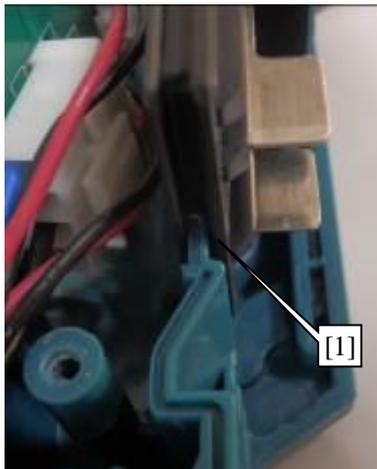
Assembling of Terminal section/ Board

Fig.12



- 1 When assembling PCB board [1], make sure that it is in the groove of Housing [2].

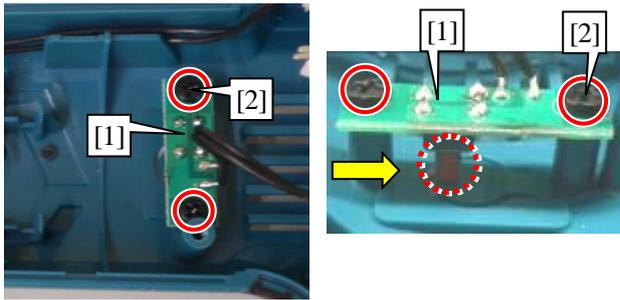
Fig.13



- 2 Align the groove of Battery terminal [1] with the rib of Housing.

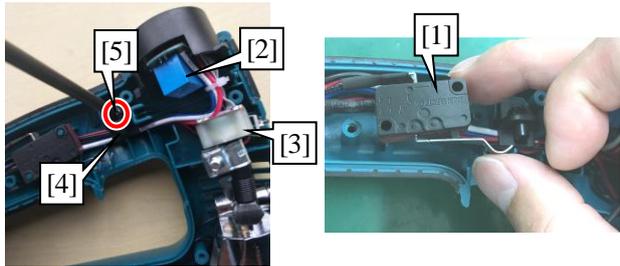
4-3-2 Assembling of Switch/ Sensor

Fig.14



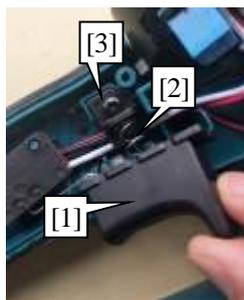
- 1 Assemble Power on/ off [1] so that the red switch side faces to the yellow arrow side, then tighten Screws 3*10 [2] (2 pcs).

Fig.15



- 2 Assemble Switch [1] into two bosses.
- 3 Assemble Digital display [2] and LED PCB [3].
- 4 Tighten SCREW 3*10 [5] carefully so as not to pinch Lead wires with Trigger spring-fixed block [4].

Fig.16



- 5 With Spring [2] putting into Switch trigger [1], align Spring [2] with the cylindrical portion of Trigger spring-fixed block [3], then assemble Switch trigger [1].

5 Check after REPAIR

1 Check the operation of the repaired machine.

- Check that neither abnormal noise nor leakage of compressed air happens.
- Check that the digital monitor is displayed, and the LED light is light up.

2 Check by putting air into the tires of the car, etc.

- Check that the pressure rises to the specified tire pressure.
- Measure the time from when the tire air is deflated condition to when it reaches the specified pressure.

3 Check that the air can be inflated at the same time as other machines.

6 CIRCUIT DIAGRAM / WIRING DIAGRAM

Fig.17

