TECHNICAL INFORMATION

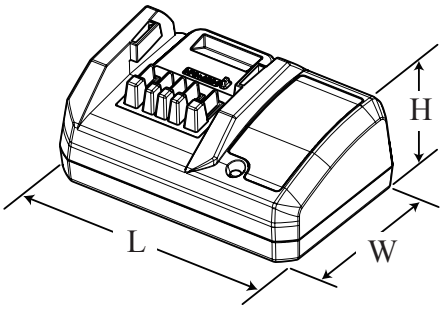
Model No. ► DC1851
Description ► Charger

CONCEPT AND MAIN APPLICATIONS

Model DC1851 is a maktec charger developed specially for charging new slide-style Li-ion batteries.
New maktec Li-ion batteries model L1451 (14.4V-1.1Ah) and model L1851 (18V-1.1Ah) can be charged approximately in 60 minutes. Also, the Makita brand Li-ion batteries designed with the same concept, model BL1411G (14.4V-1.1Ah) and model BL1811G (18V-1.1Ah) can be charged.

In order to achieve a cost-competitive advantage, this charger is not equipped with:
- Optimum Charging System
- Forced air-cooling system

Also note that it is not compatible with:
- ADP01 Interchangeable adapter
- ADP02 Refreshing adapter
- ADP03 Automatic refreshing adapter
- ADP04 Interchangeable adapter



Dimensions: mm (")	
Length (L)	150 (5-7/8)
Width (W)	100 (3-15/16)
Height (H)	65 (2-9/16)

Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Standby power (W)
			Input	Output	
110 - 120		50/60	41		0.3
100 - 240		50/60	41		0.3
220 - 240		50/60	41		0.3

Output voltage	DC 14.4 - 18V
Output current	DC 1.65 - 1.1A
Charging time*	approx. 60 min.
Protection against electric shock	Double insulation/ Grounding
Power supply cord: m (ft)	2.0 (6.6)
Weight according to EPTA-Procedure 01/2003: kg (lbs)	0.35 (0.77)

*The charging time may depend on various conditions such as room temperature, the condition of battery, etc.

Standard equipment

No

Optional accessories

No

Repair

CAUTION: Disconnect the charger from the power source for safety before repair/ maintenance!
DC1851 has two different kinds of specifications. Distinguish them by name plate "DC1851" and "DC1851 U" and follow each insturction. Do not use the different parts in repair.

[1] DISASSEMBLY/ASSEMBLY FOR DC1851

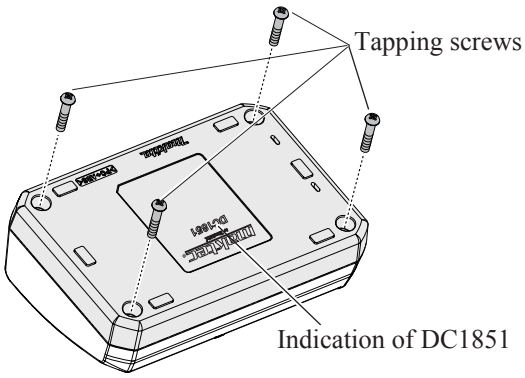
[1] -1. Terminal unit and Charger case complete

DISASSEMBLING

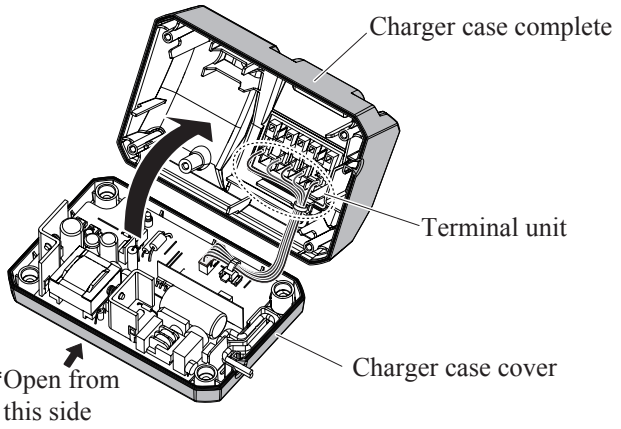
Replace Charger case complete as drawn in **Figs. 1 and 2**.

Fig. 1

1. Turn Charger upside down and remove four tapping screws.



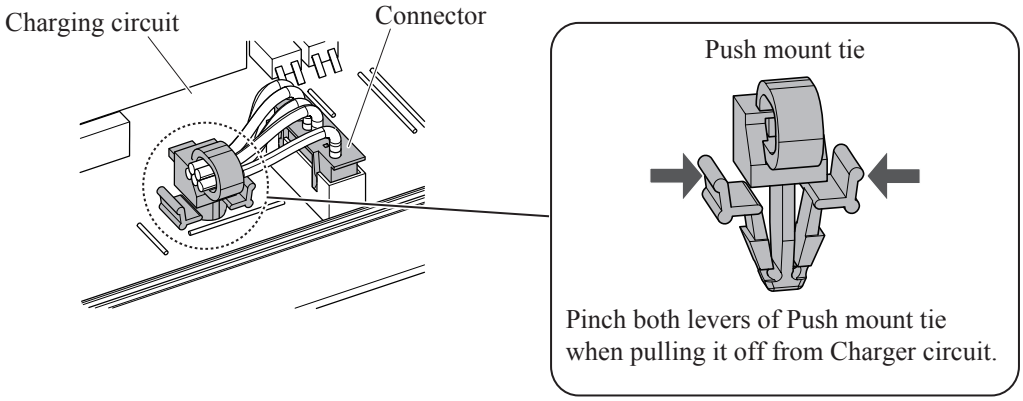
2. Turn Charger over again and open Charger case complete from rear side.



Note: Terminal unit is fully integral with Charger case complete. When it is necessary to replace Terminal unit, replacing Charger case complete and Charging condition label is required.

Fig. 2

3. When replacing Charger case complete;
   (1) By pinching Push mount tie, remove it from Charging circuit.
   (2) Remove Connector from Charging circuit.



Repair

[1] DISASSEMBLY/ASSEMBLY FOR DC1851

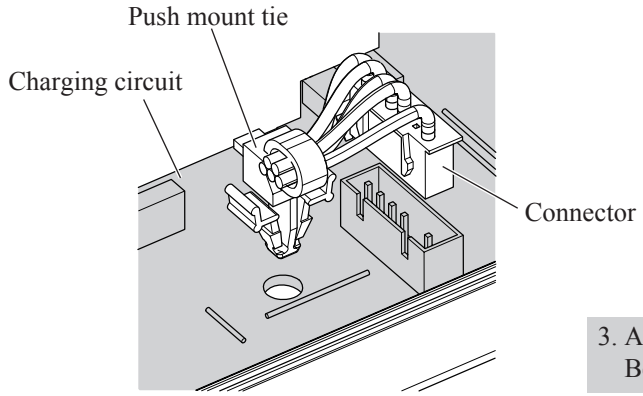
[1] -1. Terminal unit and Charger case complete (cont.)

ASSEMBLING

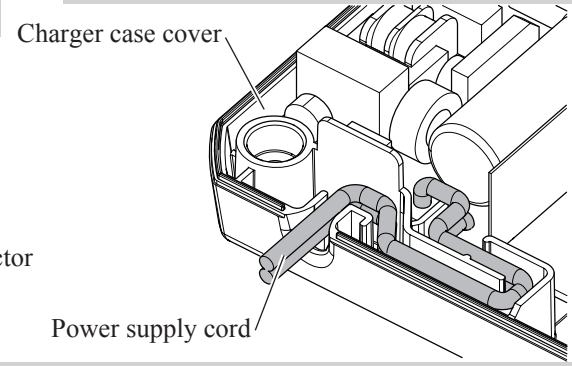
Assemble Charger case cover and Charger case complete as drawn in **Fig. 3**.

Fig. 3

1. Set Connector on Charging circuit as drawn below. Then insert Push mount tie into the hole of Charging circuit until its levers are fixed in the hole.



2. Push Lead wires firmly between the ribs and the wall of Charger case cover.



3. Assemble Charger case complete to Charger case cover. Be sure to securely tighten four tapping screws.

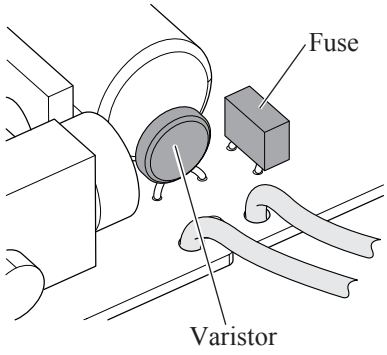
[1] -2. Replacing Varistor and Fuse

(1) If the cause of Battery charger trouble is the breakage of Varistor and Fuse, you need not replace Charging circuit, but simply replace Varistor and Fuse.
Sign of Varistor breakage:
Cracks exists in the surface of Varistor.
Cause of Varistor breakage:
Charger is plugged in a power source of two times or more than the rated voltage of Varistor.
Note: If Fuse has burned out meanwhile Varistor is not broken, something else in Charging circuit is probably causing the trouble. In this case, replace Charger circuit.

(2) Replace Varistor and Fuse. (**Fig. 4**)

Fig. 4

Varistor/ Fuse is soldered on Charging circuit.
Remove a broken Varistor/ Fuse with soldering iron.
And solder new one with soldering iron.



Repair

[2] DISASSEMBLY/ASSEMBLY FOR DC1851 U

[2]-1. Terminal unit and Charger case complete

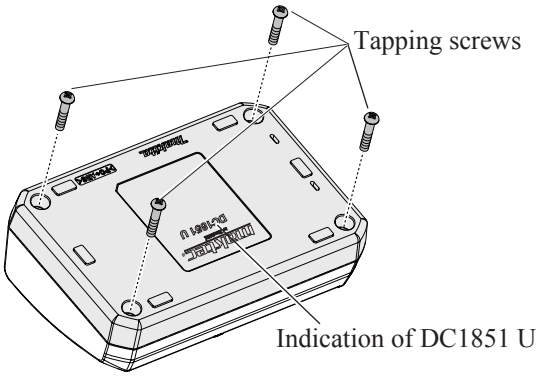
DISASSEMBLING

Important: After disconnecting the charger from the power source, wait more than 5 minutes before repairing work.

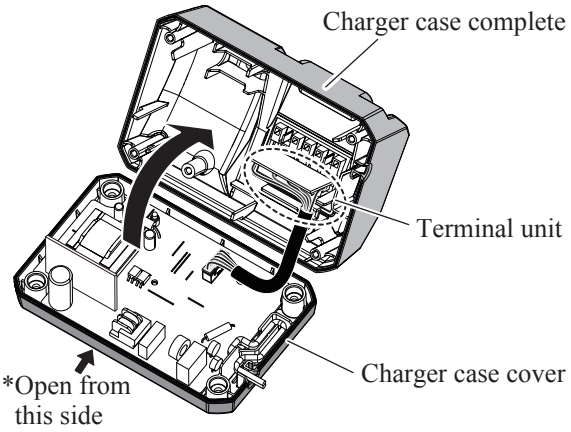
Replace Charger case complete.as drawn in **Figs. 5** and **6**.

Fig. 5

1. Turn Charger upside down and remove four tapping screws.



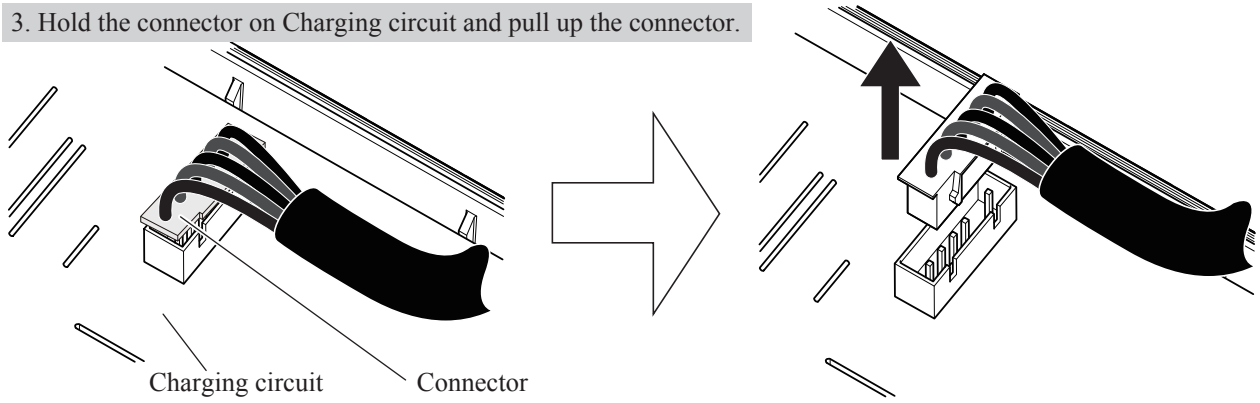
2. Turn Charger over again and open Charger case complete from rear side.



Note: Terminal unit is fully integral with Charger case complete. When it is necessary to replace Terminal unit, replacing Charger case complete and Charging condition label is required.

Fig. 6

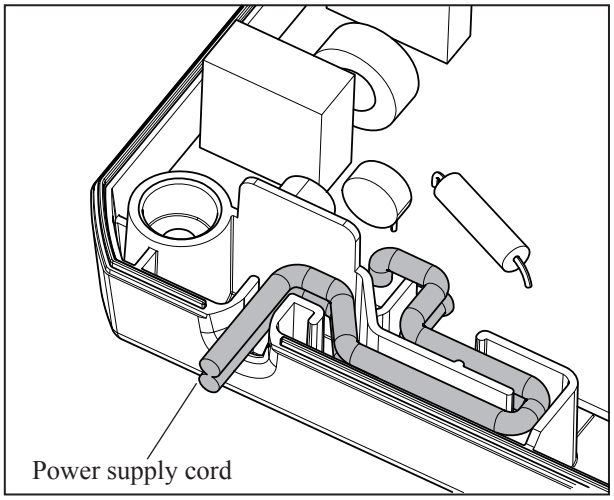
3. Hold the connector on Charging circuit and pull up the connector.



ASSEMBLING

Assemble Charger case complete to Charger case cover by reversing the disassembly procedure.
Be sure to push Power supply cord firmly between the ribs and the wall of Charger case cover as drawn in Fig. 7.

Fig. 7



Repair

[2] DISASSEMBLY/ASSEMBLY FOR DC1851 U

[2] -2. Replacing Varistor and Fuse

Neither Varistor nor Fuse is supplied for the repair.
When they have damages, replace Charging circuit with a new one.