

Service Information Bulletin

This Bulletin is for information only.

New Motor Battery Charger Board and Resistor available

Task

Timing	Category	
Next service	<input type="radio"/>	Apply at all sites
	<input type="radio"/>	Apply at affected sites as listed below
	<input checked="" type="radio"/>	Optional to improve functionality of product

Task Tracking

After completion of your task the following entry in your Service Report is required:

DD+DIS037.17E

*

* Insert the document number into the field "Comment" (SMS form).

Purpose of this document:

- It announces an updated Motor Battery Charger board and an optional resistor.
- There are two new upgrade kits available for field upgrades.

Affected serial number(s) / batch:

- The updated Motor Battery Charger board has been introduced in production. For serial numbers refer to section 1.2. The board can also be upgraded in the field, see sections 1.1 and 2.
- The resistor installation is only an optional field upgrade, details see sections 1.1 and 2.

1 Introduction/purpose

The diodes D9 can be damaged when moving the DX-D 100 / DX-D 100 Wireless downwards over long ramps with big tilt (inclination higher than 5 degrees).

**NOTE:**

The diodes D9 are located at the output of the Motor Charger board. The reason that they can be damaged is the energy provided by the motors in reverse mode. The voltage supplied by the motors could be high enough for burning those diodes.

Solution

The current Motor Battery Charger board has been replaced by A3532-06 Revision C.

This board has a new circuit which is continuously measuring the voltage at the output of the battery charger.

The circuit also works as a switch. If the voltage reaches 137 V, a big resistor (optional) will be connected in parallel to dissipate the extra energy.

The discharge resistor is an optional protection for the motor batteries overvoltage:

It **ONLY** will be mounted if requested, but it is **NOT** installed by default in all systems.

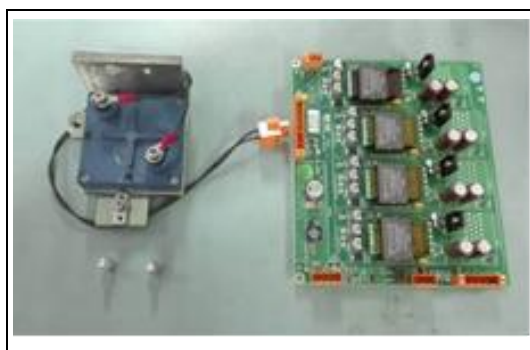


Figure 1: new board and resistor

The board A3532-06 Rev. C will work exactly at the same way as the previous one if the resistor is not installed. The board is backwards compatible.

The new schematics are part of the DX-D 100 / DX-D 100 Wireless - Mobile X-Ray Unit - Service Manual, Document ID [41600560](#).

Changed spare parts

Inverter Motor Battery Charger Board SC+A3532-04 changed to SC+A3532-06 (Inverter Motor Battery Charger revision C)

1.1 Field upgrades

Two new upgrade kits are available for field upgrades :

For DX-D 100/100 Wireless systems with board A3532-04 or A3532-06 with revision lower than C:

- **UPGRADE DISSIPATION RESISTANCE (SC+A521149-01)**
It consists of a kit for installing the new board and the new resistor in the field.

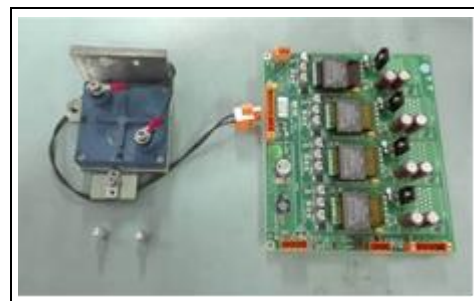


Figure 2: kit with board and resistor

For DX-D 100/100 Wireless systems with board A3532-06 revision C already installed, but without big resistor. If the optional resistor is requested later:

- **KIT DISSIPATION RESISTOR (SC+A521148-01)**
It consists of a kit for installing the resistor in the field.



Figure 3: kit with resistor only

1.2 Introduction of the Motor Battery Charger board in production

Only the new Motor Battery Charger board (SC+A3532-06 revision C) has been introduced in production, not the resistor.

The new board is installed ex-factory in systems with the following serial numbers:

- Type 5410/050 as of SN A5410001010
- Type 5411/050 as of SN A5411001208
- Type 5411/300 as of SN A5411002150
- Type 5411/400 SN A5411003015 and as of SN A5411003017

1.3 Identification of boards

- (1) Identify the installed board to order the correct spare part:
 - Board A3532-01 up to A3532-06 with revision lower than C:
No resistor connector at the board.
 - Board A3532-06 Rev. C (or later):
Resistor connector at the board - see Figure 4.

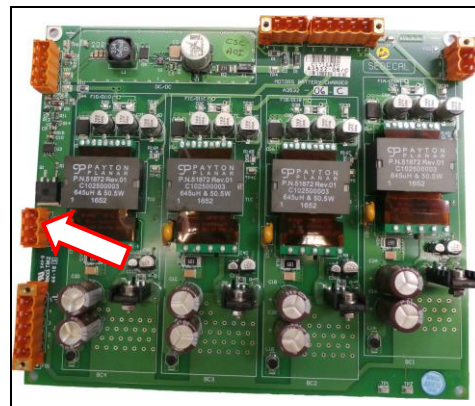


Figure 4: board with resistor connector

2 Prerequisites



NOTE:

According to the User Manual, the user should NOT drive on ramps with an inclination higher than 5 degrees.

So, if local Service are aware about ramps with an inclination > 5 degrees at the installed site (hospital), the resistor should be installed.

Or the resistor should be installed in case of already replaced motor battery charger according to this issue.



SPARE PARTS:

- SC+A3532-06
INVERTER MOTOR BATTERY CHARGER BOARD A3532-06 Rev. C
Board only (backwards compatible)
- SC+A521149-01
UPGRADE DISSIPATION RESISTANCE
Kit for installing the board A3532-06 Rev. C + resistor
- SC+A521148-01
KIT DISSIPATION RESISTOR
Kit for installing the resistor in systems with installed board A3532-06 Rev. C.



TOOLS:

- Standard service tool kit



REFERENCED DOCUMENTS:

- DX-D 100 / DX-D 100 Wireless - Mobile X-Ray Unit - Service Manual,
Document ID [41600560](#)
Direct Radiography > DX-D 100 > DX-D 100 Generic > Service Manual
- DX-D 100 User Manual 0187 ([click here](#))
Direct Radiography > DX-D 100 > DX-D 100 Generic > User Manual



IMPORTANT:

The installation and service of the product(s) described herein is to be performed by qualified personnel who are employed by Agfa HealthCare N.V or one of its affiliates or who are otherwise authorized by Agfa HealthCare N.V. or one of its affiliates to provide such services.

3 Instructions



REQUIRED TIME:
Approximately 2 hours

3.1 Dismounting generator covers

- (1) Switch off the DX-D 100 system and disconnect the power cable from mains.
- (2) Dismount the generator covers as explained in the DX-D 100 / DX-D 100 Wireless - Mobile X-Ray Unit - Service Manual, Document ID [41600560](#).

3.2 Installation of board

- (1) Replace the installed Motor Battery Charger board A3532-XX by the A3532-06 Rev. C.
Follow the replacement instruction for the board, provided in the DX-D 100 / DX-D 100 Wireless - Mobile X-Ray Unit - Service Manual, Document ID [41600560](#).
- (2) Install the resistor if applicable (section 3.3).
- (3) Mount the generator covers (section 3.4).

3.3 Installation of resistor

- (1) Make sure that board A3532-06 Rev. C (or later) is installed.
- (2) Remove the metallic support to fix the left front cover.



Figure 5

- (3) Install the support with the discharge resistor instead.

- (4) Fix it by using the two screws provided in the kit.



Figure 6

- (5) Route the cable from the discharge resistor to the Motor Battery Charger board A3532-06 Rev. C according to Figure 7.
- (6) Plug the connector to J6 (red circle) of the Inverter Motor Battery Charger board.
- (7) Mount the generator covers (section 3.4).

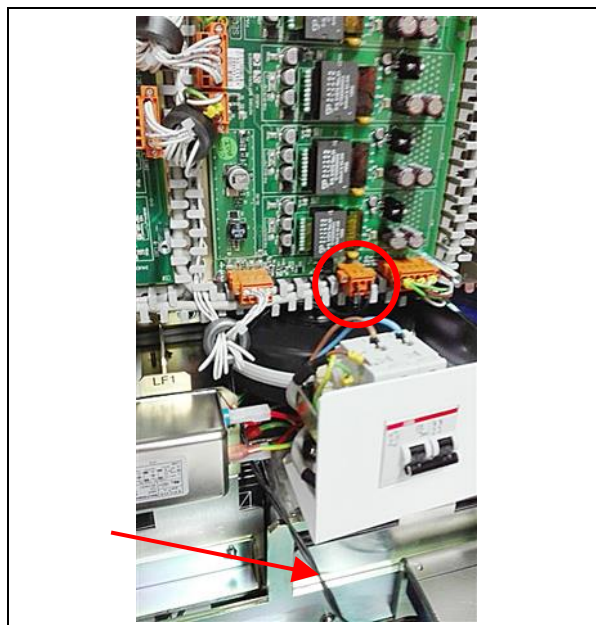


Figure 7

3.4 Generator cover mounting

- (1) Install all generator covers as originally were.
Refer to DX-D 100 / DX-D 100 Wireless - Mobile X-Ray Unit - Service Manual,
Document ID [41600560](#).

4 Verification

- (1) Check if the charger is still working. This can be done via battery monitor board (blinking LEDs while charging).

5 Keywords

Resistance; DX-D100

6 Version history

Version	Change	Date
1.0	Initial Version	05-2017