EN

scan▸X
COMPUTED RADIOGRAPHY SYSTEM

Information according to § 4 paragraph 4 of the Electrical and Electronic Equipment Law (ElektroG, WEEE)

The following batteries or accumulators are included in this electrical device

Type of Battery	Chemical system
ScanX Lithium-Ion Battery	LiFePO4 Lithium Iron phosphate accumulator

Information on the safe removal of the batteries or accumulators

WARNING
Make sure that the battery is completely discharged.

See the enclosed instructions part no. D5742D-LIT for removing the accumulator from the device, Battery Module Replacement part no. 2138100106

- Carefully remove the accumulator.

- The battery or accumulator and the device can now be disposed of separately.

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COMPUTED RADIOGRAPHY SYSTEM

Information gemäß § 4 Absatz 4 Elektrogesetz (ElektroG, WEEE)

Folgende Batterien bzw. Akkumulatoren sind in diesem Elektrogerät enthalten

Batterietyp	Chemisches System
ScanX Lithium-Ion Batterie	LiFePO4 (Lithium-Eisenphosphat-Akkumulator)

Angaben zur sicheren Entnahme der Batterien oder der Akkumulatoren

⚠ **WARNHINWEIS**
Vergewissern sie sich, ob die Batterie ganz entleert ist.

Siehe beiliegende Anleitung Art. Nr. D5742D-LIT zum Entnehmen des Akkus aus dem Gerät,
Batterie Module Replacement Art. Nr. 2138100106

- Entnehmen Sie vorsichtig den Akkumulator.

- Die Batterie bzw. der Akkumulator und das Gerät können jetzt getrennt entsorgt werden.

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Air Techniques, Inc.
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Melville, NY 11747-3062
USA

Manufactured for:
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DÜRR NDT

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Battery Module Replacement

Part Number: 2138100106 (D5742D)

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COMPUTED RADIOGRAPHY SYSTEM

Replacement Instructions

Introduction. This document provides the instructions necessary to replace the battery module used on the ScanX systems. Comprised of 8 lithium-ion battery cells, this rechargeable battery module provides up to 40 minutes of continuous scanning time and up to 4 hours of standby power making the ScanX a truly portable device.

The following information is supplementary to the device installation and operating instructions.

As a general rule, the installation and operating instructions for the device must also be observed. These instructions include important information such as safety instructions and information on the setup, electrical connections, disinfection process, cleaning process etc.

WARNING
Lithium Ion Battery Hazard

- Do not transport Lithium Ion batteries with damaged housings by ground nor air freight. Please contact DÜRR NDT GmbH & CO. KG for further details.
- Personnel handling or servicing Li-ion batteries must be aware of safety instructions and warnings before performing any maintenance actions
- Failure to follow safety instructions may result in fire, personal injury and damage to property if the battery pack is charged or used improperly

Any repairs above and beyond routine maintenance must only be carried out by suitably qualified personnel or by one of our service technicians.

Scope of delivery. The following items are included in the scope of delivery (possible variations due to country-specific requirements and/or import regulations):

– Battery module 2138100106

– **Tools Required**

– Power Driver (recommended)

– 9/64 inch Allen Key Wrench

– Phillips screwdriver PH2

– Power Driver with a T25 Torx screwdriver bit

NOTICE

Electrostatic-sensitive devices on the assemblies

- Always switch off the operating voltage before carrying out any assembly or installation work on the device.
- Before and during the installation or assembly work on the device, always ensure that the person carrying out the work is grounded.

Before working on the appliance or in case of danger, disconnect it from the mains (e. g. pull the mains plug).

Battery Module

Li-ion Battery Disposal. Send only discharged Lithium Ion batteries with intact housings for disposal. Batteries contain materials that are not to come into contact with the environment. Dispose of batteries only at facilities for recovery and recycling using appropriate collection systems. Please follow local guidelines for disposing Lithium Ion Batteries. Contact DÜRR NDT for any return information concerning locations outside and inside Germany.

Power Removal. Prior to performing the procedures contained in this document, turn off power switch by placing the rocker switch on the Built-in Control/Connector panel to the OFF (0) position. Also disconnect the line cord from the wall outlet and the communication cable from the Scanner.

Task Guidelines. Personnel performing the replacement tasks should use standard industry guidelines for working on equipment as necessary. These include the following:

- Always use a clean well-lit work area with ample space required for the size of the job.
- Observe all warnings and precautions for safety as shown by the labels placed on the equipment. Keep all attaching hardware and fastening screws together with the associated removed assembly.
- If necessary use separate storage containers or envelopes for each hardware group.
- Prior to removing any part or assembly, note location and orientation of assemblies being removed.
- Tag wires and associated mating connectors before disconnecting.
- Use care when disconnecting mating connectors so as not to damage the connector keys and connection to the associated printed circuit board, wire or cable.
- Be aware of the damage impact of electrostatic discharge (ESD) on electronic devices and use ESD precautions when handling printed circuit boards and wiring comprising the ScanX.

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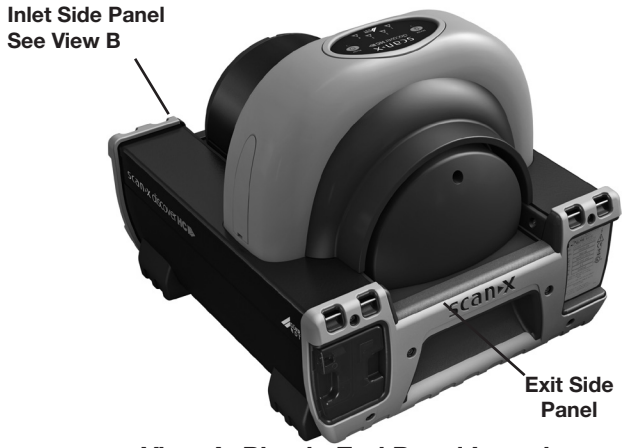
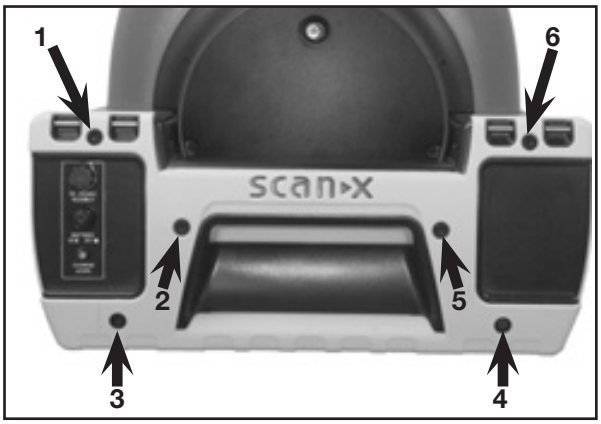
Plastic End Panel Removal. Both the inlet side and exit side plastic end panels, as shown below, are installed on the ScanX with 6 Allen screws. The only difference between the panel installation is that the inlet side panel is also attached to an internal connector via a wire harness. Refer to Figure 1 and remove each plastic end panel by performing the following steps.

1. Using an 9/64 inch Allen key wrench, remove the 6 screws securing the plastic end panel on the exit side of the ScanX.
2. Remove the panel and carefully set aside making sure to protect the finished surfaces.
3. Use the 9/64 inch Allen key and remove the 6 screws securing the plastic end panel on the inlet side of the ScanX.
4. Pull the panel away only enough to expose the battery switch and LED connector.
5. Disconnect the wire harness and then remove the panel. Carefully set the panel aside.

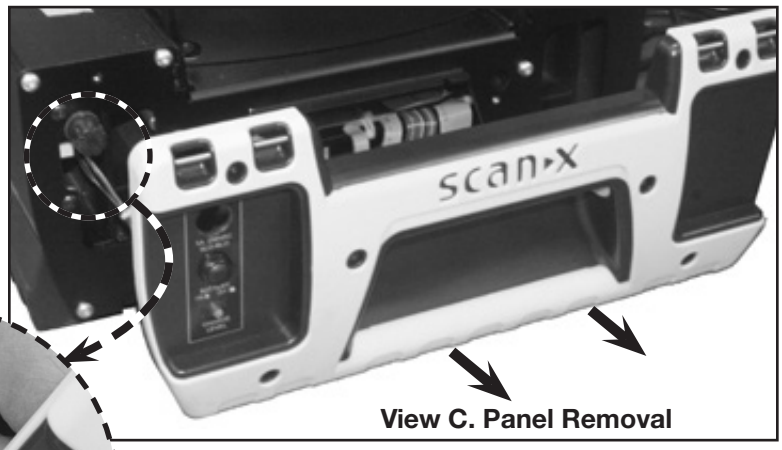


View A. Plastic End Panel Location

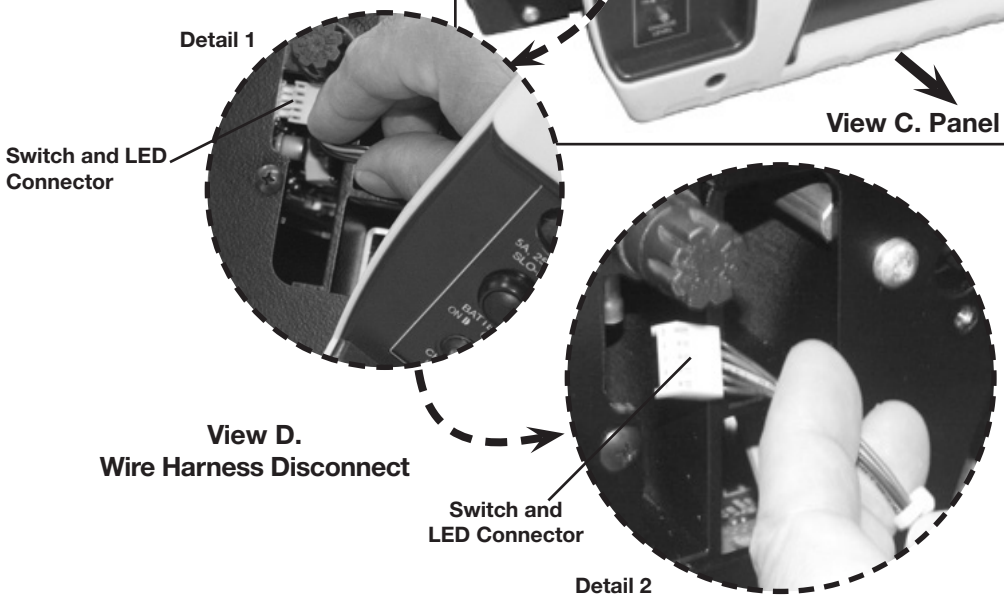


View B. Typical Panel Securing Screws Location (inlet side shown)

Important:
Make sure to disconnect wire harness from the switch and LED connector before removing the inlet side panel. (See View D)



View C. Panel Removal



View D.
Wire Harness Disconnect

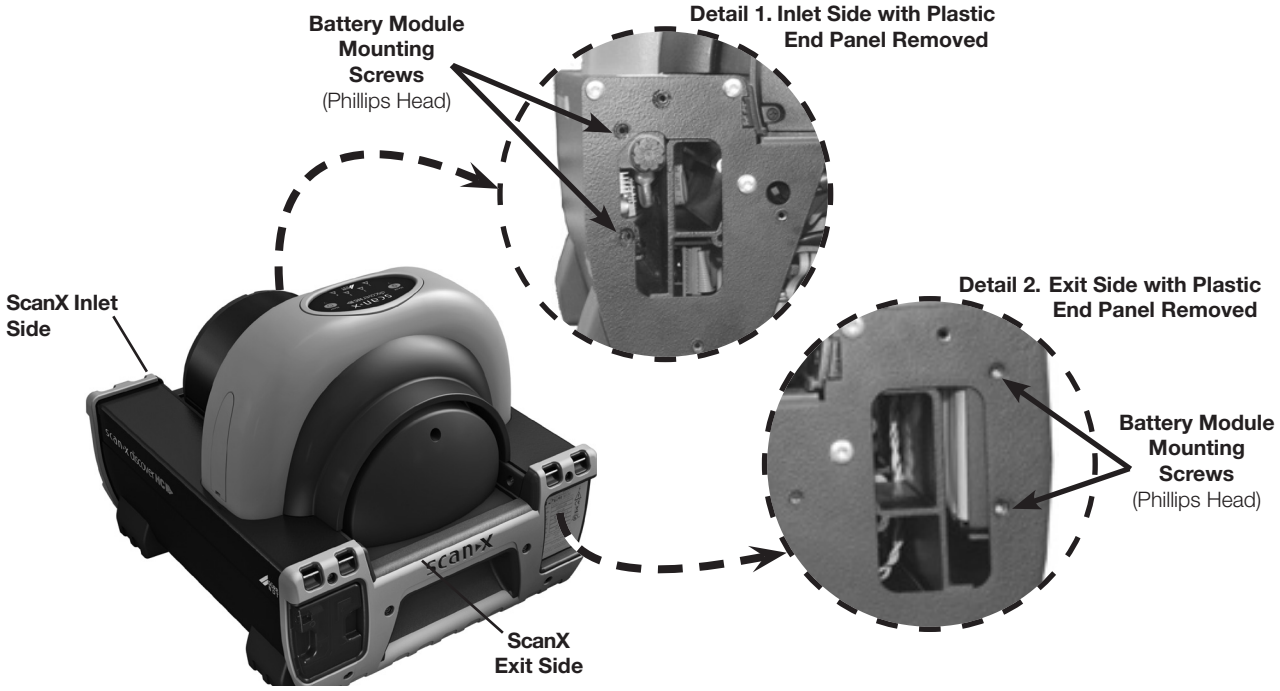
Figure 1. Plastic End Panel Removal

WARNING
Critical Procedure

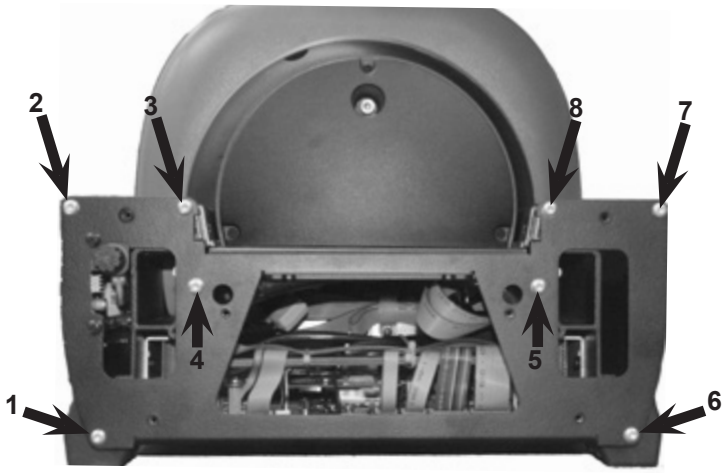
› Do not remove the chassis panels on both sides of the ScanX. Only the chassis panel on the inlet side of the ScanX must be removed to access the battery module. Removing both chassis panels will cause misalignment in the scanning path, which can only be corrected at the factory.

Inlet Side Chassis Panel Removal. Refer to Figure 2 and remove the inlet side chassis panel by performing the following steps.

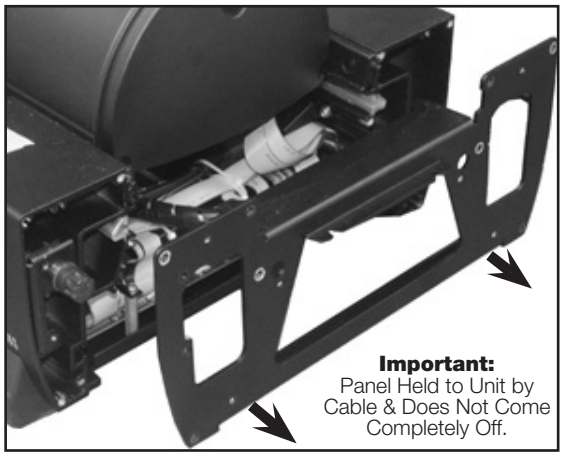
1. Using a #2 Phillips head screwdriver, remove the 4 battery module mounting screws (2 screws on each side as shown by detail 1 and 2 of View A below).
2. Use a power driver with a T25 Torx screwdriver bit and remove the 8 Torx head screws securing the inlet side chassis panel. See View B.
3. As shown by View C, disengage the inlet side chassis panel from the unit and keep by the side since the panel is held to unit by a cable and is not completely removable.



View A. ScanX Battery Module Mounting Screws Location



View B. Torx Screws Location



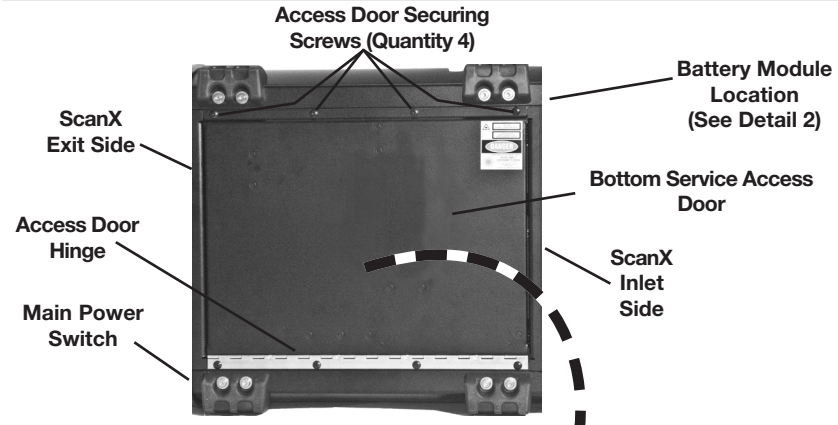
View C. Inlet Side Chassis Panel Removal

Figure 2. Inlet Side Chassis Panel Removal

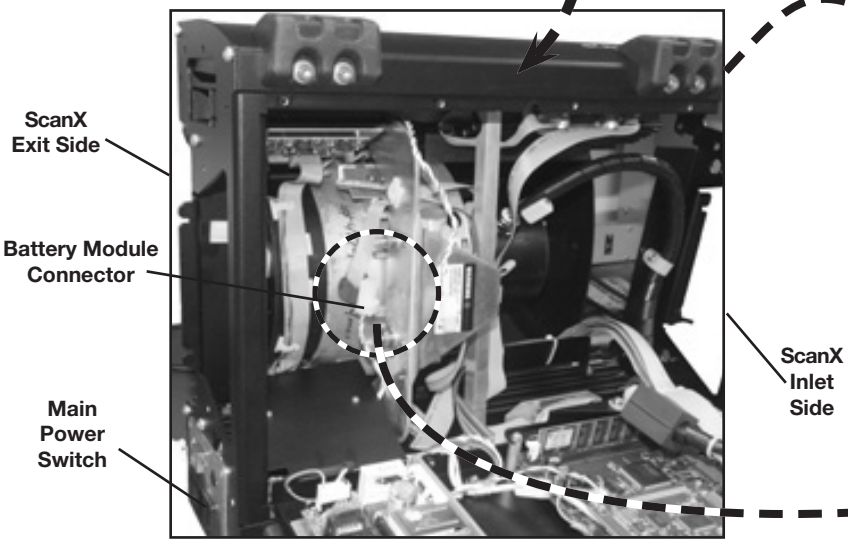
Battery Module Removal. Refer to Figure 3 and remove the Battery Module from the ScanX by performing the following steps.

1. Carefully turn the ScanX under repair on its side with the Service Access Door Hinge and Main Power Switch oriented to the bottom as shown by View A.
2. Using a #2 Phillips head screwdriver, remove the 4 screws securing the Service Access Door and slowly open the door by resting it on the work table top as shown by View B.
3. Locate the Battery Module Connector and disconnect it by carefully pulling apart. See View B and Detail 1.
4. As shown by Details 2 and 3, remove the Battery Module being careful to feed the wire harness with connector (Detail 3) from inside the unit as the module is being slid out of the compartment.
5. View C shows the Battery Module removed from the ScanX. Dispose of the Battery Module in accordance with current government rules and regulations.

WARNING
Lithium Ion Battery Hazard
- Personnel handling or servicing Li-ion batteries must be aware of safety instructions and warnings before performing any maintenance actions
- Failure to follow safety instructions may result in fire, personal injury and damage to property if the battery pack is charged or used improperly



View A. ScanX Bottom View

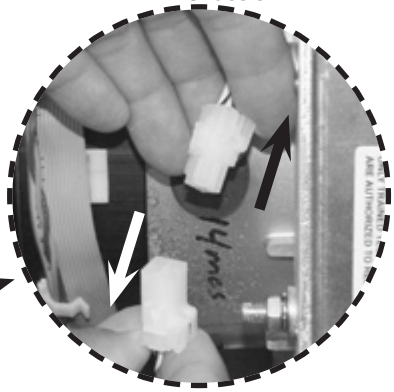


View B. Bottom Service Access Door Opened

View C. Removed Battery Module

Detail 3. Feeding Battery Module Connector Wire

Detail 2. Sliding Battery Module from Chassis



Detail 1. Disconnecting Battery Module Connector.

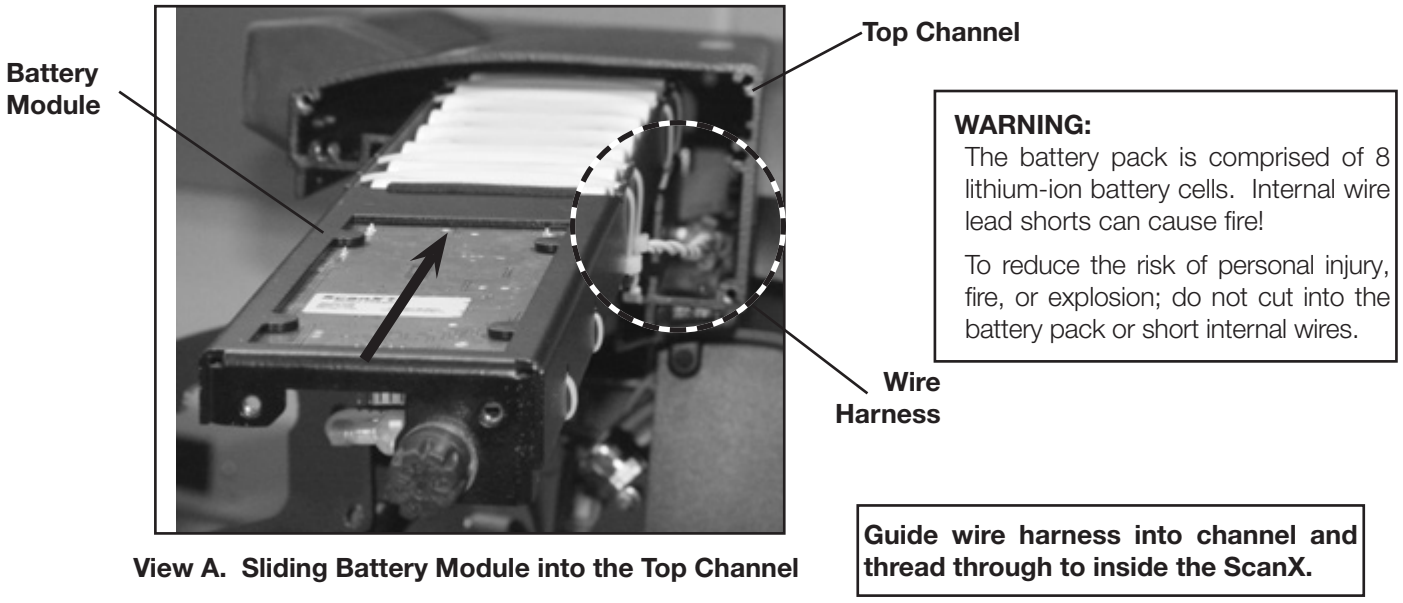
Important:
Make sure to dispose of the replaced battery module in accordance with current federal, national, state and local government rules and regulations.

Figure 3. Battery Module Removal

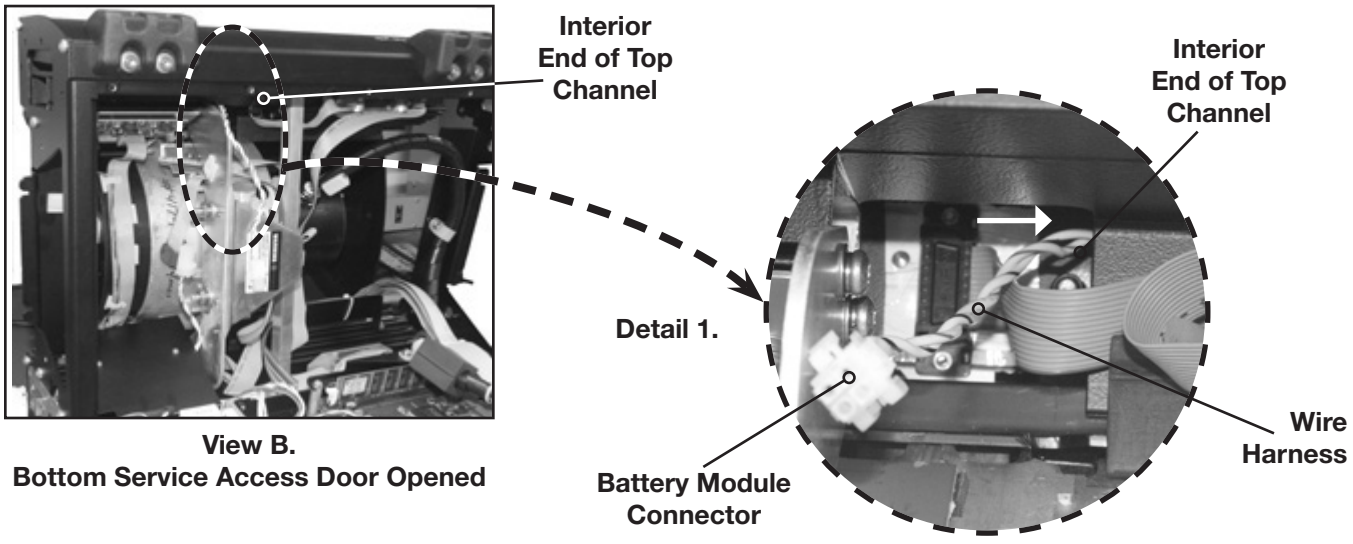
Battery Module Installation. Make sure that the ScanX unit is positioned as shown by Figure 3. The unit should still be turned on its side with the Service Access Door open. Refer to Figure 4 and install the replacement Battery Module into the ScanX by performing the following steps.

Important: Use care when pulling the wire harness through the chassis. Make sure not to disconnect the harness from the module or damage the wire harness.

1. Carefully insert the new replacement Battery Module into the top channel while simultaneously guiding the attached wire harness with the connector into upper channel as shown by Figure 4.
2. Continue pulling the wire harness through the opening while installing the Battery Module.



View A. Sliding Battery Module into the Top Channel

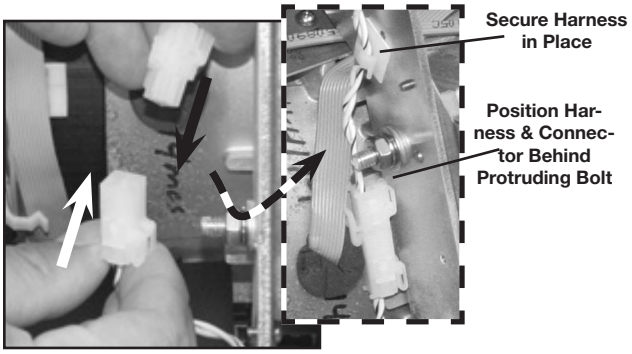


View B.
Bottom Service Access Door Opened

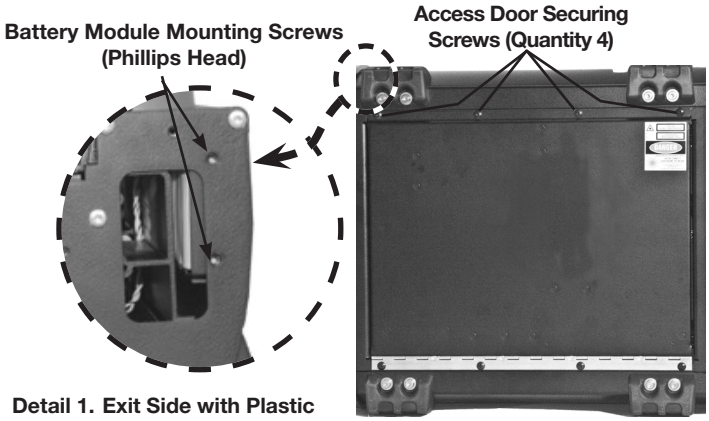
Figure 4. Insertion of Battery Module Into Chassis Channel

Final Battery Module Installation. Refer to Figure 5 and secure the replacement Battery Module in the ScanX by performing the following steps.

1. Connect the Battery Module connector making sure that the harness is secured in place and positioned behind the bolt. Close Access Door and secure door with 4 securing screws.
2. Loosely install the 2 battery module screws on the exit side of the ScanX as shown by Detail 1.
3. Carefully turn the ScanX to the upright position, orient the inlet side chassis panel in place and loosely install the 2 battery module Phillips head screws and 8 torx head screws.
4. Use a power driver with a T25 Torx screwdriver bit and secure the inlet side chassis panel and with the 8 torx head screws. See View D.
5. Using a #2 Phillips head screwdriver, tighten the 4 battery module mounting screws (2 screws on each side).
6. Orient the exit side plastic end panel in place, align the screw holes and loosely install the 6 Allen head screws. Secure the panel by tightening the 6 screws with an 9/64 inch Allen key wrench.
7. Orient the inlet side plastic end panel in place, connect the wire harness and then align the screw holes and loosely install the 6 Allen head screws. Secure the panel by tightening the 6 screws with an 9/64 inch Allen key wrench.

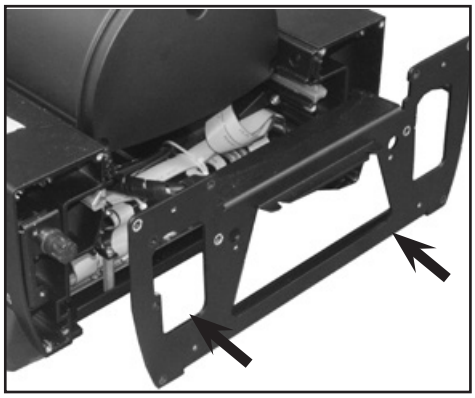


View A. Battery Module Connector



Detail 1. Exit Side with Plastic End Panel Removed

View B. ScanX Bottom View



View C. Chassis Panel Installation

View D. Torx Screws Location

Important: Make sure to connect wire harness to the switch and LED connector before installing the inlet side panel.

View E. Panel Securing Screws Location (inlet side shown)

View F. Completed Installation

Figure 5. Final Battery Module Installation

Battery Charging. The battery must always be charged prior to using. To reach the full operational power level, charge for at least 3 hours before using for the first time and on subsequent uses. Refer to the Operator's Manual and perform the battery charging procedure.

Check Scanner Operation. Check the scanner operation with the new Battery Module replacement by performing the following steps.

1. Reconnect communication cable and electrical connections in opposite sequence from removal.
2. Turn ScanX power ON.
3. Using the ScanX Diagnostics Software check all functions as per this software. The diagnostic software, ScanXDiagnostics.exe, is found at C:\ScanX\VistaScan\Utilities ScanX Diagnostics Guide.pdf.
4. If unit passes this process, exit the ScanX Diagnostics Software.
5. Initialize the ScanX System for scanning normal images using the user's imaging software.
6. Refer to the Operator's Manual and perform a scan operation of one (or more) sample image using any reasonable image exposure.
7. If the ScanX operate normally and the scanned image appears nominal, return the unit into user operation.

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