



XTM 5 Series De-manufacturing Instructions

Document Number: 480-2535-001

1.0 Purpose

This instruction defines the de-manufacturing process for the recovery of this product family as it pertains to recycling of the major product components.

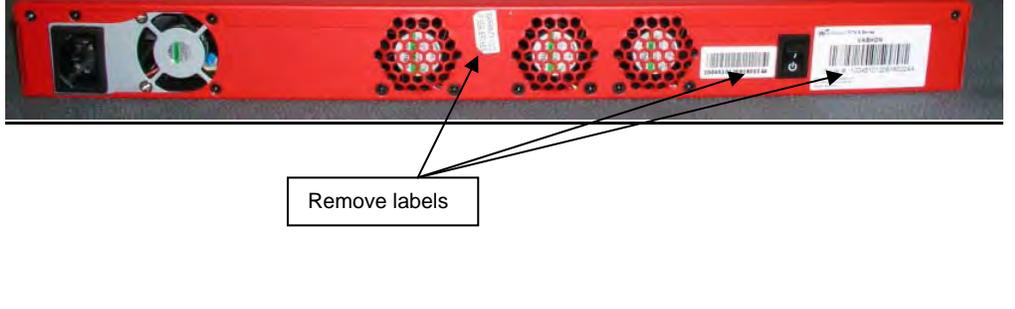
2.0 Scope

This instruction applies to the following product family and family part numbers.

Product Family Name	Family part #'s (not necessarily inclusive)
XTM 5 series	XTM 505, XTM 510, XTM 520, XTM 530; all revisions

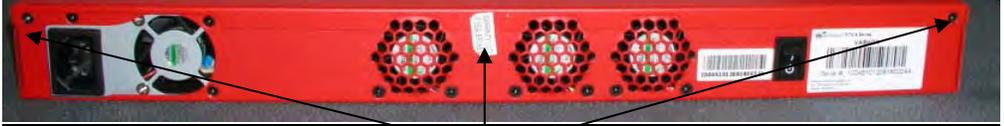
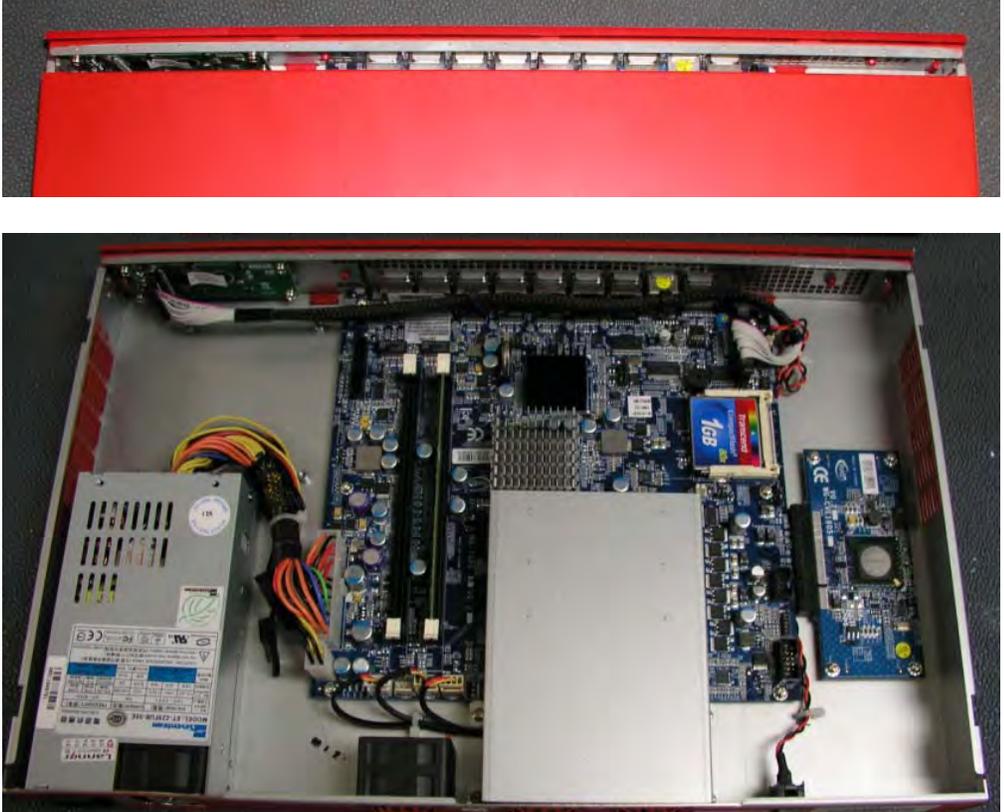
3.0 Instruction

3.1 -Remove labels

Material removed (part Desc or P/N & material type)	Instruction visual
<p>Labels Cert. label: 277-2813-001– Metalized poly-film; 1 ea. China RoHS label: 277-2722-001 – Poly-film; 1 ea.</p>	
<p>Labels Warranty Void: 277-0230-001 – Poly-film; 1 ea. ODM Bar Code: 277-3821-001 - Poly-film; 1 ea. Product UPC/Serial: 281-3800-5xx - Poly-film; 1 ea.</p>	

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3.2 –Remove back screws holding chassis top to chassis bottom and remove top cover.

Material removed (part Desc or P/N & material type)	Instruction visual
<p>Screws 200-4506-242 - Philips flat head; black; 3 ea.</p>	 <p>Remove screws; 3 ea.; back</p>
<p>Chassis Top 212-3816-001- galvanized steel w/powder coat paint</p>	

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3.3 –Depress memory tabs and remove memory.

Material removed (part Desc or P/N & material type)	Instruction visual
<p>Memory Module 114-3626-001 – 1GB DDR2 Memory Module, 1 ea.</p>	 <p>The images show a blue motherboard with two DDR2 memory modules. The top image shows a hand using a small tool to depress the retention tabs on the top module. The bottom image shows the top module being lifted away from the motherboard, leaving the bottom module in place. The motherboard has 'MB-7580' and 'V0.3' printed on it.</p>

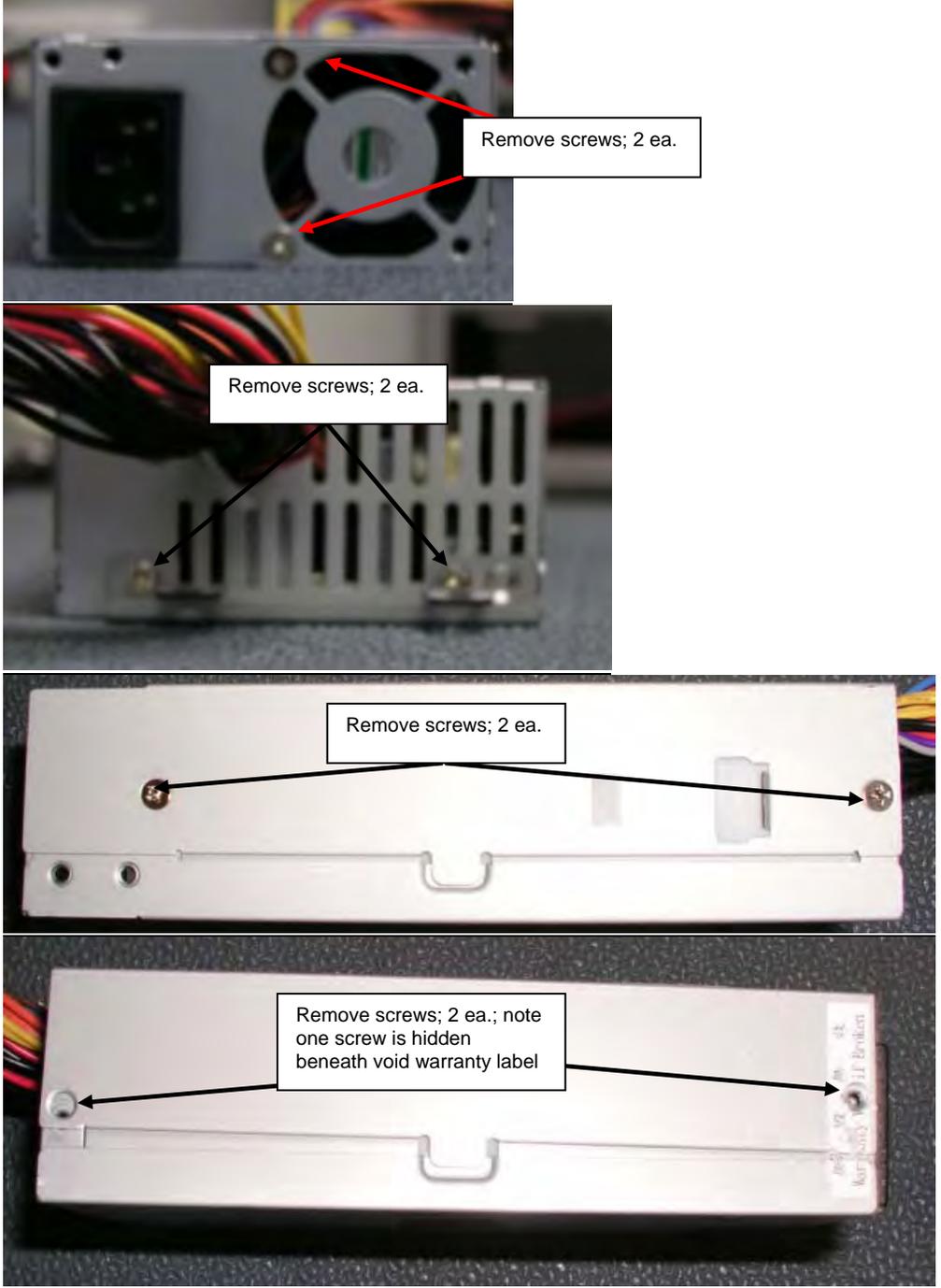
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3.4 – Unplug power supply cables from motherboard, cut all cable ties, remove power supply screws, and remove power supply.

<p>Material removed (part Desc or P/N & material type)</p>	<p>Instruction visual</p>
<p>Power Supply 140-3822-001 – Power supply, universal, 220W; 1 ea.</p> <p>Screws 203-7306-002 – screws, pan head; 2 ea.</p>	

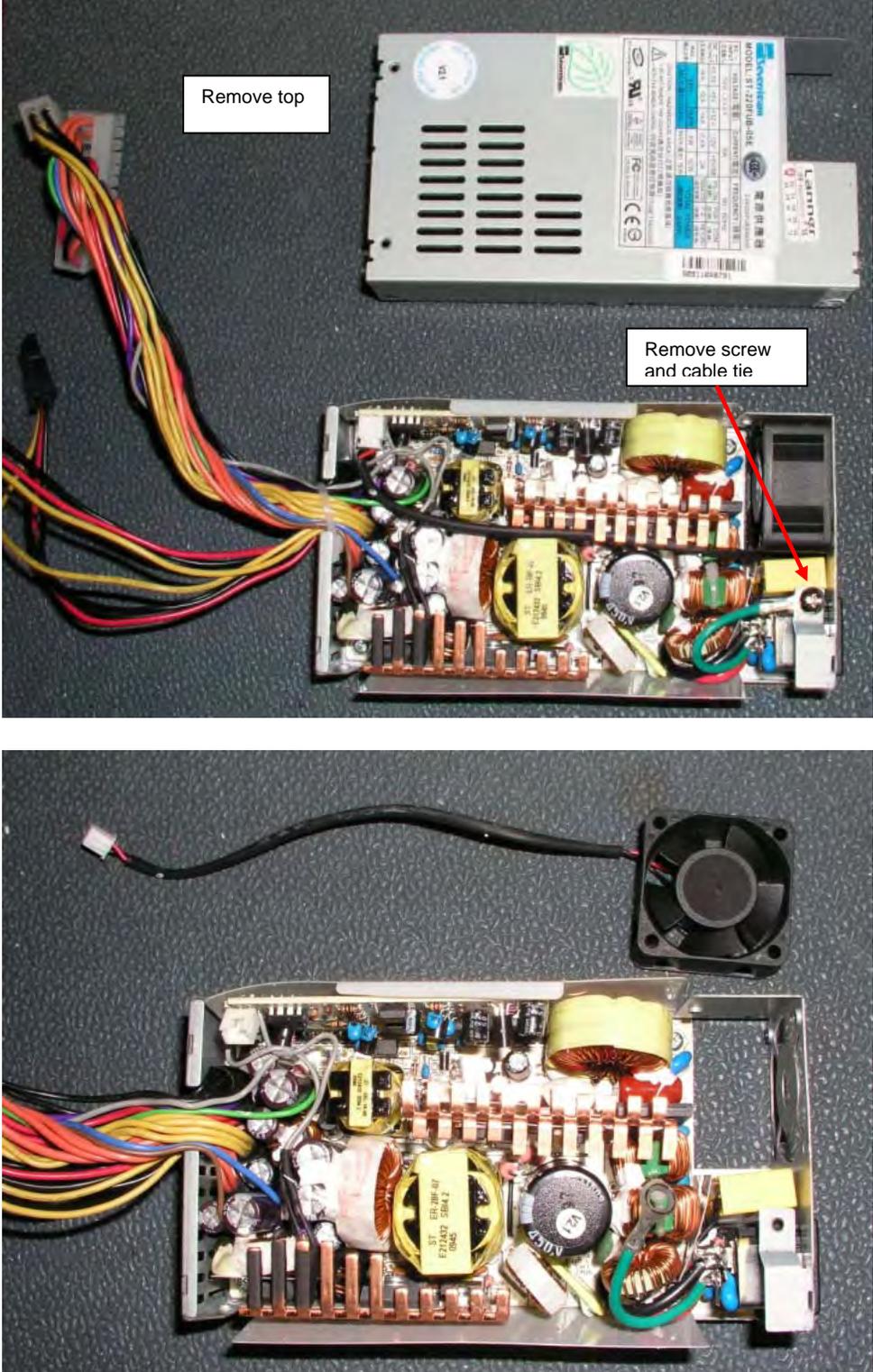
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3.5 – Remove screws from the power supply.

Material removed (P/N & material type)	Instruction visual
<p>Power Supply 140-3822-001 – Power supply, universal, 220W; 1 ea.</p> <p>Screws Part of power supply, no WG part number– Philips flat-head; Steel/zinc; 1 ea.</p> <p>Bracket 212-3637-001; power supply bracket; 1 ea.</p>	 <p>Remove screws; 2 ea.</p> <p>Remove screws; 2 ea.</p> <p>Remove screws; 2 ea.</p> <p>Remove screws; 2 ea.; note one screw is hidden beneath void warranty label</p>

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3.6 –Remove the top from the power supply, remove the cable tie and screw inside the power supply, and remove fan from the power supply.

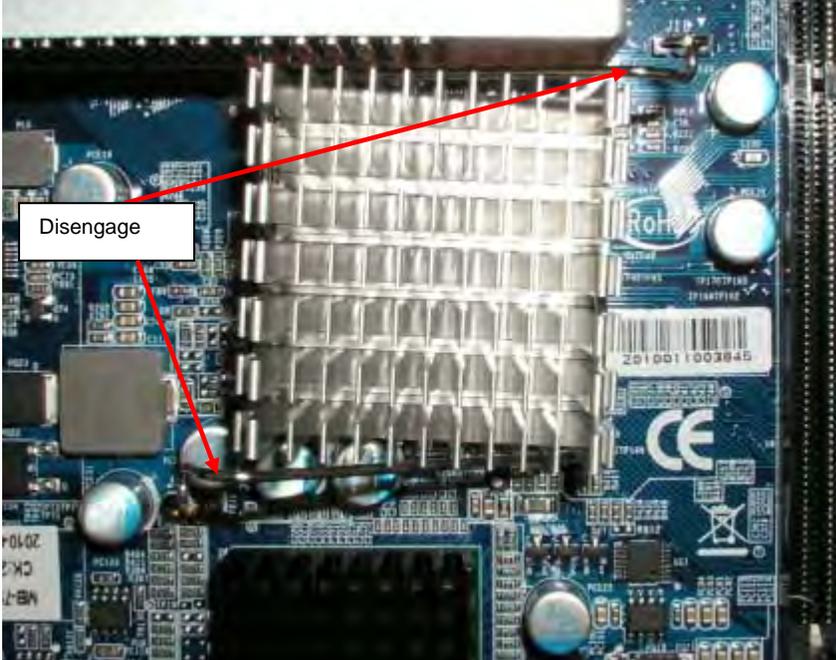
Material removed (P/N & material type)	Instruction visual
<p>Power Supply 140-3822-001 – Power supply, universal, 220W; 1 ea.</p> <p>Screws Part of power supply, no WatchGuard part number – Philips pan-head; Steel/zinc; 1 ea.</p>	 <p>The instruction visual consists of three photographs. The top photograph shows the external view of a power supply unit with a callout box labeled 'Remove top'. The middle photograph shows the internal components of the power supply with the top cover removed, and a red arrow points to a screw on the right side with a callout box labeled 'Remove screw and cable tie'. The bottom photograph shows the internal components of the power supply with the fan removed, and a black cable with a fan connector is visible.</p>

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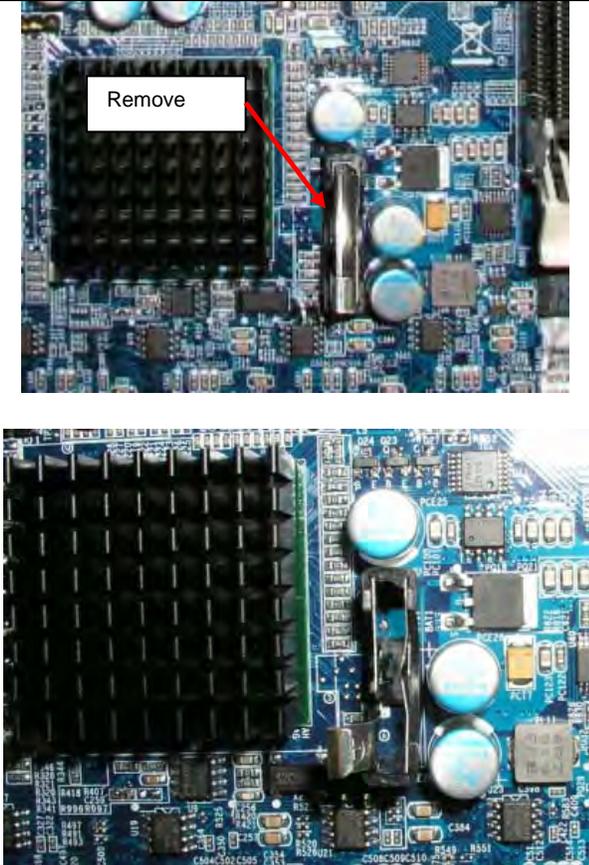
3.7 – Remove labeling from the top lid and the bottom of the power supply.

<p>Material removed (P/N & material type)</p>	<p>Instruction visual</p>
<p>Power Supply 140-3822-001 – Power supply, universal, 220W; 1 ea.</p>	

3.8 – Disengage heatsink clamps and remove heatsink from motherboard.

Material removed (P/N & material type)	Instruction visual
<p>Heatsink 52-3170-001 - heatsink, 42 x 42 x 30 mm; 1 ea.</p>	 <p>The image shows a close-up of a blue printed circuit board (PCB) with a large, silver, finned heatsink mounted on it. A red arrow points from a white rectangular box containing the word "Disengage" to a small metal clamp on the side of the heatsink. The clamp is positioned to hold the heatsink in place. The motherboard has various components visible, including capacitors, integrated circuits, and a barcode label with the number "201001003845".</p>

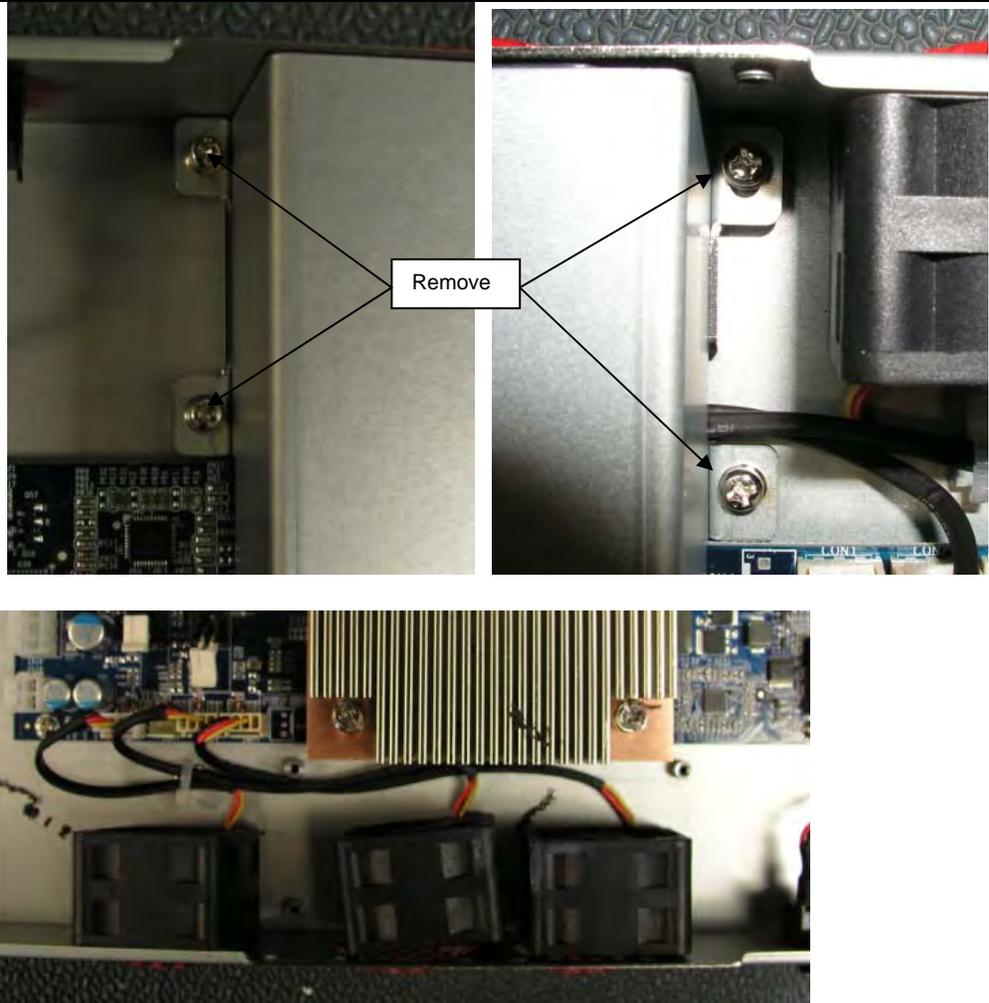
3.9 – Pull back clamp and remove battery.

Material removed (P/N & material type)	Instruction visual
<p>Battery 412-2468-001 – battery, CR2032; 1 ea</p>	 <p>The instruction visual consists of two photographs. The top photograph shows a close-up of a blue printed circuit board (PCB) with a black battery cover. A red arrow points to a silver metal tool (a battery puller) that is being used to lift the battery. A white box with the word 'Remove' is overlaid on the image. The bottom photograph shows the same PCB from a slightly different angle, with the battery puller now fully inserted and the battery being lifted away from the board.</p>

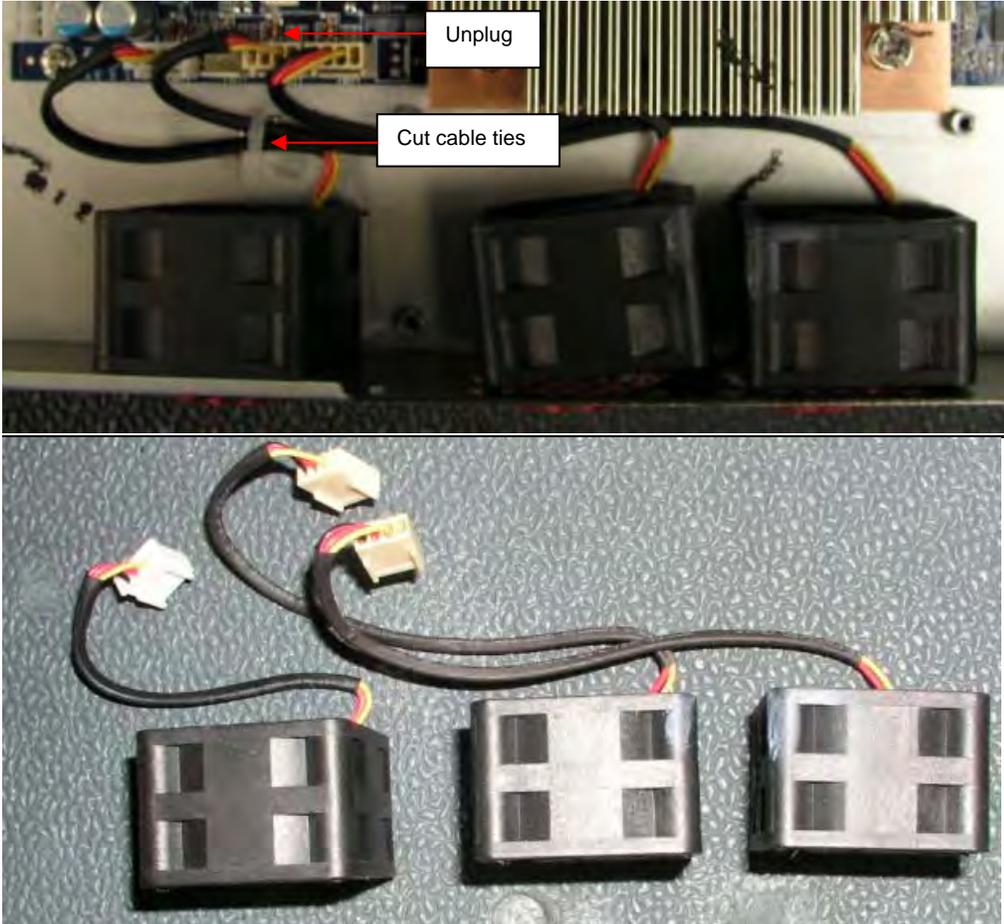
3.10 – Remove fan screws from back of chassis.

Material removed (P/N & material type)	Instruction visual
<p>Screws 200-4506-242 – screws, black, 12 ea.</p> <p>Chassis bottom 212-3817-001 – bottom, chassis, red; 1 ea</p>	

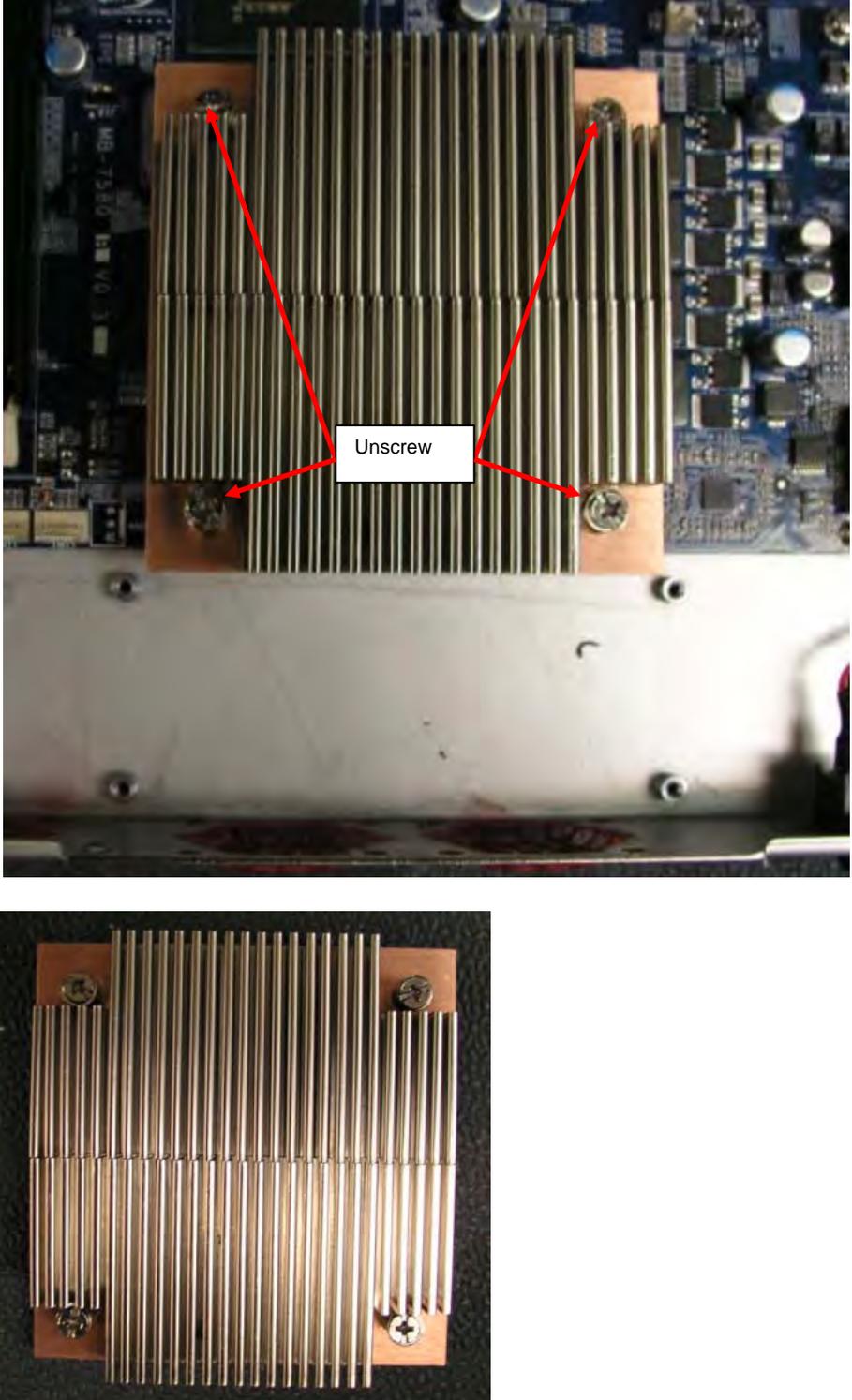
3.11– Remove screws from fan duct and remove fan duct.

Material removed (P/N & material type)	Instruction visual
<p>Fan duct 212-3544-001 – fan duct; 1 ea.</p> <p>Screws 203-7306-002 – screws, pan head; 4 ea.</p>	

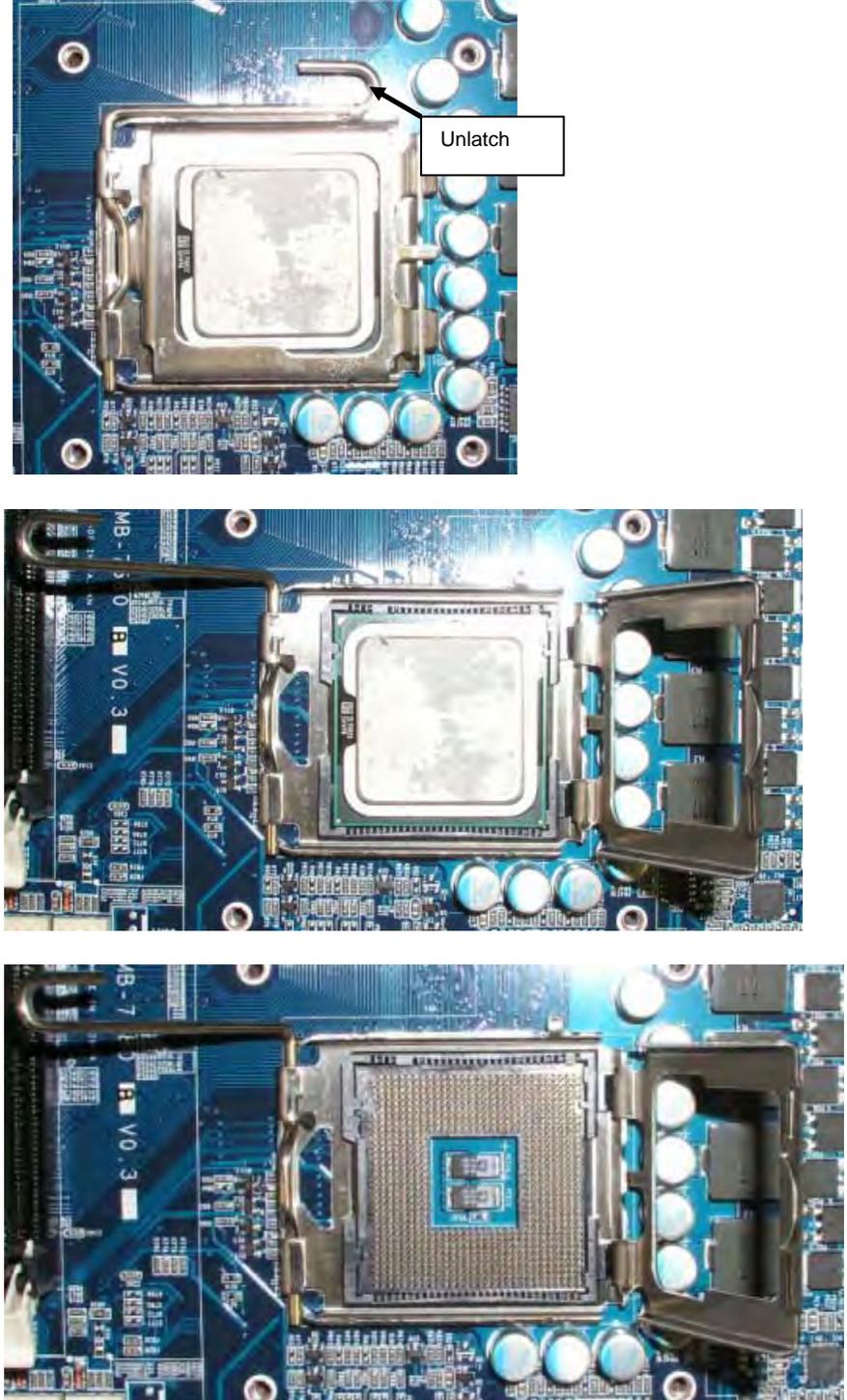
3.12 – Cut cable ties for fans, unplug fans from motherboard, and remove fans.

Material removed (P/N & material type)	Instruction visual
<p>Chassis Fan 145-3599-015 – Fan, chassis, 12V, w/15 cm cable; 1 ea.</p> <p>Chassis Fan 145-3599-010 – Fan, chassis, 12V, w/10 cm cable; 1 ea.</p>	 <p>The top photograph shows a close-up of a fan's power cable being unplugged from a motherboard. A red arrow points to the connector with the label 'Unplug'. Another red arrow points to a cable tie holding the fan to the chassis, with the label 'Cut cable ties'. The bottom photograph shows three chassis fans with their power cables detached and laid out on a blue textured surface.</p>

3.13 – Unscrew screws from heatsink and remove heatsink from motherboard.
Note that screws cannot be removed from the heatsink itself.

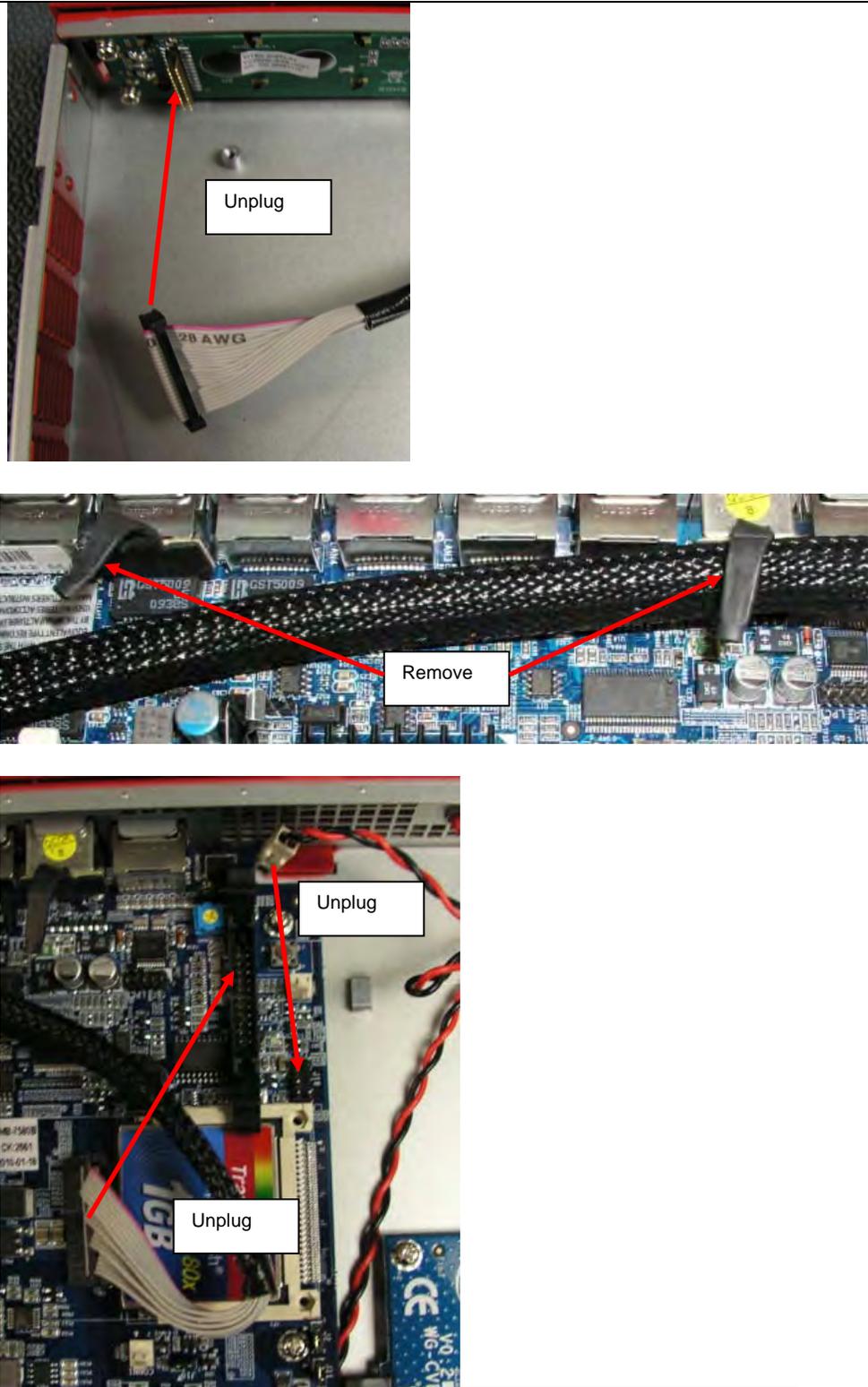
Material removed (P/N & material type)	Instruction visual
<p>Heatsink 152-3139-001 – Heatsink, CPU, alum, with screws and springs, 1 ea.</p>	 <p>The top photograph shows a silver aluminum heatsink mounted on a blue motherboard. Four screws are visible, two on each side. Red arrows point to these screws, and a white box with the text 'Unscrew' is positioned in the center. The bottom photograph shows the same heatsink removed from the motherboard and lying flat on a dark surface, with the four screws clearly visible at the corners.</p>

3.14 – Unlatch CPU from motherboard and remove CPU.

Material removed (P/N & material type)	Instruction visual
<p>CPU 113-3552-001 – CPU, Celeron 440, 2.0GHz, 1 ea.</p>	

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3.15 – Unplug LCD cable from LCD circuit board and motherboard. Unplug rocker switch cable from motherboard. Remove LCM cable.

Material removed (P/N & material type)	Instruction visual
<p>LCD cable assembly 148-3691-002 – LCD cable assembly, 24 pin to 24 pin; 1 ea.</p> <p>Power switch assembly 175-3596-001 – power switch assembly; 1 ea.</p>	 <p>The instruction visual consists of three photographs. The top photograph shows a close-up of a 24-pin LCD cable being unplugged from a green LCD circuit board. A red arrow points to the connector, and a white box with the text 'Unplug' is overlaid. The middle photograph shows a black LCM cable being removed from a blue motherboard. Two red arrows point to the cable's connection points, and a white box with the text 'Remove' is overlaid. The bottom photograph shows a power switch assembly being unplugged from a blue motherboard. Two red arrows point to the assembly's connection points, and two white boxes with the text 'Unplug' are overlaid.</p>

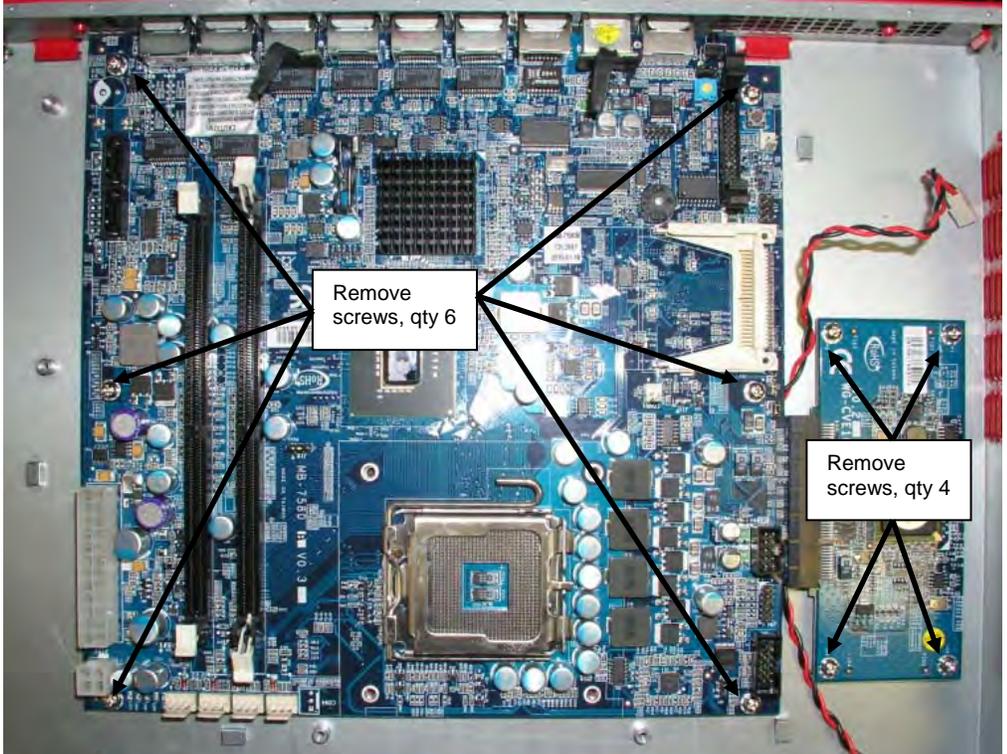
3.16 – Cut cable tie attaching power switch cable to chassis.

Material removed (P/N & material type)	Instruction visual
<p>Power switch assembly 175-3596-001 – power switch assembly; 1 ea.</p>	

3.17 – Slide the compact flash card out of the slot and remove.

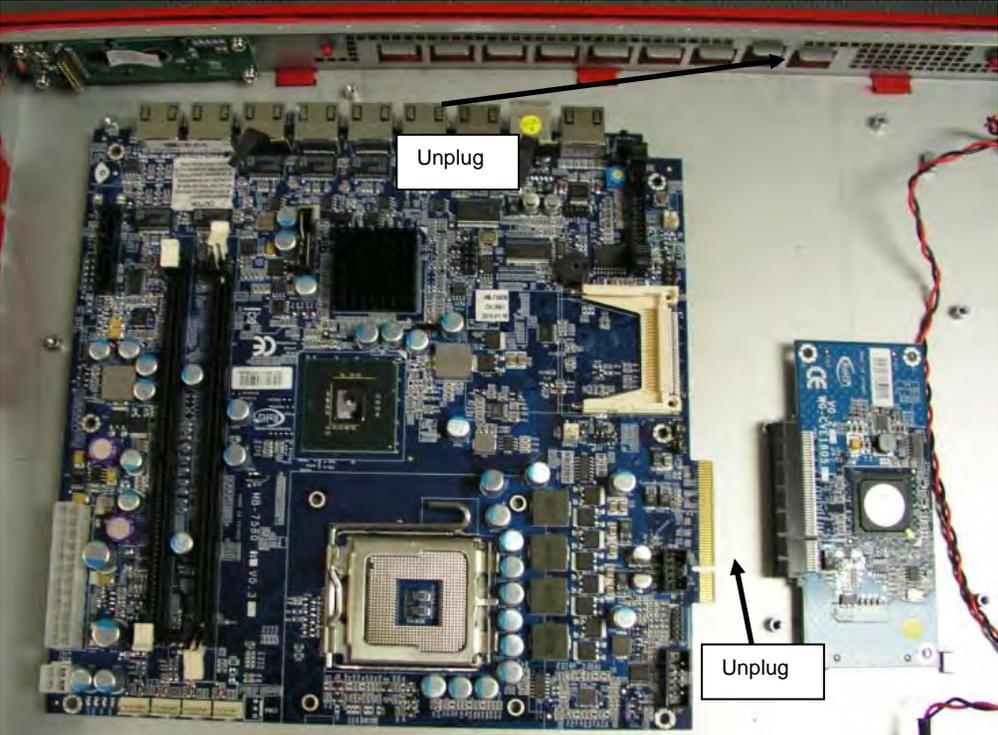
Material removed (P/N & material type)	Instruction visual
<p>Compact Flash card 121-0554-010 – Compact Flash, 1GB; 1 ea.</p>	

3.18 – Remove screws attaching the motherboard to the chassis and the Cavium card to the chassis.

Material removed (P/N & material type)	Instruction visual
<p>Screws 203-7306-002 – screws, pan head; 10 ea.</p> <p>Motherboard 299-3810-002 – PCBA, motherboard, 1 ea.</p> <p>Cavium card 299-3805-605 – PCBA, Cavium card, CN 1605; 1 ea.</p>	 <p>The image shows the interior of a server chassis. A blue motherboard is mounted in the center, and a blue Cavium card is mounted on the right side. Six screws are indicated for removal from the motherboard, and four screws are indicated for removal from the Cavium card. The callout boxes specify the quantities: 'Remove screws, qty 6' for the motherboard and 'Remove screws, qty 4' for the Cavium card.</p>

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3.19 – Unplug the Ethernet ports on the motherboard from the chassis and unplug the Cavium card from the motherboard. Remove the motherboard and the Cavium card.

Material removed (P/N & material type)	Instruction visual
<p><u>Motherboard</u> 299-3810-002 – PCBA, motherboard, 1 ea.</p> <p><u>Cavium card</u> 299-3805-605 – PCBA, Cavium card, CN 1605; 1 ea.</p> <p><u>Chassis bottom</u> 212-3817-001 – bottom, chassis, red; 1 ea</p>	

3.20 – Remove screws attaching the LCM display to the chassis. Remove the LCM display.

Material removed (P/N & material type)	Instruction visual
<p><u>Motherboard</u> 700-3015-001 – LCM display and LCD interface; 1 ea.</p> <p><u>Chassis bottom</u> 212-3817-001 – bottom, chassis, red; 1 ea</p> <p><u>Screws</u> 203-7306-002 – screws, pan head; 4 ea.</p>	

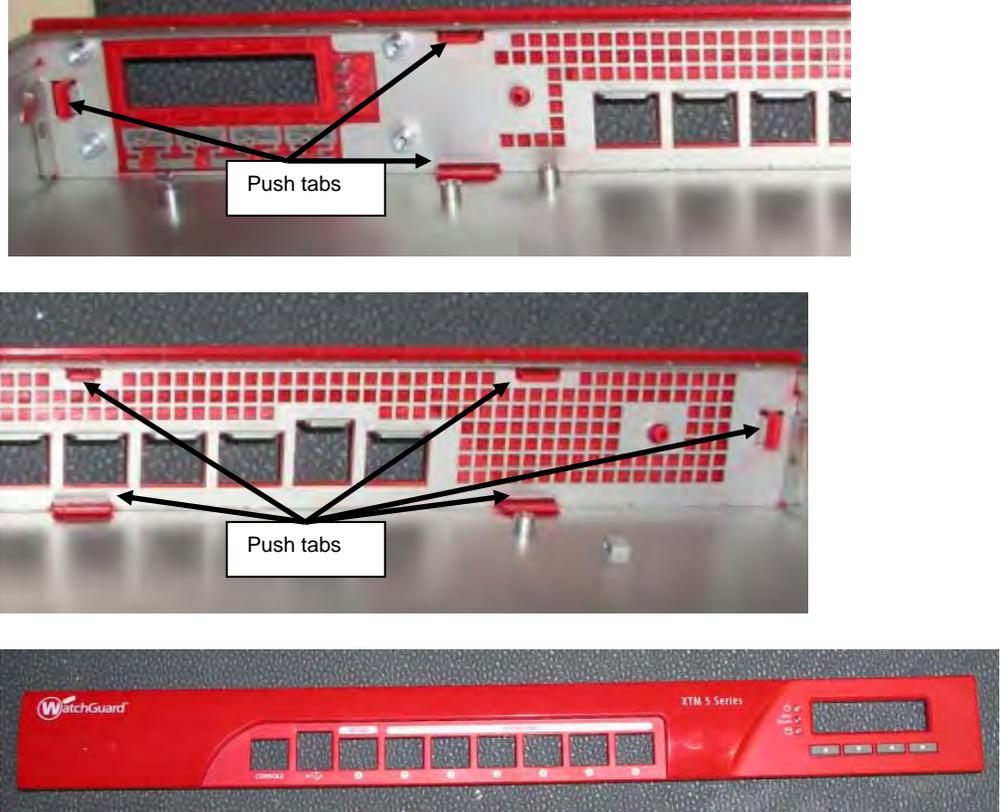
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3.21 – Use a flat-head screwdriver to disengage the power switch assembly from the chassis. Remove the power switch assembly.

Material removed (P/N & material type)	Instruction visual
<p>Power switch assembly 175-3596-001 – power switch assembly; 1 ea.</p> <p>Chassis bottom 212-3817-001 – bottom, chassis, red; 1 ea</p>	

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3.22 – Push tabs on the inside of the bezel to disengage from the chassis.
Remove the bezel. A flat-head screwdriver can be useful in this step.

<p>Material removed (P/N & material type)</p>	<p>Instruction visual</p>
<p>Bezel 230-3820-001 – bezel, red, glossy; 1 ea.</p> <p>Chassis bottom 212-3817-001 – bottom, chassis, red; 1 ea</p>	

4.0 Applicable Documents

5.0 Revision History

REV. NO.	REV. DATE	REVISED SECTION	REASON	ECO#
A	6/10/10	New document	Initial Release	1790