Avolites LTD Engineering Change Notice

ECN title	D9-215 and 330 PCIe cable protection	
ECN Number	ECN-214	
Related Product(s)	All D9 consoles up till and including SN 92-0034 or 93-0020	
Date / Author	27/06/2022	JB Toby
Reasons for ECN	Cable can get damaged on internal structures affecting the GPU	
Parts required	8200-0214 D9 PCIe protector set	
Tools required	No. 2 posidrive short and ideally a right angle Posidrive No.2	
Estimated time	10 minutes for inspection, 30 minutes for fitting protection	

1.   Important information

We have had a case of a PCIe cable being damaged inside the console due to transport vibrations, the result is a malfunctioning GPU and ultimately the console becomes unstable.

Urgently inspect each console that falls within the above indicated Serial numbers.
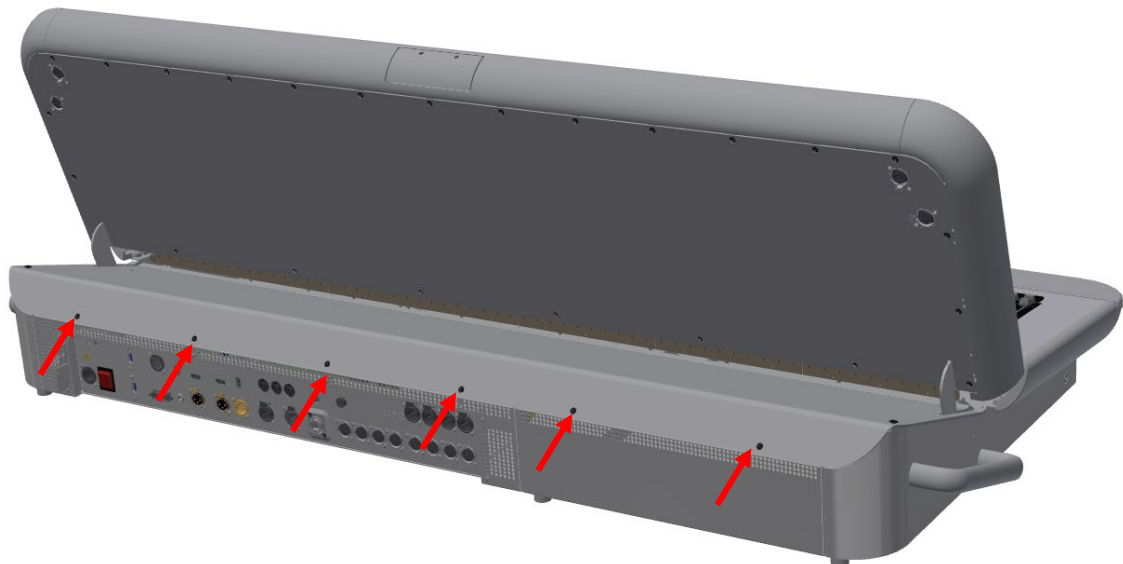
If damage or risk of damage is detected either fit a temporary fix or fit the supplied parts if you received the ECN kit.

Especially for touring consoles, fitting the temporary fix will prevent damage and a longer fix.
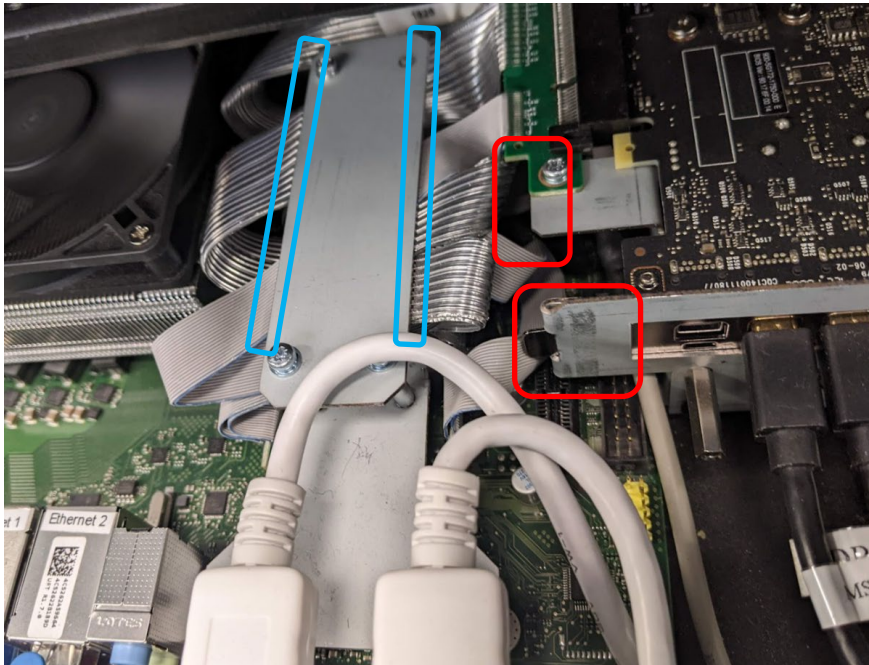
1.1   Inspection steps

Switch off the console and disconnect the console from mains.

Open the Shell lid by removing the following screws.
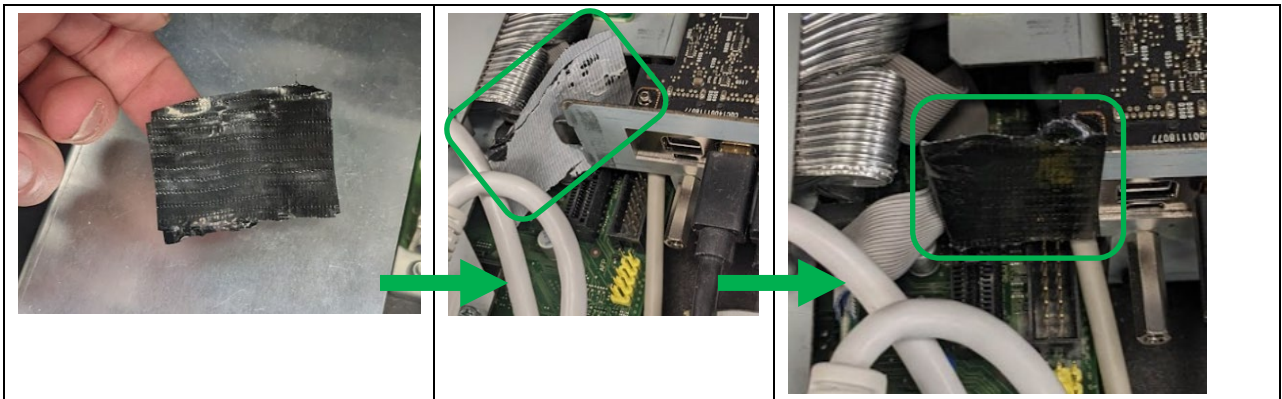
Locate the PCIe loom on the Motherboard frame.

Check that the cables are not touching the frame parts (Red rectangles above) or have been damaged where they touch the retainer (blue rectangle above).
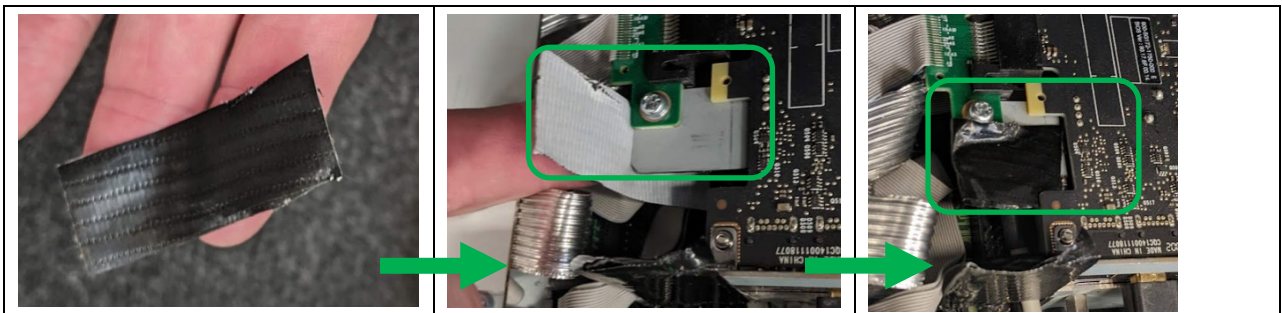
Either fit the insulator kit (see below for instructions) or fit some gaffer tape as a temporary measure As instructed below.

1.2   Temporary PCIe cable protection

Use two layers of gaffer tape approximately 50x40mm (2 x 1.57").
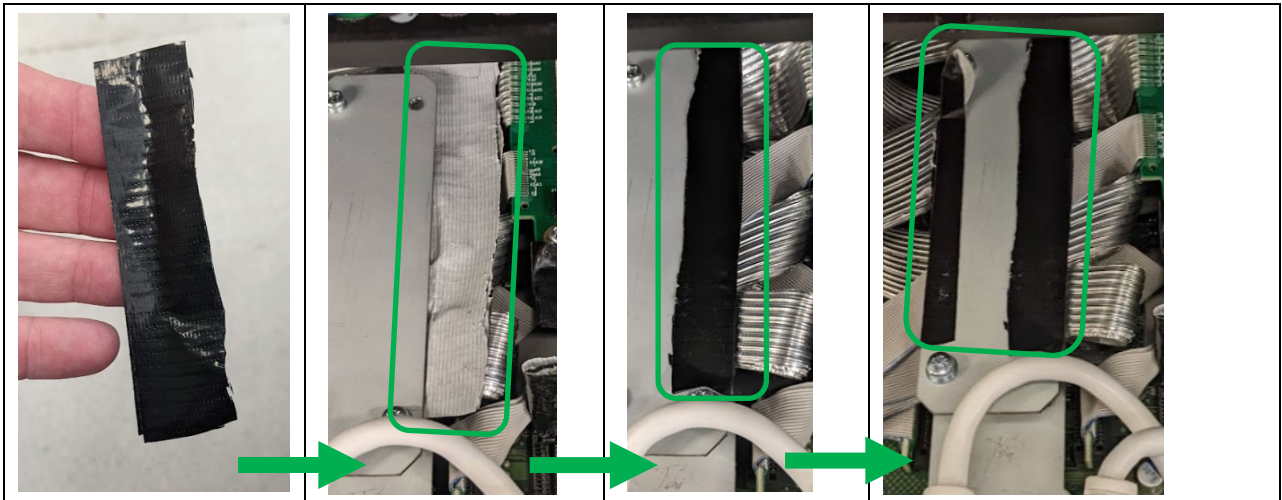Fit behind the PCI slot holder as shown, then fold against the frame.

Use two layers of gaffer tape approximately 50x20mm (2 x .78").
Fit behind the PCI Connector as shown, then fold against the frame.

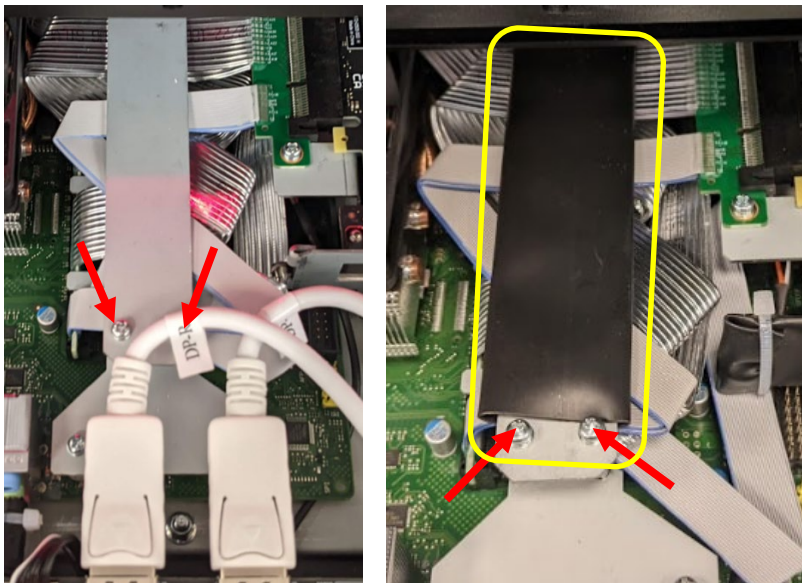Create two layers strips of gaffer tape approximately 110x20mm (4.3 x 0.78").

Fit between the PCIe cable retainer and the PCIe cable, then fold over the PCI cable retainer, repeat this on the other side.

2. Protector installation
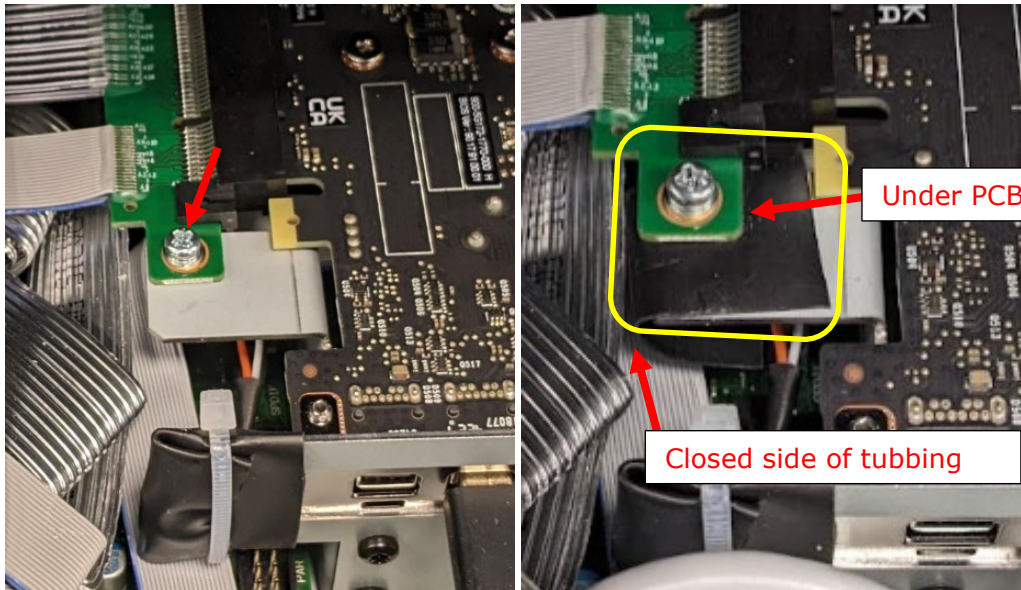
2.1 PCIe cable retainer

Remove the two screws as indicated, then slide the longest section tubing over the cable retainer, then refit the screws and tighten to 0.6Nm (4.4 inch lbs).
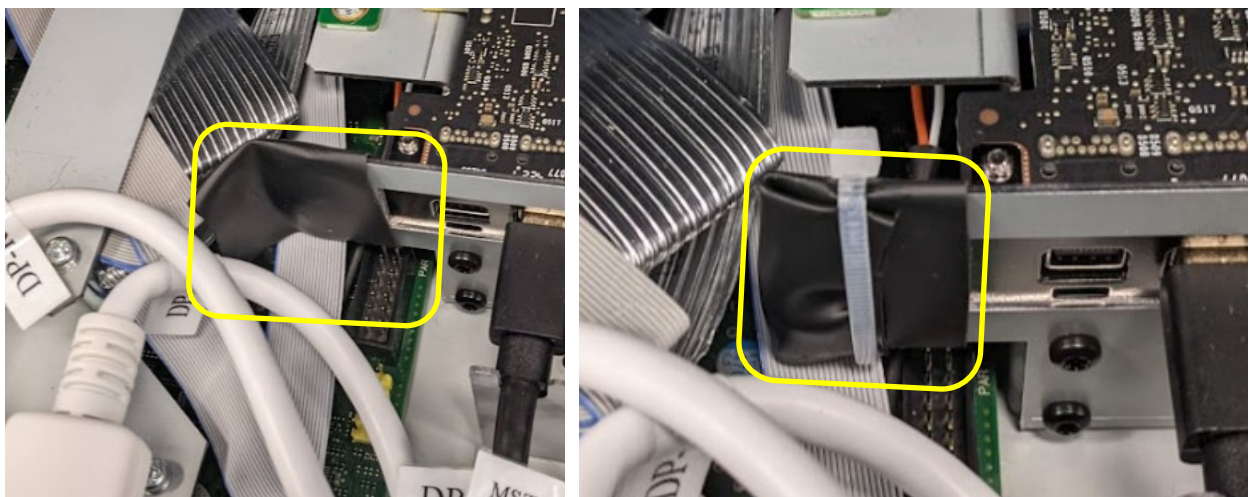
2.2   PCIe Connector

Remove the screw holding the PCI connector.

Fit the Open tubing section Under the PCB with the hole over the screw location, so that the closed section of the tube is on the Left-hand side, Refit the screw and tighten to 0.6 Nm (4.4 inch lbs).

Under PCB

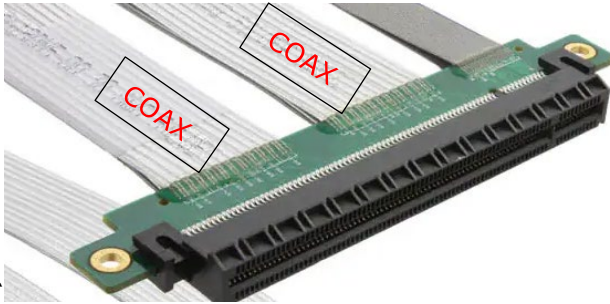Closed side of tubbing

2.3   PCIe Slot

Fit the remaining tubing over the PCI slot retention tab as shown below, then fold the end over and fit a cable tie to retain this.
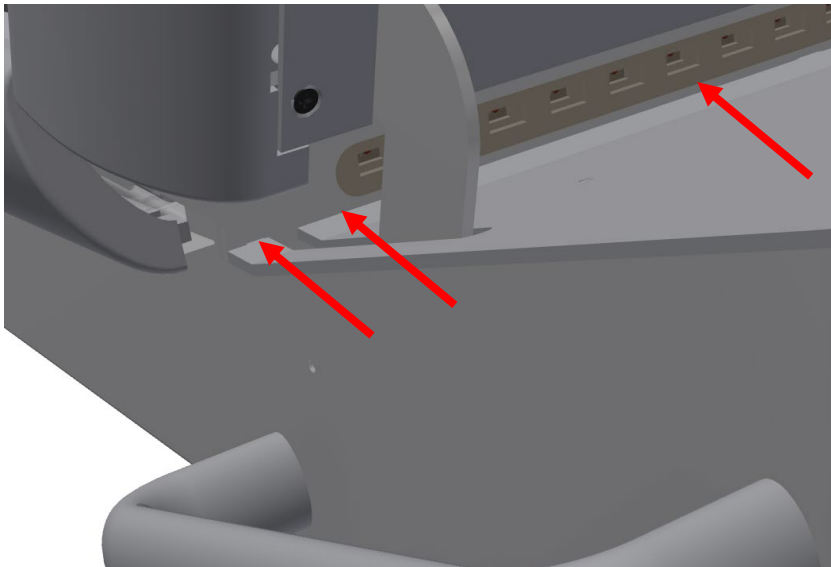
2.4   Inspection

Visually Check that the PCI cable can touch sharp edges, if needed gently move the cable around to achieve this.

Do NOT create hard folds in the Coax section of the cable.

2.5   Closing the console

Refit the Shell lid making sure the tabs (Indicated below) engage in the frame.

Refit the shell screws and tighten to 0.8Nm.