Interventional News FW43 2017

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FMI 12261 – Digital Leader (DL computer) slow down issue for Innova IGS 5X0, Innova IGS 6X0, Discovery IGS 7X0, Optima IGS 3X0 systems with Cerber A (Submitted by Narayan Sattanathan).

FMI Release Notification

FMI# 12261 – Digital Leader (DL computer) slow down issue for Innova IGS 5X0, Innova IGS 6X0, Discovery IGS 7X0, Optima IGS 3X0 systems with Cerber A

FMI Type: Mandatory

Recall (US FDA Classification): N/A

Modality: Vascular

Purpose:

If Prodiag is enabled, there is an intermittent delay of fluoroscopy and record exposures when footswitch pedal was activated. Hence the Field action is to inspect if Prodiag is enabled or disabled. If Prodiag is enabled

Then re-configure DL and ensure Prodiag command is Disabled.

Effectivity / Impacted Product: Innova IGS 5Xo, Innova IGS 6Xo, Discovery IGS 7Xo, Optima IGS 3Xo systems with Cerber A

Impacted IB: Refer Consignee: DOC2014231
Priority IB (if applicable): Not applicable

Kit usage - There is no FMI kit for this FMI12261, Only On-line Instructions P/N (5779096-8EN) is released on CDL.

Kit Part(s)#: Not applicable

Kit Plan - Not applicable - There is no FMI Kit for this FMI12261

Tools Needed (Field Supplied Tools or Pools): Refer FMI12261 instructions P/N 5779096-8EN

Labor (#FE/#Hr.): One Vascular Level 1 Qualified FE is required.

- Time required to check if Prodiag is enabled is 15 mins.
- If Prodiag is enabled, time required to Re-ghost DL and reconfiguring remote access is 2.5 Hours.

Financial Cost Center Information: Refer: FMI FRF DOC2019501

Resources: Internal FE/Distributor/Customer
F4 Approval / Release Date: 8th OCT 2017
Service Completion Due Date: 25th Feb 2018

Special Instructions to the FIELD TEAM: Collect Gantry / DL Chassis / Cerber SW Package / DL9EM2 Processor assembly serial number and part number information as applicable and send to FMI admins to update the service database systems.

FE's to put correct SR Closure comments as below:

For Scenario 1 close FMI with code 1 with closure comment: Prodiag is already disabled

For Scenario 2 close FMI with code1 with closure comment: Disabled Prodiag as Per FMI instructions

Refer to FMI Installation Instructions -P/N 5779096-8EN- for more details

Pre-Requisite or Superseded Field Actions: If FMI12256 is applicable to this site, please ensure FMI12256 is deployed first before you deploy

FMI12261

Itemized Invoice: Not applicable as No FMI Kits for this FMI12261

Test and Inspection Forms: N/A-FMI12261 does not require test or Inspection. See FMI Installation Instructions -P/N 5779096-8EN

FMI Instruction: P/N 5779096-8EN

FMI12261 Instruction is archived in CDL, CDS and TechPub.com:

http://gein.euro.med.ge.com/tech_publications/docs/doc/pdf/5779096-8EN_r1_O.pdf

FMI Customer Consignee List: DOC2014231

Development and Deployment Plan: DOC2018377

Customer Letter: N/A Not applicable

If you have any questions, please contact: Narayan. S - Email s.narayan@geind.ge.com

New Hard Drive FRU created for the DL8/DL8-2 chassis (Submitted Porsezhian Arumugam)

We have completed the release of new FRU- HDD for DL8/DL8-2.

This is based on the SN5259: SATA SYSTEM HDD FOR DL8 & DL8-2 DIAGNOSTICS AND REPLACEMENT WORK INSTRUCTIONS.

PN# 5771500 - 1TB, 3.5 inch, SATA Hard Disk Drive,

- [javascript:link(%221%22,%2214340.15389.8956.27424%22,%2214340.15389.50950.51464%22,%2214340.15389.61441.50958%22,%22526568-2%22) 5265684-2]: SPRINT XEON BOOTABLE CHASSIS FRU
- [javascript:link(%221%22,%2214340.15389.5362.14472%22,%2214340.15389.50950.51223%22,%2214340.15389.61441.50958%22,%22526568-3%22) 5265684-3]: SPRINT XEON BOOTABLE CHASSIS FRU with E6460 VGA card
- 5265684: HARMONY XEON BOOTABLE CHASSIS FRU

FE assist note

Following LLFRU part is available for this part. Refer SN5259 (http://gein.euro.med.ge.com/tech_publications/docs/doc/pdf/5781489-8EN_r1_O.p df) for the procedures.

LLFRU PN#	LLFRU Description	Remarks
5771500	1TB, 3.5 inch, SATA Hard Disk Drive	Order this LLFRU part for any issues with the SATA HDD part in the Chassis.

Parts comments have been updated by Paul Liebau to reflect these changes. Example below:

Part #: 5265684

Part Type: GP REPAIRABLES Part Weight: 51.48 LBR Repairable: Yes Returnable: Yes

Hazardous Material: N

Description: HARMONY XEON BOOTABLE CHASSIS FRU

FRU: Yes

Status: Orderable

List Price: 29382.56 USD /EACH

Comments:

-- OLC 2nd opinion part -- Used for Innova DL8M assembly 5252199. **SATA system disk FRU 5771500 now available using SN5259 for replacement instructions.** Power supply is orderable as 5272407 Zippy PS-500ATX-ZE. NOTE - 5265684-2 is not an alternate FRU. FRU 5410115 is a kit to upgrade to DL8M2 that includes a bootable chassis 5265684-2, but IP drives may need to be updated per the included upgrade instructions and are not included in the kit. Traced item, update GIB or asset in CRM after service event. Call your local RTE for parts approval. P. Liebau 15Oct2017

Mavig Dual Arm Suspension (DAS). (Submitted by Joe Parker)

In Q2 the Mavig Dual arm suspension (DAS) was released for both 4 monitor suspensions (IGS 3x most likely) and the LDM suspension. The training documents can be downloaded by clicking on the link below.

https://ge.box.com/s/10bd282h7q2oppeq89jv863qc1jctufm

This looks similar to most of the other vendors. This is only for our monitors (2 suspensions Max), no other equipment. So far there is only a single order in the US,



Some of the key features:

- Simple Mechanical installation vs. the current bridge suspension (and improved install time 1.5h)
- No Rails, no cable drapes to deal with
- Shorter PM times.

There are some links in box to videos.

Link to installation video https://ge.box.com/s/j7qlvjx4fb2iqf8j2ih1zzwnr2zufsuw

Since there is very minimal backlog as of now, we may hold a Q&A as we see more of them appear. There are no cables installed for the Vitallinq, but they have been installed on some of the early installations without issue.

New AW In-Room 3D Wireless Mouse. (Submitted by Joe Parker)

Team, this was released for sale at the end of Q2, so expect them to begin showing up on orders soon.

Product Release Information Letter:

https://ge.box.com/s/9tby4b5hmijhbsm4mb3gpg7u8kek946j

As you can see, just a serial mouse now over USB. The serial card will need to be installed, and now the adapters and plates.



ITU Reload

If the ITU doesn't pass in GE/MacLab application or in-Service utility or the ITU is locked at the screen "Data Central ..." apply this:

To start the ITU without starting the GE software or the Local ITU Service Utility the Service Button must be pressed while booting the device.

Push on reset button under ITU then immediately the Service button must be pressed until the windows CE desktop appears.

Start "Command Prompt" (DOS) windows:

Select: Start > Programs > Windows Explorer or open "My Device" in the desktop upper left corner.

Go to C:/windows folder and run (double touch) the program "FWStop.exe" this action will disable the Firewall and allow you to access remotely (with your DL, Laptop or station using IE) to the ITU.

The ITU service application window should appear.

Reload first the RAFI Service Software then when download completed successfully reset the ITU and check if GE application and ITU Service utility work if not then redo step 1 to 3 and reload Window CE (OS + Boot Loader) follow by RAFI Service software and GE application SW.

When finished, close all windows and reboot the ITU by pushing on reset button

Information from a previous newsletter:

https://ge.box.com/s/1w97cf5peqkwlghlbkgo678voj1umb5e

Service Note 5263 Released - Documentation for General Maintenance on Angix Systems

Document: 5788838-8EN

Title: DOCUMENTATION FOR GENERAL MAINTENANCE ON ANGIX SYSTEMS

Subject: This service note intends to give orientation to the maintenance of all workstations on Angix Systems

Applicability (e.g. affected product, process): Angix I, Angix II and Angix III

9/23/22, 11:02 PM

Date: 9-OCT-2017

Details: Not Applicable

Resolution: Not Applicable
Link to file on BUC server:

http://gein.euro.med.ge.com/tech_publications/docs/doc/pdf/5788838-8EN_r1_O.pdf

Link to file on CDL:

 $\frac{\text{http://olcweb.olc.med.ge.com:} 8020/\text{servlet/ClientServletProp/}5788838-8EN_r1_O.pdf?REQ=RAA&DIRECTION=SN5263&FILENAME=5788838-8EN_r1_O.pdf&FILEREV=1&DOCREV_ORG=1$

Index of Vascular FMI and SN documents:

https://ge.box.com/v/Innova-Reference-Data Note: This email is a notification that a document has been released onto the CDL server. Any questions or comments about the content of the document should be directed to the author of the document, not the author of this email.

Service Note 5261 Released – Firewall Configuration to connect to 3rd Party Equipment to Innova Discovery System Rev.1

Document: 5781601-8EN

Title: Firewall configuration to connect 3rd party equipment to Innova / Discovery system for communication through the system bus protocol **Subject:** This service note intends to give orientation to the maintenance of all workstations on Angix Systems

Subject: Procedure to describe Innova / Discovery system firewall configuration to allow communication with compatible 3rd party equipment through the system bus protocol

Applicability (e.g. affected product, process):

Innova 2100-IQ, 3100-IQ, 4100-IQ systems (Pathfinder, Sprint2, Solaris)

Innova 2121-IQ, 3131-IQ systems (if upgraded to Capella)

Innova IGS 520, 530, 540 systems (Solaris, Greenfeel, Cerber A)

Innova IGS 620, 630 systems (Capella, Ginkgo, Cerber A)

Discovery IGS 730, 740 systems (Agila, Agila2, Agila3, Greenfeel, Cerber A)

Date: 26-SEP-2017

Details: Not Applicable

Resolution: Not Applicable

Link to file on BUC server:

http://gein.euro.med.ge.com/tech_publications/docs/doc/pdf/5781601-8EN_r1_O.pdf

Link to file on CDL:

 $\frac{\text{http://olcweb.olc.med.ge.com:}8020/\text{servlet/ClientServletProp/}5781601-8EN_r1_O.pdf?REQ=RAA&DIRECTION=SN5261\&FILENAME=5781601-8EN_r1_O.pdf&FILEREV=1&DOCREV_ORG=1$

Index of Vascular FMI and SN documents:

https://ge.box.com/v/Innova-Reference-Data Note: This email is a notification that a document has been released onto the CDL server. Any questions or comments about the content of the document should be directed to the author of the document, not the author of this email.

Service Note 5259 Released - SATA System HDD for DL8 & DL8-2 Diagnostics and Replacement Work Instructions.

Document: 5781488-8EN

Title: SATA SYSTEM HDD FOR DL8 & DL8-2 DIAGNOSTICS AND REPLACEMENT WORK INSTRUCTIONS

Subject: Introducing the new Lower level FRU part 5771500: 1TB, 3.5 inch, SATA Hard Disk Drive for DL8/DL8-2 chassis along with Troubleshooting and replacement work instructions for the LLFRU SATA System Hard Disk Drive FRU

Applicability (e.g. affected product, process): All Innova X100, Optima IGS 3X0, Innova IGS 5X0 and Discovery IGS 7X0 that uses DL8/DL8-2

Date: 9-OCT-2017

Details: The information below introduces a new lower level FRU SATA HDD part for the DL8 and DL8-2 Chassis, along with troubleshooting information and replacement procedure for the SATA HDD.

Resolution: For any issues in the field related to the SATA Hard Disk Drive, instead of replacing the completeDL8/DL8-2 chassis FE's should order the SATA HDD and do the replacement.

Link to file on BUC server:

http://gein.euro.med.ge.com/tech_publications/docs/doc/pdf/5781488-8EN_r1_O.pdf

Link to file on CDL:

 $http://olcweb.olc.med.ge.com: 8020/servlet/ClientServletProp/5781488-8EN_r1_O.pdf?REQ=RAA&DIRECTION=SN5259\&FILENAME=5781488-8EN_r1_O.pdf$ 8EN r1 O.pdf&FILEREV=1&DOCREV ORG=1

Index of Vascular FMI and SN documents:

https://ge.box.com/v/Innova-Reference-Data Note: This email is a notification that a document has been released onto the CDL server. Any questions or comments about the content of the document should be directed to the author of the document, not the author of this email.

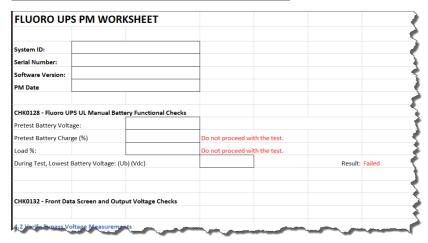
20 kVA Fluoro UPS PM Worksheet (Submitted by Hector Buenaventura)

Hi Team,

I always had difficulty in documenting the results of the PM that I am doing on a Fluoro UPS. After Salem Hospital placed their four Fluoro UPS under a service contract with us, I decided it is high time I could make my life easier by making a form where I can just drop in the results and parameter changes. You can then attach this to a Non-Specific PM form. I have found this useful. I hope you would find this useful too.

Please share with other FEs whom you think might need this.

https://ge.box.com/s/jxynaby3bbb1ylfqw31tkap5lfap5vom



Hector C. Buenaventura

Field Service Engineer

Camera pickup tube DOT artifacts (Submitted by Nick Cerfogli)

Just wanted to follow up on this PUT DOT artifact issue.

We were replacing a Heiman Saticon/Primacon XQ1560 part# 46-316327G1/2178990. The Replacement PUT for a Saticon is the XQ1560A from Narragansett Imaging. It is a Plumbicon. When the PUT was replaced it had the Dot artifacts on it that are seen in the Two Photos attached. It came with a Spec Sheet below. No Mention of the required Target Voltage change. The FE Fran Tran went to the Narragansett Imaging website and pulled down their PDF on the XQ1560A. Low and behold it recommends a Target Voltage of 45V vs the existing Heiman that requires 75V. Attached is the XQ1560A Data Sheet.

Changing the Target Voltage from 75V to 45V eliminated the DOT artifact.

Our PSP on My Workshop below for the Heiman 2178990 indicates it is a direct replacement. And includes the Narragansett Imaging Spec Sheet.

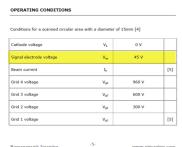
Current Part Comments; No Mention of the change to a Plumicon.

NOTE: PER PCN 201146, THIS KIT INCLUDES HEIMANN XQ1560-GESATICON P U TUBE, TY-WRAP, RE-TAINER A DIRECTION. MS7093 PER S N 4215, CHECK A2 BD IN THE CAMERA ELECTRONICS RACK; MUST BE 2153910, IF NOT CARES READ NOTE TO FE REPLACE FOR MS90 CAMERAS ONLY APPLIES TO MS90 CAMERA SHELF LIFE IS 52 WEEKS SPCN MS12746 SENSITIVE TO LIGHT AND SHOCK. DO NOT REMOVE FROM ORIGINAL PACKING MATERIAL WHEN SHIPPING. MS13128 PRICE CHANGE PER SERVICE MARKETING 6 4 99 MSA3039 TAKEN OFF RECYCLING PROGRAM 8 30 01 MS5277 PUT BACK ON RECYCLING PROGRAM 11 28 01 MSA8429 TAKEN OFF RECYCLING PROGRAM PER L.BENIWAL MSA8429 08 14 02

FROM GE PSP 2178990

GE Healthcare Plumbicon XQ 1560A (Direct replacement of Saticon XQ1560) Purchase Specifications (PSP)

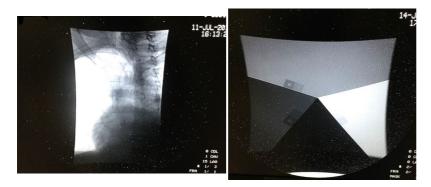
From the Narragansett Imaging XQ1560A Spec Sheet



SPEC Sheet Delivered with the Narragansett PUT



ARTIFACTS



Positioner failure during installation (Bob Meyer & Kevin Belk)

I wanted to see if this is a onetime occurrence or if anyone else had heard of defective Motor Power cables on Innova Installation.

FE was working on an install l at XYZ Hospital and had Positioner failure after loading all firmware.

MCB boards had AD C4 44 44. The C4 was on Pivot MCB. This code usually indicates a failure on the MCB. He moved the boards around and the problem appeared on any MCB put in the pivot slot. I had him disconnect the Pivot motor cable at the backplane and power on the system. All MCBs came up normal.

Checking the cable (MIS 27669) going to the gantry from the C2 Cabinet he found pin 23 shorted to Ground. He then disconnected the Gantry end of the cable and measured this pin to Cable Shield and it showed shorted. Inspecting the connectors did not reveal any bent pins or other damage. The wire shorting to ground caused the MCB to show the H-Bridge Failure.

PSDB KO 43907 was very helpful and pointed me to the cables or motor. The existence of the PSDB article indicates that this cable has caused problems in the past.

Kevin Belk added:

I had similar issue many years ago. The contractor used sheet metal screws to install duct covers and penetrated the LC power cable.

Torque Spec clarification for Discovery CMS Installation Job Card IST0337 (Submitted by David Billey)

Update:

Engineering conducted an investigation and concluded that no re-work will be required in the field for any systems that may have attached the CMS to a customer plate using the 24 Nm torque spec intended for the Halen rail bolts. This is because Loctite and Lock-washers were used as well as being double-nutted. In addition, the CMS bolts are inspected every two years during PM with job card PM0076.

That being said...going forward we need to get the hardware and torque spec from the customer when not using the Halen Rails as specified in Job Card IST0337 - Cable Management System Installation.

Since most of our CMS's are attached to a steel customer plate engineering did conclude (when using hardware listed below) that a Torque of 40Nm (30 ft-lbs) is acceptable. I mention this should you not be able to obtain the hardware and torque specs from the customer.

M12 grade 8.8 (or 1/2in grade 5) bolts minimum along with Loctite and Nord-lock washers provided with halfen rail hardware.

Clogged hose from impeller failure Coolix 2200 (Submitted by Brian Blair)

Worked with an FE on a Coolix 2200 low flow issue this week. FE had troubleshot and found very low pressure coming from the Coolix, he also noticed some intermittent resistance when turning the coupling by hand after it was removed. He ordered and replaced the pump head, there was a very noticeable increase in pressure coming from the Coolix, yet he still had flow errors when connected to the system. FE ended up finding that the hose running through the C-arc (system has had the C-arc coupling removed) to the X-ray tube clogged with impeller pieces. Just thought I would share. Coupling in the pic to reference size.



Lift Interco Compatibility. (Submitted by Paul Liebau& David Combier)

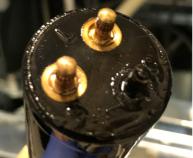
Lift Interco part number 5490870 (Rohs) can be used in place of 5244900 and 5160191 for Unity systems.

Open Filament Errors (Submitted by Brian Blair)

Team,

I worked with an FE yesterday on a system with open filament errors on both large and small filaments. Had him measure at the XRT, then the Ingrid, then through the cable. The pics above show the HV cable from the HV Tank. System has been in for 8 years. Seems like this issue pops up every now and then. Thought I would forward the pics.





Elegance table intermittent reset - investigation update (Submitted by Jim Lawrence)

Received several questions re: this investigation. So, to elaborate:

This request is <u>only</u> re: the Cerber M3A version Innova-IQ/Tilt tables (silver EMCIO boards – p/n 5736443).

It does not apply to pre-Cerber (gold EMCIO boards - p/n 5422640-2) ...

The typical error pattern for the issue, courtesy of Joe:

```
8/14/17 22:30
Error
                                           AGV
                         1050297 DO
        8/14/17 22:30
                                                              POS EVENT LOG
                         1070201
Error
        8/14/17 22:30
                                  WR
                                           Table
                                                              Heartbeat lost on TSSC on port 2
                                                              Reception timeout of joystick command for TSSC on port 2
Error
        8/14/17 22:29
                         1070174
                                  DO
                                            Table
                                                              Reception timeout of joystick command for SB on port 1
        8/14/17 22:29
                         1070174
                                                              Reception timeout of joystick command for SB on port 1
                                  DO
                                           Table
Error
        8/14/17 22:29
                                                              Reception timeout of joystick command for TSSC on port 3
                         1070182
                                            Table
Frror
        8/14/17 22:29
                         1070177
                                   DO
                                            Table
                                                              Reception timeout of joystick command for SB on port 4
                                                                                                                   If anyone has or will encounter the Innova IQ Tilt table
        8/14/17 22:29
                         1070177
                                            Table
                                                              Reception timeout of joystick command for SB on port 4
Error
Erro
        8/14/17 22:29
                         1050167
                                   DΩ
                                           GantryAxis
                                                              Front: FRT 2ND LEVEL BUMP
        8/14/17 22:29
Error
                         1061279
                                  WR
                                           AGV
                                                              Toucan disable the AGV motion
        8/14/17 22:29
                         1061114 DO
                                                              TOUCAN SRTL1 EMCIO Heartbeat loss
Error
        8/14/17 22:29
                         1070456
                                   WR
                                           Table
                                                              Table heartbeat reception loss
        8/14/17 22:29
                         1050148
                                            PosUserInterface ERR MISCELLANEOUS
Error
                                           Positioner
        8/14/17 22:29
                         1050739
                                   WR
                                                              ALARM(!!, 2.14) - Anticollision software disabled
Error
        8/14/17 22:29
                         1070454
                                   WR
                                           Table
                                                              Table p
```

EMCIO reset issue as described above and below, please perform **ALL** actions requested by David Combier below, and send to me so I can forward to David.

Engineering is not able to reproduce the symptom in Bangalore, so field feedback, logs, table Databases, etc., will help to expedite a timely solution.

Per Engineering

Please answer to the below questions for ALL sites impacted by Elegance table reset issue in the USCAN:

What are ALL sites impacted by Elegance table reset issue in the US? (please provide hospital name and SYS ID)

- 1. What is the failure mode? (detailed scenario, and info if table lost movement after reset or not?)
- 2. What is the occurrence rate?
- 3. How many times the EMCIO boards has been replaced?
- 4. What are all EMCIO Part Numbers and Serial Numbers used?
- 5. What were the actions performed on site since beginning? (in the right order, regarding part replacement, cable check, database loading, reset to default, recalibrations,)
- 6. Can you send me the original backup database + if applicable new database for each site?
- 7. Deaconess: in addition to sending logs right after the last occurrence, can you perform 50 resets and send the logs again? (Capture logs & EMCIO logs)
- 8. Deaconess: check the cabling between EMCIO and AGV TOUCAN board
- 9. OSU: how many spare EMCIO boards do you have on hand?
- 10. If any site has a new occurrence, send us Capture logs & EMCIO logs. If table is not able to be moved after a reset, send us a video of led on EMCIO board + CPU Panthera + PIB board. Please do not touch the cabling at all until further request.

Retrieved from "https://frbucwebvmdevl.em.health.ge.com/vascular_wiki/index.php?title=Interventional_News_FW43_2017&oldid=23192"

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