digital™ FCO Application

Field Change Order Number: DS-ZXHX6-XX-F001

Authors: Matthew FitzGerald (244-5607), David Gretton, John Hanson; Matt Dulchinos; Ella Libkind (MCS).

Tel. No.: Matthew FitzGerald (244-5607)

Internet Address: Matthew.J.FitzGerald@Digital.Com

Applicability: Prioris ZX6 and HX6 Models;

FR-932WW-AA, FR-932WW-AB, FR-933WW-AA
FR-933WW-AB, FR933WW-BA
FR-B50WW-AA, FR-B50WW-AC
FR-B51WW-AA, FR-B51WW-AC
FR-B52WW-AA, FR-B52WW-AC
FR-B53WW-AA, FR-B53WW-AC

Problem Statement: The problem is with a lot of Power Harness cables from the Power Supply to the SCSI Backplane on the HX6 and ZX6 systems. We have information from the cable manufacturer, Amphenol, indicating that in **Oct.Nov.Dec.1996** and possibly **Jan.1997** they used Molex contacts in connector housings manufactured by JM for the 12 pin power connectors (P1;P2) .The Molex contact becomes distorted when inserted into the JM connector and can cause intermittent connection when plugged into the power supply, this has been substantiated by Field data. Defective Date codes for cables manufactured during this period are **4496 to 1397**. **The manufacturer's name is Amphenol**.
This cable harness assembly is used on both the HX 62xx and ZX 62xx platforms and has the part number 70-31894-01.

Symptom: Three symptoms can occur in systems that have the defective cable;

1. Disk Drives in the Hot Pluggable Back Plane drop off line. This occurs more often with High Performance controllers, like RAID controllers. The problem usually occurs after the system has been moved or the power cable has been touched.
2. When a system is moved, the disk array may come up offline when powered up.
3. The second pin down on the outside row of connectors on the P2 connector becomes discolored.

Solution: Since the symptoms in this case can often occur through other issues, it is important that the cable date code and

manufacturer be examined. **This is an as needed FCO.** Any systems found with power harness manufactured by Amphenol with a 4496 to 1397 date code should be replaced.

Additional Information:

Quick Check: Tag on cable p/n 70-31894-01 has manufacturer Amphenol and date codes of 4496 to 1397

PRE/CO-REQUISITE FCO: **MTTI HRS**: 120 Minutes

TOOL/TEST EQUIPMENT: Wire Cutters for cable wraps, Quicklaunch, DOS – Formatted Floppy.

FCO PARTS INFORMATION:

FCO KIT Number	DESCRIPTION OF CONTENTS
FA-05098-01	Field Application Document
EQ-01763-01	CABLE KIT (70-31894-01)

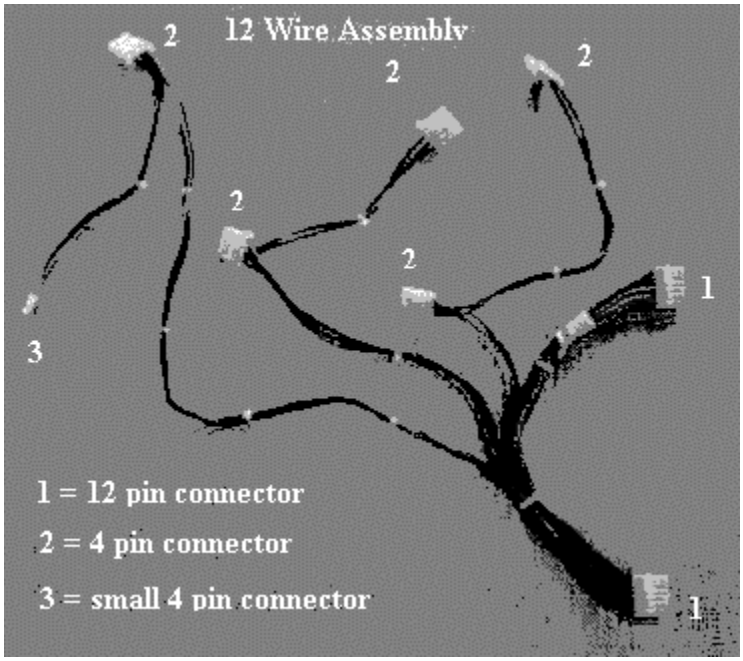
Installation Procedure:

Procedure for Replacing the 12 Wire Cable Assembly (P/N 70-31894-01)

The following procedure will step you through identifying and replacing the Amphenol cable assembly in either an HX6 or ZX6 server.

1) Shut down the Operating System (e.g. Windows NT, Novell, etc.).
2) Turn off your server.
3) Disconnect all external devices, ac power, and monitor power.
4) Unlock and remove the server side panels.
5) Locate the 12-wire cable assembly (P/N 70-31894-01) that is connected to the power supplies, SCSI backplane, diskette drive, and any optional drives (e.g. CD-ROM drive, tape drive, etc.). See item 7 below in Figure 13-3.
6) Check the 12-wire cable assembly (P/N 70-31894-01) label for the manufacturer (e.g. MFG.) to see if it is made by Amphenol. If the cable assembly is not manufactured by Amphenol, do not replace the cable and proceed to step 18. Only Amphenol cables need replacement.
7) Check the date code printed on the label of the Amphenol 12-wire cable assembly (P/N 70-31894-01). If the date code is from 4496 to 1397 (e.g. date code is wwyy where ww = week & yy = year of manufacture), the cable assembly will need to be replaced.
8) Undo the wire ties that bundle all the cable assemblies together.
9) Disconnect the 12-pin connectors from the power supplies.

10) Disconnect the two 4-pin connectors from the SCSI backplane.
11) Disconnect the small 4-pin connector from the diskette drive on the Motherboard side of the machine.
12) Disconnect the 4-pin connectors from any remaining optional drives (e.g. CD-ROM drive, tape drive, etc.).
13) Install the replacement 12-wire cable assembly. Connect each 12-pin connector to each power supply. If you have only one power supply, use only one of the 12-pin connectors.
14) Connect two 4-pin connectors to the upper and lower sections of the SCSI backplane.
15) Connect the small 4-pin connector to the diskette drive.
16) Connect 4-pin connectors to any remaining optional drives (e.g. tape drive, CD-ROM drive, etc.).
17) Re-bundle all of the cable assemblies together with wire ties.
18) Put the Side Panels back on and lock them.
19) Connect external devices and restore power.



20.) Once the system is powered back on, check all components that could have been effected by replacing the power harness. For example, check the floppy drive by accessing a floppy, verify drives are spinning, verify tape drive by running backup software and seeing that it sees the tape drive.

I.E. 1. Take Floppy Diskette and test that it can be seen by File Manager or Explorer.

2. Put QL CD in and test that it can be seen by File Manager or Explorer.

3. Check that all SCSI Drives have the Green Light Lite with no amber lights.

Field Application Template (FA) cont'd

MCS Specific Information (not to be included in EQ Kit)

Affected Units: 2000

Americas: 3000
Europe: 400
APA: 400
TOTAL: 3800

PBU FCO Implementation Requirements:

Warranty Customers:

Digital provides warranty customer with on-site implementation of FCO where symptoms and quick check exists.

Contract Customers:

Digital provides contract customer with on-site implementation of FCO where symptoms and quick check exists.

Non-Warranty/Non-Contract Customers: N/A

Product Business Unit Channels Inventory: N/A

Required FCO Completion Date: Jan 1st, 1999

Special Action and Considerations: