

Level of Urgency

Page 1

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FIELD CHANGE ORDER

Number VS40X-PA-F001

SYSTEMS AFFECTED: This FCO is only for the VAXstation 2000 and VAXstation 3100 with the VS40X-PA option installed.

PROBLEM: Video streaking seen on VR160 and VR290 color monitors with the 54-17282-01 8-plane graphics option.

SYMPTOM: When displaying a window there is a grayish shadowing effect across the width of the window and screen on the lines that include text.

QUICK CHECK: Remove the 8-plane module and check the etch. For etch C1 the module rev should be at B8 or higher and for etch D1 the module rev should be at B9 or higher.

COMPATIBILITY/PREREQUISITE FCO:  
N/A

Est. Time to Install:  
1.0 Hours

SPECIAL TOOLS or TEST EQUIPMENT:  
N/A

## FCO PARTS INFORMATION

EQ KIT NUMBER:	QUANTITY:	PART NUMBER:	DESCRIPTION:
EQ-01560-01	1	54-17282-01	8-PLANE MODULE
FA-04871-01	1		FA Document

## APPROVALS

CSSE ENGINEER  
Bob Sherman

F.S. PRODUCT SAFETY  
Robert Brister

F.S. LOGISTICS  
Scott Almeida

CSSE MANAGER  
Ron Caprio

F.S. MICROFICHE LIBRARIES

AFFECTED POPULATION  
4,200

MICROMEDIA PUB.  
Diane MacDonald

VAXDOC EP-FSVDC-LB  
STARS

INITIAL KITTING  
4,200

REVISION A	VAX Notes	Hardcopy Publication: 4,500
FCO Release Date 14 December 1989		PARTS AVAILABILITY December, 1989

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FCO VS40X-PA-F001

PAGE 2 OF 5

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*****
* INSTRUCTIONS ON HOW TO CHECK OR REPLACE THE 8-PLANE MODULE *
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* CAUTION *
* *
* This module contains electrostatic discharge sensitive devices *
* (ESDS). The use of the VELOSTAT kit is essential to prevent *
* damage which may not be noticed immediately. *
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1. REMOVING THE 8-PLANE OPTION VAXstation 3100

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Turn the system power off and then unscrew the two cover screws on the back of the system box. Next disconnect the power cable and the SCSI bus cables from the drives on the top panel. Also disconnect the SCSI bus cable from the RRD40 adapter board (if installed). Next remove the RRD40 adapter module from the four standoffs and let it hang over the back of the system box. Now unscrew the five captive screws from the upper drive mounting panel and lift the top panel from the lower panel. Disconnect the data cable from the rear of the RRD40 (if installed) and set the RRD40 adapter board aside. Disconnect the power cables from the drives on the lower drive mounting panel and disconnect the MSC cable that comes from the system module. Next unscrew the seven captive screws from the lower drive mounting panel and slide the panel forward (with the drives) then lift the panel from the system box and set it aside. Remove the graphics module from the four standoffs, then lift the graphics module off the system module.

NOTE: Only the model 40 has the upper drive mounting plate.

Place the graphics module on a static mat, component side up. Next go to step 3 to check the revision level of the graphics module.

To replace reverse the preceding steps.

For more information refer to the VAXstation 3100 Maintenance Guide (EK-285AA-MG-001) section 5.2.7.

## 2. REMOVING THE 8-PLANE OPTION VAXstation 2000

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Turn the system power switch off and disconnect all cables and loopback connectors from the rear of the system box. Place the system with the front up and the bottom facing you. If the expansion adapter is installed remove the two screws from the bottom cover.  
(Continued on Page 3)

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FCO VS40X-PA-F001  
PAGE 3 OF 5

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Now remove the four system box screws and slide the cover up and off. Place the system on its feet and with the front of the system facing you, remove the five screws that hold shield to the main chassis. Lift the shield up and hold in one hand and disconnect the cables from the shield with the other hand. Remove shield and place down with paper insulator side up. Remove the screw that holds the paper insulator and remove the paper insulator. Next remove the two DESVA interconnect cables on the side of the shield. Remove the system module from the shield by lifting up from the BNC end and disconnect the battery cable.

**\*\*WARNING\*\* DISCONNECTING THE BATTERY DESTROYS ALL NVR MEMORY DATA**

Place the system module on a static mat, component side up and remove the memory module. Now remove the 8-plane graphics board and go to step 3 to check the revision level.

To replace reverse the preceding steps.

For more information refer to the VAXstation 2000 and MicroVax 2000 Maintenance Guide (EK-VSTAB-MG-002) section 3.10.

## 3. CHECKING THE 8-PLANE MODULE REVISION LEVEL

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There may be a revision level stamped on the front of the module. Look at the far right side of the module and in the middle you will

see the etch of the module. If it is C1, then the revision level should be B8 or higher and if the etch is D1 then the revision level should be B9 or higher. Any modules below these revision levels should be replaced.

If you can not find the revision level on the 8-plane module then place the 8-plane module on the static mat with the component side up, the two 40 pin connectors at the top furthest away from you, and the Digital logo on the bottom right. Starting from the bottom right side of the right 40 pin connector move down, check the third (C63), fourth (C67), and the sixth (C66) capacitors. If they are glass type the module must be replaced. If they look like the 32 capacitors on the far left side of the module that go from top to bottom then the module has the ECO installed and does not have to be replaced. (See Figure 1 for more detail)

The old capacitors have a value of .01UF and the new capacitors have a value of .22UF.

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FCO VS40X-PA-F001

PAGE 4 OF 5

VS40X 8 PLANE COLOR OPTION			
-C1--	+-----+	+-----+	
-C2--	40 PIN CONNECTOR	40 PIN CONNECTOR	
-C3--	+-----+	+-----+	
-C4--			
-C5--			+-----+
-C6--		-C61-	ROM
-C7--		-C78-	+-----+
-C8--		-C63-	
-C9--		--R8--	--R5--
-C10-		--R7--	-C67-
-C11-		--R6--	-C64-
-C12-		--R9--	-C66-
-C13-		+-----+	
-C14-			
-C15-			
-C16-		E80	
-C17-			
-C18-			

-C19-  
 -C20-  
 -C21-  
 -C22-  
 -C23-  
 -C24-  
 -C25-  
 -C26-  
 -C27-  
 -C28-  
 -C29-  
 -C30-  
 -C31-  
 -C32-

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FIGURE 1: 8 PLANE COLOR MODULE (54-17282-01)

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FCO VS40X-PA-F001  
 PAGE 5 OF 5

LARS EXAMPLE  
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	USA	GIA	EUROPE
CATEGORY F			
Activity -			
(a)Contract and Warranty	W	U	Y
Hardware Segment code	111		
Non Contract/non warranty	F	F	F
(b)RTB/Off-site Agreement	F		
Product Line	01		

DEC Option	VS40X-PA	VS40X-PA	VS40X-PA
Type of Call	M	M	M
Action Taken	D	D	I
Fail Area-Module-Comments	VS40X-F001	VS40X-F001	VS40X-F001
Material Used	EQ-01560-01	EQ-01560-01	EQ-01560-01

(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.

(b) RTD=Return to Didital or Off-site Agreements; if Field Engineer is On-site, use Activity Code "F".

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