DIGITAL	FCO	CATEGORY [F]	PAGE 1 OF 5

FIELD CHANGE ORDER	NUMBER: KA46-F001

APPLICABILITY: This FCO is for the VAXstation 4000 model 60.

PROBLEM & SYMPTOM: The following bugs were found in the ROM code in the VAXstation 4000 Model 60 ROM version V1.1.

- o HALT VALUE RETURNS TO DEFAULT SETTINGS AFTER A POWER CYCLE (SYSTEM WILL NOT AUTOMATICALLY REBOOT IF HALT BUTTON HAS BEEN USED)
- o TABLET AND STYLUS DO NOT WORK
- o SCSI DEVICES NOT SEEN AFTER SELF-TEST FAILURE (SYSTEM WILL HAVE TO BE POWERED OFF AND ON TO SEE THE FIXED DRIVE)
- o TSZ07 SELF-TEST FAILURE AND POSSIBLE UNDETECTED DATA LOSS.
- o KEYBOARD SELECTION NOT USED ON POWER-UP (ONLY THE US KEYBOARD SELECTION WORKS)
- o TURBOCHANNEL COMPATIBILITY (NO TURBOCHANNEL OPTIONS WILL WORK)

SOLUTION: Replace the version V1.1 base system ROMs on the VAXstation 4000 Model 60 with V1.2 base system ROMs.

QUICK CHECK: With the system in console mode, you can type "SHO CONF". The top line on the VAXstation 4000 model 60 should be (KA46-A V1.2-343-V4.0). Look for V1.2, if it is at a lower revision this FCO should be installed.

PRE/CO-REQUISITE FCO: N/A	MTTI HRS 0.5 Hours

TOOL/TEST EQUIPMENT: Pocket flat head screwdriver

FCO PARTS INFORMATION

FCO KIT NO.	DESCRIPTION OF CONTENTS	EQ KIT VARIATION APPLICABILITY
EQ-01651-01 FA-04986-01	23-206E8-00, 23-207E8-00 ROMs Model 60 FA Document	NONE

FCO CHARGING INFORMATION

WARRANTY/CONTRACT				NONWARRANTY/NONCONTRACT				
ON-SITE		OFF-SITE		ON-SITE		OFF-SITE		MATERIAL ONLY
TRAVEL/ INSTALL	EQ KIT	INSTALL	EQ KIT	TRAVEL/ INSTALL	EQ KIT	INSTALL	EQ KIT	ORDER-ADMIN,HANDLING PKG,SHIPPING & EQ KIT
DEC	DEC	DEC	DEC	CUST	CUST	CUST	CUST	DEC

APPROVALS

SPE	DSHQ LOGISTICS	DS PRODUCT SAFETY
Bob Sherman	Scott Almeida	Robert Brister
_____	_____	_____
SPE MANAGER	This document is published	FCO RELEASE DATE
	on multiple media including	August 1992
_____	Customer Services and MDS	_____
MICROMEDIA	Microfiche Libraries. It is	FCO REVISION
Anne James Smith	also available electronical-	A
_____	ly via the SSD CD-ROM and	_____
POPULATION	TIMA.	PARTS AVAILABILITY
10,496		August 1992
_____	_____	_____

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    |   |   |   |   |   |   |   | |   |             FCO KA46-F001
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    |   |   |   |   |   |   |   | |   |             PAGE 2 OF 5
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```
   *****************************************************************
   *        INSTRUCTIONS ON HOW TO REPLACE THE BASE SYSTEM         *
   *           ROMS ON THE VAXSTATION 4000 MODEL 60                *
   *****************************************************************
```

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                        ***********
                        * CAUTION *
                        ***********
          WEAR A STATIC WRIST STRAP AND USE A STATIC MAT.
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   1. REMOVING THE BASE SYSTEM ROMS IN THE VAXSTATION 4000 MODEL 60
      ----

      o Have the customer run shutdown on the system.

      o After the system has been shutdown, turn off the power to the
        system and disconnect the power cord from the wall outlet. If
        the monitor is on top of the system, disconnect it from the
        system and remove it. If you have a dual monitor module,
        disconnect both monitor cables.

      o Remove the system cover by gently pulling out on the tabs on
        the right side of the cover, and lift the cover up and away.

      o Next remove the optional graphics module (if applicable) by
        lifting the module up from the front side of the system.

        You should now be able to access the base system ROMs (See page
        4 of 4).

      o Using a small pocket flat head screwdriver, gently insert the
        screwdriver between the ROM and the ROM socket on the right side

of the ROM on the right, and pry the ROM up until it is free of
the system module.

o Repeat this same procedure for the ROM on the left.

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2. INSTALLING THE NEW BASE SYSTEM ROMS IN THE VAXSTATION 4000 MODEL 60
   ----

   o Install ROM 23-207E8-00 in the left ROM socket with the notch
     facing the left, by inserting the ROM with the pins on the
     back side first, then inserting the front pins and push down.

                         ****
                         * CAUTION *
                         ****

        BE CAREFUL NOT TO BEND THE PINS ON THE NEW ROMS.

****

   o Install ROM 23-206E8-00 in the right socket with the notch facing
     the left, by inserting the ROM with the pins on the back side first,
     then inserting the front pins and push down.

   o Re-install the optional graphics module (if applicable), by inserting
     the back side through the hole in the back of the system box, then
     by pushing the front of the graphics module down into the connector
     on the system module.

   o Connect the monitor cable or cables, and the power cable.

   o Replace the system cover by aligning the teeth of the cover with
     the teeth on the side of the system enclosure and lower the cover
     until it catches and clicks into place.

   o Power-up the system and wait for the power-up diagnostics to finish.

   o Type "SHOW CONFIG". The top line should be:(KA46-A V1.2-343-V4.0).
     If the power-up diagnostics pass and the top line is correct, the
     FCO is complete.

                         ****
                         * NOTE   *
                         ****

   For more information refer to the VAXstation 4000 Model 60 Service
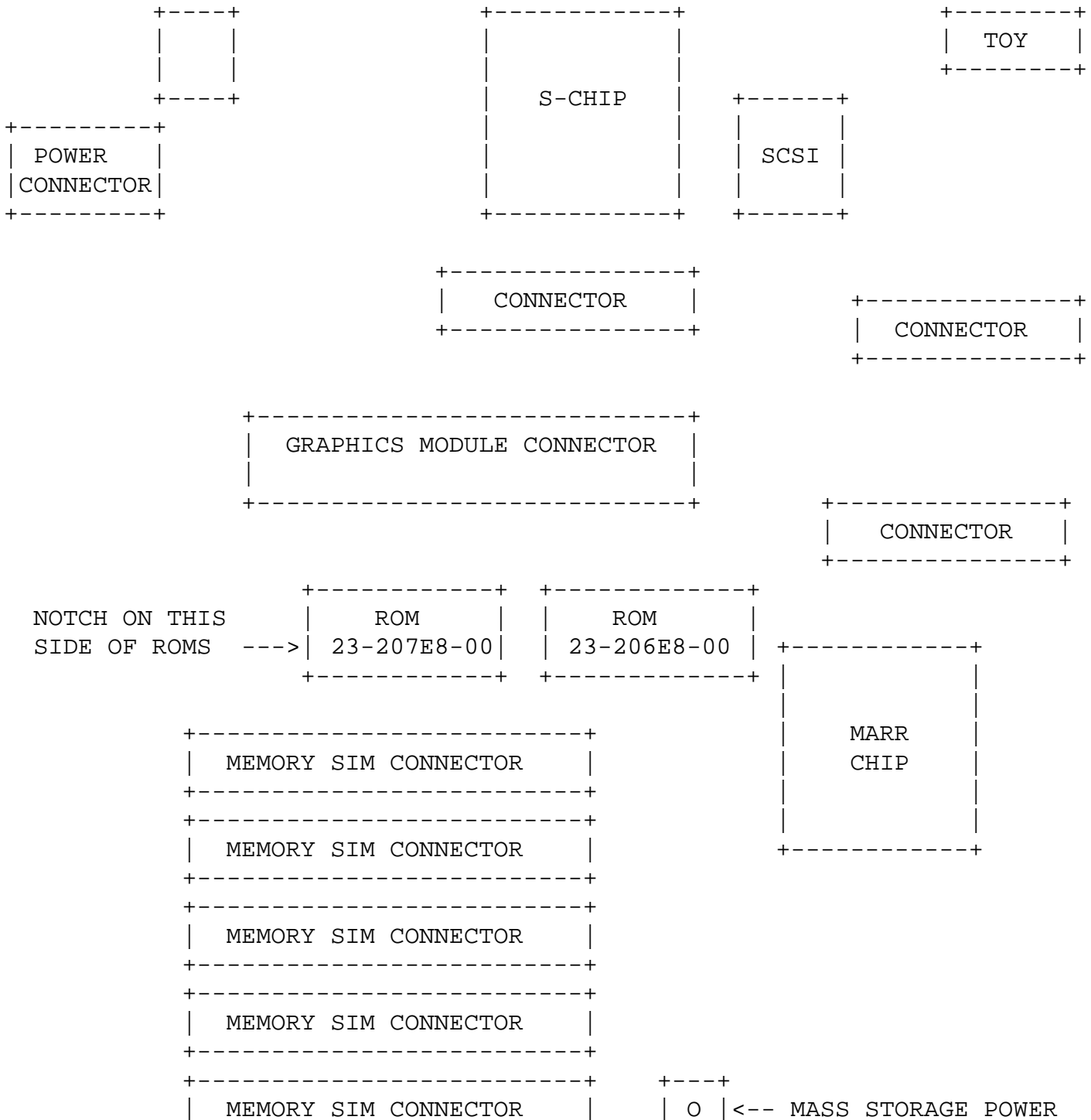   Information Manual (EK-V466B-SV-001).

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                    54-20346-01 KA46 CPU

                         BACK SIDE
+----------------------------------------------------------------------+
|                                                                      |
|                      EXTERNAL CONNECTORS                             |
| _____  |
|                                                                      |
|         +----+              +-----------+           +--------+ |
|         |    |              |           |           |  TOY   | |
|         |    |              |           |           +--------+ |
|         +----+              |   S-CHIP  |   +------+            |
| +---------+                 |           |   |      |           |
| | POWER   |                 |           |   | SCSI |           |
| |CONNECTOR|                 |           |   |      |           |
| +---------+                 +-----------+   +------+           |
|                                                                      |
|                 +----------------+                                   |
|                 |   CONNECTOR    |         +--------------+          |
|                 +----------------+         |  CONNECTOR   |          |
P|                                           +--------------+          |
O|                                                                     |
W|        +--------------------------------+                           |
E|        |   GRAPHICS MODULE CONNECTOR    |                           |
R|        |                                |                           |
 |        +--------------------------------+        +--------------+    |
S|                                                  |  CONNECTOR   |    |
U|                                                  +--------------+    |
P|        +-------------+  +-------------+                              |
P| NOTCH ON THIS        |    ROM     |  |    ROM      |                 |
L| SIDE OF ROMS  --->| 23-207E8-00|  | 23-206E8-00 | +-----------+     |
Y|                      +-------------+  +-------------+ |           |   |
 |                                                      |           |   |
 |        +--------------------------+                  |  MARR     |   |
 |        | MEMORY SIM CONNECTOR     |                  |  CHIP     |   |
 |        +--------------------------+                  |           |   |
 |        +--------------------------+                  |           |   |
 |        | MEMORY SIM CONNECTOR     |                  |           |   |
 |        +--------------------------+                  +-----------+   |
 |        +--------------------------+                                  |
 |        | MEMORY SIM CONNECTOR     |                                  |
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 |        +--------------------------+                                  |
 |        | MEMORY SIM CONNECTOR     |                                  |
 |        +--------------------------+                                  |
 |        +--------------------------+        +---+                     |
 |        | MEMORY SIM CONNECTOR     |        | O |<-- MASS STORAGE POWER
```

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    +---------------------------+        | O |<--      CONNECTOR        |
    +---------------------------+        | O |     +----------+         |
    |   MEMORY SIM CONNECTOR     |        | O |     | CONNECTOR|         |
    +---------------------------+        +---+     +----------+         |
+----------------------------------------------------------------------+

                          FRONT OF SYSTEM


    +---------------------------+   |
    |   |   |   |   |   |   |   |   |
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                            LARS DATA

CATEGORY F   USA   GIA   EUROPE

Activity Codes:

(a)Contract and Warranty   W   U   Y
(b)IN-DEC Contract/Warranty   K
   Hardware Segment Code   111   111

   Non Contract/Non Warranty   F   F   F
(c)RTD/Off-Ste Agreement   F
   Product Line   01   01

DEC Option   KA46   KA46   KA46
Type of Call   M   M   M
Action Taken   D   D   I
Fail Area-Module-FCO Comments KA46-F001   KA46-F001   KA46-F001
Material Used   EQ-01651-01   EQ-01651-01 EQ-01651-01

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

(b)   Applies to INDEC AREA ONLY - Warranty Optimum, Warranty Standard
      and Warranty Basic (on-site) Agreements.

(c)   RTD=Return to Digital or Off-Site Agreements; if Field Engineer
      On-Site, use Activity Code "F".
\\FCO_DOCS
\\EQ-01651
\\KA46
\\VAXstation 4000
\\FA-04986
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