DIGITAL	FCO	CATEGORY [O]	PAGE 1 OF 6

FIELD CHANGE ORDER   NUMBER: KFMSB-AA-O001

APPLICABILITY:
 This FCO should be implemented on all systems which include a T2029-AC
 module; The T2029-AC module is part of the option KFMSB. The reason for
 this FCO is to make sure all field stockrooms and supplies get purged.
 All customers with either the KFMSB option or the T2029-AC module
 installed, must be checked to verify compliance with this FCO.
 This FCO incorporates ECO T2029-AC-TWO002.

PROBLEM & SYMPTOM:
 Problems exist in the present KFMSB (T2029-AC) module.
 Present hardware and firmware could crash or hang the system
 1) The programmable timers will not execute a 2 byte write properly.
 2) The firmware reports the wrong hardware and software revisions.
 3) The firmware does not support the LFU utility.
 This FCO must be implemented completely, in order for the
 KFMSB (T2029-AC), to function properly.

SOLUTION:
 Install the new version of the KFMSB-AA (T2029-AC) module, new
 revision of module will be C02.

QUICK CHECK:
 Visually inspect the KFMSB (T2029-AC) module for the following identifiers,
 on the parts listed below; The module will have the following identifiers,
 if the FCO/ECO has already been implemented.
      at location E151   -   23-489K3-00
      at location E7   -   23-430E9-00

 If the KFMSB-AA (T2029-AC) module, is stamped C02; then the FCO/ECO has
 been implemented.

PRE/CO-REQUISITE FCO:	MFIT HRS
N/A	1.0

TOOL/TEST EQUIPMENT: 1.)   Std FS tool kit and ESD kit

FCO PARTS INFORMATION

FCO KIT NO.	DESCRIPTION OF CONTENTS
EQ-01709-01	Qty 1: T2029-AC module (Revision C02)
FA-05046-01	Qty 1: Field Application (FA) Document

FCO CHARGING INFORMATION (see last page)

APPROVALS

FIELD APPLICATION DOCUMENT (FA), Continuation Page

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```
*********************************************************
* WARNING:        *
*          *
* o For KFMSB(T2029-AC) modules presently in systems;   *
*    It is suggested that the module be checked using    *
*       *   quick check process, described in this FCO.        *
*    This will entail setting up a convenient time with  *
*    the customer, to bring system down to check the     *
*    T2029-AC for FCO compliance.                         *
*       *                                                 *
*       * o If system needs the FCO upgrade, a convenient     *
*    time for a system shutdown, will need to be         *
*    scheduled with the customer.  To replace the        *
*    system's earlier revision KFMSB(T2029-AC) module,   *
*    with a compliant version C02, of the module.        *
*       *                                                 *
*       *                                                 *
*       * o To limit the customers inconvenience, during KFMSB *
*    compliance check,  it would be best to bring along  *
*    an FCO compliant version of the KFMSB.  This        *
*       *    would allow, the checking and if necessary the    *
*  *   replacement of a non FCO compliant KFMSB, during    *
*    one customer visit.                                  *
*********************************************************
```

```
+------------------+
| PRE-INSTALLATION |
+------------------+
```

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*********************************************************
*       *                                                 *
*       *   The PRE-INSTALLATION process will determine, if    *
*  this FCO has been implemented.  This process will     *
*  also discuss what steps to take, if this FCO needs    *
*  to be implemented.                                     *
```

```
        *                                                      *
*************************************************************

1.  PRE-INSTALLATION
--------------------

1.1 STOCK ROOM SUPPLIES:

 a) VERIFY that all the KFMSB(T2029-AC) module(s)
           presently in stockrooms, comply with this
     FCO.  Use the quick check process discussed
     in this FCO, to verify the necessity of this FCO.

 b) If any of the KFMSB(T2029-AC) module(s) in
     the stockroom need this FCO implemented,
     order the appropriate FCO kit to replace
     the out of revision module(s).  You should
                 consume the kit on a LARS form.




        FIELD APPLICATION DOCUMENT (FA), Continuation Page

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1.2 CUSTOMER SITE:

 a) To verify if the customers' T2029-AC module(s)
     require implementation of this FCO will
     require that a system shutdown occur.

 b) It is suggested that the unless the customer
     is reporting problems with the KFMSB(T2029-AC)
     module(s), the system shutdown be performed
     during a regularly scheduled maintenance visit
     or during a regularly scheduled customer
     system shutdown.

 c) VERIFY if the KFMSB(T2029-AC) module(s) require
           the implementation of this FCO.  Use the
     quick check process, discussed in this FCO
     to verify the necessity of this FCO.

NOTE:  It should take about 5 minutes to verify FCO status.
           Make sure proper ESD module removal process is followed.
       *************************************************************
       *                    ***  C A U T I O N  ***                    *
 *    This module, as all other modules, contains           *
 * electrostatic discharge sensitive devices (ESDS).      *
```

```
*        The use of the VELOSTAT kit is essential to prevent    *
* damage which may not be noticed immediately.            *
*****************************************************************
```

1.2.1 REPLACEMENT OF KFMSB MODULE

 a) If the KFMSB(T2029-AC) module(s) need this FCO
    implemented, order the EQ kit. The revision of
    the T2029-AC module, with this (FCO/ECO) implemented
    will be C02.

NOTE: To limit customer inconvenience, if possible
         bring an FCO kit to the customer site
         during the PRE-INSTALLATION check. This way the
         FCO compliance check and the replacement
         of the non-compliant KFMSB can be accomplished,
         during one customer visit if necessary.

 b) Once you have received the new KFMSB module(s),
    verify that they have the FCO implemented. Use the
    quick check process in this FCO for FCO verification.

 c) Refer to the INSTALLATION section of this FCO
    (section 5), for installation sequence.

FIELD APPLICATION DOCUMENT (FA), Continuation Page

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3. Tools

3.1 Use Standard Field Service tool kit with ESD kit.

```
      *****************************************************************
      *                  ***  C A U T I O N  ***                      *
*   This module, as all other modules, contains              *
* electrostatic discharge sensitive devices (ESDS).      *
*        The use of the VELOSTAT kit is essential to prevent    *
* damage which may not be noticed immediately.            *
*****************************************************************
```

4.1   Set up VELOSTAT KIT

        4.1.1 Unfold the VELOSTAT mat to full size (24" x 24").

        4.1.2 Attach the 15 foot ground cord to the VELOSTAT
               snap fastener on the mat.

```
              4.1.3  Attach the alligator clip end of the ground cord
                     to a good ground on the cabinet.

              4.1.4  Attach the wrist strap to either wrist.

+---------------+
| INSTALLATION  |
+---------------+
 5. Installation
 5.1  SYSTEM SHUTDOWN
  a) Bring new KFMSB(T2029-AC) module(S) to
     the customer site.

  b) Bring system down using the customer's
      preferred shutdown process.

  c) Locate the KFMSB(S) that do not have this
     FCO implemented.

  d) Make sure all system power is off and that
     no power is on the XMI bus with the KFMSB(S)
     to be replaced.
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FIELD APPLICATION DOCUMENT (FA), Continuation Page

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```
  e) Replace the KFMSB(S) effected by this FCO,
     with the new KFMSB(S) that have his FCO
     implemented.

 NOTE:  It should take about 5 minutes to install this FCO.
            Make sure proper ESD module removal process is followed.
        *****************************************************************
        *                    ***  C A U T I O N  ***                    *
 *    This module, as all other modules, contains          *
 * electrostatic discharge sensitive devices (ESDS).       *
 *        The use of the VELOSTAT kit is essential to prevent    *
 * damage which may not be noticed immediately.            *
        *****************************************************************
  f) Then turn on all power supplies and prepare for
                   a system power up.

  g) Once power has been restored to the system refer
     to the verification section of this FCO (section 6.)
     for the completion of this installation.

 NOTE: It is suggested that no system reboot be attempted,
```

until the verification section has been completed.

+---------------+
| VERIFICATION |
+---------------+

 6. Verification

     6.1 FUNCTIONAL CHECK
  a) Verify self test performs without errors.
      If LED lights, then self test has passed successfully.

  b) Boot the system software, following any
      preferred customer process.

  c) Verify that all the DSSI disks, used by customer
      are seen by the system, once software has completed
      its startup process.

  d) VERIFICATION IS COMPLETE

       FIELD APPLICATION DOCUMENT (FA), Continuation Page

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| AFTER SUCCESSFUL COMPLETION |
+--------------------------------+

         7.   Report this FCO activity on the LARS form.

                                  LARS

                         USA   GIA   EUROPE

      COVERAGE CODE
      (a)Contract   W   U   K
         Warranty   W   U   W
         Inhouse   A
         Invoiced per Call   F

      (b)IN-DEC Contract   K   U
         Non Contract/Non Warranty F   F
      (c)RTD/Off-site Agreement   F   U

         Hardware Segment Code   111   111
         Product Line   031   031
         BBC code for K W A   111
         BBC code for F   031

DEC Option

Option ID	X	N/A	N/A
Type of Call	M	M	
REQUEST TYPE			I
Action Taken	D	D	
Action Taken	D	D	Y
QUALITY CODES			M,J,R,X,A,Z
Fail Area-Module-FCO-Comments	KFMSB-AA-O001	KFMSB-AA-O001	KFMSB-AA-001
Material Used	EQ-01709-01	EQ-01709-01	EQ-01709-01

(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site)
    Agreements; * Note material (only) free of charge for all
customers.
(b) Applies to IN-DEC Area Only
(c) RTD=Return to Digital or Off-site Agreements; If Field Engineer
    On-site, use Activity Code "F".

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|                     FCO CHARGING INFORMATION                      |
|_____|
|    WARRANTY/CONTRACT      ||      NONWARRANTY/NONCONTRACT          |
|_____||_____|
|   ON-SITE   |  OFF-SITE   ||  ON-SITE    |  OFF-SITE  |MATERIAL ONLY|
|_____|_____||_____|_____|_____ _____|
|TRAVEL/| EQ  |       | EQ  ||TRAVEL/| EQ  |       | EQ |ORDER-ADMIN, HANDLING|
|INSTALL| KIT |INSTALL| KIT ||INSTALL| KIT |INSTALL| KIT|PKG,SHIPPING & EQ KIT|
|_____|_____|_____|_____||_____|_____|_____|____|_____|
| DEC   | DEC | DEC   |DEC  || CUS   | CUS | CUS   | CUS|        CUS          |
|_____|_____|_____|_____||_____|_____|_____|____|_____|
```