

# Service

## HiPath 4000 Troubleshooting

Service Manual

A31003-H3130-S100-4-7620

[www.siemens.com/enterprise](http://www.siemens.com/enterprise)

**SIEMENS**

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## **F7000**

**A9000 -- F1000 -- F2000 -- F3000 -- F4000 -- F5000 -- F6000 -- F7000 -- F8000**

**F7000**

**F7001**

**F7002**

**F7003**

**F7004**

**F7005**

**F7050**

**F7051**

**F7052**

**F7053**

**F7054**

**F7056**

**F7059**

**F7062**

**F7072**

**F7074**

**F7075**

**F7076**

**F7079**

**F7082**

**F7083**

**F7084**

**F7085**

**F7100**

**F7101**

**F7102**

**F7132**

**F7153**

**F7154**

**F7155**

**F7156**

**F7168**

**F7169**

**F7177**

**F7178**

**F7186**

**F7187**

**F7188**

**F7189**

**F7190**

**F7191**

**F7192**

**F7193  
F7194  
F7195  
F7196  
F7197  
F7198  
F7199  
F7200  
F7201  
F7202  
F7356  
F7359  
F7360  
F7361  
F7362  
F7363  
F7364  
F7365  
F7400  
F7402  
F7403  
F7404  
F7405  
F7406  
F7407  
F7408  
F7420  
F7421  
F7422  
F7530  
F7531  
F7532  
F7533  
F7534  
F7536  
F7537  
F7538  
F7541  
F7542  
F7544  
F7545  
F7546  
F7547  
F7548**

**F7549**  
**F7550**  
**F7551**  
**F7552**  
**F7553**  
**F7554**  
**F7556**  
**F7557**  
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**F7642**  
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**F7645**  
**F7646**  
**F7650**  
**F7660**  
**F7661**  
**F7662**  
**F7663**  
**F7664**  
**F7665**  
**F7666**  
**F7700**  
**F7701**

## **F7000**

### **SM-INSERT**

#### **CAUSE. POWER ON**

*Type:* Service-specific (Format 16)

*Short text:* End of power failure.

*Cause:* Mains power supply back on again.

*Action:* Positive acknowledgment, no action.

#### *Interpretation of auxiliary data:*

Byte 0	=	Reason for boot (LO_M_AGD_SET)
00		POWER ON
01		RELOAD
02		HARD RESTART
03		SOFT RESTART
04		STOP RESET KEY
05		MANUAL BOOT
06		START OF SOFT RESTART
07		AGD MAX
Byte 1	=	Memory expansion (number of MEM boards)
Byte 2	=	Startup counter (current counter of soft restarts made)
Byte 3	=	Startup limit (Number of soft restarts that lead to a hard restart)
Byte 4	=	Hour (Hex value)
Byte 5	=	Minute (Hex value)
Byte 6	=	Second (Hex value)
Byte 7-8	=	Millisecond (Hex value)
Byte 9	=	Day (Hex value)
Byte 10	=	Month (Hex value)
Byte 11-12	=	Year(Hex value)
Byte 13-14	=	Number of day (starting from 1st January)
Byte 15	=	Weekday
00		Sunday
01		Monday
02		Tuesday
03		Wednesday
04		Thursday
05		Friday
06		Saturday

**F7001****SM-INSERT*****Cause:***

RELOAD

***Type:***

Service-specific (Format 16)

***Short text:***

Total system failure

***Cause:***

Server reloaded and operative.

***Action:***

This is not an error message, but a READY message from the server.

***Interpretation of auxiliary data:*** see [F7000](#).



## **F7002**

### **SM-INSERT**

**Cause:** HARD RESTART

**Type:** Service-specific (Format 16)

**Short text:** Central hardware error

**Cause:** Usually a central hardware error. Hard restart initiated by dependability system. Alternatively, a soft restart may have been made because of a watchdog timeout. An increase in the number of soft restarts ([F7003](#)), this can escalate to a hard restart.

**Action:** Find the error by using further error reports.

**Interpretation of auxiliary data:** see [F7000](#).

**F7003****SM-INSERT**

*Cause:* SOFT RESTART

*Type:* Service-specific (Format 16)

*Short text:* Central software plausibility error

*Cause:* Usually a central software plausibility error. Soft restart initiated by dependability, may escalate to hard restart if error persists.

*Action:* Find the error by using further error reports.

*Interpretation of auxiliary data:* see [F7000](#).

**F7004****SM-INSERT***Cause:*

RESET KEY

*Type:*

Service-specific (Format 16)

*Short text:*

Reset button pressed

*Cause:*

Reset button pressed on the central control processor (DP).

*Action:*

If error occurs repeatedly, save the error message data and contact your next level of support.

*Interpretation of auxiliary data:* see [F7000](#).

**F7005****SM-INSERT**

*Cause:* MANUAL STARTUP

*Type:* Service-specific (Format 16)

*Short text:* Manual startup.

*Cause:* Manual startup.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

*Interpretation of auxiliary data:* see [F7000](#).

**F7050**  
**SM-DP**  
**POWER FAIL**

*Type:* Diagnosis-specific (several formats apply)  
*Short text:* Hardware interrupt without dependability actions  
*Cause:* A battery voltage failure has been detected. This message is output if an interrupt occurs due to a short voltage failure. This error has no effect on user services.  
*Action:* No action necessary.

**F7051**  
**SM-DP**  
**TIMEOUT ERROR**

*Type:*

Diagnosis-specific (Format 03)

*Short text:*

Multibus seized

*Cause:*

The data processor DP has failed to release the multibus after a seizure.

*Action:*

Save the error message data and contact your [next level of support](#).

**F7052**  
**SM-DP**  
**CLOCK OFF**

*Type:* Diagnosis-specific (Format 03)

*Short text:* Clock failure

*Cause:* System clock has failed.

*Action:* The system responds with a soft restart. Save the error message data and contact your [next level of support](#).

## **F7053**

### **SM-DP**

#### **WATCHDOG 1**

*Type:* Service-specific (Format 28)

*Short text:* Watchdog 1 timeout

*Cause:* The current task is output with stack and addresses (LOG ADDR = 0) and all (LOG STACK = 0) the tasks in the OS Ready Queue in order of priority (lowest priority first). The number of stack messages per task depends on the BCA memory available, up to a maximum of 10. If only the current task is output, then the WD1 timeout was caused by this task. If more than one task is output, the interrelationships of the tasks in the stack must be determined. Please note that although tasks awaiting resource allocation are not listed, they may still be the cause of the watchdog timeout.

*Action:* The system responds with a soft restart. Save error message data and contact your [next level of support](#).



**F7054**  
**SM-DP**  
**WATCHDOG 2**

*Type:*

Diagnosis-specific (Format 03)

*Short text:*

Watchdog 2 timeout

*Cause:*

Watchdog 2 for LOW priority has timed out.

*Action:*

Save error message data and contact your [next level of support](#).

## **F7056**

### **SM-DP**

#### **UNDEFINED ERROR**

**Type:** Diagnosis-specific (several formats apply)

**Short text:** Implausible error

**Cause:** An implausible NMI has occurred (non-masked interrupt), which was generated by the DP.

**Action:** If this error recurs frequently, replace the processor board (DP). Save error message data and contact your [next level of support](#) if this does not work.

**F7059****SM-DP****MULTIBUS TIMEOUT**

**Type:** Service-specific (Format 27)

**Short text:** Inconsistency

**Cause:** The DP has detected an inconsistency on the multibus. The DP is not receiving the required responses from its partner processor (IOP, IP or LBC). The partner processor can be determined by means of the slot number output in the error message.

**Action:** Check the hardware (boards and bus cable). If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

**F7062**  
**SM-DP**  
**WATCHDOG 0**

**Type:** Diagnosis-specific (Format 32)

**Short text:** Watchdog 0 timeout

**Cause:** Repetitive error loop in high-priority task, OS deadlock, interrupts blocked too long or WD0 task no longer being polled.

For watchdog timeouts, up to 5 stack messages can be output before the actual watchdog task information message. The number of task information messages is limited to 7. The number of corresponding stack data messages is limited to 5.

Task information messages are output in the following sequence: running task, clock task, WD0 task, nucleus task, tasks in the nucleus queue or tasks in the OS ready queue. The tasks in the OS ready queue are output in order of priority (lowest priority first).

If only the running task is output, then the WD0 timeout was caused by this task. If more than one task is output, the interrelationships of the tasks in the stack must be determined. Please note that although tasks awaiting resource allocation are not listed, they may still be the cause of the watchdog timeout.

The system responds with a soft restart. The last task information message contains the action initiated.

**Action:** Save diagnosis data (stack messages and task information messages) and contact your [next level of support](#).

**F7072****SM-DP****DISALLOWED ADDRESS**

*Type:* Service-specific (Format 27)

*Short text:* Software error

*Cause:* Processor has attempted to access an address outside the upper range value of the local memory address.

*Action:* Save error message data and contact your [next level of support](#).

## **F7074**

### **SM-DP**

#### **TEST WATCHDOG 0 FAULT**

*Type:* Service-specific (Format 03)

*Short text:* Watchdog 0 error

*Cause:* A hardware check by the routine test organization (RTO) was completed with errors.

*Action:* Replace processor board (DP). If this does not work, save error message data and contact your [next level of support](#).

**F7075****SM-DP****TEST WATCHDOG 1 FAULT**

*Type:* Service-specific (Format 03)

*Short text:* Watchdog 1 error

*Cause:* A hardware check by the routine test organization (RTO) was completed with errors.

*Action:* Replace processor board (DP). If this does not work, save error message data and contact your [next level of support](#).

**F7076**  
**SM-DP**  
**TIMEOUT FAULT**

*Type:* Service-specific (Format 03)

*Short text:* Timeout

*Cause:* A hardware check by the routine test organization (RTO) was completed with errors.

*Action:* Replace processor board (DP). If this does not work, save error message data and contact your [next level of support](#).



## F7079

### SP300E V2.0 / R 6.5 and earlier

#### SM-DP

##### DPML PARITY ERROR

*Type:* Service-relevant (Format 27)

*Short text:* Checksum error

*Cause:* In the DPML board's local memory database, a byte has been corrupted (checksum error at the DPML board). The error analysis function evaluates which byte (physical address) is defective.

*Action:* The system react with a reload. Replace the DPML board. Save error message data and notify your [next level of support](#) if no solution is available.

### SP300E-V3.0/R6.6 and later

#### SM-DP

##### PARITY ERROR

*Type:* Service-relevant (Format 47)

*Short text:* Parity error, memory error

*Cause:* Sporadic defective memory component

*System reaction:* If this error occurs repeatedly, replace the Pentium processor board.

*Interpretation of auxiliary data:* See [F3176](#).

Basically, the fourth digit combination was increased from 2 digits to 3 digits for record specification in the case of PEN/EBT and LD.

The following actions which were only relevant for US Service were omitted from SP300E-V3.0/R6.6 and later:

- SR LTUR,
- HR LTUR,
- RELO LTUR,
- BL LTUR,
- PEBL LTUR

The following new actions are relevant for all services (US and IM):

- DB\_RS\_TEMP\_LOCKED signaled with **TEMPLOCK**  
--> temporarily locked. Commissioning follows.
- DB\_RS\_IN\_SERV\_TRIAL is signaled with INSTRIAL  
--> in service trial

**F7082****SM-DP*****Short text:***

PARTNER RESET

***Type:***

Service-specific (Format 39)

***Short text:***

ADP restart

***Cause:***

Base processor has requested an ADP restart.

***Action:***

If error occurs repeatedly, save the error message data and contact your  
next level of support.

**F7083****SM-DP****NMI PCI ERROR**

**Type:** Service-relevant (Format 47)

**Short text:** Non Maskable Interrupt at the peripheral computer interface bus (PCI BUS).

**Cause:** The Pentium CPU and the connected units, such as memory or hard disk, LAN controller, etc. are connected via the peripheral computer interface bus (PCI BUS). The PCI NMI error (non maskable interrupt) occurs in the event of component or bus communication faults. The error with format 47 only occurs in the case of Pentium boards.

**System reaction:** Soft restart

**Action:** If this error occurs repeatedly, replace the Pentium processor board.

**Interpretation of auxiliary data:** See new error message [F3176](#).

**F7084**  
**SM-DP**  
**FAN ERROR**

**Type:** Service-specific (Format 49)

**Short text:** RPM problems with the fans

**Cause:** The fans have failed or cannot reach the set speed (revolutions per minute)

**System reaction:** If the cooling of the processor boards is insufficient due to RPM problems with the fans, higher RPMs are set.

**Action:** Check the RPM values for the individual fans and replace any defective items.

**Interpretation of auxiliary data:**

The current and set rotation speeds are displayed. In addition, the current board and processor temperatures and the status of the controller are shown.

## **F7085**

### **SM-DP**

#### **TEMPERATURE ERROR**

**Type:** Diagnosis-relevant (Format 49)

**Short text:** Temperature thresholds of processor boards reached

**Cause:** A processor or processor board has reached its current lower or upper temperature threshold.

**System reaction:** New lower and upper temperature thresholds are set for the processor or the processor board. The rotation speeds of the fans are also recalculated accordingly.

**Action:** If this error message occurs frequently, check the cause of the temperature problems (e.g., fan problems [F7084](#)) or save the error data and notify a product specialist.

**Interpretation of auxiliary data:**

The current temperatures and all temperature thresholds of the processor board that produces the alarm are displayed. In addition, diagnosis-relevant data such as OVER TEMP, HYST and the status of the temperature sensor are shown.

**F7100**  
**SM-MEM**  
**1 BIT ERROR**

*Type:* Service-specific (Format 12)

*Short text:* 1-bit error

*Cause:* Error has no effect on operation; this message is generated by an overflow (> 20 times).

*Action:* If error occurs repeatedly, replace the board.

**F7101**  
**SM-MEM**  
**2 BIT ERROR**

*Type:*

Service-specific (Format 12)

*Short text:*

2-bit error

*Cause:*

Two-bit error. Reaction is always a restart.

*Action:*

Replace board affected.

**F7102**  
**SM-MEM**  
**WRPROT ERROR**

*Type:* Service-specific (Format 12)  
*Short text:* Write-protect error  
*Cause:* Write-protect error. Reaction is always a restart.  
*Action:* Replace board affected.



**F7132**  
**SM-MEM**  
**MEM PARITY ERROR**

*Type:* Service-specific (Format 12)

*Short text:* Corrupted byte

*Cause:* Corrupted byte in the local memory of the M8M. The error analysis system FA determines which byte is errored (physical address).

*Action:* This error message always initializes a reload. Replace the M8M.

**F7153**  
**SM-IP**  
**FW ERROR**

*Type:*

Diagnosis-specific (Format 13)

*Short text:*

Inconsistency

*Cause:*

Interface processor (IP) reset because of an inconsistency.

*Action:*

Check firmware and replace board if necessary.

**F7154**  
**SM-IP**  
**SPOR ERROR**

*Type:* Diagnosis-specific (Format 13)  
*Short text:* Sporadic error  
*Cause:* Sporadic error.  
*Action:* Message only for statistics.

## **F7155**

### **SM-IP**

#### **UNDEFINED ERROR**

*Type:* Diagnosis-specific (Format 13)

*Short text:* Implausible error

*Cause:* Implausible error.

*Action:* If this error occurs frequently, replace the board. If this does not work, save the error message data and contact your [next level of support](#).

**F7156****SM-IP****MULTIBUS TIMEOUT**

**Type:** Diagnosis-specific (Format 13)

**Short text:** Inconsistency

**Cause:** Multibus gets no acknowledgment from interface processor (IP) because of inconsistency.

**Action:** Check the hardware, boards and bus cables. If this does not work, save the error message data and contact your [next level of support](#).

**F7168****SM-IP****ACT PARTNER ON-LINE**

*Type:* Service-specific (Format 13)

*Short text:* Server IP responding to polling

*Cause:* Server IP is online to IEC bus again.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F7169****SM-IP****STANDBY PARTNER ONLINE**

*Type:* Service-specific (Format 13)

*Short text:* Standby system half responding to polling

*Cause:* Standby CC system half is online again.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F7177****SM-IP****ACT NO PARTNER*****Type:***

Service-specific (Format 2F)

***Short text:***

No connection to CC

***Cause:***

No connection to active CC half.

***Action:***

System responds with a soft restart. Replace IP or MIP board if necessary, and check cables.



**F7178****SM-IP****STANDBY NO PARTNER**

*Type:* Service-specific (Format 13)

*Short text:* Failure of standby CC half

*Cause:* Standby CC system half cannot be accessed.

*Action:* Replace IP or MIP board if necessary, and check cables.

**F7186**  
**SM-IP**  
**ACT TIMEOUT**

*Type:*

Diagnosis-specific (Format 13)

*Short text:*

Error during message transmission

*Cause:*

An error has occurred during message transmission to the IP of the active system.

*Action:*

This leads to a soft restart. Save error message data and contact your next level of support.

**F7187****SM-IP****STANDBY TIMEOUT**

*Type:* Diagnosis-specific (Format 13)

*Short text:* Error during message transmission

*Cause:* An error has occurred during message transmission to the IP of the standby CC half.

*Action:* This leads to a soft restart. Save error message data and contact your next level of support.

**F7188**  
**SM-IP**  
**ADS TIMEOUT**

*Type:*

Diagnosis-specific (Format 13)

*Short text:*

Error during message transmission

*Cause:*

An error has occurred during message transmission to the IP of the ADS.

*Action:*

This leads to a soft restart. Save error message data and contact your

next level of support.

**F7189****SM-IP****VMS1 TIMEOUT*****Type:***

Diagnosis-specific (Format 13)

***Short text:***

Error during message transmission

***Cause:***

An error has occurred during message transmission to the IP of VMS-1.

***Action:***

This leads to a soft restart. Save error message data and contact your next level of support.

**F7190****SM-IP****VMS2 TIMEOUT**

*Type:* Diagnosis-specific (Format 13)

*Short text:* Error during message transmission

*Cause:* An error has occurred during message transmission to the IP of VMS-2.

*Action:* This leads to a soft restart. Save error message data and contact your next level of support.

**F7191**  
**SM-IP**  
**VMS3 TIMEOUT**

*Type:* Diagnosis-specific (Format 13)  
*Short text:* Error during message transmission  
*Cause:* An error has occurred during message transmission to the IP of VMS-3.  
*Action:* This leads to a soft restart. Save error message data and contact your  
next level of support.

**F7192****SM-IP*****Cause:***

TCS1 TIMEOUT

***Type:***

Diagnosis-specific (Format 13)

***Short text:***

Error during message transmission

***Cause:***

An error has occurred during message transmission to the IP of TCS-1.

***Action:***

This leads to a soft restart. Save error message data and contact your

[next level of support.](#)



**F7193**  
**SM-IP**  
**TCS2 TIMEOUT**

*Type:* Diagnosis-specific (Format 13)  
*Short text:* Error during message transmission  
*Cause:* An error has occurred during message transmission to the IP of TCS-2.  
*Action:* This leads to a soft restart. Save error message data and contact your  
next level of support.

**F7194**  
**SM-IP**  
**TCS3 TIMEOUT**

*Type:*

Diagnosis-specific (Format 13)

*Short text:*

Error during message transmission

*Cause:*

An error has occurred during message transmission to the IP of TCS-3.

*Action:*

This leads to a soft restart. Save error message data and contact your  
next level of support.

**F7195**  
**SM-IP**  
**NO PARTNER**

*Type:* Diagnosis-specific (Format 2F)

*Short text:* Remote processor off-line

*Cause:* A routine poll has shown that the remote (partner) processor is not responding.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F7196****SM-IP****PARTNER TIME**

*Type:* Diagnosis-specific (Format 2F)

*Short text:* Connection loss

*Cause:* Loss of connection on receive side during a message transfer, due to a connection cleardown.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F7197****SM-IP****PARTNER BACK ON-LINE**

*Type:* Diagnosis-specific (Format 2F)  
*Short text:* Remote processor on-line again  
*Cause:* The partner processor is on-line again.  
*Action:* Positive acknowledgment, no action.

**F7198**  
**SM-IP**  
**TIME OUT**

*Type:*

Diagnosis-specific (Format 13)

*Short text:*

IP not responding

*Cause:*

IP does not respond within required time.

*Action:*

Exchange IP.

**F7199****SM-IP****PARTNER RESET**

*Type:* Diagnosis-specific (Format 2F)

*Short text:* Remote processor reset

*Cause:* The partner processor is being reset due to a previous loss of connection.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F7200**  
**SM-MB**  
**IOP CTO**

***Type:***

Diagnosis-specific (Format 03)

***Short text:***

No multibus seizure acknowledgment for IOP

***Cause:***

Input/output processor (IOP) seizes multibus without receiving seizure acknowledgment.

***Action:***

Check the hardware, firmware, and boards. If this does not work, save the error message data and contact your [next level of support](#).



**F7201**  
**SM-MB**  
**LBC CTO**

**Type:**

Diagnosis-specific (Format 03)

**Short text:**

No multibus seizure acknowledgment for LBC

**Cause:**

Line bus controller (LBC) seizes multibus without receiving seizure acknowledgment.

**Action:**

Check the hardware, firmware, and boards. If this does not work, save the error message data and contact your [next level of support](#).

**F7202**  
**SM-MB**  
**IP CTO**

**Type:**

Diagnosis-specific (Format 03)

**Short text:**

No multibus seizure acknowledgment for IP

**Cause:**

Interface processor (IP) seizes multibus without receiving seizure acknowledgment.

**Action:**

Check the hardware, firmware, and boards. If this does not work, save the error message data and contact your [next level of support](#).

**F7356**  
**IOPS-DC**  
**DC TIMEOUT**

*Type:* Diagnosis-specific (Format 06)

*Short text:* IOPS not responding

*Cause:* IOPS does not respond within the necessary time. The IOPS and the SCSI bus are reset and reinitialized. For further details see HEX data. Systems with magnetic tape units: see [F7405](#).

*Action:* Reaction by dependability: Soft restart for the server module. Check the hardware, replace IOPS board if necessary

*Interpretation of auxiliary data:* see [F7403](#).

## **F7359**

### **IOPS-DC**

#### **IOPS DC UNDEFINED**

*Type:* Diagnosis-specific (Format 06)

*Short text:* Undefined error

*Cause:* Error source ambiguous: either IOPS or disk drive. For further details see HEX data.

*Action:* Check terminating resistances and bus cable, exchange if necessary.

*Interpretation of auxiliary data:* see [F7403](#).

**F7360**  
**IOPS-DC**  
**SCSI BLOCK**

*Type:* Service-specific (Format 06)

*Short text:* SCSI bus is blocked

*Cause:* No access to HD, IOPA or CT possible.

*Action:* Check terminating resistances and SCSI cable, exchange if necessary.  
Exchange IOPA/S or HD/Tape/CT.

*Interpretation of auxiliary data:* see [F7403](#).

## **F7361**

### **IOPS-DC**

#### **CONTROLLER ERROR**

*Type:* Service-specific (Format 06)

*Short text:* Controller test error

*Cause:* IOPA reports controller test error.

*Action:* Exchange IOPA.

*Interpretation of auxiliary data:* see [F7403](#).

**F7362**  
**IOPS-DC**  
**INT TEST ERROR**

*Type:* Service-specific (Format 06)  
*Short text:* Interrupt test error  
*Cause:* IOPA reports interrupt test error.  
*Action:* Exchange IOPA.  
*Interpretation of auxiliary data:* see [F7403](#).

**F7363**  
**IOPS-DC**  
**MEM MAP ERROR**

*Type:* Service-specific (Format 06)  
*Short text:* Memory mapping test error  
*Cause:* IOPA reports memory mapping test error.  
*Action:* Exchange IOPA.  
*Interpretation of auxiliary data:* see [F7403](#).



**F7364**  
**IOPS-DC**  
**RAM ERROR**

*Type:* Service-specific (Format 06)  
*Short text:* RAM test error  
*Cause:* IOPA reports RAM test error.  
*Action:* Exchange IOPA.  
*Interpretation of auxiliary data:* see [F7403](#).

## **F7365**

### **IOPS-DC**

#### **SELF TEST TIMEOUT**

*Type:* Service-specific (Format 06)

*Short text:* IOPA not responding

*Cause:* IOPA does not report within time limit after self-test.

*Action:* Exchange IOPA.

*Interpretation of auxiliary data:* see [F7403](#).

**F7400**  
**DRIVE**  
**N INX**

*Type:* Service-specific (Format 11)

*Short text:* Device error

*Cause:* Slot information (LTG:) is contained in the auxiliary data.

*Action:* Reaction by dependability: statistics count or deactivation of device affected. Check the hardware, terminating resistances, SCSI cable, IOPS and devices (drives).

*Interpretation of auxiliary data:* see [F7403](#).

**F7402**  
**DRIVE**  
**ERROR DET BY IOP**

*Type:* Service-specific (Format 11)

*Short text:* SCSI controller (IOPS, IOPA(X), SIOP) not present

*Cause:* Error on HD, CT, TAPE or DAT recorder/driver. The device affected is displayed with DRIVE:...;

H=HD,

C=CT,

T=TAPE,

D=DAT.

*Action:* Check the hardware, terminating resistances, SCSI cable, and devices (drives). Exchange defective HW or devices.

*Interpretation of auxiliary data:* see [F7403](#).

**F7403**  
**DRIVE**  
**IO HARDWARE**

**Type:**

Service-specific (Format 11)

**Short text:**

Error on HD, CT, TAPE or DAT recorder/drive

**Cause:**

Error detected by controller. The device affected is displayed with

DRIVE:...;

H=HD,

C=CT,

T=TAPE,

D=DAT.

**Action:**

Check the hardware, terminating resistances, SCSI cable, and devices (drives). Exchange defective HW or devices.

**Interpretation of auxiliary data:**

Byte 5	=	IOPS status (valid only when byte 9 = H'0A) The auxiliary data varies according to the board type (IOPS/IOPA(X)/DP-boards with SIOP). Only the most common bytes are listed here.
10		No IOP error, order processed
11		SCSI parity error
13		FATAL SCSI ERROR, command canceled
14		FATAL SCSI ERROR, SCSI bus reset, command canceled
15		SCSI bus timeout, command canceled
16		Command timeout, command canceled
17		SCSI bus reset detected, command canceled
18		Order aborted
1A		Drive not initialized
1B		No job started (Ready / not Ready / Ready)
1C		No job started (Ready / not Ready)
1D		Insufficient RAM
20		IOPS task does not exist
21		Command not recognized
22		Illegal command
23		Command sent before end of job in process
24		IOPS-internal error
25		IOPS-internal error
2A		Command not allowed, task not started

	30	Invalid device ID
	32	Invalid transfer descriptor
	38	Maximum number of devices exceeded
	39	Drive type invalid
	3F	Parameter error
	40	SCSI device not responding, selection aborted
	41	Checksum error, command timeout
	41	Checksum error, command canceled
	44	SCSI bus is busy, selection canceled x IOPA copy/verify command error, command canceled
Byte 9	=	Operating status
	00	IO_UNCLASS
	01	IO_DATA
	02	IO_FORMAT
	03	IO_PRINT
	04	IO_WRPROT
	05	IO_HARDW
	06	IO_DELREC
	07	IO_MEDCHG
	08	IO_NOTRDY
	09	IO_CORR
	0A	IO_IOPS
	0C	IO_TIMEOUT
	0D	IO_SOFTW
	0E	IO_COMM
	10	IO_BUS_BUSY
Byte 0A	=	SCSI Status
	00	OK
	02	device reports error
	08	bus busy
	18	reservation conflict
Byte 0B	=	Sense Key
	00	no sense

	01	recovered error
	02	device not ready/access not possible
	03	medium error
	04	hardware error
	05	illegal command
	06	device reset
	07	data protect (medium write-protected)
	08	blank check (usually EOD)
	0A	copy aborted
	0B	command canceled
	0D	volume overflow
Byte 0C	=	Additional Sense Code (device-type-specific, vendor-specific).
Byte 0D	=	Additional Sense Code Qualifier
Byte 0E	=	SCSI Command
	00	test unit ready
	01	rewind
	03	request sense
	04	format unit
	05	read block limits
	07	reassign blocks
	08	read (Group 0)
	0A	write (Group 0)
	0B	seek (Group 0)
	0D	get defect list
	0F	read reverse
	10	write filemarks
	11	space
	12	query
	13	verify
	14	recover buffered data
	15	mode select (Group 0)
	16	reserve

	17	release
	18	copy
	19	erase
	1A	mode sense (Group 0)
	1B	load/unload, start/stop unit
	1C	receive diagnostic results
	1D	send diagnostic
	1E	prevent/allow medium removal
	25	read capacity
	28	read (Group 1)
	2B	locate (Group 1)
	2E	write and verify
	2F	verify
	34	read position
	37	read defect data
	3F	write buffer
	3C	read buffer
	40	change definition (Group 2)
	4C	log select (Group 2)
	4D	log sense (Group 2)
Byte 18-1C	=	Device name. Displayed bytes are in HEX; interpretation according to ASCII table (convert HEX to ASCII)
Byte 18-19	=	Unit
	A1	ADS
	V1	Voice Mail
	T1	Text-Fax-Server
Byte 1A	=	Device type
	H	hard disk
	T	magnetic tape
	D	DAT recorder
	C	cartridge
Byte 1B-1C	=	Controller number



**F7404**  
**DRIVE**  
**IO NOT READY**

*Type:*

Service-specific (Format 11)

*Short text:*

Error on HD, CT, TAPE or DAT recorder/drive.

*Cause:*

Controller not present. The device affected is displayed with DRIVE:...;

H=HD,

C=CT,

T=TAPE,

D=DAT.

*Action:*

Check the hardware, terminating resistances, SCSI cable, and devices (drives). Exchange defective HW or devices.

*Interpretation of auxiliary data:* see [F7403](#).

**F7405**  
**DRIVE**  
**IO DATA**

*Type:* Service-specific (Format 11)

*Short text:* Error on HD, CT, TAPE, MO, or DAT recorder/drive

*Cause:* Loss of data or bit corruption. The device affected is displayed with DRIVE:...; H=HD, C=CT, T=TAPE, D=DAT. In systems with magnetic tape units, parallel access to the SCSI bus can cause collisions, which make the evaluation of the call charge data impossible (see also [F7356](#)).

*Action:* Exchange or clean device and/or medium. Magnetic tape units: check the ground connection to the tape unit/ replace the SCSI bus as per HW Systems Service. MO disk drives: check DIP-FIX settings (see Devices/MO).

*Interpretation of auxiliary data:* see [F7403](#).

**F7406**  
**DRIVE**  
**IO ERROR**

*Type:*

Service-specific (Format 11)

*Short text:*

Error on HD, CT, TAPE or DAT recorder/drive

*Cause:*

The device affected is displayed with DRIVE:...; H=HD, C=CT, T=TAPE,

D=DAT.

*Action:*

Check the hardware, terminating resistances, SCSI cable, and devices (drives). Exchange defective HW or devices.

*Interpretation of auxiliary data:* see [F7403](#).

## **F7407**

### **DRIVE**

#### **QUALITY DEGRADATION**

*Type:* Service-specific (Format 11)

*Short text:* Bad DAT quality

*Cause:* Quality of tape or DAT recorder has deteriorated.

*Action:* Insert cleaning tape,

Exchange old tape, or

Exchange defective DAT recorder.

Delete the alarm [CENTRAL:029](#) MAINTENANCE NOTE if set.

## **F7408**

### **DRIVE**

#### **RESET/DATA LOSS**

*Type:* Service-specific (Format 11)

*Short text:* Power supply failure

*Cause:* Loss of power for (external) DAT recorder.

*Action:* Check power supply

Check that mains power switch is switched on

Always connect external DAT recorder to an uninterruptible power supply (UPS).

Delete the alarm [CENTRAL:029](#) MAINTENANCE NOTE if set.

**F7420**  
**FLASHMEM**  
**WRITE ERROR**

*Type:* Service-specific (Format 11)  
*Short text:* Flash memory write error  
*Cause:* Error while writing to flash memory.  
*Action:* Exchange DP board.

**F7421**  
**FLASHMEM**  
**ERASE ERROR**

*Type:* Service-specific (Format 11)  
*Short text:* Flash memory erase error  
*Cause:* Error while erasing from flash memory.  
*Action:* Exchange DP board.

**F7422**

**FLASHMEM**

**LOW VOLTAGE DETECTED**

*Type:* Service-specific (Format 11)

*Short text:* Flash memory voltage drop

*Cause:* Voltage drop while writing to / erasing from flash memory.

*Action:* Exchange DP board.



**F7530**  
**LCX**  
**NO ERROR**

*Type:*

Service-specific (several formats apply)

*Short text:*

Tests completed without errors

*Cause:*

All associated tests completed without errors.

*Action:*

Tested unit back in service.

## **F7531**

### **LCX**

#### **LCU CENTRAL ERROR**

**Type:** Service-specific (Format 03)

**Short text:** LBU / LCU error

**Cause:** Both channels found defective in LBU / LCU loop test.

**Action:** Check hardware and replace defective units. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

## **F7532**

### **LCX**

#### **LCX CORE TEST ERROR**

*Type:* Service-specific (Format 03)

*Short text:* Core test error

*Cause:* Core test error detected in service module during LCX recovery (central hardware LCX error). Core test = e.g. CHECKSUM ERROR PROM identified in self-test.

*Action:* Check hardware and replace defective units.

## **F7533**

### **LCX**

#### **LCX INTERFACE ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* LCX not reporting

*Cause:* LCX fails to report in or is defective during LCX recovery.

*Action:* Check hardware and replace defective units.

Check LBU/LCU, check backplane jumper settings (must be plugged according to LBU/LCU function). Check connecting cables between basic shelf and expansion shelf. If you are still unable to find the cause of the error, replace the shelf.

## **F7534**

### **LCX**

#### **LCX INTERRUPT ERROR**

*Type:* Service-specific (Format 04)

*Short text:* LCX not responding

*Cause:* LCX in the service module is unable to respond to an interrupt of the data processor (DP).

*Action:* Check hardware (LBC/LCX) and replace defective units.

## **F7536**

### **LCX**

#### **LCX OMS ERROR**

***Type:***

Service-specific (Format 09)

***Short text:***

Plausibility error

***Cause:***

Plausibility error detected by LCX OMS.

***Action:***

Save the error message data and contact your [next level of support](#).

**F7537****LCX****LCX PLAUS ERROR**

*Type:* Diagnosis-specific (Format 05)

*Short text:* Plausibility error

*Cause:* Plausibility error detected by one of the programs in the LCX.

*Action:* Save the error message data and contact your [next level of support](#).

## **F7538**

### **LCX**

#### **LCX TEST TIMEOUT ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Timeout

**Cause:** Timeout detected in an LBU/LCU test.

**Action:** Check hardware and replace defective units.

Check LBU/LCU. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).



## **F7541**

### **LCX**

#### **LCX LOAD ERROR**

*Type:* Service-specific (Format 03)

*Short text:* Load error

*Cause:* Error detected during LCX load, possibly file error on hard disk. Not an LCX error.

*Action:* Start device test for the hard disk.

LCS0: check that both S0 interfaces were configured with "ADD-LCS0"

**F7542****LCX****LCX NOT READY**

*Type:* Service-specific (Format 0B)

*Short text:* Sporadic error

*Cause:* Sporadic overload or HW error.

*Action:* Message only for statistics. Look for any associated, additional error messages, if this error occurs frequently.

## **F7544**

### **LCX**

#### **LCR LOOP TEST TIMEOUT**

*Type:* Service-specific (Format 03)

*Short text:* LCR loop test

*Cause:* LCR loop test.

*Action:* Timeout during test execution usually leads to LCX restart.

Check hardware and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

## **F7545**

### **LCX**

#### **LCR LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** LCR loop test

**Cause:** The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7546**

### **LCX**

#### **VCD LOOP TEST TIMEOUT**

*Type:* Service-specific (several formats apply)

*Short text:* VCD loop test

*Cause:* Loop test for digital voice compression.

*Action:* Timeout during test execution usually leads to LCX restart.

Check hardware and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

**F7547****LCX****FCD LOOP TEST ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** FCD loop test.

**Cause:** Test aborted. Error on FCD detected during test.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7548**

### **LCX**

#### **VCD INIT TEST ABORT**

*Type:* Service-specific (several formats apply)

*Short text:* VCD INIT test

*Cause:* Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

*Action:* Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7549**

### **LCX**

#### **VCD INIT TEST TIMEOUT**

**Type:** Service-specific (several formats apply)

**Short text:** Timeout

**Cause:** Timeout in the data processor (DP) in the overall VECO test.

**Action:** Check hardware and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).



**F7550****LCX****VCD INIT TEST ERROR**

*Type:* Service-specific (Format 03)

*Short text:* Central board error

*Cause:* Central board error detected during the VCD INIT test.

*Action:* Replace defective board.

## **F7551**

### **LCX**

#### **LCC INIT TEST ABORT**

**Type:** Service-specific (Format 03)

**Short text:** LCC INIT test

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7552****LCX****LCC INIT TEST TIMEOUT**

**Type:** Service-specific (Format 03)

**Short text:** LCC INIT test

**Cause:** Timeout identified in loop test. Timer in data processor (DP) timed out.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7553****LCX****LCC INIT TEST ERROR**

**Type:** Service-specific (Format 03)

**Short text:** LCC INIT test

**Cause:** Central error detected by associated tests.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7554****LCX****LCC LOOP TEST TIMEOUT**

*Type:* Service-specific (Format 03)

*Short text:* LCC loop test.

*Cause:* LCC loop test.

*Action:* Timeout during test execution usually leads to LCX restart. Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7556**

### **LCX**

#### **CONF ABORT**

**Type:** Diagnosis-specific (several formats apply)

**Short text:** Configuration abort

**Cause:** Analysis cannot be executed because configuration order for LCX or channel was aborted on account of a plausibility error. A plausibility error message from dependability is expected in addition to this report.

**Action:** Action depends on the evaluation of the HEX data. Save error message data and contact your [next level of support](#).

**F7557****LCX****IF-BUS TEST VCD ERROR**

*Type:* Service-specific (Format 03)

*Short text:* Bus error

*Cause:* Bus error while polling the VCD. An error was detected by the relevant tests.

*Action:* Check hardware and VCD board. Replace defective units.

**F7558**

**LCX**

**IF-BUS TEST LCC ERROR**

*Type:* Service-specific (Format 03)

*Short text:* Bus error

*Cause:* Bus error in LCC. An error was detected by the relevant tests.

*Action:* Check hardware and LCC board. Replace defective units.



**F7559****LCX****IF-BUS TEST BUS ERROR**

*Type:* Service-specific (Format 03)

*Short text:* General line hardware error.

*Cause:* Several boards found defective by associated tests.

*Action:* Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7560**

### **LCX**

#### **IF-BUS TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** Bus error during test.

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7561****LCX****IF-BUS TEST TIMEOUT**

**Type:** Service-specific (several formats apply)

**Short text:** Bus error

**Cause:** BUS error detected on IF bus.

**Action:** Timeout during test execution usually leads to LCX restart.

Check hardware and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

## **F7562**

### **LCX**

#### **LCX REQ TEST ERROR**

**Type:** Service-specific (Format 03)

**Short text:** LCX request test error.

**Cause:** An error was detected by associated tests.

**Action:** Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7563**

### **LCX**

#### **LCX REQ TEST ABORT**

*Type:* Service-specific (several formats apply)

*Short text:* LCX request test.

*Cause:* Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

*Action:* Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7564**

### **LCX**

#### **LCX REQ TEST TIMEOUT**

*Type:* Service-specific (several formats apply)

*Short text:* LCX request test.

*Cause:* LCX request test timeout.

*Action:* Timeout during test execution usually leads to LCX restart.

Check hardware and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

**F7565****LCX****TEST ABORT**

*Type:* Service-specific (several formats apply)

*Short text:* Test aborted

*Cause:* Test aborted.

*Action:* Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7566**

### **LCX**

#### **RAX LOOP TEST TIMEOUT**

**Type:** Service-specific (several formats apply)

**Short text:** RAX loop test

**Cause:** RAX loop test timeout.

**Action:** Timeout during test execution usually leads to LCX restart.

Check hardware (RAX board) and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).



## **F7568**

### **LCX**

#### **RAX INIT TEST ABORT**

*Type:* Service-specific (several formats apply)

*Short text:* Overall RAX test.

*Cause:* Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

*Action:* Check hardware and RAX board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7569**

### **LCX**

#### **RAX INIT TEST TIMEOUT**

*Type:* Service-specific (several formats apply)

*Short text:* Overall RAX test.

*Cause:* Timeout during test execution.

*Action:* Check hardware (RAX board) and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

**F7570****LCX****RAX INIT TEST ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* Central hardware error

*Cause:* A central hardware error was detected by the overall RAX test.

*Action:* Check hardware and RAX board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7571**

### **LCX**

#### **FCD LOOP TEST TIMEOUT**

**Type:** Service-specific (several formats apply)

**Short text:** FCD loop test.

**Cause:** FCD loop test.

**Action:** Timeout during test execution usually leads to LCX restart.

Check hardware (FCD board) and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

## **F7573**

### **LCX**

#### **IF-BUS/RAX ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* Board defective

*Cause:* Board found defective by IF bus test.

*Action:* Check hardware and RAX board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7574**

### **LCX**

#### **LCU INIT TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** LCU loop test.

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7575****LCX****LCU LOOP TEST TIMEOUT**

**Type:** Service-specific (several formats apply)

**Short text:** LCU loop test

**Cause:** LCU loop test.

**Action:** Timeout during test execution usually leads to LCX restart.

Check hardware (LBU/LCU board) and replace defective units.

Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [next level of support](#).

## **F7576**

### **LCX**

#### **LCU MODEM TEST TIMEOUT**

*Type:* Service-specific (several formats apply)

*Short text:* LCU modem loop test.

*Cause:* LCU modem loop test.

*Action:* Timeout during test execution usually leads to LCX restart. Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).



**F7577****LCX****IF-BUS/RAX/LCC ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** RAX/LCC board defective

**Cause:** RAX/LCC board found defective by IF bus test .

**Action:** Check hardware (RAX/LCC board). Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7578****LCX****IF-BUS/VCD/LCC ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** VCD/LCC board defective

**Cause:** VCD/LCC board found defective by IF bus test.

**Action:** Check hardware (VCD/LCC board). Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7579**

### **LCX**

#### **IF-BUS/FCD1/LCC ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* FCD1/LCC board defective.

*Cause:* FCD1/LCC board found defective by IF bus test.

*Action:* Check hardware (FCD1/LCC board). Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7580****LCX****IF-BUS/FCD2/LCC ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** FCD2/LCC board defective.

**Cause:** FCD2/LCC board found defective by IF bus test.

**Action:** Check hardware (FCD2/LCC board). Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7581****LCX****IF-BUS/FCD1/VCD ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** FCD1/VCD board defective.

**Cause:** FCD1/VCD board found defective by IF bus test.

**Action:** Check hardware (FCD1/VCD board) and replace defective board. If this does not work, save the error message data and contact your [next level of support](#).

**F7582****LCX****IF-BUS/FCD2/VCD ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** FCD2/VCD board.

**Cause:** FCD2/VCD board found defective by IF bus test.

**Action:** Check hardware (FCD2/VCD board) and replace defective board. If this does not work, save the error message data and contact your [next level of support](#).

**F7583****LCX****IF-BUS/FCD1/FCD2 ERROR**

**Type:** Service-specific (Format 03)

**Short text:** FCD1/FCD2 board defective

**Cause:** FCD1/FCD2 board found defective by IF bus test.

**Action:** Check hardware (FCD1/FCD2 board) and replace defective board. If this does not work, save the error message data and contact your [next level of support](#).

## **F7584**

### **LCX**

#### **LCR LOOP TEST ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Hardware error

**Cause:** A hardware error was detected by the LCR loop test.

**Action:** Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).



## **F7585**

### **LCX**

#### **LCX SYSTEM ERROR**

**Type:** Diagnosis-relevant (several formats relevant)

**Short text:** Plausibility error

**Cause:** Software or hardware plausibility error detected by processor (LCS0) or operating system.

**Action:** Save error message data and contact your [next level of support](#). Swap out the board SCS0-D if this error message occurs frequently.

**F7586****LCX****LCX NOTICE*****Type:***

Diagnosis-specific (Format 06)

***Short text:***

Plausibility error.

***Cause:***

Plausibility error detected by program on the LCX.

***Action:***

In the case of problems on the LCS0, save the error message logs for further evaluation.

**F7592****LCX****CONF LIMIT**

*Type:* Service-specific (Format 10)

*Short text:* LCX/channel association blocked

*Cause:* The LCX/channel association has been blocked by dependability due to excessive restarts.

*Action:* Save error message data, including preceding, relevant error messages, and contact your [next level of support](#).

## **F7597**

### **LCX**

#### **SWITCH ON LIMIT**

**Type:** Service-specific (several formats apply)

**Short text:** LCX/channel association blocked

**Cause:** Unable to activate affected LCX/channel association via automatic restart. LCX/channel association has been blocked by dependability due to excessive restarts.

**Action:** Save error message data, including preceding, relevant error messages, and contact your [next level of support](#).

**F7600**  
**LCX-CHAN**  
**NO ERROR**

*Type:*

Service-specific (several formats apply)

*Short text:*

Tests completed without errors

*Cause:*

All associated tests completed without errors.

*Action:*

Tested unit back in service, no action.

**F7601****LCX-CHAN****LCU LOOP TEST ERROR**

**Type:** Service-specific (Format 0E)

**Short text:** LCU loopback error

**Cause:** Error detected by LCU loopback test.

**Action:** Check hardware (LCU board). Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7603****LCX-CHAN****LCU MODEM ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* LCU modem error.

*Cause:* LCU modem error.

*Action:* Test modem, replace if necessary. If this does not work, replace LCU because error might also be in the LCU.

**F7604****LCX-CHAN****START/STOP TIMEOUT**

*Type:* Diagnosis-specific

*Short text:* Timeout

*Cause:* Timeout during attempt by call processing to activate or deactivate a channel.

*Action:* If this error occurs repeatedly, save the error message data and contact your [next level of support](#).



**F7605**  
**LCX-CHAN**  
**D-CHAN DISCON**

*Type:* Service-specific (several formats apply)

*Short text:* Unexpected HDLC disconnect

*Cause:* D channel layer 2 (HDLC link) cleared down unexpectedly.

*Action:* Check that the B-channel connection on the SWU side is okay. This error message can also occur as a result of [F7537](#).

**F7606****LCX-CHAN****NET TIMEOUT DISCON**

*Type:* Service-specific (several formats apply)

*Short text:* Forced release for B channel

*Cause:* B channel connection was forcibly released.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support. Only output in conjunction with other error messages.

**F7607****LCX-CHAN****LCU LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** LCU loop test

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

## **F7608**

### **LCX-CHAN**

#### **LCU MODEM TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** LCU modem and loop test

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7609****LCX-CHAN****LCR LOOP TEST ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* LCR loop test error.

*Cause:* LCR loop test error.

*Action:* Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7610**  
**LCX-CHAN**  
**LCR INIT ABORT**

*Type:* Service-specific (several formats apply)

*Short text:* Plausibility error

*Cause:* The LCX restart was aborted on account of a plausibility error.

*Action:* Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7612****LCX-CHAN****LCR LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** LCR loop test

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7613****LCX-CHAN****VCD LOOP TEST ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** VCD loop test error

**Cause:** Error found during digital voice compression loop test.

**Action:** Check hardware (VCD board). Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).



**F7615****LCX-CHAN****VCD LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** VCD loop test.

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and VCD board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7620****LCX-CHAN****LCC LOOP TEST ERROR**

**Type:** Service-specific (Format 0F)

**Short text:** LCC loop test error.

**Cause:** An error was detected by associated tests.

**Action:** Check hardware and LCC board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7622****LCX-CHAN****LCC LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** LCC loop test.

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware and LCC board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7623****LCX-CHAN****VCD INIT CHAN ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Channel error

**Cause:** A channel error was detected by overall VCD test.

**Action:** Check hardware and VCD board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7624****LCX-CHAN****LCC INIT CHAN ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* Channel error

*Cause:* A channel error was detected by overall LCC test.

*Action:* Check hardware and LCC board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7625**  
**LCX-CHAN**  
**CONF ABORT**

***Type:***

Service-specific (several formats apply)

***Short text:***

Configuration abort

***Cause:***

Configuration abort. Error during channel activation or deactivation.

***Action:***

Check hardware and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7627**  
**LCX-CHAN**  
**CHAN NOT READY**

*Type:* Service-specific (several formats apply)

*Short text:* Channel not ready

*Cause:* Sporadic HW error.

*Action:* If error repeats, check LCX board. Replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7628****LCX-CHAN****LCU CONTROL LINE ERROR**

*Type:* Service-specific (Format 10)

*Short text:* Channel control line error

*Cause:* V24 interface line error. Defective channel number is output.

*Action:* Channel is monitored by dependability and released again when the error is repaired. Check connecting cable. Check if connected PC, ITC, or other devices were switched off.



**F7629****LCX-CHAN****CMS PROTOCOL ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* CMS protocol error.

*Cause:* CMS protocol error.

*Action:* Deactivate and reactivate affected line. If you are unable to determine the cause of the error, and error occurs repeatedly, save the error message data and contact your [next level of support](#).

**F7631****LCX-CHAN****RAX LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** RAX loop test.

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7632****LCX-CHAN****RAX LOOP TEST ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* Hardware error

*Cause:* A channel-specific hardware error was detected by RAX loop test.

*Action:* Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7633****LCX-CHAN****RAX LOOP CLOCK ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Clock error

**Cause:** A channel-specific clock error was detected by RAX loop test.

**Action:** Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7637****LCX-CHAN****FCD LOOP TEST ABORT**

**Type:** Service-specific (several formats apply)

**Short text:** FCD loop test.

**Cause:** Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

**Action:** Check hardware (FCD) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7638****LCX-CHAN****FCD LOOP TEST ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Hardware error

**Cause:** A hardware error was detected by FCD loop test.

**Action:** Check hardware (FCD) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7639****LCX-CHAN****RAX INIT CHAN ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* Channel error

*Cause:* A channel error was detected by overall RAX test.

*Action:* Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7640****LCX-CHAN****RAX INIT CLOCK ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Clock error

**Cause:** A central clock error was detected by overall RAX test.

**Action:** Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).



**F7641****LCX-CHAN****IF-BUS/FCD1 ERROR**

*Type:* Service-specific (several formats apply)

*Short text:* Board defective

*Cause:* Board found defective by IF bus test.

*Action:* Check hardware (FCD1) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7642****LCX-CHAN****IF-BUS/FCD2 ERROR**

**Type:** Service-specific (several formats apply)

**Short text:** Board defective

**Cause:** Board found defective by IF bus test.

**Action:** Check hardware (FCD2) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7643****LCX-CHAN****LCS0 INIT CHAN ERROR**

*Type:* Service-specific (Format 0E)

*Short text:* Loop error

*Cause:* LCS0 initialization test reports loop errors on one interface.

*Action:* Check hardware (LCS0) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7644****LCX-CHAN****LCS0 LOOP TEST ERROR**

**Type:** Service-specific (Format 0E)

**Short text:** Error in loop test

**Cause:** LCS0 loop test reports errors.

**Action:** Check hardware (LCS0) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7645****LCX-CHAN****LCS0 LOOP TEST ABORT**

*Type:* Service-specific (Format 0A)

*Short text:* Implausible test result

*Cause:* LCS0 loop test was rejected, i.e. not performed.

*Action:* Check hardware (LCS0) and replace defective units. If this does not work, save the error message data and contact your [next level of support](#).

**F7646**  
**LCX-CHAN**  
**CONF LIMIT**

**Type:**

Service-specific (Format 10)

**Short text:**

LCX/channel association blocked

**Cause:**

The LCX/channel unit concerned has been blocked due to too many restarts.

**Action:**

Save error message data, including preceding, relevant error messages, and contact your [next level of support](#).

## **F7650 CHAR-COM ERROR**

**Type:** Service-specific (Format 08)

**Short text:** Error in call charge computer

**Cause:** General error detected in the call charge computer. The interface which caused the error is indicated in the slot information (LTG:). Interpretation of auxiliary data depends on the type of call detail recording used (GCU/MX or 3001A).

**Action:** Action depends on the evaluation of the HEX data. Save error message data and contact your [next level of support](#).

**Interpretation of auxiliary data:**

- Byte 3 = 30 No error
- 31 Format error (check against AMO FTBL and with GCU, menu 0.7.6.2)
  - 33 Format too long or too short
- Byte 4 = 3 0 No error
- 31 HD access error
  - 33 80% database capacity used
  - 35 Software error in GCU
  - 36 SDS intermediate buffer full (SDS=standard data set)
  - 38 100% database capacity used
  - 39 Page printer inoperable (check page printer)

### **F7650 ERROR (for 3001A)**

- Byte 3 = 30 No error
- 31 Format error
  - 33 Format too long or too short
  - 34 Timeout error (timer run out, data record not completed)
- Byte 4 = 30 No error
- 31 Floppy disk access error, check DKT file (DKT = Department, account, user)
  - 33 80% database capacity used on floppy disk (FD)
  - 34 Stack pointer overflow
  - 35 Error in controller 1
  - 36 Queue overflow
  - 37 Power failure
  - 38 100% database capacity used on floppy disk
  - 39 Page printer not operating (check page printer)





**F7660****LCX-CHAN****PSIO CONT LINE ERROR**

*Type:* Service-specific (Format 10)

*Short text:* Channel control error on PSIO

*Cause:* V24 interface line error. Defective channel number is output.

*Action:* Channel is monitored by dependability and released again when the error is repaired. Check connecting cable. Check if connected PC, ITC, or other devices were switched off.

**F7661**  
**LCX-CHAN**  
**SWITCH ON LIMIT**

*Type:* Service-specific (Format 10)

*Short text:* Channel blocked

*Cause:* Unable to activate affected channel via automatic restart. Channel has been blocked by dependability due to excessive restarts.

*Action:* Only output in conjunction with other error messages. Save error message data, including preceding, relevant error messages, and contact your [next level of support](#).

**F7662**  
**LCX-CHAN**  
**DONGLE ATTACHED**

*Type:* Service-specific (Format 10)

*Short text:* Dongle detected on channel 8 and tested.

*Cause:* Restart of the ADP, or dongle has been plugged.

This message simply indicates that a dongle has been plugged.

- A dependability test of the dongle was completed without errors.
- This message does not indicate that the correct dongle has been plugged.

*Action:* No action necessary.

**F7663**  
**LCX-CHAN**  
**DONGLE MISSING**

*Type:* Service-specific (Format 10)

*Short text:* Dongle not plugged.

*Cause:* Restart of the ADP. No dongle detected on channel 8 of the ADP data processor.

*Action:* Correct dongle must be plugged on channel 8 of the ADP data processor.

## **F7664**

### **LCX-CHAN**

#### **DONGLE HW READ ERROR**

**Type:** Service-specific (Format 10)

**Short text:** Dongle detected on channel 8.

**Cause:** Restart of the ADP, or dongle has been plugged.

This message indicates that a dongle was detected on channel 8 of the ADP data processor.

- A dependability test of the dongle was completed with errors.
- Dongle is defective.

**Action:** Exchange defective dongle. New dongle must be plugged on channel 8 of the ADP data processor.

**Interpretation of auxiliary data:** Message from CMS to FAB LINE

Byte 1      Event code

Byte 2      Service ID

Byte 3-6    AS connection

Byte 7      Channel number

Byte 15     Indication register

Byte 16     Dongle byte

23 = Dongle test initiated, resulted in test errors

**F7665**  
**LCX-CHAN**  
**DONGLE CMS TEST TO**

**Type:** Service-specific (Format 10)

**Short text:** Dongle detected on channel 8.

**Cause:** Restart of the ADP, or dongle has been plugged.

This message indicates that a dongle was detected on channel 8 of the ADP data processor.

- A dependability test of the dongle was not completed.
- CMS failed to respond within 20 seconds.

**Action:** Unplug and replug the dongle. Save error message data and contact your next level of support.

**Interpretation of auxiliary data:** Message from CMS to FAB LINE

Byte 1 Event code

Byte 2 Service ID

Byte 3-6 AS connection

Byte 7 Channel number

Byte 15 Indication register

Byte 16 Dongle byte

22 = Dongle test initiated, resulted in timeout

**F7666**  
**LCX-CHAN**  
**DONGLE TEST REJECTED**

*Type:* Service-specific (Format 10)

*Short text:* Dongle detected on channel 8.

*Cause:* Restart of the ADP, or dongle has been plugged.

This message indicates that a dongle was detected on channel 8 of the ADP data processor.

- A dependability test of the dongle was not completed.
- Unable to set channel to 'CHECK' status.

*Action:* Unplug and replug the dongle. Save error message data and contact your next level of support.

*Interpretation of auxiliary data:* Message from CMS to FAB LINE

Byte 1 Event code

Byte 2 Service ID

Byte 3-6 AS connection

Byte 7 Channel number

Byte 15 Indication register

Byte 16 Dongle byte

- 1 Channel not in status OOS\_DEF or IN\_SERVICE
- 11 Attempt to set to 'CHECK' status resulted in plausibility error
- 12 Attempt to set to 'CHECK' status rejected
- 13 Attempt to set to 'CHECK' status with negative result
- 21 Dongle test initiated, rejected

**F7700**  
**LBC-LB**  
**NO ERROR**

*Type:*

Service-specific (several formats apply)

*Short text:*

Unconfirmed error

*Cause:*

An error could not be confirmed during LBC test.

*Action:*

If error occurs repeatedly, save the error message data and contact your  
next level of support.



**F7701**  
**LBC-LB**  
**CENTRAL ERROR**

*Type:* Service-specific (Format 03)

*Short text:* LINEBUS error

*Cause:* General error on the line bus (LBC).

*Action:* Check/exchange LCU boards. If exchanging boards connected to the line bus, these must be blocked via the BSSM AMO or the LBC key. If the LBC is exchanged, an ADS restart is unavoidable in order to put the board into service.