

**Table NEO Fault Symptom Codes**

<b>Message</b>	<b>FSC</b>	<b>Description</b>
Trace Error	0200	Internal trace processing error (factory use only)
Novram Update Error	0306	The non-volatile configuration area in flash memory could not be updated (programming error)
Barcode Not Active Error	0501	The hardware could not detect a barcode reader.
OS Catastrophic Error	0901	Catastrophic Smx operating system error – task creation error, unexpected error
OS Task Exit Error	0902	SmxNet (Ethernet, Web TLC) task error – server spawn error, TCP/IP fatal error
Invalid Ethernet (MAC) Address	0A01	The library's Ethernet (MAC) address stored in the non-volatile configuration is not valid – the last 3 octets are either 0:0:0 or 255:255:255
Invalid IP Subnet Mask (255.255.255.255)	0A02	The Ethernet subnet mask stored in the non-volatile configuration is not valid – 255.255.255.255
Public Ethernet Open Error	0B00	The library could not initialize the public Ethernet (WAN) interface. Ensure that a valid Ethernet MAC address has been programmed.
Public Ethernet Set IP Error	0B01	The library could not set the IP parameters in the public (WAN) Ethernet interface
SCSI Firmware Error	1001	Internal SCSI task processing error – unexpected state or hardware status
SCSI FIFO Empty	1002	The SCSI controller data FIFO is empty but should contain more data bytes
SCSI FIFO Error	1003	The SCSI controller data FIFO should be empty but still contains data bytes
SCSI Gross Error	1004	The SCSI controller detected a gross error condition – invalid SCSI bus phase or DMA error
Illegal SCSI Cnt Cmd	1005	Either an invalid command was sent to the SCSI controller, or the controller was not in the correct mode
SCSI Message Error	1006	Internal SCSI task processing error – invalid message was detected
SCSI Invalid Element	1007	Internal SCSI task processing error – invalid element type was detected
SCSI No Pending Int	1008	Internal SCSI task processing error – interrupt service request detected with no pending interrupt
SCSI Invalid Int.	1009	The SCSI controller posted an invalid interrupt status
SCSI Continuous Resets Detected	100F	Verify that the library SCSI bus is properly terminated.
Ctl Invalid Command	2001	Internal Control task processing error – the firmware control task detected an invalid command
Undefined Config	2002	Internal Control task processing error – the firmware control task detected an invalid configuration
Invalid Drive State	2003	Internal Control task processing error – the firmware control task detected an invalid drive state
Loader Not Ready	2004	Fail to fetch, stow, scan, move passthru , Or when loader detects invalid command, aborts command.
SCSI ID Not Set	2005	Unable to set SCSI ID for library tape drive

Message	FSC	Description
Drive Comm Open Error	2006	Could not open serial communication to library tape drive
Door Fault (soft fault)	2007	Unexpected door open condition detected. Ensure door is closed and try again
Illegal Move	2008	The control task detected an illegal move command from the GUI.
Door Open (status only)	2009	Door is forced open or door sensor failed.
Cart Unaccessible	200C	For a DLT drive, fail to operate drive handle in unloaded state. For a SDLT, indicates the tape is NOT in the unloaded state. For a SLTO, indicates the tape is not ejected. Cartridge in drive is not accessible. From changer.
Drive In Error	200D	A general drive error detected by control task.
No Magazine	200E	Cannot move, element not installed , from changer.
Removal Prevented	200F	Receive medium prevent removal from drive for a fetch.
Ctl. Firmware Error	2010	Internal inter task processing error. Unexpected event. SMX send or receive error.
Drive Timeout Error	2030	can't communicate with DLT drive.
Drive Powerup Error	2072	Drive did not power up correctly. Power down, wait 30 seconds, then power up
Drive Code Update Command Error	2080	Update code from SCSI or from TAPE failed.
Move Command Failure	2081	Move command from / to drive slot failed, Detected by control task.
Open Mail Slot Fault	2090	Door open sensot timeout detected when open door.
Open Left Door Fault	2091	Door open sensot timeout detected when open door
Open Right Door Fault	2092	Door open sensot timeout detected when open door
Open Doors Fault	2093	Door open sensot timeout detected when open door
Open DLT Handle Fault	2094	Failed to open DLT handle.
No IP Address Found	20a0	SMC router failed to get an IP address .
No IP Address Mode Fault	20a1	SMC router failed to detected static or ip address Mode.
Unknown exchange for the async message	20b0	Unexpected exchange detected when process Messages.
Invalid exchange for the response	20B1	Unexpected exchange detected when processing Messages.
Drive In Error	20c0	Control failed to set SCSI id .
Drive In Error	20c1	Control failed to installed drive.
Motor Fault Condition	3000	One of the motors has been disabled and could not be re-enabled.
Shuttle Tach Errors	3001	Shuttle Tach Errors were detected during shuttle movement.
Picker Tach Errors	3002	Picker Tach errors were detected when checking slots.

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Rotary Tach Errors	3003	Rotary Tach errors were detected during rotary motor movement
Vertical Tach Errors	3004	Vertical Tach errors were detected during z-axis motor movement (NEO4000 only)
Passthru Tach Errors	3005	Passthrough motor tach errors were detected.
Excessive Picker Friction Error	3006	Excessive picker friction detected during picker operation
Bin Fetch Failure	3011	Loader failed to fetch a cartridge from a bin.
Bin Stow Error	3012	Loader failed to stow a cartridge to a bin.
Drive Fetch Failure	3013	Loader failed to fetch a cartridge from a drive.
Drive Stow Failure	3014	Loader failed to stow a cartridge to a drive
Drive Timeout Failure	3015	Loader detects unload command timeout.
Drive Status Failure	3016	Detected drive error from fetch, stow and wait for handle ok DLT drive operation.
Drive In Flux Timeout	3017	Time out waiting for drive to clear the flux status.
Drive Load Retry Failed	3018	SLTO drive fail to load, detected in drive task.
Drive Open Door Failed	3019	Failed open DLT drive door.
Drive Close Door Failed	301A	Failed close DLT drive door.
Drive Communication Error	301B	Intertask send, receive failed.
Drive Get General Status Fail	301C	Drive communication failed.
Drive Get Status 3 Fail	301D	NOT USED
Drive Unload Fail	301E	Drive failed to unload a cartridge
Undefined Config	3020	In loader, unpected config, not a Thunder or Lightning. In diag, invalid source or destination
Orphan Cartridge not stowed	3030	The loader could not succesfully stow an orphan cartridge to a bin.
Chassis S/N Mismatch. Previous S/N retained	3031	The serial number scanned from the barcode label doesn't match the value storen in non-volatile memory.
Chassis S/N Character count is not correct	3032	A valid serial number barcode label could not be read.
Chassis S/N did not scan	3033	A valid serial number barcode label could not be read
Chassis S/N save operation failed	3034	The serial number scanned from the barcode label could not be saved to non-volatile memory
Drive Unload Prevented	3035	Host has issued Prevent Media Removal command to drive and library is unable to eject and scan barcode label during inventory.
Motor Firmware Error	3040	The loader task detected an unexpected status and could not recover (internal target error).
Loader Received Invalid Command	3041	The loader task received an unexpected command and could not recover (internal target error).

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Motor Firmware Error	3042	The loader task detected an unexpected status and could not recover (internal target error).
Missing Magazine	3050	In diag, no magazine installed for diag to run.
No Cartridges In Library	3051	No cartridge available for diag to run.
Too Many Cartridges	3052	Unable to run cart or drive cycle, reason loader is full with cartridges.
Need 3 Cartridges minimum	3053	Unable to run drive cycle, not enough cartridges
Need 1 Drive Minimum	3054	No available drive to run diag.
Memory Allocation Error	3055	Firmware detected a memory allocation error
Need 5 Cartridges Minimum	3056	Unable to run drive cycle, not enough cartridges (NEO4000 only)
Invalid Magazine Type	3057	Unsupport magazine type detected.
Magazine Type Change Not Handled	3058	Unsupport magazine type detected.
Drive Type Not Supported	3059	Unsupport drive type detected.
Diag unload fail	305A	Diag: drive unload failure
Diag Fetch, Drive not loaded	305B	Diag: No cartridge present for a fetch.
Diag Stow, Drive not loaded	305C	Diag: drive load failure
Diag Timeout waiting for drive empty, ready	305D	Diag: Fetch , timeout waiting for drive unload.
Diag Timeout waiting for drive loaded, ready	305E	Diag: Stow, timeout waiting for drive to become loaded and ready
Invalid bin number	305F	Invalid bin number detected in diag,
Zone Sequence Error	3060	Shuttle detected invalid zone sensor reading during initialization
Unable to complete homing algorithm	3061	Loader was unable to complete homing algorithm during initialization
Drive 0 Eject Failed	3074	Eject command timeout
Drive 1 Eject Failed	3075	Eject command timeout
Drive 2 Eject Failed	3076	Eject command timeout
Drive 3 Eject Failed	3077	Eject command timeout
Diag get drive 0 status failed	3078	Failed to get drive status, communication error
Diag get drive 1 status failed	3079	Failed to get drive status, communication error
Diag get drive 2 status failed	307a	Failed to get drive status, communication error
Diag get drive 3 status failed	307b	Failed to get drive status, communication error
Soft Fetch Retry	3080	Soft drive fetch retry (recovered error)

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Soft Stow Retry	3081	Soft drive stow retry (recovered error)
Drive Stow Failed, Media Returned to Source	3082	The DLT drive detected an SDLT cartridge and the cartridge has been returned to its origin.
Drive Stow Failed, Media Remains in Drive	3083	The DLT drive detected an SDLT cartridge but the cartridge could not be returned to its origin.
Unsupported Drive For Requested Operation	3084	Unsupported drive type.
No Retry On Fetch/Stow	308F	The loader retried an operation and retries were disabled.
No cartridge in drive (soft fault)	3090	No cartridge detected in drive but drive cannot currently load a cartridge or accept commands
No cartridge in drive (soft fault)	3091	No cartridge detected in drive but drive can currently load a cartridge or accept other commands
Cartridge detected in drive but not loaded (soft fault)	3092	Cartridge is inserted in drive but not loaded. SCSI Load command or library load command may be issued.
Drive is loading and threading (soft fault)	3093	Drive is currently loading/threading a cartridge
Drive is in loaded/hold state (soft fault)	3094	Drive is in the loaded and hold state.
Drive can accept non-status commands (soft error)	3095	Drive can accept all commands
Drive cannot accept non-status commands	3096	Drive writing and cannot accept non-status commands
Drive cannot accept non-status commands	3097	Drive reading and cannot accept non-status commands
Drive cannot accept non-status commands	3098	Drive busy and cannot accept non-status commands
Drive is unloading/unthreading	3099	Drive is unloading and unthreading
Drive is in media removal state	309A	Drive is ready to for loader to extract cartridge
Drive load failed	309B	Drive load failed and loader is retrying operation
Drive load failed	309C	Drive load operation failed
Drive load failed	309D	Drive load failed and cartridge is in hold state
Drive eject failed	309E	Drive eject operation failed
Drive eject failed	309F	Drive eject operation failed and cartridge is in hold state
Drive state unknown	30A0	Unable to determine Drive State
Drive Cleaning Failed	30A1	Drive cleaning operation failed
Picker Jammed	3100	The picker jammed during loader initialization
Picker Jammed 2	3102	The picker jammed during a bin stow operation.
Picker Jammed 3	3103	The picker jammed during a bin stow operation.
Picker Jammed 4	3104	The picker jammed during a bin stow operation.

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Picker Jammed 5	3105	The picker jammed during a bin stow operation.
Picker Jammed 6	3106	The picker jammed during a bin stow operation.
Picker Jammed 7	3107	The picker jammed during a pass-thru fetch operation.
Picker Jammed 8	3108	The picker jammed during a pass-thru fetch operation
Picker Jammed 9	3109	The picker jammed during operation
Picker Jammed 10	310A	The picker jammed during operation
Picker Jammed 11	310B	The picker jammed during a drive fetch operation
Picker Jammed on Stow	310F	The picker jammed on a stow operation.
Picker Retries Exceeded	3110	Picker retries were exceeded
Picker Retries Exceeded	3111	Picker retries exceeded during a pass-thru fetch operation.
Picker Retries Exceeded 2	3112	Picker retries were exceeded during operation
Picker Retries Exceeded 3	3113	Picker retries exceeded during a bin stow operation.
Picker Retraction Error	3115	The picker did not retract during a bin check operation.
Shuttle Jammed	3200	The shuttle could not reach the target location.
Shuttle Jammed	3201	The shuttle could not reach the target location
Shuttle Jammed	3202	The shuttle could not reach the target location
Shuttle Jammed	3203	The shuttle could not reach the target location
Shuttle Jammed	3204	The shuttle could not reach the target location
Shuttle Jammed	3205	The shuttle could not reach the target location
Rotary Jammed	3300	The rotary track could not reach the target location.
Shuttle on Wrong Side Of The Rotary	3301	The zone indicators show that the shuttle is backwards on the rotary track during power-up initialization.
Rotary cannot find zones	3302	Rotary servo cannot detect correct operating zone
Shuttle not attached to cable	3303	Shuttle cable is not attached
Passthrough Elevator Jammed	3400	The pass-thru shuttle could not reach the target location.
Vertical Elevator Jammed	3500	The vertical elevator could not reach the target location (Thunder only).
No drives attached	5001	Menu mode operation attempted with no drives attached.
All Drive/Slots empty	5002	Menu mode move operation attempted with all Drives/Slots empty
All drives/slots full	5003	Menu mode move operation attempted with all Drives/Slots full
No slots installed	5004	Menu mode operation attempted with no magazines
No Drives Attached	5010	Menu mode clean operation attempted with no drives attached.

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All Slots Empty	5011	There are no cartridges installed in any of the reserved cleaning slots.
All Drives Full	5012	Menu mode clean operation attempted with all drive full
Drive timeout error	5013	Menu mode clean operation detected a drive timeout
Drive Already Loaded	5014	The cleaning operation failed because the drive already has a cartridge inserted.
Expired Clean'g Cart	5015	The cleaning operation failed due to an expired cleaning cartridge.
Not a Clean'g Cart	5016	The cleaning operation failed because the loaded cartridge is not a cleaning cartridge.
No slots installed	5017	Clean operation attempted with no magazines installed
All Drives/Slots Empty	5020	A menu operation detected all drives/slots empty
Bad cartridge Map	5021	A menu operation detected a bad cartridge map
Bad Novram Setting	5030	A menu operation has detected a bad Novram setting
Bad Non-vol Setting	5031	A menu operation has detected a bad non-vol setting
Invalid Setting	5032	A menu set operation detected an invalid setting
Drive Format Setting Failed	5033	A menu Drive Format selection failed
Drive Compression Setting failed	5034	A menu Drive Compression selection failed
Drive Timeout Error	5035	The cleaning operation failed because the drive timed out.
Drive Timeout Error	5036	A menu operation detected a drive communication timeout
Set Bus ID error	5037	A menu operation to set the drive SCSI ID failed
Move Command Fail	503B	A front panel move operation failed.
Clean Operation Timeout	503C	The cleaning operation failed because the drive timed out.
Drive Status Fail	503D	The cleaning operation failed because the library could not retrieve drive status.
Intermod Unknown Event	6001	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Intermod No Command Matching Response	6002	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Intermod Bad Command Length	6003	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Intermod Loopback buffer mismatch	6004	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Intermod Bad Data Length	6005	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)

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Intermod Bad Packet Length	6006	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Intermod failed to allocate TCP buffer	6007	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Intermod Command Pending Table Full	6008	The firmware detected an unexpected error during intermodule communication (multimodule or partitioning)
Command response from unexpected source	7001	A command response was received from a task to which a command had not been sent.
Control command execution failed	7002	A command response opcode from the Control task was not anticipated or is un-identifiable.
Control response not matched to a known command	7003	A command response was received from the Control task, but the original command opcode could not be determined.
Loader response not matched to a known command	7004	A command response was received from the Loader task, but the original command opcode could not be determined.
Drive response not matched to a known command	7005	A command response was received from a Drive task, but the original command opcode could not be determined.
Flash response not matched to a known command	7006	A command response was received from the Flash task, but the original command opcode could not be determined.
Drive index on Update Status message was invalid	7007	An Update Drive Status message was received from a module, but the drive index was out of range.
The Drive response was not expected	7008	A command response was received from a Drive task to which a command had not been sent.
The opcode for a WORD message was unknown	7009	A WORD-sized message was received but the message opcode could not be identified.
The opcode for a DWORD message was unknown	700A	A DWORD-sized message was received but the message opcode could not be identified.
The button causing library to go offline was unknown	700B	A command to take the library offline was completed successfully, but the GUI button that initiated the action could not be identified.
Destination Xchg was Null	700C	Attempting to send a command to a task, but the argument exchange pointer was NULL.
Sending of a cmd failed	700D	An attempt to place a command on a task exchange failed.
Deactivating a drive that is not attached	700E	The Control task is indicating that a request to deactivate a drive failed because the drive is not attached.
Deactivation of a drive failed	700F	The Control task is indicating that a request to deactivate a drive failed; reason is not known.



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Drive removal failed	7010	The Drive task is indicating that a request to power-down a drive failed; reason is not known.
Drive is Active failed	7012	The Drive task is indicating that a request to determine if a drive is executing a host command failed; reason is not known.
Control Com Unidentified	7013	During HotSwap, a command response from the Control task could not be associated with any outstanding command.
Drive status update failed	7014	The Drive task is indicating that a request to determine the current state of a drive failed; reason is not known.
Loader command execution failed	7015	The Loader task is indicating that a command has failed to complete successfully.
Sequential command execution failed	7016	The Sequential task is indicating that a command has failed to complete successfully.
Destination Xchg for msg. was Null	7017	Attempting to send a message to a task, but the argument exchange pointer was NULL.
Bad src mod in peg msg	7018	A message was received from a remote module, but the module number was out of range.
Peg message wrapping a Null msg. ptr.	7019	A Peg message has a pointer to NULL.
Xchg conversion failed	701A	Attempt to determine the module number containing the task that is returning a command response failed.
Invalid L-drive number to convert	701B	Attempt to send a command to a drive, but the logical drive number is out of range.
Invalid P-drive number to convert	701C	Attempt to send a command to a drive, but the physical drive number is out of range.
Invalid mod number to convert	701D	Attempt to send a command to a drive in a remote module, but the module number is out of range.
Unknown drive type	701E	Attempt to show detailed drive status of a drive whose type is unknown.
The Scsi response was not expected	701F	The command response from the Scsi task in a remote module was unexpected.
The Flash response was not expected	7020	The command response from the Flash task in a remote module was unexpected.
Scsi response not matched to a known command	7021	A command response was received from a Scsi task, but the original command opcode could not be determined.
Unexpected state after NonVolConfig cmd	7022	After successfully completing a NonVolConfigPut command, the current state of the save operation was unknown.
Unexpected state after SCSI mode cmd	7023	After successfully completing a ScsiUpdateModeParameters command, the current state of the save operation was unknown.
Unexpected state after SCSI init cmd	7024	After successfully completing a ScsiInit command, the current state of the save operation was unknown.

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Invalid Map Conversion Parameters	7025	An internal firmware error was detected when converting the map parameters
Cartridge reject recovery failed	8001	The drive failed to successfully load a tape even after retries.
Drive Fan stalled	8002	The fan in the drive hot-swap shoe is either not installed or has stalled.
Drive load did not complete	8003	The drive failed to successfully load a tape.
Invalid drive was installed	8004	One or more installed drives are of a type either unknown or not supported in the current library personality.
Slto unmask drive failed	8005	The Seagate LTO drive unmask operation failed.
Slto mask drive failed	8006	The Seagate LTO drive mask operation failed.
Slto unload drive(in load retry) failed	8007	The Seagate LTO drive failed to unload a cartridge during a load retry operation.
Is Drive Unloaded Failed	8008	The Seagate LTO drive failed to return status when being polled for unloaded state.
Sequential Mode completed at end of stack	8009	The library reached end of cartridge stack in sequential mode
Sequential Mode completed on stack 0	800A	The library reached end of cartridge stack in sequential mode 1
Sequential Mode completed on stack 1	800B	The library reached end of cartridge stack in sequential mode 2
Orphan cartridge recovery failed	9001	The master module could not successfully return an orphan cartridge to a slot location.
Master pass-thru opto failed.	9003	The master module opto sensor was not detected during the power-up pass-thru module inventory
SMX send error	A001	An attempt to place a message on a task's exchange generated a kernel error.
SMX receive error	A002	An attempt to receive a message from a task's exchange generated a kernel error.
Comm free list empty	A003	An attempt to acquire a message from the free pool failed because the pool is empty.
Invalid comm. put attempt	A004	An attempt to place a message on a task's exchange failed because either the argument message pointer was NULL or the argument exchange pointer was NULL.
Invalid comm. get attempt	A005	An attempt to receive a message from a task's exchange failed because the argument exchange pointer was NULL.
Comm initialization error	A006	The Comm manager could not be initialized at power-up because system is out of memory.
Put of a NULL comm.	A007	An attempt to place a Comm block on a task's exchange failed the argument Comm block pointer was NULL.
Msg contains no comm.	A008	A message obtained from the free pool did not contain a Comm block.

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Comm return address is unknown	A009	An attempt to return a command response to the originating task failed because the originator could not be determined.
Gateway initialization failed	C001	The firmware detected an error initializing the gateway for the internal router
Gateway terminate timeout	C002	The firmware detected a timeout during configuration of the internal router
Error attempting to exit menu mode	C010	An error was detected when attempting to exit the GUI menu mode.
No WAN IP address tag found	D001	The firmware detected an internal error when trying to communicate with the router
WAN port disconnected	D002	The firmware detected an internal error when trying to communicate with the router.
Sequential mode completed at end of stack	E001	Advisory message that is posted when sequential mode reaches end of stack
Sequential mode completed at end of stack 0	E002	Advisory message when sequential mode 0 reaches end of stack
Sequential mode completed at end of stack 1	E003	Advisory message when sequential mode 1 reaches end of stack
Bad Image CRC	F001	The uploaded firmware image has a bad CRC and is probably corrupted
Flash erase sector failed	F002	One of the flash memory sectors could not be programmed
Flash program sector failed	F003	One of the flash memory sectors could not be erased
Bad flash CRC	F004	The firmware image programmed into flash memory has a bad CRC and is probably corrupted
Flash exit error	F005	Internal flash task error
Incompatible image	F006	The uploaded firmware image is not compatible with the library hardware, possibly an older firmware version
Buffer allocation failed	F402	The flash task could no allocate a buffer area to hold the firmware image to be uploaded