

## **Gx-Midrange Release History**

### **Gx134/Gx158/Gx166/Gx174**

If updating from a lower level than the prior level in this file then the release notes for the intermediate levels should be examined to understand the changes.

NOTE: TTP### = "Test Track Pro" Defect number ###. Test Track Pro is a defect tracking software system. A TTP### entry in this document indicates that the defect was fixed and closed(or fixed and under test) by the noted change.

#### **Known Issues:**

1. TTP302 / TTP522: If media is (for any reason such as an accidental manual load or due to interrupted robotic moves) left in a utility slot, the library will attempt to export the media. Warnings and a not ready are generated (04-80-98 and 02-04-88). Future software may handle differently with the intent that media should remain in the library if at all possible.
2. TTP323: The LSI160 HA is supported but the LSI21320 may have an issue on the Win2000 OS.
3. TTP450: There are some cases when multiple initiators are not supported.
4. The most current version of UDO drive software is recommended.
5. TTP651: The Inquiry value of ANSI-Approved Version is returned as 3 when the unit is really a SCSI-2 compliant device. This may be corrected in a future release to a value of 2.
6. A future release will hold consideration of a secondary library and doing a SCSI sleep command.
7. TTP784: Possible add of a change to prevent downgrade of a unit that has UDO2 drives to a level that does not strictly support UDO2.

#### **H06d (20071120)**

CPU = 3066, DSP = 3043

1. **TTP827:** Remove issuance of 04-88-10 fault for cases in specific personalities that indicate an improper number of installed UDO drives.

## **H06c (20071102)**

CPU = 3065, DSP = 3043

1. **TTP810:** Fixed case where usage of CECART fails for units configured with MO only drives.
2. **TTP812:** Fix for path when drive fails media load that causes extension of finger assembly increasing probability that disengagement may occur with new bezel.
3. **TTP816:** Changed Mode Sense command specific to page 0x23 such that a request for 8 bytes responds with 8 bytes(1 0 padded byte). Otherwise, the requests for other than 8 bytes respond as in the past.
4. **TTP819:** Fixed finding that Gx158 model did not pivot for CECART test.
5. **TTP821:** Added indication to panel that lift lock may be engaged if unit senses that lift is blocked at power-up.
6. **TTP822:** Fixed incorrect indication of UDO2 drives after OFF/ON sequence from maintenance menu.
7. **TTP823:** Fixed case where after unexpected power loss, Gx will do a quick-scan, but will not update the Element Map

## **H06b (20070604)**

CPU = 3064, DSP = 3043

1. **TTP806:** Fix for case where an IO station media import incorrectly detects media type as MO instead of UDO.
2. **TTP807:** Increased the SCSI reselection timeout value to accommodate PC test system operating systems.

## **H06a (20070516)**

CPU = 3062, DSP = 3043

1. **TTP802:** Added change to prevent menu prompt to clean UDO2 drive when running LIB VERIFY test. No cleaning is necessary for UDO2 drives.
2. **TTP805:** Added recovery path to recover from load fault at drive where drive does not sense media present.

## **H06 (20070426)**

CPU = 3060, DSP = 3043

1. **TTP758:** Added change to properly set the OVERTEMP bit of log sense page 0x30.
2. **TTP761:** Corrected condition where slot 73 in a Gx80 was being skipped when doing barcode reading.
3. **TTP769:** Added drivetype for UDO2 to Mode Sense page 0x22. For UDO2 the drivetype value will be set to 0x3C (to imply 60GB).
4. **TTP773:** Drive load timeout was reduced from 90 seconds to 15 seconds.
5. **TTP782:** Added UDO2 FMR software update functionality. This is for maintenance mode.
6. **TTP785:** Change made to indicate the UDO drive type(UDO1 or UDO2) when in maintenance mode and referencing the drive states.
7. **TTP790:** Integrated UDO2 for Production Cycles test.
8. **TTP794:** Made a change to the first PUT depth on a UDO drive. Original increase was too deep for a number of units.
9. **TTP797:** Added CECART2 maintenance functionality for UDO2.

## **H05f (20061101)**

CPU = 3058, DSP = 3041

10. **TTP650:** Addition of basic functionality to support UDO2 drives. This does not affect UDO1 functionality.
11. **TTP707:** Changed the LimitRec option such that limit recovery should include attempting to put media back to its original position after a failure. This was not being done in first implementation of LimitRec.
12. **TTP728:** Fixed some differences between REQUEST SENSE data and the Gx SCSI Specification. Filled in some missing data and added corrections to the SCSI specification.
13. **TPP732:** Fan faults, 04-80-62 and 04-80-63, were not being sent to SCSI host. These are now sent to the host once for each occurrence.
14. **TTP734:** Fixed a rare case of ERP where the MTE could be left in a vertical orientation when attempting to find the lift reference.
15. **TTP738:** Corrected a case where an incorrect 04-52-59 was issued when an exchange command is issued and media is in the picker from the source and 1st destination is empty(invalid). Fixed such that the correct invalid check, 04-80-1D Element Unexpectedly Empty, is now returned.
16. **TTP739:** The Infovalid and Info2valid bit of the REQUEST SENSE command were not being set correctly to indicate valid information in sense fields. This was corrected.
17. **TTP746:** Fixed issue where the Gx158 could not be configured via SCSI.
18. **TTP747:** Fixed a condition under setup menu - changer options where the change key is shown but does not work. The change key was removed as no changes are allowed in setup menu.
19. **TTP754:** Fixed an AA(Archive Appliance) case where when commanded to power down via Mode Select the unit will reboot if not powered down within a 20 sec time. This was fixed such that the unit will wait indefinitely till the AA brings power down.

## **H05e (20060907)**

CPU = 3057, DSP = 3041

1. **TTP745:** Hardware level check fixed which displayed incorrect screen during power down for AA.
2. **TP744:** RoHS main AA config location wired such that uP sees power button during AA mode. Changed interrupt handler for power button to ignore button if NAS is present.

## **H05d (20060711)**

CPU = 3056, DSP = 3041

**NOTE** that this release does include TTP716 change of a prior release.

1. **TTP689:** Added change to prevent downloads of software prior to G04/H05 for HW level 04 (RoHS). This change only affects the download validation.
2. **TTP713:** Added prevention to disallow Gx16 model from accepting H code. This change only affects the 16-slot model download validation.
3. **TTP717:** Added additional ERP for drive load faults.
4. **TTP715:** Added support for 6 drives. This only affects the model capable of supporting 6 drives.
5. **TTP722:** Fixed a condition where in maintenance mode/sensors menu, the auto-offset and media scan sensor values do not update when using HW level 04 (RoHS). This is a correction for manufacturing and field service and does not represent a functional change.
6. **TTP730:** Changed power-up and power-down screens to remove 'PLASMON'. This is a non-functional change and affects Plasmon personality models only.
7. **TTP731:** Added command line interface(serial port) command to view the current calibration data. This is for manufacturing/engineering use only and is a non-functional change.
8. **TTP733:** This is a change made to improve manufacturing margins for drive loads and reduction of the number of recoveries. Increased the first distance on a put to a UDO drive along with increasing acceleration and deceleration rate of the picker when putting to drives in order to assist the fingers in opening. The terminal velocity of a put to a drive was slightly increased. Changed the media import

such that media type is determined not directly from the mail-slot, but is first moved to a utility slot, then picked and IDed from the utility slot.

### **H05c (20060630)**

CPU = 3055, DSP = 3039

**NOTE** that this release specifically does not include TTP716 change of H05b version. This release was to add specific changes to base code G04a.

1. **TTP720:** Corrected sense data that is recorded at time of a recovered error. This is a manufacturing support feature used when 'report recovery' is set.
2. **TTP725:** Made a change to prevent library from erroneously showing valid multiple LUNs at 8, 16, 24, and so on.
3. **TTP727:** Added fault drive address to a field in the sense data, bytes 33-34. This is a non-functional change.
4. **TTP728:** The sense data fields were filled in to match an updated version of the SCSI specification, version H and beyond.

### **H05b (20060418)**

CPU = 3054, DSP = 3039

1. **TTP716:** Fixed a condition where the Read Element Status data could be missing Element Status Page Header.

## **H05a (20060410)**

CPU = 3053, DSP = 3039

1. **TTP711:** Changed the scan option of maintenance mode to update element status even if there is media in the picker and the barcode scan can't be completed (If a barcode reader is present and enabled the Gx library physically cannot scan barcodes). The panel will now indicate a 'barcode read abort because of media in the MTE' instead of just 'scan failed'.
2. **TTP710:** Added feature to LIB VERIFY of maintenance mode which will read the drive error logs(drives that are online) and request drive lens cleaning when an 04-40-9D error is found. The request will be to clean all drives. After a cleaning the request to clean when running LIB VERIFY will not be displayed unless a newer instance of 04-40-9D is found in a drive error log.
3. **TTP703:** A change to the way the software determines lift home position was made to improve a manufacturing issue
4. **TTP765** Fixed an issue in exchange ERP path that under fault conditions might cause incorrect picker usage and subsequent 04-80-1D error or possibly an 04-80-20 error.

## **H05 (20060303)**

CPU = 3051, DSP = 3037

1. **TTP512:** Implemented a serial port console feature to force SCSI faults. This is a feature for debug only.
2. **TTP515:** TEST LIBRARY menu option changed such that it selects proper 4 corner slots and does not abort if library is empty.
3. **TTP519:** Changed the CodeBuilder program to save the build ID in the CPU image. Changed the CPU to determine which image has been loaded and extract the Build ID from that image to be used. This is for code level management internal to the controller.
4. **TTP551:** Issue of personality loss found in field upgrade tool with combination of firmware prior to a certain level. The tool was fixed along with a tech bulletin on correct sequencing.
5. **TTP561:** An ERP was implemented for a fault condition which leaves media unloaded from a drive or ejected out partially into the MTA but not engaged in pickers. This could result in a blocked lift. The ERP recovers this situation.
6. **TTP578:** Implemented a LIMIT RECOVERY option. This recovery option limits the number of tries to 3 (original attempt plus two retries) as opposed to the full recovery which allows up to 7 retries. Return to source is not done when this option is selected. Also, when LIMIT RECOVERY is selected, the library does not attempt to put media back to its original location on a failure.
7. **TTP580:** Changed the lift PID constants to provide a better profile in the down direction.
8. **TTP607:** Fixed case where negative numbers were sometimes presented as results for the PRODUCTION TEST option.
9. **TTP620:** Made slot selection in MOVE MEDIA (primarily for larger units) more user friendly by allowing forward/backward selections.
10. **TTP622:** Feature added where the library will stop logging events when a SCSI RESET occurs. This is a debug only feature.
11. **TTP629:** CYCLE TEST option for storage slots was changed to picker selection, picker 1 or picker 2.
12. **TTP631:** Quick scan on Gx174 would go to Gx80 col1 top before going to top of Gx174 to begin the scan. This was changed to go directly to top of col1 for Gx174. This is a dynamics efficiency improvement.
13. **TTP637:** An incorrect situation with Read Element Status with volume tags was corrected.

14. **TTP639:** An exchange with a specified picker should use only that picker to do the exchange, essentially two moves in somewhat reverse order. The Gx simply did a normal exchange. This was changed to the correct method.
15. **TTP640:** Fixed a bug where if a MOVE with invert is done and there is a cartridge in the unused MTE, the cartridge barcode may be corrupted (side A/B may become reversed).
16. **TTP652:** Fixed an issue where no error is issued when the picker is specified on an exchange and the source is the same as the 2nd destination, like 1->2->1. Now an 05-80-4A is issued.
17. **TTP655:** Fixed case where lift home position can become negative.
18. **TTP658:** Add option to serial console to allow clearing of unit statistics page. This for engineering test and debug only and is not a functional change.
19. **TTP660:** Added option to serial port to be able to dump error statistics page and error log page to the console. This is a debug only function.
20. **TTP661:** Added serial text to the console output to indicate when the IO station ERP-for-MO media is exercised.
21. **TTP663:** In the past when a cartridge was moved to the IO station the volume tag information is set to unknown. This was changed such that Send Volume Tag / Request Volume Ele Addr will still succeed in finding the cartridge at the IO station. However, if the cartridge is pulled out or Gx is powered down and re-powered up, then the cartridge volume tag is set to unknown, and Send Volume Tag / Request Volume Ele Addr will not find the cartridge.
22. **TTP664:** It was found that Mode sense 10 (scsi cmd 5A) returned the mode header for a mode sense 6 command. This was corrected.
23. **TTP665:** For MOVE or EXCHANGE command the media in a drive(s) is ejected concurrently with picker movement to optimize performance.
24. **TTP667/673:** Made changes to address possible conditions where Gx library would fail to recognize SCSI reset.
25. **TTP669:** Made the error codes during normal operation (intermittent errors) match the error codes and sub-codes done in power-up testing.
26. **TTP670:** Motor control features were added into the op panel in maintenance mode for some personalities (see TTP705).
27. **TTP671:** Production Test option changed to allow user to view result of previous run.
28. **TTP672:** Implemented code to force a full unit calibration after a unit has been parked.
29. **TTP676:** Added Gx16 model to modeltypes of Gx library for AA attachment.
30. **TTP677:** Updated ERP to do a full calibration on the second miss-detect of a piece of media.
31. **TTP678:** Added feature to look at configuration plug for to set "AA-MIDRANGE" personality. This is only for hardware level = 4.
32. **TTP679:** On a put to a drive, added code to check to see if the media is in the drive. If the media is not in the drive, a re-try is attempted, even if the DSP indicated that the picker was empty.
33. **TTP681:** PRODUCTION TEST was changed to prevent grouping of media in long production test runs.
34. **TTP682:** Test library op panel option changed such that it rotates picker usage at the drives.
35. **TTP684:** Changed the stepper motor profile on pivot to do a more smooth accel/decel which prevents stalling when the motor is started and overshoot when stopping.
36. **TTP690:** Fixed audible noise issue with slow pivot after increase in pivot current. The slow cal pivot speed was increased to mitigate noise.
37. **TTP692:** Dampened short moves in the upper part of column 2.
38. **TTP693:** New Pick/Put profile slowed to allow more torque.
39. **TTP700:** Added UDO lens cleaning option to menu.
40. **TTP702:** PRODUCTION TEST panel changed such that when error occurs display will show error code and the last move.
41. **TTP704:** Added ability to do a dash('-') character to the op panel serial number change function.
42. **TTP705:** Conditionally removed MOTOR TEST option from TEST & DEBUG menu of maintenance mode based on personality.
43. **TTP708:** Implementation of RoHS or HW=4, new main board.

## **H04b (20060228)**

CPU = 3049, DSP = 3034

1. **TTP688:** On a reset, all of the element reservations were released properly, but if the host reserved the entire library, that reservation was not released. Added fix to release the reservation of the entire library when a SCSI bus reset occurs.
2. **TTP699:** It was found that sending a REZERO command without parameters would clear the state of the picker, i.e. its orientation. This could at times cause inadvertent retries and confused library state. This was fixed by defining a REZERO without parameters to be a reposition at drives without changing the state of the picker.

## **H04a (20051002)**

CPU = 3046, DSP = 3034

1. **TTP642:** Added ERP to moves from IO station to recheck media type if first detected as MO media.
2. **TTP644:** The display of ILLEGAL REQUEST SCSI codes such as 05-3B-0E on the op panel was removed. It was accidentally allowed when doing field service items.
3. **TTP649:** The generation of 04-88-05 errors upon running of Rezero or Initialize in the Debug & Test Menu was fixed.

## **H04 (20050901)**

CPU = 3040, DSP = 3034

4. **TTP465:** The fault out process for changing from model types G24-80 to model types G166-174 was improved to make easier. This is manufacturing improvement.
5. **TTP544:** Add capability for production test to run the drives, do exchanges with flips, and handle mixed media.
6. **TTP550:** Unable to clear error statistics log from the maintenance option of the front panel. This was fixed.
7. **TTP555:** Glitch on BUSY causes library SCSI to become unresponsive.
8. **TTP566:** TTP613: A logical bug was fixed which would post and incorrect 04-52-59 and element status of the drive and picker incorrectly stated.
9. **TTP569:** Fixed fault where a piece of media is moved from the IO station to a picker as a final destination and barcode is disabled, the picker is staged incorrectly on the next move. Changed the function AccessPhase1() in EacAccess.cpp to prevent a picker stage if the source element is one of the pickers.
10. **TTP571:** Fixed case where SCSI initiator mode function did not handle TIN from the UDO drives.
11. **TTP573:** Added fake pivot to LIB VERIFY so that pivot is activated as part of the LIB VERIFY test of the maintenance menu.
12. **TTP574:** Add selection of 1 OR all drives to drive FMR and LIB VERIFY.
13. **TTP575:** Changed various op panel displays of 'PLASMON LIBRARY' to be personality dependent.
14. **TTP576:** References to IST/BPT disk changed to CE cartridge for consistency.
15. **TTP577:** Made 2 of the three drive options under 2 menus dependant upon personality setting.
16. **TTP579:** Fixed bug that leaves FLASH corrupted during a library FMR or SCSI download if the download file has a boot present.
17. **TTP588:** References to mailslot where changed to IO Station.
18. **TTP591:** Changed code to disallow model change to 24 slot for certain personalities.
19. **TTP592:** Added notify of need for SCSI terminator attach to the op panel when running the drive and library FMR options. It was also added to the LIB VERIFY menu.

20. **TTP593:** Changed MODEL TYPE option to SLOTS AVAIL under the changer options menu.
21. **TTP595:** Pivot speed and acceleration slowed.
22. **TTP599:** The 04-80-82 was removed from the log posting. It is an internal status code with no meaning at a higher level and was obscuring meaningful log data.
23. **TTP600:** The error log and statistics reporting were at times inconsistent with actual errors. This was corrected most specifically with fan fault generated, et al.
24. **TTP601:** Fixed a case where the unit lost location when PRODUCTION TEST fails with no recovery selected.
25. **TTP603:** Implemented enhancements to original definition of LIB VERIFY test based on usage of a CE cartridge.
26. **TTP604:** Added feature, f, to console to be able to display the software versions on the serial port.
27. **TTP606:** Changed the cable test of maintenance mode to not use customer media. Instead it will now ask for media from IO Station.
28. **TTP615:** Provided a fixed barcode label value, CECART1, for the LIB VERIFY test used for field service.
29. **TTP610:** Added fault code to specifically point to an IO station out of home position at powerup.
30. **TTP611:** Changed the cable test such that it states information about 4 drives only.
31. **TTP616:** Moved SCSI additional sense bytes 33-35(Error Subcode, type, context) to bytes 29-31. Shifted bytes 29-32(MTE number, Failure Element Addr, component number) to start at byte 32. This places Error subcode in first 32 bytes of the sense data.
32. **TTP618:** Removed some internal printf's that caused pause for Inquiry and other SCSI responses. A non-functional change.
33. **TTP619:** Powering down Gx while it is busy causes Gx to act as if a power disruption event has occurred. This was changed to a normal powerdown with a specific warning on the panel.
34. **TTP623:** Implemented the Wait-On-Load feature of the library per the SCSI specification.
35. **TTP625:** Fixed case where a fault of the tach cable of lift motor would cause the lift to slam.
36. **TTP626:** The BARCODE TXD option was removed. It served no purpose in current machine.
37. Changed all references of 'SCSI/DRV' to 'LIB VERFIY' in the maintenance menu of "5 TEST & DEBUG".
38. **TTP630:** A bug with the ChgrEject bit on mode page 20h was fixed. It now functions as specified.
39. Fixed case were exiting from the "6 FUNCTION COUNTS" data of maintenance mode option under status would fall into "7 UDO DRIVE DATA".
40. **TTP633:** Slowed down lift speed on Gx174.
41. **TTP637:** Fixed a case where the Read Element Status did not report correct volume tags after an exchange.
42. Added an ldr option to the serial console that prints a raw hex file version of the DSP log for new tool parsing.

### **H03 (20050613)**

CPU = 3038, DSP = 3032

1. **TTP458:** Fault at SCSI download produced an unrecoverable DSP. A fix was added based on the DSP security password being corrupted. No issues have been seen since.
2. **TTP465:** Added a quick fault feature to the Gx80 software that causes the library to return Error Code 15: 04-80-AE when an 80 model board is in a Gx174 model.
3. **TTP470:** It was seen in the case of IES that the MTA rubbed the rest plate in pivoting to column 1 from column 2. This was fixed by forcing the picker up off the hard stop before pivoting back to column 1 after a quick-scan.
4. **TTP486:** It was observed on recent units that the pivot calibration would finish with too much penetration into either column 2 or 1 at times resulting in sensor rub. It was found that mechanical tolerances were not good enough to guarantee pivot home and auto sensor relationship as previously



designed for in the software so the pivot calibration was changed to handle all three possible sensor states.

5. **TTP521:** Fixed issue where an Ignore Reside Wide message was issued while in narrow mode for SUN SCSI adapter after TIN rejection and a bus reset.
6. **TTP523:** Changed the unit power-loss event such that a quick cal is done upon re-power. Previously a quick cal followed by a full cal was done.
7. **TTP529:** It was found that a failure mode of the media scan sensor would cause an excessive retry loop. This was fixed by properly handling all the fault modes of the sensor.
8. **TTP532:** The prevent/allow bit was not being cleared by a bus device reset. Fixed so that the Prevent Media Removal bit is cleared whenever a bus reset or a bus device reset occurs.
9. **TTP546:** While doing ship test it was seen that the MTA pivot sensor could be hit against the side of the unit in column 1. When parking the MTA will be flipped such that the pivot sensor is to the inside of the unit to protect it against possible damage.
10. **TTP548:** It has been seen on a number of units of recent vintage that the MTA is assembled such that it contacts the rest plate before the hardstop in column1 when doing calibration. Then when we pivot to column2 the numerics of the lift algorithm gets a negative value and fails calibration as the lift overshoots slightly. This fault is attributed to a slight droop in the MTA and is fixed by doing column2 lift calibration higher and not allowing slight overshoot in column2 lift cal to cause a negative result.
11. **TTP552:** It was found that doing a mode select to the library would cause a UDO drive reset, and the drive goes narrow. Proper protocol of issuing TUR and then allowing TIN allowed the condition to work. This was fixed such that mode select does not cause a drive reset unless appropriate.
12. **TTP555:** Glitch on BUSY causes library SCSI to become unresponsive. In incorrectly handled loss of nexus was fixed.
13. **TTP556:** It was found that with mechanical tolerances on recent units(mast twist), there were faults in production testing(with no retries) on putting media where the put distance was a bit too short. The put distance was changed to add half of the put retry offset on every put. Then on retries, we add only the other half of the offset. In the seen fault cases, a retry would successfully complete.
14. **TTP557:** In engineering testing it was found that when running the op panel demonstration test an exchange of 6001->6001->(any storage slot) was attempted. A logical bug in the selection of a valid destination 2 was fixed. This bug was only in demonstration mode.
15. **TTP559:** Added improvements to error handling of 04-52-59 errors. Added a better retry for this fault at storage elements and will use the drive type when fault occurs at a drive.
16. **TTP562:** Adjusted the PUT point for a UDO drive to be 0.022 deeper.
17. A new personality string for a specific usage and specific inquiry string.
18. User warnings on DEMONSTRATION and PRODUCTION TEST op panel menu options that are in the MAINTENANCE menu.
19. Implemented a library SCSI initiator mode to facilitate additional test functions.
20. Implemented a SCSI/Drv test for field service testing.
21. Implemented a library FMR function to allow software update from disk.
22. Implemented a UDO drive FMR function to allow UDO software update from disk.
23. Implemented the ability to change the model and serial number of the library from the op panel.  
**WARNING:** Doing a model change will lose prior VPD data such as power-on hours, unit statistics, and more. The use of this feature is primarily for when a new board is installed in a unit and should not be used otherwise.
24. Implemented a UDO drive information menu for firmware level, etc.
25. Implemented a UDO drive error information menu for visibility of the last 10 UDO drive errors.
26. Made change to Demonstration test of maintenance mode op panel so that it displays any error codes correctly.

## **H02a (04/05/2005)**

CPU = 3030, DSP = 3026

1. TTP515: The Test Library op panel function was corrected for the various model types to do a better attempt at the four corners of the library.
2. TTP516: Added an extended run option of 65000 cycles to the production test option of the op panel menu.
3. TTP517: On Gx174 with new lift bracket (and possibly some units without the new bracket) fail lift calibration, but no error is generated. This was fixed.

## **H02 (03/01/2005)**

CPU = 3029, DSP = 3025

1. TTP453: Implemented a new barcode algorithm to strictly implement the reader protocol and improve reliability of the barcode reading process.
2. TTP493: The "Cycle Test" menu option for flip allows options to run 2, 20, or 200 cycles. The 200 cycle option may damage an MTA if used as there is much heat generated. The 200 cycle option was changed to 50.
3. TTP496: The EDTS stack size variable was changed to allow a LONG instead of a WORD to allow a larger stack size where needed. Also put in statements to allow viewing of the TCB if necessary.
4. TTP498: It was found that bytes 9, 10, and 11 were not cleared as expected when doing an IES. Other fields, i.e. full, were cleared appropriately. The fields were being cleared correctly for a Move/Exchange media command. This was corrected.
5. TTP499: Removed the display of the error text on the summary screen (the screen that appears when you press the '?' button after an error has occurred). This text was unnecessary. The full text is displayed in the Error Log.
6. TTP505: Added Gx134 model capability along with changing the Gx174 element map to accommodate the Gx134 and future contingencies.
7. TTP506: Fixed invalid slot number selection in the storage slot cycle test. This is in the maintenance mode test and did not affect normal operation of the library.
8. TTP509: Barcodes received by the host have CR and LF appended to the end of the code when using the new algorithm. This was corrected so that there is not a CR and LF.
9. TTP510: Change an error instance where the unit responds to mode select page 20h with an invalid field in CDB. This was changed to be more correct by responding with invalid field in parameter list.

## **H01 (01/27/2005)**

CPU = 3027, DSP = 3024

This is the first release for Gx166/174. The firmware is built from a common source for the Gx24-80 models and is significantly similar. This first release version was parallel to the G01 version for the Gx24-80 models so the release history for G01 applies to H01. It will not be listed here.