Sun StorEdge™ L8 Tape Autoloader Decision Tree

The purpose of the Sun StorEdge L8 Tape Autoloader Decision Tree is to identify a logical sequence of events to troubleshoot a Sun StorEdge L8 Tape Autoloader based upon the error code displayed on the top line of the LCD.

The following decision tree assumes the following Field Replaceable Unit (FRU) items are available for servicing a StorEdge L8 Tape Autoloader.

➢ Barcode Scanner
➢ StorEdge L8 Tape Autoloader (does not include Barcode Scanner)

Failure to successfully clear the error code after performing the steps outlined in this decision tree will result in autoloader replacement.

Sun StorEdge L8 Tape Autoloader Decision Tree

Legend:

DP = Decision Point
R= Response
A= Action

1.0 LCD Blank

A blank LCD indicates a hardware problem with the LCD, cabling problems within the StorEdge L8 Tape Autoloader or power supply problems.

DP1: Check the green Ready/Activity LED on the front panel of the StorEdge L8 Tape Autoloader to see if it is illuminated.

    R1: Green Ready/Activity LED is not illuminated.

        DP2: Visually inspect the autoloader power switch, located in the lower left corner of the front panel behind the bezel, to see if it is in the ON position.

        Note: The power switch is a toggle type switch. The power switch toggled to the left is in the ON position.

            R2: Front panel power switch is ON.

                DP3: Check to see if the autoloader fan is spinning.

                    R3: Fan is not spinning.

                    A3: Toggle the front panel power switch to the OFF position.

                    Note: Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position.

                    DP4: Check the AC Power Cord for proper connection.

                        R4: AC Power Cord is properly connected.

                          DP5: Try a different AC power cord.

                            R5: Second AC power cord does not work.

                            A5: Replace the autoloader.

                            R5: Second AC power cord works.

                            A5: Replace the failing AC power cord.

                      R4: AC power cord is not properly connected.

                      A4: Reseat the AC power cord

                      A4: Toggle the front panel power switch to the ON position.

                      Note: Use the eraser end of a pencil or something similar to press the left side of the power switch to toggle it to the ON position.

                    R3: Fan is spinning.

                      A3: Replace the autoloader.

            R2: Front panel power switch is OFF.

            A2: Toggle the front panel power switch to the ON position.

            Note: Use the eraser end of a pencil or something similar to press the left side of the power switch to toggle it to the ON position.

    R1: Green Ready/Activity LED is illuminated.

    A1: Replace the autoloader.

2.0   81h_Invalid Command Error

This error code indicates the autoloader received an undefined command or an invalid parameter to a command. Troubleshooting should begin with confirming the SCSI command sent to the autoloader is supported and was sent with valid parameters.

DP1: Check to see if the SCSI command sent to the autoloader is supported and was sent with valid parameters.

Note: For a list of supported SCSI commands, refer to Sun StorEdge L8 Tape Autoloader SCSI Reference Guide (6-00524-01).

   R1: SCSI command is supported and was sent with valid parameters.
   A1: Cycle power to the autoloader and retry SCSI command.
      DP2: Check to see if the error code is still present after cycling autoloader power and retrying the SCSI command.

      Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

            R2: Error code is still present.
            A2: Disconnect the autoloader from the host server.
            A2: Cycle power to the autoloader and retry the autoloader command via the front panel.
                  DP3: Check to see if the autoloader successfully completed the command after disconnecting the autoloader from the host server and cycling autoloader power.
                        R3: Autoloader command not successful.
                        A3: Replace the autoloader.
                        R3: Autoloader command successful.
                        A3: Troubleshoot the host server.
                        A3: Reconnect the autoloader to the host server.
                        A3: Continue normal autoloader operation.
            R2: Error code no longer present.
            A2: Continue normal autoloader operation.
   R1: SCSI command is not supported or was sent with invalid parameters.
   A1: Cycle power to the autoloader and retry supported SCSI command with valid parameters.

3.0   82h_Device Status Not Suitable To Execute This Command

This error code indicates a "BUSY" was reported to the host for the requested SCSI command. If the autoloader robotics are busy, some commands cannot be executed at the same time. This is most likely the cause of an error code 82h. Troubleshooting should begin with cycling power to the autoloader and retrying the last operation.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the last operation.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

   R1: Error code is still present.
   A1: Replace the autoloader.
   R1: Error code no longer present.
   A1: Continue normal autoloader operation.

4.0   83h_Inventory Not Valid

This error code indicates the autoloader's cartridge inventory is not valid because of manual changes to the cartridge inventory. Troubleshooting should begin with performing a cartridge re-inventory.

Note: This error can occur if the autoloader's cover is removed and a cartridge is manually removed from its cartridge transport element.

DP1: Check to see if the error code is still present after performing a cartridge re-inventory.

Note: For instructions on performing a cartridge re-inventory via the front panel, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Operating the Autoloader -> Re-inventory of Cartridges.

> R1: Error code is still present.
> A1: Cycle power to the autoloader.
>
> **Note:** The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.
>
> > DP2: Check to see if the error code is still present after cycling autoloader power.
> > > R2: Error code is still present.
> > > A2: Replace the autoloader.
> > > R2: Error code no longer present.
> > > A2: Continue normal autoloader operation.
>
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

5.0   84h_Source Element Not Ready

This error code indicates there is no cartridge in the location where a cartridge move was issued. Troubleshooting should begin with cycling power to the autoloader and retrying the cartridge move operation.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the cartridge move operation.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

Note: For instructions on performing a cartridge move operation via the front panel, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Operating the Autoloader -> Working with Data Cartridges.

> R1: Error code is still present.
> A1: Replace the autoloader.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

6.0 85h_Destination Element Not Ready

This error code indicates the location where a cartridge move was issued already contains a cartridge. Troubleshooting should begin with cycling power to the autoloader and retrying the move operation.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the cartridge move operation.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

Note: For instructions on performing a cartridge move operation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Operating the Autoloader -> Working with Data Cartridges.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

7.0 86h_Mailslot Access Rejected or Door Locked!

This error code indicates a user attempted to access the mail slot, but media removal was prevented. Host application software restricting access to the mail slot is the most likely cause of this error. Troubleshooting should begin with checking the host application software to determine if it is preventing media removal.

Note: Temporarily disconnecting the autoloader from the host server will eliminate the host and its software as the potential cause for this error.

DP1: Check the host application software to see if it is preventing media removal.
    R1: Host application software is not preventing media removal.
    A1: Cycle power to the autoloader and retry accessing the mail slot via the front panel.

    Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    Note: For instructions on accessing the mail slot via the front panel, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Operating the Autoloader -> Working with Data Cartridges -> Importing or Exporting Cartridges.

        DP2: Check to see if the error code is still present after cycling autoloader power and retrying accessing the mail slot.
            R2: Error code is still present.
            A2: Disconnect the autoloader from the host server.
            A2: Cycle power to the autoloader and retry accessing the mail slot via the front panel.
                DP3: Check to see if the error code is still present after cycling autoloader power and retrying accessing the mail slot.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Troubleshoot the host server.
                    A3: Reconnect the autoloader to the host server.
                    A3: Continue normal autoloader operation.
            R2: Error code no longer present.
            A2: Continue normal autoloader operation.
    R1: Host application software is preventing media removal.
    A1: Enable host application software to allow the user access to the mail slot.

8.0   87h_Operation Timeout

This error code indicates an autoloader command did not complete in the required amount of time. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

Note: For instructions on performing an autoloader operation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Operating the Autoloader.

   R1: Error code is still present.
   A1: Check to see that terminator and SCSI cables are securely installed. Try a different terminator and/or different SCSI cables. Cycle autoloader power and retry the autoloader command.
      DP2: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.
            R2: Error code is still present.
            A2: Replace the autoloader.
            R2: Error code is no longer present.
            R2: Continue normal autoloader operation.
   R1: Error code no longer present.
   A1: Continue normal autoloader operation.

9.0   88h_Communications Error During Loop-Back

This error code indicates a communications error was encountered during a loop-back test. Troubleshooting should begin with cycling power to the autoloader and retrying the loop-back test.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the loop-back test.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

   R1: Error code is still present.
   A1: Replace the autoloader.
   R1: Error code no longer present.
   A1: Continue normal autoloader operation.

10.0   89h_System Test Timeout

This error code indicates there was a communication timeout between the drive and the autoloader during the system test. Using invalid media or getting a SCSI bus reset can cause this error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
        DP2: Check to see that valid media is being used in the autoloader.
              R2: Valid media is being used in the autoloader.
              A2: Disconnect the autoloader from the host server and confirm that a known good LVD SCSI terminator is securely installed.
              A2: Cycle power to the autoloader.
                    DP3: Check to see if the error code is still present after cycling autoloader power.
                        R3: Error code is still present.
                        A3: Replace the autoloader.
                        R3: Error code no longer present.
                        A3: Troubleshoot the host server.
                        A3: Reconnect the autoloader to the host server.
                        A3: Continue normal autoloader operation.
              R2: Invalid media is being used in the autoloader.
              A2: Replace media with valid media.
              A2: Cycle power to the autoloader and continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

11.0   8Fh_Recovered Loader Error

This error code indicates the autoloader successfully recovered from an error. This error code is typically associated with SCSI bus resets since it takes longer for an autoloader to complete a command that was retried. Troubleshooting should begin with cycling power to the autoloader to clear the error code.

If error code 8Fh consistently repeats, replace the autoloader, as it may be an indication that components are wearing out.

12.0 90h_Mechanical Initialization Failure

This error code indicates the autoloader robotics were not able to move to a safe mechanical initialization position. This error code can occur if an error code A4h_Mail Slot Position Error was encountered (possibly due to manually opening the mail slot door) and not cleared prior to initiating autoloader robotics motion. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
            R2: Stuck cartridges and/or misaligned carriers found.
            A2: Remove stuck cartridges and reinstall cartridge carriers.
            A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

13.0 91h_Inventory Scan Failure

This error code indicates the autoloader encountered a robotics error during a cartridge inventory scan. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
            R2: Stuck cartridges and/or misaligned carriers found.
            A2: Remove stuck cartridges and reinstall cartridge carriers.
            A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

14.0 92h_Preposition Failed

This error code indicates a belt positioning error occurred during an autoloader preposition command. Troubleshooting should begin with cycling autoloader power.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

   R1: Error code is still present.
   A1: Toggle the front panel power switch to the OFF position.
   A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
      DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

      Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

         R2: Stuck cartridges and/or misaligned carriers not found.
         A2: Remove all media.
         A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
         A2: Toggle the front panel power switch to the ON position.
            DP3: Check to see if the error code is still present.
               R3: Error code is still present.
               A3: Replace the autoloader.
               R3: Error code no longer present.
               A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
         R2: Stuck cartridges and/or misaligned carriers found.
         A2: Remove stuck cartridges and reinstall cartridge carriers.
         A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
         A2: Continue normal autoloader operation.
   R1: Error code no longer present.
   A1: Continue normal autoloader operation.

15.0 93h_Cartridge Load Error

This error code indicates a failure occurred while trying to load a cartridge from the drive to its slot. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
            R2: Stuck cartridges and/or misaligned carriers found.
            A2: Remove stuck cartridges and reinstall cartridge carriers.
            A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

16.0 94h_Cartridge Unload Error

This error code indicates a failure occurred while trying to unload a cartridge from the drive to its slot. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

Note: If a stuck tape in the tape drive is suspected, allow sufficient time for the tape drive to complete all operations prior to retrying the cartridge unload operation. This may take as long as ten minutes if the autoloader power was cycled while the cartridge was positioned at the physical end of the media. Also, make sure that the backup software is not reserving the slot or preventing the tape drive from ejecting the cartridge. Temporarily disconnecting the autoloader from the host server will eliminate the host and its software as the possible cause of this error.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Cartridge stuck in tape drive.
            A2: Contact Technical Support for assistance.
            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
            R2: Stuck cartridges and/or misaligned carriers found.
            A2: Remove stuck cartridges and reinstall cartridge carriers.
            A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

17.0 95h_Import Error

This error code indicates an error occurred while trying to import a data cartridge to a carousel slot. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
            R2: Stuck cartridges and/or misaligned carriers found.
            A2: Remove stuck cartridges and reinstall cartridge carriers.
            A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

18.0 96h_Export Error

This error code indicates an error occurred while trying to export a data cartridge from its carousel slot. An empty carousel slot that is expected to be full can cause this error. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Toggle the front panel power switch to the OFF position.
> A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
> > DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.
> >
> > **Note:** For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.
> >
> > > R2: Stuck cartridges and/or misaligned carriers not found.
> > > A2: Remove all media.
> > > A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
> > > A2: Toggle the front panel power switch to the ON position.
> > > > DP3: Check to see if the error code is still present.
> > > > > R3: Error code is still present.
> > > > > A3: Replace the autoloader.
> > > > > R3: Error code no longer present.
> > > > > A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
> > > R2: Stuck cartridges and/or misaligned carriers found.
> > > A2: Remove stuck cartridges and reinstall cartridge carriers.
> > > A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
> > > A2: Continue normal autoloader operation.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

19.0 A0h_Carousel Motion Failure

This error code indicates an error occurred during carousel movement (position not found). A missing or misaligned cartridge, an obstruction or an unexpected cartridge in the carousel path can cause this error. Troubleshooting should begin with cycling autoloader power.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Toggle the front panel power switch to the OFF position.
> A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
>> DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.
>>
>> **Note:** For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.
>>
>>> R2: Stuck cartridges and/or misaligned carriers not found.
>>> A2: Remove all media.
>>> A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
>>> A2: Toggle the front panel power switch to the ON position.
>>>> DP3: Check to see if the error code is still present.
>>>>> R3: Error code is still present.
>>>>> A3: Replace the autoloader.
>>>>> R3: Error code no longer present.
>>>>> A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
>>> R2: Stuck cartridges and/or misaligned carriers found.
>>> A2: Remove stuck cartridges and reinstall cartridge carriers.
>>> A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
>>> A2: Continue normal autoloader operation.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

20.0 A1h_Cartridge Transport Position Error

This error code indicates a cartridge transport element was unable to reach its desired position while the autoloader was attempting to place a cartridge to or remove a cartridge from the drive or a carousel slot. Troubleshooting should begin with cycling autoloader power.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
        R2: Stuck cartridges and/or misaligned carriers found.
        A2: Remove stuck cartridges and reinstall cartridge carriers.
        A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
        A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

21.0 A2h_Gripper Position Error

This error code indicates the gripper was unable to reach its desired position during an autoloader motion command. Troubleshooting should begin with cycling autoloader power.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

22.0 A3h_Cartridge Pick Error

This error code indicates an error occurred while the autoloader was attempting to get a cartridge from the drive or a carousel slot. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Toggle the front panel power switch to the OFF position.
    A1: Remove the AC power cord and SCSI cables from the back panel of the autoloader.
        DP2: Inspect the autoloader for stuck cartridges and/or misaligned cartridge carriers.

        Note: For instructions on removing stuck cartridges and inspecting for proper cartridge carrier installation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Troubleshooting and Diagnostics -> Removing Stuck Cartridges From Slots.

            R2: Stuck cartridges and/or misaligned carriers not found.
            A2: Remove all media.
            A2: Reinstall cartridge carriers, autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Toggle the front panel power switch to the ON position.
                DP3: Check to see if the error code is still present.
                    R3: Error code is still present.
                    A3: Replace the autoloader.
                    R3: Error code no longer present.
                    A3: Import media, reconnect SCSI cables, and continue normal autoloader operation.
            R2: Stuck cartridges and/or misaligned carriers found.
            A2: Remove stuck cartridges and reinstall cartridge carriers.
            A2: Reinstall autoloader cover and power cord. Check to see that the LVD SCSI terminator is securely installed.
            A2: Continue normal autoloader operation.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

23.0 A4h_Mail Slot Position Error

This error code indicates the mail slot door was not in the requested position during an autoloader operation, most likely due to a cartridge or other object blocking the mail slot door. Manually opening the mail slot door can also cause this error. Troubleshooting should begin with visually inspecting the mail slot door and removing any obstruction that is present.

DP1: Check to see if a cartridge or other object is blocking the mail slot door.
    R1: Mail slot door obstruction not found.
    A1: Cycle power to the autoloader.

    Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

        DP2: Check to see if the error code is still present after cycling autoloader power.
            R2: Error code is still present.
            A2: Replace the autoloader.
            R2: Error code no longer present.
            A2: Continue normal autoloader operation.
    R1: Mail slot door obstruction found.
    A1: Clear obstruction.
    A1: Cycle power to the autoloader.

    Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

24.0 A5h_Fan Error

This error code indicates the fan within the autoloader has failed or is not operating within its specified ranges. Since the autoloader fan is not a FRU item, replace the autoloader if an A5h error code is encountered.

25.0 B0h_ROM Error

This error code indicates the autoloader encountered a ROM error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

26.0 B1h_RAM Error

This error code indicates the autoloader encountered a RAM error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Replace the autoloader.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

27.0 B2h_NVRAM Error

This error code indicates the autoloader encountered an NVRAM error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Replace the autoloader.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

28.0 B3h_Controller Timer Failure

This error code indicates an unrecoverable failure has occurred in the mail controller timer circuit. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Replace the autoloader.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

29.0 B4h_Loader to Drive Communication IC Error

This error code indicates a failure occurred in the Integrated Circuit (IC) that handles communication between the autoloader and the tape drive. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

30.0 B5h_Display Error

This error code indicates the autoloader has encountered an error with the display. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

31.0 B6h_Memory Error

This error code indicates the autoloader has encountered a memory error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

32.0 B7h_Timeout On Autoloader Command

This error code indicates the autoloader has encountered a timeout during an autoloader command. Troubleshooting should begin with cycling power to the autoloader and retrying the autoloader command.

DP1: Check to see if the error code is still present after cycling autoloader power and retrying the autoloader command.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Replace the autoloader.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

33.0 BCh_Drive Has Recorded An Over Temperature Condition

This error code indicates the autoloader tape drive has recorded an over temperature condition. Troubleshooting should begin with confirming the autoloader is installed in an environment that meets the requirements for the StorEdge L8 Tape Autoloader.

DP1: Check to see if the installation location meets the requirements for the StorEdge L8 Tape Autoloader.

Note: For technical specifications of the environment required for proper autoloader operation, refer to Sun StorEdge L8 Tape Autoloader User's Guide (6-00522-01) -> Getting Started -> Choosing an Installation Location.

> R1: Installation location requirements met.
> A1: Continue normal autoloader operation. Replace the autoloader if this error code recurs.
> R1: Installation location requirements not met.
> A1: Move the autoloader to a location that meets the requirements and continue normal autoloader operation.

34.0 BDh_No Connection to Drive

This error code indicates the autoloader encountered a drive connection problem. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

> R1: Error code is still present.
> A1: Replace the autoloader.
> R1: Error code no longer present.
> A1: Continue normal autoloader operation.

35.0 BEh_Generic Drive Response Error

This error code indicates the autoloader encountered a generic drive response error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.

36.0 BFh_Fatal Error

This error code indicates the autoloader has encountered a fatal error. Troubleshooting should begin with cycling power to the autoloader.

DP1: Check to see if the error code is still present after cycling autoloader power.

Note: The autoloader power switch is located in the lower left corner of the front panel behind the bezel. Use the eraser end of a pencil or something similar to press the right side of the power switch to toggle it to the OFF position. Press the left side of the power switch to toggle it back to the ON position.

    R1: Error code is still present.
    A1: Replace the autoloader.
    R1: Error code no longer present.
    A1: Continue normal autoloader operation.