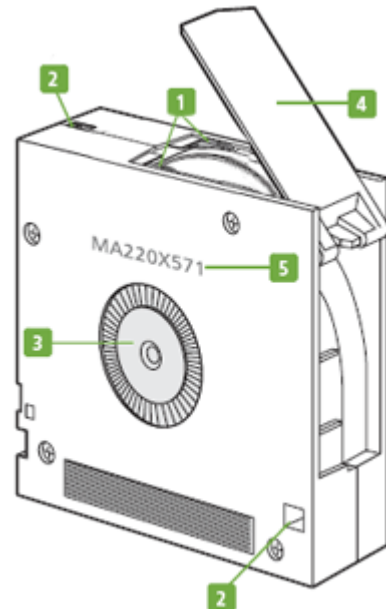


# About Super DLT (SDLT) Tapes

## Cartridge Features

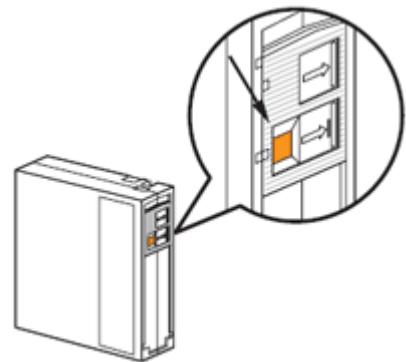
- 1 Tape Leader**  
Buckles with drive leader to pull media from cartridge.  
Super DLTtape cartridges (plastic buckle with metal pin)
- 2 Reel Lock**  
Prevents media reel in the cartridge from spinning when the cartridge is not loaded in a drive. This ensures that proper media tension is maintained.
- 3 Cartridge Hub**  
Mechanical interconnect between the cartridge and the drive reel motor.
- 4 Cartridge Door**  
Provides access to the tape leader.
- 5 Serial Number**  
Needed for identification purposes if calling for service.



## Write Protect Switch

\*Prevents overwrite or erasure of data. You can change the position of the write protect switch at any time.

Write protected– slide down toward label.  
Orange indicator should be displayed.

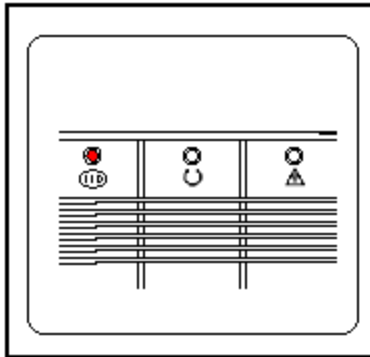


## Tape Capacity

The tape capacity is generally specified for 50% compression.

HP Super DLTtape I (C7980A) 320GB\*  
320GB with 50% compression  
160GB with no compression

# SDLT 320 Tape Drive LEDs



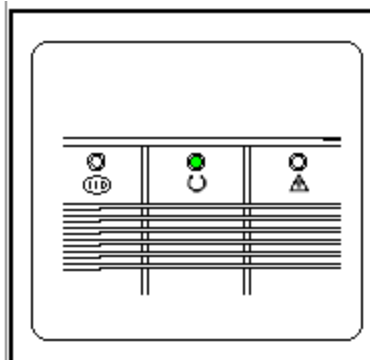
## Drive Density (left light, red)

This LED indicates drive density.

On, steady: A 220-formatted SDLT I cartridge has been inserted.

On, flashing: Density change is pending.

Off: A 320-formatted cartridge has been inserted. If no cartridge has been inserted light will be off too.



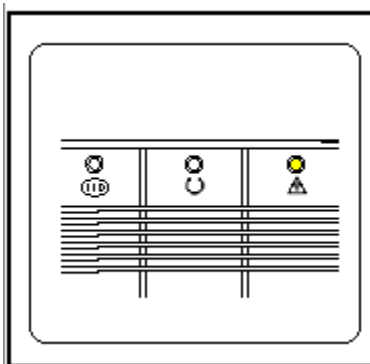
## Drive Status (middle light, green)

This LED is the Power On/Activity LED.

On, steady: The drive is ready for use. It is powered up, but not doing anything.

On, flashing: The drive is busy. For example: it is carrying out Write, Read, Self Test or firmware download.

Off: The drive power is off.



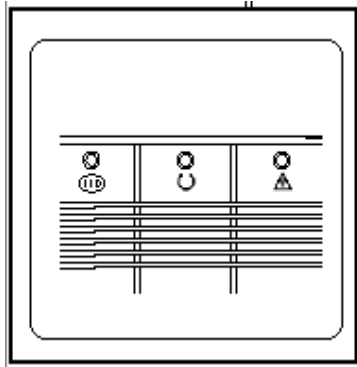
## Cleaning Required (right light, yellow)

This LED indicates when a cleaning tape should be used.

On, steady: The drive needs cleaning. For drives at firmware level V80 or above, the light will remain on if the drive is power cycled and will only go out after a supported cleaning tape has been used.

Off: The drive does not require cleaning.

# SDLT 320 Tape Drive LED Error Messages



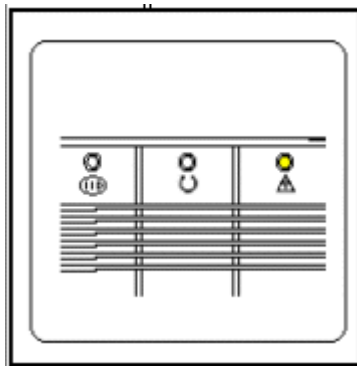
## All LEDs are Off

Drive is not being supplied power.

### Action:

Check power is being supplied to the drive. For external drives, check the power cable connection and replace the cable if necessary. You can use the power cable from your monitor or another device to check that the connection is working.

If the power supply is present and all LEDs remain off, contact the HP Customer Care Center.



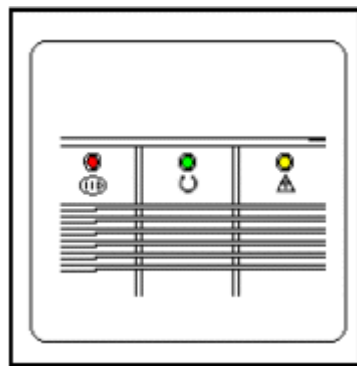
## The Right LED is Solid Yellow

The drive requires cleaning.

### Action:

Load the cleaning cartridge. See cleaning for supported cartridges and instructions.

If the Cleaning Required LED is still illuminated the cleaning cycle was not successful. Load another cleaning cartridge. If the Cleaning Required LED is still illuminated, call for service.



## All LEDs Blink in Unison

The drive mechanism has detected a hardware error or the drive fails to execute power-on self-test, which is a hardware error. If a tape is stuck in the drive and grinding noises can be heard, the problem is usually a dropped leader and most commonly occurs due to a damaged tape.

### Action:

Power cycle or reset the drive.

Load the latest firmware.

Load a new cartridge.

If the LEDs continue to blink, call for service.

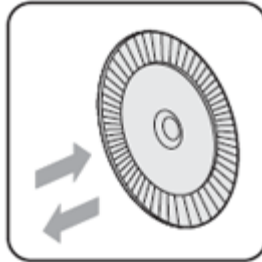
# How to Check your SDLT Tape for Damage

## Case and Reel Inspection



### Case

Inspect the case for cracks, chips, or signs of damage.



### Cartridge Hub

Confirm that the spring-loaded hub on the bottom of the cartridge is centered. Press the hub. It should spring back if operating properly. Operation of the reel locks may release the hub and re-center.

## External Cartridge Inspection



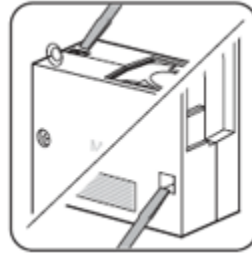
### Cartridge

Inspect the exterior of the cartridge for chips, cracks, dents or missing screws. Gently shake the cartridge, listening for rattles or loose pieces.



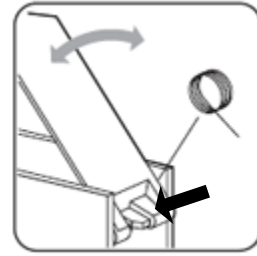
### Write Protection Switch

Move the switch. It should be able to snap into write-protected mode and write-enabled mode.



### Reel Locks

Check that both reel locks are visible. Verify operation using a small flat blade screwdriver. The reel locks should spring back when released.



### Cartridge Door

Press and hold button to unlock the door (black arrow). Ensure the door is movable and that the spring is present.

## Inspecting the Leader: SDLT Tape Cartridges



### Normal

Normal SDLT tape leader.



### Toed-In Buckle

Buckle ends clearly extend past edge of reel.



### Buckle Missing

No buckle present.



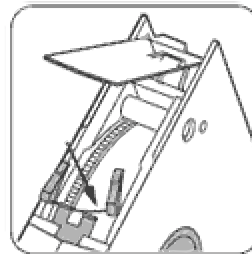
### Buckle Bent

One buckle end is bent and buckle is not symmetrical.



### Gap from Tape Leader Slack

Tape Leader is clearly visible.



### Buckle Separated from Tape Leader

Buckle has broken through tape leader on one side.



### Excessive Debris

Stuck to tape.

# SDLT 320 Tape Drive Troubleshooting

## **HP Guided Troubleshooting for SDLT Tape Drives**

The guided troubleshooting is generally very helpful and easy to follow. Technical support uses this guide to troubleshoot when you call them.

[http://h20499.www2.hp.com/gts/sparks/public/Storage\\_PL3C\\_Tape\\_SDLT\\_PUB\\_EN?lang=en&cc=US&product=Storage&series=na&subseries=na&prodTypeId=12169&prodSeriesId=330755](http://h20499.www2.hp.com/gts/sparks/public/Storage_PL3C_Tape_SDLT_PUB_EN?lang=en&cc=US&product=Storage&series=na&subseries=na&prodTypeId=12169&prodSeriesId=330755)

## **HP StorageWorks SDLT - Interpreting Front Panel Lights**

<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c00067306>

## **HP SDLT - Troubleshooting for the SDLT 220/320**

<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c00192945>

HP Technical Support

1-800-HPINVENT (1-800-474-8368)

Be prepared to provide the part name and serial number.