



WDC WD3200JD-00KLB0 WDWCAMR1030181

320 GB

SATA 1

Case ID:

345677

Creation date: 07/05/2023 2:09 PM

Software version: 2023.6

TaskForce serial: 14714747

TaskForce IP: 10.0.0.236

Location: SATA 1

Write protection: On

Device model: WDC WD3200JD-00KLB0

Device serial: WDWCAMR1030181

Size: 320 GB (320,072,933,376 bytes)

Device firmware: 0805J08

Case investigator: Adam Bert

Case description: Victims' personal data

## Diagnostics completed. Device has major issues

### Results

According to the media access timing verification test, the head stack is malfunctioning.

Recommendation: disable damaged/degraded heads in imaging settings to image good heads first.

SMART reports that there are defects in the media.

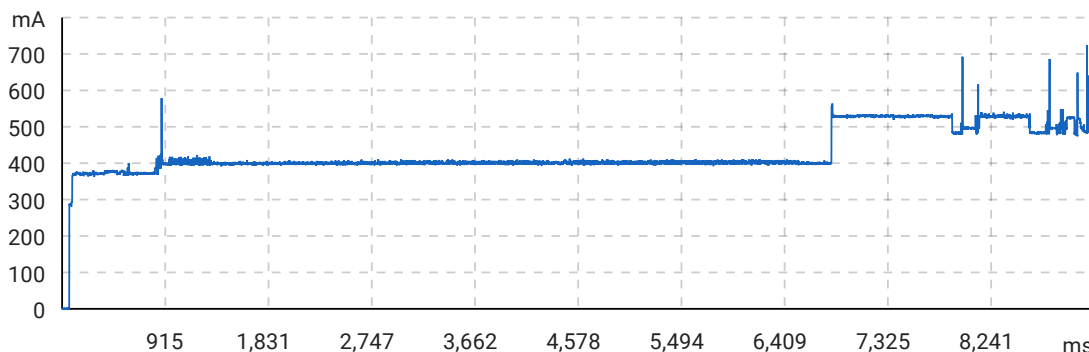
### 1. Circuit board

Device is powered on. A power cycle is needed...

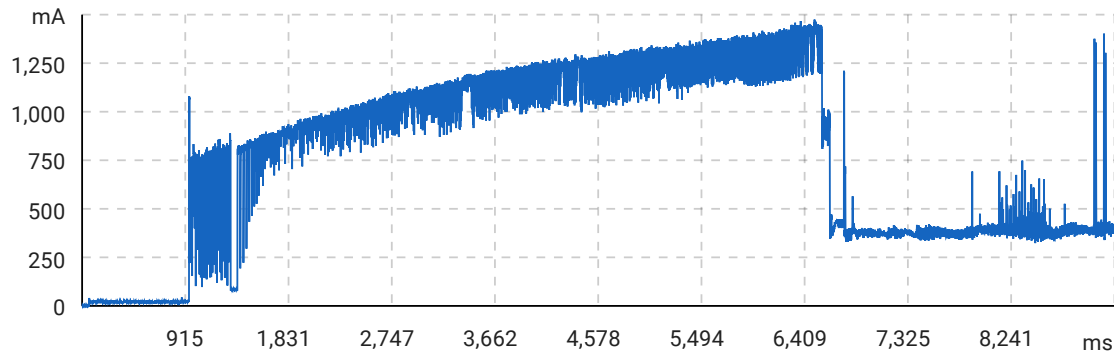
Powering down the device...

Applying power and watching currents...

#### Current oscillogram (5V):



#### Current oscillogram (12V):



Device has become ready in 9 sec

Registers. Status: 01010000 Error: 00000001

Peak power consumption during power-up: 5V line = 758.85 mA; 12V line = 1474.62 mA

Integrity word of device identification data is OK.

Device identified: WDC WD3200JD-00KLB0 SN: WDWCAMR1030181

Logical sector size: 512 bytes. Physical sector size: 512 bytes

**Circuit board check passed**

Elapsed: 18.7 sec.

## 2. Heads

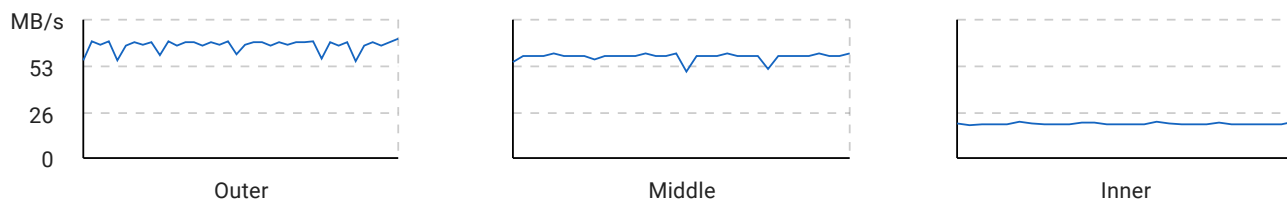
Detecting device family

Detected 6 heads: 0 1 2 3 4 5

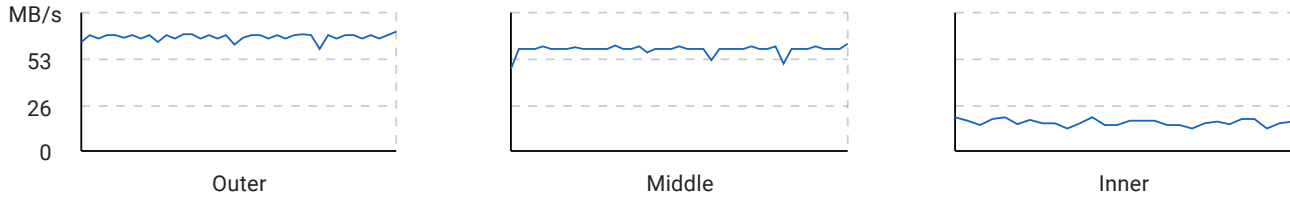
Performing media access timing verification separately for each head.

Using the following LBA ranges for this test: Outer: 0 - 900,000, Middle: 312,121,223 - 313,021,223, Inner: 624,242,447 - 625,142,447

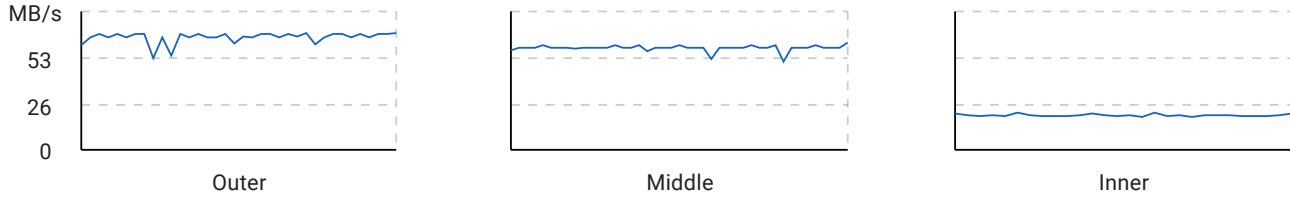
### Head #0 speed graph



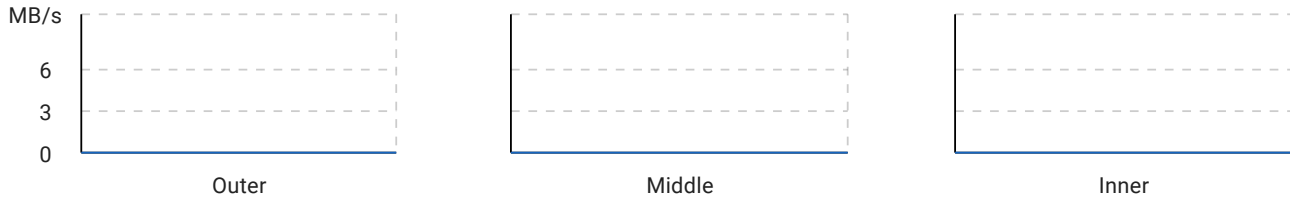
### Head #1 speed graph



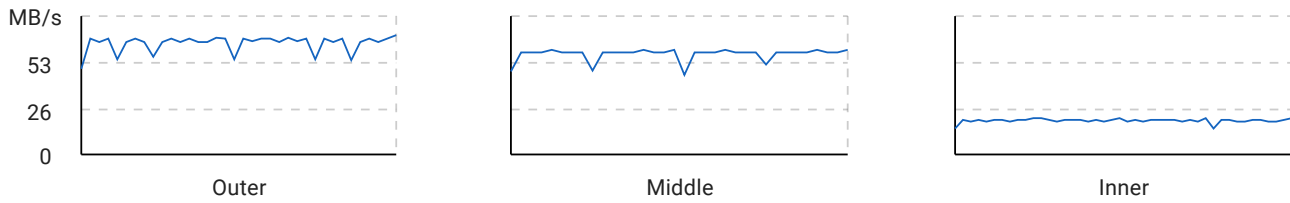
### Head #2 speed graph



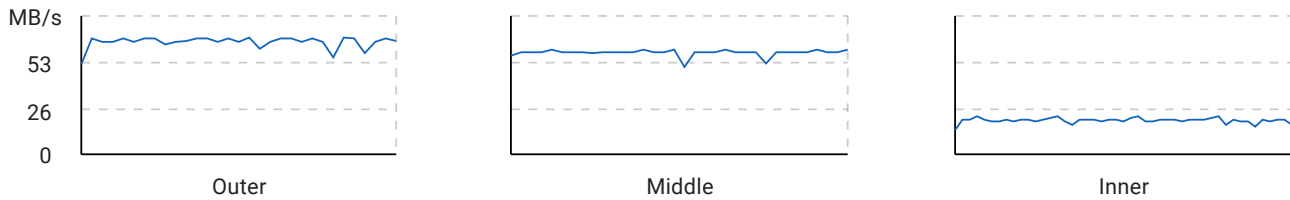
### Head #3 speed graph



### Head #4 speed graph



### Head #5 speed graph



Head #	Speed	Sectors processed	Freeze count	Read errors	Head status
0	43 MB/s	402,343	0	0	OK

1	39 MB/s	435,829	0	0	OK
2	44 MB/s	436,903	0	0	OK
3	< 1 KB/s	195,027	0	96	Damaged
4	46 MB/s	380,231	0	0	OK
5	43 MB/s	366,277	0	0	OK

According to the media access timing verification test, the head stack is malfunctioning.

**Recommendation: disable damaged/degraded heads in imaging settings to image good heads first.**

Elapsed: 246.8 sec.

### 3. Media scan

Media scan test has been skipped because the head stack is malfunctioning.

### 4. Firmware

Device is not locked.

Device identification data is valid.

Max address according to device ID: 625,142,447

Native max address (ext): 625,142,447

Max Address from DCO: 625,142,447.

Reported capacity appears logically correct.

Performing SMART checks...

**SMART reports that there are defects in the media.**

Power cycles: 735 Smart status: Fail Powered on: 566 days 2 hours

#	Attribute Name	Value	Worst	Threshold	RAW	Status
1	Raw Read Error Rate	199	199	51	12770	OK
3	Spin Up Time	185	173	21	5716	OK
4	Number of spin-up times	100	100	0	747	OK
5	Reallocated Sector Ct	183	183	140	131	FAIL
7	Seek Error Rate	200	200	51	0	OK
9	Power On Hours	82	82	0	13586	OK
10	Spin Retry Count	100	100	51	1	OK

11	Calibration Retry Count	100	100	51	0	OK
12	Power Cycle Count	100	100	0	735	OK
194	Temperature Celsius	118	103	0	32	OK
196	Reallocated Event Count	111	111	0	89	OK
197	Current Pending Sector	171	1	0	1544	FAIL
198	Offline Uncorrectable	200	200	0	0	OK
199	UDMA CRC Error Count	200	200	0	8	OK
200	Multi Zone Error Rate	200	200	51	0	OK

Reading SMART temperature...

### Temperature and power cycle history

Temperature measurements are unavailable for this device.

**Firmware check passed**

Elapsed: 0.1 sec.

## 5. File system

File system test can't be started because the device had issues during one of the previous checks.

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