Laptop Diagnostic SOP

# 1. Device Intake & Registration

SKU  
LOT#  
Serial number

# 2. Physical Inspection (Cosmetic Check)

Technicians assess scratches, dents, hinges, keyboard, and screen. Log details separately.

|  |  |  |
| --- | --- | --- |
| Side | Scratches | Dents/Cracks |
| Top | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |
| Bottom | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |
| Left | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |
| Right | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |
| Front | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |
| Back | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |
| Screen | Excellent / Minor / Moderate / Severe | Excellent / Minor / Moderate / Severe / Cracks |

Hinges: Good / Loose / Bad

Keyboard: Complete / Missing Keys (If missing, select missing keys from dropdown list (A–Z, F1–F12, Esc, Enter, Space, etc.))

# 3. Hardware Diagnostics & Functional Testing

Connect charger and attempt to boot. Log issues using the following defect codes:

## Power & Battery (P-series)

* P01 – Battery not charging
* P02 – Battery health 60–80%
* P03 – Battery health <60%
* P04 – No power on
* P05 – Power button faulty
* P06 – Power jack loose/damaged

## Cooling & Performance (H-series)

* H01 – Overheating
* H02 – Fan not spinning / noisy
* H03 – Thermal paste dried out
* H04 – CPU throttle under load
* H05 – GPU throttle under load

## Storage & Memory (S-series)

* S01 – HDD/SSD not detected
* S02 – HDD/SSD SMART failure
* S03 – Bad sectors on drive
* S04 – RAM not detected
* S05 – RAM test failure

## Input Devices & Peripherals (I-series)

* I01 – Keyboard not working
* I02 – Keyboard Backlit not working
* I03 – Touchpad not working
* I04 – USB port faulty
* I05 – HDMI/VGA port faulty
* I06 – Audio jack not working
* I07 – Webcam not working
* I08 – Microphone not working
* I09 – Wi-Fi not working
* I10 – Bluetooth not working
* I11 – Ethernet port not working
* I12 – Speaker / sound not working

## Display / Screen (D-series)

* D01 – Dead pixels
* D02 – Lines on screen
* D03 – Flickering display
* D04 – Backlight bleed
* D05 – Dim / no backlight
* D06 – Touchscreen not working (if applicable)

## Optical / Other Components (O-series)

* O01 – Optical drive not working
* O02 – Card reader not working
* O03 – Missing components (RAM cover, screws, etc.)

# 4. Final Grade Logic

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade | Grade Name | Functional Testing | Chassis Scratches/Dents | Screen | Hinges / Keyboard |
| A | Excellent | Fully Functional | Excellent | Excellent | Good / Complete |
| B | Very Good | Fully Functional | Excellent, Minor | Excellent, Minor | Good / Complete |
| B- | Good | Fully Functional | Excellent, Minor, Moderate | Excellent, Minor, Moderate | Good / Complete |
| C | Fair | Fully Functional | Excellent, Minor, Moderate, Severe | Excellent, Minor, Moderate, Severe | Good, Loose / Complete |
| C- | Fair with Minor Non-Functional | I07, I09, I10, I02, D01, D06 (no defect outside this list) | Excellent, Minor, Moderate, Severe, Cracks | Excellent, Minor, Moderate, Severe, Cracks | Good, Loose / Complete |
| D | Poor / Parts Only | Non-Functional | Excellent, Minor, Moderate, Severe, Cracks | Excellent, Minor, Moderate, Severe, Cracks | Good, Loose, Bad / Missing Keys |

# 5. Retail vs Wholesale Grade Mapping

## Retail (Online Sales – Detailed)

|  |  |
| --- | --- |
| A – Excellent | Like new, fully functional, top condition |
| B – Very Good | Fully functional, minor cosmetic signs |
| B- – Good | Fully functional, moderate cosmetic wear |
| C – Fair | Fully functional, heavy wear or cosmetic flaws |
| C- – Fair w/ Minor Non-Functional | Usable but with limited issues (e.g., Wi-Fi, webcam, touchscreen) |
| D – Poor / Parts Only | Not fully functional (major defect, missing keys, bad hinge, etc.) |

## Wholesale (Simplified)

|  |  |
| --- | --- |
| A | Same as retail A (Excellent) |
| B | Combine B + B- |
| C | Same as retail C |
| D | Retail C- becomes D (to avoid hidden issues) |
| BER | Retail D becomes Beyond Economical Repair |