Apple Portables: About the Sudden Motion Sensor

Summary
Sudden Motion Sensor technology is built-in protection for the hard disk that is designed to help prevent disk issues if the computer is dropped or undergoes severe vibration.

All Intel-based Apple portables such as the MacBook, MacBook Pro, MacBook Air, PowerBook G4 computers starting with PowerBook G4 (12-inch 1.5GHz), PowerBook G4 (15-inch 1.67/1.5GHz), PowerBook G4 (17-inch 1.67GHz), and iBook G4 computers starting with iBook G4 (Mid 2005) have Sudden Motion Sensor technology.

Products Affected
Portable Computers

The Sudden Motion Sensor is designed to detect unusually strong vibrations, sudden changes in position or accelerated movement. If the computer is dropped, the Sudden Motion Sensor instantly parks the hard drive heads to help reduce the risk of damage to the hard drive on impact. When the Sudden Motion Sensor senses that the Apple portable's position is once again stable, it unlocks the hard drive heads, and you are up and running within seconds.

In general, Sudden Motion Sensor protection does not change hard disk performance with regular operation. Occasionally, the Sudden Motion Sensor may be activated by unusually strong vibrations at a time when your Apple portable is writing data intensively, such as when recording video or audio. Should you experience dropped frames or sound elements in such a situation, make sure that your Apple portable is in a stable environment without vibration or abrupt movement. Please refer to Apple Portables: Advanced tips for Sudden Motion Sensor should you encounter a situation where the sensor must be disabled.

Note: In some locations, you may see the Sudden Motion Sensor referred to as the Mobile Motion Module. Both names refer to the same feature.