Sometimes the GPS100 takes a long time to lock up and provide a position fix; why is this?

Under extraordinary circumstances, the GPS100 goes into a deep signal search mode. When this occurs, it can take several minutes (sometimes as much as 12 minutes) before the GPS100 gathers enough information to provide a valid fix. This mode of operation doesn't normally happen, but it can occur under extraordinary conditions. For example, if the internal battery is allowed to discharge to the point where the internal clock stop workings (GPS100 is powered down for 4 or 5 days), and the almanac data is no longer valid (GPS100 has been reset or it has been left on a shelf for a couple of months), and the satellite signals are weak (GPS100 is obstructed from a clear view the sky), then the GPS100 enters deep signal search mode. Once the GPS100 finally acquires a fix and it is allowed to run for approximately 15 minutes, a new almanac will be downloaded from the satellites into the GPS100, which will facilitate faster lock times upon subsequent start ups. Furthermore, running the GPS100 for approximately 5 hours will recharge the internal battery also facilitating faster lock times upon subsequent start ups.

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