

***** TECH TIP #20 *****

Category - DISK

Product - BMX3

Reference - Very slow controller operation

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It has been noticed that some BMX3 controllers run very slow under certain conditions. Our tests have confirmed that depending on the CPU, Disk, and Controller revision, the controller may run upto 10 times SLOWER than a good one. This problem is primarily associated with 20MHZ disks such as the Sabre 9720-850 and Fujitsu 2361, although I have noticed it on the MV4000 running slow with a Fujitsu 2351.

PROBLEM DESCRIPTION:

20MHZ disk drives running on slow DCH/BMC CPU's such as the MV4000, S140, and S280 (lesser extent) will cause the disk to skip rotations thus reducing the speed of the controller. The normal way to fix this is to interleave the controller. BUT in most of the drives we use, this CAN NOT be done because of split sectoring or split drives!! Our tests have shown that a good controller will do about 18000 seeks in 15 minutes of Reli on a MV4000, a bad controller will do 1800!

RESOLUTION:

Zetaco has made a fix so that the controller will automatically do a 2:1 interleave on 20MHZ drives, thus illiminating the problem. This fix is in REVISION P or ABOVE and you must use REV G or ABOVE configuration tape for this to work.

NOTES:

BMX3 controller REV D will run in ALL CPU's except the MV4000, S140 and S280 with NO speed problems.