

Date: May 27, 1977.

From: Larry Stein, Computer Mart of New Jersey, Inc.

To: Tom Dinnella

Re: Fix to Digital Systems Disk System Controller (FDC-2)
for non-Dysan diskettes.

It appears that the 3M diskettes are only very close to the true IBM format. They appear to lack the track address marker which is part of the complete format. The current Digital Systems controller uses this marker to increment the hardware head unload counter (8 revs and you're out).

John Torode at Digital Systems, is aware of the problem and has corrected it in his latest version. He has described a fix for the problem and it works!

The original scheme takes the end of track from actual data decoded in a shift register. The fix changes this to take the end of track from the physical index marker generated by the drive (that's what that hole is for!)

TO MODIFY THE CONTROLLER:

1. Remove the cover
2. remove the connectors (3) on the controller board.
3. Remove the controller (6 nuts).
4. On the underside of the board, find the trace which runs between F12-5 and B11-5 and cut it.
5. Connect a wire from the plated hole connected to A6-17 to the plated hole on the B11-5 side of the trace which was cut.
6. Verify that no extra connections were made or cut in the process.
7. Re-assemble the controller into the drive.

You will now notice that the drive select light will go out shortly after accessing stops, if no more commands are issued. John said that the delay was set at 8 revs to keep the head loaded during assemblies. If different software is used, you could reduce the timeout count to 4, but probably not increase media life significantly.

Please let me know of your success in this venture.

Most thanks to Tom Dinnella who researched this entire matter and to John Torode whose timely attention to the problem has given rise to the solution.

CC: Tom Dinnella