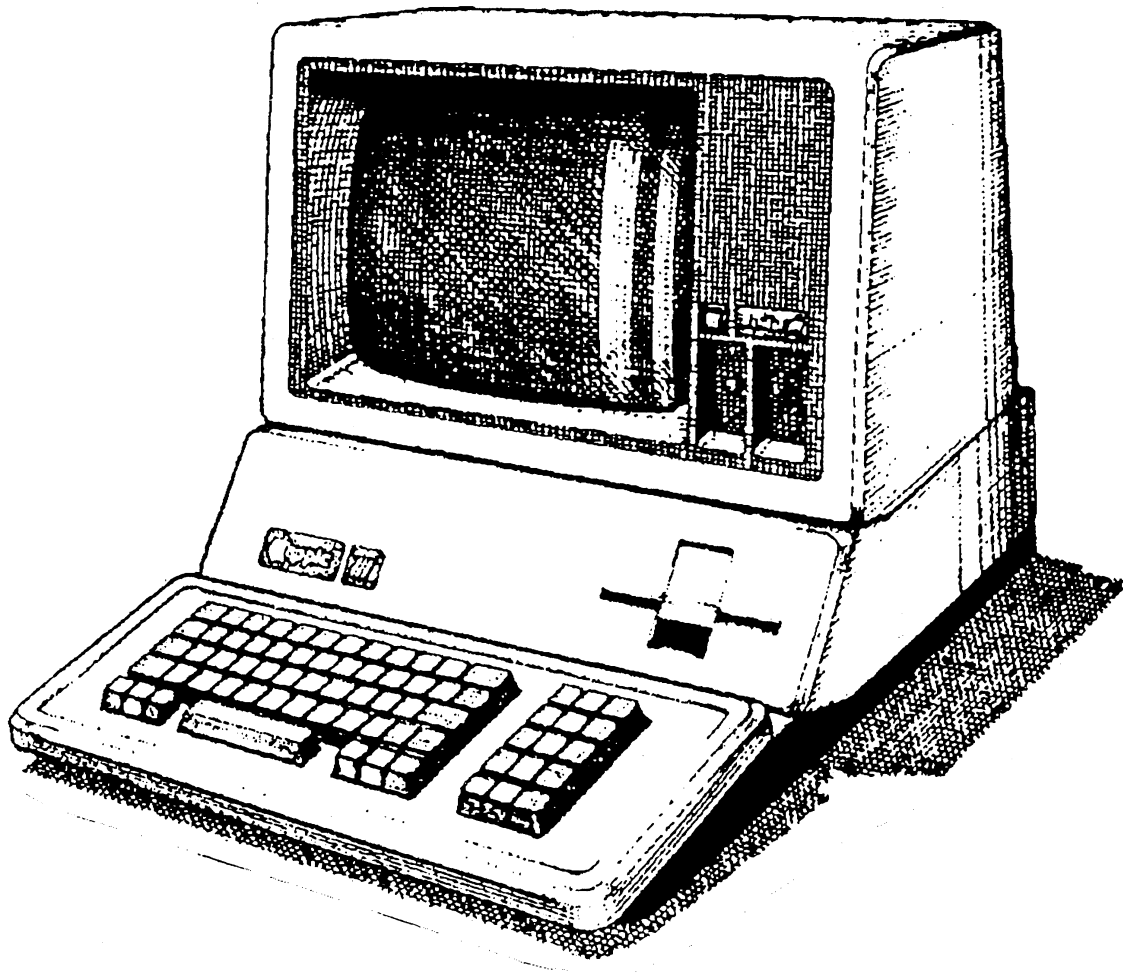




# Apple /// Computer Information



DOCUMENT NAME	#
APPLE PROFILE HARD DISK NOISE PROBLEMS	122

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**Ex Libris David T. Craig**

*Apple ProFile Noise Problems*

2 pages

# APPLE PROFILE HARD DISK NOISE PROBLEMS

## Introduction

This document contains several dialogs from the ///'s Company Bulletin Board System (BBS) discussing the problems and solutions to Apple's ProFile hard disk drive for the Apple /// and Lisa computers. Most of these messages date to around 1985.

## BBS Dialogs

From: Lavona Rann

Does anyone have information on 'oiling' a ProFile? Some of the older ones are beginning to make quite a bit of noise and one of our local engineers ('with experience on machines which rotates 3600 rpm') suggested that it sounds like bearings and can be bad news if not oiled. Since there is a plate inside which warns against removal, it makes me timid. (yeah, even I get timid.)

From: Bill Cook

Lavona,

By the time a ProFile begins to make noise there is no salvation for it. The best you can do is to back it up before total failure sets in and get it replaced.

The bearing that is failing, and yes it is a bearing, is a sealed unit. What is going to happen RSN (real soon now) is for the 'keeper' to fail and the bearing will spew its little balls all through the drive. When that happens it is bye-bye for everything, particularly your data.

P. S. I am particularly knowledgeable as I have had three such failures in the last year at work.

From: Ed Gooding

Bill/Lavona:

I have had them screech for 3 years before they finally gave up the ghost, however.

From: Richard Powell

Lavona/All

The above comments notwithstanding, my dealer has solved the "bearing noise" problem on a couple of my ProFiles by removing or adjusting the static wiper (whatever that is). The noise has ceased and the drives work fine. It is apparently a quick, easy, and inexpensive fix.

## *Apple ProFile Noise Problems*

From: Weber Baker

Richard/Lavona et al;

There are two different problems here.

One is the bearings which as Bill Cook states, are indeed sealed and must be replaced if they are going out. Simply opening them ruins them by breaking the seal.

The second is the antistatic device which channels static out of the unit. Without such a device, which is in constant contact with the moving parts of the drive, static buildup could wipe out the circuitry in the drive. The reason it contacts the moving parts is because this is where the static builds the most, not unlike rubbing your feet against a carpet or a balloon against a wool sweater. Indeed, such static is the basis for Van De Graaf generators. The static brush removes this from the disk drive.

In either case it is essential to determine which is causing the problem. Either should be fixed if it occurs.

From: James V. McCabe

There are three major problems with oiling the bearings in the ProFile.

First, it is likely that the bearings do not contain oil but contain a channeling grease such as ANDOK-C.

Secondly, it is probable that the bearings are assembled with permanent shield or seal assemblies and any attempted disassembly is certain to ruin the bearing.

Thirdly, the HDU is a class 100 area (very clean) and will surely be contaminated if it is opened -- the contamination will get between the head and the disk (the head flies maybe 20 millionths high) and nuke your disk.

I know of one person who has put up with this noise (it sounds like a rock crusher when the ProFile winds down) for three years and has lost data only because the cable was too long. Personally, I would never put up with it because it offends my professional pride. The best fix is to send it to Sun, Apple or Seagate (it's probably Seagate's HDU & Apple's controller) to have the bearings replaced. If you know of someone locally who has a good class 100 glove box or laminar flow bench and if you are game enough for a little action have them experiment with it. It's also a good idea to back up frequently when it begins to sing because if there is a rub or if the bearing fails catastrophically (races & balls pit which generate a major source of contamination) you will nuke the disk.

<<< The End >>>