

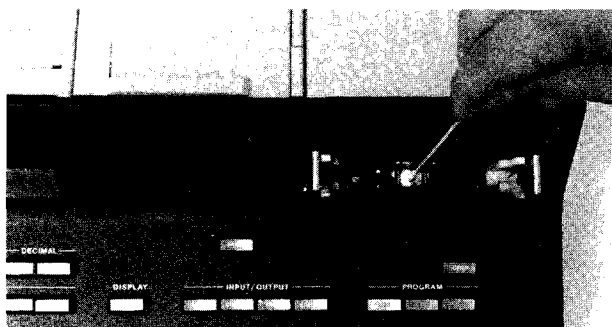
The Care And Feeding Of Tape Cassettes



Errors in magnetic-tape systems at best are annoying, and at worst can be costly, in wasted dollars and lost man-hours. Most of those errors can be avoided very easily; here's 'why' and 'how'.

The reliability of any magnetic-tape drive — whether in a computer system, in a calculator system or even in a home recording unit — can be seriously affected if the tape is not kept clean and the (read/write) head is not cleaned regularly. While it is true that some errors are caused by mechanical failure, and that heavily-used tapes do eventually wear out, the majority of magnetic-tape problems are directly traceable to small dust-particles accumulating on tape heads and on the tape. Even minute dust particles between the head and the tape can lift the tape slightly away from the head. This results in information being either recorded, or played-back, incorrectly.

The best solution to the dust problem is to make sure that the tape head in your equipment is cleaned regularly and that your tapes are properly maintained. The exact procedure for cleaning the head may vary between different instruments, so please refer to the manuals supplied with your system.

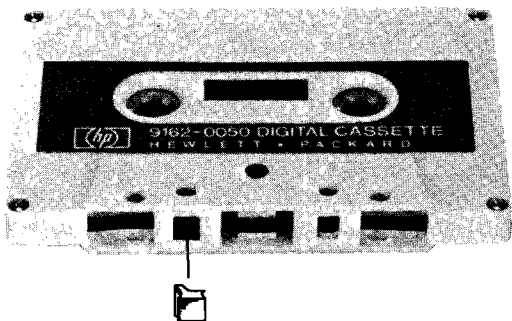


The importance of cleaning the tape-head frequently, to ensure reliable tape operations, cannot be overstressed. We recommend that the head be cleaned after every eight hours of tape operation and more often if the drive is being operated in a particularly dusty environment. If a can of a suitable head cleaner and a packet of swabs (known officially as 'cotton applicators') are kept handy, the whole cleaning operation need take no more than 30 seconds. All you have to do is dip a swab into the head cleaner and then wipe the head a few times, as shown in the picture.

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

The tape can be kept clean by rewinding it to clear-leader and storing it in its case when you are not using it. In many cases a small cleaning device, available from HP, has also proved very helpful. The cleaner simply snaps into a hole in the bottom of the tape-cassette (as shown in the picture) so that the tape is continuously wiped clean as it passes over the cleaner. This cleaner is intended to fit into the type of cassette shown in the picture, also to be used in tape-drives designed specifically for the HP 9800-Series Calculators and peripherals. Many other tape-drives use the hole, which might otherwise contain the cleaner, to determine when the tape is on clear-leader. (Even though you have the cleaners in your cassette, it is still important to keep the head clean.)



TAPE CLEANER

Recommended Tape-Cleaning Equipment

These items can all be purchased from HP. Please contact your nearest Sales and Service Office for help; office addresses are provided at the back of most of our manuals.

Description	-hp- Part Number
Can of Magnetic Head Cleaner	8500-1251
Packet of 100 Cotton Applicators (Swabs)	5080-5400
Packet of 25 Tape Cleaners (with installation instructions)	5080-9049

More Helpful Hints

- Make sure that the tape-transport door is closed at all times to keep dust out.
- Rewind the tape to clear-leader before removing it from the transport, so that dust will not collect on the tape.
- Store each cassette in its plastic case.
- Avoid leaving cassettes on top of, or near the back of, any electrical equipment. Many electrical devices (the 9866A Printer for example) have a large power transformer at the back which produces magnetic fields; these fields might erase your tape.

