

A thorough inspection should be performed before playing back recordings.

Magnetic Media - Audio

Problems	Identification	Remedies
Sticky Shed Syndrome (SSS) <i>The breakdown of the binding and/or backing layer. Also referred to as binder hydrolysis.</i>	Oxide or backing from magnetic tape will rub or wear and shed off onto the various parts of equipment when played back. You may also hear the tape squeal when played back.	Some practitioners bake tapes in lab ovens at temperatures near 130 degrees Fahrenheit for hours to days. Others use desiccation to remove moisture from sticky tapes by storing them under very low RH (approx 5%) for a long period of time.
Vinegar Syndrome <i>The breakdown in the substrate of acetate tape which produces acetic acid.</i>	The presence of acetic acid will smell like vinegar. Tapes may also exhibit signs of shrinkage and brittleness.	There is no cure for vinegar syndrome. Copy tapes as soon as possible. Do not bake.
Soft Binder Syndrome <i>Symptomatic of certain audio cassettes and reels. May exhibit similar symptoms of sticky shed but with little to no oxide shed.</i>	Squealing of audio cassette and potential shedding. Tapes usually not back coated.	Some practitioners apply lubricant to tape or use a low temperature playback environment to help with playback. Do not bake.
Physical Damage <i>Of the container or cassette cartridge. May also notice damage of tape.</i>	Broken cassette or bent reel. May notice edge damage on open-reel tape if not properly spooled on reel. For cassettes, may also see physical distortion of tape.	Re-house tape.
Oxide Loss and Delamination <i>Exhibits similar symptoms of sticky shed.</i>	Tapes will become sticky and clog heads. May occur with cassettes and DATs.	This is not sticky shed. Do not bake tapes. Copy as soon as possible and seek professional advice to do so if needed.
Blocking/Pinning <i>Adjacent layers of tape may stick together in large or small portions.</i>	Layers will adhere to each other upon playback. May occur with analog cassettes and DATs.	May cause delamination. Seek professional advice from an Audio-Video preservation specialist.
Uneven Tape Pack <i>Usually occurs when tape is over-tensioned either because it is sticky or something has obscured the tape path</i>	Tape does not lay flat around the hub. It appears stacked or at uneven heights and may appear wavy in sections.	Carefully re-spool tape onto a new hub or reel. This may require careful hand-winding or the use of a cleaner for less fragile materials.
Detached Leader <i>Many times the leader becomes detached from the tape or tape hub.</i>	Powdery white, brown, or mustard color substance that appears to grow or spread on recording.	If equipped to do so, re-splice where appropriate.
Mold or Fungus <i>All magnetic media recordings are susceptible to mold or fungus growth.</i>	Powdery white, brown, or mustard color substance that appears to grow or spread on recording.	May destroy your media if not attended to immediately. Do not handle recording because mold and fungus can be serious health hazards. Seek professional advice from an Audio-Video preservation specialist.