

Tape Recorder Alignment

By

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This is the detailed version with all adjustments
and safety steps.

Demag Heads

- Use a high quality demagnetizer
- **TURN OFF TAPE MACHINE!!**
- Always remove watches, credit cards etc.
- Turn it off and on far away from machine
- Move in circles towards machine
- Do not touch the heads
- Move over everywhere the tape touches
- Move away slowly doing circles

Three most important steps

- CLEAN THE MACHINE!
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Adjust Azimuth

- Find the Azimuth section of the tape
- Start at 500 Hz
- then 8khz
- then 16khz
- Adjust for min phase difference

Multitrack Phase Adjustment

- Put all faders to -20db or -30
- Pan all center
- Remove all EQ and Effects
- Lower master fader to off
- Play 500 hz azimuth section and raise master till level is good on meter
- Adjust azimuth for MAX level

Basic Calibrations

- Check Input calibration
- Check meter calibrations
- Check console meter calibrations
- Basically, Check that 0db out of console will show 0db when the machine is in Input and 0db back to the console from the tape machine.
- Check these every time.

Repro Adjustments

- PUT THE MACHINE IN ALL SAFE!
- Load the test tape, find 1khz section
- With the machine in Repro adjust Level
- Switch to Cue and adjust Cue Level
- Find 10khz section
- Adjust Cue Hi EQ
- Switch to Repro and adjust Repro Hi EQ
- Pack off the tape. (Library Wind)

Record adjustments

- Load blank tape
- Set console osc for 10khz at standard level
- Put tape machine in record and in Repro
- Adjust bias
- Change console osc to 1khz
- Adjust record level
- adjust console osc to 10 khz
- adjust record HF EQ

Record Adj. Cont.

- Set console osc. to 100hz
- Zero tape counter
- Adjust REPRO Lo Freq. EQ
- Rewind the tape to zero and playback 100hz
- Switch to Cue
- Adjust Cue Lo Freq. EQ
- Sweep the osc. and check results.

The End