



Dolby Laboratories Inc

Field Bulletin 220

Model CP500 Cinema Processor

Intermittent Cat. No. 675A Failure

- Modification Urgent
- Modification Recommended
- Modification Required if Problem is Present
- Modification Required on Early Units
- Information Bulletin

Symptoms

Observed symptoms include loss of output on some or all channels of the Cinema Processor, crackling audio in one or more channels or failure to generate pink noise during B-chain alignment. Rebooting the CP500 is often the only way to restore normal sound in the theatre.

Background

A number of Cat. No. 675A boards manufactured recently have been returned to us because of intermittent failure. Our investigation has pointed to a potential problem with one particular Gate Array Logic (GAL) part used on the board as the part becomes too slow to allow reliable operation at high operating temperatures.

Potentially Affected Boards

The affected Cat. No. 675A boards are located in slots J12 and J14 in the CP500. Boards in the approximate range of serial numbers from 11500 to 16700 contain parts of which some may show the Symptoms. These boards were included in CP500s shipped between October 1997 and October 1998. Boards passing through the repair system during this same period may also be affected if the GAL was replaced.



Signal Processing and Noise Reduction Systems

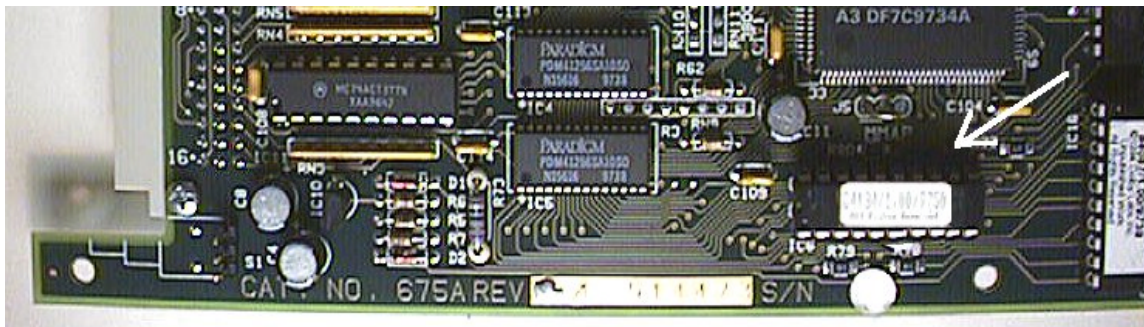
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Required change

On Cat. No. 675A boards which show any of the Symptoms listed above and with a serial number between 11500 and 16700, the GAL in location IC6 needs to be replaced. This part is located close to the serial number on the bottom edge of the board and can be identified by the label showing the number 84135/1.00/yyww (see below) where yyww indicates the year and week of manufacture of the part.



IC6 is a socketed part and can easily be changed in the field. Replacement ICs should be requested from Dolby Laboratories and the original ICs should be returned to Dolby Laboratories.

Warning

It is important to remove power from the unit before removing the Cat. No. 675A boards from the CP500.

The IC is sensitive to electrostatic damage so it is essential to wear an earthing strap at all times while handling the boards and the ICs.