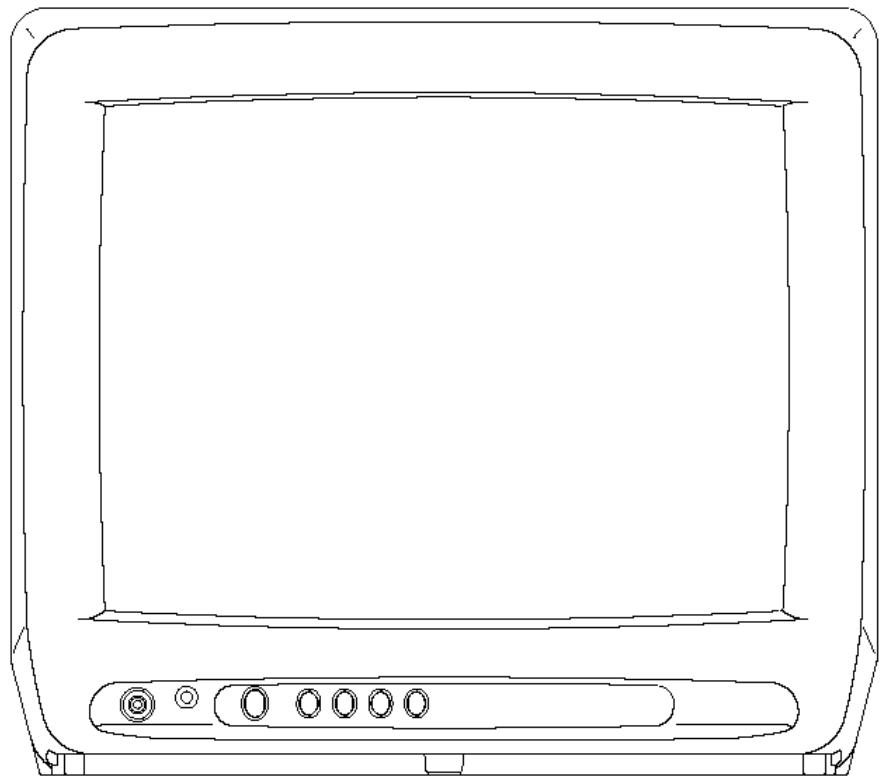


Technical Bulletin

PDI-Z13TV Series Arm Mounted TV Audio Chip Failure & Remedy

This Technical Bulletin explains the addition of a clamp diode to improve transient protection. This bulletin only affects arm mounted 13" televisions manufactured prior to December 12, 2004 and then only televisions that use earphones.



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PDI-Z13TV Series Arm Mounted Television Audio Amp Fix

Audio Amp Fix

**Wall Mounted 13”
Televisions are not
affected.**

A problem has been brought to the attention of PDI Communication Systems regarding a rare audio chip failure in the 13” arm mounted televisions. This bulletin explains the reason the audio chip fails, and how to correct the problem. This technical bulletin explains the addition of a clamp diode in the audio earphone circuit in the Z13TV arm mounted televisions. This fix effects only units manufactured before December 12, 2004 and then only units that use an externally connected earphone.

Overview

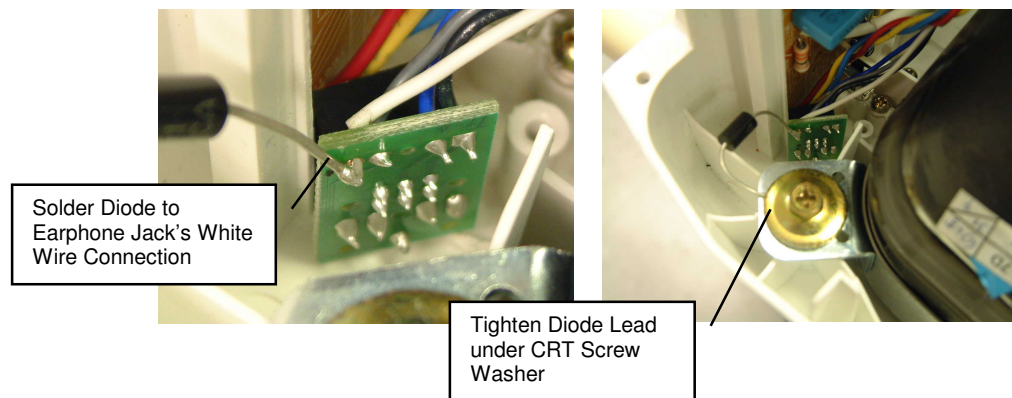
The 8-pin audio chip, type AN7511, is located on the chassis of the 13” model arm set. This problem appears only when a patient uses an external earphone and wraps the earphone cord across the face of the TV after use. Note: the earphone cord must be in actual contact with the face of the CRT and plugged into the TV’s jack. If the TV is allowed to rest for an extended period of time, usually after a minimum of 24 hours, and then turned ON with the earphone wire still draped over the face of the CRT, a transient may be induced into the earphone wire. Under the right set of circumstances, the draped earphone wire conducts the transient inside the TV possibly damaging the audio amp IC.

Procedure

This procedure assumes the television audio amp chip is fully functional and the television is disconnected from all power sources.

1. Remove the television’s back cover.
2. Located the front mounted earphone jack and solder one lead of a PD148-150 clamp diode (1.5KE51CA) to the ground foil (White Wire Connection) of the earphone jack as shown. Diode polarity is not important.
3. Loosen the CRT mounting screw, secure the loose end of the diode under the screw’s washer, and tighten.
4. Re-install the television’s back cover.
5. Test the TV for both internal speaker audio and earphone audio.
6. Test leakage currents before returning the unit to service.

**Use ESD Protection
Diode part number
PD148-150**



For More Information

If you have questions, please contact PDI Communication Systems, Inc. at (937) 743-6010.