



Introduction The analog version of the 23 inch LCD television with model number PDI-P23LCD may develop picture and control issues that can be corrected by replacement of aged electrolytic capacitors. The symptoms usually observed when electrolytic capacitors age and lose value and effectiveness are easily recognized.

PICTURE ISSUES

Picture symptoms appear as lines or dots that appear across the entire picture. This problem can be traced to electrolytic bypass and coupling capacitors on the main chassis of the TV that have aged and lost their effectiveness. The corrective action involves replacement of those capacitors.

CONTROL ISSUES

Control symptoms appear as sluggish response to either IR remote commands or pillow speaker commands. This problem can be traced to electrolytic bypass and coupling capacitors on the main chassis of the TV that have aged and lost their effectiveness. The corrective action involves replacement of those capacitors.

Affected Units All PDI-P23LCD television models. NOTE: This Technical Bulletin does NOT cover the PDI-P23LDCD model.

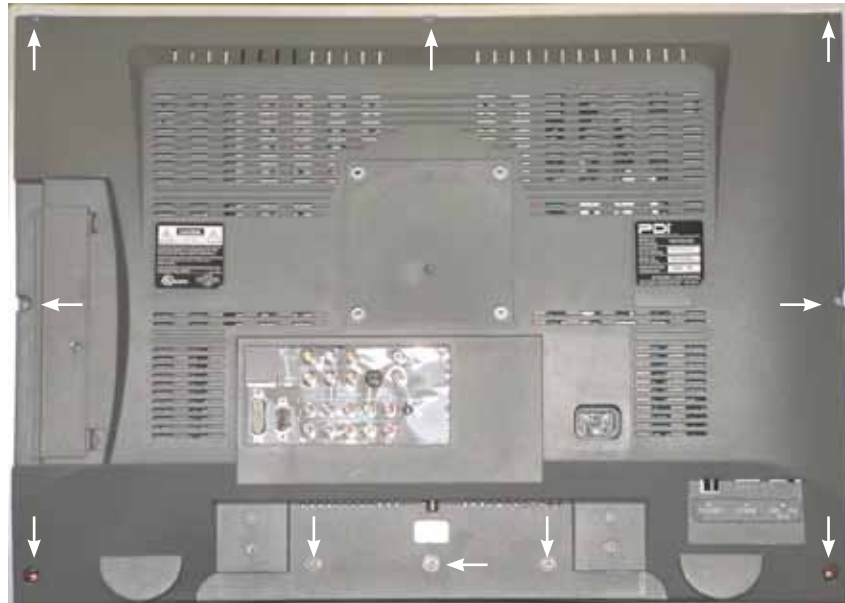
Required Tools & Materials 47uf, 25V Electrolytics
100uf, 50V Electrolytics
Grounding wrist strap and ESD service mat
Phillips P2 screwdriver
Soldering Iron, Solder, Wire Cutters, and Needle Nose Pliers

- Warnings**
- The following procedure should only be performed by qualified electronics personnel.
 - Observe all standard Electrostatic Discharge (ESD) procedures. The human body must maintain ground potential when touching the sensitive electronic components inside the television. The best way to achieve this is by wearing an appropriate wrist strap. The wrist strap will have a wire to earth ground to discharge any body potential. The ground wire MUST contain a series resistor of at least 1M Ω (1 Million Ohms) to prevent damage to the component.
 - Observe High Voltage Safety precautions. For your personal safety remove power from television before performing service on it.

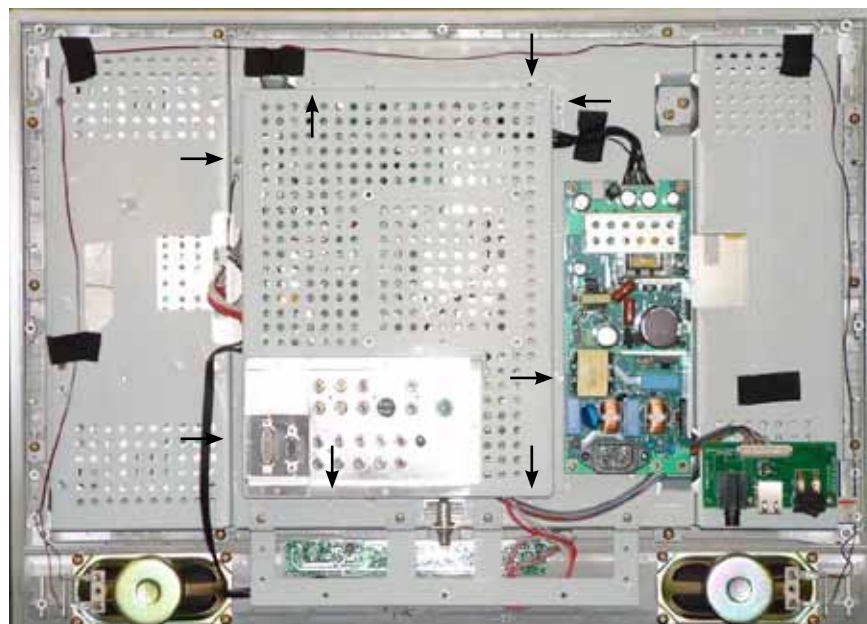
Procedure NOTE: Please refer to the full service manual for additional details¹.

COVER REMOVAL

1. Start by laying the television face down on a grounded ESD mat that will not scratch the television screen. The service technician must also wear a grounded ESD wrist strap.
2. Remove ten Phillips screws with a P2 screwdriver. Separate the Back Cover from the TV and remove.



3. Now remove the EMI shield by first removing the eight screws, which secure the shield with a P2 screwdriver. Note which screw secures the Ground Wire. Be CAREFUL not to harm the wire harness or yourself with the sharp edges of the shield during removal.

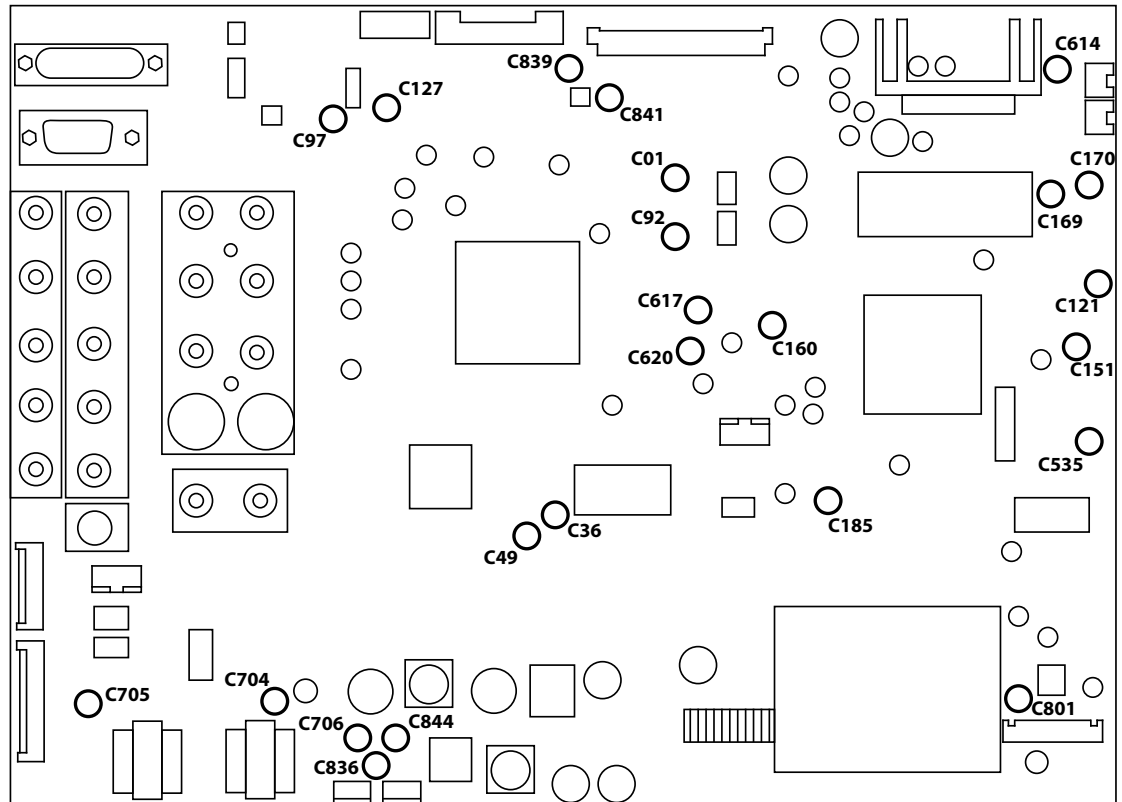


Footnote 1) See *PDI-P23LCD Service Manual - PD196I93R1.pdf*

Procedure REPLACE CAPACITORS

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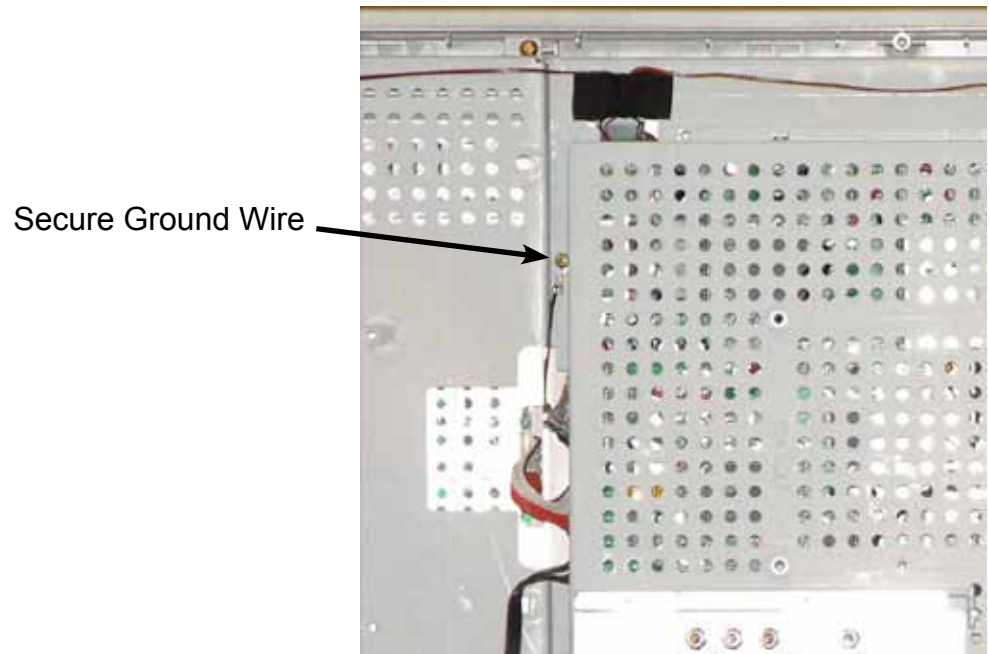
4. Disconnect all wiring harnesses from the main board.
5. Remove the 7 mounting screws that secure the main board to the metal chassis.
6. Replace the suggested capacitors on the main board as noted in the "Suggested Capacitor Replacement Chart". NOTE: It is recommended that all capacitors of like value be replaced to prevent future issues caused by aging components.



SUGGESTED CAPACITOR REPLACEMENT CHART	
<i>47uf, 25V Electrolytic Resolves Picture Issues</i>	<i>100uF, 50V Electrolytic Resolves Control Issues</i>
C26, C49	C01
C97, C121	C92
C151, C160	C617
C169, C170	C620
C185, C535	C841
C614, C706	C839
C801, C836	C704
C844	C705
Suggested Replacement Panasonic EEU-EB1E470S or PDI part PD107-366 Note: Recommend 105°C, 4,000 hr.	Suggested Replacement Panasonic EEU-EB1H101S or PDI Part PD107-258 Note: Recommend 105°C, 4,000 hr.

Final Steps REASSEMBLE

7. Reinstall the Main Board.
8. Reconnect wiring harnesses.
9. CAREFULLY replace the metal RF shield. Be sure not to pinch any part of the wiring harness. Also, be sure to secure the ground wire as shown.



10. Replace the television Back C over. Secure with 10 Phillips screws.

TEST

11. Apply CATV signal and AC power.
12. Verify proper operation of the television.

END OF PROCEDURE

For additional technical assistance, please contact our office.

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