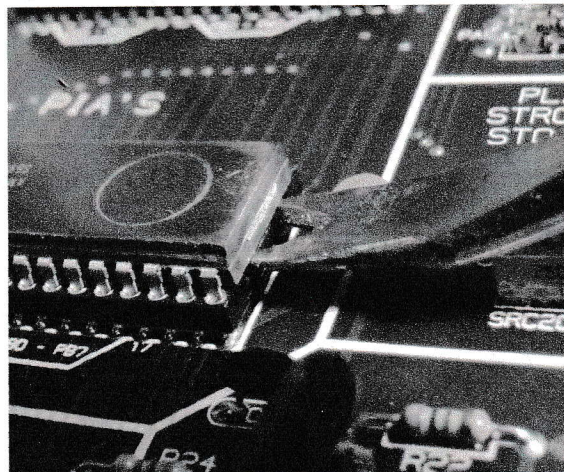


2) If you can verify the proper voltages leading up to the MUTHA.PCB then do the MPU voltage checks (lower left corner, just to the right of J4 connector).

- a. Left of R113 reads 43 VDC; the right side reads 22 VDC.
- b. Left and right sides of L1 reads 12 VDC.
- c. Left and right sides of L2 reads 5 VDC.

The 2 Red LEDs should be on with the left most (5VDC) slightly dimmer than the center one (12VDC). The green LED reflects the Bally start-up diagnostics. If any of the above voltages are out of regulation or missing then the MUTHA.PCB won't start and we should be contacted for additional help. It could be nothing more than a blown fuse or overheated connector at the Power Supply.

The MUTHA.PCB has been remarkably reliable over its 7-year production run with only a few having been sent back for service. Most of the problems were found (in the game itself) without having to send in the MPU. The additional charts provided will cover the Game Features Switch Options and the Free Play Relay Switch settings. If customer wants to disable the Free Play feature simply remove the Relay from its socket. If customer is changing any IC for any reason please note the following photo concerning the removal of IC's:



If a screwdriver or other tool is being used for prying, make sure that the tip of the tool is inserted between the IC and the socket, not under the socket. Prying under the socket can damage both the socket and the MPU.

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