



DATA EAST PINBALL, INC.

Service Bulletin #006

Date: April 27, 1988

Game: Laser War &  
Secret Service

Subject: Cpu Board Interchangeability

-----

There are three different CPU boards used in our pinball games.

CPU VERSION	USED IN	IDENTIFYING FEATURES
-----	-----	-----
1	Laser War	A 5117 CMOS 2K RAM at board location 5D. Will only work in Laser War.
2	Secret Service	This board is a modified version 1 CPU. It can be identified by a raised IC socket at 5D and several jumper wires connecting the pins of 5D to various parts of the board. The reason for the modification was to increase the boards RAM capacity from 2K to 8K. The RAM at 5D is a 2064 CMOS RAM.
3	Any DEP Game	Looks Similar to version 1 CPU (no jumpers running all around the board) except it uses a 2064 CMOS RAM at 5D and connector CN3 is a 9 instead of a 12 pin connector.

To convert a version 3 CPU to a version 1 Laser War CPU you must;

1. Remove Jumpers J5B and J6B. These Jumpers are at board location D8.
2. Install jumpers J5A (board location E7) and J6a (board location D7).
3. Add 3 pins to connector CN3 making it 12 pins long. These 3 additional pins must be added to enable the ball in play credit display used in Laser War.
4. Remove the 2 EPROMS from board locations B5 and C5
5. Install the Laser War EPROM in board location C5.

Pete Gustafson  
Field Service Manager  
Data East Pinball, Inc.

Page 1 of 1