### **First Class**

Lieberman Music Company
9549 Penn Avenue South Minneapolis, Minnesota 55431

LMC



# SPECIALS # MONTH

WHILE THEY LAST!

MONEY SCALE CALL SALES DEPT.

HOME #3<sup>-</sup>

SEEBURG \$7.95

SPECO VOM METERS

**FD90** 

96'69\$

WIRE STRIPPERS

**96.7**\$

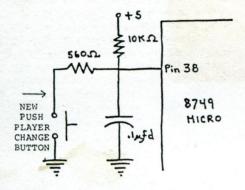
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## **LMC News Notes**

Volume 4, Number 5

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#### Arachnid Inc.



Subject: English Mark Darts Series 5000, Serial Numbers 9200 to 9810

**Problem:** Damage to Microprocessor Modification of Main Board

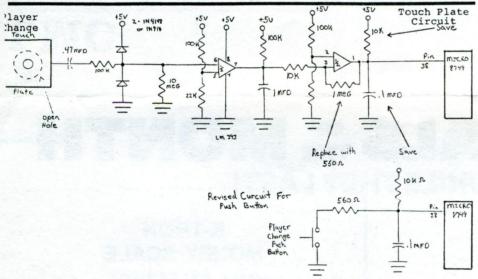
**Parts Supplied:** 

1 - .1 ufd capacitor

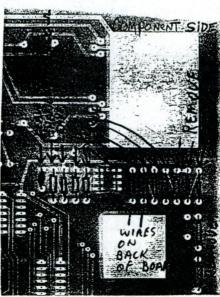
1 - 560 Ohm resistor

1 - 10K Ohm resistor

Solution: Find touch-plate circuit (LM393) on right side of board. Place the .1 ufd capacitor in first location on board. (See diagram). The 560 Ohm resistor goes into second location and the 10K Ohm goes into the third location. Wire for switch goes into indicated holes on back of board. On conversion of games with Touch Player Change Button, when converting to Player Change Push Button, see following diagrams and instructions.



Remove all components in top diagram, except 10K, ¼W Resistor, .1 Ufd Capacitor, and 1 meg ohm, ¼W Resistor. Then replace the 1 meg ohm, ¼W Resistor to a 560 ohm, ¼W Resistor. Solder new hookup wire where indicated on xerox drawing and open up touch plate on Main CPU Board from a ¼″ hole to a 7/8″ diameter hole. Insert bushing and nut on game from panel, insert push button into bushing and attach wires from Main CPU Board to push button.





Cecil Waulk, LMC operations manager

#### **Bally Midway**

Game: Spy Hunter

**Subject:** During initial power up, the game fails to go into the attract mode (garbage on screen)

#### **Modification:**

- **1.** MCR III CPU Boards, A082-91442-K000 and earlier versions.
- 2. On the CPU board, cut the trace going to IC 4053 located at G1 Pin #5 on component side.
- 3. Solder a jumper wire from IC G1 Pin #5 to IC G1 Pin #2.
- 4. Check out electrically.

**Game:** Ten Pin Deluxe Shuffle Alley **Subject:** Pin panel high voltage (300 volts potential)

- 1. High voltage is needed to start the pin fluorescent lamps. (Ten)
- 2. When adjusting or repairing the panel assembly, make sure the power is off.
- 3. All metal parts on pin panel have a 300 volt potential, which is dangerous.
- 4. A pin panel door safety switch is provided for additional protection.
- 5. I repeat, 300 volts be careful!

Andy Ducay Technical Service Manager

#### Centuri

#### Track & Field Switch Mod

During game play, beating the buttons can cause premature wearout of the buttons/switches.

To fix: Remove the E ring on the button assembly. This will expose the housing, spring & button. Merely insert a garden hose washer on the shaft and reassemble. This shortens the travel on the switch and absorbs the shock of the excessive pounding on the control panel. Approximate cost—under 5¢. Installation time—5 minutes.

By Dave Schaefer, Rowe International, Syracuse, NY