## **Product Manual**

## Theatre of Magic Trunk Fix

Resolution to the ToM Bug Causing Trunk Lockout



Owners of the 1995 Bally - Theatre of Magic (ToM) game, may know of the problem relating to the Trunk getting "locked out". This problem has been well documented over the years and indeed a couple of solutions exist as hardware and software modification to alleviate the problem.

The fundamentals of the problem are a bug in the game's firmware. This bug will put the trunk into a locked out state if the trunk eddy sensor receives a "hit" whilst the trunk is in motion. Once locked out, the trunk will not be allowed to move until the game is powered off. This solution to the problem is achieved with a new Molex plug, added to the Trunk Smart Eddy board to receive a signal from the Motor Control board. Using this communication, the Smart Eddy board will refrain from sending eddy switch hits whilst the motor is running.

The signal connection into the Smart Eddy may come from the original A-16120 (with modification) or from the Tangles TPP-1029i DC Controller board.

I propose this solution for ToM owners who are considering upgrading their eddy sensors to Smart Eddy boards, as the trunk fix can be piggy-backed onto this upgrade with little additional effort.

**P/N TPP-1039** 

## **KIT OF PARTS FROM TANGLES**

Parts supplied in the kit:

- 1 x TPP-1023i Tangles' Smart Eddy board with inhibit feature
- 1 x TPP-1029i Tangles' DC Motor Control Board with inhibit feature (TPP-1029i)
- 1 x 3 wire cable ( 0.1" plugs 560mm long)

## INSTALLATION

- Install the Smart Eddy Board (replacing the trunk eddy board).
- Connect the 2 pin Eddy sensor.
- Connect the 4 pin power/signal connector.
- Install the DC Motor Driver board (replacing the original)
- Connect the trunk motor to the 4-way header.
- Connect the power/signal to the 5-way header.
- Install the 3-Wire "inhibit" cable from Trunk Smart Eddy to the DC Motor Board.
- Route the 3-wire cable under the wiring loom to stay clear of trunk opto.



