

Product Manual

Twilight Zone

P/N **TPP-1037**

Subway Proximity Detector



Tangles'
Pin Parts

Replaces original part A-16535

The Tangles TZ Subway Eddy board (TPP-1037) utilises a modern quality construction and highest grade components to deliver a reliable replacement part for the original A-16535

This assembly employs an enhanced design to deliver the following improvements over the original:

1. Transistor buffered signal for reliable detection.
2. Improved PCB inductor provides a more reliable detection.
3. Adjustable via a multi-turn potentiometer to provide the most reliable detection.
4. Multi-turn adjustment provides long term stability of calibration.

The TPP-1037 is a drop in replacement for the original Bally part and fits the original mounting holes.

INSTALLATION

Installing the new board is a simple task requiring no specific instructions. There are two mounting screws and a single 4 pin connector.

ADJUSTMENT

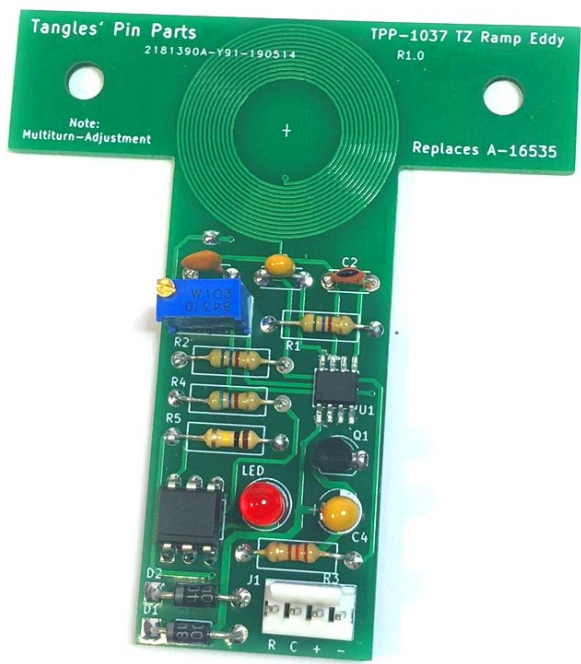
Adjust the Eddy Board after it is installed into the Twilight Zone machine. The screw adjustment provided on the board is a multi-turn adjustment with 25 turns of motion.

Turn the adjustment screw to a position where the light just comes on, then turn clockwise until the light just goes off.

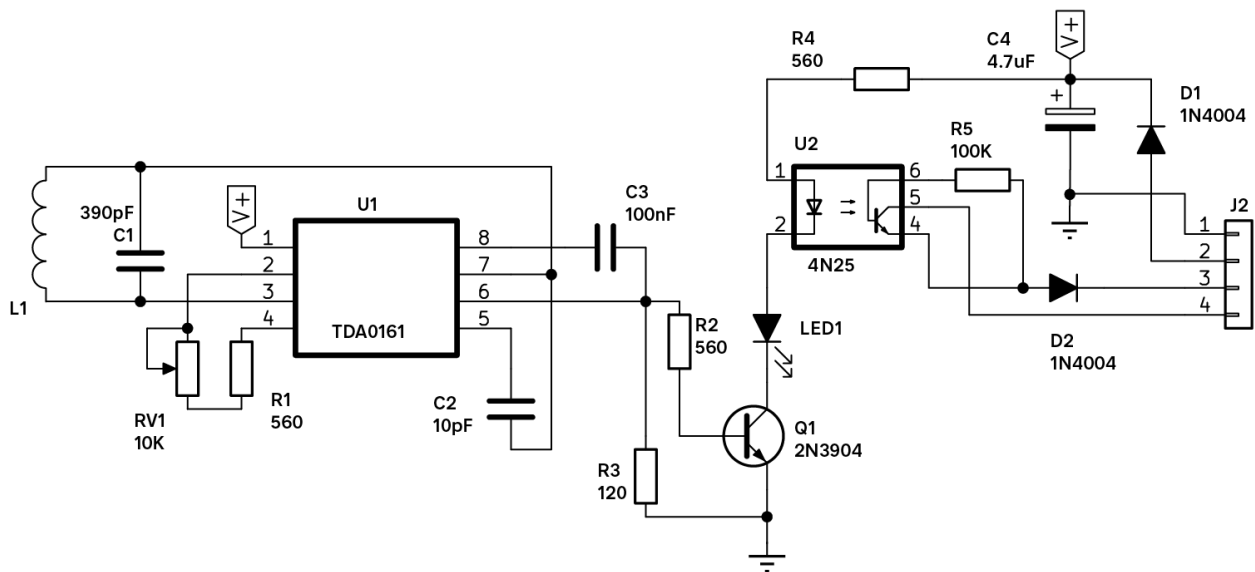
The normal (no ball detected) state of the board should be with the red LED off. When a ball passes over the sensor, the LED should come on.

To adjust the eddy, turn the machine on, raise the playfield and enter switch test mode.

- If the red LED is off, turn the adjustment screw anti-clockwise until the red led comes on.
- Turn the adjustment screw clockwise until the LED just goes off.
- Turn the adjustment an extra half turn clockwise.



Picture 1



TPP-1037 Schematic

PARTS LIST

DESIGNATOR	DESCRIPTION
U1	TDA0161 SOP-8 Package
U2	4N25 DIP
Q1	2N3906
C1	390pF Disc Ceramic
C2	10pF Disc Ceramic
C3	100nF Multi Layer Ceramic
C4	4.7uF Tantalum
D1,D2	1N4004
R1,R2,R4	560Ohm ¼ Watt
R3	120Ohm ¼ Watt
R5	100K ¼ Watt
RV1	10K Bournes 3296W
J2	AMP 640456-4
LED1	LED Red 5mm