



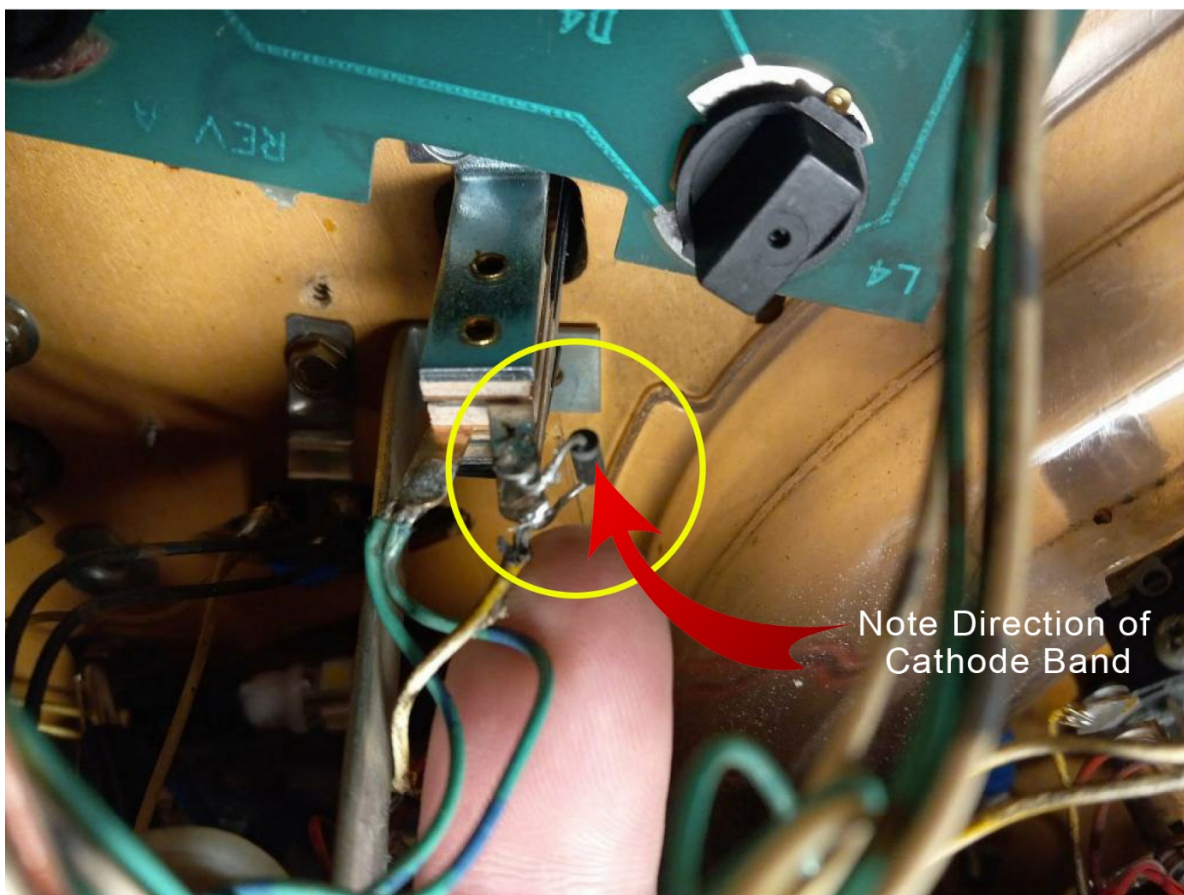
Service Bulletin SB-1

"Game Tilts after hitting the "E" target

Some experience in fixing pinballs is assumed. Basic electrical knowledge is helpful, but not necessary. You will need to solder and use the basic features of a Digital Multi-Meter (DMM) such as measuring voltage and continuity. Your machine should be off while soldering, repairing or replacing parts.

Symptom: Game tilts or the trough coil fires during gameplay after the ball hits the "E" target multiple times"

Solution: Switch is wired backwards, or Diode is either missing from the "E" target, or cold solder joints on the diode on the target. A good solution is to replace the target with a new target Williams part number A-18530-1 oblong target (blue) or the diode IN4001. Both the target and diode is available from Planetary Pinball Supply.



Inspect your target. Put the game into switch test mode in the game diagnostics. Push each stand up target and make sure only the corresponding target is triggered and displayed on the screen. If more than the switch being pushed registers on the screen an inspection of the target and associated wiring is needed.

You should have a diode soldered to the target as shown in the above picture. In most cases the diode is present and the wires are installed backwards. The wires should be attached as follows:

The two “green with a blue stripe” wires are soldered to Pin 2. Pin 2 is the center pin and does not have the diode attached. The “white with a yellow stripe” wire is attached to pin3. The other end of the diode is attached to pin 1. If the diode is missing you will need to replace either the diode or the entire target assembly. In either case inspect the solder connections and verify you have a good electrical connection. It is generally a good idea to reflow the solder on the diode and wire connections. Diode must be installed with the cathode (white band) on pin 1 (the pin with no wire attached) of the target. The opposite end of the diode is attached to pin3 which should be a white with yellow stripe wire. Double check your work and test for proper operation.

