Wiring a Taito Classic Game With a Switching Power Supply By Rich Potts

A big thank you to Anthony Pietrak and Geoff Gunn for showing me the light on this....

With the unreliability of the linear power supply PCBs in the classic Tatio games; the most reasonable alternative is to replace them with the switching power supplies. There are a few subtleties however with these Taito games. Classic Taito refers to the Elevator Action, Frontline, & Jungle King style games that have the 3-4 PCB board stacks. Power from the supply is brought in thru the 12 pin "H" and 36 pin "T" connectors; while controls are wired thru the 44 pin "G" connector. Here's what you'll need to do:

- 1) With the power off, and game unplugged, remove all connectors from the linear power board and remove it. You will be replacing it with the switching power supply.
- 2) Find a suitable location to mount your new power supply, and rout the 120v from the secondary 120v molex plug to power the switcher.
- 3) You'll need to cut the appropriate wires for power (GND, +5v, +12v) and connect them to the corresponding voltage terminals on the switcher. Double check to make sure they are all connected to the correct terminal, or bad things might happen!!
- 4) Many questions have come up about the purpose of the MRST in all of this, and I have seen on pinouts where you have to tie it low. Not the case, as it did absolutely nothing. The MRST is NOT NEEDED!!
- 5) You should not have to do anything else as far as wiring goes, unless you are starting from scratch. In that case, simply wire it as you normally would for controls and coin door, lights and such.

At this point when you are all done, you can power the game up normally and it will respond normally. However, when you go to coin it up, it will not accept a credit. Not an issue for Elevator Action and Frontline as they have free play. Jungle Hunt/King does not. There are two ways to solve this....

My cabs were all gutted, and in various states of disarray so not having to be a purist, I chose the "politically incorrect" or easiest way to solve the issue. If your cab no longer has the service switch, or if you could care less if it is there, pull pin 8 (Right coin switch) and pin J (Left coin switch) at connector "G" and tie them together to get both coin mechs to work on the door (if they are still there!!). Next, reconnect both at pin 11 (Service switch). Done! Test both coin switches on the door and you will see that they both now register credits. That was easy!

The second way is the more correct of the two, and will be what you need to do if your service switch is still intact and functioning (and you want to keep it that way!). There is a box with three pads next to the "G" connector pins (see figure 1). The pads are labeled "COM", "1", and "2" The two pads that are circled (COM and 2) will need to have a jumper wire soldered to them. This connects the counter drive back up and your coin switches will now register credits to the PCB.



Figure 1

Once you have the pads jumpered (see figure 2), you can hook your board back up, and your coin switches will function as normal, without altering the wire harness any further than adding the switching power supply. That's it!! Hopefully this will help may of you who have these

cabs that are missing the original power supply boards, or those who simply prefer the switching power supplies over the old, unreliable supply boards. Happy gaming!

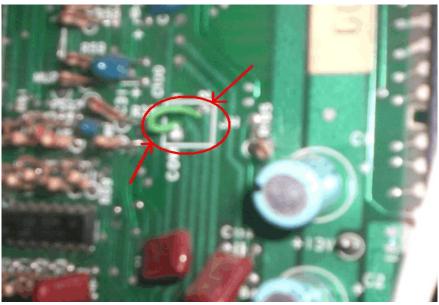


Figure 2