



Symptom: Malfunctioning Parker Fly SN 134119BMH. Master volume control does nothing. The magnetic pickups are operational but only through the magnetic volume pot. There is no output from Piezo.

Recommend: Check the output of the LTC1044 chip to make sure that it is outputting -9 Volts DC. Also check to see that the MC33179 Quad Op Amp is powered with both +9 and -9 volts DC, referenced to Ground lug. In my case, Pin 5 of the LTC1044 was outputting +9 volts.

Discussion: The Fly main board requires both positive and negative 9 Volts. The positive 9 volts comes from the 9 volt battery. The LTC1044 provides the -9 volt supply, and only requires the two 10 uF capacitors (yellow components left of chip) to operate. It is not capable of much output power, but is critical to power the OpAmp, which needs Vcc (+9V) and Vee (-9V) to operate. It is common in modern electronics for ICs to fail much more often than passive components (resistors and ceramic capacitors.) Typically, the first troubleshooting step is to check power to ICs.

Solution: The repair performed was to replace the LTC1044. LTC1044 was sourced via E-bay and came from China. Repair requires desoldering [materials: decent temperature-controlled soldering iron, leaded solder (you can use lead-free, but more troublesome particularly if you don't do a lot of soldering), solder wick, and solder flux.] There are a lot of good YouTube videos available on how to solder electric parts. Watch a few videos and practice on some junk boards before you attempt to fix something you want to keep. Be careful how long you put the iron on the board and use lots of flux. Flux essential to good soldering. I used an IC holding socket in the repair, just in case the LTC1044 burned out again. Replacing in the future would be to just unplug and plug in a new IC. This also eliminates the possibility of over-heating and damaging IC, if you don't do a lot of soldering.