Fox Oring TX Assembling. Copyright pa0nhc 20180515

IMPORTANT :
Faults can be hard to detect.
Components can be difficult to be removed.
Tinned holes can be difficult to un-solder and made open.
Keep all components separated.
Place ONE component at a time.
Visually CHECK the value of each capacitor BEFORE placing. Check the package details.
CHECK the value of each resistor using an ohm meter BEFORE placing.

Capacitors are RM2.5 (1/10”wire spacing).
Resistors are 0.25W, 3x6.5mm.

C102 is a wirebridge.
C103 is not placed, remains an open connection.

Solder :

1. Horizontally placed resistors.
2. Small capacitors.
3. Vertically placed resistors, L1, L2.
   The PCB shows which side of the part must be in direct contact with the PCB.
   The long wire side then can be used for measurements.
4. C1,8.
5. C11,13. Long wire = +.
6. Switches SW1, SW2.

7. Wind transformer Tr1 :
   Ringcore FT50-61 (½ “, Ui=125).
   Twist the wire tightly to form the 2cm long tap connection.
   Pull the wire *one time through the hole* to form the 1 turn coil part.
   Wind the opposite wire end *seven times through the hole* of the core.
   Total turns is eight.
   Spread all turns evenly around 330 degr. circumference of the core.

IMPORTANT :
Seen from the start to the end of the whole coil, all turns must have the same winding direction (for instance from start to end : all turns clock-wise, or all turns anti-clock wise).

   Remove some insulating laquer fron the three coil connections.
   Using a HOT iron (400C), tin the coil connections.
   CHECK that both wire parts of the tap are soldered together *right near the core*.

8. Place the coil onto the PCB, solder the wires, and clip them.
9. Use a drop of thermal glue to fix the coil and his wires to the PCB.

Prevent damage to semi conductors : Connect the solder iron GND connection to a GND connection on the PCB.

10. Solder : IC5, IC4, IC2, IC3, IC1, T1, T2, LED.

11. Solder all six connections of variable capacitor C100 into the PCB.
12. Connect the two not connected signal pins to the two connected pins.
    All pins four pins must be connected in parallel. (See photo).
13 Solder the battery cable, and fix it to the PCB with thermal glue.

Check all solderings.

Tune C100 for max. output with max. brigthness of the LED. Battery current : 14 / 70 mA.