

## Additional modification notes

Comments and practical issues around the instructions on <http://www.foolography.com/> by Oliver Perialis. All credit to Oliver Perialis. Use of this document at reader's own risk. No liability accepted by either Jaco Mostert or André Mostert.

I fixed 2 TC-16A's using Oliver's method. I hope that my notes below makes it even easier for the next person to modify their TC-16A.



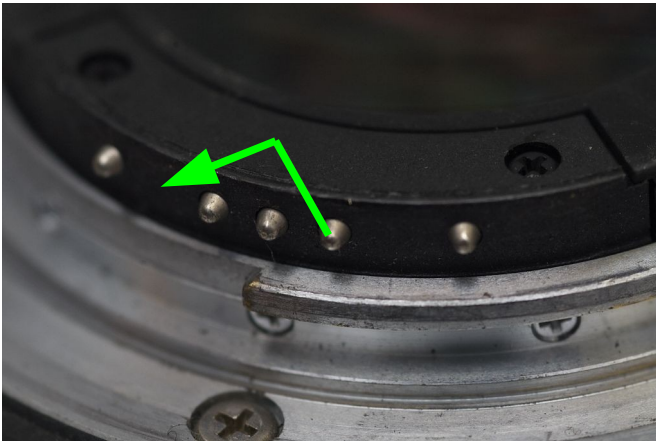
Copper strip shown: Copper contact from an old 220V relay. Used on TC-16A to operate AI switch on D100.

### Tools I used to do the job (shown in pic):

- Philips #0 for the screws on the TC-16A
- Flat screwdriver for lifting the processor cover
- Small longnose pliers
- Pin to pick up springs
- 1,4 mm drill bit

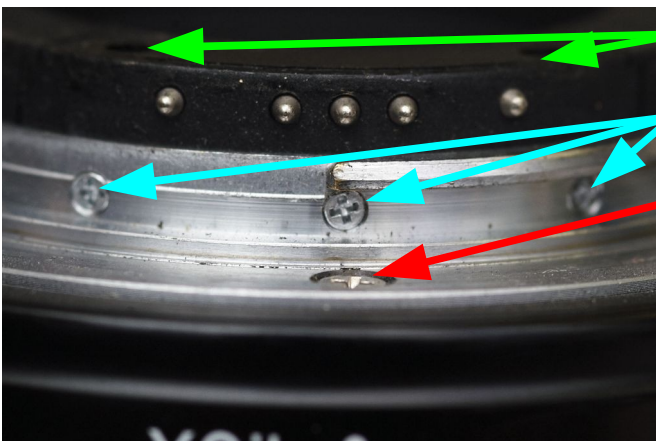
### Tools not shown in pic:

- Small bench vice to hold the spring for soldering
- Soldering iron with fine tip + solder
- Wire clipper
- Slide lupe or magnifying glass
- Good light at your working area
- Big Tupperware container



"Before" shot of the contact strip of the TC-16A

The arrow indicates where the contact has to move to.



Screws holding down the contact "box". Undo them first.

Undo the screws around the (vertical) perimeter of the lens mount.

Do not undo these screws !

I removed all screws while the TC-16A and my hands were in a big Tupperware container. Do this if you want to make sure you don't drop screws or springs ...

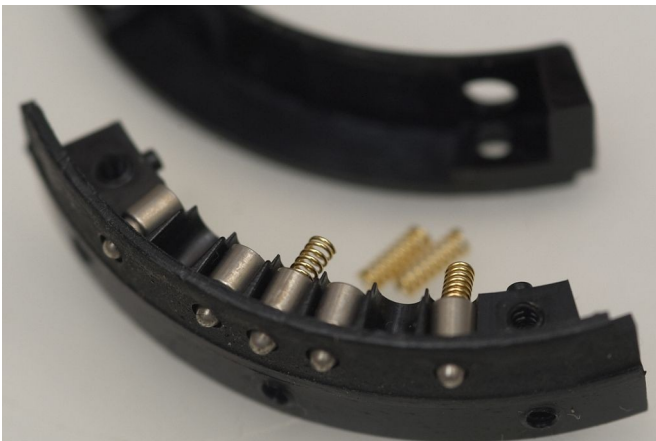


Remove this insert inside the lens mount. It fits tight. Pull it out only once all screws have been removed.



Remove the contact "box".

**CAREFUL**, the contacts **WILL** fall out and the springs **WILL** jump all over.



The contact "box" opened and removed from the lens mount.

**Contacts and springs are loose and WILL fall out.**



Drill a hole in this position (spinning the drill bit between your fingers).

Try to drill the hole in the middle of the cavity, slightly above the floor of the cavity.

If you drill the hole with the drill bit resting on the floor of the cavity the hole will be too low and slightly out of line compared to the rest of the holes. This may cause friction of the contact pin on the plastic wall.

Remove the burr using the small flat screwdriver, and ream the hole to make sure the contact moves freely.



When the hole is drilled, try out the contact in the new hole.

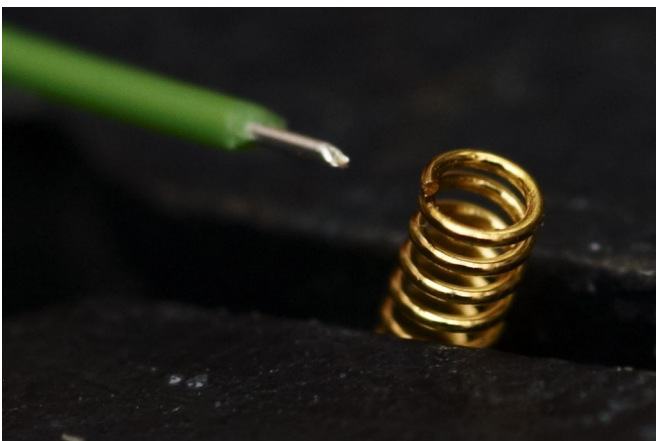
I inserted the 1,4 mm drill bit's solid side into the connector. It fits the back of the connector perfectly.

If your hole is off center (see above) the contact may not move freely due to friction on the side walls of the cavity. Just ream it a bit bigger in this case.



I used a steel pin from my wife's needlework box to handle and pick up the springs.

Bend the tip to prevent the spring from sliding down the shaft.



Solder a piece of wire to the spring. I used old wire wrap wire which I kept from a job 15 years ago!

I used a temperature controlled soldering iron with fine tip and a hobby vice to hold the spring.

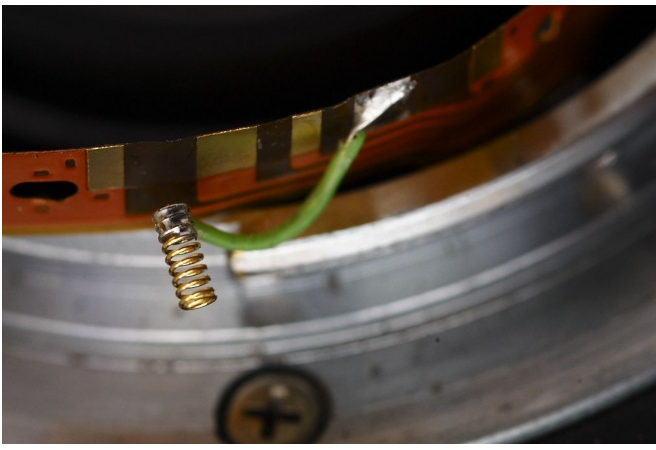
First tin the wire end, then tin the spring end, then solder the lot together. Be quick to prevent the solder to move into the spring's coils.



Check that your solder joint is good, i.e. no dry joints etc.

I used my old Nikon slide lupe for this. (Haven't used it in a while with the D100 around ...).

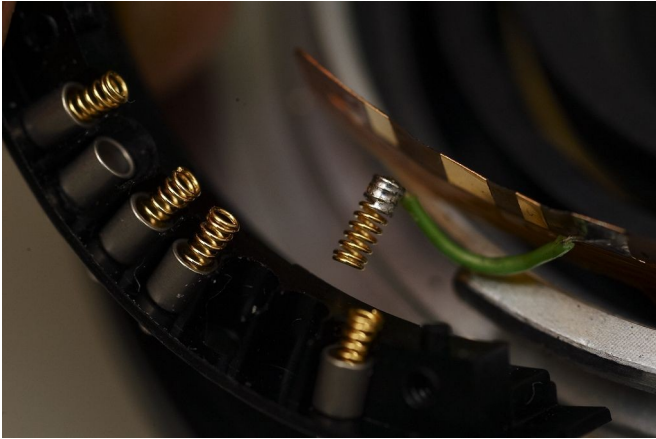




Solder the other end of the wire to the printed contact.

Don't make the wire straight – rather have a little bend. Remember, the other contacts in between must still press against the PCB.

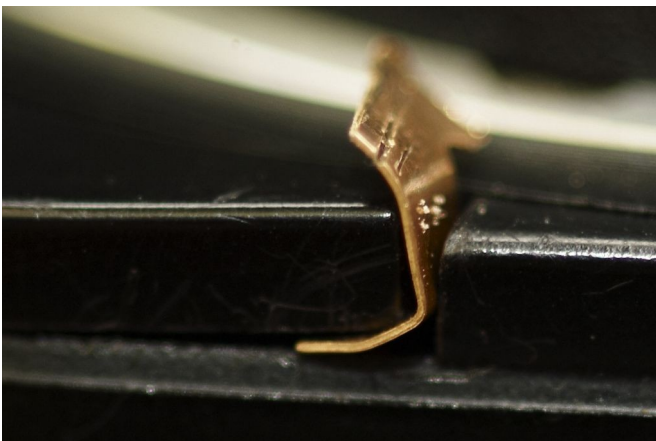
Again, first tin the wire end, then tin the contact area, then solder the lot together. **Be quick and keep the solder time down to try not to melt something on the PCB.**



Re-assemble the contact strip with the contacts and springs in place.

**Do this inside your Tupperware container!**

First close the contact "box" and fit the 2 black screws on top. Then fit the 3 screws holding the "box" onto the lens mount, then the rest of the screws.



Make the AI switch stud.

Bend a copper strip or shape another type of material for this purpose.

Remove the one processor cover screw and loosen the other one. Lift the lid using the flat screwdriver. Insert the bent piece of copper. Tighten.

I used a copper contact from a 220V relay which I broke apart. I could figure out no way to use plastic for this. Copper was easier for me.



Job done.