

A2 Macro Switch Repair Guide

The following is a compilation of instructions and tips from various contributors, to allow repair of faulty (Konica) Minolta A2 macro switches (and probably other Dx/Ax cameras).

Before you start:

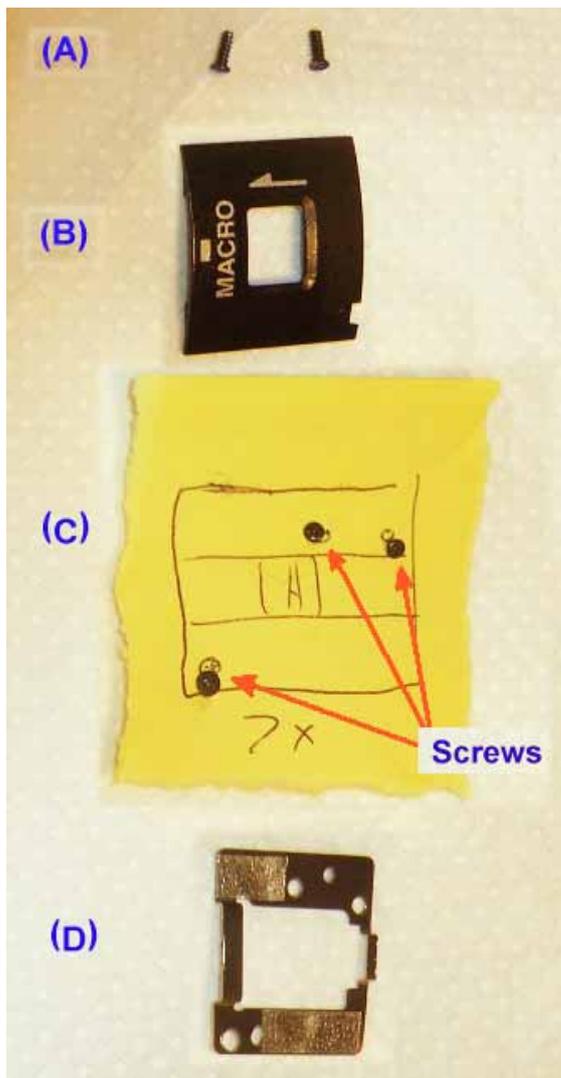
Take out camera battery - **First !**

Its easy to make mistakes when working with things this small. I used my wife's magnifying headband, but instead you could buy very strong reading glasses from £1 shop, which will aid magnification.



Prepare you working area:

Clean a work area - desk and floor! (Its best to clean the floor so you can see any miniature bits you may drop!!) Also lay down a small cloth, tissue or shallow container, so that bits will not roll away.



Always place disassembled parts in order, so that order of reassembly is obvious.

Also when a set of screws have to go back into specific holes, it's a good idea to get a small piece of card and sketch the part. Then punch small holes into it to hold each screw in the right location. This prevents mistakes on reassembly.

All these screws can be a little tight to undo, so use a good screwdriver and **DON'T** let it slip. - Because damaged screw heads are **VERY** difficult to undo!

Tools List

- A small jewellers cruciform (cross head) screwdriver
- A very thin flat screwdriver .
- Tweezers
- Epoxy resin
- 'Something' to clean surfaces to be joined. (Knife, Solvent, etc.)
- Magnifying glasses.
- Tissue/kitchen roll, to clean epoxy off screwdriver!

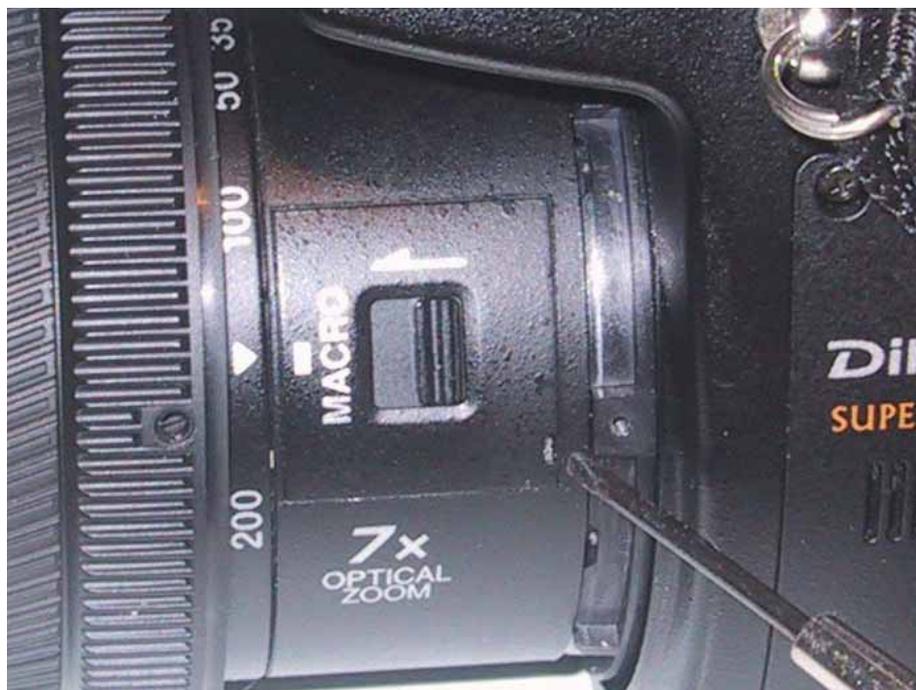
Disassembling the A1-A2 Macro switch

Using a correct size good quality cross-head screwdriver, remove the 2 screws from the manual focus ring (located around the ring).



Slide the focus ring towards the rubber part of the lens barrel.

Tip.1) With my A2 the focus ring would not slide over the zoom grip, because the grip was too large in diameter. So I took the grip off entirely, which was fine. Unlike the Dimage D7xx grip, it is not fastened with double sided tape, but is prevented from rotating around the lens with internal moulded 'pegs' which key into holes in the lens barrel beneath it. This is an altogether better method of fastening and allows of removal of the grip, and its replacement, with no scarring or damage likely to occur.



Take the small flat screwdriver, thread it into the rectangular hole located down & right from the switch "mask (something that hides the switch)" and lever to remove it (the "mask" is just taped by double side adhesive).

You will find 3 little screws holding a metal plate – carefully remove them without dropping them inside the camera – or on the floor!

(Put these screws into a small piece of marked card – each screw in correct location).

Take note of each screw position - they are slightly different from one another !!!

The metal switch retaining casing will now come off and the switch button is also now released. - take care with the small spring contact – and don't get greasy fingers on the contact tips.

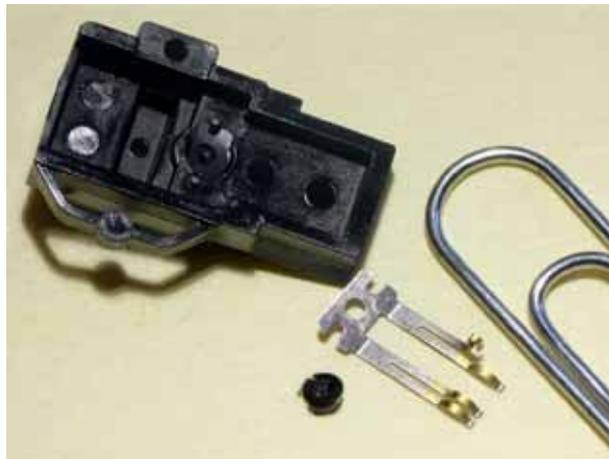


Repairing the damaged part: (the sticky bit)

*** When gluing the bits back together, DON'T get any glue into the side - sliding channel area indicated below (otherwise switch won't slide!!). ***

It is the plastic nipple which holds the spring contacts in place that breaks.

Note: You may if unlucky have a bent contactor which will need to be carefully straightened.



Baz straightened this one out - showing great skill in working with such titchy items. Remember it is spring steel, and that makes it a lot harder to bend.

Before you add glue...

A) clean the 2 faces to be bonded well (I also scratched up the plastic face to help key the glue.).

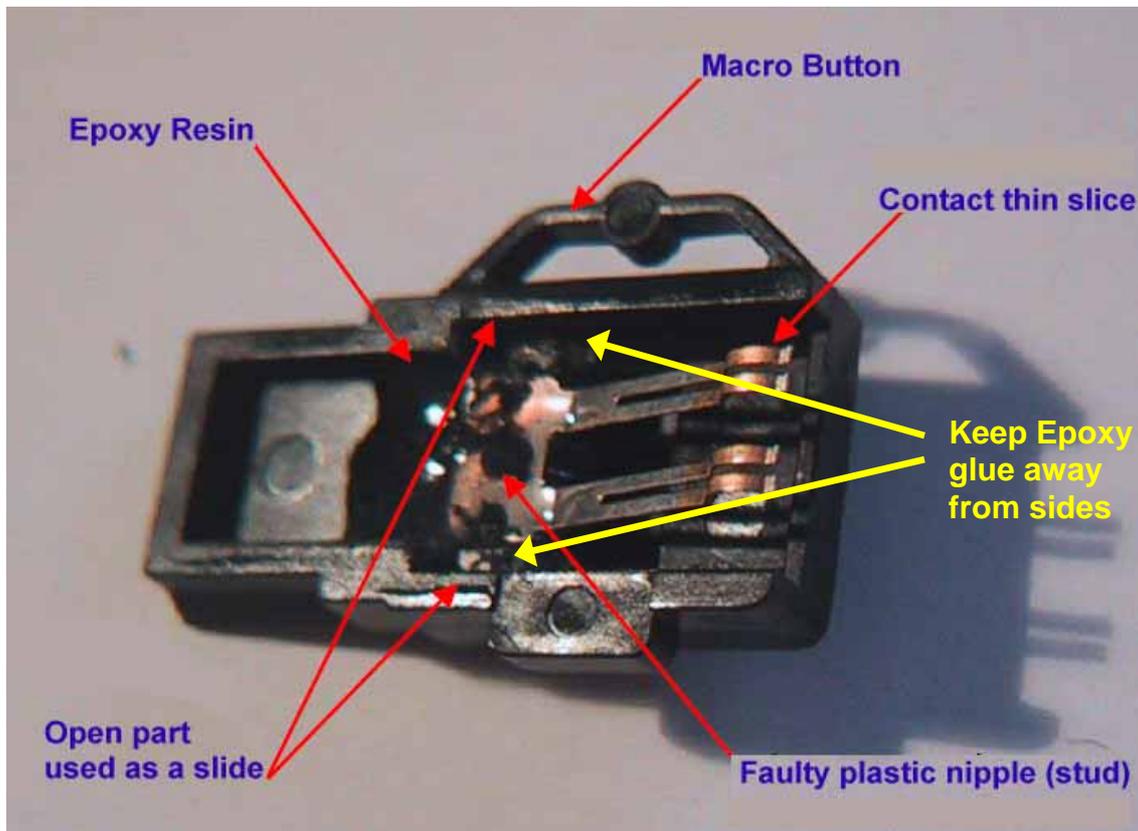
B) Figure out how you are going to stand/rest the 2 pieces so that the spring tags are at the correct angle!

...Barrie used BluTack (see diag), which I couldn't manage to do. In the end I found the keyboard was just the right place to hold it setting without the metal part moving.

Use a miniscule amount of epoxy glue (J-B Weld/Araldite, etc.) Apply by picking some up on the end of a cherry stick, or teeny screwdriver.

Note: The springy end must be raised from the switch, otherwise they will not make electrical contact with the camera!





Do avoid epoxy-ing the "open part used as a slide ", (use a small screwdriver to remove it in case you were clumsy), otherwise the switch would not move after reassembly. Wait during one or 2 hours before full reassembly (depending on glue). Then if necessary re-align the contacts a little.

Tip.2) In his original instructions Michel states...." Do avoid epoxy-ing the "open part used as a slide ", (use a small screwdriver to remove it in case you were clumsy), otherwise the switch would not move after reassembly."

Well, my epoxy sagged a little before it set, and ran into the zone in question. So take heed!! It is a whole lot easier to remove epoxy BEFORE it sets!!

*[The zone in question is the small recess or "box" that lies *under* the contact prongs, (not *behind* them) and it is the *sides* that must be kept clear of epoxy. This clear space either side of the contact prongs is needed to accommodate the two *rails* that are part of the moulding the switch button fits down on. If those rails are not free to fit into the "box" the switch button will fit in okay, but it will be obliged to be ON, and will not be able to be slid to the OFF position.*

Beware!! It took me about an hour of painstaking work with the point of a scalpel to erode away the offending excesses of hardened epoxy !!]

Tip.3) I found the above job easier than it might have been, because I steadied the button on a blob of Blu-Tack whilst working on it. Hmmm.. A good bright desk lamp is also pretty damn essential, too!

Reassembly

Do exactly the opposite of disassembly



- Put the Macro switch back to its position.
- Put the metal sheet casing above. Put the screws back.
- Test the switch moves.
- Insert battery and check the Macro symbol appears on the screens.
- Put the plastic switch mask on.
- Slide the manual focus ring back and fix the 2 screws.

Note: DON'T over-tighten the 3 screws on the metal switch retaining plate, other wise the switch will end up much to stiff to operate (I had to re-open the camera and slightly back these off!).

Footnote

PS: For those who would use this information in order to modify the switch to try and allow it to work outside the 2 specific lens positions - full wide angle and full telephoto zoom - by cutting the switch short. Be warned - the A2 will not focus outside of these positions (real life experience tested with my camera).

Conclusion

(Original author wrote) - It's a pity that Minolta used so cheap and nasty a device on such a good camera, especially as they know it will be used often.

But that may be unfair, as the same/similar mechanism seems to work so well on the other models. It's possible they were unfortunate with the batch of plastic on this part.

NOTE (From Adrian): I am NOT the (French) author, OR the translator of the original memo. But my thanks go out to those people who did create this originally and Baz from the DPR forum who also added many extra tips and photos.