

Solving Nikonos V TTL problems

by Peter Rowlands

The sad news that Nikon are to discontinue the Nikonos V makes it all the more necessary to look after your existing cameras. The manual which comes with the camera is helpful enough but there are some tips they don't tell you about but UwP will!

The TTL flash contacts are probably the biggest cause of exposure failures and care should always be taken when removing a sync cord from the socket, especially just after the camera has been taken out of a rinse tank. The small gap between the centre of the flash plug and the threaded part you screw into the camera socket will almost certainly retain a small amount of water. If you unscrew the sync cord with the camera upside down this water could drop into the flash socket.

On a Nikonos 111 or 1Va this would not be a major problem and a small burst of low pressure air would expel the unwanted water. The problem with the Nikonos V is that the two extra pins for TTL signals are sprung loaded. This allowed Nikonos 111 and 1Va flashguns to be used but it did leave a weak link in the system.

The problem is that, being spring loaded rather than moulded into the solid insulating plastic as the other three are, water can get past the small pins and into the insides of the flash pin assembly and eventually, if there is enough pressure or water, it will actually get inside the camera and could do a lot of damage.

I know rinse water is supposed to be fresh but, in the real world, it rarely is so it will be slightly salty and will cause a resistance in the sprung loaded contacts which will fool the flash into thinking that it is giving out enough power when the system is next used. Unfortunately for those who didn't know this, it will seem as if everything is working as the flash will fire every time but it will only be a very small output and the shots will almost certainly be very dark or underexposed.

An early indication that you may have a problem is if the lightning bolt in the camera viewfinder flashes rather than stays on permanently when the flash ready light is on. If this happens you must try to clean and dry the flash contacts. Doing this may seem a bit nerve racking but you have no choice if you want to solve the problem. The following is what I recommend if you are on site and don't have access to a Nikonos repair facility:



The weakest links. The two smallest connectors are sprung loaded and water/grease can get behind them. Water increases resistance and grease stops electrical contact and even small amounts will cause TTL failure



The small gap between the centre of the flash plug and the threaded part you screw into the camera socket will almost certainly retain a small amount of water for a long time after a rinse.



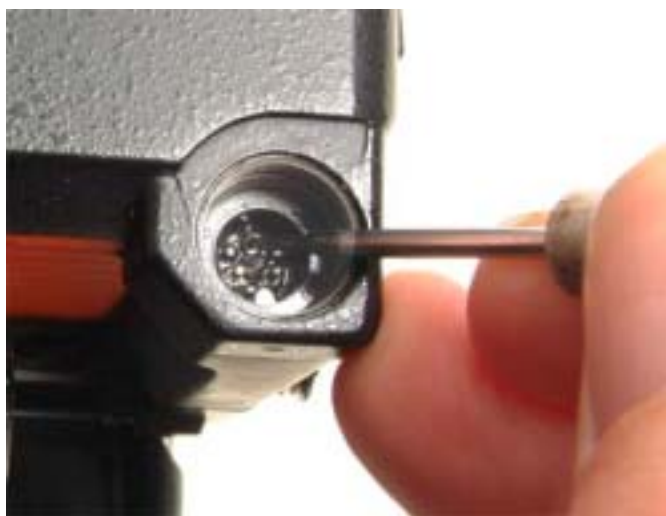
You are not advised to remove the flash plug like this as drops of water can fall onto the flash pins and cause TTL failure. It is better to hold the camera normally and carefully remove the plug from underneath.



Diver's Best CL40 comes in a 1/2oz bottle which has lasted me three years so far. It is basically a contact cleaner which can be used if an application of degreasing liquid has not solved the problem (please refer to the text)



Diver's Best say don't do this but it has worked for me. Bear in mind that you haven't got much to lose because the only solution after this is to have a Nikonos repair technician replace the flash pin assembly from inside the camera and this is an expensive repair.



I didn't tell you to do this! Use a fine pointed device to push each of the two small sprung loaded pins up and down a few times and then blow the CL40 away with a blast of low pressure air.

The first option is to give the socket a blast of low pressure air. If you are lucky it may expel any trapped water or grease.

The second option is to drop some degreasing liquid into the socket. There are many varieties of degreasing liquids, some of which will attack the plastic, so be careful which one you use. I use an IPA based liquid called Isopropanol which is very good. I think RS components sell it in small quantities but I use it so much for my work that I buy it by the gallon!

With a generous amount of degreaser in the socket use a fine pointed device to push each of the two small sprung loaded pins up and down a few times. This will get the liquid behind the pins and inside the flash pin assembly. There it will degrease the contacts and should also absorb any moisture. A blast of low pressure air will then expel the remaining liquid either physically or by evaporation. I have found that this solves the problem about half of the time. For the other half there is one final, last ditch attempt to try...

I was given a small sample of 'CL40' about three years ago. It's made/marketed by Diver's Best in the USA. I don't know if they have an agent in the UK but their address is 112 Commerce Street, Riverdale, Atlanta GA 30236. I suspect that CL40 is merely a rebranded contact cleaner such as those sold by Maplin or RS Components but it has worked very well for me over the years so I'm not knocking it.

The CL40 instructions tell you not to do what I am about to recommend but it works for me a lot of the time! I apply a small amount of CL40/switch cleaner into the socket and depress the spring contacts as before, then blow it away with a blast of low pressure air. If you still have a problem, the only solution is to have a Nikonos repair technician replace the flash pin assembly from the inside of the camera.

Fortunately you can test the TTL system without film in the camera as follows:

Make sure you are wound on to at least Frame 1 and fire the flash straight into the lens with it set at the widest aperture (F2.5 on the 35mm lens). When you fire the flash you should get a very small flash and a very fast recycle time.

Now cover the lens with a lenscap or place the camera face down on a solid surface. When you fire the flash now the output should be much brighter and the ready light will blink a few times, go out and then the flash will start to recycle. This indicates that the flash has fired at full power and that your TTL system is working fine.

Next issue we'll look at more do's and don'ts to make sure you keep your Nikonos working.

See you in Issue 3 of UwP on December 1st 2001!

Peter Rowlands