



## [www.discovery2.co.uk](http://www.discovery2.co.uk)

### [HOME](#)

### Faults and Fixes - ACE "Amber Light"

*After or During a recent wading session the ACE light decided to take a permanent residence on my dashboard much to my annoyance!! As we all know, the diagnostics for the Discovery 2 is a more specific field of testing that requires either Testbook, Rovacom, Autologic or more recently Nanocom.*

*Nanocom has bought diagnostics to the DIY user in a very affordable package, however it does not yet cover the ACE (active cornering enhancement ECU) installed in the Discovery 2. If Nanocom had covered this, I would have simply bought one to diagnose my ACE light. With all this in mind and the fact the other tools are so out of the DIY users price range, I had no option but to book her in to find out what the fault was before I could attempt to rectify it.*

*Fortunately there is an independent Land Rover specialist not too far from me so she was booked in there for a diagnostic session at Autoland. The session was a week away so I had to live with the light and the fact the car handled so differently as the ACE system had gone into a default mode.*

*During that week I spent sometime searching this particular fault, and although I could not find much on the internet, I did find several references to the light and faults caused by accelerometers of which there is 2 fitted to the Discovery 2. I bought a new one of these and tried it in both locations (1 under drivers seat on chassis) and the other behind the map pocket where the sunroof ECU is.*

*Unfortunately this was a pot shot and did not solve the issue, however I can keep it for a spare for now. Whilst I was trying the new accelerometer I also made sure all the plugs etc were clean and dry on the Valve block DCV's*

*The only other info I could find was one ref to the pressure transducer fitted in the front of the valve block, this however was a lot more money than the accelerometers, the pressure transducer is about £75 + VAT. After a bit more studying of the ACE system, I came to the conclusion that it was "highly" likely the pressure transducer had died as it was only an "amber" light, so the day before I went for the diagnostic session I ordered one from the dealer to have ready if I needed it. The test session confirmed a fault of 0023 "no pressure signal", so my "hunch" was correct as nothing else would give this particular code / fault. So off to the dealer I went and bought the new transducer, some new ACE fluid (if needed) and went home to replace it.*

*Here is the little culprit !! not a lot for £80 +*



*And here is where it is located on the Valve block on ACE equipped cars (plug disconnected)*





*Because the pipes are in the "way", you will DEF need a 27mm Deep socket to undo / fit it as you cannot get a spanner in there + a socket is always a "safer" option.*



*With a small extension, you can get a ratchet on it quite easily to undo it, it "should" not be that tight.*

*NOTE !! it is HIGHLY RECOMMENDED to make sure you clean around where it is of all dirt etc as you don't want any dirt going into the ACE system !!*



\*\*\*\*\*CAREFULLY CLEAN THE MATING FACE ON THE VALVE BLOCK TAKING EXTREME CARE NOT TO PUSH ANY DIRT INTO THE HOLE!!\*\*\*\*\*



*Put a a container below where you are working, you will loose a little fluid, but not a significant amount.*

*The new transducer comes with a new "o" ring already fitted, but its a good idea to lubricate the new "o" ring with some new ACE fluid before you install it, this helps it "slide" in and not get caught and possibly tear / nip / snap.*



*Fit the new transducer, torque it up to 15lbs ft or 20 NM. Connect the multiplug back on to it. Check the ACE fluid level in the reservoir, it should not have really changed, if it has top it up to the max mark. Then turn on the ignition and wait for dash the self test and the AMBER light should now extinguish !! start the car and check it remains off.*

*Fortunately, the ACE ecu will only light the dash light when a fault is present, if the fault is fixed or goes away, the light goes out!!! so there is no need for a reset with Testbook or similar.*

*The workshop manual states that after a transducer replacement, the ACE filter should be changed, I personally don't see why this is, if your careful not to get any dirt etc into the system, there should be no need to do it. I will however be replacing the ACE filter as part of my routine maintenance at a later date, this will be included in the maintenance section once its been completed.*

*So, "if" you have an Amber ACE light on, this "could" be your fix, and you if your willing to take a pot shot, it could save you a Testbook session and the inconvenience of taking it to a Dealer or specialist to have it diagnosed.*