



The ocean may've been the cradle of life, but water is still not at all welcome in some places, such as inside a car. There, it'll not only contribute to a musty smell, it can also cause subtle and not-so-subtle problems in electrical systems. If it's not absolutely pure, it's a pretty good conductor itself, but worse than that is the fact that it promotes corrosion in any connection and even down inside the insulation of all those myriad wires.

You're starting to see where we're going with this? How about strange malfunctions in the central locking system and the anti-theft alarm (ATA) of SLK models? The uninvited moisture has a way of penetrating the electrical connectors at the pump, migrating along the wires or the pneumatic line. This raises havoc and causes consternation among technicians presented with complaints about glitches in these two security-related systems.

So, before you go crazy following wiring diagrams and trying to outguess the electronic logic, do a simple visual exam – as they say in the medical profession, look for horses before you look for zebras. If you find H₂O at the pump, pull the harness connectors and see if the terminals are wet and/or corroded. Clean them thoroughly, or replace the metal contacts. A moisture-dispersing spray will help. Chances are good this will be the fix.

But how is the water getting into the trunk where it doesn't belong? In other words, you've got to locate the leak. First, perform a water penetration test using a garden hose. In the SLK, a possible entrance point is the rear seal of the Vario roof. Water penetrates from under the seal and over the metal fold into the trunk, then drips onto the trim and runs along the longitudinal member and the cables into the pump's connector. The seal has an elastic sealant (except for over the metal fold). This might not be sufficient. The seal or the metal fold may be too small, or maybe the metal fold is wavy (the seal can't compensate for the waves).

Another potential leak point is between the Vario roof rear lower seal the trunk seal on the quarter panel (they cross over each other). Perhaps the shell of the vehicle is not within the specified dimensions in this area (especially the metal fold for the trunk seal) so that the seal "tips" to the side when the trunk lid is closed. Or maybe the seal for the roof or the trunk is not within specs.

There is also the possibility of leaks at the water drain hose of the rear fender. The water runs between the seal and the body cutout because there is not enough clearance for the seal. This may be the result of the seal not been snapped into place properly. Or, perhaps the cutout isn't within the specified dimensions, or the seal groove is too big.

Regardless, fix the leak, then install the repair wiring harness (Part Number A170 540 35 09) and rotate the pump 180° from its original position – refer to WIS document AR80.20-P-2710G. This lengthens the lines and forms a loop so that the water that would otherwise run down the lines will now drip off at the lowest point of the loop.

For parts, you'll need:

- 20 Raychem connectors (green), A001 546 99 41

- 2 Raychem connectors (red), A002 546 00 41

- 1 Raychem connector (blue), A002 546 01 41

- 1 Tape, A006 989 94 85

- 2 Hose, A007 997 61 82

- 1 Repair wiring harness, A170 540 35 09

- 1 Foam housing for the pump, A170 800 02 35

So, as is so often the case, the problem with these high-tech systems isn't the high-tech part at all, but something simple. You've just got to know what to look for.