WIPER RELAY REPAIR

The intermittent (including variable), self-park, and ten-wipes-with-washer functions are all provided by a BLUE 'relay' unit mounted under the dash near the fuses (see Relay Identification).

If the (front) wiper relay is missing or completely non-functional, the wipers still work on both speeds but with no self-park, wipe-with-wash or intermittent functions.

Front & rear relays are identical in function and pin-out.

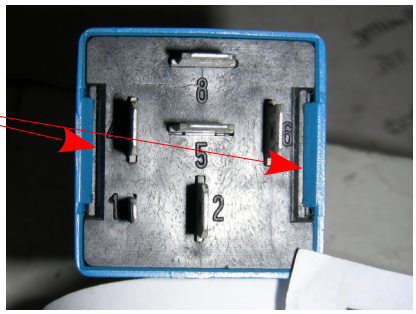
On my Xantia, the front and rear units were of different makesand are externally different; the front unit (right) has a plated steel mounting tag that slots through, and is screwed to, an upstand on the farthest edge of the relay plate. The tag is jammed into a pair of slots moulded on the outside of the blue cover.

Be aware that most of the different layouts of the relays (on the under-dash plate that supports fuse block) are undocumented – colour is the only reliable guide.

The rear unit is simply a blue cube with the same arrangement of spade connectors and simply plugs into the rear wiper motor, with the electical spade-connectors providing the only mechanical support. The lack of any other support means that every time the tailgate or hatch is shut, the spades are subjected to a sudden shock load - whip-lash.

Loss of intermittent wipe seems to be a relatively common problem, sometimes the fault itself is intermittent! The failure is usually a complete fracture of the solder joint of one spade connector on the internal Printed Circuit Board (PCB). Once you've found the relay (potentially the hardest part) and removed it, repair is a simple soldering job.

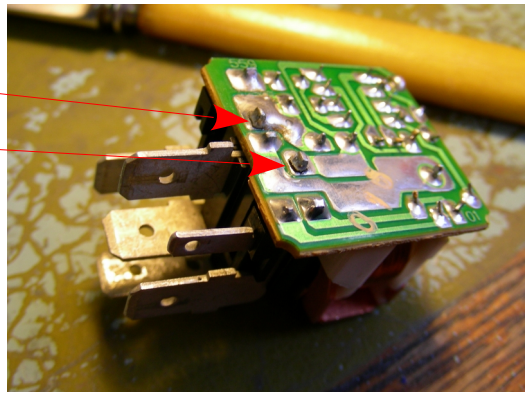
The cover comes off quite easily. Slide something like a thin knife blade under the retaining barbs on opposite sides.



For just this sort of job, I have a couple of what were small tea knives with broken blades (the handle of one is visible in the photo below); the ends of the blades were ground square, the sharp edges and corners rounded and polished.

Gently ease off the blue cover being careful of the internal components.

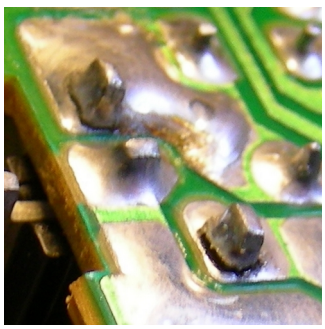
A typical failed relay: the solder joint of one of the spade connectors was partly fractured and that of terminal 2 (relay common contact) was completely fractured.



It's a fairly simple to re-solder the joints, building up a more generous shoulder to spread the load over a large area of copper, but it's vital to avoid any tag getting hot enough to melt or distort the black plastic base that supports and locates the tags.

In time, the lack of support will result in a further failure.

Zooming in on those 2 pins, you can see that the fractures are at the edge of the original solder joints and very close to the edges of the hole in the PCB. Repeated violent jerks on the spades have eventually lifted the edges of the (very thin) copper layer away from the PCB base and then from the rest of the copper layer.



I strongly suspect that this relay was a replacement (at less than 65,000 miles): I found that some moron had sliced through the tailgate water-shield, so that whenever the tailgate was opened in/after wet weather,

water inside the tailgate leaked into the boot - permanently wet carpet!