How to assemble ZEVA CAN connectors

Ian Hooper, September 2017

1) Remove 20-25mm of outer insulation from the wire end, by either cutting around gently with a sharp blade or using wire strippers.



2) Remove metal foil wrapping pairs of wires then spread cores out to make them easier to work on.



3) Use wire strippers or side cutters to remove about 3mm / 1.8" of insulation from each wire.



4) Remove crimp pins from strip using side cutters, being sure to cut close to the pin so there is no excess flange, then insert into crimping tool as shown, with back of pin flush with front of crimper jaws (the side with text markings). Gentle pressure will be required to hold the pin in place.



5) Insert wire into pin, with ends of conductor approximately flush with rear face of crimper jaws. (If the conductor extends too far into the pin, it can get in the way of the mating connector pins.) Then close crimping tool firmly to join pin to wire.



6) Repeat for all five wires. A completed crimp should look as below. Pointy-nose pliers can be used to similar effect if you have no suitable crimping tool.



7) Optionally for a more reliable connection, you can add a touch of solder to the mating point between conductors and pin, as shown. Be careful not to add too much solder as if it extends beyond the strain relief (where the pin holds the insulation) it can cause the wire to be more brittle.



8) Insert the five pins into the connector housing, ensuring that the barb of the pin reaches the small holes in the housing so the pins can't fall out. Pins can be removed if necessary by pushing on the barb through the hole with a small tool, then pulling the pin out gently.



9) Optionally, some heatshrink may be added to tidy up the end of the outer insulation.

