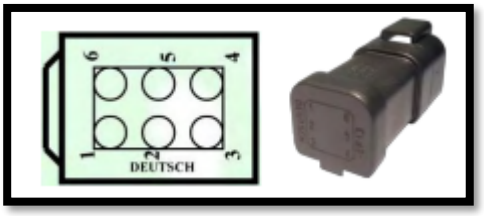
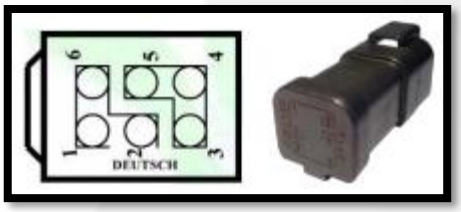
Bussed Electrical Connector Supply Constraint

Global supply of Deutsch connectors has become incredibly stressed in the last number of months. Multiple suppliers and distributors of electronic components are warning that supply shortages may continue to persist for coming months. The constrained supply has been especially noticeable on connectors with a specialized function such as bussed connectors.

Two of the most commonly used buss connectors used in various electrical harnesses at Lubecore are the 1 x 6 Buss and the 2 x 3 Buss, which are Lubecore part numbers 13.211 and 13.263 respectively. The 1 x 6 Buss is most often used for joining multiple grounds to a single source, while the 2 x 3 Buss allows a paired positive and negative signals to be either split or joined.

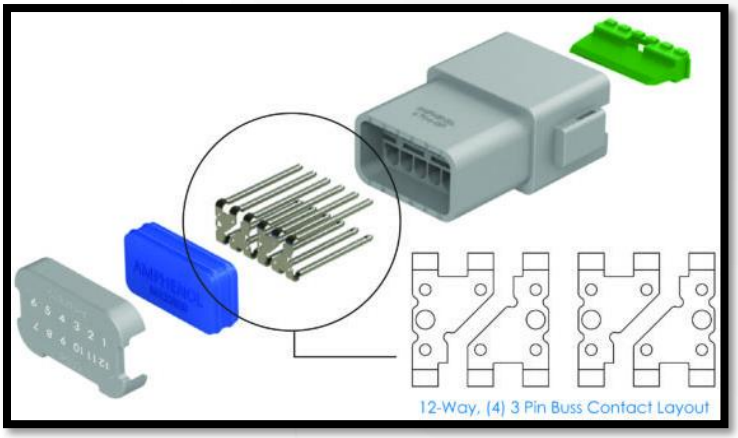


13.211: 1 x 6 Buss



13.263: 2 x 3 Buss

The internal contacts of the bussed connectors are bridged (bussed) where they make contact with the insulator seal within the connector housing. The back cap is ultrasonically welded onto the housing body, retaining the seal and the buss pins.

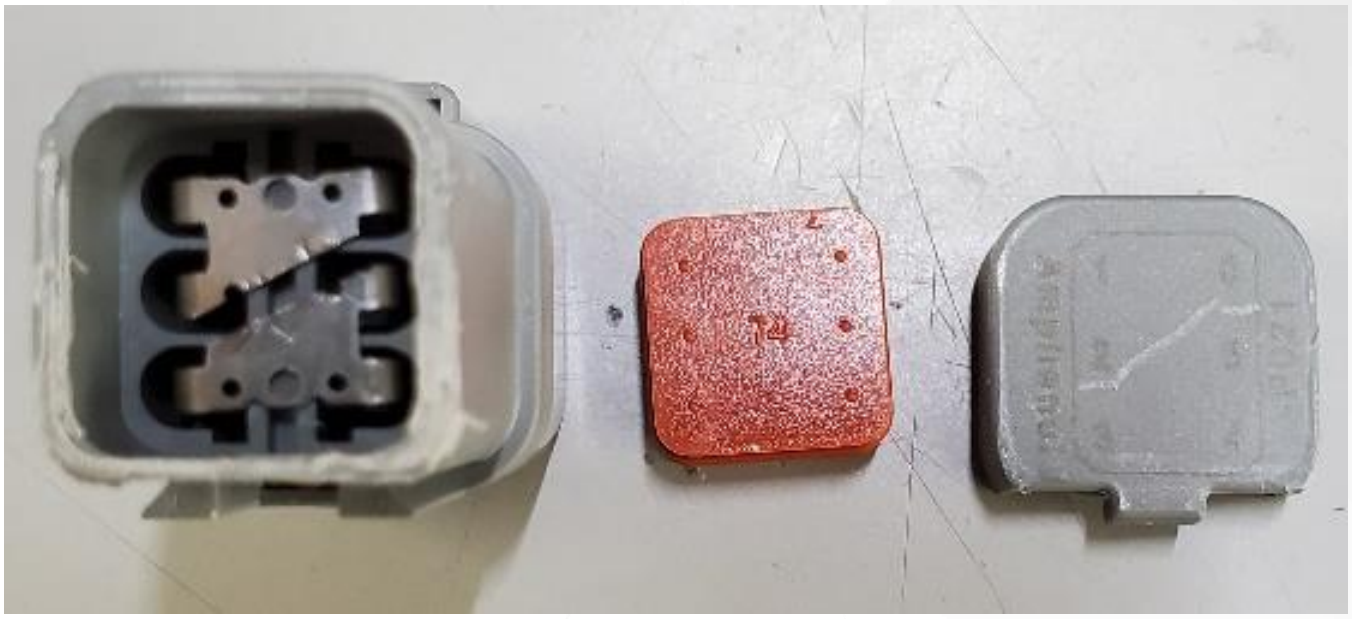


The supply for 13.211 has so far been stable enough to allow Lubecore to keep stock, however, 13.263 has proven very difficult to acquire, and lead time estimates have been increasing. In order to use what we have, and maintain customer deliveries of harnesses that must include the 13.263 it was determined that the 13.211 can be carefully disassembled and modified to function as the

13.263. This modification is not meant to be a long-term solution and will only be used during the time that supply of the 13.263 is unavailable.

Modification Steps:

1. Carefully remove the ultrasonically welded cap. This was achieved by carefully prying at the welded seams with a wolfgarten tubing cutter.
2. Remove the silicone seal and pull out the 1 x 6 buss pin unit.
3. Using the wolfgarten tubing cutter, snip away the centre material of the 6 position buss into 2 separate 3 position busses. This will be a diagonal cut so that the positions 1, 2 & 6 are bussed and 3, 4 & 5 are bussed.
4. Insert the buss connector pieces back into the housing. Check to ensure that enough material has been removed so that there is a suitable gap between the two buss pieces.
5. Replace the silicone seal, and mark the back cap with a split line showing that the buss has been separated into 2 units.
6. Use cyanoacrolate glue to glue on the back cap and ensure that the connector is sealed and ready for use.



13.211: 1 x 6 Buss with modified buss bar. Back Cap has been marked to indicate the modification. This has now become a 2 x 3 Buss connector.