# MC4 Melted Plugs

In the cases where an installer reports a melted plug(s), it is almost always due to either of two reasons:

1. Incompatible plug types used (not the ones supplied)
2. Faulty termination of DC cable.

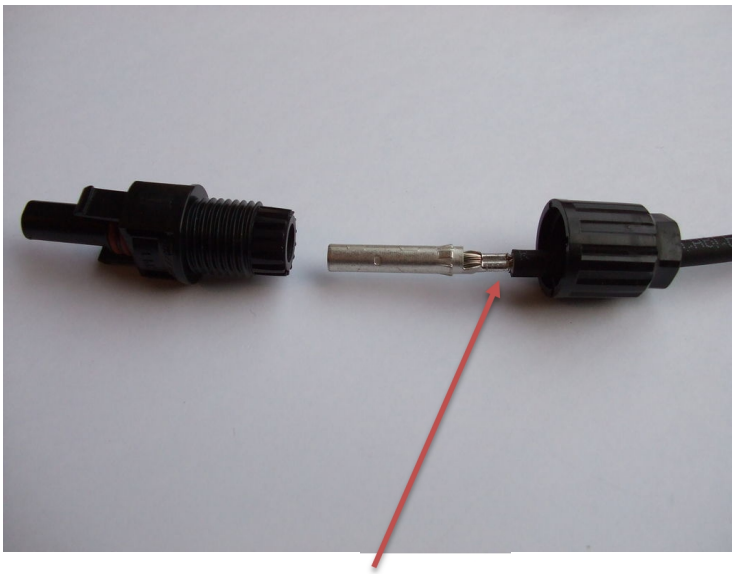
When the connection is not secure, there is a resistance across the connection, which causes heat. As DC power is constant, the heat builds up and will cause the connection to oxidise even more, causing more resistance. Eventually the heat builds up and melts the plug casing. In rare cases, it can catch fire.


Example of a melted plug

AS/NZS 5033 states that the DC plug and socket must be of the same manufacturer and type. If different brand plugs and sockets are used, the connection may not be properly bonded. Or, that the inner sleeve may push back into the plug body and not connect properly.

In the case of faulty workmanship, the plug insert may not be properly crimped or terminated to the cable.

Below is a correctly crimped termination. Note, the correct tool must be used.

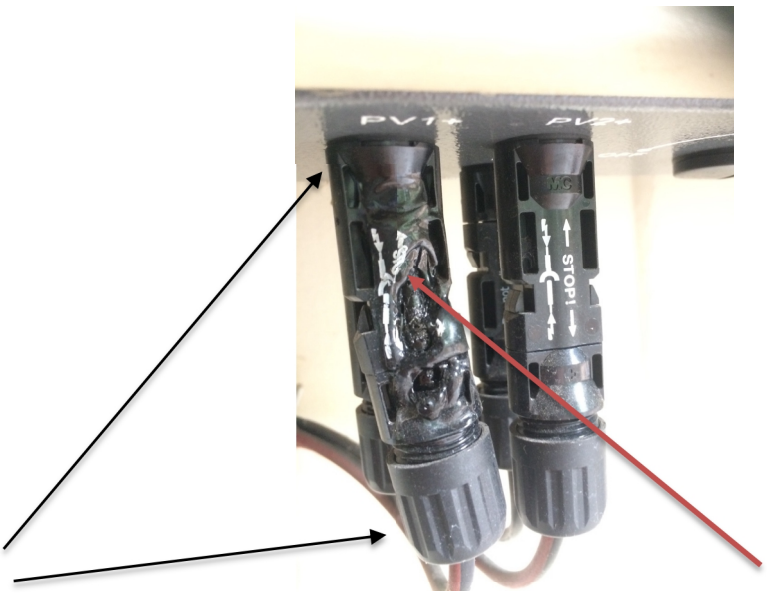


Must be solid and tight

**How do we know it's the connection?**

The giveaway is that the damage will be concentrated at the point of maximum heat.

In the below example, we can clearly see that the areas just above and below are not heat damaged. **So, the heat is exactly where the connection is.**




Free from damage

Damaged