

# PARKER'S ELECTRICAL NQ

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Gromac Quarrrtes NQ  
Townsville

On the 16 of April 2018 I received a call out to Gromac Pinnacle Quarries Townsville in regard to some cables that had caught fire in the switchboard of the Screen, some photos below.

I have found that there was damage to the earth wire for the full length of cable for conveyer 5 & 7 and the only damage to the active cables was when the earth hade melted through the insulation the created a short circuit, I also found that the short circuit on conveyer 5 hade fused the contactor closed, at the point of the short circuit the circuit protection had worked properly. The plant was working on it's own onboard generator.

I replaced the cables and contactor then cared out the following test that Andrew Holland from Wirtgen requested.

DC Injection Test at 500Ma 43ms

Earth Fault Loop of Conveyor 5 = 0

Insulation Resistance Conveyor 5 = 5 Mohms

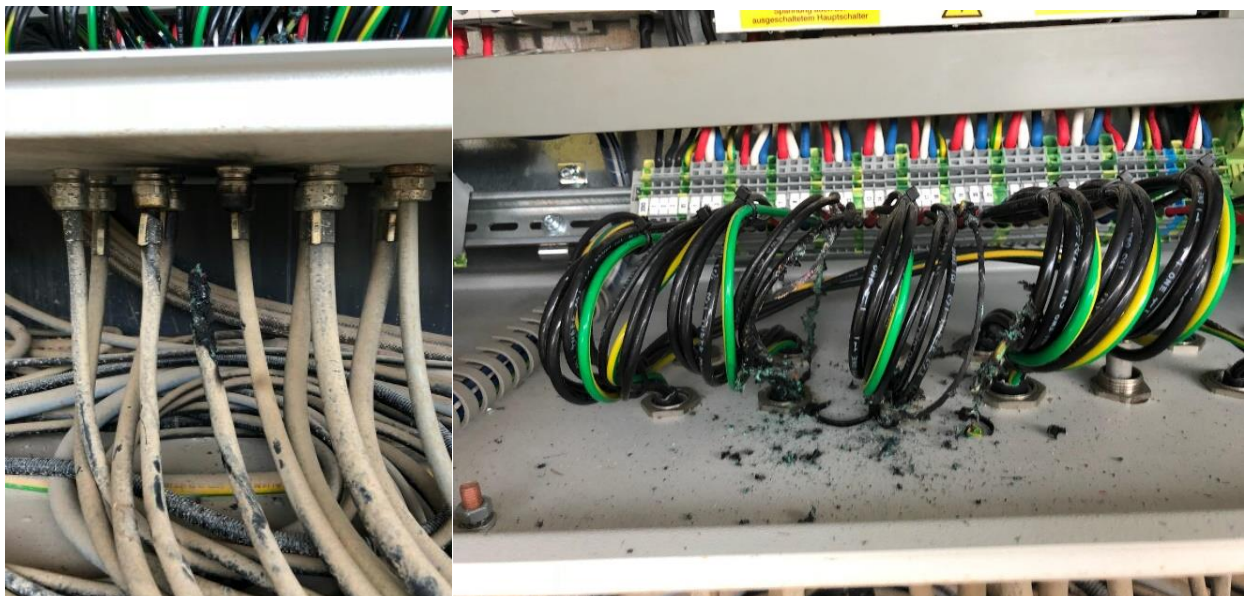
Earth Fault Loop of Conveyor 7 = 0

Insulation Resistance Conveyor 7 = >200 Mohms

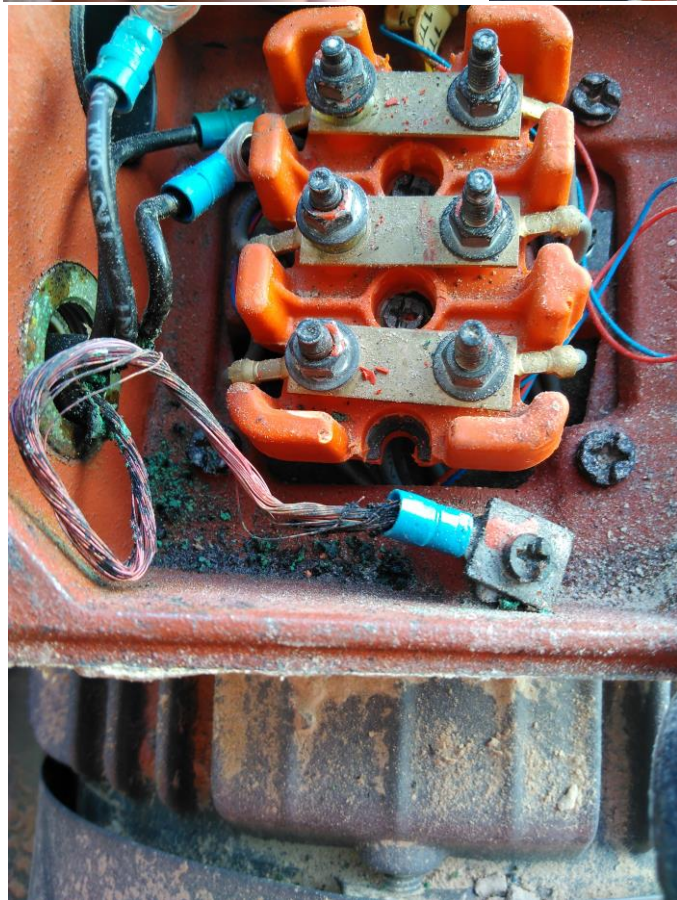
There have been NO welding works carried out.

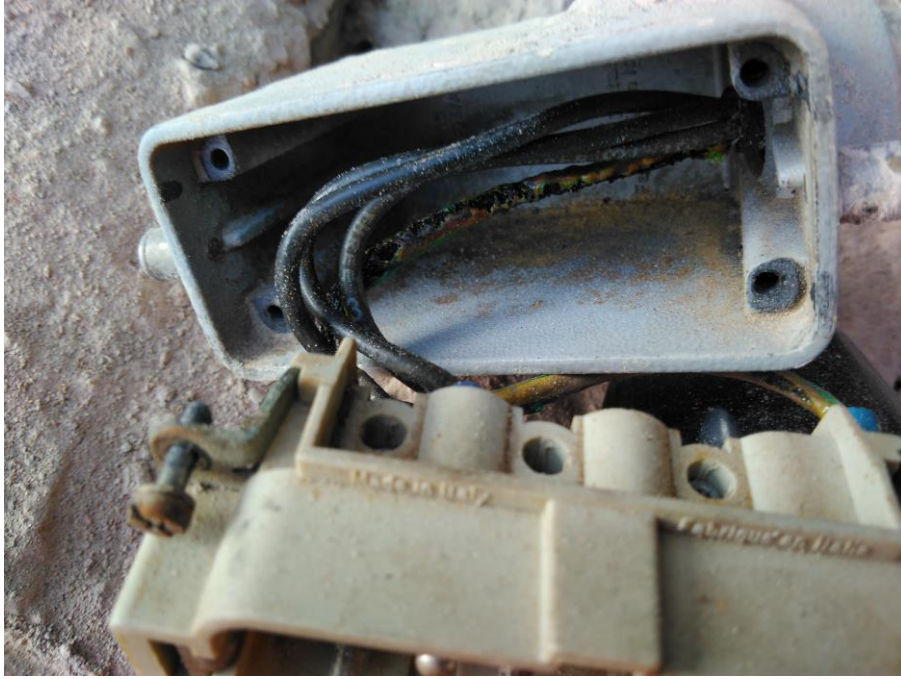
With the conveyors running there was no AC or DC voltages or Amps on the earth of Conveyors 5 & 7.

The only Possible reason for this fault that I could find was that the conveyors hade no bonding earth to the rest of the machine, so I installed a bonding earth as this is good practices.









Gary Parker

*Gary Parker*