

IMDM OUTER

Title: Electric shock received from TCR casing live at 750v dc.

Incident

On the 15th of August at approx 14:20 hours, on the BML2 at 90m 75ch a Team Leader from Outer Distribution and Plant was carrying out Traction Current Relay maintenance on TCR E088 at Brockenhurst.

He un-padlocked the case, opened it to carry out maintenance, and whilst maintaining the equipment his right hand came into contact with the casing and he received an electric shock; the casing was found to be 'live at 750v dc'. Work was immediately suspended the equipment was covered and made safe and a warning sign erected.

A Temporary Isolation was organised to enable investigations and potential repair. Upon inspection it was found the insulation of the traction cable clamped through the rear of the TCR had broken down, this had caused a hole in the cable which in turn had made contact with the casing making the casing 'live'.

The cable was replaced with a new cable safely re-clamped the TCR.



Figure 1. TCR Ground mounted case (approx. A4 size)



Figure 2. 750v dc cable clamps masking damage.



Figure 3. Damage to cable.

Action to be taken

TCR CASES ARE LOCATED IN THE CESS IN 3RD RAIL AREAS. DO NOT TOUCH THESE CASES UNLESS YOU ARE COMPETENT TO DO SO.

The Work Instruction relating to this equipment will be re-written and issued to the E&P staff by the E&P RAM where the 'Test before touch' LSR will apply.

If there is a need to work in close proximity to a TCR, insulated gauntlets rated 0 will be worn.