

Every employee and contractor working for Northern Powergrid, should go home at the end of each shift uninjured and in good health after a productive days work.

Dangers of installing incorrect batteries

Recently an item of equipment, sent in for test and calibration was found to contain the incorrect type of battery. The Unit, a 'Sniffer' used to locate cable faults was sent to Hellaby for its periodic test and calibration.

During initial inspection it was discovered that the outer casing was damaged. See figure 1.

On further investigation it was found that alkaline batteries (non-rechargeable) had been installed. See figure 2. The test unit was originally fitted with, and should have still been fitted with, the correct NiMH (rechargeable) batteries.

The defective unit had been put 'on-charge' resulting in the failure of the non-rechargeable alkaline batteries which caused the side casing to rupture.

The extent of the damage caused to the casing and internal electronic circuits has resulted in the unit being scrapped. Apart from the cost of the unit replacement at £4600, the consequences of fitting incorrect batteries could have been far worse in that it could have resulted in a fire.



Figure 1

It is imperative that when replacing batteries, especially rechargeable batteries, that only the correct type are used (as specified by the manufacturer). You should check with the manufactures instructions if you are unsure of the correct type of batteries to use or preferably utilise the support of the inspections team.

Any units fitted with rechargeable batteries are intended to be maintenance free for the user.

If the recharge cycle of the unit is indicating that the batteries have reached the end of their useful life the unit should be returned to the inspections team to be refurbished and checked.

Please check any items of equipment known to contain batteries to ensure they are fitted with the manufactures recommended batteries and notify you supervisor of any units that are not correct to have any incorrect batteries replaced immediately.



Figure 2

This issue can also be found in the home. Many domestic electrical and electronic devices may also contain rechargeable batteries that are automatically recharged when placed in their holder and don't necessarily require a plug in charger (e.g. house phone, TV remote, kitchen appliances etc.). When rechargeable batteries have reached the end of their recharge cycle life and need changing care should be taken not to mix them with non-rechargeable batteries as they can look the same. Attempting to recharge a non-rechargeable battery can result in a fire risk. Always check the battery type and consult the manufactures instructions.