Incorrect Vibration dampers

ISSUE IDENTIFIED:

A crew sent to repair a vibration damaged conductor with broken conductor strands near clamp on GOR-HWB A pole 173, identified significant corrosion of the conductor under the vibration damper clamp.

Dampers were removed from all 3 phases to prevent further deterioration, and were found to be **incorrect** damper stock code L044606.

The **correct** damper stock code for 19/2.34 Copper diameter 11.68mm is L044620



Figure 1: shows incorrect alluminium alloy clamp L044606 removed from conductors, corrosion resulting from dissimilar metals can be seen on the clamp.

CONTIBUTING FACTORS:

- The correct dampers for copper conductors have conductor clamps made of a steel alloy (L044620) as opposed to the aluminium alloy (L044606) for the other conductors types
- A review of historical scanned QA records indicates that most of the incorrect vibration dampers were installed by projects in the mid to late 1990's
- Incorrect Damper stock code L044606 does not exist in Maximo or in any stock lists
- Some installations around this time did not comply with now superceded TP.ML 03.26 Installation of Vibration Dampers

ACTIONS TAKEN TO PREVENT REOCCURENCE:

Transpower requires the correct vibration damper clamps to be used

- Desktop analysis of CA photos showed mostly steel alloy damper clamps on GOR-HWB
- However Poles 176 and 197 appear to be alloy and will be checked on next patrol
- Teams are reminded to ensure dampers are installed in compliance with TP.SS 02.16 which specifies :
 - Damper Stock Code L044620 for Copper conductors
 - O Damper Stock Code L044606 for ACSR conductors (coyote 15.89mm to skunk 12.95mm)
- This alert is to remind maintenance and project teams to ensure correct damper stock code is used

LEARNINGS FROM THIS

 All Service Delivery Managers, Project Managers, and Service Providers <u>must</u> report any instances they come across, where dampers with aluminium clamps have been incorrectly fitted to copper conductors. It is <u>essential</u> that all dampers are selected, installed and maintainted in accordance with TP.SS 02.16 Installation and maintenance of conductor, conductor accessories and aerial communications cables.



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