

CASE STUDY

CAT 793D SERVICE ISSUE IDENTIFICATION

H-E PARTS COR COOLING (H-E PARTS) SPECIALIZES IN APPLICATION SPECIFIC HEAT TRANSFER SOLUTIONS FOR THE MINING AND OFF-HIGHWAY MARKETS. H-E PARTS OFFERS INNOVATIVE SOLUTIONS THAT PROVIDE ADDED VALUE BY EXTENDING SERVICE INTERVALS, IMPROVING PERFORMANCE AND INCREASING PRODUCTIVITY, WHILE REDUCING DOWNTIME AND ASSOCIATED LIFE CYCLE COSTS.

A customer located in the Pilbara region of Western Australia was experiencing radiator failures in their rebuilt CAT 793D haul trucks soon after installation. The failures prompted the customer to reach out to H-E Parts for a solution to prevent further downtime and find the root cause of the issue.

H-E Parts technicians received the COR Cooling™ unit at our facility to exchange for another, as part of our service exchange program. To determine and understand the cause of the failure, H-E Parts technicians cut and removed a section of the core for further analysis. The condition of the core after only a short service period showed internal signs of severe corrosion and random pitting, indicating that it may have been exposed to stray current, resulting in premature wear, cracking and ultimately leading to the radiator failure.

H-E parts liaised with site personnel to understand the condition of the radiator and it was discovered that the radiator failures were occurring on only one truck. After initial testing using a multimeter was conducted, an on-site investigation found the engine was missing an earth strap to the chassis. This was causing stray current to pass through the radiator, an issue which has been identified previously by H-E Parts technical subject matter experts (SME's).

H-E Parts identified the cause of the failures, preventing the customer from further downtime due to a third install. Since the installation of the new service exchange unit, the customer hasn't experienced any further failure or issues and the radiators are again meeting required service exchange intervals.

At H-E Parts we specialize in the supply and maintenance of all types of radiators. Our technical team members are experienced with heavy diesel equipment, meaning you can rely on us for troubleshooting and service delivery performance. We service, overhaul and re-core the full range of heat transfer equipment from a range of industries and applications, offering rapid turnaround service and repair of mining, heavy industrial and transport heat transfer equipment, ensuring easy access to specialist services.

H-E Parts International replacement parts are compatible with the makes and/or models of the third-party equipment described. H-E Parts International is not an authorized repair facility of these third parties and it does not have an affiliation with any manufacturers of these third-party products. All brands, original equipment manufacturer (OEM) part numbers or references are owned by the respective OEM entities or their affiliates. These terms are used by H-E Parts International for identification and cross reference purposes only and are not intended to indicate affiliation with, or approval by the OEM, of H-E Parts International or its products.

LOCATION	Western Australia, Australia
APPLICATION	CAT 793D
PRODUCT	COR Cooling™ radiator



Radiator analysis showing stray current damage



Newly supplied COR Cooling™ radiator