

# Industrial Metal Case Study

## Epoxy Repair Paste

### Delivery Truck Cracked Engine Timing Cover Repair

Industrial Metal repairs a crack in a 466 International engine cover, saving a Puerto Rico dairy \$1000 in parts and a week downtime for a delivery truck



The hairline crack can just about be seen in the centre of the metal casing

#### Defect

Oil was noticed leaking from the timing cover of a dairy delivery truck's 466 International engine. Once opened, a hairline crack was found inside the casing.

A replacement cover was quoted at \$1000 and a week lead time. The dairy needed the truck back in service as soon as possible and so they sought a faster, more cost-effective repair method.

#### Solution

The ends of the hairline crack were drilled to relieve stress concentration and prevent it spreading.

A coarse 3-square file was used to widen the top and bottom of the crack, creating two V-shaped grooves in the casing.

This increased the surface area for **Industrial Metal Epoxy Paste** to bond to when rebuilding the metalwork.

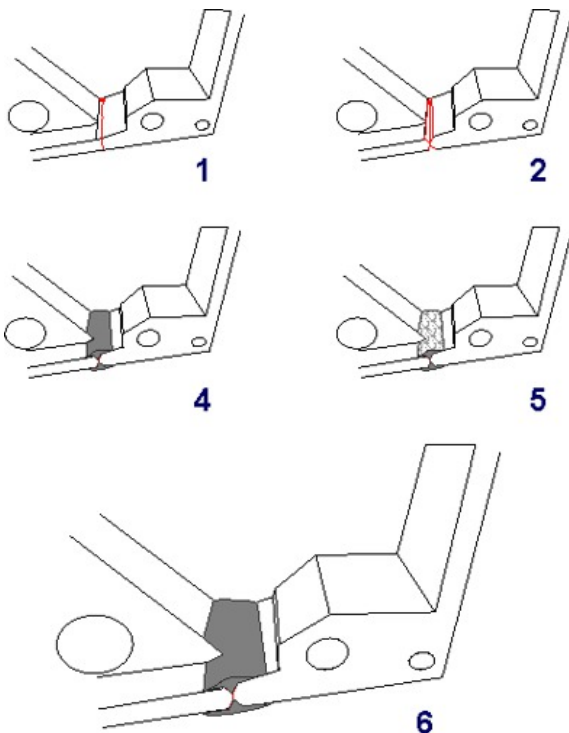
The paste was forced into both ends of the crack with a spatula, filling the widened V-shapes. To ensure full adhesion, Industrial Metal was overlapped by 20mm either side of both grooves.

#### Result

Industrial Metal has a full cure time of 24 hours. Once set, it formed a metallic material which seamlessly filled both grooves to repair the crack.

A day after the application had been completed and the delivery truck was back on the road, with the timing cover no longer leaking.

The dairy were very pleased with the technical advice received from Sylmasta, the ease and speed of the repair - and of course the money saved.



Repair instructions, showing V-shaped grooves cut into the top and bottom of the crack and a 20mm paste overlap to ensure full adhesion



Completed repair with the crack seamlessly filled