

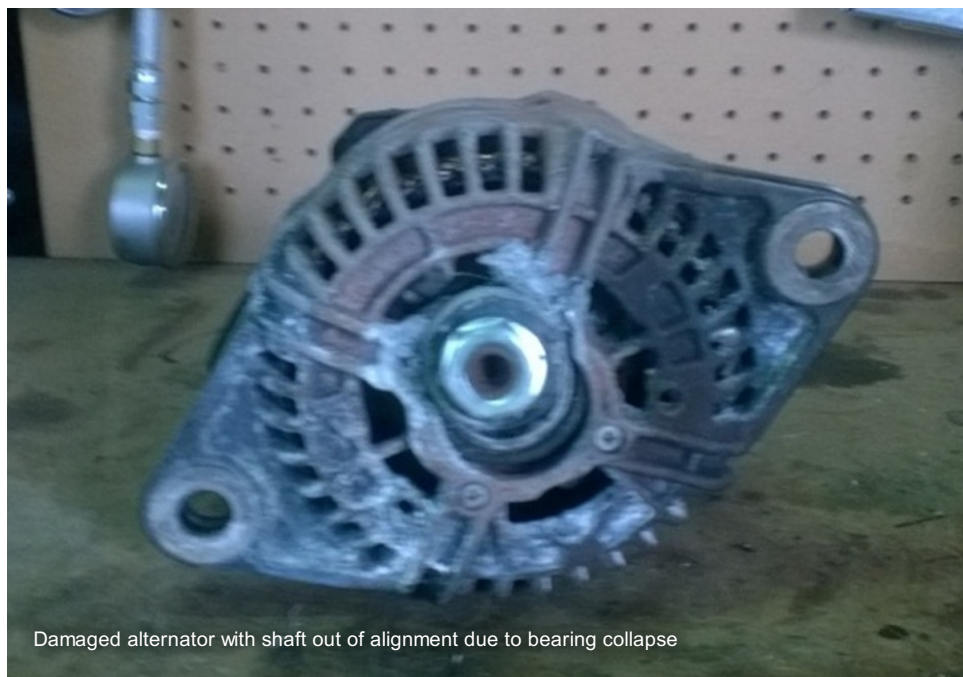
Alternator bearing collapse caused small fire

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A member has reported an incident on a workboat used in the offshore wind farm industry, in which there was a serious failure of an alternator bearing, leading to a small engine room fire.

What happened?

The vessel crew noticed a sound change from the engines and a reduction in revs (dropped by about 100 rpm) followed immediately by the fire alarm. The crew shut the fire flaps, and the fuel and ventilation shut off using the emergency stops. The engine room was checked, and smoke and small flames or glowing were observed from the alternator. The fire was extinguished, the safety of crew, passengers and vessel was confirmed, and the vessel returned to port on one engine.



Damaged alternator with shaft out of alignment due to bearing collapse

Our member's investigation revealed the following:

- The crew were trained to respond to a fire alarm in a certain way and did so in a swift and professional manner.
- The problem was found to have been caused by a bearing collapse in one of the alternators.

Our member took the following actions:

- All alternators should be checked regularly for signs of damage which may manifest itself as 'Black fluff' in the windings.
- When the engines are shut down the alternators should be checked for overheating.

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