

# CFM-MN-04 Inadequate Maintenance results in excessive heat during subsequent mobile equipment operations

Fires following maintenance, caused by:

- During normal operations engine components rise above the ignition temperature of adjacent fuel sources caused by
- Turbo failure e.g. heat shielding for turbocharger not replaced
- Electrical fault (including cable runs or insulation being pinched/damaged, battery locations being compromised, etc.)
- Friction between moving components e.g. collapsed wheel bearings
- Maintainers not identifying compromised elements of the fuel, hydraulic or fire response systems (so work orders not raised or not closed to meet site requirements)
- Operating without lubricants
- Lagging on hot surfaces not repaired/replaced
- Deflection barriers that separate oil hoses and fuel lines from hot surfaces e.g. turbochargers
- Like for like components not replaced e.g. contained fuel lines and hydraulic hoses that prevent leaks from spraying onto hot surfaces.

Credible Failure mode is addressed by:

- 🛡️ BI-01.13 Clear maintainer performance management expectations supported by an active and consistent performance management process
- 🛡️ BI-01.51 Skilled and experienced personnel are accountable for maintaining mobile equipment
- 🛡️ BI-02.02 Maintenance requirements cover all safety and operational systems on mobile plant
- 🛡️ BI-02.07 Regular checking and maintenance of brakes, steering and tyres
- 🛡️ BI-02.09 Regular checking and maintenance of alarms and monitors
- 🛡️ BI-02.21 Design of components means they cannot be fitted wrongly e.g. turbochargers on backwards
- 🛡️ BI-04.04 Site change management process apply to the introduction of new types and models of mobile equipment
- 🛡️ BI-05.04 Regular and consistent application of performance management processes